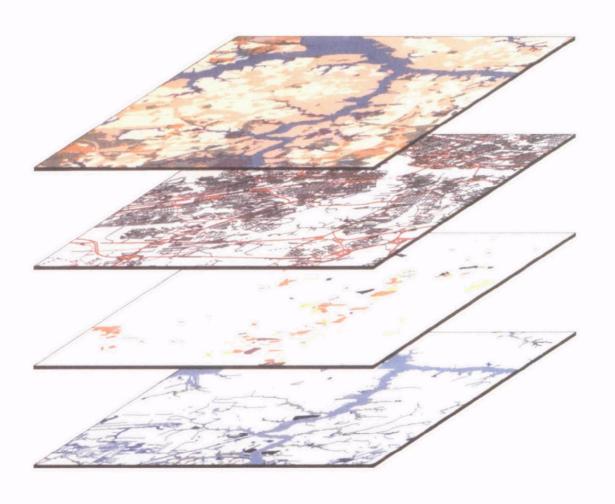
## **Federal Geographic Data Committee**

## Manual of Federal Geographic Data Products



## **Federal Geographic Data Committee**

# Manual of Federal Geographic Data Products

## Information provided by:

U.S. Department of Agriculture
U.S. Department of Commerce
U.S. Department of Defense
U.S. Department of Health and Human Services
U.S. Department of the Interior
U.S. Department of Transportation
Federal Emergency Management Agency
National Aeronautics and Space Administration
Tennessee Valley Authority

## Compiled under contract for:

Office of Information Resources Management U.S. Environmental Protection Agency

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Prepared under EPA Contract No. 68-W90065 Delivery Order No. 13 September 1992

> VíGYAN Inc. Falls Church, Virginia

On the cover: The National Mapping and Water Resource Divisions of the U.S. Geological Survey and the Environmental Protection Agency cooperated to produce a data base for a nine-quadrangle area in the Elizabeth River Watershed of the Chesapeake Bay. This area served as a pilot project location where geographic information system activities were performed in support of the interagency Chesapeake Bay Restoration Program. The cover graphic, produced by Robert DeAngelis and Dave Catts, U.S. Geological Survey, shows sample data layers of the data base.

## Acknowledgments

The Manual of Federal Geographic Data Products was published by the Federal Geographic Data Committee (FGDC). The committee, which was established by the Office of Management and Budget, undertook the Manual as part of its responsibility to promote the coordinated development, use, sharing, and dissemination of surveying, mapping, and related spatial data.

Funding for the compilation and editing of the *Manual* was provided by the U.S. Environmental Protection Agency's (EPA) Office of Information Resources Management. The Agency conceived of the *Manual* and initiated a partnership with the FGDC to jointly design, compile, and produce the *Manual*. The *Manual* provides a means of satisfying the EPA's internal need for a comprehensive, standardized description of Federal geographic data products. The *Manual* serves as a data catalog within the EPA's Spatial Data Management Plan — a data life cycle plan for acquiring, preparing, and delivering spatial data to meet the needs of the Agency.

The *Manual* would not be possible, of course, without the contributions of the Federal agencies that submitted descriptions of their geographic data products. Authors from the agencies carefully drafted the descriptions of their products and worked closely with the EPA to make the *Manual* a success. The efforts of the authors, the agencies, their FGDC representatives, and ViGYAN staff are greatly appreciated.

## ■ Table of Contents ■

| Pr | reface                                                                                                                                                                                                                                    | iii                                  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Fe | ederal Geographic Data Committee Overview                                                                                                                                                                                                 | v                                    |
| Da | ata Product Keyword Matrix                                                                                                                                                                                                                | vii                                  |
| 1  | United States Department of Agriculture  Agriculture Stabilization and Conservation Service                                                                                                                                               | 1 - 5                                |
|    | United States Department of Commerce  Bureau of the Census  Bureau of Economic Analysis  National Environmental Satellite, Data, and Information Service  National Ocean Service  National Weather Service                                | 2 - 31<br>2 - 35<br>2 - 85           |
| 3  | United States Department of Defense  Defense Mapping Agency                                                                                                                                                                               | 3 - 1                                |
| 4  | United States Department of Health and Human Services  Centers for Disease Control                                                                                                                                                        | 4 - 1                                |
| 5  | United States Department of the Interior  Bureau of Land Management  Bureau of Mines  Bureau of Reclamation  Minerals Management Service  National Park Service  United States Fish and Wildlife Service  United States Geological Survey | 5 - 29<br>5 - 37<br>5 - 45<br>5 - 51 |
| 6  | United States Department of Transportation Federal Highway Administration                                                                                                                                                                 | 6 - 1                                |
| •  | Independent Agencies Federal Emergency Management Agency National Aeronautics and Space Administration Tennessee Valley Authority                                                                                                         | 7 - 5<br>7 - 13                      |
| Аp | ppendix A: Reader Response Form                                                                                                                                                                                                           | A - 1                                |

#### ■ Preface ■

The Manual of Federal Geographic Data Products describes Federal geographic data products that are national in scope and commonly distributed to the public. Geographic data products include maps, digital data, aerial photography and multispectral imagery, earth science, and other geographically-referenced data sets. Federal agencies were encouraged to list only those geographic data products that are supported by an office to which the public could make inquiries and place orders. Federal agencies also were encouraged to list only those geographic data that would be available by January 1993.

Data products are described in a standardized format and grouped by producing agency. A cross-reference matrix is provided to help readers find products by data type.

The products listed in the *Manual* include only those that currently are distributed by the agencies. Readers interested in historical Federal geographic data products should contact the Reference Services Staff of the National Archives and Records Administration at (202) 501-5579. The Map and Geography Division of the Library of Congress also has an extensive collection of current and historical geographic data products from Federal and non-Federal sources. The Division can be reached at (202) 707-MAPS.

While much effort was made to ensure that the *Manual* is comprehensive, inevitably there will be products that were overlooked. In addition, rapidly changing geographic data technologies, especially digital technologies, are resulting in new products and new forms of existing products. Readers should contact the offices listed in the *Manual* to inquire about the availability of new products and references to other Federal geographic data. The FGDC intends to revise the Manual approximately every 2 years.

Readers are invited to provide corrections and to suggest other Federal products or information for inclusion in future editions of the *Manual*. Readers also are encouraged to comment on the usefulness of the *Manual*, and to suggest improved methods of presenting the information. Please see the "Reader Response Form" on page A-1.

## ■ Federal Geographic Data Committee Overview

On October 19, 1990, the Executive Office of the President, Office of Management and Budget (OMB) revised Circular A-16, "Coordination of Surveying, Mapping, and Related Spatial Data Activities." The goals of the Circular are to develop a national digital geographic information resource, to reduce duplication, to reduce the expense of developing geographic data, and to increase the benefits of using available data and ensuring coordination of Federal agency geographic data activities. A major objective of A-16 is the development of a national spatial data infrastructure with the involvement of Federal, State, and local governments, and the private sector. This national information resource, linked by criteria and standards, will enable sharing and efficient transfer of spatial data between producers and users.

Circular A-16 established the Federal Geographic Data Committee (FGDC) to promote the coordinated development, use, sharing, and dissemination of geographic data. The committee oversees and provides policy guidance for agency efforts to coordinate geographic data activities. Federal agencies were assigned the responsibilities of leading coordination activities for categories of data (Figure 1). Agency responsibilities include providing governmentwide leadership in developing data standards, assisting information and data exchange, and coordinating data collection.

The FGDC has organized subcommittees to manage activities related to data categories, and working groups to address crosscutting issues common to all data categories. Subcommittees establish protocols and implement standards for data content, quality, and transfer; encourage the exchange of information and the transfer of data; and organize the collection of geographic data to reduce duplication of effort. Working groups have been established for Standards, Technology, and Liaison with the non-Federal spatial data community.

The FGDC is currently composed of representatives from 14 departments and independent agencies, including:

Department of Agriculture Department of Transportation
Department of Commerce Environmental Protection Agency

Department of Defense Federal Emergency Management Agency

Department of Energy Library of Congress

Department of Housing and Urban Development National Archives and Records Administration

Department of the Interior

Department of State Tennessee Valley Authority

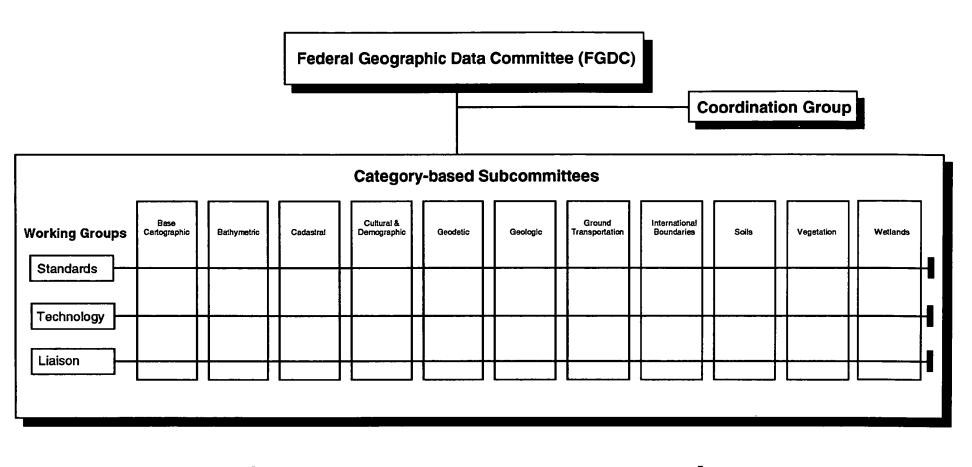
The Departments of Education, Health and Human Services, Justice, and Labor; the General Services Administration; the National Capital Planning Commission; and the Smithsonian Institution also participate on FGDC subcommittees and working groups.

National Aeronautics and Space Administration

The FGDC sponsors and participates in conferences and other forums concerning issues important to the development of the national spatial data infrastructure. The committee also publishes the Federal Geographic Data Newsletter, Summary of GIS Use in the Federal Government, annual reports, and other publications of interest to the spatial data community.

For more information about the FGDC, its activities, the *Manual*, or to be added to the newsletter mailing list, please contact:

Federal Geographic Data Committee Secretariat U.S. Geological Survey 590 National Center Reston, VA 22092 USA (703) 648-4533





U.S. Geological Survey

**Bureau of Land Management** 

Figure 1: FGDC Organizational Structure

Soil Conservation Service

| Data Product Keyword Matrix                                                      |                 |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             |                  |                     |             |          |           |              |          |                                 |                    |                  |            |          |           |                |
|----------------------------------------------------------------------------------|-----------------|-------------|----------|-----------|--------------------------------------------------|-------------|--------------|---------------------------|------------------|-------------------|--------------------------|-----------------------------|------------------|---------------------|-------------|----------|-----------|--------------|----------|---------------------------------|--------------------|------------------|------------|----------|-----------|----------------|
| Data Category<br>Keywords                                                        |                 | ic          |          |           | 0                                                |             |              | Administrative boundaries | graphy           | ndaries           | International boundaries | Local government boundaries | aries            | omic                | , i         |          |           |              |          | Global Positioning System (GPS) | ontrol             | Irol             |            |          |           |                |
| Section/Chapter                                                                  | Page Number     | Atmospheric | Climate  | Radiation | Temperature                                      | Weather     | Boundaries   | Administrat               | Census geography | County boundaries | Internations             | Localgover                  | State boundaries | Socioeconomic       | Demographic | Economic | Mortality | Natality     | Geodetic | Global Posi                     | Horizontal control | Vertical control | Geophysics | Gravity  | Magnetics | Seismic        |
|                                                                                  | 1               |             |          |           |                                                  | ****        |              | 8888                      |                  | X-3-5             |                          |                             | ÷ ::             |                     |             | . 36.7   | 7.00      | X.1.         |          |                                 |                    |                  |            |          |           |                |
| U.S. DEPARTMENT OF AGRICULTURE  Agriculture Stabilization & Conservation Service | 1-1             |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             |                  |                     |             |          |           |              |          | QÇ                              |                    |                  |            | å vý     | () ()     | Ŷ              |
| Forest Service                                                                   | 1-5             | -           | ┞        | _         |                                                  |             | -            | -                         |                  | •                 | $\dashv$                 | -                           | -                | -                   | Н           |          | _         | -            | $\vdash$ | _                               |                    | _                | Н          | H        | -         | Н              |
| Soil Conservation Service                                                        | 1-21            | -           | ┞        | _         |                                                  |             | H            |                           |                  |                   |                          | $\dashv$                    | $\dashv$         | -                   | _           | _        |           | -            | H        |                                 |                    |                  | H          |          | $\vdash$  | Н              |
| U.S. DEPARTMENT OF COMMERCE                                                      | 2               |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             | 888              |                     |             | 388      | 85        |              |          | 253<br>361                      |                    | 370              |            | ಁಁ       |           |                |
| Bureau of the Census                                                             | 2-1             |             | ***      |           |                                                  |             | <b>◎</b>     |                           |                  |                   |                          | •                           | •                | <u> </u>            |             |          |           |              | Ç Ş      | ***                             |                    |                  | **         |          |           |                |
| Bureau of Economic Analysis                                                      | 2-31            | ┞           | -        |           | <del>                                     </del> | Н           |              | H                         |                  |                   | $\dashv$                 | -                           |                  |                     | •           |          |           | -            |          | -                               | $\dashv$           |                  | Н          | Н        |           | $\vdash$       |
| Nat'l Environmental Satellite Data & Info. Service                               | 2-35            |             |          | •         |                                                  |             | H            | -                         | $\dashv$         | -                 | $\dashv$                 | +                           | -                | -                   |             |          |           | -            | •        | -                               |                    |                  |            | •        |           |                |
| National Ocean Service                                                           | 2-85            | -           |          | _         | -                                                |             |              | Н                         | $\dashv$         | $\dashv$          | $\dashv$                 | $\dashv$                    | -                | $\dashv$            | H           | _        |           | -            | •        | •                               | •                  | •                |            |          | _         |                |
| National Weather Service                                                         | 2-111           | -           | -        |           |                                                  |             | _            |                           | -                | $\dashv$          | $\dashv$                 | 4                           |                  | $\dashv$            | Н           |          | _         | <del> </del> |          |                                 | _                  |                  | Н          | Н        | <u> </u>  | $\vdash$       |
| U.S. DEPARTMENT OF DEFENSE                                                       | 3               |             | ***      |           |                                                  |             |              |                           |                  | ¥8.               |                          |                             |                  | 800                 | . 353       |          |           | 98 J.S.      |          | ***                             | 3333               | 33.88i           | 730        |          | 333       | :33            |
| Defense Mapping Agency                                                           | 3-1             |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             | <b>&gt;&gt;</b>  |                     |             |          |           |              |          |                                 |                    |                  | <u> </u>   |          |           | -33            |
| U.S. DEPT: OF HEALTH & HUMAN SERVICES                                            | 4               |             |          |           |                                                  |             |              |                           |                  |                   |                          | ***                         | ***              |                     |             | ***      |           |              |          |                                 | ****               |                  |            | ***      |           | ***            |
| Centers for Disease Control                                                      | <b>7</b><br>4−1 |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             |                  |                     |             |          |           |              |          |                                 |                    |                  |            |          |           | <u>\</u>       |
| U.S. DEPARTMENT OF THE INTERIOR                                                  | 5               |             |          |           |                                                  |             |              |                           |                  | <u> </u>          |                          |                             |                  | <b>&gt;&gt;&gt;</b> |             |          | <b>→</b>  |              |          | ***                             | ****               |                  |            | ***      |           |                |
| Bureau of Land Management                                                        | 5-1             |             |          |           |                                                  |             | <u></u>      |                           |                  | ***               |                          |                             |                  | 386                 |             |          |           | ***          |          | ***                             |                    |                  |            |          |           |                |
| Bureau of Mines                                                                  | 5-29            | -           | -        |           | Н                                                | $\vdash$    | Ĕ            | Н                         |                  |                   | $\dashv$                 | $\dashv$                    | $\dashv$         | -                   | Н           | $\vdash$ |           | <u> </u>     | -        | ├                               | H                  | $\vdash$         | Н          | Н        | $\vdash$  | $\vdash\vdash$ |
| Bureau of Reclamation                                                            | 5-33            | ┢           | -        | _         | Н                                                | $\dashv$    | -            | $\vdash$                  | -                |                   | $\vdash$                 | $\dashv$                    | $\dashv$         | -                   |             | Н        |           | <u> </u>     | -        |                                 | Н                  | _                | $\vdash$   | Н        | -         | H              |
| Minerals Management Service                                                      | 5-37            | $\vdash$    | -        |           | $\vdash$                                         | -           | •            | •                         | $\dashv$         |                   | •                        | $\dashv$                    |                  | $\dashv$            |             | $\dashv$ | _         | ļ            | -        | $\vdash$                        | Н                  | H                | Н          | Н        | $\vdash$  | Н              |
| National Park Service                                                            | 5-45            | $\vdash$    |          | _         | Н                                                | $\dashv$    | Ľ            | •                         | -                |                   | $\dashv$                 | +                           | ٦                | $\dashv$            | -           | $\vdash$ | _         | <u> </u>     | -        | -                               | $\vdash$           | -                | H          | Н        | -         | Н              |
| U.S. Fish & Wildlife Service                                                     | 5-51            | $\vdash$    | $\vdash$ | -         | H                                                |             | Ť            | Н                         | $\dashv$         | $\dashv$          | $\vdash \vdash$          | $\dashv$                    | $\dashv$         | -                   | Н           | Н        |           | -            | -        | <u> </u>                        | Н                  |                  | H          | Н        | $\vdash$  | $\vdash$       |
| U.S. Geological Survey                                                           | 5-59            | •           | •        | •         |                                                  | •           | •            | •                         | •                | •                 |                          | •                           | •                | •                   | •           | •        | •         | ۲.           | •        | $\vdash$                        | •                  | •                |            | •        | •         | •              |
| U.S. DEPT. OF TRANSPORTATION                                                     | 6               |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             |                  | <i>-</i>            |             |          | <i>-</i>  |              |          |                                 | <u> </u>           | <u> </u>         |            |          |           |                |
| Federal Highway Administration                                                   | 6-1             |             |          | 880       |                                                  |             |              |                           |                  | 988               |                          | 388                         | ***              |                     |             | 3333     |           |              |          |                                 |                    |                  |            |          |           |                |
| INDEPENDENT AGENCIES                                                             | 7               |             |          |           |                                                  |             |              |                           |                  |                   |                          |                             | <b>**</b>        |                     |             |          | ***       |              |          |                                 |                    |                  | ***        |          |           |                |
| Federal Emergency Management Agency                                              | 7-1             | 9.00        | - 100 m  | 438       | - 23                                             | \$1660<br>1 | <b>%</b> (%) | · ***                     | :XXX             |                   |                          |                             |                  | (XX)                |             |          | 889       |              |          |                                 |                    |                  |            |          |           |                |
| National Aeronautics & Space Administration                                      | 7-5             | $\vdash$    | H        |           |                                                  |             | Н            | H                         | $\dashv$         | $\dashv$          | $\dashv$                 | +                           | $\dashv$         | ᅱ                   | $\dashv$    |          |           | _            | $\vdash$ | Н                               | $\vdash$           | $\vdash$         | $\vdash$   | $\vdash$ | $\vdash$  | H              |
| Tennessee Valley Authority                                                       | 7-13            |             | H        |           | H                                                | -           | •            | •                         | +                | •                 | $\dashv$                 | _                           | •                |                     |             |          | -         | $\vdash$     |          | -                               | •                  |                  | Н          | Н        | Н         | $\vdash$       |

#### Data Product Keyword Matrix (cont.) **Data Category Keywords** System U.S. Public Land Survey Federal land ownership County land ownership Private land ownership Subsurface ownership State land ownership Remotely Sensed Cadastral (general Aerial photography Land Ownership Orthophotoquads Hydrologic units Page Number Hydrography Subsurface Waterways Floodplain Wetlands Satellite Radar Snow Section/Chapter Water U.S. DEPARTMENT OF AGRICULTURE Agriculture Stabilization & Conservation Service • • Forest Service 1-5 Soil Conservation Service • • • 1-21 19 2 U.S. DEPARTMENT OF COMMERCE Bureau of the Census 2-1 • Bureau of Economic Analysis 2-31 Nat'l Environmental Satellite Data & Info. Service 2-35 National Ocean Service 2-85 • National Weather Service 2-111 U.S. DEPARTMENT OF DEFENSE 3 Defense Mapping Agency 3 - 1U.S. DEPT. OF HEALTH & HUMAN SERVICES 4 Centers for Disease Control U.S. DEPARTMENT OF THE INTERIOR 5 . Bureau of Land Management • 5-1 Bureau of Mines 5-29 Bureau of Reclamation 5-33 Minerals Management Service 5-37 • • National Park Service 5-45 U.S. Fish & Wildlife Service 5-51 U.S. Geological Survey 5-59 • • • • • • • • U.S. DEPT. OF TRANSPORTATION 6 Federal Highway Administration 6-1 INDEPENDENT AGENCIES Federal Emergency Management Agency 7-1 • • National Aeronautics & Space Administration 7-5 Tennessee Valley Authority 7-13

#### Data Product Keyword Matrix (cont.) **Data Category Keywords** Surface and Manmade Features Geographic names Fransmission lines Page Number **Topography** and cover Vegetation Land use Pipelines Ports Structures Railroads Contours Elevation Section/Chapter U.S. DEPARTMENT OF AGRICULTURE Agriculture Stabilization & Conservation Service Forest Service 1-5 Soil Conservation Service • 1-21 U.S. DEPARTMENT OF COMMERCE 2 Bureau of the Census 2-1 Bureau of Economic Analysis 2-31 Nat'l Environmental Satellite Data & Info. Service • • 2-35 • National Ocean Service • 2-85 National Weather Service 2-11 U.S. DEPARTMENT OF DEFENSE 3 Defense Mapping Agency • 3-1 U.S. DEPE OF HEALTH & HUMAN SERVICES Centers for Disease Control 4-1 U.S. DEPARTMENT OF THE INTERIOR 5 Bureau of Land Management • 5-1 **Bureau of Mines** 5-29 **Bureau of Reclamation** 5-33 Minerals Management Service 5-37 National Park Service 5-45 U.S. Fish & Wildlife Service 5-51 U.S. Geological Survey 5-59 • • • • lacksquare• U.S. DEPT. OF TRANSPORTATION б Federal Highway Administration 6-1 INDEPENDENT AGENCIES Federal Emergency Management Agency 7-1 National Aeronautics & Space Administration 7-5 Tennessee Valley Authority 7-13 •

| Agricultural Stabilization & Conservation Service |             |                    |                 |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|---------------------------------------------------|-------------|--------------------|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Data Product Keywords  Data Product               | Page Number | Aerial photography | Remotely sensed |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| Aerial Photography                                | 3           | •                  | •               |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                   |             |                    |                 |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                   | Ш           | L                  |                 |  |  |  |  |  |  |  |  |  |  |  |  |   | _ |
|                                                   | Ш           | _                  |                 |  |  |  |  |  |  |  |  |  |  |  |  | _ |   |
|                                                   |             |                    |                 |  |  |  |  |  |  |  |  |  |  |  |  |   | ╝ |



Agricultural Stabilization and Conservation Service

#### **Aerial Photography**

#### **Data Product Keywords**

Aerial photography, remotely sensed

#### Summary

Aerial photography is available from various types of film, (black-and-white, natural color, color-infrared) at scales from 1:6,000 up to 1:120,000. The precise visual information provided by aerial photography can be used in many ways. The myriad of applications include conservation practices, locating field boundaries, tax assessment, urban development, pollution studies, and watershed studies.

#### **Extent of Program**

**National** 

#### **Available Product Coverage**

Aerial photography is available for the conterminous United States, Hawaii and portions of Alaska. Contact the Sales Branch for details or for a comprehensive listing of available coverage.

#### Information Content

Coverage is currently available from 1950 to the present. Aall photography is flown vertical, so that rectified products can be produced. Rectification is accomplished by using an analytical aerotriangulation system which measures known points on a photograph and mathematically computes scale and tilt data necessary to correct the photography. The final rectified photography furnished maintains an accuracy greater than 99 percent for most cropland areas.

For the years 1950 to 1980, 1:20,000 and 1:40,000 scale black-and-white products are available. For the years 1980 to 1987, products from the National High Altitude Photography Program are available. Complete coverage at the 1:58,000 scale is available from color-infrared positive film. Both color and black-and-white reproductions can be made.

From 1987 on, photographic coverage is available at a scale of 1:40,000 from the National Aerial Photography Program in color-infrared or black-and-white exposures.

The ASCS also produces photographs for the Forest Service and the Soil Conservation Service. The scales vary from 1:6,000 to 1:120,000. Most Forest Service

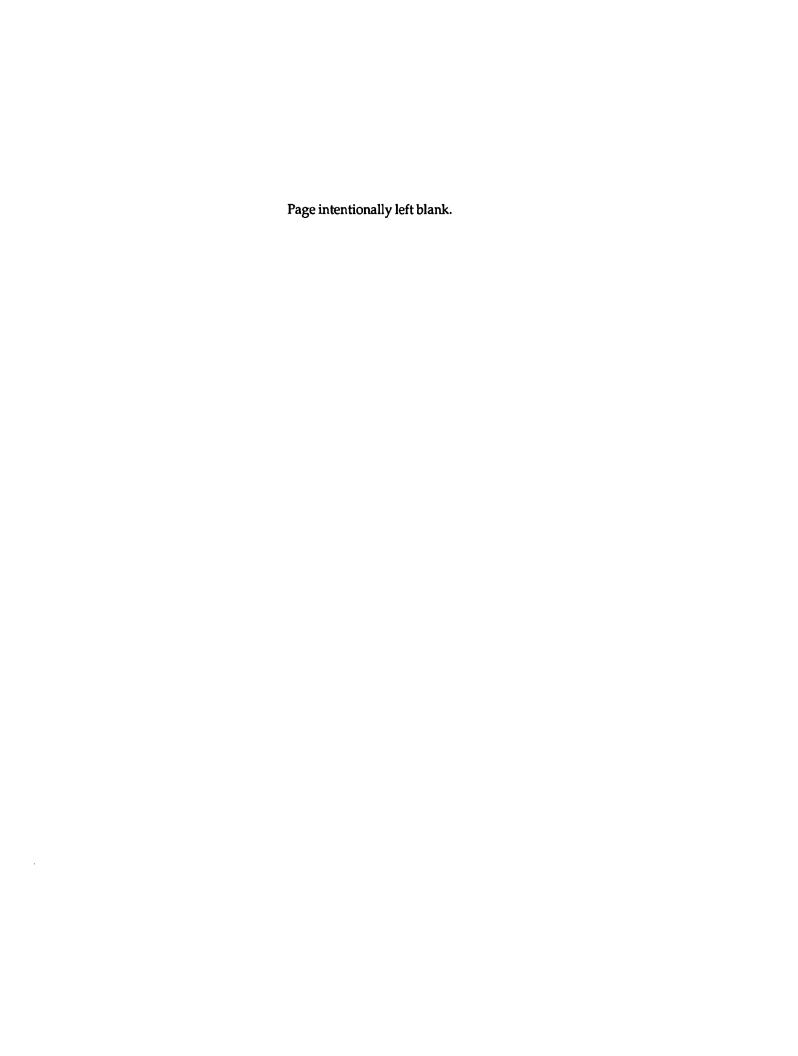
photography is produced in natural color; some is produced in color-infrared.

#### **Product Delivery Format**

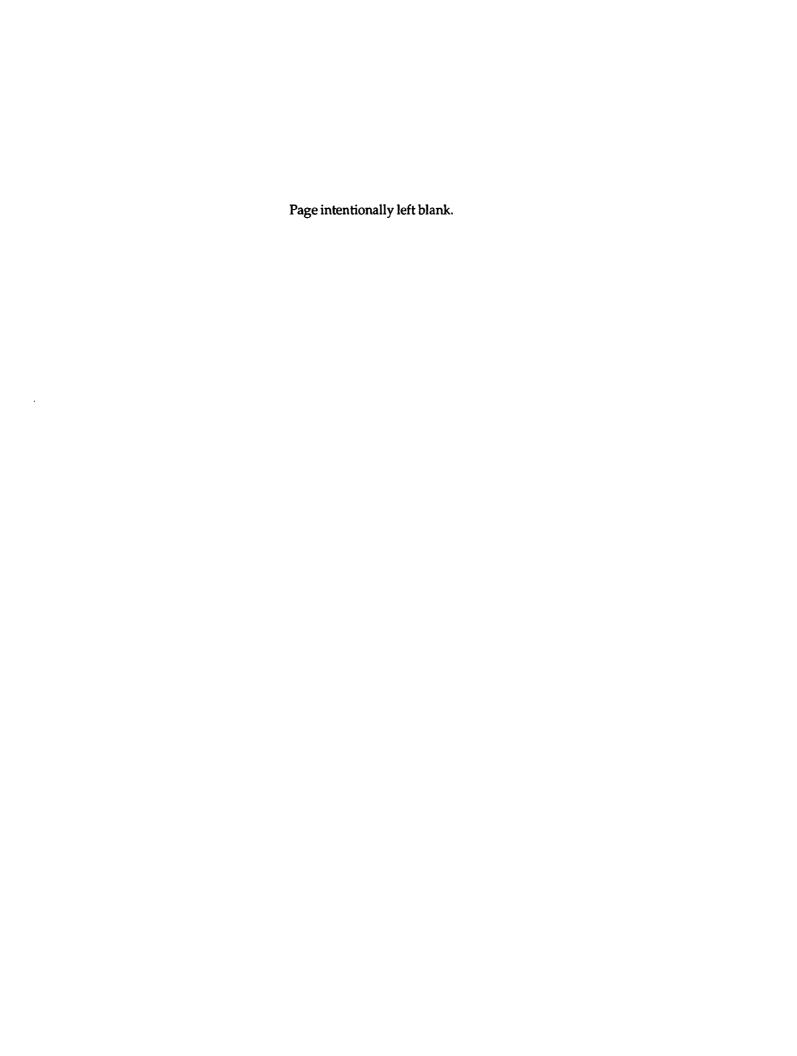
Photographs are available in different scales ranging from 1 inch = 5,000 feet to 1 inch = 200 feet. Photograph sizes range from 10- by 10-inch to 38- by 38-inch, on paper or film. Photographic enlargements are available in rectified format.

#### Technical, Ordering, and Availability Information

USDA ASCS Aerial Photography Field Office Sales Branch 2222 West 2300 South P.O. Box 30010 Salt Lake City, UT 84130-0010 Telephone: (801) 524-5856



| Forest Service                                    |             |                           |            |                   |           |                        |                  |             |            |               |            |       |                            |            |        |  |   |   |
|---------------------------------------------------|-------------|---------------------------|------------|-------------------|-----------|------------------------|------------------|-------------|------------|---------------|------------|-------|----------------------------|------------|--------|--|---|---|
| Data Product Keywords  Data Product               | Page Number | Administrative boundaries | Boundaries | County boundaries | Elevation | Federal land ownership | Geographic names | Hydrography | Hydrologic | Landownership | Recreation | Roads | Surface & manmade features | Topography | Travel |  |   |   |
| Forest Visitor Maps (Family of Maps)              |             | •                         | •          | •                 |           | •                      | •                | •           | •          | •             | •          | •     | •                          |            | •      |  |   | = |
| A Guide to Your National Forests (Family of Maps) |             | •                         | •          |                   |           | •                      |                  |             |            | •             | •          | •     | •                          |            |        |  |   | • |
| Pocket Visitor Guide (Family of Maps)             |             | •                         | •          | •                 |           | •                      | •                | •           | •          | •             | •          | •     | •                          |            |        |  |   |   |
| Regional or State Guide (Family of Maps)          |             | •                         | •          |                   |           | •                      | •                |             |            | •             | •          |       |                            |            |        |  | T |   |
| Wilderness and Special Area Maps                  |             |                           | •          |                   | •         | •                      |                  | •           | •          | •             | •          |       |                            | •          |        |  |   |   |



**Forest Service** 

## **Forest Visitor Maps (Family of Maps)**

#### **Data Product Keywords**

Administrative boundaries, boundaries, county boundaries, Federal land ownership, geographic names, hydrography, hydrologic, land ownership, recreation, roads, surface and manmade features, travel, travel accessibility

#### **Summary**

The Forest Visitor Map provides detailed information about a National Forest and/or National Grassland. It is intended for use by the Forest visitor and those interested in specific activities. The map shows a variety of recreational opportunities available on National Forests. The travel management philosophy of the Forest is included on the map.

#### **Extent of Program**

National

#### **Available Product Coverage**

Available for all National Forests and National Grasslands.

#### **Information Content**

The Forest Visitor Map covers an entire National Forest, National Grassland or a subdivision of a National Forest (general, such as north, south, east and west; or administrative divisions) and contains long-term (3 to 4 years) travel management information. This map is at a scale of 1:126,720 or metric 1:100,000. The map scale may be reduced to 1:253,440 when necessary. The Forest Visitor Map portrays information concerning the interstate and intrastate highway systems, boundaries, hydrography, Forest Supervisor and Ranger District office locations, recreation sites, and land ownership. The inclusion of Travel Management information detailing travel opportunities and restrictions is mandatory on all Forest Visitor Maps.

Many maps will show a publication date; they are revised on a 7-year cycle.

#### **Product Delivery Format**

The Forest Visitor Map is printed on standard map stock and on polyfilm.

#### Technical, Ordering, and Availability Information

Maps are obtained through the Public Affairs Office or the information desk at each Regional Office, Forest Supervisor Office, and District Ranger Office. The maps are provided to the public for a nominal fee.

Washington Office:
Public Affairs Office
U.S. Department of Agriculture
Forest Service
P.O. Box 96090
Washington, D.C. 20090-6090
Telephone: (202) 447-3957

Regional Offices: Northern Region Federal Building 200 East Broadway Street P.O. Box 7669 Missoula, MT 59807 Telephone: (406) 329-3511

Intermountain Region Federal Building 324 25th Street Ogden, UT 84401

Telephone: (801) 625-5354

Southern Region 1720 Peachtree Road NW Atlanta, GA 30367

Telephone: (404) 347-4191

Rocky Mountain Region
11177 West Eighth Avenue

P.O. Box 25127 Lakewood, CO 80255 Telephone: (303) 236-9431 Pacific Southwest Region 630 Sansome Street

San Francisco, CA 94111 Telephone: (415) 556-0122

Eastern Region
310 West Wisconsin Avenue
Room 500

Milwaukee, WI 53203 Telephone: (414) 291-3693 Southwestern Region
Federal Building
517 Gold Avenue SW
Albuquerque, NM 87102
Telephone: (505) 842-3292
Pacific Northwest Region
333 SW First Street
Portland, OR 97204
Telephone: (503) 221-2877

Alaska Region Federal Office Building 709 West Ninth Street P.O. Box 21628 Juneau, AK 99802 Telephone: (907) 586-8863



#### ROAD LEGEND Closed year long to motor vehicles, including highway vehicles in all cases, and motor bikes and all terrain vehicles (ATV's) in many cases. Check with local Ranger District office for information on specific roads. Posted at the gate or barrier as to what type of vehicle is restricted. Open to foot, horse, and bicycle traffic. Many of these roads are open to snowmobiles traveling over snow. Part year restrictions on motorized use. Check with local Ranger District office for information on specific roads. These restrictions posted at the gate or barrier. Restrictions typically are during the fall hunting seasons, or during winter and spring months to minimize disturbance to wildlife and road surfaces. Many of these roads are open to snowmobiles traveling over snow. Open year long to motorized traffic. Most of these roads are not plowed when snow covered - check with local Ranger District office for updated conditions. TRAIL LEGEND Nonwilderness trails closed year long to motorized traffic, including highway vehicles in all cases, and motor bikes and ATV's in most cases. Check with local Ranger District office for information on specific trails. Posted at the trailhead as to the type of traffic prohibited. Open to foot, horse, and bicycle traffic. Outside of wilderness, trails open year long to motorized traffic such as trail bikes and ATV's. Closed to highway or four wheel drive vehicles. Within wilderness, a motorized and mechanical equipment is prohibited year long. This includes wheeled carts, hang gliders, and bicycles, as well as all forms of motorized equipment and vehicles. AREA LEGEND Wilderness closed yearlong to motor vehicles. All motorized and mechanical equipment is prohibited year long. This includes wheeled carts, hang gliders, and bicycles, as well as all forms of motorized equipment and vehicles. Areas closed year long to motor vehicles, including snowmobiles. Refer to road and trail legend to determine which roads and trails within these areas are open or restricted to motor vehicles. Areas closed year long to motor vehicles, except there are no restrictions on snowmobiles operating on snow. Refer to road and trail legend to determine which roads and trails within these areas are open or restricted to motor vehicles. Areas closed December 1 - May 15 to motor vehicles, including snowmobiles Refer to road and trail legend to determine which roads and trails within these areas are open or restricted to motor vehicles. Areas open to all motor vehicles. Refer to road and trail legend to determine which roads and trails within these areas are open or restricted to motor vehicles Game Unit Boundary - Refer to Idaho Department of Fish & Game regulations for official written descriptions.

A sample road, trail, and area legend and information block from the Nez Perce Forest Visitor Map.



A portion of the Nez Perce Forest Visitor Map in Idaho showing a representative level of map detail.

**Forest Service** 

## A Guide to Your National Forests (Family of Maps)

#### **Data Product Keywords**

Administrative boundaries, boundaries, Federal land ownership, land ownership, recreation, roads, surface and manmade features

#### **Summary**

A Guide To Your National Forests is available to individuals who request information about the National Forests and require a general overview. This map serves as an introduction to the National Forests and Grasslands and as a source listing for further information.

#### **Extent of Program**

National

#### **Available Product Coverage**

National.

#### Information Content

A Guide to Your National Forests is a generalized map of the National Forest lands. The map was derived from the U.S. Geological Survey National Atlas of the United States of America at a scale of 1:7,500,000. The geographic coverage of this map is the entire conterminous United States, Alaska, Hawaii, and Puerto Rico. The scale has been reduced and the map modified by the Forest Service. The map content includes National Forests and Grasslands, Forest Service offices such as Regional Offices, Forest and Range Experiment Stations, Forest Products Laboratory, Grey Towers National Historic Landmark, and State and Private Forestry Area headquarters. The map contains the location of major cities, drainages, the Interstate Highway System, and other important roads, Forest Service Regional boundaries and State boundaries. The map educates the user concerning the three main areas of the Forest Service – the National Forest System, Research and State and Private Forestry. The map includes a brief description of each region and describes information contained within the map. The map contains addresses and phone numbers of the Washington Office, Regional Offices, Forests, Grasslands, Stations and Areas.

Changes to the information which appears in the Guide are made as needed at the time of reprint.

#### **Product Delivery Format**

Paper

#### Technical, Ordering, and Availability Information

This map is available free of charge through the Public Affairs Offices at the Washington Office and Regional Offices. Some distribution will be done by the Forests and Ranger Districts. Contact:

Regional Offices:

Northern Region

Federal Building

200 East Broadway Street

P.O. Box 7669

Missoula, MT 59807

Telephone: (406) 329-3511

Intermountain Region

Federal Building

324 25th Street

Ogden, UT 84401

Telephone: (801) 625-5354

Southern Region

1720 Peachtree Road NW

Atlanta, GA 30367

Telephone: (404) 347-4191

Rocky Mountain Region

11177 West Eighth Avenue

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Lakewood, CO 80255

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Pacific Southwest Region

630 Sansome Street

San Francisco, CA 94111

Telephone: (415) 556-0122

Eastern Region

310 West Wisconsin Avenue

**Room 500** 

Milwaukee, WI 53203

Telephone: (414) 291-3693

Southwestern Region

Federal Building

517 Gold Avenue SW

Albuquerque, NM 87102

Talankana (505) 842 2202

Pacific Northwest Region 333 SW First Street Portland, OR 97204 Telephone: (503) 221-2877 Alaska Region Federal Office Building 709 West Ninth Street P.O. Box 21628 Juneau, AK 99802 Telephone: (907) 586-8863

**Forest Service** 

## **Pocket Visitor Guide (Family of Maps)**

#### **Data Product Keywords**

Administrative boundaries, boundaries, county boundaries, Federal land ownership, geographic names, hydrography, hydrologic, land ownership, recreation, roads, surface and manmade features

#### Summary

The Pocket Visitor Guide provides a small-scale, generalized map of an individual National Forest for those seeking information about the Forest.

#### **Extent of Program**

Individual National Forests; limited availability.

#### **Information Content**

The Pocket Visitor Guide is a generalized small-scale map of the forest that is formatted to accommodate a smaller fold size. The Pocket Visitor Guide includes the location of cities and towns, boundary lines, primary, secondary and significant roads accessing Forest Service facilities or points of interest, major lakes and streams, all lands administered by the Forest Service, recreation opportunities, Forest Supervisor's Offices, District Rangers Stations, and Visitor Centers.

The Pocket Visitor Guide is updated on a regular basis.

#### **Product Delivery Format**

The Guide is available on standard map stock.

#### Technical, Ordering, and Availability Information

The Guide is available through the Regional Public Affairs Office or at the Forest Supervisor or Ranger District Offices. This is an optional map and may not be available Forest Service-wide. The map is provided to the public free of charge.

Regional Offices: Northern Region Federal Building 200 East Broadway Street P.O. Box 7669 Missoula, MT 59807 Telephone: (406) 329-3511 Intermountain Region Federal Building 324 25th Street Ogden, UT 84401 Telephone: (801) 625-5354 Southern Region 1720 Peachtree Road NW Atlanta, GA 30367 Telephone: (404) 347-4191 Rocky Mountain Region 11177 West Eighth Avenue P.O. Box 25127 Lakewood, CO 80255 Telephone: (303) 236-9431 Pacific Southwest Region 630 Sansome Street

630 Sansome Street
San Francisco, CA 94111
Telephone: (415) 556-0122
Eastern Region

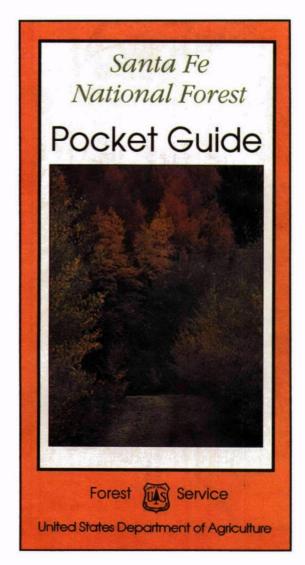
310 West Wisconsin Avenue Room 500 Milwaukee, WI 53203 Telephone: (414) 291-3693

Southwestern Region
Federal Building
517 Gold Avenue SW
Albuquerque, NM 87102
Telephone: (505) 842-3292

Pacific Northwest Region 333 SW First Street Portland, OR 97204 Telephone: (503) 221-2877

Alaska Region
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709 West Ninth Street
P.O. Box 21628
Juneau, AK 99802
Telephone: (907) 586-8863

## Recreation Opportunity Sites

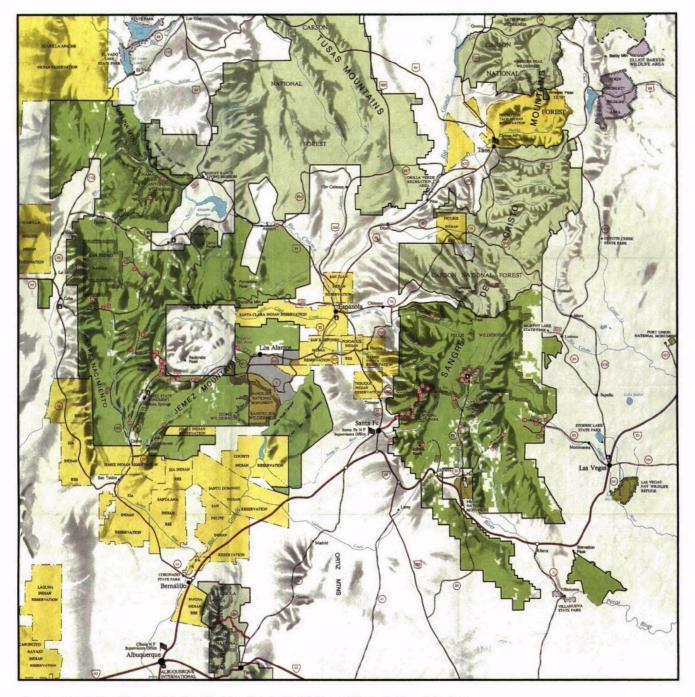


| Site No. | Site Name         | Elevation | Location on<br>Map | Facilities     | Number of Family Units | Season<br>of Use   | Stay Limit<br>Days | Group<br>Person Limit |  |  |  |  |  |
|----------|-------------------|-----------|--------------------|----------------|------------------------|--------------------|--------------------|-----------------------|--|--|--|--|--|
| 1        | Rio Puerco        | 8,200     | B-4                | <b>(1)</b>     | 6                      | May-Oct            | 14                 |                       |  |  |  |  |  |
| 2        | Clear Creek       | 8,500     | B-5                | <b>(1) (4)</b> | 10                     | May-Oct            | 14                 |                       |  |  |  |  |  |
| 3        | Rio Las Vacas     | 8,200     | B-5                | 00 🗸 🛥         | 6                      | May-Oct            | 14                 |                       |  |  |  |  |  |
|          | Seven Springs     | 8,000     | B-5                | <b>(1)</b>     | 7                      | May-Oct            | 14                 |                       |  |  |  |  |  |
| 5        | Fenton Lake       | 8,000     | B-5                | (State)        | 15                     | May-Oct            | 14                 |                       |  |  |  |  |  |
| 6        | San Antonio       | 7,800     | C-5                |                | 36                     | May-Oct            | 14                 |                       |  |  |  |  |  |
| 7        | Horseshoe Springs | 7,800     | C-5                | <b>(1)</b>     | 3                      | May-Oct            | 14                 |                       |  |  |  |  |  |
| 8        | La Cueva          | 7,700     | C-5                | 00开色           | 9                      | May-Oct            |                    |                       |  |  |  |  |  |
| 9        | Redondo           | 8,100     | C-5                |                | 59                     | May-Oct            | 14                 |                       |  |  |  |  |  |
| 10       | Dark Canyon       | 7,500     | C-5                | <b>(1)</b>     | 2                      | May-Oct            |                    |                       |  |  |  |  |  |
| 11       | Indian Head       | 7,100     | C-5                | <b>(1)</b>     | 4                      | May-Oct            | 200                |                       |  |  |  |  |  |
| 12       | Battleship Rock   | 7,500     | C-5                | <b>100 77</b>  | 37                     | Apr-Nov            |                    |                       |  |  |  |  |  |
| 13       | Jemez Falls       | 7,900     | C-6                | MA&■G          | 52                     | May-Oct            | 14                 |                       |  |  |  |  |  |
| 1        | East Fork         | 8,100     | C-5                | <b>1</b>       | 40                     | Jan-Dec            |                    |                       |  |  |  |  |  |
| 15       | Las Conchas       | 8,400     | C-6                | (I) A          | 8                      | May-Oct            | 14                 |                       |  |  |  |  |  |
| 16       | Lower Jemez       | 5,800     | C-6                |                | (To I                  | e Compleated 6/92) |                    |                       |  |  |  |  |  |
| 17       | Paliza            | 7,500     | C-6                | O A T = G      | 20                     | May-Oct            | 14                 | 50                    |  |  |  |  |  |
| 18       | Borrego Mesa      | 8,400     | F-5                | <b>11</b>      | 8                      | May-Oct            | 14                 |                       |  |  |  |  |  |
| 19       | Jacks Creek       | 8,900     | G-6                | MAVG           | 30                     | May-Oct            | 14                 | 80                    |  |  |  |  |  |

| Site No. | Site Name      | Elevation | Location on<br>Map | Facilities               | Number of<br>Family Units | Season<br>of Use | Stay Limit<br>Days | Group<br>Person Limit |
|----------|----------------|-----------|--------------------|--------------------------|---------------------------|------------------|--------------------|-----------------------|
| 20       | Iron Gate      | 9,400     | G-6                | On A =                   | 15                        | May-Oct          | 14                 |                       |
| 21       | Panchuela      | 8,300     | G-6                |                          | 6                         | May-Oct          | 14                 |                       |
| 22       | Cowles         | 8,200     | G-6                | OD # &                   | 9                         | May-Oct          | 1                  |                       |
| 23       | Aspen Basin    | 10,300    | G-6                | (I) A                    | 10                        | Jan-Dec          | 14                 |                       |
| 24       | Aspen Vista    | 10,000    | G-6                | <b>00</b> #              | 10                        | Jan-Dec          |                    |                       |
| 25       | Big Tesuque    | 9,700     | F-6                | <b>(1)</b>               | 7                         | May-Oct          | 14                 |                       |
| 26       | Holy Ghost     | 8,200     | G-6                | MADE G                   | 25                        | May-Oct          | 14                 | 40                    |
| 27       | Little Tesuque | 8,300     | F-6                | OD # &                   | 10                        | Mar-Nov          |                    |                       |
| 28       | Black Canyon   | 8,400     | F-6                |                          | 40                        | May-Oct          | 14                 |                       |
| 29       | Winay Bridge   | 7,400     | G-6                | <b>11 27</b>             | 7                         | May-Oct          |                    |                       |
| 30       | Field Tract    | 7,400     | G-6                | OD A T =                 | 16                        | May-Oct          | 14                 |                       |
| 31       | Glorieta       | 10,200    | G-6                | <b>11)</b>               | 5                         | May-Oct          | 14                 |                       |
| 32       | Dalton         | 7,200     | G-7                | 40 开                     | 8                         | May-Oct          | 100                | TO.                   |
| 33       | Manzanares     | 8,200     | G-6                | <b>1</b>                 | 2                         | May-Oct          | 14                 |                       |
| 34       | Big Pine       | 7,800     | H-6                | dt) 77                   | 6                         | May-Oct          | 100                |                       |
| 35       | Baker Flat     | 7,800     | H-6                | <b>11) 23</b>            | 5                         | May-Oct          |                    |                       |
| 36       | Oak Flats      | 7,800     | H-6                | <b>100</b> <del>77</del> | 7                         | May-Oct          | 1                  |                       |
| 37       | El Porvenir    | 7,600     | H-6                |                          | 19                        | May-Oct          |                    |                       |
| 38       | E.V.Long       | 7,500     | G-6                | O A U                    | 21                        | May-Oct          | 14                 | 10                    |

| Fac | ilities Legend   |
|-----|------------------|
| 1   | Restrooms        |
|     | Campground       |
| #   | Picnic/Rest Area |
| U   | Drinking Water   |
| G   | Group Area       |
| 6   | Barrier Free     |
| -   | Access           |

A sample of the recreation opportunity information on a Pocket Visitor Guide; Santa Fe National Forest, New Mexico.



A representative Pocket Visitor Guide; Santa Fe National Forest, New Mexico.

**Forest Service** 

## Regional or State Guide (Family of Maps)

#### **Data Product Keywords**

Administrative boundaries, boundaries, Federal land ownership, geographic names, land ownership, recreation

#### **Summary**

This guide provides maps for individuals visiting a particular part of the country who need a small-scale map to plan their visit. It provides an overview of the region or State and includes major points of interest and recreation opportunities.

#### **Extent of Program**

National

#### **Available Product Coverage**

National, by region and/or State.

#### Information Content

The maps in these guides cover an entire region or a portion of one or more regions. They show the location of land areas administered by the Forest Service as well as other Federal agencies which may be of interest to the visitor. The map is produced at various scales based on the needs of the region. Other Federal or State governmental agencies and cooperating associations may assist with these maps.

The information provided in these maps is updated as needed at the time of reprint.

#### **Product Delivery Format**

The maps are available on standard map stock paper.

#### Technical, Ordering, and Availability Information

Regional/State Guides are available from the Public Affairs Office of each Region. The Guides are available free of charge.

Regional Offices: Northern Region Federal Building 200 East Broadway Street P.O. Box 7669 Missoula, MT 59807 Telephone: (406) 329-3511 Intermountain Region
Federal Building
324 25th Street
Ogden, UT 84401
Telephone: (801) 625-5354
Southern Region

1720 Peachtree Road NW Atlanta, GA 30367

Telephone: (404) 347-4191 Rocky Mountain Region

11177 West Eighth Avenue P.O. Box 25127 Lakewood, CO 80255

Telephone: (303) 236-9431

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630 Sansome Street
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Telephone: (415) 556 0122

Telephone: (415) 556-0122

Eastern Region
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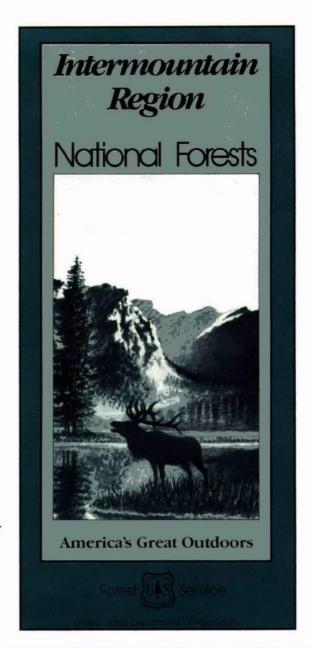
Room 500

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517 Gold Avenue SW
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Alaska Region Federal Office Building 709 West Ninth Street P.O. Box 21628 Juneau, AK 99802

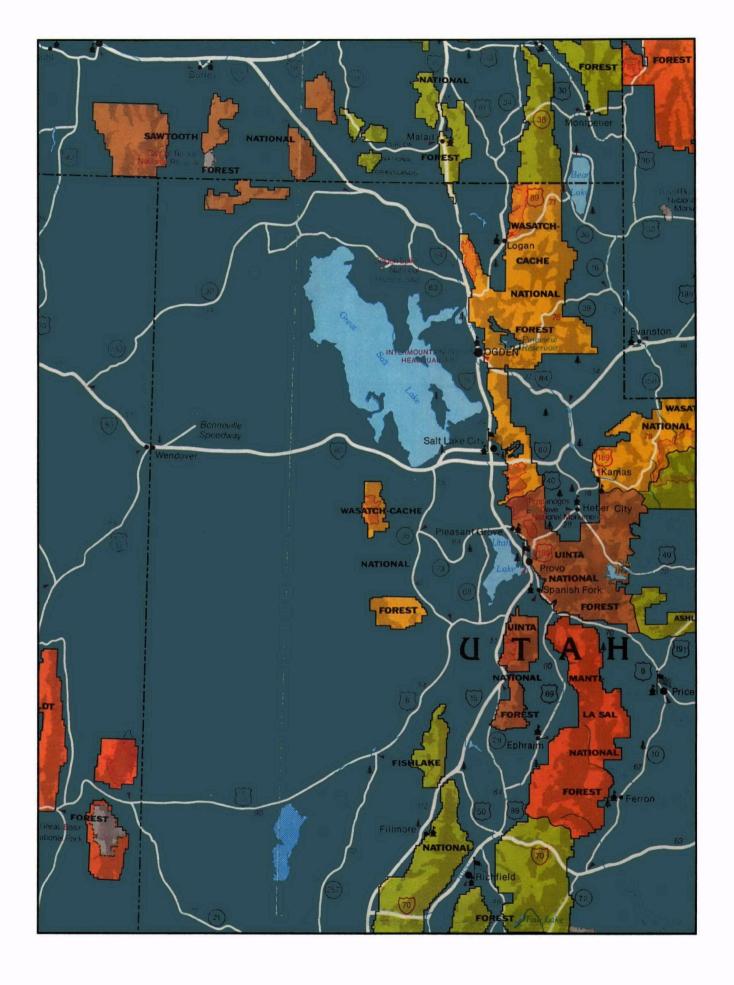
Telephone: (907) 586-8863



This page: An example of the legend found on Regional Guides; Intermountain Region.

Following page: A portion of a Regional Guide to the Intermountain Region covering Utah, parts of Idaho, Wyoming and Nevada.





Forest Service

## Wilderness and Special Area Maps

#### **Data Product Keywords**

Administrative boundaries, boundaries, elevation, Federal land ownership, hydrography, hydrologic, land ownership, recreation, topography, wilderness

#### **Summary**

The Wilderness or Special Area Maps provide information on wildernesses, National Scenic Trails, Wild and Scenic Rivers, Geologic, Scenic, and National Recreation Areas.

#### **Extent of Program**

National

#### **Available Product Coverage**

Available for most Wilderness and Special Areas.

#### **Information Content**

The Special Area Maps coincide with USGS 7.5-minute quadrangle maps, but may conform to other geographic lines or to topographic or cultural features. Because of the wide variety of needs and interests found within special areas, there is no specific standard scale for the Wilderness and Special Area Maps. These maps are any combination of various functional layers necessary to portray the specific special area. The maps include entry points and parking areas, trails, springs, hydrography, National Forest land ownership, topography, emergency information and use restrictions.

The Wilderness or Special Areas include enough contiguous area to show essential access routes and management areas. The map update cycle is determined by the Forest.

#### **Product Delivery Format**

Wilderness or Special Area maps are available on standard map stock.

#### Technical, Ordering, and Availability Information

These maps are available for a minimal fee through the Regional and Forest Public Affairs Offices and at District Ranger Stations.

Regional Offices: Northern Region Federal Building 200 East Broadway Street P.O. Box 7669 Missoula, MT 59807

Telephone: (406) 329-3511 Intermountain Region Federal Building 324 25th Street

324 25th Street
Ogden, UT 84401
Telephone: (801) 625

Telephone: (801) 625-5354

Southern Region

1720 Peachtree Road NW Atlanta, GA 30367

Telephone: (404) 347-4191 Rocky Mountain Region

11177 West Eighth Avenue

P.O. Box 25127 Lakewood, CO 80255 Telephone: (303) 236-9431

Pacific Southwest Region 630 Sansome Street San Francisco, CA 94111 Telephone: (415) 556-0122

Eastern Region

310 West Wisconsin Avenue

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Milwaukee, WI 53203 Telephone: (414) 291-3693

Southwestern Region Federal Building 517 Gold Avenue SW Albuquerque, NM 87102 Telephone: (505) 842-3292

Pacific Northwest Region 333 SW First Street Portland, OR 97204 Telephone: (503) 221-283

Telephone: (503) 221-2877

Alaska Region

Federal Office Building 709 West Ninth Street P.O. Box 21628

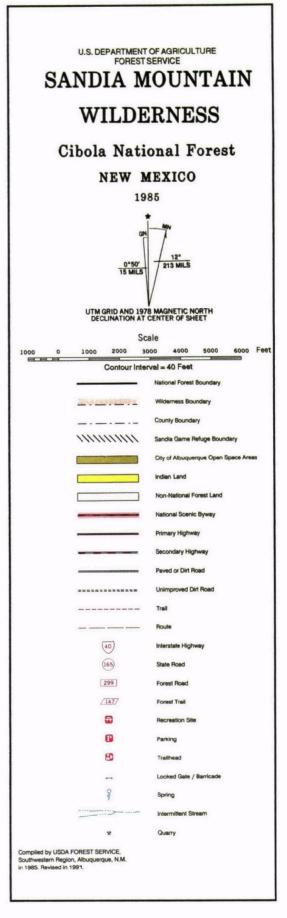
P.O. Box 21628 Juneau, AK 99802

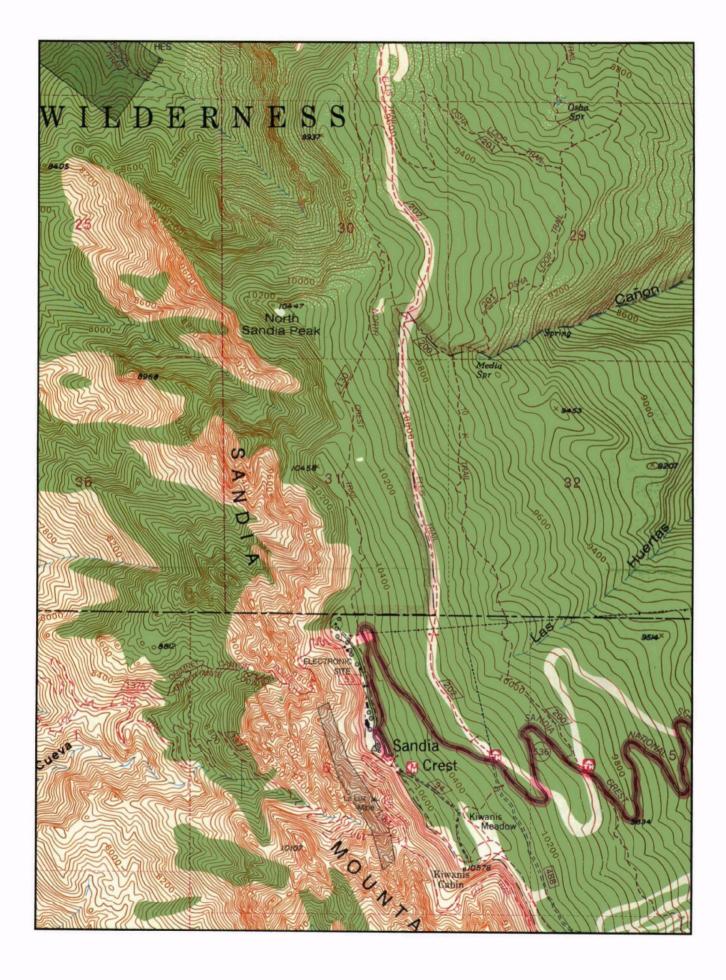
Telephone: (907) 586-8863



This page: A sample of the information found on wilderness maps; Sandia Mountain Wilderness.

Following page: A portion of the wilderness map which highlights an area of the Sandia Wilderness located in the Southwestern Region outside of Albuquerque, NM.





| Soil Conservation Service                                                                                                         |        |             |            |                  |           |         |       |            |       |  |  |  |  |   |      |          |   |
|-----------------------------------------------------------------------------------------------------------------------------------|--------|-------------|------------|------------------|-----------|---------|-------|------------|-------|--|--|--|--|---|------|----------|---|
| Data Product Keywords  Data Product  Hydrologic Units Geographic Database  Nat'l Resources Inventory (NRI), Primary Sampling Unit |        | Hydrography | Hydrologic | Hydrologic units | and cover | and use | Soils | Subsurface | Water |  |  |  |  |   |      |          |   |
| Hudrologic I Inits Geographic Database                                                                                            | Page 3 |             |            |                  | =         |         | 0,    | 0)         |       |  |  |  |  |   |      |          | = |
|                                                                                                                                   |        |             |            | •                |           |         | _     | _          | _     |  |  |  |  | - | <br> | $\dashv$ | _ |
| (PSU) Geographic Database                                                                                                         |        |             |            |                  | •         |         |       |            |       |  |  |  |  |   |      |          |   |
| National Soil Geographic Database (NATSGO)                                                                                        |        |             |            |                  |           |         | •     | •          |       |  |  |  |  |   |      |          |   |
| Soil Survey Geographic Database (SSURGO)                                                                                          |        |             |            |                  |           |         | •     | •          |       |  |  |  |  |   |      |          |   |
| State Soil Geographic Database (STATSGO)                                                                                          | 33     |             |            |                  |           |         | •     | •          |       |  |  |  |  |   |      |          |   |



Soil Conservation Service

# **Hydrologic Units Geographic Database**

### **Data Product Keywords**

Hydrography, hydrologic, hydrologic units, hydrology, river basins, watersheds

#### **Summary**

Hydrologic units being mapped and digitized by the Soil Conservation Service (SCS) define the locations of river basins, watersheds and sub-watersheds. Areas being digitized include the existing 8-digit USGS hydrologic units and SCS 11-digit (approximately 250,000 acres in size) and 14-digit (approximately 10,000 to 40,000 acres in size).

### **Extent of Program**

**National** 

### Available Product Coverage

Hydrologic unit data is available for selected counties and areas throughout the United States.

The mapping and digitizing of hydrologic units to national standards has begun in selected areas of the country. A minimal amount of data is available at this time.

#### Information Content

Digitizing is done by line segment (vector) format in accordance with SCS digitizing standards and specifications. Standards are also established for mapping the hydrologic units (HUCs). HUCs are being mapped and digitized on either the 1:24,000 or 1:100,000 USGS quadrangle maps.

#### **Product Delivery Format**

Hydrologic unit data will be available in the USGS Digital Line Graph Optional Distribution format.

Distribution media is normally 9-track magnetic tape at 1,600 bpi. Cost for the distribution of digital data has not been established yet.

### Technical, Ordering, and Availability Information

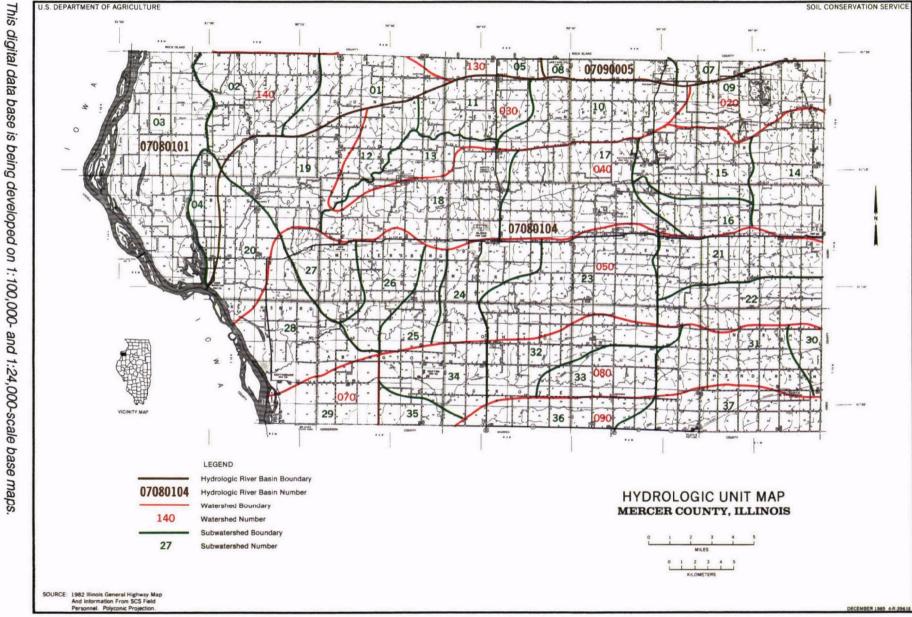
To obtain hydrologic unit digital data contact:

National Cartographic and Geographic Information Systems Center USDA – Soil Conservation Service P.O. Box 6567 Fort Worth, TX 76115

Telephone: (817) 334-5559

To obtain technical and programmatic information about hydrologic units, contact:

Soil Conservation Service Resource Inventory Division P.O. Box 2890 Washington, D.C. 20013 Telephone: (202) 720-5424



Soil Conservation Service

# National Resources Inventory (NRI), Primary Sampling Unit (PSU) Geographic Database

### **Data Product Keywords**

Land cover, land use, soils, subsurface, water, land treatment, natural resources, resource inventory, soil erosion, vegetative condition

### **Summary**

The Soil Conservation Service (SCS) conducts a national resource inventory of non-Federal lands on a 5-year cycle. Information is collected on soil characteristics, land cover and use, erosion, land treatment, conservation treatment needs, vegetative condition, and potential for cropland conversion. The National Resource Inventory (NRI) is the Federal Government's principal source of information on the status, condition, and trends of the Nation's soil, water and related natural resources.

### **Extent of Program**

National

### **Available Product Coverage**

1982 and 1987 attribute data are available for all of the United States. Attribute and spatial data for the 1992 NRI will be available in early 1994.

#### Information Content

The SCS conducted NRIs in 1982 and 1987. Sample points will be digitized for the first time beginning with the 1992 NRI. The 1982 and 1987 data are georeferenced by State, county, Major Land Resource Area and 8-digit hydrologic unit code.

The inventory is based on a scientifically designed random sample of the United States. Data collection sites consist of approximately 300,000 Primary Sampling Units (PSUs) and 800,000 sample points. PSUs range in size from 40 acres to 640 acres, but are typically 160 acres. Each PSU usually has three sample points randomly placed within them. Over 100 pieces of information are collected for each sample point.

The base map used for compiling and digitizing the PSU sample points is either a 1:24,000- or 1:100,000-scale USGS quadrangle map. PSUs digitized from the quadrangle maps are merged and archived as countywide data sets. All county data sets are merged and archived as a Statewide data set.

#### **Product Delivery Format**

Digital data is stored in a Modified Digital Line Graph (DLG-3) Optional format. A flat ASCII file provides the alphanumeric attributes and accompanies the DLG-3 data file. Data is archived in UTM and a Lambert Conic Conformal projection. Attribute data for 1982 and 1987 are available as a flat ASCII file.

### Technical, Ordering, and Availability Information

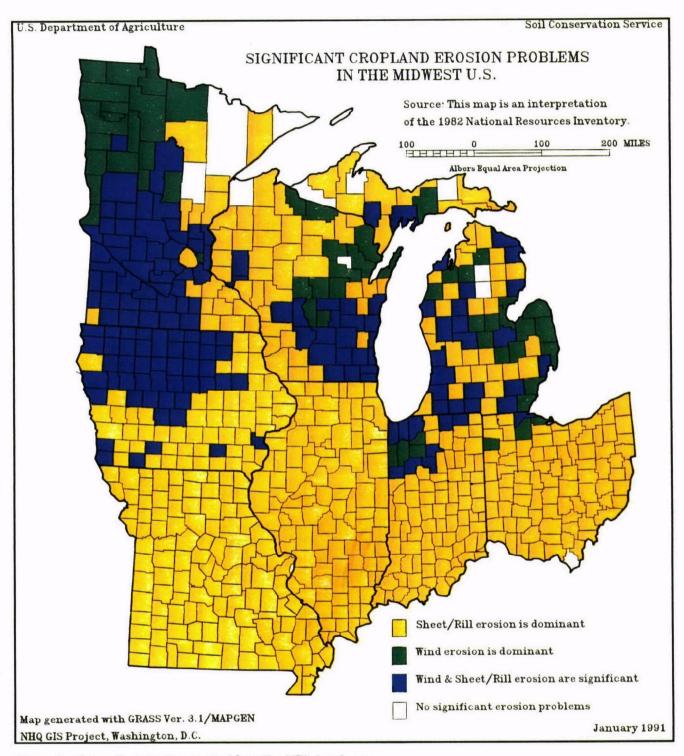
To obtain NRI PSU digital and attribute data contact:

National Cartographic and Geographic Information Systems Center USDA – Soil Conservation Service P.O. Box 6567 Fort Worth, TX 76115

Telephone: (817) 334-5559 FAX: (817) 334-5290

To obtain technical information about the use and availability of 1982 and 1987 NRI data, contact:

Soil Conservation Service Resource Inventory Division P.O. Box 2890 Washington, D.C. 20013 Telephone: (202) 720-4530



Example of map that can be created from the NRI data base.

Soil Conservation Service

# National Soil Geographic Database (NATSGO)

#### **Data Product Keywords**

Soils, subsurface, land resource regions, major land resource area

### Summary

The soil boundaries of the National Soil Geographic Database (NATSGO) were formed from the major land resource area (MLRA) and land resource region (LRR) boundaries. The MLRA and LRR boundaries were developed from State general soil maps. The NATSGO map was digitized at a scale of 1:7,500,000. The digital data is designed to be used for national, regional, and multi-State resource appraisal, planning, and monitoring.

#### **Extent of Program**

National

### **Available Product Coverage**

A single data unit is distributed for the United States and the Caribbean area. A hard copy (color) of the NATSGO data is available.

#### Information Content

Digitizing is done by line segment (vector) format. The base map used is a 1970 Census Bureau State and county digital data base, Albers Equal Area projection.

Map unit composition for NATSGO was determined by sampling done as part of the 1982 National Resources Inventory. Sample data were expanded for the MLRAs, with sample design being statistically significant to State parts of the MLRAs.

NATSGO is linked to a Soil Interpretations Record attribute data base through the NRI data base. The soil mapping units contain many components. Soil interpretative maps can be developed to reflect the percentage of the map unit having the queried characteristics. For example, two soil interpretations that can be made from the data bases are percentage of soils with less than 20 inches to bedrock and occurrence of hydric soils.

### **Product Delivery Format**

NATSGO data is available in either the USGS Digital Line Graph (DLG-3) Optional Distribution Format or the SCS Geographic Exchange Format. Distribution media for NATSGO data is 9-track magnetic tape at 1,600 bpi. The cost of spatial and attribute data for complete U.S. coverage is \$500.

The Soil Interpretations Record attribute data is stored in a relational data base. This format is nonfixed length, tab delimited, ASCII file and distributed on magnetic or cartridge tape.

### Technical, Ordering, and Availability Information

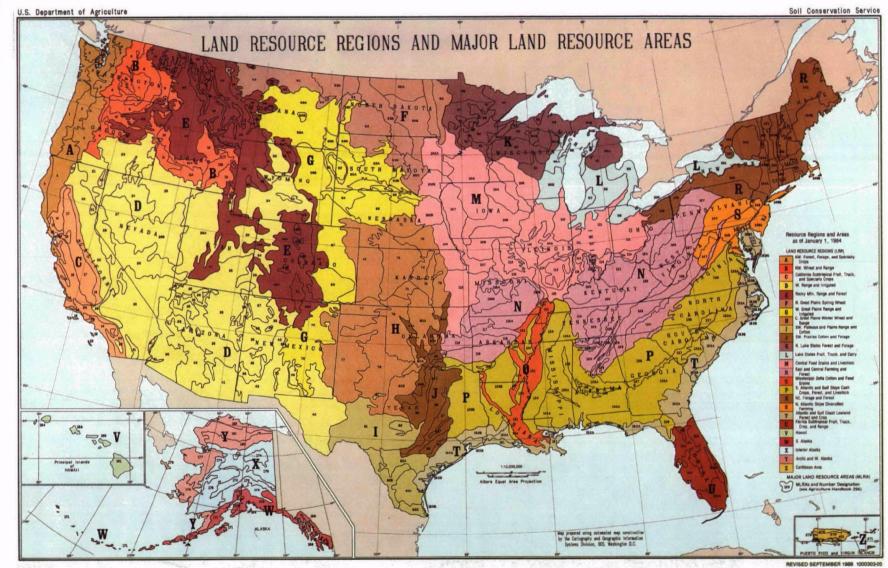
To obtain NATSGO soil spatial and attribute data contact:

National Cartographic and Geographic Information Systems Center USDA – Soil Conservation Service P.O. Box 6567 Fort Worth, TX 76115

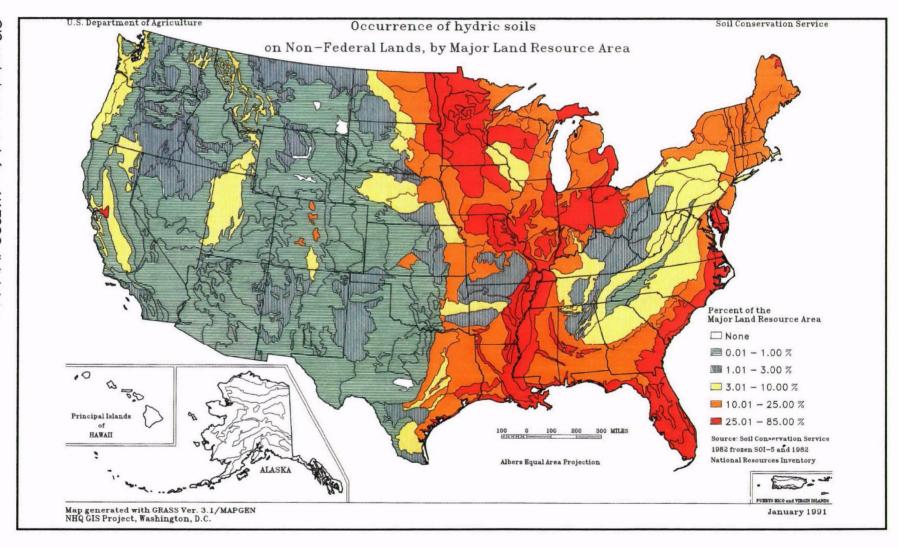
Telephone: (817) 334-5559 FAX: (817) 334-5290

To obtain technical information about the use of soils data, please contact an SCS State Soil Scientist in your State or contact:

National Soil Survey Center USDA – Soil Conservation Service Federal Building, Room 152 100 Centennial Mall, North Lincoln, NE 68508 Telephone: (402) 437-5423



This map is also called a major land resource area map (MLRA).



Soil Conservation Service

# Soil Survey Geographic Database (SSURGO)

#### **Data Product Keywords**

Soils, subsurface, soil survey

### Summary

Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic Database (SSURGO). Mapping scales range from 1:12,000 to 1:31,680; SSURGO is the most detailed level of soil mapping done by the Soil Conservation Service (SCS). SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships, and county natural resource planning and management. The user should be knowledgeable of soils data and their characteristics.

### Extent of Program

National

### Available Product Coverage

SSURGO data is available for selected counties and areas throughout the United States and its territories. A soil survey digitizing status map and list of surveys digitized is available.

#### Information Content

Digitizing is done by line segment (vector) format in accordance with SCS digitizing standards and specifications. The mapping bases used meet national map accuracy standards and are either orthophotoquads or 7.5-minute quadrangles. SSURGO data is collected and archived in 7.5-minute quadrangle units, and distributed as complete coverage for a county or area usually consisting of 10 or more quad units. Soil boundaries ending at quad neatlines are joined by computer to adjoining orthophotoquad maps to achieve an exact match.

SSURGO is linked to a Soil Interpretations Record attribute relational data base, which gives the proportionate extent of the component soils and their properties for each map unit. SSURGO contains one to three components. The Soil Interpretations Record data base includes over 25 soil, physical and chemical properties for approximately 18,000 soil series recognized in the United States. Information that can be queried from the data base includes available water capacity, soil reaction, salinity, flooding, water table, bedrock, and interpretations for septic tank limitations, engineering, cropland, woodland, and recreation development.

### **Product Delivery Format**

SSURGO data is available in either the USGS Digital Line Graph (DLG-3) Optional Distribution Format or the SCS Geographic Exchange Format. SCS soil map symbols (e.g. AbC) are not normally carried within the DLG-3 Optional Format, however these map symbols are made available as a unique ASCII file when SCS soils data are distributed in the DLG format.

The attribute data is stored in a relational data base. This format is nonfixed length, tab delimited, ASCII file and distributed on magnetic or cartridge tape.

Distribution media is normally 9-track magnetic tape at 1,600 bpi. The cost of spatial and attribute data for one county or soil survey area is \$500.

### Technical, Ordering, and Availability Information

To obtain SSURGO soil spatial and attribute data contact:

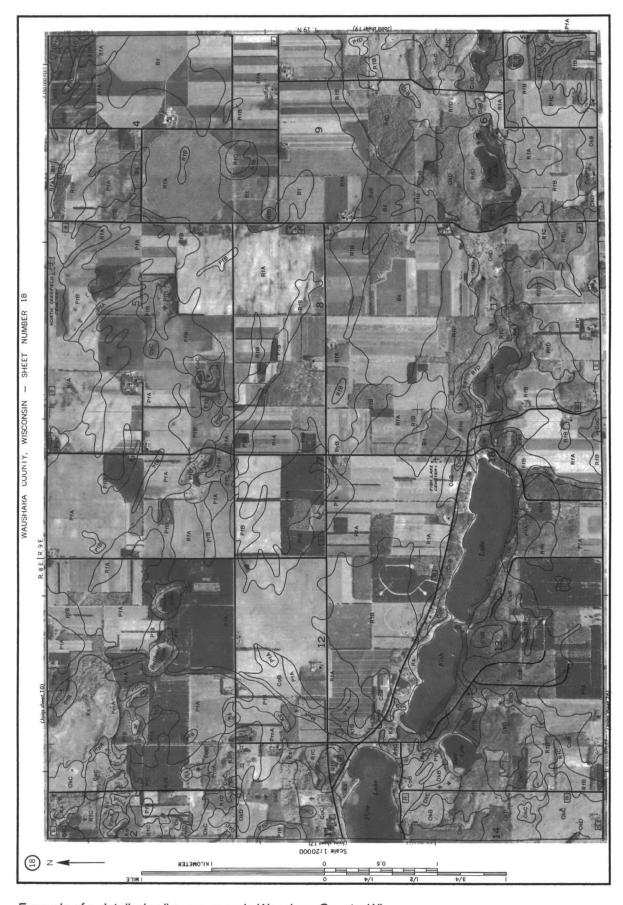
National Cartographic and Geographic Information Systems Center USDA – Soil Conservation Service P.O. Box 6567 Fort Worth, TX 76115 Telephone: (817) 334-5559

FAX: (817) 334-5290

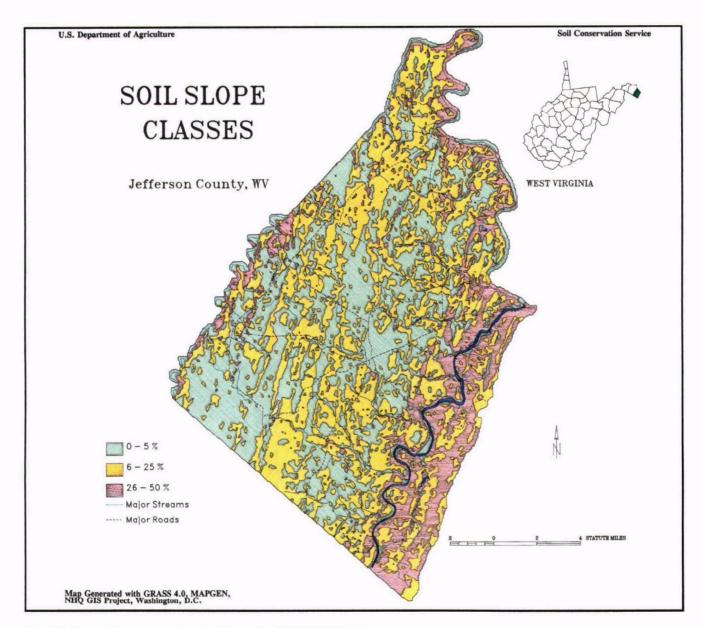
To obtain technical information about the use of soils data, please contact an SCS State Soil Scientist in your State or contact:

National Soil Survey Center USDA – Soil Conservation Service Federal Building, Room 152 100 Centennial Mall, North Lincoln, NE 68508

Telephone: (402) 437-5423



Example of a detailed soil survey map in Waushura County, WI.



A soil interpretive map generated from the SSURGO data base.

Soil Conservation Service

# State Soil Geographic Database (STATSGO)

### **Data Product Keywords**

Soils, subsurface, general soils map

### **Summary**

Soil maps for the State Soil Geographic Database (STATSGO) were made by generalizing the detailed soil survey or SSURGO geographic data base. The mapping scale for STATSGO is 1:250,000. The level of mapping is designed for broad planning and management uses covering State, regional or multi-county areas.

# **Extent of Program**

National

#### **Available Product Coverage**

STATSGO data is available for most States. Development of a STATSGO is planned for each State. A STATSGO digitizing status map is available.

#### Information Content

Digitizing is done by line segment (vector) format in accordance with Soil Conservation Service (SCS) digitizing specifications. The base map used is the U.S. Geological Survey 1:250,000 topographic quadrangles. The number of soil polygons per quadrangle map is between 100 and 400. The minimum area mapped is 1,544 acres.

STATSGO data is collected in 1:250,000 quadrangle units. Map unit delineation units match at State boundaries. States have been joined as one complete seamless data base to form Statewide coverage. Composition of soil map units was coordinated across State boundaries, so that component identities and relative extents would match.

Each STATSGO is linked to a Soil Interpretations Record attribute data base. The attribute data base gives the proportionate extent of the component soils and their properties for each map unit. The STATSGO map units consists of 1 to 21 components. The Soil Interpretations Record data base includes over 25 soil, physical and chemical properties for approximately 18,000 soil series recognized in the United States. Examples of information that can be queried from the data base are available water capacity, soil reaction, salinity, flooding, water table, bedrock, and interpreta-

tions for pesticide leaching potential, areas flooded for long durations, and sources of gravel.

#### **Product Delivery Format**

STATSGO data is available in either the USGS Digital Line Graph (DLG-3) Optional Distribution Format or the SCS Geographic Exchange Format. SCS soil map symbols are not normally carried within the DLG-3 Optional Format, however these map symbols are made available as a unique ASCII file when SCS soils data are distributed in the DLG format.

Distribution media for STATSGO data is normally 9-track magnetic tape at 1,600 bpi. The cost of spatial and attribute data for one county or soil survey area is \$500.

The Soil Interpretations Record attribute data is stored in a relational data base. This format is nonfixed length, tab delimited, ASCII file and distributed on magnetic or cartridge tape.

Distribution media for the soil interpretations record is normally 9-track magnetic tape at 1,600 bpi. The cost of spatial and attribute data for one county or soil survey area is \$500.

#### **Technical, Ordering, and Availability Information**

To obtain STATSGO soil spatial and attribute data contact:

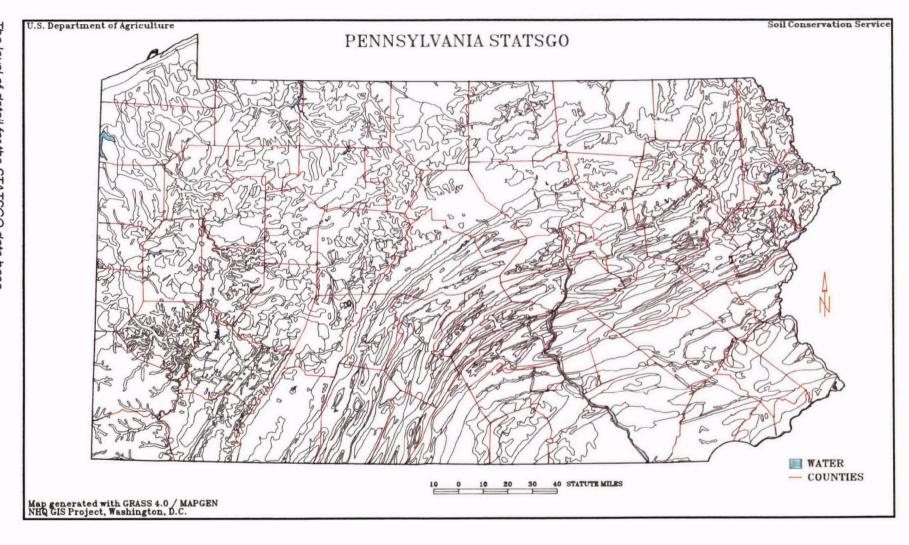
National Cartographic and Geographic Information Systems Center USDA – Soil Conservation Service P.O. Box 6567 Fort Worth, TX 76115 Telephone: (817) 334-5559

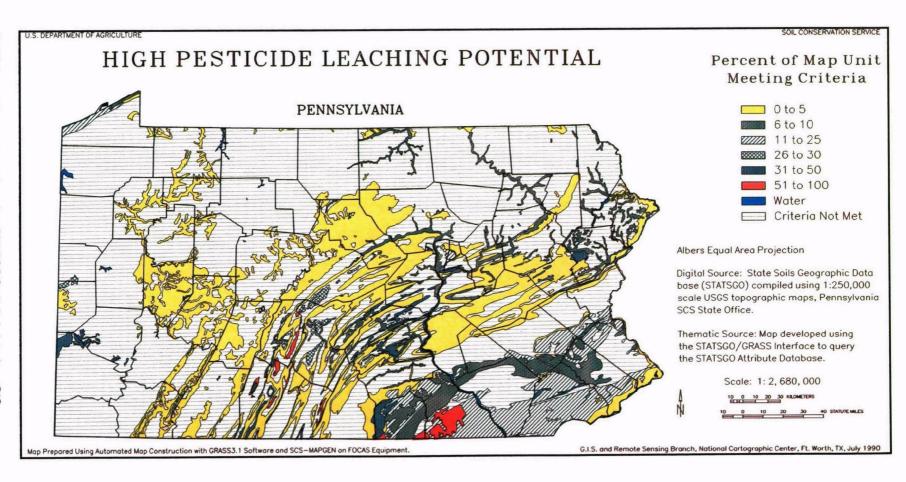
FAX: (817) 334-5290

To obtain technical information about the use of soils data, contact an SCS State Soil Scientist in your State or:

National Soil Survey Center USDA – Soil Conservation Service Federal Building, Room 152 100 Centennial Mall, North Lincoln, NE 68508

Telephone: (402) 437-5423





| Bureau of the Census                                                          |             |                           |          |            |                  |         |                   |             |          |                  |             |            |                             |           |           |       |               |                  |                            |           |           |
|-------------------------------------------------------------------------------|-------------|---------------------------|----------|------------|------------------|---------|-------------------|-------------|----------|------------------|-------------|------------|-----------------------------|-----------|-----------|-------|---------------|------------------|----------------------------|-----------|-----------|
| Data Product Keywords  Data Product                                           | Page Number | Administrative boundaries | Airports | Boundaries | Census geography | Coastal | County boundaries | Demographic | Economic | Geographic names | Hydrography | Hydrologic | Local government boundaries | Pipelines | Railroads | Roads | Socioeconomic | State boundaries | Surface & Manmade features | Water     | Waterways |
| Agriculture Census (1987) & Current Programs                                  | 3           |                           | Н        |            |                  |         |                   |             | •        |                  | H           |            |                             |           |           | _     | •             |                  |                            | ╡         | ᄏ         |
| Agriculture, Census (1987) & Current Programs  Construction, Current Programs |             |                           | H        | $\vdash$   |                  |         |                   |             | •        |                  | H           |            |                             |           | H         | П     | •             | -                |                            | -         |           |
| Construction, Current Programs  Current Business Data                         |             |                           |          |            |                  |         |                   | _           | •        | Ħ                |             | Н          | П                           |           | Н         |       | •             | -                |                            | ᅥ         | $\dashv$  |
| Economic, Censuses (1987)                                                     | 8           | -                         | H        | Н          |                  |         |                   |             | •        |                  |             |            |                             |           |           |       | •             | Н                |                            | ヿ         | $\dashv$  |
| Foreign Trade Data                                                            | 11          |                           | П        |            |                  | _       |                   | Н           | •        |                  |             |            |                             |           |           |       | •             |                  |                            | $\exists$ | _         |
| Governments, Census (1987)                                                    | 14          | Г                         | П        | П          |                  |         |                   |             | •        |                  |             |            |                             |           |           |       | •             |                  |                            | $\neg$    | コ         |
| Housing, Current Programs                                                     | 15          |                           |          | П          |                  |         |                   |             | •        |                  |             |            |                             |           |           |       | •             |                  |                            | $\Box$    |           |
| Manufactures, Current Programs                                                |             |                           |          |            |                  |         |                   |             | •        |                  |             |            |                             |           |           | П     | •             |                  |                            |           |           |
| Population, Current Programs                                                  |             |                           |          |            |                  |         |                   | •           |          |                  |             |            |                             |           |           |       | •             |                  |                            | $\sqcap$  | $\Box$    |
| Population & Housing, (1990) Census                                           | 20          |                           |          | $\Box$     |                  |         |                   | •           |          |                  |             |            |                             |           |           |       | •             |                  |                            | $\Box$    |           |
| Statistical Compendia                                                         | 22          |                           |          |            |                  |         |                   | •           |          |                  |             |            |                             |           |           |       | •             |                  |                            |           |           |
| TIGER/Line Files & Other TIGER Extract Products                               |             | •                         | •        | •          | •                | •       | •                 |             |          | •                | •           | •          | •                           | •         | •         | •     |               | •                | •                          | •         | •         |
| TIGER and Other Geographic Reference Products                                 |             |                           |          |            | •                |         |                   |             |          | •                |             |            |                             |           |           |       |               |                  |                            |           |           |
| User Defined Areas Program (UDAP)                                             |             |                           |          |            |                  |         |                   | •           |          |                  |             |            |                             |           |           |       | •             |                  |                            | $\Box$    |           |
| 1990 Census Maps                                                              | 28          | •                         |          | •          | •                | •       | •                 |             |          | •                | •           | •          | •                           | •         | •         | •     |               | •                | •                          | •         | •         |



Bureau of the Census

# Agriculture, Census (1987) and Current Programs

#### **Data Product Keywords**

Economic, socioeconomic

### Summary

Data files and reports from the 1987 Census of Agriculture include statistics on number of farms; farm, operator, and labor characteristics; livestock, poultry, and their products; crop production and value; operating expenditures; irrigation; and other data. Results of the 1992 Census of Agriculture will become available in 1993 (advance reports) and continue through 1995.

### **Extent of Program**

United States, Puerto Rico, Guam, and the United States Virgin Islands.

#### Available Product Coverage

Data are for each county, State, and the United States, and for other geographic areas, including Puerto Rico, Guam, and the Virgin Islands of the United States. Custom-designed tabulations are available on a reimbursable basis. These tabulations can be requested by writing to the Chief, Agriculture Division, Bureau of the Census, Washington, D.C. 20233 or by calling 1-800-523-3215.

#### Information Content

#### Advance Reports

Published separately for each county in the United States with 10 or more farms, each State, and the United States. These reports contain data for all farms (places from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year). The reports include data on number of farms, land in farms, size of farms, land use practices, farm and operator characteristics, sales, expenditures, machinery and equipment, livestock, poultry, dairy products sold, and major crops harvested.

#### Geographic Area Series

Detailed data are provided in national and State tables for the United States, and in county and State tables separately for each State. These reports include data on number and size of farm; crop production; livestock, poultry, and their products; tenure, age, and occupation of operator; type of organization; value of products sold; government payments plus market value of agricultural products sold; expenses; direct marketing; labor (number of employees); land use; irrigation; and the standard industrial classification of farms. Data will be available in printed copy, computer tape and CD-ROM.

#### **Outlying Areas**

**Puerto Rico:** Data available in printed copy for the 5 regions and 78 municipios.

Guam: Data in printed copy for the 19 election districts.

Virgin Islands of the United States: Data for the three islands. A highlights summary of outlying area reports will be available on the private AGRIDATA network and on CENDATA, available through DIALOG or CompuServe.

#### Subject Series

Agricultural Atlas of the United States: The Nation's agriculture is graphically illustrated at the county level by dot and multicolored pattern maps. The maps provide displays on the size and type of farm, land use, farm tenure, market value of products sold, crops harvested, livestock inventories, and other characteristics of farms.

Coverage Evaluation: The completeness of the census of agriculture is evaluated by an independent enumeration for the United States, its geographic regions, and selected States or groups of States. Estimates (with their sample reliability) are made of farms not on the census, farms classified as nonfarms in the census, duplicate farms in the census, and nonfarms classified as farms.

Ranking of States and Counties: Ranks the leading States and counties for selected items in the 1987 Census of Agriculture and comparative data from the 1982 Census of Agriculture.

History: The planning and conduct of the 1987 Census of Agriculture is described in detail. It explains the history of the agriculture census, farm definition, data collection and processing, data dissemination, coverage evaluation and research, and the census of agriculture in outlying areas. Also, provides copies of the

questionnaires, forms, and letters sent to the public.

Government Payments and Market Value of Agricultural Products Sold: Shows detailed data for farms cross-tabulated by combined market value of agricultural products sold and government payments received. It also includes detailed national and selected State data.

ZIP Code Tabulations of Selected Items: This shows the number of farms by ZIP Code in the 1987 census. This also includes the number of farms, by frequency, for items such as land in farms, market value of agricultural products sold, cattle and calf inventory, hog and pig inventory, cropland harvested, cotton, soybeans for beans, peanuts for nuts, and three major crops (which varies State-by-State).

Farm and Ranch Irrigation Survey (1988): This report contains detailed tabulations about irrigation on the Nation's farms and ranches in 1988. It provides data for each of the major irrigation States and water resources areas defined by use of county boundaries. Subjects include estimated quantity of irrigation water used by crop, source of water, method of water distribution, and information on wells and pumps used in irrigation. Expenses for maintenance and repair, purchase of water, and energy costs for pumping water are included.

Agricultural Economics and Land Ownership Survey (1988): Presents selected data at the national, regional, and State levels on acreage, land ownership, capital purchases and expenses, and assets and debts for farm operators and landlords. It includes information on market value of agricultural products sold, income and expenses from farm-related sources, production contracts, and off-farm work and income for the farm operators. The report also provides data on real estate taxes, type of ownership, and characteristics and occupation of farm landlords.

Census of Horticultural Specialties (1988): Contains data for the U.S., each State, and selected counties on potted flowering plants; bedding/garden plants; cut flowers; cut cultivated florist greens; nursery plants; foliage plants; unfinished plant materials; sod; dried bulbs, corms, tubers, and rhizomes used for forcing; cultivated mushrooms; greenhouse produced vegetables; vegetables produced for truck-crop production; vegetable seeds; and flower seeds. Subjects include number of plants sold, retail and wholesale value of products sold, and greenhouse use by commodity group. Selected production expenses and horticultural labor data also are presented.

#### **Current Programs**

Residents of Farms and Rural Areas Report: Age, race, employment characteristics, for the United States. Annual.

### **Product Delivery Format**

Results of the 1987 Census of Agriculture are available in printed reports, computer tape, diskettes, and CD-ROM. Order forms can be obtained from the address below.

### Technical, Ordering, and Availability Information

Data User Services Division Customer Services Bureau of the Census Washington, D.C. 20233 Telephone: (301) 763-4100

Bureau of the Census

# **Construction, Current Programs**

#### **Data Product Keywords**

Economic, socioeconomic

#### Summary

Periodic surveys provide current statistics on construction activity. Examples of the data include monthly housing starts and sales, housing completions, housing under construction, and value of new construction put in place. Each quarter the Bureau compiles data on expenditures for upkeep and improvements to residential properties. Annual data include characteristics of new housing and housing units authorized for demolition in permit-issuing places.

### **Extent of Program**

**United States** 

#### Available Product Coverage

Most of the recurring reports present data for the Nation and four regions (Northeast, South, Midwest, and West). Monthly and annual Housing Units Authorized by Building Permits have data for selected metropolitan areas and permit-issuing places, States, and the United States.

#### Information Content

Housing Starts: New units under private ownership; type of structure; purpose of construction; backlog of unused permits; manufacturers' shipments of mobile homes, their placement for residential use, average sales price, and dealers' inventories. Selected characteristics of apartment buildings and total construction time.

New Residential Construction in Selected Metropolitan Statistical Areas: New housing authorized; authorized but not started; started; started, under construction; and completed.

Housing Completions: Number of privately owned units completed or under construction, by type of structure.

New One-Family Houses Sold and For Sale: Privately owned units sold and for sale, by stage of construction; ratio of houses for sale to those sold; median and average sales prices; type of financing and sales price by region.

Characteristics of New Housing: Selected physical and financial data for one-family units and multifamily buildings; similar data on new apartments.

Price Index of New One-Family Houses Sold: Change over time in national sales price (including land) of units with characteristics of those sold in 1982.

Value of New Construction Put in Place: Construction expenditures by ownership type and type of construction; unadjusted and seasonally adjusted figures in current and constant dollars.

Housing Units Authorized by Building Permits: Number and value of new units (excluding mobile homes, hotels, motels, and group residential structures).

Expenditures for Residential Upkeep and Improvements: Owners' expenditures, seasonally adjusted by property type and structural purpose; owner-occupants of one-unit properties' payments to contractors for purchased materials.

Expenditures for Nonresidential Improvements and Upkeep: Special study of improvements and/or upkeep of private, State, and local structures, by size of building, principal activity, and year built. (See also Population and Housing, Surveys.)

#### Product Delivery Format

All the reports are available in print and on microfiche; Characteristics of New Housing and Housing Units Authorized by Building Permits also are available on computer tape. Housing Starts, Housing Completions, New One-Family Houses Sold and For Sale, Price Index of New One-Family Houses Sold, Value of New Construction Put in Place, and Housing Units Authorized by Building Permits are carried on-line.

# Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza, Room 315 Washington, D.C. 20233 Telephone: (301) 763-4100

Bureau of the Census

#### **Current Business Data**

### **Data Product Keywords**

Economic, socioeconomic

### Summary

Current business data are derived from either sample surveys or administrative records. The annual County Business Patterns series, based on administrative records, contains data on the number of employees for the mid-March pay period and payroll statistics by county and by industry. The data cover most of the economic divisions of the economy: agricultural services; construction; mining; manufacturing; public utilities; transportation; wholesale and retail trades; finances, insurance and real estate; and other services. A series of current reports, based on sample surveys of retail, wholesale, and service industry trades, includes estimates of sales, inventories, and other economic measures for some kinds of business and geographic areas. The reports are issued monthly (except for services) and annually.

### **Extent of Program**

**United States** 

#### Available Product Coverage

County Business Patterns: Provides data for the United States, States, and counties.

Monthly Retail Trade; Sales and Inventories: United States, regions, divisions, selected metropolitan areas, selected cities, and these large States: California, Florida, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.

Advance Monthly Retail Sales; Monthly Wholesale Trade: Sales and Inventories; 1988 Service Annual Survey, and 1988 Motor Freight Transportation and Warehousing Survey: United States.

#### **Information Content**

County Business Patterns: Data on number of employees in mid-March pay period; number and employment size of establishments and payroll by 2-, 3-, and 4-digit SIC levels.

Monthly Retail Trade: Estimates of sales, end-ofmonth inventories, and inventory-sales ratios by kind of business.

Advance Monthly Retail Sales: Estimates of sales and percentage changes from prior periods for major kind-of-business groups.

Annual Retail Trade: Estimates of annual sales, yearend inventories, sales-inventory ratios, merchandise purchased, accounts-receivable balances by kind of business.

Service Annual Survey: Estimates of receipts of selected service industries; data for selected kinds of business by a Federal tax status; for selected industries, additional data on sources of receipts, expenses, and/or industry-specific items.

Annual Survey of Communication Services: Estimates of operating revenue and expenses, by kind of business, for establishments engaged in telephone communications; telegraph and other message communications; radio and television broadcasting stations and networks; cable and other pay television services; and other communications services, such as radar station operations, satellite Earth stations, and satellite or missile tracking stations.

Motor Freight Transportation and Warehousing Survey: Estimates of operating revenues and expenses for trucking and public warehousing; inventories of revenuegenerating equipment for the trucking industry.

Monthly Wholesale Trade; Sales and Inventories: Estimated sales, inventories, and stock-sales ratios of merchant wholesalers by selected kind-of-business groups.

Annual Wholesale Trade: Estimated annual sales, year-end inventories, sales-inventory ratios, method of inventory valuation, and purchases by selected kind-of-business categories for merchant wholesalers.

#### **Product Delivery Format**

County Business Patterns in printed reports, microfiche, computer tape, CD-ROM, diskette, and on-line.

The Monthly Retail Trade, Monthly Wholesale Trade, Service Annual Survey, and Motor Freight

Transportation and Warehousing reports are available in print, microfiche, and on-line.

The annual reports are in print and microfiche only.

# **Technical, Ordering, and Availability Information**

Bureau of the Census Customer Services Washington Plaza, Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100

Bureau of the Census

# **Economic, Censuses (1987)**

#### **Data Product Keywords**

Economic, socioeconomic

### **Summary**

Subject and geographic area summary data by Standard Industrial Classification (SIC) code and by State from the Censuses of Retail Trade; Wholesale Trade; Service Industries; Transportation; Manufactures; Mineral Industries; and Construction Industries from the 1987 and previous economic censuses.

### **Extent of Program**

United States (contact Census Bureau about economic censuses conducted in Puerto Rico, Virgin Islands of the United States, Guam, and the Commonwealth of the Northern Mariana Islands).

### **Available Product Coverage**

United States, States, metropolitan areas, counties and cities with 2,500+ population, ZIP Code areas, and offshore areas (for Census of Mineral Industries only). Products from 1992 censuses, including new censuses: Transportation, Communications, and Utilities Industries; and Financial, Insurance, and Real Estate Industries, will be available in 1994 and 1995.

#### Information Content

#### Retail Trade

Geographic Area Series: Number of establishments with payroll, employment, and sales, by varied retail classifications.

Nonemployer Statistics: Number of nonpayroll establishments and sales by varied retail classifications; national data by kind of business for establishments with and without payroll.

Subject Series: Specialized data on establishment and firm size (including legal form of organization); measures of value produced, capital expenditures, depreciable assets, and operating expenses; merchandise line sales; and miscellaneous subjects.

**Special Reports:** Selected aggregate data, ratios, and rankings such as sales per capita; nonpayroll-establishment size.

ZIP Code Statistics Series: Number of establishments for varied sales- and employment-size groups for selected retail classifications; number of establishments, sales, annual payroll, and number of employees for retail trade as a whole.

#### Wholesale Trade

Geographic Area Series: Number of establishments, sales, payroll, employment, operating expenses, end-of-year inventories; type-of-operation and kind-of-business detail varies by geographic level.

Subject Series: Data on establishment and firm size (including legal form of organization); measures of value produced, capital expenditures, depreciable assets, and operating expenses; commodity line sales; and miscellaneous subjects.

#### Service Industries

Geographic Area Series: Receipts/revenue, payroll, and employment for establishments with payroll, by kind of business.

Nonemployer Series: Number of nonemployer establishments subject to Federal income tax, and their receipts.

Subject Series: Establishment and firm size (including legal form of organization); capital expenditures, depreciable assets, and operating expenses; hotels, motels and other lodging places; and miscellaneous subjects (e.g., receipts by source or class of client).

**ZIP Code Series:** Taxable establishments with payroll by receipts- and employment-size groups by kind of business; number of establishments, receipts, annual payroll, and number of employees for service industries as a whole.

#### **Transportation**

Truck Inventory and Use Survey: Number of vehicles, truck miles and average miles per truck by selected characteristics (e.g., products carried), type of equipment and fuel, size class, model year, major use, weight, etc.

Selected Transportation Industries, Geographic Area Series: Number of establishments, revenue, payroll, and employment by varied transportation classifications; revenue and employees per establishment, revenue and payroll per employee.

Selected Transportation Industries, Miscellaneous Subjects: Establishments with payroll by revenue and employment size; firms by revenue and employment size and number of establishments operated; major revenue sources by some kinds of business.

#### **Manufactures**

Industry Series: For 83 groups of related industries. Number of establishments, number of firms, payroll, value of shipments, cost of materials, new capital expenditures, inventories, production hours worked, value added by manufacture. Some industry data cross-classified by employment size and degree of primary-product specialization. Tables showing data classified to old and new SIC schemes.

Geographic Area Series: Data by industry on number of establishments, payroll, employment, value of shipments, expenditures for new capital equipment, hours worked, value added by manufacture. Data for auxiliary establishments, State-level data on assets, rents, inventories, cost of materials; number of establishments by employment size for 2-digit major SIC groups. State, metropolitan area, place, and county-level summary totals available.

Location of Manufacturing Plants: Number of establishments by employment size for 4-digit SIC detailed industries.

Subject Series: Detailed statistics for individual subjects, including textile machinery in place, distribution of sales by class of customer, type of organization, concentration ratios in manufacturing.

Analytical Reports: Information from the Census of Manufactures and related sources on exports from manufacturing establishments, selected characteristics of exporters, and indexes of production for manufacturing and mineral industries.

#### Mineral Industries

Industry Series: For 31 4-digit SIC industries: number of establishments and companies; payroll, employment, hours worked; quantity and value of products shipped and supplies used; cost of purchased machinery; capital expenditures; assets, depreciation, amortization, and depletion; rents; inventories; quantity and cost of fuels produced and consumed; value added by mining; and mineral development and exploration costs. General statistics by State and offshore area, type of operation, and establishment size.

Geographic Area Series: Number of establishments, payroll, employment, hours worked, value of shipments, cost of supplies, capital expenditures, assets, rental payments, inventories, and value added by mining. Selected data by 4-digit SIC industry by type of operation, and for certain 2- and 3-digit SIC industries by county or offshore area.

Subject Series: Fuels and electric energy consumed, water use, and national summary totals for 31 industries (including gross book value of depreciable assets, capital expenditures, retirement; depreciation, and rental payments).

#### Construction

Industry Series: Separate reports for 27 industries: number of employees, construction workers/hours; payrolls; selected payments for construction work subcontracted to others and for materials, components, and supplies; payments for renting or leasing structures, machinery, and equipment; payments for power, fuel, and lubricants; fringe benefits; selected purchased services; value of construction work by type; receipts from land sale and other business; capital expenditures, fixed assets, and depreciation; inventories; location of construction work; ownership of construction projects; class of construction; summary report includes data on establishments without payroll.

Geographic Area Series: Data from the industry series organized by State rather than by industry.

**Subject Series:** Selected data for establishments with and without payroll.

#### **Product Delivery Format**

All of the industry and geographic area series reports from the economic censuses are available on computer tape, CD-ROM, and in printed reports and microfiche. Several other data files from the 1987 economic censuses also are available on CD-ROM. Selections from the economic censuses also are carried on CENDATA, the Census Bureau's on-line data base. For information about obtaining reports from previous economic censuses, contact the office listed below.

### Technical, Ordering, and Availability Information

Customer Services
Bureau of the Census
Washington Plaza, Room 326
Washington, D.C. 20233
Telephone: (301) 763-4100
EAY: (201) 763-4704

#### Table 2. Selected Ratios for the United States and States: 1987—Con.

[includes only establishments with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms and comparability of 1982 and 1997 censuses, including revised methodology for presenting establishment counts, see appendix A]

| 1987             | <u></u>                                                                                                                                                      | <del> </del>                      |                                           | 1                                                        |                           |  |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------|----------------------------------------------------------|---------------------------|--|
| SIC code         | Geographic area and kind of business                                                                                                                         | Per<br>establishment<br>(dollars) | Per<br>employee <sup>1</sup><br>(dollars) | Annual payroll<br>per employee <sup>1</sup><br>(dollars) | Employe<br>establis<br>(n |  |
|                  | MICHIGAN—Con.                                                                                                                                                |                                   |                                           |                                                          |                           |  |
|                  | Transportation services—Con.                                                                                                                                 |                                   |                                           |                                                          |                           |  |
|                  | Freight shipping services—Con.                                                                                                                               | 1 117 700                         | E4 800                                    | 24 844                                                   |                           |  |
| 1 pt.<br>1 pt.   | Freight forwarding                                                                                                                                           | 1 112 768<br>487 514              | 51 832<br>62 236                          | 21 614  <br>21 018                                       |                           |  |
| ,8               | Other transportation services                                                                                                                                | 1 205 768                         | 69 505                                    | 16 707                                                   |                           |  |
|                  | MINNESOTA                                                                                                                                                    |                                   |                                           |                                                          |                           |  |
|                  | Motor freight transportation and warehousing                                                                                                                 | 1 036 891                         | 86 536                                    | 21 788                                                   |                           |  |
| 2                | Trucking and courier services, except air                                                                                                                    | 1 050 381<br>367 626              | 87 318<br>71 334                          | 21 858<br>17 716                                         |                           |  |
| 2 pt.<br>2 pt.   | Local trucking without storage  Household goods moving  General freight  Garbage and trash collection.  Dump trucking  Other local trucking without storage. | 171 431<br>592 582                | 43 498<br>70 884                          | 14 502<br>19 367                                         |                           |  |
| 2 pt.<br>2 pt.   | Garbage and trash collection                                                                                                                                 | 412 892<br>306 653                | 71 195<br>94 848                          | 17 054<br>18 141                                         |                           |  |
| 2 pt.            | Other local trucking without storage                                                                                                                         | 255 554                           | 65 955                                    | 16 372                                                   |                           |  |
| 3<br>3 pt.       | Trucking, except local                                                                                                                                       | 1 828 664<br>1 420 355            | 111 932<br>81 463                         | 24 618<br>20 217                                         |                           |  |
| 3 pt.<br>3 pt.   | Household goods moving<br>General freight<br>Other trucking, except local                                                                                    | 2 530 889<br>834 891              | 116 265<br>106 923                        | 25 761<br>21 689                                         |                           |  |
| 4                | Local trucking with storage                                                                                                                                  | 414 551                           | 50 890                                    | 17 069                                                   |                           |  |
| 5                | Courier services, except by air                                                                                                                              | 2 557 980                         | 45 938                                    | 19 769                                                   |                           |  |
| 5 pt.<br>5 pt.   | Local courier services                                                                                                                                       | 8                                 | 8                                         | 8                                                        |                           |  |
| .                | Public warehousing and storage                                                                                                                               | 714 822                           | 65 658                                    | 19 938                                                   |                           |  |
| 1 2              | Farm products warehousing and storage Retrigerated warehousing General warehousing and storage                                                               | 590 222<br>712 875                | 61 767<br>81 861                          | 13 035<br>21 474                                         |                           |  |
| 5<br>5 pt.       | General warehousing and storage General goods warehousing Self-service or miniwarehousing                                                                    | 631 909<br>948 231                | 60 840<br>60 426                          | 18 818<br>20 194                                         |                           |  |
| 5 pt.            |                                                                                                                                                              | 175 000                           | 64 286                                    | 7 347                                                    |                           |  |
| 3                | Special warehousing and storage, n.e.c.                                                                                                                      | 1 088 000                         | 62 747                                    | 23 427                                                   |                           |  |
|                  | Trucking terminal facilities                                                                                                                                 |                                   | 400 400                                   | 44 500                                                   |                           |  |
|                  | Water transportation                                                                                                                                         | 1 248 409                         | 182 189                                   | 41 566                                                   |                           |  |
| 2,3,4            | Water transportation of freight Water transportation of passengers Services incidental to water transportation                                               | 10 158 000<br>373 833             | 340 220<br>72 355                         | 69 885<br>18 290                                         |                           |  |
| 3                | Marinas                                                                                                                                                      | 486 813<br>365 605                | 100 581<br>89 834                         | 27 248<br>15 851                                         |                           |  |
| 1,2,9            | Other services incidental to water transportation                                                                                                            | 649 688  <br>354 293              | 110 585<br>46 215                         | 37 856<br>16 919                                         |                           |  |
|                  | Arrangement of passenger transportation                                                                                                                      | 280 364                           | 37 732                                    | 15 574                                                   |                           |  |
| 4<br>5           | Travel agencies                                                                                                                                              | 231 693<br>643 333                | 33 611<br>57 461                          | 14 864<br>19 394                                         |                           |  |
| 9                | Arrangement of passenger transportation, n.e.c                                                                                                               | 310 591                           | 37 339                                    | 14 191                                                   |                           |  |
| 1 pt.            | Freight shipping services Freight forwarding                                                                                                                 | 589 652<br>965 528                | 78 881<br>91 544                          | 23 181<br>22 349                                         |                           |  |
| 1 pt.<br>8       | Arrangement of freight and cargo, n.e.c                                                                                                                      | 363 273<br>391 500                | 64 582<br>34 126                          | 24 121<br>12 237                                         |                           |  |
|                  | MISSISSIPPI                                                                                                                                                  |                                   |                                           |                                                          |                           |  |
|                  | Motor freight transportation and warehousing                                                                                                                 | 805 345                           | 64 385                                    | 19 553                                                   |                           |  |
| ,                | Trucking and courier services, except air                                                                                                                    | 805 508                           | 63 396                                    | 19 788                                                   |                           |  |
| pt.              | Local trucking without storage                                                                                                                               | 312 134  <br>264 533  <br>512 640 | 57 018<br>99 200<br>60 956                | 13 994<br>15 975                                         |                           |  |
| 2 pt<br>2 pt     | General freight Garbage and trash collection Dump trucking Other local trucking without storage.                                                             | 199 400                           | 60 956<br>53 892<br>46 968                | 16 048<br>12 288<br>12 078                               |                           |  |
| 2 pt<br>2 pt     | Other local trucking without storage                                                                                                                         | 207 009<br>288 418                | 57 153                                    | 12 078<br>13 274                                         |                           |  |
| ₃.               |                                                                                                                                                              | 1 198 657<br>588 057              | 67 731<br>43 699                          | 20 906<br>15 072                                         |                           |  |
| pt.              | Trucking, except local Household goods moving General freight Other trucking, except local                                                                   | 1 492 472<br>776 395              | 43 699<br>68 057<br>73 727                | 22 091                                                   |                           |  |
| 3 pt.            |                                                                                                                                                              |                                   |                                           | 17 916                                                   |                           |  |
| .                | Local trucking with storage                                                                                                                                  | (D)                               | (D)                                       | (D)                                                      |                           |  |
| pt.              | Courier services, except by air Local courier services                                                                                                       | 000                               | 8                                         | (D)<br>(O)                                               |                           |  |
| 5 pt.            |                                                                                                                                                              |                                   | (Ď)                                       |                                                          |                           |  |
| 1 2              | Public warehousing and storage                                                                                                                               | 803 528<br>1 183 617              | 77 987<br>88 022                          | 16 330<br>17 568                                         |                           |  |
| 5                | Remgerated warehousing General warehousing and storage                                                                                                       | 549 000<br>355 500                | 58 821<br>56 018                          | 14 119<br>14 218                                         |                           |  |
| 5 pt.  <br>5 pt. | General goods warehousing<br>Self-service or miniwarehousing                                                                                                 | 814 778<br>112 353                | 52 007<br>79 583                          | 15 319<br>7 750                                          |                           |  |
| в                | Special warehousing and storage, n.e.c.                                                                                                                      | 242 857                           | 47 222                                    | 9 444                                                    |                           |  |
|                  | Trucking terminal facilities                                                                                                                                 | -                                 | _                                         | -                                                        |                           |  |
| 3 I              |                                                                                                                                                              |                                   |                                           |                                                          |                           |  |

Geographic Area Series (TC87-A-1), shows summary data for States.

Bureau of the Census

# **Foreign Trade Data**

#### **Data Product Keywords**

Economic, socioeconomic

#### Summary

The export statistics are first compiled to reflect Schedule B, Statistical Classifications of Domestic and Foreign Commodities Exported from the United States. Import data are first compiled to reflect Harmonized Tariff Schedules of the United States Annotated (HT-SUSA). Data appear in published reports for commodity classifications derived from the Standard International Trade Classification (SITC) Revision 3 and the Harmonized Commodity Description and Coding System (Harmonized System). Special reports also are available for commodity classifications derived from Standard Industrial Classification (SIC) and end-use categories. Monthly and annual data in different arrangements and greater detail than in the reports appear on computer tape, publications, and excerpts from tabulations. Compact discs can offer still greater detail. In addition, the Bureau produces data files of classifications such as the Harmonized Commodity Master Tape. Also, the Bureau, at the users' request and expense, makes special tabulations of foreign trade data on tape, paper, and - most recently - diskettes for personal computers.

### **Extent of Program**

United States and Puerto Rico.

#### Available Product Coverage

Commodity, territory, world area, U.S. possessions, States, country of origin, country of destination, U.S. Customs district of lading, Customs district of entry, foreign port, SITC commodity, Customs district and port, coastal district, port of unlading, foreign port of lading, Customs district and port of lading, foreign port of unlading.

#### **Information Content**

The Census Bureau produces the following foreign trade reports and subject content for the corresponding geographic or commodity coverage, publication frequency, and media:

FT900 U.S. Merchandise Trade: Free Alongside Ship (F.A.S.) and customs values; merchandise trade bal-

ances; unadjusted and seasonally adjusted tables, by month and year to date; commodity, county, and world area. Monthly. Print and on-line.

FT900 Supplement, U.S. Merchandise Trade: Summarizes F.A.S. and customs values; merchandise trade balances; unadjusted and seasonally adjusted tables, by month and year to date, with U.S. exports by State, country totals, and trade balances; commodity, country, and world area. Monthly. Print and on-line.

FT920 U.S. Merchandise Trade: Selected Highlights: Tables on exports, general imports, and imports for consumption, including data on U.S. Customs district and method of transportation, world area by country of origin and destination. Monthly. Print.

FT925 U.S. Merchandise Trade: Exports, General Imports, and Imports for Consumption: SITC Commodity by Country: Unadjusted values, by month and year to date; data by country for imports, domestic merchandise, and reexports; commodity. Country. Monthly. Print.

FT927 U.S. Merchandise Trade: Exports and General Imports – Country by SITC Commodity: County, commodity, value, and shipping weight. Annual. Print.

FT947 U.S. Merchandise Trade: Exports, General Imports, 6-digit HS Commodity by Country and Imports for Consumption – Harmonized Commodity by Country: Customs values; data by country for imports, domestic merchandise, and reexports; commodity and country. Annual. Print.

FT895 U.S. Trade with Puerto Rico and U.S. Possessions – Data on shipments to FT247 U.S. Imports for Consumption and General Imports – 10-digit HTSUSA Commodity by Country of Origin: Net quantity and value; commodity, country of origin. Annual. Print.

FT447 U.S. Exports – 10-digit HS Schedule B Commodity by Country: Net quantity and value; commodity, country of destination. Annual. Print.

EM545 U.S. Exports of Domestic and Foreign Merchandise: Harmonized Schedule B commodity, country of destination, customs district of exportation, quantity, and F.A.S. value. Current month and cumulative January to date. Print and computer tape.

EM595 Shipments of Merchandise Between the United States and Puerto Rico and Shipments from the United States to the Virgin Islands: Current month total net quantity, value information, and value and shipping weight data for vessel and air shipments for each territory in commodity, by customs district detail. Monthly. Computer tape.

CDIM U.S. Imports of Merchandise and Imports of Merchandise for Consumption – Harmonized System Commodity Classification (HTSUSA) (Customs and C.I.F. Values): Net quantity; customs, C.I.F., and dutiable values; import charges, type of entry/unlading, rate provision code, method of transportation; calculated duty and shipping weight for waterborne and airborne shipments; commodity, country, and subcode, Customs district of entry/unlading. Monthly and year-to-date. Compact discs.

IM145 U.S. General Imports Harmonized System Commodity Classification – (HTSUSA) by Country-by-Country Subcode by Customs District of Entry: Data arranged by entry; current month and calendar year to date; commodity, country, and subcode, Customs district of entry/unlading. Monthly. Print and computer tape.

IM146 U.S. Imports for Consumption – (HTSUSA) Commodity Classification by Country Subcode by Rate Provision (Customs Value): Net quantity, customs value, calculated duty, rate provision code; current month and cumulative year to date; same as above. Monthly. Print.

CDEX U.S. Exports of Merchandise – Harmonized System Commodity Classification (HS-Based Schedule B) by Country by Customs District (F.A.S. Value): Net quantity of domestic and foreign merchandise, method of transportation, F.A.S. value, shipping weight for waterborne and airborne shipments; commodity, country of origin, Customs district. Monthly. Compact disc.

EQ912 U.S. Exports of Domestic and Foreign Merchandise by State: Export data by State of exportation, by 2-digit SIC commodity code, and country of destination; data items provided are total value and separate value and shipping weight for vessel and air shipments, and value and shipping weight for containerized cargo. Annual and quarterly. Computer tape.

EQ932 U.S. Exports of Domestic and Foreign Merchandise by Region: Export data by region of exportation by 4-digit SITC, Revision 3 commodity code, by customs district and port of exportation, by country of destination; data items provided are total value and separate value and shipping weight for vessel and air

shipments, and value and shipping weight for containerized cargo. Annual and quarterly. Computer tape.

EQ952 U.S. Exports of Domestic and Foreign Merchandise by Port: Export data by State of exportation, by customs district, by port of exportation, by country of destination; data items provided are total value and separate value and shipping weight for vessel and air shipments, and value and shipping weight for containerized cargo. Annual and quarterly. Computer tape.

TM380 U.S. General Imports of Merchandise and Inbound Transit Cargo: Type of vessel service (e.g., liner, irregular, tanker), value, shipping weight (kilograms), vessel flag (e.g., U.S.), containerized cargo. Tape includes HTSUSA 6-digit codes; U.S. Customs district, foreign port, SITC commodity, country of origin. Monthly. Computer tape.

TM385 Monthly Vessel Entrances (Imports): Part 1, entrances by alphabetic vessel name. Part 2, entrances by Customs district, port, and manifest arrangement. U.S., Customs district and port of unlading, foreign port of lading. Monthly. Microfiche, computer tape.

TM780 U.S. Exports of Merchandise and Outbound Intransit Cargo: For domestic and foreign merchandise. Type of vessel service (e.g., liner, irregular, tanker), value, shipping weight (kilograms), vessel flag (e.g., U.S.), containerized cargo. Tape includes HS-B 6-digit codes; U.S. Customs district and port of lading, foreign port of unlading, SITC commodity. Monthly. Print, computer tape.

TM785 Monthly Vessel Clearances (Exports): Part 1: Vessel clearances by alphabetic vessel name. Part 2: clearances in Customs district, port, and manifest arrangement; U.S. Customs district and port. Monthly. Microfiche, computer tape.

TM985 U.S. Waterborne Exports and General Imports (F.A.S. and Customs Values): For domestic and foreign merchandise: type of vessel service (e.g., dry cargo, liner, irregular, tanker), value, shipping weight (kilograms); for U.S. flag vessels: containerized cargo and trade area; U.S., coastal district, Customs district and port. Monthly. Print.

TA987 Vessel Entrances and Clearances: Number and tonnage, flag; Customs district, port. Annual. Print.

Harmonized Commodity Master Tape: Commodity descriptions, classifications, and cross-classifications needed for the "Harmonized System" effective with January 1989 data. 1989. Computer tape.

# **Product Delivery Format**

See above "Information Content" for delivery format of each product.

# **Technical, Ordering, and Availability Information**

Customer Services Bureau of the Census Washington Plaza-Room 315 Washington, D.C. 20233 Telephone: (301) 763-2074

Bureau of the Census

### **Governments, Census (1987)**

#### **Data Product Keywords**

Economic, socioeconomic

### Summary

The Census of Governments enumerates Governmental units in the United States. Currently, 1987 Census of Governments products are available. The data focus on State and local governments in the United States, featuring such subjects as value of taxable property, number of public employees, payrolls, revenue, expenditures, debts, and financial assets.

### **Extent of Program**

United States, Puerto Rico

### **Available Product Coverage**

United States, States, counties, and county subdivisions, cities with 50,000+ population, municipalities and Northeast townships with 10,000+ population, school systems with 5,000+ enrollment, and special districts with 100+ employees; special district governments with significant financial activity; State and local government employee retirement systems with assets of \$20+ million. The reports based on the 1992 census will be published in 1994 and 1995.

#### **Information Content**

Government Organization: Number of county, municipal, and township governments by size class; public school systems by size of enrollment, grades, and number of schools operated; special districts by function and amount of outstanding debt; number of local governments by type in each county area; local government structure by State; popularly elected officials: data on number directly elected by voters, by type of government and type of office, for U.S., States, and county areas.

Taxable Property Values: Number of realty parcels and amount of assessed value, distributed by major property-use categories.

Public Employment: Payrolls, and full-time employee average October earnings, by function and type of government. Local government data summarized by size category for U.S., States, counties, municipalities and Northeast townships with 10,000+ population, school systems with 5,000+ enrollment, and special

districts with 100+ employees; employment and payroll data by function; summarized by county area, for U.S., States, individual county areas; number of employees belonging to an employee organization; contractual agreements and employees covered; employee bargaining units, and Government cost for selected employee benefits by type, State, and type of government; number of current State and local government employees covered by Federal social security, for U.S. and States.

Government Finances: Six data sets based on revenue, expenditure, and indebtedness, for U.S., States, school systems with 5,000+ enrollment, special district governments with significant financial activity, all county governments, county areas, and local government employee retirement systems with assets of \$20+ million.

Topical Studies: Historical statistics on Governmental revenue, expenditures, and indebtedness, by Federal, State and local governments; public employment for the U.S.; State government programs for financial grants and reimbursements to local governments and amounts paid; State intergovernmental expenditures by function and type of recipient government, for States; organization, employment, and finances of governments, for Puerto Rico and municipios.

#### Product Delivery Format

Government Organization is on computer tape, microfiche, on-line, and in print.

Taxable Property is in print, microfiche, and on-line.

Public Employment is in print, microfiche, and on-line.

Government Finances is in print, microfiche, computer tape, and on-line.

**Topical Studies** is in print and microfiche.

For information about previous Government Censuses, contact the office listed below.

#### Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza, Room 315 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

Bureau of the Census

# **Housing, Current Programs**

### **Data Product Keywords**

Economic, socioeconomic

#### Summary

Current housing reports present statistics from such surveys as the Survey of Market Absorption and the American Housing Survey. They cover such areas as the United States, regions, metropolitan areas (inside and outside) and selected central cities, and are issued annually, quarterly, six times a year, or occasionally in various media.

### **Extent of Program**

**United States** 

### **Available Product Coverage**

U.S., regions, inside/outside metropolitan areas, selected metropolitan areas and their central cities, selected metropolitan areas and selected central cities with 100,000+ population, depending on the publication.

#### Information Content

American Housing Survey: Tenure, vacancy characteristics, rooms, persons in unit, persons per room, value, contract rent, and congregate housing (meals included in rent). Also: condominium status; plumbing and kitchen facilities; telephone in unit; house heating fuel; source of water and method of sewage disposal; vehicles available; year structure built; year moved into residence; number of bedrooms; farm residence; shelter costs, including utilities; and neighborhood and recent movers' characteristics, for U.S. and regions; six times a year. Also, this same survey is available for selected metropolitan areas and their central cities, with 12 to 16 metropolitan areas completed per year.

American Housing Survey, Microdata Files: Individual respondent data (without identifiers) for selected metropolitan areas and selected central cities with 100,000+ population. Biennially and quadrennially.

Market Absorption of Apartments: Absorption rates for rental units by size, rent, facilities; for condominium units by size and asking price. Annually, for U.S., regions, inside/outside metropolitan areas.

Other reports: Housing Vacancies and Home Ownership, Home Ownership Trends, Special Reports, Characteristics of Apartments Completed, American Housing Briefs, and other reports collected for the Housing and Urban Development Department.

### **Product Delivery Format**

All of the housing reports are available in printed reports, except American Housing Survey, Microdata Files, which is only available on computer tape. All other reports are available on microfiche, except the American Housing Briefs. Selections of some reports also are available on-line.

# Technical, Ordering, and Availability Information

Customer Services
Bureau of the Census
Washington Plaza – Room 326
Washington, D.C. 20233
Telephone: (301) 763-4100
FAX: (301) 763-4794

Bureaus of the Census

### Manufactures, Current Programs

### **Data Product Keywords**

Economic, socioeconomic

### Summary

The Annual Survey of Manufactures is essentially the same as the Census of Manufactures, except that it provides product class shipments and is conducted annually except in census years. The Current Industrial Reports (monthly, quarterly, and annual) are a series of more than 100 reports, usually by commodity. Also covered are Manufacturers' Shipments, Inventories, and Orders (M3); Survey of Plant Capacity; Pollution Abatement Costs and Expenditures, and manufacturing technology data within specific industries. The Plant and Equipment Expenditure Survey (quarterly and annual) contains actual and planned expenditures, by industry, for new structures and equipment.

### **Extent of Program**

**United States** 

### **Available Product Coverage**

The Annual Survey of Manufactures and the Current Industrial Reports present data for the United States and have some data for the States. The Plant and Expenditures Survey has data for the United States only.

#### Information Content

Annual Survey of Manufactures: The survey currently covers a sample of approximately 56,000 manufacturing establishments from a total of about 220,000 in the Census of Manufactures universe. Included in the survey are all large manufacturing plants, which account for more than two-thirds of the total employment of all manufacturing establishments in the United States, and a sample of the more numerous mediumand small-sized establishments. This annual survey provides estimates of such statistics as employment, payroll, work hours, value added by manufacture and supplemental labor costs for industry group and industries. In addition, the program covers the value of shipments for classes of products as well as fuels and electric energy data by industry group and industry.

Current Industrial Reports: More than 100 report series cover the entire range of industrial activity. Data appear for industries in the following categories based on the major 2-digit groupings of the standard industrial classification code: apparel and leather; chemicals, rubber, and plastic; intermediate metal products; lumber, furniture, and paper products; machinery and equipment; primary metals; processed foods; stone, clay, glass, and concrete products; and textile mill products. The various publication series include monthly, quarterly, annual, and biennial reports. Monthly and quarterly series generally include annual summaries; for some commodities, reports are issued every year or two only.

Manufacturing and Trade Inventories and Sales: Provides monthly estimates of sales and inventories for manufacturers, retailers, and merchant wholesalers. Also shown are retail inventory estimates and inventories/sales ratios by major kind-of-business categories.

Plant and Equipment Expenditures: Unpublished data (quarterly and annual): Provides statistics on expenditures for new plant and equipment in current dollars for private non-farm (Standard Industrial Classification) groups 10 through 80 on an industry-enterprise basis. The statistics are presented in two data sets. The detailed set includes the following: annual and quarterly, actual and planned, expenditures for plant and equipment combined; annual expenditures for plant; and expenditures for equipment. The summary data set includes: annual and quarterly estimates of expenditures for plant and equipment combined; and annual estimated expenditures for plant and equipment, tabulated separately.

Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations (QFR): Presents up-to-date aggregate statistics on the financial position of U.S. corporations. Based upon an extensive sample survey, the report presents estimated statements of income and retained earnings, balance sheets, and related financial and operating ratios for the domestic operations of all manufacturing corporations with assets over \$250,000, and corporations in the mining and trade areas with assets over \$50 million. Data are classified by industry and by asset size.

### **Product Delivery Format**

The Annual Survey of Manufactures is available in print, microfiche, and computer tape.

The Current Industrial Reports are available in print and microfiche; some are on computer tape and on-line.

The Plant and Equipment Expenditures Survey is in print, computer tape, diskette, and on-line.

# **Technical, Ordering, and Availability Information**

Bureau of the Census Customer Services Washington Plaza, Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100

Bureau of the Census

# **Population, Current Programs**

### **Data Product Keywords**

Demographic, socioeconomic

### **Summary**

Much of the current population data from the Census Bureau is derived from the Current Population Survey (CPS). In addition, the Bureau has conducted the Survey of Income and Program Participation (SIPP) since October 1983. The CPS is a household sample survey of the civilian noninstitutional population of the United States. Its primary task is to produce monthly statistics on unemployment and the labor force, as published by the Bureau of Labor Statistics in its monthly bulletin, "Employment and Earnings." The CPS also serves as a vehicle for supplemental studies on subjects other than employment. Users can order series subscriptions or purchase individual reports. CPS microdata files on computer tape also are available. The SIPP, another national survey, typically collects data from the same households over time. The program's principal purpose is to provide better estimates of money and in-kind income. Recurrent questions deal with employment, types of income, and noncash benefits. Periodically, questions are added dealing with school enrollment, marital history, migration, disability, and other topics. There are currently more than 60 population series or reports issued each year.

### **Extent of Program**

United States. Some reports on Puerto Rico, the United States Virgin Islands, and the Outlying Areas (American Samoa, Guam, Commonwealth of the Northern Mariana Islands).

### **Available Product Coverage**

Varies depending on report. Check the 1992 Census Catalog and Guide or call Customer Services (see telephone number below) for specific product coverage.

#### Information Content

Population Characteristics: Population profile, marital status and living arrangements, household and family characteristics, school enrollment, educational attainment, fertility, mobility, voting (biennial), Hispanic origin, farm population. United States. Annual.

Special Studies: Youth, women, older, Black, and

metropolitan/non-metropolitan populations; income. United States. Annual.

Population Estimates and Projections: Population estimates; U.S.; monthly; estimates by age, sex, births, deaths, net migration; race (U.S. only); U.S., States. Annual. Projections by age, sex, race; Hispanic origin (U.S. only). U.S., States. Irregular.

Local Population Estimates: Population, per capita income, births, deaths, net migration. Counties, metropolitan areas, sub-county areas. Annual and biennial.

**Special Censuses:** Age, sex, race, Hispanic origin, housing units. Selected counties, places. By contract.

Consumer Income: Money income, noncash benefits, poverty status, by level of education, age, sex, race, and type of householder. U.S., regions, divisions. Annual.

Household Economic Studies: Income, labor-force activity, wealth, participation in government programs, disability, child care, pensions. U.S., regions. Quarterly, annual.

Survey of Income and Program Participation Microdata File: Same as previous, with monthly longitudinal measurements; topical modules in rectangular files. U.S., States, large metropolitan areas. Monthly.

Current Population Survey Microdata File: Laborforce characteristics and periodic supplements used to produce Population Characteristics, Farm Population, and Consumer Income tabulations. U.S., States, large metropolitan areas. Periodic, within year.

Special Demographic Analyses: Demographic trends and developments in topical areas such as education and population distribution. U.S. Occasional.

Statistical Briefs: Short, topical studies on children, pensions, computer use, etc. U.S. Occasional.

In addition, the Census Bureau collects data for other agencies on labor-force characteristics, health, longitudinal studies of socioeconomic changes, voting, education, income, leisure activities, English-language proficiency, outdoor recreation, crime, prisoners, visual impairment, scientists and engineers, consumer expenditures, capital punishment, volunteer workers, retirement history, veterans. U.S., States, large cities, governmental units. Periodic.

### **Product Delivery Format**

All reports with the exception of the microdata files and the Statistical Briefs are available in printed reports and microfiche (the microdata files are on computer tape only).

The Statistical Briefs are only available on paper.

The Special Censuses and the Special Demographic Analyses are not available on computer tape. Several reports are on-line and Local Population Estimates is on CD-ROM.

# **Technical, Ordering, and Availability Information**

Customer Services Bureau of the Census Washington Plaza, Room 315 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

33

Table 3. Families, by Type, Age of Own Children and Age, Race, and Hispanic Origin of Householder: March 1991—Con.

[Numbers in thousands except for averages and medians. For meaning of symbols, see text]

|                                                                                                                                                            |                                                                           | Age of householder                                |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|----------------------------------------|------------------------------------------|------------------------------------|----------------------------------------------------------------------|
| Characteristic                                                                                                                                             | Total                                                                     | Under 20<br>years                                 | 20 to 24<br>years                                   | 25 to 29<br>years                                                    | 30 to 34<br>years                                             | 35 to 39<br>years                                               | 40 to 44<br>years                                        | 45 to 54<br>years                                   | 55 to 64<br>years                                   | 65 to 74<br>years                      | 75 to 84<br>years                        | 85 years<br>and over               | Median<br>age                                                        |
| WHITE-OTHER FAMILIES,<br>FEMALE HOUSEHOLDER                                                                                                                |                                                                           |                                                   |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| Tenure                                                                                                                                                     |                                                                           |                                                   |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| , Families<br>Owner families<br>Renter families                                                                                                            | 7 512<br>3 818<br>3 695                                                   | 87<br>13<br>74                                    | 464<br>43<br>421                                    | 803<br>135<br>669                                                    | 975<br>328<br>647                                             | 1 048<br>446<br>602                                             | 986<br>545<br>441                                        | 1 274<br>815<br>459                                 | 740<br>572<br>168                                   | 636<br>522<br>114                      | 398<br>314<br>84                         | 101<br>85<br>16                    | 41.9<br>49.2<br>35.3                                                 |
| Size of Family                                                                                                                                             |                                                                           |                                                   |                                                     |                                                                      |                                                               | ,                                                               |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| Families Two persons Three persons Four persons Five persons Six persons Seven or more persons                                                             | 7 512<br>3 936<br>2 201<br>910<br>309<br>90<br>68                         | 87<br>65<br>17<br>1<br>2<br>1                     | 464<br>268<br>132<br>51<br>8<br>2                   | 803<br>372<br>267<br>123<br>30<br>7                                  | 975<br>358<br>345<br>177<br>67<br>22<br>6                     | 1 048<br>415<br>380<br>181<br>47<br>11                          | 988<br>450<br>352<br>128<br>40<br>11                     | 1 274<br>718<br>330<br>143<br>46<br>24<br>13        | 740<br>450<br>188<br>53<br>25<br>6<br>17            | 636<br>483<br>110<br>30<br>29<br>2     | 398<br>303<br>59<br>17<br>14<br>5        | 101<br>73<br>20<br>6<br>1          | 41.9<br>45.5<br>39.5<br>37.8<br>40.1<br>41.4<br>(B)                  |
| Total persons                                                                                                                                              | 21 000<br>2.80                                                            | 205<br>2.38                                       | 1 191<br>2.57                                       | 2 218<br>2.76                                                        | 2 878<br>2.95                                                 | 3 063<br>2.92                                                   | 2 816<br>2.88                                            | 3 604<br>2.83                                       | 2 045<br>2.76                                       | 1 699<br>2.67                          | 1 019<br>2.56                            | 261<br>2.59                        | XX                                                                   |
| Age of Own Children                                                                                                                                        |                                                                           |                                                   |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| Families With own children of any age Under 25 years Under 18 years Under 19 years Under 19 years Under 6 years Under 7 years Under 7 years Under 1 year   | 7 512<br>6 607<br>5 312<br>4 337<br>3 137<br>1 709<br>892<br>304<br>3 339 | 67<br>73<br>73<br>73<br>73<br>73<br>70<br>42<br>2 | 464<br>409<br>409<br>407<br>407<br>385<br>274<br>95 | 803<br>728<br>728<br>725<br>712<br>548<br>266<br>83<br>419           | 975<br>915<br>915<br>912<br>827<br>387<br>164<br>46<br>771    | 1 048<br>1 011<br>1 011<br>956<br>624<br>204<br>79<br>28<br>883 | 986<br>943<br>935<br>733<br>322<br>71<br>17<br>3<br>699  | 1 274<br>1 154<br>979<br>444<br>134<br>23<br>8<br>- | 740<br>590<br>217<br>64<br>21<br>11<br>7<br>4<br>53 | 636<br>449<br>39<br>18<br>16<br>5<br>5 | 398<br>257<br>4<br>3<br>-<br>-<br>-<br>3 | 101<br>78<br>1<br>1<br>1<br>1<br>1 | 41.9<br>40.9<br>37.6<br>35.3<br>32.3<br>28.6<br>28.9<br>25.9<br>37.4 |
| Total own children Under 25 years Under 19 years Under 19 years Under 12 years Under 8 years Under 3 years Under 1 years Under 1 years Six to 17 years     | 10 971<br>8 989<br>7 134<br>4 651<br>2 121<br>989<br>328<br>5 013         | 82<br>82<br>82<br>81<br>80<br>75<br>42<br>2       | 607<br>607<br>603<br>603<br>535<br>314<br>101<br>68 | 1 237<br>1 237<br>1 237<br>1 232<br>1 202<br>688<br>289<br>83<br>548 | 1 723<br>1 723<br>1 706<br>1 305<br>473<br>185<br>49<br>1 233 | 1 884<br>1 862<br>1 674<br>852<br>228<br>85<br>32<br>1 446      | 1 652<br>1 632<br>1 131<br>399<br>75<br>18<br>4<br>1 057 | 1 875<br>1 514<br>599<br>163<br>24<br>7             | 850<br>278<br>75<br>23<br>12<br>6<br>5              | 657<br>49<br>25<br>22<br>6<br>5<br>1   | 324<br>5<br>3<br>-<br>-<br>-<br>3        | 101<br>2<br>2<br>2<br>2<br>2       | SSSSSSS                                                              |
| Own Children, Selected Ages                                                                                                                                |                                                                           |                                                   |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| Families with own children under 18                                                                                                                        | 4 337<br>998<br>711<br>2 628                                              | 73<br>72<br>1                                     | 407<br>344<br>41<br>23                              | 725<br>306<br>242<br>177                                             | 912<br>141<br>246<br>525                                      | 956<br>73<br>132<br>751                                         | 733<br>34<br>37<br>662                                   | 444<br>12<br>11<br>421                              | 64<br>11<br>53                                      | 18<br>4<br>2<br>13                     | 3<br>-<br>3                              | 1 1 -                              | 35.3<br>26.4<br>31.5<br>38.9                                         |
| Total members                                                                                                                                              | 12 657<br>2.92                                                            | 168<br>(B)                                        | 1 047<br>2.57                                       | 2 029<br>2.80                                                        | 2 730<br>2.99                                                 | 2 838<br>2.97                                                   | 2 181<br>2.97                                            | 1 363<br>3.07                                       | 215<br>(B)                                          | 75<br>(B)                              | 9<br>(B)                                 | 3<br>(8)                           | 88                                                                   |
| Own Children Under 18                                                                                                                                      |                                                                           |                                                   |                                                     |                                                                      |                                                               |                                                                 |                                                          |                                                     |                                                     |                                        |                                          |                                    |                                                                      |
| Families Without own children under 18 With own children under 18 One under 18 Two under 18 Tree under 18 Four under 18 Four under 18 Sox or more under 18 | 7 512<br>3 175<br>4 337<br>2 226<br>1 425<br>509<br>130<br>34             | 87<br>14<br>73<br>62<br>11                        | 484<br>56<br>407<br>239<br>124<br>36                | 803<br>79<br>725<br>332<br>259<br>106<br>23                          | 975<br>62<br>912<br>339<br>347<br>160<br>48<br>16             | 1 048<br>93<br>958<br>424<br>358<br>131<br>27<br>8              | 986<br>253<br>733<br>430<br>230<br>51<br>19<br>3         | 1 274<br>830<br>444<br>329<br>89<br>19              | 740<br>675<br>64<br>555<br>5                        | 636<br>619<br>18<br>11<br>5<br>1       | 398<br>395<br>3<br>3                     | 101                                | 41.9<br>57.9<br>35.3<br>36.7<br>34.6<br>33.5<br>(B)<br>(B)           |

"Household and Family Characteristics: March 1991."

Bureau of the Census

# Population and Housing, (1990) Census

### **Data Product Keywords**

Demographic, socioeconomic

### Summary

Population and housing statistics, organized hierarchically from the national level down to the census block level. The data files and reports are further organized by 100 percent (or complete) count subjects (asked of all residents) and sample subjects (asked of about 17.7 million randomly selected housing units). Various products to be released over a period of time beginning in 1991.

### **Extent of Program**

United States, Puerto Rico, the United States Virgin Islands, and the Pacific islands of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

### **Available Product Coverage**

Census data are presented for the following political and statistical entities: the Nation, census regions, census divisions, States, counties and county equivalents, incorporated places and minor civil divisions of counties, congressional and voting districts, metropolitan areas, census county divisions, census designated places, urbanized areas, census tracts and block numbering areas, census block groups, blocks, tabulation areas for Alaska Native villages and American Indian tribes, and ZIP codes. In addition, the Census Bureau will produce special tabulations for user-defined areas, such as neighborhoods, traffic zones, or other locally specified geographic areas not available in standard census files or reports.

Release dates for specific data sets (nearly 2,500 1990 Census of Population and Housing data products were planned) may be obtained by writing or calling: Bureau of the Census, Data User Services Division, Washington Plaza – Room 326, Washington, D.C. 20233 (Telephone: (301) 763-4100).

#### Information Content

Population: Reports denoted 100 percent may include total population, race, Hispanic origin, age, sex, household relationship, household size, residence in group quarters, family type, marital status, and urban/rural

residence. Other reports (including data based on a sample), may have the above items plus type of group quarters, place of birth, citizenship, year of immigration, language spoken at home and ability to speak English, ancestry, school enrollment and attainment, residence five years prior to census, disability status, fertility, veteran status and service, labor-force status in week prior to census, year last worked, current place of work and journey to work, industry, occupation, class of worker, work experience in 1989, income in 1989 by type, and poverty status in 1989.

Housing: Reports denoted 100 percent include tenure, vacancy characteristics, rooms, persons in unit, persons per room, value, contract rent, and congregate housing (meals included in rent). Other reports, which include data based on a sample, may cover the above items plus condominium status, plumbing and kitchen facilities, telephone in unit, house heating fuel, source of water and method of sewage disposal, vehicles available, year structure built, year moved into residence, number of bedrooms, farm residence, and shelter costs, including utilities.

### **Product Delivery Format**

Available all or in part on computer tape, CD-ROM, on-line, and floppy diskette, as well as printed reports and microfiche. Some of the printed reports contain combined population and housing data. The computer tape files (some of which also are available on CD-ROM) contain either complete count or sample population and housing data. Selected data are available on-line (CENDATA).

Limited summaries may be obtained in computer printouts and complete count and sample data down to the block-group level and an extract of complete count data down to the block level are available on microfiche.

Also on tape and CD-ROM, unidentifiable individual housing unit records with sample data for large geographic areas (100,000+ population). Data generally are organized by State on all media, but summaries in some media are also provided for metropolitan areas, counties, and other geographic levels.

Number of reels, discs, and reports for the data set depends on the size of the State's population and geo-

graphic areas presented. Only selected data are available on CD-ROM, microfiche, and on-line.

### Technical, Ordering, and Availability Information

See "Census Catalog and Guide: 1992," or contact the following office for detailed information on all products, including stock numbers, prices, and availability:

Customer Services Bureau of the Census Washington Plaza, Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

```
1990 Census Of Population And Housing Summary Tape File 1A
   040 District of Columbia
          District of Columbia
   050
            Tract 1
  140
   150
               BG 1
MEDIAN VALUE
Universe: Specified owner-occupied housing units
                                                                        500,001
Median value.....
STF1A8DC: Record No
 list cnty, tractbna, blckgr, h023b001 for sumlev="150" while tractbna ="007601
 list cnty, tractbna, blckgr, h023b001 for sumlev="150" .AND. tractbna ="007601
         cnty tractbna blckgr h023b001
Record#
                              000086300
              007601
   1322
         001
   1323
         001
              007601
                       2
                              000091000
              007601
                              000088100
   1324
         001
                       3
                              000082000
   1325
         001
              007601
              007601
                       5
                              000080600
   1326
        001
Command :L:\STF1A8DC
                                 :Rec EOF/1546
                                                   :File :
                                                                      Num
```

A computer printout of data from the 1990 Census of Population and Housing's Summary Tape File 1A on CD-ROM shows median values of specified owner-occupied housing units for block groups in Washington, D.C. With commercial computer-mapping software, users can link census housing data with block groups whose boundaries are found in the Census Bureau's TIGER/Line™ files.

Bureau of the Census

# Statistical Compendia

### **Data Product Keywords**

Demographic, socioeconomic

### **Extent of Program**

Mostly national and State; some international data.

### **Available Product Coverage**

Mostly U.S.; but also data for regions, States, metropolitan areas, selected cities, and foreign countries; divisions, counties, places with 2,500+ population, counties of metropolitan areas and central cities, depending on the focus of the particular publication.

### Information Content

Statistical Abstract of the United States: Standard annual summary of social, political, and economic statistics, with recent time series data. Guide to sources. Mostly U.S., but also some data for regions, States, metropolitan areas, selected cities, and foreign countries. Annual.

County and City Data Book: A Statistical Abstract supplement; data from most recent censuses and from other Government agencies and private sources. Regions, divisions, States, counties, places with 2,500+population. Periodic (latest 1988).

State and Metropolitan Area Data Book: A Statistical Abstract supplement; data from most recent censuses, other Government agencies, and about 60 non-Federal agencies and private sources. Regions, divisions, States, metropolitan areas, metropolitan counties, and central cities. Periodic (latest 1991).

County Statistics File 3: Over 1,600 data items from 1960 to 1986 from the Census Bureau, other Federal agencies, and private organizations on a variety of topics in time-series form. Data items include those shown in the "County and City Data Book" and the "State and Metropolitan Area Data Book" for counties. U.S., States, counties. 1988.

Historical Statistics of the United States from Colonial Times to 1970: A "Statistical Abstract" supplement; over 12,500 time series, mostly annual, providing a statistical history of U.S. social, economic, political, and geographic development during periods from 1610 to 1970. U.S., States, selected cities. Occasional.

### **Product Delivery Format**

All but County Statistics File 3 are available in printed reports and microfiche. The County Statistics File 3 is available on computer tape as are the County and City Data Book and the State and Metropolitan Area Data Book.

Both the County and City Data Book and the State and Metropolitan Area Data Book also are available on floppy diskettes. The County and City Data Book is available on CD-ROM.

Selections from all of the compendia, with the exception of the Historical Statistics of the United States from Colonial Times to 1970 are carried in the Census Bureau's on-line data base, CENDATA.

# Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza, Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

### And from:

Superintendent of Documents Government Printing Office Washington, D.C. 20402 Telephone: (202) 783-3238

Bureau of the Census

## TIGER/Line Files and Other TIGER Extract Products

### **Data Product Keywords**

Administrative boundaries, airports, boundaries, census geography, coastal, county boundaries, geographic names, hydrography, hydrologic, local government boundaries, pipelines, railroads, roads, State boundaries, surface and manmade features, water, waterways

### **Summary**

The TIGER (Topologically Integrated Geographic Encoding and Referencing) System, developed by the Census Bureau in support of the 1990 Census of Population and Housing, has spawned a new line of publicuse extract products containing digital data for map features, boundaries, names, codes, coordinates, and – in the urban cores of the most populous counties – address ranges and ZIP Codes.

### **Extent of Program**

United States, Puerto Rico, the Virgin Islands of the United States, and the outlying areas of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, the Midway Islands, plus the other areas comprising the former Trust Territory of the Pacific Islands (the Marshall Islands and the Federated States of Micronesia).

### **Available Product Coverage**

The TIGER/Line Census files 1990, are available for the entire Nation and its territories by State or groups of States on CD-ROM, and by county or groups of counties within a State and statistical equivalents on computer tape or cartridge. Other TIGER extract products available now or scheduled for release shortly include: TIGER/Line™ School District; TIGER/SDTS™, TIGER/Boundary™, TIGER/Census Tract Comparability™, and TIGER/UA Limit™ files – all available on computer tape.

### **Information Content**

A brief description of the TIGER/Line files and the other TIGER extract products follows:

TIGER/Line Census files 1990: Detailed public-use extracts for each county and statistical equivalent in the United States, Puerto Rico, and the outlying areas. The final set reflects all 1990 census geographic boundaries, codes, latitude and longitude coordinates (to six decimal

places), feature names, and, in the urban cores of the most populous counties, address ranges and ZIP Codes. The CD-ROM version also contains TIGER/GRF-N™ (Geographic Reference File-Names) for each State on the CD. (See TIGER and Other Geographic Reference Products.)

TIGER/Line School District files – Includes school district names and codes and urbanized area codes. Organized by county or groups of counties within States as specified by the purchaser.

TIGER/SDTS: Presents the point, line, and area information from the TIGER data base in a format that complies with the proposed FIPS Spatial Data Transfer Standard (SDTS).

TIGER/UA Limit: Consists of all the segments in the TIGER data base that comprise the boundary of the 1990 urbanized areas. The file exists only for 1990 urbanized areas and will be distributed as a set of files for the Nation. There will be a total of 810 files on the magnetic tape (405 sets of two files each).

TIGER/Boundary files: Contain a digital representation of the boundaries for the entities specified in the title of each product. They also include the shorelines of major water features. They will have a "thinned" set of the latitude and longitude coordinate values (to six decimal places) of the boundaries of various geographic entities such as States, counties, county subdivisions, places, American Indian/Alaska Native areas, census tracts/block numbering areas, block groups, urbanized areas, and districts of the 103rd Congress. Users who need boundary files with coordinates having the same density as those in the TIGER/Line files should contact TIGER marketing (301-763-1384). The principal use of these files is for computer mapping.

In addition to the technical documentation provided with the above electronic products, the Census Bureau also makes available to the public its Unisys TIGER documentation (three volumes) and VAX TIGER documentation (four volumes). (See TIGER and Other Geographic Reference Products; Maps.)

### **Product Delivery Format**

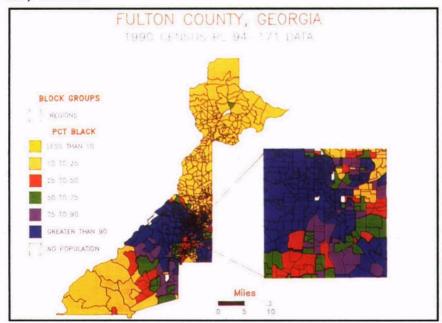
TIGER/Line files are available on computer tape (9-track, 6,250 bpi, ASCII or EBCDIC, labeled or unlabelled) or tape cartridges (IBM 3480 compatible). Costs vary depending on the size of the State. These files also are avail-

able on CD-ROM (44 discs for the entire Nation). The following files are on computer tape or cartridge only: TIGER/SDTS, TIGER/Boundary, and TIGER/UA Limit.

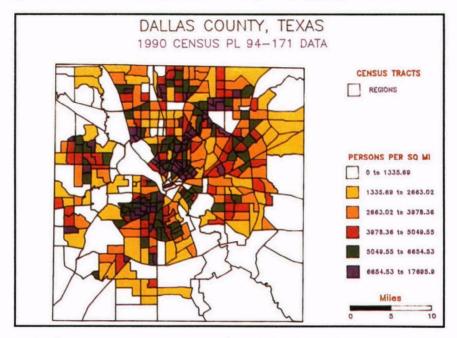
# Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza, Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

For more specialized information, applications, and training, call (301) 763-1580. An electronic bulletin board with TIGER-related information is available on (301) 763-7554.



Public Law 94-171 data shows the percent of Black population, by block groups, in Fulton County, GA. The thematic map was developed by combining the demographic data with TIGER/Line digital map files through the use of commercially available computer-mapping software.



A thematic map showing persons per square mile (population density) by census tract in Dallas County, TX also uses Public Law 94-171 data. This map was produced by combining demographic data with the Census Bureau's TIGER geographic data, using commercially available computer-mapping software.

Bureau of the Census

# **TIGER and Other Geographic Reference Products**

### **Data Product Keywords**

Census geography, geographic names

### **Summary**

The Census Bureau has developed a number of geographic reference files, based on its Topologically Integrated Geographic Encoding and Referencing (TIGER) System. These files provide varying hierarchical levels of the geographic entities used in tabulating the demographic and economic data collected in the Bureau's censuses and surveys. These may be available on computer tape, CD-ROM, printed reports, and/or microfiche. In addition, the Bureau publishes various lists of geographic names and places with their respective Census Bureau and/or Federal Information Processing Standards (FIPS) codes.

### **Extent of Program**

United States, Puerto Rico, the Virgin Islands of the United States, and the Pacific islands of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

### Available Product Coverage

Reference files provide lists of names, including spelling variations, of legal and statistical entities, roads and streets within counties, boundary features, Census and Federal Information Processing Standards (FIPS) codes, address ranges and ZIP Codes in selected areas, and other data, generally organized by State and by county within a State, alphabetically, by metropolitan area, etc.

### Information Content

The following is a list of some of the most popular geographic reference products:

TIGER/Census Tract Street Index<sup>TM</sup>: Version I of this file has county-based files for the core urban areas of 550 counties. They contain address-range information on census tract and block numbering area codes from the TIGER data base. Version II will contain additional address information incorporated from the 1990 census address control file, plus ZIP Codes.

TIGER/GRF-N<sup>TM</sup> (Geographic Reference File-Names): State files of geographic names and codes for 1990 census geographic entities presented in entity-type sort. TIGER/GICS™ (Geographic Identification Code Scheme): State files of geographic names and codes for 1990 census geographic entities at the place level and higher, presented in hierarchical order. The computer tape version also will contain population and housing unit counts, area measurements, and "internal point" coordinates for all included geographic entities. Supersedes TIGER/GRF-N.

TIGER/Map Sheet Corner Point Coordinate™ file: This file provides the corner point coordinates (latitude and longitude) for each map sheet in the County Block Map (1990) series. It can be used to register the paper map sheets to the TIGER/Line files for purposes of inserting map updates.

TIGER/Map Sheet-Geography™ file: This file identifies the County Block Map (1990) sheets that are required for coverage of American Indian/Alaska Native areas, county subdivisions, places, and census tracts/block numbering areas.

City Reference File, 1987: Presents a listing of post office names (and spelling variations), State abbreviations, and ZIP Codes, with their associated State, metropolitan area, county, and place codes, at the time of the 1987 economic censuses. It allows users to assign census geographic codes at these levels to records containing ZIP Code, post office name, and State abbreviation.

Metropolitan Areas (MSAs, CMSAs, and PMSAs) as Designated by OMB, June 1983 and Revised Through June 1990: Lists alphabetically the metropolitan areas designated by the Office of Management and Budget. In addition, the list provides the component entities and geographic codes associated with each metropolitan area.

Boundary and Annexation Survey, 1980 to 1989: Presents boundary change information for incorporated places and other legal entities; identifies all new entities, consolidations and mergers, and disincorporations; reports other selected actions for counties, minor civil divisions, and incorporated places; and reports both land area and change in land area during the decade for places.

Geographic Areas Reference Manual: To be developed by the Census Bureau as a guide for local census statistical areas committees and other agencies and groups working with the Bureau to maintain and im-

prove the geographic areas, concepts, and methods used for data presentation in the decennial, economic, and agriculture censuses. This product currently has no expected completion date.

TIGER/Census Tract Comparability: Lists the 1990 census tract codes if their numbers and/or boundaries have changed since 1980.

TIGER-related products: FORTRAN Mapping Source Code and COBOL Address Matching Source Code files – The Census Bureau is providing the FORTRAN source code routines used to produce maps from the TIGER data base on its Unisys 1100-Series mainframe computers, and the COBOL Address Matching Source Code file used to match address lists to an extract of the TIGER data base on its Unisys computers. (It does not include individual addresses.) These routines do not run on any computer system without extensive additional programming. The Census Bureau does not support the routines or answer questions about them. They are available only on computer tape.

### **Product Delivery Format**

All except the Geographic Areas Reference Manual are available on computer tape

The TIGER/Census Tract Street Index is available on CD-ROM, microfiche, and computer printouts as well.

The 1990 Census TIGER/Line files on CD-ROM include the TIGER/GRF-N.

The TIGER/GICS will be published as the 1990 Census Geographic Identification Code Scheme.

### Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794

Bureau of the Census

# **User Defined Areas Program (UDAP)**

### **Data Product Keywords**

Demographic, socioeconomic

### **Summary**

Users define the standard set of 1990 census data for areas not reported in standard data products. To participate, users must delineate these areas in whole census blocks on Census Bureau-provided maps. A standard set of data tables, presenting demographic, social, economic, and housing characteristics, has been designed for the UDAP.

### **Extent of Program**

United States, United States Virgin Islands, Puerto Rico.

### **Available Product Coverage**

Any grouping of census blocks at user's discretion.

### Information Content

Standard set of data sets from the 1990 Census of Population and Housing (see Population and Housing, (1990) Census). The UDAP report covers a wide range of subjects asked about during the 1990 census. Text defining subject terminology and the statistical limitations of the data will accompany all UDAP products. The UDAP standard product package offers program participants the option to submit the boundaries of their user-defined areas either by map delineation or electronic submission.

### **Product Delivery Format**

Data for each user-defined publication area (UDPA) will be available as an additional cost option on specialized media, including computer tape reels, tape cartridges, and flexible diskettes for microcomputers. The data available on tape and diskette generally follow the format and content of the 1990 census Summary Tape File 3A.

### Technical, Ordering, and Availability Information

UDAP Staff
Decennial Planning Division
Bureau of the Census
Washington, D.C. 20233
Telephone: (301) 763-4282

Bureau of the Census

# 1990 Census Maps

### **Data Product Keywords**

Administrative boundaries, boundaries, census geography, coastal, county boundaries, geographic names, hydrography, hydrologic, local government boundaries, pipelines, railroads, roads, State boundaries, surface and manmade features, water, waterways

### **Summary**

Various versions of the 1990 census County Block Maps and four 1990 census outline map series produced on electrostatic plotters may be purchased from the Census Bureau; printed maps for use with 1990 census data products and other publications also are planned.

### **Extent of Program**

United States, Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

# **Available Product Coverage**

Maps show detail for the more than 7 million census blocks and American Indian/Alaska Native areas, States, counties, county subdivisions, places, metropolitan areas, urbanized areas, voting districts, census tracts/block numbering areas, the map series subject area, and selected base features at a small scale.

### Information Content

The following is a description of some of the map types:

County Block Maps: The most detailed set of maps the Census Bureau produces. One or more 36- by 42-inch map sheets for each county/county equivalent, displaying census block numbers, geographic features, and legal and statistical boundaries, names, and codes (e.g., places, census tracts); in three versions: the 1990 Census County Block Map does not show voting districts; the P.L. 94-171 County Block Map shows voting districts where these were delineated by State officials; and the Entity-Based Block Maps for American Indian/Alaska Native areas and places that are in more than one county.

Voting District Outline Maps: Electrostatically plotted, variable-scale county maps covering the counties in States that delineated voting districts for the Census Bureau. Show voting district numbers and names, boundaries, underlying features and their names, as appropriate, as well as American Indian/Alaska Native area, county, county subdivision, and place names and boundaries. Insets as required.

Census Tract/Block Numbering Area Outline Maps: County-based maps showing census tract/block numbering area boundaries and numbers, the features underlying these boundaries, and the names of the underlying features; also, the boundaries and names of American Indian/Alaska Native areas, counties, county subdivisions, and places. Insets as required. Maps produced by electrostatic plotter for all areas.

County Subdivision Outline Maps: Two versions: in the census reports, printed maps partitioned into multiple, page-size sheets, with scale varying from State to State. Individual (one or more) 36- by 60-inch map sheets produced by electrostatic plotting, for each State and statistically equivalent area. Both show names and boundaries of all American Indian/Alaska Native areas, counties (and statistically equivalent areas), county subdivisions, and places for which data were tabulated in the 1990 census.

State/County Outline Maps: Maps displaying county boundaries and names within each State. One page-size map per State in the printed reports.

State/Metropolitan Area Outline Maps: These maps display county boundaries and names along with the name and boundaries of each metropolitan statistical area, consolidated metropolitan statistical area, and primary metropolitan statistical area within each State. These maps also show locations and names of the larger places in each State. One page-size map per State in the printed reports. For metropolitan areas that extend into adjacent States, the map portrays the full extent on all affected State maps.

United States Base Map: Small-scale U.S. map showing State boundaries and the boundaries and names of all counties and statistically equivalent areas, including those in Puerto Rico, the Virgin Islands of the United States, and the Pacific outlying areas. Does not show State names. Sheet size: approximately 36- by 48-inch. Scale: 1:5 million.

Congressional Districts of the 103rd Congress: One map for the United States and its major possessions,

showing the boundaries and numbers of the reapportioned congressional districts for the 103rd Congress (1993 to 1994 – the first Congress to be redistricted as a result of the 1990 census) with only ranges of numbers in most multidistrict counties. Map includes State and county boundaries and county names. Scale: 1:150 miles.

State Congressional Districts of the 103rd Congress: These printed, page-size maps for each State depict the boundaries and number of the districts of the 103rd Congress of the United States. Each map depicts all congressional districts, counties, State capital, and generally all places of 25,000 or more inhabitants. Each State map or maps will be printed in the corresponding State publication in the CPH-4 series. Maps for all States also will be combined in a" Congressional District Atlas."

Urbanized Area Outline Maps and Urbanized Area Boundary Maps: Two versions: in the census reports, printed small-scale maps showing the extent and component entities (American Indian/Alaska Native areas, counties, county subdivisions, and places) of each 1990 census urbanized area (UA). Several small UAs may be grouped on a page; some large UAs require more than one page. Individual electrostatically plotted maps (36-by 48-inch) for each 1990 urbanized area show UA boundaries, the underlying features, and the features' names, as appropriate; also, the boundaries and names of States, American Indian/Alaska Native areas, counties, county subdivisions, and places. Scale varies by area.

Other printed maps: United States of America; Census Regions and Divisions of the United States; Metropolitan Areas of the United States: 1990; Urbanized Areas of the United States: 1990; American Indian and Alaska Native Areas: 1990.

Statistical (Thematic) Maps: These maps will be included in published reports: "Major Acquisitions of Territory by the United States and Dates of Admission of States"; "Mean Center of Population of the United States: 1790 to 1990"; "Median Center of Population of the United States: 1880 to 1990 (tentative)"; and "Population and Geographic Centers of the United States: 1990."

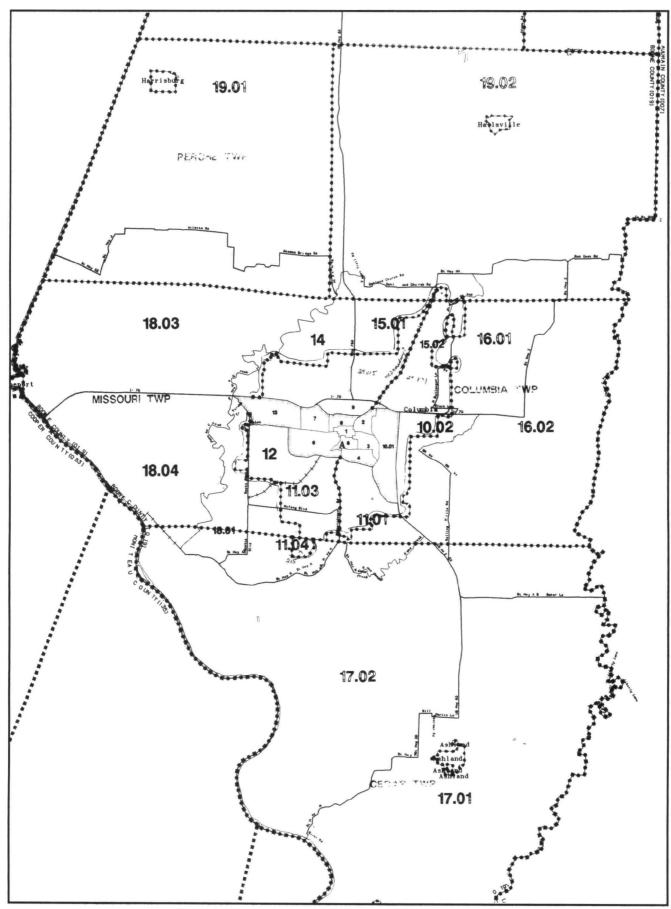
For information about other map products, see the "Census Catalog and Guide: 1992," the "Monthly Product Announcement," and the "Daily List"; or write or call Customer Services, Bureau of the Census, Washington Plaza-Room 326, Washington, D.C. 20233 (telephone: (301) 763-4100; FAX: (301) 763-4794).

### **Product Delivery Format**

1990 Census County Block, Voting District Outline, Census Tract/Block Numbering Area Outline, County Subdivision Outline, and Urbanized Area Boundary maps come in electrostatically plotted versions. State and County Outline, State/Metropolitan Area Outline, County Subdivision Outline, and Urbanized Area Outline maps will be printed in the reports. In addition, County Block, County Subdivision Outline, and Census Tract/Block Numbering Area Outline maps are scheduled to be available on CD-ROMs as metafiles for use on microcomputers.

# Technical, Ordering, and Availability Information

Customer Services Bureau of the Census Washington Plaza-Room 326 Washington, D.C. 20233 Telephone: (301) 763-4100 FAX: (301) 763-4794



A reduced portion of an electrostatically plotted parent sheet for a census tract/block numbering area map for Boone County, Missouri. The census tract numbers go up to 4 digits, including suffixes.

| Bureau of Economic Analysis                 |             |            |                   |             |          |               |                  |      |  |                                     |          |    |  |   |  |
|---------------------------------------------|-------------|------------|-------------------|-------------|----------|---------------|------------------|------|--|-------------------------------------|----------|----|--|---|--|
| Data Product                                | Page Number | Boundaries | County boundaries | Demographic | Economic | Socioeconomic | State boundaries |      |  |                                     |          |    |  |   |  |
| Regional Economic Information System (REIS) | 33          | •          | •                 | •           | •        | •             | •                |      |  |                                     |          |    |  |   |  |
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Bureau of Economic Analysis (BEA)

# Regional Economic Information System (REIS)

### **Data Product Keywords**

Boundaries, county boundaries, demographic, economic, socioeconomic, state boundaries

### **Summary**

The Regional Economic Information System (REIS) contains over 20 years of economic data for all States, counties, and metropolitan areas of the Nation. Beginning with 1969, REIS provides annual estimates of personal income by major source, per capita income, earnings by 2-digit Standard Industrial Classification (SIC) industry, full and part-time employment by 1-digit SIC, regional economic profiles and other related information.

### **Extent of Program**

National

### **Available Product Coverage**

National coverage. The REIS is updated annually and released in early May. The estimates are available 16 months after the end of the last calendar year. For example, the estimates for 1969 to 1990 were released in May of 1992.

### **Information Content**

The data for the REIS is contained on a single CD-ROM. Currently a separate floppy disk contains software developed by the Bureau of Economic Analysis (BEA) to allow 1) the display of data on the screen, 2) the printing of standard local area BEA tables, and 3) the copying of data subsets to files in a variety of formats. This last function allows data to be formatted for easy import into spreadsheets, data base programs, or other applications.

All data files on the CD-ROM are in ASCII fixed record length format. The record formats are identical to that used on files distributed on mainframe tapes. Each file can be accessed as either a sequential or a random file. All documentation about the content and format of the files is included on the disk. This gives users the option to write their own applications which directly access the files on the CD-ROM.

The main REIS data base is organized into five tables:

CA5 Total Personal Income by Type of Payment and Earnings by Industrial Source: Also con-

tains information on per capita personal income and population.

### CA25 Full and Part-Time Employment by Major Industry

CA30 Regional Economic Profile: Contains selected summary statistics on both income and employment.

CA35 Transfer Payments: Contains details on payments from governments and businesses to individuals and nonprofit institutions. Includes a variety of payments such as the Old-Age, Survivors, and Disability Payments; Federal Civilian Retirement Payments; Aid to Families with Dependent Children; and many others.

CA45 Farm Income and Expenses: Contains selected information on total farm gross receipts, production expenses, and value of inventory change as well as the derivation of farm proprietors' income.

In addition to the REIS data base, the disk contains BEARFACTS. For each area, BEARFACTS provides two pages of text describing economic highlights. One page covers developments for the most recent year. The other covers developments over the last decade., These pages can be viewed, copied, or printed from the REIS software.

The CD-ROM disk also contains other data files that are not accessible from the provided software, but which can be used by other application programs. These files contain the following information:

Quarterly State Personal Income from IQ1969 – IVQ19nn where nn is the year prior to the issuance of the disk. For example, the disk released in May 1992 contains quarterly State data up to IVQ1991.

Gross State Product, 1977 to 1989.

Projections to 2040 of income and employment for States and metropolitan areas.

Census county level commuting flows from the 1960, 1970, and 1980 Censuses.

The disk contains several information files including a complete documentation of the personal income estimating methodology.

### **Product Delivery Format**

The REIS data base and ancillary files are available on CD-ROM in an IBM-compatible format. The data base itself (the five "CA" tables) are also available on mainframe (9-track) tape. State annual, State quarterly, and selected county estimates are made available on floppy diskettes.

### Technical, Ordering, and Availability Information

The REIS CD-ROM is available from the Bureau of Economic Analysis at a cost of \$35.00. To order, request Accession No. 55-90-30-599, enclose a check or money order payable to Bureau of Economic Analysis, and mail to:

Public Information Office Order Desk, BE-53 Bureau of Economic Analysis U.S. Department of Commerce Washington, D.C. 20230

You may telephone (202) 254-6630 for further information or to place an order using MasterCard or VISA. You can fax a request for further ordering information to the BEA REIS staff at (202) 254-7713.

### National Environmental Satellite, Data, and Information Service **Data Product Keywords** Page Number Environmental Atmospheric Hydrography Geophysics Magnetics Ecological Elevation Geodetic Geology Land use Coastal Gravity **Data Product** Advanced Very High Global Res. Radiometer (AVHRR) 37 • • Instrument Data 40 Aeromagnetic Data 42 Bathymetric Data 44 Climate Cloud Motion Vectors (WINDS) 46 • • Coastal Zone Color Scanner Level 11 Digital Data 47 • • • CoastWatch Data 48 • Daily, Monthly, & Seasonal Heat Budget Data 50 Daily & Weekly Vegetation Index Tapes (New) 51 • • 52 Daily & Weekly Vegetation Index Tapes (Old) Geomagnetic Observatory Data 53 • 54 Geophysics of N. America (GNA) CD-ROM • • • Global Change Data Base 56 • Global Cloud Data 58 Global Photographic Displays of Sea Surface Temp. 59 • Global & Regional Radiance Data 60 **Gravity Data** 61 • Great Lakes Ice Data 63 • • Land Seismic Reflection Data 65 • Marine Geology Files 66 Marine Geophysics 67 Paleoclimate Data 68 69 Seismology • Solar Backscan UV Radiometer (SBUV)/2 Level 1B Data 70 TIROS TOVS Level 1B Data Sets 71 • • TIROS TOVS Sounding Products 72 • • 73 Topographic Data • Vegetation Index (Old & New) Hard-Copy Images 75 Visible and Infrared Spin Scan Radiometer 77 (VISSR) Data DATA CENTERS NOAA Nat'l Climatic Data Center (NCDC) 78 • • • NOAA Nat'l Climatic Data Center (NCDC) Satellite Data 79 Services Division (SDSD) NOAA Nat'l Geophysical Data Center (NGDC) 81 • • • • • • • • • • • • 83 NOAA Nat'l Oceanographic Data Center (NODC)

### National Environmental Satellite, Data, and Information Service Surface & manmade features **Data Product Keywords** Remotely sensed Page Number Temperature **Topography** Subsurface Vegetation Radiation Satellite Seismic Weather **Data Product** Advanced Very High Global Res. Radiometer (AVHRR) 37 • • • • • Instrument Data 40 • Aeromagnetic Data 42 • • Bathymetric Data 44 Climate 46 Cloud Motion Vectors (WINDS) • 47 • • Coastal Zone Color Scanner Level II Digital Data 48 CoastWatch Data 50 • • • • Daily, Monthly, & Seasonal Heat Budget Data 51 • • • Daily & Weekly Vegetation Index Tapes (New) 52 • • • • Daily & Weekly Vegetation Index Tapes (Old) 53 Geomagnetic Observatory Data 54 Geophysics of N. America (GNA) CD-ROM 56 • • • Global Change Data Base 58 • Global Cloud Data 59 . Global Photographic Displays of Sea Surface Temp. 60 • Global & Regional Radiance Data 61 **Gravity Data** 63 • Great Lakes Ice Data 65 Land Seismic Reflection Data 66 Marine Geology Files 67 • • Marine Geophysics 68 Paleoclimate Data • Seismology 70 • • • Solar Backscan UV Radiometer (SBUV)/2 Level 1B Data TIROS TOVS Level 1B Data Sets 72 • TIROS TOVS Sounding Products 73 • Topographic Data 75 Vegetation Index (Old & New) Hard-Copy Images Visible and Infrared Spin Scan Radiometer **77** (VISSR) Data DATA CENTERS NOAA Nat'l Climatic Data Center (NCDC) • • NOAA Nat'l Climatic Data Center (NCDC) Satellite Data • • 79 Services Division (SDSD) 81 NOAA Nat'l Geophysical Data Center (NGDC) NOAA Nat'l Oceanographic Data Center (NODC) •

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Advanced Very High Global Resolution Radiometer (AVHRR) Instrument Data

### **Data Product Keywords**

Atmospheric, climate, ecological, environmental, ice, land cover, land use, radiation, remotely sensed, satellite, temperature, vegetation, weather, clouds, sea surface temperature

### **Summary**

The Advanced Very High Resolution Radiometer (AVHRR) instrument data provide global area coverage (GAC), local area coverage (LAC) and high resolution picture transmission (HRPT). When processed into mapped images the data are used for cloud study, weather status, and surface studies.

The AVHRR instrument receives data in either four or five spectral bands depending on the instrument. The bands include two visible and up to three infrared channels. The instrument has a 1 km resolution capability for LAC and HRPT data. A typical resolution value is 4 km for the GAC data.

### **Extent of Program**

Global

### **Available Product Coverage**

Global coverage of entire Earth's surface at low resolution. High resolution imagery over selected areas. Data available from October 19, 1978.

### Information Content

The AVHRR instrument has two different versions. The first version has two visible channels and two infrared channels with the long wave infrared channel being repeated into the fifth channel position. The second version has two visible channels with three infrared channels. Both versions have a resolving power of 1 km. The low-resolution (4 km) data are gathered over the Earth's entire surface on an orbit by orbit basis. The high-resolution (1 km) data are gathered over selected areas. The LAC is recorded onboard spacecraft for playback at a later time. The HRPT data are available to those users who are able to readout the data on a real time basis. Data are stored on magnetic tape in the Level 1B format. This format is standard for all the Television and Infrared Operational Satellite (TIROS)-

N series of satellites. The image data are stored on photographic film or negatives. The image data can be generated from Level 1B data tapes.

### Product Delivery Format

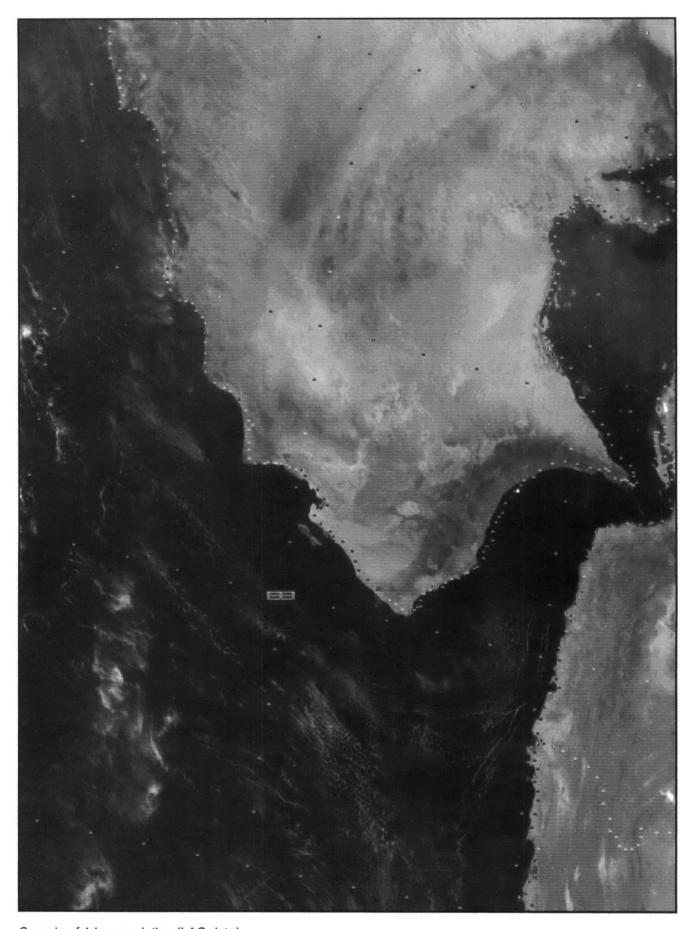
Data are available on magnetic tape. Also available as images or photographic negatives.

### Technical, Ordering, and Availability Information

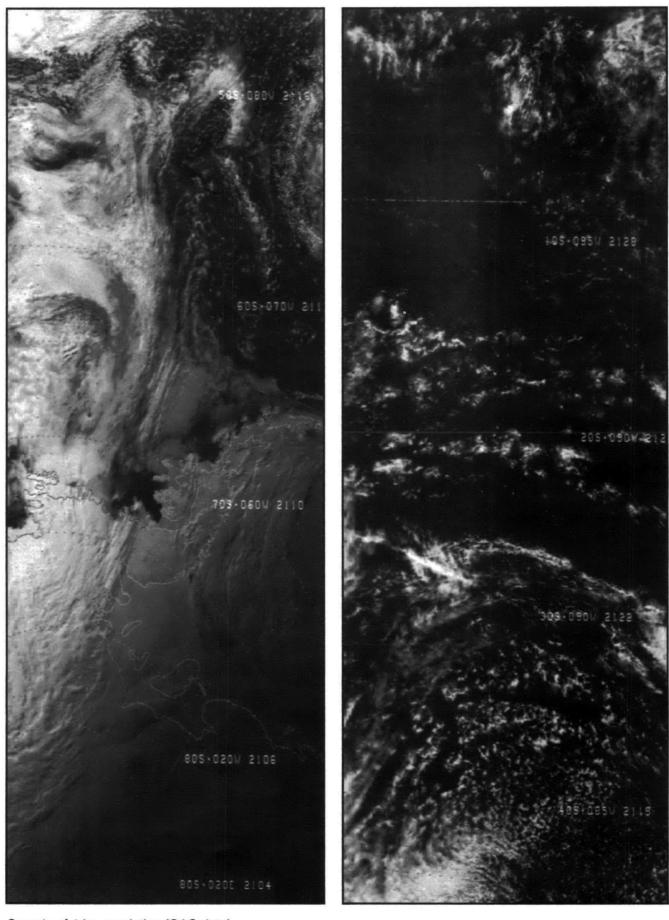
NOAA

National Climatic Data Center Satellite Data Service Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443



Sample of 1-km resolution (LAC data).



Sample of 4-km resolution (GAC data).

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# **Aeromagnetic Data**

### **Data Product Keywords**

**Geophysics, magnetics, subsurface**, aeromagnetic, geomagnetism

### **Summary**

Aeromagnetic data consist of surveys providing information on magnetic fields, aeromagnetic data, and geomagnetism for surveyed areas. Aeromagnetic data have a variety of uses, such as exploration for energy and mineral resources, modeling of magnetic fields, geophysical research, and integration with satellite imagery to enhance geological studies.

### **Extent of Program**

Global

### **Available Product Coverage**

Global, but irregularly spaced. Survey areas include: United States, Canada, Nordic countries, Iceland and Greenland Sea, the Antarctic, the Arctic Basin, South Pacific, North Atlantic and the former USSR. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided

for region as available.

### **Information Content**

Surveys generally include both low- and high-density data and line spacing is .05 to 5 km, altitude above ground and the sampling interval along flight lines is 1 second. Numerous datum, accuracies, resolution and sources are available.

### **Product Delivery Format**

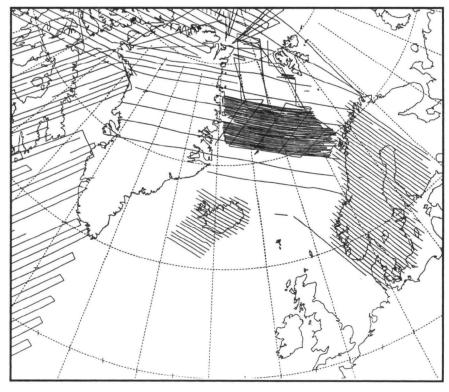
CD-ROM and other primarily magnetic media.

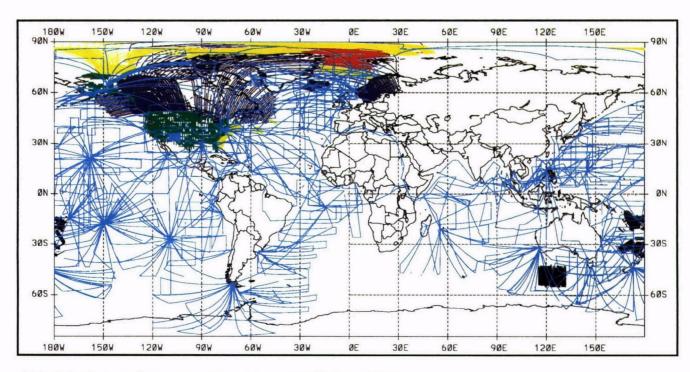
### Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6128

FAX: (303) 497-6513

Aeromagnetic survey areas for the North Atlantic. Lines indicate survey flight lines.





Global distribution of aeromagnetic surveys available from NGDC.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# **Bathymetric Data**

### **Data Product Keywords**

Bathymetry, coastal, elevation, hydrography, subsurface, surface and manmade features, topography, bottom characteristics, ocean depths

### Summary

Data sets include: National Ocean Service Digital Hydrographic Database (NOSHB), which consists of depth, navigation features, (both manmade and natural), and bottom characteristics; ETOPO5, which is a data set of average elevations/depths for 5 arc-minute squares of latitude and longitude for the entire world; Geophysical Data System (GEODAS) trackline geophysical data base, which includes bathymetry, magnetics, gravity and seismic data; Geophysical Long Range ASDIC (GLORIA) Sidescan image data on CD-ROM; and hydrographic data from sources other than NOS.

### **Extent of Program**

NOSHB - National ETOPO5 - Global GEODAS - Global GLORIA - Regional Other hydrographic data bases - Global

### **Available Product Coverage**

Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

The NOS Digital Hydrographic Database (NOSHB), which covers the entire United States (including Alaska and Hawaii) provides 11 Surveys with 14 million data values on depth, navigation features, and bottom characteristics.

ETOPO5 provides mean elevation and depth on a global scale in 5 minute latitude-longitude square areas; the data set includes 9.3 million values.

GEODAS covers bathymetric, magnetic, gravity and seismic data; the data set is global and includes 50 million data values.

GLORIA provides sidescan images on a regional scale and is available on 4 CD-ROMs.

Other hydrographic data is primarily depth data; it consists of a sparsely populated data base of global scale.

### Information Content

NOSHB provides depth values, feature and bottom characteristic locations.

ETOPO5 provides mean elevation/depth, meters for 5-minute latitude-longitude square.

GEODAS provides depth (in meters), magnetic field intensity (in nannoteslas), and gravity data (in milligals).

GLORIA provides sidescan images.

Other hydrographic data provides depth information.

### **Product Delivery Format**

NOSHB and ETOPO5 media are currently available on 9-track magnetic tape, and will be made available on CD-ROM in the future.

GEODAS is available on CD-ROM and 9-track tape.

GLORIA is available on CD-ROMs.

Other hydrographic data bases are available on 9-track tape.

### Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC3 Boulder, CO 80303 Telephone: (303) 497-6338 FAX: (303) 497-6513

Tracklines of cruises which collected bathymetric data worldwide. or 9-track tapes.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

### Climate

### **Data Product Keywords**

Atmospheric, climate, ecological, environmental, satellite, temperature, weather, dust

# **Summary**

The following climate products are available, and produced by the National Climatic Data Center (NCDC): A Dust Climatology of the Western United States, Climatic Atlas of the United States, Climatic Study of the Near Coastal Zone, and a Historical Climatology Series.

# **Extent of Program**

Regional, national, and coastal zone.

### Available Product Coverage

The United States, Western United States, Persian Gulf, Gulf of Oman, Malacca and Sunda Straits, Red Sea, Southern Gulf of Aden, Caribbean Sea, and Gulf of Mexico.

### Information Content

Selective Guide to Climatic Data Source: This Guide was prepared by NCDC/National Environmental Satellite, Data, and Information Service (NESDIS). It was designed to assist potential users of climatological information by acquainting them with the various forms in which weather data are archived and the products that are prepared from these data. Detailed information is presented on 200 separate files of publications, manuscript and autographic records, charts, digital data, and satellite imagery.

A Dust Climatology of the Western United States: This one-time publication was prepared by the NCDC/NESDIS for the U.S. Nuclear Regulatory Commission. Data for 180 selected cities for the years 1948 through 1977 were used for the analyses. Maps are presented depicting annual number of dust episodes, dust-episode durations, season of occurrence, and probability of thunderstorm inducement.

Climatic Atlas of the United States: This atlas, last published in 1963, presents monthly and annual climatic maps and tables of various weather and atmospheric parameters for the United States.

Climatic Study of the Near Coastal Zone: There are currently nine separate publications in this file which

were prepared by NCDC/NESDIS for the U.S. Navy, Naval Oceanography Command. The areas covered by each publication are 1) East Coast of the United States, 2) West Coast of the United States, 3) Persian Gulf and Gulf of Oman, 4) Malacca and Sunda Straits, 5) Red Sea South and Gulf of Aden, 6) Southern California Operating Area, and 7) the Caribbean Sea and Gulf of Mexico in three volumes.

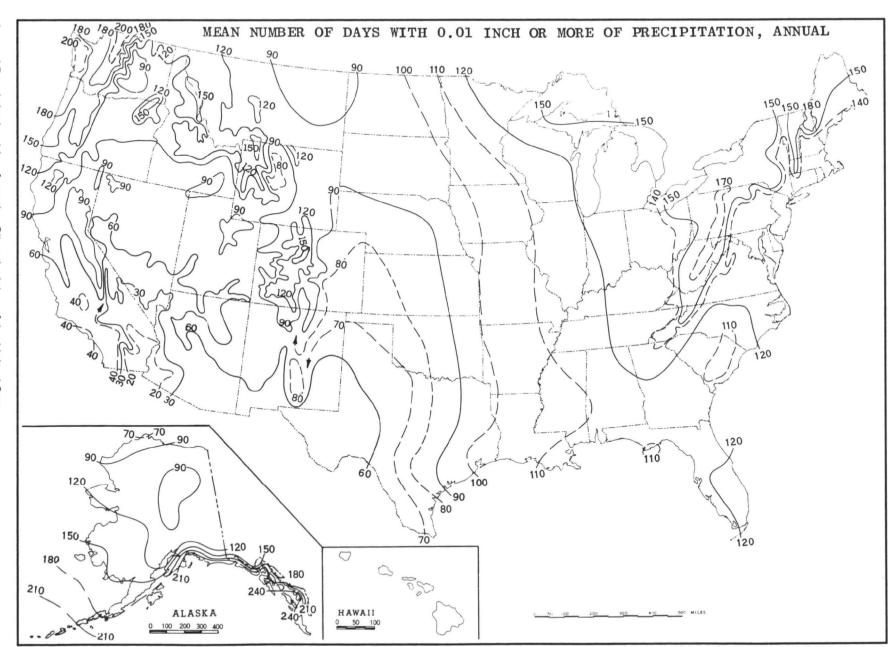
Historical Climatology Series 3-1 through 3-12: Charts which depict the areal distribution of climate elements or parameters are often used in studies of climate variability. The atlases in this file are designed to provide maps of climatological parameters which show climatic fluctuations in a relatively long-term or historical context. They cover the contiguous United States from 1895 through 1983. The analyses can be on a local, regional, or continental scale. These atlases, which are prepared and published by NCDC/NESDIS, are updated periodically.

# **Product Delivery Format**

Microfilm, publications, and paper copies.

### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Climatic Services Division Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682



National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# **Cloud Motion Vectors (WINDS)**

### **Data Product Keywords**

Atmospheric, climate, environmental, remotely sensed, satellite, weather, clouds

### Summary

Cloud motion vectors (WINDS) are computed by measuring the movement of clouds over a specific time period using manual or automated techniques. WINDS are derived from Visible and Infrared Spin Scan Radiometer (VISSR) images. The VISSR is operated on the Geostationary Operational Environment Satellite (GOES).

### **Extent of Program**

Wind vectors over ocean areas in view of satellite.

### **Available Product Coverage**

The wind vectors cover the ocean areas from latitude 60°S to 60°N and from longitude 15°W to 175°E. Data are available from 1974 to the present.

### Information Content

The cloud motion vectors are derived from successive pairs of VISSR images by both manual and automated techniques. The products are created twice daily from each GOES satellite. Each cloud measurement describes one vector and includes a time tag (YYMMDDHH), latitude and longitude, pressure altitude, measured or computed wind speed and direction, and quality flags.

The WINDS are derived over oceanic areas at 2.5 degree longitude and latitude grids taken from images no more than 2 hours apart. Approximately 750 wind vectors are archived each day.

### **Product Delivery Format**

The data are archived on 1,600 bpi tapes. One tape is used per month.

# Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Coastal Zone Color Scanner (CZCS) Level II Digital Data

### **Data Product Keywords**

Atmospheric, climate, coastal, environmental, marine, radiation, remotely sensed, satellite, biological oceanography, sea surface temperature

### **Summary**

The Coastal Zone Color Scanner (CZCS) was designed for quantitative remote sensing of the bio-optical properties of marine waters by measuring the visible spectral signatures of the sea.

### **Extent of Program**

Coastal zone area of entire Earth.

# **Available Product Coverage**

Coastal zone area of entire Earth. Data available from October 24, 1978 to June 23, 1986.

### Information Content

CZCS was flown on the NIMBUS-7 spacecraft. It is capable of scanning one infrared and five visible regions of the spectrum simultaneously. It is able to use the measured radiances to map chlorophyll concentration, suspended sediment distribution, and water temperatures.

The data are available on magnetic tape. Each tape has a unique identification number and contains the derived parameters for 2-minute scene on a tape. In addition to a magnetic tape for each scene, there are also two 25- by 25-cm negatives. Each negative contains two 19- by 9-cm images of parameters derived from the Level I data. Additional spacecraft information is also provided on each of the negatives.

### **Product Delivery Format**

Data are available on magnetic tape and photographic negatives.

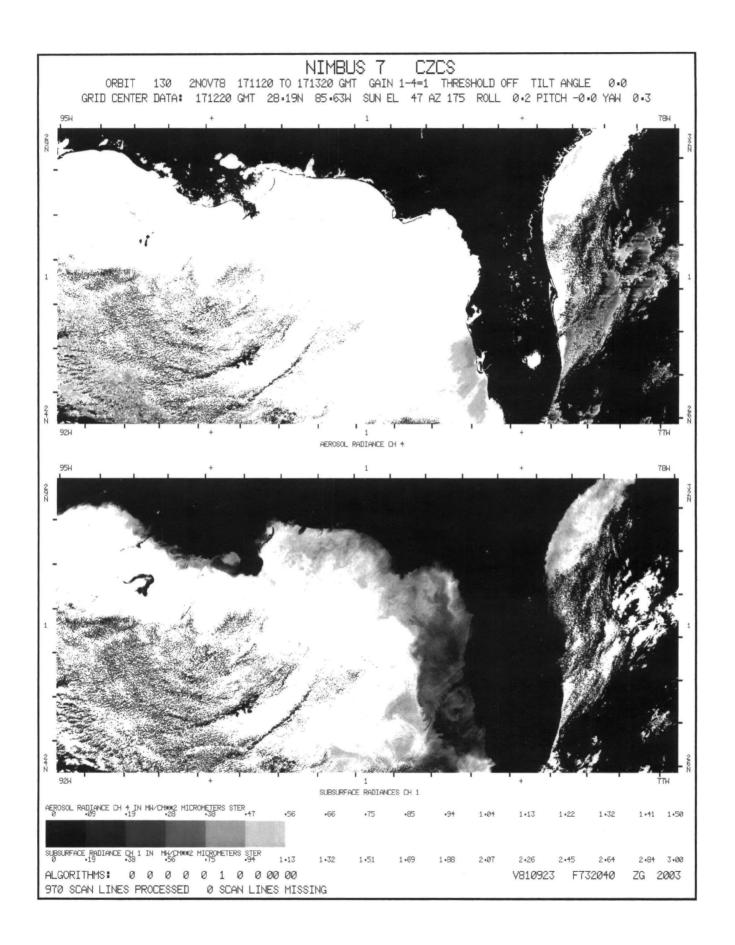
### Technical, Ordering, and Availability Information

NOAA

National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443

Following page: Sample CZCS image taken from the NIMBUS-7, which shows date, time, and coordinates.



National Environmental Satellite, Data, and Information Service (NESDIS)

### **CoastWatch Data**

### **Data Product Keywords**

Coastal, environmental, marine, remotely sensed, satellite, temperature, AVHRR, polar orbiter, reflectance, sea surface temperature, turbidity

### **Summary**

A growing number of near-real time ocean data products are provided by the National Oceanic and Atmospheric Administration (NOAA) Coastal Program's CoastWatch and are stored at the National Oceanographic Data Center. Much of this data will be available for on-line access. These products include: Sea surface temperature (SST) products derived from the NOAA Television and Infrared Operational Satellite (TIROS) polar orbiter's Advanced Very High Resolution Radiometer (AVHRR); Channel 1, 2, and solar zenith angle data (for determining reflectance); and data from the moored U.S. coastal and Great Lakes' meteorological buoys.

# **Extent of Program**

Coastal Zones of the United States (presently, Southeast, Northeast, Great Lakes, Gulf of Mexico, Hawaii, West Coast), and the Caribbean (Puerto Rico, Jamaica, and Yucatan).

### **Available Product Coverage**

Both near real-time and delayed-mode data are received by CoastWatch. Presently, real-time AVHRR SST images from NOAA polar orbiters for the Southeast, Northeast, Great Lakes, Gulf of Mexico, Hawaii, West Coast, and the Caribbean are available. Alaskan coastal data should be available in 1993. Data from satellites are telecommunicated in near-real time to coastal managers and planners. On-line access to metadata and data is available.

### **Information Content**

The NOAA TIROS Polar Orbiter's AVHRR data are being used to produce SST products. The SST products are being produced by taking AVHRR brightness data and converting it to SST data using algorithms. Image products have resolutions of 1 and 4 kilometers, and the SST data are presented to the user in compressed binary format. After being decompressed, the headers

will be in ASCII. The user can produce turbidity products by applying an algorithm to the reflectance.

### **Product Delivery Format**

FAX: (202) 606-4586

The SST data are available only by telecommunication or floppy diskette. In the near future, selected products will be available on CD-ROM.

# **Technical, Ordering, and Availability Information**

Mary Hollinger National Oceanographic Data Center User Services Branch NOAA/NESDIS E/OC21 Washington, D.C. 20235 Telephone: (202) 606-4549

2 - 49

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Daily, Monthly, and Seasonal Heat Budget Data

### **Data Product Keywords**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite, temperature, weather

### Summary

The Heat Budget products are produced from Advanced Very High Resolution Radiometer (AVHRR) data. Prior to the Television and Infrared Operational Satellite (TIROS)-N series of satellites, data were produced using a scanning radiometer (SR). Data are derived from corrected infrared and visible radiances mapped into 2.5 degree displays. Monthly, seasonal and decadal products are also produced.

# **Extent of Program**

Global

### **Available Product Coverage**

Covers entire Earth's surface. Data are available from June 1, 1974.

### Information Content

The monthly heat budget data (1979 to present) are produced from low-resolution AVHRR daily data. Infrared and visible radiances are derived from averaging a 10 by 10 array of global area coverage (GAC) data representing a 50-km square of viewed area. Combined with these data are time, Earth location, satellite altitude and solar zenith angle. All this information is used to create the initial data base. The heat budget parameters are then derived for daytime and nighttime values. These values are then mapped into a 2.5-degree array. The data will be mapped into a polar stereographic and a Mercator projection.

Monthly mean heat budgets were produced from 1974 through 1978 using the SR from NOAA-3 and NOAA-5. Seasonal heat budgets are available from 1974 to present and are produced from the daily heat budget data. Decadal heat budget data (1974 to 1986) are derived from the seasonal heat budget data.

### **Product Delivery Format**

Data are available on magnetic tape. Daily and monthly photographic displays are generated for quality control.

### Technical, Ordering, and Availability Information

NOAA
National Climatic Data Center
Satellite Data Services Division
Room 100
Princeton Executive Square
Washington, D.C. 20233
Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Daily and Weekly Vegetation Index Tapes (New)

### **Data Product Keywords**

Climate, environmental, land cover, land use, remotely sensed, satellite, surface and manmade features, vegetation, vegetation index

### **Summary**

These vegetation index tapes are part of the National Oceanic and Atmospheric Administration (NOAA) Polar Operational Environmental Satellite (POES) Series Advanced Very High Resolution Radiometer (AVHRR) and include weekly polar stereographic and Mercator arrays. They contain composites of the data needed for the vegetation index mapped to polar stereographic, Mercator, and Plate Carré projections at about 20-km resolution.

# **Extent of Program**

Global

# **Available Product Coverage**

Global. Data available from April 1, 1985.

### Information Content

The vegetation index tapes contain composites of the normalized vegetation index, AVHRR channels 1, 2, 4, and 5, solar zenith angles, and scan angles. These data are mapped to polar stereographic, Mercator, and Plate Carré projections with a resolution of about 20 km. The Plate Carré maps data from only 75°N to 55°S; consequently the polar stereographic projection, which uses data from the Plate Carré, will have holes at the poles. The polar stereographic projection has a higher resolution than the Plate Carré projection (13 km compared to 16 km). The Mercator projection has a resolution of 19.5 km.

# **Product Delivery Format**

Data are available on 9-track magnetic tapes.

### **Technical, Ordering, and Availability Information**

NOAA
National Climatic Data Center
Satellite Data Services Division
Room 100
Princeton Executive Square
Washington, D.C. 20233
Telephone: (301) 763-8400
FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite Data and Information Service (NESDIS)

# Daily and Weekly Vegetation Index Tapes (Old)

### **Data Product Keywords**

Climate, environmental, land cover, land use, remotely sensed, satellite, surface and manmade features, vegetation, vegetation index

### Summary

These vegetation index tapes are part of the National Oceanic and Atmospheric Administration (NOAA) Polar Operational Environmental Satellite (POES) Series Advanced Very High Resolution Radiometer (AVHRR) data. They contain information regarding the amount of vegetation which the AVHRR instrument can discern.

# **Extent of Program**

Global

### **Available Product Coverage**

Global. Produced from May 10, 1982 to April 1985.

### **Information Content**

The vegetation index is a measure of the spectral reflectance of the chlorophyll pigment in visible and near infrared part of the spectrum. The index measures the density and vigor of green vegetation. There is a daily version which is composed of three files (Documentation, Channel 2, and Scaled Vegetation Index). The weekly version contains five files (Documentation, Mapped Channel 2, Scaled Simple Vegetation Index, Scaled Normalized Vegetation Index, and Mapped Channel 1). The data have been reduced from 10 bit precision to 8-bit precision. It has been mapped using the 8-bit data, and has a range of 0 to 255.

### **Product Delivery Format**

The data are available on 9-track 6,250 magnetic tapes.

### Technical, Ordering, and Availability Information

NOAA
National Climatic Data Center
Satellite Data Services Division
Room 100
Princeton Executive Square
Washington, D.C. 20233
Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# **Geomagnetic Observatory Data**

# **Data Product Keywords**

Geophysics, magnetics, geomagnetic

### **Summary**

Geomagnetism, the oldest branch of geophysics, has been used for centuries as an aid to navigation. Today, geomagnetic data are used in a variety of ways; for example, in remote sensing applications, global climate changes, dating archaeological artifacts and zoological studies. Geomagnetic observatory data include secular change data, mathematical models of the Earth's magnetic field, magnetic field survey data, and geomagnetic variation data. They have numerous datum, accuracies, resolution and sources.

### **Extent of Program**

Global, irregularly spaced.

# **Available Product Coverage**

National, regional. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

# Axis of Earth's Rotation Geographic North Pole Geomagnetic Axis Geomagnetic North Pole Plane of Magnetic Equator N

### Information Content

These data bases include: 1) Secular change data such as observatory annual means, and international repeat station records. 2) Mathematical models of the Earth's magnetic field. 3) Magnetic field survey data taken from world surveys worldwide. Most of these observations include declination and horizontal intensity, or declination horizontal intensity and vertical or total intensity. 4) Geomagnetic variation data including copies of magnetograms, 2.5 and 1.0 minute data, hourly values and various magnetic indices.

# **Product Delivery Format**

Primarily magnetic media.

### **Technical, Ordering, and Availability Information**

NOAA National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6337

FAX: (303) 497-6513

The complex magnetic field is usually approximated by models.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Geophysics of North America (GNA) CD-ROM

# **Data Product Keywords**

Bathymetry, elevation, geophysics, gravity, magnetics, remotely sensed, satellite, seismic, subsurface, surface and man-made features, topography, vegetation, crustal stress, geomagnetism, thermal aspects

### **Summary**

This compact disc contains consolidated land and marine data for North America, much of which is from the Geological Society of America's "Decade of North American Geology." It includes magnetic, gravity, earthquake seismology, thermal aspects and stress data. Satellite imagery data (e.g. vegetation index),

topography, and additional grids of magnetics and gravity are also included in this compilation. Access software is furnished on floppy disc. A special feature of this product is its color graphics capability.

# **Extent of Program**

National, regional.

## **Available Product Coverage**

Most of the data sets included on the CD-ROM cover the Northern Hemisphere from approximately the Prime Meridian to the International Date Line.

### **Information Content**

| Discipline | Data Type                                                                      | Grid                  | Coverage**                     |
|------------|--------------------------------------------------------------------------------|-----------------------|--------------------------------|
| Topography | Average elevations & bathymetry                                                | 30 sec<br>5 min       | United States<br>North America |
| Gravity    | Bouguer (land) & free air (marine) anomalies                                   | 4 km<br>6 km*         | United States<br>North America |
|            | Isostatic anomalies                                                            | 4 km*                 | United States                  |
| Magnetics  | Satellite derived anomalies                                                    | 2 deg<br>(up to 50 N) | North America                  |
|            | Airborne and ship-derived anomalies                                            | 2 km*                 | North America                  |
| Imagery    | Satellite-derived images<br>(Advanced Very High Resolution<br>Radiometer 1986) | 10 min                | North America                  |
| Seismicity | Earthquake events<br>(1534 to 1986)                                            | N/A                   | North America                  |
| Stress     | Crustal Stress                                                                 | N/A                   | North America                  |
| Thermal    | Thermal Aspects                                                                | N/A                   | North America                  |

<sup>\*</sup> Also available as 2.5-min gridded data

### **Product Delivery Format**

CD-ROM with accession software.

# Technical, Ordering, and Availability Information

NOAA National

National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303

Telephone: (303) 497-6591 FAX: (303) 497-6513

<sup>\*\*</sup> North America coverage is inclusive of surrounding marine regions

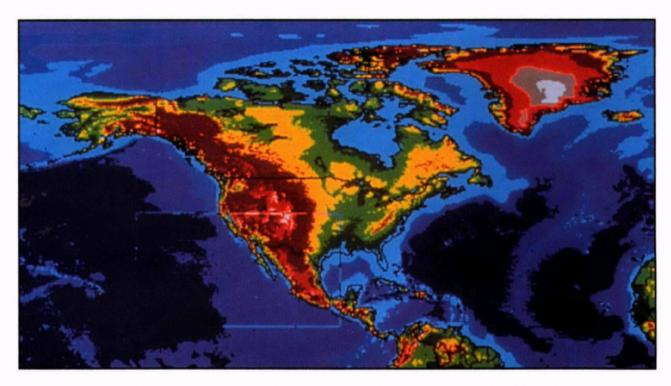


Illustration showing 5-minute topography/bathymetry generated by the access software accompanying the Geophysics of North America CD-ROM.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Global Change Data Base**

#### **Data Product Keywords**

Atmospheric, climate, ecological, environmental, land cover, land use, remotely sensed, satellite, temperature, topography, vegetation, weather, AVHRR, global change

#### Summary

Global change data bases include: National Oceanic and Atmospheric Administration – International Geosphere Biosphere Program (NOAA-IGBP) Pilot Data Base for Africa; National Geophysical Data Center (NGDC)-EPA Global Ecosystems Data Base which is revised annually and consists of multithematic global or continental scale data sets; and the NGDC Reprocessed Advanced Very High Resolution Radiometer (AVHRR) Data Base, which contains monthly and biweekly calibrated and uncalibrated versions of the NOAA AVHRR Vegetation Index.

#### **Extent of Program**

The NOAA-IGBP Pilot Data Base covers the continent of Africa. The NGDC-EPA Global Ecosystems Data Base is global, and consists of multi-thematic global or continental scale data sets. The NGDC Reprocessed AVHRR Data Base provides global NOAA AVHRR and vegetation index.

## **Available Product Coverage**

Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

The NOAA-IGBP Pilot Data Base provides integrated, geographic (latitude/longitude) spatial data from 5-minute to 1-degree representation, and contains coregistered, nested raster grids and vector data within a geographic window for the African continent. Temporal coverage is limited to recent decades. This data base is being updated for general distribution as a regional subset of the Ecosystems Data Base, with additional continental data sets.

The NGDC-EPA Global Ecosystems Data Base provides integrated, geographic (latitude/longitude) spatial data from 5-minute to 1-degree representation, and contains co-registered, global, nested raster grids and vector data. Temporal coverage is limited to recent decades.

The NGDC Reprocessed AVHRR Data Base provides global coverage.

#### Information Content

The NOAA-IGBP Pilot Data Base includes, but is not limited to: Global Vegetation Index (GVI) time series, topography, soils, land cover classes, desertification hazard and other ecological variables.

The NGDC-EPA Global Ecosystems Data Base includes, but is not limited to: GVI time series, topography, soils, land cover classes, and other ecological variables.

The NGDC Reprocessed AVHRR Data Base, will include monthly and biweekly calibrated and uncalibrated versions of the NOAA AVHRR Vegetation Index.

#### **Product Delivery Format**

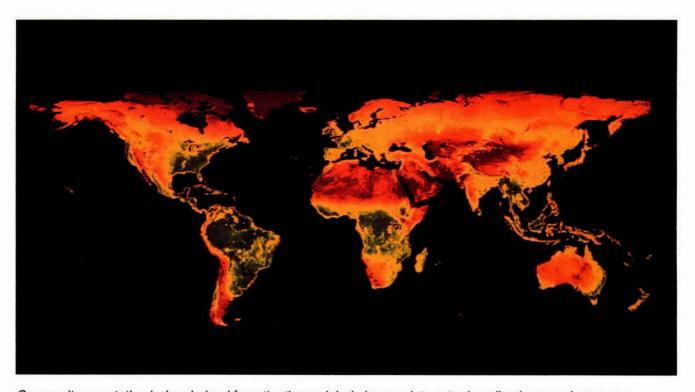
The NOAA-IGBP Pilot Data Base data are delivered in a generic Geographic Information System (GIS) format on floppy diskette. On request, subsets or the entire data base can be provided on various media.

The NGDC-EPA Global Ecosystems Data Base data are delivered in a generic GIS format on CD-ROMs, revised annually over the life of the project. On request, subsets or the entire data base can be provided on various media.

The NGDC Reprocessed AVHRR Data Base will be distributed on CD-ROM.

#### Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6125 FAX: (303) 497-6513



Composite vegetation index derived from the three global change data sets described on previous page.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

#### **Global Cloud Data**

#### **Data Product Keywords**

Atmospheric, climate, environmental, remotely sensed, satellite, weather, cirrus, convective, monthly data, statistics, upper air

#### **Summary**

These cloud data are derived from the International Satellite Cloud Climatology Project (ISCCP-C). Global cloud data provide a study of the entire Earth's atmosphere. The data set contains averages and variances of various cloud radiative properties derived from the ISCCP project.

## **Extent of Program**

Global

#### **Available Product Coverage**

Global. Data available from July 1, 1983.

#### Information Content

This data set contains averages and variances of various cloud radiative properties derived from the ISCCP-B3 radiance data. The ISCCP-C step contains two stages, C1 and C2. The C1 stage represents the global cloud data every 3 hours at a resolution of 250 by 250 km. The C2 stage contains the monthly averages and other summary statistics of the C1 stage quantities. The data are collected every 3 hours starting at 0000 Greenwich mean time (GMT). The data can be read from tape in either equal area or equal latitude-longitude increments. Some of the variables included are the following: fractional cloud cover, spatial mean and variances of cloud optical thickness, cloud top temperature and height, cloud size distribution, surface temperature, and reflectively topography. Correlative data would include atmospheric temperature, ozone abundance, and humidity.

## **Product Delivery Format**

Two magnetic tapes per month.

#### Technical, Ordering, and Availability of Information

NOAA

National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Global Photographic Displays of Sea Surface Temperature (Quality Control Image, Global/Climatic)

#### **Data Product Keywords**

Climate, environmental, marine, remotely sensed, satellite, temperature, weather, oceans, sea surface temperature

#### Summary

Photographic displays representing the global assessment for sea surface temperatures and others representing the regional assessment.

#### **Extent of Program**

Global

#### **Available Product Coverage**

Total global sea surface. Data are available from April, 1976 to January 1, 1980.

#### Information Content

The photographic displays are used for quality assessment, one representing the global analysis and the other depicting the regional analysis. The global photographic display provides a gray scale representation of sea surface temperatures from -85 degrees Celsius to +61 degrees Celsius in eight tonal steps, and portrays observational density in four tonal steps.

#### **Product Delivery Format**

Data are available on film.

## Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400 FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Global and Regional Radiance Data

#### **Data Product Keywords**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite

#### Summary

The data set contains visible and infrared radiance data from the Advanced Very High Resolution Radiometer (AVHRR), MIR and VSSR instruments aboard the National Oceanic Atmospheric Administration's (NOAA) Geostationary Meteorological Satellite (GMS), METEOSAT, and Geostationary Operational Environment Satellites (GOES) satellites. These data were collected as part of the International Satellite Cloud Climatology Project (ISCCP).

## **Extent of Program**

Global

## **Available Product Coverage**

Global. Data available from July 1, 1983.

#### Information Content

The data set contains visible and infrared radiance data from the AVHRR, MIR and VSSR instruments aboard the NOAA, GMS, METEOSAT, and GOES satellites. These data were collected as part of the ISCCP. The observations have been reduced to three different resolutions: B1 is 10 km, B2 is 20 km, and B3 is 30 km. The observations that were temporally reduced, were sampled every 3 hours except for the GMS and NOAA satellites. The radiance values were normalized to allow for a uniform data set. All instruments were normalized to the AVHRR instrument. The GMS satellite data are processed by the Japanese Meteorological Agency, the METEOSAT data are processed by the European Space Agency, and all are collected by the Goddard Space Flight Center Institute for Space Studies.

#### **Product Delivery Format**

Data are available on magnetic tapes.

#### **Technical, Ordering, and Availability Information**

NOAA
National Climatic Data Center
Satellite Data Services Division
Room 100
Princeton Executive Square
Washington, D.C. 20233
Telephone: (301) 763-8400
FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Gravity Data**

#### **Data Product Keywords**

Elevation, geophysics, gravity, subsurface

#### **Summary**

Gravity data usually include observed gravity, free-air and Bouguer anomalies and elevation. Data sets available from National Geophysical Data Center include: a variety of regional surveys; the U.S. National and World Relative Gravity Reference Network Base Stations; gridded data for the United States and North America, and gridded gravity data at various resolutions for other areas of the world. Applications of gravity data include: exploration for gas, oil and mineral deposits; identifying fault lines, calibrating navigation and guidance equipment.

## **Extent of Program**

Global coverage, randomly spaced; primarily on land.

#### **Available Product Coverage**

Global, regional, national, North America. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

#### Information Content

Gravity data usually include observed gravity, free-air and Bouguer anomalies and elevation. Numerous datum, accuracies, resolution and sources are available among these data sets.

#### **Product Delivery Format**

Regional surveys are available on CD-ROM, magnetic tape, and 51/4- or 31/2-inch floppy diskette.

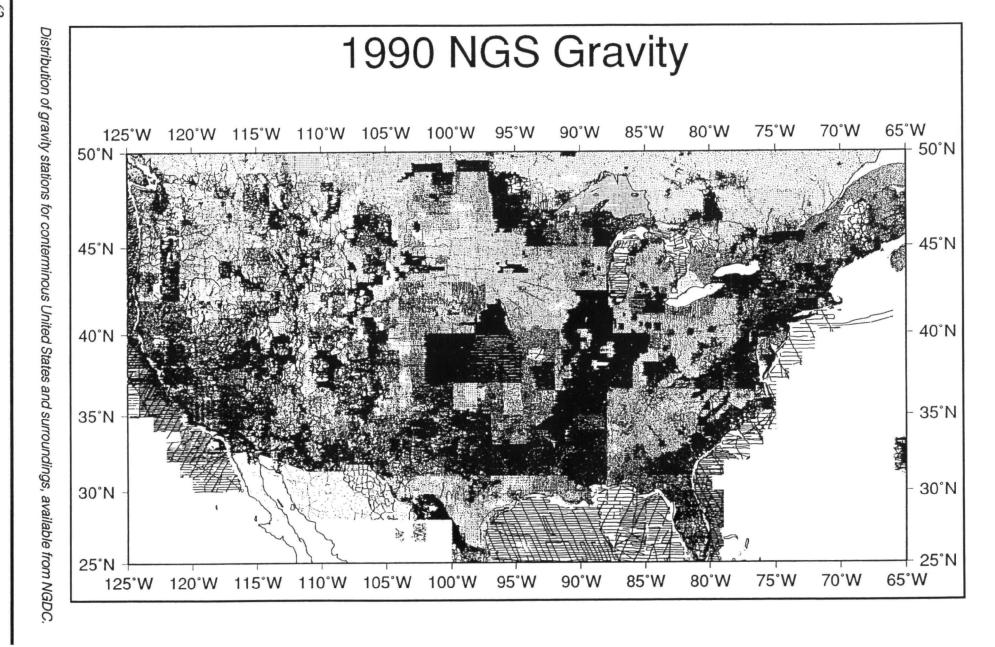
U.S. National and World Relative Gravity Reference Network Base Stations data are available on CD-ROM, magnetic tape, and 5%- or 3½-inch floppy diskette

Gridded data for the United States and North America are available on CD-ROM, magnetic tape, and 5%- or 3½-inch floppy diskette.

Gridded gravity data is available on CD-ROM, magnetic tape, and 5%- or 3%-inch floppy diskette.

#### Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6120 FAX: (303) 497-6513



National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

#### **Great Lakes Ice Data**

### **Data Product Keywords**

Ecological, environmental, hydrography, ice, land cover, marine, surface and manmade features, freshwater ice, ice navigation, river ice

#### **Summary**

These data provide a record of ice extent, type and concentration from 1955 to the present. Data sets include: ice charts from 1973 to present; Great Lakes Ice concentration data base from 1960 to 1979; daily ice observations from 1955 to present; and aerial photos from 1963 to 1973.

#### **Extent of Program**

**Great Lakes Basin** 

## **Available Product Coverage**

Ice charts cover all Great Lakes and connecting waterways, except Lake Ontario.

The Great Lakes Ice Concentration Data Base is in five sections, one for each Great Lake. Lake St. Clair is included in the Lake Erie section.

The daily ice observations are provided from shore locations on all Great Lakes and connecting waterways. A site location list is available upon request.

Aerial photo coverage is concentrated in areas of historical ice cover impact on navigation and hydroelectric operations.

#### Information Content

These data products provide a record of ice extent, type and concentration for the Great Lakes Basin from 1955 to the present.

Ice charts are available for the Great Lakes and connecting waterways (except Lake Ontario); ice charts date from 1973 to the present. The charts are produced three times weekly from satellite imagery, using surface observations when available. The data set is updated each mid-summer.

The Great Lakes Ice Concentration Data Base shows ice concentration in five sections, one for each Great Lake; data are available from 1960 to 1979. The data base is coded to the nearest 10 percent for each 5- by 5-

km grid square. The data base has not been updated since 1979.

The daily ice observations are provided for all Great Lakes and connecting waterways from 1955 to the present. Observations are taken from shore locations, and are available by site (an average 34 sites per year) or area. A site location list is provided upon request.

The aerial photos show areas of historical ice cover impact on navigation and hydroelectric operations; they are available in black-and-white (some color) and thermal infrared serial photos, 9- by 9-inch; they span the years 1963 through 1973.

#### **Product Delivery Format**

Ice charts are available on microfiche or as photocopies of original letter-size chart. The user can select by lake or by year.

The Great Lakes Data Base (65 MB) is available on 9-track tape.

The Great Lakes Ice Concentration Data Base/Data Set (4 MB) is available on 9-track tape or high-density diskettes (either 5¼- or 3½-inch).

Custom photographic products are available as negatives, slides or prints. The collection is available for onsite use by appointment.

#### Technical, Ordering, and Availability Information

National Snow and Ice Data Center NOAA National Geophysical Data Center 325 Broadway, E/GC4 Boulder, CO 80303 Telephone: (303) 492-5171

Fax: (303) 492-2468

Aerial photograph of Lake Erie ice cover east of Dunkirk, NY, 31 March 1965, taken from an altitude of 49,000 feet. Black arrow-shaped area at upper left is a lead (opening in the ice). At lower right, the outlet of Cattaraugus Creek is indicated by the area of open water (black) and thin ice (grey) extending northwest into the lake at the town of Irving, NY. Thin ice is indicated by shades of gray; darkest gray is thinnest ice. Photo by U.S. Air Force for NOAA/Great Lakes Environmental Research Laboratory.



National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Land Seismic Reflection Data**

#### **Data Product Keywords**

Geophysics, seismic, subsurface, common depth point, seismic reflection, stratigraphy

#### **Summary**

Land seismic reflection data sets provide data on seismic reflection, stratigraphy, and common depth point, which are used to map the subsurface structures prior to mineral, oil and gas exploration.

#### **Extent of Program**

National, North American continent

#### **Available Product Coverage**

Data are available for the following eight regional areas: 1) Appalachian Overthrust, 2) Mississippi Embayment, 3) South Carolina, 4) Texas Panhandle, 5) central Virginia, 6) Wyoming, 7) southern Alaska and 8) National Petroleum Reserve, Alaska.

#### Information Content

Numerous datum, accuracies, resolution and sources, of land seismic reflection data including seismic reflection, stratigraphy, and common depth point.

#### **Product Delivery Format**

Magnetic tape and paper records.

#### Technical, Ordering, and Availability Information

NOAA
National Geophysical Data Center
325 Broadway, E/GC1
Boulder, CO 80303
Telephone: (303) 497-6120

FAX: (303) 497-6513

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Marine Geology Files**

#### **Data Product Keywords**

Geology, marine, subsurface, ocean crust, seafloor sediment

#### Summary

Data sets include the full spectrum of geologic analyses performed on seafloor sediment and ocean crust samples, as well as in situ measurements such as drilling logs, and seafloor photographs. Samples described and analyzed include cores, grab samples, dredge hauls, and drill samples from the ocean floor.

#### **Extent of Program**

Global

#### **Available Product Coverage**

Global. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

#### **Information Content**

Data sets include the full spectrum of geologic analyses performed on seafloor sediment and ocean crust samples, as well as in situ measurements such as drilling logs, and seafloor photographs. Samples described and analyzed include cores, grab samples, dredge hauls, and drill samples from the ocean floor. Data were generated by oceanographic institutions and government agencies, worldwide. Data sets include full documentation as to methods, units, etc. Some data sets include bibliographic references. All data are searchable through a computerized inventory on a variety of parameters for each sample, including collecting institution, ship, latitude/longitude, water depth, sampling device and type of analyses. Note: methods, units and measurements are not uniform.

#### **Product Delivery Format**

Paper copies, microfilm, microfiche, magnetic tape, floppy diskette, slides and CD-ROM formats are available. Not all data are available in all formats.

## Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC3 Boulder, CO 80303 Telephone: (303) 497-6339 FAX: (303) 497-6513

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Marine Geophysics**

#### **Data Product Keywords**

Bathymetry, geophysics, gravity, magnetics, marine, seismic, subsurface, seismic reflection, side-scan

#### **Summary**

National Geophysical Data Center's (NGDC's) marine geophysical data holdings are inventoried within GEOphysical Data System (GEODAS). Data include bathymetry (referenced elsewhere), magnetics, gravity and seismic reflection sub-bottom profiles, side-scan imagery, and some seismic refraction.

#### **Extent of Program**

Global

#### **Available Product Coverage**

Marine data throughout the world oceans, detailed coverage is data and region specific. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

#### Information Content

Data are available in MGD77 (Marine Geophysical Data) exchange format, a self-documenting format containing metadata, position, magnetic total and residual field (in nannoteslas), diurnal correction if available, free air gravity anomaly (in milligal), and seismic line and shotpoint numbers for cross reference to analog data.

#### **Product Delivery Format**

CD-ROM or 9-track magnetic tape.

#### Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC3 Boulder, CO 80303 Telephone: (303) 497-6338

FAX: (303) 497-6513

#### NGDC **Geophysical Data** (GEODAS) **Holdings Institutions: 30** Legs: 3,216 MGD77 records: 33,259,717 Trackline data naut.mi. km. trackline kilometers 10<sup>7</sup> 2x10<sup>7</sup> **Navigation** 11,681,240 21,633,656 **Bathymetry** 10,448,490 19,350,603 **Magnetics** 6,790,642 12,576,269 Gravity 4,583,402 8,488,461 **Seismics** 64,152 34,640 Sscan/Refrac 19,750 36,578

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

#### **Paleoclimate Data**

## **Data Product Keywords**

Climate, ecological, environmental, surface and manmade features, cryosphere, paleoclimatology, tree rings

#### Summary

The Paleoclimate Data Base consists of various proxy indicators of climate, which are used to make interpretations of climate variability for time intervals when no instrumental weather records are available. Data include tree-ring growth and ice core records for annual resolution climate reconstructions; and fossil plankton, fossil pollen and geochemical measurements used to interpret lower frequency climate variability.

#### **Extent of Program**

Global

## **Available Product Coverage**

Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.

#### **Information Content**

Tree-ring widths and site chronologies, sediment carbonate percent and faunal counts; also derived climate interpretations. These data provide a growing basis for understanding the patterns and causes of natural environmental variability (atmosphere, oceans, cryosphere, biosphere) over time periods greater than a few decades. They also provide a basis for testing the realism of predictive climate, ocean, glacier, and biosphere models.

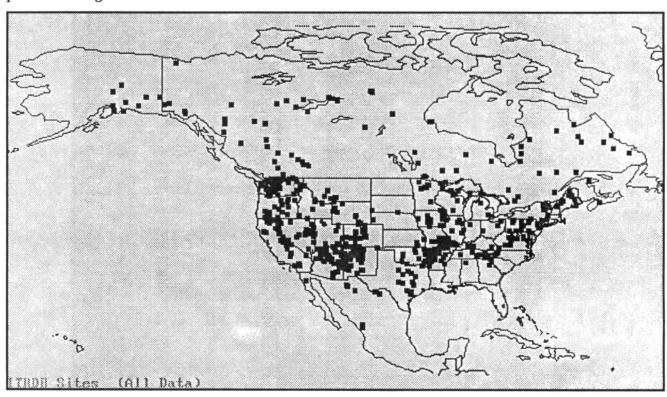
## **Product Delivery Format**

Floppy diskette or 9-track magnetic tape.

## Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC4 Boulder, CO 80303 Telephone: (303) 497-6280

FAX: (303) 497-6513



NOAA Paleoclimate Data Base. Tree-ring data site locations.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Seismology

#### **Data Product Keywords**

Environmental, geophysics, seismic, subsurface, surface and manmade features, earthquakes

#### Summary

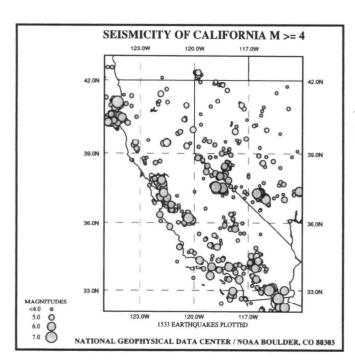
A broad array of data obtained from earthquakes categorized in data bases, archived by National Geophysical Data Center. These collections are valuable resources for scientists concerned with the study of the Earth, engineers involved with controlling earthquake damage, and the layperson who is interested in learning more about natural hazards.

#### **Extent of Program**

Global

#### **Available Product Coverage**

Available for global, national and regional scales. Requestors of data covering a given region should designate latitude/longitude parameters; data will be provided for region as available.



#### Information Content

Numerous datum, accuracies, resolution and sources are available from data bases including the following:

The Earthquake Data Base contains information on date, origin, time of event, location of event, depth, magnitude, maximum intensity and related phenomena.

**Significant Earthquakes** contains information on global events which meet specified criteria.

The Earthquake Intensity File details reports on U.S. earthquakes.

Seismograph Station Bulletins contain information on the characteristics of recording instruments at any given station and whether events were recorded at that station.

Strong Motion Accelograph records document the triggering event, station characteristics and peak recorded ground motion.

## **Product Delivery Format**

Primarily magnetic media.

#### Technical, Ordering, and Availability Information

NOAA

National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6472

FAX: (303) 497-6513

Retrieval from the NGDC Earthquake Data Base.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Solar Backscan Ultraviolet Radiometer (SBUV)/2 Level 1B Data

#### **Data Product Keywords:**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite, weather, ozone, ultraviolet

#### Summary

The Solar Backscan Ultraviolet Radiometer (SBUV)/2 was designed to map the total ozone concentrations and vertical distribution of ozone in the Earth's atmosphere.

#### **Extent of Program**

Global

## Available Product Coverage

Global. Data are available from December 12, 1984.

#### Information Content

The SBUV/2 instrument measures solar radiation in 12 discrete bands in the ultraviolet region of the spectrum (252 to 339 nanometers). The SBUV/2 is made up of two distinct instruments, the Cloud Cover Radiometer (CCR) and the scanning double monochromator. The monochromator samples the solar radiation backscattered in the ultraviolet in 12 distance bands. The CCR measures radiation just outside the ozone absorption band and was designed to measure the reflectively of the surface in the field of view of the instrument. The Level 1B data set contains all sensor data, support data files for the derivation of atmospheric ozone and solar flux, instrument in-flight calibration prelaunch calibration and other necessary information. The data have been reprocessed and are available in both the reprocessed and original data sets.

#### **Product Delivery Format**

Data are available on magnetic tape.

#### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Television and Infrared Operational Satellite (TIROS) Operational Vertical Sounder (TOVS) Level 1B Data Sets

## **Data Product Keywords**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite, temperature, weather

#### **Summary**

The Television and Infrared Operational Satellite (TIROS) Operational Vertical Sounder (TOVS) Level 1B data set is composed of data from the High Resolution Infrared Scanner (HIRS)/2, Microwave Sounding Unit (MSU), and either the Stratospheric Sounding Unit (SSU) or Solar Backscan Ultraviolet Radiometer (SBUV)/2 instruments on the TIROS spacecraft. A Level 1B data set contains the raw instrument values, location of the satellite with respect to the Earth's surface, and the necessary calibration values used to convert the raw instrument values to meaningful numbers. The data are used to calculate pressures, temperatures, water vapor percentages, and ozone concentrations in the atmosphere.

## **Extent of Program**

Global

## **Available Product Coverage**

Global. Data are available from October 19, 1978.

#### **Information Content**

The TOVS Level 1B data sets are composed of the Level 1B data sets of the HIRS/2, MSU, and SSU instruments. The HIRS/2 instrument has detectors in the longwave (15 micron) and shortwave (4.3 micron) areas of the spectrum. The MSU has detectors in the 5.5 micron region of the oxygen emitting region of the spectrum. The SSU has detectors in the 15 micron region for the spectrum. This region is dominated by the CO<sup>2</sup> bands. The MSU has a resolution of about 124 km at the subpoint and it decreases as the instrument looks further away from the subpoint. The SSU has a resolution of 147 km at the subpoint and the resolution decreases as the instrument looks further away from the subpoint. The HIRS/2 has a resolution of about 17 km at the subpoint and its resolution is reduced to about 30 km at the end of a scan.

The TOVS 1B data sets serve as the input data to produce the TOVS sounding products.

## **Product Delivery Format**

The data are available on magnetic tape.

## **Technical, Ordering, and Availability Information**

NOAA

National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400

FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

# Television and Infrared Operational Satellite (TIROS) Operational Vertical Sounder (TOVS) Sounding Products

#### **Data Product Keywords**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite, temperature, weather, precipitable water

## Summary

This product measures radiation in various spectral intervals, overt broad layers and depths of the atmosphere.

The Television and Infrared Operational Satellite (TIROS) Operational Vertical Sounder (TOVS) sounding product is divided into weekly files. Each product set includes: time, date, latitude, longitude, solar zenith angle, land/sea indicator, pressure bounds and layer mean temperatures for 15 vertical layers in the atmosphere, pressure bounds and layer mean precipitable water for three layers, tropopause pressure and temperature, total ozone amount, cloud cover percentage and cloud top pressure altitude, and equivalent black body temperatures.

## **Extent of Program**

Global

#### **Available Product Coverage**

Covers entire Earth's atmosphere. Data available from January 1, 1979.

#### **Information Content**

The TOVS sounding product is derived from the High Resolution Infrared Scanner (HIRS)/2, Microwave Sounding Unit (MSU), and Stratospheric Sounding Unit (SSU) instruments on the TIROS-N series of National Oceanic and Atmospheric Administration (NOAA) spacecraft. These instruments measure radiation over broad areas over spanning spectral intervals and depths of the atmosphere. Approximately 10,000 soundings are produced daily.

#### **Product Delivery Format**

Data are available on magnetic tape.

#### Technical, Ordering, and Availability Information

NOAA

National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square

Washington, D.C. 20233 Telephone: (301) 763-8400 FAX: (301) 763-8443

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Topographic Data**

#### **Data Product Keywords**

Bathymetry, elevation, surface and manmade features, topography, digital terrain model

#### Summary

Topography is the three-dimensional shape of a land surface, including its relief and the position of features, both manmade and natural. Raw topographic data may be used for making surface models or for analyses in conjunction with other data to evaluate resources or hazards.

#### **Extent of Program**

Global

#### **Available Product Coverage**

Global, national (conterminous United States), and regional coverage. Data sets include: 30-arc-second gridded point or average elevation values for the conterminous United States: 1- and 3-minute gridded elevations for the conterminous United States; 5-minute gridded average elevation for much of the Northern Hemisphere; 5-minute global average elevation model; 10-minute global modal, maximum and minimum elevations; and 1-degree average elevations for the world.

## **Information Content**

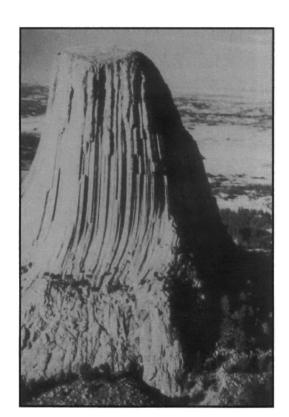
National Geophysical Data Center topographic data consist of elevations generally having a vertical precision from 6 to 30 meters; some data also include terrain characteristics. Available data products show numerous datum, accuracies, resolution and sources.

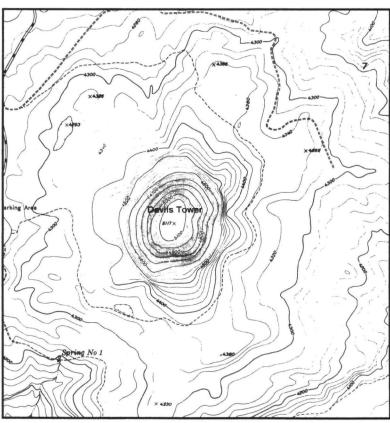
#### **Product Delivery Format**

Primarily magnetic media.

## Technical, Ordering, and Availability Information

NOAA National Geophysical Data Center 325 Broadway, E/GC1 Boulder, CO 80303 Telephone: (303) 497-6764 FAX: (303) 497-6513





Devils Tower National Monument, Wyoming, and its representation on a topographic map. (Photograph credit: University of Colorado.)

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## **Vegetation Index (Old and New) Hard-Copy Images**

## **Data Product Keywords**

Climate, environmental, land cover, land use, remotely sensed, satellite, surface and manmade features, vegetation, vegetation index

#### **Summary**

Imagery of the vegetation index values as mapped to a polar stereographic projection. This imagery is derived from the National Oceanic and Atmospheric Administration (NOAA) Polar Operational Environmental Satellite (POES) Advanced Very High Resolution Radiometer (AVHRR).

#### **Extent of Program**

Global

#### **Available Product Coverage**

Covers all land surfaces on Earth. Data starts on March 10, 1982.

#### Information Content

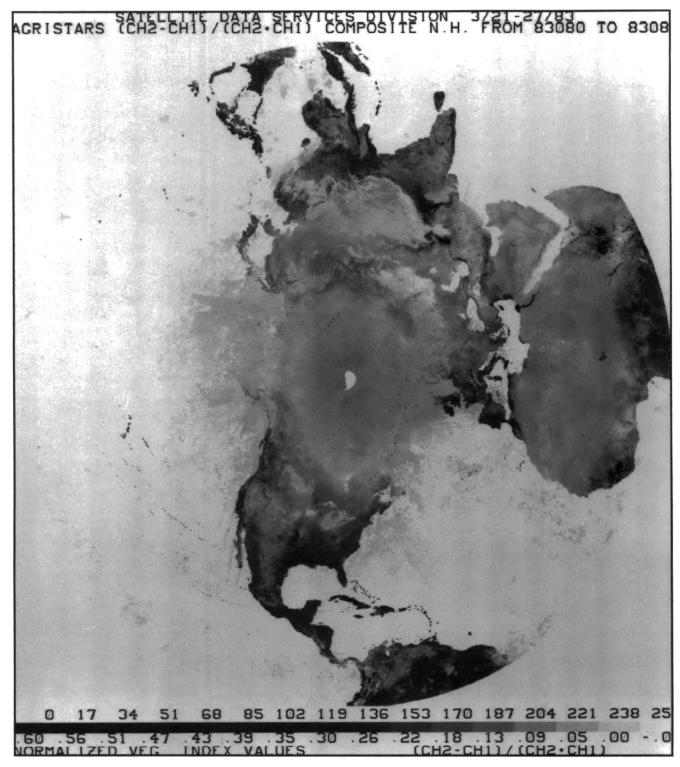
Both old and new hard-copy images show vegetation density; the darker the image, the denser the vegetation. Water, clouds, snow, and ice appear as white or light grey. Deserts appear as light grey also. Problems also occur at certain times of the year where there is persistent cloud cover because the vegetation index cannot be computed there. Dark areas on the negative indicate areas where the data is missing.

#### **Product Delivery Format**

The vegetation index imagery is on two different types of output media. The old type is on photographic negatives. The new type is produced on an Optronics Laserwriter. The images can be requested as a 10-by 10-inch negative, glossy contact print, positive transparency, or an enlargement.

#### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Satellite Data Services Division Room 100 Princeton Executive Square Washington, D.C. 20233 Telephone: (301) 763-8400 FAX: (301) 763-8443



Vegetation Index (old and new) hard-copy images.

National Oceanic and Atmospheric Administration (NOAA)
National Environmental Satellite, Data, and Information Service (NESDIS)

## Visible and Infrared Spin Scan Radiometer (VISSR) Data

#### **Data Product Keywords**

Atmospheric, climate, environmental, radiation, remotely sensed, satellite

#### Summary

The Visible and Infrared Spin Scan Radiometer (VISSR) operates on the Geostationary Operational Environment Satellite (GOES). The VISSR instrument simultaneously scans the Earth's atmosphere, land surfaces, and oceans in several different wavelengths. The data from the instrument can be viewed as either a photographic image or received in digital form on computer tapes.

#### **Extent of Program**

Global

### **Available Product Coverage**

Earth's atmosphere, oceans, and surface. Latitude 60°S to 60°N, longitude 15°W to 175°E. Hard-copy imagery is available from 1966 to the present.

#### Information Content

Visible and infrared imagery is generated on a half-hour schedule except when there are periods of severe storm conditions. Then the imagery schedule will change to one of the predefined severe storm schedules. The imagery is available from either the visible or infrared channels.

Wind speeds and direction are able to be computed using several sequential images. The motion of clouds at specific heights in the atmosphere are measured and the wind speeds and direction are derived.

#### **Product Delivery Format**

The imagery is available either in a hard-copy format or on magnetic tape. Imagery is also available on 35mm microfilm with each reel covering several days worth of data. It is available in 10- by 10-inch negatives of full disk images or sectors. Imagery may be available in 1-km, 2-km, or 4-km resolution. Not all resolutions are available for every area; an inquiry should be made to Satellite Data Services Division (SDSD) before ordering.

Data are available on 9-track magnetic tapes, 3480 tape cartridges, 10- by 10-inch negatives, 35mm microfilm reels, or 16mm film loops.

The wind speeds and directions are available on computer tape.

## Technical, Ordering, and Availability Information

NOAA
National Climatic Data Center
Satellite Data Services Division
Room 100
Princeton Executive Square
Washington, D.C. 20233
Telephone: (301) 763-8400

FAX: (301) 763-8443

National Environmental Satellite, Data, and Information Service (NESDIS)

## **NOAA National Climatic Data Center (NCDC)**

Editor's Note: Due to the extremely large number of products available from NESDIS Data Centers, this page provides a Data Center product summary. Many individual NESDIS data products are detailed in the preceding product descriptions.

#### **Data Product Keywords**

Atmospheric, climate, environmental, ice, land cover, marine, radiation, remotely sensed, satellite, seismic, subsurface, temperature, vegetation, weather, heat budget, meteorology, ocean

## **Summary**

All data produced at the National Climatic Data Center (NCDC) are geographically referenced. NCDC collects and maintains all United States weather records and is the largest climatic center in the world. It is a unique central source of historical weather information and related products. It manages and operates the World Data Center-A for Meteorology, which provides for international exchange of meteorological and climatological data.

NCDC is part of the National Climate Services System. This system links climate activities at all government levels. NCDC supports State climatologists and regional climate centers, as well as the National Weather Service's (NWS) Climate Analysis Center, an organization established to monitor, diagnose, and predict real-time climate conditions.

Information is provided in a wide number of classification schemes, standards, data formats, reference systems, accuracy, resolutions, time frames, and is derived from sources of meteorological and climatological data described herein.

#### **Extent of Program**

Global

#### Available Product Coverage

Data are available only in delay-mode, and at many different time schedules. Data from U.S. sources are received from the following: NWS cooperative observers; solar radiation; satellite; forecasts warnings analyses; NWS/Federal Aviation Administration (FAA)/military hourly airways, surface marine, and upper air; rocketsonde; aircraft; and radar. The five main contributors of these data are the NWS, the FAA, the U.S. Coast Guard, the U.S. Air Force, and the U.S. Navy.

The global weather and climate community has developed a communications network to transmit observations from around the world in minutes. These data are

provided to NCDC by the NWS's National Meteorological Center, the Air Force's Global Weather Central, and the Navy's Fleet Numerical Oceanography Center.

The four World Centers for Meteorology (U.S., USSR, Japan, and China), strive for free communication and exchange of data amongst themselves. The World Meteorological Organization provides for the international exchange of information. To supplement all these exchanges, NCDC also maintains cooperative agreements with individual nations.

#### **Information Content**

NCDC holds all weather records routinely collected by the U.S. Federal Government, as well as large quantities of data acquired from foreign sources and from cooperative exchanges with State or local agencies and various research activities. These data include surface observations from land stations, ocean weather stations, and moving ships. Daily climatological observations from cooperative observing stations, upper air observations (including balloon and aircraft reports), and radar observations are also archived at NCDC. NCDC's archive of historical weather data includes observations from the 1800s to the present. NWS products, such as forecasts, warnings, and analyses, are archived at NCDC through a system known as the Service Records Retention System. A component of NCDC is the Satellite Data Services Division located in Camp Springs, Maryland. They handle requests for satellite and satellite-derived data.

#### **Product Delivery Format**

Data are available from NCDC on a variety of media including magnetic tape, floppy diskettes, microforms, hard-copy manuscripts, photographs, and charts.

#### Technical, Ordering, and Availability Information

NOAA
National Climatic Data Center
Climate Services Division
NOAA/NESDIS E/CC3
Federal Building
Asheville, NC 28801-2696
Telephone: (704) 259-0682
FAX: (704) 259-0876

National Environmental Satellite, Data, and Information Service (NESDIS)

## NOAA National Climatic Data Center (NCDC) Satellite Data Services Division (SDSD)

Editor's Note: Due to the extremely large number of products available from NESDIS Data Centers, this page provides a Data Center product summary. Many individual NESDIS data products are detailed in the preceding product descriptions.

#### **Data Product Keywords**

Atmospheric, climate, environmental, ice, marine, radiation, remotely sensed, satellite, surface and manmade features, temperature, vegetation, weather, heat budget, ocean

## **Summary**

The Satellite Data Services Division (SDSD) is a component of the National Climatic Data Center (NCDC). All data produced by SDSD are geographically referenced.

SDSD houses information that was acquired by a series of spacecraft satellite sensors beginning in 1960. This division archives and quality controls satellite data for retrospective use. Over 8 million individual images, 50,000 computer compatible tapes, and 800 mass storage tapes from 30 satellites are now archived. Satellite data files contain imagery from the following satellites: the National Oceanic and Atmospheric Administration (NOAA) Series Polar Operational Environmental Satellite (POES), Television and Infrared Operational Satellite (TIROS), Geostationary Operational Environmental Satellite (GOES), DoD's Defense Meteorological Satellite Program (DMSP), and Sea Satellite (SEASAT), Digital data on magnetic tapes can be used quantitatively in climate research. Digital data from the latest satellites are the fastest growing section of the division's holdings. Products that are derived from satellite data, such as sea and air temperature, ozone, cloud motion vectors, sea surface height, surface winds, are also available to users.

#### Extent of Program

Global

#### **Available Product Coverage**

Products are available in delay-mode only, at different time schedules. The satellite and satellite derived products are used only for retrospective purposes.

#### **Information Content**

The Vertical Temperature Profile Radiometer (VTPR) was housed on the early NOAA (pre-TIROS-N) operating orbiting environmental satellites. The VTPR was a radiometer with eight channels, six of them in the carbon dioxide band (13 to 15 micrometers), and water vapor window channels (12 and 18.7 micrometers).

Raw radiance (data), clear column radiance (cloud-free data), and derived sounding files over the world's oceans are available from November 1972 through February 1979.

The Advanced Very High Resolution Radiometer (AVHRR) and TIROS Operational Vertical Sounder (TOVS) instruments have been aboard the TIROS-N/NOAA 6/7/8/9/10/11 series of polar orbiting satellites since 1979. The AVHRR is a five-channel scanning radiometer, with visible, near-infrared (IR), and IR channels. This sensor produces 1-km resolution data, but is sometimes sampled down to 4-km resolution. AVHRR data are transmitted continuously, and up to 10 minutes per orbit can be recorded on board for readout when contacted. Heat budget data are available and consist of daytime and nighttime longwave outgoing flux, available incoming energy, and absorbed solar radiation. This data base is updated daily.

TOVS instruments are the High Resolution Infrared Sounder (HIRS), Microwave Sounding Unit (MSU), and Stratospheric Sounding Unit (SSU). These data bases are updated daily.

SEASAT was an experimental satellite geared to oceanographic applications. The Altimeter was an active radar altimeter operating at 13.5 Ghz. The Scanning Multichannel Microwave Radiometer (SMMR) was a passive scanning radiometer with five microwave channels of 10.69, 18.0, 22.35, and 27.0 Ghz. The Scatterometer was an active backscatter radiometer operating at 13.9 Ghz. The Synthetic Aperture Radar (SAR) produced high resolution images of ocean and land surface topography of North and Central America, Western Europe, and Iceland, and Greenland with a swath of 100 kilometers, and a ground resolution of about 25 meters from July to October 1978.

The Visible and Infrared Spin Scan Radiometer (VISSR) was housed on the GOES 1/2/3. GOES 4/5/6 carried the VISSR Atmospheric Sounder (VAS) which presently produces VISSR data daily. VAS produces multichannel IR data for research purposes. The geostationary platform results in half hourly views of the same field of view over North and South America, the North and South Atlantic Ocean, and Northeastern and Southeastern Pacific Ocean.

The Sea Surface Temperature (SST) products are derived from the AVHRR sensor and TOVS data collected by the TIROS-N/NOAA 6/7/8/9/10/11 series of polar orbiting satellites from 1979 to the present. TOVS data are used to calibrate AVHRR for effects of the atmosphere. The model used to develop SSTs uses the near-IR channel (3) and the two IR channels (4 and 5) of the AVHRR sensor. Available data include 7- or 8-day observations, SST analyses at 500 km, 100 km, 50 km, 14 km, and monthly mean contours. The data base is updated weekly and monthly. Atmospheric temperature and humidity profiles are derived from TOVS data, while atmospheric winds and cloud heights are derived from the VAS data. Surface winds and atmospheric temperatures are produced from Scatterometer data. With regard to oceanographic applications, ocean winds, surface temperature, and sea ice are derived from SMMR data. The SAR sensor is used to measure land and ice topography.

#### **Product Delivery Format**

Satellite and satellite derived data at SDSD are available on magnetic tape and cartridges. Some data are available to users in the form of photographs, negatives, slides, and transparencies.

## **Technical, Ordering, and Availability Information**

NOAA/NESDIS/NCDC/SDSDE/CC6 Satellite Data Services Division Room 100 PES 5627 Allentown Road Washington, DC 20233

Telephone: (301) 763-8400 FAX: (301) 763-8443

National Environmental Satellite, Data, and Information Service (NESDIS)

## **NOAA National Geophysical Data Center (NGDC)**

Editor's Note: Due to the extremely large number of products available from NESDIS Data Centers, this page provides a Data Center product summary. Many individual NESDIS data products are detailed in the preceding product descriptions.

#### **Data Product Keywords**

Atmospheric, bathymetry, climate, coastal, ecological, elevation, environmental, geodetic, geology, geophysics, gravity, hydrography, ice, land cover, land use, magnetics, marine, remotely sensed, satellite, seismic, subsurface, surface and manmade features, temperature, topography, vegetation, charged particles, earthquake, geography, hydrologic, magnetic and electric fields, neutral particles, paleontology, radiance and imagery, solar

## **Summary**

The National Geophysical Data Center (NGDC) combines, in a single data center, the fields of seismology, geomagnetism, marine geology and geophysics, solar phenomena, the ionosphere, and snow and ice. NGDC collects, organizes, archives, publishes, and disseminates solid earth, solar-terrestrial physics, and snow and ice data from worldwide sources.

All of the data produced at NGDC are geographically referenced.

NGDC also operates the World Data Center A (WDC-A)-Solid Earth Geophysics, the WDC-A-Solar Terrestrial Physics, and the World Data Center A for Marine Geology and Geophysics. NGDC contracts with the University of Colorado to operate the WDC-A for Glaciology (Snow and Ice) and the National Snow and Ice Data Center (NSIDC).

Information is portrayed in a wide number of classification schemes, standards, data formats, reference systems, accuracy, resolutions, and time frames, and is derived from sources applicable to geophysical, solarterrestrial, and snow and ice data.

#### **Extent of Program**

Global

#### Available Product Coverage

NGDC receives only delayed-mode data on all different time scales. NGDC receives data from the National Oceanic and Atmospheric Administration (NOAA) observing programs and by cooperative agreements, data from universities, other Government agencies, and foreign organizations.

#### Information Content

Accelerograms, digitized strong-motion data, and historical files of earthquake epicenter data and tsunami occurrences are included in NCDC's holdings. Geomagnetic data consist primarily of worldwide geomagnetic, and aeromagnetic survey measurements, observatory magnetograms, digital values of various sample ratings, and indexes of magnetic activity. Holdings include about 1 million magnetograms which accumulate at a rate of 50,000 per year, most held on 35mm microfilm, and hundreds of magnetic tapes containing digital data derived from magnetograms and survey measurements.

Solid earth geophysics data also include a large number of files pertaining to common depth point, seismic data, gravity, and topography data. Geothermic holdings include data and maps on volcanoes, geothermal energy, and global heat flow.

In the marine geology and geophysics area, users can access gravimetric, magnetic, bathymetric, and seismic data, along with geotechnical, textural, petrologic, and paleontologic analyses and descriptions of sediment and rock samples.

The marine geology and geophysics holdings include 10.2 million track miles of underway geophysical data, 35.5 million National Ocean Survey hydrographic records, information on 132,000 ocean bottom geologic core samples, and geochemical analyses of over 5,100 marine samples.

The files maintained by the Center's Solar-Terrestrial Data Service Division now contain more than 12 million feet of ionogram film, 800,000 feet of all-sky camera film, 3 million sheets of graphical and numerical data, and additional information, on magnetic tape, received from NOAA and NOAA-supported stations as well as several hundred cooperating institutions. This division includes data on solar flares, solar radioemission events, sudden ionospheric disturbances and satellite measurements of the solar wind, ultraviolet, x-ray, and particle emissions.

NSIDC holds data on all forms of snow and ice: 1 million transparencies and negatives of Defense Meteorological Satellite Program imagery; 400 computercompatible magnetic tapes containing sea ice, snow cover, lake ice and ice core data; 200 microfiche and film reels of lake ice, climatological and snow cover data; 10,000 historical glacier photos, a 39 MB on-line data base indexing the 20,000-document information center collection, and a 19 MB glacier photo index on-line data base.

NGDC can supply specialized data services on a reimbursable basis utilizing geographic information systems and tabular data base processing.

## **Product Delivery Format**

Data are available from NGDC on a variety of media, including magnetic tape, floppy diskettes, CD-ROMs, microforms, hard-copy and computer printouts, publications, photographs, maps, tables, graphs, and direct electronic transfer by computer.

## Technical, Ordering, and Availability Information

National Geophysical Data Center Information Services Division NOAA/NESDIS E/GC4 325 Broadway Boulder, CO 80303-3328 Telephone: (303) 497-6958

FAX: (303) 497-6513

National Environmental Satellite, Data, and Information Service (NESDIS)

## **NOAA National Oceanographic Data Center (NODC)**

Editor's Note: Due to the extremely large number of products available from NESDIS Data Centers, this page provides a Data Center product summary. Many individual NESDIS data products are detailed in the preceding product descriptions.

## **Data Product Keywords**

Atmospheric, bathymetry, climate, coastal, ecological, elevation, environmental, geodetic, geology, hydrography, marine, radiation, remotely sensed, satellite, subsurface, surface and manmade features, temperature, topography, vegetation, weather, hydrologic, ocean

## **Summary**

All data produced by the National Oceanographic Data Center (NODC) are geographically referenced.

NODC maintains and stores a large, multidisciplinary marine scientific data base through activities that include acquisition, processing, storage, and retrieval of oceanographic data. It manages and operates The World Data Center-A (WDC-A) for Oceanography. The principal types of data exchanged by the WDC-A are serial oceanographic station data, bathythermograph, current, biological, and sea surface observations. NODC archives and disseminates the U.S. Navy Geodetic Satellite (GEOSAT) data. GEOSAT provided the first long-term global observations of sea level, wind speed, wave height, and ice topography.

A component of NODC is the Ocean Pollution Data and Information Network (OPDIN). OPDIN provides access to the ocean pollution data and information produced by 11 participating Federal departments and agencies.

Another component of NODC is the National Oceanic and Atmospheric Administration (NOAA) Library and Information Network (NLIN). It includes a million-volume research collection with a comprehensive coverage of:

- hydrographic surveying (1820 to present);
- oceanography, meteorology, and hydrology (1870 to present);
- living marine resources (1870 to present); and
- meteorological satellite applications (1960 to present).

NLIN supplies computer-based information retrieval from over 500 data bases. Most of these can be accessed by dial-up systems such as DIALOG, BRS, NEWSNET, WESTLAW, and OCLC. An increasing number of data bases are available on CD-ROM.

## **Extent of Program**

Global

#### **Available Product Coverage**

Global, U.S. coastal waters, Great Lakes.

NODC receives both delayed-mode and near real-time data. Delayed-mode ocean data are collected from ocean research or operational programs and submitted to NODC months to years after collection. Near real-time ocean data comes from more immediate marine operations such as ocean prediction and monitoring and submitted to NODC within a few days to approximately a month after collection. Satellites and in situ instruments collect this data and then telecommunicate it to central processing centers that in turn provide them to NODC. The three main contributors of this type data to NODC are the NOAA National Meteorological Center, the U.S. Navy Fleet Numerical Oceanography Center, and the NOAA Ocean Products Center. Contact User Services Division for details.

NODC maintains several data inventory systems, to answer detailed inquiries about data availability. Users can be supplied with various types of data inventory products. They range from observations meeting specific selection criteria, to more complex products that show the spatial and temporal distribution of available data. These products include data summaries by year, season, or month; observations by 1-, 2-, 5-, or 10-degree subsquares; or graphic plots indicating the regions with specific observations. The NODC Ocean Science Information Exchange (NOSIE) is an on-line inventory system. Data can be provided to users in a number of forms from simple magnetic tape copies of data to complicated computer-generated data summaries, statistical analyses, and graphic plots.

#### Information Content

Data are portrayed in a wide number of classification schemes, standards, data formats, reference systems, accuracy, resolutions, time frames, and sources applicable to oceanographic and marine data.

The international data base of the Center comprises more than 2 million scientific observations. On average, data for about 100,000 observations, including 35,000 oceanographic stations, are received annually. All the

Center's holdings are described in the Catalogue of Data and the annual Change Notices to the Catalogue.

## **Product Delivery Format**

Data are available on 9-track magnetic tape, and 51/4inch or 31/2-inch diskettes. Paper products include data summaries, graphic plots, statistical analyses, logs, reports, and publications. Selected data are available on CD-ROM, microfilm, and microfiche.

## **Technical, Ordering, and Availability Information**

National Oceanographic Data Center **User Services Branch** NOAA/NESDISE/OC21 1825 Connecticut Avenue, NW Washington, DC 20235 Telephone: (202) 606-4549

FAX: (202) 606-4586

| National Ocean Service                           |             |                    |               |               |               |           |               |          |         |                                 |                    |             |            |                  |          |            |                 |           |            |                            |            |                  |
|--------------------------------------------------|-------------|--------------------|---------------|---------------|---------------|-----------|---------------|----------|---------|---------------------------------|--------------------|-------------|------------|------------------|----------|------------|-----------------|-----------|------------|----------------------------|------------|------------------|
| Data Product Keywords  Data Product              | Page Number | Aerial Photography | Bathymetry    | Coastal       | Contours      | Elevation | Environmental | Geodetic | Geology | Global Positioning System (GPS) | Horizontal control | Hydrography | Hydrologic | Hydrologic units | Land use | Navigation | Remotely sensed | Satellite | Subsurface | Surface & manmade features | Topography | Vertical control |
| Aerial Photographs                               | 87          | •                  |               |               |               |           |               |          |         |                                 |                    |             |            |                  |          |            | •               |           |            |                            |            |                  |
| Aeronautical Planning Charts                     | 89          | Г                  |               |               |               |           | Г             |          |         |                                 |                    |             |            |                  |          | •          |                 |           |            |                            |            |                  |
| Bathymetric Maps                                 | 90          |                    | •             |               |               |           |               |          |         |                                 |                    |             |            |                  |          |            |                 |           | •          |                            |            |                  |
| Coastal Assessment Framework (CAF)               | 92          |                    |               | •             |               |           | •             |          |         |                                 |                    |             | •          | •                |          |            |                 |           |            |                            |            |                  |
| Conventional Nautical Charts                     | 93          |                    |               |               |               |           | Г             |          |         |                                 |                    | •           |            |                  |          | •          |                 |           |            |                            |            |                  |
| Geodetic Data                                    | 95          | -                  |               |               |               |           |               | •        |         | •                               | •                  |             |            |                  |          |            | •               | •         |            |                            |            | •                |
| HydrographicSurveys                              | 96          |                    |               |               |               |           |               |          |         |                                 |                    | •           |            |                  |          |            |                 | П         |            |                            |            |                  |
| Instrument Navigation Charts                     | 98          |                    |               |               |               |           |               |          |         |                                 |                    |             |            |                  |          | •          |                 |           |            |                            |            |                  |
| Small Craft Nautical Charts                      | 100         |                    |               |               |               |           |               |          |         |                                 |                    | •           |            |                  |          | •          |                 |           |            |                            |            | $\neg$           |
| Supplementary Aeronautical Publications          | 102         |                    |               |               |               |           |               |          |         |                                 |                    |             |            |                  |          | •          |                 | П         |            |                            |            | $\neg$           |
| Topographic Bathymetric Maps                     | 104         |                    | •             | П             |               |           |               |          | •       |                                 |                    |             |            |                  | •        |            |                 |           | •          | •                          |            |                  |
|                                                  | ,           | $\overline{}$      | $\overline{}$ | $\overline{}$ | $\overline{}$ | -         | -             |          |         |                                 |                    | $\neg$      |            |                  |          |            |                 | $\Box$    | _          | -                          |            |                  |
| Topographic Surveys & Planimetric Shoreline Maps | 106         |                    |               | •             | •             | •         |               |          |         |                                 |                    | 1           |            |                  |          |            |                 | ļ ļ       |            | ļ                          | •          | 4                |



National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

## **Aerial Photographs**

#### **Data Product Keywords**

Aerial photography, remotely sensed, photogrammetry

## Following page: A portion of a 1:20,000-scale aerial photograph; Hatteras Inlet, North Carolina.

## **Summary**

Aerial photographs and field surveys provide the basic data for compiling coastal survey maps and airport obstruction charts.

#### **Extent of Program**

**National** 

#### **Available Product Coverage**

Shoreline (coastal area), major airports.

#### Information Content

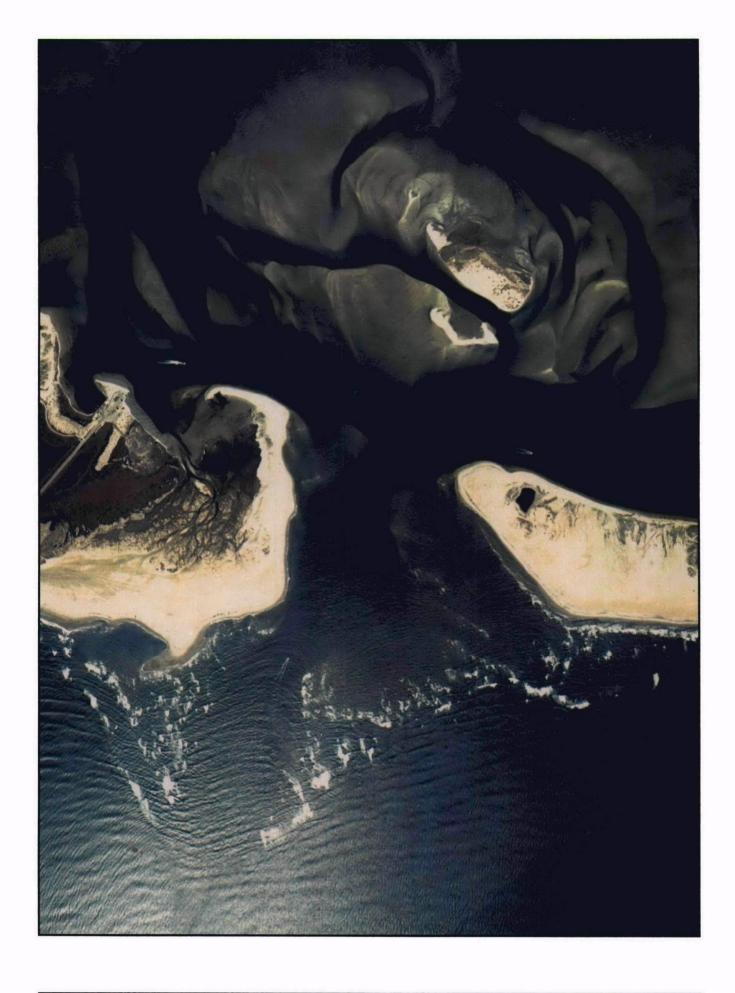
The photographs consist of natural color, color-infrared, and black-and-white infrared. They are usually exposed at scales from 1:20,000 to 1:50,000. The color photographs are currently used by the Coast and Geodetic Survey primarily for photogrammetric surveys which support nautical charting activities. Supplemental color infrared and black-and-white infrared photographs are used to aid photo interpretation. Panchromatic photographs, usually at a contact scale of 1:30,000, are used in the NOS/FAA Airport Obstruction Chart Program to compile airport obstruction charts and to help position navigational aids. Copies of all the above photographs in nominal 9- by 9-inch contact size and as 2X, 3X, and 4X enlargements are available to the public. Paper indexes which depict the center of the photographs in relation to a geographic base are also available.

#### **Product Delivery Format**

Prints, film positives, negatives.

## Technical, Ordering, and Availability Information

Photogrammetry Branch National Ocean Service NOAA 6001 Executive Blvd. Rockville, MD 20852 Telephone: (301) 443-8601



National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

## **Aeronautical Planning Charts**

#### **Data Product Keywords**

Navigation, aeronautical charts, flight planning

## Summary

These are small-scale charts designed for pre- and inflight planning of long flights. The NOAA Aeronautical Chart User's Guide publication is designed to be used as a teaching aid, reference document, and an introduction to the wealth of information provided on NOAA's aeronautical charts and publications. It includes product descriptions, explanations of chart terms and symbols, and a comprehensive display of aeronautical charting symbols organized by chart type.

#### Products include the following:

- Flight Case Planning Chart
- Gulf of Mexico and Caribbean Planning Chart
- NOAA Aeronautical Chart User's Guide

## **Available Product Coverage**

Conterminous United States, portions of Canada and Mexico, the Gulf of Mexico, the Caribbean, and parts of South America.

#### Information Content

Small-scale charts with scales ranging from 1:60 nm to 1:85 nm. Selected routes should be transferred to more detailed charts for navigation.

### **Product Delivery Format**

Paper charts with varying revision cycles. The NOAA Aeronautical Chart User's Guide is an 8½- by 11-inch book.

#### Technical, Ordering, and Availability Information

Contact NOAA Distribution Branch listed below for more details on ordering:

NOAA Distribution Branch, N/CG33 National Ocean Service Riverdale, MD 20737-1199 Telephone: (301) 436-6990



Planning charts for the conterminous United States, Gulf of Mexico and Caribbean Areas.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Bathymetric Maps**

### **Data Product Keywords**

Bathymetry, subsurface

### Summary

Bathymetric maps, topographic maps of the sea floor, portray the size, shape, and distribution of underwater features through the use of contours.

### **Extent of Program**

National

# **Available Product Coverage**

National; 1:250,000 scale.

#### Information Content

These maps, which are not used in marine navigation, serve as the basic tools for performing scientific, engineering, marine, and marine environmental studies undertaken to develop energy and marine resources. Many of the 1:250,000-scale maps may be ordered with an overprint of the Minerals Management Service mineral lease block information.

#### **Product Delivery Format**

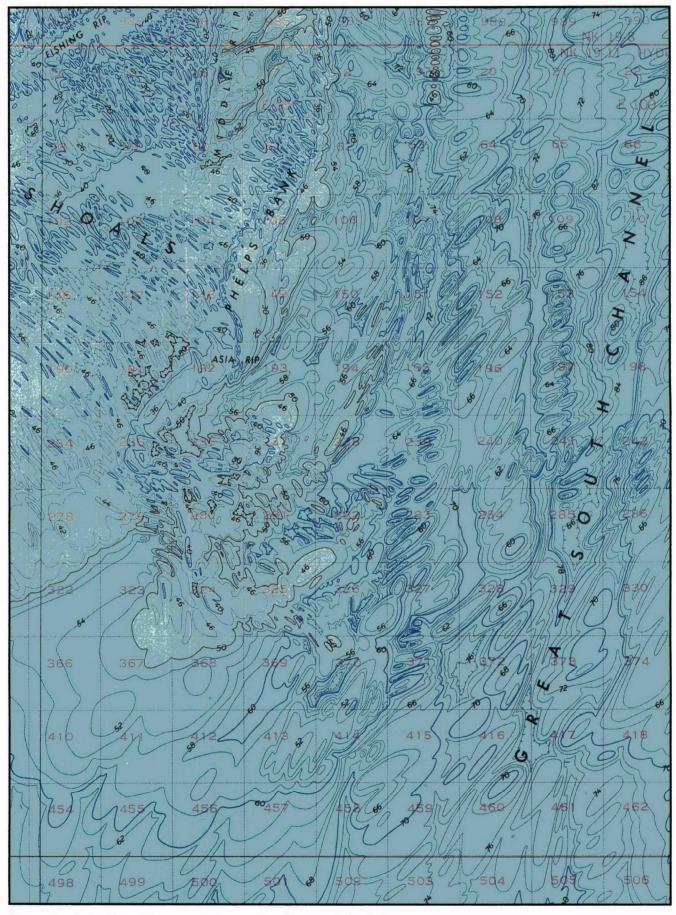
Paper, digital, bromide (plastic).

### Technical, Ordering, and Availability Information

For orders:

Distribution Branch National Ocean Service NOAA Riverdale, MD 20737 Telephone: (301) 436-6990

For information:



Example of a bathymetric map; Hydrographer Canyon, Atlantic Ocean.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# Coastal Assessment Framework (CAF)

### **Data Product Keywords**

Coastal, environmental, hydrologic, hydrologic units, coastal drainage areas, estuarine drainage areas

### Summary

The Coastal Assessment Framework (CAF) is a hydrologic unit-based set of estuarine and coastal drainage areas (EDAs and CDAs). These drainage areas extend from the mouth of an estuary to its head-of-tide, and encompass both the land and water components of each estuary. All U.S. Geological Survey (USGS) hydrologic cataloging units within this drainage area are included in the EDA or CDA. There are 102 EDAs and 265 CDAs along the Great Lakes, the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean. Alaska and Hawaii are currently not included in the CAF. A coastline is associated with the CAF, that can be used to define the land and water components of each EDA or CDA.

### **Extent of Program**

National

#### Available Product Coverage

The CAF is available for the oceanic coasts and Great Lakes of the conterminous United States and small portions of Canada. A document discussing the CAF is available free of charge.

#### Information Content

The CAF is available in ARC/INFO format. The CAF currently exists as a polygon coverage. The coverage has been attributed with USGS 8-digit hydrologic cataloging unit numbers and EDA and CDA codes. The original linework was digitized from USGS 1:500,000 State hydrologic units maps. The coastline is the "D" scale (1:250,000) NOS shoreline, which was generalized from 1:40,000- and 1:80,000-scale nautical charts. The shoreline exists as four arc coverages (Atlantic Coast, Gulf of Mexico Coast, Pacific Coast and Great Lakes Coast). No political boundaries, except international boundaries, have been included with these coverages.

### **Product Delivery Format**

The CAF is available in ARC/INFO export format. All digital files are geo-referenced, and are available in the geographic (longitude and latitude as decimal degrees)

projection. The data can be supplied on PC-based media, including high density 3½-inch and 5½-inch floppy diskette. Approximate size of available files: 20 MB.

## **Technical Ordering, and Availability Information**

Strategic Environmental Assessments Division
Office of Ocean Resources, Conservation,
and Assessment
National Ocean Service
NOAA
6001 Executive Boulevard
Rockville, MD 20852
Telephone: (301) 443-8843

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Conventional Nautical Charts**

#### **Data Product Keywords**

Hydrography, navigation

#### Summary

Conventional nautical charts are printed reproductions at a reduced scale of some portion of the navigational part of the Earth's surface.

#### **Extent of Program**

National. The National Ocean Service's area of nautical charting responsibility encompasses the coastal marine environment of the continental United States, including the Great Lakes and Alaska, together with Hawaii, Puerto Rico, U.S. Virgin Islands, United States trust territories, and other islands in the Atlantic and Pacific Oceans.

### Available Product Coverage

There are four classifications of nautical charts:

Sailing Charts, published at a scale smaller than 1:600,000, are used for planning and fixing the mariner's position as the coast is approached from the open ocean or for sailing along the coast between distant ports. The shoreline and topography are generalized and only offshore soundings, the principal navigational aids, outer buoys, and landmarks visible at considerable distances are shown.

General Charts of the coast, published at scales from 1:150,000 to 1:600,000, are used for coastal navigation when a course is well offshore but can be fixed by landmarks, lights, buoys, and characteristic soundings.

Coast Charts, published at scales from 1:50,000 to 1:150,000, are used for close navigation inside outlying reefs and shoals, in entering or leaving bays and harbors of considerable size, and in navigating the larger inland waterways.

Harbor Charts, published at scales of 1:50,000 and larger, are used for navigating in harbors and smaller waterways and for anchorage.

#### **Information Content**

These charts show the nature and shape of the coast, depths of water, general configuration and character of the bottom, prominent landmarks, port facilities, cultural details, dredged channels, aids to navigation,

marine hazards, magnetic variations, and maritime boundaries. Changes brought about by people and nature require that nautical charts be constantly maintained to aid safe navigation.

### **Product Delivery Format**

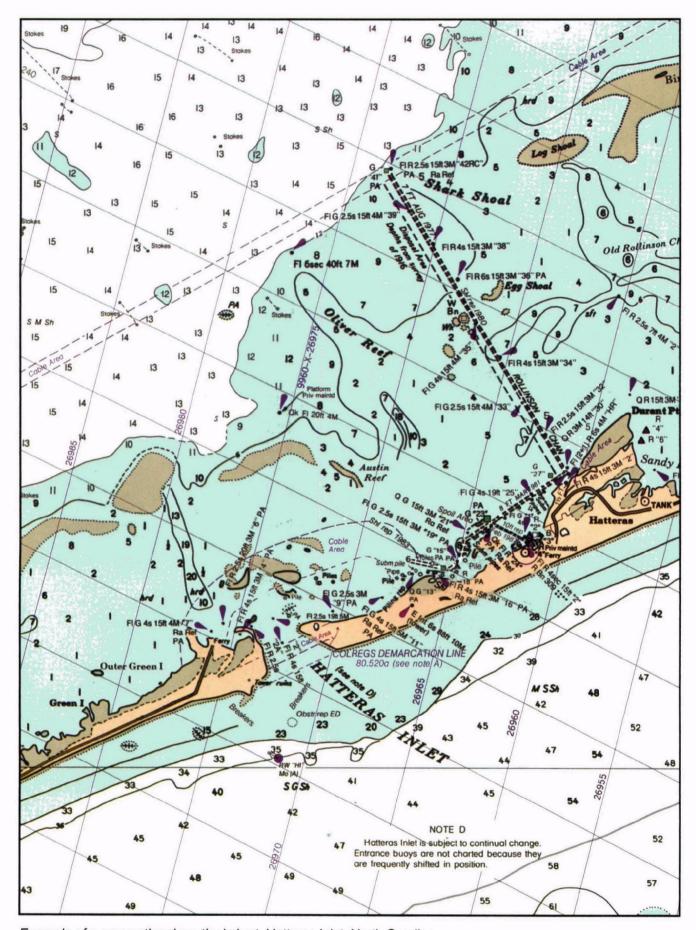
Paper; digital in progress.

# Technical, Ordering, and Availability Information

For orders:

Distribution Branch National Ocean Service NOAA Riverdale, MD 20737 Telephone: (301) 436-6990

For information:



Example of a conventional nautical chart; Hatteras Inlet, North Carolina.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

### **Geodetic Data**

### **Data Product Keywords**

Geodetic, Global Positioning System (GPS), horizontal control, remotely sensed, satellite, vertical control

### Summary

Geodetic data comprise the results of geodetic surveys to determine, among other things, latitude, longitude, height, scale, and orientation control. These surveys provide information valuable for a variety of everyday uses.

## **Extent of Program**

The United States, Canada, Mexico

### **Available Product Coverage**

The United States, Canada, Mexico

#### Information Content

Height listings (height values for geodetic reference points located throughout the United States); coordinate listings (latitudes, longitudes, and plane coordinates of geodetic reference points located throughout the United States); computed gravity values; precise orbital data for the Global Positioning System satellite constellation; plane coordinate zone maps; geodetic control diagrams; published distances and descriptions for calibration base lines; and geodetic data sheets. (Geodetic data sheets are comprehensive summaries of all published information for a given geodetic reference point, including: the geographic position and/or height based on the current reference datum, the condition of the survey mark when it was last visited, a description of where the point is located and how to reach it, and an explanation of the terms used in the data sheet.)

In support of these data, the National Geodetic Survey (NGS) provides software, publications, and various user services. NGS distributes approximately 30 software programs used to compute, verify, or adjust field surveying observations, convert coordinates from one geodetic datum to another, or to assist in other specialized tasks utilizing geodetic data. NGS distributes approximately 200 publications on geodesy, mapping, charting, and related topics, such as plane coordinate systems and numerical analysis.

NGS also conducts several programs to assist users of geodetic data, including an advisory program (currently conducted in cooperation with 26 States), a program of technical workshops (conducted in cooperation with the American Congress on Surveying and Mapping and other organizations, such as universities), and a program to establish precisely measured base lines for use in calibrating instruments which measure distance.

# **Product Delivery Format**

NGS data products are available on paper, computer diskette, or magnetic tape.

### **Technical Ordering and Availability Information**

National Geodetic Information Center N/CG174, Rockwall Building, Room 24 National Geodetic Survey, NOAA Rockville, MD 20850

Telephone: (301) 443-8631 FAX: (301) 881-0390

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Hydrographic Surveys**

## **Data Product Keywords**

Hydrography

## **Summary**

These hydrographic surveys promote safe navigation through the determination of data relating to a body of water.

### **Extent of Program**

National

### **Available Product Coverage**

Shoreline to 200-mile limit.

#### Information Content

A hydrographic survey may consist of the determination of one or several of the following classes of data: depth of water; configuration and nature of the bottom; velocity of currents; heights and times of tides and water stages; location of aids and dangers for navigation and survey purposes; configuration of marginal land areas, and determination of magnetic declination and anomalies for navigating by magnetic compass. Also, information on geographic names and harbor facilities often is documented. Most NOS hydrographic data are now collected by computer-supported field systems which permit the graphic display of the hydrographic information on smooth sheets and allow the data to be stored in digital form.

Hydrographic survey smooth sheets are usually plotted at a scale of 1:10,000. The criteria for scale selection are based on the area to be covered and the amount of hydrographic detail necessary to depict adequately the bottom topography and portray the least depths over critical features. The standard size for hydrographic survey sheets, whether plotted manually or machine plotted, is 91 by 136 cm. Accurate vertical control of hydrographic surveys is tied to tidal observation. Other pertinent corrections are tied to the raw soundings, according to the type of sounding equipment utilized. Depths on most hydrographic surveys are reduced to true depths below an accepted datum plane; e.g., mean lower low water.

A Descriptive Report (DR) is a narrative document written for each hydrographic survey describing the conditions under which the survey was performed and

factors affecting the adequacy and accuracy of the survey. These reports are not available for older vintage hydrographic surveys in the Great Lakes. Usually a copy of the survey will be sufficient to meet the needs of the public, eliminating the additional expense of the DR.

## **Product Delivery Format**

Stable-base matte or paper.

Copies of hydrographic survey indexes are available on 8½- by 11-inch pages. In areas where the indexes are not current, photocopies of the relevant Master Diagram index sheets are available.

## Technical, Ordering, and Availability Information

Photographically reproduced copies of surveys and related documents are processed on request. The requisition should be addressed to:

NOAA, National Ocean Service HSB, Data Control Section, N/CG243 WSC1, Room 404 6001 Executive Blvd. Rockville, MD 20852 Telephone: (301) 443-8408

Some hydrographic data are available in digital form. Inquiries regarding digital hydrographic survey data should be directed to:

National Geophysical Data Center NOAA E/GC3 325 Broadway Boulder, CO 80303-3328 Telephone: (303) 497-6338

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Portion of a hydrographic survey; Buzzards Bay, Massachusetts.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Instrument Navigation Charts**

## **Data Product Keywords**

Navigation, aeronautical, Instrument Flight Rule (IFR)

### **Summary**

Enroute Altitude Charts provide aeronautical information for navigation under instrument flight rules above and below 18,000 feet mean sea level (MSL). The Terminal Procedures Publication (TPP) is a top-bound, 16-volume set covering the conterminous U.S., Puerto Rico, and the Virgin Islands. The TPP includes the Instrument Approach Procedure (IAP) Charts, Standard Instrument Departure (SID) Charts. Standard Terminal Arrival (STAR) Charts, Profile Descent Charts, Charted Visual Flight Procedures (CVFPs), and Airport Diagrams.

#### Products include the following:

- Enroute Low Altitude Charts
- IFR Enroute High Altitude Charts
- U.S. Terminal Procedures Publication
- Alaska Terminal Procedures Publication

### Available Product Coverage

Enroute Low Altitude Charts cover the conterminous U.S. and Alaska. Area Charts, which show congested terminal areas at larger scale are automatically included with subscriptions of these charts. The Enroute High Altitude Charts cover the conterminous U.S. and Alaska, and portions of Canada and Mexico. The TPP covers the conterminous U.S., Puerto Rico, and the U.S. Virgin Islands. Alaska coverage is provided in the Alaska Terminal Procedures Publication.

#### Information Content

These charts give pilots information for safe navigation under IFR conditions. Enroute Low Altitude Charts are designed to be used by pilots flying below 18,000 feet MSL. The charts are revised on a 56-day cycle. There are 28 enroute low altitude charts for the conterminous United States and 4 charts which cover Alaska. Enroute High Altitude Charts are to be used by pilots flying above 18,000 feet MSL. There are 6 enroute high altitude charts for the conterminous U.S. and 2 charts which cover Alaska. Scales for both of these types of charts vary and depend on the complexity of the area.

IAP charts are designed to provide an IFR descent

from the enroute environment to a point where a safe landing can be made. SID charts are Air Traffic Control-coded departure procedures which have been established at certain airports to simplify clearance. STAR charts are Air Traffic Control-coded IFR arrival procedures. Profile Descent Charts show uninterrupted descent from cruising altitude to the minimum altitude before a descent. CVFPs are an operational technique designed to move air traffic safely and expeditiously. Airport Diagrams are designed to assist in the movement of ground traffic in complex runway/taxiway configurations.

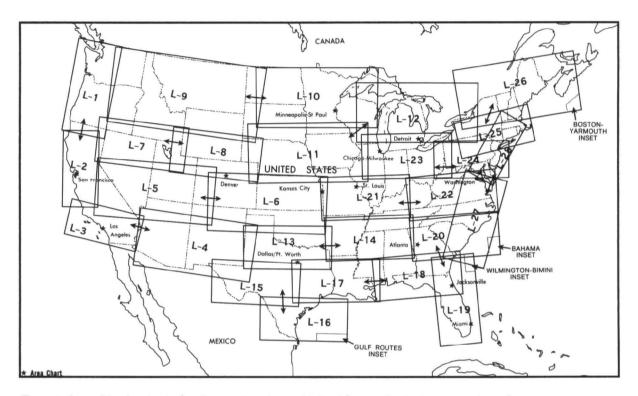
#### **Product Delivery Format**

Paper charts with varying revision cycles and a publication consisting of 16 bound books.

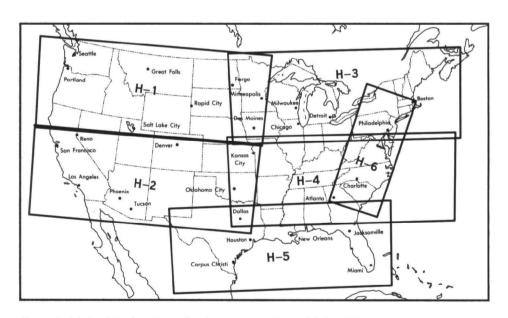
### Technical, Ordering, and Availability Information

Contact NOAA Distribution Branch listed below for more details on ordering. Products are available by subscription or one-time sales.

NOAA Distribution Branch, N/CG33 National Ocean Service Riverdale, MD 20737-1199 Telephone: (301) 436-6990



Enroute low altitude charts for the conterminous United States (includes area charts).



Enroute high altitude charts for the conterminous United States.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

### **Small Craft Nautical Charts**

### **Data Product Keywords**

Hydrography, navigation

### **Summary**

Small craft nautical charts, published at scales from 1:10,000 to 1:80,000, are designed for easy reference and plotting in limited spaces.

### **Extent of Program**

**National** 

# **Available Product Coverage**

Canoe Charts are a series of maps of the Minnesota-Ontario Border Lakes. Most canoe charts do not show hydrography. They are intended to portray the general shape and size of these lakes and to provide information of interest to campers and boaters who must portage between the lakes.

Folio Charts consist of three or four sheets, printed front and back, that are bound in a protective card-board jacket.

Area Charts are folded in panels for convenient use and are enclosed in a protective jacket.

Route Charts, published in a single long, narrow sheet, printed front and back, are designed for river and narrow waterway coverage, such as the Intra-coastal Waterways.

Recreational Charts are a series of large-scale charts providing sequential page coverage for selected Great Lakes areas. These charts are published in book format. Each page provides a large-scale, small-size chart.

#### Information Content

In some areas these charts represent the only chart coverage for all marine users. They portray regular nautical chart detail and other specific details of special interest to small-craft operators, such as enlargements of harbors; tide, current, and weather data; rules-of-the-road information; locations of marine facilities, anchorages, courses; and distances.

### **Product Delivery Format**

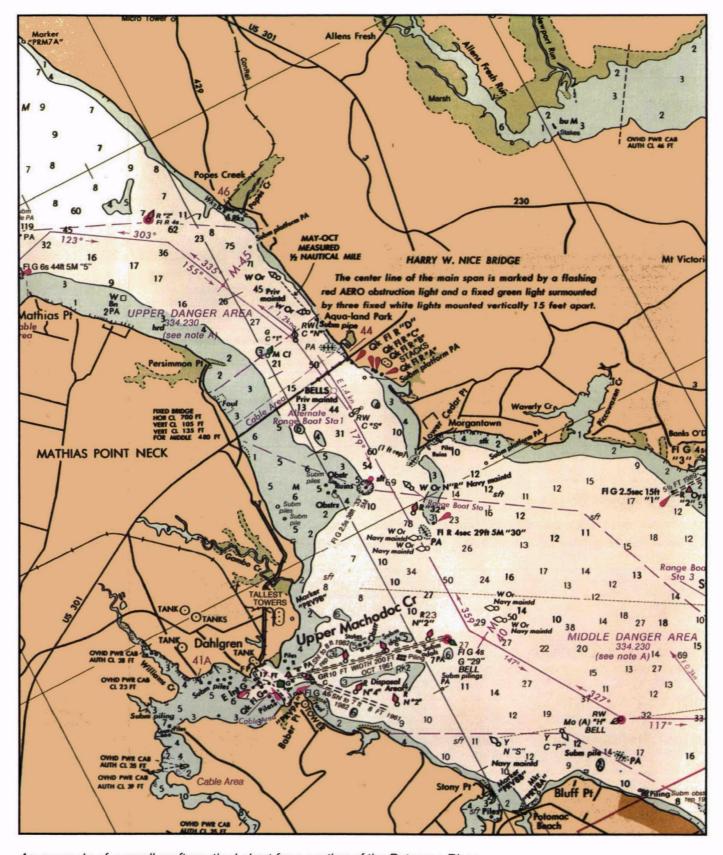
Paper, digital in progress.

### Technical, Ordering, and Availability Information

For orders:

Distribution Branch National Ocean Service NOAA Riverdale, MD 20737 Telephone: (301) 436-6990

For information:



An example of a small craft nautical chart for a portion of the Potomac River.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Supplementary Aeronautical Publications**

### **Data Product Keywords**

Navigation, aeronautical

### **Summary**

These publications are primarily used to provide pilots, planners, and air traffic controllers with more precise and additional information not found on some aeronautical charts. The products are primarily available in paper format, however some products are available in digital form.

- Airport/Facility Directory (A/FD)
- Chart Supplement Pacific
- North Pacific Route Chart (NPRC)
- Navigational Aid (NAVAID) Digital Data File
- North Atlantic Route Chart (NARC)
- Digital Obstacle File (DOF)
- Supplement Alaska
- Digital Aeronautical Chart Supplement (DACS)

## **Available Product Coverage**

The A/FD covers the conterminous United States, Puerto Rico, and the U.S. Virgin Islands in a seven-volume set. The NPRC covers the North Pacific Ocean only. The NARC covers the North Atlantic Ocean only. Supplement Alaska covers the State of Alaska only. The NAVAID file covers the U.S. and some of its possessions. The DOF covers verified obstacles in the U.S. with limited coverage of the Pacific, the Caribbean, Canada, and Mexico. The DACS covers the U.S. and its possessions.

#### Information Content

These charts and publications contain a variety of information including a voluminous amount of airport data, air routes, aids to navigation, reporting points, obstructions to navigation, geographic positions, special notices and procedures, selected IAPs, and military training and oceanic routes. Some products are updated as frequently as every 56 days.

The A/FD is a pilot's manual which contains data on airports, seaplane bases, heliports, NAVAIDs, communications, special notices, and operational procedures. The A/FD also provides a means for pilots to update visual charts between edition dates.

The NPRC is designed for FAA Controllers to monitor

transoceanic flights, shows established intercontinental air routes, including reporting points with geographic positions.

The NARC is designed for FAA Controllers to monitor transatlantic flights, show oceanic control areas, coastal navigation aids, oceanic reporting points, and NAVAID coordinates and reporting points.

The Supplement Alaska is a civil and military flight information publication containing an A/FD, airport sketches, communications data, NAVAID facilities, and special notices and procedures.

The Chart Supplement Pacific covers much of the same information as that contained in the Alaska Supplement, however, for the Hawaiian and Pacific Islands.

The NAVAID Digital Data File is a current listing of navigational aids by type, coordinates, frequency, channel, elevation, etc.

The DOF is a complete listing of verified obstacles with unique identifiers and are listed in order of ascending latitude of each State.

The DACS provides digital airspace data not otherwise readily available. It contains nine sections.

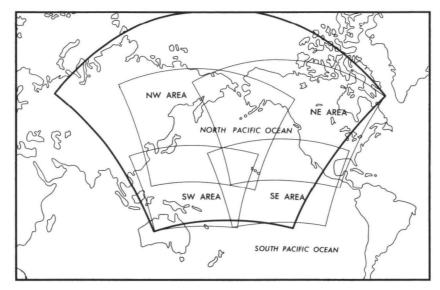
#### **Product Delivery Format**

- A/FD Paper book format
- Chart Supplement Pacific Paper book format
- NPRC Paper chart format
- NAVAID Digital Data File Paper, magnetic tape, disk
- NARC Paper chart format
- DOF Paper format only
- Supplement Alaska Paper book format
- DACS Paper books or magnetic tape

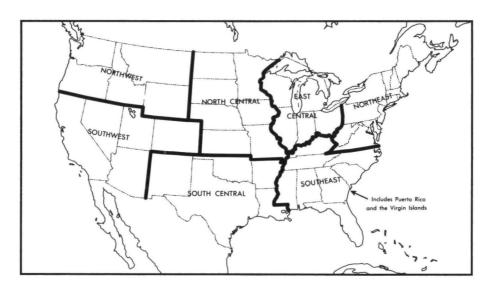
#### Technical, Ordering, and Availability Information

For more information on the Digital Obstacle File (DOF) call: (301) 443-8323.

NOAA Distribution Branch, N/CG33 National Ocean Service Riverdale, MD 20737-1199 Telephone: (301) 436-6990



North Pacific route charts.



Airport / facility directory areas of coverage.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

# **Topographic – Bathymetric Maps**

### **Data Product Keywords**

Bathymetry, geology, land use, subsurface, surface and manmade features

### **Summary**

Topographic-bathymetric maps is a series of maps at 1:24,000-, 1:100,000-, and 1:250,000-scales, which graphically depicts the sea floor and adjacent land areas through the use of land and water contours and multiple tints.

### **Extent of Program**

National

### **Available Product Coverage**

Adjacent land areas of the United States.

#### **Information Content**

These maps, which are not used for marine navigation, assist scientific, engineering, marine, geophysical, and marine environmental studies undertaken to develop energy and marine resources. The 1:250,000-scale maps are overprinted with Minerals Management Service mineral lease block information.

#### **Product Delivery Format**

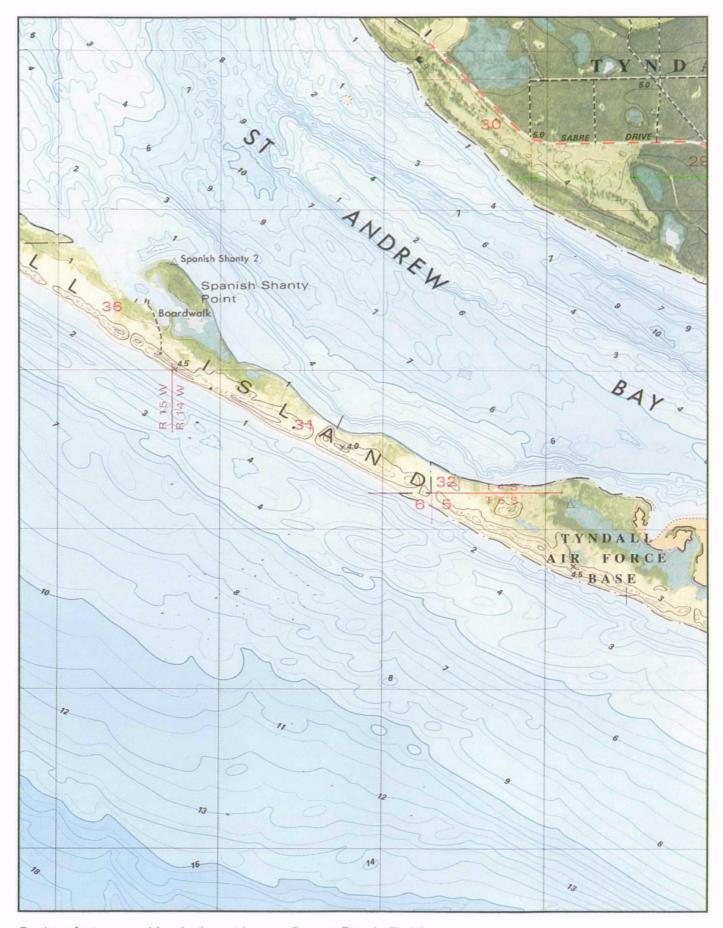
Paper

#### Technical, Ordering, and Availability Information

For orders:

Distribution Branch National Ocean Service NOAA Riverdale, MD 20737 Telephone: (301) 436-6990

For information:



Portion of a topographic - bathymetric map; Beacon Beach, Florida.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

## **Topographic Surveys and Planimetric Shoreline Maps**

### **Data Product Keywords**

Coastal, contours, elevation, topography, shoreline

#### **Summary**

These surveys represent a unique and comprehensive record of the coastline and the adjacent waters, showing conditions existing on particular dates for more than a century and providing a detailed record of the changes that have occurred from both natural and artificial causes. Most of the shoreline maps have been compiled at scales of 1:10,000 or 1:20,000. A number of harbor areas have been completed at 1:5,000 scale.

### **Extent of Program**

National

### Available Product Coverage

Shoreline areas of the United States and possessions.

#### Information Content

These topographic and photogrammetric surveys, along with hydrographic surveys, have been used by National Ocean Service (NOS) for the production and maintenance of nautical charts since 1835. Consequently, over 23,000 individual topographic, photogrammetric, and hydrographic surveys are on file in the NOS archives. However, some of the earliest original topographic survey sheets have been transferred to the National Archives, Cartographic and Architectural Branch.

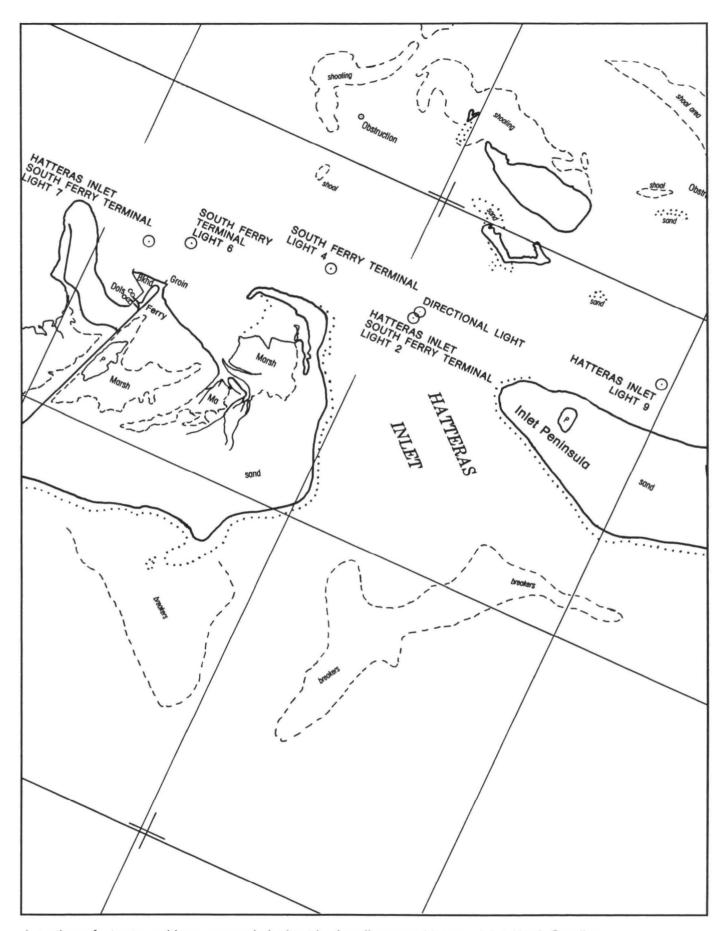
Topographic and photogrammetric surveys (shoreline maps) are surveys of the land features of an area. As their extent is limited by varying nautical chart requirements, they generally cover a distance of 1 to 10 kilometers inland from the shoreline. Topographic surveys vary not only in coverage but also in content. Some may show only the shoreline and planimetric features immediately adjacent to the shoreline; others may be complete planimetric maps, covering the limits of the entire map; and still others may show contouring and spot elevations. Data depicted within the limits of the map may consist of the mean high water line, the sounding datum line, landmarks and aids to navigation, land contours and spot elevations, photobathymetry, onshore and offshore details, roads, railroads, buildings, marsh, swamp, streams, boundary lines, and numerous other planimetric features.

### **Product Delivery Format**

Stable-base matte or paper.

### Technical, Ordering, and Availability Information

NOAA, National Ocean Service HSB, Data Control Section, N/CG243 WSC1, Room 404 6001 Executive Blvd. Rockville, MD 20852 Telephone: (301) 443-8408



A portion of a topographic survey and planimetric shoreline map; Hatteras Inlet, North Carolina.

National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS)

### **Visual Aeronautical Chart Products**

#### **Data Product Keywords**

Navigation, aeronautical, Visual Flight Rule (VFR)

### **Summary**

These charts are designated for Visual Flight Rule (VFR) navigation and planning for slow to medium speed aircraft (with the exception of the World Aeronautical Charts). The topographic information features consist of the relief and a judicious selection of visual checkpoints used for flight under VFRs. The checkpoints include populated places, drainage patterns, roads, railroads, and other distinctive landmarks. The aeronautical information on these charts includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstructions and related data.

#### Products include the following:

- Sectional Aeronautical Charts
- Terminal Area Charts
- Charted VFR Flyway Planning Charts
- U.S. Gulf Coast VFR Aeronautical Chart
- World Aeronautical Charts
- Helicopter Route Charts

### **Available Product Coverage**

Conterminous United States, Hawaiian Islands, Alaska, Puerto Rico and the Virgin Islands. World Aeronautical Charts cover the U.S., the Caribbean, and portions of Canada and Mexico. Helicopter charts are available for Baltimore/Washington, Chicago, Los Angeles, New York, and Houston. The Charted VFR Flyway Planning Charts are for areas around Atlanta, Dallas/Ft. Worth, Detroit, Houston, Los Angeles, Miami, Phoenix, and San Diego Terminal Area Charts.

#### Information Content

These charts give pilots information for safe navigation under VFR conditions. Scales of the charts range from 1:125,000 to 1:1 million with revision cycles depending on the chart. The revision cycles range from every six months (Sectionals and Terminal Area Charts) to yearly (World Aeronautical Charts) to as required (Helicopter Charts).

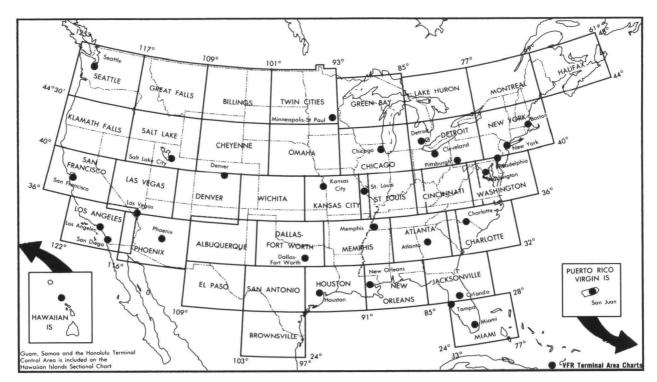
# **Product Delivery Format**

Paper charts with varying revision cycles.

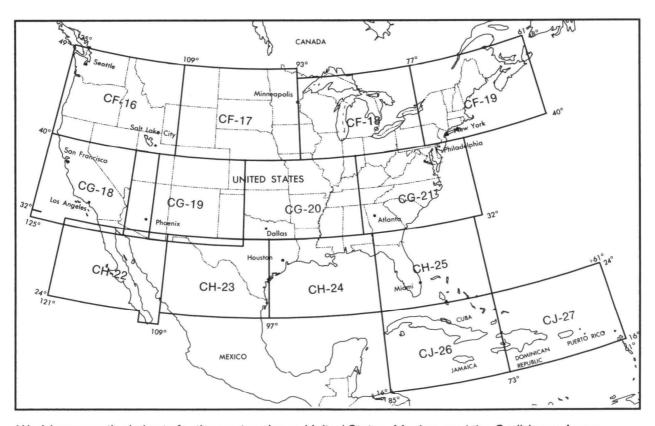
### Technical, Ordering, and Availability Information

Contact NOAA Distribution Branch listed below for more details on ordering. Products are available by subscription or one-time sales.

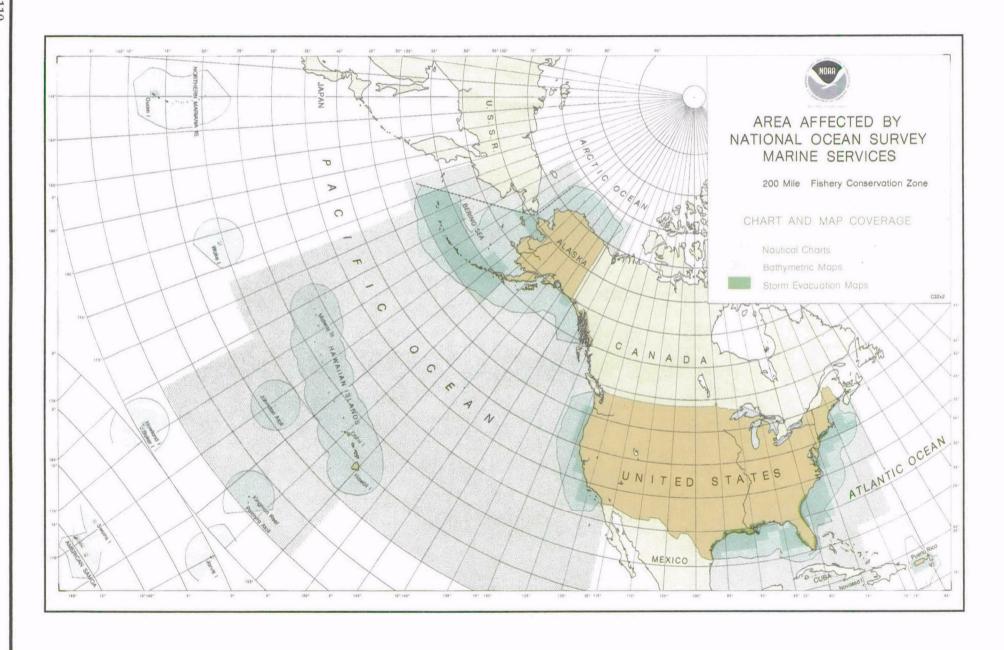
> NOAA Distribution Branch, N/CG33 National Ocean Service Riverdale, MD 20737-1199 Telephone: (301) 436-69909



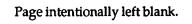
Sectional and VFR terminal area charts for the conterminous United States, Hawaiian Islands, Puerto Rico and the Virgin Islands.



World aeronautical charts for the conterminous United States, Mexico, and the Caribbean Areas.



| National Weather Service            |             |             |          |               |       |                 |           |             |         |  |  |  |  |  |  |  |   |
|-------------------------------------|-------------|-------------|----------|---------------|-------|-----------------|-----------|-------------|---------|--|--|--|--|--|--|--|---|
| Data Product Keywords  Data Product | Page Number | Atmospheric | Contours | Environmental | Radar | Remotely sensed | Satellite | Temperature | Weather |  |  |  |  |  |  |  |   |
| Numerical Models                    | 113         | •           | •        | •             |       |                 |           |             | •       |  |  |  |  |  |  |  | _ |
| Precipitation                       | 115         | •           |          | •             |       |                 |           |             | •       |  |  |  |  |  |  |  |   |
| Pressure                            | 116         | •           | •        | •             |       | •               | •         |             | •       |  |  |  |  |  |  |  |   |
| Synoptic Charts                     | 118         | •           | •        | •             | •     | •               | •         | •           | •       |  |  |  |  |  |  |  |   |
| Temperature                         | 120         | •           |          | •             |       |                 |           | •           | •       |  |  |  |  |  |  |  |   |



National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

#### **Numerical Models**

#### **Data Product Keywords**

Atmospheric, contours, environmental, weather, vorticity

#### **Summary**

Numerical model charts consist of vorticity charts and mean relative humidity/vertical velocity charts. These charts are analyzed twice daily and present mean relative humidity, vertical velocity, 500 millibar height contours, and absolute vorticity isopleths from May 1, 1961 to present.

#### **Extent of Program**

National

### **Available Product Coverage**

North America

#### Information Content

Mean relative humidity/vertical velocity charts: These charts of North America are analyzed twice a day and prepared by the National Weather Service, National Meteorological Center. The charts depict mean relative humidity through the three lowest layers of the seven-layer primitive equations (PE) numerical prediction model and vertical velocity isopleths at the 700-millibar level. These charts are available from May 1, 1961 through the present.

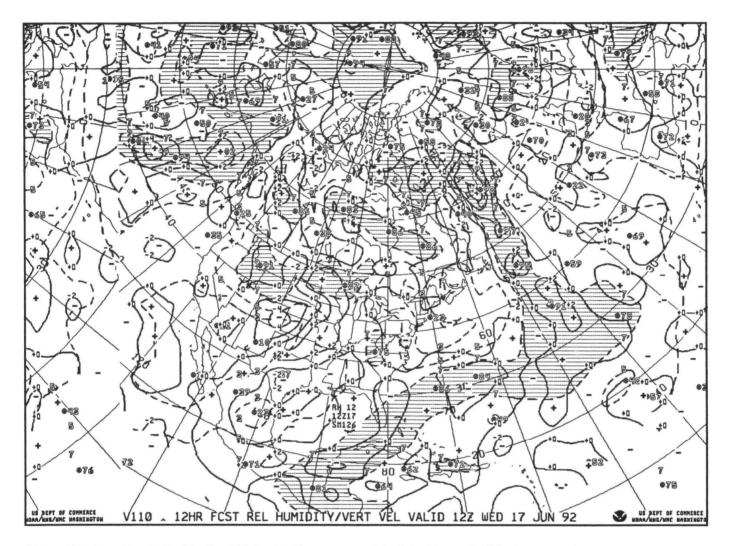
Vorticity charts: These charts are produced on computer and analyzed twice daily by the National Weather Service, National Meteorological Center. They show 12-, 24-, 36-, and 48-hour forecasts for North America. The basis for these charts is the seven-layer primitive equation (PE) numerical prediction model. The charts depict 500-millibar-height contours and absolute vorticity isopleths. The charts are available from May 1, 1961 through the present.

### **Product Delivery Format**

Microfilm and paper copies.

### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682



**Mean Relative Humidity/Vertical-Velocity Prognoses:** 12-, 24-, 36-, and 48-hr forecast charts are computer-produced twice daily from 0000 UTC and 1200 UTC data. They are transmitted on a four-panel chart covering the conterminous U.S. Mean relative humidity isopleths are drawn for 50, 70, and 90% and labeled with one digit hollow numbers. Areas with relative humidity above 70% are hatched. Centers of maximum and minimum relative humidities are indicated with two-digit numbers in percent. Vertical velocity isopleths, applicable to the 700 mb level, are depicted as solid lines with labels at 1 microbar per second. Centers of upward and downward motion are shown as + and – respectively.

### **Department of Commerce**

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

# Precipitation

### **Data Product Keywords**

Atmospheric, environmental, weather, precipitation, moisture index

### Summary

Twenty-four hour precipitation charts and composite moisture index charts containing the lifted index/K-index (indexes of atmospheric stability), precipitable water, freezing level and average relative humidity from May 1, 1962 to present.

### **Extent of Program**

**National** 

### **Available Product Coverage**

Conterminous United States, Southern Canada, and Northern Mexico.

#### Information Content

Observed 24-hour precipitation charts: The computer plotted charts in this file, covering the conterminous United States, Southern Canada, and Northern Mexico,

are prepared by the National Weather Service, National Meteorological Center. Data plotted are 24-hour precipitation totals at each station location. These charts are available from January 1, 1962 through the present.

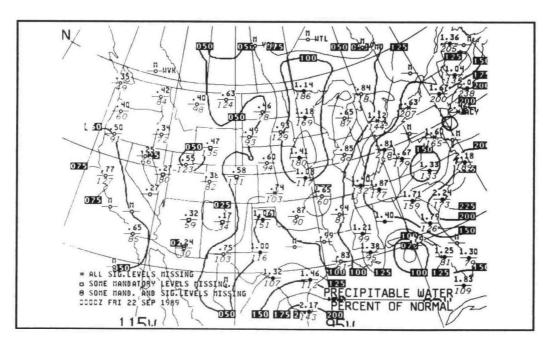
Composite moisture index charts: These four-panel charts, consisting of the lifted index/K-index, precipitable water, freezing level, and average relative humidity analyses, are prepared by the National Weather Service, National Meteorological Center. These charts have been produced twice daily from January 1, 1962 through the present.

## **Product Delivery Format**

Microfilm and paper copies.

### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682



Composite Moisture Index Charts: The precipitable water is analyzed for intervals of .50 inch with .25 inch (dashed isopleths) used to define the pattern when necessary. Station circles are blacked-in for values of 1.00 inch or greater.

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

#### **Pressure**

### **Data Product Keywords**

Atmospheric, contours, environmental, remotely sensed, satellite, weather, pressure

### **Summary**

These Northern Hemisphere and North American constant pressure charts for levels from 850 millibars to 1 millibar are produced twice daily.

### **Extent of Program**

National and Northern Hemisphere.

### **Available Product Coverage**

Major stations across the United States and Northern Hemisphere.

#### Information Content

Northern American constant pressure charts: The constant pressure charts in this file are analyzed twice daily and prepared by the National Weather Service, National Meteorological Center. Station observational data with wind barbs are plotted on the charts and they are analyzed for heights and isotachs for each constant pressure level from 850 millibars through 1 millibar. These charts are available from January 1, 1946 through the present.

Northern Hemisphere constant pressure charts: The constant pressure charts in this file are analyzed twice daily and prepared by the National Weather Service, National Meteorological Center. Station observational data with wind barbs are plotted on the charts and they are analyzed for heights and isotachs for each constant pressure level from 850 millibars through 1 millibar. These charts are available from January 1, 1946 through the present.

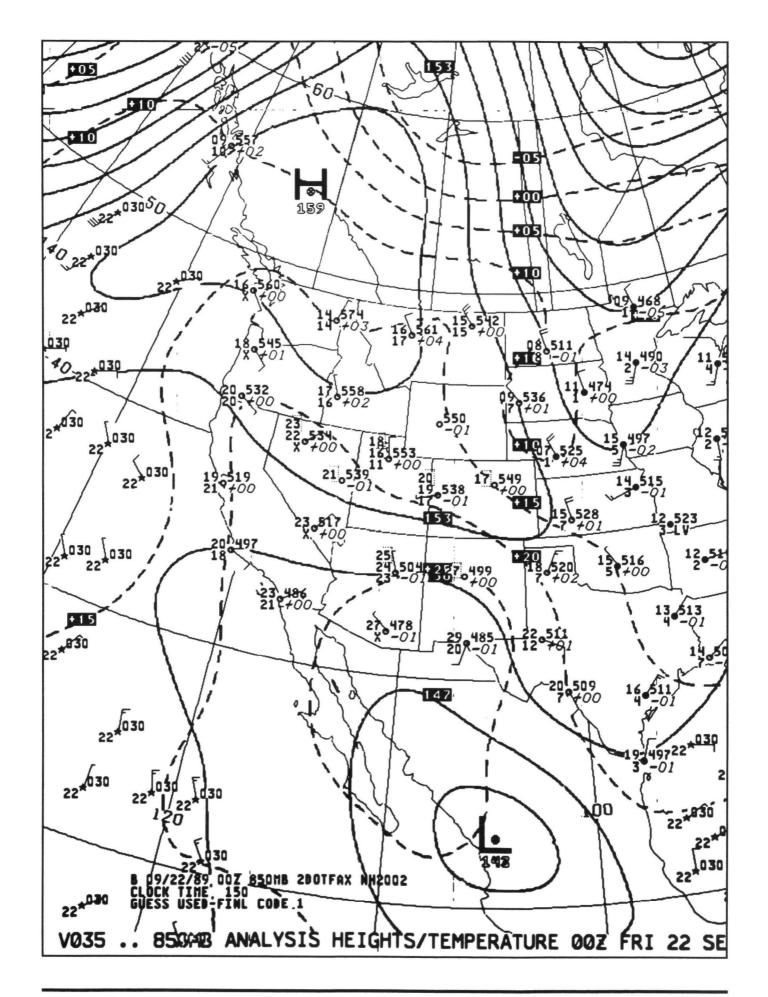
#### **Product Delivery Format**

Microfilm and paper copies.

### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682

Following page: The North American constant pressure analysis charts are computer-produced twice daily by the Limited-Area Fine Mesh Analysis program based on upper air data (radiosonde, rawinsonde, pilot balloons, aircraft observations, and satellite information) available at 0000 UTC and 1200 UTC. Plotted data show height of the constant pressure surface (in meters with the high order digit omitted for the 850 mb chart), temperature and dew point depression in °C (station circle darkened for depressions ≤ 5°C), 12-hour height change in tens of meters, and wind direction and speed. Height contours are shown as solid lines labeled in decameters. Isotherms are shown as dashed lines at 5°C intervals.



National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

# **Synoptic Charts**

### **Data Product Keywords**

Atmospheric, contours, environmental, radar, remotely sensed, satellite, temperature, weather, surface

### Summary

Northern Hemisphere/North American surface weather charts, North American weather depiction charts, U.S. winds aloft charts, daily weather maps, and U.S. radar summary charts.

### **Extent of Program**

National and Northern Hemisphere.

### **Available Product Coverage**

Major North American and Northern Hemisphere stations.

#### **Information Content**

Northern Hemisphere surface charts: The analyzed surface weather charts in this file are prepared by the National Weather Service, National Meteorological Center. The charts are analyzed at 4-millibar intervals, surface land and surface-marine data are plotted, and pressure systems and fronts are depicted. These charts are available from May 1, 1954 through the present.

North American surface charts: The analyzed surface weather charts in the file are prepared by the National Weather Service, National Meteorological Center. The charts are analyzed at 4-millibar intervals, station data are plotted, and pressure systems and fronts are depicted. These charts are available from March 1, 1942 through the present. Some of these charts from 1942 through 1953 are analyzed for the United States only.

Weather-depiction analysis charts: These surface charts for the conterminous United States, Southern Canada, and Northern Mexico are computer-plotted and analyzed manually at 3-hour intervals. They are prepared by the National Weather Service, National Meteorological Center. The analyses include areas of instrument flight rule (IFR), marginal visual flight rule (MVFR), and visual flight rule (VFR) flying conditions. These charts are available from January 1, 1976 through the present.

Winds-aloft charts: These plotted charts show various upper air levels of the United States; they are produced

two and sometimes four times daily by the National Weather Service, National Meteorological Center. These charts are available from March 1, 1942 through the present.

Daily weather maps – weekly: This publication file includes the former U.S. Weather Bureau "Daily Weather Map" series from January 1899 through December 1959 and subsequent National Weather Service "Daily Weather Map-Weekly" series from January 1960 through the present. The Climate Analysis Center offers one-year subscriptions to this weekly publication.

Radar-summary charts: The radar summary charts in this file are analyzed hourly and prepared by the National Weather Service, National Meteorological Center. The analyses include areas, lines, and cells of radar detected precipitation aloft with the height of the base and tops, and their movement and intensity. These charts for the contiguous United States are available from March 1, 1957 through the present.

## **Product Delivery Format**

Microfilm, paper copies, and publications.

# Technical, Ordering, and Availability Information

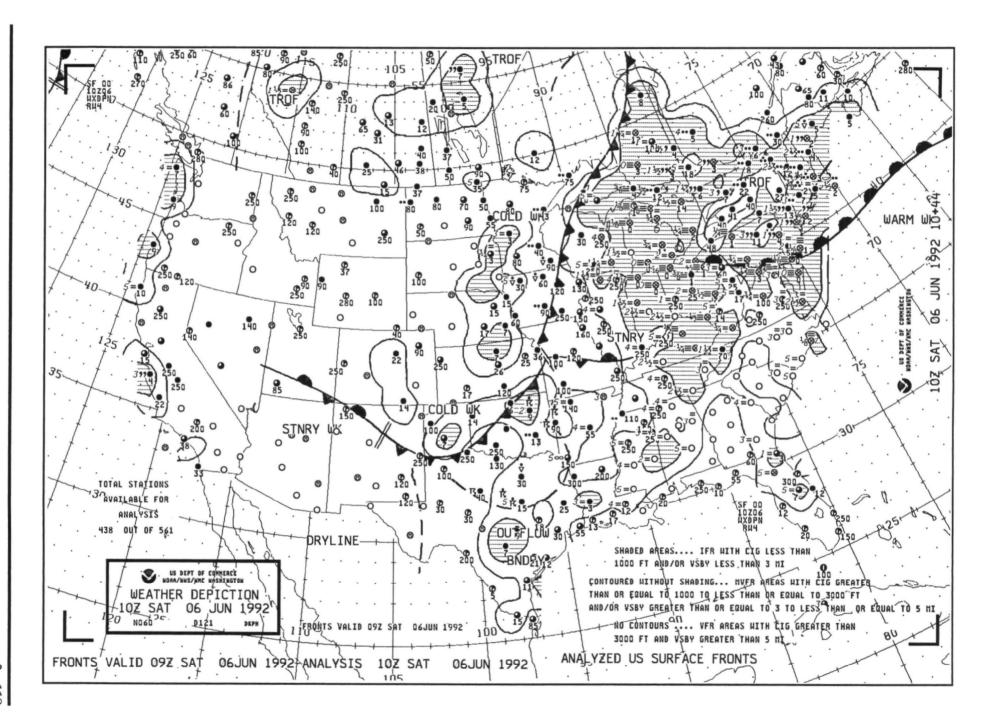
NOAA

National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682

For daily weather map subscriptions:

Climate Analysis Center Room 808, World Weather Building Washington, D.C. 20233

Following page: A weather depiction chart shows plotted data, IFR and MVFR isopleths, and positions of fronts and pressure systems taken from hourly weather observations at 0000 UTC plus every three hours. The plotted data include significant weather, visibility, total sky cover, and ceiling height. Visibilities over 6 miles are not plotted. Isopleths depict IFR conditions (ceilings be-low 1,000 feet and/or visibilities less than 3 miles) with solid lines and MVFR conditions (ceilings 1,000 to 3,000 feet inclusive and visibilities 3 to 5 miles inclusive).



National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

# **Temperature**

### **Data Product Keywords**

Atmospheric, environmental, temperature, weather

### **Summary**

Twelve-hour maximum/minimum temperature charts from April 1, 1966 to present.

### **Extent of Program**

National

#### **Available Product Coverage**

Major stations in the contiguous United States and Southern Canada.

#### Information Content

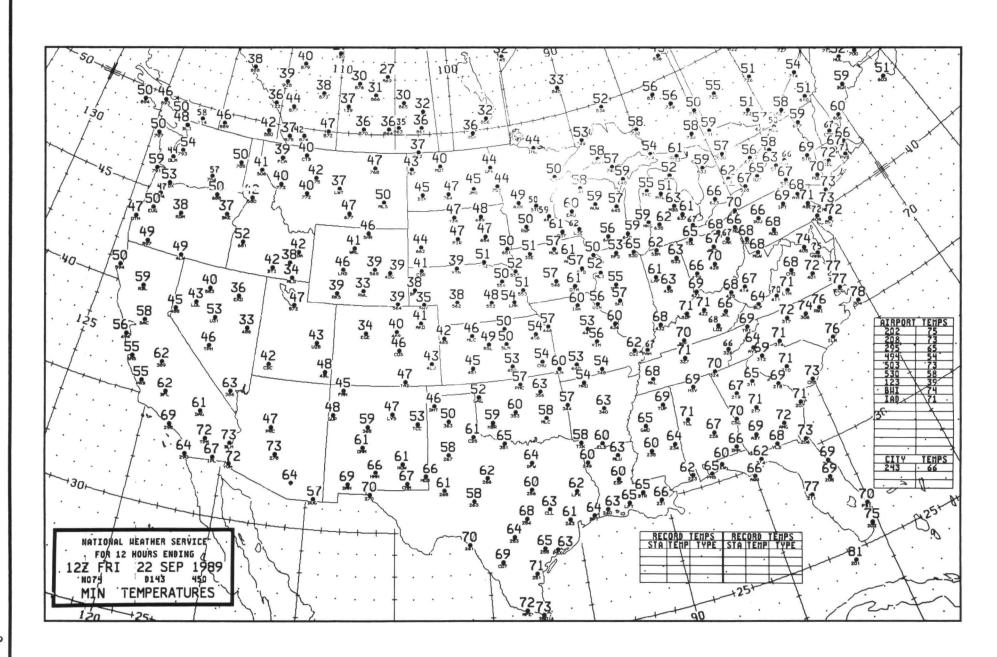
These twice-daily charts are prepared by the National Weather Service, National Meteorological Center and depict selected station's 12-hour maximum and minimum temperatures in the contiguous United States and Southern Canada along with special remarks to indicate if the temperature(s) was a "record." These charts are available from April 1, 1966 through the present.

#### **Product Delivery Format**

Microfilm and paper copies.

#### Technical, Ordering, and Availability Information

NOAA National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733 Telephone: (704) 259-0682 Following page: Two charts are produced each day, one for maximum temperatures (°F) observed during the 12 hours ending at 0000 UTC and one for minimum temperatures observed during the 12 hours ending at 1200 UTC. When both a city office and an airport office provide temperature data, the city office temperature is plotted on-station and the airport temperature is listed in the printed box. The RECORD TEMPS box gives reported record extreme temperatures along with a contraction indicating the type of temperature record. Example is a minimum temperature chart.



| Defense Mapping Agency                   |             |          |            |         |          |           |                  |                         |            |            |       |           |       |                            |            |                    |           |  |  |
|------------------------------------------|-------------|----------|------------|---------|----------|-----------|------------------|-------------------------|------------|------------|-------|-----------|-------|----------------------------|------------|--------------------|-----------|--|--|
| Data Product Keywords  Data Product      | Page Number | Airports | Boundaries | Coastal | Contours | Elevation | Geographic names | Internationalboundaries | Land cover | Navigation | Ports | Railroads | Roads | Surface & manmade features | Topography | Transmission lines | Waterways |  |  |
| ARC Digitized Raster Graphics (ADRGs)    | 3           | •        | •          | •       | •        | •         | •                | •                       | •          | •          | •     | •         | •     | •                          | •          | •                  | •         |  |  |
| Digital Chart of the World (DCW)         | 4           | •        | •          | •       | •        | •         | •                | •                       | •          |            | •     | •         | •     | •                          | •          | •                  | •         |  |  |
| Global Navigation & Planning Chart (GNC) | 5           | •        |            | •       |          | •         | •                | •                       | •          | •          |       | •         | •     | •                          |            |                    | •         |  |  |
| Jet Navigation Chart                     | 6           | •        | •          | •       | •        | •         | •                | •                       |            | •          | •     | •         | •     | •                          | •          |                    | •         |  |  |
| Joint Operations Graphic-Air (JOG-A)     | 7           | •        | •          | •       | •        | •         | •                | •                       | •          | •          | •     | •         | •     | •                          | •          | •                  | •         |  |  |
| Operational Navigation Chart             | 8           | •        | •          | •       | •        |           |                  | •                       | •          | •          | •     | •         | •     | •                          | •          | •                  | •         |  |  |
| Tactical Pilotage Charts                 | 9           | •        | •          | •       | •        |           |                  | •                       | •          | •          | •     | •         | •     | •                          | •          | •                  | •         |  |  |
| World Mean Elevation Data                | 10          |          |            |         |          | •         |                  |                         |            |            |       |           |       |                            | •          |                    |           |  |  |
| World Vector Shoreline (WVS)             | 11          |          | •          | •       |          |           | •                | •                       |            |            |       |           |       |                            |            |                    | •         |  |  |



**Defense Mapping Agency** 

# **ARC Digitized Raster Graphics (ADRGs)**

#### **Data Product Keywords**

Airports, boundaries, coastal, contours, elevation, geographic names, international boundaries, land cover, navigation, ports, railroads, roads, surface and manmade features, topography, transmission lines, waterways

#### Summary

ARC Digitized Raster Graphics (ADRGs) are digital raster representations of selected charts on CD-ROMs. This product is used in electronic map displays, digital moving map displays, command and control systems and for general planning purposes that require small to medium scale (1:5 million to 1: 250,000) cartographic features.

### **Extent of Program**

Global

# **Available Product Coverage**

Global

#### Information Content

The Global Navigation and Planning Chart shows principal cities, towns, drainage, primary roads and railroads, prominent culture, shaded relief, and spot elevations. Aeronautical data includes NAVAIDS, airports and restricted areas.

The Operational Navigation Chart provides cartographic data with an aeronautical overprint depicting obstructions, aerodromes, special use airspace, navigational aids, maximum elevation figures, and related data.

The Jet Navigation Chart provides coverage of large cities, roads, railroads, and drainage. Relief is shown by contours, spot elevations, and gradient tints. Aeronautical information necessary for the purpose of the charts is included. This includes restricted areas, L/MF and VOR ranges, radio beacons, and a selection of standard broadcast stations and airports. Runway patterns are exaggerated so they may be more readily identified as visual landmarks.

The Tactical Pilotage Chart provides cartographic data with aeronautical overprint depicting obstructions, aerodromes, special use airspace, navigational

aids and related data. Because of the scale, some features, including obstructions, are generalized in developed regions (only the highest obstruction within ticked area or urban quadrant is shown).

The Joint Operations Graphic Chart portrays such features as relief, drainage, vegetation, populated places, cultural features, and coastal hydrography. Linear features are plotted as to their correct orientation and in their true location, wherever scale permits. The aeronautical overprint depicts obstructions, aerodromes, special use airspace, navigational aids, and related data. If produced from a Joint Operations Graphic-Ground (JOG-G) base, contour line elevation values are converted from meters to feet.

Coordinate Reference System: Equal Arc Second

Horizontal Datum: World Geodetic System 84

Vertical Datum: Same as source charts Specification: DoD MIL-A-89007

# **Product Delivery Format**

CD-ROM. The ADRGs can be read on a Macintosh or IBM PC-compatible CD-ROM reader. The user must provide the application software to access the CD-ROM.

# Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

# **Digital Chart of the World (DCW)**

# **Data Product Keywords**

Airports, boundaries, coastal, contours, elevation, geographic names, international boundaries, land cover, ports, railroads, roads, surface and manmade features, topography, transmission lines, waterways

# **Summary**

The Digital Chart of the World (DCW) is a 1,700 MB data base of vector geographic information. It provides global coverage of topographic information equivalent in detail to a 1:1 million scale map. Application software along with its source code, designed to operate on an MS-DOS based microcomputer, is furnished with the DCW.

# **Extent of Program**

Global

# **Available Product Coverage**

Global

## **Information Content**

Topographic information: Major road and rail networks, major drainage systems, major utility networks (cross-country pipelines and communication lines), all major airports, contours, coastlines, international boundaries and populated places. An index of geographic names is provided to aid in locating areas of interest.

Structure: Topologically structured, thematically layered feature data in Vector Product Format (MIL-STD 60006).

Coordinate Reference System: Geographic Horizontal Datum: World Geodetic System 84

Vertical Datum: Mean Sea Level Specification: DoD MIL-D 89009

#### **Product Delivery Format**

Four CD-ROMs conforming to ISO Standard 9660 Volume and File Structure of CD-ROM for Information Interchange. Each DCW data library contains 17 thematic layers. DCW disk 1 covers North America; disk 2 covers Europe and North Asia; disk 3 covers South

America, Africa, and Antarctica; and disk 4 covers South Asia and Australia. Each disk contains the application software. This package called VPFVIEW, allows the display of selected combinations of features and themes for a user-selected geographic area of interest.

# Technical, Ordering, and Availability Information

The DCW is scheduled for public release in late summer 1992 and will be available without restriction.

Contact:

Earth Science Information Center U.S. Geological Survey Box 25046, Federal Center, MS 504 Denver, CO 80225-0046 Telephone: (303) 236-5829

**Defense Mapping Agency** 

# Global Navigation and Planning Chart (GNC)

# **Data Product Keywords**

Airports, coastal, elevation, geographic names, international boundaries, land cover, navigation, railroads, roads, surface and manmade features, waterways

## **Summary**

Global Navigation and Planning Charts (GNCs) are small scale (1:5 million) aeronautical charts suitable for flight planning, operations over long distances, and enroute navigation in long-range, high-altitude, high-speed aircraft.

# **Extent of Program**

Global

## **Available Product Coverage**

Global

#### Information Content

Principal cities, towns, drainage, primary roads and railroads, prominent culture, shaded relief, and spot elevations are shown. Aeronautical data includes NA-VAIDS, airports and restricted areas.

# **Coordinate Reference System:**

Polar Regions: Transverse Mercator Other Regions: Lambert Conformal Conic

Specification: PS/1AD/200

# **Product Delivery Format**

Paper, 42 by 571/2 inches.

## Technical, Ordering, and Availability Information

Defense Mapping Agency

# **Jet Navigation Chart**

# **Data Product Keywords**

Airports, boundaries, coastal, contours, elevation, geographic names, international boundaries, navigation, ports, railroads, roads, surface and manmade features, topography, waterways

#### Summary

Worldwide small scale (1:2 million) aeronautical charts. Used for high-altitude (25,000 to 50,000 feet) high speed, long-range navigation and planning and as a source for navigational filmstrips.

# **Extent of Program**

Global

## Available Product Coverage

Global

#### Information Content

Large cities, roads, railroads, and drainage. Relief is shown by contours, spot elevations, and gradient tints. Aeronautical information necessary for the purpose of the charts is included. This includes restricted areas, L/MF and VOR ranges, radio beacons, and a selection of standard broadcast stations and airports. Runway patterns are exaggerated so they may be more readily identified as visual landmarks.

#### Coordinate Reference System:

Polar Regions: Transverse Mercator Other Regions: Lambert Conformal Conic

Specification: PS/1AC/140

# **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

# Joint Operations Graphic-Air (JOG-A)

# **Data Product Keywords**

Airports, boundaries, coastal, contours, elevation, geographic names, international boundaries, land cover, navigation, ports, railroads, roads, surface and manmade features, topography, transmission lines, waterways

#### **Summary**

The Joint Operations Graphic-Air (JOG-A) is a standard Joint Operations Graphic-Ground (JOG-G) with an aeronautical overprint. JOGs are medium scale (1:250,000) cartographic products that support pre-flight and aeronautical operational functions.

# **Extent of Program**

Global

#### **Available Product Coverage**

**United States** 

#### Information Content

Feature portrayal includes relief, drainage, vegetation, populated places, cultural features, and coastal hydrography. Linear features are plotted as to their correct orientation and in their true location, wherever scale permits. The aeronautical overprint depicts obstructions, aerodromes, special use airspace, navigational aids, and related data. If produced from a JOGG base, contour line elevation values are converted from meters to feet.

# **Coordinate Reference System:**

Polar Regions: Polar Stereographic Other Regions: Transverse Mercator

Specification: DoD MIL- J-89100

#### **Product Delivery Format**

**Paper** 

# Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

# **Operational Navigation Chart**

# **Data Product Keywords**

Airports, boundaries, coastal, contours, international boundaries, land cover, navigation, ports, railroads, roads, surface and manmade features, topography, transmission lines, waterways

### Summary

A worldwide small scale (1:1million) aeronautical chart. Designed for medium-altitude (2,000 to 25,000 feet), high-speed visual and radar navigation. Also used for mission planning/analysis and intelligence briefing, and are source for navigational filmstrips, special purpose, and cockpit/visual display products.

# **Extent of Program**

Global

# **Available Product Coverage**

Global

#### Information Content

Cartographic data with an aeronautical overprint depicting obstructions, aerodromes, special use airspace, navigational aids, maximum elevation figures, and related data.

#### Coordinate Reference System:

Polar Regions: Polar Stereographic Other Regions: Lambert Conformal Conic

Specification: DoD MIL-O-89102

#### **Product Delivery Format.**

Paper

# Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

# **Tactical Pilotage Charts**

#### **Data Product Keywords**

Airports, boundaries, coastal, contours, international boundaries, land cover, navigation, ports, railroads, roads, surface and manmade features, topography, transmission lines, waterways

#### **Summary**

A worldwide medium scale (1:500,000) aeronautical chart. Designed for very low-altitude (below 500 feet) through medium-altitude, high-speed visual and radar navigation. Also used for mission planning/analysis and intelligence briefings and are a source for navigational filmstrips, special purpose, and cockpit/visual display products.

# **Extent of Program**

Global

# **Available Product Coverage**

Global. Only navigationally significant landmass areas are covered.

#### Information Content

Cartographic data with aeronautical overprint depicting obstructions, aerodromes, special use airspace, navigational aids and related data. Because of the scale, some features, including obstructions, are generalized in developed regions (only the highest obstruction within ticked area or urban quadrant is shown).

#### Coordinate Reference System:

Polar Regions: Polar Stereographic. Other Regions: Lambert Conformal Conic.

Specification: DoD MIL-T-89101

# **Product Delivery Format**

Paper

#### Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

#### World Mean Elevation Data

#### **Data Product Keywords**

Elevation, topography, terrain models

# Summary

A digital data file containing minimum, maximum, and mean terrain elevations.

# **Extent of Program**

Global

# **Available Product Coverage**

Global

#### Information Content

Elevation data (in meters), minimum elevation, maximum elevation, mean elevation, standard deviation, source, and absolute vertical accuracy. The preferred source is Digital Terrain Elevation Data (DTED). In areas with no DTED coverage, small scale cartographic source is used.

**Structure:** Textual listing by World Aeronautical Chart (WAC) world area grid (WAG) cells.

Data Density: The standard unit of depiction is the 12- by 18-nautical mile WAG cell. There are 400 WAG cells corresponding to the geographic limits of each parent WAC.

Coordinate Reference System: Geographic Horizontal Datum: World Geodetic System 84

Vertical Datum: Mean Sea Level Specification: PS/1CM/100

# **Product Delivery Format**

ASCII coded 132 character records with 25 records per block and a variable number of blocks per file.

Media: 9-track, 6,250 CPI, ½-inch magnetic tape.

Accuracy: Source and absolute vertical accuracy are

provided per WAG cell.

# Technical, Ordering, and Availability Information

**Defense Mapping Agency** 

# World Vector Shoreline (WVS)

#### **Data Product Keywords**

Boundaries, coastal, geographic names, international boundaries, waterways

# **Summary**

A digital data file containing the shorelines, international boundaries, and country names of the world.

# **Extent of Program**

Global

#### **Available Product Coverage**

Global

#### Information Content

Shoreline derived by vector processing Digital Landmass Blanking data, international boundaries and country labels.

Structure: Chain node vector

Coordinate Reference System: Geographic Horizontal Datum: World Geodetic System 84

Vertical Datum: Mean High Water Specification: DoD MIL-W-89012

#### **Product Delivery Format**

ASCII coded and written to unlabeled ANSI standard magnetic tape. Records have fixed length of 48 bytes and are blocked by 200 for a standard block size of 9,600 bytes. Standard file size is 1- by 1-degree cells grouped by regional geographic area. Media is 9-track, ½-inch magnetic tape, 6,250 CPI. Accuracy requirement for World Vector Shoreline (WVS) data is that 90 percent of all identifiable shoreline features be located within 500 meters circular error of their true geographic position with respect to the preferred datum (WGS 84).

# **Technical, Ordering, and Availability Information**

| Centers for Disease Control         |             |            |                   |             |           |          |                  |  |  |  |   |  |  |  |  |   |   |  |
|-------------------------------------|-------------|------------|-------------------|-------------|-----------|----------|------------------|--|--|--|---|--|--|--|--|---|---|--|
| Data Product Keywords  Data Product | Page Number | Boundaries | County boundaries | Demographic | Mortality | Natality | State boundaries |  |  |  |   |  |  |  |  |   |   |  |
| National Vital Registration         | 3           | •          | •                 | •           | •         | •        | •                |  |  |  | _ |  |  |  |  |   | - |  |
|                                     |             |            |                   |             |           |          |                  |  |  |  |   |  |  |  |  |   |   |  |
|                                     |             |            |                   |             |           |          |                  |  |  |  |   |  |  |  |  | _ |   |  |



# U.S. Department of Health and Human Services

Centers for Disease Control

# **National Vital Registration**

#### **Data Product Keywords**

Boundaries, county boundaries, demographic, mortality, natality, State boundaries

# **Summary**

The National Center for Health Statistics, Centers for Disease Control, Department of Health and Human Services, provides uniform statistics through its birth, fetal death, and death registration system of the United States.

## **Extent of Program**

National

# **Available Product Coverage**

State, county, city, population, metropolitan statistical area, metropolitan/non-metropolitan.

#### Information Content

Natality data includes all births occurring within the United States. Detailed natality data from 1968 to late 1980s are available to the public on data tapes. Local area and State summary data are weighted to represent 100 percent birth count.

Mortality data includes all deaths occurring within the United States. Detailed mortality data from 1968 to late 1980s are available to the public on data tapes. Local area summary, summary cause-of-death, detailed multiple cause-of-death, and fetal death tapes are available. All natality and mortality data files are fixed-length blocked files. Causes of death are coded according to the International Classification of Diseases. Geography areas are coded on the tapes as specified by the "Federal Information Processing Standards" (FIPS) manual.

#### **Product Delivery Format**

Data tapes are available in 9-track (1,600 or 6,250 bpi) code, either extended binary coded decimal interchange code alone or in combination with binary code.

## Technical, Ordering, and Availability Information

National Technical Information Service (NTIS) 5285 Port Royal Road Springfield, VA 22161 Telephone: (703) 487-4763

| Bureau of Land Management                             |             |                    |            |                     |            |                        |            |                |                        |            |                 |                      |                      |       |                                |          |        |        |           |
|-------------------------------------------------------|-------------|--------------------|------------|---------------------|------------|------------------------|------------|----------------|------------------------|------------|-----------------|----------------------|----------------------|-------|--------------------------------|----------|--------|--------|-----------|
| Data Product Keywords  Data Product                   | Page Number | Aerial Photography | Boundaries | Cadastral (general) | Ecological | Federal land ownership | Hydrologic | Land ownership | Private land ownership | Recreation | Remotely sensed | State land ownership | Subsurface ownership | Trave | U.S. Public Land Survey System | Wetlands |        |        |           |
| Aerial Photography                                    | 3           | •                  |            |                     |            |                        |            |                |                        |            | •               |                      |                      |       |                                |          |        |        |           |
| Cadastral Survey Records                              | 5           |                    |            | •                   |            |                        |            | •              |                        |            |                 |                      |                      |       | •                              |          |        |        |           |
| Land Records Information                              | 8           |                    |            |                     |            | •                      |            | •              |                        |            |                 |                      |                      |       | •                              |          |        |        |           |
| Public Land Statistics, 1990                          | 13          |                    |            |                     |            | •                      |            | •              |                        |            |                 |                      |                      |       |                                |          |        |        |           |
| Recreation 2000 & Fish & Wildlife 2000 Publications   | 15          |                    |            |                     | •          |                        | •          |                |                        | •          |                 |                      |                      | •     |                                | •        |        |        |           |
| 1:1,000,000- & 1:500,000-Scale Land Status State Maps | 17          |                    | •          |                     |            | •                      |            | •              | •                      |            |                 | •                    |                      |       |                                |          |        |        |           |
| 1:100,000-Scale Surface Mgmt. Status Edition          | 20          |                    | •          |                     |            | •                      |            | •              | •                      | •          | $\neg$          | •                    |                      |       |                                |          |        | $\neg$ | $\exists$ |
| 1:100,000-Scale Surface/Minerals Mgmt. Status Edition | 23          |                    | •          |                     |            | •                      |            | •              | •                      |            |                 | •                    | •                    |       |                                |          | $\neg$ | $\neg$ |           |
| 1:100,000-Scale Wilderness Status State Maps          | 26          |                    | •          |                     |            | •                      |            | •              |                        |            |                 |                      |                      |       |                                |          |        |        |           |



# U.S. Department of the Interior

**Bureau of Land Management** 

# **Aerial Photography**

#### **Data Product Keywords**

Aerial photography, remotely sensed

## Summary

Bureau of Land Management (BLM)-acquired coverage over selected BLM administered lands.

# **Extent of Program**

Western United States and Alaska

### **Available Product Coverage**

Select areas in the Western United States that are under BLM administration. See status graphic.

#### **Information Content**

The following types of photography are available:

Resource photography: Flown over large areas generally at scales of 1:12,000 or 1:24,000. Film may be black-and-white, natural color, or false color-infrared.

Riparian photography: Flown over small stream segments generally at scales of 1:2,400, 1:4,800, or 1:6,000. Primarily false color-infrared film.

Photogrammetric photography: Generally flown at scales ranging from 1:2,400 to 1:12,000 for photogrammetric applications.

## **Product Delivery Format**

Indexes, paper contact prints, enlargements, negatives and positives are available.

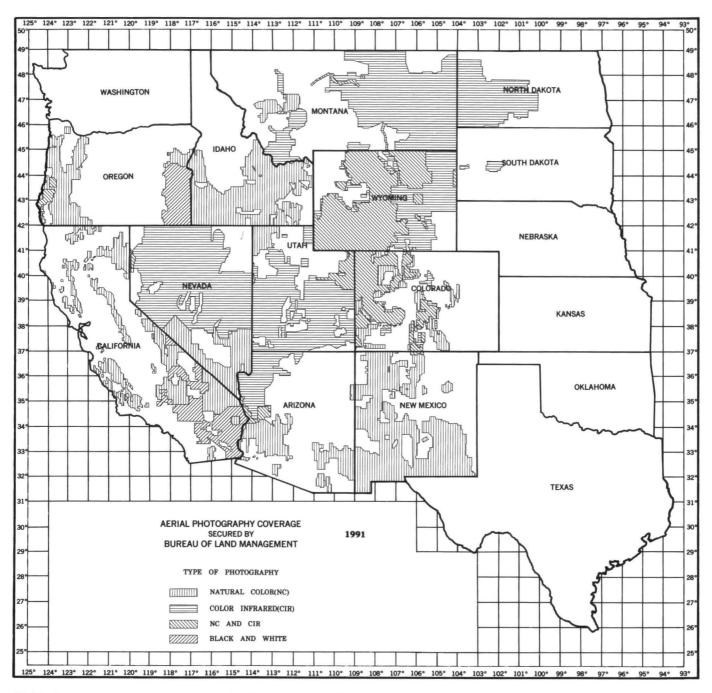
## Technical, Ordering, and Availability Information

Western United States:

Service Center DFC, Bldg. 50 SC-671C P.O. Box 25047 Denver, CO 80225-0047 Telephone: (303) 236-6382 FAX: (303) 236-7990

For information about coverage in Alaska contact:

Alaska State Office 222 W. 7th Avenue, #13 Anchorage, AK 99513-7599 Telephone: (907) 271-5063



BLM photographic coverage over the Western United States.\*

<sup>\*</sup> Although there is photographic coverage over portions of Alaska, no index is currently available. Contact the Alaska State Office for information.

# U.S. Department of Interior Bureau of Land Management

# **Cadastral Survey Records**

# **Data Product Keywords**

Cadastral, land ownership, U.S. Public Land Survey System, surveys

### **Summary**

Since 1785 the Federal Government has been conducting surveys of the Western United States starting in the Ohio River basin and moving westward. The survey is the basis for describing land units for transfer out of Federal ownership or to hold certain land for public use. All surveys are approved by the Chief Cadastral Surveyor in each of the Bureau offices.

# **Extent of Program**

National. All land west of the original 13 colonies, except Texas and Hawaii.

# **Available Product Coverage**

All field notes, survey plats and indexes are available for most of the Western States including: Alaska, Montana, Oregon, Washington, Idaho, Utah, Arizona, New Mexico, Colorado, Wyoming, Nevada and California. The remaining Public Land Survey System records are available through the individual State government offices or the Bureau's Eastern States office in Springfield, Virginia. (See status graphic.)

#### Information Content

The survey records are made up of three major parts as follows:

Field Notes: The field notes are the written record of the survey. This record identifies and describes the lines and corners of the survey and the procedures by which they were established or reestablished.

Survey Plats: The plat is the drawing that represents the lines surveyed, established, retraced, or resurveyed, showing the direction and length of each line; the relation to the adjoining official surveys; and the boundaries, description, and area of each parcel of the land. Occasionally the plat may constitute the entire record of the survey.

Survey Index: A computer log showing when a survey or resurvey was done, by whom, volume and page of the book where the field notes may be found, and other important information related to surveys.

All survey records are approved by the Chief Cadastral Surveyor in each of the Bureau offices. All Bureau surveys are required to follow the Manual of Surveying Instructions for the Survey of the Public Lands of the United States. The manual provides the standard for Federal agencies and many States to follow in the execution of surveys.

# **Product Delivery Format**

Public land survey records are available from most Bureau of Land Management (BLM) offices in microfilm images. For the States that do not have microfilm, xerox copies are available for public sale. The price of these records will be determined by each office based on materials and the amount of the required search.

# Technical, Ordering, and Availability Information

See the listing below for the appropriate BLM Public Affairs Office.

Western States administration: Each State administers the public land within its boundaries, with the following additions:

- Oregon administers Washington.
- 2. Montana administers North Dakota and South Dakota.
- 3. Wyoming administers Nebraska.
- New Mexico administers Oklahoma, Kansas and Texas.

Questions should be directed to the Public Affairs Office in the appropriate administrative State (e.g., questions regarding public land in North Dakota should be directed to the Montana State office).

Eastern States administration: The BLM Eastern States office administers all public land east of the black boundary. Refer to graphic on page 5 – 11 for land records coverage.

Alaska State Office 222 W. 7th Avenue, #13 Anchorage, AK 99513-7599 Telephone: (907) 271-5555

Arizona State Office 3707 North 7th Street P.O. Box 16563

Phoenix, AZ 85011 Telephone: (602) 640-5504

California State Office Federal Building

2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Eastern States Office 7450 Boston Blvd. Springfield, VA 22153 Telephone: (703) 440-1600

Idaho State Office 3380 Americana Terrace

Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office Granite Tower 222 N. 32nd Street P.O. Box 36800 Billings, MT 59107

Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Reno, NV 89520-0006 Telephone: (702) 785-6586 New Mexico State Office

Joseph M. Montoya Federal Building

South Federal Place

P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office 1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

Wyoming State Office 2515 Warren Avenue

P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

123 E

# TOWNSHIP 50 NORTH, RANGE 75 WEST, OF THE SIXTH PRINCIPAL MERIDIAN, WYOMING.

DEPENDENT RESURVEY

A history of surveys is contained in the field

The north boundary was dependently resurveyed by James D. Claflin during the resurvey of T. 51 N., R. 75 W., executed concurrently under this same group.

This plat represents the dependent resurvey of a portion of the south boundary, the east and west boundaries and the subdivisional lines designed to restore the corners in their true original locations according to the best available evidence, T. 50 N., R. 75 W., Sixth Principal Meridian, Wyoming.

Certain modified lots and areas shown hereon pertain to Federal interest estate only. Except as indicated hereon, the lottings and areas are as shown on the plat approved August 14, 1883.

Survey executed by James D. Claflin, Cadastral Surveyor, beginning September 24, 1986, and completed June 4, 1987, pursuant to Special Instructions dated April I, 1986, for Group No. 481,

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Cheyenne, Wyoming

November 21, 1989

This plat is strictly conformable to the approved field notes, and the survey, having been correctly executed in accordance with the requirements of law and the regulations of this Bureau, is hereby accepted

Chief Cadastral Surveyor for Wyoming

# U.S. Department of Interior Bureau of Land Management

# **Land Records Information**

#### **Data Product Keywords**

Federal land ownership, land ownership, U.S. Public Land Survey System, title plats

### Summary

Land records information is maintained by the Bureau of Land Management (BLM), and shows administration of the public lands by the Federal Government and the availability of the lands for use under the public land laws. For official public land surveys, land status records include the Master Title Plat, Supplemental Master Title Plat, Use Plat, Historical Index, Control Document Index, Miscellaneous Document Index, Serial Register, Mineral Location and Contest Index, Tract Books, Plat Books, and Patents.

Records for Federally owned land in the Eastern States are held in a different format and date back to 1755 and before. The BLM Eastern States Office administers those States that are east of North and South Dakota, Nebraska, Kansas, Oklahoma, and Texas. (See status graphic.)

#### **Extent of Program**

National

# **Available Product Coverage**

See status graphic.

#### Information Content

The following is a brief description of the types of land records information available. Some records are graphic products; others provide only textual descriptions. Examples of selected graphic products have been included.

Master Title Plats: A composite of the survey plats of a township on which is shown the ownership and land status. Specific survey information is not transferred from the survey plat to the MTP (i.e. bearings, distances, etc.).

Supplemental Master Title Plats: Are prepared entirely from office records designed to show a revised subdivision of one or more sections without change in the section boundaries and without other modification of the record. Supplemental plats are required where

the master plat fails to portray units suitable for administration or disposal or where a modification of its representation is necessary. They are also required to show the segregation of alienated lands from public lands, where the former are included in irregular surveys of patented mineral or other private claims made subsequent to the plat of the subsisting survey, or where the segregation of the claims was overlooked at the time of its approval.

Use Plats: A copy of the master title plat and any supplemental master title plats of a township. Use plats show, in addition to the status shown on the master title plat, information concerning use of the lands, such as applications, leases, and permits.

Historical Index: A chronological summary of all actions that affect, have affected, or will affect the title to, disposition of, or use status of lands and resources within a township.

Control Document Index: A reference file consisting of microphotographic copies of legal documents mounted in aperture tabulating cards arranged by State, meridian, and township.

Miscellaneous Document Index: A list, by State, of those documents that apply to lands not specifically described on which conditions may exist that would restrict disposition or use of the lands.

Serial Register: Instituted in 1908 as a digest of land case records. BLM maintains these individual chronological records of each public land transaction. Each transaction (case) appears as a page or pages in a serial register. Each one is identified by the serial number assigned to it. A running record of each case, its inception and any actions on it, is kept in book form in the land office of each public domain land State. Serial register pages are now microfilmed for easy retrieval of information as well as to conserve space.

Mineral Location and Contest Index: A component of the land status records. It is a listing by township and range of: mineral location notices filed under special mining claim recording laws; abandonments, and relinquishments of mining claims secured by the Government; and actions initiated to determine the validity of mineral, agricultural, and other claims on national resource lands. Tract Books: This series begins at about 1800. Tract books are designed primarily for the maintenance of permanent records of all transactions involving public land offices. Tract books were the companion records to the land office "status plat." Prior to the beginning of the records improvement program in 1955, these records constituted the records required in accordance with 43 Code of Federal Regulations 1813.1-1. These records are now microfilmed. As this is done, the tract books are transferred to the appropriate Federal Records Center as part of the National Archives.

**Patents:** A document by which the United States conveys legal title to some portion of the public lands.

# **Product Delivery Format**

The majority of land records information is available in hard copy only. Some of the records can be obtained on microfilm. Master Title Plats, Use Plats and Historical Indexes are available in either 20- by 25-inch paper prints or aperture cards. Serial Register pages are available on 8½- by 11-inch format. Copies of original patents issued can be obtained in either aperture card or paper prints.

# Technical, Ordering, and Availability Information

Western States administration: Each State administers the public land within its boundaries, with the following additions:

- 1. Oregon administers Washington.
- Montana administers North Dakota and South Dakota.
- 3. Wyoming administers Nebraska.
- New Mexico administers Oklahoma, Kansas and Texas.

Questions should be directed to the Public Affairs Office in the appropriate administrative State (e.g., questions regarding public land in North Dakota should be directed to the Montana State Office).

Eastern States administration: The BLM Eastern States Office administers all public land east of the black boundary.

Refer to listing below for the appropriate Public Affairs Office.

Alaska State Office 222 W. 7th Avenue, #13 Anchorage, AK 99513-7599 Telephone: (907) 271-5555 Arizona State Office 3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011 Telephone: (602) 640-5504

California State Office Federal Building

2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Eastern States Office 7450 Boston Blvd. Springfield, VA 22153 Telephone: (703) 440-1600

Idaho State Office 3380 Americana Terrace Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office
Granite Tower
222 N. 32nd Street
P.O. Box 36800
Billings, MT 59107
Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Repo NV 89520-0006

Reno, NV 89520-0006 Telephone: (702) 785-6586

New Mexico State Office
Joseph M. Montoya Federal Building

South Federal Place P.O. Box 1449

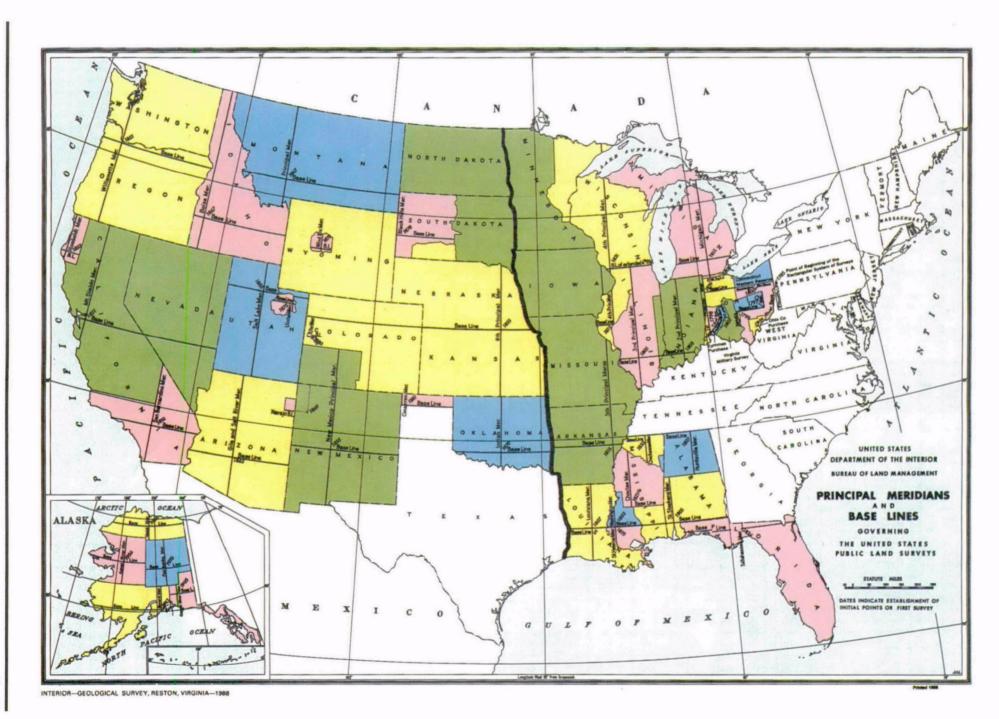
Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office 1300 N.E. 44th Avenue P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019 Wyoming State Office 2515 Warren Avenue P.O. Box 1828 Cheyenne, WY 82003 Telephone: (307) 775-6011 At right: Land records coverage in the United States. The wide black boundary line divides BLM administration into the following categories: Western States administration, and Eastern States administration. Color keyed lands represent areas where public land surveys are established. Noncolor keyed lands have no public land surveys. Where public land surveys are established, land records are generally available by referencing township and range. Individual State offices can provide detailed listings of the various land information products available in each State.



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R. 48

# U.S. Department of Interior

**Bureau of Land Management** 

# **Public Land Statistics, 1990**

### **Data Product Keywords**

Federal land ownership, land ownership, administrative information

#### Summary

An annual publication that shows statistics related to the Bureau's management of approximately 270 million acres of public lands and 300 million acres of additional subsurface mineral estate during a given fiscal year.

# **Extent of Program**

**National** 

#### **Available Product Coverage**

270 million acres of public lands and 300 million acres of additional subsurface mineral estate.

#### Information Content

"Public Land Statistics, 1990" describes the management of the public lands (the 1990 edition featured 68 tables and narratives). Originally published in 1816, the publication continues to serve as a valuable information resource on the management of the nation's public lands.

#### Topics include:

Fish and wildlife habitat management, which provides data on types of wildlife habitat, number of wildlife habitat improvement projects, and number of plant and animal species that are threatened and endangered.

Outdoor recreation, which features data on recreation visits to public lands and developed recreation sites administered by the Bureau of Land Management (BLM).

Range management, which features tables on grazing permits and range condition.

Forest management, which features data on timber sales and forest development.

Wilderness resources, which includes an update on wilderness study area status and wilderness designations.

Energy and mineral resources, which includes information on competitive and noncompetitive oil and gas leases in effect, coal leases in effect, and mineral patents.

# **Product Delivery Format**

"Public Land Statistics, 1990" is a 6- by 9-inch paper-back book.

# Technical, Ordering, and Availability Information

Copies of "Public Land Statistics, 1990" can be obtained by contacting any BLM office, or by contacting the Service Center. See listing below.

Alaska State Office 222 W. 7th Avenue, #13 Anchorage, AK 99513-7599 Telephone: (907) 271-5555

Arizona State Office 3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011 Telephone: (602) 640-5504

Telephone: (602) 640-5504 California State Office

Federal Building 2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO80215-7076 Telephone: (303) 239-3667

Eastern States Office 7450 Boston Blvd. Springfield, VA22153 Telephone: (703) 440-1600

Idaho State Office 3380 Americana Terrace Boise, ID 83706 Telephone: (208) 384-3014

Montana State Office Granite Tower 222 N. 32nd Street P.O. Box 36800

Billings, MT 59107 Telephone: (406) 255-7913 Public Land Statistics, 1990

Nevada State Office 850 Harvard Way P.O. Box 12000

Reno, NV 89520-0006 Telephone: (702) 785-6586

New Mexico State Office

Joseph M. Montoya Federal Building

South Federal Place P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office 1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

Service Center DFC, Bldg. 50 P.O. Box 25047

Denver, CO 80225-0047 Telephone: (303) 236-6639

Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

Wyoming State Office 2515 Warren Avenue

P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

# **U.S. Department of Interior**

**Bureau of Land Management** 

# Recreation 2000 and Fish & Wildlife 2000 Publications

#### **Data Product Keywords**

Ecological, hydrologic, recreation, travel, wetlands

#### Summary

Recreation 2000 and Fish & Wildlife 2000 are major nationwide programs initiated by the Bureau of Land Management (BLM) to meet the public's increasing demand for recreational and wildlife opportunities on the public lands. Recreation 2000 publications include mapping products, guides, and brochures designed to increase public awareness of the availability and importance of recreational and wildlife values and BLM's stewardship role.

#### **Extent of Program**

Western United States

# **Available Product Coverage**

Level I: National. Currently there is one publication

entitled, "Recreational Guide to BLM Pub-

lic Lands."

Level II: State

Level III: District

Level IV: Site specific

#### Information Content

Recreation 2000 mapping products address four separate levels of detail as follows:

Level I: Small-scale national recreation maps,

guides, and brochures portraying BLM recreation sites in the Western United

States.

Level II: Individual State recreation maps, guides,

and brochures portraying various BLM

recreational facilities.

Level III: District recreation maps, guides, and bro-

chures portraying various BLM recre-

ational facilities.

Level IV: Site-specific recreation maps, guides, and

brochures developed by the BLM.

#### **Product Delivery Format**

Paper maps, brochures, and publications.

#### **Technical, Ordering, and Availability Information**

Level I Contact:

Service Center

DFC, Bldg. 50 SC-658

P.O. Box 25047

Denver, CO 80225-0047

Contact the appropriate State Public Affairs office.

Alaska State Office

222 W. 7th Avenue, #13

Anchorage, AK 99513-7599

Telephone: (907) 271-5555

Arizona State Office

3707 North 7th Street

P.O. Box 16563

Phoenix, AZ 85011

Telephone: (602) 640-5504

California State Office

Federal Building

2800 Cottage Way, E-2841

Sacramento, CA 95825-1889

Telephone: (916) 978-4746

Colorado State Office

2850 Youngfield Street

Lakewood, CO 80215-7076

Telephone: (303) 239-3667

Idaho State Office

3380 Americana Terrace

Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office

Granite Tower

222 N. 32nd Street

P.O. Box 36800

Billings, MT 59107

Telephone: (406) 255-7913

Nevada State Office

850 Harvard Way

P.O. Box 12000

Reno, NV 89520-0006

Telephone: (702) 785-6586

New Mexico State Office

Joseph M. Montoya Federal Building

South Federal Place

P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office

1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

Service Center

DFC, Bldg. 50 SC-658

P.O. Box 25047

Denver, CO 80225-0047 Telephone: (303) 236-6364

Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

Wyoming State Office 2515 Warren Avenue

P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

# **U.S. Department of Interior**

**Bureau of Land Management** 

# 1:1,000,000- and 1:500,000-Scale Land Status State Maps

#### **Data Product Keywords**

Boundaries, Federal land ownership, land ownership, private land ownership, State land ownership

# **Summary**

State maps at 1:1,000,000 and 1:500,000 scale showing surface ownership of Federal, State, and private lands.

# **Extent of Program**

Western United States

#### **Available Product Coverage**

For 1:1,000,000 scale: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming.

For 1:500,000 scale: Same as above, plus Nebraska and North Dakota.

California is available at 1:750,000 scale.

Alaska is available at 1:2,500,000 scale.

#### Information Content

Portrays lands administered by the Bureau of Land Management (BLM), Oregon & California Lands administered by BLM and the Forest Service, the Corps of Engineers, the Tennessee Valley Authority, the Bureau of Reclamation, the Department of Energy, and State and county-administered lands as well as National Forests, National Grasslands, National Parks and Monuments, Indian Lands, Military Reservations, Wildlife Refuges, and Land-Use Lands Bankhead-Jones.

No mineral management is portrayed on maps of these scales with the exception of the Arizona, Nebraska, and Wyoming 1:500,000-scale maps.

#### **Product Delivery Format**

These maps are available as hard-copy lithographic products, individual color separate negatives, and composite negatives.

#### Technical, Ordering, and Availability Information

Printed lithographic copies are available from the individual BLM State Offices. North Dakota maps are available from the BLM Montana State Office. The

Nebraska map is available from the BLM Wyoming State Office. See the list below for contact information.

Color separates are also available from the individual BLM State Offices. See the listing below for contact information.

Alaska State Office 222 W. 7th Avenue, #13 Anchorage, AK 99513-7599 Telephone: (907) 271-5555

Arizona State Office 3707 North 7th Street P.O. Box 16563

Phoenix, AZ 85011 Telephone: (602) 640-5504

California State Office Federal Building

2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Idaho State Office

3380 Americana Terrace

Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office Granite Tower 222 N. 32nd Street P.O. Box 36800 Billings, MT 59107 Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Reno, NV 89520-0006

Telephone: (702) 785-6586 New Mexico State Office

Joseph M. Montoya Federal Building

South Federal Place P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316 Oregon State Office 1300 N.E. 44th Avenue P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

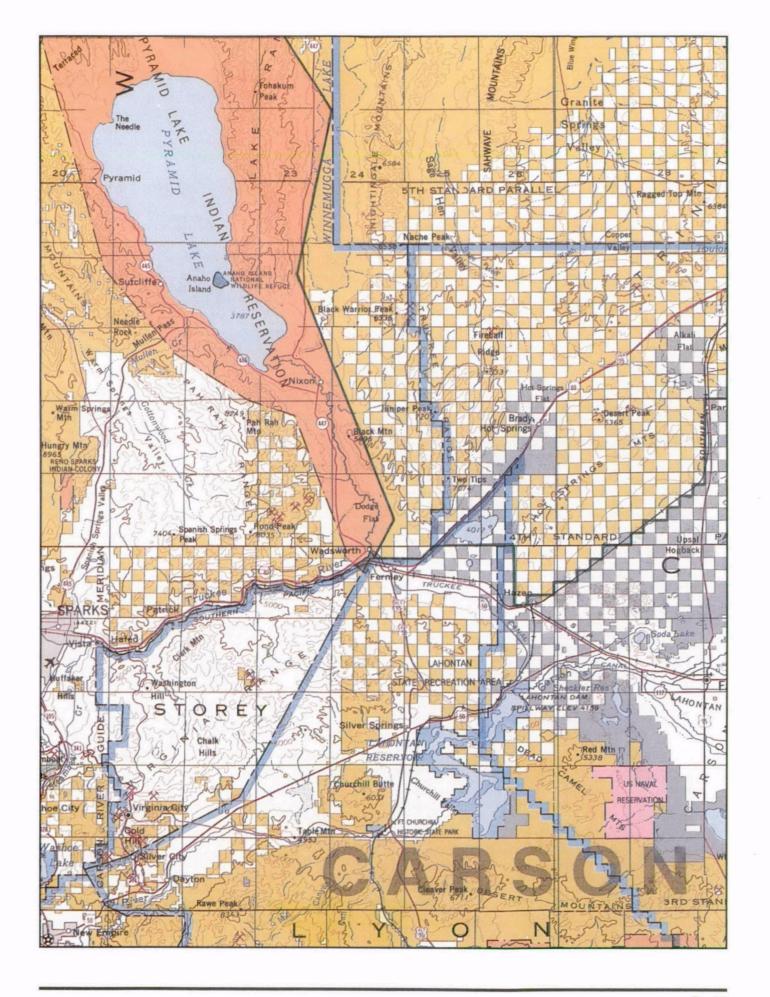
**Utah State Office** P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

Wyoming State Office 2515 Warren Avenue P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

Representative portion of a 1:500,000-scale land status State map.



Bureau of Land Management

# 1:100,000-Scale Surface Management Status Edition

#### **Data Product Keywords**

Boundaries, Federal land ownership, land ownership, private land ownership, recreation, State land ownership

## Summary

Standard national map series showing public lands administered by the Bureau of Land Management (BLM), other Federal agencies, States, Indian tribes, and private lands.

# **Extent of Program**

National (excluding Alaska and Hawaii).

## **Available Product Coverage**

Available by quadrangle (30- by 60-minute) for Western States and northern Minnesota and Wisconsin at a scale of 1:100,000. An index map of the United States showing the status of this program is available from U.S. Geological Survey (USGS) Earth Science Information Centers (ESIC) and from USGS map Distribution.

#### Information Content

1:100,000-scale map products consist of two separate editions:

Portrays lands administered by the BLM, Oregon & California Lands administered by BLM and the Forest Service, the Corps of Engineers, the Tennessee Valley Authority, the Bureau of Reclamation, the Department of Energy, and State and county-administered lands; as well as National Forests, National Grasslands, National Parks and Monuments, Indian Lands, Military Reservations, Wildlife Refuges, and Land-Use Lands Bankhead-Jones.

Maps are updated based on usage and demand at the request of the individual States.

#### **Product Delivery Format**

These maps are available as hard-copy lithographic products, individual color separate negatives, and composite negatives.

## Technical, Ordering, and Availability Information

Printed lithographic copies are available from the individual BLM State Offices or USGS Map Sales (excluding Colorado). See the listing below.

Arizona State Office 3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011

Telephone: (602) 640-5504

California State Office Federal Building 2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Eastern States Office 7450 Boston Blvd. Springfield, VA 22153 Telephone: (703) 443-1600

Idaho State Office 3380 Americana Terrace Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office Granite Tower 222 N. 32nd Street P.O. Box 36800 Billings, MT 59107

Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Reno, NV 89520-0006 Telephone: (702) 785-65

Telephone: (702) 785-6586 New Mexico State Office

Joseph M. Montoya Federal Building South Federal Place

P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316 Oregon State Office

1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

Wyoming State Office 2515 Warren Avenue P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

U.S. Geological Survey Map Distribution

Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7477

## Color separates are available from:

Service Center

DFC, Bldg. 50 SC-671A

P.O. Box 25047

Denver, CO 80225-0047 Telephone: (303) 236-7345

#### The National Index Map is available from:

Earth Science Information Center

U.S. Geological Survey 507 National Center

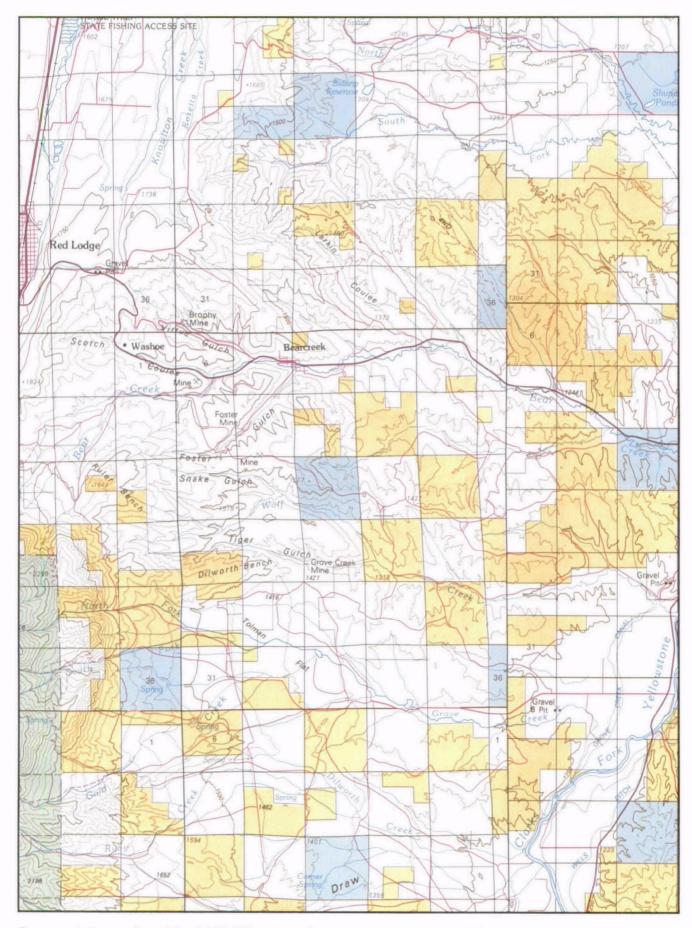
Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5-118 of the U.S. Department of the

Interior, U.S. Geological Survey section.



Representative portion of the 1:100,000-scale surface management status edition.

**Bureau of Land Management** 

# 1:100,000-Scale Surface/Minerals Management Status Edition

#### **Data Product Keywords**

Boundaries, Federal land ownership, land ownership, private land ownership, State land ownership, subsurface ownership

#### Summary

Standard national map series showing public lands administered by the Bureau of Land Management (BLM), other Federal agencies, States, Indian tribes, and private lands.

## **Extent of Program**

National (excluding Alaska and Hawaii).

## **Available Product Coverage**

Available by quadrangle (30- by 60-minute) for Western States and northern Minnesota and Wisconsin at a scale of 1:100,000. An index map of the United States showing the status of this program is available from U.S. Geological Survey (USGS) Earth Science Information Centers (ESIC) and from USGS map Distribution.

#### Information Content

1:100,000-scale map products consist of two separate editions:

Surface/Minerals management status edition: In addition to the above surface ownership information, this edition also portrays Federally owned minerals in the following categories: all minerals; coal only; oil and gas only; oil, gas, and coal only; other minerals; and no Federal minerals.

Maps are updated based on usage and demand at the request of the individual States.

#### **Product Delivery Format**

These maps are available as hard-copy lithographic products, individual color separate negatives, and composite negatives.

#### Technical, Ordering, and Availability Information

Printed lithographic copies are available from the individual BLM State Offices or USGS Map Sales (excluding Colorado). See the listing below.

Arizona State Office 3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011

Telephone: (602) 640-5504

California State Office Federal Building

2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 Telephone: (916) 978-4746

Colorado State Office 2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Eastern States Office 7450 Boston Blvd. Springfield, VA 22153 Telephone: (703) 443-1600

Idaho State Office 3380 Americana Terrace Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office
Granite Tower
222 N. 32nd Street
P.O. Box 36800
Billings, MT 59107
Talanhana (406) 255 7013

Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Reno, NV 89520-0006 Telephone: (702) 785-6586

New Mexico State Office
Joseph M. Montoya Federal Building

South Federal Place P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office 1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287 Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155

Telephone: (801) 539-4019 Wyoming State Office

2515 Warren Avenue

P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011

U.S. Geological Survey Map Distribution

Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7477

# Color separates are available from:

Service Center

DFC, Bldg. 50 SC-671A

P.O. Box 25047

Denver, CO 80225-0047 Telephone: (303) 236-7345

#### The National Index Map is available from:

**Earth Science Information Center** 

U.S. Geological Survey

507 National Center

Reston, VA 22092

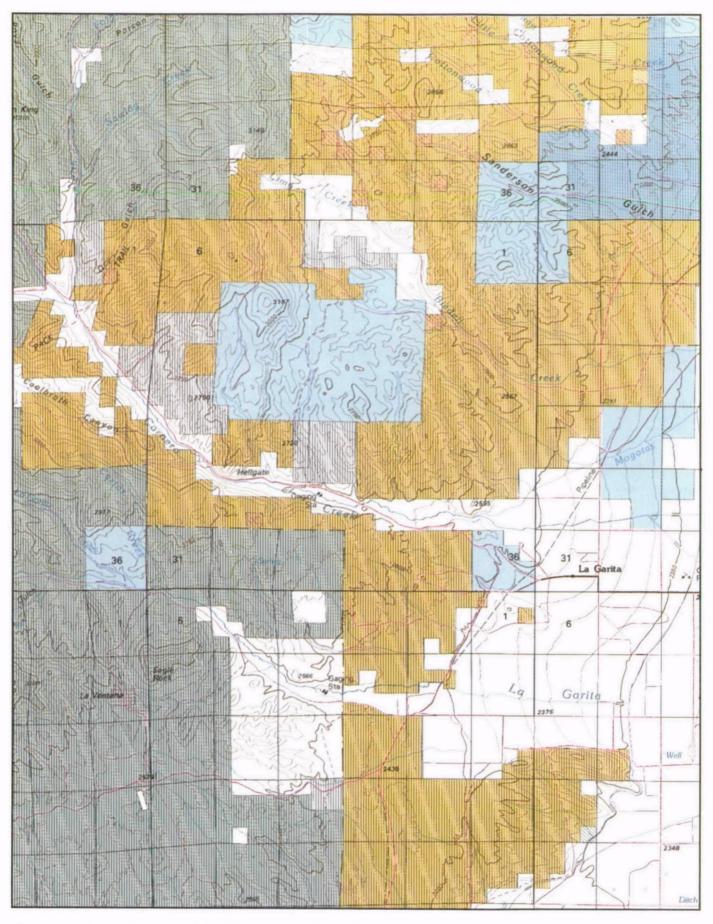
Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5 – 118 of the U.S. Department of the

Interior, U.S. Geological Survey section.



Representative portion of the 1:100,000-scale surface/minerals management status edition.

**Bureau of Land Management** 

# 1:1,000,000-Scale Wilderness Status State Maps

## **Data Product Keywords**

Boundaries, Federal land ownership, land ownership, wilderness

## **Summary**

1:1 million-scale product portraying the status of wilderness ownership of Federal agencies.

# **Extent of Program**

Western United States

## **Available Product Coverage**

Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming.

#### **Information Content**

These maps portray lands designated (by the Bureau of Land Management (BLM), the U.S. Forest Service, the National Park Service, and the Fish and Wildlife Service) as wilderness or primitive areas, lands endorsed as suitable for wilderness areas, and wilderness study areas.

Textual descriptions of Wilderness Study Areas may be provided on the reverse side of the printed maps.

These maps are printed on a State-by-State basis at 1:1 million-scale and are updated as required to support BLM recommendations and legislative actions.

#### **Product Delivery Format**

These maps are available as hard-copy lithographic products.

# Technical, Ordering, and Availability Information

Available from the individual BLM State Offices. See listing below:

Arizona State Office 3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011 Telephone: (602) 640-5504 California State Office Federal Building 2800 Cottage Way, E-2841 Sacramento, CA 95825-1889

Telephone: (916) 978-4746 Colorado State Office

2850 Youngfield Street Lakewood, CO 80215-7076 Telephone: (303) 239-3667

Idaho State Office 3380 Americana Terrace Boise, ID 83706

Telephone: (208) 384-3014

Montana State Office Granite Tower 222 N. 32nd Street P.O. Box 36800 Billings, MT 59107

Telephone: (406) 255-7913

Nevada State Office 850 Harvard Way P.O. Box 12000 Reno, NV 89520-0006 Telephone: (702) 785-6586 New Mexico State Office

Joseph M. Montoya Federal Building

South Federal Place P.O. Box 1449

Santa Fe, NM 87504-1449 Telephone: (505) 988-6316

Oregon State Office 1300 N.E. 44th Avenue

P.O. Box 2965

Portland, OR 97208-2965 Telephone: (503) 280-7287

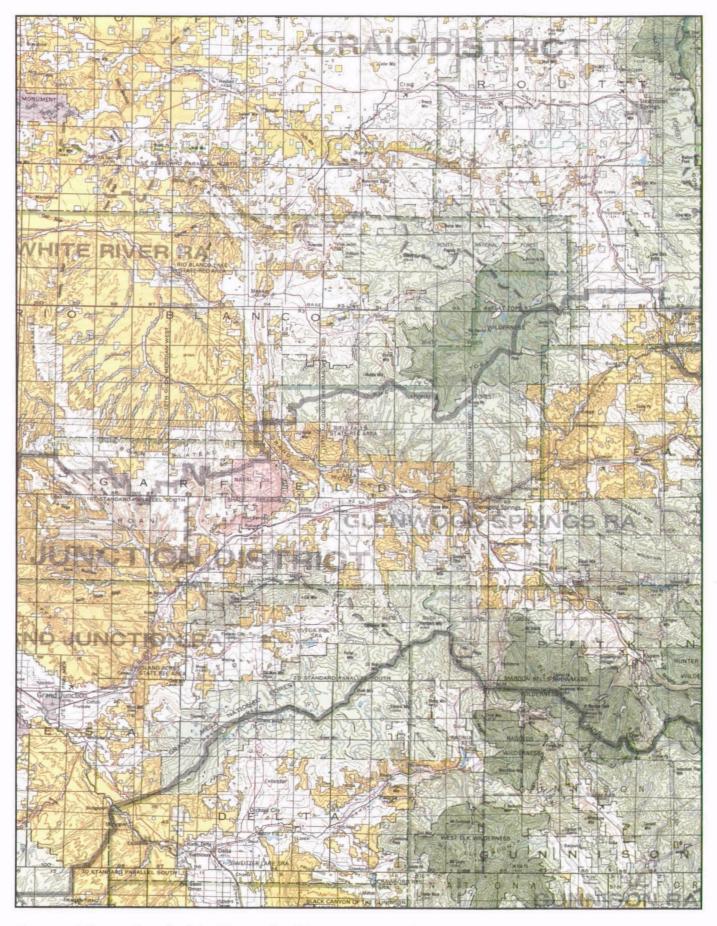
Utah State Office P.O. Box 45155

Salt Lake City, UT 84145-0155 Telephone: (801) 539-4019

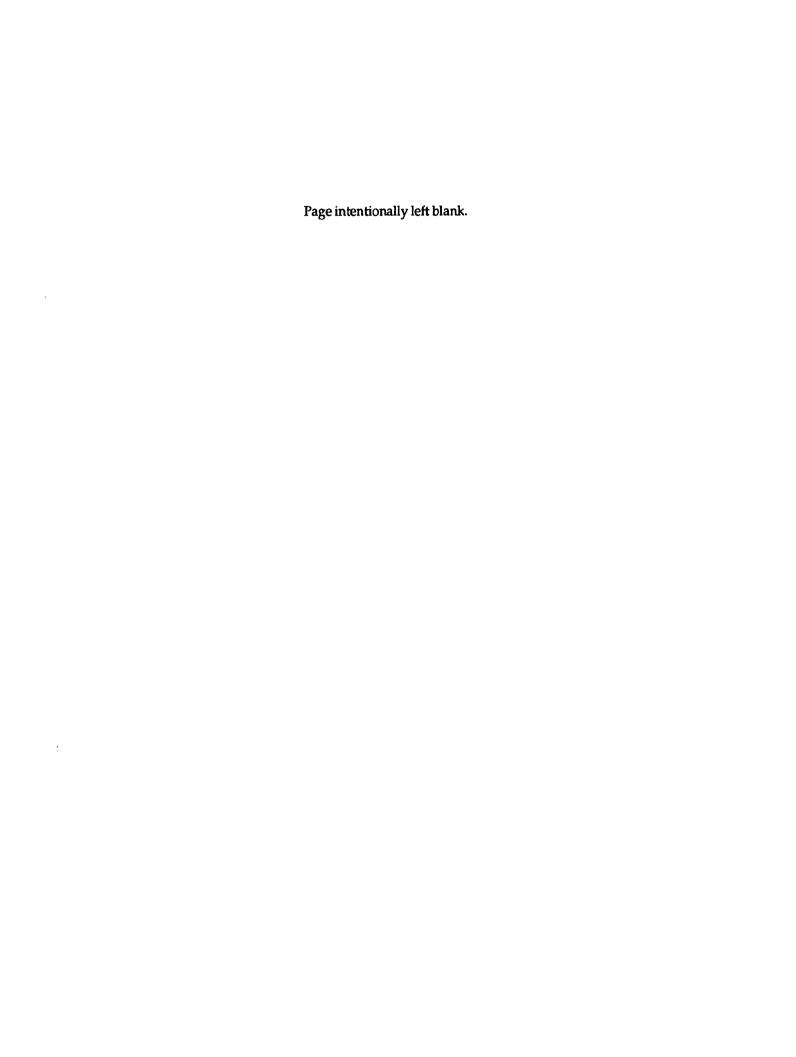
Wyoming State Office 2515 Warren Avenue

P.O. Box 1828

Cheyenne, WY 82003 Telephone: (307) 775-6011



Representative portion of a 1:1 million-scale wilderness status state map.



| Bureau of Mines                             |              |          |            |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
|---------------------------------------------|--------------|----------|------------|---|--|---|--|--|--|--|--|--|--|--|--|---|---|
| Data Product Keywords                       |              |          |            |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
|                                             | Page Number  | als      | ırface     |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
| Data Product                                | Page         | Minerals | Subsurface |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
| Minerals Availability System (MAS) Database | 31           | •        | •          |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
|                                             |              |          |            |   |  |   |  |  |  |  |  |  |  |  |  |   |   |
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|                                             |              |          |            |   |  |   |  |  |  |  |  |  |  |  |  |   |   |



**Bureau of Mines** 

# Minerals Availability System (MAS) Database

# **Data Product Keywords**

Minerals, subsurface, mining

## **Summary**

The Minerals Availability System database consists of 200,000 mining data points and 2,000 of the most important mines and processing plants in the United States and abroad.

## **Available Product Coverage**

United States and certain foreign countries.

#### **Information Content**

Latitude, longitude, political jurisdiction, primary commodities, current status, operational methods of current mining operations, past producers and prospects.

## **Product Delivery Format**

Requests must be limited to one state or foreign country or less (i.e. county) and scope of commodity coverage must be limited to two commodities (i.e. iron and gold) 5½-inch or 3½-inch floppy disk formatted in DOS. Larger data sets will be considered on a case-by-case basis. Clear formatted diskettes must be provided.

## Technical, Ordering, and Availability Information

Branch of Minerals Availability Bureau of Mines 810 7th St. NW Washington, D.C. 20241 MS 5205

Telephone: (202) 501-9597



| Bureau                                                    | Bureau of Reclamation |          |            |                            |           |          |        |              |         |         |         |   |   |        |          |          |          |           |   |
|-----------------------------------------------------------|-----------------------|----------|------------|----------------------------|-----------|----------|--------|--------------|---------|---------|---------|---|---|--------|----------|----------|----------|-----------|---|
| Data Product Keywords  Data Product                       | Page Number           | Land use | Recreation | Surface & manmade features | Waterways |          |        |              |         |         |         |   |   |        |          |          |          |           |   |
| Recreation Map of BOR Projects & Visitor Areas (Wall Map) | 35                    | •        | •          | •                          | •         | $\Box$   | $\top$ | $\downarrow$ |         | $\prod$ | $\perp$ | 1 | 1 |        | 1        |          | $\Box$   | $\exists$ | _ |
| · · · · · · · · · · · · · · · · · · ·                     | $\vdash$              | -        |            |                            | $\dashv$  | $\dashv$ |        | +            | +       | +       | +       | + | 1 | +      | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | - |
|                                                           |                       |          |            |                            |           |          |        | $\pm$        | $\perp$ |         |         | 1 |   | $\top$ | 1        |          |          |           |   |
|                                                           |                       |          |            |                            |           |          |        |              |         |         |         |   |   |        |          |          |          |           |   |



**Bureau of Reclamation** 

# Recreation Map of Bureau of Reclamation (BOR) Projects and Visitor Areas (Wall Map)

## **Data Product Keywords**

Land use, recreation, surface and manmade features, waterways

## Summary

Shows location of public recreation areas on projects constructed by Federal Bureau of Reclamation, Department of the Interior in 17 western States.

#### **Extent of Program**

Western United States

## **Available Product Coverage**

Western U.S. with State boundaries.

#### Information Content

Location map showing facilities and recreation activities available.

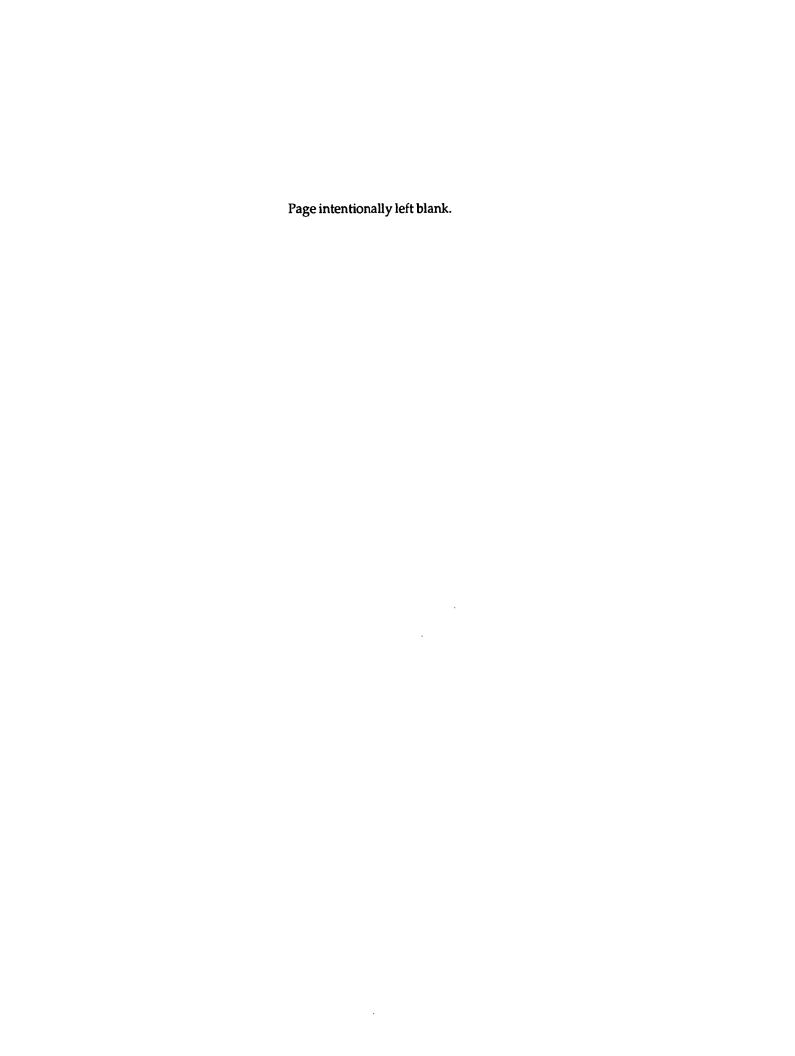
Most recreation areas are centered around water storage reservoirs. Recreation activities generally include camping, fishing, boating, and water-skiing. Hunting is permitted in some areas, and many have hiking trails. Facilities generally available include primitive and developed campgrounds, picnic areas, restrooms, and drinking water. Full-service marinas and groceries are often available. All facilities are open to the public; generally a fee is required.

#### **Product Delivery Format**

Brochure style, paper. 8 by 4 inches folded. When open 23½ by 16½ inches. Double-sided, front and back, four-color.

#### Technical, Ordering, and Availability Information

Bureau of Reclamation Publications D-7923A P.O. Box 25007 Denver Federal Center Denver, CO 80225-0007 Telephone: (303) 236-6741



| Minerals Ma                                                  | an          | a                         | g          | er                  | n       | er                     | Minerals Management Service |                         |                |                        |                  |                      |       |          |   |  |  |   |  |  |  |
|--------------------------------------------------------------|-------------|---------------------------|------------|---------------------|---------|------------------------|-----------------------------|-------------------------|----------------|------------------------|------------------|----------------------|-------|----------|---|--|--|---|--|--|--|
| Data Product Keywords  Data Product                          | Page Number | Administrative boundaries | Boundaries | Cadastral (general) | Coastal | Federal land ownership | Hydrologic                  | Internationalboundaries | Land ownership | Private land ownership | State boundaries | State land ownership | Water |          |   |  |  |   |  |  |  |
| Official Protraction Diagrams (OPDs) &<br>Leasing Maps (LMs) | 39          | •                         | •          | •                   | •       | •                      | •                           | •                       | •              | •                      | •                | •                    | •     |          |   |  |  |   |  |  |  |
| Supplemental Official OCS Block Diagrams (SOBDs)             | 43          | •                         | •          | •                   | •       | •                      | •                           | •                       | •              | •                      | •                | •                    | •     |          |   |  |  |   |  |  |  |
|                                                              | -           |                           | _          | ļ                   |         |                        |                             | _                       |                | _                      | _                |                      |       | $\vdash$ | _ |  |  | _ |  |  |  |



Minerals Management Service (MMS)

# Official Protraction Diagrams (OPDs) and Leasing Maps (LMs)

## **Data Product Keywords**

Administrative boundaries, boundaries, cadastral, coastal, Federal land ownership, hydrologic, international (maritime) boundaries, land ownership, private land ownership, State boundaries, State land ownership, water

#### Summary

Official protraction diagrams (OPDs) and leasing maps (LMs) are approved diagrams depicting areal measurements, coordinates, boundaries, and Federal and State land ownership for the Minerals Management Service (MMS) Outer Continental Shelf (OCS) cadastres in accordance with 30 Code of Federal Regulations (CFR) 256.8.

#### **Extent of Program**

The OCS offshore of the United States, from the computational baseline for offshore projected boundaries (similar to the mean lower-low water line) to the Exclusive Economic Zone (EEZ) limit, approximately 200 nautical miles from the shoreline, or international maritime boundary (e.g., the U.S. – U.S.S.R. Provisional Maritime Boundary), as applicable.

#### **Available Product Coverage**

Approximately 500 North American Datum of 1927 (NAD 27) based OPDs and LMs are available for the EEZ areas offshore of the conterminous U.S. and Alaska. As of the date of this document, 23 North American Datum of 1983 (NAD 83) based OPDs between 68°N and 75°N and 156°W and the U.S. – U.S.S.R. Provisional Maritime Boundary have been developed.

#### **Information Content:**

NAD 27 OPDs and LMs at 1:250,000 scale delineate the five OCS cadastres used for the MMS offshore program:

- OPDs based on the Universal Transverse Mercator (UTM) grid but using English coordinates and areal measurements (feet and acres, respectively) in the portions of the Gulf of Mexico not covered by LMs.
- OPDs based on the UTM grid using metric coordinates and areal measurements (meters and hectares, respectively) throughout the remainder of the EEZ not covered by LMs.

- 3. LMs based on a seaward extension of the California State Plane Coordinate System (SPCS) offshore of southern California.
- 4. LMs based on a seaward extension of the Louisiana SPCS offshore of Louisiana.
- 5. LMs based on a seaward extension of the Texas SPCS offshore of Texas.

OPDs use the UTM projection and reference the Clarke 1866 Spheroid. LMs use the Lambert projection and reference the Clarke 1866 spheroid. Full cadastre grid blocks on OPDs are 15,840 by 15,840 feet in the Gulf of Mexico and 4,800 by 4,800 meters throughout the remainder of the EEZ. Full cadastre grid blocks on LMs are generally 15,840 by 15,840 feet, but with variations.

Under provisions of the OCS Lands Act, OPDs and LMs depict boundaries projected seaward from a baseline - the "State Seaward Boundary" (generally 3 geographical miles or 3 marine leagues, as appropriate for the particular coastal State) and the Limit of "8(g) Zone" (generally 3 geographical miles beyond the State Seaward Boundary). Non-projected maritime boundaries are depicted as stipulated in the treaty, international agreement, court decree, etc. establishing the boundary. Areal measurements and distances for fractional cadastre grid blocks along UTM zone boundaries and partial cadastre grid blocks adjoining international maritime boundaries and OPD/LM interfaces are depicted, usually to 2 decimal places. Areal measurements for Federal and State land ownership, projected boundary coordinates, and computational baseline coordinates for cadastre blocks adjoining the State Seaward Boundary and the Limit of "8(g) Zone" are portrayed on Supplemental Official OCS Block Diagrams (SOBDs).

NAD 83 OPDs at 1:250,000 scale delineate a new cadastre, strictly adhering to the definitive parameters of the NAD 83 UTM grid system. OPDs use the UTM projection systems and reference the Geodetic Reference System of 1980 ellipsoid. Full cadastre grid blocks are 4,800 by 4,800 meters. Areal measurements and distances for fractional blocks along UTM zone boundaries are depicted in hectares to 6 decimal places and 3 decimal places, respectively. Areal measurements for Federal and State land ownership, projected boundary coordinates, international maritime boundary coordi-

nates, and computational baseline coordinates for cadastre blocks adjoining the State Seaward Boundary, the Limit of "8(g) Zone," and international maritime boundaries are portrayed on SOBDs.

#### **Product Delivery Format**

Paper prints are the standard product. Stable base film (positive or negative) and microfiche may be available upon special request.

## **Technical, Ordering, and Availability Information**

Technical information concerning OPDs and LMs is available from:

Minerals Management Service Mapping and Survey Group P.O. Box 25165, MS 4421 Denver Federal Center Denver, CO 80225

Telephone: (303) 236-7050

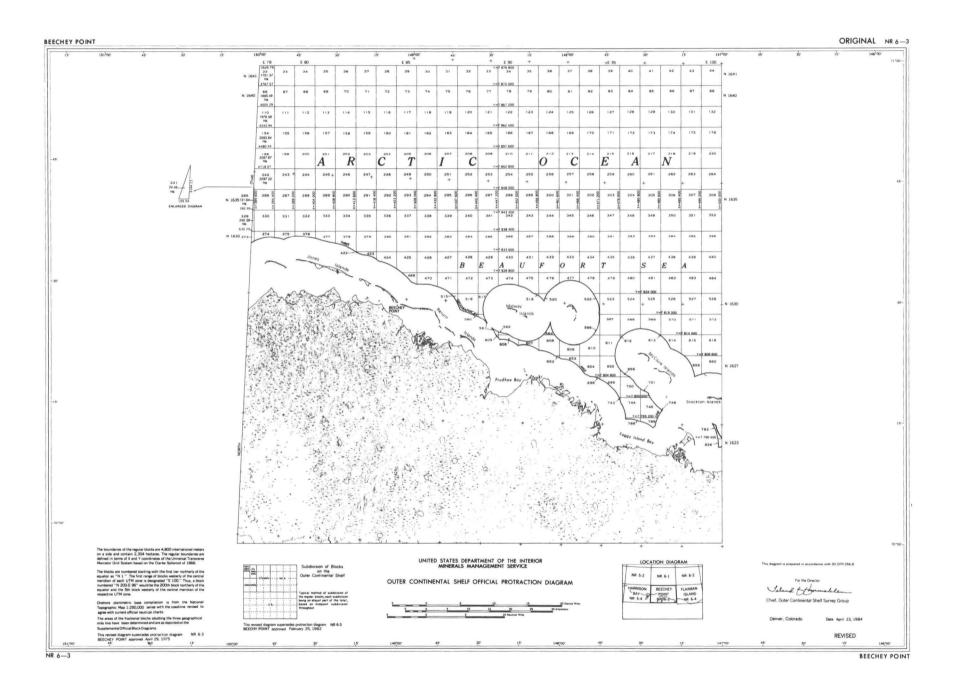
OPDs and LMs for a MMS OCS region are available through the region's Public Affairs Offices:

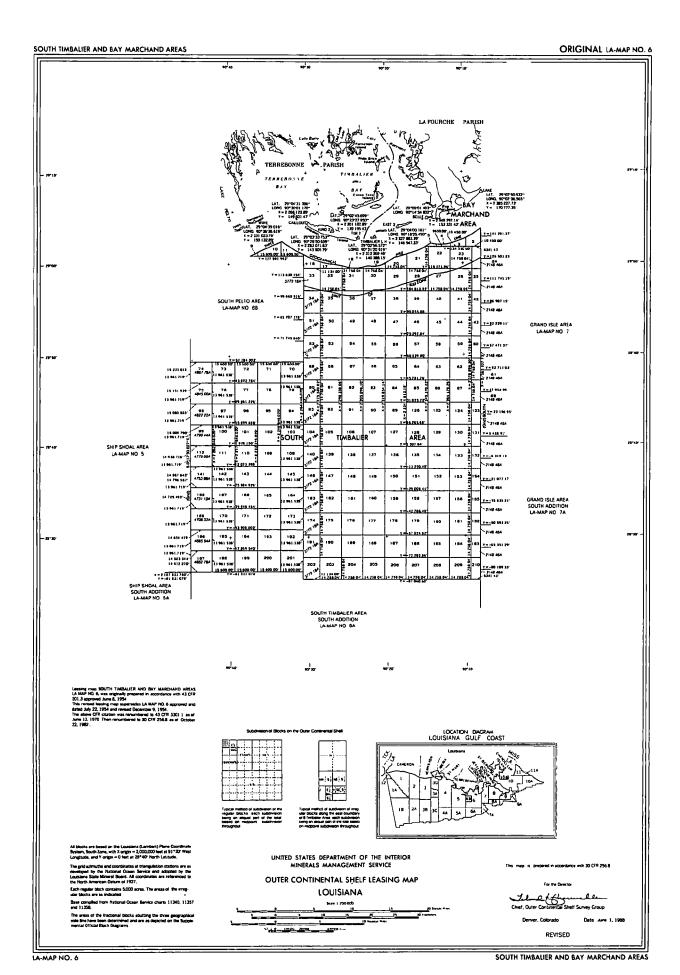
Minerals Management Service Alaska OCS Region 949 East 36th Ave., Rm. 110 Anchorage, AK 99508-4302 Telephone: (907) 261-4010 Minerals Management Service Atlantic OCS Region 381 Elden St., Suite 1109 Herndon, VA 22070-4817 Telephone: (703) 787-1113 Minerals Management Service Gulf of Mexico OCS Region 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394 Telephone: (504) 736-0557 Minerals Management Service

Pacific OCS Region 770 Paseo Camarillo Camarillo, CA 93010 Telephone: (805) 389-7520

At right: Example of an Official Protraction Diagram.

Following page: Example of a Leasing Map.





Minerals Management Service (MMS)

# Supplemental Official Outer Continental Shelf (OCS) Block Diagrams (SOBDs)

#### **Data Product Keywords**

Administrative boundaries, boundaries, cadastral, coastal, Federal land ownership, hydrologic, international (maritime) boundaries, land ownership, private land ownership, State boundaries, State land ownership, water

## **Summary**

Supplemental Official Outer Continental Shelf (OCS) Block Diagrams (SOBDs) are approved Minerals Management Service (MMS) diagrams developed as supplements to Official Protraction Diagrams (OPDs) and Leasing Maps (LMs) in accordance with 30 Code of Federal Regulations (CFR) 256.8. They depict areal measurements, projected and non-projected boundaries, offshore boundary intersection coordinates, and Federal and State land ownership for individual OCS cadastre grid blocks.

## **Extent of Program**

The OCS offshore of the United States, from the State Seaward Boundary to the Exclusive Economic Zone (EEZ) limit, approximately 200 nautical miles from the shoreline, or international maritime boundary (e.g., the U.S. – U.S.S.R. Provisional Maritime Boundary), as applicable.

## **Available Product Coverage**

Over 15,000 North American Datum of 1927 (NAD 27)-based SOBDs have been developed in support of the MMS program in the EEZ areas offshore of the conterminous U.S. and Alaska. As of the date of this document, approximately 500 North American Datum of 1983 (NAD 83) based SOBDs between 68°N and 75°N and 156°W and the U.S. – U.S.S.R. Provisional Maritime Boundary have been developed.

#### **Information Content**

NAD 27 SOBDs at approximate 1:39,500 scale (1 inch = 3,300 feet and 1 inch = 1,000 meters) detail offshore boundary intersections, contributing computational baseline points, and Federal and State land ownership for individual OPD and LM cadastre grid blocks adjoining the State Seaward Boundary and the Limit of "8(g) Zone." SOBD areal measurements and coordinate values reflect those of the parent OPD (English – acres and feet; or metric – hectares and meters) or LM (English), usually to 2 decimal places.

NAD 83 SOBDs at approximate 1:39,400 scale (1 inch = 1,000 meters) detail offshore boundary intersections, contributing computational baseline points, and Federal and State land ownership for individual OPD or LM cadastre grid blocks adjoining the State Seaward Boundary, the Limit of "8(g) Zone," and international maritime boundaries. SOBD areal measurements in hectares and coordinate values in meters reflect the metric values of the parent OPD to 6 decimal places and 3 decimal places, respectively.

## **Product Delivery Format**

SOBDs are available as xerographic prints.

#### Technical, Ordering, Availability Information

Technical information concerning SOBDs is available from:

Minerals Management Service Mapping and Survey Group P.O. Box 25165, MS 4421 Denver Federal Center Denver, CO 80225 Telephone: (303) 236-7050

SOBDs for an MMS OCS region are available through the region's Public Affairs Offices:

Minerals Management Service Alaska OCS Region 949 East 36th Ave., Rm. 110 Anchorage, AK 99508-4302 Telephone: (907) 261-4010 Minerals Management Service Atlantic OCS Region 381 Elden St., Suite 1109 Herndon, VA 22070-4817 Telephone: (703) 787-1113 Minerals Management Service Gulf of Mexico OCS Region 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394 Telephone: (504) 736-0557 Minerals Management Service Pacific OCS Region 770 Paseo Camarillo Camarillo, CA 93010 Telephone: (805) 389-7520

#### Date Printed: 28-JAN-91 INS U.S. Department of the Interior Minerals Management Service Page 1 of 1 Supplemental Official OCS Block Diagram Leasing Map/ OPD Number OCS Planning Area Name Central Gulf of Mexico NH16-04 Leasing Map / OPD Name Mobile **Block Number** 813 North American Datum 1927 X Feet X | State Seaward Boundary Radius 18 228.310 X Revision Supersedes 16~JUN-89 Meters Limit of '8(g) Zone' Radius State Y= 10 961 280.000 A = 1781.044331A Federal 8(g) Area B = 3978.955669A Disputed Federal 800.000 640.000 Non-8(g) 50 124 Disputed Federal Withdrawn Area Federal Deferred Area Total Y= 10 945 440.000 Area 5760.000000A **Contributing Baseline Points** Offshore Intersections Х \* 1-2 1 130 163.125 10 972 870.897 1 124 640.000 10 955 444.424 10 955 460.271 2-3 1 128 458.994 10 973 271.960 1 124 572.667 10 973 661.924 10 955 769.548 1 126 520.356 1 123 035.155 3-4 10 955 972.241 1 124 674.047 10 974 009.834 1 121 959.489 4-5 1 120 468.223 10 956 140.713 5-6 1 122 514.504 10 974 253.803 10 956 156.122 1 122 514.504 10 974 253.803 1 120 336.152 6-7 10 956 311.277 7-8 1 120 500.960 10 974 496.166 1 119 047,130 10 974 571.399 1 117 885.356 10 956 357.499 8-9 1 118 610.011 \* 9-10 1 117 287.382 10 956 391.137 1 118 610.011 10 974 571.399 1 116 018.001 10 956 483.485 \* 10-11 1 116 493.842 10 974 725.352 10 10 974 694,749 10 956 470.256 11-12 1 114 998.633 11 1 115 371.640 10 956 780.368 12-13 1 113 537.316 10 974 908.640 12 1 111 630.217 1 108 800.000 10 957 306.676 \*Tangent Segment

Example of a Supplemental Official OCS Block Diagram.

| National Park Service               |             |                           |            |             |            |       |            |                            |            |  |  |  |  |  |          |  |  |  |
|-------------------------------------|-------------|---------------------------|------------|-------------|------------|-------|------------|----------------------------|------------|--|--|--|--|--|----------|--|--|--|
| Data Product Keywords  Data Product | Page Number | Administrative boundaries | Boundaries | Hydrography | Recreation | Roads | Structures | Surface & manmade features | Topography |  |  |  |  |  |          |  |  |  |
| National Park Service Maps          | 47          | •                         | •          | •           | •          | •     | •          | •                          | •          |  |  |  |  |  |          |  |  |  |
|                                     | $\vdash$    |                           |            |             |            |       |            |                            |            |  |  |  |  |  | $\dashv$ |  |  |  |
|                                     |             |                           |            |             | _          | _     |            |                            |            |  |  |  |  |  |          |  |  |  |
|                                     |             |                           |            |             |            |       |            |                            |            |  |  |  |  |  |          |  |  |  |



National Park Service (NPS)

# **National Park Service Maps**

#### **Data Product Keywords**

Administrative boundaries, boundaries, hydrography, recreation, roads, structures, surface and manmade features, topography

#### Summary

These maps are a part of the Official Map-folder series for each park. These maps provide travelers with up-to-date data on America's parklands. Most are in color.

## **Extent of Program**

Over 350 units of the National Park System including national and territorial coverage.

## **Available Product Coverage**

Nearly every National Park Service (NPS) unit has its own map as a part of the Official Map-folder series.

#### Information Content

NPS maps use United States Geological Survey (USGS) topographic maps as a base for planimetrically accurate data. The parks then supplement the base with upto-date information – new road and trail alignments, building locations, etc. The information is focused towards the needs of park visitors, including road access, recreation, major topographic features, administrative boundaries, and other points of interest. Each park has it own focus – recreation, historic, ecosystems, general information, or interpretation.

Many park maps have shaded relief art, an artist's rendering of topographic features derived from USGS contour lines on the base map.

Scales and revision cycles vary from map to map.

#### **Product Delivery Format**

Nearly every NPS unit has a map-folder. They are designed for use by the layperson and are printed on quality paper.

#### Technical, Ordering, and Availability Information

Maps may be ordered by writing to the superintendent of each National Park unit. For more information, contact the Regional Office in your area of interest: North Atlantic Region: Encompasses Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont. Contact:

North Atlantic Region National Park Service 15 State St. Boston, MA 02109

Mid-Atlantic Region: Encompasses Delaware, Maryland, Pennsylvania, Virginia, West Virginia, excluding parks assigned to the National Capital Region. Contact:

Mid-Atlantic Region National Park Service 143 South Third St. Philadelphia, PA 19106

National Capital Region: Encompasses metropolitan area of Washington, D.C., with some units in Maryland, Virginia, West Virginia. Contact:

National Capital Region National Park Service 1100 Ohio Drive, SW Washington, D.C. 20242

Southeast Region: Encompasses Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virgin Islands. Contact:

> Southeast Region National Park Service Richard B. Russell Federal Building 75 Spring St., SW Atlanta, GA 30303

Midwest Region: Encompasses Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, Wisconsin. Contact:

Midwest Region National Park Service 1709 Jackson St. Omaha, NE 68102 Rocky Mountain Region: Encompasses Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming. Contact:

Rocky Mountain Region National Park Service P.O. Box 25287 Denver, CO 80225

Southwest Region: Encompasses Arizona (northeast corner), Arkansas, Louisiana, New Mexico, Oklahoma, Texas. Contact:

Southwest Region National Park Service P.O. Box 728 Santa Fe. NM 87504

Western Region: Encompasses American Samoa, Arizona (most), California, Guam, Hawaii, Nevada. Contact:

Western Region National Park Service 600 Harrison St., Suite 600 San Francisco, CA 94107

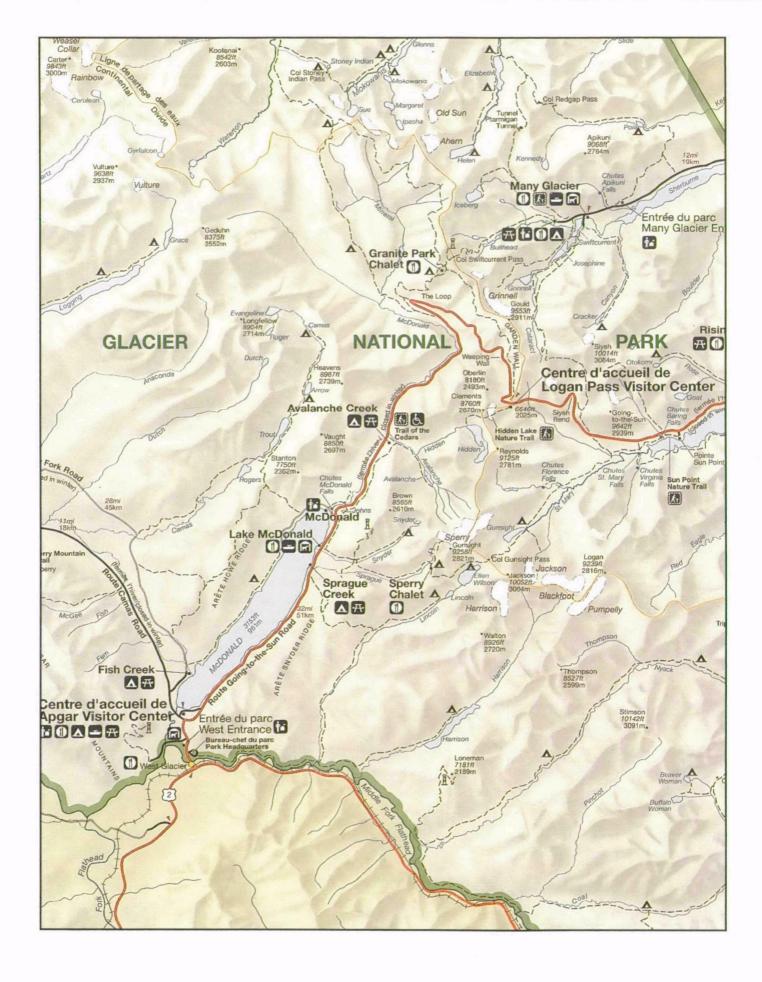
Pacific Northwest Region: Encompasses Idaho, Oregon, Washington. Contact:

Pacific Northwest Region National Park Service 83 South King St., Suite 212 Seattle, WA 98104

Alaska Region: Encompasses Alaska national parklands. Contact:

Alaska Region National Park Service 2525 Gambell St. Anchorage, AK 99503

This map segment, showing the central section of Glacier National Park in northern Montana, is an outstanding example of the National Park Service's map program. Luminous shaded relief artwork hints at the mountainous terrain. The bold red road connects points of interest for the visitor. Black-and-white pictograph symbols clearly indicate services. Bright labels are printed in both French and English because Glacier National Park is part of the Waterton-Glacier International Peace Park with Canada.





| United States I                            | ij          | sł         | 1          | &                 | V        | /il | ld | li | fe | 5 | Se | r | vi | C | е |              |   |   |
|--------------------------------------------|-------------|------------|------------|-------------------|----------|-----|----|----|----|---|----|---|----|---|---|--------------|---|---|
| Data Product Keywords                      | ber         |            |            | anmade features   |          |     |    |    |    |   |    |   |    |   |   |              |   |   |
| Data Product                               | Page Number | Hydrologic | Land cover | Surface & manmade | Wetlands |     |    |    |    |   |    |   | :  |   |   |              |   |   |
| National Wetlands Inventory (NWI) Products | 53          | •          | •          | •                 | •        |     |    |    |    |   |    |   |    |   |   |              |   |   |
|                                            | ╀           | H          | _          |                   |          |     |    |    |    |   |    |   |    |   |   |              | - | _ |
|                                            |             |            |            |                   |          |     |    |    |    | _ |    |   |    |   |   | <br>$\vdash$ |   | - |
|                                            |             |            |            |                   |          |     |    |    |    |   |    |   |    |   |   |              |   |   |



U.S. Fish and Wildlife Service

## **National Wetlands Inventory (NWI) Products**

### **Data Product Keywords**

Hydrologic, land cover, surface and manmade features, wetlands

#### Summary

The National Wetlands Inventory (NWI) provides wetlands data. These data provide consultants, planners and resource managers with information on wetland location and type.

### **Extent of Program**

**National** 

### **Available Product Coverage**

NWI wetlands data are available in map form at 1:24,000 scale for approximately 75 percent of the conterminous United States, Hawaii, and 24 percent of Alaska. Availability of maps at 1:100,000 and 1:250,000 scale is limited. A color, wall-sized map of the wetland resources of the United States at 1:3,168,000 scale is also available.

Digital wetlands data are available for approximately 16 percent of the conterminous United States. See graphics for current status of large-scale mapping, Alaska mapping, and digital data.

#### Information Content

The standard NWI map product is a 1:24,000-scale map of wetland point, line, and area features overlaid on a United States Geological Survey (USGS) 7.5-minute topographic map. Maps are compiled from National Aerial Photography Program (NAPP) 1:40,000-scale and National High Altitude Photography program (NHAP) 1:58,000- or 1:80,000-scale aerial photography with source dates ranging from the 1980s to the present.

All photo-interpretable wetlands are mapped. In the treeless prairies, ¼-acre wetlands are mapped. In forested areas, small open water and emergent wetlands are mapped. In general, the minimum mapping unit is from 1 to 3 acres depending on the wetland type and the scale and emulsion of the aerial photography. In regions of the country where evergreen forested wetlands predominate, wetlands smaller than 3 acres may not be mapped. Thus, a detailed on-the-ground analysis of a single site may result in a revision of the wet-

land boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on the maps.

The wetlands are classified in accordance with the "Classification of Wetlands and Deepwater Habitats of the United States" by Cowardin et. al., published by the United States Fish and Wildlife Service in 1979 (FWS/OBS - 79/31).

The 1:3,168,000-scale national map should be used only as a graphic to approximate relative distribution and location of wetlands.

Digital wetland data are digitized from the 1:24,000scale wetlands maps into topologically correct data files containing ground planimetric coordinates and wetland attributes.

### **Product Delivery Format**

Wetland maps at 1:24,000 scale are available on paper or mylar, with or without the USGS topographic base map.

Digital data, registered to the USGS 7.5-minute, 1:24,000-scale base map, are available in Digital Line Graph Optional, MOSS Export, and GRASS vector format on 9-track magnetic tape, 8mm cassette, ¼-inch cassette, and on floppy disk for small orders (less than 10 quads).

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5 – 118 of the Department of the Interior, U.S. Geological Survey section.

For 1:24,000-scale wetland maps only, you may also contact the State Distribution Center for NWI Maps. If the State you are interested in is not listed, contact one of the ESIC offices listed above.

| Alabama       | (205) 349-2852 | Nebraska       | (402) 472-7523 |
|---------------|----------------|----------------|----------------|
| Arizona       | (413) 545-0359 | New Hampshire  | (603) 271-2155 |
| Arkansas      | (413) 545-0359 | New Jersey     | (609) 777-1039 |
| Connecticut   | (203) 566-7719 | New Mexico     | (413) 545-0359 |
| Delaware      | (302) 739-4691 | New York       | (607) 256-6520 |
| Florida       | (904) 644-2883 | North Carolina | (919) 733-2302 |
| Georgia       | (404) 651-5592 | Ohio           | (614) 265-6770 |
| Hawaii        | (808) 587-0166 | Oklahoma       | (405) 271-2521 |
| Illinois      | (815) 753-0914 | Oregon         | (503) 378-3805 |
| Iowa          | (413) 545-0359 | Pennsylvania   | (413) 545-0359 |
| Kentucky      | (502) 564-5174 | Rhode Island   | (401) 277-6820 |
| Louisiana     | (413) 545-0359 | South Carolina | (803) 734-9100 |
| Maine         | (207) 289-2801 | Texas          | (512) 463-8337 |
| Maryland      | (301) 548-4774 | Vermont        | (802) 244-6951 |
| Massachusetts | (413) 545-0359 | Washington     | (206) 459-6201 |
| Minnesota     | (612) 296-4800 | West Virginia  | (304) 637-0245 |
| Mississippi   | (413) 545-0359 | Wyoming        | (307) 777-6942 |
| Missouri      | (413) 545-0359 | . •            |                |

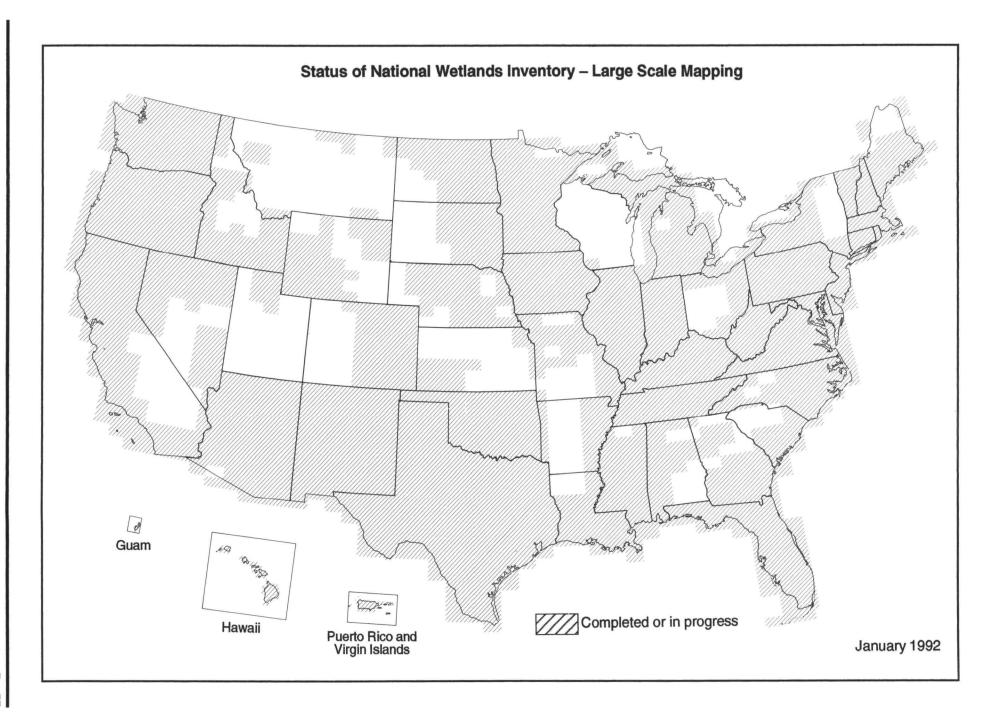
To discuss details for wetlands mapping and digitizing in areas not already available, call NWI at (813) 893-3624.

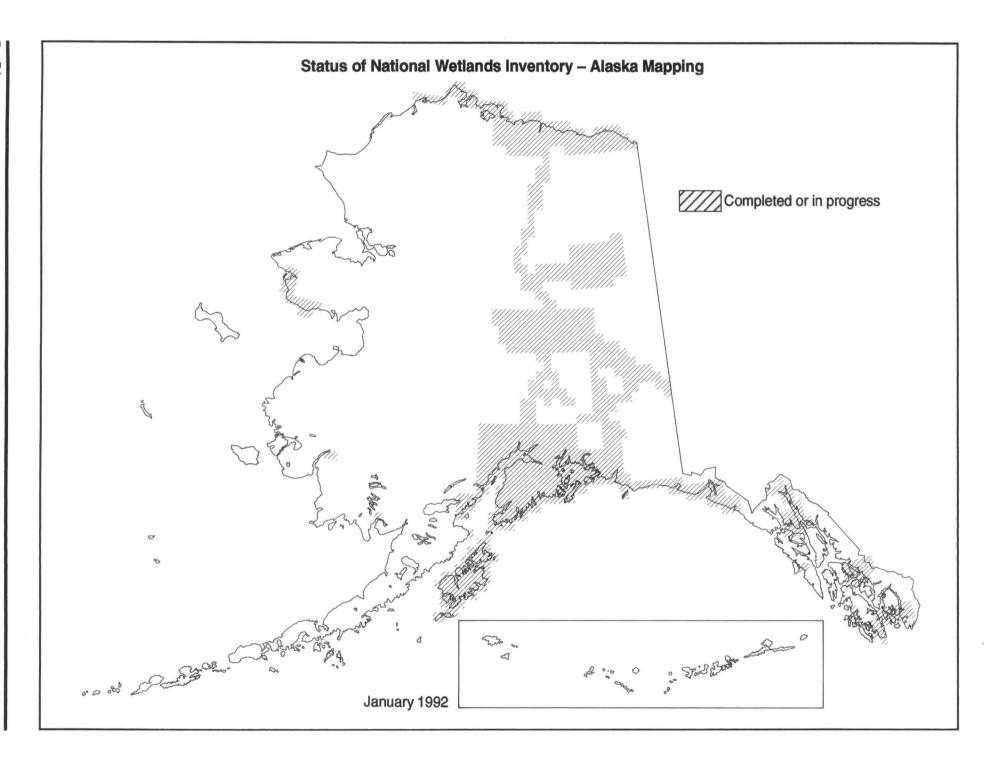
At right: Status of National Wetlands Inventory largescale mapping.

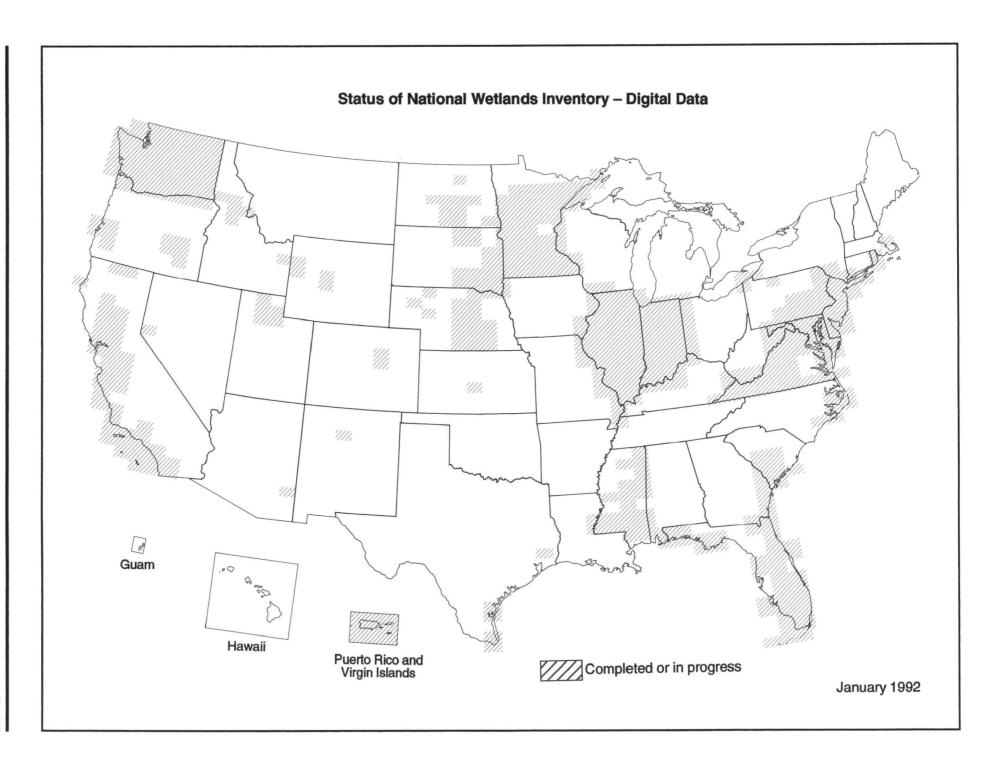
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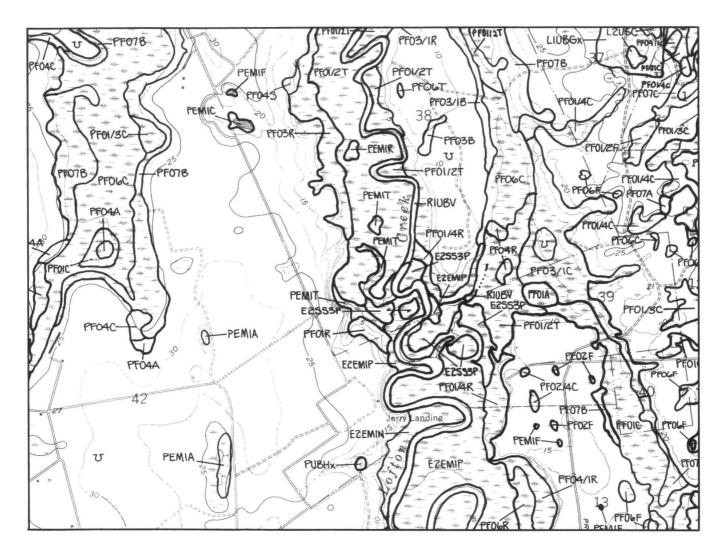
Status of National Wetlands Inventory – Alaska mapping.

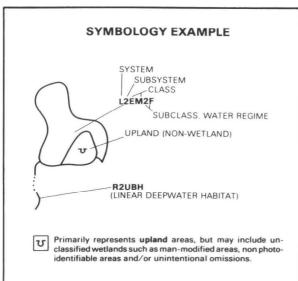
Status of National Wetlands Inventory digital data.











This is a portion of a 1:24,000 scale wetlands map of the Hedges, Florida area (near Jacksonville). It is typical of the wetlands maps produced by the U.S. Fish and Wildlife Service, National Wetlands Inventory. The wetlands information has been overlaid on a U.S. Geological Survey 7.5 minute quadrangle map.

#### **United States Geological Survey Data Category Keywords** Administrative boundaries Federal land ownership County landownership County boundaries Aerial photography Census geography Page Number Demographic **Atmospheric** Boundaries Bathymetry Ecological Economic Elevation Contours Geodetic Coastal **Data Product** Aerial Photographs & Satellite Photographs 63 **Bulletins** 66 • Coal Investigations Maps (C Series) 67 Digital Airborne & Satellite Imagery 68 Digital Data Series (DDS) 69 • Digital Elevation Models (DEMs) 70 Digital Line Graphs (DLGs) 71 • Dig. Sidescan Sonar Images of the Sea Floor 72 (GLORIA Atlases) Flood-Prone Area Maps 73 Geographic Names Information System (GNIS) 74 Geologic Quadrangle Maps (GQ Series) 75 • Geophysical Investigations Maps (GP Series) 77 Hydrologic Investigations Atlases (HA Series) 79 • Hydrologic Unit Maps 80 Land Use & Land Cover Digital Data 82 • • Mineral Investigations Resources Maps (MR Series) 83 Misc. Field Studies Maps (MF Series) 84 • Misc. Investigations Series Maps (I Series) 86 • • National Earthquake Information Center Products 89 National Uranium Resource Evaluation (NURE) Data 91 • National Water Conditions (Report Series) 93 National Water Summary (Report Series) 95 National Water-Use Information (Report Series) 97 Oil & Gas Investigations Charts (OC Series) 99 Oil & Gas Investigations Maps (OM Series) 100 Open-File Reports 101 • Orthophotoquads 102 Other Format Maps 103 • • • Other Map Products 104 • • • • • • • • • Photographic Products from Airborne & Satellite 105 **Imagery** Professional Papers 106 • Quadrangle Format Maps 107 o io • • • • Quaternary Geologic Atlas of the United States 109 Regional Aquifer-System Analysis (Report Series) 111 • Satellite Image Maps 112 State Geologic Maps 113 • Surface Water Map 114 Thematic Maps 0 0 0 0 0 0 0 115 • Water Data 116 Water Supply Papers & Other Book Series 117

#### **United States Geological Survey (cont.) Data Category Keywords** Local government boundaries International boundaries Private land ownership Horizontal control Orthophotoquads Hydrologicunits Landownership Page Number Hydrography Hydrologic Magnetics Navigation Landcover Landuse Pipelines Minerals Mortality Marine Ports **Data Product** Aerial Photographs & Satellite Photographs 63 • Bulletins 66 Coal Investigations Maps (C Series) 67 Digital Airborne & Satellite Imagery 68 Digital Data Series (DDS) • • • 69 Digital Elevation Models (DEMs) 70 Digital Line Graphs (DLGs) 71 • • • • • • • • • Dig. Sidescan Sonar Images of the Sea Floor 72 (GLORIA Atlases) Flood-Prone Area Maps 73 • • • • ē Geographic Names Information System (GNIS) 74 Geologic Quadrangle Maps (GQ Series) 75 Geophysical Investigations Maps (GP Series) 77 Hydrologic Investigations Atlases (HA Series) • • 79 • Hydrologic Unit Maps 80 00000 Land Use & Land Cover Digital Data 82 • • Mineral Investigations Resources Maps (MR Series) 83 Misc. Field Studies Maps (MF Series) 84 Misc. Investigations Series Maps (I Series) 86 • • • National Earthquake Information Center Products 89 National Uranium Resource Evaluation (NURE) Data • 91 National Water Conditions (Report Series) • 93 National Water Summary (Report Series) • • 95 National Water-Use Information (Report Series) 97 • • Oil & Gas Investigations Charts (OC Series) 99 Oil & Gas Investigations Maps (OM Series) 100 Open-File Reports • • 101 Orthophotoquads 102 Other Format Maps 103 • • • • Other Map Products 104 • • • • Photographic Products from Airborne & Satellite 105 Imagery • **Professional Papers** 106 Quadrangle Format Maps • • • • • 107 • Quaternary Geologic Atlas of the United States 109 • • Regional Aquifer-System Analysis (Report Series) 111 Satellite Image Maps 112 State Geologic Maps 113 Surface Water Map 114 • $\bullet$ $\bullet$ $\bullet$ $\bullet$ • • • • Thematic Maps • • 115 Water Data • • 116 • • • Water Supply Papers & Other Book Series 117

#### **United States Geological Survey (cont.)** U.S. Public Land Survey System **Data Category Keywords** Surface and manmade f Subsurface ownership State land ownership **Transmission lines** Remotely Sensed State boundaries Socioeconomic Soils Vertical control Page Number Temperature Topography Subsurface Recreation Structures Weather Wetands Water **Data Product** Aerial Photographs & Satellite Photographs 63 Bulletins 66 • 67 ٠ Coal Investigations Maps (C Series) Digital Airborne & Satellite Imagery 68 69 Digital Data Series (DDS) Digital Elevation Models (DEMs) 70 $\bullet$ $\bullet$ $\bullet$ $\bullet$ Digital Line Graphs (DLGs) 71 Dig. Sidescan Sonar Images of the Sea Floor 72 (GLORIA Atlases) 73 Flood-Prone Area Maps Geographic Names Information System (GNIS) 74 75 Geologic Quadrangle Maps (GQ Series) Geophysical Investigations Maps (GP Series) 77 79 Hydrologic Investigations Atlases (HA Series) 80 • Hydrologic Unit Maps 82 • Land Use & Land Cover Digital Data • • • Mineral Investigations Resources Maps (MR Series) 83 84 • Misc. Field Studies Maps (MF Series) • Misc. Investigations Series Maps (1 Series) 86 • • National Earthquake Information Center Products 89 National Uranium Resource Evaluation (NURE) Data 91 National Water Conditions (Report Series) 93 • • 95 National Water Summary (Report Series) • • National Water-Use Information (Report Series) 97 Oil & Gas Investigations Charts (OC Series) 99 Oil & Gas Investigations Maps (OM Series) 100 Open-File Reports 101 Orthophotoquads 102 • Other Format Maps 103 • • • • • • • • Other Map Products 104 • . . • • Photographic Products from Airborne & Satellite 1105 • • Imagery Professional Papers 106 • 107 • • • • • Quadrangle Format Maps Quaternary Geologic Atlas of the United States 109 • Regional Aquifer-System Analysis (Report Series) **h**11 112 • Satellite Image Maps 113 State Geologic Maps 114 Surface Water Map • 115 • • • • • • • • Thematic Maps • • • Water Data 116 • • 117 • • • • Water Supply Papers & Other Book Series



United States Geological Survey (USGS)

## **Aerial Photographs and Satellite Photographs**

#### **Data Product Keywords**

Aerial photography, remotely sensed, satellite

### **Summary**

Aerial photographs and satellite photographs from manned missions are archived and distributed by the Earth Resources Observation System (EROS) Data Center (EDC). The EDC manages the repository of multi-agency National Aerial Photography Program (NAPP) photos at 1:40,000 scale in color-infrared or black-and-white; National High Altitude Aerial Photography Program (NHAP) photos at 1:58,000 scale for color-infrared and 1:80,000 scale for black-and-white; and aerial photos at various scales from United States Geological Survey (USGS) mapping projects and other Federal agencies such as the National Aeronautics and Space Administration (NASA), Bureau of Reclamation, Environmental Protection Agency, and the United States Army Corps of Engineers.

### **Extent of Program**

Aerial photographs – nationwide Satellite photographs – World

#### Available Product Coverage

Multiple aerial photographic coverage of the United States; satellite hand-held photos along paths in the United States and other parts of the world. Indexes are available for NAPP, NHAP, and satellite hand-held photographs. The Earth Science Information Center (ESIC) Aerial Photography Summary Record System (APSRS) provides data on current and historical photo coverage of the United States.

#### **Information Content**

Aerial photos at various scales, with different emulsions, and information on camera characteristics, cloud cover and sources for obtaining copies. Hand-held satellite photos in black-and-white, and color.

#### **Product Delivery Format**

Photographic prints, transparencies, enlargements from photo negatives archived at EDC.

### Technical, Ordering, and Availability Information

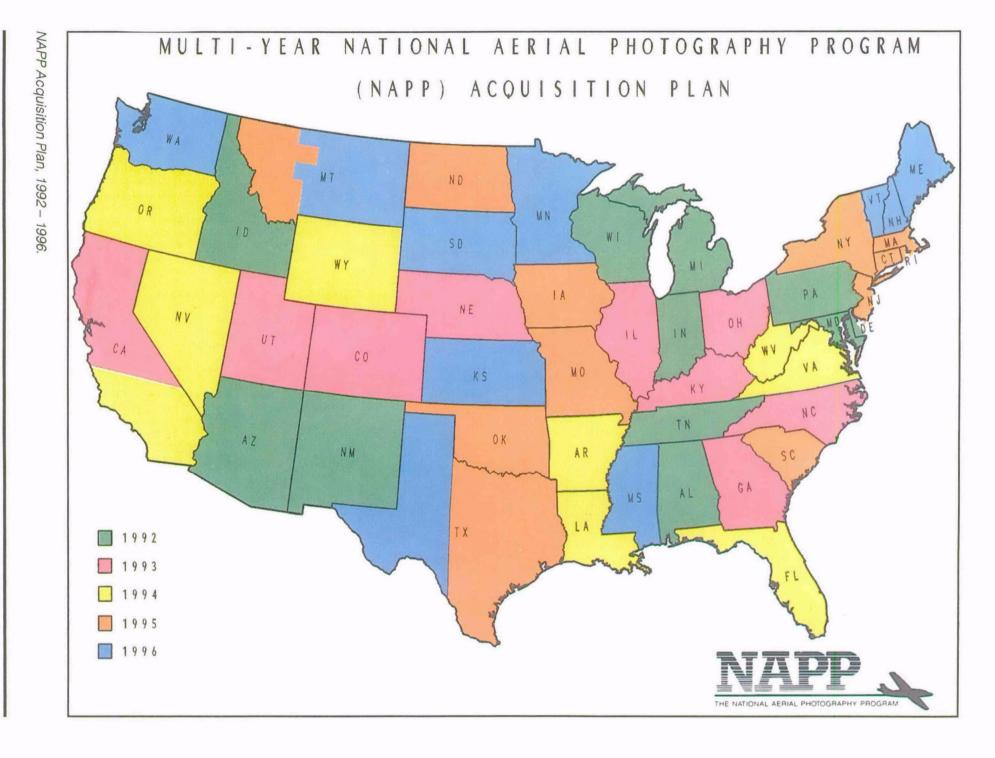
Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Sioux Falls ESIC U.S. Geological Survey EROS Data Center Sioux Falls, SD 57198 Telephone: (605) 594-6151 FAX: (605) 594-6589

Or contact any Earth Science Information Center office listed on page 5 – 118.





NAPP aerial photograph of Washington, DC, scale 1:40,000, dated April 5, 1988.

United States Geological Survey (USGS)

### **Bulletins**

### **Data Product Keywords**

Coastal, geology, geophysics, gravity, hydrologic, magnetics, marine, minerals, seismic, soils, subsurface, water, cartography, geochemistry, paleontology, stratigraphy

### Summary

Reports on the results of resource studies and of geologic and topographic investigations, as well as collections of short papers related to a specific topic; generally more limited in scope or geographic coverage than professional papers. Some contain geologic or geophysical maps.

### **Extent of Program**

National and international.

### **Available Product Coverage**

Random. Products available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961,"
"Publications of the Geological Survey, 1962-1970,"
"Publications of the U.S. Geological Survey, 1971
through 1981," and annual supplements for 1982 and
later years. New bulletins are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

In addition, geologic maps published as plates or figures in bulletins are catalogued in the following sources:

- GEOINDEX, a computerized data base produced by the United States Geological Survey (USGS) which contains bibliographic information for published geologic maps.
- 2. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

Bulletins, like professional papers, contain significant data and interpretations and are reports of lasting sci-

entific significance, but they are generally more limited in scientific scope and/or geographic coverage. The range of subject matter is similar to that in the professional paper series; among the most common topics are bedrock and surficial geology, stratigraphy, paleontology, geochemistry, and mineral resources. Some bulletins are collections of related reports on a specific topic. Bulletins that report the results of regional geologic investigations sometimes contain one or more geologic maps.

### **Product Delivery Format**

Book publications.

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476

Or contact any Earth Science Information Center office listed on page 5 - 118.

United States Geological Survey (USGS)

# **Coal Investigations Maps (C Series)**

### **Data Product Keywords**

Geology, minerals, subsurface, coal

### **Summary**

Geologic maps (mostly multicolored) on topographic or planimetric bases; various scales; show bedrock geology, stratigraphy, and structural relations in certain coal resource areas.

### **Extent of Program**

Coal resource areas nationwide.

### Available Product Coverage

Random. Maps available are catalogued in the following sources:

- "Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," "Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."
- GEOINDEX, a computerized data base produced by the United States Geological Survey (USGS) which contains bibliographic information for published geologic maps.
- 3. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

The C Series is used to present data relating to the origin, characteristics, and resource potential of coal deposits. Typical products consist of a geologic map, with structure contours if appropriate, cross sections, columnar sections, and measured sections of coal zones. Most maps highlight the distribution of coal beds. Some C-Series maps only show the coal beds, whereas others are also general-purpose geologic maps. The area covered may be either a single quadrangle, part of a quadrangle, or parts of several quad-

rangles, and the data can be presented at any scale. The most common formats are individual 7½-minute and 30- by 60-minute quadrangles. C-Series maps are accompanied by a description of map units, and some are also accompanied by a supplemental text.

### **Product Delivery Format**

Paper

### **Technical, Ordering, and Availability Information**

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5 - 118.

United States Geological Survey (USGS)

## **Digital Airborne and Satellite Imagery**

### **Data Product Keywords**

Radar, remotely sensed, satellite, AVHRR, digital imagery, LANDSAT, MSS, panchromatic, RBV, SLAR, SPOT, TM

### Summary

Digital images of the United States are available from the Earth Resources Observation System (EROS) Data Center, including Side-Looking Airborne Radar (SLAR), which penetrates cloud cover and enhances shadows of subtle terrain features and satellite Advanced Very-High Resolution Radiometer (AVHRR), useful for tracking vegetation growth on a regional basis. The EROS Data Center also serves as the central ordering agency within the Federal Government for Land Satellite (LANDSAT) Thematic Mapper (TM) and Multispectral Scanner (MSS) digital data and Return Beam Vidicon (RBV) data; as well as Système Probatoire d'Observation de la Terre (SPOT) panchromatic and MSS data.

### **Extent of Program**

AVHRR, LANDSAT, SPOT - global, national.

SLAR - conterminous United States and Alaska.

#### **Available Product Coverage**

SLAR covers about 40 percent of the United States (conterminous) and 15 percent of Alaska; it is an ongoing program.

LANDSAT, SPOT and AVHRR provide multiple coverage of the United States and the World. A set of World Reference System Path-Row maps is available for LANDSAT.

#### Information Content

SLAR imagery is acquired by transmitting a beam of microwave energy to the ground at an oblique angle and recording the returns as shades of gray and shadows. These shadows make subtle terrain features, such as faults and folds, easier to detect than on other forms of imagery. SLAR imagery is collected in blocks defined by 1:250,000-scale, 1- by 2-degree quadrangles.

LANDSAT imagery is archived from LANDSATs 1 and 2 (January 1972-February 1982) – MSS (4 spectral Bands) and RBV (3 Bands); LANDSAT 3 (March 1978-

March 1983)-MSS (4 Bands), RBV (1 Band-4 Subscenes); LANDSATs 4 and 5 (July 1982-date)-MSS (4 Bands), and TM (7 Bands). Applications include mapping, land use, urban planning, agriculture, forestry, natural resource inventory, geology and mineral resources.

SPOT imagery is collected by two identical sensors in MSS (4 Bands) and Panchromatic (1 Band). Applications are the same as for LANDSAT Sensors.

**AVHRR** imagery is collected in 5 channels measuring visible, near infrared, and thermal infrared radiation. Applications include cloud temperatures, sea-surface temperature, land temperature and vegetation index.

### **Product Delivery Format**

SLAR – 9-track, 6,250-bpi magnetic tape, CD-ROMs of 1:250,000-scale quadrangle areas.

**AVHRR** – 9-track 1,600 or 6,250-bpi magnetic tape, CD-ROMs of the United States or regions of the United States.

LANDSAT and SPOT – magnetic tape, diskettes in various formats.

### **Technical, Ordering, and Availability Information**

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Sioux Falls ESIC U.S. Geological Survey EROS Data Center Sioux Falls, SD 57189 Telephone: (605) 594-6151 FAX: (605) 594-6589

Or contact any Earth Science Information Center office listed on page 5 – 118.

United States Geological Survey (USGS)

## **Digital Data Series (DDS)**

#### **Data Product Keywords**

Coastal, geology, geophysics, gravity, hydrologic, magnetics, marine, minerals, seismic, subsurface, water, cartography, geochemistry, geophysics

### **Summary**

Digital maps and other geoscience data and information formally published on CD-ROM. Subject matter includes geology, geophysics, geochemistry, mineral resources, rock core information, seafloor surveys, and other topics. Maps and other images are accompanied by explanatory text.

#### **Extent of Program**

National

### **Available Product Coverage**

Random. This is a new publication series initiated in October 1991. For available products, see the monthly catalog "New Publications of the U.S. Geological Survey."

#### Information Content

The Digital Data Series (DDS) is intended to include information and data derived from the entire range of earth science investigations conducted by the United States Geological Survey (USGS) including regional geologic studies, geophysical surveys, geochemical surveys, offshore geologic investigations, mineral resource investigations, and water resource investigations. DDS discs may contain one or more of the following types of data sets: map data, other graphic data, tabular data, and descriptive text material. The discs also contain software to enhance the usefulness of the data. As of May 1992, five reports had been released in the Digital Data Series: "National Geochemical Data Base: National Uranium Resource Evaluation Data for the Conterminous Western United States" (DDS-1); "Geology of Nevada: A Digital Representation of the 1978 Geologic Map of Nevada" (DDS-2); "A Geologic Map of the Sea Floor in Western Massachusetts Bay, Constructed from Digital Sidescan - Sonar Images, Photography, and Sediment Samples" (DDS-"National Energy Research Seismic Library – Processed Seismic Data for 29 Lines in the National Petroleum Reserve in Alaska" (DDS-5); and "Digitized

Strong-Motion Accelerograms of North and Central American Earthquakes 1933 – 1986" (DDS-7).

### **Product Delivery Format**

CD-ROM

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425

Denver, CO 80225

Telephone: (303) 236-7476

Or contact any Earth Science Information Center office listed on page 5-118.

United States Geological Survey (USGS)

## **Digital Elevation Models (DEMs)**

### **Data Product Keywords**

Elevation, topography, DEM

### **Summary**

Digital records of terrain elevations for ground positions at regularly spaced horizontal intervals which are derived from United States Geological Survey (USGS) 7.5-minute, 15-minute, 30- by 60-minute, and 1-degree (1:250,000-scale) quadrangle map hypsographic data and/or by photogrammetric methods.

### **Extent of Program**

National for 7.5-minute and 15-minute quadrangles (Alaska); conterminous United States and Hawaii for 30- by 60-minute quadrangles.

### **Available Product Coverage**

Coverage varies. A National Index is available for 7.5-minute and 15-minute Digital Elevation Model (DEM) coverage. The 1:100,000-scale map National Index can be used as a guide for locating 30- by 60-minute DEMs.

#### **Information Content**

Elevation data spacing varies from 30 meters for 7.5-minute DEMs to 3 arc seconds for 1:250,000 scale maps. Complete U.S. coverage is only available for the 1:250,000-scale digital line graph (DLG) data. All DEM data are similar in logical data structure and are ordered from south to north in profiles that are ordered from west to east.

7.5-minute DEM data are produced in 7.5-minute units which correspond to USGS 7.5-minute topographic quadrangle map series. 7.5-minute DEM data consist of a regular array of elevations referenced horizontally on the Universal Transverse Mercator (UTM) coordinate system of the North American Datum of 1927 (NAD 27). These data are stored as profiles with 30-meter spacing along and between each profile.

15-minute DEM data correspond to USGS 15-minute topographic quadrangle map series in Alaska. The unit sizes in Alaska vary depending on the latitudinal location of the unit. 15-minute DEM data consist of a regular array of elevation referenced horizontally to the geographic (latitude/longitude) coordinate system of North American Datum 1927 (NAD 27). The spacing

between elevations along profiles is 2 arc seconds of latitude by 3 arc seconds of longitude.

30-minute DEM data cover 30-minute by 30-minute areas which correspond to the east half or west half of the USGS 30- by 60-minute topographic quadrangle map series for the conterminous United States and Hawaii. Each 30-minute unit is produced and distributed as four 15- by 15-minute cells. 30-minute DEM data have the same characteristics as the 15-minute DEM data except that the spacing of elevations along and between each profile is 2 arc seconds.

1-degree DEM data are produced by the Defense Mapping Agency in 1-degree by 1-degree units which correspond to the east half or west half of USGS 1- by 2-degree topographic quadrangle maps series, for all of the United States and its territories. 1-degree DEM data consist of a regular array of elevations referenced horizontally using the geographic (latitude/longitude) coordinate system of the World Geodetic System 1972 Datum. A few units are also available using the World Geodetic System 1984 Datum. Spacing of the elevations along and between each profile is 3 arc seconds with 1,201 elevations per profile. The only exception is DEM data in Alaska, where the spacing and number of elevations per profile varies depending on the latitudinal location of the DEM.

### **Product Delivery Format**

The standard distribution product is 9-track 1,600- or 6,250-bpi magnetic tape.

#### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5 – 118.

United States Geological Survey (USGS)

## **Digital Line Graphs (DLGs)**

#### **Data Product Keywords**

Administrative boundaries, airports, boundaries, coastal, contours, county boundaries, county land ownership, elevation, Federal land ownership, geodetic, horizontal control, hydrography, hydrologic, ice, international boundaries, land ownership, local government boundaries, pipelines, ports, railroads, roads, State boundaries, State land ownership, structures, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation, vertical control, water, waterways, wetlands, DLG, hypsography, transportation

### **Summary**

Digital representations by points, lines and areas of planimetric information derived from 7.5- and 15-minute scale topographic quadrangle maps (large-scale); 30- by 60-minute intermediate scale maps; and 1:2 million-scale (small scale) sectional National Atlas maps.

## **Extent of Program**

National

#### **Available Product Coverage**

Areas of product coverage for series are indicated in a National Index for 7.5- and 15-minute (large scale) digital line graphs (DLGs). A National Index is also available for 1:100,000-scale maps (intermediate) as a guide to locating 1:100,000 DLGs.

Small scale DLGs cover areas in the United States that correspond to the sectional National Atlas maps at 1:2 million scale.

#### Information Content

These DLGs are digital representations of programquadrangle format and sectional maps. All DLG data distributed by the Unites States Geological Survey (USGS) are DLG-Level 3 (DLG-3), which means the data contain a full range of attribute codes, have full topological structuring, and have passed certain quality-control checks.

Large-scale DLG data files are available for the U.S. Public Land Survey, boundaries, transportation, hydrography and in some areas, hypsography. They are produced in 7.5-minute by 7.5-minute units which

correspond to USGS 1:20,000-, 1:24,000-, 1:25,000-scale topographic quadrangle maps. The unit sizes of 1:63,360-scale Alaska quadrangles vary depending on the latitudinal location of the unit.

Intermediate (1:100,000 scale) DLG data files that cover transportation and hydrography, are available for all States except Alaska. Intermediate-scale DLG data are sold in 30-minute by 30-minute units which correspond to the east half or west half of USGS 30- by 60-minute 1:100,000-scale topographic quadrangle maps. Each 30-minute unit is produced and distributed as four 15- by 15-minute cells, except in high-density areas, where the 15-minute cells may be subdivided into four 7.5-minute cells.

National Atlas sectionals of the United States at 1:2 million scale are available for boundaries, transportation and hydrography. These small-scale DLG data correspond to USGS 1:2 million-scale sectional maps of the National Atlas of the United States of America and are sold in 21 units. Fifteen sections cover the conterminous United States, five cover Alaska and one covers Hawaii. These sectional DLGs are usually sold in multi-State units. However, some may cover only one State or a portion of a State.

#### **Product Delivery Format**

The standard distribution product is 9-track, 1,600 or 6,250 bpi magnetic tape in a variety of formats. The sectional DLGs at 1:2 million scale are available on one CD-ROM, and the first of a series of CD-ROMs has been released with 1:100,000 intermediate-scale transportation and hydrography data.

#### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5-118.

United Stated Geological Survey (USGS)

# Digital Sidescan Sonar Images of the Sea Floor (GLORIA Atlases)

### **Data Product Keywords**

Bathymetry, geology, geophysics, magnetics, marine, remotely sensed, seismic, exclusive economic zone, GLORIA, Image maps, sea floor

### **Summary**

Digital sidescan sonar images of the sea floor are available for the Exclusive Economic Zone (EEZ) around the 30 coastal States. The images show sea-floor morphology and geologic processes which have occurred seaward of the continental shelf.

### **Extent of Program**

The program covers the EEZ of the United States, which extends seaward 200 nautical miles from the coast of the United States and its island territories.

#### **Available Product Coverage**

Data coverage is approximately 2 million square nautical miles of sea floor seaward of the shelf edge around the 30 coastal States. Mapping is continuing around the American Flag islands of the central and western Pacific Ocean.

#### **Information Content**

The United States Geological Survey (USGS) is using a Geophysical Long Range ASDIC (GLORIA) sidescan sonar system to obtain a plan view of the sea floor of the EEZ. GLORIA imagery is acquired by transmitting a 6.5-KHz sound pulse into the ocean toward the sea floor at an oblique angle. The reflected sound wave strength provides information on the inclination of the sea floor, surface roughness, and acoustic impedance of the sea floor. The picture element (pixel) resolution is approximately 50 meters. The data are digitally mosaicked into image maps which are at a scale of 1:500,000. These mosaics provide the equivalent of "aerial photographs" that reveal many physiographic and geologic features of the sea floor.

The results of GLORIA surveys are compiled as Atlases that are published as Miscellaneous Investigations Series Maps (I Series). As of May 1992, four Atlases are available: Western Conterminous United States (I-1792); Gulf of Mexico and Eastern Caribbean Areas (I-1864A,B); Bering Sea (I-2053); and Atlantic Continental Margin (I-2054). The GLORIA Atlases are also available in digital format on CD-ROM.

### **Product Delivery Format**

Paper map products and CD-ROM.

### Technical, Ordering, and Availability Information

For I-Series maps, contact:

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number; 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5-118.

For CD-ROMs, contact:

USGS-NOAA
Joint Office for Mapping and Research
915 National Center
Reston, VA 22092
Telephone: (703) 648-6525
FAX: (703) 648-5464

United States Geological Survey (USGS)

## Flood-Prone Area Maps

### **Data Product Keywords**

Boundaries, flood, floodplain, hydrography, hydrologic, land use, local government boundaries, mortality, socioeconomic, surface and manmade features, topography, water, waterways

#### **Summary**

Maps showing flood-prone areas outlined on standard United States Geological Survey (USGS) topographic quadrangles.

### **Extent of Program**

National

### Available Product Coverage

Flood-prone areas, primarily in urban and developing areas.

#### Information Content

Flood-prone areas are outlined on standard USGS topographic quadrangles at a scale of 1:24,000 as part of the national program for managing flood losses in urban areas mandated by the National Flood Insurance Act of 1968 and the recommendations of the Task Force on Federal Flood Control Policy (89th Congress). Efforts to produce these maps began in 1969. As of Fiscal Year 1976, over 12,000 quadrangles had been mapped.

#### **Product Delivery Format**

Paper

#### Technical, Ordering, and Availability Information

Flood-prone area maps, although not a published series, are available, by quadrangle name, from the USGS Water Resources Division District Office in the State of interest.

Locations of the USGS Water Resources Division District Offices can be obtained by contacting:

U.S. Geological Survey Hydrologic Information Unit 419 National Center Reston, VA 22092

Telephone: (703) 648-6817

United States Geological Survey (USGS)

# **Geographic Names Information System (GNIS)**

#### **Data Product Keywords**

Geographic names

### **Summary**

Geographic names for all known places, features, and areas in the United States that are identified by proper name. Each name is located by geographic coordinates and map source reference. Products include the National Geographic Names Data Base (NGNDB) and the Topographic Map Names Data Base (TMNDB).

### **Extent of Program**

National

### **Available Product Coverage**

One concise national and seven State place name gazetteers published to date. Coverage for remaining States is available as computer-generated listings. The TMNDB is available as a computer-generated listing.

#### Information Content

The NGNDB contains records on almost 2 million geographic feature names in the United States - from populated places, schools, reservoirs, and parks, to streams, valleys, springs, and ridges. Standard reports are sold by State and include all geographic name records currently in Geographic Names Information System (GNIS) from the individual State and territory data base files. The entries are sorted alphabetically by feature name. Each entry will include the official name of the feature; the feature type; the status of the name as viewed by the U.S. Board on Geographic Names; the county in which the feature is located; and geographic coordinates in degrees, minutes, and seconds that locate the approximate center of an area or feature. Geographic coordinates that locate the source or heading of linear features are also given, as is the name of the 1:24,000-scale Survey topographic map on which the feature is portrayed. If available, the elevation in feet is given.

The United States Geological Survey (USGS) Professional Paper 1200, "The National Gazetteer of the United States of America," is derived from the NGNDB and is available for some States; a concise National Gazetteer is also available.

The TMNDB is a digital inventory of topographic maps published by the USGS. The data base is in five files: TOPO 024, TOPO 062, TOPO 100, TOPO 125, and TOPO 250, representing the USGS map series. Each file lists the map name, geographic coordinates referring to the corner of the map closest to 0 degrees longitude, the first eight characters of the code developed by the USGS that uniquely identifies each map (except TOPO 100 and TOPO 250), the map scale, and the two-character Federal Information Processing Standards (FIPS) code identifying the State.

A report that lists all populated place records in GNIS for the United States is also a standard product. The entries are listed alphabetically by feature name.

#### **Product Delivery Format**

Published gazetteers; computer generated State and national listings in bound-paper and microfiche formats; and national, State, and topographic map names GNIS data on 9-track, 6,250-bpi magnetic tape in ASCII code.

## Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: 703/648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office listed on page 5-118.

United States Geological Survey (USGS)

# Geologic Quadrangle Maps (GQ Series)

### Data Product Keywords

Geology, subsurface, bedrock geology, surficial geology

### Summary

Multicolored geologic maps on topographic bases in 7½- or 15-minute quadrangle units; scales 1:24,000, 1:62,500, and 1:63,360; show bedrock, surficial, or engineering geology.

### **Extent of Program**

National

#### Available Product Coverage

Random; maps are available for approximately 1,700 quadrangles. These maps are catalogued in the following sources:

- 1. "Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," "Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."
- 2. GEOINDEX, a computerized data base produced by the United States Geological Survey (USGS) which contains bibliographic information for published geologic maps.
- 3. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available in Earth Science Information Center offices, at USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

Maps in the Geologic Quadrangle (GQ) Series are general-purpose geologic maps that portray geologic relations using color, patterns, and varying weights of linework. Each GQ-Series map covers a single 71/2- or 15-minute quadrangle. The publication scale is the same as that of the topographic base. All geologically significant units at the publication scale are shown, and geologic features are depicted uniformly throughout the area of the map. Faults that display mappable offset of stratigraphic or lithologic units or which display geomorphic evidence of recent movement, or are of some other special significance, are mapped and, where possible, are classified as to type (i.e., normal, reverse, thrust, strike-slip, etc.). The dip and direction of relative movement of faults are indicated where known. Attitudes of rocks and of significant structural, features are indicated wherever practical; structure sections are included for clarity and to show relations at depth. Some maps show structure contours.

GQ-Series maps portray both bedrock units and surficial units. Where possible, surficial units are subdivided on the basis of age, origin, morphology, and/or lithology. Maps that meet these criteria but do not portray the bedrock geology are termed surficial geologic maps. If the map portrays only the bedrock units it is termed a bedrock geologic map.

A GQ-Series map is accompanied by an explanation that describes the distinctive characteristics and principal variations in the map units. Map units are described in terms of lithologic character, physical properties, thickness (where possible), economic significance, geologic and/or absolute age and contact relations. Stratigraphic nomenclature is consistent with the Code of Stratigraphic Nomenclature. Some maps are also accompanied by a supplementary text.

#### **Product Delivery Format**

Paper

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

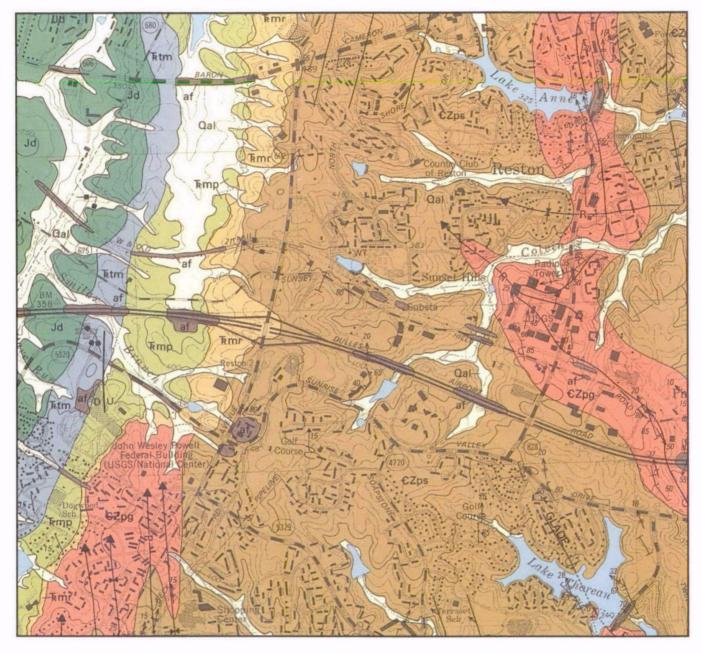
FAX: (703) 648-5548

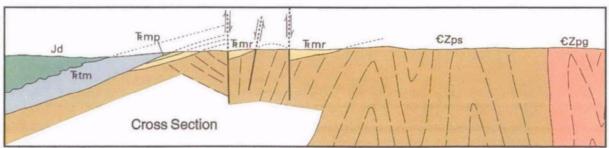
Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center listed on page 5 – 118.





Example of a geologic quadrangle map (GQ Series). Part of "Geologic Map of the Vienna Quadrangle, Fairfax County, VA, and Montgomery County, MD," 1989, GQ-1670, scale 1:24,000. Colors and letter symbols (Jd, Qal, etc.) identify rock and sediment units of different age, composition, and origin. Inferred subsurface relations are shown in the accompanying cross section.

United States Geological Survey (USGS)

# **Geophysical Investigations Maps (GP Series)**

#### Data Product Keywords

Geophysics, gravity, magnetics, seismic, aeromagnetic

#### Summary

Maps on topographic or planimetric bases produced at various scales. They show results of surveys using geophysical techniques, such as gravity and aeromagnetic surveys, which reflect subsurface structures that are of economic or geologic significance.

### **Extent of Program**

National

### Available Product Coverage

Random. Maps available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961,"
"Publications of the Geological Survey, 1962-1970,"
Publications of the U.S. Geological Survey, 1971
through 1981," and annual supplements for 1982 and
later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

These sources are available in Earth Science Information Center offices at United States Geological Survey (USGS) libraries and may be available at other earth science libraries, such as those of universities.

#### Information Content

Geophysical investigation (GP)-Series maps present the results of geophysical studies of areas that range in size from an entire country to small areas such as a single mining district only a few square miles in extent. The data consist mainly of aeromagnetic and/or gravity contours plotted on planimetric or topographic base maps at appropriate scales. A generalized geologic map may be included as part of the base. Interpretations of prominent or significant anomalies are described in the accompanying text. Also included in the GP Series are seismicity maps showing earthquake epicenters. Most commonly, GP-Series maps are printed in black and one other color, with the base screened black and the contours in red or green. Extremely detailed or complex maps are printed in multiple colors. The maps are accompanied by an explanation and, in many cases, by a supplemental text.

### **Product Delivery Format**

Paper

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

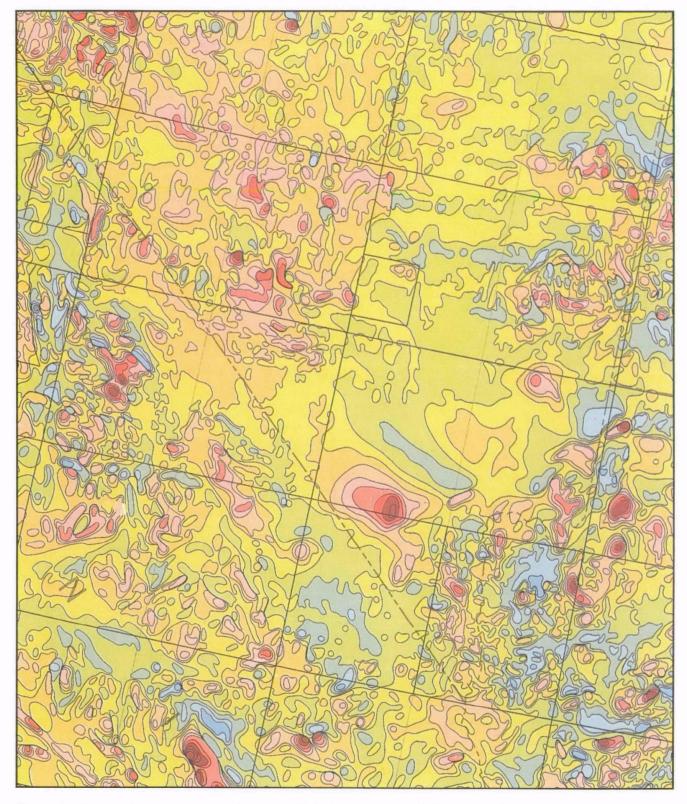
Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5 - 118.



Example of a geophysical investigations map (GP Series). Part of "A Composite Magnetic Anomaly Map of the Conterminous United States West of 96 Longitude," 1987, GP-977, scale 1:2,500,000. Colors identify areas of different magnetic field strength (red = high, blue = low). Area shown is southern Nevada and southeastern California.

United States Geological Survey (USGS)

# **Hydrologic Investigations Atlases (HA Series)**

### **Data Product Keywords**

Flood, geology, hydrography, hydrologic, hydrologic units, subsurface, water, waterways, hydrology

### **Summary**

Hydrologic investigations atlases (HA Series) are maps developed from basic data collection and special studies, and are used to present a wide variety of hydrologic and hydrogeologic facts concerning the Nation's water resources.

### **Extent of Program**

National

#### **Available Product Coverage**

Map coverage varies according to the kind of information presented.

#### Information Content

Atlases are either black-and-white or multicolored maps showing a wide range of water resources information, such as depth to groundwater, floods, irrigated acreage, producing aquifers, water availability, surface water discharge, chemical or mineral content of water, surface impoundments, and water temperature. Maps vary as to the number of sheets required to depict the hydrology presented, in sheet sizes, and in scale. Principal maps are most frequently presented at a scale of 1:24,000, however much smaller scales like 1:250,000 are used for larger areas of study.

More than 600 hydrologic atlases have been published. Most of these have been prepared in cooperation with State, county, and municipal agencies. Atlases usually cover natural hydrologic units, such as drainage basins. Relevant data, information, and analyses that support the principal atlas maps are often shown on smaller maps, graphs, and tables. Other supporting information is often included, notably photographs and references.

#### **Product Delivery Format**

Maps are available in paper media, folded and placed in an open-top paper jacket.

### Technical, Ordering, and Availability Information

Maps are sold by the United States Geological Survey (USGS); to order, contact:

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548 Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5 - 118.

United States Geological Survey (USGS)

## **Hydrologic Unit Maps**

#### **Data Product Keywords**

Boundaries, county boundaries, hydrologic, hydrologic units, international boundaries, State boundaries, water, waterways, hydrology

### **Summary**

Hydrologic unit maps of the United States, and each State, show the boundaries of river basins and numeric codes for each basin.

## **Extent of Program**

**National** 

### **Available Product Coverage**

Map coverage includes a map of the United States and maps for each State.

#### **Information Content**

These maps include a hydrologic unit map of the United States, and hydrologic unit maps for each State. They delineate the hydrographic boundaries of major river basins and show numeric codes assigned to each river basin. The maps were prepared in a cooperative project between the United States Geological Survey (USGS) and the U.S. Water Resources Council, which was initiated in 1972. Boundaries and numeric codes are depicted for 21 regions, 222 subregions, 352 accounting units, and 2,100 cataloging units. River basins are delineated that have drainage areas greater than 700 square miles. Also included on the maps are State and county codes that use the Federal Information Processing Standards (FIPS). State maps are published at a scale of 1:500,000; the U.S. map is at a scale of 1:2,500,000.

The report "Hydrologic Unit Maps," (USGS Water-Supply Paper 2294), describes the maps and contains the numeric codes for the river basins. In addition, the hydrologic boundaries were digitized, and the scale was reduced in the digitization to 1:1 million.

### **Product Delivery Format**

The maps are available on paper media. Information on the digital data bases can be found in "Data Bases and Systems of the U.S. Geological Survey," (USGS Circular 817, sequence numbers 145, 173, and 191).

### Technical, Ordering, and Availability Information

Maps may be ordered from:

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

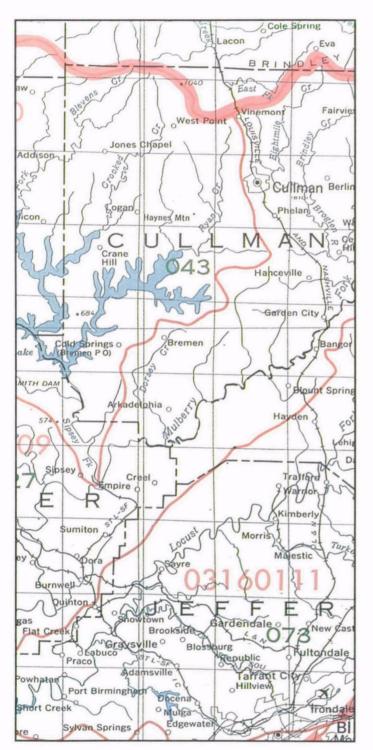
Telephone: (303) 236-7477

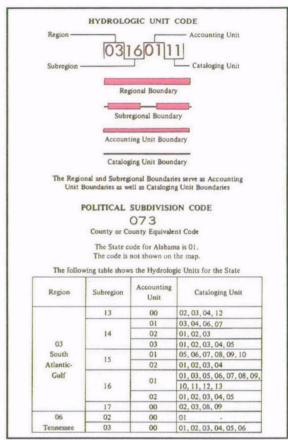
Or contact any Earth Science Information Center office listed on page 5-118.

Water-Supply Paper 2294 may be purchased, and Circular 817 obtained at no cost, from:

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7477





Example of part of a State Hydrologic Unit Map that shows culture in black, hydrography in blue, hydrologic unit boundaries and 8-digit hydrologic unit codes in red, and county codes in green.

United States Geological Survey (USGS)

## Land Use and Land Cover Digital Data

### **Data Product Keywords**

Administrative boundaries, airports, boundaries, census geography, coastal, county boundaries, county land ownership, Federal land ownership, hydrography, hydrologic, hydrologic units, ice, international boundaries, land cover, land ownership, land use, pipelines, ports, railroads, roads, snow, State boundaries, State land ownership, structures, surface and manmade features, transmission lines, vegetation, water, waterways, wetlands

### Summary

Land use and land cover (LULC) data are derived from thematic overlays registered to 1:250,000-scale base maps and a limited number of 1:100,000-scale base maps. Land use and land cover data provides information on urban or built-up land, agricultural land, rangeland, forest land, water, wetlands, barren land, tundra, and perennial snow or ice. Associated maps display information in five data categories: (1) political units, (2) hydrologic units, (3) census county subdivisions, (4) Federal land ownership, and (5) State land ownership.

### **Extent of Program**

**National** 

#### Available Product Coverage

LULC data is available for the conterminous United States and Hawaii. Refer to the LULC National Index sheet, available free of charge upon request. Digital data registered to the United States Geological Survey (USGS); 1- by 2-degree, 1:250,000-scale base maps; and a limited number of USGS 30- by 60-minute, 1:100,000scale base maps are available.

#### Information Content

The 1:100,000- and 1:250,000-scale LULC and associated maps used to produce the digital files are polygon, or areal, maps. Areas consisting of uniform structures and similar characteristics are compiled on the map as a series of lines forming polygons. Each polygon is identified with an attribute code, derived from a modified Anderson level II scheme, describing the area. Digitized map information is processed through the Geographic Information Retrieval and Analysis System to produce data in two formats: the vector polygon and the composite grid cell formats.

In the vector polygon format, all topological elements of the polygon map are represented as points, lines, and areas that (with special software) may be joined to form polygons replicating the graphic map.

In the composite grid cell format, the map is divided into 4-hectare (10-acre) cells. Each cell is completely identified with attribute codes for all LULC and associated map data.

Digital LULC and associated maps are stored in the UTM coordinate system.

### **Product Delivery Format**

9-track magnetic tapes.

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Or contact any Earth Science Information Center office

listed on page 5 - 118.

United States Geological Survey (USGS)

# **Mineral Investigations Resources Maps (MR Series)**

### **Data Product Keywords**

Geology, minerals, subsurface

### **Summary**

Mineral distribution and classification maps; scales from 1:250,000 to 1:5 million. Maps show geographic distribution and grade of mineral-resource commodities.

### **Extent of Program**

National

#### Available Product Coverage

Random. Maps available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961,"
"Publications of the Geological Survey, 1962-1970,"
"Publications of the U.S. Geological Survey, 1971
through 1981," and annual supplements for 1982 and
later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

These sources are available at Earth Science Information Center offices, in United States Geological Survey (USGS) libraries, and may be available at other earth science libraries, such as those of universities.

#### **Information Content**

MR-Series maps contain information on the location of mineral occurrences, mineral resources, mines and prospects, commodities (other than organic fuels) and their distribution, and target areas with resource potential. The maps typically are of small scale (1:250,000 or smaller) and show little geology. Many maps cover very large areas such as Alaska or the conterminous United States.

### **Product Delivery Format**

Paper

## Technical, Ordering, and Availability Information

Earth Science Information Center

U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution

Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5 – 118.

United States Geological Survey (USGS)

## Miscellaneous Field Studies Maps (MF Series)

### **Data Product Keywords**

Geology, geophysics, gravity, magnetics, minerals, seismic, subsurface

### **Summary**

Mostly black-and-white maps on topographic or planimetric bases; quadrangle or irregular areas; various scales. Pre-1971 maps show bedrock geology in relation to specific mining or mineral-deposit problems; later maps are preliminary black-and-white maps on various subjects such as environmental studies, wilderness mineral investigations, and regional geology.

### **Extent of Program**

National and international.

#### **Available Product Coverage**

Random. Maps available are catalogued in the following sources:

- "Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," "Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."
- GEOINDEX, a computerized data base produced by the United States Geological Survey which contains bibliographic information for published geologic maps.
- 3. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

The MF Series contains a varied assortment of topical material that covers nearly all aspects of USGS investigations and research, including bedrock and surficial geology, offshore geology, mineral resource assessments, and geophysical and geochemical surveys. The purpose of the MF Series is to provide a means for rapidly publishing either the preliminary results of

ongoing studies or the final results of studies that lack the scope necessary to qualify them for treatment as Geological Quadrangle Series maps (GQ Series) or Miscellaneous Investigations Series maps (I Series). The MF Series commonly serves as a means of publishing maps and other data in response to the mandated deadlines of specialized major programs such as the Forest Service Wilderness Studies and the Alaska and Conterminous United States Mineral Assessment Program. MF-Series maps are produced from cameraready, hand-drafted or computer-drafted copy provided by the author, and almost all of them are printed in black-and-white.

### **Product Delivery Format**

Paper

### Technical, Ordering, and Availability Information

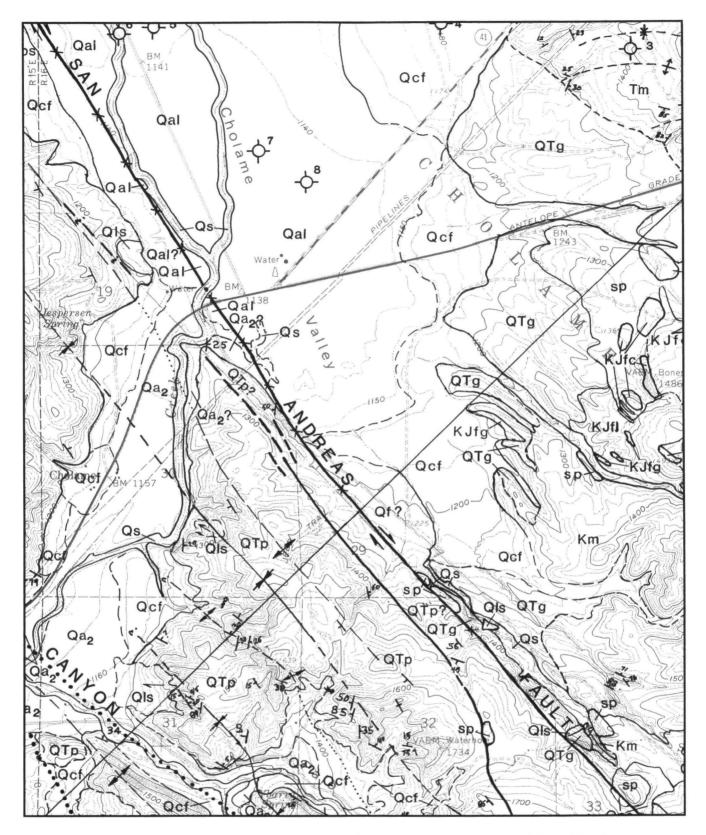
Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225 Telephone: (303) 236-7477

Or contact any Earth Science Information Center office



Example of a miscellaneous field investigations map (MF Series). Part of "Geologic Map of the Cholame Quadrangle, San Luis Obispo County, California," 1991, MF-2170, scale 1:24,000. Letter symbols (Qls, KJfg, etc.) identify rock and sediment units of different age, composition, and origin. Heavy solid and dotted lines represent faults.

United States Geological Survey (USGS)

# Miscellaneous Investigations Series Maps (I Series)

## **Data Product Keywords**

Geology, geophysics, gravity, magnetics, marine, minerals, seismic, subsurface, bedrock geology, marine geology, surficial geology

## **Summary**

Maps (mostly multicolored) on planimetric or topographic bases showing regular and irregular areas; various scales. This series portrays a wide variety of format and subject matter including bedrock, surficial, and marine geology, engineering geology, mineral and energy resources, and geophysics. The series also includes maps of the Earth's Moon and other planetary bodies.

# **Extent of Program**

National, planetary.

## **Available Product Coverage**

Random. Maps available are catalogued in the following sources:

- "Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," "Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."
- GEOINDEX, a computerized data base produced by the United States Geological Survey (USGS), which contains bibliographic information for published geologic maps.
- 3. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

Maps in the I Series are similar in scientific quality and cartographic standards to maps in the GQ Series, but the I Series accommodates a greater range of map types than the GQ Series for several reasons:

 The I-Series map need not cover only a single 7½- or 15-minute quadrangle. The area covered

- may be greater or less than a whole quadrangle, or may be a mosaic of several quadrangles, at any scale. Many I-Series maps are published at a scale of 1:100,000 or 1:250,000 using standard 30-by 60-minute or 1- by 2-degree topographic base maps, respectively.
- The publication scale may differ from that of the published topographic base, or the base used may incorporate obsolete or outdated topographic quadrangles if the geologic map has been prepared to fit it.
- The map need not conform to all the standards set for general-purpose geologic maps. Thus, many I-Series maps are special-purpose maps showing selected types of features or information such as faults, landslides, or mineral resource potential.

Consequently, the I Series includes both black-and-white and multicolored products and such diverse topical material as bedrock and surficial geology, bathymetry, vegetation, landforms, hydrogeology, land classification, map projections, quality of water, and maps of the Moon, planets, and other satellites. Many I-Series maps are general-purpose geologic maps similar in content to Geological Quadrangle (GQ)-Series maps but cover areas other than a 7½- or 15-minute quadrangle and/or are printed on a topographic base map that has been either reduced or enlarged from the published scale. Many I-Series maps published before 1961 are photogeologic maps that were compiled from aerial photographs with little or no field checking.

I-Series maps are accompanied by a description of map units that describes the distinctive characteristics and principal variations in the map units, and, in many cases, by a supplemental text.

#### **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

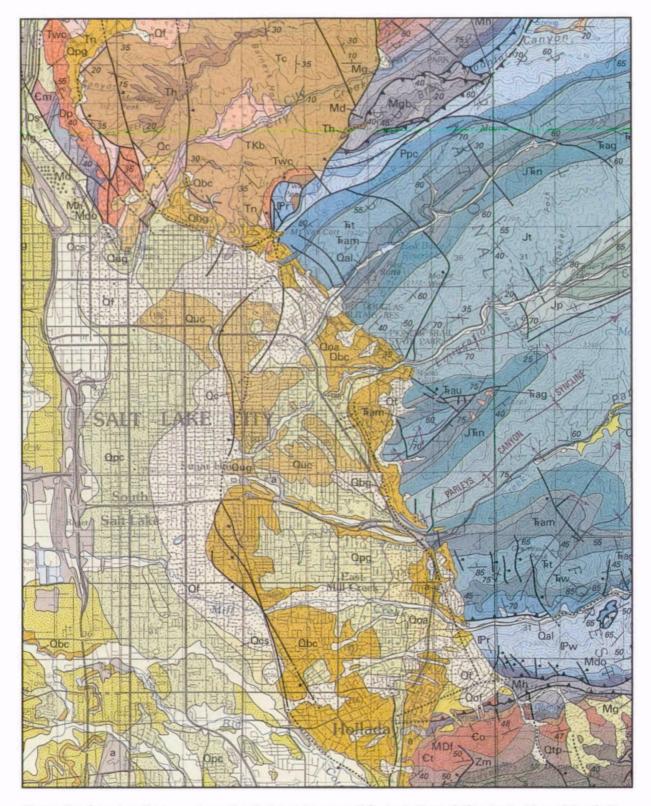
Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477



Example of a miscellaneous investigations series map (I Series). Part of "Geologic Map of the Salt Lake City 30' x 60' Quadrangle, North-Central Utah, and Uinta County, Wyoming," 1990, I-1944, scale 1:100,000. Colors and letter symbols (Tc, Ppc, etc.) identify rock and sediment units of different age, composition, and origin. Heavy black lines represent faults.

United States Geological Survey (USGS)

# National Earthquake Information Center Products

## **Data Product Keywords**

Geophysics, seismic, earthquakes

# **Summary**

The United States Geological Survey's (USGS) National Earthquake Information Center (NEIC) collects and disseminates information on earthquakes within the United States and worldwide. NEIC products include the following: Earthquake Digital Data CD-ROM; Global Hypocenter Data Base CD-ROM; Hypocenter Associated Data CD-ROM; maps and posters; Preliminary Determination of Epicenters (PDE) Monthly Listing; Earthquake Data Report (published monthly); and "U.S. Earthquakes" (published annually).

# **Extent of Program**

Worldwide

## **Available Product Coverage**

Worldwide

#### Information Content

Earthquake Digital Data CD-ROM. Each volume of Earthquake Digital Data contains digital waveform data from high-quality seismic stations located throughout the world. Volumes 1 through 8 span the time period 1980 through 1986 and contain data for earthquakes of magnitude 5.5 or greater. Beginning with 1987 data (Volume 9), the magnitude threshold is lowered to 4.9. The retrieval software, SONIC, is provided on floppy disks written for IBM-compatible microcomputers.

Global Hypocenter Data Base CD-ROM. This data base contains parameters for more than 438,000 earth tremors. Seven worldwide and 12 regional earthquake catalogs are included on this CD-ROM. The combined catalogs span a time period from 2,100 BC through 1988. Each earthquake entry contains detailed information (if available) on date, origin time, location, depth, magnitude estimates, intensity, cultural effects (damage/casualties), and other related information. The retrieval software, EPIC, is written for IBM-compatible microcomputers and is provided on a floppy diskette.

Hypocenter Associated Data CD-ROM. This CD-ROM contains two data bases: the International Seis-

mological Centre (ISC) Bulletin from January 1964 through August 1987, and the Source Parameters Data Base covering the period January 1977 through March 1989. The ISC Bulletin contains data on 396,661 natural or artificial seismic events including hypocenter and magnitude computations, damage and casualty reports, tsunami heights, and intensity values. The Source Parameters Data Base contains various focal mechanism, seismic moment, and radiated energy solutions for 5671 natural seismic events. The retrieval software, FAISE, is written for IBM-compatible personal computers and is provided on floppy disk.

Maps and posters. Full-color maps and posters available include the following: Seismicity of Alaska, 1786-1987 (scale 1:2,500,000); Seismicity of California, 1808-1987 (scale 1:1 million); Seismicity of Hawaii, 1962-1985 (scale 1:750,000); Earthquakes in Utah, 1884-1989 (scale 1:500,000); World Seismicity, 1979-1988; and Circum-Pacific Seismic Potential, 1989-1999. Additional State seismicity maps have been published primarily as Miscellaneous Field Studies Maps (MF Series).

Preliminary Determination of Epicenters (PDE)
Monthly Listing. This is a monthly publication that
lists parameters (including date, time, location, and
magnitude) for all earthquakes located by the NEIC for
a given month.

Earthquake Data Report (EDR). This is a bulletin of all seismic phase and amplitude data which were associated with events published in the PDE Monthly Listing. The data are grouped by event, with events listed by origin time in date/time order through the month.

U.S. Earthquakes. This publication describes all earthquakes that were reported as felt in the United States and nearby territories for a given year and lists locations for earthquakes with magnitudes of 2.5 or greater in the 50 States. This product is published annually as a U.S. Geological Survey Bulletin.

#### **Product Delivery Format**

CD-ROM products are noted above. Other products are paper publications. Beginning with the January 1989 edition, EDR is also available on floppy disk.

# Technical, Ordering, and Availability Information

For CD-ROM products, contact:

National Earthquake Information Center P.O. Box 25046

Denver Federal Center, MS 967

Denver, CO 80225

Telephone: (303) 273-8500

For maps and posters, listings, reports and bulletins, contact:

**Earth Science Information Center** 

U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution

Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7476 U.S. Geological Survey

Books and Open-File Reports Federal Center, Box 25425

Denver, CO 80225

Telephone: (303) 236-7476

United States Geological Survey (USGS)

# **National Uranium Resource Evaluation (NURE) Data**

## **Data Product Keywords**

Geology, geophysics, magnetics, minerals, subsurface, geochemistry, uranium

### **Summary**

Maps and reports containing geologic, geophysical, and geochemical data obtained under the Department of Energy's National Uranium Resource (NURE) Program from 1974 to 1980. The data were transferred to the United States Geological Survey (USGS) in 1984. Types of NURE data available from USGS are: Geologic maps, aerial radiometric data, aeromagnetic data, data from hydrological and stream-sediment sample analyses, geochemical data from rock sample analyses, radiometric data from borehole logging, and evaluation data for uranium resource estimates.

# **Extent of Program**

Conterminous United States and Alaska.

## **Available Product Coverage**

Data are available for most areas of the conterminous United States and Alaska. Data and products available are shown in catalogs (see Technical, Ordering, and Availability Information).

#### Information Content

NURE data are organized and retrievable by reference to a rectangular grid system that corresponds to the National Topographic Map Series 1:250,000-scale quadrangle system used by the USGS. In this system, a total of 621 quadrangles cover the conterminous United States and Alaska: 468 for the conterminous States and 153 for Alaska. However, not all categories of NURE data are available for all quadrangles.

Seven major types of NURE data are available from the USGS. These are:

Geologic maps. The NURE program produced 421 geologic quadrangle maps at a scale of 1:250,000, of which 288 are available.

Aerial radiometric data. These data, which indicate the presence of potassium, uranium, and thorium, are available for 540 quadrangles.

Aeromagnetic data. These data, acquired using a magnetometer with a sensitivity of ¼ gamma, are available for the same 540 quadrangles as the aerial radiometric data.

Data from hydrogeochemical and stream-sediment sample analyses. These data are from more than 300,000 samples of ground, lake, and stream water and more than 700,000 samples of lake and stream sediments that were analyzed for chemical composition by a variety of techniques. The data consist of chemical analyses for as many as 47 elements of 1,500 to 2,000 samples per quadrangle. Data are available for 310 quadrangles in the conterminous States and 104 quadrangles in Alaska.

Geochemical data from rock sample analyses. These data consist of more than 250,000 whole-rock and trace- and minor-element analyses, gamma-spectroscopy analyses, and thin-section analyses performed on nearly 50,000 rock samples from 158 quadrangles.

Radiometric data from borehole logging. These data include resistivity, natural-gamma, spectral-gamma (KUT), neutron-neutron, caliper, magnetic-susceptibility, temperature, and vertical-deviation log data obtained from more than 435,000 feet of log from about 700 drill holes in the conterminous States. In addition, non-proprietary log data for 848 industry boreholes totalling another 2.3 million feet are included to produce a data base of more than 1,550 holes.

Evaluation data for uranium resource estimates. These data are presented for 162 quadrangles.

#### **Product Delivery Format**

NURE data are available in three formats: paper copies, microfiche, and computer-readable magnetic tapes. Stream sediment analyses for the conterminous Western United States are available on CD-ROM (see Digital Data Series).

# **Technical, Ordering, and Availability Information**

For paper or microfiche open-file reports, and for a microfiche catalog of available reports, contact:

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476

Or contact any Earth Science Information Center office listed on page 5 – 118.

For digitized data on computer-readable magnetic tape, and for a microfiche or digitized catalog of the data files available, contact:

Sioux Falls ESIC U.S. Geological Survey EROS Data Center Sioux Falls, SD 57198 Telephone: (605) 594-6151 FAX: (605) 594-6589

The catalogs of reports and data are available at USGS libraries and may be available at other earth science libraries, such as those of universities.

United States Geological Survey (USGS)

# **National Water Conditions (Report Series)**

## **Data Product Keywords**

Hydrography, hydrologic, water, waterways, weather, lakes, wells

#### Summary

Reports provide monthly summary information on hydrologic conditions.

### **Extent of Program**

United States and southern Canada.

# **Available Product Coverage**

Map coverage in the reports is national, usually by river basin.

### **Information Content**

This monthly summary of water conditions in the United States and southern Canada contains maps, graphs, tables, and short text descriptions of such topics as streamflow, precipitation, conditions in lakes, reservoirs, and wells, and trends over time.

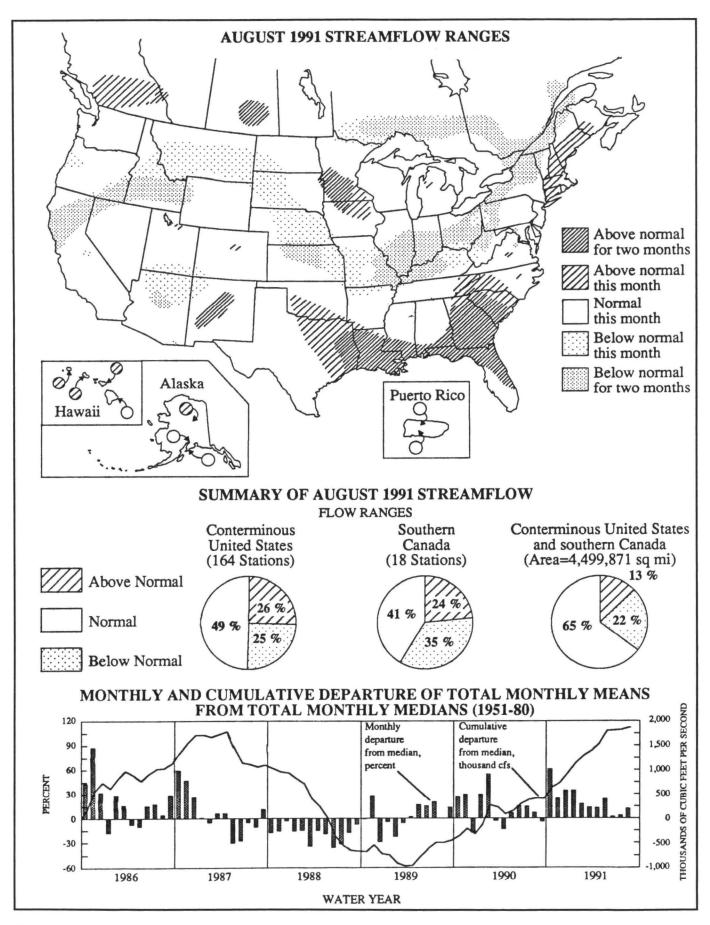
#### **Product Delivery Format**

Monthly reports are brief, paper-bound documents with black-and-white illustrations.

### **Technical, Ordering, and Availability Information**

Single copies of the reports and subscriptions are available at no cost from the United States Geological Survey (USGS). Contact:

U.S. Geological Survey Hydrologic Information Unit 419 National Center Reston, VA 22092 Telephone: (703) 648-6817



National water conditions, August 1991.

United States Geological Survey (USGS)

# **National Water Summary (Report Series)**

### **Data Product Keywords**

Flood, hydrography, hydrologic, socioeconomic, temperature, water, waterways, weather, wetlands, hydrology

### **Summary**

Reports provide summary hydrologic information nationally, and for each State. Each report concerns a different aspect of hydrology.

## **Extent of Program**

National

### **Available Product Coverage**

National and State.

#### Information Content

This biennial report series contains summarized information about the availability, quantity, quality, and use of water resources at the national level, but with State summaries as well. Each report contains text, maps, and graphs that describe some aspect of water resources. Maps are generally small-scale, intended to display the water resources phenomena treated in that report.

Subjects covered in currently-available reports include: hydrologic events, floods and droughts, water supply and use, groundwater quality, groundwater, issues, and surface water.

# **Product Delivery Format**

Reports are available as high-quality paper-bound documents with color illustrations.

## Technical, Ordering, and Availability Information

Reports are available for sale from:

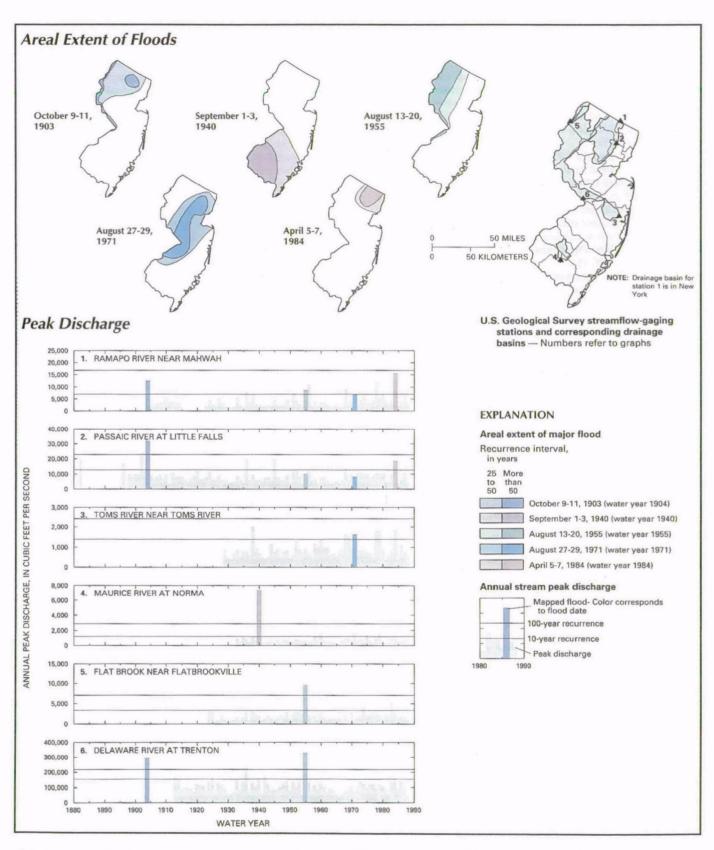
Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476



Areal extent of major floods with a recurrence interval of 25 years or more in New Jersey, and annual peak discharge for selected sites, water years from 1882 to 1988.

United States Geological Survey (USGS)

# **National Water-Use Information (Report Series)**

### **Data Product Keywords**

Hydrography, hydrologic, hydrologic units, socioeconomic, water, water supply, water use

### Summary

Reports provide periodic information on water use at the State and national levels.

# **Extent of Program**

**National** 

### **Available Product Coverage**

Map coverage in the reports is national by State and river basin.

#### Information Content

This report is issued every 5 years to provide for the comprehensive and systematic documentation of data on water use throughout the United States. The report contains maps, tables, and short text that describes water use in 12 categories, and shows geographical distribution by State and water resources region, as well as trends over time.

## **Product Delivery Format**

Reports are available as paper-bound documents, with black-and-white illustrations.

#### Technical, Ordering, and Availability Information

Reports are available at no cost from the United States Geological Survey. Contact:

Earth Science Information Center U.S. Geological Survey

507 National Center

Reston, VA 22092

Telephone: (703) 648-5920

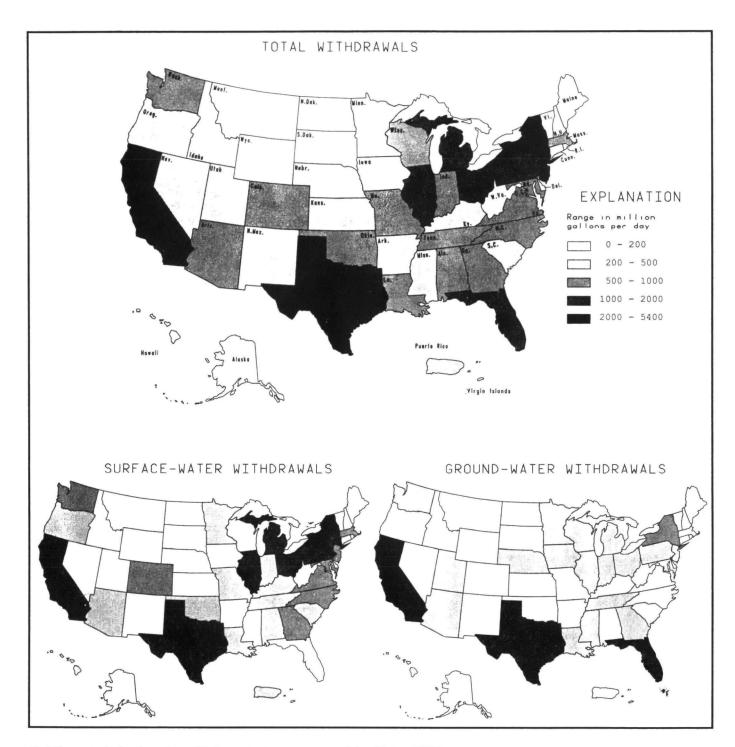
FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425

Denver, CO 80225

Telephone: (303) 236-7476



Public-supply freshwater withdrawals, by source and by State, 1985.

United States Geological Survey (USGS)

# Oil and Gas Investigations Charts (OC Series)

# **Data Product Keywords**

Geology, minerals, subsurface, gas, oil, petroleum

#### Summary

Charts show stratigraphic information for certain oil and gas fields and other areas having hydrocarbon potential.

### Extent of Program

Petroleum resource areas nationwide.

# Available Product Coverage

Random. Products available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

These sources are available at Earth Science Information Center offices, in United States Geological Survey (USGS) libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

OC-Series publications present geologic, geochemical, and geophysical information about areas that contain known or potential petroleum resources. The information is not typically in map form but consists of such items as well logs, correlation diagrams, graphs, and tables that describe the physical characteristics of rock units in petroleum resource areas. Data types include the following: general physical attributes such as stratigraphic thickness, lithology, grain size, mineralogy, permeability, and porosity; specialized attributes such as organic carbon content, kerogen content, and vitrinite reflectance; well-log data such as spontaneous potential and resistivity; and borehole gravity measurements. Some charts present seismic data. Some charts are accompanied by an explanatory text.

# **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution

Federal Center, Box 25286

Denver, CO 80225 Telephone: (303) 236-7477

United States Geological Survey (USGS)

# Oil and Gas Investigations Maps (OM Series)

## **Data Product Keywords**

Geology, minerals, subsurface, gas, oil, petroleum

# **Summary**

Geologic maps (multicolored or black-and-white) on topographic or planimetric bases; quadrangle or irregular areas. These maps, at various scales, show geology, stratigraphy, and structural relations in certain hydrocarbon resource areas.

## **Extent of Program**

Petroleum resource areas nationwide.

### **Available Product Coverage**

Random. Products available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961,"
"Publications of the Geological Survey, 1962-1970,"
Publications of the U.S. Geological Survey, 1971
through 1981," and annual supplements for 1982 and
later years. New maps are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

These sources are available at Earth Science Information Center offices, in United States Geological Survey (USGS) libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

OM-Series maps present the results of geologic studies that apply particularly to areas of known or potential petroleum resources. Typical products include geologic maps and cross sections, columnar sections, structure contours, correlation diagrams, and data on wells drilled for oil and gas in the mapped area. Most of the maps in this series were published before 1965.

# **Product Delivery Format**

Paper

## Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548 Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

United States Geological Survey (USGS)

# **Open-File Reports**

### **Data Product Keywords**

Bathymetry, coastal, geology, geophysics, gravity, hydrologic, magnetics, marine, minerals, seismic, soils, subsurface, water, geochemistry

## **Summary**

Open-file reports include manuscript reports, maps, and other material that are made available for public consultation and use. Many open-file reports include, or consist of, geologic, geophysical, or geochemical maps.

# **Extent of Program**

National and international.

## **Available Product Coverage**

Random. Products available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961," "Publications of the Geological Survey, 1962-1970," "Publications of the U.S. Geological Survey, 1971 through 1981," and annual supplements for 1982 and later years. New open-file reports are listed in the monthly catalog, "New Publications of the U.S. Geological Survey."

In addition, geologic maps that are included in or comprise open-file reports are catalogued in the following sources:

- GEOINDEX, a computerized data base produced by the United States Geological Survey (USGS) which contains bibliographic information for published geologic maps.
- 2. USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

The Open-File Series is designed for immediate release of basic data, preliminary reports, and a wide range of documents that may or may not meet criteria for publication in other USGS report series or in outside journals. The subject matter of open-file reports spans almost the entire range of earth science investigations conducted by the USGS, including bedrock and surfi-

cial geology, stratigraphy, paleontology, geophysics, geochemistry, mineral and energy resources, geologic hazards, and water resources. Geologic maps in the Open-File Series are either preliminary versions of maps intended for later publication, or final products released for immediate use by the public. Although open-file reports and maps have undergone technical review for scientific content, most have not been reviewed for conformity with USGS editorial standards or stratigraphic nomenclature.

# **Product Delivery Format**

Most open-file reports are delivered as black-andwhite paper or microfiche copies produced on demand from an original held by the Books and Open-File Reports section of the USGS. Some open-file reports are digital products in the form of diskettes or CD-ROMs.

## Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476

United States Geological Survey (USGS)

# **Orthophotoquads**

## **Data Product Keywords**

Aerial photography, geographic names, orthophotoquads, remotely sensed, digital orthophotoquads

## **Summary**

Orthophotoquads are distortion-free aerial photographic images that are formatted as standard 7.5-minute quadrangles (15-minute in Alaska) or as quarter-quadrangles at a scale of 1:12,000.

# **Extent of Program**

National (pilot projects for 1:12,000 scale).

## **Available Product Coverage**

More than two-thirds of the conterminous United States and all of Hawaii are covered by 7.5-minute orthophotoquads; more than one-third of Alaska is presently covered by 15-minute orthophotoquads. Quarter-quads at 1:12,000 scale are available in pilot project areas. Refer to the National Orthophotoquad Index for coverage.

### Information Content

Orthophotoquads contain no symbolized features, and a minimal number of names. Because they show a wealth of planimetric details and land use and land cover information that is not symbolized on conventional line maps, they make excellent supplements to the published maps. Pilot projects have demonstrated that digital scanning of aerial photos and rectification of scanned imagery to horizontal and vertical ground control can produce orthophoto digital data bases from which orthophotoquads at 1:12,000 and 1:24,000 were generated.

#### **Product Delivery Format**

Black-and-white diazo or photographic prints, negatives or positives. Demonstration of digital orthophotoquads available on either 1.2 MB 5½-inch or 1.44 MB 3½-inch diskettes.

## Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

United States Geological Survey (USGS)

# **Other Format Maps**

### **Data Product Keywords**

Administrative boundaries, airports, bathymetry, boundaries, coastal, contours, county boundaries, county land ownership, elevation, Federal land ownership, geographic names, hydrography, hydrologic, ice, international boundaries, land ownership, pipelines, ports, railroads, recreation, roads, snow, State boundaries, State land ownership, structures, subsurface, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation, water, waterways, wetlands, United States, world

#### **Summary**

The United States Geological Survey (USGS) publishes maps in non-quadrangle format. These maps include: a county map series, State base map series, U.S. base maps, a National Park series, and outline maps of the World. Scales range from 1:960 to 1:80 million. Data categories are increasingly generalized as the map scales become smaller. These maps provide data on boundaries, hydrography, Public Land Survey System, transportation, manmade structures, hypsography, vegetative and non-vegetative surface cover (e.g., woods, orchards, lava, sand), geographic reference systems, geographic names, bathymetric contours (in coastal areas). No hypsography data is included in planimetric editions.

### **Extent of Program**

Global

### **Available Product Coverage**

World, United States, States, counties, National Parks.

For specific product coverages, refer to national indexes for National Parks and county maps; State indexes/catalogues for county, State, and U.S. maps; and brochures for World maps.

#### Information Content

The county map series is at 1:50,000 scale or 1:100,000 scale in planimetric or topographic editions which may consist of one or more sheets depending on the size of the county.

The State base map series, most at a scale of 1:500,000 and usually published in three separate editions: 1) a base map showing drainage, railroads and populated places; 2) a highway and contour edition with these features superimposed on the base map; and 3) a shaded relief edition with shading superimposed on the highway and contour edition.

U.S. base maps are published at scales ranging from 1:2,500,000 through 1:16,500,000 in planimetric and topographic versions. Some portray historical information such as growth of the United States and thematic information such as Federal aid highways.

The National Park series of topographic maps is published at scales ranging from 1:960 to 1:250,000, many available in shaded relief editions.

Outline maps of the World are available at scales of 1:40 million and 1:80 million.

### **Product Delivery Format**

Paper

### Technical, Ordering and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS U.S. Geological Survey

Map Distribution Federal Center, Box 25286 Denver CO 80225

Telephone: (303) 236-7477

United States Geological Survey (USGS)

# **Other Map Products**

#### **Data Product Keywords**

Administrative boundaries, aerial photography, airports, bathymetry, boundaries, coastal, contours, county boundaries, county land ownership, elevation, Federal land ownership, geodetic, geographic names, geology, horizontal control, hydrography, hydrologic, ice, international boundaries, land ownership, local government boundaries, orthophotoquads, pipelines, ports, railroads, recreation, roads, remotely sensed, satellite, snow, State boundaries, state land ownership, structures, subsurface, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation, vertical control, water, waterways, wetlands, Antarctica, color image map, DMA, map separates, satellite image map

## Summary

Other map products, published to meet the special needs of Federal agencies, include: DMA (Defense Mapping Agency) 15-minute topographic maps, Antarctic map series, shaded relief topographic maps, satellite image maps, and U.S. border maps. Map feature and color separates of United States Geological Survey (USGS) map series are also available for persons who want to custom-design map content for their own use.

#### Extent of Program

15-minute topographic maps cover selected areas in the United States.

The Antarctic map series covers Antarctic areas.

U.S. border maps cover the entire U.S. – Mexico border and the easterly end of the U.S. – Canada border.

#### Available Product Coverage

Product coverage varies. A national index is available for DMA maps; a continental index for Antarctic maps; an index of U.S. – Canada Border Maps is shown in the State Indexes/Catalogs; and a U.S. – Mexico Border Map Index has been published.

#### Information Content

Standard format and satellite image maps provide planimetry, topography, and reconnaissance geology

information. Color-image maps show international boundaries. Standard topographic map data is presented on the DMA 1:50,000-scale maps.

The DMA 15-minute topographic maps are published at 1:50,000 scale.

The Antarctic map series includes principally topographic and geologic reconnaissance maps at 1:250,000 scale, and some topographic and satellite image maps at 1:100,000 scale. Shaded relief topographic reconnaissance, sketch-map, and satellite image series are also produced at 1:500,000 scale.

Color image U.S. border maps are produced at 1:25,000 scale.

### **Product Delivery Format**

Paper.

Also, a series of map feature and color separates of USGS maps are available in film negative or positive formats for those who want to custom-design map content for their own use.

### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286

Denver CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office

listed on page 5 – 118.

United States Geological Survey (USGS)

# Photographic Products from Airborne and Satellite Imagery

### **Data Product Keywords**

Aerial photography, radar, remotely sensed, satellite, AVHRR, imagery, LANDSAT, photographic, SLAR, SPOT

#### Summary

Color and black-and-white photographic products generated from imagery digital data by the Earth Resources Observation System (EROS) Data Center (EDC).

## **Extent of Program**

Advanced Very High Resolution Radiometer (AVHRR) Land Satellite (LANDSAT), and Système Probatoire d'Observation de la Terre (SPOT) – global, national.

Side-Looking Airborne Radar (SLAR) – conterminous United States.

## Available Product Coverage

SLAR covers about 40 percent of conterminous United States plus about 15 percent of Alaska; it is an ongoing program.

LANDSAT, SPOT and AVHRR provide multiple coverage of the United States and World. A set of World Reference System Path-Row maps is available for LANDSAT.

#### **Information Content**

**SLAR** is available as strip images at either 1:250,000 scale or 1:400,000 scale, mosaics at 1:50,000 to 1:250,000 scale, and mosaic indexes.

**AVHRR** is available as regional color composites (e.g., all of the United States, physiographic regions of the United States).

LANDSAT and SPOT images or enlargements are produced to the specifications of Federal agencies ordering imagery through EDC.

## **Product Delivery Format**

**SLAR** data consist of black-and-white photographic prints, film positives or negatives of strip images, mosaics and mosaic indexes.

**AVHRR** data are available as color prints or transparencies.

LANDSAT and SPOT data are available as color prints, transparencies, enlargements; black-and-white prints, enlargements.

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

Sioux Falls ESIC U.S. Geological Survey EROS Data Center Sioux Falls, SD 57189 Telephone: (605) 594-6151

FAX: (605) 594-6151

United States Geological Survey (USGS)

# **Professional Papers**

### **Data Product Keywords**

Coastal, geology, geophysics, gravity, hydrologic, land cover, land use, magnetics, marine, minerals, seismic, soils, subsurface, surface and manmade features, water, cartography, geochemistry, paleontology, stratigraphy

## **Summary**

Comprehensive reports on the results of resource studies and of geologic, hydrologic, and topographic investigations. Also include collections of related papers addressing different aspects of a single scientific topic. Many contain geologic or geophysical maps.

## **Extent of Program**

National and international.

## **Available Product Coverage**

Random. Products available are catalogued in the following sources:

"Publications of the Geological Survey, 1879-1961,"
"Publications of the Geological Survey, 1962-1970,"
"Publications of the U.S. Geological Survey, 1971
through 1981," and annual supplements for 1982 and
later years. New Professional Papers are listed in the
monthly catalog, "New Publications of the U.S. Geological Survey."

In addition, geologic maps published as plates or figures in Professional Papers are catalogued in the following sources:

- GEOINDEX, a computerized data base produced by the United States Geologic Survey (USGS) which contains bibliographic information for published geologic maps.
- USGS Geologic Map Indexes (GMIs) for the 50 States and several territories.

These sources are available at Earth Science Information Center offices, in USGS libraries, and may be available at other earth science libraries, such as those of universities.

#### Information Content

The Professional Paper Series includes comprehensive reports of wide and lasting interest and scientific importance. The reports are characterized by thoroughness of study and breadth of technical scope and/or geographic coverage. Included are the results of resource studies and of major geologic, hydrologic, and topographic investigations. The series also includes collections of related papers addressing different aspects of a single scientific topic. Many professional papers that report the results of regional geologic investigations include one or more geologic maps. In addition, professional papers address such topics as stratigraphy, paleontology, structural geology, engineering geology, soils, geologic hazards, petrology, hydrogeologic features such as aquifers, geochemistry, geophysics, and mineral and energy resources.

# **Product Delivery Format**

Book publications.

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476

United States Geological Survey (USGS)

# **Quadrangle Format Maps**

### **Data Product Keywords**

Administrative boundaries, airports, bathymetry, boundaries, coastal, contours, county boundaries, county land ownership, elevation, Federal land ownership, geodetic, geographic names, horizontal control, hydrography, hydrologic, ice, international boundaries, land ownership, local government boundaries, pipelines, ports, railroads, recreation, roads, snow, State boundaries, State land ownership, structures, subsurface, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation, vertical control, water, waterways, wetlands, base maps

#### Summary

Quadrangle format maps are a multicolored topographic base map series of the United States Geological Survey (USGS). Most USGS topographic maps use contours to show the shape and elevation of the terrain. Elevations are usually shown in feet, but on some maps they are in meters. Contour intervals vary, depending mainly on the scale of the map and the type of terrain. The maps show and name prominent natural and cultural (manmade) features. Those at scales of 1:24,000 show an area in detail. Such detail is useful for engineering, local area planning. Less detail is shown at scales of 1:63,360 and 1:100,000. They cover large areas and are used in land management and planning. Maps at a scale of 1:250,000 cover very large areas on each sheet and are used in regional planning.

# **Extent of Program**

7.5-minute map series: Conterminous United States, Hawaii, and territories at 1:24,000 or 1:25,000; Puerto Rico at 1:20,000.

15-minute map series: Alaska at 1:63,360.

**30- by 60-minute map series:** Conterminous United States and Hawaii at 1:100,000.

1- by 2-degree map series: United States at 1:250,000.

# **Available Product Coverage**

Entire United States for 1:250,000-scale maps; all of Alaska except offshore islands at 1:63,360; all of conterminous United States, Hawaii, Puerto Rico, and territories in 7½-minute format; and almost 100 percent of conterminous United States at 1:100,000 in topographic

and/or planimetric versions. Indexes are available for all series.

#### Information Content

Information content on all of these map series is essentially the same, though features may be generalized or omitted as the scale of the map decreases (the greatest map detail being at 1:24,000 scale and most generalized map detail at 1:250,000 scale). Large to intermediate-scale maps (1:20,000-1:100,000) meet national map accuracy standards. Data portrayed include boundaries, hydrography, Public Land Survey System, transportation, manmade structures, hypsography, vegetative and non-vegetative surface cover (e.g., woods, orchards, lava, sand), geographic reference systems, geographic names, bathymetric contours (in coastal areas). The maps use National Geodetic Survey horizontal and vertical datums and State and UTM coordinate reference systems.

# **Product Delivery Format**

Paper

## Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: (703) 648-5548

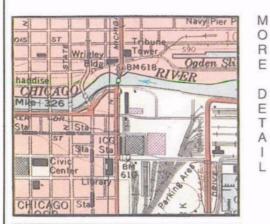
Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

Or contact any Earth Science Information Center office listed on page 5 – 118.

Following page: A wide variety of maps are available through the National Mapping Division. Scales of the maps differ depending on the amount of detail needed.



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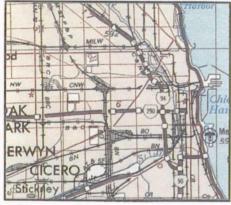
S

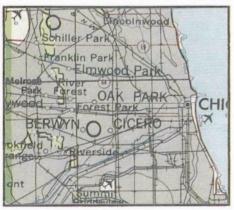
D

E

A







1:24,000-Scale (1 inch = 2,000 feet) Area Shown = 0.6 square mile

Covers approximately 57 square miles and are used where detailed land surface information is required. Used for energy and mineral exploration, for natural resource and water management, for agricultural and census area statistics, for outdoor recreation activities, and for many engineering studies and surveys. Approximately 54,000 maps are required to cover the conterminous U.S.

1:100,000-Scale (1 inch ~ 1.5 miles) Area Shown = 10 square miles

Covers an area equal to 32 of the 1:24,000-scale maps from which the content is derived. Maps are used for countywide studies where less extensive detail is required. Used as a multi-purpose base for displaying important farmlands. wetlands, Federal land ownership and subsurface mineral rights, and for State and county management planning. Approximately 1,800 maps are required to cover the conterminous U.S.

1:250,000-Scale (1 inch ~ 4 miles) Area Shown = 72 square miles

Covers an area equal to 128 of the 1:24,000-scale maps. Maps are used for regional planning, water resource studies, for civil defense and disaster relief coordination, and as bases for air pollution, aeronautical charts, land-use, and weather records. Approximately 450 maps are required to cover the conterminous U.S.

1:500,000-Scale (1 inch ~ 8 miles) Area Shown = 290 square miles

These maps generally cover a State and are used to plan general studies, inventories and management activities; to help in locating interstate utilities; to delineate drainage basin boundaries and as a base to prepare State Highway and other maps. They are available as a planimetric, topographic, or shaded-relief edition.

United States Geological Survey (USGS)

# **Quaternary Geologic Atlas of the United States**

# **Data Product Keywords**

Geology, soils, subsurface, surficial geology

## Summary

Multicolored maps on topographic bases in 4- by 6degree quadrangle units; scale 1:1 million; show regional distribution of Quaternary (surficial) geologic materials in the conterminous United States and adjoining areas.

# **Extent of Program**

National

#### Available Product Coverage

Maps are available for 18 of the 53 proposed quadrangles in the Atlas, and another 12 maps have been approved for publication and are currently in production. The rest are being compiled. Most of the maps available or in production are in the Eastern and Central United States. For availability, see sources listed under Miscellaneous Investigations Series (I Series) maps.

### **Information Content**

The Quaternary Geologic Atlas is a coordinated series of surficial geologic maps that will, when completed, cover the entire conterminous United States at a scale of 1:1 million. The Atlas is a product of collaboration among State geological surveys, universities, and the United States Geological Survey (USGS).

Maps in the Quaternary Atlas show the regional distribution of geologically young surficial deposits such as glacial, alluvial, eolian, lacustrine, marine, and landslide deposits. In addition, the maps show the distribution of slope and upland deposits that have not been mapped widely in the past, such as colluvium, residuum, and saprolite. These materials, which are the products of weathering and have many different physical characteristics, are classified, mapped, and described on the basis of unpublished interpretations, published and unpublished subsoil data, and the distribution of bedrock parent materials.

Map units are differentiated on the basis of a combination of criteria such as lithology, texture, genesis, stratigraphic relations, and age. Some geomorphic features, such as moraines, are distinguished as map units. Erosional landforms, such as stream terraces, are not distinguished, and differentiation of sequences of alluvial deposits of different ages is not possible at a scale of 1:1 million. Most landslides are too small to be shown at this scale, but areas in which landslides are present are distinguished as map units. Each map is accompanied by a detailed description of map units.

For practical purposes, the maps are surficial materials maps. They are not maps of soils as soils are recognized and classified in pedology or agronomy. Rather they are generalized maps of soils as recognized in engineering geology, or of subsoils or parent materials from which pedologic and agronomic soils are formed.

The topographic base maps for the Quaternary Geologic Atlas are 4- by 6-degree quadrangles from the International Map of the World Series. Maps of the Atlas are in the I Series and each is numbered I-1420, with a suffix corresponding to the International Map of the World identification code for the quadrangle represented; for example, I-1420 (NJ-17) for the Chesapeake Bay quadrangle.

#### **Product Delivery Format**

Paper

### Technical, Ordering, and Availability Information

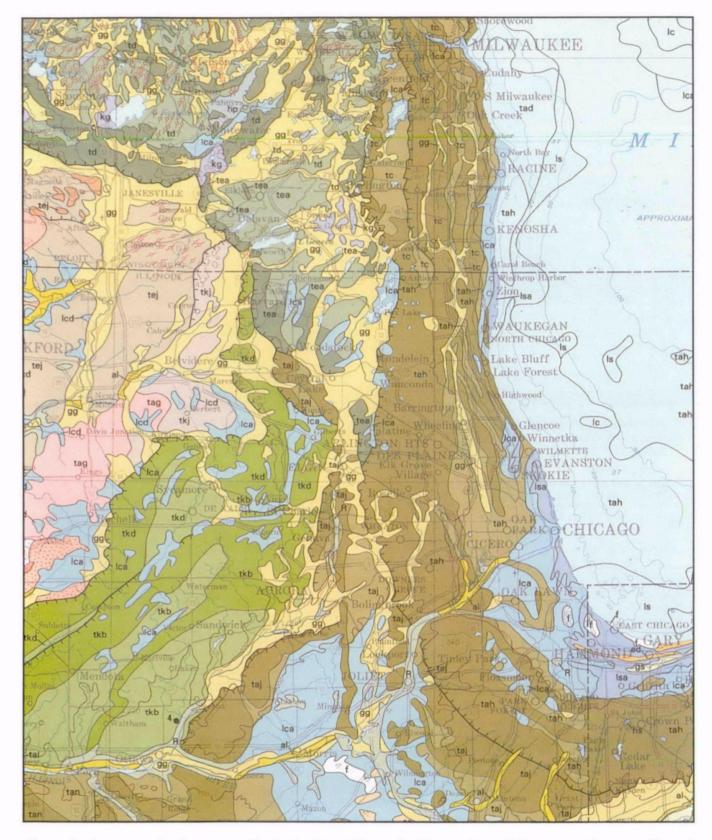
Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477



Example of a map in the Quaternary Geologic Atlas of the United States. Part of "Quaternary Geologic Map of the Chicago 4° x 6° Quadrangle, United States," 1983, I-1420 (NK-16), scale 1:1 million. Colors and letter symbols identify surficial sediment units of different age, composition, and origin.

United States Geological Survey (USGS)

# Regional Aquifer-System Analysis (Report Series)

### **Data Product Keywords**

Geology, hydrography, hydrologic, subsurface, water, aquifer, groundwater

## **Summary**

Reports provide the results of studies of regional groundwater systems. The studies concern the occurrence, movement, and quality of groundwater in major aquifer systems.

## **Extent of Program**

**National** 

#### **Available Product Coverage**

Map coverage in individual reports is by aquifer system in different parts of the Nation.

#### **Information Content**

This series of reports documents the results of studies of regional groundwater systems, which together include much of the Nation. Information includes principles and hydrologic factors controlling the occurrence, movement, and quality of groundwater throughout major aquifer systems. Twenty-eight systems have been identified for study, of which seventeen were completed by the end of Fiscal Year (FY) 1990. The overall objective of the program is to assemble hydrologic, geologic, and geochemical information and create capabilities necessary for effective management of groundwater. More than 600 reports, hydrologic atlases, and scientific journal articles have been completed.

## **Product Delivery Format**

Published as paper-bound documents. Some maps are published on paper media as hydrologic atlases.

### Technical, Ordering, and Availability Information

Information on the program can be obtained from:

The U.S. Geological Survey Office of Ground Water 411 National Center Reston, VA 22092

Telephone: (703) 648-5001

For reports and hydrologic atlases, contact:

Earth Science Information Center

U.S. Geological Survey

507 National Center

Reston, VA 22092

Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425

Denver, CO 80225

Telephone: (303) 236-7476

Or contact any Earth Science Information Center office

listed on page 5 - 118.

United States Geological Survey (USGS)

# Satellite Image Maps

### **Data Product Keywords**

Remotely sensed, satellite, image maps

# **Summary**

Experimental multicolored or black-and-white image maps produced from digital data collected by Land Satellite (LANDSAT) and Système Probatoire d'Observation de la Terre (SPOT) sensors. Scales range from 1:24,000 (Point Loma, CA) to 1:7,500,000 (conterminous 48 States). Most of the color image maps are generated to simulate color-infrared photography. Many satellite image maps in standard quadrangle formats have the topographic maps printed on the reverse sides.

# **Extent of Program**

National - selected areas.

## **Available Product Coverage**

Satellite image maps are available in selected areas in about half the United States and such areas as Antarctica, the Bahamas, and Iceland.

#### Information Content

LANDSAT image maps are multicolored, photographlike maps made from data collected by Earth resources satellites (LANDSAT and SPOT sensors). They are a small but diverse group of mostly experimental maps printed in a wide range of scales and sizes.

Some image maps are printed to express natural landscape color, but most are printed to emphasize objects seen in particular wave-lengths of light, primarily near infrared.

On color-infrared film, healthy vegetation appears in shades of red. Unhealthy vegetation appears in shades of pink, blue, or white. Clear water appears dark blue or black. Sediment laden water takes on a light blue tone. Most cultural features appear as a steely blue-gray.

Many satellite image maps are formatted as standard maps in the United States Geological Survey (USGS) series, e.g., 1- by 2-degree, 1:250,000-scale; or 30- by 60-minute, 1:100,000-scale, with the topographic maps printed on the reverse sides.

Satellite image maps between the scales of 1:24,000 and 1:100,000 meet national map accuracy standards.

## **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5902 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225

Telephone: (303) 236-7477

United States Geological Survey (USGS)

# **State Geologic Maps**

## **Data Product Keywords**

Geology, subsurface

# **Summary**

Geologic map compilations of individual States; scales range from 1:125,000 to 1:2,500,000.

## **Extent of Program**

State by State.

## **Available Product Coverage**

Maps published by the United States Geological Survey (USGS) are available for the following States (year of publication in parentheses): Alaska (1980); Arizona (1969); Arkansas (1976, reprinted 1992); Colorado (1979); Idaho (1947, reprinted 1959); Kentucky (1981); Massachusetts (1983); Montana (1955); Nevada (1978); New Hampshire (1955); New Mexico (1965); North Dakota (1980); Oklahoma (1954, reprinted 1991); Oregon (1992); South Dakota (1951); Wyoming (1985). Contact State agencies for geologic maps of other States.

#### Information Content

State geologic maps show the general distribution of rocks and sediments exposed at the surface throughout the entire State. Major faults are also shown. Map units are described in terms of lithology and geologic age in an accompanying explanation. The production of most State maps published by the USGS is done in cooperation with the States.

#### **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286 Denver, CO 80225 Telephone: (303) 236-7477

United States Geological Survey (USGS)

# **Surface Water Map**

## **Data Product Keywords**

Boundaries, ecological, flood, hydrography, hydrologic, hydrologic units, navigation, State boundaries, structures, surface and manmade features, water, waterways, dams and reservoirs, land development, surface water

## **Summary**

The Surface Water and Related Land Resources Development Map includes the United States and Puerto Rico at a scale of 1:3,168,000. Depicted on the map are streams and lakes, dams, reservoirs, major river basin boundaries, State boundaries, and related features.

## **Extent of Program**

National

## **Available Product Coverage**

Map covers the United States and Puerto Rico.

#### Information Content

The Surface Water and Related Land Resources Development Map is designed to portray both the development and preservation aspects of Federal water resources activities, with the main theme being the spatial distribution of dams and reservoirs. The map shows other features such as the boundaries of major river basins and States, streams and lakes, Federal surface water irrigation projects, watershed-protection areas, licensed hydropower facilities, existing segments of the Federal Wild and Scenic Rivers System, and navigation and flood-damage reduction projects. Dams are shown that have normal storage capacity of at least 5,000 acre-feet, or a maximum storage capacity of at least 25,000 acre-feet. This includes about 800 dams owned by Federal agencies and about 2,000 dams owned by non-Federal organizations.

The current map depicts information from the period 1981 to 1983.

## **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-5920 FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, Box 25286

Denver, CO 80225

Telephone: (303) 236-7477

United States Geological Survey (USGS)

# **Thematic Maps**

## **Data Product Keywords**

Administrative boundaries, airports, atmospheric, bathymetry, boundaries, census geography, climate, coastal, contours, county boundaries, county land ownership, demographic, ecological, economic, elevation, Federal land ownership, geographic names, geology, geophysics, gravity, hydrography, hydrologic, hydrologic units, ice, international boundaries, land cover, land ownership, land use, local government boundaries, magnetics, marine, minerals, pipelines, ports, radiation, railroads, recreation, roads, seismic, snow, socioeconomic, soils, State boundaries, State land ownership, structures, subsurface, subsurface ownership, surface and manmade features, temperature, topography, transmission lines, U.S. Public Land Survey System, vegetation, water, waterways, weather, wetlands, thematic

## **Summary**

Maps in which information on special subjects is geographically displayed on planimetric base maps or overlays registered to planimetric or topographic base maps. This category is divided into land use/land cover and associated maps, and National Atlas maps. Land use refers to human uses of land (for example, housing and industry). Land cover describes the vegetation, water, natural surface, and manmade structures on the land surface. The National Atlas maps are separate sheets of selected thematic maps from the "National Atlas of the United States of America."

# **Extent of Program**

National

# **Available Product Coverage**

National, regions, States. A national index is available for land use and land cover maps; a brochure is available listing National Atlas maps.

#### Information Content

Data portrayed on thematic maps includes land use and land cover, sociocultural, economic, administrative, and historical information.

Land use, land cover, and associated maps are printed at 1:250,000 scale (1:100,000 scale in some areas). They cover categories including: built-up land, agricultural

land, range land, forest land, water, wetland, barren land, tundra and snow or ice. Standard base map features include boundaries, cities, and towns, railroads, roads and highways, rivers and lakes, but no contours.

National Atlas maps are printed at scales of 1:7.5 million to 1:34 million and portray geographic patterns of significant physical, economic, sociocultural, administrative and historical characteristics of the United States. (This series includes a set of 1:2 million-scale sectional reference maps.) Many National Atlas map separate sheets are available including: tectonic features; potential natural vegetation; population distribution (urban and rural); major forest types; minimum and maximum temperature maps; territorial growth; annual sunshine, evaporation and solar radiation, and others.

#### **Product Delivery Format**

Land use, land cover and associated maps are available as two-color maps in the United States Geological Survey (USGS) Open-File L Series, and as overlays along with associated overlays of political units, hydrologic units and census county subdivisions for use with 1:250,000- and 1:100,000-scale base maps.

National Atlas maps are available in paper form.

#### Technical, Ordering, and Availability Information

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Map Distribution Federal Center, box 25286

Denver, CO 80225

Telephone: (303) 236-7477

United States Geological Survey (USGS)

#### Water Data

# **Data Product Keywords**

Flood, hydrography, hydrologic, temperature, water, waterways, water quality, WATSTORE

## Summary

Water quantity and quality data for geographic regions of the United States are available in print form and as machine-readable files.

# **Extent of Program**

National

# **Available Product Coverage**

Data are available for all parts of the Nation where the United States Geological Survey (USGS) has a data-collection program. Availability can vary by State, according to the program of the USGS District Office for that State.

#### **Information Content**

Water-data stations throughout the United States are used to obtain records on stream discharge (flow), stage (height), reservoir and lake stage and storage, groundwater levels, well and spring discharge, and the quality of surface and groundwater. All data collected are stored in the USGS Water Data Storage and Retrieval System (WATSTORE) data base, and also are published annually for each State in U.S. Geological Survey Water-Data Reports.

The National Water Information System (NWIS) is the term for the hardware/software delivery system of which the WATSTORE data base is a part. Certain stations have been organized into four specialized networks with the following functions:

The largest network, which consists of more than 400 sampling sites, is the National Stream Quality Accounting Network (NASQAN). Samples from NASQAN data-collection sites, which are located at or near the downstream end of hydrologic accounting units or similar points, are used to measure a comprehensive list of physical/chemical characteristics to show the cumulative effects of upstream activity. These samples are taken at a minimum interval of once per quarter. Operated within NASQAN is the Radiochemical Surveillance Network consisting of 46 sites

at which data for several isotopes are obtained. Additional radiochemical data are collected from the Tritium Network, consisting of 13 streamflow and 9 atmospheric precipitation sites in the Nation. The Hydrologic Bench-Mark Network consists of 58 sites used to monitor streamflow and water quality of small river basins that are relatively unaffected by man's activities.

## **Product Delivery Format**

WATSTORE data are available in machine-readable form, or as computer-printed tables or graphs, statistical analyses, digital plots and published reports.

# Technical, Ordering, and Availability Information

Information about water data is available on request from:

The Assistant Chief Hydrologist for Operations 441 National Center Reston, VA 22092 Telephone: (703) 648-5031

Water-data questions may also be directed to the National Water Information Clearinghouse (NWIC): 1-800-426-9000.

General information on water data and referrals to field offices may be obtained from:

U.S. Geological Survey Hydrologic Information Unit 419 National Center Reston, VA 22092 Telephone: (703) 648-6817

Or contact the District Chief in the State of interest to obtain data.

Water-Data Reports may be purchased from:

The National Technical Information Service (NTIS) 5285 Port Royal Road Springfield, VA 22161 Telephone: (703) 487-4763

United States Geological Survey (USGS)

# **Water Supply Papers and Other Book Series**

### **Data Product Keywords**

Geology, hydrography, hydrologic, hydrologic units, socioeconomic, subsurface, water, waterways, water supply

#### **Summary**

The United States Geological Survey (USGS) publishes a wide variety of reports containing the results of water resources investigations, many of which depict maps of the areas studied.

# **Extent of Program**

National

# **Available Product Coverage**

Areas of water resources investigations.

## **Information Content**

These reports provide interpretive investigations that include hydrologic maps and hydrogeologic maps. These maps use planimetric or topographic map bases, and may also include thematic information on geology. The USGS Water Resources Division releases information in several book series – water supply papers, professional papers, bulletins, circulars, water resources investigations reports, and open-file reports.

Maps vary according to the subject and area studied, and may be contained within the report or in a map pocket at the back of a report.

#### **Product Delivery Format**

Paper-bound documents.

#### Technical, Ordering, and Availability Information

Reports may be ordered from:

Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Toll Free Number: 1-800-USA-MAPS

U.S. Geological Survey Books and Open-File Reports Federal Center, Box 25425 Denver, CO 80225

Telephone: (303) 236-7476

Or contact any Earth Science Information Center office listed on page 5 - 118.

Also available are catalogs of USGS publications. A monthly list of new USGS publications is available free from:

U.S. Geological Survey 582 National Center Reston, VA 22092

United States Geological Survey (USGS)

### **Earth Science Information Centers**

Earth Science Information Centers (ESICs) offer nationwide information and sales service for U.S. Geological Survey (USGS) map products and earth science publications. This network of ESICs provides information about geologic, hydrologic, topographic, and land use maps, books, and reports; aerial, satellite, and radar images and related products; earth science and map data in digital form and related applications software; and geodetic data. A separate address list is available for State ESIC offices.

ESICs can fill orders for custom products such as aerial photographs, orthophotoquads, digital cartographic data, and geographic names data.

ESICs can also provide information about earth science materials from many public and private producers in the United States by using automated catalog systems for information retrieval and research services.

For further information contact any ESIC or call 1-800-USA-MAPS.

Anchorage-ESIC U.S. Geological Survey 4230 University Drive, Rm. 101 Anchorage, AK 99508-4664 Telephone: (907) 786-7022

Lakewood-ESIC U.S. Geological Survey

Box 25046, Federal Center, MS 504

Building 25, RM. 1813 Denver, CO 80225-0046 Telephone: (303) 236-5829

Menlo Park-ESIC U.S. Geological Survey Building 3, MS 532, RM. 3128 345 Middlefield Road Menlo Park, CA 94025 Telephone: (415) 329-4309

Reston-ESIC

U.S. Geological Survey 507 National Center Reston, VA 22092

Telephone: (703) 648-6045

Rolla-ESIC

U.S. Geological Survey 1400 Independence Road

Rolla, MO 65401

Telephone: (314) 341-0851

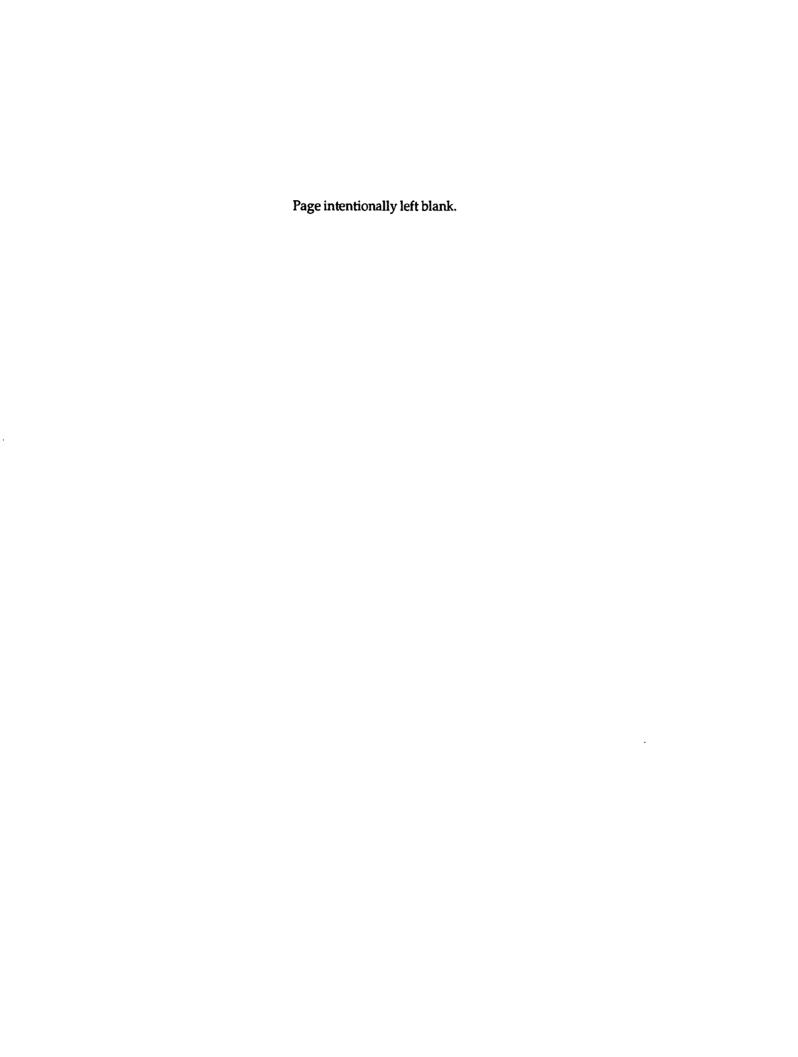
Salt Lake-ESIC U.S. Geological Survey 8105 Federal Building 125 South State Street Salt Lake City, UT 84138 Telephone: (801) 524-5652 Sioux Falls-ESIC U.S. Geological Survey EROS Data Center Sioux Falls, SD 57198 Telephone: (605) 594-6151

Spokane-ESIC
U.S. Geological Survey
678 U.S. Courthouse
West 920 Riverside Avenue
Spokane, WA 99201
Telephone: (509) 353-2524
Stennis Space Center-ESIC
U.S. Geological Survey
Building 3101
Stennis Space Center, MS 39529
Telephone: (601) 688-3544

Washington, D.C.-ESIC U.S. Geological Survey U.S. Department of the Interior 1849 C Street, NW, Rm. 2650 Washington, D.C. 20240

Telephone: (202) 208-4047

| Federal Highway Administration      |             |          |                            |  |  |  |  |  |  |  |  |  |  |  |   |          |          |          |
|-------------------------------------|-------------|----------|----------------------------|--|--|--|--|--|--|--|--|--|--|--|---|----------|----------|----------|
| Data Product Keywords  Data Product | Page Number | Roads    | Surface & manmade features |  |  |  |  |  |  |  |  |  |  |  |   |          |          |          |
| National Highway Planning Network   | 3           | •        | •                          |  |  |  |  |  |  |  |  |  |  |  |   |          |          |          |
|                                     | _           | <u> </u> |                            |  |  |  |  |  |  |  |  |  |  |  | _ | $\dashv$ | $\dashv$ | $\dashv$ |
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# **U.S. Department of Transportation**

Federal Highway Administration

# **National Highway Planning Network**

### **Data Product Keywords**

Roads, surface and manmade features

### Summary

The National Highway Planning Network (NHPN) is a geographically-based analytic network representation of major highways in the United States jointly sponsored by the Federal Highway Administration and the U.S. Army Forces Command.

### **Extent of Program**

**National** 

# **Available Product Coverage**

Unified national network. Updates with new roads and additional attributes are released at irregular intervals.

### **Information Content**

The NHPN has been used for vehicle routing, scheduling, and tracking; studies of environmental and social impacts of transporation; optimal network design; and as a base for the integration of roadway inventory data.

The network is comprised of lists of nodes and links, nodes being points representing junctions or traffic generators and links representing sections of roadway between them. Each node's entry contains its longitude and latitude and, frequently, a nearby place name. Each link's entry contains its endpoint nodes, attribute information about the road (its sign route number or name, length, administrative and functional class, access control, number of lanes, and various other characteristics important for simulating traffic operations and performance), and a digitized chain of longitude/latitude coordinates depicting the road's alignment.

The NHPN contains 55,000 links representing 400,000 miles of roadway, and has complete coverage of the Interstate and rural arterial systems, approximately 65 percent coverage of urban principal arterials, and an additional 70,000 miles of rural collectors.

Locational data are based on the United States Geological Survey 1:2 million National Atlas Digital Line Graphs, although many new roads have been independently digitized. Approximately 5 percent of the mileage is not digitized (represented by straight lines be-

tween junctions). Overall, geographic accuracy is approximately 1,200m root mean square.

# **Product Delivery Format**

ASCII fixed-format text files, approximately 17 MB. Unified national node and link files available on 9-track magnetic tape. Also available as separate state files in compressed form on multiple PC-DOS floppy diskettes.

### Technical, Ordering, and Availability Information

Available from: The National Energy Software Center 9700 S. Cass Ave. Argonne, IL 60439

Telephone: (708) 252-7250

Telephone: (615) 574-4419

Technical questions may be directed to the developer:

Bruce Peterson Oak Ridge National Laboratory Post Office Box 2008 Oak Ridge, TN 37831-6206



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| Data Product Keywords                        |             |       |            |            |    |    |    |   |    |    |     |   |   |    |    |    |                 |       |
| Data Product                                 | Page Number | Flood | Floodplain | Hydrologic |    |    |    |   |    |    |     |   |   |    |    |    |                 |       |
| Flood Insurance Rate Maps (Digital & Analog) | 3           | •     | •          | •          |    |    |    |   |    |    |     |   |   |    |    |    |                 |       |
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# **Federal Emergency Management Agency**

# Flood Insurance Rate Maps (Digital and Analog)

### **Data Product Keywords**

Flood, floodplain, hydrologic, flood hazards

# **Summary**

Digital thematic overlay and analog maps of flood hazards. These products map delineating areas expected to be inundated by the 1 percent chance/year flood event, base flood elevation, floodway, and other flood-risk related data.

# **Extent of Program**

National

# **Available Product Coverage**

Digital data is limited; contact the Office of Risk Assessment for details. Nationwide for analog.

#### **Information Content**

The data files use the Digital Line Graph-3 format and are available in four thematic layers:

- 1. Political areas
- 2. Map panel areas
- 3. FEMA hydrography
- 4. Flood Hazard Zones

Digital flood insurance rate maps are created from the latest flood insurance study for a county.

The Z-fold paper (analog) maps contain political areas, map panel area, and depict the floodway and flood hazard zones in shaded grey tones.

### **Product Delivery Format**

CD-ROM; analog.

### Technical, Ordering, and Availability Information

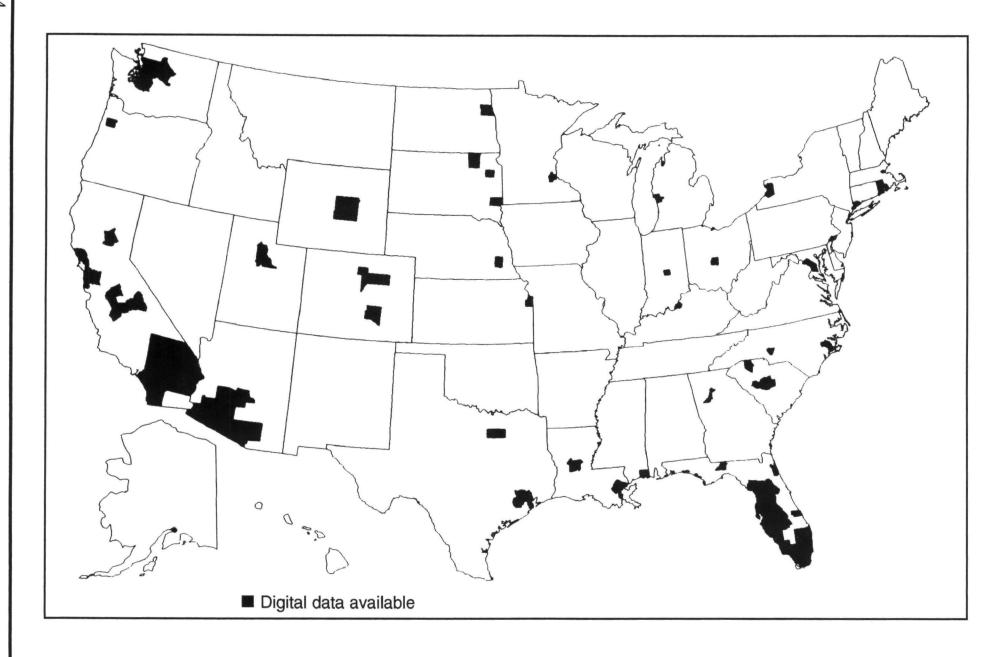
For information on the digital products, contact:

Assistant Administrator Federal Insurance Administration Office of Risk Assessment 500 C St., SW Washington, D.C. 20472

For information on the analog products, contact:

Federal Map Distribution Center 6930 San Tomas Road Baltimore, MD 21227 Telephone: 1-800-333-1364

Following page: Shaded areas indicate that digital flood insurance rate data is available.



| National Aeronautics                                       | \$ 8        | <u></u>    | S        | pa       | ac              | е         | A    | \c    | ln                | ni         | n        | is       | tr | at | tic | or | 1 |   |
|------------------------------------------------------------|-------------|------------|----------|----------|-----------------|-----------|------|-------|-------------------|------------|----------|----------|----|----|-----|----|---|---|
| Data Product Keywords                                      |             |            |          |          |                 |           |      |       | features          |            |          |          |    |    |     |    |   |   |
| Data Product                                               | Page Number | Hydrologic | Land use | Radar    | Remotely sensed | Satellite | Snow | Soils | Surface & manmade | Vegetation | Wetlands |          |    |    |     |    |   |   |
| GISS Global Soils Data Set                                 | 7           |            | <u> </u> |          |                 |           |      | •     | •                 |            |          | <u> </u> |    |    |     |    |   | = |
| GISS Global Vegetation & Land Use Databases                | 8           |            | •        | $\vdash$ |                 |           |      |       | •                 | •          |          |          |    |    |     |    |   |   |
| GISS Wetlands Database                                     | 9           |            |          |          |                 |           |      |       | •                 | •          | •        |          |    |    |     |    |   |   |
| Global Snow Cover Parameters from Satellite Microwave Data | 10          | •          |          |          | •               | •         | •    |       | •                 | •          |          |          |    |    |     |    |   |   |
| Shuttle Imaging Radar Data (SIR-A & SIR-B)                 | 11          |            |          | •        | •               | •         |      |       |                   |            |          |          |    |    |     |    |   |   |
| Vegetation Index Derived from Satellite Microwave Data     | 12          |            |          |          | •               | •         |      |       | •                 | •          |          |          |    |    |     |    |   |   |



# **GISS Global Soils Data Set**

### **Data Product Keywords**

Soils, surface and manmade features

# **Summary**

The Goddard Institute for Space Studies (GISS) Global Soils Data Set is a global digital data base of soil properties at a resolution of 1 degree latitude by 1 degree longitude.

# **Extent of Program**

Global

### **Available Product Coverage**

Global; 1 degree latitude by 1 degree longitude.

### **Information Content**

For each land cell, the data base includes major and associated soil units, surface texture, and slope; phase and miscellaneous land units are included where available. There are a total of 106 soil units, 7 combinations of 3 textures, 12 phases, and a series of miscellaneous units. These data were digitized from a global series of soil maps produced by the Food and Agriculture Organization of the United Nations at a scale of 1:5 million.

The data base was compiled as part of an effort to improve modeling of the hydrologic cycle in the GISS General Circulation Model.

### **Product Delivery Format**

Complete data set: 1 CCT

Condensed version: One magnetic disk

### Technical, Ordering, and Availability Information

The complete data base is available from:

National Center for Atmospheric Research Data Support Section P.O. Box 3000 Boulder, CO 80307 Telephone: (303) 497-1219 The condensed version, distinguishing 26 major soil units, is available on-line from the National Aeronautics and Space Administration (NASA)/GISS. For the condensed version, contact:

Nadim R. Habra NASA/GISS 2880 Broadway New York, NY 10025 Telephone: (212) 678-5539 FAX: (212) 678-5552

# GISS Global Vegetation and Land Use Databases

### **Data Product Keywords**

Land use, surface and manmade features, vegetation, seasonal albedo

### **Summary**

Goddard Institute for Space Studies (GISS) Global Vegetation and Land Use data bases are digital data bases of vegetation and land use, compiled at a resolution of 1-degree latitude by 1 degree longitude resolution.

# **Extent of Program**

Global.

# Available Product Coverage

Global; 1 degree latitude by 1 degree longitude.

### **Information Content**

These data bases were compiled by drawing on approximately 100 published sources.

For the Vegetation Database, vegetation data from varied sources were consistently recorded using the hierarchical United Nations Educational, Scientific, and Cultural Organization classification system. The raw data base distinguishes about 180 vegetation types, that have been collapsed to 32 for the archived, available GISS Global Vegetation Database.

The land use data base was compiled using a hierarchical system. The raw data set, identifying major agricultural systems annotated with crop combinations, identifies about 120 land use types globally; the archived version has been collapsed to five cultivation intensity groups indicating percentages of 1-degree cells that are cultivated. Albedo is compiled from both the natural vegetation and cultivation characteristics, and is provided for the 32 vegetation types as seasonal snow-free values.

The vegetation and land use data bases can be used independently, or they can be combined to produce a land cover data base.

### **Product Delivery Format**

One computer compatible tape.

# Technical, Ordering, and Availability Information

National Center for Atmospheric Research

Data Support Section P.O. Box 3000

Boulder, CO 80307

Telephone: (303) 497-1219

NASA Climate Data System

**DAAC User Support Office** 

NASA/GSFC

Code 935

Greenbelt, MD 20771

Telephone: (301) 286-3209

The data bases are available on-line from National Aeronautics and Space Administration (NASA)/GISS. Contact:

Nadim R. Habra

NASA/GISS

2880 Broadway

New York, NY 10025

Telephone: (212) 678-5539

FAX: (212) 678-5552

# **GISS Wetlands Database**

### **Data Product Keywords**

Surface and manmade features, vegetation, wetlands, methane

### Summary

This data set consists of wetland data source, wetland type, fractional inundation, vegetation type and soil type compiled globally at a resolution of 1 degree latitude by 1 degree longitude.

### **Extent of Program**

Global

### **Available Product Coverage**

Global land; 1 degree by 1 degree.

#### Information Content

The series of arrays of the wetland data base includes information for all land cells that have at least 1 percent of their area designated as wetland. The wetland data source variable has a total of seven source combinations (1-7). Wetland type codes range from 1 to 12. Fractional inundation was compiled from a series of 1:1 million scale Operational Navigation Charts. Vegetation type codes range from 1 to 178 and soil type codes range from 1 to 107.

Global digital data bases on the distribution and environmental characteristics of natural wetlands have been archived on tape in five global 1- by 1-degree latitude/longitude arrays:

- Data Sources, is designated by a total of seven source combinations.
- 2. Wetland Type, is classified by 12 wetlands types.
- Fractional Inundation, gives the inundated proportion of 1-degree cells.
- 4. Vegetation Types, are designated by 178 codes.
- 5. Soil Types, have 107 codes.

The sources of information used in compilation are maps produced over a variable time frame ranging from 1971 to 1981. The data set reflects wetland distribution for the current climate.

### **Product Delivery Format**

One computer compatible tape.

### Technical, Ordering, and Availability Information

The full series of wetlands information is available from:

National Center for Atmospheric Research Data Support Section P.O. Box 3000 Boulder, CO 80307

Telephone: (303) 497-1219

Two of the five arrays – Wetland Type and Fractional Inundation – are available on-line from NASA/GISS. Contact:

Nadim R. Habra NASA/GISS 2880 Broadway New York, NY 10025 Telephone: (212) 678-5539

### Global Snow Cover Parameters from Satellite Microwave Data

### **Data Product Keywords**

Hydrologic, remotely sensed, satellite, snow, surface and manmade features, vegetation

### **Summary**

Global snow cover maps derived from the NIMBUS-7 Scanning Multichannel Microwave Radiometer (SMMR) data for a period of 9 years (1978 to 1987).

### **Extent of Program**

Global

### **Available Product Coverage**

Global 0.25 degree by 0.25 degree snow maps for period from 1978 to 1987.

### **Information Content**

The SMMR perceives microwave radiation penetrating through clouds and snowpacks, which provides depth and water equivalent information about snow fields. Based on theoretical calculations, snow covered area and snow water equivalent retrieval algorithms have been developed. The spatial resolution of the data is 0.25 degrees by 0.25 degrees.

Intercomparisons of SMMR, National Oceanic and Atmospheric Administration/National Environmental Satellite Data Information Service (NOAA/NESDIS) and United States Air Force Global Weather Center snow maps have been conducted to evaluate and assess the accuracy of SMMR-derived snow maps. The total snow covered area derived from SMMR is usually about 10 percent less than the other two products. This is because passive microwave sensors cannot detect shallow, dry snow which is less than 5 cm in depth. However, when the microwave signatures indicate snow, the entire field of view is probably snow covered. To evaluate the quality of retrieved snow water equivalent from passive microwave data, several areas were chosen for comparison. The best results were found in the Canadian high plains and the Russian steppe areas. Further tests are required before regional algorithms can be developed to improve the quality of the data for operational purposes.

# **Product Delivery Format**

One magnetic tape.

# Technical, Ordering, and Availability Information

DAAC User Support Office/GSFC NASA/GSFC Code 935 Greenbelt, MD 20771 Telephone: (301) 286-3209

# Shuttle Imaging Radar Data (SIR-A and SIR-B)

### **Data Product Keywords**

Radar, remotely sensed, satellite

### **Summary**

This data set provides data from the Shuttle Imaging Radar (SIR-A) which flew aboard the Space Shuttle Columbia in November 1981 (STS-2) and the SIR-B which flew aboard the space shuttle Challenger in October 1985. These imaging radar data are useful for a variety of topographic and geologic analyses.

# **Extent of Program**

Areas over North America, Asia, Europe, the Middle East, Australia and the Pacific Islands, north Africa, northeastern Africa, off the southern coast of Africa, and northern and western South America; from November 1981 and October 1985.

### **Available Product Coverage**

Discontinuous strips between 40 degrees north and south latitude.

#### Information Content

This data set contains several independent data "takes" from the SIR-A which provide coverage over several areas including southern North America, southern Asia and Europe, Australia and the Pacific islands, north Africa and northern South America.

The SIR-A instrument operated for a total of almost 8 hours during the 2½ day flight. SIR-A is a horizontally polarized L-band radar operating at 1.28 GHz (23 cm). The SIR-A obtained imagery at a resolution of 40m with a swath width of 50km and a look angle of approximately 45 degrees (variable). The imagery is produced at a scale of 1:500,000.

The imagery from the SIR-B includes several independent data "takes" which provide imagery over areas of Australia, Europe, western South America, North America, and north eastern Africa as well as limited areas of the Middle East, Asia, and off the southern coast of Africa.

SIR-B is a horizontally polarized L-band radar operating at frequency 1.28 GHz (wavelength 23 cm). The SIR-B antenna had the capability of being mechanically tilted to acquire data at varying incidence angles from

15 to 60 degrees. The SIR-B obtained imagery at a resolution of approximately 25 m (varying with incidence angles) with a swath width of 20 to 50 km. The SIR-B provided both digitally recorded and optically recorded data.

Note: At this time, 100 percent of the SIR-A data is archived at NSSDC. Approximately 10 percent of the SIR-B data is archived at NSSDC. The remainder of the SIR-B data is proprietary and may be made available at NSSDC soon, pending congressional decision on the reassessment of the Land Remote Sensing Commercialization Act of 1984.

### **Product Delivery Format**

Magnetic tape and photographic images.

### Technical, Ordering, and Availability Information

National Space Science Data Center Mail Code 633.4 NASA/Goddard Space Flight Center Greenbelt, MD 20771 Telephone: (301) 286-6695 FAX: (301) 286-4952

# **Vegetation Index Derived from Satellite Microwave Data**

### **Data Product Keywords**

Remotely sensed, satellite, surface and manmade features, vegetation

### **Summary**

This data set is a microwave vegetation index formed from the differences of vertically and horizontally polarized brightness temperatures expressed in degrees Kelvin at 37 GHz frequency.

# **Extent of Program**

Global

### **Available Product Coverage**

Global, 0.25 degree by 0.25 degree; January 1979 through December 1990.

#### Information Content

This data set consists of monthly composites of global Scanning Multichannel Microwave Radiometer (SMMR) observations from January 1979 to August 1987 and global Special Sensor Microwave/Imaging (SSM/I) observations from July 1987 to December 1990. No SSM/I data is available for December 1987 due to heating problems with the sensor. The global images are stored on magnetic tapes on a quarter-degree latitude-longitude grid. No spatial or temporal smoothing was performed on the data. Mixing pixels have been filled by spatial and temporal averaging. The spatial resolution of the digital data is 0.25 degrees by 0.25 degrees (latitude by longitude). The data grids are available in either a north or south polar stereographic grid.

The temperature difference data have been found to be highly correlated with the normalized difference vegetation index derived from Advanced Very High Resolution Radiometer, rainfall and drought over the Sahel, seasonal variation of atmospheric carbon dioxide concentration at Mauna Loa, land surface evaporation and primary productivity over hot arid and semi-arid regions of Africa and Australia. The data have provided information about land surface change (desertification) due to drought. Although many details of the temperature difference data require further analysis, the above correlations suggest that this data would be useful for

spatial, seasonal and inter-annual studies of some biospheric processes.

### **Product Delivery Format**

Two magnetic tapes.

### Technical, Ordering, and Availability Information

DAAC User Support Office/GSFC NASA/GSFC Code 935 Greenbelt, MD 20771

Telephone: (301) 286-3209

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|------------------------------------------------------------------------------|-------------|--------------------------|--------------------|----------|------------|------------|---------------------|----------|-------------------|-----------|------------------------|----------|---------|--------------------|-------------|------------|----------|----------------|-----------------------------|----------|------------|-----------------|
| Data Product Keywords  Data Product                                          | Page Number | Administrativeboundaries | Aerial Photography | Airports | Bathymetry | Boundaries | Cadastral (general) | Contours | County boundaries | Elevation | Federal land ownership | Geodetic | Geology | Horizontal control | Hydrography | Land cover | Land use | Land ownership | Local government boundaries | Minerals | Navigation | Orthophotoquads |
| Aerial Photographs                                                           | 15          |                          | •                  |          |            |            |                     |          |                   |           |                        |          |         |                    |             |            |          |                | Ħ                           |          |            | 目               |
| Cadastral Maps                                                               | 16          | •                        |                    |          |            | •          | •                   |          |                   |           | •                      | П        |         |                    |             |            |          | •              | П                           | П        |            | П               |
| Cemetery Data                                                                | 18          |                          |                    |          |            |            |                     |          |                   |           |                        |          |         |                    |             |            |          |                | П                           | П        |            |                 |
| Digital Elevation Data                                                       | 19          |                          |                    |          |            |            |                     | •        |                   | •         |                        |          |         |                    |             |            |          |                | П                           | П        |            | П               |
| Large-Scale Topographic Maps                                                 | 20          |                          |                    |          |            |            |                     | •        |                   |           |                        |          |         |                    | •           |            |          |                | П                           | П        |            |                 |
| National Series Base Topographic Mapping,<br>71/x-Minute Quadrangle Series   | 21          |                          |                    | •        |            | •          |                     | •        | •                 |           |                        |          |         |                    | •           |            |          | •              | •                           |          |            |                 |
| National Series Base Topographic Mapping, 30- by 60-Minute Quadrangle Series | 23          |                          |                    | •        |            | •          |                     | •        | •                 |           |                        |          |         |                    | •           |            |          | •              |                             |          |            |                 |
| Navigation Maps – Tennessee Valley Region                                    | 25          |                          |                    |          | •          |            |                     |          |                   |           |                        |          |         |                    |             |            |          |                | П                           | П        | •          |                 |
| Orthophotoquads                                                              | 27          |                          |                    |          |            |            |                     |          |                   |           |                        |          |         |                    |             |            |          |                | П                           | П        |            | •               |
| Recreation Maps - Tennessee Valley Authority Lakes                           | 28          |                          |                    |          |            |            |                     |          |                   |           |                        |          |         |                    | •           |            |          |                | П                           | П        |            |                 |
| Special Regional Maps                                                        | 30          |                          |                    |          |            |            |                     |          |                   |           |                        |          | •       |                    | •           | •          | •        |                | П                           | •        |            |                 |
| Survey Control Data                                                          | 31          |                          |                    |          |            |            |                     |          |                   |           |                        | •        |         | •                  |             |            |          | П              | П                           | П        |            |                 |
| Tennessee Valley Authority Power System Maps                                 | 32          | •                        |                    |          |            | •          |                     |          |                   |           |                        |          |         |                    |             |            |          | П              | П                           | П        |            | $\prod$         |
| Tennessee Valley Region Wall Reference Map                                   | 33          |                          |                    | •        |            | •          |                     |          |                   |           |                        |          |         |                    | •           |            |          |                | П                           |          |            |                 |

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|---------------------------------------------------------------------------------|-------------|-----------|-------|-----------|------------|-----------------|----------|---------------|----------|------------------|------------|----------------------------|------------|--------------------|--------------------------------|------------|------------------|-------|-----------|----------|----------|----------|----------|
| Data Product  Data Product                                                      | Page Number | Pipelines | Ports | Railroads | Recreation | Remotely sensed | Roads    | Socioeconomic | Soils    | State boundaries | Subsurface | Surface & manmade features | Topography | Transmission lines | U.S. Public Land Survey System | Vegetation | Vertical control | Water | Waterways |          |          |          |          |
| A wid Dhanasan ha                                                               | 17          |           |       | $\vdash$  |            |                 | <u>.</u> |               |          |                  | _          |                            |            |                    |                                |            |                  | _     | =         |          | 〓        | =        | 뒥        |
| Aerial Photographs  Cadastral Maps                                              | 18          | Н         |       | $\vdash$  |            | -               | $\dashv$ |               |          |                  | $\dashv$   |                            | -          | $\dashv$           | -                              | -          | $\dashv$         |       | Н         | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ |
| Cemetery Data                                                                   | 20          | Н         |       | $\vdash$  | $\exists$  |                 | $\dashv$ |               | $\dashv$ | _                | $\dashv$   | -                          | -          |                    |                                |            | Н                |       | $\vdash$  |          | $\dashv$ | $\dashv$ | ㅓ        |
| Digital Elevation Data                                                          | 21          | Н         | H     | H         | $\exists$  |                 | ┪        | -             | $\dashv$ |                  | $\dashv$   |                            |            |                    |                                |            |                  |       | $\vdash$  |          | $\dashv$ | $\dashv$ | ᅦ        |
| Large-Scale Topographic Maps                                                    | 22          | -         |       | -         |            | $\dashv$        | •        | _             | $\dashv$ |                  | 寸          | •                          | •          | •                  |                                | •          | _                |       |           |          | $\dashv$ | $\dashv$ | -        |
| National Series Base Topographic Mapping, 71/2-Minute Quadrangle Series         | 23          | •         |       | •         |            |                 | •        |               |          | •                |            | •                          | •          | •                  | •                              | •          |                  |       |           |          |          |          |          |
| National Series Base Topographic Mapping, 30- by<br>60-Minute Quadrangle Series | 25          | •         |       | •         |            |                 | •        |               |          | •                |            | •                          | •          | •                  | •                              | •          |                  |       |           |          |          | 1        |          |
| Navigation Maps – Tennessee Valley Region                                       | 27          |           | •     | П         |            |                 |          |               |          |                  |            | •                          |            |                    |                                |            |                  |       | •         |          |          |          | $\neg$   |
| Orthophotoquads                                                                 | 29          |           |       | П         |            | •               |          |               |          |                  |            |                            |            |                    |                                |            |                  |       |           |          |          |          | $\neg$   |
| Recreation Maps – Tennessee Valley Authority Lakes                              | 30          |           |       | П         | •          |                 | •        |               |          |                  |            | •                          |            |                    |                                |            |                  |       | •         |          |          |          |          |
| Special Regional Maps                                                           | 32          |           |       | •         |            |                 | •        |               | •        |                  | •          | •                          | •          |                    |                                |            |                  | •     |           |          |          |          |          |
| Survey Control Data                                                             | 33          |           |       |           |            |                 |          |               |          |                  |            |                            |            |                    |                                |            | •                |       |           |          |          |          |          |
| Tennessee Valley Authority Power System Maps                                    | 34          |           |       |           |            |                 | •        |               |          |                  |            | •                          |            | •                  |                                |            |                  |       |           |          |          |          |          |
| Tennessee Valley Region Wall Reference Map                                      | 35          |           |       | •         |            |                 | •        |               |          | •                |            | •                          |            |                    |                                |            |                  |       |           |          |          |          |          |

# **Aerial Photographs**

# **Data Product Keywords**

Aerial photography, remotely sensed

# **Summary**

Black-and-white panchromatic, color and color-infrared aerial photographs of areas within the Tennessee Valley Region at various dates from 1933 to the present time.

# **Extent of Program**

Tennessee River Watershed.

# **Available Product Coverage**

Most sites in Tennessee Valley watershed are covered at some date. Historical photos are available. Older coverage may be archived.

#### Information Content

Vertical aerial photographs of all types of emulsion, mostly black-and-white panchromatic, from low and medium altitudes are available for most areas of the Tennessee Valley watershed. Older coverage may be archived and difficult to retrieve. Photographs of reservoirs are usually obtained every fall. Photographs of generating plant sites are obtained frequently, both spot oblique and vertical. Large area photography is seldom obtained. Cameras now used include Wild RC8 and RC10 with current calibrations.

### **Product Delivery Format**

Film and prints.

### Technical, Ordering, and Availability Information

# **Cadastral Maps**

### **Data Product Keywords**

Administrative boundaries, boundaries, cadastral, Federal land ownership, land ownership

### Summary

Mapping of Tennessee Valley Authority (TVA) reservoir lands, generating plant reservations, and other land holdings.

# **Extent of Program**

Tennessee River watershed.

# Available Product Coverage

Vicinity of TVA reservoirs and generating plants.

### Information Content

Maps are drawn to 1 inch = 500 foot scale showing TVA property boundary, critical reservoir contours, political boundaries, cultural features, and State plane coordinates of property corners. Maps are generally 22- by 34-inches. These maps provide public information regarding the location of TVA property, landrights, and their relationship to neighboring properties.

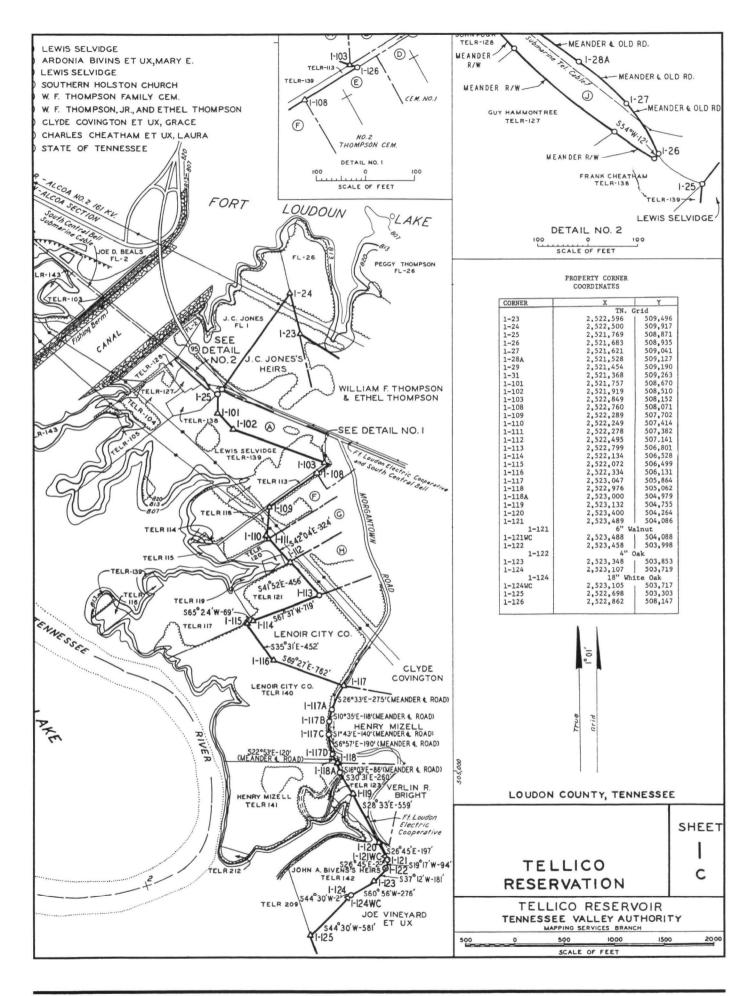
### **Product Delivery Format**

Blueline prints.

# Technical, Ordering, and Availability Information

TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

At right: Example of a TVA cadastral map.



# **Cemetery Data**

### **Data Product Keywords**

Socioeconomic

### Summary

Information resulting from cemetery investigations/ relocation conducted by the Tennessee Valley Authority (TVA) during construction of the reservoir and power generation system.

# **Extent of Program**

Tennessee River watershed.

### **Available Product Coverage**

Cemeteries on and in the immediate vicinity of TVA lands.

#### Information Content

Cemetery records contain name, birth/death date, cause of death, original cemetery and reinterment cemetery, plat maps of the deceased, name of the nearest relative at time of relocation, date relocated, condition of remains, disposition of articles found in graves, and epitaph. These records can be used as a source of accurate documentation of information such as the location of relatives' relocated graves, etc.

#### **Product Delivery Format**

Photocopies of files for specific graves.

# Technical, Ordering, and Availability Information

# **Digital Elevation Data**

### **Data Product Keywords**

Contours, elevation, topography, terrain models

### Summary

Elevation data in two-dimensional contour files.

### **Extent of Program**

Tennessee Valley Authority (TVA) power service area.

### **Available Product Coverage**

Selected generating plant sites in TVA power service area.

### **Information Content**

Digital Elevation Model data. Maps are plotted at scales between 1 inch = 50 feet and 1 inch = 400 feet with automatically interpolated contours between 1 foot and 5 feet. Most use the State plane coordinate system, North American Datum 1927. Maps of plant sites are reasonably current; other sites are updated as needed. These files are useful for the design and siting of additional plant facilities, roads, and other site improvements.

### **Product Delivery Format**

Magnetic media; two-dimensional digital files. Most files are Intergraph IGDS format.

# Technical, Ordering, and Availability Information

# **Large-Scale Topographic Maps**

### **Data Product Keywords**

Contours, hydrography, roads, surface and manmade features, topography, transmission lines, vegetation

### **Summary**

Topographic maps at large scale with 1- to 5-foot contour interval, covering a limited number of plant sites and industrial sites in the Tennessee Valley Region. Some are digital (Intergraph IGDS).

### **Extent of Program**

Tennessee Valley Authority (TVA) power service area.

### **Available Product Coverage**

Selected industrial and generating plant sites in the TVA power service area.

### **Information Content**

Topographic maps at scales between 1 inch = 50 feet and 1 inch = 400 feet with contour intervals between 1 foot and 5 feet. These maps meet National Map Accuracy Standards unless otherwise specified on map sheet. Most of these maps use the State plane coordinate system, North American Datum 1927. Maps of plant sites are kept reasonably current; others are updated as needed by the agency. More recent maps are compiled using MicroStation software and Digital Elevation Model technique to produce contours. These maps are useful for the design and siting of roads, new plant facilities, and future site improvements.

### **Product Delivery Format**

Magnetic media, reproducible or paper maps.

### Technical, Ordering, and Availability Information

# National Series Base Topographic Mapping, 7½-Minute Quadrangle Series

# **Data Product Keywords**

Airports, boundaries, contours, county boundaries, hydrography, land ownership, local government boundaries, pipelines, railroads, roads, State boundaries, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation

### **Summary**

National series, large-scale base cartographic data in a cooperative mapping program administered by the United States Geological Survey. This series is at 1:24,000 scale. The Tennessee Valley Authority (TVA) produces, revises and maintains 805 7½-minute quadrangles in this series.

### **Extent of Program**

Tennessee River watershed.

# **Available Product Coverage**

Tennessee River watershed.

#### Information Content

These maps use contours to show the shape and elevation of the terrain, and show and name prominent natural and cultural (manmade) features. The detail provided by the 1:24,000 (1 inch = 2,000 feet) maps in this series is useful for local area planning. An index is available at no cost.

### **Product Delivery Format**

Primarily hard-copy paper map products, including map separates, special products from map separates and reprints of the 805 quadrangles in TVA jurisdiction.

Approximately 40 quadrangles are available in digital format (Intergraph design files).

Availability of digital data in Digital Line Graph-3 (DLG-3) format is limited, but increasing.

# Technical, Ordering, and Availability Information

For map separates, digital design files, special products from map separates and reprint processing of the 805 quadrangles, contact:

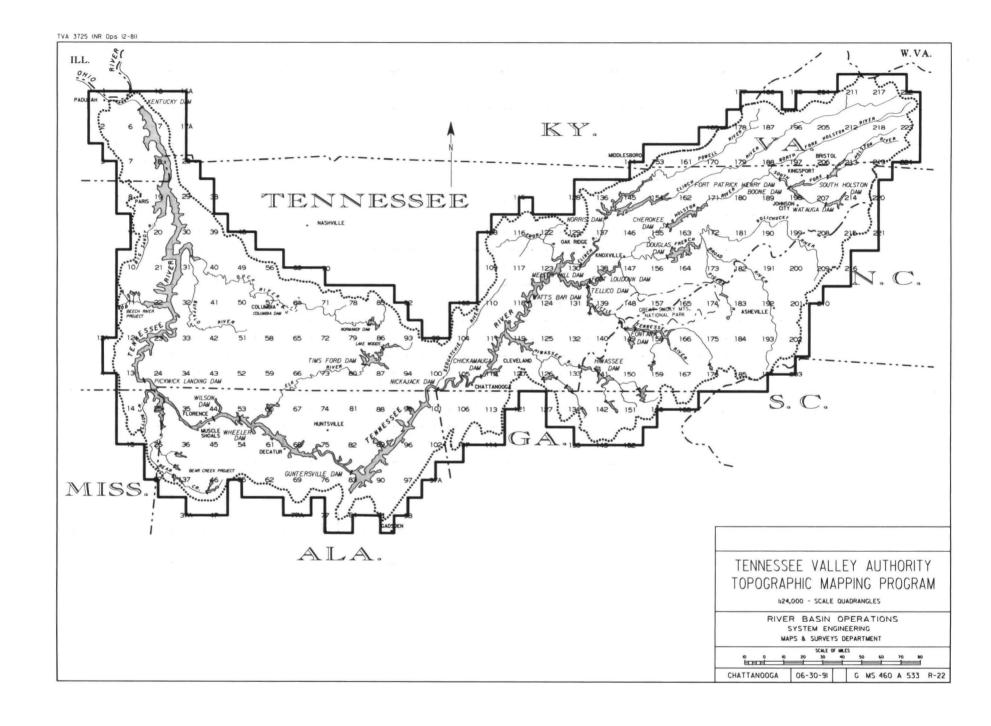
TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

For DLG-3 data, contact:

National Digital Cartographic Data Base Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Following page: Extent of Tennessee Valley Authority topographic mapping program; 7½-minute Quadrangle Series.



# National Series Base Topographic Mapping, 30- by 60-Minute Quadrangle Series

### **Data Product Keywords**

Airports, boundaries, contours, county boundaries, hydrography, land ownership, pipelines, railroads, roads, State boundaries, surface and manmade features, topography, transmission lines, U.S. Public Land Survey System, vegetation

### Summary

National series intermediate-scale base cartographic data produced through a cooperative mapping program administered by the United States Geological Survey. This series is at 1:100,000 scale. The Tennessee Valley Authority (TVA) produces, revises and maintains 40 30- by 60-minute quadrangles in this series.

### **Extent of Program**

Tennessee River watershed.

# Available Product Coverage

Tennessee River watershed.

#### Information Content

These maps use contours to show the shape and elevation of the terrain, and show and name prominent natural and cultural (manmade) features. At the 1:100,000 scale contour intervals are shown in meters.

#### **Product Delivery Format**

Primarily hard-copy paper map products, including map separates, special products from map separates and reprints of the 40 quadrangles.

Some categories of data are available for all quadrangles in digital line graph (DLG) format. TVA handles archiving of map separates, special product orders from map separates and reprint processing of the 40 quadrangles in TVA jurisdiction.

# Technical, Ordering, and Availability Information

For map separates, special products from map separates and reprint processing of the 805 quadrangles, contact:

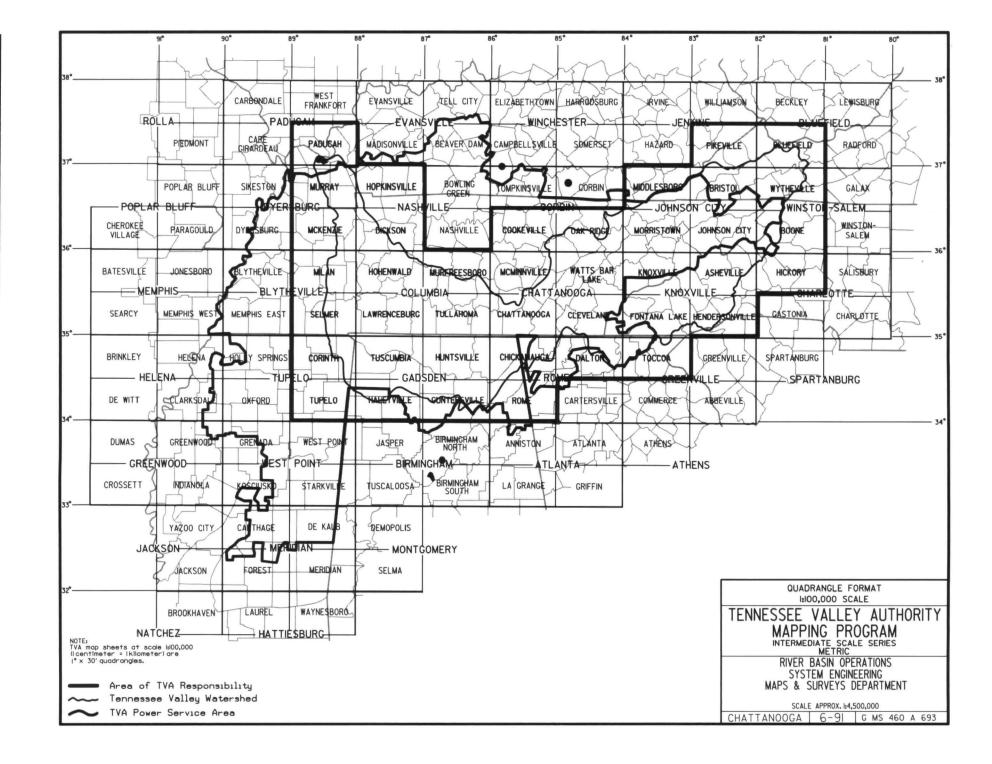
TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

For DLG-3 data, contact:

National Digital Cartographic Data Base Earth Science Information Center U.S. Geological Survey 507 National Center Reston, VA 22092 Telephone: (703) 648-5920

FAX: (703) 648-5548

Following page: Extent of Tennessee Valley Authority Mapping Program; 30- by 60-Minute Quadrangle Series.



# **Navigation Maps - Tennessee Valley Region**

### **Data Product Keywords**

Bathymetry, navigation, ports, surface and manmade features, waterways

### **Summary**

Navigation maps for the Tennessee River and its tributary streams and lakes. This group consists of three types of maps and/or charts.

### **Extent of Program**

Tennessee River watershed.

### **Available Product Coverage**

Tennessee River watershed.

#### Information Content

This group consists of three series of maps and/or charts:

Tennessee River Navigation Charts – Folio of Charts, which cover the area from Paducah, KY to Knoxville, TN, are produced as part of a cooperative program between the Tennessee Valley Authority (TVA) and United States Army Corps of Engineers, Nashville District. This group consists of a folio of 118 charts covering the main Tennessee River and tributary areas at a scale of 1 inch = ½ mile. It is revised annually.

Tennessee River Navigation Charts – Full Color Maps, also cover the area from Paducah, KY to Knoxville, TN. This series consists of full color maps with extensive backshore detail in addition to navigation information. They are produced at a scale of 1 inch = ½ mile.

TVA Tributary Navigation Maps are detailed maps for TVA lakes located on tributary streams. Content includes underwater contours, navigation aids, roads, topography in lake vicinity, recreation and other facilities. They are produced at a scale of 1 inch = 2,000 feet, and other scales. An index is available at no cost.

#### **Product Delivery Format**

Paper.

Contact the United States Army Corps of Engineers, Nashville District, for availability of digital data for Tennessee River Navigation Charts – Folio of Charts, produced as part of the cooperative program between TVA and the Army Corps of Engineers.

### Technical, Ordering, and Availability Information

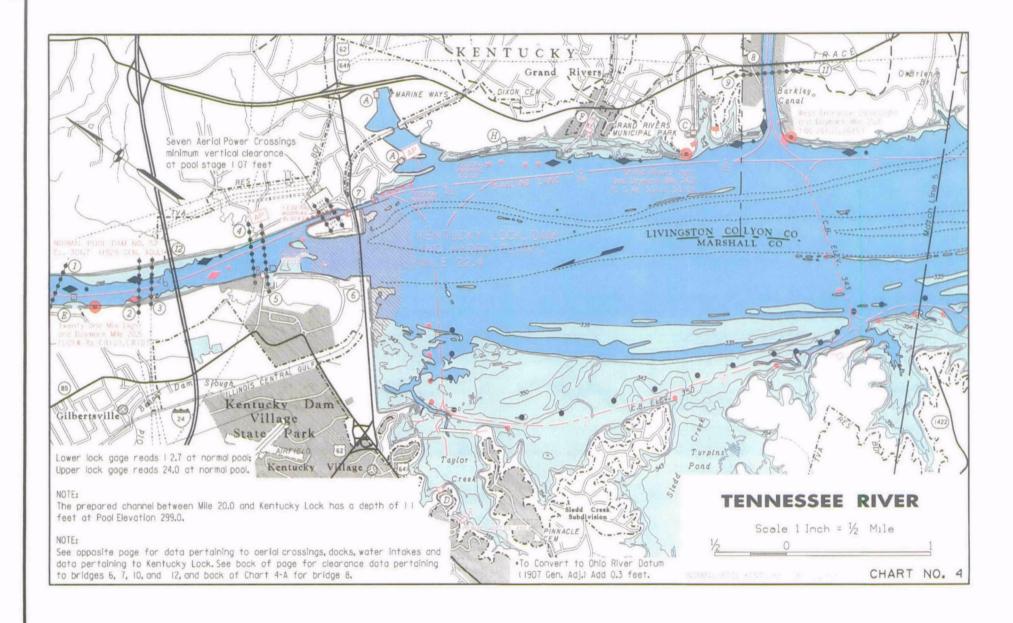
Tennessee River Navigation Charts – Folio of Charts is available at a cost of \$12.00 from TVA.

Tennessee River Navigation Charts – Full Color Maps are available at a cost of \$1.25 per sheet from TVA.

TVA Tributary Navigation Maps are available at a cost of \$1.50 each from TVA. Contact:

TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

Following page: Example of Tennessee River navigation chart.



# **Orthophotoquads**

### **Data Product Keywords**

Orthophotoquads, remotely sensed

### **Summary**

This series is currently being developed. The orthophotoquads will be produced at 1:12,000 scale, in 3%-minute quarter quadrangle format.

### **Extent of Program**

Tennessee River watershed.

# **Available Product Coverage**

Tennessee River watershed. Initial products will cover Tellico Lake area in east Tennessee and other selected areas.

### **Information Content**

Orthophotoquads are distortion free, aerial photographic images. They contain no symbolized features, and a minimal number of names. They show a wealth of planimetric details and land use and land cover information that is not symbolized on conventional line maps. They make excellent supplements to published maps.

# **Product Delivery Format**

Digital data and orthophoto quarter quadrangles.

# Technical, Ordering, and Availability Information

Orthophoto quarter quadrangles are available from:

TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

Both digital data and orthophoto quarter quadrangles are available from any Earth Science Information Center office listed on page 5–118 of the U.S. Department of the Interior, U.S. Geological Survey section.

# Recreation Maps – Tennessee Valley Authority Lakes

### **Data Product Keywords**

Hydrography, recreation, roads, surface and manmade features, waterways

# **Summary**

Series of detailed brochures/maps to facilitate recreational use of the Tennessee Valley Authority (TVA) mainstream and tributary lakes.

### **Extent of Program**

Tennessee River watershed

### **Available Product Coverage**

Tennessee River watershed

#### Information Content

Recreation Maps of TVA Lakes. Scale and size of maps vary. A series of multicolored, pocket size folders of TVA lakes showing highways, roads, road mileages, cities and rural communities, public access areas, commercial recreation areas, boat docks, private clubs, group camps, public parks, wildlife management areas, boat launching sites, and lands open to public use. These maps guide the public to recreation facilities maintained by TVA and other public agencies as well as commercial recreation development on TVA reservoirs. An index is available at no cost.

### **Product Delivery Format**

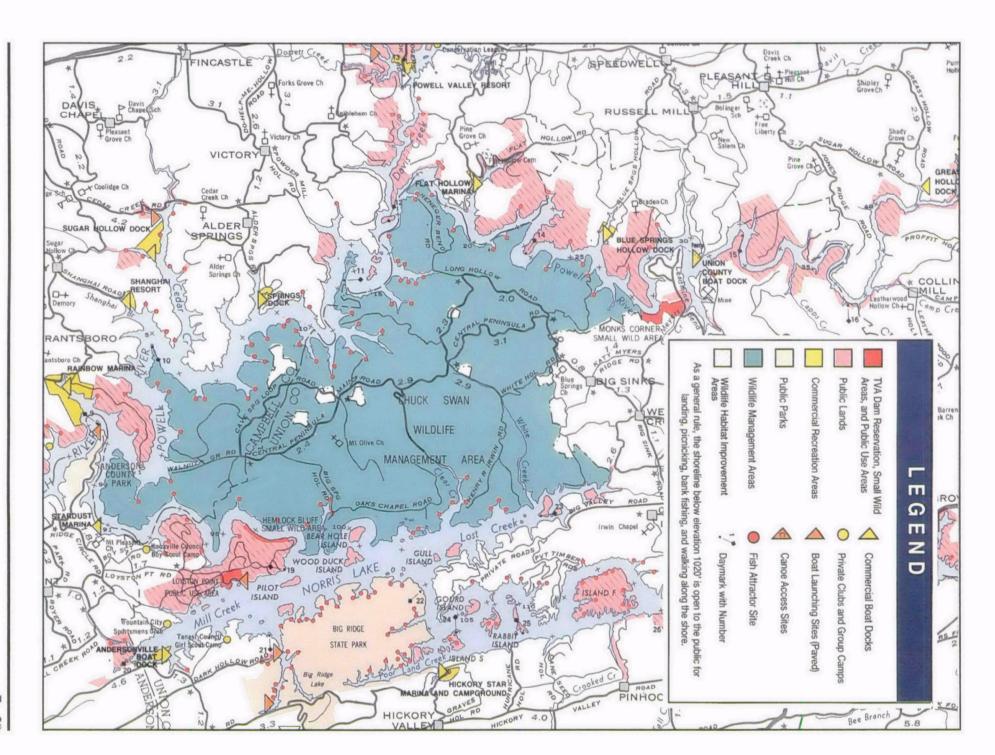
Paper

# **Technical, Ordering, and Availability Information**

These maps are available free of charge. Contact:

TVA Map Sales HB1A 1101 Market Street Chattanooga, TN 37402-2801 Telephone: (615) 751-Maps (6277)

At right: Example of TVA recreation map.



# **Special Regional Maps**

### **Data Product Keywords**

Geology, hydrography, land cover, land use, minerals, railroads, roads, soils, subsurface, surface and manmade features, topography, water, reference, thematic

### Summary

A wide variety of regional and subregional maps of varying scales and levels of detail. Included are such products as regional reference maps, tributary watershed maps, reservoir area maps, land use/land cover mapping, soils, geology, and minerals mapping.

# **Extent of Program**

Tennessee River watershed and Tennessee Valley Authority (TVA) power service area.

### **Available Product Coverage**

Tennessee River watershed and Tennessee Valley Authority power service area.

### **Information Content:**

Regional Reference Map: General base map of Tennessee Valley Region, size 11 by 17 inches, scale 1 inch = 30 miles. One edition with county outlines and one edition without county outlines. Lithoprinted.

Tributary Watershed Maps: Tributary watershed maps by TVA's Maps and Surveys Branch, lithoprinted in colors, showing drainage basin outline, drainage, topography, highways, railroads, and cities for each major watershed of the Tennessee Valley. Typical scale is 1 inch = 4 miles.

Reservoir Area Maps: Reservoir area maps revised since 1970 showing reservoir and surrounding region, drainage, highways, railroads, and shoreline of lakes at normal pool elevation. These maps are available in two sizes. Blueline prints are available for the 22-inch edition; scale varies. Maps lithoprinted in colors are available in 11-inch edition; scale varies. Revised editions are available for selected reservoirs. Call TVA for specific coverage information.

Land Use/Land Cover Maps: Land use and land cover maps are compiled from current aerial photography at various scales to meet the needs of regional development projects conducted by TVA and other agencies.

Soils Map: Soils in the Tennessee Valley – General suitability for agricultural use. This soil map was compiled by TVA Soils and Fertilizer Branch in cooperation with the Soil Conservation Service, U.S. Department of Agriculture with cartography by TVA's Maps and Surveys Branch. 1968 Edition, scale 1 inch = 10 miles. It shows by color legend and symbol: soil association, prevailing topography, parent material, principal utilization, and general suitability of soils in the Tennessee Valley.

Geology Maps: Geologic map of Tennessee in four sections, folded, 1:250,000 scale, size 37 by 49 inches.

Geologic map of Georgia. 1:500,000 scale, size 42 by 58 inches.

Mineral Resources Maps: Mineral resources of the Tennessee Valley Region, 1970 edition, scale 1 inch = 10 miles, size 35 by 49 inches, lithoprinted in colors.

Mineral Resources and Mineral Industries of Tennessee 1:500,000 scale, size 40 by 60 inches.

#### Product Delivery Format

Paper

# **Technical, Ordering, and Availability Information**

# **Survey Control Data**

# **Data Product Keywords**

Geodetic, horizontal control, vertical control

### Summary

Official records of the location and status of survey control monuments placed by the Tennessee Valley Authority (TVA).

# **Extent of Program**

Tennessee River watershed.

### **Available Product Coverage**

Vicinity of TVA reservoirs and generation plants.

#### **Information Content**

3- by 5-inch card containing detailed description of physical location of monument, condition, when last recovered, horizontal or vertical position based on State plane North American Datum 27 and North American Vertical Datum 29. These records cover several thousand survey control monuments placed by TVA since 1933.

### **Product Delivery Format**

Photocopies

### Technical, Ordering, and Availability Information

# **Tennessee Valley Authority Power System Maps**

### **Data Product Keywords**

Administrative boundaries, boundaries, roads, surface and manmade features, transmission lines, cities

### Summary

Tennessee Valley Region map showing transmission lines substations, municipalities, cooperatives, and interconnections of the Tennessee Valley Authority (TVA) power system/power service area.

# **Extent of Program**

TVA power service area.

### **Available Product Coverage**

TVA power service area.

#### Information Content

Electric power transmission system map of the Tennessee Valley Region, at a scale of 1 inch = 15 miles. Shows transmission lines, cities and towns, rivers and lakes, highways, railroads, political boundaries, dams and generating plants. Size 31 by 40 inches. This map provides public information regarding the location of TVA electric power transmission facilities useful for siting industrial development and additional transmission facilities.

# **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

This map is available at a cost of \$5.00 from TVA. Contact:

# **Tennessee Valley Region Wall Reference Map**

### **Data Product Keywords**

Airports, boundaries, hydrography, State boundaries, railroads, roads, surface and manmade features, cities

# **Summary**

General regional reference map.

### **Extent of Program**

Tennessee Valley region and vicinity.

### **Available Product Coverage**

Tennessee Valley region and vicinity.

### **Information Content**

1980 edition of the Tennessee Valley Authority's (TVA's) principal base map of the Tennessee Valley Region. Map features include TVA installations, interstate highway system, highways and roads, cities and towns, rivers, lakes, railroads, political boundaries, parks, Tennessee River watershed, TVA power service area, and other features. Size 48 by 62 inches, scale 1 inch = 10 miles. Lithoprinted in color. Available with or without 7½-minute quadrangle index overlay.

# **Product Delivery Format**

Paper

# Technical, Ordering, and Availability Information

This map is available at a cost of \$10.00 from TVA. Contact:

# ■ Reader Response Form ■

Readers are invited to provide corrections and to suggest additional Federal products or information to be included in the *Manual*. Readers also are encouraged to comment on the usefulness of the *Manual* and to suggest improvements in presentation. Please send your corrections, comments, and suggestions to:

Federal Geographic Data Committee Secretariat U.S. Geological Survey 590 National Center Reston, VA 22092 Telephone: (703) 648-4533

FAX: (703) 648-5755

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