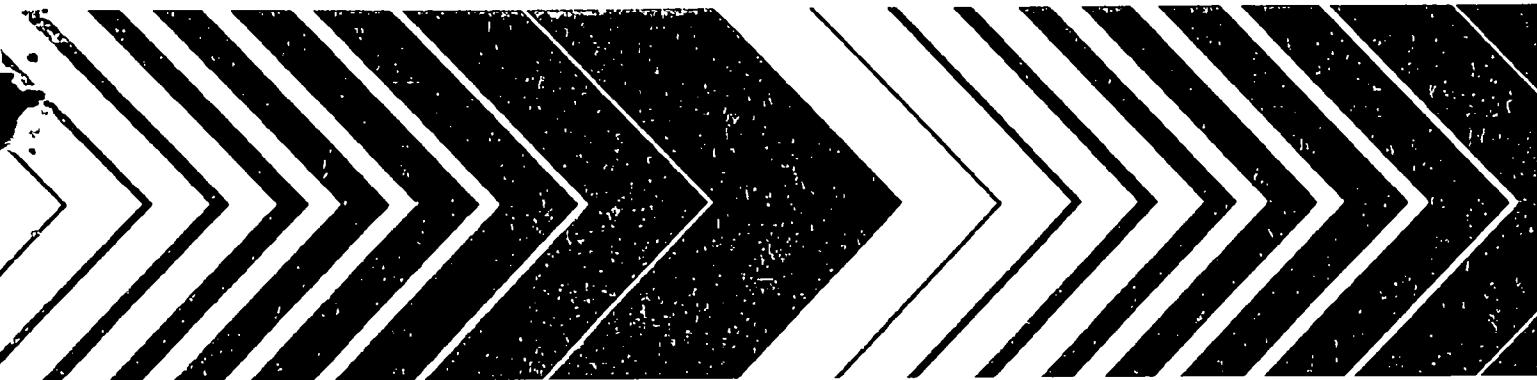




# **Phytoplankton Water Quality Relationships in U.S. Lakes, Part III:**

**Working  
Paper 707**

**Genera  
*Dactylococcopsis*  
Through *Gyrosigma*  
Collected from  
Eastern and  
Southeastern Lakes**



PHYTOPLANKTON WATER QUALITY RELATIONSHIPS IN U.S. LAKES, PART III:  
Genera *Dactylococcopsis* through *Gyrosigma*  
Collected from Eastern and Southeastern Lakes

by

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## FOREWORD

The National Eutrophication Survey (NES) was initiated in 1972 in response to an Administration commitment to investigate the nationwide threat of accelerated eutrophication to freshwater lakes and reservoirs. The survey was designed to develop, in conjunction with State environmental agencies, information on nutrient sources, concentrations, and impact on selected freshwater lakes as a basis for formulating comprehensive and coordinated national, regional, and State management practices relating to point-source discharge reduction and nonpoint-source pollution abatement in lake watersheds.

The survey collected physical, chemical, and biological data from 815 lakes and reservoirs throughout the contiguous United States. To date, the Survey has yielded about 2 1/2 million physical and chemical data points and about 75,000 phytoplankton records. In-depth analyses are being made to advance the rationale and data base for refinement of nutrient water quality criteria for the Nation's freshwater lakes.

## ABSTRACT

Water quality relationships for about 180 genera and 700 species and varieties of phytoplankton were determined based on National Eutrophication Survey data collected in 17 eastern and southeastern states during 1973. This report, Part III, presents environmental requirements and relative abundance of 34 phytoplankton genera: *Dactylococcopsis* through *Gyrosigma*.

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## LIST OF ABBREVIATIONS AND SYMBOLS

TOTAL DEPTH VALUES - chemical and physical data from the entire lake

PARTIAL DEPTH VALUES - chemical and physical data from the photic zone

ROUND 1 - data collected during the spring

ROUND 2 - data collected during the summer

ROUND 3 - data collected during the fall

ROUND ALL - data collected during the sampling year

DOM - (dominant occurrence) genus constituted 10 percent or more of the numerical total cell concentration of each lake-date sample in this category

NONDOM - (non-dominant occurrence) genus constituted less than 10 percent of the numerical total cell concentration of each lake-date sample in this category

OCC - (occurrence) genus was detected in each lake-date sample in this category

NONOCC - (non-occurrence) genus was not detected in any of the lake-date samples represented in this category

MIN - minimum value of a given parameter for the nature of occurrence indicated

MAX - maximum value of a given parameter for the nature of occurrence indicated

MEAN - mean value of a given parameter for the nature of occurrence indicated

STDV - standard deviation of the mean

N - sample size

LIST OF ABBREVIATIONS AND SYMOBLS (CONTINUED)

N </> :

    N < - number of lakes with values less than the minimum (MIN)  
    > - number of lakes with values greater than the maximum (MAX)

O/WR:

    O - number of occurrences  
  
    WR - number of lakes having values within the range defined by the  
          MIN and MAX  
  
CHLA - chlorophyll a ( $\mu\text{g/l}$ )  
TURB - turbidity (% transmission)  
SECCHI - Secchi disc (inches)  
PH - standard pH units  
DO - dissolved oxygen (mg/l)  
TEMP - temperature (degrees Celsius)  
TOTALP - total phosphorus (mg/l)  
ORTHOP - dissolved orthophosphorus (mg/l)  
NO<sub>2</sub>NO<sub>3</sub> - nitrite-nitrate nitrogen (mg/l)  
NH<sub>3</sub> - ammonia nitrogen (mg/l)  
KJEL - total Kjeldahl nitrogen (mg/l)  
ALK - total alkalinity (expressed as CaCO<sub>3</sub>, mg/l)  
N/P - inorganic nitrogen (NO<sub>2</sub>NO<sub>3</sub> + NH<sub>3</sub>)/total phosphorus (TOTALP)  
CONC - number of cells, colonies, or filaments/ml  
PERC - percent composition of numerical total

## INTRODUCTION

During the spring, summer, and fall of 1973, the National Eutrophication Survey (NES) sampled 250 lakes in 17 states. About 750,000 physical and chemical data points were measured from these study lakes. Some 180 genera and over 700 phytoplankton species and varieties were enumerated from the 694 water samples examined resulting in about 25,000 phytoplankton occurrence records. In order to determine phytoplankton water quality relationships in eastern states, the physical, chemical, and biological data collected were merged. From this it has been possible to establish the environmental requirements and relative importance of phytoplankton forms.

The physical and chemical lake data were summarized on a seasonal basis and organized by various categories of phytoplankton occurrence, e.g., numerical dominance, non-dominance, occurrence and non-occurrence. The summaries provide knowledge of the specific requirements or environmental limits for each taxon and are useful for the development of biological tools for monitoring and prediction of water quality or trophic condition.

A report series is necessary to present the large volume of information produced in this study. This report, Part III of the series Phytoplankton 34 genera (alphabetically from *Dactylococcus* through *Gyrosigma*) of the phytoplankton detected in samples from 17 eastern and southeastern states (Table 1). Part I (Taylor et al., 1978) presents the methods used, rationale under which the study was carried out, and limitations of the data. Parts II, IV, and V of the series (Williams et al., 1978; Lambou et al., 1978; Morris et al., 1978) present the findings for the other 146 phytoplankton genera encountered in our study of eastern and southeastern lakes. Parts VI and VII of the series will present an analysis of the environmental relationships of 57 common phytoplankton genera and a comparison of trophic state indices. Additional interpretative reports and phytoplankton water quality relationships by species will be forthcoming.

Table 1. LISTING OF PHYTOPLANKTON GENERA ADDRESSED IN THIS REPORT

GENUS	ALGAL UNITS COUNTED	PAGE	GENUS	ALGAL UNITS COUNTED	PAGE
<i>Dactylococcopsis</i>	Cell	10	<i>Eunotia</i>	Cell	48
<i>Dactylothece</i>	Cell	12	*flagellate	Cell	50
<i>Denticula</i>	Cell	14	*flagellates	Cell	52
<i>Desmidium</i>	Cell	16	<i>Fragilaria</i>	Cell	54
<i>Diatoma</i>	Cell	18	<i>Franceia</i>	Cell	56
<i>Dichotomococcus</i>	Colony	20	<i>Frustrulia</i>	Cell	58
<i>Dictyosphaerium</i>	Colony	22	<i>Geminella</i>	Filament	60
<i>Dimorphococcus</i>	Colony	24	<i>Glenodinium</i>	Cell	62
<i>Dinobryon</i>	Cell	26	<i>Gloeocapsa</i>	Colony	64
*dinoflagellate	Cell	28	<i>Gloeocystis</i>	Colony	66
*dinoflagellates	Cell	30	<i>Gloeothece</i>	Colony	68
<i>Diploneis</i>	Cell	32	<i>Golenkinia</i>	Cell	70
<i>Echinospaerella</i>	Cell	34	<i>Gomphonema</i>	Cell	72
<i>Elakatothrix</i>	Cell	36	<i>Gomphosphaeria</i>	Colony	74
<i>Epithemia</i>	Cell	38	<i>Gonatozygon</i>	Cell	76
<i>Euastrum</i>	Cell	40	<i>Gonium</i>	Colony	78
<i>Eucapsis</i>	Colony	42	<i>Gonyaulax</i>	Cell	80
<i>Eudorina</i>	Colony	44	<i>Gymnodinium</i>	Cell	82
<i>Euglena</i>	Cell	46	<i>Gyrosigma</i>	Cell	84

\* General categories summarized in the appendix

## RESULTS

The overall ranges of physical, chemical and biological conditions defined by our population of 250 eastern and southeastern study lakes are presented in Table 2. It should be noted that the levels of nutrients (nitrogen and phosphorus forms) as well as chlorophyll *a* (CHLA) and Secchi disk (SECCHI) measurements strongly suggest a lake population bias toward the eutrophic (nutrient enriched) end of the trophic spectrum, and may reflect the initial criteria for selection of lakes to be sampled by the NES (see Part I, Taylor et al. 1978).

The Appendix summarizes environmental requirements of the 34 phytoplankton genera included in this report. Findings for each genus occupy two Appendix pages. A detailed description of the Appendix format is found in Part I of this report series (Taylor et al., 1978). The first Appendix page for a genus contains the statistics for partial depth (photic zone) conditions under which the taxon was found to occur (OCC) or was not detected (NONOCC). The second page provides statistics associated with partial depth conditions representing the taxon as a numerical dominant (DOM) and as a non-dominant form (NONDOM).

The Appendix was generated by computer. Because it was only possible to use upper case letters in the print-out, all scientific names are printed in upper case letters and are not italicized. Definitions of terms and abbreviations appearing in the Appendix are given on page vi. Table 2 summarizes all the physical and chemical data by seasonal sampling round and total and partial depth values.

TABLE 2. SUMMARY OF LAKE-DATE PHYSICAL AND CHEMICAL DATA FOR TOTAL AND PARTIAL  
DEPTH VALUES (N IS THE SAMPLE SIZE; THE OTHER TERMS AND ABBREVIATIONS  
ARE DEFINED ON PAGE vi.)

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P
TOTAL DEPTH VALUES														
R	MIN	0.3	6	2	5.2	0.7	6.8	0.004	0.001	0.024	0.025	0.199	10	0.0
O	MAX	355.6	100	252	10.6	19.2	28.7	1.719	1.209	9.745	0.635	4.699	248	142.0
U 1	MEAN	21.0	69	44	7.8	8.7	16.9	0.124	0.058	0.800	0.115	0.789	70	18.7
N	STDEV	41.40	20.5	36.2	0.74	2.18	5.35	0.2311	0.1641	1.4755	0.0960	0.7021	67.2	25.01
D	N	247	187	249	249	245	248	249	249	249	249	249	249	249
R	MIN	1.4	4	1	4.1	2.2	14.9	0.004	0.001	0.027	0.044	0.261	10	0.0
O	MAX	595.0	116	222	10.6	16.0	31.1	2.559	1.191	9.691	1.081	7.149	334	122.0
U 2	MEAN	34.4	71	49	7.6	6.1	25.2	0.142	0.057	0.503	0.177	1.255	76	14.5
N	STDEV	62.58	23.8	35.0	0.91	2.13	3.33	0.2809	0.1492	0.8352	0.1538	1.0845	71.0	20.08
D	N	247	238	241	247	246	246	247	247	247	247	247	247	247
R	MIN	0.8	1	6	5.2	1.5	8.8	0.005	0.002	0.019	0.019	0.199	10	0.0
O	MAX	241.4	99	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	337	76.0
U 3	MEAN	23.2	72	50	7.5	6.9	19.8	0.164	0.075	0.340	0.210	1.209	75	9.7
N	STDEV	34.27	22.9	35.0	0.83	1.87	3.47	0.4083	0.2096	0.5362	0.3529	1.1042	66.4	12.85
D	N	247	221	246	245	242	246	246	245	246	246	246	246	246
R	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.019	0.019	0.199	10	0.0
O	MAX	595.0	116	252	10.6	19.2	31.1	4.549	2.009	9.745	3.024	8.199	334	142.0
U 4	MEAN	26.2	71	48	7.7	7.2	20.6	0.143	0.069	0.575	0.167	1.083	73	14.3
N	STDEV	47.93	22.6	35.7	0.84	2.33	5.40	0.3154	0.1760	1.0519	0.2317	1.0013	68.2	20.28
D	N	247	221	246	245	241	246	246	245	246	246	246	246	246
PARTIAL DEPTH VALUES														
R	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0
O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0
U 1	MEAN	21.0	71	44	7.9	9.0	17.5	0.123	0.057	0.870	0.107	0.796	70	18.6
N	STDEV	41.40	20.6	36.2	0.73	2.02	5.59	0.2314	0.1642	1.4754	0.0953	0.6975	67.3	25.14
D	N	247	187	249	249	245	248	249	249	249	249	249	249	249
R	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0
O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0
U 2	MEAN	34.4	72	49	7.8	7.0	26.6	0.134	0.053	0.493	0.120	1.217	73	14.1
N	STDEV	62.58	24.0	35.8	0.69	1.98	2.35	0.2611	0.1479	0.8836	0.0878	1.0778	68.9	23.76
D	N	247	237	241	247	246	246	247	247	247	247	247	247	247
R	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0
O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0
U 3	MEAN	23.2	74	50	7.6	7.3	20.4	0.155	0.070	0.342	0.122	1.118	73	9.6
N	STDEV	34.27	23.1	35.0	0.84	1.61	3.25	0.4091	0.2088	0.5677	0.2232	1.0572	64.1	14.87
D	N	247	221	246	245	241	246	246	245	246	246	246	246	246
R	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0
O	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0
U 4	MEAN	26.2	72	48	7.8	7.0	21.5	0.137	0.060	0.569	0.116	1.043	72	14.1
N	STDEV	47.93	22.7	35.7	0.83	2.07	5.49	0.3157	0.1753	1.0660	0.1487	0.9749	66.7	22.04
D	N	247	645	736	761	732	740	742	741	742	742	742	742	742

## REFERENCES

- Lambou, V. W., F. A. Morris, M. K. Morris, W. D. Taylor, L. R. Williams, and S. C. Hern. 1978. Phytoplankton Water Quality Relationships in U.S. Lakes, Part IV: Genera *Hantzschia* through *Pteromonas* collected from eastern and southeastern lakes. National Eutrophication Survey Working Paper No. 708. U.S. Environmental Monitoring and Support Laboratory, Las Vegas, Nevada. vii + 105 pp.
- Morris, M. K., W. D. Taylor, L. R. Williams, S. C. Hern, V. W. Lambou, F. A. Morris. 1978. Phytoplankton Water Quality Relationships in U.S. Lakes, Part V: Genera *Quadrigula* through *Zygnema* collected from eastern and southeastern lakes. Working Paper No. 709. U.S. Environmental Protection Agency. Environmental Monitoring and Support Laboratory, Las Vegas, Nevada. vii + 99 pp.
- Taylor, W. D., L. R. Williams, S. C. Hern, V. W. Lambou, F. A. Morris, and M. K. Morris. 1978. Phytoplankton Water Quality Relationships in U.S. Lakes, Part I: Methods, rationale, and data limitations. National Eutrophication Survey Working Paper No. 705. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada. vii + 67 pp.
- Williams, L. R., S. C. Hern, V. W. Lambou, F. A. Morris, M. K. Morris, and W. D. Taylor. 1978. Phytoplankton Water Quality Relationships in U.S. Lakes, Part II: Genera *Acanthosphaera* through *Cystodinium* collected from eastern and southeastern lakes. National Eutrophication Survey Working Paper No. 706. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada. vii + 119 pp.

## BIBLIOGRAPHY

List of reports containing all phytoplankton data  
collected in 1973 which was used in the series  
"Phytoplankton Water Quality Relationships in U.S. Lakes."

Hern, S. C., J. W. Hilgert, V. W. Lambou, F. A. Morris, M. K. Morris, L. R. Williams, W. D. Taylor, and F. A. Hiatt. 1977. Distribution of Phytoplankton in South Carolina Lakes. EPA-600/3-77-102, Ecological Research Series. v + 64 pp.

Hern, S. C., J. W. Hilgert, V. W. Lambou, F. A. Morris, M. K. Morris, L. R. Williams, W. D. Taylor, and F. A. Hiatt. 1978. Distribution of Phytoplankton in Delaware Lakes. EPA-600/3-78-027, Ecological Research Series. v + 33 pp.

Hiatt, F. A., S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, M. K. Morris, L. R. Williams, and W. D. Taylor. 1977. Distribution of Algae in Pennsylvania. U.S. EPA National Eutrophication Survey Working Paper No. 689. iv + 74 pp.

Hiatt, F. A., S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, M. K. Morris, L. R. Williams, and W. D. Taylor. 1978. Distribution of Phytoplankton in Tennessee Lakes. EPA-600/78-016, Ecological Research Series. v + 67 pp.

Hilgert, J. W., V. W. Lambou, F. A. Morris, R. W. Thomas, M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, and S. C. Hern. 1977. Distribution of Phytoplankton in Virginia Lakes. EPA-600/3-77-100, Ecological Research Series. v + 40 pp.

Hilgert, J. W., V. W. Lambou, F. A. Morris, M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, and S. C. Hern. 1978. Distribution of Phytoplankton in Ohio Lakes. EPA-600/3-78-015, Ecological Research Series. v + 94 pp.

Lambou, V. W., F. A. Morris, R. W. Thomas, M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern and J. W. Hilgert. 1977. Distribution of Phytoplankton in Maryland Lakes. EPA-600/3-77-124, Ecological Research Series. v + 24 pp.

- Lambou, V. W., F. A. Morris, M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern, and J. W. Hilgert. 1977. Distribution of Phytoplankton in West Virginia Lakes. EPA-600/3-77-103, Ecological Research Series. v + 21 pp.
- Morris, F. A., R. W. Thomas, M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern, J. W. Hilgert, and V. W. Lambou. 1977. Distribution of Phytoplankton in Indiana Lakes. U.S. EPA National Eutrophication Survey Working Paper No. 682. iii + 73 pp.
- Morris, F. A., M. K. Morris, L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern, J. W. Hilgert, and V. W. Lambou. 1978. Distribution of Phytoplankton in Georgia Lakes. EPA-600/3-78-011, Ecological Research Series. v + 63 pp.
- Morris, M. K., L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, and R. W. Thomas. 1977. Distribution of Phytoplankton in Illinois Lakes. U.S. EPA National Eutrophication Survey Working Paper No. 681. iii + 131 pp.
- Morris, M. K., L. R. Williams, W. D. Taylor, F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, and R. W. Thomas. 1977. Distribution of Phytoplankton in North Carolina Lakes. U.S. EPA National Eutrophication Survey Working Paper No. 687. iii + 75 pp.
- Taylor, W. D., F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, R. W. Thomas, M. K. Morris, and L. R. Williams. 1977. Distribution of Phytoplankton in Alabama Lakes. EPA-600/3-77-082, Ecological Research Series. v + 51 pp.
- Taylor, W. D., F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, R. W. Thomas, M. K. Morris, and L. R. Williams. 1977. Distribution of Phytoplankton in Florida Lakes. U.S. EPA National Eutrophication Survey Working Paper No. 679. iii + 113 pp.
- Taylor, W. D., F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, M. K. Morris, and L. R. Williams. 1978. Distribution of Phytoplankton in Kentucky Lakes. EPA-600/3-78-013, Ecological Research Series. v + 28 pp.
- Williams, L. R., W. D. Taylor, F. A. Hiatt, S. C. Hern, J. W. Hilgert, V. W. Lambou, F. A. Morris, R. W. Thomas, and M. K. Morris. 1977. Distribution of Phytoplankton in Mississippi Lakes. EPA-600/3-77-101, Ecological Research Series. v + 29 pp.
- Williams, L. R., F. A. Morris, J. W. Hilgert, V. W. Lambou, F. A. Hiatt, W. D. Taylor, M. K. Morris, and S. C. Hern. 1978. Distribution of Phytoplankton in New Jersey Lakes. EPA-600/3-78-014, Ecological Research Series. v + 59 pp.



## APPENDIX

### PHYTOPLANKTON GENERA WATER QUALITY RELATIONSHIPS

Computer generated summary of physical, chemical and biological conditions associated with occurrence (OCC), non-occurrence (NONOCC), dominance (DOM) and non-dominance (NONDOM) of 34 genera of phytoplankton (*Dactylococopsis* to *Gyrosigma*) from 250 eastern and southeastern lakes sampled during 1973.

## GENUS: DACTYLOCOCCOPSIS

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN	1.5	21	7	6.6	3.8	11.9	0.008	0.001	0.025	0.022	0.225	10	0.0	0 0.0
O	O	MAX	188.6	100	252	10.1	15.5	28.9	1.184	1.032	9.745	0.554	3.000	227	70.0	16679 36.9
U	1	C MEAN	19.5	72	35	8.0	8.7	19.4	0.136	0.071	0.955	0.116	0.834	67	13.1	869 4.2
N	C	STDV	28.09	15.9	31.5	0.67	1.85	5.18	0.2175	0.1772	1.8332	0.1027	0.6148	55.1	15.44	2620.5 6.35
D	C	NC/	8/ 4	6/ 0	8/ 0	4/ 1	4/ 1	31/ 0	8/ 4	0/ 3	1/ 0	0/ 1	4/ 4	0/ 3	0/ 14	
		O/WR	76/235	62/181	76/241	76/244	75/240	76/217	76/237	76/246	76/248	76/241	76/246	76/235		
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.024	0.199	10	0.0	0 0.0
O	O	MAX	355.6	100	185	10.6	19.2	28.0	1.719	1.209	8.089	0.635	4.699	248	142.0	0 0.0
U	1	N MEAN	21.6	70	47	7.9	9.1	16.7	0.117	0.051	0.832	0.103	0.779	71	21.0	0 0.0
N	O	STDV	46.16	22.6	37.6	0.75	2.08	5.58	0.2376	0.1584	1.2918	0.0919	0.7320	72.2	28.07	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 3	0/ 0	0/ 0	0/ 1	1/ 0	0/ 0	0/ 0	0/ 0	
		C O/WR	171/267	125/187	173/248	173/249	170/245	172/245	173/249	173/249	173/248	173/249	173/249	173/249	173/249	
R	N	MIN	2.4	4	6	5.5	3.3	21.2	0.007	0.001	0.027	0.036	0.304	10	0.0	0 0.0
O	O	MAX	595.0	96	117	10.6	14.2	32.2	1.599	1.191	6.057	0.719	7.149	281	210.0	35822 56.7
U	2	C MEAN	44.5	70	40	7.8	6.7	27.6	0.171	0.088	0.435	0.116	1.327	68	10.2	2523 7.5
N	C	STDV	82.68	23.5	23.0	0.83	1.66	2.17	0.3002	0.2163	1.0019	0.0948	1.1266	59.5	24.66	6203.3 10.82
D	C	NC/	6/ 0	0/ 7	1/ 11	2/ 0	4/ 3	3/ 0	4/ 1	0/ 0	1/ 0	1/ 0	7/ 0	0/ 2	0/ 0	
		O/WR	92/241	89/230	90/229	92/245	91/239	92/243	92/242	92/247	92/246	92/246	92/240	92/245	92/247	
R	N	MIN	1.4	5	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0 0.0
O	O	MAX	312.0	121	222	10.3	17.8	31.4	2.559	0.609	4.099	0.565	6.349	334	130.0	0 0.0
U	2	N MEAN	28.5	73	54	7.8	7.2	26.0	0.113	0.032	0.528	0.121	1.151	77	16.4	0 0.0
N	O	STDV	46.05	24.3	40.8	0.92	2.13	2.26	0.2679	0.0781	0.8068	0.0836	1.0459	73.9	22.98	0.0 0.00
D	C	NC/	0/ 2	1/ 0	0/ 0	0/ 1	0/ 0	0/ 2	0/ 0	0/ 3	0/ 3	0/ 1	0/ 1	0/ 0	0/ 1	
		C O/WR	155/245	148/236	151/241	155/246	155/246	154/244	155/247	155/244	155/246	155/246	155/247	155/247	155/246	
R	N	MIN	0.8	6	7	6.4	1.6	12.6	0.004	0.001	0.024	0.034	0.242	10	0.0	0 0.0
O	O	MAX	171.5	97	159	10.0	11.4	29.6	3.084	2.009	2.569	3.024	8.199	291	85.0	48815 42.8
U	3	C MEAN	24.0	70	40	7.7	7.3	21.1	0.178	0.097	0.312	0.128	1.194	72	7.5	2105 7.8
N	C	STDV	29.15	22.8	27.9	0.75	1.51	3.06	0.3845	0.2773	0.4495	0.2955	1.1341	56.6	11.92	5453.4 9.41
D	C	NC/	0/ 3	2/ 2	1/ 2	12/ 1	0/ 2	1/ 0	0/ 1	0/ 3	0/ 2	4/ 0	7/ 0	0/ 0	0/ 2	
		O/WR	119/244	112/217	119/243	118/232	117/239	119/245	118/245	118/245	118/238	118/242	118/239	118/246	118/244	
R	N	MIN	0.8	1	6	4.7	1.9	9.0	0.005	0.002	0.017	0.020	0.199	10	0.0	0 0.0
O	D	MAX	241.4	100	185	10.3	13.5	29.0	4.549	0.847	4.469	0.979	6.000	283	90.0	0 0.0
U	3	N MEAN	22.5	78	60	7.5	7.3	19.8	0.133	0.044	0.369	0.117	1.048	73	11.5	0 0.0
N	O	STDV	38.52	22.9	38.1	0.90	1.70	3.30	0.4309	0.1080	0.6253	0.1248	0.9803	70.5	16.98	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	0/ 1	1/ 0	1/ 4	0/ 0	0/ 1	0/ 1	0/ 0	0/ 0	
		C O/WR	128/247	109/221	127/246	127/245	124/240	127/245	128/245	127/246	128/245	128/245	128/245	128/245	128/246	
R	N	MIN	0.8	4	6	5.5	1.6	11.9	0.004	0.001	0.024	0.022	0.225	10	0.0	0 0.0
O	A	MAX	595.0	100	252	10.6	15.5	32.2	3.084	2.009	9.745	3.024	8.199	291	210.0	48815 56.7
U	L	C MEAN	29.4	71	39	7.8	7.5	22.7	0.164	0.087	0.523	0.121	1.141	69	9.9	1912 6.7
N	L	STDV	53.33	21.5	27.5	0.76	1.82	4.90	0.3197	0.2343	1.1655	0.2038	1.0345	57.0	17.90	5172.1 9.31
D	C	NC/	6/ 0	2/ 3	5/ 0	5/ 0	1/ 3	32/ 0	0/ 1	0/ 0	6/ 0	1/ 0	10/ 0	0/ 2	0/ 0	
		O/WR	287/735	263/640	285/731	286/736	283/728	287/708	286/741	286/741	286/736	286/741	286/732	286/740	286/742	
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0
O	A	MAX	355.6	121	222	10.6	19.2	31.4	4.549	1.209	8.089	0.979	6.349	334	142.0	0 0.0
U	L	N MEAN	24.2	73	53	7.7	8.0	20.7	0.120	0.043	0.599	0.113	0.981	74	16.8	0 0.0
N	L	O STDV	44.11	23.5	39.1	0.87	2.20	5.71	0.3123	0.1219	0.9988	0.0999	0.9315	72.2	23.91	0.0 0.00
D	C	NC/	0/ 2	0/ 0	0/ 1	0/ 0	0/ 0	0/ 2	0/ 0	0/ 2	0/ 1	0/ 1	0/ 2	0/ 0	0/ 1	
		C O/WR	454/739	382/645	451/735	455/741	449/732	453/738	456/742	455/739	456/741	456/741	456/740	456/742	456/741	

## GENUS: DACTYLOCOCCOPSIS

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	COND	PERC	
R	N	MIN	5.2	64	12	6.8	6.4	14.3	0.031	0.003	0.041	0.045	0.574	15	0.0	133	10.7
O	D	MAX	53.7	91	60	10.1	11.6	26.5	1.184	1.032	0.922	0.164	1.832	91	7.0	16679	36.9
U	I	MEAN	24.7	76	36	8.4	8.6	21.4	0.385	0.297	0.199	0.087	1.186	54	3.0	5998	21.2
N	M	STDEV	16.06	10.7	14.7	1.22	1.73	4.24	0.4393	0.4017	0.3210	0.0380	0.4290	30.3	3.27	6208.0	8.31
D	NC/>	81/ 16	56/ 21	19/ 47	9/ 1	21/ 13	98/ 19	72/ 4	27/ 3	6/ 55	30/ 37	124/ 17	61/ 73	0/133			
	O/WR	7/150	6/110	7/183	7/239	7/211	7/131	7/173	7/219	7/188	7/182	7/108	7/115	7/116			
R	N	MIN	1.5	21	7	6.6	3.8	11.9	0.008	0.001	0.025	0.022	0.225	10	0.0	0	0.0
C	O	MAX	188.6	100	252	9.3	15.5	28.9	1.159	0.851	5.745	0.554	3.000	227	70.0	8755	9.0
U	I	MEAN	19.0	72	35	7.9	8.7	19.2	0.111	0.048	1.031	0.118	0.798	68	14.1	349	2.5
N	D	STDEV	28.96	16.4	32.7	0.58	1.88	5.25	0.1677	0.1207	1.9060	0.1069	0.6217	57.0	15.83	1112.1	2.35
D	NC/>	8/ 4	6/ 0	8/ 0	4/ 8	4/ 1	31/ 0	8/ 5	0/ 4	1/ 0	0/ 1	4/ 4	0/ 3	0/ 14			
	O/WR	69/235	56/181	69/241	69/237	68/240	69/217	69/236	69/245	69/248	69/248	69/241	69/246	69/235			
R	N	MIN	2.9	29	21	6.4	3.3	25.7	0.007	0.003	0.025	0.044	0.424	12	0.0	24	10.3
O	D	MAX	140.2	92	91	9.0	9.2	30.2	1.259	1.191	1.917	0.325	2.574	149	103.0	35822	56.7
U	Z	MEAN	35.9	75	43	7.8	6.6	28.8	0.168	0.112	0.228	0.097	1.224	47	12.1	9644	24.4
N	M	STDEV	37.08	18.3	17.4	0.71	1.44	1.21	0.3068	0.2865	0.4217	0.0634	0.6952	37.2	24.19	10612.1	12.28
D	NC/>	11/ 11	21/ 29	40/ 28	15/ 12	4/ 19	94/ 4	4/ 3	9/ 0	4/ 15	13/ 7	36/ 21	27/ 37	0/ 3			
	O/WR	20/225	18/187	20/173	20/220	20/223	20/148	20/240	20/238	20/228	20/227	20/190	20/183	20/244			
R	N	MIN	2.4	4	6	5.5	3.8	21.2	0.007	0.001	0.027	0.036	0.304	10	0.0	0	0.0
C	O	MAX	595.0	96	117	10.6	14.2	32.2	1.599	0.969	6.657	0.719	7.149	281	210.0	6502	9.5
U	Z	MEAN	46.9	69	40	7.8	6.7	27.2	0.171	0.082	0.493	0.121	1.355	74	9.6	545	2.8
N	D	STDEV	91.47	24.6	24.4	0.87	1.73	2.26	0.3005	0.1945	1.1061	0.1016	1.2222	63.5	24.93	965.8	2.55
D	NC/>	6/ 0	0/ 7	1/ 11	2/ 0	6/ 3	3/ 0	4/ 1	0/ 1	1/ 0	1/ 0	7/ 0	0/ 2	0/ 0			
	O/WR	72/241	71/230	70/229	72/245	71/237	72/243	72/242	72/246	72/246	72/246	72/240	72/245	72/247			
R	N	MIN	1.1	17	10	6.6	4.5	15.2	0.006	0.004	0.024	0.038	0.307	14	0.0	47	10.1
O	D	MAX	78.0	97	104	9.9	10.1	27.8	0.921	0.493	0.599	0.189	4.099	219	19.0	48815	42.8
U	Z	MEAN	18.0	74	42	7.6	7.3	21.5	0.137	0.063	0.157	0.071	0.890	55	4.5	5172	20.4
N	M	STDEV	18.30	21.3	22.2	0.77	1.33	3.77	0.2085	0.1217	0.1678	0.0340	0.7738	46.4	4.33	9104.3	10.38
D	NC/>	2/ 12	7/ 2	3/ 24	23/ 2	9/ 10	7/ 2	10/ 7	6/ 8	6/ 40	11/ 32	23/ 6	32/ 8	0/ 22			
	O/WR	31/233	31/212	31/219	31/220	30/222	31/237	31/229	31/229	31/200	31/203	31/217	31/206	31/224			
R	N	MIN	0.8	6	7	6.4	1.6	12.6	0.034	0.001	0.024	0.034	0.242	10	0.0	3	3.0
O	D	MAX	171.5	97	159	10.0	11.4	29.6	3.084	2.009	2.569	2.024	8.199	291	85.0	20961	5.9
U	Z	MEAN	26.1	69	39	7.7	7.3	21.0	0.192	0.110	0.368	0.149	1.302	78	8.6	1024	3.4
N	D	STDEV	31.93	23.3	29.8	0.75	1.57	2.79	0.4303	0.3144	0.5032	0.3417	1.2231	58.9	13.49	2687.1	2.65
D	NC/>	0/ 3	2/ 2	1/ 2	12/ 1	0/ 2	1/ 0	0/ 1	0/ 0	6/ 2	4/ 0	7/ 0	0/ 3	0/ 2			
	O/WR	88/244	91/217	88/243	87/232	87/239	88/245	87/245	87/238	87/242	87/239	87/246	87/244				
R	N	MIN	1.1	17	10	6.4	3.3	14.3	0.007	0.003	0.024	0.038	0.307	12	0.0	24	10.1
O	A	MAX	140.2	97	104	10.1	11.6	30.2	1.259	1.191	1.917	0.325	4.099	219	103.0	48815	56.7
U	L	MEAN	25.3	75	41	7.8	7.2	24.0	0.178	0.108	0.186	0.082	1.041	52	6.9	6814	21.9
N	L	STDEV	27.16	19.2	19.7	0.84	1.52	4.71	0.2843	0.2401	0.2933	0.0475	0.7227	41.3	14.85	9464.6	10.85
D	NC/>	9/ 22	21/ 12	30/ 65	30/ 5	10/ 23	103/ 4	14/ 10	38/ 3	6/ 52	33/ 30	63/ 14	93/ 27	0/ 8			
	O/WR	58/710	55/612	58/641	58/706	57/699	58/633	58/718	58/700	58/684	58/679	58/665	58/622	58/734			
R	N	MIN	0.8	4	6	5.5	1.6	11.9	0.004	0.001	0.024	0.022	0.225	10	0.0	3	3.0
O	A	MAX	595.0	130	252	10.6	15.5	32.2	3.084	2.009	9.745	3.024	8.199	291	210.0	20961	6.9
U	L	MEAN	30.5	70	38	7.8	7.5	22.6	0.161	0.082	0.608	0.131	1.166	74	10.6	670	2.9
N	L	STDEV	58.11	22.1	29.1	0.74	1.88	4.91	0.3286	0.2330	1.2836	0.2260	1.0997	59.7	18.55	1873.6	2.55
D	NC/>	6/ 0	2/ 3	5/ 0	5/ 0	1/ 3	32/ 0	0/ 1	0/ 0	6/ 0	1/ 0	10/ 0	0/ 2	0/ 0			
	O/WR	229/735	238/640	227/731	228/736	226/728	229/708	228/741	228/741	228/736	228/741	228/732	228/740	228/742			

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**GENUS: DACTYLOTHECE**

### PARTIAL DEPTH VALUES

## GENUS: DACTYLOTHECE

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN															
O	D	MAX															
U	1	O	MEAN														
U	0	M	STDEV														
D		N</>															
D		O/WR															
R	N	MIN															
O	D	MAX															
U	2	O	MEAN														
U	0	M	STDEV														
D		N</>															
D		O/WR															
R	N	MIN															
O	D	MAX															
U	2	O	MEAN														
U	0	M	STDEV														
D		N</>															
D		O/WR															
R	N	MIN	54.4	54	26	9.1	9.4	20.2	0.192	0.031	0.051	0.081	1.375	88	1.0	0 0.0	
O	D	MAX	54.4	54	26	9.1	9.4	20.2	0.192	0.031	0.051	0.081	1.375	88	1.0	0 0.0	
U	3	O	MEAN	54.4	54	26	9.1	9.4	20.2	0.191	0.031	0.050	0.081	1.375	88	1.0	0 0.0
U	0	M	STDEV	0.00	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.0	0.0 0.00	
D		N</>	217/ 29	39/181	57/187	237/ 7	223/ 17	125/114	210/ 35	170/ 72	70/172	141/192	185/ 59	169/ 75	13/204		
D		O/WR	1/ 1	1/ 1	1/ 2	1/ 1	1/ 1	1/ 7	1/ 1	1/ 3	1/ 4	1/ 3	1/ 2	1/ 2	1/ 29		
R	A	D	MIN														
O	A	D	MAX														
U	U	O	MEAN														
U	L	M	STDEV														
D		N</>															
D		O/WR															
R	N	MIN	54.4	54	26	9.1	9.4	20.2	0.192	0.331	0.051	0.081	1.375	88	1.0	0 0.0	
O	A	D	MAX	54.4	54	26	9.1	9.4	20.2	0.192	0.031	0.051	0.081	1.375	88	1.0	0 0.0
U	U	N	MEAN	54.4	54	26	9.1	9.4	20.2	0.191	0.031	0.050	0.081	1.375	88	1.0	0 0.0
U	L	D	STDEV	0.35	0.0	0.3	0.00	0.30	0.03	0.0033	0.0030	0.0000	0.0000	0.0000	0.0	0.0	0.0 0.00
D		N</>	452/ 88	122/522	208/519	706/ 30	588/139	294/438	641/ 99	549/188	105/631	366/368	580/159	518/221	32/647		
D		O/WR	1/ 1	1/ 1	1/ 9	1/ 5	1/ 5	1/ 6	1/ 2	1/ 4	1/ 6	1/ 8	1/ 3	1/ 3	1/ 63		

## GENUS:DENTICULA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NOZN03	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0 0.0	
O	O	MAX	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0 0.0	
U	I	C	MEAN	4.9	76	34	7.2	6.4	28.0	0.050	0.007	0.343	0.098	0.478	40	9.0	0 0.0
N	C	STDV	0.30	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00	
D	NC/	>	73/172	92/ 89	130/117	37/204	21/220	243/ 3	113/133	96/147	126/122	169/ 76	101/147	123/122	120/117		
O/WR			1/ 2	1/ 6	1/ 2	1/ 8	1/ 4	1/ 2	1/ 3	1/ 6	1/ 1	1/ 4	1/ 4	1/ 12			
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0 0.0	
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0 0.0	
U	I	N	MEAN	21.0	71	44	7.9	9.0	17.5	0.123	0.057	0.872	0.107	0.797	70	18.7	0 0.0
N	O	STDV	41.47	20.6	36.2	0.73	2.02	5.56	0.2319	0.1645	1.4780	0.0955	0.6986	67.5	25.18	0.0 0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR		246/247	186/187	248/249	248/249	246/245	247/248	248/249	248/249	248/249	248/249	248/249	248/249	248/249		
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0 0.0	
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.657	0.719	7.149	334	210.0	0 0.0	
U	2	N	MEAN	34.4	72	49	7.8	7.0	26.6	0.134	0.053	0.493	0.120	1.217	73	14.1	0 0.0
N	O	STDV	62.58	24.0	35.8	0.89	1.98	2.35	0.2811	0.1479	0.8836	0.0878	1.0778	68.9	23.76	0.0 0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR		247/247	237/237	241/241	247/247	246/246	246/246	247/247	247/247	247/247	247/247	247/247	247/247	247/247		
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0	
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0 0.0	
U	3	C	MEAN	23.2	74	50	7.6	7.3	20.4	0.155	0.070	0.342	0.122	1.118	73	9.6	0 0.0
N	O	STDV	34.27	23.1	35.0	0.84	1.61	3.25	0.4091	0.2088	0.5677	0.2232	1.0572	64.1	14.87	0.0 0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR		247/247	221/221	246/246	245/245	241/241	246/246	246/246	245/245	246/246	246/246	246/246	246/246	246/246		
R	N	MIN	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0 0.0	
O	A	O	MAX	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0 0.0
U	L	C	MEAN	4.9	76	34	7.2	6.4	28.0	0.050	0.007	0.343	0.098	0.478	40	9.0	0 0.0
N	L	O	STDV	0.30	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00
D	NC/	>	152/584	258/373	311/413	171/549	161/552	646/ 88	346/392	255/466	484/257	462/267	217/523	335/401	440/269		
O/WR			1/ 5	1/ 14	1/ 12	1/ 21	1/ 19	1/ 6	1/ 4	1/ 20	1/ 1	1/ 13	1/ 2	1/ 6	1/ 33		
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0	
O	A	O	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0 0.0
U	L	N	MEAN	26.2	72	48	7.8	7.8	21.5	0.137	0.060	0.570	0.116	1.044	72	14.1	0 0.0
N	L	O	STDV	47.95	22.8	35.7	0.83	2.07	5.49	0.3159	0.1754	1.0667	0.1488	0.9754	66.8	22.05	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR		740/741	644/645	735/736	740/741	731/732	739/740	741/742	740/741	741/742	741/742	741/742	741/742	741/742		

## GENUS:DENTICULA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN													0	0.0	
O	D	MAX													0	0.0	
U	1	MEAN													0	0.0	
N	M	STDEV													0	0.0	
D	N</>														0.0	0.00	
		O/WR															
R	N	MIN	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0		
O	O	MAX	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0		
U	1	MEAN	4.9	76	34	7.2	6.4	28.0	0.050	0.007	0.343	0.098	0.478	40	9.0		
N	D	STDEV	0.00	0.0	0.0	0.00	0.00	0.03	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	
D	O	N</>	73/172	92/ 89	130/117	37/204	21/220	243/ 3	113/133	96/147	126/122	169/ 76	101/147	123/122	120/117		
		O/WR	1/ 2	1/ 6	1/ 2	1/ 8	1/ 4	1/ 2	1/ 3	1/ 6	1/ 1	1/ 4	1/ 1	1/ 4	1/ 12		
R	N	MIN															
O	D	MAX															
U	2	MEAN															
N	M	STDEV															
D	N</>																
		O/WR															
R	N	MIN															
O	O	MAX															
U	2	MEAN															
N	D	STDEV															
D	O	N</>															
		M/WR															
R	N	MIN															
O	D	MAX															
U	3	MEAN															
N	M	STDEV															
D	N</>																
		O/WR															
R	N	MIN															
O	O	MAX															
U	3	MEAN															
N	D	STDEV															
D	O	N</>															
		M/WR															
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDEV															
D	N</>																
		O/WR															
R	4	MIN	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0	0.0
O	A	MAX	4.9	76	34	7.2	6.4	28.0	0.050	0.008	0.344	0.099	0.479	40	9.0	0	0.0
U	L	MEAN	4.9	76	34	7.2	6.4	28.0	0.050	0.007	0.343	0.098	0.478	40	9.0	0	0.0
N	L	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	O	N</>	152/504	258/373	311/413	171/549	161/552	646/ 88	346/392	255/466	484/257	462/267	217/523	335/401	440/269		
		O/WR	1/ 5	1/ 14	1/ 12	1/ 21	1/ 19	1/ 6	1/ 4	1/ 20	1/ 1	1/ 13	1/ 2	1/ 6	1/ 33		

GENUS *DESMIDIUM*

#### PARTIAL DEPTH VALUES

## GENUS: DESMIDIUM

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN															
O D MAX															
U 1 O MEAN															
N M STDV															
D O NC/>															
O/WR															
R N MIN	0.8	80	40	6.9	9.0	11.6	0.004	0.002	0.054	0.066	0.232	10	4.0	0	0.0
O D MAX	5.3	89	102	7.0	10.5	14.1	0.040	0.003	0.509	0.085	0.649	11	120.0	0	3.0
U 1 O MEAN	3.0	85	71	6.9	9.8	12.8	0.021	0.002	0.281	0.075	0.340	11	62.0	0	0.0
N M STDV	3.18	6.4	43.8	0.07	1.06	1.77	0.0254	0.0007	0.3217	0.0134	0.1534	0.7	82.02	0.0	0.00
D O NC/>	6/160	108/ 29	156/ 21	17/219	105/ 39	26/152	0/160	10/210	11/ 90	91/102	5/154	0/208	51/ 3		
O/WR	2/ 81	2/ 50	2/ 72	2/ 13	2/101	2/ 70	2/ 89	2/ 29	2/148	2/ 56	2/ 90	2/ 41	2/195		
R N MIN															
O D MAX															
U 2 C MEAN															
N M STDV															
D O NC/>															
O/WR															
R N MIN															
O D MAX															
U 2 N MEAN															
N D STDV															
D O NC/>															
O/WR															
R N MIN	10.4	88	51	6.6	4.6	26.1	0.021	0.008	0.208	0.074	0.649	21	14.0	0	0.0
O D MAX	10.4	88	51	6.6	4.6	26.1	0.021	0.008	0.208	0.074	0.649	21	14.0	0	0.0
U 3 O MEAN	10.4	88	51	6.6	4.6	26.1	0.021	0.007	0.208	0.073	0.649	21	14.0	0	0.0
N M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D O NC/>	123/123	146/ 68	160/ 82	23/215	11/228	232/ 12	49/195	62/177	158/ 87	128/114	92/152	70/173	204/ 37		
O/WR	1/ 1	1/ 7	1/ 4	1/ 7	1/ 2	1/ 2	1/ 2	1/ 6	1/ 1	1/ 4	1/ 2	1/ 3	1/ 5		
R N MIN															
C A D MAX															
U L O MEAN															
N L M STDV															
D O NC/>															
O/WR															
R N MIN	0.8	83	40	6.6	4.6	11.6	0.004	0.002	0.054	0.066	0.232	10	4.0	0	0.0
O A D MAX	10.4	89	102	7.0	10.5	26.1	0.043	0.008	0.509	0.085	0.649	21	120.0	0	0.0
U L N MEAN	5.5	86	64	6.8	8.0	17.3	0.021	0.004	0.256	0.074	0.443	14	46.0	0	0.0
N L O STDV	4.80	4.9	33.1	0.21	3.07	7.75	0.0180	0.0032	0.2314	0.0095	0.2085	6.1	64.20	0.0	0.00
D O NC/>	6/368	312/146	401/ 69	46/589	34/ 55	27/171	0/448	14/466	115/194	249/342	13/412	C/508	208/ 6		
O/WR	3/367	3/187	3/266	3/106	3/643	3/542	3/294	3/261	3/433	3/151	3/317	3/234	3/528		

## GENUS: DIATOMA

### PARTIAL DEPTH VALUES

## GENUS: DIATOMA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN													0	0.0
O	D	MAX													118	2.5
U	L	MEAN													22	0.4
N	M	STDEV													18.88	
D		N</>													37.6	0.68
D		O/WR														
R	N	MIN	2.9	13	6	7.3	7.7	8.5	0.029	0.005	0.072	0.034	0.243	27	2.0	
O	D	MAX	247.1	98	55	9.1	12.4	20.6	0.185	0.091	9.745	0.479	2.549	198	70.0	
U	L	MEAN	38.9	58	27	8.1	9.9	14.4	0.102	0.035	2.122	0.102	0.829	118	21.8	
N	M	STDEV	63.77	27.6	14.0	0.43	1.21	2.74	0.0467	0.0270	2.4957	0.0986	0.5419	60.2		
D	O	N</>	33/ 2	2/ 2	4/ 63	45/ 12	42/ 4	2/ 75	65/ 30	53/ 24	33/ 0	9/ 5	8/ 11	98/ 17	25/ 14	
D	M	O/WR	20/212	12/183	20/182	20/192	20/199	20/171	20/154	20/172	20/216	20/235	20/230	20/134	20/210	
R	N	MIN														
O	D	MAX														
U	Z	MEAN														
N	M	STDEV														
D	O	N</>														
D	M	O/WR														
R	N	MIN	2.0	14	17	5.7	4.7	21.2	0.013	0.004	0.072	0.042	0.332	10	0.0	
O	D	MAX	141.6	92	98	10.6	14.2	29.9	0.659	0.292	2.697	0.235	4.000	162	55.0	
U	Z	MEAN	36.9	67	38	7.9	7.2	24.6	0.153	0.050	0.537	0.117	1.211	65	12.1	
N	M	STDEV	48.52	25.5	24.5	1.26	2.74	2.82	0.2057	0.0918	0.7884	0.0538	1.1844	48.4	16.35	
D	O	N</>	3/ 9	8/ 29	24/ 24	5/ 0	16/ 3	3/ 10	26/ 12	22/ 12	48/ 9	10/ 19	12/ 6	0/ 29	0/ 13	
D	M	O/WR	10/235	10/200	10/193	10/242	10/227	10/233	10/239	10/213	10/190	10/216	10/229	10/218	10/234	
R	N	MIN														
O	D	MAX														
U	Z	MEAN														
N	M	STDEV														
D	O	N</>														
D	M	O/WR														
R	N	MIN	3.6	23	12	5.9	5.6	12.6	0.028	0.035	0.089	0.052	0.352	13	3.0	
O	D	MAX	51.0	90	55	8.8	12.7	21.0	0.369	0.105	0.909	0.242	1.974	237	13.0	
U	Z	MEAN	24.4	62	36	7.6	8.4	17.6	0.117	0.029	0.470	0.109	0.995	86	8.0	
N	M	STDEV	22.65	34.8	16.5	1.12	2.83	3.52	0.1425	0.0422	0.3668	0.0770	0.6407	87.9	4.12	
D	O	N</>	26/ 31	12/ 51	7/ 72	2/ 12	25/ 1	1/ 93	68/ 18	15/ 23	112/ 30	60/ 17	37/ 29	0/ 5	68/ 42	
D	M	O/WR	5/190	3/158	5/167	5/231	5/215	5/152	5/160	5/207	5/104	5/169	5/180	5/241	5/136	
R	N	MIN														
O	A	MAX														
U	L	MEAN														
N	L	STDEV														
D	O	N</>														
D	M	O/WR														
R	N	MIN	2.0	13	6	5.7	4.7	8.5	0.013	0.004	0.072	0.034	0.243	10	0.0	
O	A	MAX	247.1	98	98	10.6	14.2	29.9	0.659	0.292	9.745	0.479	4.000	237	70.0	
U	L	MEAN	36.3	62	31	8.0	8.9	17.8	0.119	0.039	1.425	0.107	0.962	98	17.0	
N	L	STDEV	54.60	26.6	18.1	0.83	2.27	5.31	0.1237	0.0539	2.0805	0.0833	0.7827	64.3	17.44	
D	O	N</>	36/ 6	15/ 7	5/ 75	9/ 0	37/ 5	2/ 10	67/ 35	69/ 38	177/ 0	13/ 16	18/ 15	0/ 19	0/ 26	
D	M	O/WR	35/699	25/623	35/656	35/732	35/690	35/728	35/640	35/634	35/565	35/713	35/709	35/723	35/716	

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## GENUS DICHROMISSEUS

#### PARTIAL DEPTH VALUES

## GENUS:DICHTOMOCOCCUS

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NC2N03	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN																
O	O	MAX																
U	1	O	MEAN															
N	M	STDEV																
O		N</>																
		O/WR																
R	N	MIN																
O	O	MAX																
U	1	N	MEAN															
N	D	STDEV																
D	O	N</>																
		O/WR																
R	N	MIN																
O	D	MAX																
U	2	O	MEAN															
N	M	STDEV																
O		N</>																
		O/WR																
R	N	MIN	9.4	13	6	6.2	4.9	24.5	0.030	0.008	0.075	0.067	0.349	10	1.0	0	0.0	
C	C	MAX	155.8	90	75	9.3	10.0	29.5	0.427	0.302	1.199	0.174	2.924	130	9.0	770	2.1	
U	2	N	MEAN	74.0	64	33	8.0	7.3	28.0	0.210	0.094	0.280	0.108	1.889	63	3.4	132	0.4
N	D	STDEV	59.66	27.3	21.6	1.04	1.61	1.73	0.1543	0.1219	0.4073	0.0333	0.8912	42.9	3.26	287.1	0.78	
D	O	N</>	91/ 7	7/ 52	1/ 40	7/ 8	20/ 11	45/ 20	62/ 16	97/ 11	53/ 29	53/ 38	17/ 14	0/ 45	12/ 86			
		O/WR	7/149	7/178	7/230	7/232	7/215	7/181	7/149	7/139	7/165	7/156	7/216	7/202	7/149			
R	N	MIN																
O	C	MAX																
U	3	C	MEAN															
N	H	STDEV																
O		N</>																
		O/WR																
R	N	MIN																
C	O	MAX																
U	3	N	MEAN															
N	C	STDEV																
D	O	N</>																
		O/WR																
R	N	MIN																
O	A	MAX																
U	L	O	MEAN															
N	L	H	STDEV															
O		N</>																
		O/WR																
R	N	MIN	9.4	13	6	6.2	4.9	24.5	J.030	J.008	J.075	0.067	G.349	10	1.0	0	0.0	
C	A	MAX	155.8	90	75	9.3	10.0	29.5	0.427	0.302	1.199	0.174	2.924	130	9.0	770	2.1	
U	L	N	MEAN	74.0	64	33	8.0	7.3	28.0	0.210	0.094	0.280	0.108	1.889	63	3.4	132	0.4
N	L	D	STDEV	59.66	27.3	21.6	1.04	1.61	1.73	0.1543	0.1219	0.4073	0.0333	0.8912	42.9	3.26	287.1	0.78
D	O	N</>	340/ 16	15/128	5/124	16/ 20	45/ 84	468/ 21	222/ 46	255/ 37	189/ 93	257/107	99/ 37	0/152	32/269			
		O/WR	7/285	7/502	7/607	7/705	7/603	7/251	7/474	7/449	7/460	7/378	7/606	7/590	7/441			

## GENUS: DICTYOSPHAERIUM

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN	2.3	6	5	6.7	3.9	9.3	0.014	0.002	0.038	0.034	0.282	10	0.0	0	0.0
O O MAX	247.1	96	185	9.3	12.3	28.9	0.716	0.616	4.389	0.479	3.000	248	67.0	457	2.5
U L C MEAN	34.5	71	42	8.1	8.8	18.1	0.136	0.055	0.535	0.110	1.058	87	9.9	58	0.5
N C STDV	48.29	22.9	39.2	0.60	1.76	5.43	0.1649	0.1255	0.9294	0.0887	0.6950	69.9	14.26	98.3	0.66
D N</>	21/ 2	0/ 4	2/ 1	6/ 8	6/ 6	5/ 0	22/ 8	10/ 5	4/ 9	9/ 5	21/ 4	0/ 0	0/ 15		
O/WR	41/224	31/183	41/246	41/235	40/233	41/243	41/219	41/234	41/236	41/235	41/224	41/249	41/234		
R N MIN	0.3	8	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0
O O MAX	355.6	100	252	10.6	19.2	28.8	1.719	1.209	9.745	0.635	4.699	240	142.0	0	0.0
U L N MEAN	18.3	71	44	7.9	9.0	17.4	0.120	0.057	0.936	0.106	0.744	67	20.3	0	0.0
N O STDV	39.46	20.2	35.6	0.74	2.07	5.63	0.2427	0.1711	1.5539	0.0967	0.6879	66.5	26.45	0.0	0.00
D C N</>	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0		
C O/WR	206/247	156/186	208/249	208/249	205/245	207/247	208/249	208/249	208/249	208/249	208/249	208/248	208/249		
R N MIN	2.2	11	9	5.5	3.1	20.1	0.008	0.002	0.027	0.034	0.281	10	0.0	0	0.0
O O MAX	595.0	94	222	9.7	17.8	31.4	1.599	1.191	6.099	0.376	5.699	280	130.0	1585	15.2
U L C MEAN	51.5	69	41	7.9	7.2	26.8	0.168	0.086	0.310	0.113	1.504	79	8.6	136	1.0
N C STDV	79.35	22.8	34.0	0.84	1.98	2.39	0.2931	0.2268	0.6185	0.0556	1.0449	64.6	17.71	273.0	2.15
D N</>	4/ 0	6/ 19	7/ 0	2/ 3	1/ 0	1/ 2	6/ 1	3/ 0	1/ 3	0/ 6	5/ 3	0/ 3	0/ 1		
O/WR	67/243	65/212	65/234	67/242	66/245	67/243	67/240	67/244	67/243	67/241	67/239	67/244	67/246		
R N MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.036	0.215	10	0.0	0	0.0
O O MAX	456.6	121	216	10.6	16.0	32.2	2.559	2.609	6.857	0.719	7.149	334	210.0	0	0.0
U L N MEAN	28.1	73	52	7.7	6.9	26.5	0.122	0.041	0.562	0.122	1.110	71	16.1	0	0.0
N O STDV	53.96	24.4	36.1	0.90	1.98	2.33	0.2763	0.1027	0.9564	0.0971	1.0731	70.4	25.40	0.0	0.00
D C N</>	0/ 1	0/ 0	0/ 1	0/ 0	0/ 1	0/ 0	0/ 0	0/ 3	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0		
C O/WR	180/246	172/237	176/240	180/247	180/245	179/246	180/247	180/244	180/247	180/246	180/247	180/247	180/247		
R N MIN	2.8	1	6	6.0	2.8	12.6	0.010	0.003	0.020	0.035	0.210	10	0.0	0	0.0
O O MAX	134.4	97	157	9.4	12.7	29.6	3.084	2.009	1.959	3.024	8.199	283	44.0	917	5.6
U L C MEAN	32.7	70	39	7.9	7.6	20.8	0.256	0.148	0.280	0.155	1.488	79	4.3	108	0.5
N C STDV	30.96	24.0	28.7	0.77	1.66	2.98	0.4688	0.3407	0.4429	0.3704	1.2738	62.7	6.20	198.8	0.80
D N</>	16/ 4	0/ 2	0/ 3	3/ 3	2/ 1	1/ 0	11/ 1	2/ 0	2/ 4	5/ 0	2/ 0	0/ 1	0/ 12		
C O/WR	77/227	69/219	77/243	75/239	73/238	76/245	76/234	76/243	76/240	76/241	76/244	76/245	76/234		
R N MIN	0.8	3	10	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O O MAX	241.4	100	185	10.3	13.5	29.0	4.549	0.847	4.469	0.831	6.000	291	90.0	0	0.0
U L N MEAN	18.9	76	56	7.5	7.2	20.2	0.109	0.035	0.369	0.108	0.953	70	12.0	0	0.0
N O STDV	34.91	22.4	36.4	0.85	1.58	3.35	0.3720	0.0865	0.5877	0.1031	0.9007	64.7	16.89	0.0	0.00
D C N</>	0/ 0	1/ 0	3/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 4	0/ 0	0/ 3	0/ 1	0/ 0	0/ 0		
C O/WR	170/247	152/220	169/263	170/245	168/241	170/245	170/246	169/241	170/246	170/243	170/245	170/246	170/246		
R N MIN	2.2	1	5	5.5	2.8	9.3	0.008	0.002	0.020	0.034	0.210	10	0.0	0	0.0
O A O MAX	595.0	97	222	9.7	17.8	31.4	3.084	2.009	4.389	3.024	8.199	283	130.0	1585	15.2
U L C MEAN	39.9	70	40	7.9	7.7	22.4	0.197	0.105	0.348	0.130	1.398	81	7.1	107	0.7
N L C STDV	56.91	23.2	33.0	0.76	1.90	4.93	0.3600	0.2665	0.6661	0.2440	1.0944	64.8	13.39	214.4	1.44
D N</>	39/ 0	0/ 12	3/ 1	5/ 8	4/ 1	6/ 2	19/ 1	14/ 0	2/ 11	13/ 0	5/ 0	0/ 3	0/ 4		
C O/WR	185/702	165/633	183/732	183/728	179/727	184/732	184/722	184/727	184/729	184/729	184/737	184/739	184/738		
R N MIN	0.3	3	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O A O MAX	456.6	121	252	10.6	19.2	32.2	4.549	1.209	9.745	0.831	7.149	334	210.0	0	0.0
U L N MEAN	21.6	73	50	7.7	7.8	21.2	0.117	0.045	0.642	0.112	0.926	69	16.4	0	0.0
N L O STDV	43.65	22.5	36.3	0.84	2.12	5.64	0.2974	0.1290	1.1632	0.0989	0.9031	67.2	23.79	0.0	0.00
D C N</>	0/ 1	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 2	0/ 0	0/ 3	0/ 1	0/ 0	0/ 0		
C O/WR	556/740	480/644	553/736	558/741	553/732	556/740	558/742	557/739	558/742	558/739	558/741	558/742	558/742		

## GENUS: DICTYOSPHAERIUM

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN	2.3	6	5	6.7	3.9	9.3	0.014	0.002	0.038	0.034	0.282	10	0.0	0	0.0
O O MAX	247.1	96	185	9.3	12.3	28.9	0.716	0.616	4.389	0.479	3.000	248	67.0	457	2.5
U 1 O MEAN	34.5	71	42	8.1	8.8	18.1	0.136	0.055	0.535	0.110	1.058	87	9.9	58	0.5
N M STDV	48.29	22.9	39.2	0.60	1.76	5.43	0.1649	0.1255	0.9294	0.0887	0.6950	69.9	14.26	98.3	0.66
D O NC/>	21/ 2	3/ 4	2/ 1	6/ 8	6/ 6	5/ 0	22/ 8	10/ 5	4/ 9	9/ 5	21/ 4	0/ 0	0/ 15		
M O/WR	41/224	31/183	41/246	41/235	40/233	41/243	41/219	41/234	41/236	41/235	41/224	41/249	41/234		
P N MIN	10.8	77	65	8.4	7.0	24.5	0.018	0.007	0.095	0.080	0.949	181	9.0	357	15.2
O D MAX	10.8	77	65	8.4	7.0	24.5	0.018	0.007	0.095	0.080	0.949	181	9.0	357	15.2
U 2 O MEAN	10.8	77	65	8.4	7.0	24.5	0.017	0.007	0.094	0.080	0.948	181	9.0	357	15.2
N M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D O NC/>	110/136	95/136	188/ 52	185/ 45	131/101	45/194	44/201	79/150	78/168	85/158	132/112	227/ 19	148/ 86		
O/WR	1/ 1	1/ 6	1/ 1	1/ 17	1/ 14	1/ 7	1/ 2	1/ 18	1/ 1	1/ 4	1/ 3	1/ 1	1/ 13		
R N MIN	2.2	11	9	5.5	3.1	20.1	0.008	0.002	0.027	0.034	0.281	10	0.0	0	0.0
C O MAX	595.0	94	222	9.7	17.8	31.4	1.599	1.191	4.099	0.376	5.699	280	130.0	1585	4.6
U 2 N MEAN	52.1	69	40	7.9	7.2	26.8	0.171	0.087	0.313	0.113	1.512	78	8.6	132	0.8
N D STDV	79.79	23.0	34.1	0.85	2.00	2.39	0.2948	0.2283	0.6227	0.0559	1.0506	63.9	17.85	273.7	1.24
D O NC/>	4/ 0	6/ 19	7/ 0	2/ 3	1/ 3	1/ 2	6/ 1	3/ 0	1/ 3	0/ 6	5/ 3	0/ 3	0/ 1		
M O/WR	66/243	64/212	64/234	66/242	65/245	66/243	66/240	66/244	66/243	66/241	66/239	66/244	66/246		
R N MIN	2.8	1	6	6.0	2.8	12.6	0.010	0.003	0.020	0.035	0.210	10	0.0	0	0.0
O O MAX	134.4	97	157	9.4	12.7	29.6	3.084	2.009	1.959	3.024	8.199	283	44.0	917	5.6
U 3 O MEAN	32.7	70	39	7.9	7.6	20.8	0.256	0.148	0.280	0.155	1.488	79	4.3	108	0.5
N D STDV	30.96	24.0	28.7	0.77	1.66	2.98	0.4688	0.3407	0.4429	0.3704	1.2738	62.7	6.20	198.8	0.80
O C NC/>	16/ 4	0/ 2	0/ 3	3/ 3	2/ 1	1/ 0	11/ 1	2/ 0	2/ 4	5/ 0	2/ 0	0/ 1	0/ 12		
M O/WR	77/227	69/219	77/243	75/239	73/238	76/245	76/234	76/240	76/241	76/241	76/245	76/245	76/234		
R N MIN	10.8	77	65	8.4	7.0	24.5	0.018	0.007	0.095	0.080	0.949	181	9.0	357	15.2
O A O MAX	10.8	77	65	8.4	7.0	24.5	0.018	0.007	0.095	0.080	0.949	181	9.0	357	15.2
U L O MEAN	10.8	77	65	8.4	7.0	24.5	0.017	0.007	0.094	0.080	0.948	181	9.0	357	15.2
N L M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D O NC/>	383/356	272/359	583/151	574/127	259/453	468/264	117/619	205/486	243/497	355/376	462/275	675/ 65	440/269		
O/WR	1/ 2	1/ 14	1/ 2	1/ 40	1/ 20	1/ 8	1/ 6	1/ 50	1/ 2	1/ 11	1/ 5	1/ 2	1/ 33		
R N MIN	2.2	1	5	5.5	2.8	9.3	0.038	0.032	0.020	0.034	0.210	10	0.0	0	0.0
C A O MAX	595.0	97	222	9.7	17.8	31.4	3.084	2.009	4.385	3.024	8.199	283	130.0	1585	5.6
U L N MEAN	40.0	70	40	7.9	7.7	22.4	0.198	0.105	0.349	0.130	1.400	80	7.1	106	0.6
N L D STDV	57.02	23.3	33.1	0.76	1.91	4.94	0.3607	0.2671	0.6676	0.2446	1.0968	64.5	13.43	214.2	0.96
D O NC/>	39/ 0	0/ 12	3/ 1	5/ 0	4/ 1	6/ 2	19/ 1	14/ 0	2/ 11	13/ 0	5/ 0	0/ 3	0/ 4		
M O/WR	184/702	164/633	182/732	182/728	178/727	183/732	183/722	183/727	183/729	183/729	183/737	183/739	183/736		

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**GENUS: DIMORPHOCOCCUS**

## PARTIAL DEPTH VALUES

## GENUS:DIMORPHOCOCCUS

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	MIN																
O	D	MAX															
U	I	O	MEAN														
N	M	STDV															
D		NC/															
		D/WR															
R	N	MIN															
O	D	MAX															
U	I	N	MEAN														
N	D	STDV															
D	O	NC/															
		M	D/WR														
R		MIN															
O	D	MAX															
U	2	O	MEAN														
N	M	STDV															
D		NC/															
		D/WR															
R	N	MIN															
C	D	MAX															
U	2	N	MEAN														
N	D	STDV															
D	O	NC/															
		M	D/WR														
R		MIN															
O	C	MAX															
U	3	O	MEAN														
N	M	STDV															
D		NC/															
		D/WR															
R	N	MIN	23.2	87	41	7.6	7.5	18.2	0.078	0.007	0.174	0.084	1.065	62	4.0	860 3.1	
O	D	MAX	23.2	87	41	7.6	7.5	18.2	0.078	0.007	0.174	0.084	1.065	62	4.0	880 3.1	
U	3	N	MEAN	23.2	87	41	7.6	7.5	18.2	0.077	0.007	0.174	0.084	1.065	62	4.0	880 3.1
N	M	STDV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00	
D	O	NC/	180/ 66	137/ 75	126/115	116/118	122/110	60/162	151/ 93	42/183	149/ 96	147/ 97	158/ 85	135/109	93/130		
		D/WR	1/ 1	1/ 9	1/ 5	1/ 11	1/ 9	1/ 4	1/ 2	1/ 20	1/ 1	1/ 2	1/ 3	1/ 2	1/ 23		
R		MIN															
O	A	D	MAX														
U	L	C	MEAN														
N	L	M	STDV														
D		NC/															
		D/WR															
R	N	MIN	23.2	87	41	7.6	7.5	18.2	0.078	0.007	0.174	0.084	1.065	62	4.0	880 3.1	
O	A	O	MAX	23.2	87	41	7.6	7.5	18.2	0.078	0.007	0.174	0.084	1.065	62	4.0	880 3.1
U	L	N	MEAN	23.2	87	41	7.6	7.5	18.2	0.077	0.007	0.174	0.084	1.065	62	4.0	880 3.1
N	L	D	STDV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00	
D	O	NC/	545/195	439/182	417/396	286/423	331/388	213/523	461/278	205/486	368/371	383/350	511/226	427/311	208/478		
		D/WR	1/ 1	1/ 24	1/ 13	1/ 34	1/ 13	1/ 4	1/ 3	1/ 50	1/ 3	1/ 9	1/ 5	1/ 4	1/ 56		

GENUS:DINOBRYON

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN	0.6	19	2	6.2	3.8	7.2	0.004	0.001	0.025	0.022	0.207	10	1.0	0	0.0
D	O	MAX	53.8	100	252	9.7	12.8	28.0	0.716	0.541	7.557	0.554	2.449	248	137.0	3750	52.4
U	I	MEAN	12.7	76	55	7.8	9.3	16.2	0.064	0.022	0.786	0.088	0.602	70	23.1	217	5.9
V	C	STOV	12.19	18.1	42.3	0.64	1.66	4.97	0.0901	0.0619	1.2400	0.0790	0.3712	73.6	27.30	569.9	11.22
W	C	N</>	4/ 15	4/ 0	0/ 0	2/ 2	4/ 2	1/ 3	0/ 8	0/ 7	1/ 2	0/ 1	1/ 12	0/ 0	7/ 1		
O	C	O/WR	85/228	66/183	86/249	86/245	86/239	86/244	86/241	86/242	86/246	86/248	86/236	86/249	86/241		
R	N	MIN	0.3	6	3	5.3	0.7	6.8	0.004	0.001	0.024	0.031	0.199	10	0.0	0	0.0
D	O	MAX	355.6	97	185	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	240	142.0	0	0.0
U	I	MEAN	25.3	67	37	8.0	8.8	18.2	0.153	0.075	0.914	0.117	0.898	70	16.2	0	0.0
V	C	STOV	49.87	21.2	30.8	0.76	2.18	5.79	0.2739	0.1958	1.5875	0.1017	0.8012	64.0	23.66	0.0	0.00
W	C	N</>	0/ 0	0/ 3	1/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0		
O	C	O/WR	162/247	121/184	163/247	163/249	159/245	162/248	163/249	163/249	163/246	163/249	163/249	163/248	163/249		
R	N	MIN	1.4	4	6	5.2	3.0	17.3	0.006	0.001	0.027	0.034	0.261	10	0.0	0	0.0
D	O	MAX	170.5	98	184	8.9	11.7	31.4	1.029	0.555	1.824	0.719	3.699	281	130.0	591	59.2
U	I	MEAN	14.6	64	72	7.5	7.2	25.6	0.059	0.025	0.294	0.100	0.776	72	20.4	69	3.6
V	C	STOV	26.45	16.7	39.2	0.87	1.41	2.52	0.1631	0.0896	0.4189	0.0946	0.6120	79.1	29.20	123.7	8.55
W	C	N</>	0/ 5	0/ 3	1/ 2	1/ 16	0/ 6	0/ 2	2/ 6	0/ 6	1/ 16	0/ 0	2/ 8	0/ 2	0/ 1		
O	C	O/WR	60/242	59/234	54/238	60/230	60/240	60/244	60/239	60/241	60/230	60/247	60/237	60/245	60/246		
R	N	MIN	1.5	5	1	4.1	3.1	20.1	0.004	0.001	0.025	0.039	0.215	10	0.0	0	0.0
D	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.565	7.169	334	210.0	0	0.0
U	I	MEAN	40.8	68	42	7.9	7.0	26.9	0.159	0.062	0.557	0.126	1.358	74	12.0	0	0.0
V	C	STOV	69.21	24.8	31.9	0.88	2.13	2.21	0.3060	0.1614	0.9798	0.0848	1.1556	65.5	21.43	0.0	0.00
W	C	N</>	1/ 0	1/ 0	0/ 0	0/ 0	1/ 0	1/ 0	0/ 0	0/ 0	3/ 1	0/ 0	0/ 0	0/ 0	0/ 0		
O	C	O/WR	187/246	178/236	187/241	187/247	186/245	186/245	187/247	187/247	187/243	187/247	187/247	187/247	187/247		
R	N	MIN	1.1	1	6	5.6	1.6	9.0	0.005	0.001	0.017	0.031	0.199	10	0.0	0	0.0
D	O	MAX	70.4	100	185	8.8	10.3	27.2	0.791	0.450	1.824	0.979	3.000	261	90.0	1932	60.6
U	I	MEAN	11.6	83	73	7.4	7.5	19.2	0.057	0.024	0.272	0.115	0.772	73	13.7	114	4.6
V	C	STOV	15.61	19.3	41.3	0.79	1.48	3.09	0.1142	0.0661	0.4156	0.1588	0.5630	73.3	19.16	266.2	10.31
W	C	N</>	2/ 17	0/ 0	0/ 0	1/ 12	0/ 8	0/ 3	1/ 10	0/ 9	0/ 6	1/ 1	0/ 15	0/ 2	0/ 0		
O	C	O/WR	75/228	65/221	75/246	75/232	73/233	75/243	75/235	74/236	75/240	75/244	75/231	75/244	75/246		
R	N	MIN	0.8	3	7	4.7	1.9	13.5	0.004	0.002	0.021	0.020	0.210	10	0.0	0	0.0
D	O	MAX	241.4	99	150	10.3	13.5	29.6	4.549	2.009	4.669	3.024	8.199	291	85.0	0	0.0
U	I	MEAN	28.2	70	40	7.7	7.2	20.9	0.197	0.090	0.372	0.125	1.270	73	7.8	0	0.0
V	C	STOV	38.76	23.5	26.3	0.84	1.66	3.18	0.4791	0.2437	0.5950	0.2465	1.1819	59.8	12.17	0.0	0.00
W	C	N</>	0/ 0	1/ 1	1/ 5	0/ 0	1/ 0	2/ 0	0/ 0	1/ 0	4/ 0	0/ 0	2/ 0	0/ 0	0/ 2		
O	C	O/WR	172/247	156/219	171/240	170/245	168/240	171/244	171/246	171/242	171/246	171/244	171/246	171/246	171/244		
R	N	MIN	0.6	1	2	5.2	1.6	7.2	0.004	0.001	0.017	0.022	0.199	10	0.0	0	0.0
D	O	MAX	170.5	100	252	9.7	12.8	31.4	1.029	0.555	7.557	0.979	3.699	281	137.0	3750	60.6
U	I	MEAN	12.9	81	66	7.6	8.1	19.8	0.060	0.024	0.478	0.100	0.707	72	19.2	142	4.6
V	C	STOV	18.98	18.3	41.8	0.77	1.81	5.39	0.1211	0.0715	0.8717	0.1159	0.5171	74.7	25.63	396.7	10.24
W	C	N</>	4/ 14	0/ 3	1/ 0	2/ 8	1/ 9	1/ 2	0/ 20	0/ 21	0/ 2	1/ 1	0/ 20	0/ 4	0/ 2		
O	C	O/WR	220/723	190/642	215/735	221/731	219/722	221/737	221/722	220/720	221/740	221/740	221/722	221/738	221/740		
R	N	MIN	0.3	3	1	4.1	0.7	6.8	0.004	0.001	0.021	0.020	0.199	10	0.0	0	0.0
D	O	MAX	595.0	121	222	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0	0.0
U	I	MEAN	31.8	69	40	7.8	7.6	22.2	0.170	0.075	0.608	0.123	1.185	72	12.0	0	0.0
V	C	STOV	54.99	23.4	29.9	0.84	2.16	5.38	0.3637	0.2020	1.1370	0.1602	1.0831	63.1	19.96	0.0	0.00
W	C	N</>	0/ 0	1/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	4/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
O	C	O/WR	521/741	455/644	521/735	520/741	513/732	519/740	521/742	521/741	521/738	521/742	521/742	521/742	521/742		

## GENUS:DINOBRYON

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	0.6	58	19	6.5	7.7	9.7	0.004	0.001	0.052	0.031	0.207	10	3.0	57	11.9
O	D MAX	45.3	94	252	8.4	11.3	22.1	0.137	0.085	0.989	0.164	1.099	198	137.0	3750	52.4
U	L O MEAN	9.5	82	73	7.6	9.8	14.4	0.036	0.015	0.352	0.059	0.500	66	34.9	810	27.6
N	M STDV	12.98	10.8	61.1	0.59	1.11	3.49	0.0455	0.0256	0.2608	0.0357	0.3124	74.6	43.99	1132.0	11.38
D	N</>	4/ 23	38/ 13	55/ 0	3/ 45	42/ 19	7/ 64	0/ 43	0/ 26	10/ 51	3/ 37	1/ 37	0/ 17	34/ 1		
O/WR		15/220	10/136	15/194	15/201	15/184	15/177	15/206	15/223	15/188	15/209	15/211	15/232	15/214		
R	N MIN	1.8	19	2	6.2	3.8	7.2	0.306	0.001	0.025	0.022	0.242	10	1.0	0	0.0
O	D MAX	53.8	100	172	9.7	12.8	28.0	0.716	0.341	7.557	0.554	2.449	248	87.0	1278	9.4
U	L N MEAN	13.4	75	52	7.8	9.2	16.6	0.070	0.024	0.877	0.094	0.623	71	20.6	92	1.3
N	D STDV	11.99	19.0	36.7	0.65	1.74	5.17	0.0961	0.0672	1.3433	0.0843	0.3809	73.9	21.96	216.6	2.22
D	N</>	14/ 15	4/ 0	0/ 2	2/ 2	4/ 2	1/ 3	3/ 8	0/ 7	1/ 2	0/ 1	7/ 12	0/ 0	7/ 7		
M	D/WR	70/218	56/183	71/247	71/245	71/239	71/244	71/238	71/242	71/246	71/248	71/230	71/249	71/235		
R	N MIN	2.6	85	38	6.6	6.2	23.5	0.010	0.034	0.035	0.040	0.261	11	4.0	28	11.6
O	D MAX	9.9	95	144	8.9	8.5	29.0	0.023	0.011	0.656	0.099	1.532	159	63.0	591	59.2
U	L O MEAN	6.7	90	95	7.8	7.8	25.5	0.016	0.006	0.186	0.058	0.704	77	17.7	291	20.5
N	M STDV	2.38	4.2	33.2	0.79	0.77	1.74	0.0052	0.0026	0.2213	0.0195	0.4567	62.3	21.27	217.4	17.42
D	N</>	8/18	146/ 10	120/ 5	19/ 16	75/ 34	25/ 38	14/178	22/120	12/ 45	4/112	2/ 61	18/ 31	64/ 9		
O/WR		7/ 91	7/ 81	7/116	7/212	7/137	7/183	7/ 55	7/190	7/131	7/184	7/198	7/174			
R	N MIN	1.4	4	6	5.2	3.0	17.3	0.006	0.001	0.027	0.034	0.276	10	3.0	0	0.0
O	D MAX	170.5	98	184	8.9	11.7	31.4	1.029	0.555	1.824	0.719	3.699	281	130.0	297	9.4
U	L N MEAN	15.6	83	68	7.4	7.1	25.7	0.064	0.028	0.308	0.106	0.786	71	20.8	40	1.4
N	D STDV	27.99	17.6	39.1	0.87	1.46	2.62	0.1730	0.0952	0.4378	0.0992	0.6326	81.5	30.23	66.4	2.07
O	N</>	0/ 5	0/ 3	1/ 2	1/ 16	0/ 6	0/ 2	2/ 6	0/ 6	1/ 16	0/ 0	4/ 8	0/ 2	0/ 1		
M	C/WR	53/242	52/234	47/238	53/230	53/240	53/244	53/239	53/241	53/230	53/247	53/235	53/245	53/246		
R	N MIN	3.3	90	43	6.2	6.4	15.8	0.008	0.004	0.019	0.042	0.315	10	3.0	53	10.2
O	D MAX	17.1	100	169	8.5	8.4	24.1	0.053	0.020	0.579	0.159	1.250	167	58.0	1932	60.6
U	L O MEAN	6.7	96	115	7.3	7.7	19.4	0.020	0.009	0.295	0.082	0.666	75	26.2	604	27.8
N	M STDV	4.98	3.3	38.9	0.98	0.60	2.33	0.0154	0.0048	0.2456	0.0415	0.3375	73.5	21.45	539.7	15.85
D	N</>	21/ 65	158/ 0	134/ 1	7/ 30	54/ 43	16/ 32	5/129	8/ 98	1/ 43	20/ 43	24/ 68	0/ 24	68/ 8		
O/WR		9/141	6/ 63	9/111	9/208	9/146	9/198	9/112	9/139	9/202	9/186	9/154	9/222	9/170		
R	N MIN	1.1	1	6	5.6	1.6	9.0	0.005	0.001	0.017	0.031	0.199	10	0.0	0	0.0
O	D MAX	70.4	97	185	8.8	10.3	27.2	0.791	0.450	1.824	0.979	3.000	261	90.0	401	10.0
U	L N MEAN	12.3	82	67	7.4	7.4	19.2	0.062	0.026	0.269	0.120	0.787	73	12.0	47	1.4
N	D STDV	16.23	19.8	38.4	0.76	1.57	3.19	0.1208	0.0733	0.4349	0.1683	0.5874	73.9	18.35	84.0	2.26
D	N</>	2/ 17	0/ 2	0/ 0	1/ 12	0/ 8	0/ 3	1/ 10	0/ 9	0/ 6	1/ 1	0/ 15	0/ 2	0/ 0		
O/WR		4/228	59/219	66/246	66/232	66/243	66/236	66/235	66/236	66/240	66/244	66/231	66/244	66/246		
R	N MIN	0.6	58	19	6.2	6.2	9.7	0.004	0.001	0.019	0.031	0.207	10	3.0	28	10.2
O	A D MAX	45.3	130	252	8.9	11.3	29.0	0.137	0.085	0.989	0.164	1.532	198	137.0	3750	60.6
U	L O MEAN	6.1	88	90	7.6	6.7	18.3	0.027	0.011	0.298	0.065	0.594	71	28.5	633	26.1
N	L M STDV	9.40	9.5	52.0	0.76	1.37	5.28	0.0334	0.0181	0.2490	0.0354	0.3556	69.6	34.13	853.4	14.05
D	N</>	4/110	134/ 3	126/ 0	16/ 40	141/ 31	8/ 39	0/141	0/ 82	1/114	4/123	3/137	0/ 46	146/ 2		
O/WR		31/627	23/538	31/610	31/685	31/560	31/693	31/601	31/659	31/627	31/615	31/602	31/696	31/594		
R	N MIN	1.1	1	2	5.2	1.6	7.2	0.005	0.001	0.017	0.022	0.199	10	3.0	0	0.0
O	A C MAX	170.5	130	185	9.7	12.8	31.4	1.029	0.555	7.557	0.979	3.699	281	130.0	1278	10.0
U	L N MEAN	13.6	80	62	7.6	8.0	20.0	0.066	0.026	0.507	0.106	0.726	72	17.7	62	1.4
N	L D STDV	19.04	19.1	38.5	0.78	1.86	5.38	0.1292	0.0766	3.9320	0.1233	0.5374	75.7	23.73	146.9	2.18
D	N</>	9/ 14	0/ 3	1/ 3	2/ 8	1/ 9	1/ 2	5/ 20	0/ 21	0/ 2	1/ 1	0/ 20	0/ 4	0/ 4		
O/WR		189/718	167/642	184/732	190/731	188/722	190/737	190/717	189/720	190/740	190/740	190/722	190/738	190/738		

## GENUS:DINOFLAGELLATE

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHEI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN	0.6	19	10	6.6	3.9	9.2	0.007	0.001	0.041	0.032	0.207	10	0.0	0 0.0
O	O	MAX	45.3	100	128	8.7	12.3	28.0	0.701	0.616	7.439	0.339	1.625	227	84.0	203 14.7
U	L	C MEAN	10.2	73	43	7.6	8.7	19.3	0.074	0.031	0.601	0.094	0.517	50	14.9	37 2.0
N	C	STDEV	9.96	17.4	27.4	0.56	1.82	5.55	0.1017	0.0870	1.1370	0.0655	0.2620	49.4	16.32	48.4 3.32
D	C	NC/	4/ 23	4/ 0	15/ 7	4/ 19	6/ 6	4/ 3	6/ 9	0/ 5	6/ 3	5/ 10	1/ 25	0/ 3	0/ 9	
O/WR			49/220	45/183	49/227	49/224	49/233	49/241	49/234	49/244	49/240	49/234	49/223	49/246	49/240	
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0 0.0
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0 0.0
U	L	C MEAN	23.6	70	44	8.0	9.1	17.1	0.135	0.063	0.935	0.110	0.864	75	19.5	0 0.0
N	O	STDEV	45.61	21.5	38.1	0.74	2.06	5.53	0.2521	0.1777	1.5424	0.1012	0.7522	70.3	26.81	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
O/WR			198/247	142/187	200/249	200/249	196/245	199/248	200/249	200/249	200/249	200/249	200/249	200/249	200/249	
R	N	MIN	1.9	35	9	5.2	3.1	22.9	0.007	0.002	0.029	0.034	0.261	10	0.0	0 0.0
O	O	MAX	135.8	107	184	9.1	10.1	31.4	1.109	0.969	3.151	0.309	3.799	239	130.0	324 13.1
U	2	C MEAN	21.0	81	56	7.6	6.7	27.7	0.071	0.036	0.231	0.098	0.976	47	12.7	72 1.2
N	C	STDEV	27.28	14.4	35.2	0.79	1.41	1.90	0.1405	0.1176	0.4170	0.0526	0.7854	40.2	21.78	87.9 2.05
D	C	NC/	2/ 12	27/ 1	7/ 2	1/ 11	1/ 10	11/ 2	4/ 5	3/ 1	4/ 7	0/ 8	2/ 7	0/ 11	0/ 1	
O/WR			78/233	76/209	77/232	78/235	78/235	78/233	78/243	78/243	78/236	78/239	78/238	78/236	78/246	
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.036	0.215	10	0.0	0 0.0
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0 0.0
U	2	N MEAN	40.7	68	45	7.0	7.2	26.1	0.164	0.061	0.614	0.130	1.328	85	14.7	0 0.0
N	O	STDEV	72.60	26.4	35.6	0.92	2.19	2.37	0.3225	0.1596	1.0084	0.0985	1.1742	75.8	24.66	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0	
O/WR			169/247	161/237	164/241	169/247	168/246	168/246	169/247	169/247	169/246	169/247	169/247	169/247	169/247	
R	N	MIN	1.1	26	8	5.6	1.6	9.0	0.004	0.003	0.022	0.020	0.199	10	0.0	0 0.0
O	O	MAX	128.6	97	157	10.0	11.4	29.6	3.084	2.009	1.866	3.024	8.199	175	90.0	1797 16.4
U	3	C MEAN	18.7	78	52	7.5	7.3	21.7	0.177	0.107	0.258	0.121	1.103	54	9.6	122 1.6
N	C	STDEV	26.32	16.7	34.0	0.82	1.65	3.38	0.4335	0.3090	0.3695	0.3214	1.3103	39.6	16.53	270.0 2.78
D	C	NC/	2/ 5	13/ 2	2/ 3	1/ 1	0/ 2	0/ 0	0/ 1	2/ 0	5/ 5	0/ 0	0/ 0	0/ 18	0/ 0	
O/WR			93/240	86/206	93/241	92/243	91/239	93/246	92/245	92/243	92/236	92/246	92/246	92/228	92/246	
R	N	MIN	0.8	1	6	4.7	1.9	12.6	0.005	0.001	0.017	0.031	0.210	10	0.0	0 0.0
O	O	MAX	241.4	100	185	10.3	13.5	29.0	4.549	0.847	4.469	0.979	6.000	291	88.0	0 0.0
U	3	N MEAN	25.9	71	50	7.6	7.3	19.6	0.141	0.048	0.392	0.123	1.127	84	9.6	0 0.0
N	O	STDEV	38.10	26.0	35.7	0.85	1.59	2.90	0.3946	0.1071	0.0264	0.1353	0.8766	72.8	13.85	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	1/ 1	1/ 0	0/ 4	0/ 0	1/ 1	2/ 1	0/ 0	0/ 1	
O/WR			154/247	135/221	153/246	153/245	150/240	153/244	154/245	153/241	154/246	154/244	154/243	154/246	154/245	
R	N	MIN	0.6	19	8	5.2	1.6	9.0	0.004	0.001	0.022	0.020	0.199	10	0.0	0 0.0
O	A	O MAX	135.8	107	184	10.0	12.3	31.4	3.084	2.009	7.439	3.024	8.199	239	130.0	1797 16.4
U	L	C MEAN	17.6	78	51	7.6	7.4	23.3	0.117	0.064	0.325	0.107	0.927	51	11.9	85 1.6
N	L	STDEV	24.32	16.3	33.3	0.76	1.77	4.93	0.3007	0.2185	0.6521	0.2126	1.0008	42.1	18.57	187.1 2.69
D	C	NC/	4/ 23	26/ 1	16/ 5	2/ 6	1/ 14	3/ 2	0/ 1	0/ 0	5/ 3	0/ 0	0/ 0	0/ 18	0/ 4	
O/WR			220/714	207/618	219/715	219/733	218/717	220/735	219/741	219/741	219/734	219/742	219/742	219/724	219/738	
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.022	0.199	10	0.0	0 0.0
O	A	O MAX	595.0	121	252	10.6	19.2	32.2	4.549	1.209	9.745	0.979	7.149	334	210.0	0 0.0
U	L	N MEAN	29.8	70	46	7.8	7.9	20.7	0.146	0.058	0.672	0.120	1.092	81	15.0	0 0.0
N	L	STDEV	54.54	24.8	36.6	0.84	2.17	5.55	0.3217	0.1539	1.1832	0.1116	0.9607	72.9	23.29	0.0 0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 2	0/ 0	1/ 1	0/ 1	0/ 0	0/ 0	
O/WR			521/741	438/645	517/736	522/741	514/732	520/740	523/742	522/739	523/742	523/740	523/741	523/742	523/742	

## GENUS:DINOFLAGELLATE

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	0.6	51	20	6.8	5.3	17.3	0.027	0.006	0.190	0.079	0.424	21	7.0	22	14.1
O	D MAX	2.4	78	21	7.0	8.9	27.0	0.046	0.007	0.342	0.154	0.454	34	16.0	58	14.7
U	L O MEAN	1.5	65	21	6.9	7.1	22.1	0.036	0.006	0.266	0.116	0.438	28	11.5	40	14.4
N	M STDV	1.27	19.1	0.7	0.14	2.55	0.86	0.0134	0.0007	0.1074	0.0530	0.0212	9.2	6.36	25.5	0.44
D	N</>	4/222	28/ 81	60/174	9/219	11/140	139/ 13	57/145	68/153	86/123	125/ 43	81/152	89/138	100/ 80		
	O/WR	2/ 21	2/ 78	2/ 15	2/ 21	2/ 94	2/ 96	2/ 47	2/ 28	2/ 40	2/ 81	2/ 16	2/ 22	2/ 69		
R	N MIN	1.5	19	10	6.6	3.9	9.2	0.007	0.001	0.041	0.032	0.207	10	0.0	0	0.0
C	O MAX	45.3	100	128	8.7	12.3	28.0	0.701	0.616	7.439	0.339	1.625	227	84.0	203	8.8
U	L N MEAN	10.5	73	44	7.6	8.7	19.2	0.076	0.032	0.616	0.093	0.520	51	15.0	37	1.4
M	D STDV	10.00	17.5	27.6	0.55	1.79	5.54	0.1035	0.0887	1.1592	0.0662	0.2671	50.2	16.63	49.3	2.12
D	O N</>	8/ 23	4/ 0	15/ 7	4/ 19	6/ 6	4/ 3	6/ 9	0/ 5	6/ 3	5/ 10	1/ 25	0/ 3	0/ 9		
	M O/WR	47/216	43/183	47/227	47/226	47/233	47/241	47/234	47/244	47/240	47/234	47/223	47/246	47/240		
R	N MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	206	13.1
O	D MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	206	13.1
U	Z O MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	206	13.1
N	M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	N</>	49/195	237/ 0	241/ 0	32/210	229/ 16	187/ 57	55/187	62/168	61/163	38/205	80/164	37/200	117/109		
	O/WR	1/ 3	0/ 0	0/ 0	1/ 5	1/ 1	1/ 2	1/ 5	1/ 17	1/ 3	1/ 4	1/ 3	1/ 2	1/ 21		
R	N MIN	1.9	35	9	5.2	3.1	22.9	0.007	0.002	0.029	0.034	0.261	10	0.0	0	0.0
O	O MAX	135.8	107	184	9.1	10.1	31.4	1.139	0.969	3.151	0.309	3.799	239	130.0	324	5.0
U	2 N MEAN	21.1	81	56	7.6	6.7	27.7	0.072	0.036	0.233	0.098	0.980	48	12.8	70	1.1
M	D STDV	27.41	14.4	35.2	0.79	1.37	1.91	0.1413	0.1183	0.6195	0.0527	0.7894	40.2	21.92	87.1	1.54
D	O N</>	2/ 12	27/ 1	7/ 2	1/ 11	1/ 13	11/ 2	4/ 5	3/ 1	4/ 7	0/ 8	2/ 7	0/ 11	0/ 1		
	C/WR	77/233	76/209	77/232	77/235	77/233	77/238	77/243	77/236	77/239	77/238	77/236	77/246			
R	N MIN	1.9	60	36	6.8	1.6	21.6	0.015	0.010	0.026	0.051	0.875	12	2.0	64	11.9
O	D MAX	3.1	87	51	7.9	6.6	26.0	0.076	0.044	0.544	0.831	2.074	64	18.0	90	16.4
U	3 O MEAN	2.3	77	42	7.2	4.3	23.8	0.048	0.031	0.205	0.320	1.432	36	8.3	79	13.8
N	M STDV	0.69	15.9	7.8	0.61	2.52	2.20	0.0309	0.0185	0.2934	0.4419	0.6038	26.2	8.50	13.3	2.31
D	N</>	11/227	48/ 75	94/ 82	39/ 88	0/168	161/ 14	25/ 95	77/ 52	15/ 48	57/ 3	132/ 26	29/103	42/ 25		
	C/WR	3/ 9	3/ 90	3/ 70	3/118	3/ 73	3/ 71	3/122	3/116	3/103	3/186	3/ 88	3/118	3/179		
R	N MIN	1.1	26	8	5.6	2.8	9.0	0.004	0.003	0.022	0.020	0.199	10	0.0	0	0.0
O	O MAX	128.6	97	157	10.0	11.4	29.6	3.384	2.009	1.866	3.024	6.199	175	90.0	1797	9.3
U	3 N MEAN	19.2	78	52	7.5	7.4	21.7	0.182	0.109	0.260	0.114	1.092	55	9.7	124	1.2
N	M STDV	26.59	16.9	34.5	0.83	1.53	3.39	0.4402	0.3139	0.3730	0.3178	1.3279	39.9	16.75	274.4	1.66
D	O N</>	2/ 5	13/ 2	2/ 3	1/ 1	2/ 2	0/ 0	9/ 1	2/ 0	5/ 5	0/ 0	3/ 0	0/ 18	0/ 0		
	O/WR	90/240	83/206	90/241	89/243	88/237	90/246	85/245	89/243	89/236	89/246	89/228	89/246			
R	N MIN	0.6	51	23	6.8	1.6	17.3	0.015	0.006	0.326	0.051	0.424	12	2.0	22	11.9
O	A D MAX	6.4	87	51	7.9	9.7	28.7	0.076	0.044	0.544	0.831	2.074	64	18.0	236	16.4
U	L O MEAN	2.7	72	34	7.0	6.1	24.1	0.039	0.018	0.207	0.209	0.962	30	9.2	87	13.9
N	L 4 STDV	1.98	15.9	13.2	0.43	2.96	4.14	0.0232	0.0180	0.2012	0.3068	0.6439	19.2	6.37	62.9	1.55
D	N</>	4/505	107/182	135/234	80/314	1/102	175/ 61	86/281	158/139	18/187	134/ 3	168/ 77	93/298	95/133		
	C/WR	6/232	5/356	5/367	6/367	6/629	6/506	6/375	6/444	6/537	6/605	6/497	6/4351	6/514		
R	N MIN	1.1	19	8	5.2	2.8	9.0	0.004	0.001	0.022	0.020	0.199	10	0.0	0	0.0
O	A O MAX	135.8	107	184	10.0	12.3	31.4	3.084	2.009	7.439	3.024	8.199	239	130.0	1797	9.3
U	L N MEAN	18.0	78	52	7.6	7.4	23.3	0.119	0.066	0.329	0.104	0.926	51	12.0	85	1.2
N	L O STDV	24.53	16.3	33.5	0.76	1.72	4.96	0.3046	0.2214	0.6603	0.2096	1.0100	42.6	18.79	189.5	1.73
D	O N</>	9/ 23	26/ 1	16/ 5	2/ 6	4/ 14	3/ 2	0/ 1	0/ 0	5/ 3	0/ 0	3/ 0	0/ 18	0/ 4		
	C/WR	214/709	202/618	214/715	213/733	212/714	214/735	213/741	213/734	213/742	213/742	213/724	213/738			

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**GENUS:DINOFAGELLATES**

**PARTIAL DEPTH VALUES**

## GENUS:DINOFLAGELLATES

## PARTIAL DEPTH VALUES

		RHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	6.6	96	172	7.2	8.7	25.3	0.010	0.001	0.060	0.064	0.335	10	11.0	231	21.3
O	O MAX	6.6	96	172	7.2	8.7	25.3	0.010	0.001	0.060	0.064	0.335	10	11.0	231	21.3
U	I O MEAN	6.6	96	172	7.2	8.7	25.3	0.009	0.003	0.360	0.063	0.335	10	11.0	231	21.3
N	M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.3000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	N</>	138/135	178/ 4	246/ 2	37/204	92/149	214/ 33	12/233	0/239	17/229	05/161	42/206	0/214	142/103		
	O/WR	1/ 4	1/ 5	1/ 1	1/ 8	1/ 4	1/ 1	1/ 4	1/ 10	1/ 3	1/ 3	1/ 1	1/ 35	1/ 4		
R	N MIN	4.7	58	20	7.4	7.0	14.0	0.027	0.003	0.112	0.046	0.336	13	5.0	0	3.0
C	O MAX	10.5	85	59	8.4	10.1	28.9	0.069	0.027	2.375	0.089	0.649	51	67.0	185	5.4
U	I N MEAN	8.2	75	38	7.9	8.5	15.2	0.044	0.010	0.778	0.071	0.462	27	21.8	71	1.9
N	D STDV	2.86	15.0	16.3	0.44	1.34	6.98	0.0182	0.0109	1.0760	0.0180	0.1331	16.9	30.19	85.1	2.42
O	O N</>	69/100	38/ 48	60/ 56	52/ 45	32/ 57	89/ 0	57/106	27/ 75	53/ 24	34/ 92	43/104	50/112	66/ 15		
M	O/WR	4/ 78	3/101	4/133	4/152	4/156	4/159	4/ 86	4/147	4/172	4/123	4/102	4/ 87	4/168		
R	N MIN															
O	D MAX															
U	I O MEAN															
N	M STDV															
D	N</>															
	O/WR															
R	N MIN	2.2	64	20	7.0	5.9	27.8	0.019	0.008	0.134	0.079	0.465	13	4.0	0	0.0
O	O MAX	8.4	83	60	7.8	6.5	28.2	0.125	0.055	0.355	0.170	0.543	36	15.0	46	2.1
U	I N MEAN	4.6	76	42	7.3	6.2	28.0	0.059	0.024	0.212	0.128	0.494	23	8.7	20	1.2
N	D STDV	3.35	10.7	20.2	0.46	0.30	0.21	0.0571	0.0263	0.1234	0.0460	0.0422	11.9	5.69	23.7	1.07
O	O N</>	4/165	59/ 99	35/ 60	40/121	64/144	151/ 74	46/ 52	97/ 34	105/ 67	81/ 41	44/177	32/145	64/ 48		
M	O/WR	3/ 78	3/ 79	3/146	3/ 86	3/ 38	3/ 21	3/149	3/116	3/ 75	3/125	3/ 26	3/ 70	3/135		
R	N MIN															
O	D MAX															
U	I O MEAN															
N	M STDV															
D	N</>															
	O/WR															
R	N MIN	9.7	52	19	7.0	6.5	19.7	0.053	0.016	0.090	0.043	0.687	34	4.0	0	0.0
C	O MAX	12.9	84	63	7.8	6.8	24.8	0.362	0.022	1.866	0.067	0.699	175	37.0	85	1.2
U	I N MEAN	11.3	68	31	7.4	6.6	22.2	0.057	0.019	0.977	0.054	0.692	105	20.5	43	0.6
N	D STDV	2.26	22.6	17.0	0.56	0.21	3.61	0.0063	0.0042	1.2558	0.0169	0.0384	59.7	23.33	60.1	0.85
O	O N</>	114/103	37/101	37/108	64/100	59/152	104/ 23	114/116	126/ 91	114/ 5	24/133	100/143	95/ 18	93/ 14		
M	O/WR	2/ 30	2/ 83	2/101	2/ 81	2/ 30	2/119	2/ 16	2/ 28	2/127	2/ 89	2/ 3	2/133	2/139		
R	N MIN	6.6	96	172	7.2	8.7	25.3	0.010	0.001	0.060	0.064	0.335	10	11.0	231	21.3
O	A D MAX	6.6	96	172	7.2	8.7	25.3	0.013	0.001	0.360	0.064	0.335	10	11.0	231	21.3
U	L C MEAN	6.6	96	172	7.2	8.7	25.3	0.009	0.000	0.360	0.063	0.335	10	11.0	231	21.3
N	L D STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.0	0.00
D	N</>	237/498	613/ 18	729/ 6	171/549	514/211	520/217	37/691	0/727	136/599	228/500	92/649	0/668	500/221		
	O/WR	1/ 6	1/ 17	1/ 1	1/ 21	1/ 7	1/ 3	1/ 14	1/ 14	1/ 7	1/ 14	1/ 1	1/ 74	1/ 21		
R	N MIN	2.2	52	19	7.0	5.9	14.3	0.319	0.003	0.090	0.043	0.336	13	4.0	0	0.0
C	A O MAX	12.9	85	60	8.4	10.1	28.9	0.125	0.055	2.375	0.170	0.699	175	67.0	185	5.4
U	L N MEAN	7.7	74	38	7.6	7.3	22.8	0.052	0.017	0.634	0.086	0.524	43	17.1	47	1.4
N	L D STDV	3.68	13.6	16.0	0.51	1.43	6.04	0.0316	0.0162	0.6612	0.0414	0.1283	51.1	21.41	62.3	1.69
D	O N</>	39/298	114/226	126/166	127/127	116/ 77	94/ 47	123/158	38/117	225/ 40	64/111	93/386	110/ 70	208/ 28		
	C/WR	9/404	8/305	9/444	9/487	9/539	9/599	9/461	9/586	9/477	9/567	9/263	9/562	9/506		

**GENUS: DIPLONEIS**

### PARTIAL DEPTH VALUES

PARTIAL DEPTH VALUES																
		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
<b>R</b> N MIN																
O D MAX																
U 1 O MEAN																
N M STDV																
D N</>																
O WR																
R N MIN		8.0	69	30	6.8	8.0	14.3	0.050	0.006	0.056	0.058	0.574	15	2.0	0	0.0
O D MAX		27.2	85	60	8.7	8.7	25.6	0.072	0.022	0.126	0.087	1.519	137	3.0	0	0.0
U 1 N MEAN		15.2	78	40	7.9	8.4	19.9	0.063	0.015	0.095	0.072	1.175	64	2.7	0	0.0
N D STDV		10.48	8.1	17.3	0.98	0.36	5.65	0.0121	0.0083	0.0357	0.0145	0.5222	64.3	0.58	0.0	0.00
D O N</>		122/ 47	73/ 48	113/ 47	9/ 19	57/149	98/ 29	113/100	68/ 93	14/186	67/ 96	124/ 28	61/ 48	25/198		
M C/WR		3/ 78	3/ 66	3/ 89	3/221	3/ 39	3/121	3/ 36	3/ 91	3/ 49	3/ 86	3/ 97	3/140	3/ 26		
R N MIN																
O D MAX																
U 2 O MEAN																
N M STDV																
D N</>																
C WR																
R N MIN		17.0	87	83	7.7	7.6	25.1	0.023	0.006	0.251	0.059	1.099	32	13.0	0	0.0
O D MAX		17.0	87	83	7.7	7.6	25.1	0.023	0.006	0.251	0.059	1.099	32	13.0	0	0.0
U 2 N MEAN		17.0	87	83	7.7	7.6	25.1	0.023	0.005	0.250	0.058	1.098	32	13.0	0	0.0
N D STDV		0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D O N</>		154/ 92	159/ 65	206/ 34	104/134	163/ 76	73/169	63/178	62/168	159/ 85	38/205	149/ 93	90/153	181/ 62		
M C/WR		1/ 1	1/ 13	1/ 1	1/ 9	1/ 7	1/ 4	1/ 6	1/ 17	1/ 3	1/ 4	1/ 5	1/ 4	1/ 4		
R N MIN																
O D MAX																
U 3 O MEAN																
N M STDV																
D N</>																
O WR																
R N MIN		7.2	37	16	6.7	6.5	17.4	0.012	0.007	0.032	0.032	0.432	14	2.0	0	0.0
O D MAX		27.2	82	71	7.4	8.2	27.2	0.144	0.018	0.121	0.099	1.000	45	5.0	0	0.0
U 3 N MEAN		9.2	60	43	7.1	7.5	21.5	0.059	0.010	0.064	0.065	0.743	31	3.7	0	0.0
N D STDV		1.76	31.8	27.5	0.36	0.89	5.08	0.0729	0.0063	0.3487	0.0335	0.2880	15.6	1.53	0.0	0.00
D O N</>		87/121	21/117	19/ 53	30/139	59/ 53	37/ 3	19/ 49	42/107	31/118	2/ 79	53/ 93	32/133	42/110		
M C/WR		3/ 39	2/ 83	3/174	3/ 76	3/120	3/206	3/178	3/ 96	3/ 97	3/165	3/100	3/ 81	3/ 94		
R N MIN																
O A D MAX																
U L C MEAN																
N L M STDV																
D N</>																
O WR																
R N MIN		7.2	37	16	6.7	6.5	14.3	0.012	0.006	0.032	0.032	0.432	14	2.0	0	0.0
O A D MAX		27.2	87	83	8.7	8.7	27.2	0.144	0.022	0.251	0.099	1.519	137	13.0	0	0.0
U L N MEAN		12.9	73	48	7.5	7.9	21.3	0.056	0.011	0.104	0.067	0.979	45	4.6	0	0.0
N L D STDV		7.07	18.8	24.5	0.73	0.74	4.76	0.0452	0.0069	0.0749	0.0217	0.4097	42.1	3.87	0.0	0.00
D O N</>		269/179	69/182	75/106	61/ 58	180/211	103/119	59/135	158/252	43/310	7/267	176/139	125/130	95/198		
M C/WR		7/293	6/394	7/555	7/622	7/341	7/518	7/548	7/331	7/389	7/468	7/427	7/479	7/449		

## GENUS: ECHINOSPHEARELLA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2ND3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN																
O	O	MAX																
U	L	C	MEAN															
N	C	STDEV																
D	C	NC/																
		O/HR																
P	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0	
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0	
U	I	N	MEAN	21.0	71	44	7.9	9.0	17.5	0.123	0.057	0.870	0.107	0.796	70	18.6	0	0.0
N	O	STOV	41.40	20.6	36.2	0.73	2.32	5.59	0.2314	0.1642	1.4754	0.0953	0.6975	67.3	25.14	0.0	0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0.0	0.00
C	O/HR	247/247	187/187	249/249	249/249	245/245	248/248	249/249	249/249	249/249	249/249	249/249	249/249	249/249	249/249	249/249	0.0	0.00
R	N	MIN	58.0	99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3	
O	O	MAX	58.0	-99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3	
U	2	C	MEAN	58.0	0	39	8.7	9.2	28.2	0.093	0.009	0.073	0.054	1.098	23	1.0	103	0.3
N	C	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00	
D	C	NC/	208/ 38	237/ 0	121/114	219/ 22	225/ 19	166/ 74	175/ 71	105/132	50/194	28/216	149/ 93	73/170	12/219	0.0	0.00	0.0
C	O/HR	1/ 1	0/ 0	1/ 6	1/ 6	1/ 2	1/ 6	1/ 1	1/ 10	1/ 3	1/ 5	1/ 4	1/ 16	0.0	0.00	0.0	0.00	
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0	
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0	
U	2	N	MEAN	34.3	72	49	7.8	7.0	26.6	0.135	0.053	0.495	0.120	1.217	74	14.1	0	0.0
N	O	STOV	62.69	24.0	35.9	0.89	1.98	2.35	0.2817	0.1482	0.8850	0.0879	1.0800	68.9	23.80	0.0	0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0.00	0.00
C	O/HR	246/247	237/237	240/241	246/247	245/246	245/246	246/247	246/247	246/247	246/247	246/247	246/247	246/247	246/247	246/247	0.0	0.00
R	N	MIN																
O	O	MAX																
U	3	C	MEAN															
N	C	STDEV																
D	C	NC/																
		O/HR																
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0	
U	3	N	MEAN	23.2	74	50	7.6	7.3	20.4	0.155	0.070	0.342	0.122	1.118	73	9.6	0	0.0
N	O	STDEV	34.27	23.1	35.0	0.84	1.61	3.25	0.4091	0.2088	0.5677	0.2232	1.0572	64.1	14.87	0.0	0.00	
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0.00	0.00
C	O/HR	247/247	221/221	246/246	245/245	241/241	246/246	246/246	245/245	246/246	246/246	246/246	246/246	246/246	246/246	246/246	0.0	0.00
P	N	MIN	58.0	99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3	
C	A	O	MAX	58.0	-99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3
U	L	C	MEAN	58.0	0	39	8.7	9.2	28.2	0.093	0.009	0.073	0.054	1.098	23	1.0	103	0.3
N	L	C	STOV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	C	NC/	662/ 78	645/ 0	390/335	668/ 58	564/151	655/ 79	514/226	275/440	182/553	151/580	522/213	241/490	32/647	0.0	0.00	0.00
C	O/HR	1/ 1	0/ 0	1/ 11	1/ 15	1/ 17	1/ 6	1/ 2	1/ 26	1/ 7	1/ 11	1/ 7	1/ 11	1/ 63	0.0	0.00	0.00	0.00
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	A	O	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0	0.0
U	L	N	MEAN	26.2	72	48	7.8	7.8	21.5	0.137	0.060	0.570	0.116	1.043	72	14.1	0	0.0
N	L	O	STDEV	47.94	22.7	35.7	0.83	2.07	5.49	0.3159	0.1754	1.0666	0.1488	0.9756	66.7	22.05	0.0	0.00
D	C	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0.00	0.00
C	O/HR	740/741	645/645	735/736	740/741	731/732	739/740	741/742	740/741	741/742	741/742	741/742	741/742	741/742	741/742	741/742	0.0	0.00

## GENUS.ECHINOSPHERELLA

## PARTIAL DEPTH VALUES

		CHLA	TURP	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
*		MIN																
O	D	MAX																
U	I	C	MEAN															
N	M	STDEV																
D		N</>																
		O/WR																
R	N	MIN																
C	O	MAX																
U	I	N	MEAN															
N	D	STDEV																
D	O	N</>																
		O/WR																
P		MIN																
O	D	MAX																
U	2	O	MEAN															
N	M	STDEV																
D		N</>																
		O/WR																
R	N	MIN	58.0	99999	39	8.7	9.2	28.2	0.093	0.005	0.074	0.054	1.399	23	1.0	103	0.3	
O	O	MAX	58.0	-99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.399	23	1.0	103	0.3	
U	2	N	MEAN	58.0	0	39	8.7	9.2	28.2	0.093	0.009	0.073	0.054	1.098	23	1.0	103	0.3
N	D	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0003	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00	
D	O	N</>	208/ 38	237/ 0	121/116	219/ 22	225/ 19	166/ 74	175/ 71	105/132	50/194	28/216	149/ 93	73/172	12/219			
		O/WR	1/ 1	0/ 0	1/ 6	1/ 6	1/ 2	1/ 6	1/ 1	1/ 10	1/ 3	1/ 3	1/ 5	1/ 4	1/ 16			
Q		MIN																
O	O	MAX																
U	3	O	MEAN															
M	4	STDEV																
D		N</>																
		O/WR																
R	N	MIN																
C	C	MAX																
U	3	N	MEAN															
N	D	STDEV																
D	C	N</>																
		O/WR																
R		MIN																
O	A	MAX																
U	L	C	MEAN															
N	L	M	STDEV															
D		N</>																
		O/WR																
R	N	MIN	58.3	99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3	
O	O	MAX	58.3	-99999	39	8.7	9.2	28.2	0.093	0.009	0.074	0.054	1.099	23	1.0	103	0.3	
U	L	N	MEAN	58.0	0	39	8.7	9.2	28.2	0.093	0.009	0.073	0.054	1.098	23	1.0	103	0.3
N	L	D	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.30
D	O	N</>	662/ 78	645/ 0	390/335	668/ 58	564/151	655/ 79	514/226	275/440	182/553	151/580	522/213	241/490	32/647			
		O/WR	1/ 1	0/ 0	1/ 11	1/ 15	1/ 17	1/ 6	1/ 2	1/ 26	1/ 7	1/ 11	1/ 7	1/ 11	1/ 63			

## GENUS: ELAKATOTHRIX

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	COND	PERC
R N MIN	2.9	53	17	6.8	5.2	14.0	0.015	0.001	0.083	0.058	0.282	10	1.0	0	0.0
O O MAX	27.0	95	168	8.7	9.6	25.6	0.716	0.541	0.283	0.554	2.449	156	23.0	62	4.3
U 1 C MEAN	12.1	80	71	7.8	8.3	19.6	0.157	0.094	0.178	0.186	1.168	76	9.3	17	1.1
N C STOV	10.20	17.0	60.1	0.71	1.58	4.03	0.2757	0.2188	0.0791	0.1884	0.6902	65.6	7.87	24.3	1.72
D N</>	33/ 48	33/ 9	39/ 3	9/ 19	10/ 85	89/ 29	26/ 8	0/ 7	36/135	67/ 1	21/ 12	0/ 41	7/ 57		
O/WR	6/166	6/145	6/207	6/221	6/150	6/130	6/215	6/242	6/ 78	6/181	6/216	6/208	6/185		
R N MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0
O O MAX	355.6	100	252	10.6	19.2	26.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0
U 1 C MEAN	21.2	70	43	7.9	9.0	17.4	0.122	0.056	0.087	0.105	0.787	70	18.8	0	0.0
N C STOV	41.86	20.7	35.3	0.73	2.03	5.62	0.2309	0.1632	1.4495	0.0917	0.6919	67.5	25.38	0.0	0.00
D N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0	0.00
C O/WR	241/247	181/187	243/249	243/249	239/245	242/248	243/249	243/249	243/249	243/249	243/249	243/249	243/249		
R N MIN	2.5	18	9	6.6	5.6	23.7	0.015	0.003	0.051	0.049	0.599	11	0.0	0	0.0
O O MAX	135.8	91	61	8.9	10.1	29.8	1.109	0.969	6.857	0.183	2.799	237	210.0	92	1.0
U 2 C MEAN	30.5	71	36	8.0	7.5	26.5	0.144	0.087	1.331	0.098	1.142	100	31.1	14	0.2
N C STOV	38.67	22.2	15.0	0.62	1.46	2.07	0.2928	0.2655	2.0967	0.0335	0.6285	74.7	57.20	28.6	0.34
D N</>	7/ 12	11/ 41	7/ 58	19/ 16	44/ 10	18/ 11	31/ 5	9/ 1	25/ 1	21/ 35	80/ 18	18/ 12	0/ 0		
O/WR	13/228	12/185	12/176	13/212	13/192	13/217	13/211	13/237	13/222	13/191	13/149	13/217	13/247		
R N MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0
O O MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	4.295	0.719	7.149	334	130.0	0	0.0
U 2 N MEAN	34.7	72	50	7.7	7.0	26.6	0.134	0.051	0.447	0.121	1.221	72	13.1	0	0.0
N C STOV	63.70	24.1	36.4	0.90	2.01	2.37	0.2811	0.1393	0.7661	0.0897	1.0981	68.4	20.26	0.0	0.00
D N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 1		
C O/WR	234/247	225/237	229/241	234/247	233/246	233/246	234/247	234/247	234/246	234/247	234/247	234/247	234/246		
R N MIN	5.3	22	12	6.8	5.7	14.8	0.010	0.006	0.032	0.036	0.225	10	0.0	0	0.0
O O MAX	198.0	93	115	8.7	13.5	24.0	0.929	0.784	1.092	0.569	2.649	241	14.0	96	1.0
U 3 C MEAN	47.3	68	39	7.9	7.7	19.7	0.267	0.155	0.272	0.137	1.487	121	4.7	28	0.3
N C STOV	49.02	26.1	29.4	0.61	2.02	2.51	0.3467	0.2632	0.3328	0.1419	0.6467	73.5	4.58	35.0	0.34
D N</>	56/ 2	11/ 28	7/ 17	39/ 17	29/ 0	5/ 34	11/ 6	28/ 5	31/ 23	9/ 4	5/ 18	0/ 3	0/ 37		
O/WR	14/189	11/182	14/222	14/189	14/212	14/207	14/229	14/212	14/192	14/233	14/223	14/243	14/209		
R N MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O O MAX	241.4	100	185	10.3	12.7	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0
U 3 N MEAN	21.7	74	51	7.6	7.3	20.5	0.148	0.065	0.346	0.121	1.096	70	9.9	0	0.0
N C STOV	32.76	22.9	35.2	0.85	1.58	3.28	0.4122	0.2046	0.5582	0.2273	1.0739	62.5	15.23	0.0	0.00
D N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C O/WR	233/247	210/221	232/246	231/245	227/240	232/246	232/246	231/245	232/246	232/246	232/246	232/246	232/246		
R N MIN	2.5	18	9	6.6	5.2	14.0	0.010	0.001	0.032	0.036	0.225	10	0.0	0	0.0
C A D MAX	198.0	95	168	8.9	13.5	29.8	1.109	0.969	6.857	0.569	2.799	241	210.0	96	4.3
U L C MEAN	36.3	72	44	7.9	7.7	22.4	0.199	0.117	0.672	0.131	1.293	104	15.9	20	0.4
N L C STOV	41.53	22.6	34.6	0.62	1.72	4.29	0.3106	0.2513	1.4095	0.1232	0.6859	72.4	37.44	30.7	0.82
D N</>	46/ 11	24/ 35	21/ 9	46/ 40	59/ 7	94/ 11	37/ 18	0/ 9	43/ 5	27/ 6	10/ 42	0/ 13	0/ 0		
O/WR	33/684	29/586	32/706	33/655	33/666	33/635	33/687	33/732	33/694	33/709	33/690	33/729	33/742		
R N MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O A D MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	142.0	0	0.0
U L N MEAN	25.8	72	48	7.7	7.8	21.5	0.134	0.057	0.565	0.115	1.031	71	14.0	0	0.0
N L C STOV	48.20	22.8	35.8	0.84	2.09	5.54	0.3159	0.1707	1.0464	0.1498	0.9851	66.1	21.09	0.0	0.00
D N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1		
C O/WR	708/741	616/645	704/736	708/741	699/732	707/740	709/742	708/741	709/742	709/742	709/742	709/742	709/741		

## GENUS: ELAKATOTHR IX

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN															
D O MAX															
U 1 D MEAN															
N 4 STDV															
D O NC/>															
O D/WR															
R N MIN	2.9	53	17	6.8	5.2	14.0	0.015	0.031	0.083	0.058	0.282	10	1.0	0	0.0
D O MAX	27.0	95	168	8.7	9.6	25.6	0.716	0.541	0.283	0.554	2.449	156	23.0	62	4.3
U 1 N MEAN	12.1	80	71	7.8	8.3	19.6	0.157	0.094	0.178	0.186	1.168	76	9.3	17	1.1
N D STDV	10.20	17.0	60.1	0.71	1.58	4.03	0.2757	0.2188	0.0751	0.1884	0.8902	65.6	7.87	24.3	1.72
D O NC/>	33/ 48	33/ 9	39/ 3	9/ 19	10/ 85	89/ 29	26/ 8	3/ 7	36/135	67/ 1	21/ 12	0/ 41	7/ 57		
M D/WR	6/166	6/145	6/207	6/221	6/150	6/130	6/215	6/242	6/ 78	6/181	6/216	6/208	6/185		
R N MIN															
D O MAX															
U 2 D MEAN															
N M STDV															
D O NC/>															
O D/WR															
R N MIN	2.5	18	9	6.6	5.6	23.7	0.015	0.003	0.051	0.049	0.599	11	0.0	0	0.0
D O MAX	135.8	91	61	8.9	10.1	29.8	1.139	0.969	6.857	0.183	2.799	237	210.0	92	1.0
U 2 N MEAN	30.5	71	36	8.0	7.5	26.5	0.144	0.087	1.331	0.098	1.142	100	31.1	14	0.2
N D STDV	38.67	22.2	15.0	0.62	1.46	2.07	0.2928	0.2655	2.0967	0.0335	0.6285	74.7	57.20	28.6	0.34
D O NC/>	7/ 12	11/ 41	7/ 58	19/ 16	44/ 10	18/ 11	31/ 5	9/ 1	25/ 0	21/ 35	80/ 18	18/ 12	0/ 0		
M D/WR	13/228	12/185	12/176	13/212	13/192	13/217	13/211	13/237	13/222	13/191	13/149	13/217	13/247		
R N MIN															
D O MAX															
U 3 D MEAN															
N M STDV															
D O NC/>															
C D/WR															
R N MIN	5.3	22	12	6.8	5.7	14.8	0.010	0.036	0.032	0.036	0.225	10	3.3	0	0.0
D O MAX	198.0	93	115	8.7	13.5	24.0	0.929	0.784	1.092	0.569	2.649	241	14.0	96	1.0
U 3 N MEAN	47.3	68	39	7.9	7.7	19.7	0.267	0.155	0.272	0.137	1.487	121	4.7	28	0.3
N D STDV	49.02	26.1	29.4	0.61	2.02	2.51	0.3467	0.2632	0.3328	0.1419	0.6467	73.5	4.58	35.0	0.34
D O NC/>	56/ 2	11/ 28	7/ 17	39/ 17	29/ 0	5/ 34	11/ 6	28/ 5	31/ 23	9/ 4	5/ 18	0/ 3	0/ 37		
M C/WR	14/189	11/182	14/222	14/189	14/212	14/207	14/229	14/212	14/192	14/233	14/223	14/243	14/239		
R N MIN															
C A D MAX															
U L D MEAN															
N L M STDV															
D O NC/>															
O D/WR															
R N MIN	2.5	18	9	6.6	5.2	14.0	0.310	0.031	0.032	0.036	0.225	10	3.3	0	0.0
D A P MAX	198.0	95	168	8.9	13.5	29.8	1.109	0.969	6.857	0.569	2.799	241	210.0	96	4.3
U L N MEAN	34.3	72	44	7.9	7.7	22.4	0.199	0.117	0.672	0.131	1.293	104	15.9	20	0.4
N L D STDV	41.53	22.6	34.6	0.62	1.72	4.29	0.3106	0.2513	1.4095	0.1232	0.6859	72.4	37.44	30.7	0.82
D O NC/>	46/ 11	24/ 35	21/ 9	46/ 40	59/ 7	94/ 11	37/ 18	0/ 9	43/ 5	27/ 6	10/ 42	0/ 13	0/ 3		
M D/WR	33/684	29/586	32/706	33/655	33/666	33/635	33/687	33/732	33/694	33/709	33/690	33/729	33/742		

## **GENUS: EPITHEMIA**

#### PARTIAL DEPTH VALUES

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## GENUS:EPITHEMIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN													1.0	0	0.0
O	D	MAX													0	0	0.0
U	I	MEAN													0	0	0.0
N	H	STDEV													5.4	3	0.0
D		NC/													0.0	0.0	0.00
		O/WR															
R	N	MIN	4.1	53	17	7.7	6.7	10.9	0.018	0.005	0.054	0.034	0.482	53			
O	D	MAX	49.1	95	105	8.4	11.4	21.1	0.163	0.058	0.376	0.554	2.449	196	13.0		
U	I	MEAN	28.1	81	39	8.1	9.3	15.4	0.102	0.031	0.218	0.173	1.202	122			
N	H	STDEV	19.24	24.0	37.3	0.29	1.75	3.72	0.0501	0.0227	0.1149	0.2141	0.7364	70.1	4.77	0.0	0.00
D		NC/	58/ 20	33/ 9	39/ 19	87/ 45	26/ 18	18/ 69	35/ 39	53/ 39	11/119	9/ 1	103/ 12	137/ 20	7/ 94		
		O/WR	5/169	3/145	5/191	5/117	5/201	5/161	5/175	5/157	5/119	5/239	5/134	5/ 92	5/148		
R	N	MIN															
O	D	MAX															
U	I	MEAN															
N	H	STDEV															
D		NC/															
		O/WR															
R	N	MIN	108.9	24	9	8.7	6.7	25.0	0.270	0.092	0.159	0.119	2.474	239	1.0	3	0.0
O	D	MAX	170.5	51	18	8.9	11.7	26.5	0.321	0.118	0.170	0.194	2.915	281	1.0	0	0.0
U	I	MEAN	130.5	40	12	8.8	8.8	25.5	0.298	0.102	0.164	0.144	2.754	267	1.0	0	0.0
N	H	STDEV	34.68	14.4	5.2	0.12	2.59	0.84	0.0260	0.0134	0.0055	0.0427	0.2438	29.0	0.00	0.0	0.00
D		NC/	229/ 5	15/190	7/207	219/ 16	111/ 5	66/125	221/ 21	221/ 21	126/110	162/ 27	222/ 15	235/ 2	12/219		
		O/WR	3/ 13	3/ 32	3/ 27	3/ 12	3/129	3/ 55	3/ 5	3/ 5	3/ 11	3/ 58	3/ 10	3/ 10	3/ 16		
R	N	MIN															
O	D	MAX															
U	I	MEAN															
N	H	STDEV															
D		NC/															
		O/WR															
R	N	MIN	5.1	23	12	7.1	6.1	12.6	0.020	0.007	0.029	0.041	0.599	17	1.0	0	0.0
O	D	MAX	66.5	97	93	8.8	9.6	21.5	0.369	0.105	0.939	0.119	1.974	237	6.0	29	0.3
U	I	MEAN	25.4	72	49	8.0	8.0	17.7	0.124	0.040	0.195	0.075	1.245	121	3.3	4	0.0
N	H	STDEV	23.73	31.1	37.6	0.65	1.30	2.87	0.1342	0.0436	0.3230	0.0259	0.5660	82.0	2.06	11.0	0.13
D		NC/	52/ 19	12/ 2	7/ 28	74/ 12	43/ 12	1/ 85	46/ 18	42/ 23	19/ 30	17/ 58	81/ 29	46/ 5	13/ 97		
		O/WR	7/176	7/207	7/211	7/159	7/186	7/160	7/182	7/180	7/197	7/171	7/136	7/195	7/136		
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDEV															
D		NC/															
		O/WR															
R	N	MIN	4.1	23	9	7.1	6.1	10.9	0.018	0.005	0.029	0.034	0.482	17	1.0	0	0.0
C	A	MAX	170.5	97	105	6.9	11.7	26.5	0.369	0.118	0.909	0.554	2.915	281	13.0	29	0.3
U	L	MEAN	47.3	67	38	8.2	8.6	18.5	0.152	0.050	0.196	0.122	1.532	153	3.5	2	0.0
N	L	STDEV	48.72	29.2	34.8	0.55	1.71	4.67	0.1199	0.0418	0.2211	0.1256	0.8372	89.3	3.31	7.5	0.09
D		NC/	117/ 14	33/ 12	21/ 62	152/ 40	130/ 21	19/155	117/ 55	106/ 63	25/125	13/ 9	220/ 38	164/ 4	32/198		
		O/WR	15/610	13/600	15/653	15/549	15/581	15/566	15/570	15/572	15/592	15/720	15/484	15/574	15/512		

## GENUS: EUASTRUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
P	N	MIN	6.6	63	16	7.0	5.2	12.8	0.027	0.002	0.038	0.037	0.336	16	1.0	0	0.0
O	A	MAX	37.8	91	59	9.1	10.3	28.9	0.716	0.541	0.469	0.171	1.824	115	10.0	7	0.3
U	I	MEAN	19.3	78	35	8.1	7.8	22.2	0.136	0.078	0.174	0.099	0.947	39	5.0	1	0.0
N	C	STDEV	10.86	9.5	13.2	0.61	1.02	5.34	0.2065	0.1614	0.1233	0.0496	0.5444	27.7	3.10	2.1	0.09
D	N/C	N</>	108/ 32	49/ 21	33/ 56	23/ 12	10/ 49	54/ 0	57/ 8	10/ 7	4/ 96	17/ 32	43/ 18	66/ 58	7/107		
D/WR		11/107	9/117	11/160	11/214	11/186	11/194	11/184	11/232	11/149	11/200	11/188	11/125	11/135			
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0
O	O	MAX	355.6	100	252	10.6	19.2	28.8	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0
U	I	MEAN	21.0	70	44	7.9	9.0	17.3	0.122	0.056	0.902	0.107	0.789	71	19.2	0	0.0
N	D	STDEV	42.29	20.9	36.9	0.73	2.02	5.52	0.2329	0.1646	1.5013	0.0969	0.7039	68.3	25.53	0.0	0.00
D	C	N/C	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	O/WR	236/247	178/187	238/249	238/249	234/245	237/247	238/249	238/249	238/249	238/249	238/249	238/249	238/249	238/249		
R	N	MIN	2.6	44	15	6.6	4.9	24.2	0.015	0.004	0.029	0.041	0.399	10	1.0	0	0.0
O	D	MAX	70.6	95	75	8.6	8.6	31.5	0.187	0.104	0.454	0.156	2.549	109	10.0	271	1.2
U	Z	MEAN	19.9	78	39	7.5	6.5	28.1	0.055	0.016	0.128	0.089	0.948	37	4.8	37	0.2
N	C	STDEV	16.63	11.4	12.5	0.95	0.91	1.92	0.0367	0.0210	0.0999	0.0300	0.5363	22.5	2.27	68.8	0.31
D	C	N/C	8/ 34	34/ 10	20/ 40	19/ 28	20/ 29	34/ 1	31/ 37	22/ 22	4/ 57	9/ 47	25/ 22	0/ 60	12/ 76		
C	O/WR	26/205	26/193	26/181	26/200	26/197	26/211	26/179	26/203	26/186	26/191	26/200	26/187	26/159			
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0
U	Z	MEAN	36.1	71	50	7.8	7.1	26.4	0.144	0.058	0.536	0.123	1.248	78	15.2	0	0.0
N	O	STDEV	65.73	25.0	37.5	0.92	2.06	2.33	0.2956	0.1556	0.9243	0.0916	1.1210	71.2	24.89	0.0	0.00
D	C	N/C	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	221/247	211/237	215/241	221/247	220/246	220/246	221/247	221/247	221/247	221/247	221/247	221/247	221/247			
R	N	MIN	3.7	48	16	6.6	4.6	13.9	0.012	0.004	0.024	0.020	0.281	10	0.0	0	0.0
O	D	MAX	78.5	93	72	8.9	9.5	29.6	0.909	0.784	0.919	0.296	3.265	117	35.0	380	1.7
U	Z	MEAN	17.0	80	38	7.4	6.9	22.0	0.097	0.047	0.148	0.090	0.914	42	4.6	25	0.2
N	C	STDEV	16.77	11.1	10.9	0.55	1.14	3.41	0.1413	0.1242	0.1725	0.0644	0.6429	26.3	5.69	65.2	0.38
D	C	N/C	30/ 11	30/ 28	19/ 46	23/ 6	11/ 14	4/ 0	19/ 8	8/ 5	6/ 29	0/ 12	19/ 14	0/ 56	0/ 15		
C	O/WR	40/296	39/163	40/181	40/214	38/216	40/242	40/219	40/232	40/211	40/234	40/213	40/190	40/231			
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.031	0.199	10	0.0	0	0.0
O	D	MAX	241.4	100	185	10.3	13.5	29.0	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0
U	Z	MEAN	24.4	73	53	7.6	7.4	20.1	0.166	0.074	0.379	0.129	1.158	79	10.6	0	0.0
N	D	STDEV	36.61	24.7	37.5	0.88	1.67	3.14	0.4421	0.2215	0.5866	0.2418	1.1169	67.4	15.88	0.0	0.00
D	C	N/C	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	207/247	182/221	206/246	205/245	203/241	206/245	206/246	205/245	206/246	206/245	206/246	206/246	206/246			
R	N	MIN	2.6	44	15	6.6	4.6	12.8	0.012	0.002	0.024	0.020	0.281	10	0.0	0	0.0
O	A	MAX	78.5	95	75	9.1	10.3	31.5	0.909	0.784	0.919	0.296	3.265	117	35.0	380	1.7
U	L	MEAN	18.3	79	38	7.5	6.9	24.1	0.089	0.041	0.145	0.091	0.930	39	4.7	25	0.2
N	L	STDEV	15.90	10.9	11.7	0.60	1.25	4.40	0.1306	0.1092	0.1462	0.0525	0.5882	25.0	4.43	62.2	0.33
D	C	N/C	48/ 53	85/ 35	67/124	46/ 30	34/ 66	56/ 1	59/ 24	14/ 13	6/123	0/ 37	45/ 31	0/169	0/ 77		
C	O/WR	77/640	74/525	77/545	77/665	75/632	77/683	77/659	77/714	77/613	77/705	77/666	77/573	77/665			
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.022	0.199	10	0.0	0	0.0
O	A	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0	0.0
U	L	MEAN	27.1	71	49	7.8	7.9	21.2	0.143	0.062	0.619	0.119	1.056	76	15.2	0	0.0
N	L	STDEV	50.27	23.7	37.4	0.85	2.12	5.53	0.3301	0.1814	1.1147	0.1558	1.0097	69.0	22.98	0.0	0.00
D	C	N/C	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	664/741	571/645	659/736	664/741	657/732	663/740	665/742	664/741	665/742	665/741	665/742	665/742	665/742			

## GENUS: EUASTRUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN															
O	D	MAX															
U	1	MEAN															
N	M	STDEV															
D		N</>															
		O/WR															
R	N	MIN	6.6	63	16	7.0	5.2	12.8	0.027	0.002	0.038	0.037	0.336	16	1.0	0 0.0	
C	O	MAX	37.8	91	59	9.1	10.3	28.9	0.716	0.541	0.469	0.171	1.824	115	10.0	7 0.3	
U	1	MEAN	19.3	78	35	8.1	7.8	22.2	0.136	0.078	0.174	0.099	0.947	39	5.0	1 0.0	
N	D	STDEV	10.86	9.5	13.2	0.61	1.82	5.34	0.2365	0.1614	0.1233	0.0496	0.5444	27.7	3.10	- 2.1 0.09	
D	O	N</>	108/ 32	49/ 21	33/ 56	23/ 12	10/ 49	54/ 0	57/ 8	10/ 7	4/ 96	17/ 32	43/ 18	66/ 58	7/107		
M	H	O/WR	11/107	9/117	11/160	11/214	11/186	11/194	11/184	11/232	11/149	11/200	11/188	11/125	11/135		
R	N	MIN															
O	D	MAX															
U	2	MEAN															
N	M	STDEV															
D		N</>															
		O/WR															
R	N	MIN	2.6	44	15	6.6	4.9	24.2	0.015	0.004	0.029	0.041	0.399	10	1.0	0 0.0	
C	O	MAX	70.6	95	75	8.6	8.6	31.5	0.187	0.104	0.454	0.156	2.549	109	10.0	271 1.2	
U	2	MEAN	19.9	78	39	7.5	6.5	28.1	0.055	0.016	0.128	0.089	0.948	37	4.8	37 0.2	
N	D	STDEV	16.63	11.4	12.5	0.55	0.91	1.92	0.0367	0.0210	0.0999	0.0303	0.5363	22.5	2.27	68.8 0.31	
D	O	N</>	8/ 34	34/ 10	20/ 40	19/ 28	20/ 29	34/ 1	31/ 37	22/ 22	4/ 57	9/ 47	25/ 22	0/ 60	12/ 76		
M	H	O/WR	26/205	26/193	26/181	26/200	26/197	26/211	26/179	26/203	26/186	26/191	26/200	26/187	26/159		
R	N	MIN															
O	D	MAX															
U	3	MEAN															
N	M	STDEV															
D		N</>															
		O/WR															
R	N	MIN	3.7	48	16	6.6	4.6	13.9	0.012	0.004	0.024	0.020	0.281	10	0.0	0 0.0	
O	D	MAX	78.5	93	72	8.9	9.5	29.6	0.909	0.784	0.919	0.296	3.265	117	35.0	383 1.7	
U	3	MEAN	17.0	80	38	7.4	6.9	22.0	0.097	0.067	0.148	0.090	0.914	42	4.6	25 0.2	
N	D	STDEV	16.77	11.1	10.9	0.55	1.14	3.41	0.1413	0.1242	0.1725	0.0644	0.6429	26.3	5.69	65.2 0.38	
D	O	N</>	30/ 11	30/ 28	19/ 46	23/ 8	11/ 14	4/ 3	19/ 8	8/ 5	6/ 29	0/ 12	19/ 14	0/ 56	0/ 15		
M	H	O/WR	40/206	39/163	40/181	40/214	38/216	40/242	40/219	40/232	40/211	40/234	40/213	40/190	40/231		
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDEV															
D		N</>															
		O/WR															
R	N	MIN	2.6	44	15	6.6	4.6	12.8	0.012	0.002	0.024	0.020	0.281	10	0.0	0 0.0	
O	A	MAX	78.5	95	75	9.1	10.3	31.5	0.909	0.784	0.919	0.296	3.265	117	35.0	383 1.7	
U	L	MEAN	18.3	79	38	7.5	6.9	24.1	0.089	0.041	0.145	0.091	0.930	39	4.7	25 0.2	
N	L	STDEV	15.90	10.9	11.7	0.60	1.25	4.40	0.1306	0.1092	0.1442	0.0525	0.5882	25.0	4.43	62.2 0.33	
D	O	N</>	48/ 53	85/ 35	67/124	46/ 30	34/ 66	56/ 1	59/ 24	14/ 13	6/123	0/ 37	45/ 31	0/ 169	0/ 77		
M	H	O/WR	77/640	74/525	77/545	77/665	75/632	77/683	77/659	77/714	77/613	77/705	77/666	77/573	77/665		

## GENUS: EUCAPSIS

## PARTIAL DEPTH VALUES

		CHLA	TUPS	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	COND	PERC
R	N	MIN	49.3	67	18	9.7	10.6	24.4	0.108	0.012	0.169	0.125	2.649	109	3.0	0 0.0
O	O	MAX	49.3	67	18	9.7	10.6	24.4	0.108	0.012	0.169	0.125	2.649	109	3.0	0 0.0
U	I	MEAN	49.3	67	18	9.7	10.6	24.4	0.107	0.011	0.168	0.125	2.648	109	3.0	0 0.0
N	C	STDEV	0.00	0.0	0.0	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00
D		N</>	227/ 19	67/118	43/194	244/ 2	206/ 36	202/ 45	180/ 65	126/113	80/168	187/ 59	240/ 8	187/ 61	34/198	
		C/WR	1/ 1	1/ 2	1/ 12	1/ 3	1/ 3	1/ 1	1/ 4	1/ 10	1/ 1	1/ 3	1/ 1	1/ 1	1/ 17	
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0 0.0
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0 0.0
U	I	MEAN	20.8	71	44	7.9	9.0	17.5	0.123	0.057	0.873	0.107	0.788	70	16.7	0 0.0
N	O	STDEV	41.46	20.6	36.2	0.72	2.02	5.58	0.2319	0.1646	1.4777	0.0955	0.6889	67.4	25.17	0.0 0.00
D	C	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
		C O/WR	246/247	186/187	248/249	248/249	244/245	247/248	248/249	248/249	248/249	248/249	248/249	248/249	248/249	
R	N	MIN	3.8	82	20	6.7	5.5	25.6	0.016	0.005	0.027	0.047	0.304	17	1.0	0 0.0
O	O	MAX	17.9	93	62	7.4	6.5	29.1	0.107	0.083	0.336	0.104	2.299	54	17.0	330 1.7
U	2	MEAN	10.6	88	39	7.1	5.9	27.5	0.054	0.031	0.144	0.075	1.296	37	6.5	83 0.4
N	C	STDEV	5.97	4.6	17.3	0.31	0.42	1.60	0.0418	0.0358	0.1486	0.0238	0.8906	18.1	7.19	165.0 0.84
D		N</>	20/ 89	121/ 22	35/ 56	25/167	36/144	88/ 34	39/ 61	38/ 26	1/ 72	19/107	7/ 29	45/114	12/ 40	
		D/WR	4/138	4/ 94	4/150	4/ 55	4/ 66	4/124	4/147	4/183	4/174	4/121	4/211	4/ 88	4/195	
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0 0.0
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0 0.0
U	2	MEAN	34.8	72	49	7.8	7.0	26.6	0.136	0.053	0.499	0.120	1.215	74	14.2	0 0.0
N	O	STDEV	63.02	24.1	36.0	0.89	1.99	2.36	0.2832	0.1490	0.8896	0.0883	1.0821	69.2	23.92	0.0 0.00
D	C	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
		C O/WR	243/247	233/237	237/241	243/247	242/246	242/246	243/247	243/247	243/247	243/247	243/247	243/247	243/247	
R	N	MIN														
O	O	MAX														
U	3	MEAN														
N	C	STDEV														
D		N</>														
		O/WR														
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0 0.0
U	3	MEAN	23.2	74	50	7.6	7.3	20.4	0.155	0.070	0.342	0.122	1.118	73	9.6	0 0.0
N	O	STDEV	34.27	23.1	35.0	0.84	1.61	3.25	0.4091	0.2088	0.5477	0.2232	1.0572	64.1	14.87	0.0 0.00
D	C	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
		C O/WR	267/247	221/221	246/246	245/245	241/241	246/246	246/246	245/245	246/246	246/246	246/246	246/246	246/246	
R	N	MIN	3.8	67	18	6.7	5.5	24.4	0.016	0.005	0.027	0.047	0.304	17	1.0	0 0.0
O	A	MAX	49.3	93	62	9.7	10.6	29.1	0.108	0.083	0.336	0.125	2.649	109	17.0	330 1.7
U	L	MEAN	18.3	84	35	7.7	6.8	26.9	0.065	0.027	0.149	0.085	1.566	52	5.8	66 0.3
N	L	STDEV	18.07	10.1	17.7	1.17	2.13	1.96	0.0434	0.0323	0.1291	0.0301	0.9803	35.7	6.42	147.6 0.75
D		N</>	104/103	190/ 67	99/160	61/ 8	73/ 51	463/ 35	97/187	106/ 83	20/261	98/188	60/ 45	164/185	32/143	
		D/WR	5/534	5/388	5/477	5/672	5/608	5/262	5/458	5/552	5/461	5/456	5/637	5/393	5/567	
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0
O	A	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0 0.0
U	L	MEAN	26.2	72	48	7.8	7.8	21.5	0.138	0.060	0.572	0.116	1.039	72	14.2	0 0.0
N	L	STDEV	48.07	22.8	35.8	0.83	2.07	5.49	0.3167	0.1759	1.0690	0.1492	0.9746	66.9	22.10	0.0 0.00
D	C	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
		C O/WR	736/741	640/645	731/736	736/741	727/732	735/740	737/742	736/741	737/742	737/742	737/742	737/742	737/742	

## GENUS:EUCAPSI

PARTIAL DEPTH VALUES																
		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NOS	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN														
C	O	MAX														
U	1	MEAN														
N	M	STDV														
D		N</>														
		O/HR														
R	N	MIN	49.3	67	18	9.7	10.6	24.4	0.108	0.012	0.169	0.125	2.649	109	3.0	0 0.0
C	O	MAX	49.3	67	18	9.7	10.6	24.4	0.138	0.012	0.169	0.125	2.649	109	3.0	0 0.0
U	1	MEAN	49.3	67	18	9.7	10.6	24.4	0.137	0.011	0.168	0.125	2.648	109	3.0	0 0.0
N	D	STDV	0.00	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.30	
D	O	N</>	227/ 19	67/118	43/194	244/ 2	206/ 36	202/ 45	180/ 65	126/113	80/168	187/ 59	240/ 8	187/ 61	34/198	
		O/HR	1/ 1	1/ 2	1/ 12	1/ 3	1/ 3	1/ 1	1/ 4	1/ 10	1/ 1	1/ 3	1/ 1	1/ 1	1/ 17	
R	N	MIN	3.8	82	20	6.7	5.5	25.6	0.016	0.005	0.027	0.047	0.304	17	1.0	0 0.0
C	O	MAX	17.9	93	62	7.4	6.5	29.1	0.107	0.083	0.336	0.104	2.299	54	17.0	330 1.7
U	2	MEAN	10.6	88	39	7.1	5.9	27.5	0.054	0.031	0.144	0.075	1.296	37	6.5	83 0.4
N	D	STDV	5.97	4.6	17.3	3.31	0.42	1.60	0.0418	0.0358	0.1486	0.0238	0.8906	18.1	7.19	165.0 0.84
D	O	N</>	20/ 89	121/ 22	35/ 56	25/167	36/144	88/ 34	39/ 61	38/ 26	1/ 72	19/107	7/ 29	45/114	12/ 40	
		O/HR	4/138	4/ 94	4/150	4/ 55	4/ 66	4/124	4/147	4/183	4/174	4/121	4/211	4/ 88	4/195	
R	N	MIN														
C	O	MAX														
U	3	MEAN														
N	M	STDV														
D		N</>														
		O/HR														
R	N	MIN														
C	O	MAX														
U	3	MEAN														
N	D	STDV														
D	O	N</>														
		O/HR														
R	N	MIN	3.5	67	18	6.7	5.5	24.4	0.016	0.005	0.027	0.047	0.304	17	1.0	0 0.0
C	O	MAX	49.3	93	62	9.7	10.6	29.1	0.108	0.083	0.336	0.125	2.649	109	17.0	330 1.7
U	L	MEAN	16.2	84	35	7.7	6.8	26.9	0.065	0.027	0.145	0.085	1.556	52	5.8	66 0.3
N	L	STDV	18.07	10.1	17.7	1.17	2.13	1.96	0.0434	0.0323	0.1291	0.0301	0.9803	35.7	6.42	147.6 3.75
D	O	N</>	104/103	190/ 67	99/160	61/ 8	73/ 51	463/ 35	97/187	106/ 83	20/261	98/188	60/ 45	164/185	32/143	
		O/HR	5/534	5/388	5/477	5/672	5/608	5/242	5/458	5/552	5/461	5/456	5/637	5/393	5/567	

## GENUS: EUDORINA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC	
R	M MIN	3.4	35	9	7.0	5.2	7.2	0.012	0.003	0.085	0.030	0.265	12	1.0	0	0.0	
O	O MAX	27.7	94	105	8.8	12.0	28.9	0.716	0.541	3.429	0.369	1.824	199	53.0	9	0.9	
U	L C MEAN	12.4	73	44	7.8	8.7	17.9	0.110	0.052	0.812	0.109	0.668	63	15.6	1	0.1	
V	C STDV	8.19	10.4	25.0	0.65	2.36	7.37	0.1840	0.1416	1.0836	0.0913	0.3997	62.6	15.76	2.4	0.24	
D	N</>	45/ 46	16/ 13	11/ 19	23/ 17	10/ 9	1/ 0	16/ 8	27/ 7	38/ 15	2/ 8	13/ 18	41/ 15	7/ 21			
O/WR		14/156	11/158	14/219	14/209	16/226	14/247	14/215	14/196	14/218	14/193	14/221					
R	M MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.022	0.199	10	0.0	0	0.0		
O	O MAX	355.6	100	252	10.6	19.2	28.8	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0	
U	L N MEAN	21.5	70	44	7.9	9.0	17.5	0.123	0.057	0.873	0.106	0.804	70	18.8	0	0.0	
N	C STDV	42.53	20.7	36.8	0.74	2.00	5.49	0.2343	0.1658	1.4972	0.0957	0.7111	67.7	25.60	0.0	0.30	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
C	O/WR	233/247	176/187	235/249	235/249	231/245	234/247	235/249	235/249	235/249	235/249	235/249	235/249	235/249	235/249		
R	M MIN	2.7	82	24	5.5	3.8	21.2	0.012	0.004	0.027	0.034	0.310	10	1.0	0	0.0	
O	O MAX	92.5	94	184	9.5	15.2	31.4	0.285	0.050	1.299	0.225	1.799	71	15.0	110	1.4	
U	L C MEAN	21.8	88	64	7.5	8.2	27.0	0.061	0.014	0.218	0.090	0.863	22	6.4	14	0.2	
N	C STDV	28.48	4.5	45.5	1.22	3.47	2.67	0.0769	0.0138	0.3681	0.0501	0.5432	17.0	3.63	34.1	0.43	
D	N</>	9/ 25	121/ 19	48/ 2	2/ 4	6/ 2	3/ 2	24/ 23	22/ 38	1/ 25	0/ 21	9/ 43	0/ 91	12/ 48			
O/WR		12/213	9/ 97	11/191	12/241	12/238	12/241	12/200	12/187	12/221	12/195	12/156	12/187				
R	M MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.036	0.215	10	0.0	0	0.0	
O	O MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0	
U	L N MEAN	35.1	71	48	7.8	7.0	26.6	0.138	0.055	0.507	0.121	1.235	76	14.5	0	0.0	
N	C STDV	63.80	24.2	35.2	0.87	1.07	2.33	0.2873	0.1513	0.9002	0.0891	1.0957	69.5	24.29	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0			
C	O/WR	235/247	228/237	230/261	235/247	234/246	234/246	235/247	235/247	235/247	235/246	235/247	235/247	235/247	235/247		
R	M MIN	3.9	19	17	6.7	4.0	17.2	0.013	0.004	0.024	0.037	0.321	14	1.0	0	0.0	
O	O MAX	237.0	90	157	10.3	12.7	23.0	0.299	0.080	1.564	0.205	4.399	116	17.0	67	0.8	
U	L C MEAN	44.7	68	57	7.9	8.0	19.8	0.107	0.030	0.389	0.074	1.110	50	6.0	16	0.2	
N	C STDV	70.62	28.5	39.5	1.07	2.62	2.01	0.0859	0.0277	0.4802	0.0488	1.2017	33.4	5.29	26.6	0.27	
D	N</>	33/ 1	9/ 51	23/ 3	30/ 0	5/ 1	35/ 55	22/ 19	8/ 31	6/ 11	10/ 26	27/ 4	32/ 58	13/ 28			
C	O/WR	10/213	7/161	10/220	10/215	9/235	10/156	10/205	10/206	10/229	10/210	10/215	10/156	10/205			
R	M MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	O MAX	241.4	100	185	10.0	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0	
U	L N MEAN	22.3	74	50	7.6	7.3	20.4	0.157	0.071	0.340	0.124	1.119	74	9.8	0	0.0	
N	C STDV	31.63	22.9	34.8	0.83	1.56	3.29	0.4172	0.2130	0.5512	0.2274	1.0535	64.9	15.13	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
C	O/WR	237/247	214/221	236/246	235/246	232/241	236/246	236/246	235/246	236/246	236/246	236/246	236/246	236/246	236/246		
R	M MIN	2.7	19	9	5.5	3.8	7.2	0.012	0.003	0.024	0.030	0.265	10	1.0	0	0.0	
O	A O MAX	237.0	94	184	10.3	15.2	31.4	0.716	0.541	3.429	0.369	4.399	199	53.0	110	1.4	
U	L C MEAN	24.5	77	56	7.7	8.3	21.5	0.093	0.033	0.497	0.093	0.856	46	9.9	9	0.1	
N	L C STDV	41.72	20.2	36.6	0.94	2.78	6.30	0.1298	0.0893	0.7796	0.0686	0.7457	46.3	11.19	24.5	0.32	
D	N</>	52/ 9	26/ 52	21/ 5	5/ 2	15/ 4	1/ 2	59/ 31	38/ 23	6/ 22	3/ 26	29/ 10	0/ 42	32/ 46			
O/WR		36/680	27/567	35/710	36/734	35/713	36/737	36/652	36/680	36/714	36/713	36/703	36/700	36/664			
R	M MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	A O MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0	0.0	
U	L N MEAN	26.3	72	47	7.8	7.7	21.5	0.139	0.061	0.573	0.117	1.052	73	14.3	0	0.0	
N	L D STDV	48.25	22.8	35.7	0.82	2.03	5.45	0.3222	0.1785	1.0789	0.1516	0.9847	67.3	22.43	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
C	O/WR	705/741	618/645	701/736	705/741	697/732	704/740	706/742	705/741	706/742	706/742	706/742	706/742	706/742	706/742		

## GENUS:EUDORINA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN													0	0.0	
O	D	MAX													9	0.9	
U	1	MEAN													1	0.1	
N	M	STDEV															
D		N</>															
		O/wR															
R	N	MIN	3.4	35	9	7.0	5.2	7.2	0.012	0.003	0.085	0.030	0.265	12	1.0		
C	O	MAX	27.7	94	105	8.8	12.0	28.9	0.716	0.541	3.429	0.369	1.824	199	53.0		
U	1	MEAN	12.4	73	44	7.8	8.7	17.9	0.113	0.352	0.812	0.109	0.668	63	15.6		
N	D	STDEV	8.19	19.4	25.0	0.45	2.36	7.37	0.1840	0.1416	1.0836	0.0913	0.3997	62.6	15.76	2.4	
D	O	N</>	45/ 46	16/ 13	11/ 19	23/ 17	10/ 9	1/ 0	16/ 8	27/ 7	38/ 15	2/ 8	13/ 18	41/ 15	7/ 21		
	M	O/wR	14/156	11/158	14/219	14/209	14/226	14/247	14/225	14/215	14/196	14/239	14/218	14/193	14/221		
R	N	MIN															
O	D	MAX															
U	2	MEAN															
N	M	STDEV															
D		N</>															
		O/wR															
R	N	MIN	2.7	82	24	5.5	3.8	21.2	0.312	0.004	0.027	0.034	0.310	10	1.0	0	0.0
C	O	MAX	92.5	94	184	9.5	15.2	31.4	0.285	0.050	1.299	0.225	1.799	71	15.0	110	1.4
U	2	MEAN	21.8	88	64	7.5	8.2	27.0	0.061	0.014	0.218	0.090	0.863	22	6.4	14	0.2
N	D	STDEV	28.48	4.5	45.5	1.22	3.47	2.67	0.0769	0.0138	3.3681	0.0501	0.5432	17.0	3.63	34.1	0.43
D	O	N</>	9/ 25	121/ 19	48/ 2	2/ 4	6/ 2	3/ 2	24/ 23	22/ 38	1/ 25	0/ 21	9/ 43	0/ 91	12/ 48		
	M	O/wR	12/213	9/ 97	11/191	12/241	12/238	12/241	12/200	12/187	12/221	12/226	12/195	12/156	12/187		
R	N	MIN															
O	D	MAX															
U	3	MEAN															
N	M	STDEV															
D		N</>															
		O/wR															
R	N	MIN	3.9	19	17	6.7	4.0	17.2	0.013	0.004	0.024	0.037	0.321	14	1.0	0	0.0
C	O	MAX	237.0	93	157	10.3	12.7	23.0	0.299	0.083	1.564	0.205	4.399	116	17.0	67	0.8
U	3	MEAN	44.7	68	57	7.9	8.3	19.8	0.137	0.030	0.389	0.074	1.110	50	6.0	16	0.2
N	D	STDEV	70.62	28.5	39.5	1.07	2.62	2.01	0.0859	0.0277	0.4802	0.0488	1.2017	33.4	5.29	26.6	0.27
D	O	N</>	33/ 1	9/ 51	23/ 3	30/ 0	5/ 1	35/ 55	22/ 19	8/ 31	6/ 11	10/ 26	27/ 4	32/ 58	13/ 28		
	M	O/wR	10/213	7/161	10/220	10/215	9/235	10/156	10/205	10/206	10/229	10/210	10/215	10/156	10/205		
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDEV															
D		N</>															
		O/wR															
R	N	MIN	2.7	19	9	5.5	3.8	7.2	0.012	0.003	0.024	0.030	0.265	10	1.0	0	0.0
C	A	MAX	237.0	94	184	10.3	15.2	31.4	0.716	0.541	3.429	0.369	4.399	199	53.0	110	1.4
U	L	MEAN	24.5	77	54	7.7	8.3	21.5	0.093	0.033	0.497	0.093	0.856	46	9.9	9	0.1
N	L	STDEV	41.72	20.2	36.6	0.94	2.78	6.30	0.1298	0.0893	0.7796	0.0686	0.7457	46.3	11.19	24.5	0.32
D	O	N</>	52/ 9	26/ 52	21/ 5	5/ 2	15/ 4	1/ 2	59/ 31	38/ 23	6/ 22	3/ 26	29/ 10	0/ 42	32/ 46		
	M	O/wR	36/683	27/567	35/710	36/734	35/713	36/737	36/652	36/641	36/713	36/703	36/700	36/664			

## GENUS: EUGLENA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	MN	0.3	6	5	5.3	3.8	7.2	0.004	0.001	0.041	0.022	0.199	10	0.0	0	0.0	
O	MAX	247.1	98	252	10.1	15.5	28.9	1.184	1.032	9.745	0.524	3.199	248	98.0	347	19.6	
U	MEAN	24.4	63	31	8.0	9.0	18.0	0.124	0.054	1.199	0.107	0.814	82	16.4	45	1.1	
N	STDV	37.63	21.5	28.7	0.70	1.95	5.52	0.1731	0.1430	1.9989	0.0791	0.6075	66.1	20.47	75.6	3.06	
D	N</>	0/ 2	0/ 2	2/ 0	0/ 1	4/ 1	1/ 0	0/ 4	0/ 3	6/ 0	0/ 3	0/ 3	0/ 0	0/ 5			
O/WR		106/245	81/185	107/247	107/248	107/240	107/247	107/245	107/246	107/243	107/246	107/246	107/249	107/244			
R	N	MN	0.5	15	2	5.3	0.7	6.8	0.004	0.001	0.024	0.024	0.207	10	0.0	0	0.0
O	MAX	355.6	100	185	10.6	19.2	28.8	1.719	1.209	4.199	0.635	4.699	240	142.0	0	0.0	
U	MEAN	18.4	76	53	7.8	9.0	17.1	0.122	0.059	0.622	0.106	0.783	61	20.3	0	0.0	
N	STDV	43.98	18.1	38.4	0.74	2.08	5.63	0.2677	0.1790	0.8253	0.1062	0.7602	67.2	28.11	0.0	0.00	
D	N</>	1/ 0	3/ 0	0/ 1	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 11	1/ 0	1/ 0	0/ 1	0/ 0			
C	O/WR	141/246	106/184	142/248	142/249	138/245	141/247	142/249	142/249	142/238	142/248	142/248	142/248	142/249			
R	N	MN	1.4	4	6	5.2	3.1	20.6	0.007	0.003	0.027	0.036	0.215	10	0.0	0	0.0
O	MAX	595.0	107	150	10.3	17.8	32.2	1.599	1.191	6.857	0.719	6.349	334	210.0	4027	28.3	
U	MEAN	39.9	66	39	7.8	6.9	26.8	0.155	0.067	0.641	0.131	1.278	80	13.6	149	1.2	
N	STDV	65.11	25.3	24.7	0.83	2.09	2.22	0.2698	0.1790	1.0189	0.0948	0.9772	70.8	25.31	490.7	3.25	
D	N</>	0/ 0	0/ 1	1/ 4	1/ 1	1/ 0	2/ 0	4/ 1	9/ 0	1/ 0	1/ 0	0/ 1	0/ 0	0/ 0			
O/WR		144/247	137/236	143/236	144/245	143/245	143/244	144/242	144/238	144/246	144/246	144/266	144/247	144/247			
R	N	MN	1.5	9	1	6.1	3.0	17.3	0.004	0.001	0.025	0.034	0.226	10	0.0	0	0.0
O	MAX	456.6	121	222	10.6	14.2	30.1	2.559	0.589	2.099	0.565	7.149	293	130.0	0	0.0	
U	MEAN	26.8	80	63	7.6	7.2	26.2	0.106	0.034	0.287	0.104	1.131	64	14.7	0	0.0	
N	STDV	58.32	19.4	43.8	0.96	1.82	2.48	0.2952	0.0866	0.4100	0.0745	1.2042	65.2	21.51	0.0	0.00	
D	N</>	1/ 1	4/ 0	0/ 0	0/ 0	0/ 3	0/ 6	0/ 0	0/ 5	0/ 14	0/ 1	1/ 0	0/ 1	0/ 1			
C	O/WR	103/245	100/233	98/241	103/247	103/243	103/240	103/247	103/242	103/233	103/246	103/246	103/246	103/246			
R	N	MN	1.1	1	6	5.6	1.9	9.0	0.006	0.001	0.020	0.020	0.240	10	0.0	0	0.0
O	MAX	198.0	97	159	10.0	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	71.0	5010	59.4	
U	MEAN	24.7	69	40	7.7	7.3	20.4	0.172	0.067	0.395	0.134	1.157	77	8.0	192	1.7	
N	STDV	31.17	24.6	25.6	0.76	1.61	3.22	0.4642	0.2051	0.6185	0.2679	1.0801	63.5	11.22	647.1	7.05	
D	N</>	2/ 2	0/ 2	0/ 2	1/ 1	1/ 0	0/ 0	2/ 0	0/ 0	2/ 0	0/ 0	6/ 0	0/ 0	0/ 3			
C	O/WR	158/243	142/219	157/244	156/243	156/240	157/246	157/244	157/245	157/244	157/246	157/246	157/246	157/243			
R	N	MN	0.8	8	12	4.7	1.6	13.5	0.004	0.002	0.017	0.032	0.199	10	0.0	0	0.0
O	MAX	241.4	120	185	10.3	12.7	27.8	1.639	1.255	1.731	0.831	6.000	283	90.0	0	0.0	
U	MEAN	20.5	63	69	7.5	7.2	20.4	0.123	0.075	0.248	0.102	1.051	66	12.5	0	0.0	
N	STDV	39.20	16.4	41.4	0.95	1.62	3.31	0.2869	0.2162	0.3784	0.1040	1.0181	64.8	19.49	0.0	0.00	
D	N</>	3/ 3	3/ 0	7/ 0	0/ 0	0/ 1	2/ 2	0/ 2	1/ 1	0/ 7	2/ 3	0/ 1	0/ 1	0/ 0			
C	O/WR	89/247	79/218	89/239	89/245	85/240	89/242	89/244	88/243	89/239	89/241	89/245	89/245	89/246			
R	N	MN	0.3	1	5	5.2	1.9	7.2	0.004	0.001	0.020	0.020	0.199	10	0.0	0	0.0
O	MAX	595.0	107	252	10.3	17.8	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	5010	59.4	
U	MEAN	30.0	67	37	7.8	7.6	22.0	0.153	0.063	0.693	0.126	1.109	79	12.2	139	1.3	
N	STDV	47.79	24.2	26.4	0.78	2.05	5.20	0.3411	0.1810	1.3042	0.1800	0.9553	66.7	19.87	500.5	5.03	
D	N</>	0/ 0	0/ 1	3/ 0	2/ 2	2/ 1	1/ 0	0/ 0	0/ 0	2/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
O/WR		408/741	360/644	407/733	407/737	406/729	407/739	408/742	408/741	408/740	408/742	408/742	408/742	408/742			
R	N	MN	0.5	8	1	4.1	0.7	6.8	0.004	0.001	0.017	0.024	0.199	10	0.0	0	0.0
O	MAX	456.6	121	222	10.6	19.2	30.1	2.559	1.255	4.199	0.831	7.149	293	142.0	0	0.0	
U	MEAN	21.6	80	60	7.7	8.0	20.8	0.117	0.056	0.419	0.104	0.962	63	16.5	0	0.0	
N	STDV	47.76	18.3	41.3	0.88	2.08	5.77	0.2808	0.1683	0.6391	0.0966	0.9937	65.7	24.25	0.0	0.00	
D	N</>	1/ 1	8/ 0	0/ 1	0/ 0	0/ 0	0/ 6	0/ 2	0/ 1	0/ 15	2/ 3	0/ 1	0/ 1	0/ 1			
C	O/WR	333/739	285/637	329/735	334/741	326/732	333/734	334/740	333/740	334/727	334/737	334/741	334/741	334/741			

## GENUS:EUGLENA

## - PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	0.5	47	9	5.3	4.2	15.9	0.004	0.001	0.313	0.042	0.265	10	3.0	8	12.9
O	D MAX	4.3	88	68	7.6	9.4	27.4	0.226	0.026	0.469	0.185	0.654	17	98.0	116	19.6
U	L C MEAN	2.2	64	39	6.7	6.1	23.0	0.102	0.012	0.389	0.127	0.491	14	35.7	45	17.3
N	M STDV	1.92	21.4	42.8	1.21	2.87	6.19	0.1129	0.0125	0.0780	0.0754	0.2024	3.8	54.00	61.8	3.84
D	N</>	1/184	24/ 37	11/ 28	0/162	7/103	123/ 8	0/ 23	0/ 78	120/ 96	26/ 27	13/103	0/171	34/ 5		
	C/WR	3/ 62	3/126	3/210	3/ 87	3/135	3/117	3/226	3/171	3/ 33	3/196	3/133	3/ 78	3/210		
P	N MIN	0.3	6	5	6.6	3.8	7.2	0.007	0.002	0.041	0.022	0.199	10	0.0	0	0.0
O	C MAX	247.1	98	252	10.1	15.5	28.9	1.184	1.032	9.745	0.524	3.199	248	84.0	367	8.0
U	L N MEAN	25.0	63	31	8.0	9.0	17.9	0.124	0.055	1.222	0.107	0.823	83	15.8	45	0.6
N	D STDV	37.98	21.6	28.5	0.65	1.88	5.47	0.1749	0.1449	2.0229	0.0795	0.6131	66.1	19.06	76.2	1.20
D	O N</>	0/ 2	0/ 2	2/ 0	4/ 1	4/ 1	1/ 0	6/ 4	10/ 3	6/ 0	0/ 3	0/ 3	0/ 0	0/ 9		
	M O/WP	103/245	78/185	104/247	104/244	104/240	104/247	104/239	104/236	104/243	104/246	104/246	104/249	104/240		
R	N MIN	8.7	4	6	8.0	5.9	24.8	0.104	0.042	1.715	0.139	1.137	154	2.0	236	22.1
O	O MAX	112.7	47	14	8.3	7.4	30.5	1.029	0.555	3.020	0.719	3.699	240	34.0	3669	28.3
U	Z O MEAN	60.7	26	10	8.1	6.6	27.6	0.566	0.298	2.369	0.429	2.417	197	18.0	1853	25.2
N	M STDV	73.54	30.4	5.7	0.21	1.06	4.03	0.6540	0.3627	0.9199	0.4101	1.8116	60.8	22.63	2286.1	4.37
D	N</>	84/ 15	0/196	1/221	137/ 62	66/ 76	54/ 3	183/ 6	203/ 6	6 229/ 8	185/ 0	155/ 8	212/ 9	28/ 26		
	O/WR	2/148	2/ 41	2/ 19	2/ 48	2/106	2/189	2/ 58	2/ 38	2/ 10	2/ 62	2/ 84	2/ 26	2/193		
R	N MIN	1.4	5	6	5.2	3.1	20.6	0.007	0.003	0.027	0.036	0.215	13	0.0	3	0.0
O	O MAX	595.0	107	150	10.3	17.8	32.2	1.599	1.191	6.857	0.504	6.349	334	210.0	4327	9.2
U	Z N MEAN	39.6	67	39	7.8	6.9	26.8	0.169	0.064	0.617	0.127	1.262	79	13.5	125	0.8
N	D STDV	65.23	24.9	24.6	0.83	2.10	2.21	0.2614	0.1755	1.3668	0.0816	0.9625	69.8	25.41	406.6	1.52
D	O N</>	0/ 0	1/ 1	1/ 4	1/ 1	1/ 0	2/ 0	4/ 1	9/ 0	1/ 0	1/ 2	0/ 1	0/ 0	0/ 0		
	M O/WR	142/247	135/235	141/236	142/245	141/245	141/244	142/242	142/238	142/246	142/244	142/246	142/247	142/247		
P	N MIN	7.1	1	6	7.7	3.5	16.9	0.211	0.094	1.199	0.127	1.265	171	4.0	1487	35.3
O	D MAX	42.4	61	29	8.1	7.9	19.0	0.498	0.361	2.569	0.979	3.300	291	13.0	5313	59.4
U	Z D MEAN	22.5	24	15	7.9	5.7	17.8	0.368	0.236	1.789	0.435	1.846	212	7.7	3187	50.1
N	M STDV	18.06	32.4	12.3	0.21	3.11	1.08	0.1454	0.1343	0.7040	0.4719	0.9991	68.7	4.73	1764.7	13.01
D	O N</>	85/ 37	0/169	0/179	127/ 71	3/ 81	30/158	215/ 15	218/ 12	224/ 2	193/ 1	178/ 15	224/ 0	93/ 42		
	C/WR	3/125	3/ 52	3/ 67	3/ 47	2/157	3/ 58	3/ 16	3/ 15	3/ 20	3/ 52	3/ 53	3/ 22	3/111		
P	N MIN	1.1	3	7	5.6	1.9	9.0	0.006	0.001	0.020	0.020	0.240	10	0.0	0	0.0
O	O MAX	198.0	97	159	10.0	13.5	29.6	4.549	2.009	4.469	3.024	8.199	241	71.0	4989	8.0
U	Z N MEAN	24.8	70	41	7.6	7.4	20.5	0.169	0.063	0.367	0.128	1.143	74	8.0	134	0.7
N	M STDV	31.41	23.6	25.6	0.77	1.59	3.23	0.4676	0.2052	0.5871	0.2616	1.0832	60.7	11.32	456.5	1.36
D	O N</>	2/ 2	1/ 2	1/ 2	1/ 1	1/ 0	0/ 0	2/ 0	0/ 0	2/ 0	0/ 0	6/ 0	0/ 3	0/ 0		
	M C/WR	155/243	139/218	154/243	153/243	154/240	154/246	154/244	154/245	154/244	154/246	154/240	154/243	154/243		
R	N MIN	0.5	1	6	5.3	3.5	15.9	0.004	0.001	0.313	0.042	0.265	10	2.0	8	12.9
O	A D MAX	112.7	88	88	8.3	9.4	30.5	1.029	0.555	3.020	0.979	3.699	291	98.0	5010	59.4
U	L C MEAN	24.5	39	23	7.5	6.1	22.2	0.318	0.167	1.409	0.318	1.481	134	20.8	1675	31.6
N	L M STDV	38.15	31.3	27.5	0.97	2.17	5.53	0.3306	0.2029	1.0176	0.3381	1.2218	108.3	32.92	1543.6	17.37
D	N</>	1/ 31	0/166	5/ 93	3/167	12/139	141/ 3	0/ 20	0/ 21	467/ 26	56/ 1	29/ 20	0/ 2	95/ 10		
	O/WR	8/709	8/479	8/638	8/571	7/581	8/596	8/722	8/720	8/249	8/685	8/693	8/740	8/637		
R	N MIN	0.3	3	5	5.2	1.9	7.2	0.006	0.001	0.020	0.199	10	0.0	3	0.0	
C	A D MAX	595.0	107	252	10.3	17.8	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	4989	9.2
U	L N MEAN	30.1	67	38	7.8	7.6	22.0	0.150	0.061	0.678	0.122	1.102	78	12.0	108	0.7
N	L D STDV	47.99	23.8	26.3	0.77	2.05	5.20	0.3439	0.1802	1.3063	0.1741	0.9497	65.4	19.55	376.1	1.38
D	O N</>	3/ 0	1/ 1	3/ 0	2/ 2	2/ 1	1/ 0	7/ 0	0/ 0	2/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
	M O/WR	400/741	352/643	399/733	399/737	399/729	399/739	400/735	400/741	400/740	400/742	400/742	400/742	400/742		

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**GENUS: EUNOTIA**

#### PARTIAL DEPTH VALUES

## GENUS:EUNOTIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	M	MIN															
O	D	MAX															
U	I	MEAN															
R	M	STDV															
D		NC/															
	C/WR																
R	N	MIN	0.5	6	5	5.3	6.0	9.7	0.004	0.001	0.052	0.034	0.265	10	1.0	0	0.0
O	O	MAX	100.9	97	88	9.1	12.4	27.8	0.234	0.154	2.276	0.554	2.611	196	98.0	19	2.6
U	I	MEAN	20.4	71	41	7.7	9.2	16.3	0.083	0.029	0.572	0.114	0.899	61	19.4	2	0.2
N	D	STDV	24.68	22.7	24.1	0.94	1.42	5.31	0.0667	0.0391	0.6142	0.1180	0.7137	66.3	26.05	5.0	0.73
D	O	NC/	1/ 9	0/ 3	2/ 28	0/ 12	14/ 4	7/ 6	0/ 22	0/ 17	10/ 25	9/ 1	13/ 9	0/ 20	7/ 5		
	C/WR		18/237	14/184	18/219	18/237	18/227	18/235	18/227	18/232	18/214	18/239	18/227	18/229	18/237		
R	M	MIN	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.974	0.504	1.199	10	8.0	54	23.1
O	D	MAX	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.974	0.504	1.199	10	8.0	54	23.1
U	2	MEAN	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.973	0.503	1.199	10	8.0	54	23.1
N	4	STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D		NC/	82/163	50/186	48/189	2/242	96/144	11/233	205/ 41	183/ 63	210/ 36	244/ 2	161/ 81	0/229	138/ 99		
	C/WR		1/ 2	1/ 1	1/ 4	1/ 3	1/ 6	1/ 2	1/ 1	1/ 1	1/ 1	1/ 1	1/ 5	1/ 18	1/ 10		
R	N	MIN	1.4	35	15	5.5	4.3	21.2	0.010	0.003	0.030	0.040	0.332	10	0.0	0	0.0
O	O	MAX	78.0	92	81	8.7	8.9	31.4	1.259	1.191	0.566	0.239	1.724	172	45.0	76	1.0
U	2	MEAN	19.4	72	41	7.0	6.3	25.5	0.147	0.107	0.232	0.131	0.920	39	11.0	9	0.2
N	D	STDV	25.13	18.0	18.3	1.07	1.50	3.30	0.3512	0.3411	0.1818	0.0628	0.5683	48.3	12.15	22.3	0.36
D	O	NC/	3/ 30	27/ 29	20/ 36	2/ 22	9/ 23	3/ 2	14/ 3	9/ 0	7/ 51	4/ 18	12/ 48	0/ 23	0/ 19		
	C/WR		12/217	12/181	12/185	12/223	12/214	12/241	12/230	12/238	12/189	12/225	12/187	12/224	12/228		
R	M	MIN															
C	O	MAX															
U	3	MEAN															
N	H	STDV															
D		NC/															
	C/WR																
R	N	MIN	0.8	13	12	5.6	5.0	9.0	0.011	0.003	0.029	0.045	0.240	10	1.0	0	0.0
O	O	MAX	237.0	95	140	10.3	10.2	24.1	0.369	0.142	1.959	0.309	4.399	237	44.0	68	1.2
U	3	MEAN	37.5	69	46	7.2	8.1	18.3	0.394	0.029	0.507	0.104	1.158	40	11.1	9	0.2
N	D	STDV	67.08	29.8	32.0	1.93	1.50	4.33	0.1208	0.0439	0.6849	0.0879	1.1023	63.1	12.71	20.5	0.42
D	2	NC/	0/ 1	6/ 16	7/ 9	1/ 0	15/ 9	0/ 32	15/ 18	2/ 18	19/ 4	31/ 11	6/ 4	0/ 5	13/ 12		
	4	C/WR	14/246	13/199	14/230	13/244	12/217	13/214	14/213	14/225	14/223	14/204	14/236	14/241	14/221		
R	M	MIN	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.974	0.504	1.199	10	8.0	54	23.1
O	A	MAX	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.974	0.504	1.199	10	8.0	54	23.1
U	L	MEAN	8.6	57	24	5.5	6.5	22.9	0.178	0.025	0.973	0.503	1.199	10	8.0	54	23.1
N	L	STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D		NC/	320/415	131/511	184/538	5/733	180/538	382/352	630/111	506/230	625/116	727/ 14	547/189	0/668	417/302		
	C/WR		1/ 6	1/ 3	1/ 14	1/ 3	1/ 14	1/ 6	1/ 1	1/ 5	1/ 1	1/ 1	1/ 6	1/ 74	1/ 23		
R	N	MIN	0.5	6	5	5.3	4.3	9.0	0.034	0.001	0.029	0.034	0.240	10	0.0	0	0.0
O	A	MAX	237.0	97	140	10.3	12.4	31.4	1.259	1.191	2.276	0.554	4.399	237	98.0	76	2.6
U	L	MEAN	25.6	71	43	7.3	8.0	19.5	0.104	0.050	0.459	0.115	0.987	40	14.5	6	0.2
N	L	STDV	42.79	23.5	25.1	1.02	1.07	5.90	0.1961	0.1794	0.5656	0.0946	0.8157	59.5	19.29	16.7	0.54
D	0	NC/	1/ 9	5/ 12	3/ 20	3/ 2	26/ 12	3/ 2	0/ 10	0/ 3	25/ 41	13/ 9	15/ 10	0/ 19	0/ 10		
	C/WR		44/731	39/628	44/713	43/736	42/694	43/735	44/732	44/738	44/676	44/720	44/717	44/723	44/732		

## GENUS: FLAGELLATE

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHT	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
P	N	MIN	0.6	8	5	6.5	3.9	6.8	0.005	0.001	0.024	0.022	0.242	10	0.0	0 0.0
O	O	MAX	247.1	100	185	10.1	12.8	28.0	1.184	1.032	9.745	0.369	3.000	227	137.0	14936 68.3
U	I	MEAN	16.5	71	44	7.8	6.7	18.0	0.104	0.045	1.107	0.094	0.757	79	19.5	928 16.0
N	C	STDV	29.31	21.4	39.4	0.64	1.79	5.55	0.1537	0.1252	1.9070	0.0555	0.4930	71.4	25.73	2065.5 16.32
D	N	NC/	4/ 2	1/ 0	2/ 1	3/ 1	6/ 2	0/ 3	2/ 4	0/ 3	0/ 0	0/ 8	7/ 4	0/ 3	0/ 1	
C/WR		109/241	79/186	110/246	110/245	109/237	110/245	110/243	110/246	110/249	110/241	110/238	110/246	110/248		
R	N	MIN	0.3	6	2	5.3	0.7	8.5	0.004	0.001	0.035	0.024	0.199	10	0.0	0 0.0
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	5.846	0.635	4.699	248	142.0	0 0.0
U	I	MEAN	24.5	70	43	7.9	9.2	17.1	0.138	0.067	0.682	0.116	0.826	63	17.9	0 0.0
N	C	STDV	48.70	20.1	33.5	0.78	2.16	5.61	0.2776	0.1894	0.9793	0.1170	0.8248	63.4	24.73	0.0 0.00
D	N	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 0	0/ 0	0/ 0	3/ 6	1/ 0	0/ 0	0/ 0	0/ 0	
C/WR		138/247	108/187	139/249	139/249	136/245	138/246	139/249	139/249	139/240	139/248	139/249	139/249	139/249		
R	N	MIN	2.0	4	6	5.2	3.3	20.1	0.006	0.001	0.025	0.036	0.265	10	0.0	0 0.0
O	O	MAX	456.6	98	222	10.6	16.0	31.5	1.474	0.609	6.857	0.719	7.149	281	210.0	7531 34.0
U	Z	MEAN	35.4	70	47	7.8	7.0	26.7	0.115	0.045	0.630	0.119	1.259	83	17.5	361 5.1
N	C	STDV	57.54	25.0	35.6	0.90	1.85	2.36	0.2183	0.1084	1.1430	0.0903	1.0400	72.2	30.81	831.4 7.07
D	N	NC/	3/ 1	0/ 3	1/ 0	1/ 0	4/ 1	1/ 1	2/ 2	0/ 3	0/ 0	1/ 0	3/ 0	0/ 2	0/ 0	
C/WR		105/243	105/234	100/240	105/246	105/241	105/244	105/243	105/244	105/247	105/246	105/244	105/245	105/247		
R	N	MIN	1.4	5	1	4.1	3.0	17.3	0.004	0.001	0.027	0.034	0.215	10	0.0	0 0.0
O	O	MAX	595.0	121	216	10.2	17.8	32.2	2.559	1.191	4.099	0.565	6.349	334	131.0	0 0.0
U	Z	MEAN	33.8	74	50	7.7	7.0	26.5	0.149	0.059	0.392	0.120	1.186	66	11.5	0 0.0
N	C	STDV	66.26	23.1	36.0	0.89	2.08	2.34	0.3198	0.1715	0.6119	0.0862	1.075	65.6	16.42	0.0 0.00
D	N	NC/	0/ 0	1/ 0	0/ 1	0/ 2	0/ 0	0/ 0	0/ 0	0/ 0	1/ 3	0/ 1	0/ 1	0/ 0	0/ 4	
C/WR		142/247	132/236	141/240	142/245	141/246	141/246	142/247	142/247	142/243	142/246	142/246	142/247	142/243		
R	N	MIN	0.8	3	7	4.7	1.9	12.6	0.005	0.002	0.017	0.032	0.199	10	0.0	0 0.0
O	O	MAX	198.0	100	185	9.4	13.5	27.2	4.549	2.009	1.989	3.024	8.199	261	88.0	21560 79.2
U	Z	MEAN	20.3	76	52	7.6	7.3	19.9	0.163	0.065	0.318	0.133	1.050	79	19.3	1302 12.6
N	C	STDV	29.66	21.7	35.7	0.81	1.63	3.07	0.5209	0.2280	0.4298	0.2860	1.0000	67.0	16.26	3452.4 17.53
D	N	NC/	0/ 2	1/ 0	1/ 0	0/ 3	1/ 0	1/ 3	1/ 0	1/ 0	0/ 3	2/ 0	0/ 0	0/ 2	0/ 1	
C/WR		119/245	107/220	118/245	119/242	119/240	119/242	119/245	118/244	119/243	119/244	119/246	119/244	119/245		
R	N	MIN	1.1	1	6	5.6	1.6	9.0	0.004	0.001	0.021	0.020	0.225	10	0.0	0 0.0
O	O	MAX	241.4	99	159	10.3	11.4	29.6	1.609	1.189	4.469	0.979	6.000	291	90.0	0 0.0
U	Z	MEAN	25.9	72	49	7.6	7.3	20.9	0.147	0.075	0.364	0.112	1.182	67	8.9	0 0.0
N	C	STDV	37.98	24.2	34.4	0.86	1.59	3.34	0.2667	0.1900	0.6398	0.1415	1.1083	60.8	13.48	0.0 0.00
D	N	NC/	2/ 0	0/ 1	0/ 2	1/ 0	0/ 2	0/ 0	0/ 2	0/ 2	4/ 0	0/ 1	5/ 1	0/ 0	0/ 0	
C/WR		128/245	114/220	128/244	126/244	122/239	127/246	127/244	127/243	127/242	127/240	127/246	127/246	127/245		
R	N	MIN	0.6	3	5	4.7	1.9	6.8	0.005	0.001	0.017	0.022	0.199	10	0.0	0 0.0
O	O	MAX	456.6	100	222	10.6	16.0	31.5	4.549	2.009	9.745	3.024	8.199	281	215.0	21560 79.2
U	Z	MEAN	23.8	73	48	7.8	7.7	21.4	0.128	0.052	0.676	0.116	1.019	80	15.6	883 11.3
N	C	STDV	41.15	23.0	37.0	0.79	1.89	5.34	0.3456	0.1650	1.3311	0.1811	0.9015	70.0	24.96	2446.5 15.22
D	N	NC/	4/ 1	1/ 3	3/ 1	1/ 0	2/ 2	0/ 1	5/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 4	0/ 0	
C/WR		333/736	291/641	328/732	334/740	333/728	334/739	334/737	333/741	334/742	334/761	334/742	334/738	334/742		
R	N	MIN	0.3	1	1	4.1	0.7	8.5	0.004	0.001	0.021	0.020	0.199	10	0.0	0 0.0
O	O	MAX	595.0	121	252	10.6	19.2	32.2	2.559	1.209	5.846	0.979	6.349	334	142.0	0 0.0
U	Z	MEAN	28.2	72	47	7.8	7.9	21.5	0.144	0.066	0.482	0.116	1.062	65	12.9	0 0.0
N	C	STDV	52.79	22.6	34.7	0.85	2.21	5.62	0.2892	0.1832	0.7761	0.1159	1.0318	63.2	19.27	0.0 0.00
D	N	NC/	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 0	0/ 2	4/ 7	0/ 1	0/ 2	0/ 0	0/ 1		
C/WR		408/741	354/645	408/736	407/741	399/732	406/738	408/740	408/739	408/731	408/741	408/740	408/742	408/741		

## GENUS: FLAGELLATE

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	0.6	13	6	6.5	3.9	10.4	0.005	0.001	0.024	0.022	0.269	10	1.0	8	10.0
O	D MAX	50.7	100	185	8.7	12.8	27.4	0.716	0.541	9.745	0.231	1.824	226	137.0	14936	68.3
U	I C MEAN	9.9	75	48	7.7	8.7	17.2	0.087	0.034	1.276	0.091	0.719	79	23.0	1619	28.9
N	4 STDV	10.19	21.3	44.0	0.57	1.89	5.18	0.1085	0.0779	2.0350	0.0503	0.3426	72.4	28.13	2785.5	14.86
D	N</>	4/ 17	2/ 0	4/ 1	3/ 19	6/ 2	13/ 8	2/ 8	0/ 7	0/ 3	0/ 16	16/ 18	0/ 4	7/ 1		
O/WR		52/226	39/185	53/244	53/227	53/237	53/227	53/239	53/242	53/249	53/233	53/215	53/245	53/241		
R	N MIN	1.5	8	5	6.7	4.8	6.8	0.008	0.001	0.038	0.030	0.242	10	0.0	0	0.0
O	D MAX	247.1	96	172	10.1	12.0	26.0	1.164	1.032	7.557	0.369	3.000	227	112.0	3010	9.8
U	I N MEAN	22.5	67	40	7.9	8.7	18.8	0.119	0.055	0.950	0.098	0.793	78	16.1	285	3.9
N	D STDV	38.54	20.9	34.5	0.70	1.70	5.81	0.1858	0.1571	1.7837	0.0601	0.6012	71.2	23.04	475.0	2.88
D	N</>	8/ 2	1/ 4	2/ 2	6/ 1	9/ 9	0/ 3	8/ 4	0/ 3	4/ 2	2/ 8	7/ 4	0/ 3	0/ 4		
O/WR		57/237	40/182	57/245	57/242	56/227	57/245	57/237	57/246	57/243	57/239	57/238	57/246	57/245		
R	N MIN	2.8	32	20	6.7	4.5	23.4	0.009	0.004	0.047	0.056	0.265	10	1.0	48	10.8
O	D MAX	92.9	93	105	8.5	8.5	29.6	0.203	0.083	3.679	0.170	2.299	240	130.0	7531	34.0
U	I C MEAN	20.1	75	44	7.7	6.9	26.6	0.062	0.019	0.716	0.102	0.929	85	23.0	1146	19.4
N	D STDV	26.44	18.9	24.8	0.58	1.28	2.04	0.0550	0.0244	1.0776	0.0332	0.5955	79.0	33.72	1849.0	6.92
D	N</>	10/ 24	24/ 22	35/ 19	25/ 38	13/ 34	15/ 18	9/ 33	22/ 26	18/ 5	32/ 41	3/ 29	0/ 9	12/ 1		
O/WR		16/213	16/191	16/187	16/184	16/199	16/205	16/199	16/224	16/174	16/215	16/238	16/234			
R	N MIN	2.0	4	6	5.2	3.3	20.1	0.006	0.001	0.025	0.036	0.276	10	0.0	0	0.0
C	O MAX	456.6	98	222	10.6	16.0	31.5	1.474	0.609	6.857	0.719	7.149	281	210.0	1454	10.0
U	I D MEAN	38.1	69	47	7.8	7.0	26.7	0.125	0.050	0.615	0.122	1.318	83	16.6	220	2.5
N	D STDV	61.19	26.0	37.4	0.95	1.94	2.43	0.2350	0.1168	1.1595	0.0968	1.3929	71.4	30.36	319.2	2.64
D	N</>	3/ 1	0/ 3	1/ 0	1/ 0	4/ 1	1/ 1	2/ 2	0/ 3	0/ 0	1/ 0	4/ 0	0/ 2	0/ 0		
O/WR		89/243	89/234	84/240	89/246	89/241	89/244	89/243	89/247	89/246	89/243	89/245	89/247			
R	N MIN	0.8	3	11	6.0	1.9	12.6	0.008	0.003	0.017	0.035	0.210	10	0.0	53	10.3
O	D MAX	126.8	96	152	8.8	12.7	23.8	4.549	2.009	1.989	3.024	8.199	241	88.0	21560	79.2
U	I O MEAN	16.1	79	62	7.6	7.1	19.6	0.284	0.108	0.416	0.179	1.384	80	15.9	3053	32.1
N	D STDV	22.47	22.3	36.5	0.75	1.92	2.65	0.8774	0.3712	0.4628	0.4780	1.4283	67.4	23.22	5382.3	18.85
D	N</>	0/ 6	1/ 7	5/ 4	3/ 12	1/ 1	1/ 37	5/ 0	2/ 0	0/ 3	5/ 0	2/ 0	0/ 3	0/ 1		
O/WR		39/241	35/213	38/237	39/230	39/239	39/238	39/241	39/243	39/243	39/241	39/244	39/243	39/245		
R	N MIN	0.8	11	7	4.7	3.5	13.5	0.005	0.002	0.019	0.032	0.199	10	0.0	3	0.0
C	O MAX	198.0	100	185	9.4	13.5	27.2	0.929	0.632	1.675	0.569	3.557	261	61.0	9008	9.9
U	I N MEAN	22.3	75	48	7.7	7.4	20.0	0.103	0.043	0.270	0.111	1.034	79	7.6	448	3.1
N	D STDV	32.51	21.5	34.6	0.85	1.48	3.26	0.1553	0.0973	0.4071	0.1037	0.7153	67.3	13.61	1271.4	2.92
D	N</>	9/ 2	5/ 0	1/ 0	0/ 3	3/ 0	2/ 3	1/ 6	1/ 6	1/ 9	2/ 4	0/ 10	0/ 2	0/ 6		
O/WR		80/245	72/216	80/245	80/242	80/238	80/241	80/239	79/238	80/236	80/240	80/244	80/240			
R	N MIN	0.6	3	6	6.0	1.9	10.4	0.005	0.001	0.017	0.022	0.210	10	0.0	8	10.0
C	O MAX	126.8	100	185	8.8	12.8	29.6	4.549	2.009	9.745	3.024	8.199	241	137.0	21560	79.2
U	L O MEAN	13.7	77	52	7.7	7.9	19.5	0.154	0.058	0.882	0.124	0.882	80	20.5	2367	28.7
N	L D STDV	18.50	21.2	39.4	0.64	1.98	5.11	0.5378	0.2310	1.5529	0.2902	0.9271	71.0	27.33	3888.3	16.04
D	N</>	4/ 27	1/ 3	5/ 3	12/ 49	2/ 9	14/ 18	5/ 0	0/ 0	0/ 0	1/ 0	5/ 0	0/ 13	0/ 2		
O/WR		137/710	93/641	107/728	108/680	138/721	138/708	108/737	108/741	108/742	108/741	108/737	108/729	108/740		
R	N MIN	0.8	4	5	4.7	3.3	6.8	0.005	0.001	0.019	0.030	0.199	10	0.0	0	0.0
O	A O MAX	456.6	100	222	10.6	16.0	31.5	1.474	1.032	7.557	0.719	7.149	281	210.0	9008	10.0
U	L N MEAN	28.6	71	45	7.8	7.6	22.4	0.116	0.049	0.577	0.112	1.005	80	13.3	317	3.1
N	L D STDV	47.59	23.6	35.6	0.86	1.84	5.20	0.1968	0.1218	1.2022	0.0918	0.8836	69.6	23.45	820.8	2.84
D	N</>	6/ 1	2/ 3	3/ 1	1/ 0	10/ 2	0/ 1	5/ 7	0/ 8	1/ 0	5/ 0	0/ 13	0/ 2	0/ 0		
O/WR		226/734	231/640	221/732	226/740	225/720	226/739	226/730	225/733	226/739	226/735	226/741	226/738	226/742		

## GENUS:FLAGELLATES

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHT	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	0.5	6	5	5.3	5.7	7.2	0.004	0.001	0.052	0.024	0.199	10	1.0	19	0.3	
O	O	MAX	186.6	100	252	9.3	15.5	28.9	1.159	0.851	5.866	0.554	2.949	206	98.0	7622	71.6	
U	1	C	MEAN	16.9	70	45	7.8	9.4	16.8	0.077	0.029	0.668	0.102	0.594	60	18.2	1274	24.2
N	C	STDEV	30.09	20.1	34.2	0.63	1.60	5.47	0.1329	0.0950	0.9204	0.1012	0.5077	52.9	18.69	1653.7	18.05	
D	N</>	1/ 4	0/ 0	2/ 0	0/ 8	12/ 1	1/ 0	0/ 5	0/ 4	10/ 6	1/ 1	0/ 6	0/ 10	7/ 5				
D/WR		81/242	66/187	82/247	82/241	82/232	82/247	82/244	82/245	82/233	82/247	82/243	82/239	82/237				
P	N	MIN	0.3	8	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.224	10	0.0	0	0.0	
O	O	MAX	355.6	100	185	10.6	19.2	28.8	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0	
U	1	N	MEAN	23.0	71	43	7.9	8.8	17.9	0.145	0.071	0.969	0.109	0.895	75	18.8	0	0.0
N	O	STDEV	45.87	20.9	37.2	0.76	2.17	5.63	0.2643	0.1680	1.6760	0.0925	0.7557	73.0	27.75	0.0	0.00	
O	C	N</>	0/ 0	1/ 0	0/ 1	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	3/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	166/247	121/186	167/248	167/249	163/245	166/247	167/249	167/249	167/249	167/249	167/246	167/249	167/249	167/249			
R	N	MIN	1.4	5	6	5.5	3.1	20.1	0.004	0.001	0.025	0.034	0.215	10	0.0	16	0.4	
O	O	MAX	595.0	121	222	9.7	17.8	31.4	1.599	1.191	4.274	0.504	5.699	266	130.0	12320	72.4	
U	2	C	MEAN	30.9	75	53	7.7	7.0	26.5	0.116	0.056	0.377	0.108	1.034	59	13.0	1256	14.5
N	C	STDEV	62.12	22.4	38.4	0.83	1.96	2.22	0.2304	0.1727	0.6510	0.0647	0.8499	51.9	20.70	2076.8	14.13	
O	N</>	0/ 0	1/ 0	1/ 0	2/ 3	17/ 0	1/ 2	0/ 1	0/ 0	0/ 2	0/ 2	0/ 3	0/ 7	0/ 1				
O/WR		133/247	125/236	132/240	133/242	132/245	132/243	133/246	133/245	133/245	133/246	133/245	133/240	133/246				
R	N	MIN	2.4	4	1	4.1	3.0	17.3	0.004	0.001	0.027	0.036	0.265	10	0.0	0	0.0	
O	O	MAX	456.6	98	171	10.6	16.0	32.2	2.559	0.609	6.857	0.719	7.149	334	210.0	0	0.0	
U	2	N	MEAN	38.6	69	44	7.8	7.0	26.7	0.156	0.050	0.629	0.133	1.430	90	15.4	0	0.0
N	O	STDEV	63.14	25.3	31.9	0.95	2.01	2.50	0.3305	0.1130	1.0818	0.1074	1.2648	81.4	26.94	0.0	0.00	
O	C	N</>	6/ 1	0/ 3	0/ 3	0/ 0	0/ 1	0/ 0	0/ 0	0/ 3	1/ 0	1/ 0	3/ 0	0/ 0	0/ 0			
C	O/WR	114/240	112/234	109/238	114/247	114/245	114/246	114/247	114/246	114/246	114/246	114/246	114/247	114/247	114/247			
R	O	MIN	1.2	13	8	5.6	1.6	9.0	0.004	0.003	0.022	0.020	0.221	10	0.0	0	0.0	
O	O	MAX	237.0	100	169	10.3	11.4	29.6	1.609	1.189	4.669	0.974	5.399	220	90.0	24300	92.2	
U	3	C	MEAN	23.3	76	51	7.6	7.3	20.9	0.142	0.074	0.332	0.109	1.159	63	9.4	1932	19.3
N	C	STDEV	32.23	19.6	34.1	0.86	1.55	3.06	0.2579	0.1834	0.5734	0.1279	1.0532	50.1	14.65	3240.5	20.15	
O	N</>	4/ 1	6/ 0	2/ 1	1/ 0	0/ 2	0/ 0	0/ 2	2/ 2	5/ 0	0/ 2	4/ 2	0/ 7	0/ 0				
O/WR		133/242	117/215	133/243	131/244	129/239	132/246	132/244	132/241	132/241	132/244	132/240	132/239	132/246				
R	N	MIN	0.8	1	6	4.7	1.9	12.6	0.005	0.001	0.017	0.031	0.199	10	0.0	0	0.0	
O	O	MAX	241.4	99	185	9.2	13.5	29.0	4.569	2.009	2.688	3.024	8.199	291	88.0	0	0.0	
U	3	N	MEAN	23.0	71	50	7.6	7.3	19.8	0.169	0.065	0.353	0.138	1.071	84	9.8	0	0.0
N	O	STDEV	36.67	26.3	36.1	0.81	1.69	3.37	0.5361	0.2357	0.5188	0.2976	1.0646	75.9	15.19	0.0	0.00	
O	C	N</>	0/ 0	0/ 1	0/ 0	0/ 5	1/ 0	1/ 1	1/ 0	0/ 0	0/ 1	1/ 0	0/ 0	0/ 0	0/ 1			
C	O/WR	114/247	104/220	113/246	114/240	112/240	114/244	114/245	113/245	114/245	114/246	114/246	114/246	114/245				
R	N	MIN	0.5	5	5	5.3	1.6	7.2	0.004	0.001	0.022	0.020	0.199	10	0.0	0	0.0	
O	4	O	MAX	595.0	121	252	10.3	17.8	31.4	1.609	1.191	5.846	0.974	5.699	266	130.0	24300	92.2
U	L	C	MEAN	24.7	74	50	7.7	7.7	22.1	0.117	0.056	0.429	0.107	0.978	61	12.9	1519	18.6
N	L	O	STDEV	45.90	20.9	35.9	0.80	1.98	5.22	0.2240	0.1628	0.7090	0.1009	0.8969	51.4	18.43	2525.8	17.90
O	N</>	1/ 0	3/ 0	3/ 0	3/ 2	1/ 1	1/ 2	0/ 4	0/ 3	5/ 7	0/ 2	0/ 5	0/ 9	0/ 4				
O/WR		347/740	308/642	347/733	346/736	343/730	346/737	347/738	347/730	347/740	347/737	347/733	347/738					
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.022	0.199	10	0.0	0	0.0	
O	A	O	MAX	456.6	100	185	10.6	19.2	32.2	4.569	2.009	9.745	3.024	8.199	334	210.0	0	0.0
U	L	N	MEAN	27.5	70	45	7.0	7.8	21.0	0.155	0.063	0.693	0.124	1.100	82	15.2	0	0.0
N	L	O	STDEV	49.56	24.1	35.5	0.85	2.15	5.68	0.3777	0.1857	1.2896	0.1803	1.0364	76.4	24.75	0.0	0.00
O	C	N</>	0/ 1	0/ 3	0/ 3	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0			
C	O/WR	394/740	337/642	389/733	395/741	389/732	394/740	395/742	394/741	395/742	395/741	395/742	395/742	395/742				

## GENUS: FLAGELLATES

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	M/P	CONC	PERC	
R	N	MIN	0.5	24	9	5.3	5.7	8.5	0.004	0.001	0.052	0.032	0.199	10	1.0	20	10.9
O	D	MAX	146.8	97	252	9.3	15.5	28.9	1.159	0.851	5.846	0.524	2.949	164	98.0	6677	71.8
U	I	MEAN	11.4	72	45	7.7	9.3	17.4	0.071	0.031	0.575	0.096	0.476	46	18.5	1343	32.4
N	M	STDV	21.01	17.1	36.2	0.65	1.65	5.42	0.1523	0.1120	0.0242	0.0870	0.3825	35.7	19.23	1611.2	15.66
D	N	NC/	1/ 6	7/ 3	11/ 0	0/ 8	12/ 1	2/ 0	0/ 5	0/ 4	10/ 6	5/ 3	0/ 6	0/ 37	7/ 5		
O	W/R		56/240	50/177	57/238	57/241	57/232	57/246	57/244	57/245	57/233	57/241	57/243	57/212	57/237		
R	N	MIN	2.8	6	5	6.7	6.4	7.2	0.012	0.001	0.062	0.024	0.250	10	1.0	19	0.3
C	O	MAX	188.6	100	120	8.8	12.4	27.8	0.218	0.171	4.389	0.554	2.611	206	72.0	7622	9.6
U	I	MEAN	29.1	64	44	8.1	9.7	15.3	0.090	0.023	0.879	0.117	0.864	90	17.6	1118	5.5
N	D	STDV	42.17	27.2	29.8	0.52	1.50	5.61	0.0722	0.0344	1.0988	0.1288	0.6475	71.5	18.46	1771.0	2.53
D	N	NC/	31/ 4	0/ 0	2/ 12	6/ 17	21/ 4	1/ 6	16/ 24	0/ 16	21/ 9	1/ 1	9/ 9	0/ 10	7/ 13		
O	W/R		25/212	16/187	25/235	25/226	25/220	25/241	25/209	25/233	25/219	25/247	25/231	25/239	25/229		
R	N	MIN	1.4	13	6	5.7	4.1	20.1	0.004	0.001	0.030	0.034	0.215	10	0.0	35	10.3
C	D	MAX	135.8	121	222	9.7	17.8	29.7	1.109	0.969	4.274	0.306	2.799	237	103.0	11031	72.4
U	Z	MEAN	17.2	79	63	7.5	7.1	26.3	0.075	0.035	0.433	0.102	0.820	40	15.4	1491	23.9
N	H	STDV	23.64	20.2	44.5	0.76	2.16	2.29	0.1433	0.1222	0.8005	0.0613	0.5483	43.0	22.33	2290.8	14.52
D	N	NC/	0/ 12	7/ 0	1/ 0	5/ 3	7/ 0	1/ 15	0/ 5	0/ 1	7/ 2	0/ 9	0/ 18	0/ 12	0/ 3		
O	W/R		67/235	61/230	66/240	67/239	67/239	66/230	67/242	67/246	67/238	67/229	67/235	67/244			
R	N	MIN	1.9	5	9	5.5	3.1	22.4	0.036	0.002	0.025	0.039	0.332	10	0.0	16	0.4
O	O	MAX	595.0	107	150	9.6	15.2	31.4	1.599	1.191	2.184	0.504	5.699	266	130.0	12320	10.0
U	Z	MEAN	44.8	71	45	7.9	6.9	26.7	0.157	0.077	0.321	0.114	1.251	69	10.5	1018	4.9
N	D	STDV	82.95	23.8	29.9	0.88	1.75	2.14	0.2889	0.2109	0.4512	0.0679	1.0329	58.0	18.76	1821.0	2.68
D	N	NC/	2/ 0	1/ 1	7/ 4	2/ 6	1/ 2	8/ 2	2/ 1	3/ 0	0/ 13	3/ 2	0/ 7	0/ 1			
O	W/R		66/245	64/235	66/230	66/239	65/263	66/236	66/244	66/244	66/234	66/242	66/232	66/240	66/246		
R	N	MIN	1.2	29	14	5.6	1.6	9.0	0.004	0.003	0.022	0.020	0.221	10	0.0	24	10.1
O	D	MAX	116.4	97	157	8.9	10.8	29.6	1.609	1.189	4.469	0.831	4.000	185	62.0	24300	92.2
U	Z	MEAN	14.7	81	55	7.4	7.1	21.1	0.141	0.082	0.361	0.100	0.892	57	8.7	2481	30.4
N	H	STDV	18.10	14.4	33.8	0.67	1.48	3.19	0.2925	0.2198	0.6625	0.1172	0.7644	44.1	10.27	3783.7	20.73
D	N	NC/	4/ 7	17/ 2	14/ 3	1/ 8	0/ 4	0/ 0	0/ 2	2/ 2	5/ 0	0/ 3	4/ 7	0/ 15	3/ 5		
O	W/R		75/236	65/202	75/229	75/236	74/237	75/246	75/244	75/241	75/243	75/235	75/231	75/241			
R	N	MIN	2.6	13	8	6.0	4.5	15.7	0.008	0.003	0.029	0.032	0.225	10	0.0	0	0.3
O	O	MAX	237.3	100	169	10.3	11.4	27.2	0.921	0.609	1.959	0.974	5.399	220	90.0	1900	10.0
U	Z	MEAN	34.5	70	45	7.9	7.7	20.8	0.144	0.062	0.294	0.120	1.511	71	10.4	1223	4.9
N	D	STDV	41.83	23.4	34.0	1.02	1.58	2.09	0.2033	0.1209	0.4318	0.1409	1.2654	56.5	19.01	2196.5	2.92
D	N	NC/	14/ 1	6/ 0	2/ 1	3/ 0	9/ 2	12/ 3	5/ 7	2/ 7	19/ 4	2/ 2	5/ 2	0/ 7	0/ 0		
O	W/R		58/232	52/219	58/243	56/242	55/230	57/231	57/234	57/236	57/223	57/242	57/239	57/246			
R	N	MIN	0.5	13	6	5.3	1.6	8.5	0.004	0.001	0.022	0.020	0.199	10	0.0	20	10.1
O	A	MAX	146.8	121	252	9.7	17.8	29.7	1.609	1.189	5.846	0.831	4.000	237	103.0	24300	92.2
U	L	MEAN	14.6	78	54	7.5	7.8	21.8	0.099	0.052	0.447	0.099	0.749	51	13.7	1821	26.8
N	L	STDV	20.95	17.7	38.6	0.70	2.04	5.16	0.2156	0.1648	0.7598	0.0924	0.6253	41.6	18.09	2846.3	17.69
D	N	NC/	1/ 19	15/ 0	5/ 0	3/ 8	1/ 1	2/ 15	0/ 4	0/ 4	5/ 7	0/ 3	0/ 15	0/ 19	0/ 8		
O	W/R		198/721	176/630	198/731	199/730	198/730	199/723	199/738	199/730	199/739	199/727	199/723	199/734			
R	N	MIN	1.9	5	5	5.5	3.1	7.2	0.006	0.001	0.025	0.024	0.225	10	0.0	0	0.3
O	A	MAX	595.0	107	169	10.3	15.2	31.4	1.599	1.191	4.389	0.974	5.699	266	130.0	12320	10.0
U	L	MEAN	38.2	70	45	7.9	7.7	22.5	0.141	0.062	0.405	0.117	1.285	73	11.7	1115	5.0
N	L	STDV	63.42	24.0	31.3	0.89	1.90	5.28	0.2336	0.1606	0.6359	0.1110	1.0957	59.9	18.87	1957.5	2.75
D	N	NC/	30/ 0	3/ 1	3/ 8	5/ 2	7/ 4	1/ 2	7/ 5	0/ 3	13/ 11	2/ 2	10/ 5	0/ 9	0/ 4		
O	W/R		149/711	132/641	149/725	147/734	145/721	148/737	146/730	148/738	148/718	148/727	148/733	148/738			

## GENUS: FRAGILARIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHE	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN	0.3	6	5	6.7	6.3	6.8	0.006	0.001	0.038	0.024	0.199	10	0.0	0 0.0
O	D	MAX	188.6	100	252	9.7	12.7	28.0	0.545	0.123	9.745	0.554	3.199	248	87.0	15396 53.0
U	L	C MEAN	17.8	73	51	6.1	9.7	15.8	0.070	0.021	0.763	0.098	0.814	91	17.9	516 6.6
N	C	STDV	25.80	20.1	41.1	0.58	1.34	5.01	0.0773	0.0280	1.3210	0.1015	0.6604	69.5	18.34	1883.0 11.56
D	N</>	0/ 4	0/ 0	2/ 0	6/ 2	18/ 3	0/ 3	3/ 10	0/ 18	4/ 0	1/ 1	0/ 3	0/ 0	0/ 7		
O	C O/WR	76/243	52/187	76/247	76/241	75/224	76/245	76/236	76/231	76/245	76/247	76/246	76/249	76/242		
R	N	MIN	0.5	8	2	5.3	0.7	9.1	0.004	0.001	0.026	0.022	0.207	10	0.0	0 0.0
O	D	MAX	355.6	100	172	10.6	19.2	28.9	1.719	1.209	8.089	0.635	4.699	240	142.0	0 0.0
U	L	N MEAN	22.3	69	40	7.8	8.7	18.2	0.146	0.073	0.917	0.111	0.788	61	18.9	0 0.0
N	O	STDV	46.69	20.7	33.4	0.76	2.20	5.69	0.2700	0.1942	1.5397	0.0925	0.7149	64.5	27.64	0.0 0.00
D	N</>	1/ 0	1/ 0	0/ 2	0/ 0	0/ 0	3/ 0	0/ 0	0/ 0	0/ 1	0/ 0	1/ 0	0/ 1	0/ 0		
O	C C O/WR	171/246	135/186	173/247	173/249	170/245	172/245	173/249	173/249	173/248	173/249	173/248	173/248	173/249		
R	N	MIN	2.8	5	10	5.5	4.3	20.1	0.008	0.001	0.029	0.034	0.215	10	0.0	0 0.0
O	O	MAX	258.7	107	222	10.2	15.2	30.1	0.606	0.287	2.099	0.504	6.349	275	130.0	69813 75.5
U	2	C MEAN	27.5	78	56	7.9	7.4	25.7	0.079	0.027	0.332	0.119	1.103	69	13.1	1311 7.5
N	C	STDV	41.21	20.1	37.4	0.83	1.89	2.31	0.1036	0.0504	0.4271	0.0803	0.9445	60.4	23.79	7946.0 15.42
D	N</>	10/ 3	1/ 1	12/ 0	2/ 2	9/ 2	1/ 6	6/ 13	0/ 13	4/ 14	0/ 2	0/ 1	0/ 5	0/ 1		
O	W/R	77/234	72/235	72/229	77/243	77/235	77/228	77/234	77/229	77/245	77/246	77/242	77/246			
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.036	0.226	10	0.0	0 0.0
O	D	MAX	595.0	121	216	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0 0.0
U	2	N MEAN	37.6	70	46	7.7	6.8	27.0	0.159	0.065	0.566	0.120	1.268	75	14.5	0 0.0
N	O	STDV	70.04	25.2	34.8	0.91	2.01	2.26	0.3290	0.1739	1.0185	0.0912	1.1319	72.5	23.81	0.0 0.00
D	N</>	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 0	1/ 0	0/ 0	0/ 0		
O	C C O/WR	170/247	165/237	169/240	170/247	169/246	169/246	170/247	170/247	170/247	170/246	170/246	170/247	170/247		
P	N	MIN	1.5	1	6	5.9	3.5	12.6	0.006	0.004	0.017	0.035	0.221	10	1.0	0 0.0
O	O	MAX	116.4	97	157	9.4	12.7	26.7	1.609	1.189	1.824	0.979	4.000	283	90.0	15566 85.6
U	3	C MEAN	19.6	77	64	7.8	7.7	19.4	0.099	0.048	0.382	0.114	1.065	92	11.3	709 9.7
N	C	STDV	21.93	23.9	36.7	0.72	1.66	2.52	0.2145	0.1570	0.5202	0.1359	0.7529	72.7	16.10	2363.9 19.41
D	N</>	7/ 7	0/ 2	0/ 3	2/ 3	3/ 1	1/ 8	2/ 2	0/ 2	0/ 6	5/ 1	4/ 7	0/ 1	13/ 0		
O	W/R	62/233	49/219	62/243	62/240	61/237	62/237	62/242	62/235	62/240	62/240	62/235	62/245	62/233		
R	N	MIN	0.8	3	7	4.7	1.6	9.0	0.004	0.001	0.020	0.020	0.199	10	0.0	0 0.0
O	D	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	88.0	0 0.0
U	3	N MEAN	24.4	73	46	7.5	7.2	20.8	0.173	0.077	0.328	0.125	1.136	67	9.0	0 0.0
N	O	STDV	37.48	22.8	33.3	0.86	1.58	3.39	0.4553	0.2235	0.5574	0.2460	1.1429	59.8	14.44	0.0 0.00
D	C N</>	0/ 0	1/ 0	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 0	0/ 0	0/ 0	0/ 0	0/ 1		
O	W/R	185/247	172/220	184/245	183/245	180/241	184/246	183/246	184/244	184/246	184/246	184/246	184/246	184/245		
P	N	MIN	0.3	1	5	5.5	3.5	6.8	0.006	0.001	0.017	0.024	0.199	10	0.0	0 0.0
O	A	MAX	258.7	107	252	10.2	15.2	30.1	1.609	1.189	9.745	0.979	6.349	283	130.0	69813 85.6
U	L	C MEAN	21.8	76	57	8.0	8.3	20.4	0.082	0.031	0.499	0.110	0.990	83	14.3	856 7.8
N	L	STDV	31.50	21.2	38.7	0.72	1.94	5.51	0.1384	0.0912	0.8901	0.1060	0.8053	67.9	20.01	5037.9 15.50
D	N</>	0/ 4	0/ 1	3/ 0	5/ 4	12/ 4	0/ 6	7/ 4	0/ 4	0/ 0	2/ 1	0/ 2	0/ 3	0/ 4		
O	W/R	215/737	173/644	210/733	215/732	213/716	215/734	215/731	215/737	215/742	215/739	215/740	215/739	215/738		
R	N	MIN	0.5	3	1	4.1	0.7	9.0	0.004	0.001	0.020	0.020	0.199	10	0.0	0 0.0
O	A	MAX	595.0	121	216	10.6	19.2	32.2	4.549	2.009	8.089	3.024	8.199	334	210.0	0 0.0
U	L	N MEAN	28.0	71	44	7.7	7.6	21.9	0.160	0.072	0.598	0.119	1.064	67	14.0	0 0.0
N	L	STDV	53.12	23.1	33.8	0.85	2.09	9.43	0.3617	0.1986	1.1295	0.1629	1.0361	65.8	22.83	0.0 0.00
D	C N</>	1/ 0	1/ 0	0/ 2	0/ 0	0/ 0	3/ 0	0/ 0	0/ 0	2/ 1	0/ 0	0/ 0	0/ 0	0/ 0		
O	C D/WR	526/740	472/644	526/734	526/741	519/732	525/737	527/742	526/741	527/739	527/742	527/742	527/742	527/742		

## GENUS: FRAGILARIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2N03	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	1.8	6	5	6.7	8.6	8.5	0.006	0.001	0.060	0.035	0.243	10	1.0	62	13.6	
O	D	MAX	100.9	97	127	8.8	12.3	27.0	0.212	0.063	1.654	0.129	2.611	206	87.0	15396	53.0	
U	1	MEAN	13.6	76	66	8.0	9.9	14.4	0.047	0.012	0.650	0.069	0.654	93	25.6	1911	25.5	
N	H	STDV	24.65	27.0	38.4	0.61	1.02	4.92	0.0521	0.0177	0.4936	0.0282	0.5706	73.3	22.09	3935.0	14.41	
D	N</>	14/ 9	0/ 3	2/ 10	6/ 17	81/ 6	2/ 13	3/ 27	0/ 32	17/ 32	16/ 56	8/ 9	0/ 10	7/ 7				
O/WR		15/224	11/184	15/237	15/226	15/158	15/233	15/219	15/217	15/200	15/177	15/232	15/239	15/235				
R	N	MIN	0.3	24	6	6.8	6.3	6.8	0.008	0.001	0.030	0.024	0.199	10	0.0	0	0.0	
O	O	MAX	188.6	100	252	9.7	12.7	28.0	0.545	0.123	9.745	0.554	3.199	248	86.0	3067	9.8	
U	1	MEAN	18.9	73	48	8.1	9.6	16.2	0.076	0.023	0.791	0.105	0.853	90	16.0	173	2.0	
N	D	STDV	26.17	18.2	41.1	0.57	1.41	5.01	0.0817	0.0298	1.4562	0.1115	0.6792	69.1	16.97	461.4	2.75	
D	N</>	0/ 4	7/ 0	4/ 0	9/ 2	18/ 3	0/ 3	8/ 10	0/ 18	4/ 0	1/ 1	0/ 3	0/ 0	0/ 8				
M	O/WR	61/243	41/180	61/245	61/238	60/224	61/245	61/231	61/245	61/247	61/246	61/249	61/241					
R	N	MIN	6.0	36	12	5.5	4.8	20.6	0.012	0.003	0.031	0.034	0.215	10	1.0	36	10.8	
O	D	MAX	115.7	103	184	9.3	10.6	28.9	0.445	0.287	1.824	0.504	3.399	265	130.0	69813	75.5	
U	2	MEAN	21.4	80	66	7.7	7.0	25.3	0.094	0.046	0.576	0.165	1.033	55	20.2	5472	30.5	
N	H	STDV	27.22	18.1	47.8	0.82	1.41	2.02	0.1133	0.0808	0.5761	0.1273	0.8165	63.1	34.20	17189.5	21.69	
D	N</>	42/ 14	29/ 2	13/ 2	2/ 8	19/ 8	2/ 45	24/ 15	9/ 13	9/ 16	0/ 2	0/ 13	0/ 8	12/ 1				
O/WR		16/191	15/206	16/226	16/237	16/219	16/199	16/208	16/225	16/222	16/245	16/234	16/239	16/234				
R	N	MIN	2.8	5	10	5.7	4.3	20.1	0.008	0.001	0.029	0.036	0.265	10	0.0	0	0.0	
O	O	MAX	258.7	107	222	10.2	15.2	30.1	0.606	0.244	2.099	0.376	6.349	275	130.0	3273	8.6	
U	2	MEAN	29.1	77	53	8.0	7.5	25.8	0.076	0.022	0.268	0.107	1.122	73	11.2	219	1.5	
N	D	STDV	44.20	20.6	33.8	0.83	1.99	2.38	0.1016	0.0382	0.3580	0.0582	0.9807	59.6	20.18	527.1	2.37	
D	N</>	10/ 3	1/ 1	12/ 0	5/ 2	9/ 2	17/ 6	6/ 13	0/ 14	4/ 14	1/ 6	3/ 1	0/ 5	0/ 1				
M	O/WR	61/234	57/235	56/229	61/240	61/235	61/239	61/228	61/233	61/229	61/240	61/243	61/246	61/246				
P	N	MIN	3.4	37	36	6.7	5.6	15.9	0.010	0.004	0.024	0.039	0.399	12	3.0	53	13.4	
O	O	MAX	50.6	97	144	8.6	9.0	23.0	0.176	0.089	1.675	0.242	1.232	283	90.0	15566	85.6	
U	3	MEAN	17.3	83	77	7.5	7.5	19.2	0.048	0.018	0.578	0.108	0.826	88	23.0	2670	37.1	
N	H	STDV	14.49	18.2	33.9	0.56	1.24	1.91	0.0457	0.0237	0.5767	0.0593	0.2647	73.5	25.91	4489.2	26.32	
D	N</>	22/ 32	21/ 2	94/ 6	30/ 19	25/ 22	18/ 55	11/ 38	8/ 28	6/ 9	12/ 17	44/ 69	25/ 1	68/ 0				
O/WR		14/193	10/198	14/146	14/196	14/194	14/173	14/197	14/209	14/231	14/217	14/133	14/220	14/178				
R	N	MIN	1.5	1	6	5.9	3.5	12.6	0.006	0.004	0.017	0.035	0.221	10	1.0	0	0.0	
C	O	MAX	116.4	97	157	9.4	12.7	26.7	1.699	1.189	1.824	0.979	4.000	261	52.0	2679	9.5	
U	3	MEAN	20.2	76	60	7.6	7.8	19.4	0.114	0.056	0.325	0.116	1.134	93	7.9	137	1.7	
N	D	STDV	23.75	25.2	36.9	0.77	1.78	2.69	0.2411	0.1775	0.4944	0.1516	0.8333	73.2	9.92	445.5	2.84	
D	N</>	7/ 7	0/ 2	0/ 3	2/ 3	3/ 1	1/ 6	2/ 2	8/ 2	0/ 6	5/ 1	4/ 7	0/ 2	13/ 9				
M	O/WR	48/233	39/219	48/243	48/240	47/237	48/237	48/242	48/235	48/240	48/240	48/235	48/244	48/224				
R	N	MIN	1.8	6	5	5.5	4.8	8.5	0.006	0.001	0.024	0.034	0.215	10	1.0	36	10.6	
O	A	MAX	115.7	103	184	9.3	12.3	26.9	0.445	0.287	1.824	0.504	3.399	283	130.0	69812	85.6	
U	L	MEAN	17.5	80	70	7.6	8.1	19.8	0.064	0.026	0.601	0.115	0.843	78	22.9	3413	30.9	
N	L	STDV	22.78	20.8	40.2	0.68	1.75	5.56	0.0797	0.0521	0.5386	0.0921	0.6139	70.5	27.52	10681.7	21.29	
D	N</>	27/ 30	5/ 2	3/ 5	5/ 20	42/ 14	2/ 47	7/ 45	0/ 39	6/ 54	13/ 14	7/ 29	0/ 3	32/ 4				
O/WR		45/684	36/638	45/728	45/716	45/676	45/691	45/690	45/702	45/682	45/715	45/706	45/739	45/706				
R	N	MIN	0.3	1	6	5.7	3.5	6.8	0.006	0.001	0.024	0.034	0.215	10	1.0	0	0.0	
O	A	MAX	258.7	107	252	10.2	15.2	30.1	1.609	1.189	1.824	0.504	3.399	283	130.0	3273	9.8	
U	L	MEAN	22.9	75	53	8.0	8.3	20.6	0.087	0.032	0.472	0.108	1.029	85	12.0	179	1.7	
N	L	STDV	33.40	21.3	37.7	0.73	1.99	5.50	0.1500	0.0991	0.9613	0.1097	0.8460	67.3	16.88	480.1	2.64	
D	N</>	0/ 4	0/ 1	5/ 0	9/ 4	12/ 4	0/ 6	7/ 4	0/ 4	0/ 0	2/ 1	0/ 2	0/ 7	0/ 4				
M	O/WR	170/737	137/644	165/731	170/728	168/716	170/734	170/731	170/737	170/742	170/739	170/740	170/735	170/738				

GENUS: FRANCEIA

#### PARTIAL DEPTH VALUES

## GENUS: FRANCIA

## PARTIAL DEPTH VALUES

		CHLA	TUPB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN															
O	D	MAX															
U	1	MEAN															
N	M	STDV															
O	N</>																
O	O/WR																
R	N	MIN	10.5	59	29	8.1	7.0	16.4	0.027	0.003	0.062	0.054	0.449	18	1.0	0	0.0
C	O	MAX	46.3	85	59	8.6	11.1	28.9	0.164	0.044	5.795	0.143	1.332	185	70.0	274	1.5
U	I	MEAN	27.5	72	39	8.4	9.0	22.5	0.100	0.019	1.567	0.087	0.752	99	20.8	69	0.4
N	D	STDV	18.02	11.2	13.9	0.22	2.23	6.17	0.0564	0.0172	2.8199	0.0402	0.3942	93.4	32.93	137.3	0.73
D	O	N</>	144/ 22	41/ 48	104/ 56	146/ 26	32/ 24	130/ 0	57/ 36	27/ 45	21/ 7	58/ 46	92/ 31	78/ 27	7/ 14		
M	O/WR		4/ 81	4/ 98	4/ 89	4/ 77	4/ 189	4/ 110	4/ 156	4/ 177	4/ 221	4/ 145	4/ 126	4/ 144	4/ 228		
P	N	MIN															
O	O	MAX															
U	2	MEAN															
N	M	STDV															
O	N</>																
O	O/WR																
R	N	MIN	5.2	50	18	5.5	4.9	21.2	0.311	0.003	0.029	0.041	0.349	10	0.0	0	0.0
O	O	MAX	135.8	95	91	8.9	9.9	30.1	1.109	0.969	2.664	0.185	2.799	160	61.0	340	1.9
U	2	MEAN	31.1	78	46	7.7	6.9	27.2	0.110	0.061	0.374	0.090	1.093	47	11.8	51	0.3
N	D	STDV	33.37	11.2	20.7	0.81	1.18	2.63	0.2221	0.1981	0.7107	0.0340	0.7320	37.4	17.06	82.3	0.48
D	O	N</>	32/ 12	63/ 10	28/ 28	2/ 16	20/ 12	3/ 6	20/ 5	9/ 1	4/ 11	9/ 34	17/ 18	0/ 30	0/ 11		
M	O/WR		25/203	25/184	25/185	25/229	25/214	25/237	25/222	25/237	25/232	25/204	25/212	25/217	25/236		
R	N	MIN															
O	D	MAX															
U	3	MEAN															
N	M	STDV															
O	N</>																
O	O/WR																
R	N	MIN	3.4	13	16	5.5	5.4	17.0	0.012	0.003	0.032	0.032	0.243	11	1.0	0	0.0
O	O	MAX	134.4	97	72	9.3	10.8	27.2	0.909	0.784	1.959	0.279	3.565	175	37.0	513	1.2
U	3	MEAN	22.8	78	40	7.5	7.3	21.7	0.112	0.058	0.338	0.076	1.910	51	6.4	32	0.1
N	D	STDV	27.56	19.3	15.0	0.73	1.26	2.69	0.1657	0.1430	0.5460	0.0485	0.8723	46.0	7.64	132.9	0.27
D	O	N</>	22/ 4	6/ 2	19/ 46	19/ 4	23/ 4	31/ 3	19/ 8	2/ 5	31/ 4	2/ 14	8/ 9	21/ 18	13/ 14		
M	O/WR		29/221	26/213	29/181	28/222	28/214	28/212	29/219	29/238	29/211	29/230	29/229	29/207	29/219		
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDV															
O	N</>																
O	O/WR																
R	N	MIN	3.4	13	16	5.5	4.9	16.4	0.011	0.003	0.029	0.032	0.243	10	0.0	0	0.0
O	A	MAX	135.8	97	91	9.3	11.1	30.1	1.109	0.969	5.795	0.279	3.565	185	70.0	513	1.9
U	L	MEAN	26.7	77	42	7.6	7.2	24.2	0.110	0.057	0.435	0.083	1.028	52	9.7	43	0.2
N	L	STDV	29.59	15.4	17.7	0.77	1.39	4.01	0.1855	0.1633	0.9348	0.0421	0.7842	47.5	14.97	95.3	0.41
D	O	N</>	82/ 23	15/ 12	75/ 86	5/ 20	45/ 36	152/ 6	51/ 18	38/ 9	25/ 8	7/ 41	18/ 25	0/ 59	0/ 26		
M	O/WR		58/636	55/618	58/575	57/716	57/651	57/582	58/673	58/694	58/709	58/694	58/683	58/716			

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**GENUS: FRUSTULIA**

#### PARTIAL DEPTH VALUES

## GENUS: FRUSTULIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N	MIN														
O	D	MAX														
U	I	MEAN														
N	M	STDV														
D		N</>														
		O/WR														
R	N	MIN	2.1	24	2	6.2	6.4	9.7	0.010	0.032	0.052	0.034	0.199	10	2.0	0 0.0
O	O	MAX	21.2	98	81	7.8	11.3	27.2	0.166	0.030	0.680	0.232	0.621	36	65.0	0 0.0
U	I	MEAN	7.5	74	42	7.2	8.8	16.6	0.059	0.012	0.271	0.089	0.433	15	12.6	0 0.0
N	D	STDV	6.17	24.3	25.5	0.49	1.56	5.57	0.0487	0.0111	0.2180	0.0609	0.1356	8.7	21.30	0.0 0.00
D		N</>	20/ 57	7/ 2	0/ 33	2/132	21/ 19	7/ 11	12/ 35	10/ 64	10/ 76	9/ 15	0/111	0/134	25/ 16	
		O/WR	8/170	7/178	8/216	8/115	8/20*	8/230	8/202	8/175	8/163	8/225	8/138	8/115	8/208	
R	N	MIN														
O	D	MAX														
U	I	MEAN														
N	M	STDV														
D		N</>														
		O/WR														
R	N	MIN	1.4	45	24	5.5	4.5	21.4	0.019	0.004	0.089	0.069	0.465	10	4.0	0 0.0
O	O	MAX	15.7	87	50	7.6	7.0	29.4	0.178	0.025	0.976	0.504	1.199	21	11.0	0 0.0
U	I	MEAN	7.8	66	33	6.5	6.4	24.7	0.071	0.011	0.317	0.199	0.672	15	8.0	0 0.0
N	D	STDV	5.02	17.6	10.3	1.03	1.08	3.57	0.0640	0.0085	0.3713	0.1754	0.3130	5.7	2.74	0.3 0.30
D		N</>	5/ 95	36/ 65	48/ 84	2/143	13/151	4/ 25	46/ 41	22/ 63	67/ 36	60/ 2	44/ 81	0/177	64/ 68	
		O/WR	5/152	5/136	5/109	5/102	5/132	5/217	5/160	5/162	5/144	5/185	5/122	5/ 70	5/115	
R	N	MIN														
O	D	MAX														
U	I	MEAN														
N	M	STDV														
D		N</>														
		O/WR														
R	N	MIN	4.2	8	8	3.6	6.5	15.5	0.010	0.005	0.037	0.044	0.225	10	0.0	0 0.0
O	O	MAX	241.4	96	119	9.2	11.4	20.5	1.329	0.847	1.959	0.309	6.390	214	19.0	18 1.4
U	I	MEAN	63.6	55	51	7.1	7.2	18.4	0.348	0.151	0.506	0.103	2.169	58	7.7	2 0.2
N	D	STDV	91.44	41.6	46.5	1.45	1.86	2.00	0.4980	0.3106	0.7701	0.0934	2.4688	79.0	7.16	6.8 0.54
D		N</>	37/ 0	3/ 7	2/ 16	1/ 5	73/ 2	10/107	11/ 5	15/ 4	42/ 4	27/ 11	5/ 1	0/ 13	0/ 22	
		O/WR	7/210	5/211	7/226	6/239	5/166	6/129	7/230	7/226	7/200	7/208	7/240	7/236	7/224	
R	N	MIN														
O	A	MAX														
U	L	MEAN														
N	L	STDV														
D		N</>														
		O/WR														
R	N	MIN	1.4	8	2	5.5	4.5	9.7	0.010	0.032	0.037	0.036	0.199	10	0.0	0 0.0
C	A	MAX	241.4	98	119	9.2	11.4	29.4	1.329	0.847	1.959	0.504	6.000	214	65.0	18 1.4
U	L	MEAN	27.2	66	43	7.0	8.0	19.3	0.163	0.060	0.365	0.122	1.100	30	9.8	1 0.1
N	L	STDV	58.41	28.2	31.6	1.00	1.78	5.32	0.3152	0.1875	0.4954	0.1129	1.6152	49.4	13.81	4.0 0.32
D		N</>	14/ 7	8/ 7	1/ 41	5/ 26	30/ 28	8/ 26	37/ 9	14/ 12	60/ 50	13/ 14	0/ 4	0/ 32	0/ 29	
		O/WR	20/720	17/630	20/694	19/710	18/674	19/706	20/696	20/715	20/632	20/715	20/738	20/713	20/713	

**GENUS: GEMINELLA**

#### PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02NQ3	NH3	KJEL	ALK	N/P	CONC	PERC		
0	O	MIN																
0	O	MAX																
U	1	C	MEAN															
U	1	C	STDEV															
D	0	N	N/C>															
D	0	C	O/WR															
R	N	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0
C	O	N	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0
U	1	N	MEAN	21.0	71	44	7.9	9.0	17.5	0.123	0.057	0.870	0.107	0.796	70	18.6	0	0.0
M	0	O	STDEV	41.40	20.6	36.2	0.73	2.02	5.59	0.2314	0.1642	1.6754	0.0953	0.6975	67.3	25.14	0.0	0.000
D	0	N	N/C>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0.000
C	O	N	O/WR	247/247	187/187	249/249	249/249	245/245	248/248	249/249	249/249	249/249	249/249	249/249	249/249	249/249	249/249	249/249
Q	N	N	MIN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0	0.0
O	O	N	MAX	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0	0.0
U	2	C	MEAN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.050	0.075	0.625	11	8.0	0	0.0
M	C	N	STDEV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.000
D	N	N/C>	7/239	176/ 54	136/100	55/185	111/127	231/ 11	31/208	9/225	25/220	77/167	87/159	18/220	138/ 99			
O	O	C	O/WR	1/ 1	1/ 7	1/ 5	1/ 7	1/ 8	1/ 4	1/ 8	1/ 13	1/ 2	1/ 3	1/ 1	1/ 9	1/ 10		
R	N	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0
O	O	N	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0
U	2	N	MEAN	36.6	72	49	7.8	7.0	26.6	0.135	0.053	0.495	0.120	1.219	76	14.1	0	0.0
M	O	O	STDEV	62.68	24.0	35.9	0.89	1.99	2.34	0.2816	0.1482	0.8850	0.0879	1.0793	68.9	23.81	0.0	0.000
D	C	N/C>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	O	N	O/WR	246/247	236/237	260/261	246/247	245/246	245/246	246/247	246/247	246/247	246/247	246/247	246/247	246/247	246/247	
R	N	N	MIN															
O	O	N	MAX															
U	3	C	MEAN															
M	C	N	STDEV															
D	C	N/C>																
C	O/WR	N	O/WR	247/247	221/221	246/246	245/245	241/241	246/246	246/246	245/245	246/246	246/246	246/246	246/246	246/246		
R	N	N	MIN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0	0.0
O	A	O	MAX	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0	0.0
U	L	C	MEAN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.050	0.075	0.625	11	8.0	0	0.0
M	L	C	STDEV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.000	0.0	0.000	
D	C	N/C>	46/693	479/146	430/296	171/549	210/501	725/ 11	86/645	38/672	105/631	328/409	317/422	74/649	417/302			
C	O/WR	N	O/WR	1/ 2	1/ 20	1/ 10	1/ 21	1/ 21	1/ 4	1/ 11	1/ 31	1/ 6	1/ 5	1/ 3	1/ 19	1/ 23		
R	N	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O	A	O	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	9.745	3.024	8.199	334	210.0	0	0.0
U	L	N	MEAN	26.2	72	48	7.8	7.8	21.5	0.137	0.060	0.570	0.116	1.043	72	14.1	0	0.0
M	L	O	STDEV	47.95	22.7	35.7	0.83	2.07	5.49	0.3159	0.1754	1.0666	0.1488	0.9755	66.7	22.05	0.0	0.000
D	C	N/C>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	O/WR	N	O/WR	740/741	644/645	735/736	760/741	731/732	739/740	741/742	740/741	741/742	741/742	741/742	741/742	741/742		

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## GENUS: GEMINELLA

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHT	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN														
O	D MAX														
U	1 C MEAN														
N	M STDEV														
O	N</>														
	O/WR														
R	N MIN														
O	D MAX														
U	2 O MEAN														
N	M STDEV														
O	N</>														
	O/WP														
R	N MIN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0 0.0
O	C MAX	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	5 0.0
U	2 N MEAN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.050	0.075	0.625	11	8.0	0 0.0
N	D STDEV	0.00	0.0	0.3	0.00	0.00	0.00	0.0000	0.0003	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00
O	N</>	7/239	176/ 54	136/100	55/185	111/127	231/ 11	31/208	9/225	25/220	77/167	87/159	18/220	138/ 99	
	O/WR	1/ 1	1/ 7	1/ 5	1/ 7	1/ 8	1/ 4	1/ 8	1/ 13	1/ 2	1/ 3	1/ 1	1/ 9	1/ 10	
R	N MIN														
O	D MAX														
U	3 O MEAN														
N	M STDEV														
O	N</>														
	O/WR														
R	N MIN														
C	C MAX														
U	3 N MEAN														
N	D STDEV														
O	C N</>														
	O/WR														
R	N MIN														
O	A D MAX														
U	L O MEAN														
N	L 4 STDEV														
O	N</>														
	O/WR														
R	N MIN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0 0.0
O	A C MAX	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.051	0.076	0.625	11	8.0	0 0.0
U	L 4 MEAN	2.5	89	42	7.2	6.7	29.8	0.015	0.003	0.050	0.075	0.625	11	8.0	0 0.0
N	L D STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00
O	N</>	46/693	479/146	430/296	171/549	210/501	725/ 11	86/645	38/672	105/631	328/409	317/422	74/649	417/302	
	O/WR	1/ 2	1/ 20	1/ 10	1/ 21	1/ 21	1/ 4	1/ 11	1/ 31	1/ 6	1/ 5	1/ 3	1/ 19	1/ 23	

## GENUS: GLENODINIUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	N MIN	0.6	50	8	6.2	5.2	6.8	0.005	0.002	0.034	0.022	0.294	10	0.0	0	0.0
O	O MAX	53.7	94	120	9.7	12.0	28.9	0.716	0.541	6.425	0.554	2.665	164	79.0	152	8.6
U	L C MEAN	15.9	77	43	8.0	9.2	17.6	0.095	0.043	0.698	0.108	0.941	54	16.5	30	0.8
N	C STDV	13.23	12.9	26.9	0.85	1.67	5.79	0.1471	0.1116	1.4561	0.1218	0.7297	44.4	20.76	46.3	1.65
D	N</>	4/ 16	27/ 13	10/ 12	2/ 2	10/ 2	0/ 0	2/ 8	10/ 7	2/ 5	0/ 1	24/ 7	0/ 37	0/ 11		
O	D/WR	33/227	26/167	33/227	33/245	33/233	33/248	33/239	33/232	33/242	33/248	33/218	33/212	33/238		
R	N MIN	0.3	6	2	5.3	0.7	7.2	0.004	0.001	0.024	0.024	0.199	10	0.0	0	0.0
O	O MAX	355.6	100	252	10.6	19.2	28.8	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0
U	I N MEAN	21.7	70	44	7.9	9.0	17.5	0.127	0.059	0.896	0.106	0.774	72	18.9	0	0.0
N	O STDV	44.14	21.4	37.4	0.71	2.07	5.57	0.2417	0.1710	1.4799	0.0909	0.6915	69.9	25.77	0.0	0.00
O	C N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 1	0/ 0	0/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	D/WR	214/247	161/187	216/249	216/249	212/245	215/246	216/249	216/249	216/249	216/248	216/249	216/249	216/249	216/249	
R	N MIN	1.5	5	6	4.1	3.2	22.7	0.004	0.001	0.029	0.040	0.226	10	0.0	0	0.0
O	O MAX	258.7	98	126	9.4	11.7	32.2	0.955	0.594	6.857	0.565	4.299	334	210.0	657	100.0
U	2 C MEAN	48.1	59	40	7.8	6.9	26.4	0.135	0.040	0.801	0.134	1.393	112	19.6	92	3.8
N	C STDV	58.46	29.0	31.0	1.01	1.53	2.11	0.2016	0.1040	1.3667	0.1001	0.9459	86.8'	35.18	163.9	15.41
D	N</>	1/ 3	1/ 3	1/ 7	0/ 6	3/ 6	10/ 0	0/ 7	0/ 4	4/ 0	4/ 1	1/ 5	0/ 0	0/ 0	0/ 0	
O	D/WR	46/243	46/233	46/233	46/241	46/237	46/236	46/240	46/243	46/243	46/242	46/241	46/247	46/247		
R	N MIN	1.4	4	1	5.5	3.0	17.3	0.006	0.001	0.025	0.034	0.215	10	0.0	0	0.0
O	O MAX	595.0	121	222	10.6	17.8	31.5	2.559	1.191	4.295	0.719	7.149	293	130.0	0	0.0
U	2 N MEAN	31.3	75	51	7.7	7.0	26.6	0.134	0.056	0.423	0.116	1.176	65	12.8	0	0.0
N	O STDV	63.21	21.6	36.6	0.86	2.07	2.40	0.2968	0.1563	0.7165	0.0847	1.1039	61.0	20.19	0.0	0.00
O	C N</>	0/ 0	0/ 0	0/ 0	2/ 0	0/ 0	0/ 1	2/ 0	0/ 0	1/ 0	0/ 0	0/ 1	0/ 1	0/ 1	0/ 1	
C	D/WR	201/247	191/237	195/261	231/245	200/246	200/245	201/245	201/247	201/246	201/247	201/247	201/246	201/246	201/246	
R	N MIN	1.7	23	12	4.7	4.7	12.6	0.005	0.002	0.020	0.031	0.204	10	0.0	0	0.0
O	O MAX	67.0	96	185	8.8	10.3	27.2	0.929	0.632	2.688	0.373	1.974	237	70.0	286	35.1
U	3 C MEAN	18.2	76	51	7.5	7.5	19.8	0.100	0.046	0.209	0.087	0.956	77	8.3	38	1.7
N	C STDV	18.60	19.7	40.3	0.93	1.29	3.74	0.1734	0.1162	0.4880	0.0671	0.5320	75.7	15.52	70.2	6.24
D	N</>	9/ 18	12/ 7	7/ 0	0/ 12	13/ 8	1/ 3	1/ 6	2/ 1	1/ 10	1/ 29	0/ 5	0/ 4	0/ 0	0/ 0	
O	D/WR	32/220	31/202	32/239	32/233	32/220	32/242	32/239	31/238	32/243	32/235	32/216	32/241	32/242		
R	N MIN	0.8	1	6	5.6	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O	O MAX	241.4	100	169	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0
U	3 N MEAN	23.9	74	50	7.6	7.3	20.5	0.163	0.073	0.362	0.128	1.143	72	9.8	0	0.0
N	O STDV	35.99	23.6	34.2	0.82	1.65	3.16	0.4331	0.2189	0.5544	0.2375	1.1135	62.3	14.80	0.0	0.00
O	C N</>	0/ 0	0/ 0	0/ 1	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	D/WR	215/247	190/221	214/245	213/244	209/241	214/246	214/246	214/245	214/246	214/246	214/246	214/246	214/246	214/246	
R	N MIN	0.6	5	6	4.1	3.2	6.8	0.004	0.001	0.020	0.022	0.234	10	0.0	0	0.0
O	O MAX	258.7	98	185	9.7	12.8	32.2	0.955	0.632	6.857	0.565	4.299	334	210.0	657	100.0
U	4 L C MEAN	29.9	69	44	7.8	7.8	21.8	0.113	0.043	0.599	0.113	1.133	84	15.4	58	2.3
N	L C STDV	42.23	24.4	33.0	0.95	1.77	5.56	0.1782	0.1088	1.2297	0.1004	0.8057	76.7	26.86	117.7	10.52
D	N</>	4/ 5	3/ 7	5/ 3	0/ 8	9/ 9	0/ 0	0/ 21	0/ 14	2/ 5	1/ 8	2/ 12	0/ 0	0/ 0	0/ 0	
O	D/WR	111/733	103/635	111/728	111/733	111/714	111/740	111/721	110/727	111/735	111/733	111/728	111/742	111/742		
R	N MIN	0.3	1	1	5.3	0.7	7.2	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O	O MAX	595.0	121	252	10.6	19.2	31.5	4.549	2.009	9.745	3.024	8.199	293	142.0	0	0.0
U	L H MEAN	25.5	73	48	7.8	7.8	21.4	0.161	0.063	0.564	0.117	1.027	70	13.9	0	0.0
N	L O STDV	48.86	22.4	36.2	0.80	2.12	9.48	0.3340	0.1844	1.0356	0.1557	1.0015	64.6	21.09	0.0	0.00
O	C N</>	0/ 0	0/ 0	0/ 0	3/ 0	0/ 0	1/ 1	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 1	0/ 1	
C	D/WR	630/741	542/645	625/736	630/738	621/732	629/738	631/741	631/742	631/742	631/742	631/741	631/741	631/741		

## GENUS: GLENODINIUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	MIN														0	0.0
O	MAX														152	8.6
U	MEAN														30	0.8
N	STDV														16.5	1.65
D	NC/														46.3	1.65
	O/WR															
R	N MIN	0.6	50	8	6.2	5.2	6.8	0.005	0.002	0.034	0.022	0.294	10	0.0		
O	O MAX	53.7	94	120	9.7	12.8	28.9	0.716	0.541	6.425	0.554	2.665	164	79.0	152	8.6
U	1 MEAN	15.9	77	43	8.0	9.2	17.6	0.095	0.043	0.698	0.108	0.941	54	16.5	30	0.8
N	0 STDV	13.23	12.9	26.9	0.85	1.67	5.79	0.1471	0.1116	1.4561	0.1218	0.7297	44.4	20.76		
D	NC/	4/ 16	27/ 13	10/ 12	2/ 2	10/ 2	0/ 0	2/ 8	10/ 7	2/ 5	0/ 1	24/ 7	0/ 37	0/ 11		
	O/WR	33/227	26/147	33/227	33/245	33/233	33/248	33/239	33/232	33/242	33/248	33/218	33/212	33/238		
R	MIN	1.5	82	50	4.1	7.0	22.7	0.004	0.001	0.089	0.042	0.226	10	10.0	69	13.7
O	MAX	12.0	93	126	6.5	7.6	26.8	0.019	0.004	0.308	0.125	0.500	13	85.0	657	100.0
U	2 MEAN	8.0	89	97	5.6	7.2	25.2	0.009	0.001	0.220	0.088	0.361	11	52.3	428	48.9
N	STDV	5.68	5.9	41.3	1.21	0.32	2.21	0.0086	0.0017	0.1160	0.0424	0.1370	1.7	36.42	314.8	45.28
D	NC/	1/117	121/ 22	154/ 7	0/228	131/ 70	10/114	0/195	0/239	67/ 79	10/ 74	1/188	0/210	161/ 6		
	O/WR	3/129	3/ 94	3/ 80	3/ 19	3/ 45	3/122	3/ 52	3/ 38	3/101	3/163	3/ 58	3/ 37	3/ 80		
R	N MIN	3.6	5	6	5.2	3.2	22.9	0.010	0.002	0.029	0.040	0.384	10	0.0	0	0.0
O	O MAX	258.7	98	118	9.4	11.7	32.2	0.955	0.594	6.857	0.565	4.299	334	210.0	542	3.8
U	2 N MEAN	50.9	57	36	8.3	6.9	26.5	0.144	0.043	0.841	0.137	1.465	119	17.3	69	0.6
N	0 STDV	59.47	28.9	26.4	0.74	1.58	2.10	0.2057	0.1071	1.4553	0.1024	0.9361	85.4	34.26	124.3	0.88
D	NC/	18/ 3	1/ 3	1/ 10	1/ 6	3/ 6	11/ 0	14/ 7	3/ 4	4/ 0	4/ 1	24/ 5	0/ 0	0/ 0		
	O/WR	43/226	43/233	43/230	43/240	43/237	43/235	43/226	43/240	43/243	43/242	43/218	43/247	43/247		
R	MIN	1.7	99999	86	4.7	7.5	22.2	0.007	0.002	0.297	0.194	0.532	10	61.0	286	35.1
O	MAX	1.7	-99999	86	4.7	7.5	22.2	0.007	0.002	0.297	0.194	0.532	10	61.0	286	35.1
U	3 O MEAN	1.7	0	86	4.7	7.5	22.2	0.007	0.031	0.297	0.193	0.531	10	61.0	286	35.1
N	STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0003	0.0300	0.0000	0.0300	0.0000	0.0	0.0	0.0	0.30
D	NC/	9/236	221/ 0	208/ 37	0/244	122/110	171/ 72	4/241	1/243	176/ 69	214/ 30	72/173	0/225	239/ 6		
	O/WR	1/ 2	3/ 0	1/ 1	1/ 1	1/ 9	1/ 3	1/ 1	1/ 1	1/ 1	1/ 2	1/ 1	1/ 21	1/ 1		
R	N MIN	1.7	23	12	6.1	4.7	12.6	0.005	0.003	0.020	0.031	0.204	10	3.0	0	0.0
O	O MAX	67.0	96	185	8.8	10.3	27.2	0.929	0.632	2.688	0.373	1.974	237	70.0	261	6.5
U	3 N MEAN	18.7	76	50	7.6	7.5	19.7	0.103	0.048	0.206	0.084	0.969	79	6.6	30	0.6
N	0 STDV	18.66	19.7	40.4	0.79	1.31	3.77	0.1754	0.1179	0.4958	0.0653	0.5351	76.0	12.38	54.5	1.36
D	NC/	9/ 18	12/ 7	7/ 0	4/ 12	13/ 8	1/ 3	1/ 6	2/ 6	2/ 1	1/ 10	1/ 29	0/ 5	0/ 4		
	O/WR	31/220	31/202	31/239	31/229	31/220	31/242	31/239	30/237	31/243	31/235	31/216	31/241	31/242		
R	HJN	1.5	82	50	4.1	7.0	22.2	0.004	0.001	0.089	0.042	0.226	10	10.0	69	13.7
O	A MAX	12.0	93	126	6.5	7.6	26.8	0.019	0.034	0.308	0.194	0.532	13	85.0	657	100.0
U	L O MEAN	6.4	89	95	5.2	7.3	24.5	0.028	0.031	0.239	0.115	0.403	11	54.5	292	45.5
N	L 4 STDV	5.61	5.9	34.2	1.04	0.29	2.36	0.0071	0.0014	0.1021	0.0630	0.1408	1.5	31.67	266.7	37.61
D	NC/	16/323	344/ 67	491/ 32	0/695	259/377	363/135	0/605	0/635	220/278	56/ 80	12/485	0/617	473/ 17		
	O/WR	4/402	3/234	4/213	4/ 46	4/ 96	4/242	4/137	4/106	4/244	4/606	4/245	4/125	4/252		
R	N MIN	0.6	5	6	5.2	3.2	6.8	0.005	0.002	0.020	0.022	0.204	10	0.0	0	0.0
O	A MAX	258.7	98	185	9.7	12.8	32.2	0.955	0.632	6.857	0.565	4.299	334	210.0	542	6.6
U	L N MEAN	30.8	68	42	7.9	7.8	21.8	0.117	0.044	0.613	0.113	1.160	87	14.0	46	3.7
N	L D STDV	42.76	24.5	31.5	0.81	1.80	5.63	0.1803	0.1106	1.2506	0.1017	0.8977	76.8	25.70	89.2	1.29
D	NC/	4/ 6	3/ 7	5/ 3	2/ 8	9/ 9	0/ 0	5/ 21	14/ 14	2/ 5	1/ 8	2/ 12	0/ 0	0/ 0		
	O/WR	107/733	100/635	107/728	107/731	107/714	107/740	107/716	106/713	107/735	107/733	107/728	107/742	107/742		

**GENUS: GLYCOPSA**

### PARTIAL DEPTH VALUES

## GENUS: GLCEOcapsa

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N MIN															
O	D MAX															
U	1 O MEAN															
N	M STDV															
D	N</>															
	O/WR															
R	N MIN															
O	O MAX															
U	1 N MEAN															
N	D STDV															
D	O N</>															
	M O/WR															
R	N MIN	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.099	0.185	0.699	69	54.0	0 0.0	
O	O MAX	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.099	0.185	0.699	69	54.0	0 0.0	
U	2 N MEAN	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.098	0.185	0.698	69	54.0	0 0.0	
N	D STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0 0.00	
D	N</>	118/127	137/126	97/138	209/ 28	160/ 83	54/188	113/131	105/132	232/ 14	212/ 34	96/150	152/ 93	231/ 15		
	O/WR	1/ 2	1/ 4	1/ 6	1/ 10	1/ 3	1/ 4	1/ 3	1/ 10	1/ 1	1/ 1	1/ 1	1/ 2	1/ 1		
R	N MIN															
O	D MAX															
U	3 O MEAN															
N	M STDV															
D	N</>															
	O/WR															
R	N MIN															
O	O MAX															
U	3 N MEAN															
N	D STDV															
D	N</>															
	O/WR															
R	N MIN															
O	A D MAX															
U	L C MEAN															
N	L M STDV															
D	N</>															
	C/WR															
R	N MIN	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.099	0.185	0.699	69	54.0	0 0.0	
O	A D MAX	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.099	0.185	0.699	69	54.0	0 0.0	
U	L N MEAN	11.3	79	34	8.6	7.3	24.8	0.041	0.009	2.098	0.185	0.698	69	54.0	0 0.0	
N	L D STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0 0.00	
D	N</>	399/339	301/333	311/413	639/ 73	305/418	482/251	294/439	275/440	697/ 43	645/ 95	350/386	456/283	696/ 45		
	O/WR	1/ 3	1/ 11	1/ 12	1/ 29	1/ 9	1/ 7	1/ 9	1/ 26	1/ 2	1/ 2	1/ 6	1/ 3	1/ 1		

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**GENUS: GLOEOSTRIS**

#### PARTIAL DEPTH VALUES

## GENUS: GLOEOCYSTIS

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN													0	0.0		
O	D	MAX													227	1.3		
U	1	MEAN													42	0.4		
N	M	STCV													90.8	0.53		
D	N</>																	
D	O/WR																	
R	N	MIN	2.4	6	5	7.0	3.8	12.1	0.006	0.004	0.107	0.064	0.269	14	1.0			
O	D	MAX	100.9	89	132	9.5	10.9	28.0	0.212	0.013	0.989	0.201	3.199	154	137.0			
U	1	MEAN	34.5	58	40	8.0	8.6	19.3	0.079	0.007	0.426	0.118	1.389	77	29.0			
N	M	STOV	38.04	30.2	46.9	0.94	2.89	7.68	0.0722	0.0041	0.3747	0.0542	1.2137	57.1	53.15			
D	O	N</>	22/ 9	0/ 29	2/ 4	23/ 7	4/ 27	37/ 3	3/ 27	39/110	52/ 51	85/ 20	16/ 3	56/ 43	7/ 1			
D	M	O/WR	6/216	6/158	6/243	6/219	6/214	6/208	6/219	6/100	6/146	6/144	6/230	6/150	6/241			
R	N	MIN	3.0	79	34	6.4	7.2	21.5	0.006	0.005	0.027	0.040	0.399	10	2.0	124	19.5	
O	D	MAX	19.4	98	113	8.6	11.7	26.0	0.113	0.079	2.099	0.185	1.149	275	54.0	268	31.2	
U	2	MEAN	10.3	90	67	7.7	8.5	24.1	0.042	0.024	0.571	0.109	0.673	91	19.8	166	23.5	
N	M	STOV	6.96	8.0	34.2	0.94	2.13	1.91	0.0495	0.0362	1.0103	0.0656	0.3427	125.8	23.36	68.6	5.32	
D	O	N</>	12/ 83	107/ 3	97/ 17	15/ 28	153/ 6	5/138	2/ 58	38/ 27	1/ 14	4/ 34	25/ 88	0/ 5	28/ 15			
D	M	O/WR	4/152	4/127	4/127	4/204	4/ 87	4/103	4/187	4/182	4/232	4/209	4/134	4/242	4/204			
R	N	MIN	5.8	46	17	5.2	4.4	22.9	0.011	0.003	0.033	0.036	0.276	10	2.0	3	0.0	
O	D	MAX	32.9	95	123	8.2	7.6	25.5	0.187	0.104	0.817	0.232	1.632	172	48.0	241	9.6	
U	2	MEAN	13.8	79	61	7.1	6.3	24.5	0.073	0.029	0.345	0.128	0.717	59	12.3	57	1.6	
N	M	STOV	11.52	16.1	42.4	1.07	1.05	0.92	0.0659	0.0371	0.2975	0.0630	0.5613	62.7	16.00	91.6	3.54	
D	O	N</>	37/ 68	38/ 10	24/ 9	1/ 75	11/ 70	11/158	20/ 37	9/ 22	10/ 39	1/ 20	4/ 54	0/ 23	28/ 17			
D	M	O/WR	7/142	7/189	7/208	7/171	7/165	7/ 77	7/190	7/216	7/198	7/226	7/189	7/224	7/202			
R	N	MIN	5.1	82	48	6.4	1.9	16.7	0.019	0.007	0.056	0.063	0.294	20	6.0	25	10.5	
O	D	MAX	19.2	91	144	6.7	6.7	20.9	0.027	0.013	0.125	0.179	0.849	20	11.0	3023	50.2	
U	3	MEAN	12.1	87	96	6.5	4.3	18.8	0.023	0.009	0.390	0.120	0.571	20	8.5	1524	30.4	
N	M	STOV	9.97	6.4	67.9	0.21	3.39	2.97	0.0056	0.0042	0.0467	0.0820	0.3924	0.0	3.54	2119.9	28.36	
D	O	N</>	52/ 75	132/ 42	151/ 6	12/206	1/159	26/ 97	39/178	42/128	78/116	95/ 35	21/115	64/176	136/ 50			
D	M	O/WR	2/120	2/ 77	2/ 89	2/ 27	2/ 81	2/125	2/ 29	2/ 75	2/ 52	2/116	2/ 110	2/ 6	2/ 60			
R	N	MIN	5.5	1	6	7.3	6.0	15.9	0.104	0.032	0.074	0.055	0.332	58	3.0	0	0.0	
C	O	MAX	50.6	88	48	6.2	7.6	22.7	0.498	0.361	1.199	0.979	3.000	283	8.0	22	3.9	
U	3	MEAN	26.1	46	24	7.8	6.6	18.8	0.239	0.129	0.628	0.331	1.273	146	4.8	15	1.1	
N	M	STOV	23.02	36.2	18.0	0.41	0.90	2.91	0.1925	0.1551	0.4810	0.4370	1.1873	104.3	2.22	13.2	1.89	
D	O	N</>	60/ 32	0/ 68	0/ 90	85/ 60	39/104	18/ 65	180/ 15	173/ 12	97/ 21	70/ 1	33/ 15	127/ 1	68/ 74			
D	M	O/WR	4/155	4/153	4/156	4/100	3/ 98	4/163	4/ 51	4/ 60	4/128	4/175	4/198	4/118	4/104			
R	N	MIN	3.3	79	34	6.4	1.9	16.7	0.006	0.005	0.027	0.040	0.294	10	2.0	25	10.5	
C	A	MAX	19.4	98	144	8.6	11.7	26.0	0.113	0.079	2.099	0.185	1.149	275	54.0	3023	50.2	
U	L	MEAN	10.9	89	77	7.3	7.1	22.4	0.035	0.019	0.411	0.113	0.639	67	16.0	618	25.8	
N	L	M	STOV	7.07	7.0	43.0	0.94	3.14	3.40	0.0397	0.0291	0.8273	0.0629	0.3226	104.1	19.07	1180.6	13.68
D	N	N</>	69/218	331/ 7	311/ 15	30/ 73	2/ 21	159/175	7/176	106/ 86	20/ 43	42/ 95	51/202	0/ 7	95/ 45			
C	W	M	6/454	6/337	6/410	6/638	6/709	6/406	6/759	6/549	6/679	6/635	6/489	6/735	6/602			
R	N	MIN	2.4	1	5	5.2	3.8	12.1	0.036	0.003	0.033	0.036	0.269	10	1.0	0	0.0	
C	A	MAX	100.9	95	132	9.5	10.9	28.0	0.498	0.361	1.199	0.979	3.199	283	137.0	241	9.6	
U	L	MEAN	24.0	64	45	7.6	7.2	21.3	0.107	0.045	0.440	0.172	1.085	86	16.4	42	1.1	
N	L	M	STOV	26.38	28.6	40.7	0.96	2.12	5.27	0.1167	0.0863	0.3651	0.2155	0.9725	76.1	32.87	77.6	2.40
D	O	N</>	42/ 40	3/ 35	3/ 22	2/ 14	15/ 39	38/ 88	7/ 43	38/ 33	46/ 93	27/ 1	34/ 32	0/ 3	32/ 2			
M	O/WR		17/659	17/610	17/711	17/725	16/678	17/614	17/692	17/670	17/603	17/714	17/676	17/739	17/708			

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GENUS: GLUEOLICE

### PARTIAL DEPTH VALUES

## GENUS: GLOEOTHECE

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN															
O D MAX															
U 1 O MEAN															
N M STDV															
D N</>															
D O/MR															
R N MIN															
O O MAX															
U 1 N MEAN															
N D STDV															
D O N</>															
M O/MR															
R N MIN	2.4	95	116	6.3	6.4	25.9	0.007	0.003	0.061	0.036	0.332	11	13.0	73	10.9
O D MAX	2.4	95	116	6.3	6.4	25.9	0.007	0.003	0.061	0.036	0.332	11	13.0	73	10.9
U 2 O MEAN	2.4	95	116	6.3	6.4	25.9	0.007	0.003	0.060	0.035	0.332	11	13.0	73	10.9
N M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.0	0.00
D N</>	6/240	218/ 10	225/ 12	11/232	86/150	98/142	4/241	9/225	37/208	1/244	12/231	18/220	181/ 62		
D O/MR	1/ 1	1/ 9	1/ 4	1/ 4	1/ 10	1/ 6	1/ 2	1/ 13	1/ 2	1/ 2	1/ 4	1/ 9	1/ 4		
R N MIN	2.2	69	22	7.0	5.9	27.9	0.019	0.011	0.059	0.076	0.465	13	0.0	115	0.2
O O MAX	135.8	83	45	9.1	9.2	29.1	1.109	0.969	0.149	0.137	2.799	82	15.0	3397	4.8
U 2 N MEAN	80.3	76	34	8.0	8.0	28.6	0.508	0.407	0.101	0.097	1.929	43	5.0	1228	2.9
N D STDV	69.59	7.0	11.5	1.05	1.80	0.61	0.5534	0.4996	0.0452	0.0343	1.2755	35.4	8.66	1878.9	2.42
D O N</>	4/ 12	69/ 99	43/ 93	40/ 11	64/ 19	155/ 34	46/ 5	120/ 1	31/127	77/ 63	44/ 18	32/ 78	0/ 48		
D 4 O/MR	3/231	3/ 69	3/105	3/196	3/163	3/ 57	3/196	3/126	3/ 89	3/107	3/185	3/137	3/199		
R N MIN	5.7	92	58	6.8	5.3	24.5	0.012	0.006	0.030	0.161	0.493	15	15.0	186	11.9
O O MAX	5.7	92	58	6.8	5.3	24.5	0.012	0.006	0.030	0.161	0.493	15	15.0	186	11.9
U 3 O MEAN	5.7	92	58	6.8	5.3	24.5	0.011	0.005	0.029	0.160	0.493	15	15.0	186	11.9
N M STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0	0.00
D N</>	66/179	179/ 36	177/ 67	39/189	19/218	220/ 25	19/224	28/203	28/216	206/ 39	64/181	41/203	209/ 32		
D O/MR	1/ 2	1/ 6	1/ 2	1/ 17	1/ 4	1/ 1	1/ 3	1/ 14	1/ 2	1/ 1	1/ 1	1/ 2	1/ 5		
R N MIN	56.8	85	32	6.9	5.7	22.9	0.909	0.784	0.274	0.279	2.299	34	1.0	714	2.8
O D MAX	56.8	85	32	6.9	5.7	22.9	3.939	3.784	0.274	0.279	2.299	34	1.0	714	2.8
U 3 N MEAN	56.8	85	32	6.9	5.7	22.9	0.908	0.783	0.274	0.279	2.299	34	1.0	714	2.8
N D STDV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D C N</>	219/ 26	123/ 94	75/166	56/181	29/237	182/ 63	237/ 8	239/ 5	173/ 71	231/ 14	224/ 21	95/148	13/204		
D 4 C/MR	1/ 2	1/ 7	1/ 5	1/ 8	1/ 5	1/ 4	1/ 1	1/ 1	1/ 2	1/ 1	1/ 1	1/ 3	1/ 29		
R N MIN	2.4	92	58	6.3	5.3	24.5	0.007	0.030	0.036	0.332	11	13.0	73	10.9	
O A D MAX	5.7	95	116	6.8	6.4	25.9	0.012	0.036	0.061	0.161	0.493	15	15.0	186	11.9
U L O MEAN	4.0	94	87	6.5	5.8	25.2	0.009	0.004	0.045	0.098	0.412	13	14.0	130	11.4
N L D STDV	2.33	2.1	41.0	0.35	0.78	0.99	0.0035	0.0021	0.0219	0.0883	0.1138	2.8	1.41	79.9	0.65
D N</>	42/538	541/ 35	540/ 44	22/631	61/552	468/181	14/675	38/536	37/596	27/126	83/515	74/593	530/166		
D 2/161	2/ 69	2/152	2/ 88	2/119	2/ 91	2/ 53	2/167	2/109	2/589	2/144	2/ 75	2/ 46			
R N MIN	2.2	69	22	6.9	5.7	22.9	0.319	0.011	0.059	0.076	0.465	13	0.0	115	C.2
O A D MAX	135.8	85	45	9.1	9.2	29.1	1.109	0.969	0.274	0.279	2.799	82	15.0	3397	4.8
U L N MEAN	74.4	78	33	7.7	7.4	27.1	0.608	0.501	0.144	0.142	2.021	41	4.0	1099	2.9
N L D STDV	58.02	7.3	9.4	1.02	1.86	2.88	0.4943	0.4491	0.0939	0.0950	1.0577	29.2	7.35	1555.5	1.98
D O N</>	39/ 23	204/226	166/271	110/ 30	92/151	382/ 35	123/ 18	325/ 9	128/293	328/ 41	199/ 42	110/239	0/166		
M O/MR	4/679	4/215	4/299	4/601	4/489	4/523	4/601	4/407	4/321	4/373	4/501	4/393	4/576		

## GENUS: COLEPKINIA

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHE	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R N MIN	3.8	26	7	6.9	3.8	12.8	0.020	0.003	0.034	0.045	0.386	10	0.0	0	0.0
O O MAX	247.1	91	80	10.1	11.6	28.8	1.184	1.032	4.389	0.479	3.199	137	41.0	6042	30.8
U L C MEAN	44.2	74	35	8.4	8.2	23.1	0.206	0.119	0.346	0.110	1.285	55	6.0	466	2.8
N C STDV	60.91	14.9	15.8	0.82	1.93	4.91	0.2896	0.2517	0.9088	0.0920	0.8216	39.3	8.76	1276.7	6.93
D C NC/ >	51/ 2	8/ 21	8/ 35	17/ 1	6/ 13	54/ 1	39/ 4	27/ 3	2/ 9	30/ 5	64/ 3	0/ 48	0/ 32		
O/WR	22/194	19/158	22/206	22/231	21/228	22/193	22/206	22/219	22/238	22/214	22/182	22/201	22/217		
R N MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0
O O MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0
U L N MEAN	18.7	70	46	7.8	9.1	16.9	0.115	0.051	0.921	0.106	0.749	71	19.8	0	0.0
N O STDV	38.42	21.1	37.5	0.70	2.02	5.35	0.2241	0.1527	1.5109	0.0958	0.6676	69.4	25.87	0.0	0.00
D C NC/ >	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
O/WR	225/247	168/187	227/249	227/249	224/245	226/248	227/249	227/249	227/249	227/249	227/249	227/249	227/249		
R N MIN	2.0	5	9	5.5	3.3	22.5	0.010	0.003	0.027	0.034	0.265	10	0.0	0	0.0
O O MAX	595.0	107	184	10.6	17.8	31.4	1.599	1.191	4.099	0.325	7.149	240	41.0	6160	8.5
U L C MEAN	61.7	74	43	8.0	7.9	27.7	0.211	0.109	0.311	0.101	1.527	49	6.5	410	1.2
N C STDV	104.02	23.9	28.2	1.09	2.75	1.93	0.3755	0.2561	0.7056	0.0551	1.4636	43.5	7.50	1201.3	2.03
D C NC/ >	3/ 0	1/ 1	7/ 2	2/ 0	4/ 0	9/ 2	14/ 1	9/ 0	1/ 3	0/ 7	3/ 0	0/ 9	0/ 21		
O/WR	59/244	54/235	58/232	59/245	58/242	59/235	59/232	59/238	59/243	59/240	59/244	59/238	59/226		
R N MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.036	0.215	10	0.0	0	0.0
O O MAX	312.0	121	222	9.4	13.5	32.2	2.559	0.594	6.857	0.719	6.250	334	210.0	0	0.0
U L N MEAN	25.9	72	51	7.7	6.7	26.2	0.110	0.036	0.551	0.125	1.119	81	16.5	0	0.0
N O STDV	38.59	24.0	37.7	0.81	1.58	2.36	0.2405	0.0846	0.9268	0.0951	0.9077	73.5	26.49	0.0	0.00
D C NC/ >	0/ 2	0/ 0	0/ 0	0/ 6	0/ 6	0/ 5	0/ 0	0/ 4	0/ 0	1/ 0	0/ 2	0/ 0	0/ 0		
O/WR	188/245	183/237	183/241	188/241	188/241	187/246	188/247	188/243	188/247	188/246	188/245	188/247	188/247		
R N MIN	2.0	13	11	6.1	2.8	13.5	0.013	0.004	0.020	0.032	0.242	10	0.0	0	0.0
O O MAX	171.5	96	104	10.0	11.4	29.0	3.084	2.009	1.959	3.024	8.199	197	44.0	9432	9.9
U L C MEAN	38.2	74	39	7.8	7.6	21.7	0.308	0.196	0.347	0.164	1.612	60	5.4	398	0.8
N C STDV	42.52	20.7	20.4	0.91	1.69	3.30	0.5817	0.4200	0.5144	0.4592	1.5403	46.4	7.51	1440.5	1.67
D C NC/ >	13/ 3	6/ 7	5/ 24	4/ 1	2/ 2	2/ 1	22/ 1	8/ 0	2/ 4	2/ 0	7/ 0	0/ 14	0/ 12		
O/WR	45/231	43/208	45/217	44/240	43/237	44/243	45/223	45/237	45/260	45/244	45/239	45/232	45/234		
R N MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O O MAX	241.4	100	185	10.3	13.5	29.6	4.549	0.847	4.469	0.979	6.000	291	90.0	0	0.0
U L N MEAN	19.9	74	53	7.6	7.2	20.1	0.120	0.041	0.341	0.113	1.008	76	10.6	0	0.0
N O STDV	31.30	23.7	37.0	0.82	1.59	3.18	0.3522	0.1003	0.5561	0.1189	0.8832	67.1	15.93	0.0	0.00
D C NC/ >	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 4	0/ 0	0/ 1	0/ 1	0/ 0	0/ 0		
O/WR	202/247	178/221	201/246	201/245	198/241	202/246	201/246	200/241	201/246	201/245	201/245	201/246	201/246		
R N MIN	2.0	5	7	5.5	2.8	12.8	0.010	0.003	0.020	0.032	0.242	10	0.0	0	0.0
O A O MAX	595.0	107	184	10.6	17.8	31.4	3.084	2.009	4.389	3.024	8.199	240	44.0	9432	30.8
U L C MEAN	50.2	74	40	8.0	7.9	24.8	0.245	0.142	0.330	0.125	1.515	54	6.0	415	1.3
N L C STDV	80.00	21.3	23.7	1.00	2.28	4.19	0.4482	0.3238	0.6806	0.2791	1.3983	43.8	7.69	1294.0	3.39
D C NC/ >	36/ 0	3/ 1	13/ 5	5/ 0	4/ 1	5/ 2	37/ 1	38/ 0	2/ 11	7/ 0	16/ 0	0/ 15	0/ 60		
O/WR	126/705	116/641	125/718	125/736	122/727	125/682	126/704	126/703	126/729	126/735	126/726	126/727	126/682		
R N MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O A O MAX	355.6	121	252	10.6	19.2	32.2	4.549	1.209	9.745	0.979	6.250	334	210.0	0	0.0
U L N MEAN	21.3	72	49	7.7	7.8	20.8	0.115	0.043	0.618	0.114	0.946	76	15.8	0	0.0
N L C STDV	36.37	23.0	37.5	0.78	2.03	5.49	0.2764	0.1186	1.1229	0.1039	0.8324	70.0	23.60	0.0	0.00
D C NC/ >	0/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 2	0/ 0	0/ 1	0/ 3	0/ 0	0/ 0		
O/WR	615/739	529/645	611/736	616/741	610/732	615/740	616/742	615/739	616/742	616/741	616/739	616/742	616/742		

## GENUS: GOLENKINIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN	11.1	64	41	7.8	3.8	24.7	0.048	0.004	0.060	0.069	0.799	28	0.0	266	14.1
O	D	MAX	42.8	74	44	10.1	11.6	25.2	1.184	1.032	0.118	0.201	1.282	71	7.0	6042	30.8
U	L	MEAN	26.9	69	43	8.9	7.7	24.9	0.615	0.517	0.089	0.134	1.040	50	3.5	3154	22.5
N	L	STDV	22.42	7.1	2.1	1.63	5.52	0.35	0.8032	0.7269	0.0410	0.0933	0.3415	30.4	4.95	4084.2	11.87
D	N</>	150/ 27	56/ 98	159/ 79	102/ 1	4/ 13	203/ 34	109/ 4	39/ 3	17/193	98/ 20	170/ 32	101/ 91	0/133			
D	O/WR	2/ 70	2/ 33	2/ 11	2/146	2/228	2/ 11	2/136	2/207	2/ 39	2/131	2/ 47	2/ 57	2/116			
R	N	MIN	3.8	26	7	6.9	6.4	12.8	0.020	0.003	0.034	0.045	0.386	10	0.0	0	0.0
O	O	MAX	247.1	91	80	9.6	11.5	28.8	0.701	0.616	4.389	0.479	3.199	137	41.0	1252	3.8
U	L	MEAN	45.9	75	34	8.3	8.3	23.0	0.165	0.079	0.372	0.108	1.309	56	6.3	197	0.9
N	D	STDV	63.55	15.5	16.4	0.75	1.56	5.12	0.1984	0.1544	0.9513	0.0940	0.8561	40.7	9.10	295.0	1.00
D	O	N</>	51/ 2	8/ 21	8/ 35	17/ 5	21/ 16	54/ 1	39/ 9	27/ 5	2/ 9	30/ 5	64/ 3	0/ 48	0/ 32		
M	O/WR	20/194	17/158	20/206	20/227	19/208	20/193	20/201	20/217	20/238	20/214	20/182	20/201	20/217			
R	N	MIN															
O	D	MAX															
U	2	MEAN															
N	N	STDV															
D	N</>																
D	O/WR																
R	N	MIN	2.0	5	9	5.5	3.3	22.5	0.010	0.003	0.027	0.034	0.265	10	0.0	0	0.0
C	O	MAX	595.0	197	184	10.6	17.8	31.4	1.599	1.191	4.099	0.325	7.149	240	41.0	6160	8.5
U	2	MEAN	61.7	74	43	0.0	7.9	27.7	0.211	0.105	0.311	0.101	1.527	49	6.5	410	1.2
N	D	STDV	104.02	23.9	28.2	1.09	2.75	1.93	0.3755	0.2561	0.7056	0.0551	1.4636	43.5	7.50	1231.3	2.03
D	O	N</>	37/ 0	1/ 1	7/ 2	2/ 0	4/ 0	9/ 2	14/ 1	9/ 0	1/ 3	0/ 7	3/ 0	0/ 9	0/ 21		
M	O/WR	59/244	54/235	58/232	59/245	58/242	59/235	59/232	59/238	59/243	59/240	59/244	59/238	59/226			
R	N	MIN															
O	D	MAX															
U	3	MEAN															
N	M	STDV															
D	N</>																
D	O/WR																
R	N	MIN	2.0	13	11	6.1	2.8	13.5	0.013	0.004	0.020	0.032	0.242	10	0.0	0	0.0
O	O	MAX	171.5	96	104	10.0	11.4	29.0	3.084	2.009	1.959	3.024	8.199	197	44.0	9432	9.9
U	3	MEAN	38.2	74	39	7.8	7.6	21.7	0.308	0.196	0.347	0.164	1.612	60	5.4	398	0.8
N	D	STDV	42.52	20.7	20.4	0.91	1.69	3.30	0.5817	0.4230	0.3144	0.4592	1.5603	46.4	7.51	1440.5	1.67
D	O	N</>	13/ 3	6/ 7	5/ 24	4/ 1	2/ 2	2/ 1	22/ 1	8/ 0	2/ 4	2/ 3	7/ 0	0/ 14	0/ 12		
M	O/WR	45/231	43/208	45/217	44/240	43/237	44/243	45/223	45/237	45/240	45/244	45/239	45/232	45/234			
R	A	MIN	11.1	64	41	7.8	3.8	24.7	0.048	0.004	0.060	0.069	0.799	28	0.0	266	14.1
O	A	MAX	42.8	74	44	10.1	11.6	25.2	1.184	1.032	0.118	0.201	1.282	71	7.0	6042	30.8
U	L	MEAN	26.9	69	43	8.9	7.7	24.9	0.615	0.517	0.089	0.134	1.040	50	3.5	3154	22.5
N	L	STDV	22.42	7.1	2.1	1.63	5.52	0.35	0.8032	0.7269	0.0410	0.0933	0.3415	33.4	4.95	4084.2	11.87
D	N</>	392/117	168/296	417/277	353/ 5	15/ 23	479/220	337/ 14	69/ 8	136/463	272/ 71	401/170	274/275	0/325			
D	O/WR	2/232	2/ 81	2/ 42	2/383	2/694	2/ 41	2/391	2/664	2/143	2/399	2/171	2/189	2/417			
R	N	MIN	2.0	5	7	5.5	2.8	12.8	0.010	0.003	0.020	0.032	0.242	10	0.0	0	0.0
C	A	MAX	595.0	197	184	10.6	17.8	31.4	3.084	2.009	4.389	3.024	8.199	240	44.0	9432	9.9
U	L	MEAN	50.6	74	40	8.0	7.9	24.8	0.239	0.135	0.334	0.125	1.523	54	6.0	371	1.0
N	L	STDV	80.57	21.5	23.9	0.99	2.25	4.23	0.4434	0.3161	0.6854	0.2813	1.4080	44.1	7.73	1200.9	1.77
D	N	N</>	36/ 0	3/ 1	13/ 5	5/ 0	4/ 1	56/ 2	37/ 1	38/ 0	2/ 11	7/ 0	16/ 0	0/ 15	0/ 60		
M	O/WR	124/725	114/641	123/718	123/736	120/727	123/682	124/704	124/703	124/729	124/735	124/726	124/727	124/682			

## GENUS: GOMPHONEMA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN	0.3	13	2	6.5	6.3	8.5	0.005	0.001	0.056	0.031	0.199	10	2.0	0	0.0
O	O	MAX	54.1	88	88	9.2	12.4	28.0	0.259	0.171	9.745	0.539	2.110	248	112.0	95	4.1
U	L	MEAN	12.1	62	27	7.8	9.2	15.6	0.089	0.031	1.375	0.105	0.656	83	21.9	9	0.5
N	C	STDV	13.70	19.4	17.5	0.54	1.31	4.49	0.0565	0.0333	2.0176	0.0866	0.3947	76.8	27.21	19.4	1.08
O	C	NC(>)	0/ 14	2/ 37	0/ 28	3/ 11	18/ 4	2/ 3	2/ 18	0/ 16	14/ 0	3/ 2	0/ 14	0/ 0	25/ 4		
O	WR		38/233	25/148	38/221	38/235	38/223	38/243	38/229	38/233	38/235	38/244	38/235	38/249	38/220		
R	N	MIN	0.5	6	3	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.207	10	0.0	0	0.0
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	8.089	0.635	4.699	240	142.0	0	0.0
U	1	MEAN	22.6	72	46	7.9	8.9	17.8	0.129	0.062	0.779	0.107	0.821	68	18.0	0	0.0
N	O	STDV	44.46	20.5	37.9	0.75	2.12	5.71	0.2499	0.1775	1.3413	0.0970	0.7368	65.4	24.77	0.0	0.00
O	C	NC(>)	1/ 0	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	1/ 0	0/ 1	0/ 0		
C	WR		209/246	162/187	211/248	211/249	207/245	210/248	211/249	211/249	211/248	211/249	211/248	211/248	211/249		
R	N	MIN	2.3	14	9	6.7	4.3	21.5	0.010	0.001	0.054	0.073	0.265	16	1.0	0	0.0
O	O	MAX	170.5	93	77	8.9	11.7	28.9	0.370	0.122	4.274	0.376	2.474	281	27.0	519	23.7
U	2	MEAN	26.8	64	33	7.9	6.9	25.6	0.103	0.027	0.702	0.134	1.034	101	11.6	27	1.2
N	C	STDV	40.69	25.8	17.3	0.61	1.99	1.77	0.1009	0.0342	1.0349	0.0703	0.6311	88.4	7.07	119.1	5.43
O	C	NC(>)	5/ 5	8/ 22	7/ 39	25/ 16	9/ 6	5/ 45	14/ 20	0/ 20	28/ 2	73/ 6	3/ 24	40/ 2	12/ 30		
O	WR		19/237	19/207	18/195	19/206	19/231	19/196	19/213	19/227	19/217	19/168	19/220	19/205	19/205		
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0
U	Z	MEAN	35.1	73	50	7.7	7.0	26.7	0.137	0.055	0.476	0.118	1.232	71	14.3	0	0.0
N	O	STDV	64.09	23.7	36.6	0.91	1.98	2.38	0.2911	0.1535	0.8702	0.0891	1.1065	66.7	24.64	0.0	0.00
O	C	NC(>)	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	WR		228/247	218/237	223/241	228/247	227/246	227/246	228/247	228/247	228/247	228/247	228/247	228/247	228/247		
R	N	MIN	3.4	13	12	5.9	5.0	12.6	0.011	0.003	0.020	0.032	0.360	10	2.0	0	0.0
O	O	MAX	134.4	95	140	8.8	12.7	24.1	0.369	0.142	1.959	0.567	2.854	237	45.0	10	1.4
U	3	MEAN	22.5	71	55	7.6	7.7	19.3	0.083	0.024	0.427	0.112	1.027	75	9.9	1	0.1
N	C	STDV	29.80	26.7	35.4	0.81	1.71	2.75	0.0963	0.0366	0.5367	0.1231	0.6556	61.3	10.81	2.2	0.30
O	C	NC(>)	22/ 4	6/ 16	7/ 9	2/ 12	15/ 1	1/ 32	15/ 18	2/ 18	2/ 4	2/ 5	34/ 16	0/ 5	42/ 11		
O	WR		20/221	18/199	20/230	19/231	19/225	19/213	20/213	20/225	20/240	20/239	20/196	20/241	20/193		
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0
U	3	MEAN	23.3	74	50	7.6	7.3	20.5	0.161	0.074	0.334	0.123	1.126	73	9.6	0	0.0
N	O	STDV	34.69	22.8	35.0	0.84	1.60	3.27	0.4254	0.2172	0.5492	0.2301	1.0863	64.4	15.20	0.0	0.00
O	C	NC(>)	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	WR		227/247	203/221	226/246	226/245	222/241	227/246	226/246	225/245	226/246	226/246	226/246	226/246	226/246		
R	N	MIN	0.3	13	2	5.9	4.3	8.5	0.005	0.001	0.020	0.031	0.199	10	1.0	0	0.0
O	A	MAX	170.5	95	140	9.2	12.7	28.9	0.370	0.171	9.745	0.567	2.854	281	112.0	519	23.7
U	L	MEAN	18.4	65	36	7.8	8.3	19.0	0.091	0.028	0.963	0.114	0.845	85	16.3	11	0.6
N	L	STDV	27.34	23.6	25.9	0.63	1.87	5.45	0.0796	0.0340	1.5763	0.0936	0.5596	75.8	20.82	60.3	2.79
O	C	NC(>)	0/ 14	15/ 35	1/ 20	11/ 26	26/ 10	2/ 47	5/ 54	3/ 53	2/ 0	4/ 7	0/ 41	0/ 4	32/ 7		
O	WR		77/727	62/595	76/715	76/704	76/696	76/691	77/683	77/688	77/740	77/731	77/701	77/738	77/703		
R	N	MIN	0.5	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0
O	A	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	6.089	3.024	8.199	334	210.0	0	0.0
U	L	MEAN	27.1	73	49	7.8	7.7	21.8	0.143	0.064	0.524	0.116	1.066	71	13.9	0	0.0
N	L	STDV	49.70	22.5	36.5	0.85	2.09	5.43	0.3320	0.1845	0.9817	0.1539	1.0099	65.5	22.18	0.0	0.00
O	C	NC(>)	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0		
C	WR		664/740	593/645	660/736	665/741	656/732	664/740	665/742	664/741	665/742	665/742	665/742	665/742	665/742		

## GENUS: GOMPHONEMA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
<b>*</b> MIN																
O D	MAX															
U L	MEAN															
N D	STDEV															
D	NC/															
	O/Hr															
R N	MIN	0.3	13	2	6.5	6.3	8.5	0.005	0.001	0.056	0.031	0.199	10	2.0	0	0.0
O D	MAX	54.1	88	88	9.2	12.4	28.0	0.259	0.171	9.745	0.539	2.110	248	112.0	95	4.1
U L	MEAN	12.1	62	27	7.8	9.2	15.6	0.089	0.031	1.375	0.105	0.656	83	21.9	5	0.5
N D	STDEV	13.70	19.4	17.5	0.54	1.31	4.49	0.0565	0.0333	2.0176	0.0866	0.3947	76.8	27.21	19.4	1.08
D	NC/	0/ 14	2/ 37	0/ 28	3/ 11	18/ 4	2/ 3	2/ 18	0/ 16	14/ 0	3/ 2	0/ 14	0/ 0	25/ 6		
	O/Hr	38/233	25/148	38/221	38/233	38/223	38/243	38/229	38/233	38/235	38/244	38/235	38/249	38/220		
R N	MIN	7.4	93	99999	8.6	9.0	24.5	0.010	0.001	0.094	0.084	0.782	114	15.0	519	23.7
O D	MAX	7.4	93	-99999	8.6	9.0	24.5	0.010	0.001	0.094	0.084	0.782	114	15.0	519	23.7
U L	MEAN	7.4	93	0	8.6	9.0	24.5	0.029	0.003	0.093	0.084	0.781	114	15.0	519	23.7
N D	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	NC/	66/177	208/ 22	241/ 0	209/ 28	223/ 21	45/194	14/227	0/244	74/169	95/168	106/140	189/ 56	192/ 48		
	O/Hr	1/ 4	1/ 7	0/ 0	1/ 10	1/ 2	1/ 7	1/ 6	1/ 3	1/ 4	1/ 4	1/ 1	1/ 2	1/ 7		
P N	MIN	2.3	14	9	6.7	4.3	21.5	0.013	0.002	0.054	0.073	0.265	16	1.0	0	0.0
C D	MAX	170.5	91	77	8.9	11.7	28.9	0.370	0.122	4.274	0.376	2.474	281	27.0	0	0.0
U L	MEAN	27.9	63	33	7.9	6.8	25.7	0.108	0.029	0.736	0.137	1.048	100	11.4	0	0.0
N D	STDEV	41.59	25.6	17.3	0.60	1.98	1.79	0.1012	0.0346	1.0540	0.0713	0.6463	90.9	7.23	0.0	3.30
D	NC/	5/ 5	8/ 41	7/ 39	25/ 16	9/ 6	5/ 45	26/ 20	3/ 23	28/ 2	73/ 6	3/ 24	40/ 2	12/ 30		
	O/Hr	18/237	18/188	18/195	18/236	18/231	18/196	18/201	18/224	18/217	18/168	18/220	18/205	18/205		
<b>*</b> MIN																
C D	MAX															
U L	MEAN															
N D	STDEV															
D	NC/															
	O/Hr															
R N	MIN	3.4	13	12	5.9	5.0	12.6	0.011	0.003	0.020	0.032	0.340	10	2.0	0	0.0
C D	MAX	134.4	95	140	8.8	12.7	24.1	0.369	0.142	1.959	0.567	2.854	237	45.0	10	1.4
U L	MEAN	22.5	71	55	7.6	7.7	19.3	0.383	0.124	3.427	0.112	1.027	75	9.9	1	0.1
N D	STDEV	29.80	26.7	35.4	0.81	1.71	2.75	0.0963	0.0366	0.5367	0.1231	0.6556	61.3	10.81	2.2	0.30
D	NC/	22/ 4	6/ 16	7/ 9	2/ 12	15/ 1	1/ 32	15/ 18	2/ 18	2/ 4	2/ 5	34/ 16	0/ 5	42/ 11		
	O/Hr	29/221	18/199	20/230	19/231	19/225	19/213	20/213	20/225	20/240	20/239	20/196	20/241	20/193		
R N	MIN	7.4	93	99999	8.6	9.0	24.5	0.010	0.001	0.094	0.084	0.782	114	15.0	519	23.7
O A D	MAX	7.4	93	-99999	8.6	9.0	24.5	0.010	0.001	0.094	0.084	0.782	114	15.0	519	23.7
U L	MEAN	7.4	93	0	8.6	9.0	24.5	0.009	0.000	0.093	0.084	0.781	114	15.0	519	23.7
N L	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	NC/	276/459	561/ 67	736/ 0	639/ 73	543/178	468/264	37/691	0/727	238/499	383/350	592/348	560/179	562/166		
	O/Hr	1/ 6	1/ 17	0/ 0	1/ 29	1/ 11	1/ 8	1/ 14	1/ 14	1/ 5	1/ 9	1/ 2	1/ 3	1/ 14		
R N	MIN	0.3	13	2	5.9	4.3	8.5	0.005	0.001	0.020	0.031	0.199	10	1.0	0	0.0
O A D	MAX	170.5	95	140	9.2	12.7	28.9	0.370	0.171	9.745	0.567	2.854	281	112.0	95	4.1
U L	MEAN	16.5	65	36	7.7	8.2	18.9	0.092	0.028	9.974	0.114	3.846	85	16.3	5	0.2
N L	STDEV	27.49	23.6	25.9	0.63	1.88	5.45	0.0796	0.0341	1.5835	0.0941	0.5633	76.3	20.96	14.4	0.80
D	NC/	0/ 14	15/ 35	1/ 20	11/ 26	26/ 10	2/ 47	5/ 54	3/ 53	2/ 0	4/ 7	0/ 41	0/ 4	32/ 7		
	O/Hr	76/727	61/595	76/715	75/704	75/696	75/691	76/683	76/688	76/740	76/731	76/701	76/738	76/703		

## GENUS: GOMPHOCSPHAERIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	3.6	6	5	7.9	9.0	12.3	0.006	0.001	0.062	0.045	0.536	105	1.0	0	0.0	
O	O	MAX	100.9	96	127	8.6	11.1	16.4	0.212	0.043	0.532	0.104	2.611	196	87.0	305	0.3	
U	I	C	MEAN	40.2	66	60	8.3	9.9	14.1	0.108	0.014	0.232	0.075	1.203	155	20.8	61	0.1
N	C	STDEV	39.77	42.2	58.6	0.25	0.78	1.52	0.0902	0.0170	0.1836	0.0242	0.8519	34.0	37.29	136.4	0.12	
D	C	N</>	47/ 9	0/ 4	2/ 10	117/ 26	105/ 24	41/117	3/ 27	0/ 66	21/ 88	30/ 72	117/ 9	183/ 20	7/ 7			
O	W/R		5/191	4/183	5/237	5/106	5/116	5/ 90	5/219	5/203	5/140	5/147	5/123	5/ 46	5/235			
R	N	MIN	0.3	8	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0	
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0	
U	I	N	MEAN	20.6	71	43	7.9	9.0	17.6	0.123	0.058	0.883	0.107	0.788	68	18.6	0	0.0
N	O	STDEV	41.42	20.1	35.7	0.73	2.03	5.62	0.2335	0.1658	1.4875	0.0961	0.6936	66.8	24.94	0.0	0.00	
D	C	N</>	0/ 0	1/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
O	W/R		242/267	183/186	244/249	244/249	240/245	243/248	244/249	244/249	246/249	244/249	244/249	244/249	244/249			
R	N	MIN	2.5	14	9	7.2	5.7	23.1	0.008	0.001	0.051	0.059	0.399	11	0.0	0	0.0	
O	O	MAX	108.9	95	150	8.9	9.0	29.8	0.750	0.433	2.184	0.199	2.915	266	130.0	229	18.8	
U	2	C	MEAN	31.3	74	52	8.4	7.4	24.8	0.094	0.035	0.408	0.105	1.311	134	22.5	73	3.5
N	C	STDEV	36.28	21.6	34.7	0.45	1.07	1.66	0.1761	0.0997	0.6479	0.0426	0.7783	71.1	36.25	84.0	5.74	
D	C	N</>	7/ 17	8/ 10	7/ 4	55/ 16	51/ 21	13/ 11	6/ 10	0/ 6	25/ 13	38/ 24	25/ 15	18/ 7	0/ 1			
O	W/R		19/223	19/219	17/230	19/176	19/174	19/222	19/231	19/239	19/209	19/185	19/207	19/222	19/246			
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0	
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0	
U	2	N	MEAN	34.7	72	49	7.7	7.0	26.7	0.138	0.055	0.501	0.121	1.209	68	13.4	0	0.0
N	O	STDEV	64.34	24.2	35.9	0.90	2.04	2.34	0.2882	0.1513	0.9012	0.0905	1.1000	66.4	22.39	0.0	0.00	
D	C	N</>	0/ 0	0/ 0	0/ 3	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
O	W/R		228/267	218/237	224/241	228/247	227/246	228/247	228/247	228/247	228/247	228/247	228/247	228/247	228/247			
R	N	MIN	1.9	22	11	6.8	2.8	15.7	0.010	0.004	0.024	0.039	0.399	12	1.0	0	0.0	
O	O	MAX	126.8	96	144	8.8	9.6	26.0	3.084	2.009	1.675	3.024	8.199	220	59.0	233	30.9	
U	3	C	MEAN	25.0	73	54	8.0	7.1	19.4	0.244	0.140	0.347	0.283	1.542	113	11.8	42	3.0
N	C	STDEV	29.72	25.0	36.3	0.65	1.75	2.69	0.6901	0.4505	0.5030	0.6583	1.6834	65.6	16.67	63.9	6.84	
D	C	N</>	11/ 6	11/ 7	5/ 6	39/ 12	2/ 12	12/ 14	11/ 1	8/ 0	6/ 9	12/ 0	44/ 0	25/ 7	13/ 7			
O	W/R		21/230	20/203	21/235	20/194	21/227	21/220	20/234	20/237	20/231	20/234	20/202	20/214	20/226			
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	1.255	4.469	0.979	6.000	291	90.0	0	0.0	
U	3	N	MEAN	23.0	74	50	7.6	7.3	20.5	0.147	0.064	0.341	0.108	1.081	69	9.4	0	0.0
N	O	STDEV	34.71	22.9	34.9	0.84	1.60	3.28	0.3758	0.1726	0.5525	0.1230	0.9800	62.8	14.73	0.0	0.00	
D	C	N</>	0/ 0	3/ 0	3/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0			
O	W/R		226/247	221/221	225/246	225/245	220/241	225/246	226/246	225/244	226/246	226/245	226/246	226/246	226/246			
R	N	MIN	1.9	6	5	6.8	2.8	12.3	0.006	0.001	0.024	0.039	0.399	11	0.0	0	0.0	
O	A	O	MAX	126.8	96	150	8.9	11.1	29.8	3.084	2.009	2.184	3.024	8.199	266	130.0	305	30.9
U	L	C	MEAN	29.4	73	54	8.2	7.5	21.1	0.164	0.080	0.360	0.182	1.404	127	17.4	57	2.8
N	L	C	STDEV	33.28	24.8	37.7	0.55	1.62	4.18	0.4793	0.3113	0.5419	0.4484	1.2012	65.8	28.81	81.5	5.99
D	C	N</>	30/ 27	5/ 18	3/ 13	80/ 40	4/ 36	42/ 11	7/ 1	0/ 0	6/ 42	35/ 0	138/ 0	76/ 9	0/ 4			
O	W/R		45/684	43/622	43/720	44/621	45/692	45/607	44/734	44/741	44/694	44/707	44/604	44/659	44/738			
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	A	O	MAX	595.0	121	252	10.6	19.2	32.2	4.549	1.255	9.745	0.979	7.149	334	210.0	0	0.0
U	L	N	MEAN	26.0	72	47	7.7	7.8	21.5	0.135	0.059	0.583	0.112	1.020	69	13.9	0	0.0
N	L	O	STDEV	48.73	22.6	35.6	0.83	2.10	5.57	0.3029	0.1633	1.0895	0.1040	0.9506	65.3	21.55	0.0	0.00
D	C	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 1	0/ 0	0/ 0			
O	W/R		696/741	692/645	693/736	697/741	687/732	695/740	698/742	697/740	698/742	698/741	698/741	698/742	698/742			

## GENUS: COMPHOSPHAERIA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC
R	MIN															
O	D MAX															
U	1 O MEAN															
M	H STDV															
D	NC/															
	O/WR															
R	N MIN	3.6	6	5	7.9	9.0	12.3	0.006	0.001	0.062	0.045	0.536	105	1.0	0	0.0
O	D MAX	100.9	96	127	8.6	11.1	16.4	0.212	0.043	0.532	0.104	2.611	196	87.0	305	0.3
U	1 N MEAN	40.2	66	60	8.3	9.9	14.1	0.108	0.016	0.232	0.075	1.203	155	20.8	61	0.1
M	D STDV	39.77	42.2	58.6	0.25	0.78	1.52	0.0902	0.0170	0.1836	0.0242	0.8519	34.0	37.29	136.4	0.12
D	NC/	47/ 9	0/ 4	2/ 10	117/ 26	105/ 24	41/117	3/ 27	0/ 46	21/ 88	30/ 72	117/ 9	183/ 20	7/ 7		
	O/WR	5/191	4/183	5/237	5/106	5/116	5/ 93	5/219	5/293	5/160	5/147	5/123	5/ 46	5/235		
R	N MIN	7.2	78	56	8.2	6.6	23.1	0.023	0.009	0.077	0.085	1.311	135	7.0	169	12.2
O	D MAX	11.9	87	70	8.9	8.4	24.0	0.033	0.011	0.134	0.156	1.532	199	8.0	229	18.8
U	2 O MEAN	10.1	82	61	8.4	7.2	23.8	0.028	0.009	0.103	0.113	1.402	176	7.3	195	15.0
M	D STDV	2.54	4.6	7.8	0.40	1.06	0.87	0.0052	0.0009	0.0287	0.0376	0.1152	35.6	0.58	30.9	3.41
D	NC/	62/118	101/ 65	165/ 50	164/ 16	102/ 39	13/188	63/153	105/120	55/140	99/ 47	173/ 61	204/ 14	117/ 99		
	O/WR	3/ 67	3/ 71	3/ 26	3/ 67	3/105	3/ 45	3/ 31	3/ 22	3/ 52	3/101	3/ 13	3/ 29	3/ 31		
R	N MIN	2.5	14	9	7.2	5.7	23.4	0.008	0.001	0.051	0.059	0.399	11	0.0	0	0.0
O	D MAX	108.9	95	150	8.9	9.0	29.8	0.750	0.433	2.184	0.199	2.915	266	130.0	211	9.7
U	2 N MEAN	35.3	73	50	8.4	7.5	25.0	0.107	0.039	0.465	0.103	1.294	126	25.3	50	1.3
M	D STDV	38.36	23.3	38.1	0.47	1.11	1.73	0.1902	0.1085	0.6939	0.0444	0.8504	74.0	39.02	69.4	2.52
D	NC/	7/ 17	8/ 10	7/ 4	55/ 16	51/ 21	15/ 11	6/ 10	0/ 8	25/ 13	38/ 24	25/ 15	18/ 7	0/ 1		
	O/WR	16/223	16/219	14/230	16/176	16/174	16/223	16/231	16/239	16/209	16/185	16/207	16/222	16/246		
R	N MIN	3.1	87	51	6.9	6.6	26.0	0.015	0.010	0.026	0.051	0.875	12	5.0	233	30.9
O	D MAX	3.1	87	51	6.9	6.6	26.0	0.015	0.010	0.026	0.051	0.875	12	5.0	233	30.9
U	3 O MEAN	3.1	87	51	6.9	6.6	26.0	0.015	0.009	0.025	0.050	0.875	12	5.0	233	30.5
M	D STDV	0.00	0.0	0.0	0.00	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00
D	NC/	19/227	137/ 75	160/ 82	56/181	67/168	231/ 14	29/216	77/155	15/229	57/186	132/113	25/218	116/110		
	O/WR	1/ 1	1/ 9	1/ 4	1/ 8	1/ 6	1/ 1	1/ 1	1/ 13	1/ 2	1/ 3	1/ 1	1/ 3	1/ 20		
R	N MIN	1.9	22	11	6.8	2.8	15.7	0.010	0.004	0.024	0.039	0.399	15	1.0	0	0.0
O	D MAX	126.8	96	144	8.8	9.6	24.5	3.084	2.039	1.675	3.024	8.199	220	59.0	183	9.0
U	3 N MEAN	26.1	72	55	8.1	7.1	19.1	0.257	0.147	0.364	0.295	1.577	119.	12.1	33	1.6
M	D STDV	35.35	25.4	37.3	0.61	1.79	2.29	0.7069	0.4618	0.5109	0.6740	1.7220	62.8	17.05	47.9	2.50
D	NC/	11/ 6	11/ 7	5/ 6	39/ 12	2/ 12	12/ 25	11/ 1	8/ 0	6/ 9	12/ 0	44/ 0	41/ 7	13/ 7		
	O/WR	20/230	19/203	20/235	19/194	20/227	20/209	19/234	19/237	19/231	19/234	19/202	19/198	19/226		
R	N MIN	3.1	78	51	6.9	6.6	23.1	0.015	0.005	0.026	0.051	0.875	12	5.0	169	12.2
O	D MAX	11.9	87	70	8.9	8.4	26.0	0.033	0.011	0.134	0.156	1.532	199	8.0	233	30.9
U	L O MEAN	8.3	83	59	8.0	7.0	24.4	0.025	0.009	0.084	0.097	1.270	135	6.8	204	19.0
M	L H STDV	4.07	4.5	8.1	0.83	0.90	1.30	0.0382	0.0008	0.0452	0.0437	0.2801	87.0	1.26	31.7	8.40
D	NC/	73/325	286/182	498/145	110/ 40	194/250	393/175	86/492	275/390	18/434	134/132	431/137	93/ 42	264/302		
	O/WR	4/343	4/177	4/ 93	4/591	4/288	4/174	4/164	4/ 76	4/290	4/476	4/174	4/637	4/176		
R	N MIN	1.9	6	5	6.8	2.8	12.3	0.036	0.001	0.324	0.039	0.399	11	0.0	3	0.0
O	A O MAX	126.8	96	150	8.9	11.1	29.8	3.084	2.009	2.184	3.024	8.199	266	130.0	305	9.7
U	L N MEAN	31.4	72	54	8.2	7.6	20.8	0.178	0.087	0.388	0.191	1.417	126	18.5	43	1.3
M	L D STDV	34.19	25.8	39.5	0.53	1.68	4.24	0.5011	0.3261	0.5612	0.4698	1.3213	64.6	30.03	69.7	2.36
D	NC/	30/ 27	5/ 18	3/ 13	80/ 40	4/ 36	42/ 11	7/ 1	0/ 0	6/ 42	35/ 0	138/ 0	74/ 9	0/ 4		
	O/WR	41/684	39/622	39/720	40/621	41/692	41/687	40/734	40/741	40/694	40/707	40/604	40/659	40/738		

PARTIAL DEPTH VALUES																
GENUS: GONATOZYGON																
	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	MIN															
O	MAX															
U	1 C	MEAN														
N	C	STDEV														
D	NC/															
C	O/WR															
R	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0 0.0	
O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0 0.0	
U	1 N	MEAN	21.0	71	44	7.9	9.0	17.5	0.123	0.057	0.870	0.107	0.796	70	18.6	0 0.0
N	O	STDEV	41.40	20.6	36.2	0.73	2.02	5.59	0.2314	0.1642	1.4754	0.0953	0.6975	67.3	25.14	0.0 0.00
D	NC/		0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	
C	O/WR	247/247	187/187	249/249	249/249	245/245	248/248	249/249	249/249	249/249	249/249	249/249	249/249	249/249	249/249	
R	MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
O	MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
U	2 C	MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	0 0.0
N	C	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.00
D	NC/		49/195	237/ 0	241/ 0	32/210	229/ 16	187/ 57	55/187	62/168	81/163	38/205	80/164	37/208	117/109	
C	O/WR	1/ 3	0/ 0	0/ 0	1/ 5	1/ 1	1/ 2	1/ 5	1/ 17	1/ 3	1/ 4	1/ 3	1/ 2	1/ 21		
R	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0 0.0	
O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0 0.0	
U	2 N	MEAN	34.6	72	49	7.8	7.0	26.6	0.135	0.053	0.495	0.120	1.219	74	14.1	
N	O	STDEV	62.68	24.0	35.8	0.89	1.98	2.35	0.2816	0.1402	0.8851	0.0879	1.0793	68.9	23.81	0.0 0.00
D	NC/		0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	246/247	237/237	241/241	246/247	245/246	246/246	246/247	246/247	246/247	246/247	246/247	246/247	246/247		
R	MIN															
C	O	MAX														
U	3 C	MEAN														
N	C	STDEV														
D	NC/															
C	O/WR															
R	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0 0.0	
O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.669	3.024	8.199	291	90.0	0 0.0	
U	3 N	MEAN	23.2	74	50	7.6	7.3	20.4	0.155	0.070	0.342	0.122	1.118	73	9.6	
N	O	STDEV	34.27	23.1	35.0	0.84	1.61	3.25	0.4091	0.2088	0.5477	0.2232	1.0572	64.1	14.87	0.0 0.00
D	NC/		0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	247/247	221/221	246/246	245/245	241/241	246/246	246/246	245/245	246/246	246/246	246/246	246/246	246/246		
R	MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
O	MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
U	L C	MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	0 0.00
N	L C	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	
D	NC/		232/505	645/ 0	736/ 0	80/631	618/102	676/ 61	147/588	158/536	247/490	184/537	287/440	125/601	366/325	
C	O/WR	1/ 4	0/ 0	0/ 0	1/ 30	1/ 12	1/ 3	1/ 7	1/ 47	1/ 5	1/ 21	1/ 15	1/ 16	1/ 51		
R	MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
O	MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0	
U	L N	MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	0 0.00
N	L O	STDEV	47.95	22.7	35.7	0.83	2.07	5.49	0.3159	0.1754	1.0666	0.1488	0.9754	66.7	22.05	0.0 0.00
D	NC/		0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	O/WR	740/741	645/645	736/736	740/741	731/732	739/740	741/742	740/741	741/742	741/742	741/742	741/742	741/742		

## GENUS: GONATOCYDON

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	MIN															
O	MAX															
U	1 O	MEAN														
N	M	STDEV														
D	NC/2															
	O/WR															
R	N	MIN														
O	O	MAX														
U	1 N	MEAN														
N	O	STDEV														
D	O	NC/2														
	M	O/WR														
R		MIN														
O	D	MAX														
U	2 O	MEAN														
N	M	STDEV														
D	NC/2															
	O/WR															
R	N	MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0
O	O	MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0
U	2 N	MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	0 0.0
N	D	STDEV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.30
D	O	NC/2	69/195	237/ 0	241/ 0	32/210	229/ 16	187/ 57	55/187	62/168	81/163	38/205	80/164	37/208	117/109	
	H	O/WR	1/ 3	0/ 0	0/ 0	1/ 5	1/ 1	1/ 2	1/ 5	1/ 17	1/ 3	1/ 4	1/ 3	1/ 2	1/ 21	
R		MIN														
C	D	MAX														
U	3 O	MEAN														
N	M	STDEV														
D	O	NC/2														
	O/WR															
R	N	MIN														
O	C	MAX														
U	3 N	MEAN														
N	O	STDEV														
D	O	NC/2														
	M	O/WR														
R		MIN														
O	A D	MAX														
U	L O	MEAN														
N	L M	STDEV														
D	O	NC/2														
	O/WR															
R	N	MIN	6.4	99999	99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0
O	A O	MAX	6.4	-99999	-99999	6.8	9.7	28.7	0.021	0.006	0.099	0.059	0.599	14	7.0	0 0.0
U	L N	MEAN	6.4	0	0	6.8	9.7	28.7	0.021	0.005	0.098	0.058	0.598	14	7.0	0 0.0
N	L D	STDEV	0.00	0.0	0.0	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0 0.30
D	O	NC/2	232/505	645/ 0	736/ 0	80/631	618/102	676/ 61	147/588	158/536	247/490	184/537	287/440	125/601	366/325	
	H	O/WR	1/ 4	0/ 0	0/ 0	1/ 30	1/ 12	1/ 3	1/ 7	1/ 47	1/ 5	1/ 21	1/ 15	1/ 16	1/ 51	

## GENUS: GONIUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	2.3	64	24	6.8	3.9	17.7	0.079	0.005	0.061	0.047	0.348	12	2.0	0	0.0	
O	D	MAX	25.6	81	45	8.7	10.0	27.2	0.130	0.040	0.455	0.191	0.719	95	6.0	109	0.7	
U	I	C	MEAN	15.7	75	31	7.9	21.2	0.104	0.027	0.264	0.099	0.587	58	3.8	27	0.2	
N	C	STDV	9.74	9.8	9.7	0.79	2.80	4.22	0.0248	0.0157	0.1926	0.0628	0.1665	38.9	1.71	54.5	0.35	
D	N</>	21/ 50	56/ 66	82/ 77	9/ 19	6/ 62	147/ 11	150/ 46	53/ 50	20/ 99	40/ 23	45/ 92	41/ 68	25/ 149				
D	C/WR	4/176	3/ 65	4/ 90	4/221	4/177	4/ 90	4/ 53	4/146	4/130	4/186	4/112	4/140	4/ 75				
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0	
O	D	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	9.745	0.635	4.699	248	142.0	0	0.0	
U	I	N	MEAN	21.0	71	44	7.9	9.0	17.4	0.123	0.057	0.880	0.107	0.799	70	18.9	0	0.0
N	C	STDV	41.72	20.7	36.4	0.73	2.01	5.60	0.2333	0.1655	1.4853	0.0958	0.7025	67.7	25.27	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0		
C	C/WR	243/247	184/187	245/249	245/249	261/245	244/248	245/249	245/249	245/249	245/249	245/249	245/249	245/249	245/249	245/249		
R	N	MIN	9.3	62	27	7.8	6.1	25.5	0.099	0.052	0.116	0.099	0.465	21	1.0	0	0.0	
O	D	MAX	33.6	79	32	7.9	6.7	28.6	0.203	0.060	0.585	0.125	1.750	33	7.0	0	0.0	
U	I	C	MEAN	21.4	71	30	7.8	6.4	27.0	0.151	0.055	0.350	0.112	1.107	27	4.0	0	0.0
N	C	STDV	17.18	12.0	3.5	0.07	0.42	2.19	0.0735	0.0056	0.3316	0.0183	0.9086	8.5	4.24	0.0	0.00	
D	N</>	89/ 65	55/126	63/148	113/110	71/127	84/ 59	178/ 33	210/ 32	94/ 50	130/ 74	44/ 46	63/151	12/109				
D	C/WR	2/ 93	2/ 56	2/ 30	2/ 24	2/ 48	2/103	2/ 36	2/ 5	2/103	2/ 43	2/157	2/ 33	2/126				
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.215	10	0.0	0	0.0	
O	D	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0	
U	I	N	MEAN	34.5	72	49	7.8	7.0	26.6	0.134	0.053	0.495	0.120	1.218	74	14.2	0	0.0
N	C	STDV	62.82	24.1	35.9	0.89	1.99	2.35	0.2823	0.1485	0.8869	0.0881	1.0806	69.0	23.84	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
C	C/WR	245/247	235/237	239/241	245/247	246/246	244/246	245/247	245/247	245/247	245/247	245/247	245/247	245/247	245/247	245/247		
R	N	MIN	5.4	27	11	6.9	2.8	18.3	0.042	0.012	0.034	0.035	0.340	18	0.0	0	0.0	
O	D	MAX	126.8	90	72	8.8	9.3	26.8	3.084	2.009	1.824	3.024	8.199	142	44.0	0	0.0	
U	I	C	MEAN	41.6	66	32	8.0	7.1	21.9	0.626	0.375	0.640	0.492	2.167	71	9.9	0	0.0
V	C	STDV	42.78	25.8	20.3	0.73	2.13	3.10	1.1098	0.7356	0.6450	1.1164	2.7728	52.3	15.61	0.0	0.00	
D	N</>	59/ 6	14/ 51	5/ 46	56/ 12	2/ 18	64/ 6	94/ 1	98/ 0	35/ 6	5/ 0	34/ 0	51/ 40	0/ 12				
D	C/WR	7/182	7/156	7/195	7/177	7/221	7/176	7/151	7/147	7/205	7/241	7/212	7/155	7/234				
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	D	MAX	241.4	100	185	10.3	13.5	29.6	4.549	1.255	4.469	0.979	6.000	291	90.0	0	0.0	
U	I	N	MEAN	22.7	74	51	7.6	7.3	20.4	0.161	0.061	0.333	0.111	1.088	73	9.6	0	0.0
N	C	STDV	33.95	23.0	35.2	0.84	1.60	3.25	0.3667	0.1684	0.5437	0.1253	0.9610	64.5	14.89	0.0	0.00	
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0			
C	C/WR	240/247	214/221	239/246	238/245	234/241	239/246	238/244	239/246	239/245	239/245	239/246	239/246	239/246	239/246			
R	N	MIN	2.3	27	11	6.8	2.8	17.7	0.042	0.005	0.034	0.035	0.340	12	0.0	0	0.0	
O	A	D	MAX	126.8	90	72	8.8	10.0	28.6	3.084	2.009	1.824	3.024	8.199	142	44.0	109	0.7
U	L	C	MEAN	30.5	69	31	7.9	7.2	22.5	0.392	0.219	0.480	0.313	1.518	60	7.1	8	0.1
V	L	C	STDV	33.49	20.3	15.2	0.65	2.13	3.73	0.8281	0.5491	0.5097	0.8155	2.1172	44.8	11.57	30.2	0.19
D	N</>	40/ 27	43/128	37/130	80/ 49	4/ 84	198/ 64	303/ 1	106/ 0	48/ 54	22/ 0	95/ 0	93/126	0/ 60				
C	C/WR	13/674	12/474	13/569	13/612	13/644	13/478	13/635	13/640	13/720	13/647	13/523	13/682					
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	A	D	MAX	595.0	121	252	10.6	19.2	32.2	4.549	1.255	9.745	0.979	7.149	334	210.0	0	0.0
U	L	N	MEAN	26.1	72	48	7.7	7.8	21.5	0.133	0.057	0.571	0.113	1.034	72	14.2	0	0.0
V	L	C	STDV	48.16	22.8	35.9	0.83	2.07	5.52	0.2983	0.1608	1.0734	0.1041	0.9431	67.0	22.16	0.0	0.00
D	N</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 1	0/ 0	0/ 1	0/ 0	0/ 0	0/ 0	0/ 0			
C	C/WR	728/741	633/645	723/736	728/741	719/732	727/740	729/742	728/740	729/742	729/741	729/741	729/742	729/742	729/742			

## GENUS: CONIUM

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC	
R	N	MIN													0	0.0	
O	O	MAX													109	0.7	
U	1	MEAN													6.0		
N	M	STDEV													27	0.2	
D	N</>														54.5	0.35	
D	O/WR																
R	N	MIN	2.3	64	24	6.8	3.9	17.7	0.079	0.005	0.061	0.047	0.348	12	2.0		
O	O	MAX	25.6	81	45	8.7	10.0	27.2	0.130	0.040	0.455	0.191	0.719	95	6.0		
U	1	MEAN	15.7	75	31	7.9	7.9	21.2	0.104	0.027	0.264	0.099	0.587	58	3.8		
N	M	STDEV	9.74	9.8	9.7	0.79	2.80	4.22	0.0248	0.0157	0.1926	0.0628	0.1665	38.9	1.71		
D	O	N</>	21/ 50	56/ 66	82/ 77	9/ 19	6/ 62	147/ 11	150/ 46	53/ 50	20/ 99	40/ 23	45/ 92	41/ 68	25/ 149		
D	M	O/WR	4/176	3/ 65	4/ 90	4/221	4/177	4/ 90	4/ 53	4/146	4/130	4/186	4/112	4/ 143	4/ 75		
R	N	MIN															
O	O	MAX															
U	2	MEAN															
N	M	STDEV															
D	N</>																
D	O/WR																
R	N	MIN	9.3	62	27	7.8	6.1	25.5	0.099	0.052	0.116	0.099	0.465	21	1.0		
O	O	MAX	33.6	79	32	7.9	6.7	28.6	0.203	0.060	0.585	0.125	1.750	33	7.0		
U	2	MEAN	21.4	71	30	7.8	6.4	27.0	0.151	0.055	0.350	0.112	1.107	27	4.0		
N	M	STDEV	17.18	12.0	3.5	0.07	0.42	2.19	0.0735	0.0056	0.316	0.0183	0.9086	8.5	4.24		
D	O	N</>	89/ 65	55/126	63/148	113/110	71/127	84/ 59	178/ 33	210/ 32	94/ 50	130/ 74	44/ 46	63/151	12/109		
D	M	O/WR	2/ 93	2/ 56	2/ 30	2/ 24	2/ 48	2/103	2/ 36	2/ 5	2/103	2/ 43	2/157	2/ 33	2/126		
R	N	MIN															
O	O	MAX															
U	3	MEAN															
N	M	STDEV															
D	N</>																
D	O/WR																
R	N	MIN	5.4	27	11	6.9	2.8	18.3	0.342	0.012	0.034	0.035	0.340	18	0.3		
O	O	MAX	126.8	90	72	8.8	9.3	26.8	3.084	2.009	1.824	3.024	8.199	142	44.0		
U	3	MEAN	41.6	66	32	8.0	7.1	21.9	0.626	0.375	0.640	0.492	2.167	71	9.9		
N	M	STDEV	42.78	25.8	20.3	0.73	2.13	3.10	1.1098	0.7356	0.6450	1.1164	2.7728	52.3	15.61		
D	O	N</>	59/ 6	14/ 51	5/ 46	56/ 12	2/ 18	64/ 6	94/ 1	98/ 0	35/ 6	5/ 0	34/ 0	51/ 43	0/ 12		
D	M	O/WR	7/182	7/156	7/195	7/177	7/221	7/176	7/151	7/147	7/205	7/241	7/212	7/155	7/234		
R	N	MIN															
O	A	MAX															
U	L	MEAN															
N	L	STDEV															
D	N</>																
D	O/WR																
R	N	MIN	2.3	27	11	6.8	2.8	17.7	0.042	0.005	0.034	0.035	0.340	12	0.0		
O	A	MAX	126.8	90	72	8.8	10.0	26.6	3.084	2.009	1.824	3.024	8.199	142	44.0		
U	L	MEAN	30.5	69	31	7.9	7.2	22.5	0.392	0.219	0.480	0.313	1.518	60	7.1		
N	L	STDEV	33.49	20.3	15.2	0.65	2.13	3.73	0.8281	0.5491	0.5097	0.8155	2.1172	44.8	11.57		
D	O	N</>	40/ 27	43/128	37/130	80/ 49	4/ 84	198/ 64	333/ 1	106/ 0	48/ 54	22/ 0	95/ 0	93/126	0/ 60		
D	M	O/WR	13/674	12/474	13/569	12/612	13/644	13/478	13/438	13/635	13/640	13/720	13/647	13/523	13/682		



## GENUS: GONYAULAX

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2N03	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN																
O	D	MAX																
U	I	MEAN																
N	M	STDEV																
D		NC/																
		G/WR																
R	N	MIN	5.5	99999	120	8.5	12.0	6.8	0.016	0.005	0.125	0.046	0.294	18	10.0	0	0.0	
O	D	MAX	5.5	-99999	120	8.5	12.0	6.8	0.016	0.005	0.125	0.046	0.294	18	10.0	0	0.0	
U	I	MEAN	5.5	0	120	8.5	12.0	6.8	0.015	0.005	0.125	0.046	0.293	18	10.0	0	0.0	
N	M	STDEV	0.00	0.0	0.0	0.00	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	0.00	0.0	0.00	
D	O	NC/	89/153	187/	0 234/	12 204/	34 234/	9	0/247	28/217	53/181	58/188	34/209	24/223	78/166	132/107		
M	G/WR		1/ 5	0/ 0	1/ 3	1/ 11	1/ 2	1/ 1	1/ 4	1/ 15	1/ 3	1/ 6	1/ 2	1/ 5	1/ 10			
R	N	MIN																
O	D	MAX																
U	2	MEAN																
N	M	STDEV																
D	O	NC/																
		G/WR																
R	N	MIN																
O	G	MAX																
U	2	MEAN																
N	D	STDEV																
D	O	NC/																
		G/WR																
R	N	MIN																
O	D	MAX																
U	3	MEAN																
N	M	STDEV																
D	O	NC/																
		G/WR																
R	N	MIN																
C	O	MAX																
U	3	MEAN																
N	D	STDEV																
D	O	NC/																
		G/WR																
R	A	MIN																
O	A	MAX																
U	L	MEAN																
N	L	STDEV																
D	O	NC/																
		G/WR																
R	N	MIN	5.5	99999	120	8.5	12.0	6.8	0.016	0.005	0.125	0.046	0.294	18	10.0	0	0.0	
O	A	MAX	5.5	-99999	120	8.5	12.0	6.8	0.016	0.005	0.125	0.046	0.294	18	10.0	0	0.0	
U	L	MEAN	5.5	0	120	8.5	12.0	6.8	0.015	0.005	0.125	0.046	0.293	18	10.0	0	0.0	
N	L	STDEV	0.00	0.0	0.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	3.0	3.00	0.0	0.30	
D	O	NC/	186/546	645/	0 695/	37 614/102	713/	17	0/739	97/632	106/583	286/450	87/644	51/688	178/547	473/242		
M	G/WR		1/ 9	0/ 0	1/ 4	1/ 25	1/ 2	1/ 1	1/ 13	1/ 52	1/ 6	1/ 11	1/ 3	1/ 17	1/ 27			

**GENUS: GYMNODINTON**

#### PARTIAL DEPTH VALUES

## GENUS: GYMNOdinium

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	N02N03	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	0.8	89	102	6.8	9.2	11.6	0.004	0.003	0.083	0.073	0.232	10	10.0	33	14.2	
O	D	MAX	4.9	95	168	6.9	10.5	20.2	0.015	0.003	0.509	0.085	0.282	11	120.0	307	21.1	
U	1	O	MEAN	2.8	92	135	6.8	9.8	15.9	0.039	0.002	0.295	0.079	0.256	11	65.0	170	17.6
M	H	STDV	2.90	4.2	46.7	0.07	0.92	6.08	0.0077	0.0030	0.3012	0.0084	0.0353	0.7	77.78	193.7	4.90	
D	N</>	6/172	150/ 9	225/ 3	9/226	120/ 39	26/ 80	0/221	27/210	36/ 90	105/102	5/226	0/208	132/ 3				
D	O/WR	2/ 69	2/ 28	2/ 21	2/ 14	2/ 86	2/142	2/ 28	2/ 12	2/123	2/ 42	2/ 18	2/ 41	2/114				
R	N	MIN	2.6	6	5	6.2	4.2	11.7	0.010	0.001	0.025	0.022	0.312	10	1.0	0	0.0	
O	D	MAX	247.1	100	172	9.3	12.8	27.2	0.234	0.154	7.557	0.185	2.665	227	86.0	328	7.9	
U	1	N	MEAN	34.2	63	41	8.0	8.9	17.4	0.088	0.025	1.183	0.078	0.974	94	19.4	45	6.9
N	D	STDV	48.51	26.8	34.8	0.60	1.76	5.34	0.0626	0.0323	1.9097	0.0370	0.6401	74.7	25.37	77.7	1.61	
D	N</>	26/ 2	0/ 0	2/ 2	2/ 8	7/ 2	28/ 11	12/ 22	0/ 17	1/ 2	0/ 27	33/ 7	0/ 3	7/ 8				
D	O/WR	34/219	29/187	34/245	34/239	34/236	34/209	34/215	34/232	34/246	34/222	34/209	34/246	34/234				
R	N	MIN																
O	D	MAX																
U	2	O	MEAN															
M	H	STDV																
D	N</>																	
D	O/WR																	
R	N	MIN	4.9	5	6	5.7	4.2	21.2	0.008	0.002	0.029	0.036	0.276	10	0.0	0	0.0	
O	D	MAX	206.7	96	171	8.6	8.1	30.1	0.867	0.042	4.295	0.376	3.599	223	48.0	244	6.3	
U	2	N	MEAN	32.4	65	52	7.5	6.4	25.9	0.099	0.013	0.630	0.117	0.987	74	11.9	48	1.0
N	D	STDV	49.12	27.4	43.7	0.83	1.13	2.05	0.1795	0.0124	1.1035	0.0759	0.7645	68.7	13.28	68.8	1.45	
D	N</>	29/ 4	1/ 7	1/ 3	5/ 28	8/ 49	3/ 6	6/ 9	3/ 43	4/ 1	1/ 6	4/ 12	0/ 13	0/ 17				
D	O/WR	22/214	22/229	22/237	22/214	22/189	22/237	22/232	22/201	22/242	22/240	22/231	22/234	22/230				
R	N	MIN																
O	D	MAX																
U	3	O	MEAN															
N	H	STDV																
D	N</>																	
D	O/WR																	
R	N	MIN	1.5	11	7	6.3	4.1	13.5	0.008	0.003	0.025	0.041	0.199	10	0.0	0	0.0	
O	D	MAX	171.5	96	119	9.9	10.1	26.2	0.921	0.493	1.225	0.567	4.099	261	35.0	548	3.9	
U	3	N	MEAN	27.3	71	43	7.8	7.3	20.0	0.124	0.042	0.256	0.123	1.188	85	6.5	70	0.7
N	D	STDV	35.34	25.6	30.2	0.86	1.34	3.07	0.1745	0.0945	0.3411	0.1055	0.9755	68.7	6.89	133.9	1.10	
D	N</>	7/ 3	5/ 7	1/ 16	8/ 2	8/ 10	2/ 11	5/ 7	2/ 8	12/ 18	17/ 5	0/ 6	0/ 2	0/ 15				
D	O/WR	29/237	24/209	29/229	29/235	29/223	29/233	29/234	29/235	29/216	29/224	29/240	29/244	29/231				
R	N	MIN	0.8	89	102	6.8	9.2	11.6	0.004	0.003	0.083	0.073	0.232	10	10.0	33	14.2	
O	A	D	MAX	4.9	95	168	6.9	10.5	20.2	0.015	0.003	0.509	0.085	0.282	11	120.0	307	21.1
U	L	O	MEAN	2.8	92	135	6.8	9.8	15.9	0.039	0.002	0.295	0.079	0.256	11	65.3	170	17.6
N	L	H	STDV	2.90	4.2	46.7	0.07	0.92	6.08	0.0077	0.0000	0.3012	0.0084	0.0353	0.7	77.78	193.7	4.90
D	N</>	6/584	479/ 35	663/ 9	80/614	564/ 55	27/438	0/645	38/672	200/194	305/342	13/693	0/649	473/ 6				
D	O/WR	2/151	2/131	2/ 64	2/ 47	2/113	2/275	2/ 97	2/ 31	2/348	2/ 95	2/ 36	2/ 93	2/263				
R	N	MIN	1.5	5	5	5.7	4.1	11.7	0.008	0.001	0.025	0.022	0.199	10	0.0	0	0.0	
C	A	O	MAX	247.1	100	172	9.9	12.8	30.1	0.921	0.493	7.557	0.567	4.099	261	86.0	548	7.9
U	L	N	MEAN	31.3	66	45	7.8	7.7	20.5	0.103	0.027	0.723	0.104	1.050	86	13.1	54	0.6
N	L	D	STDV	44.20	26.4	35.7	0.77	1.80	5.19	0.1414	0.0596	1.3925	0.0783	0.7964	70.8	18.56	97.0	1.40
D	N</>	16/ 6	3/ 3	3/ 6	9/ 7	22/ 9	29/ 6	19/ 23	0/ 24	13/ 2	1/ 7	0/ 14	0/ 11	0/ 16				
D	O/WR	85/719	75/639	85/727	85/725	85/701	85/705	85/730	85/717	85/727	85/734	85/728	85/731	85/726				

## GENUS: GYROSIGMA

## PARTIAL DEPTH VALUES

		CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	N/P	CONC	PERC		
R	N	MIN	1.5	13	7	6.6	6.7	9.1	0.017	0.002	0.056	0.047	0.315	10	1.0	0	0.0	
O	O	MAX	247.1	98	85	9.1	11.9	25.6	0.218	0.171	9.745	0.554	2.549	215	112.0	194	2.5	
U	L	C	MEAN	18.8	53	27	7.8	9.0	16.1	0.104	0.035	1.726	0.117	0.794	83	19.3	9	0.2
N	C	STDV	45.03	25.8	20.1	0.58	1.04	4.15	0.0583	0.0340	2.6927	0.0971	0.5570	70.4	26.84	35.6	0.50	
D	C	NC</>	8/ 2	2/ 2	8/ 32	4/ 12	26/ 11	3/ 29	32/ 24	10/ 16	14/ 0	40/ 1	35/ 11	0/ 7	7/ 4			
		O/WR	29/237	19/183	30/209	30/233	30/208	30/216	30/193	30/223	30/235	30/208	30/203	30/242	30/238			
R	N	MIN	0.3	6	2	5.3	0.7	6.8	0.004	0.001	0.024	0.022	0.199	10	0.0	0	0.0	
O	O	MAX	355.6	100	252	10.6	19.2	28.9	1.719	1.209	7.439	0.635	4.699	248	142.0	0	0.0	
U	L	N	MEAN	21.2	73	46	7.9	9.0	17.7	0.125	0.060	0.752	0.105	0.796	68	18.5	0	0.0
N	O	STDV	40.99	19.0	37.3	0.74	2.12	5.74	0.2458	0.1745	1.1821	0.0952	0.7157	66.9	24.96	0.0	0.00	
D	C	NC</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 3	0/ 0	0/ 0	0/ 0	0/ 0			
		O/WR	218/247	168/187	219/249	219/249	215/245	218/248	219/249	219/249	219/246	219/249	219/249	219/249	219/249			
R	N	MIN	2.7	14	12	5.5	4.3	23.8	0.015	0.005	0.033	0.036	0.215	10	2.0	0	0.0	
O	O	MAX	141.2	95	123	8.9	9.7	31.4	0.370	0.194	3.836	0.376	2.615	268	52.0	85	0.4	
U	L	Z	MEAN	28.6	66	37	7.6	6.2	26.6	0.094	0.030	0.571	0.140	1.055	70	11.0	8	0.0
N	C	STDV	34.48	25.7	22.1	0.74	1.38	2.23	0.0857	0.0488	0.8671	0.0836	0.6785	58.5	12.11	23.9	0.09	
D	C	NC</>	9/ 10	8/ 10	13/ 9	2/ 16	9/ 16	21/ 2	31/ 20	38/ 16	10/ 4	1/ 6	0/ 20	0/ 6	28/ 16			
		O/WR	28/228	27/219	27/219	28/229	28/221	28/223	28/196	28/193	28/233	28/240	28/227	28/241	28/203			
R	N	MIN	1.4	4	1	4.1	3.0	17.3	0.004	0.001	0.025	0.034	0.226	10	0.0	0	0.0	
O	O	MAX	595.0	121	222	10.6	17.8	32.2	2.559	1.191	6.857	0.719	7.149	334	210.0	0	0.0	
U	Z	N	MEAN	35.2	73	50	7.8	7.1	26.6	0.140	0.056	0.483	0.117	1.237	74	14.5	0	0.0
N	O	STDV	65.33	23.7	36.9	0.91	2.03	2.37	0.2967	0.1559	0.8872	0.0881	1.1180	70.2	24.85	0.0	0.00	
D	C	NC</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0			
		O/WR	219/247	210/237	214/241	219/247	218/246	218/246	219/247	219/247	219/247	219/247	219/246	219/247	219/247			
R	N	MIN	1.5	23	12	6.3	4.0	12.6	0.008	0.003	0.025	0.031	0.199	10	0.0	0	0.0	
O	O	MAX	71.4	96	90	9.1	10.3	27.0	0.369	0.105	1.731	0.399	2.099	237	71.0	29	0.5	
U	3	C	MEAN	20.4	72	42	7.7	7.2	20.1	0.085	0.023	0.283	0.109	0.931	78	8.5	3	0.0
N	C	STDV	21.06	21.6	20.9	0.83	1.71	3.84	0.0814	0.0235	0.4374	0.0990	0.5386	65.0	14.75	8.1	0.14	
D	C	NC</>	7/ 15	12/ 7	7/ 32	8/ 7	5/ 8	1/ 5	5/ 18	2/ 23	12/ 7	1/ 7	0/ 25	0/ 5	0/ 3			
		O/WR	22/225	19/202	22/207	22/230	22/228	22/240	22/223	22/220	22/227	22/238	22/221	22/241	22/243			
R	N	MIN	0.8	1	6	4.7	1.6	9.0	0.004	0.001	0.017	0.020	0.210	10	0.0	0	0.0	
O	O	MAX	241.4	100	185	10.3	13.5	29.6	4.549	2.009	4.469	3.024	8.199	291	90.0	0	0.0	
U	3	N	MEAN	23.5	74	51	7.6	7.3	20.5	0.161	0.074	0.348	0.124	1.137	72	9.7	0	0.0
N	O	STDV	35.31	23.3	36.0	0.84	1.60	3.19	0.4274	0.2182	0.5579	0.2319	1.0940	64.1	14.91	0.0	0.00	
D	C	NC</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 0	0/ 0	0/ 0			
		O/WR	225/247	202/221	224/246	223/245	219/241	224/246	224/246	223/245	224/246	224/246	224/244	224/246	224/246			
R	N	MIN	1.5	13	7	5.5	4.0	9.1	0.008	0.002	0.025	0.031	0.199	10	0.0	0	0.0	
O	A	MAX	247.1	98	123	9.1	11.9	31.4	0.370	0.194	9.745	0.554	2.615	268	112.0	194	2.5	
U	L	C	MEAN	22.7	64	34	7.7	7.5	20.9	0.095	0.030	0.925	0.123	0.923	77	13.4	7	0.1
N	L	C	STDV	35.75	25.4	21.7	0.71	1.81	5.67	0.0746	0.0375	1.8364	0.0929	0.6007	64.4	19.86	26.2	0.32
D	C	NC</>	16/ 6	15/ 7	13/ 35	5/ 30	19/ 19	4/ 2	19/ 54	14/ 48	13/ 0	4/ 9	0/ 48	0/ 8	0/ 7			
		O/WR	79/719	65/623	79/688	80/706	80/694	80/734	80/669	80/709	80/729	80/709	80/734	80/735				
R	N	MIN	0.3	1	1	4.1	0.7	6.8	0.004	0.001	0.017	0.020	0.199	10	0.0	0	0.0	
O	A	MAX	595.0	121	252	10.6	19.2	32.2	4.549	2.009	7.439	3.024	8.199	334	210.0	0	0.0	
U	L	N	MEAN	26.6	73	49	7.8	7.8	21.6	0.142	0.064	0.526	0.115	1.057	71	14.2	0	0.0
N	L	O	STDV	49.18	22.3	36.7	0.84	2.10	5.47	0.3329	0.1849	0.9240	0.1541	1.0102	67.0	22.30	0.0	0.00
D	C	NC</>	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 3	0/ 0	0/ 0	0/ 0	0/ 0			
		O/WR	662/741	580/645	657/736	661/741	652/732	660/740	662/742	661/741	662/739	662/742	662/742	662/742	662/742			

## GENUS: CYRSTIGMA

## PARTIAL DEPTH VALUES

	CHLA	TURB	SECCHI	PH	DO	TEMP	TOTALP	ORTHOP	NO2NO3	NH3	KJEL	ALK	M/P	CONC	PERC
R N MIN															
O D MAX															
U 1 O MEAN															
N M STDV															
D N</>															
O/WR															
R N MIN	1.5	13	7	6.6	6.7	9.1	0.017	0.002	0.056	0.047	0.315	10	1.0	0	0.0
O D MAX	247.1	98	85	9.1	11.9	25.6	0.218	0.171	9.745	0.554	2.549	215	112.0	194	2.5
U 1 N MEAN	16.8	53	27	7.6	9.0	16.1	0.104	0.035	1.726	0.117	0.794	63	19.3	9	0.2
N D STDV	45.03	25.8	20.1	0.58	1.04	4.15	0.0583	0.0340	2.6927	0.0974	0.5570	70.4	26.84	35.6	0.50
O O N</>	8/ 2	2/ 2	8/ 32	4/ 12	26/ 11	3/ 29	32/ 24	10/ 16	14/ 0	40/ 1	35/ 11	0/ 7	7/ 4		
M O/WR	29/237	19/163	30/209	30/233	30/208	30/216	30/193	30/223	30/235	30/208	30/203	30/242	30/238		
R N MIN															
O D MAX															
U 2 O MEAN															
N M STDV															
D N</>															
O/WR															
R N MIN	2.7	14	12	5.5	4.3	23.8	0.015	0.005	0.033	0.036	0.215	10	2.0	0	0.0
C O MAX	141.2	95	123	8.9	9.7	31.4	0.370	0.194	3.836	0.376	2.615	268	52.0	85	0.4
U 2 N MEAN	28.6	66	37	7.6	6.2	26.6	0.094	0.030	0.571	0.160	1.055	70	11.0	8	0.0
N D STDV	34.48	25.7	22.1	0.74	1.38	2.23	0.0857	0.0488	0.8671	0.0836	0.6785	58.5	12.11	23.9	0.09
O O N</>	9/ 10	8/ 10	13/ 9	2/ 16	9/ 16	21/ 2	31/ 20	38/ 16	10/ 4	1/ 6	0/ 20	0/ 6	28/ 16		
M O/WR	28/228	27/219	27/219	28/229	28/221	28/223	28/196	28/193	28/233	28/240	28/227	28/241	28/203		
R N MIN															
O D MAX															
U 3 O MEAN															
N M STDV															
D N</>															
O/WR															
R N MIN	1.5	23	12	6.3	4.3	12.6	0.008	0.003	0.025	0.031	0.199	10	3.0	0	0.3
O D MAX	71.4	96	90	9.1	10.3	27.0	0.369	0.105	1.731	0.399	2.099	237	71.0	29	0.5
U 3 N MEAN	20.4	72	42	7.7	7.2	20.1	0.085	0.023	0.283	0.109	0.931	78	8.5	3	0.0
N D STDV	21.06	21.6	20.9	0.83	1.71	3.84	0.0814	0.0235	0.4374	0.0990	0.5386	65.0	14.75	8.1	0.14
D O N</>	7/ 15	12/ 7	7/ 32	8/ 7	5/ 8	1/ 5	5/ 18	2/ 23	12/ 7	1/ 7	0/ 25	0/ 5	0/ 3		
M C/WR	22/225	19/202	22/207	22/230	22/228	22/240	22/223	22/220	22/227	22/238	22/221	22/241	22/243		
R N MIN															
O A D MAX															
U L O MEAN															
N L M STDV															
D N</>															
O/WR															
R N MIN	1.5	13	7	5.5	4.0	9.1	0.008	0.002	0.025	0.031	0.199	10	0.0	0	0.0
C L O MAX	247.1	98	123	9.1	11.9	31.4	0.370	0.194	9.745	0.554	2.615	268	112.0	194	2.5
U L N MEAN	22.7	64	34	7.7	7.5	20.9	0.095	0.030	0.925	0.123	0.923	77	13.4	7	0.1
N L D STDV	35.75	25.4	21.7	0.71	1.81	5.67	0.0746	0.0375	1.8364	0.0929	0.6007	64.4	19.86	26.2	0.32
D O N</>	16/ 6	15/ 7	13/ 35	5/ 30	19/ 19	4/ 2	19/ 54	14/ 48	13/ 0	4/ 9	0/ 48	0/ 8	0/ 7		
M O/WR	79/719	65/623	79/688	80/706	80/694	80/734	80/669	80/679	80/729	80/729	80/694	80/734	80/735		