RESULTADOS
MEDIDAS DE SONDA OCEÁNICA (CTD-IMIDA)
COORDINADAS POR EL IMIDA EN EL MM

Fecha: Miercoles 6/10/2021

El presente informe muestra un resumen inicial de los resultados de los muestreos coordinados por el IMIDA y realizados por el IMIDA en el Mar Menor (MM) en la fecha indicada mediante SONDA multiparamétrica (CTD), que mide un total de 7 variables: temperatura, conductividad, turbidez, pH, oxígeno, salinidad y clorofila.

Cada punto de muestreo puede llegar a proporcionar en torno a 10.000 datos, que son tratados de forma automatizada por los técnicos del IMIDA. Tal cantidad de información requiere, además de su descarga, un complejo proceso de análisis, procesado y de transformación de datos.

Para controlar rápidamente la situación de la laguna con respecto a los niveles de oxígeno y llevar un seguimiento diario de la misma, se ha decidido identificar y alertar únicamente de los valores que representan situaciones de posible anoxia/hipoxia en base a la siguiente clasificación. Se considerarán no preocupantes los valores de oxígeno superiores a 4 miligramos por litro (mg/L):

0-2 mg/L: ANOXIA

2-4 mg/L: HIPOXIA

>4 mg/L: NO PREOCUPANTE

Las tablas siguientes incluyen los datos necesarios para tener una visión global de todo el proceso:

OBSERVACIONES GENERALES

Se realiza **UNA SALIDA** en barco para muestreo por la mañana, en horario de 07:30 a 11:00 horas.

Salida desde el puerto de Lo Pagán, con los técnicos y un patrón del IMIDA.

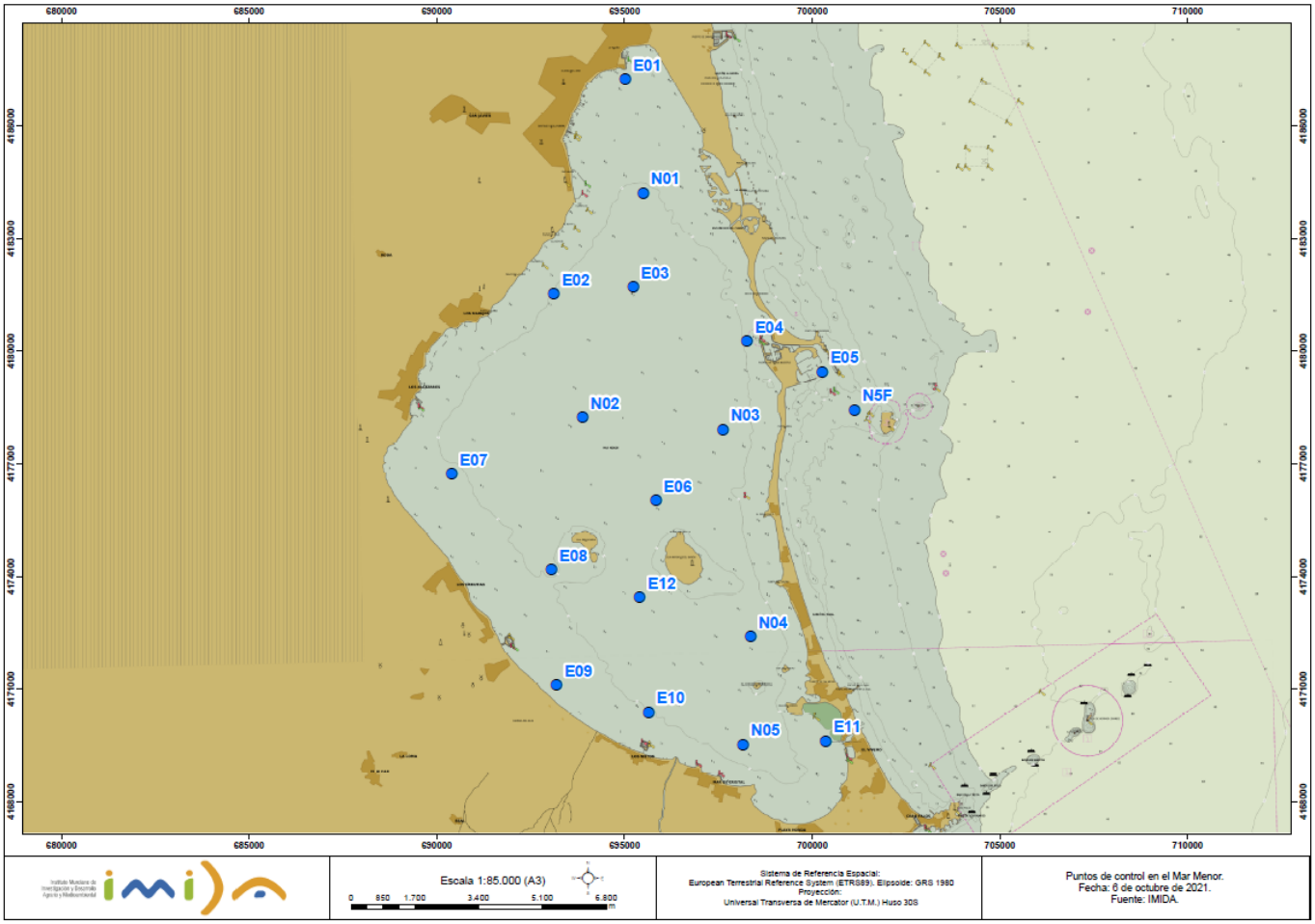
ORDEN	Punto	D. Secchi	Hora	Fondo	Viento (km/h)	Dirección	Sonda
1	E01	2,60	08:02	no	4	N	2,60
2	N01	2,80	08:07	no	4	N	5,60
3	E03	1,90	08:17	no	4	N	6,50
4	E02	2,20	08:28	no	4	N	5,40
5	N02	1,80	08:37	no	4	N	6,10
6	E07	1,00	08:47	no	8	N	4,70
7	E08	1,50	08:56	no	8	N	5,00
8	E09	1,10	09:04	no	8	N	2,30
9	E10	1,60	09:12	no	8	N	5,00
10	N05	1,40	09:19	no	8	N	5,70
11	E11	1,60	09:27	no	8	N	4,10
12	N04	1,70	09:35	no	12	N	5,90
13	E12	1,60	09:45	no	12	N	6,00
14	E06	1,50	09:53	no	20	N	6,50
15	N03	2,00	10:03	no	20	N	6,30
16	E04	2,30	10:11	no	20	N	5,20
16	E05	4,50	10:22	no	20	N	5,20
18	N5F	8,00	10:28	no	20	N	9,90

UBICACIÓN DE LOS TRABAJOS

Estación de Acuicultura Marina de San Pedro del Pinatar: Coordinación para la organización de las salidas al mar, manejo y mantenimiento de sondas.

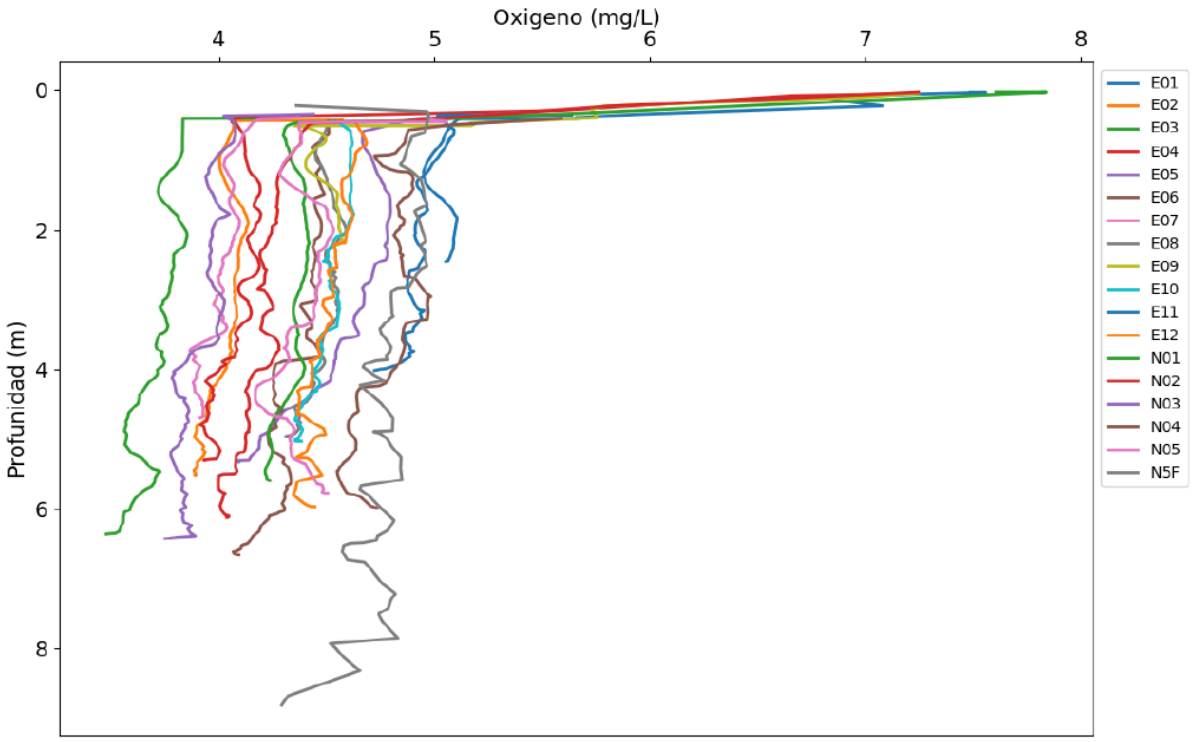
Instalaciones del IMIDA de La Alberca: Diseño y puesta en marcha de la encuesta para la toma de datos, procesamiento, tratamiento, análisis de datos, cartografía y maquetación.

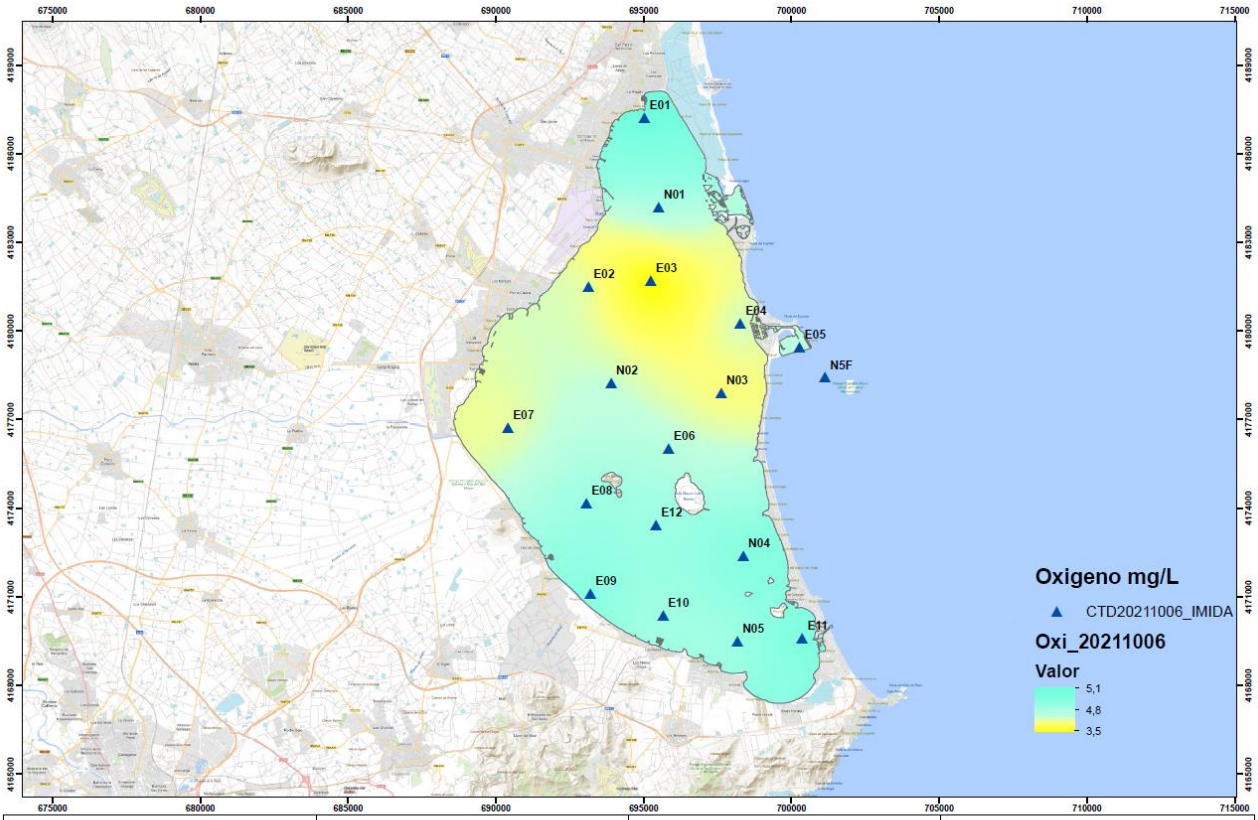
Mar Menor: El IMIDA ha muestreado un total de 18 puntos con el CTD, previamente establecidos por el grupo de monitorización.



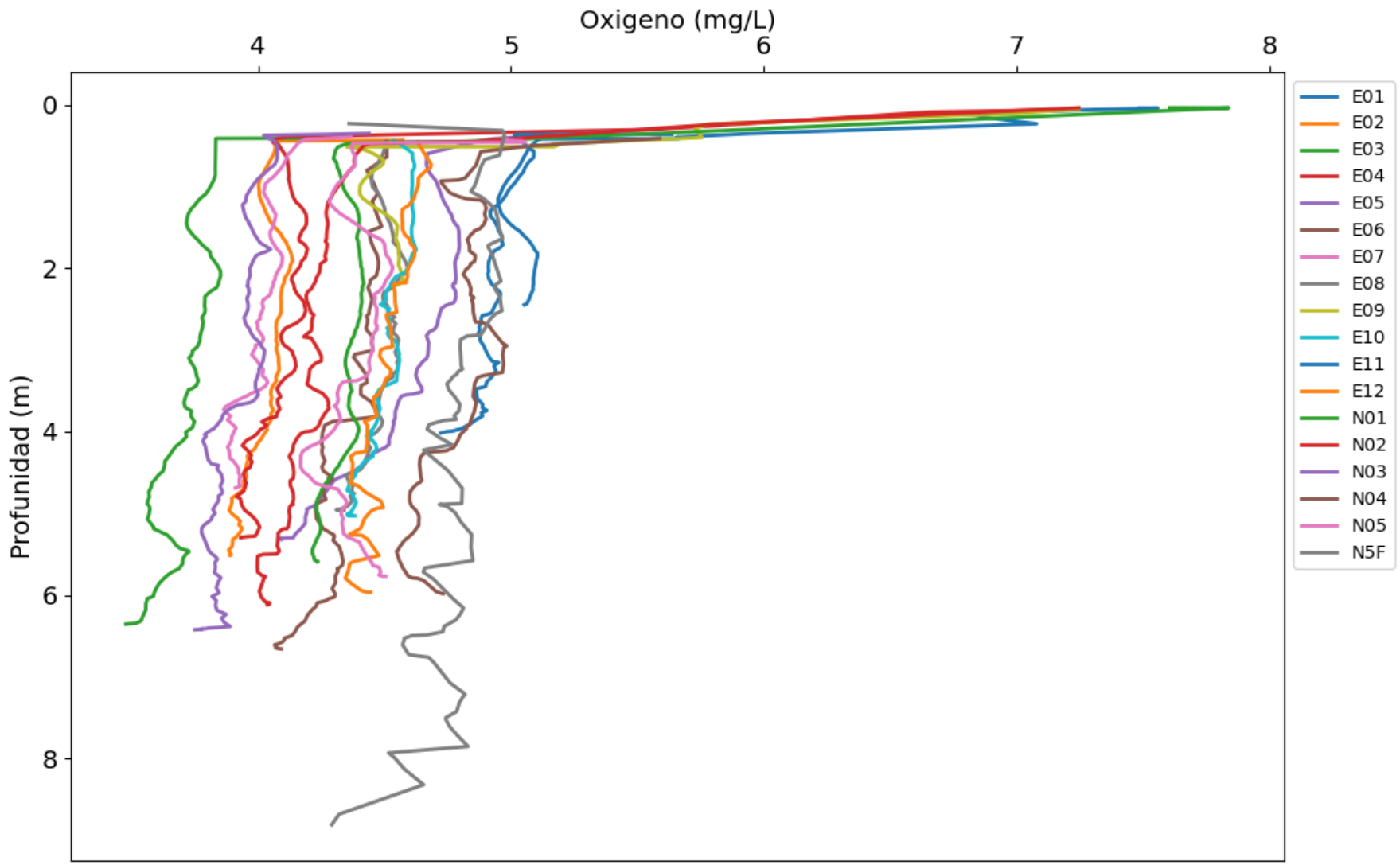
SITUACIÓN GENERAL

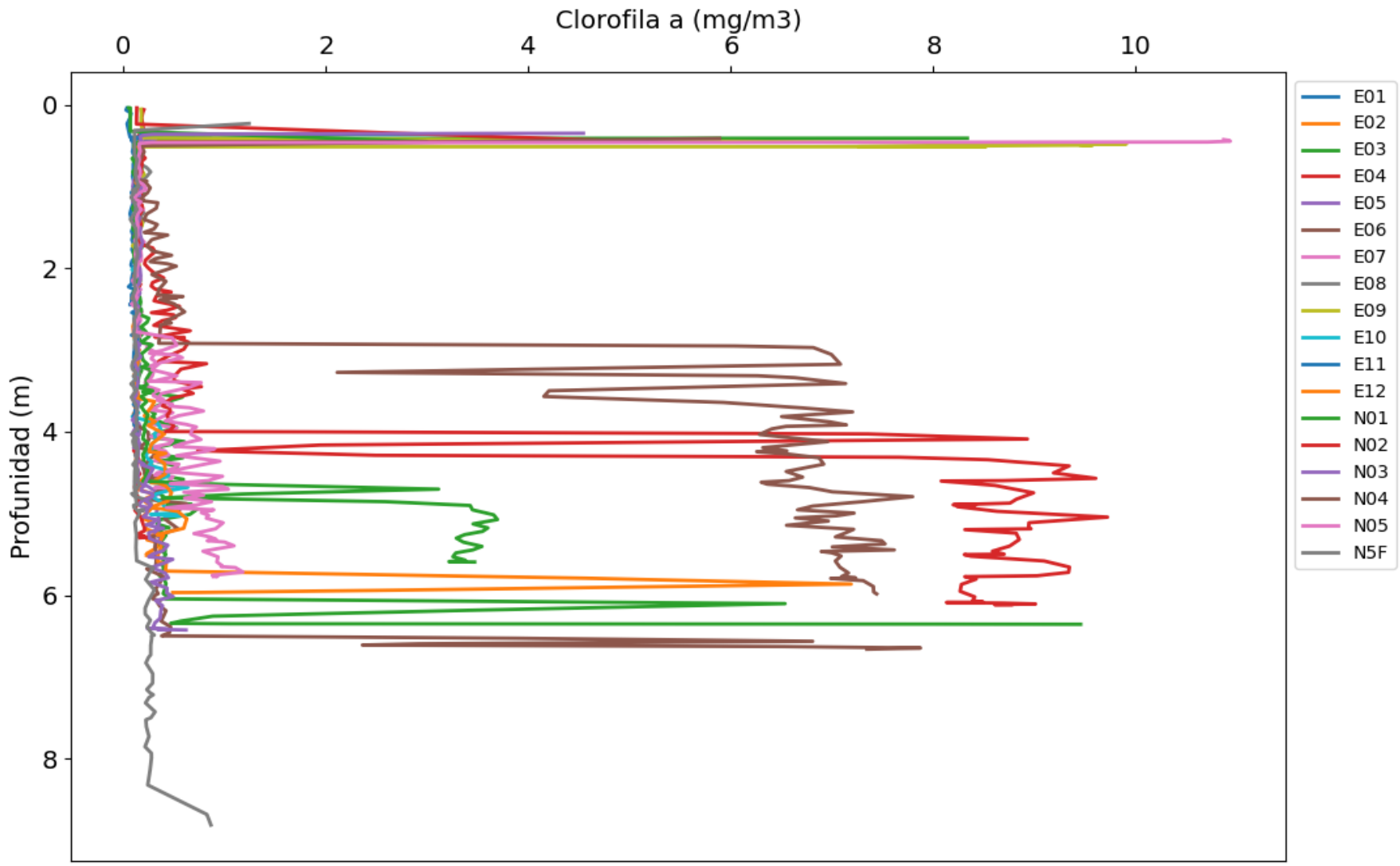
El día 6 de octubre se observa una ligera reducción de los puntos muestreo con hipoxia respecto a los datos del lunes día 4 de octubre, en una superficie aproximadamente la mitad. Además del número de superficie se observa un leve aumento de los valores de oxígeno en su totalidad, correspondiendo el punto más crítico a la muestrea E03 llegando a valores de 3,5 mg/L de oxígeno.

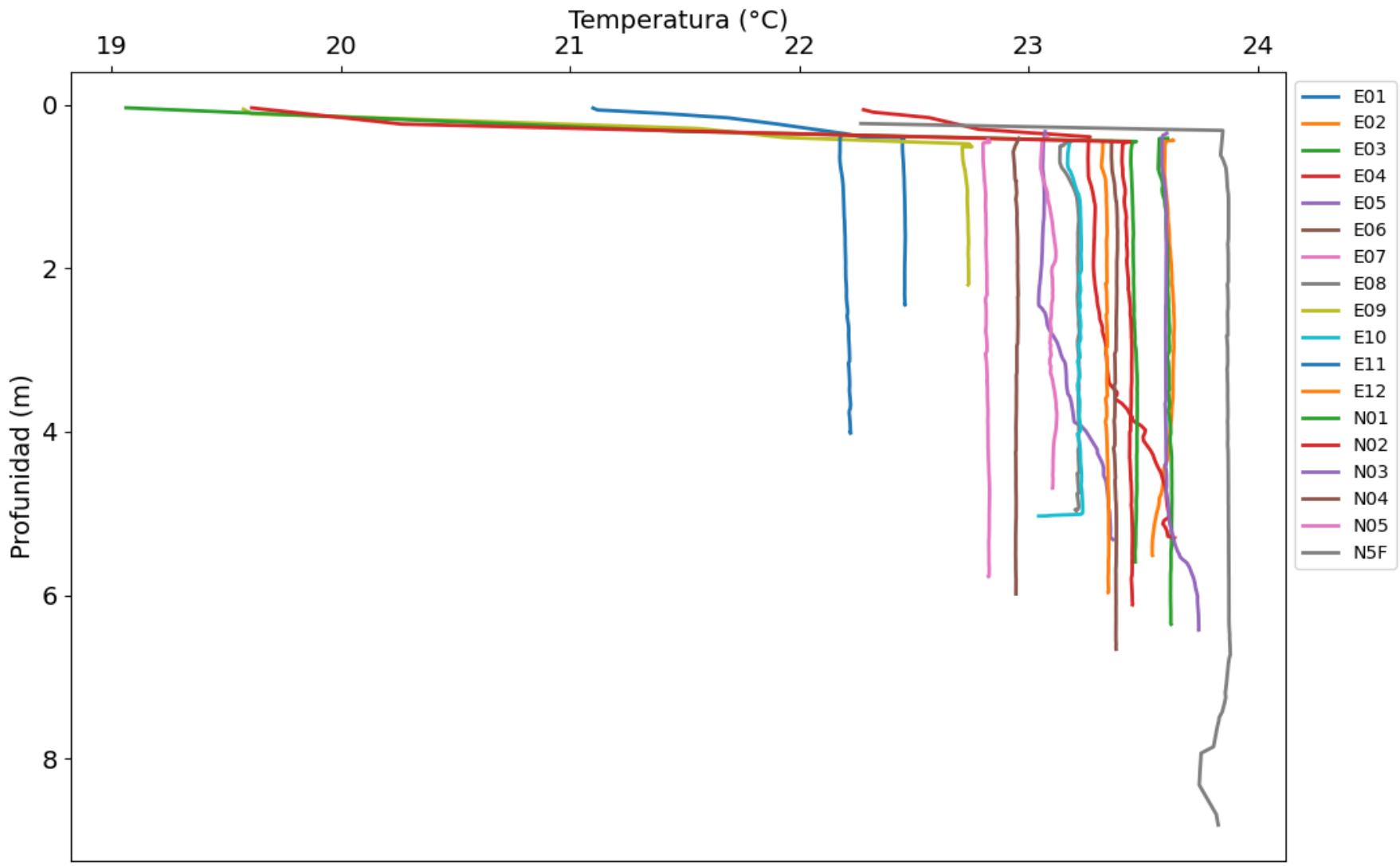


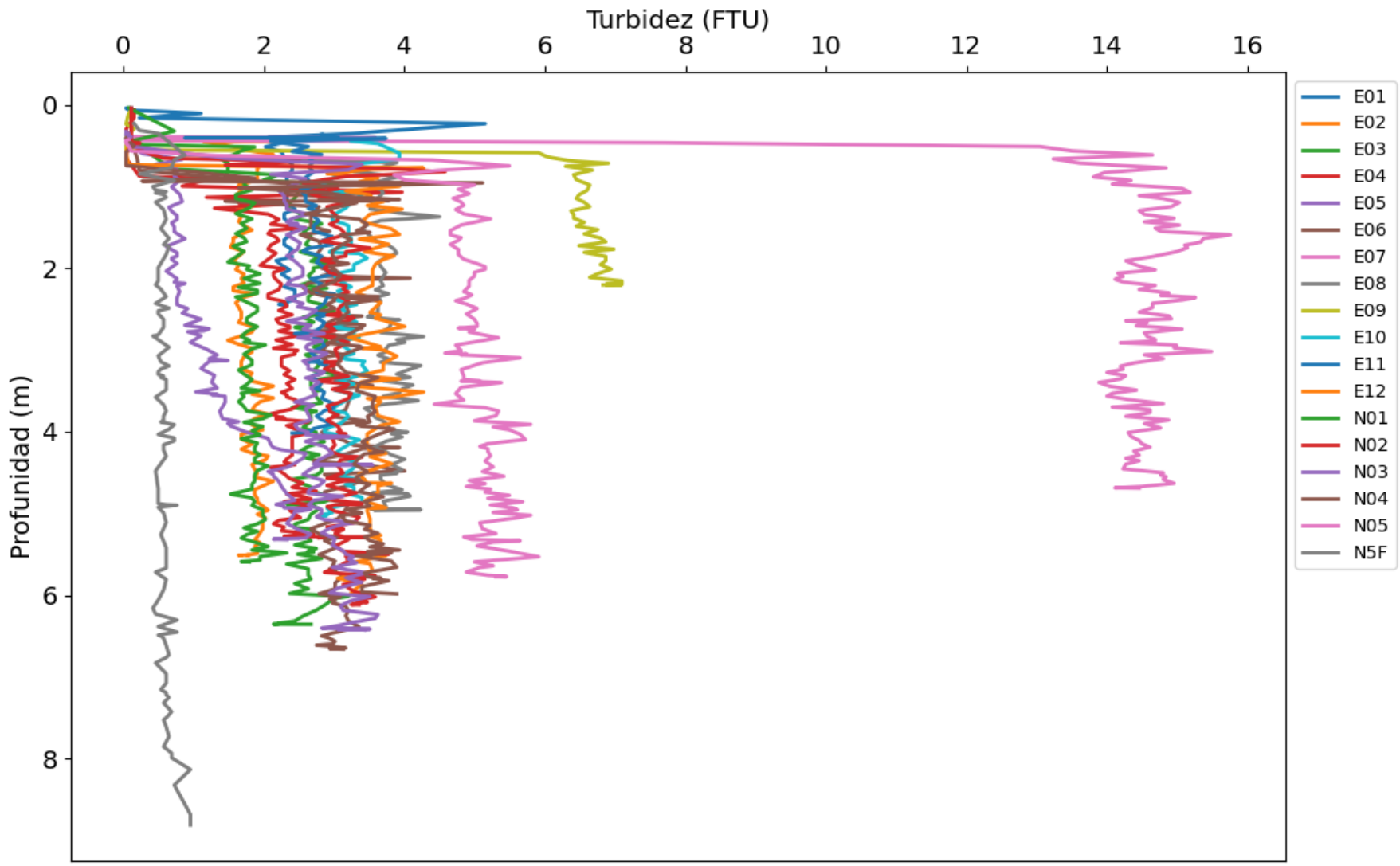

675000
680000
685000
690000
695000
700000
705000
710000
715000
4189000
4186000
4183000
4180000
4177000
4174000
4171000
4168000
4165000
E01
N01
E02
E03
E04
E05
N5F
N02
N03
E07
E06
E08
E12
N04
E09
E10
N05
E11
Oxigeno mg/L
CTD20211006_IMIDA
Oxi_20211006
Valor
5,1
4,8
3,5
Escala 1:50.000 (A3)
0 1.000 2.000 4.000 6.000 8.000
m
Sistema de Referencia Espacial:
European Terrestrial Reference System (ETRS89). Elipsoide: GRS 1980
Proyección:
Universal Transversa de Mercator (U.T.M.) Huso 30S
Puntos de control y nivel de oxigeno en el Mar Menor.
Fecha:6 de Octubre de 2021.
Fuente: IMIDA.

FICHA GENERAL DE MUESTREOS PARA OXÍGENO, TURBIDEZ, CLOROFILA Y TEMPERATURA **FECHA: 06-10-2021**

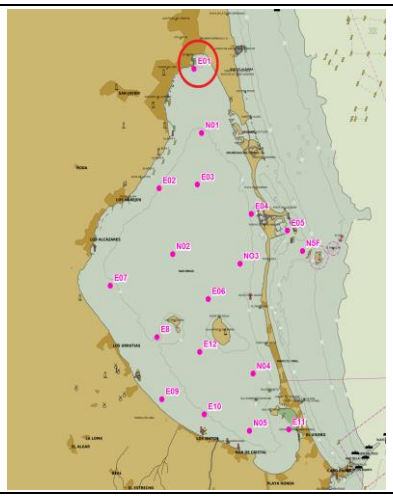


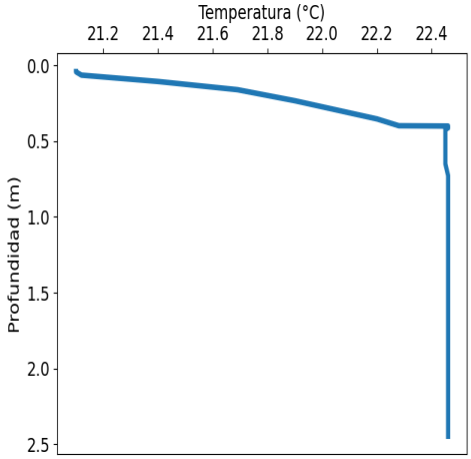

Clorofila a (mg/m3)
0
2
4
6
8
10
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

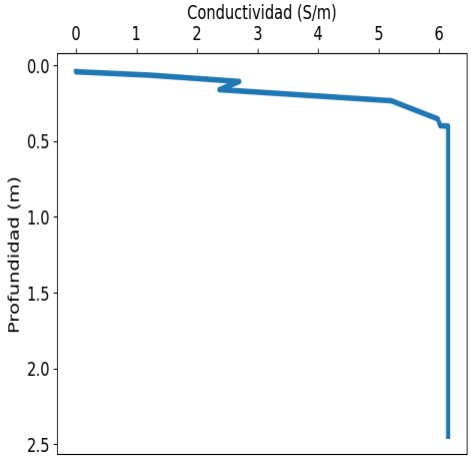

Temperatura (°C)
19
20
21
22
23
24
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

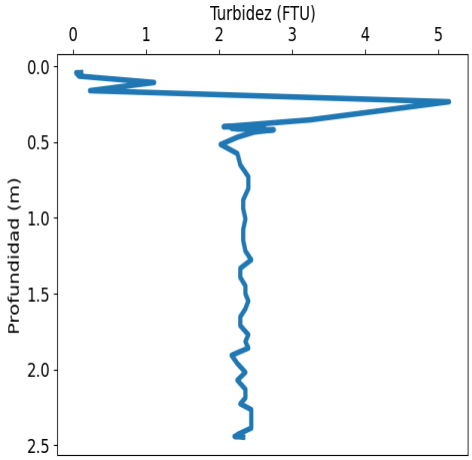

Turbidez (FTU)
0
2
4
6
8
10
12
14
16
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

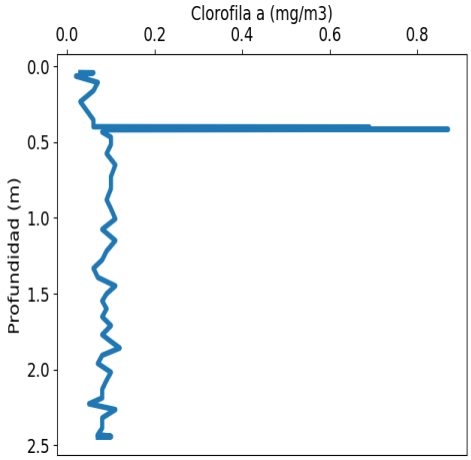
Nombre: CTD E01 - Punto 001 **Fecha: 06/10/2021** **Hora: 07:10:21**

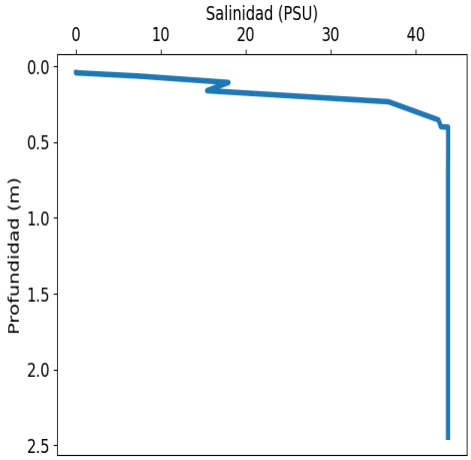


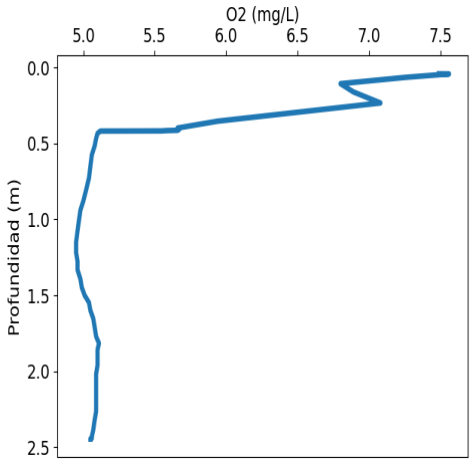


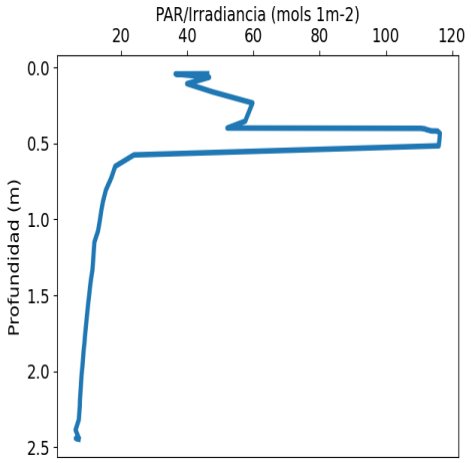












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.1	0.0	0.04	4.95	6.32	0.02	0.01
PROF (metros)	0.042	0.042	0.043	1.15	2.387	0.065	0.042
MÁXIMO	22.46	22.46	5.15	7.56	116.24	0.87	43.79
PROF (metros)	0.401	0.401	0.234	0.043	0.434	0.416	0.401

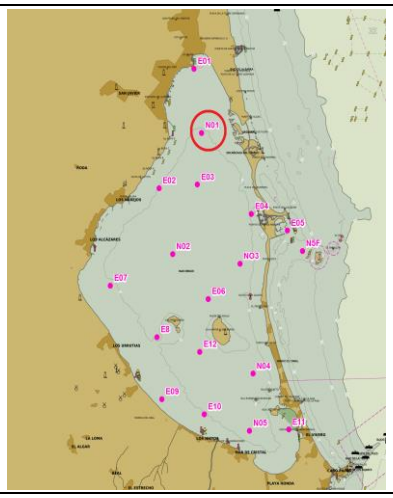
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E01 - Punto 001	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.17	5.08	2.07	5.79	67.82	0.22	35.99
1 - 2m	22.46	6.15	2.34	5.03	10.49	0.09	43.78
2 - 3m	22.46	6.15	2.33	5.08	7.31	0.08	43.78

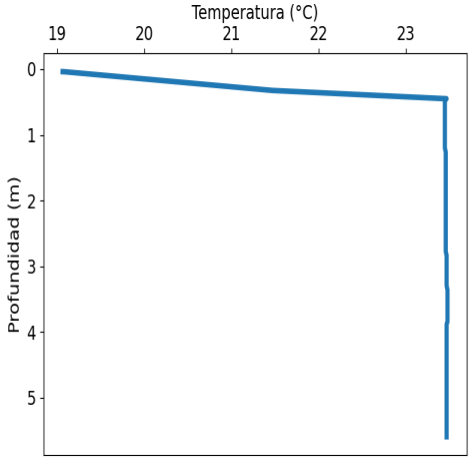
OBSERVACIONES GENERALES

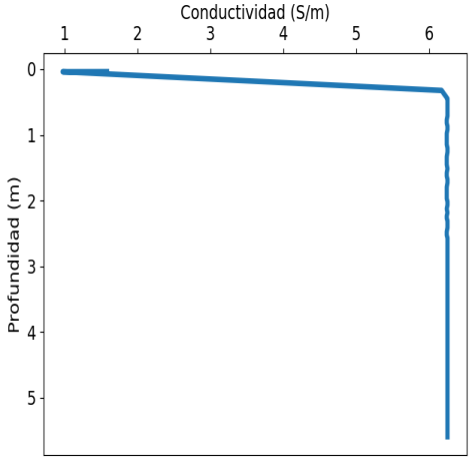
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.042	21.1	0.0	0.11	7.49	46.06	0.03	0.01
0.043	21.1	0.0	0.04	7.56	36.48	0.06	0.01
0.065	21.12	1.21	0.08	7.26	46.63	0.02	7.5
0.107	21.4	2.7	1.11	6.8	39.96	0.07	17.96
0.161	21.69	2.37	0.23	6.89	47.65	0.06	15.43
0.234	21.9	5.21	5.15	7.08	59.7	0.03	36.78
0.354	22.2	5.98	3.24	5.94	57.5	0.06	42.66
0.399	22.28	6.02	2.06	5.66	52.11	0.06	42.94
0.401	22.46	6.15	2.25	5.66	110.49	0.69	43.79
0.405	22.46	6.15	2.4	5.67	111.8	0.68	43.79
0.409	22.46	6.15	2.17	5.67	112.09	0.68	43.79
0.414	22.46	6.15	2.25	5.66	113.03	0.52	43.79
0.416	22.45	6.15	2.63	5.58	113.29	0.87	43.79
0.418	22.45	6.15	2.4	5.55	113.61	0.39	43.79
0.419	22.45	6.15	2.75	5.12	115.52	0.09	43.79
0.434	22.45	6.15	2.48	5.1	116.24	0.08	43.79
0.468	22.45	6.15	2.25	5.09	116.13	0.1	43.79
0.516	22.45	6.15	2.02	5.08	115.89	0.1	43.79
0.576	22.45	6.15	2.25	5.06	23.94	0.09	43.79
0.651	22.45	6.15	2.29	5.05	18.29	0.11	43.78
0.728	22.46	6.15	2.4	5.04	17.08	0.1	43.78
0.807	22.46	6.15	2.4	5.02	15.48	0.1	43.78
0.881	22.46	6.15	2.33	5.0	14.61	0.09	43.78
0.94	22.46	6.15	2.33	4.98	14.11	0.1	43.78
1.007	22.46	6.15	2.36	4.97	13.65	0.11	43.78
1.076	22.46	6.15	2.33	4.96	13.11	0.08	43.78
1.15	22.46	6.15	2.33	4.95	12.01	0.11	43.78
1.219	22.46	6.15	2.36	4.95	11.78	0.09	43.78
1.277	22.46	6.15	2.44	4.96	11.61	0.08	43.78
1.333	22.46	6.15	2.29	4.96	11.42	0.06	43.78
1.393	22.46	6.15	2.29	4.98	10.99	0.07	43.78
1.449	22.46	6.15	2.36	4.99	10.67	0.11	43.78
1.501	22.46	6.15	2.36	5.01	10.42	0.09	43.78
1.548	22.46	6.15	2.4	5.04	10.16	0.08	43.78
1.6	22.46	6.15	2.36	5.05	9.92	0.09	43.78
1.653	22.46	6.15	2.29	5.07	9.68	0.08	43.78
1.711	22.46	6.15	2.29	5.08	9.42	0.1	43.78
1.771	22.46	6.15	2.4	5.09	9.15	0.08	43.78
1.816	22.46	6.15	2.36	5.11	9.0	0.1	43.78

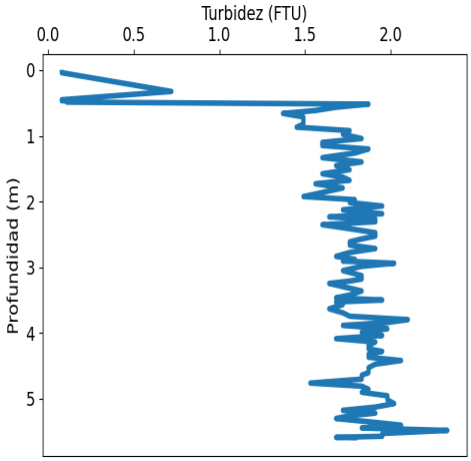
1.859	22.46	6.15	2.4	5.1	8.78	0.12	43.78
1.907	22.46	6.15	2.17	5.1	8.61	0.08	43.78
1.961	22.46	6.15	2.25	5.1	8.42	0.07	43.78
2.019	22.46	6.15	2.36	5.09	8.16	0.1	43.78
2.071	22.46	6.15	2.25	5.09	8.0	0.09	43.78
2.131	22.46	6.15	2.36	5.09	7.83	0.08	43.78
2.188	22.46	6.15	2.36	5.09	7.65	0.08	43.78
2.227	22.46	6.15	2.29	5.09	7.61	0.05	43.78
2.265	22.46	6.15	2.44	5.09	7.48	0.11	43.78
2.32	22.46	6.15	2.44	5.08	7.3	0.08	43.78
2.387	22.46	6.15	2.44	5.07	6.32	0.08	43.78
2.43	22.46	6.15	2.25	5.06	7.12	0.07	43.78
2.441	22.46	6.15	2.25	5.06	6.98	0.1	43.78
2.442	22.46	6.15	2.21	5.06	6.39	0.07	43.78
2.445	22.46	6.15	2.29	5.05	6.97	0.1	43.78
2.447	22.46	6.15	2.33	5.05	7.27	0.07	43.78

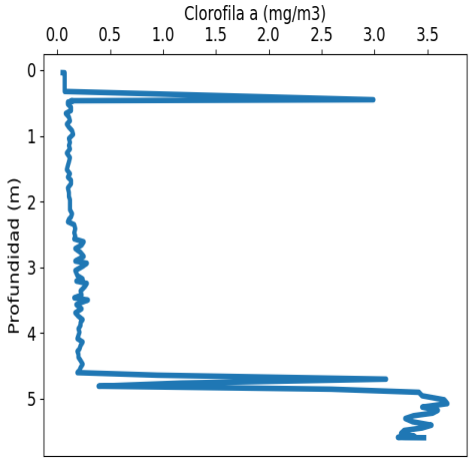
Nombre: CTD N01 - Punto 002 **Fecha: 06/10/2021** **Hora: 07:10:49**

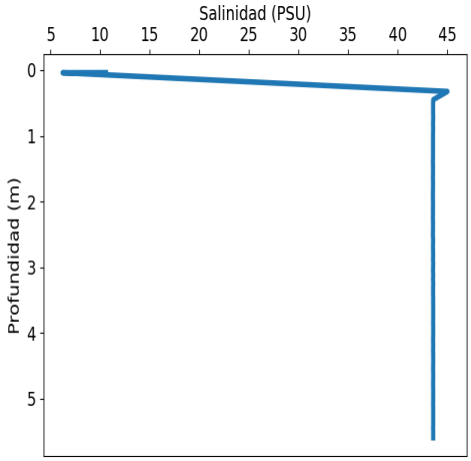


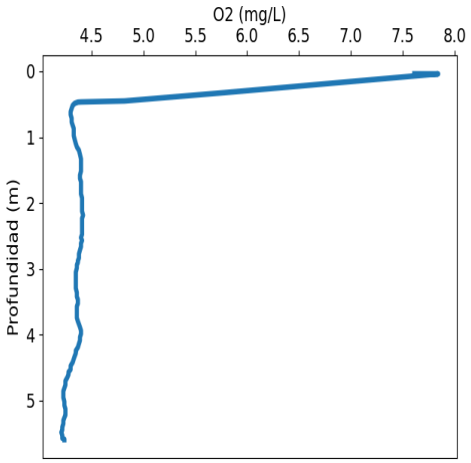


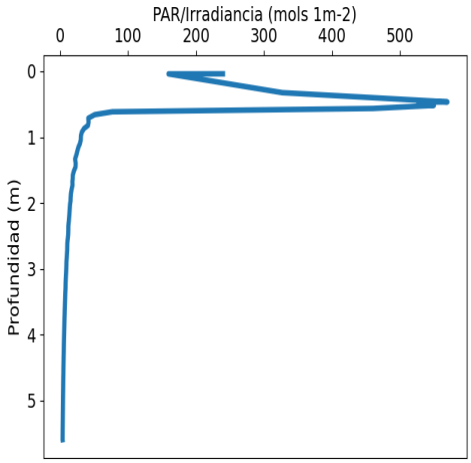












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.06	0.97	0.08	4.21	4.05	0.05	6.2
PROF (metros)	0.039	0.04	0.039	5.481	5.59	0.039	0.04
MÁXIMO	23.48	23.48	2.33	7.84	569.62	3.69	45.02
PROF (metros)	3.36	0.451	5.481	0.04	0.466	5.073	0.325

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N01 - Punto 002	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.82	5.66	1.01	4.84	250.79	0.28	39.52
1 - 2m	23.46	6.24	1.69	4.39	21.65	0.11	43.56
2 - 3m	23.46	6.25	1.81	4.4	11.93	0.18	43.56
3 - 4m	23.47	6.25	1.79	4.37	7.62	0.22	43.57
4 - 5m	23.47	6.25	1.86	4.3	5.39	0.89	43.57
5 - 6m	23.47	6.25	1.89	4.23	4.29	3.43	43.58

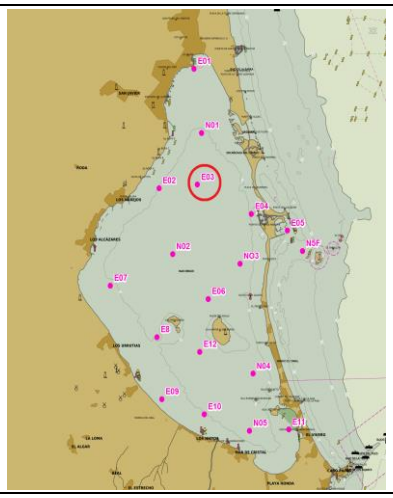
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 5 - 6m con los valores 3.43 respectivamente

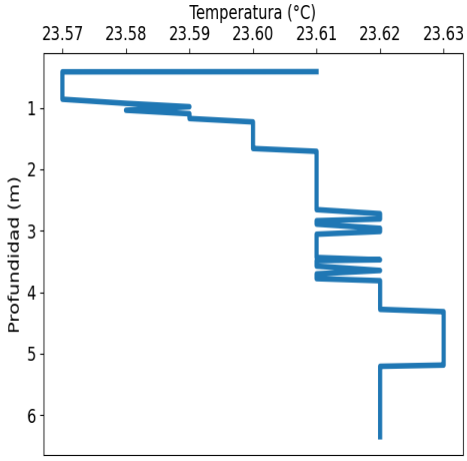
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.039	19.06	1.58	0.08	7.61	239.79	0.05	10.58
0.04	19.08	0.97	0.08	7.84	159.65	0.07	6.2
0.325	21.47	6.17	0.72	5.78	327.04	0.07	45.02
0.451	23.47	6.25	0.08	4.82	546.97	2.99	43.58
0.466	23.45	6.25	0.08	4.4	569.62	0.13	43.58
0.469	23.45	6.25	0.11	4.37	526.57	0.15	43.58
0.487	23.45	6.25	0.11	4.34	531.11	0.1	43.57
0.518	23.45	6.25	1.87	4.32	549.77	0.1	43.57
0.565	23.45	6.25	1.68	4.31	459.91	0.13	43.57
0.615	23.45	6.25	1.56	4.3	77.16	0.13	43.57
0.659	23.45	6.25	1.37	4.3	51.21	0.08	43.57
0.713	23.45	6.25	1.49	4.31	41.8	0.11	43.58
0.772	23.45	6.24	1.49	4.31	42.26	0.12	43.57
0.822	23.45	6.24	1.49	4.32	41.4	0.09	43.56
0.868	23.45	6.25	1.45	4.33	35.7	0.11	43.57
0.921	23.45	6.25	1.76	4.33	32.44	0.14	43.57
0.977	23.45	6.24	1.72	4.33	31.04	0.15	43.56
1.041	23.45	6.24	1.83	4.34	30.8	0.11	43.56
1.1	23.45	6.24	1.6	4.35	29.5	0.12	43.56
1.148	23.45	6.24	1.6	4.36	27.47	0.11	43.56
1.2	23.45	6.25	1.87	4.38	26.0	0.12	43.56
1.262	23.46	6.25	1.79	4.39	24.54	0.09	43.56
1.332	23.46	6.24	1.6	4.4	22.45	0.12	43.56
1.397	23.46	6.24	1.83	4.4	23.29	0.11	43.55
1.453	23.46	6.24	1.68	4.4	23.08	0.1	43.56
1.515	23.46	6.25	1.76	4.4	20.64	0.09	43.56
1.577	23.46	6.24	1.6	4.39	19.08	0.12	43.56
1.628	23.46	6.24	1.72	4.39	18.96	0.1	43.55
1.676	23.46	6.25	1.76	4.4	18.49	0.13	43.56
1.729	23.46	6.25	1.56	4.4	18.63	0.13	43.56
1.793	23.46	6.24	1.72	4.4	17.32	0.1	43.56
1.862	23.46	6.24	1.6	4.4	16.27	0.11	43.55
1.924	23.46	6.24	1.49	4.41	15.86	0.11	43.55
1.971	23.46	6.24	1.79	4.41	15.71	0.12	43.55
2.015	23.46	6.25	1.76	4.41	15.06	0.12	43.56

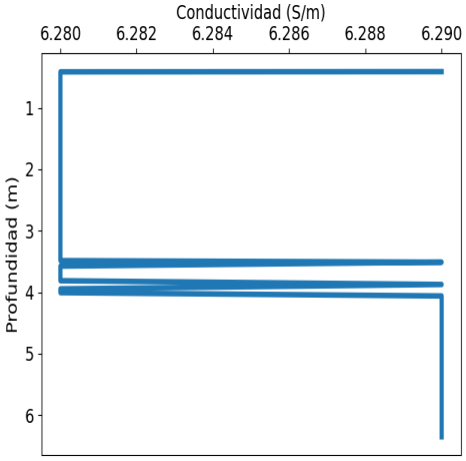
2.068	23.46	6.25	1.95	4.41	14.67	0.12	43.56
2.125	23.46	6.24	1.72	4.41	14.32	0.12	43.55
2.185	23.46	6.25	1.95	4.42	13.96	0.14	43.56
2.233	23.46	6.24	1.64	4.41	13.56	0.13	43.55
2.27	23.46	6.24	1.91	4.41	13.29	0.11	43.55
2.307	23.46	6.25	1.91	4.41	12.89	0.1	43.56
2.352	23.46	6.25	1.6	4.41	12.54	0.16	43.56
2.413	23.46	6.25	1.76	4.41	12.48	0.17	43.56
2.474	23.46	6.24	1.91	4.41	12.3	0.16	43.55
2.526	23.46	6.24	1.91	4.4	11.84	0.17	43.55
2.568	23.46	6.25	1.83	4.41	11.37	0.16	43.57
2.612	23.46	6.25	1.76	4.4	11.03	0.25	43.57
2.662	23.46	6.25	1.76	4.4	10.91	0.23	43.56
2.715	23.46	6.25	1.91	4.39	10.83	0.17	43.56
2.774	23.46	6.25	1.76	4.38	10.47	0.22	43.57
2.834	23.47	6.25	1.68	4.38	10.15	0.25	43.57
2.878	23.47	6.25	1.79	4.37	9.85	0.2	43.56
2.905	23.47	6.25	1.72	4.37	9.73	0.17	43.57
2.938	23.47	6.25	2.02	4.36	9.67	0.28	43.58
2.985	23.47	6.25	1.83	4.36	9.54	0.24	43.57
3.05	23.47	6.25	1.72	4.35	9.27	0.17	43.56
3.126	23.47	6.25	1.83	4.35	8.88	0.19	43.58
3.178	23.47	6.25	1.83	4.35	8.65	0.24	43.56
3.209	23.47	6.25	1.76	4.35	8.53	0.18	43.57
3.245	23.47	6.25	1.64	4.35	8.45	0.28	43.58
3.294	23.47	6.25	1.72	4.35	8.37	0.26	43.57
3.36	23.48	6.25	1.83	4.36	8.05	0.22	43.57
3.422	23.48	6.25	1.76	4.36	7.87	0.23	43.57
3.464	23.48	6.25	1.68	4.37	7.74	0.16	43.58
3.498	23.48	6.25	1.95	4.37	7.63	0.29	43.58
3.527	23.48	6.25	1.68	4.37	7.54	0.24	43.57
3.568	23.48	6.25	1.72	4.36	7.41	0.18	43.58
3.631	23.48	6.25	1.64	4.36	7.2	0.23	43.58
3.692	23.48	6.25	1.72	4.36	7.06	0.17	43.58
3.744	23.48	6.25	1.76	4.36	6.9	0.2	43.58
3.796	23.48	6.25	2.1	4.37	6.77	0.24	43.58
3.84	23.48	6.25	1.98	4.38	6.68	0.22	43.57
3.884	23.47	6.25	1.72	4.39	6.58	0.22	43.58
3.936	23.47	6.25	1.98	4.4	6.45	0.2	43.58
3.987	23.47	6.25	1.83	4.4	6.34	0.21	43.58
4.037	23.47	6.25	1.95	4.39	6.2	0.2	43.58
4.085	23.47	6.25	1.68	4.39	6.09	0.19	43.57
4.136	23.47	6.25	1.91	4.38	5.98	0.24	43.57
4.191	23.47	6.25	1.87	4.37	5.88	0.22	43.58
4.241	23.47	6.25	1.87	4.35	5.82	0.21	43.57
4.279	23.47	6.25	1.95	4.35	5.74	0.19	43.57
4.322	23.47	6.25	1.87	4.34	5.63	0.2	43.58
4.368	23.47	6.25	1.87	4.33	5.56	0.2	43.58
4.418	23.47	6.25	2.06	4.32	5.47	0.22	43.58
4.473	23.47	6.25	1.91	4.3	5.37	0.24	43.58
4.526	23.47	6.25	1.87	4.3	5.28	0.22	43.57
4.566	23.47	6.25	1.87	4.28	5.25	0.21	43.57
4.602	23.47	6.25	1.87	4.28	5.21	0.19	43.58
4.641	23.47	6.25	1.83	4.27	5.11	0.95	43.58
4.701	23.47	6.25	1.83	4.25	5.03	3.11	43.58
4.761	23.47	6.25	1.53	4.25	4.96	1.17	43.57
4.808	23.47	6.25	1.83	4.24	4.9	0.39	43.57
4.854	23.47	6.25	1.87	4.23	4.84	2.59	43.58

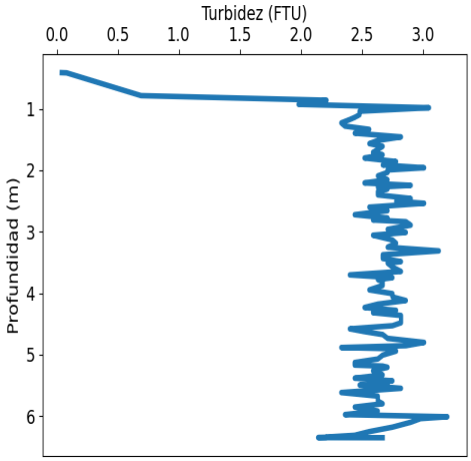
4.901	23.47	6.25	1.83	4.23	4.77	3.42	43.58
4.954	23.47	6.25	1.98	4.23	4.69	3.45	43.58
5.015	23.47	6.25	1.98	4.24	4.64	3.66	43.58
5.073	23.47	6.25	2.02	4.24	4.57	3.69	43.57
5.126	23.47	6.25	1.91	4.25	4.52	3.45	43.58
5.175	23.47	6.25	1.72	4.25	4.46	3.6	43.58
5.218	23.47	6.25	1.91	4.25	4.41	3.55	43.58
5.257	23.47	6.25	1.76	4.24	4.39	3.37	43.58
5.3	23.47	6.25	1.68	4.23	4.34	3.29	43.58
5.349	23.47	6.25	1.87	4.23	4.29	3.36	43.58
5.401	23.47	6.25	2.06	4.22	4.23	3.54	43.58
5.444	23.47	6.25	1.83	4.22	4.2	3.45	43.57
5.481	23.47	6.25	2.33	4.21	4.17	3.28	43.58
5.527	23.47	6.25	1.95	4.22	4.12	3.25	43.58
5.57	23.47	6.25	1.95	4.22	4.09	3.38	43.58
5.587	23.47	6.25	1.68	4.24	4.06	3.22	43.58
5.59	23.47	6.25	1.76	4.24	4.05	3.29	43.58
5.592	23.47	6.25	1.79	4.24	4.07	3.47	43.58

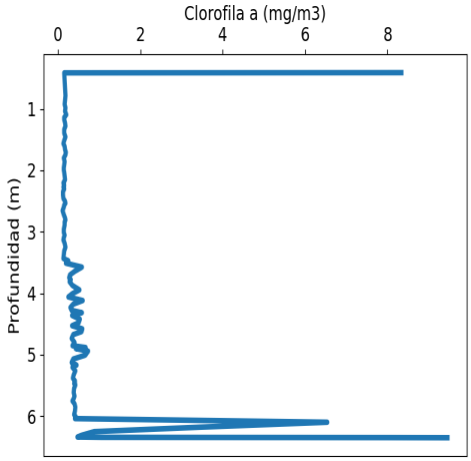
Nombre: CTD E03 - Punto 003 **Fecha: 06/10/2021** **Hora: 07:10:37**

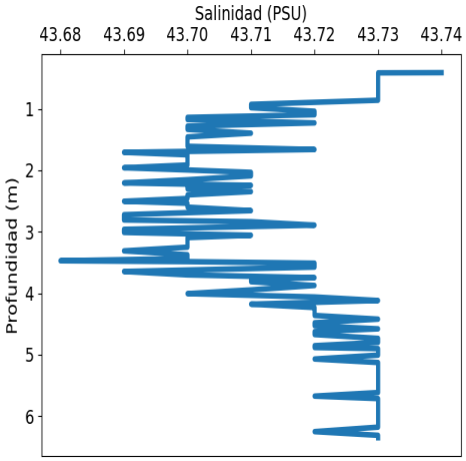


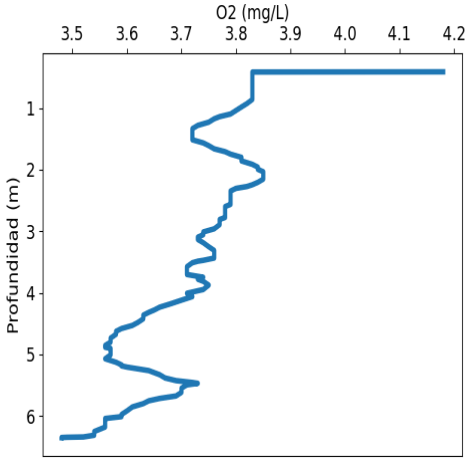


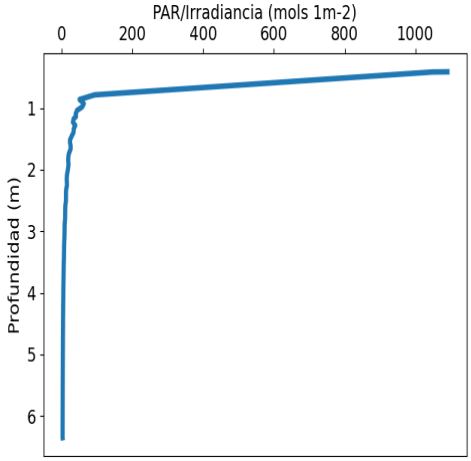












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.57	6.28	0.04	3.48	2.91	0.11	43.68
PROF (metros)	0.414	0.414	0.411	6.351	6.342	2.657	3.473
MÁXIMO	23.63	23.63	3.2	4.18	1090.3	9.46	43.74
PROF (metros)	4.318	0.411	6.012	0.411	0.411	6.353	0.411

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E03 - Punto 003	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.58	6.28	1.34	3.89	400.52	1.53	43.72
1 - 2m	23.6	6.28	2.59	3.77	28.13	0.16	43.7
2 - 3m	23.61	6.28	2.72	3.8	12.21	0.15	43.7
3 - 4m	23.61	6.28	2.72	3.74	6.62	0.25	43.7
4 - 5m	23.62	6.29	2.7	3.62	4.26	0.45	43.72
5 - 6m	23.62	6.29	2.59	3.64	3.38	0.4	43.73
6 - 7m	23.62	6.29	2.61	3.53	3.03	3.13	43.73

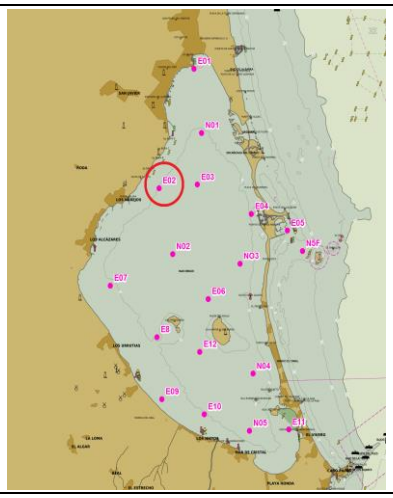
OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 0 - 1m, 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 3.89, 3.77, 3.8, 3.74, 3.62, 3.64, 3.53 respectivamente. CLOROFILA elevada en la(s) columna(s) de agua 6 - 7m con los valores 3.13 respectivamente

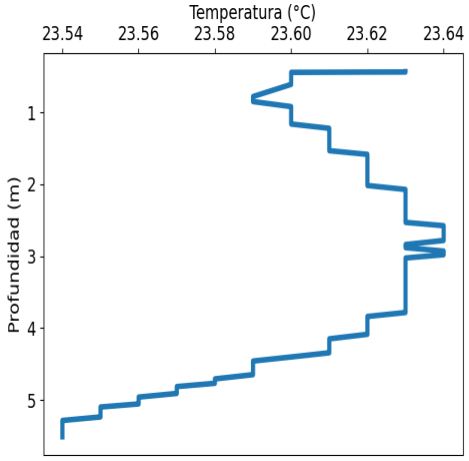
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.411	23.61	6.29	0.04	4.18	1090.3	8.34	43.74
0.414	23.57	6.28	0.08	3.83	1047.4	0.15	43.73
0.785	23.57	6.28	0.69	3.83	93.62	0.18	43.73
0.86	23.57	6.28	2.21	3.83	50.75	0.17	43.73
0.927	23.58	6.28	1.98	3.82	63.08	0.16	43.71
0.982	23.59	6.28	3.05	3.81	58.0	0.18	43.71
1.039	23.58	6.28	2.48	3.8	43.45	0.17	43.72
1.096	23.59	6.28	2.48	3.79	39.83	0.2	43.72
1.139	23.59	6.28	2.44	3.77	40.85	0.15	43.7
1.174	23.59	6.28	2.4	3.76	34.14	0.15	43.7
1.229	23.6	6.28	2.33	3.75	32.07	0.17	43.72
1.281	23.6	6.28	2.36	3.73	38.85	0.18	43.7
1.334	23.6	6.28	2.56	3.72	34.56	0.15	43.7
1.396	23.6	6.28	2.44	3.72	33.76	0.15	43.71
1.457	23.6	6.28	2.82	3.72	28.56	0.18	43.7
1.515	23.6	6.28	2.63	3.72	23.9	0.15	43.7
1.566	23.6	6.28	2.56	3.74	23.99	0.13	43.7
1.61	23.6	6.28	2.67	3.75	25.64	0.16	43.7
1.662	23.6	6.28	2.63	3.76	25.72	0.17	43.72
1.708	23.61	6.28	2.59	3.78	22.78	0.19	43.69
1.748	23.61	6.28	2.67	3.79	20.25	0.18	43.7
1.8	23.61	6.28	2.52	3.81	19.11	0.14	43.7
1.858	23.61	6.28	2.78	3.81	18.75	0.16	43.7
1.914	23.61	6.28	2.67	3.83	19.69	0.15	43.7
1.959	23.61	6.28	3.01	3.84	18.81	0.14	43.69
1.995	23.61	6.28	2.71	3.84	17.96	0.14	43.7
2.034	23.61	6.28	2.71	3.85	16.86	0.15	43.71
2.091	23.61	6.28	2.63	3.85	15.24	0.16	43.71
2.154	23.61	6.28	2.71	3.85	14.6	0.17	43.7
2.206	23.61	6.28	2.52	3.84	15.06	0.13	43.69
2.245	23.61	6.28	2.9	3.83	15.22	0.15	43.71

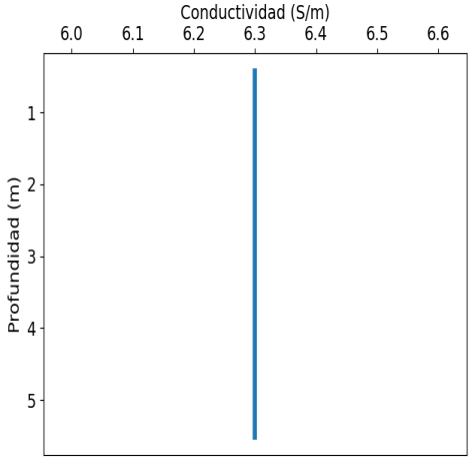
2.274	23.61	6.28	2.63	3.82	14.83	0.13	43.7
2.304	23.61	6.28	2.71	3.8	13.48	0.15	43.7
2.347	23.61	6.28	2.63	3.79	12.7	0.12	43.71
2.401	23.61	6.28	2.63	3.79	12.54	0.12	43.7
2.459	23.61	6.28	2.9	3.79	12.51	0.13	43.7
2.504	23.61	6.28	2.78	3.79	12.45	0.17	43.69
2.537	23.61	6.28	3.01	3.79	11.8	0.18	43.7
2.564	23.61	6.28	2.82	3.79	11.12	0.15	43.7
2.6	23.61	6.28	2.56	3.78	10.66	0.14	43.7
2.657	23.61	6.28	2.71	3.78	10.35	0.11	43.71
2.723	23.62	6.28	2.44	3.78	10.23	0.14	43.69
2.777	23.62	6.28	2.71	3.78	10.06	0.17	43.69
2.809	23.62	6.28	2.59	3.77	9.92	0.18	43.69
2.837	23.61	6.28	2.86	3.77	9.44	0.16	43.71
2.893	23.61	6.28	2.9	3.77	8.79	0.16	43.72
2.961	23.62	6.28	2.71	3.76	8.56	0.14	43.69
3.012	23.62	6.28	2.86	3.74	8.52	0.14	43.69
3.057	23.61	6.28	2.59	3.74	8.35	0.16	43.71
3.096	23.61	6.28	2.67	3.73	8.21	0.14	43.7
3.135	23.61	6.28	2.75	3.73	7.87	0.13	43.7
3.187	23.61	6.28	2.78	3.74	7.47	0.16	43.7
3.252	23.61	6.28	2.71	3.75	7.2	0.18	43.7
3.312	23.61	6.28	3.13	3.76	7.02	0.15	43.69
3.375	23.61	6.28	2.67	3.76	6.81	0.14	43.7
3.436	23.61	6.28	2.67	3.76	6.68	0.13	43.7
3.473	23.62	6.28	2.78	3.74	6.59	0.25	43.68
3.487	23.61	6.28	2.82	3.73	6.52	0.22	43.7
3.512	23.61	6.29	2.71	3.72	6.27	0.19	43.72
3.576	23.61	6.28	2.75	3.71	6.05	0.58	43.72
3.647	23.62	6.28	2.82	3.71	5.92	0.4	43.69
3.703	23.61	6.28	2.4	3.71	5.78	0.29	43.7
3.748	23.61	6.28	2.75	3.74	5.68	0.27	43.72
3.78	23.61	6.28	2.63	3.73	5.58	0.31	43.71
3.814	23.62	6.28	2.67	3.74	5.48	0.28	43.71
3.875	23.62	6.29	2.67	3.75	5.27	0.35	43.72
3.947	23.62	6.28	2.56	3.74	5.11	0.52	43.71
4.008	23.62	6.28	2.75	3.71	5.02	0.35	43.7
4.062	23.62	6.29	2.75	3.72	4.91	0.25	43.72
4.12	23.62	6.29	2.86	3.7	4.79	0.6	43.73
4.179	23.62	6.29	2.63	3.68	4.7	0.37	43.71
4.234	23.62	6.29	2.52	3.66	4.6	0.3	43.72
4.28	23.62	6.29	2.78	3.65	4.54	0.33	43.72
4.318	23.63	6.29	2.59	3.64	4.48	0.58	43.72
4.363	23.63	6.29	2.82	3.63	4.38	0.34	43.72
4.423	23.63	6.29	2.82	3.63	4.29	0.53	43.73
4.482	23.63	6.29	2.82	3.62	4.24	0.5	43.72
4.53	23.63	6.29	2.75	3.61	4.19	0.34	43.72
4.581	23.63	6.29	2.4	3.59	4.12	0.59	43.73
4.626	23.63	6.29	2.52	3.58	4.04	0.57	43.72
4.674	23.63	6.29	2.67	3.58	3.99	0.37	43.72
4.736	23.63	6.29	2.71	3.57	3.91	0.33	43.73
4.802	23.63	6.29	3.01	3.57	3.87	0.4	43.73
4.855	23.63	6.29	2.86	3.56	3.83	0.35	43.72
4.885	23.63	6.29	2.33	3.56	3.81	0.67	43.72
4.903	23.63	6.29	2.71	3.57	3.78	0.43	43.73
4.943	23.63	6.29	2.78	3.57	3.73	0.73	43.73
5.009	23.63	6.29	2.67	3.57	3.66	0.66	43.73
5.072	23.63	6.29	2.63	3.56	3.64	0.37	43.72

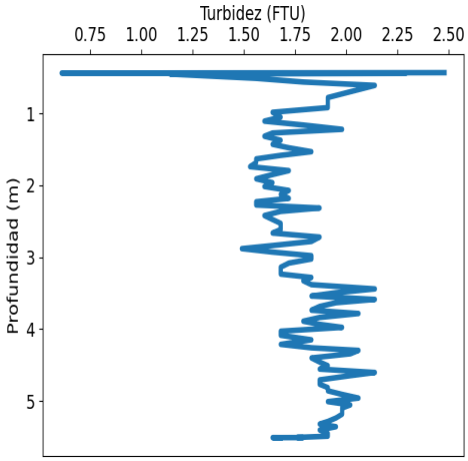
5.129	23.63	6.29	2.44	3.58	3.59	0.33	43.73
5.171	23.63	6.29	2.44	3.59	3.57	0.45	43.73
5.187	23.63	6.29	2.67	3.59	3.56	0.36	43.73
5.207	23.62	6.29	2.71	3.6	3.53	0.35	43.73
5.264	23.62	6.29	2.59	3.64	3.48	0.42	43.73
5.331	23.62	6.29	2.67	3.66	3.44	0.38	43.73
5.384	23.62	6.29	2.44	3.67	3.42	0.36	43.73
5.427	23.62	6.29	2.75	3.69	3.39	0.41	43.73
5.457	23.62	6.29	2.63	3.72	3.37	0.41	43.73
5.471	23.62	6.29	2.71	3.73	3.37	0.39	43.73
5.496	23.62	6.29	2.48	3.71	3.34	0.42	43.73
5.549	23.62	6.29	2.82	3.7	3.31	0.39	43.73
5.618	23.62	6.29	2.33	3.7	3.28	0.38	43.73
5.676	23.62	6.29	2.63	3.69	3.25	0.4	43.72
5.716	23.62	6.29	2.63	3.66	3.24	0.38	43.73
5.755	23.62	6.29	2.63	3.64	3.22	0.35	43.73
5.8	23.62	6.29	2.67	3.63	3.2	0.4	43.73
5.854	23.62	6.29	2.44	3.61	3.17	0.42	43.73
5.919	23.62	6.29	2.63	3.6	3.15	0.41	43.73
5.977	23.62	6.29	2.36	3.59	3.13	0.39	43.73
6.012	23.62	6.29	3.2	3.59	3.12	0.43	43.73
6.042	23.62	6.29	2.98	3.56	3.1	0.41	43.73
6.101	23.62	6.29	2.9	3.56	3.08	6.54	43.73
6.181	23.62	6.29	2.75	3.56	3.04	3.47	43.73
6.254	23.62	6.29	2.56	3.54	3.03	0.88	43.72
6.314	23.62	6.29	2.44	3.54	3.0	0.57	43.73
6.342	23.62	6.29	2.21	3.52	2.91	0.47	43.73
6.347	23.62	6.29	2.21	3.49	3.01	1.06	43.73
6.351	23.62	6.29	2.14	3.48	2.97	8.04	43.73
6.353	23.62	6.29	2.67	3.48	3.01	9.46	43.73

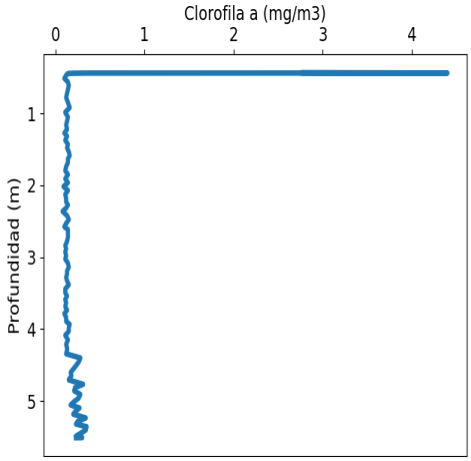
Nombre: CTD E02 - Punto 004 **Fecha: 06/10/2021** **Hora: 07:10:01**

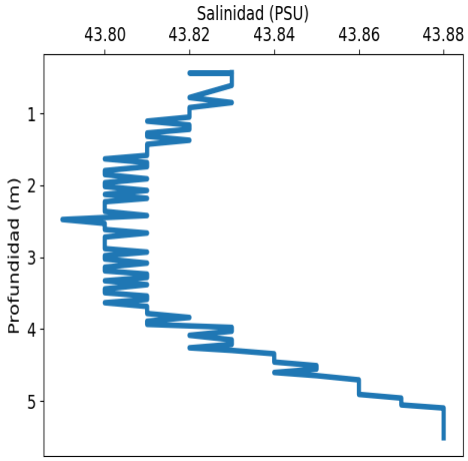


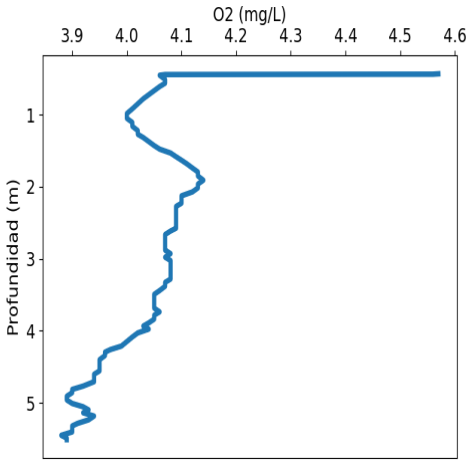


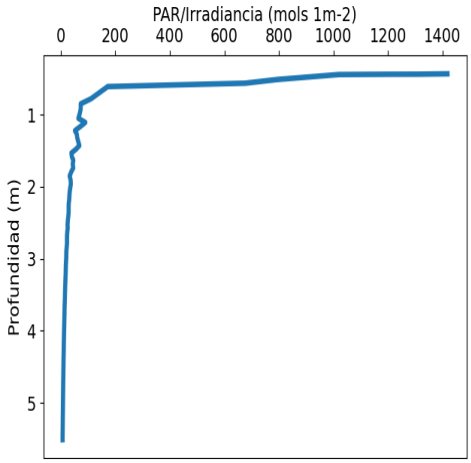












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.54	6.3	0.61	3.88	6.64	0.08	43.79
PROF (metros)	5.284	0.434	0.44	5.45	5.509	2.363	2.476
MÁXIMO	23.64	23.64	2.48	4.57	1417.7	4.4	43.88
PROF (metros)	2.576	0.434	0.434	0.434	0.434	0.439	5.097

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E02 - Punto 004	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.6	6.3	1.68	4.16	658.94	0.72	43.83
1 - 2m	23.61	6.3	1.67	4.07	52.54	0.13	43.81
2 - 3m	23.63	6.3	1.68	4.09	26.25	0.12	43.8
3 - 4m	23.63	6.3	1.87	4.06	15.49	0.13	43.81
4 - 5m	23.59	6.3	1.9	3.95	9.9	0.19	43.84
5 - 6m	23.55	6.3	1.88	3.91	7.2	0.26	43.88

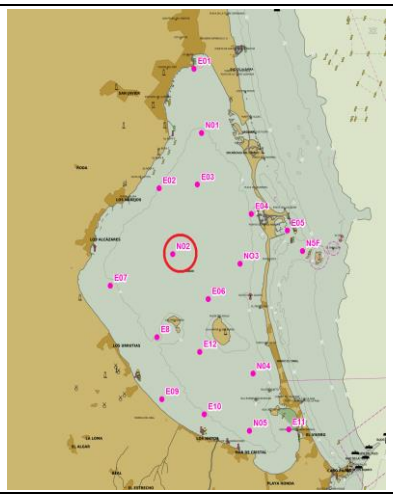
OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 4 - 5m, 5 - 6m con los valores 3.95, 3.91 respectivamente.

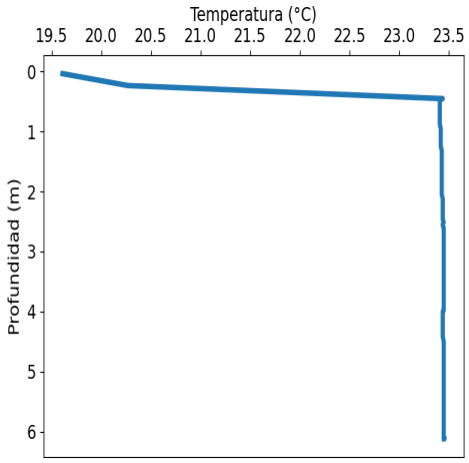
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.434	23.63	6.3	2.48	4.57	1417.7	2.78	43.83
0.439	23.63	6.3	0.76	4.56	1312.1	4.4	43.83
0.44	23.62	6.3	0.61	4.42	1202.0	0.31	43.82
0.444	23.6	6.3	2.29	4.07	1019.9	0.15	43.83
0.454	23.6	6.3	1.14	4.06	986.38	0.13	43.83
0.513	23.6	6.3	1.56	4.07	793.64	0.1	43.83
0.564	23.6	6.3	1.79	4.07	676.51	0.14	43.83
0.611	23.6	6.3	2.14	4.06	172.1	0.15	43.83
0.78	23.59	6.3	1.91	4.03	110.95	0.12	43.82
0.85	23.59	6.3	1.91	4.02	73.26	0.14	43.83
0.92	23.6	6.3	1.91	4.01	73.17	0.16	43.82
0.985	23.6	6.3	1.64	4.0	69.54	0.11	43.82
1.052	23.6	6.3	1.68	4.0	64.53	0.14	43.82
1.108	23.6	6.3	1.6	4.01	90.0	0.13	43.81
1.162	23.6	6.3	1.79	4.01	72.75	0.12	43.82
1.222	23.61	6.3	1.98	4.02	52.02	0.13	43.82
1.273	23.61	6.3	1.64	4.02	59.01	0.1	43.81
1.318	23.61	6.3	1.6	4.03	60.14	0.13	43.81
1.374	23.61	6.3	1.68	4.04	64.16	0.11	43.82
1.43	23.61	6.3	1.64	4.05	68.02	0.14	43.81
1.479	23.61	6.3	1.72	4.06	56.06	0.13	43.81
1.533	23.61	6.3	1.83	4.08	38.91	0.15	43.81
1.584	23.62	6.3	1.68	4.09	40.81	0.16	43.81
1.633	23.62	6.3	1.56	4.1	45.89	0.14	43.8
1.684	23.62	6.3	1.56	4.11	43.98	0.14	43.81
1.741	23.62	6.3	1.53	4.12	45.52	0.12	43.81
1.796	23.62	6.3	1.72	4.13	38.19	0.11	43.8
1.851	23.62	6.3	1.64	4.13	32.66	0.14	43.8
1.91	23.62	6.3	1.56	4.14	36.16	0.11	43.81
1.964	23.62	6.3	1.64	4.13	36.86	0.14	43.8
2.017	23.62	6.3	1.6	4.13	34.6	0.09	43.8
2.072	23.63	6.3	1.72	4.12	32.69	0.14	43.81
2.127	23.63	6.3	1.68	4.1	31.67	0.11	43.8
2.182	23.63	6.3	1.72	4.1	30.87	0.12	43.81

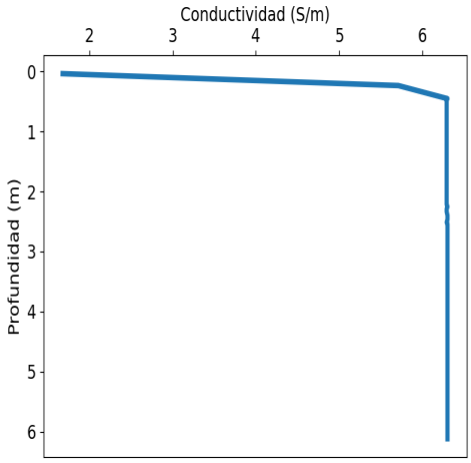
2.229	23.63	6.3	1.56	4.1	29.35	0.12	43.8
2.274	23.63	6.3	1.56	4.09	28.84	0.14	43.8
2.316	23.63	6.3	1.87	4.09	28.96	0.12	43.8
2.363	23.63	6.3	1.68	4.09	28.78	0.08	43.8
2.421	23.63	6.3	1.6	4.09	27.36	0.13	43.81
2.476	23.63	6.3	1.64	4.09	25.8	0.15	43.79
2.53	23.63	6.3	1.68	4.09	24.84	0.12	43.8
2.576	23.64	6.3	1.68	4.09	25.37	0.1	43.8
2.615	23.64	6.3	1.68	4.08	24.23	0.14	43.8
2.664	23.64	6.3	1.64	4.07	23.06	0.14	43.81
2.72	23.64	6.3	1.87	4.07	22.76	0.14	43.8
2.781	23.64	6.3	1.83	4.07	22.88	0.13	43.8
2.838	23.63	6.3	1.64	4.07	21.79	0.11	43.8
2.881	23.63	6.3	1.49	4.07	20.79	0.12	43.8
2.929	23.64	6.3	1.64	4.08	20.25	0.11	43.81
2.979	23.64	6.3	1.83	4.07	20.2	0.12	43.8
3.025	23.63	6.3	1.83	4.08	19.58	0.11	43.8
3.082	23.63	6.3	1.72	4.08	18.78	0.14	43.81
3.139	23.63	6.3	1.68	4.08	18.34	0.15	43.8
3.19	23.63	6.3	1.68	4.08	18.04	0.13	43.8
3.235	23.63	6.3	1.68	4.08	17.68	0.13	43.81
3.282	23.63	6.3	1.83	4.08	17.09	0.12	43.81
3.328	23.63	6.3	1.79	4.07	16.72	0.13	43.8
3.382	23.63	6.3	1.83	4.07	16.23	0.15	43.81
3.441	23.63	6.3	2.14	4.06	15.74	0.11	43.8
3.494	23.63	6.3	1.95	4.05	15.37	0.11	43.8
3.54	23.63	6.3	1.83	4.05	15.12	0.13	43.81
3.587	23.63	6.3	2.14	4.05	14.84	0.11	43.81
3.633	23.63	6.3	1.95	4.05	14.33	0.12	43.8
3.685	23.63	6.3	1.87	4.05	13.95	0.11	43.81
3.737	23.63	6.3	1.83	4.06	13.7	0.13	43.81
3.783	23.63	6.3	2.06	4.05	13.5	0.1	43.81
3.838	23.62	6.3	1.87	4.05	13.09	0.12	43.82
3.89	23.62	6.3	1.79	4.04	12.79	0.12	43.81
3.934	23.62	6.3	1.87	4.03	12.57	0.16	43.81
3.976	23.62	6.3	1.98	4.04	12.26	0.15	43.83
4.029	23.62	6.3	1.68	4.02	11.96	0.15	43.83
4.086	23.62	6.3	1.68	4.01	11.65	0.11	43.82
4.149	23.61	6.3	1.83	4.0	11.31	0.14	43.83
4.212	23.61	6.3	1.68	3.99	11.03	0.12	43.83
4.26	23.61	6.3	1.83	3.97	10.9	0.13	43.82
4.296	23.61	6.3	2.06	3.96	10.73	0.13	43.83
4.343	23.61	6.3	2.02	3.96	10.44	0.12	43.84
4.401	23.6	6.3	1.83	3.95	10.17	0.28	43.84
4.458	23.59	6.3	1.87	3.95	9.97	0.26	43.84
4.508	23.59	6.3	1.91	3.95	9.78	0.23	43.85
4.556	23.59	6.3	1.87	3.95	9.63	0.2	43.85
4.603	23.59	6.3	2.14	3.94	9.47	0.17	43.84
4.647	23.59	6.3	2.02	3.94	9.32	0.18	43.85
4.706	23.58	6.3	1.87	3.94	8.97	0.15	43.86
4.767	23.58	6.3	1.87	3.92	8.86	0.31	43.86
4.813	23.57	6.3	1.91	3.9	8.7	0.22	43.86
4.858	23.57	6.3	1.91	3.9	8.55	0.21	43.86
4.908	23.57	6.3	1.98	3.89	8.41	0.28	43.86
4.959	23.56	6.3	2.06	3.89	8.21	0.26	43.87
5.008	23.56	6.3	1.91	3.9	8.1	0.21	43.87
5.054	23.56	6.3	2.02	3.92	7.92	0.17	43.87
5.097	23.55	6.3	1.98	3.93	7.86	0.27	43.88

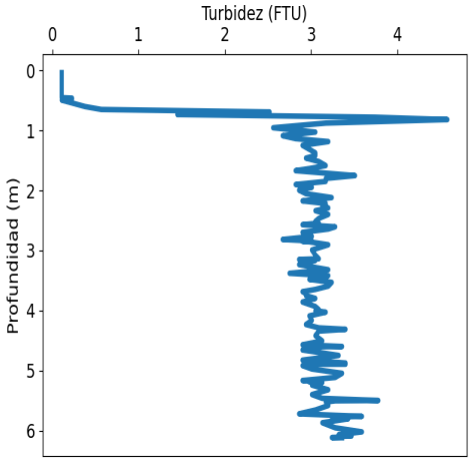
5.137	23.55	6.3	1.98	3.92	7.71	0.23	43.88
5.183	23.55	6.3	1.98	3.94	7.54	0.2	43.88
5.235	23.55	6.3	1.95	3.93	7.38	0.34	43.88
5.284	23.54	6.3	1.91	3.91	7.3	0.25	43.88
5.32	23.54	6.3	1.87	3.9	7.22	0.23	43.88
5.357	23.54	6.3	1.95	3.9	7.07	0.35	43.88
5.403	23.54	6.3	1.87	3.9	6.96	0.34	43.88
5.45	23.54	6.3	1.91	3.88	6.84	0.28	43.88
5.489	23.54	6.3	1.91	3.89	6.71	0.23	43.88
5.506	23.54	6.3	1.76	3.89	6.67	0.3	43.88
5.508	23.54	6.3	1.79	3.89	6.67	0.3	43.88
5.509	23.54	6.3	1.64	3.89	6.64	0.27	43.88
5.51	23.54	6.3	1.68	3.89	6.65	0.23	43.88

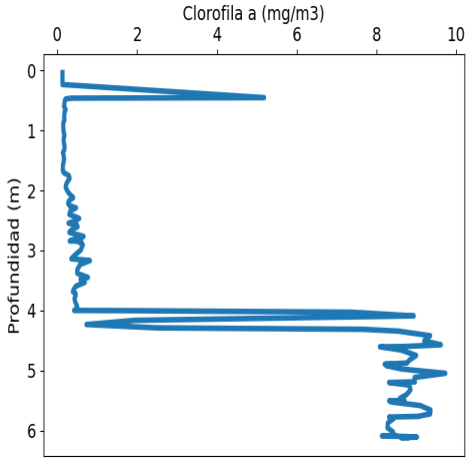
Nombre: CTD N02 - Punto 005 **Fecha: 06/10/2021** **Hora: 07:10:06**

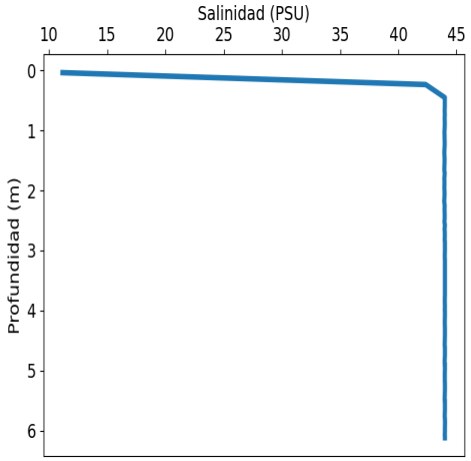


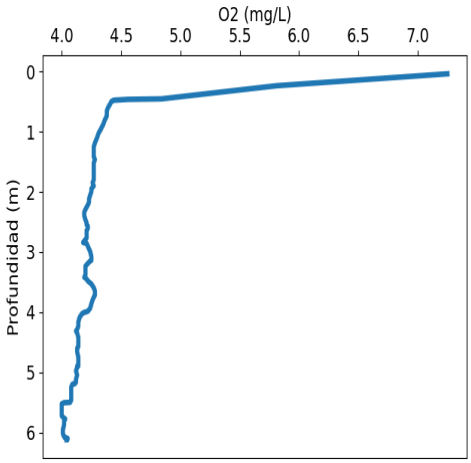


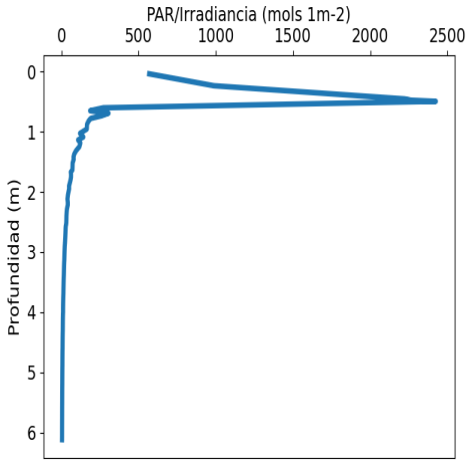












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.61	1.68	0.11	4.0	3.78	0.13	11.15
PROF (metros)	0.04	0.04	0.04	5.521	6.105	0.04	0.04
MÁXIMO	23.46	23.46	4.58	7.25	2424.9	9.72	44.01
PROF (metros)	6.105	0.456	0.821	0.04	0.497	5.043	5.866

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N02 - Punto 005	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.92	5.92	1.42	4.73	887.22	0.54	41.52
1 - 2m	23.43	6.29	3.02	4.27	80.09	0.19	43.96
2 - 3m	23.44	6.3	3.05	4.21	30.14	0.43	43.98
3 - 4m	23.45	6.3	3.03	4.24	14.15	0.51	44.0
4 - 5m	23.45	6.3	3.1	4.14	7.65	7.29	44.0
5 - 6m	23.45	6.3	3.2	4.06	4.88	8.77	43.99
6 - 7m	23.45	6.3	3.39	4.03	3.92	8.56	44.0

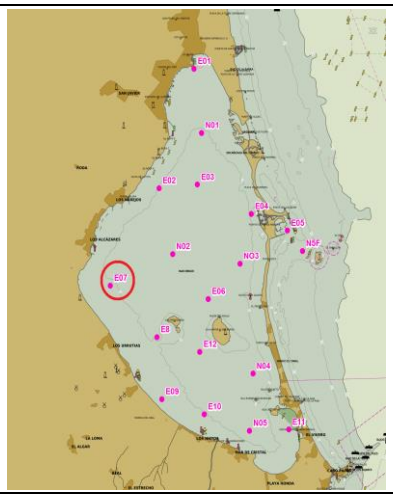
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 4 - 5m, 5 - 6m, 6 - 7m con los valores 7.29, 8.77, 8.56 respectivamente

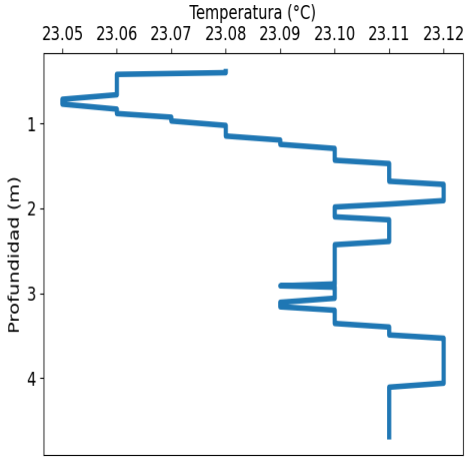
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.04	19.61	1.68	0.11	7.25	568.17	0.13	11.15
0.238	20.27	5.71	0.11	5.81	987.75	0.13	42.35
0.456	23.44	6.3	0.11	4.84	2220.0	5.18	44.0
0.464	23.42	6.29	0.23	4.56	2241.2	0.36	43.99
0.478	23.41	6.29	0.23	4.44	2261.5	0.21	43.99
0.497	23.41	6.29	0.11	4.42	2424.9	0.19	43.99
0.604	23.41	6.29	0.38	4.39	271.44	0.17	43.99
0.653	23.41	6.29	0.57	4.38	185.56	0.21	43.98
0.694	23.41	6.29	2.52	4.38	305.08	0.18	43.98
0.737	23.41	6.29	1.45	4.38	259.21	0.18	43.99
0.781	23.41	6.29	3.74	4.37	189.96	0.17	43.98
0.821	23.41	6.29	4.58	4.36	176.46	0.18	43.98
0.879	23.41	6.29	3.17	4.35	165.57	0.15	43.99
0.957	23.42	6.29	2.56	4.33	164.34	0.15	43.98
1.029	23.42	6.29	3.05	4.31	120.05	0.16	43.96
1.089	23.42	6.29	2.67	4.3	141.85	0.18	43.97
1.138	23.42	6.29	2.82	4.29	107.71	0.16	43.97
1.187	23.42	6.29	3.2	4.28	122.69	0.16	43.98
1.25	23.42	6.29	2.9	4.27	116.05	0.18	43.98
1.316	23.43	6.29	2.98	4.27	94.75	0.18	43.96
1.374	23.43	6.29	3.05	4.27	82.64	0.14	43.95
1.42	23.43	6.29	3.05	4.27	78.12	0.16	43.96
1.462	23.43	6.29	2.94	4.28	79.5	0.17	43.97
1.519	23.43	6.29	3.09	4.27	72.41	0.16	43.97
1.586	23.43	6.29	3.17	4.27	71.76	0.14	43.96
1.636	23.43	6.29	2.98	4.27	71.1	0.14	43.95
1.671	23.43	6.29	2.82	4.27	60.38	0.14	43.95
1.703	23.43	6.29	3.09	4.27	62.04	0.16	43.98
1.753	23.43	6.29	3.51	4.27	61.97	0.29	43.97
1.8	23.43	6.29	3.17	4.27	59.14	0.31	43.95
1.85	23.43	6.29	3.17	4.26	54.54	0.26	43.96
1.901	23.43	6.29	2.82	4.27	49.33	0.22	43.96
1.948	23.43	6.29	3.01	4.25	49.73	0.21	43.95
1.996	23.43	6.29	2.86	4.25	46.03	0.24	43.96

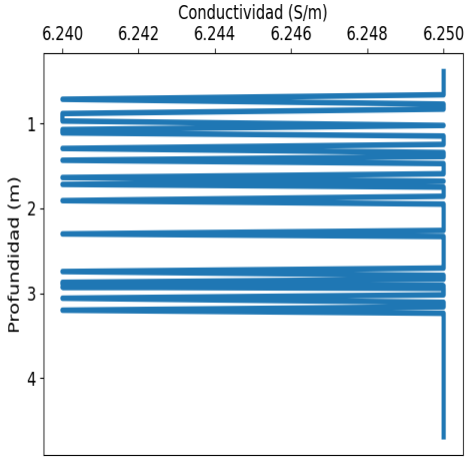
2.054	23.43	6.29	2.94	4.24	41.93	0.3	43.97
2.119	23.44	6.29	3.24	4.23	39.07	0.4	43.96
2.174	23.44	6.29	2.9	4.23	41.08	0.29	43.94
2.217	23.44	6.29	3.17	4.22	41.14	0.27	43.96
2.254	23.44	6.3	3.13	4.21	38.04	0.31	43.98
2.291	23.44	6.29	3.2	4.2	35.37	0.47	43.97
2.337	23.44	6.29	3.05	4.19	33.9	0.33	43.97
2.399	23.44	6.3	3.2	4.19	32.54	0.3	43.98
2.465	23.44	6.3	3.09	4.2	32.04	0.55	43.98
2.514	23.45	6.29	3.05	4.21	31.44	0.43	43.96
2.544	23.44	6.3	3.09	4.21	30.01	0.28	43.97
2.57	23.44	6.3	2.9	4.22	27.99	0.49	44.0
2.605	23.45	6.3	3.28	4.22	27.07	0.51	43.99
2.642	23.45	6.3	3.2	4.21	26.67	0.38	43.97
2.698	23.45	6.3	2.9	4.21	25.79	0.3	43.99
2.765	23.45	6.3	3.01	4.21	24.64	0.66	43.99
2.816	23.45	6.3	2.67	4.19	23.62	0.42	43.98
2.841	23.45	6.3	3.01	4.18	23.09	0.31	43.99
2.846	23.45	6.3	2.9	4.19	23.32	0.6	44.0
2.855	23.45	6.3	2.98	4.21	22.72	0.54	44.0
2.904	23.45	6.3	3.2	4.22	21.41	0.64	44.0
2.991	23.45	6.3	3.01	4.24	20.12	0.59	44.0
3.077	23.45	6.3	3.05	4.25	19.18	0.44	43.99
3.137	23.45	6.3	3.09	4.25	18.56	0.35	43.99
3.149	23.45	6.3	2.86	4.24	18.31	0.53	44.0
3.167	23.45	6.3	3.05	4.23	17.84	0.82	44.0
3.234	23.45	6.3	2.86	4.2	16.91	0.57	44.0
3.32	23.45	6.3	3.2	4.2	16.07	0.5	44.0
3.379	23.45	6.3	2.75	4.2	15.52	0.5	44.0
3.418	23.45	6.3	3.2	4.19	14.94	0.65	44.0
3.448	23.45	6.3	3.17	4.21	14.56	0.77	44.0
3.48	23.45	6.3	2.98	4.22	14.22	0.58	44.0
3.53	23.45	6.3	3.24	4.25	13.81	0.69	44.0
3.592	23.45	6.3	3.2	4.27	13.31	0.47	44.0
3.647	23.45	6.3	3.05	4.28	12.93	0.41	44.0
3.685	23.45	6.3	2.9	4.28	12.72	0.39	44.0
3.714	23.45	6.3	2.94	4.28	12.3	0.46	44.0
3.75	23.45	6.3	2.94	4.27	11.87	0.46	44.0
3.797	23.45	6.3	3.05	4.26	11.46	0.43	43.99
3.857	23.45	6.3	2.9	4.25	10.93	0.45	43.99
3.932	23.45	6.3	3.05	4.24	10.52	0.5	44.0
3.983	23.45	6.3	3.09	4.22	10.54	0.46	43.99
3.997	23.44	6.3	3.09	4.2	10.6	0.42	43.99
4.001	23.44	6.3	3.05	4.19	10.4	1.82	44.0
4.026	23.44	6.3	3.17	4.17	9.96	7.36	44.0
4.088	23.44	6.3	2.98	4.15	9.38	8.93	44.0
4.162	23.44	6.3	3.01	4.14	9.05	1.94	43.99
4.231	23.44	6.3	2.94	4.14	8.81	0.73	43.99
4.287	23.44	6.3	3.09	4.13	8.64	2.49	44.0
4.311	23.44	6.3	3.4	4.12	8.57	7.66	44.0
4.341	23.44	6.3	3.09	4.13	8.22	8.54	44.0
4.417	23.44	6.3	3.05	4.14	7.79	9.34	44.0
4.503	23.45	6.3	3.13	4.14	7.49	9.19	43.99
4.569	23.45	6.3	2.9	4.14	7.3	9.61	43.98
4.597	23.45	6.3	3.36	4.13	7.3	8.69	43.99
4.602	23.45	6.3	3.13	4.13	7.16	8.08	44.0
4.655	23.45	6.3	2.9	4.13	6.82	8.61	44.0
4.746	23.45	6.3	3.32	4.14	6.54	8.99	44.0

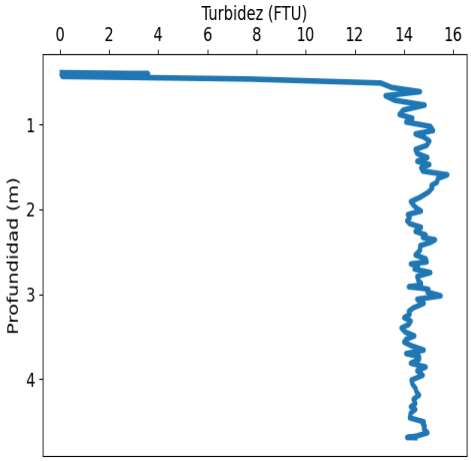
4.824	23.45	6.3	2.9	4.14	6.4	8.82	43.98
4.872	23.45	6.3	3.4	4.14	6.32	8.76	43.98
4.892	23.45	6.3	3.4	4.14	6.27	8.2	43.99
4.893	23.45	6.3	3.01	4.13	6.24	8.42	44.0
4.915	23.45	6.3	2.9	4.13	6.08	8.24	44.0
4.972	23.45	6.3	3.01	4.12	5.89	8.63	44.0
5.043	23.45	6.3	3.36	4.13	5.73	9.72	43.99
5.112	23.45	6.3	3.28	4.12	5.56	8.95	43.99
5.163	23.45	6.3	2.9	4.12	5.49	8.94	43.99
5.186	23.45	6.3	3.13	4.11	5.47	8.96	43.99
5.188	23.45	6.3	2.98	4.1	5.45	8.82	43.99
5.196	23.45	6.3	3.13	4.09	5.4	8.31	44.0
5.24	23.45	6.3	3.01	4.08	5.24	8.82	44.0
5.317	23.45	6.3	3.2	4.08	5.07	8.85	44.0
5.397	23.45	6.3	3.01	4.08	4.94	8.75	43.99
5.46	23.45	6.3	3.13	4.08	4.85	8.58	43.98
5.496	23.45	6.3	3.78	4.07	4.82	8.7	43.98
5.501	23.45	6.3	3.28	4.02	4.8	8.31	44.0
5.521	23.45	6.3	3.17	4.0	4.74	8.37	44.0
5.579	23.45	6.3	3.2	4.0	4.59	9.09	44.0
5.654	23.45	6.3	3.05	4.0	4.51	9.35	44.0
5.718	23.45	6.3	2.86	4.0	4.45	9.34	43.99
5.76	23.45	6.3	3.59	4.02	4.39	9.03	43.98
5.771	23.45	6.3	3.24	4.03	4.39	8.31	43.99
5.801	23.45	6.3	3.43	4.02	4.29	8.42	44.0
5.866	23.45	6.3	3.13	4.02	4.19	8.28	44.01
5.95	23.45	6.3	3.28	4.01	4.1	8.27	44.0
6.018	23.45	6.3	3.59	4.01	4.04	8.41	44.0
6.064	23.45	6.3	3.32	4.02	4.01	8.39	43.99
6.082	23.45	6.3	3.47	4.03	3.99	8.5	43.99
6.086	23.45	6.3	3.47	4.03	3.94	8.13	44.0
6.094	23.45	6.3	3.32	4.05	3.84	8.69	44.0
6.105	23.46	6.3	3.36	4.05	3.78	9.01	44.0
6.113	23.45	6.3	3.24	4.04	3.9	8.61	44.0
6.115	23.45	6.3	3.36	4.04	3.88	8.77	44.0

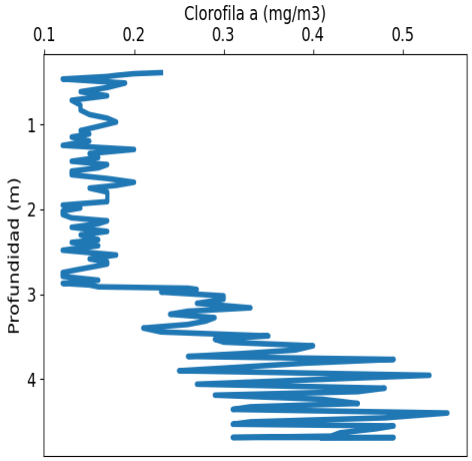
Nombre: CTD E07 - Punto 006 **Fecha: 06/10/2021** **Hora: 07:10:53**

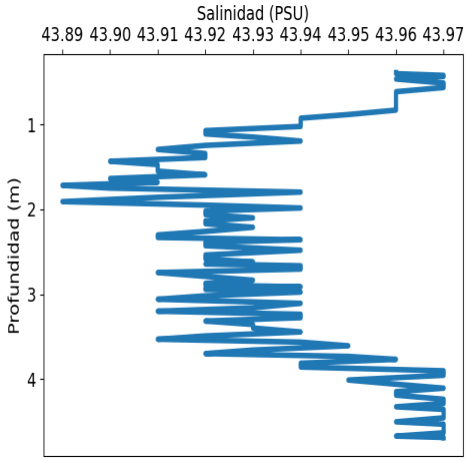


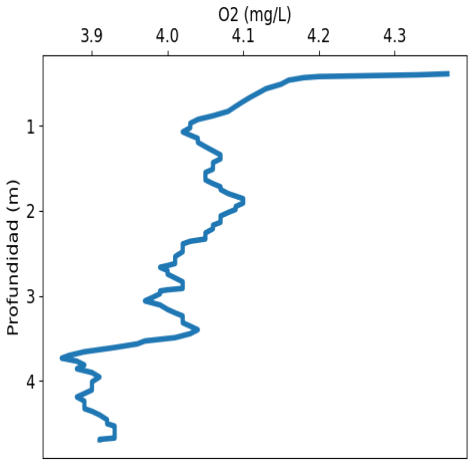


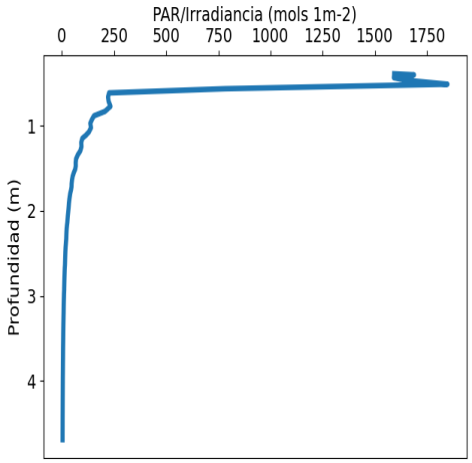












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.05	6.24	0.08	3.86	3.39	0.12	43.89
PROF (metros)	0.716	0.716	0.391	3.731	4.688	0.466	1.718
MÁXIMO	23.12	23.12	15.76	4.37	1847.7	0.55	43.97
PROF (metros)	1.718	0.391	1.593	0.391	0.513	4.397	0.423

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E07 - Punto 006	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.06	6.25	10.04	4.14	823.11	0.17	43.96
1 - 2m	23.1	6.25	14.87	4.06	68.2	0.15	43.92
2 - 3m	23.1	6.25	14.63	4.03	17.45	0.16	43.92
3 - 4m	23.11	6.25	14.41	3.96	6.71	0.32	43.94
4 - 5m	23.11	6.25	14.49	3.91	3.79	0.4	43.97

OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 3 - 4m, 4 - 5m con los valores 3.96, 3.91 respectivamente.

DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.391	23.08	6.25	0.08	4.37	1592.2	0.23	43.96
0.403	23.08	6.25	3.59	4.33	1687.6	0.2	43.96
0.423	23.06	6.25	0.08	4.2	1652.8	0.18	43.97
0.436	23.06	6.25	0.11	4.18	1590.7	0.17	43.97
0.466	23.06	6.25	7.71	4.16	1647.0	0.12	43.96
0.513	23.06	6.25	13.05	4.15	1847.7	0.19	43.97
0.566	23.06	6.25	13.5	4.13	782.86	0.17	43.97
0.615	23.06	6.25	14.65	4.12	226.23	0.14	43.96
0.663	23.06	6.25	13.24	4.11	221.2	0.17	43.96
0.716	23.05	6.24	13.62	4.1	224.15	0.13	43.96
0.773	23.05	6.25	14.84	4.09	232.99	0.14	43.96
0.832	23.06	6.25	13.96	4.08	206.68	0.14	43.96
0.884	23.06	6.24	13.81	4.06	154.19	0.15	43.95
0.927	23.07	6.24	14.34	4.04	144.14	0.17	43.94
0.972	23.07	6.24	14.08	4.03	136.24	0.18	43.94
1.024	23.08	6.25	15.07	4.03	139.57	0.16	43.94
1.073	23.08	6.24	15.18	4.02	129.68	0.14	43.92
1.112	23.08	6.24	14.46	4.03	115.36	0.15	43.92
1.149	23.08	6.25	14.8	4.04	97.99	0.13	43.93
1.196	23.09	6.25	15.03	4.04	92.88	0.15	43.94
1.247	23.09	6.25	14.92	4.05	93.9	0.12	43.92
1.295	23.1	6.24	14.46	4.06	88.55	0.2	43.91
1.343	23.1	6.25	14.53	4.07	76.31	0.15	43.92
1.39	23.1	6.25	14.95	4.07	67.97	0.16	43.92
1.434	23.1	6.24	14.53	4.06	66.2	0.13	43.9
1.473	23.11	6.25	15.03	4.06	66.49	0.17	43.91
1.511	23.11	6.25	14.69	4.06	64.0	0.16	43.91
1.55	23.11	6.25	14.76	4.05	57.47	0.13	43.91
1.593	23.11	6.25	15.76	4.05	51.83	0.13	43.92
1.637	23.11	6.24	15.37	4.05	48.67	0.17	43.9
1.681	23.11	6.25	15.34	4.06	46.72	0.2	43.91
1.718	23.12	6.24	15.11	4.07	46.28	0.18	43.89
1.75	23.12	6.25	15.14	4.07	44.22	0.15	43.9
1.797	23.12	6.25	14.99	4.08	39.85	0.17	43.94
1.858	23.12	6.25	14.65	4.1	36.32	0.17	43.91

1.909	23.12	6.24	14.27	4.1	34.05	0.17	43.89
1.95	23.11	6.25	14.38	4.09	32.78	0.12	43.92
1.984	23.1	6.25	14.5	4.09	31.59	0.14	43.94
2.02	23.1	6.25	14.69	4.08	30.16	0.12	43.92
2.061	23.1	6.25	14.15	4.07	28.47	0.12	43.92
2.1	23.1	6.25	14.23	4.07	27.24	0.13	43.93
2.135	23.11	6.25	14.12	4.07	26.2	0.17	43.92
2.169	23.11	6.25	14.23	4.06	24.55	0.16	43.92
2.211	23.11	6.25	14.69	4.06	22.96	0.13	43.93
2.26	23.11	6.25	14.46	4.05	21.88	0.17	43.92
2.301	23.11	6.24	14.88	4.05	21.31	0.14	43.91
2.331	23.11	6.25	14.76	4.05	20.9	0.15	43.91
2.358	23.11	6.25	15.26	4.03	20.0	0.16	43.94
2.389	23.11	6.25	15.07	4.02	19.11	0.13	43.92
2.428	23.1	6.25	14.65	4.02	17.88	0.16	43.92
2.481	23.1	6.25	14.65	4.02	16.79	0.12	43.94
2.537	23.1	6.25	14.46	4.01	16.02	0.18	43.92
2.583	23.1	6.25	14.88	4.01	15.46	0.15	43.92
2.619	23.1	6.25	14.92	4.01	15.05	0.17	43.93
2.643	23.1	6.25	14.27	4.0	14.68	0.17	43.92
2.664	23.1	6.25	14.57	3.99	14.04	0.16	43.94
2.703	23.1	6.25	14.42	4.0	13.4	0.14	43.94
2.744	23.1	6.24	15.07	4.0	12.86	0.12	43.91
2.789	23.1	6.25	14.53	4.01	12.3	0.12	43.92
2.834	23.1	6.25	14.57	4.02	11.79	0.16	43.93
2.871	23.1	6.24	14.69	4.02	11.44	0.12	43.92
2.89	23.1	6.24	14.69	4.02	11.28	0.15	43.92
2.912	23.09	6.25	14.19	4.02	11.02	0.16	43.94
2.928	23.1	6.24	14.72	4.0	11.04	0.26	43.92
2.942	23.1	6.25	14.99	3.99	10.74	0.27	43.92
2.974	23.1	6.25	14.95	3.99	10.16	0.23	43.94
3.018	23.1	6.25	15.49	3.98	9.74	0.3	43.92
3.058	23.1	6.24	14.53	3.97	9.3	0.3	43.91
3.106	23.09	6.25	14.8	3.99	8.86	0.27	43.94
3.159	23.09	6.25	14.38	4.0	8.55	0.33	43.93
3.199	23.1	6.24	14.19	4.01	8.32	0.26	43.91
3.235	23.1	6.25	14.23	4.02	7.98	0.24	43.94
3.275	23.1	6.25	14.0	4.02	7.73	0.29	43.94
3.315	23.1	6.25	14.27	4.02	7.4	0.28	43.92
3.355	23.1	6.25	14.19	4.03	7.12	0.26	43.93
3.397	23.11	6.25	13.89	4.04	6.92	0.21	43.93
3.443	23.11	6.25	14.04	4.03	6.64	0.23	43.94
3.49	23.11	6.25	14.42	4.01	6.45	0.35	43.92
3.529	23.12	6.25	14.08	3.97	6.27	0.29	43.91
3.563	23.12	6.25	14.0	3.96	6.06	0.3	43.94
3.606	23.12	6.25	14.3	3.93	5.82	0.4	43.95
3.656	23.12	6.25	14.8	3.89	5.63	0.38	43.93
3.698	23.12	6.25	14.08	3.87	5.51	0.32	43.92
3.731	23.12	6.25	14.61	3.86	5.43	0.26	43.95
3.766	23.12	6.25	14.61	3.88	5.23	0.49	43.96
3.811	23.12	6.25	14.27	3.89	5.09	0.39	43.94
3.856	23.12	6.25	14.88	3.88	4.97	0.32	43.94
3.9	23.12	6.25	14.53	3.9	4.8	0.25	43.97
3.953	23.12	6.25	14.76	3.91	4.59	0.53	43.97
4.009	23.12	6.25	14.3	3.9	4.48	0.39	43.95
4.058	23.12	6.25	14.34	3.9	4.37	0.27	43.96
4.105	23.11	6.25	14.46	3.9	4.28	0.48	43.97
4.146	23.11	6.25	14.5	3.89	4.23	0.45	43.96

4.187	23.11	6.25	14.61	3.88	4.11	0.29	43.96
4.235	23.11	6.25	14.38	3.89	4.01	0.41	43.97
4.285	23.11	6.25	14.46	3.89	3.93	0.45	43.97
4.324	23.11	6.25	14.27	3.89	3.86	0.33	43.96
4.355	23.11	6.25	14.46	3.9	3.83	0.31	43.97
4.397	23.11	6.25	14.27	3.91	3.73	0.55	43.97
4.454	23.11	6.25	14.23	3.92	3.64	0.48	43.97
4.501	23.11	6.25	14.8	3.92	3.6	0.33	43.96
4.529	23.11	6.25	14.76	3.93	3.58	0.31	43.97
4.549	23.11	6.25	14.84	3.93	3.55	0.49	43.97
4.583	23.11	6.25	14.8	3.93	3.49	0.47	43.97
4.63	23.11	6.25	14.95	3.93	3.41	0.43	43.97
4.669	23.11	6.25	14.5	3.93	3.41	0.42	43.96
4.685	23.11	6.25	14.12	3.91	3.4	0.31	43.97
4.686	23.11	6.25	14.3	3.91	3.4	0.49	43.97
4.688	23.11	6.25	14.46	3.91	3.39	0.41	43.97

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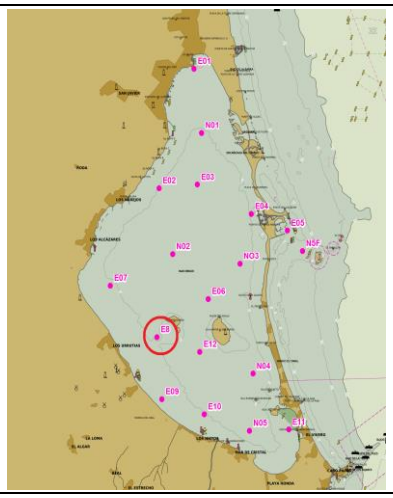
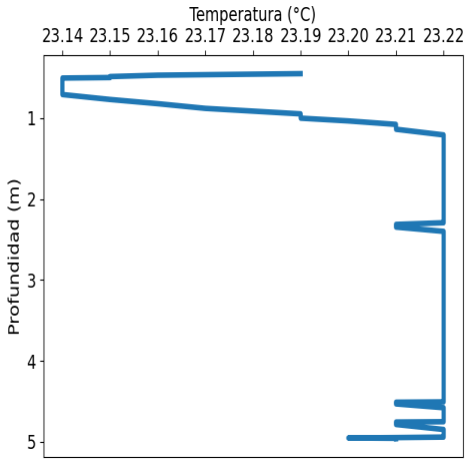
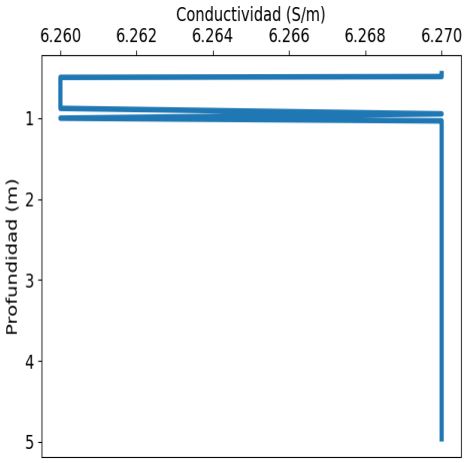
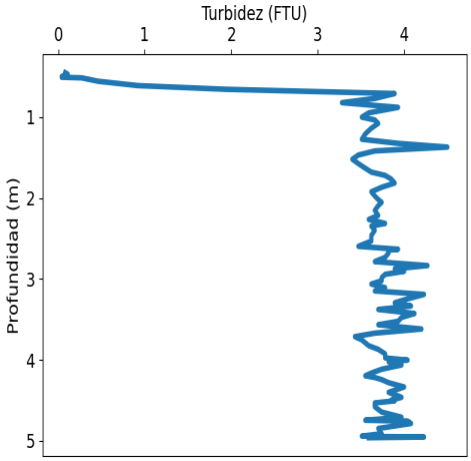
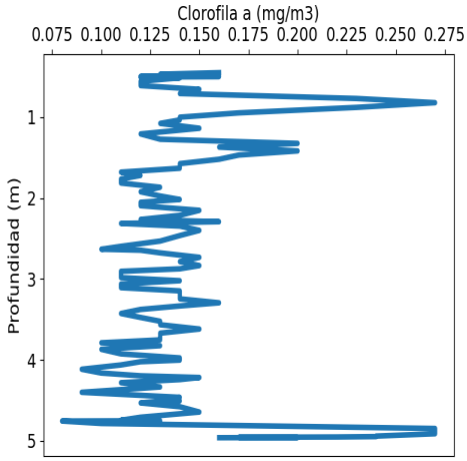
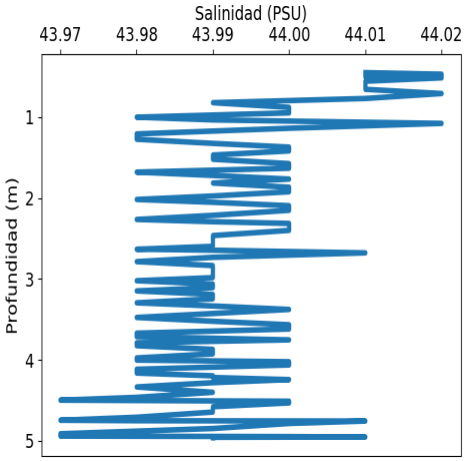


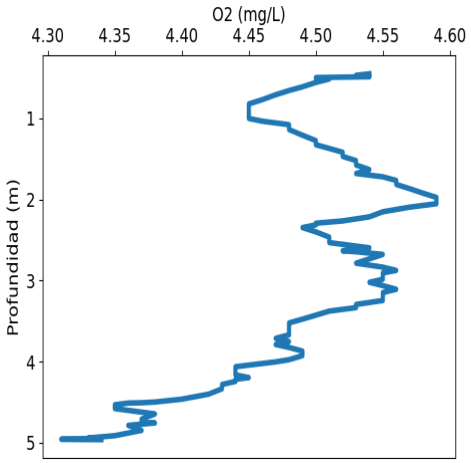


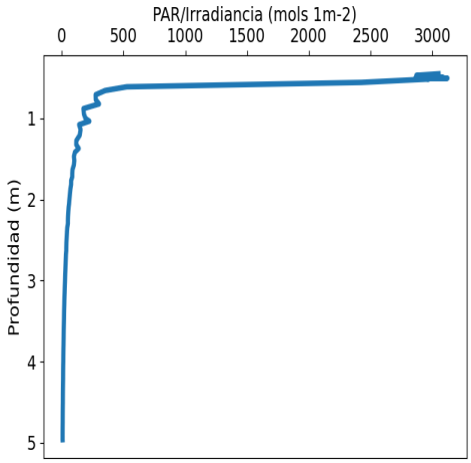


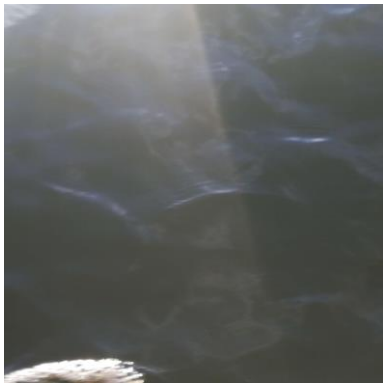












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.14	6.26	0.04	4.31	6.82	0.08	43.97
PROF (metros)	0.505	0.497	0.497	4.957	4.953	4.756	4.498
MÁXIMO	23.22	23.22	4.5	4.59	3122.6	0.27	44.02
PROF (metros)	1.208	0.451	1.371	1.975	0.505	0.822	0.47

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E08 - Punto 007	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.15	6.26	1.4	4.49	1776.08	0.16	44.01
1 - 2m	23.21	6.27	3.68	4.52	112.23	0.14	43.99
2 - 3m	23.22	6.27	3.75	4.54	41.06	0.13	43.99
3 - 4m	23.22	6.27	3.8	4.51	18.31	0.13	43.99
4 - 5m	23.22	6.27	3.81	4.39	8.88	0.15	43.99

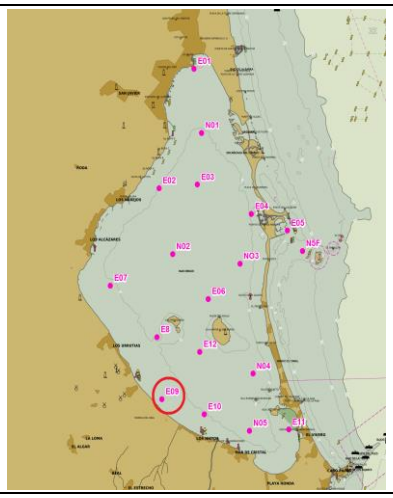
OBSERVACIONES GENERALES

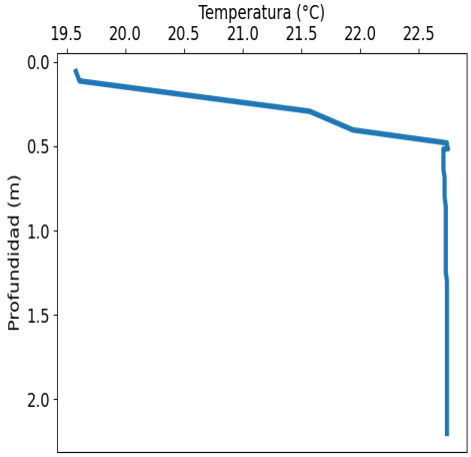
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.451	23.19	6.27	0.08	4.54	3050.4	0.16	44.01
0.47	23.16	6.27	0.11	4.53	2870.6	0.13	44.02
0.487	23.15	6.27	0.08	4.54	2992.9	0.14	44.02
0.497	23.15	6.26	0.04	4.5	3089.5	0.12	44.02
0.499	23.15	6.26	0.04	4.5	2864.7	0.16	44.01
0.505	23.14	6.26	0.04	4.5	3122.6	0.12	44.01
0.508	23.14	6.26	0.04	4.51	2944.8	0.12	44.02
0.515	23.14	6.26	0.27	4.51	2972.2	0.14	44.02
0.557	23.14	6.26	0.46	4.5	2424.9	0.12	44.01
0.611	23.14	6.26	0.92	4.49	526.21	0.12	44.01
0.657	23.14	6.26	1.95	4.48	351.32	0.15	44.01
0.709	23.14	6.26	3.89	4.47	274.35	0.14	44.02
0.77	23.15	6.26	3.66	4.46	275.43	0.23	44.01
0.822	23.16	6.26	3.28	4.45	302.12	0.27	43.99
0.88	23.17	6.26	3.93	4.45	175.56	0.23	44.0
0.948	23.19	6.27	3.59	4.45	179.72	0.17	44.0
1.001	23.19	6.26	3.51	4.45	192.49	0.14	43.98
1.035	23.2	6.27	3.66	4.46	223.58	0.14	43.99
1.078	23.21	6.27	3.7	4.48	140.7	0.13	44.02
1.138	23.21	6.27	3.62	4.48	152.45	0.15	44.0
1.208	23.22	6.27	3.55	4.49	145.68	0.12	43.98
1.274	23.22	6.27	3.51	4.5	118.31	0.13	43.98
1.325	23.22	6.27	3.93	4.5	117.54	0.2	43.99
1.371	23.22	6.27	4.5	4.51	137.48	0.16	44.0
1.418	23.22	6.27	3.66	4.52	106.57	0.2	44.0
1.469	23.22	6.27	3.47	4.52	98.63	0.17	43.99
1.521	23.22	6.27	3.4	4.53	101.79	0.16	43.99
1.575	23.22	6.27	3.47	4.53	98.31	0.14	44.0
1.632	23.22	6.27	3.55	4.54	87.17	0.14	44.0
1.68	23.22	6.27	3.62	4.53	85.39	0.11	43.98
1.721	23.22	6.27	3.78	4.55	85.23	0.12	43.99
1.766	23.22	6.27	3.85	4.56	76.36	0.11	44.0
1.815	23.22	6.27	3.89	4.56	75.88	0.11	43.99
1.867	23.22	6.27	3.74	4.57	70.54	0.13	44.0
1.923	23.22	6.27	3.62	4.58	66.79	0.12	44.0
1.975	23.22	6.27	3.66	4.59	63.7	0.13	43.99
2.018	23.22	6.27	3.7	4.59	61.13	0.14	43.98

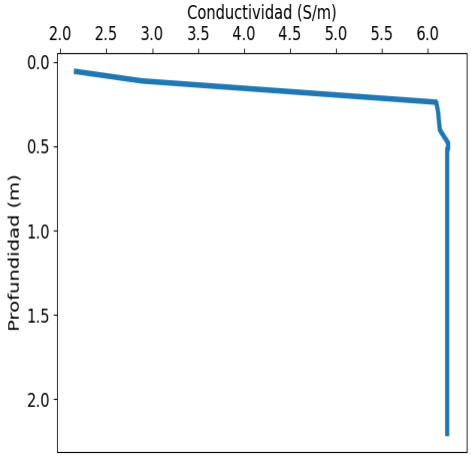
2.053	23.22	6.27	3.74	4.59	59.3	0.12	43.99
2.095	23.22	6.27	3.7	4.57	55.84	0.12	44.0
2.152	23.22	6.27	3.66	4.55	53.19	0.15	44.0
2.214	23.22	6.27	3.7	4.54	50.85	0.14	43.99
2.265	23.22	6.27	3.59	4.52	49.92	0.12	43.98
2.293	23.22	6.27	3.7	4.5	49.98	0.16	43.99
2.314	23.21	6.27	3.78	4.5	48.28	0.11	44.0
2.347	23.21	6.27	3.62	4.49	44.88	0.14	44.0
2.4	23.22	6.27	3.66	4.5	42.49	0.15	44.0
2.464	23.22	6.27	3.62	4.51	40.21	0.14	43.99
2.532	23.22	6.27	3.62	4.51	37.92	0.13	43.99
2.597	23.22	6.27	3.47	4.54	36.87	0.11	43.99
2.633	23.22	6.27	3.93	4.52	36.76	0.1	43.98
2.645	23.22	6.27	3.82	4.53	35.89	0.12	43.99
2.678	23.22	6.27	3.82	4.55	34.06	0.13	44.01
2.733	23.22	6.27	3.78	4.54	32.69	0.15	43.99
2.786	23.22	6.27	3.66	4.53	31.42	0.14	43.98
2.835	23.22	6.27	4.27	4.55	30.26	0.15	43.99
2.875	23.22	6.27	3.89	4.56	29.38	0.14	43.99
2.906	23.22	6.27	4.0	4.55	28.48	0.11	43.99
2.943	23.22	6.27	3.78	4.55	27.62	0.11	43.99
2.984	23.22	6.27	3.74	4.55	26.94	0.11	43.99
3.022	23.22	6.27	3.74	4.54	26.15	0.14	43.98
3.063	23.22	6.27	3.62	4.55	25.06	0.11	43.99
3.108	23.22	6.27	3.78	4.56	24.17	0.11	43.99
3.148	23.22	6.27	3.66	4.55	23.46	0.14	43.98
3.191	23.22	6.27	4.23	4.55	22.41	0.14	43.99
3.246	23.22	6.27	4.04	4.55	21.4	0.14	43.99
3.295	23.22	6.27	3.89	4.53	20.76	0.16	43.98
3.334	23.22	6.27	4.08	4.53	20.02	0.14	43.99
3.377	23.22	6.27	3.7	4.51	19.29	0.12	44.0
3.427	23.22	6.27	4.12	4.5	18.7	0.11	43.99
3.476	23.22	6.27	3.97	4.49	18.2	0.12	43.98
3.523	23.22	6.27	3.93	4.48	17.44	0.13	43.99
3.566	23.22	6.27	3.7	4.48	16.74	0.13	44.0
3.619	23.22	6.27	4.2	4.48	16.02	0.15	44.0
3.67	23.22	6.27	3.66	4.48	15.57	0.13	43.98
3.713	23.22	6.27	3.43	4.47	15.26	0.13	43.98
3.753	23.22	6.27	3.51	4.48	14.76	0.13	44.0
3.789	23.22	6.27	3.55	4.47	14.49	0.1	43.98
3.825	23.22	6.27	3.59	4.48	13.93	0.13	43.98
3.87	23.22	6.27	3.7	4.49	13.46	0.1	43.99
3.926	23.22	6.27	3.78	4.49	12.93	0.11	43.99
3.976	23.22	6.27	3.78	4.48	12.67	0.14	43.98
4.003	23.22	6.27	4.04	4.47	12.56	0.14	43.98
4.023	23.22	6.27	3.82	4.46	12.12	0.12	44.0
4.063	23.22	6.27	3.97	4.44	11.68	0.11	44.0
4.116	23.22	6.27	3.74	4.44	11.3	0.09	43.98
4.163	23.22	6.27	3.62	4.44	11.08	0.1	43.98
4.197	23.22	6.27	3.55	4.45	10.97	0.12	43.99
4.218	23.22	6.27	3.66	4.44	10.85	0.15	43.99
4.244	23.22	6.27	3.74	4.44	10.54	0.14	44.0
4.282	23.22	6.27	3.82	4.43	10.14	0.11	43.99
4.335	23.22	6.27	4.0	4.43	9.68	0.13	43.98
4.401	23.22	6.27	3.82	4.42	9.25	0.09	43.99
4.463	23.22	6.27	3.97	4.4	9.07	0.14	43.98
4.498	23.22	6.27	3.85	4.38	9.02	0.13	43.97
4.507	23.22	6.27	3.89	4.37	9.04	0.14	43.99

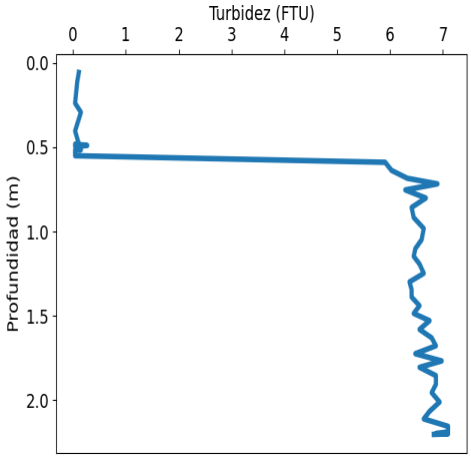
4.511	23.21	6.27	3.85	4.36	8.93	0.13	44.0
4.532	23.21	6.27	3.66	4.35	8.66	0.12	44.0
4.579	23.22	6.27	3.66	4.35	8.33	0.14	43.99
4.645	23.22	6.27	3.74	4.38	8.0	0.15	43.99
4.709	23.22	6.27	3.97	4.37	7.77	0.12	43.98
4.746	23.22	6.27	3.55	4.37	7.77	0.11	43.97
4.752	23.22	6.27	3.82	4.37	7.77	0.13	43.98
4.756	23.21	6.27	4.04	4.38	7.67	0.08	44.01
4.786	23.21	6.27	4.08	4.36	7.42	0.1	44.0
4.848	23.22	6.27	3.7	4.37	7.12	0.27	43.99
4.913	23.22	6.27	3.74	4.35	6.97	0.27	43.97
4.942	23.22	6.27	3.51	4.33	7.04	0.24	43.97
4.948	23.21	6.27	3.78	4.34	6.96	0.24	44.0
4.953	23.2	6.27	4.23	4.32	6.82	0.22	44.01
4.957	23.21	6.27	4.0	4.31	6.84	0.17	43.99
4.96	23.21	6.27	3.74	4.32	6.94	0.2	43.99
4.962	23.21	6.27	3.59	4.34	6.99	0.16	43.99

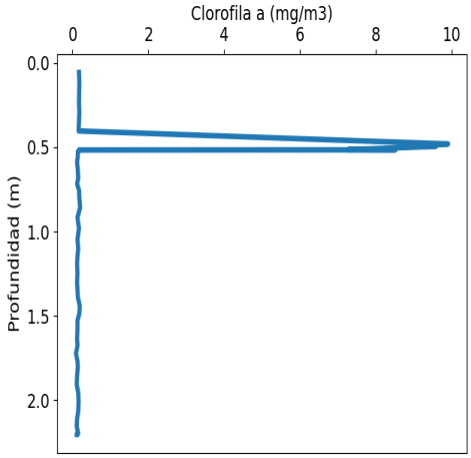
Nombre: CTD E09 - Punto 008 **Fecha: 06/10/2021** **Hora: 08:10:24**

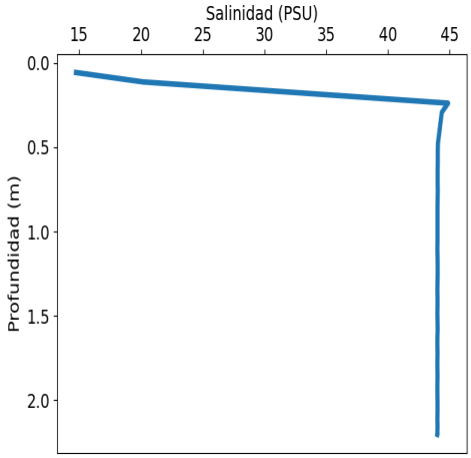


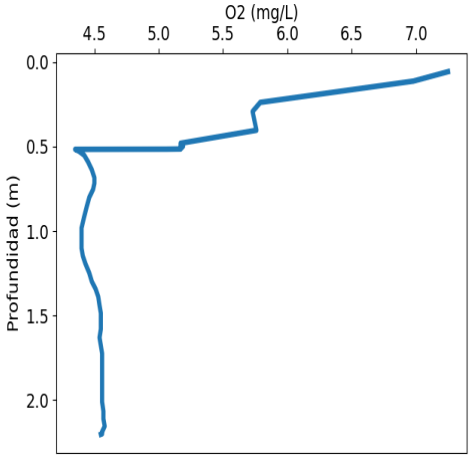


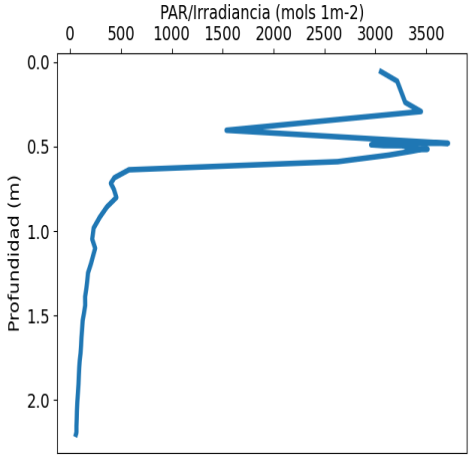












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.58	2.17	0.04	4.35	56.81	0.09	14.73
PROF (metros)	0.056	0.056	0.238	0.516	2.204	1.725	0.056
MÁXIMO	22.75	22.75	7.1	7.25	3716.3	9.91	44.88
PROF (metros)	0.514	0.48	2.156	0.056	0.48	0.48	0.238

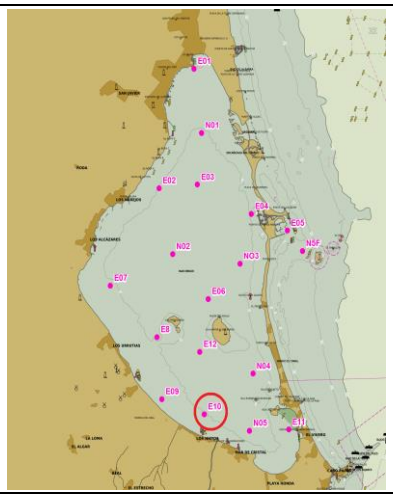
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E09 - Punto 008	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.33	5.91	2.36	5.04	2265.56	3.04	41.96
1 - 2m	22.74	6.21	6.62	4.51	140.64	0.13	44.02
2 - 3m	22.74	6.21	6.91	4.56	62.51	0.13	44.02

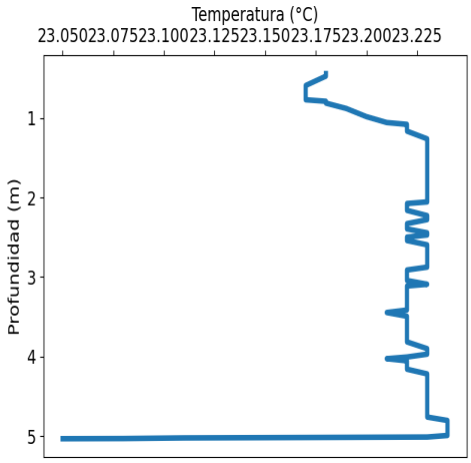
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 0 - 1m con los valores 3.04 respectivamente

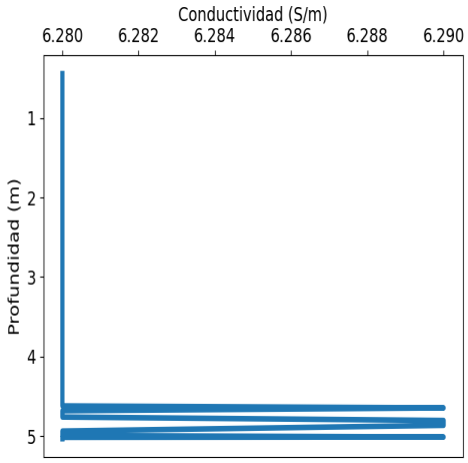
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.056	19.58	2.17	0.11	7.25	3056.7	0.17	14.73
0.112	19.61	2.89	0.08	6.98	3215.2	0.18	20.18
0.238	20.98	6.09	0.04	5.79	3294.4	0.17	44.88
0.292	21.57	6.11	0.15	5.73	3449.9	0.18	44.37
0.403	21.94	6.13	0.04	5.76	1537.1	0.16	44.18
0.48	22.74	6.22	0.11	5.17	3716.3	9.91	44.05
0.481	22.74	6.22	0.04	5.17	3006.2	9.83	44.05
0.489	22.74	6.22	0.27	5.18	2958.5	9.44	44.05
0.494	22.74	6.22	0.08	5.17	3081.6	9.49	44.05
0.495	22.74	6.22	0.04	5.18	3342.8	9.58	44.05
0.497	22.74	6.22	0.08	5.19	3282.9	9.27	44.05
0.514	22.75	6.22	0.11	5.17	3422.8	7.27	44.04
0.515	22.75	6.22	0.15	5.06	3515.2	8.52	44.04
0.516	22.71	6.21	0.04	4.35	3453.9	0.17	44.04
0.527	22.71	6.21	0.04	4.38	3359.1	0.14	44.04
0.55	22.71	6.21	0.04	4.42	3132.8	0.14	44.04
0.589	22.71	6.21	5.91	4.45	2630.5	0.12	44.04
0.637	22.71	6.21	6.03	4.48	578.53	0.14	44.03
0.684	22.72	6.21	6.33	4.5	435.33	0.15	44.03
0.717	22.72	6.21	6.9	4.5	399.74	0.12	44.03
0.753	22.72	6.21	6.29	4.49	430.01	0.17	44.04
0.801	22.72	6.21	6.68	4.46	454.51	0.18	44.03
0.857	22.73	6.21	6.41	4.44	361.48	0.2	44.02
0.917	22.73	6.21	6.45	4.42	292.41	0.13	44.02
0.982	22.73	6.21	6.64	4.4	231.11	0.17	44.02
1.048	22.73	6.21	6.6	4.4	216.74	0.13	44.02
1.102	22.73	6.21	6.48	4.4	245.81	0.15	44.01
1.147	22.73	6.21	6.45	4.41	225.34	0.13	44.02
1.193	22.73	6.21	6.56	4.43	204.73	0.12	44.03
1.248	22.73	6.21	6.64	4.46	175.56	0.13	44.03
1.299	22.74	6.21	6.37	4.48	167.3	0.12	44.02
1.344	22.74	6.21	6.41	4.51	158.4	0.13	44.01
1.389	22.74	6.21	6.41	4.53	147.11	0.14	44.02
1.44	22.74	6.21	6.56	4.54	147.72	0.19	44.02
1.486	22.74	6.21	6.45	4.55	135.96	0.18	44.01
1.529	22.74	6.21	6.75	4.55	123.26	0.13	44.02
1.581	22.74	6.21	6.56	4.55	117.33	0.13	44.03
1.631	22.74	6.21	6.79	4.54	111.16	0.12	44.01

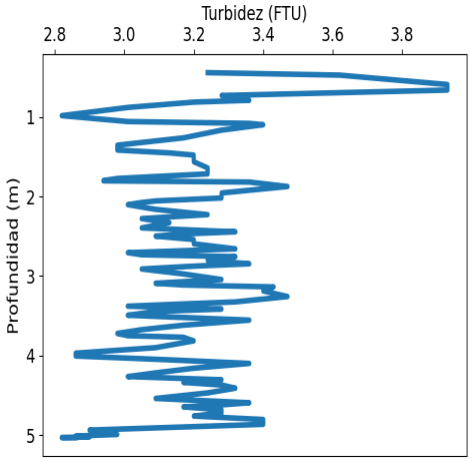
1.678	22.74	6.21	6.87	4.55	107.38	0.13	44.01
1.725	22.74	6.21	6.48	4.56	101.9	0.09	44.02
1.768	22.74	6.21	6.98	4.56	93.81	0.13	44.01
1.806	22.74	6.21	6.56	4.56	89.38	0.14	44.01
1.855	22.74	6.21	6.87	4.56	85.41	0.12	44.02
1.907	22.74	6.21	6.87	4.56	81.94	0.11	44.01
1.956	22.74	6.21	6.79	4.56	76.66	0.15	44.01
2.012	22.74	6.21	6.94	4.56	70.43	0.16	44.02
2.067	22.74	6.21	6.75	4.57	66.34	0.15	44.02
2.112	22.74	6.21	6.64	4.57	64.49	0.12	44.01
2.156	22.74	6.21	7.1	4.58	61.86	0.11	44.02
2.189	22.74	6.21	7.1	4.56	61.8	0.14	44.01
2.199	22.74	6.21	6.87	4.56	60.12	0.15	44.01
2.201	22.74	6.21	7.1	4.56	58.24	0.11	44.02
2.204	22.74	6.21	6.83	4.55	56.81	0.11	44.01

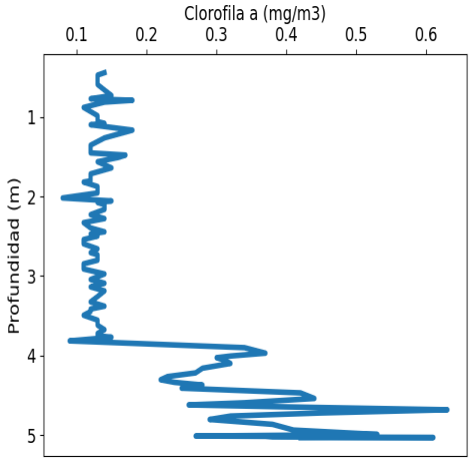
Nombre: CTD E10 - Punto 009 **Fecha: 06/10/2021** **Hora: 08:10:40**

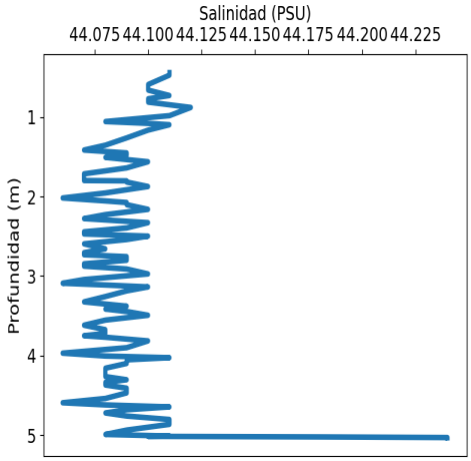


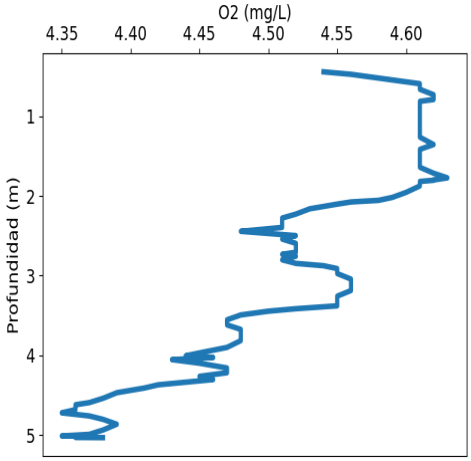


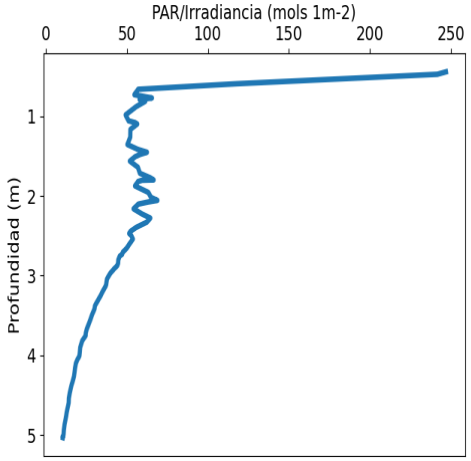












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.05	6.28	2.82	4.35	10.35	0.08	44.06
PROF (metros)	5.03	0.445	0.985	4.719	5.02	2.019	2.019
MÁXIMO	23.24	23.24	3.93	4.63	246.83	0.63	44.24
PROF (metros)	4.801	4.643	0.594	1.774	0.445	4.679	5.028

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E10 - Punto 009	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.18	6.28	3.37	4.6	100.79	0.14	44.11
1 - 2m	23.23	6.28	3.18	4.61	56.98	0.13	44.09
2 - 3m	23.23	6.28	3.16	4.53	52.97	0.12	44.08
3 - 4m	23.22	6.28	3.17	4.51	29.29	0.15	44.08
4 - 5m	23.23	6.28	3.18	4.41	15.35	0.34	44.09
5 - 6m	23.13	6.28	2.86	4.36	10.6	0.41	44.18

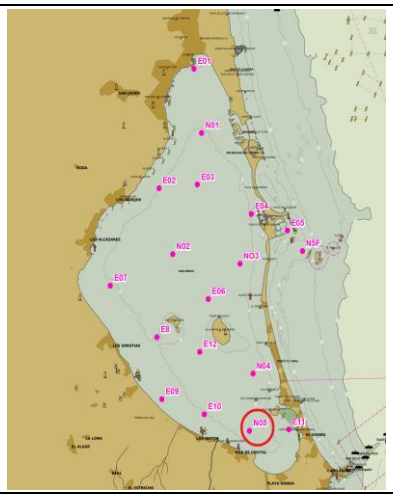
OBSERVACIONES GENERALES

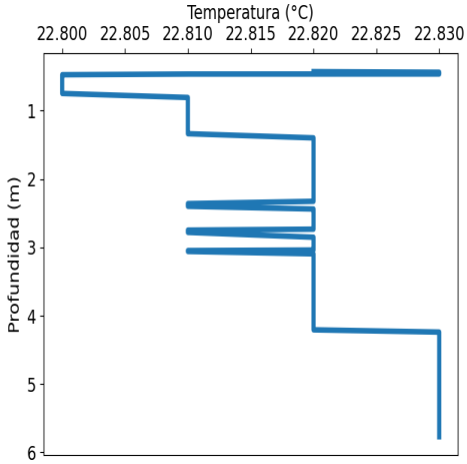
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.445	23.18	6.28	3.24	4.54	246.83	0.14	44.11
0.476	23.18	6.28	3.62	4.56	241.46	0.13	44.11
0.594	23.17	6.28	3.93	4.61	118.14	0.13	44.1
0.664	23.17	6.28	3.93	4.61	57.06	0.14	44.1
0.732	23.17	6.28	3.28	4.62	54.64	0.15	44.11
0.773	23.17	6.28	3.32	4.62	65.53	0.12	44.1
0.792	23.18	6.28	3.36	4.62	57.86	0.18	44.1
0.815	23.18	6.28	3.2	4.61	61.38	0.14	44.1
0.882	23.19	6.28	3.01	4.61	55.73	0.11	44.12
0.985	23.2	6.28	2.82	4.61	49.25	0.13	44.11
1.059	23.21	6.28	3.01	4.61	51.08	0.13	44.08
1.082	23.22	6.28	3.36	4.61	55.18	0.14	44.1
1.099	23.22	6.28	3.4	4.61	56.46	0.12	44.11
1.167	23.22	6.28	3.28	4.61	52.21	0.18	44.1
1.264	23.23	6.28	3.17	4.61	52.13	0.14	44.09
1.356	23.23	6.28	2.98	4.62	50.35	0.12	44.08
1.417	23.23	6.28	2.98	4.61	56.8	0.12	44.07
1.453	23.23	6.28	3.13	4.61	62.46	0.12	44.09
1.48	23.23	6.28	3.2	4.61	58.21	0.17	44.09
1.509	23.23	6.28	3.2	4.61	55.12	0.16	44.08
1.564	23.23	6.28	3.2	4.61	51.86	0.13	44.1
1.641	23.23	6.28	3.24	4.61	56.86	0.15	44.09
1.716	23.23	6.28	3.24	4.62	58.04	0.12	44.07
1.774	23.23	6.28	2.98	4.63	64.56	0.12	44.07
1.8	23.23	6.28	2.94	4.62	66.57	0.12	44.07
1.804	23.23	6.28	2.94	4.62	59.44	0.12	44.09
1.819	23.23	6.28	3.36	4.61	56.98	0.11	44.09
1.875	23.23	6.28	3.47	4.61	55.05	0.13	44.1
1.956	23.23	6.28	3.28	4.6	63.23	0.13	44.08
2.019	23.23	6.28	3.28	4.59	64.97	0.08	44.06
2.056	23.23	6.28	3.09	4.58	68.88	0.15	44.08
2.076	23.22	6.28	3.05	4.56	63.22	0.13	44.09
2.103	23.22	6.28	3.01	4.55	57.11	0.14	44.09
2.162	23.22	6.28	3.09	4.53	54.14	0.14	44.1
2.228	23.23	6.28	3.24	4.52	59.52	0.12	44.08
2.278	23.23	6.28	3.05	4.51	64.52	0.14	44.07

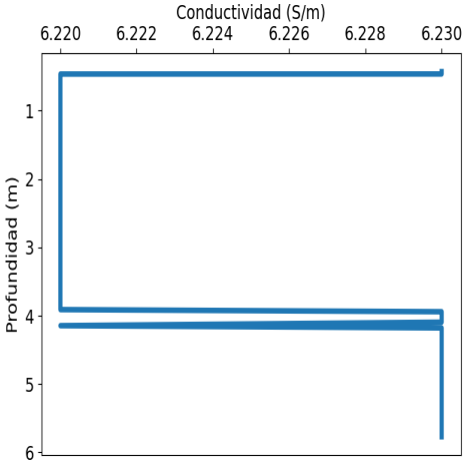
2.329	23.22	6.28	3.13	4.51	62.33	0.11	44.1
2.395	23.22	6.28	3.05	4.51	55.78	0.12	44.09
2.444	23.23	6.28	3.32	4.48	52.32	0.14	44.07
2.471	23.23	6.28	3.17	4.5	51.45	0.12	44.07
2.498	23.22	6.28	3.09	4.52	52.79	0.13	44.1
2.541	23.22	6.28	3.2	4.51	53.75	0.11	44.09
2.595	23.23	6.28	3.2	4.52	51.9	0.11	44.07
2.658	23.23	6.28	3.32	4.52	49.84	0.13	44.08
2.706	23.23	6.28	3.01	4.52	47.54	0.12	44.07
2.732	23.23	6.28	3.05	4.51	47.11	0.13	44.07
2.756	23.23	6.28	3.32	4.52	45.59	0.13	44.09
2.801	23.23	6.28	3.24	4.51	44.76	0.13	44.09
2.846	23.23	6.28	3.36	4.52	44.62	0.11	44.07
2.875	23.23	6.28	3.2	4.54	44.1	0.11	44.07
2.911	23.22	6.28	3.05	4.55	42.32	0.11	44.09
2.973	23.22	6.28	3.17	4.55	39.71	0.14	44.1
3.043	23.22	6.28	3.28	4.56	37.74	0.12	44.07
3.09	23.23	6.28	3.09	4.56	37.4	0.14	44.06
3.112	23.22	6.28	3.17	4.56	37.27	0.13	44.08
3.136	23.22	6.28	3.43	4.56	36.83	0.12	44.1
3.186	23.22	6.28	3.4	4.56	35.42	0.14	44.09
3.257	23.22	6.28	3.47	4.55	33.68	0.13	44.08
3.324	23.22	6.28	3.32	4.55	31.8	0.12	44.07
3.378	23.22	6.28	3.01	4.55	30.34	0.14	44.09
3.414	23.22	6.28	3.28	4.52	30.1	0.12	44.08
3.445	23.21	6.28	3.09	4.5	29.51	0.12	44.09
3.492	23.22	6.28	3.01	4.48	28.51	0.11	44.1
3.553	23.22	6.28	3.36	4.47	27.51	0.13	44.08
3.617	23.22	6.28	3.17	4.47	26.31	0.13	44.07
3.673	23.22	6.28	3.05	4.48	25.26	0.14	44.08
3.72	23.22	6.28	2.98	4.48	24.69	0.13	44.08
3.749	23.22	6.28	3.01	4.48	24.65	0.13	44.07
3.768	23.22	6.28	3.17	4.48	24.1	0.15	44.08
3.814	23.22	6.28	3.2	4.48	22.54	0.09	44.1
3.899	23.23	6.28	3.09	4.47	21.27	0.34	44.09
3.968	23.23	6.28	2.86	4.45	20.97	0.37	44.06
4.004	23.22	6.28	2.86	4.44	20.77	0.32	44.08
4.025	23.21	6.28	2.98	4.46	20.3	0.3	44.11
4.052	23.22	6.28	3.13	4.43	19.52	0.31	44.09
4.097	23.22	6.28	3.36	4.45	18.61	0.32	44.09
4.157	23.22	6.28	3.2	4.47	18.1	0.28	44.08
4.216	23.23	6.28	3.09	4.47	17.74	0.27	44.08
4.262	23.23	6.28	3.01	4.45	17.42	0.23	44.08
4.302	23.23	6.28	3.28	4.46	16.91	0.22	44.09
4.335	23.23	6.28	3.17	4.44	16.48	0.24	44.08
4.368	23.23	6.28	3.28	4.42	15.96	0.28	44.08
4.408	23.23	6.28	3.32	4.41	15.49	0.25	44.09
4.467	23.23	6.28	3.24	4.39	14.85	0.42	44.09
4.537	23.23	6.28	3.09	4.38	14.27	0.44	44.08
4.591	23.23	6.28	3.36	4.37	14.17	0.34	44.06
4.618	23.23	6.28	3.28	4.36	13.92	0.26	44.08
4.643	23.23	6.29	3.17	4.36	13.65	0.4	44.11
4.679	23.23	6.28	3.28	4.36	13.27	0.63	44.09
4.719	23.23	6.28	3.28	4.35	12.89	0.45	44.08
4.758	23.23	6.28	3.2	4.37	12.62	0.32	44.09
4.801	23.24	6.29	3.4	4.38	12.23	0.29	44.11
4.862	23.24	6.29	3.4	4.39	11.64	0.38	44.11
4.934	23.24	6.28	2.9	4.38	11.18	0.41	44.09

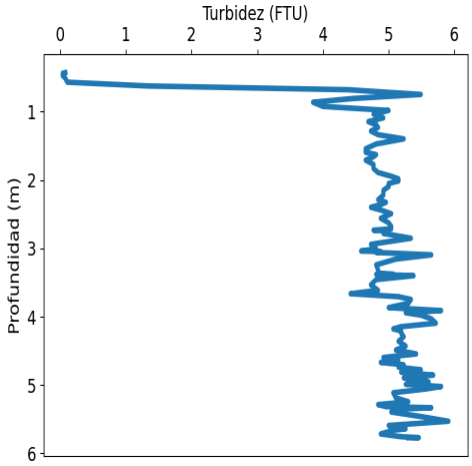
4.989	23.24	6.28	2.98	4.37	11.0	0.53	44.08
5.009	23.23	6.29	2.86	4.35	10.81	0.27	44.11
5.013	23.19	6.28	2.86	4.37	10.64	0.37	44.1
5.02	23.11	6.28	2.9	4.36	10.35	0.38	44.18
5.028	23.08	6.28	2.82	4.36	10.6	0.61	44.24
5.03	23.05	6.28	2.86	4.38	10.58	0.42	44.24

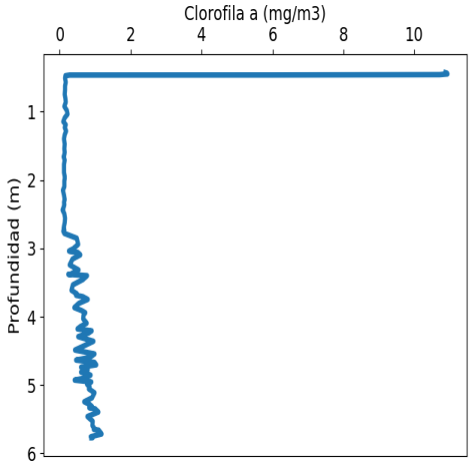
Nombre: CTD N05 - Punto 010 **Fecha: 06/10/2021** **Hora: 08:10:34**

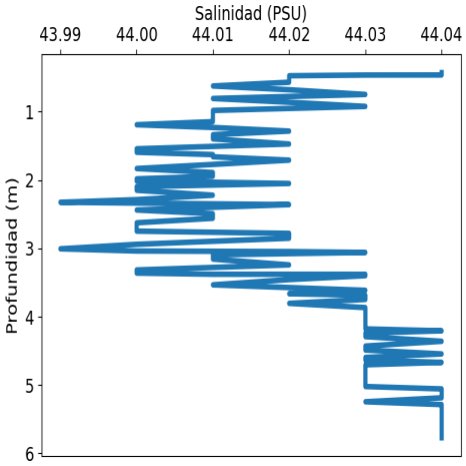


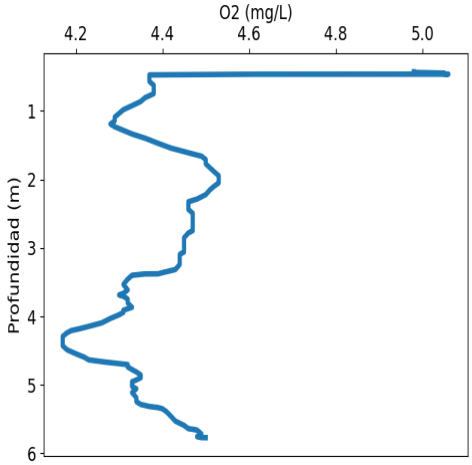


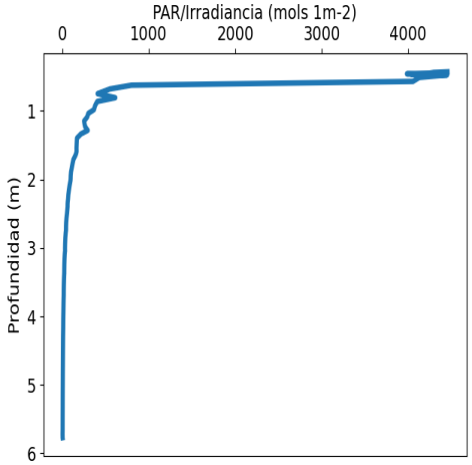












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.8	6.22	0.04	4.17	3.25	0.08	43.99
PROF (metros)	0.473	0.463	0.437	4.291	5.715	2.438	2.325
MÁXIMO	22.83	22.83	5.91	5.06	4454.8	10.93	44.04
PROF (metros)	0.437	0.428	5.529	0.462	0.428	0.447	0.428

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N05 - Punto 010	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.81	6.22	1.81	4.58	2579.58	3.21	44.03
1 - 2m	22.82	6.22	4.83	4.41	183.87	0.14	44.01
2 - 3m	22.82	6.22	4.95	4.48	57.74	0.16	44.01
3 - 4m	22.82	6.22	5.02	4.37	20.81	0.48	44.02
4 - 5m	22.83	6.23	5.28	4.26	7.97	0.73	44.03
5 - 6m	22.83	6.23	5.27	4.41	4.42	0.92	44.04

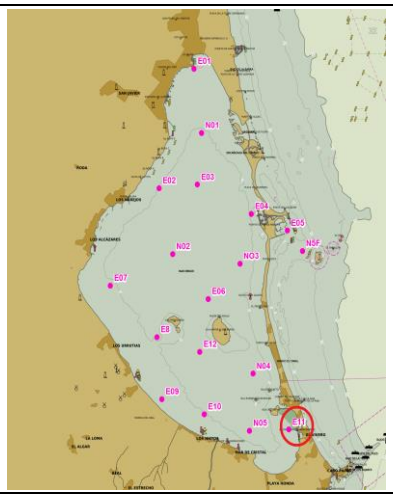
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 0 - 1m con los valores 3.21 respectivamente

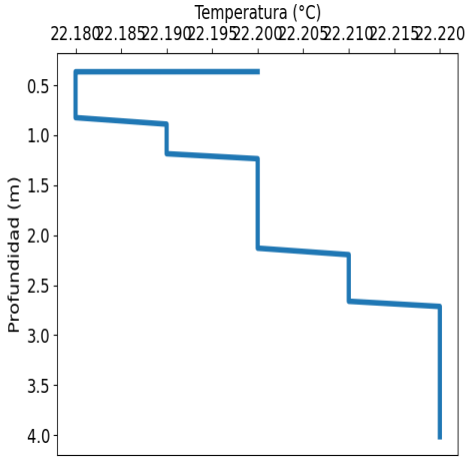
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.428	22.82	6.23	0.08	4.98	4454.8	10.87	44.04
0.437	22.83	6.23	0.04	4.98	4295.6	10.92	44.04
0.447	22.83	6.23	0.04	5.05	4252.0	10.93	44.04
0.457	22.83	6.23	0.04	5.05	3984.8	10.71	44.04
0.462	22.83	6.23	0.04	5.06	4089.6	5.99	44.04
0.463	22.81	6.22	0.04	4.61	4038.8	0.28	44.03
0.473	22.8	6.22	0.04	4.37	4450.7	0.16	44.02
0.51	22.8	6.22	0.08	4.37	4128.7	0.15	44.02
0.568	22.8	6.22	0.11	4.37	4055.7	0.17	44.02
0.623	22.8	6.22	1.34	4.38	800.29	0.15	44.01
0.678	22.8	6.22	4.39	4.38	551.3	0.15	44.02
0.747	22.8	6.22	5.49	4.38	407.88	0.14	44.03
0.806	22.81	6.22	4.46	4.36	613.19	0.16	44.01
0.861	22.81	6.22	3.85	4.35	404.87	0.17	44.02
0.922	22.81	6.22	4.0	4.33	379.16	0.13	44.03
0.981	22.81	6.22	5.0	4.31	365.87	0.2	44.01
1.035	22.81	6.22	4.77	4.3	300.93	0.22	44.01
1.089	22.81	6.22	4.92	4.29	287.5	0.14	44.01
1.145	22.81	6.22	4.69	4.29	252.39	0.1	44.01
1.19	22.81	6.22	4.81	4.28	257.53	0.17	44.0
1.23	22.81	6.22	4.84	4.29	264.06	0.14	44.01
1.283	22.81	6.22	4.73	4.31	294.17	0.18	44.02
1.336	22.81	6.22	4.84	4.33	215.04	0.14	44.01
1.397	22.82	6.22	5.23	4.36	169.25	0.12	44.01
1.472	22.82	6.22	4.81	4.39	166.41	0.14	44.02
1.542	22.82	6.22	4.65	4.42	164.15	0.13	44.0
1.593	22.82	6.22	4.65	4.45	164.95	0.14	44.0
1.627	22.82	6.22	4.81	4.47	158.14	0.13	44.01
1.659	22.82	6.22	4.77	4.49	148.0	0.11	44.01
1.708	22.82	6.22	4.65	4.5	128.42	0.14	44.02
1.771	22.82	6.22	4.77	4.5	118.25	0.12	44.01
1.831	22.82	6.22	4.77	4.51	109.65	0.12	44.0
1.89	22.82	6.22	4.84	4.52	100.89	0.12	44.01
1.944	22.82	6.22	5.04	4.53	97.33	0.14	44.01
1.982	22.82	6.22	5.15	4.53	96.39	0.14	44.0

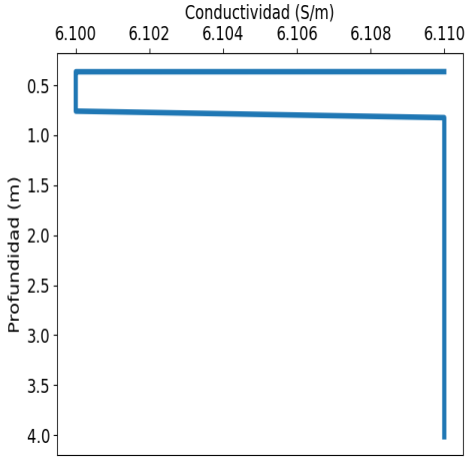
2.013	22.82	6.22	5.15	4.53	94.84	0.13	44.0
2.05	22.82	6.22	5.0	4.53	89.6	0.13	44.02
2.096	22.82	6.22	5.0	4.52	83.43	0.13	44.0
2.149	22.82	6.22	4.92	4.51	77.52	0.09	44.0
2.221	22.82	6.22	4.92	4.5	70.12	0.12	44.01
2.286	22.82	6.22	4.84	4.48	66.6	0.14	44.0
2.325	22.82	6.22	4.96	4.46	63.03	0.12	43.99
2.359	22.81	6.22	4.88	4.46	61.36	0.13	44.02
2.398	22.81	6.22	4.73	4.46	60.89	0.11	44.01
2.438	22.82	6.22	4.88	4.46	58.33	0.08	44.0
2.492	22.82	6.22	5.04	4.47	54.74	0.13	44.01
2.559	22.82	6.22	4.88	4.47	49.12	0.15	44.01
2.625	22.82	6.22	5.0	4.47	45.35	0.14	44.0
2.677	22.82	6.22	5.04	4.47	43.69	0.12	44.0
2.713	22.82	6.22	5.04	4.47	43.34	0.11	44.0
2.733	22.82	6.22	4.77	4.47	43.22	0.13	44.0
2.747	22.81	6.22	5.0	4.47	42.41	0.1	44.0
2.78	22.81	6.22	4.92	4.46	39.42	0.13	44.02
2.851	22.82	6.22	5.34	4.45	35.26	0.48	44.02
2.94	22.82	6.22	4.73	4.45	32.47	0.52	44.0
3.006	22.82	6.22	4.81	4.45	31.43	0.38	43.99
3.038	22.82	6.22	4.58	4.45	31.95	0.26	44.0
3.046	22.81	6.22	4.88	4.45	31.9	0.3	44.02
3.059	22.81	6.22	4.81	4.45	30.34	0.51	44.03
3.094	22.82	6.22	5.65	4.44	28.19	0.58	44.01
3.156	22.82	6.22	5.11	4.44	25.75	0.36	44.01
3.241	22.82	6.22	4.81	4.44	23.69	0.28	44.02
3.315	22.82	6.22	4.84	4.43	22.86	0.53	44.0
3.361	22.82	6.22	4.84	4.4	22.5	0.36	44.0
3.378	22.82	6.22	5.07	4.39	22.74	0.31	44.01
3.379	22.82	6.22	4.81	4.36	22.37	0.24	44.03
3.399	22.82	6.22	5.38	4.33	21.15	0.77	44.03
3.456	22.82	6.22	4.81	4.32	19.48	0.65	44.02
3.533	22.82	6.22	4.73	4.31	17.84	0.37	44.01
3.613	22.82	6.22	4.84	4.32	16.79	0.33	44.03
3.663	22.82	6.22	4.42	4.31	16.55	0.48	44.02
3.686	22.82	6.22	4.81	4.3	16.52	0.46	44.03
3.706	22.82	6.22	5.15	4.31	16.12	0.65	44.03
3.746	22.82	6.22	5.34	4.32	15.28	0.79	44.03
3.804	22.82	6.22	5.3	4.32	14.34	0.54	44.02
3.866	22.82	6.22	5.0	4.33	13.66	0.41	44.03
3.91	22.82	6.22	5.8	4.31	13.12	0.62	44.03
3.941	22.82	6.23	5.26	4.31	12.76	0.72	44.03
3.976	22.82	6.23	5.49	4.3	12.19	0.67	44.03
4.03	22.82	6.23	5.65	4.28	11.56	0.66	44.03
4.094	22.82	6.23	5.72	4.26	11.07	0.76	44.03
4.145	22.82	6.22	5.19	4.23	10.8	0.58	44.03
4.178	22.82	6.23	5.07	4.21	10.56	0.5	44.03
4.206	22.82	6.23	5.19	4.19	10.18	0.9	44.04
4.239	22.83	6.23	5.19	4.18	9.74	0.81	44.03
4.291	22.83	6.23	5.23	4.17	9.16	0.52	44.03
4.359	22.83	6.23	5.15	4.17	8.67	0.95	44.04
4.429	22.83	6.23	5.26	4.17	8.32	0.67	44.03
4.487	22.83	6.23	5.11	4.18	7.96	0.43	44.03
4.544	22.83	6.23	5.42	4.2	7.64	0.98	44.04
4.596	22.83	6.23	4.92	4.22	7.43	0.84	44.03
4.634	22.83	6.23	5.15	4.23	7.22	0.46	44.03
4.668	22.83	6.23	4.88	4.27	7.05	0.98	44.04

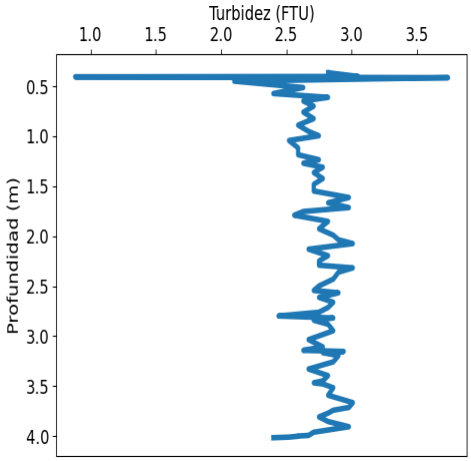
4.703	22.83	6.23	5.23	4.32	6.86	1.03	44.03
4.738	22.83	6.23	5.15	4.32	6.69	0.6	44.03
4.776	22.83	6.23	5.49	4.33	6.5	0.79	44.03
4.811	22.83	6.23	5.19	4.34	6.32	0.6	44.03
4.854	22.83	6.23	5.68	4.35	6.13	0.87	44.03
4.895	22.83	6.23	5.23	4.35	6.01	0.72	44.03
4.927	22.83	6.23	5.53	4.34	5.91	0.42	44.03
4.954	22.83	6.23	5.61	4.33	5.78	0.89	44.03
4.988	22.83	6.23	5.26	4.33	5.7	0.77	44.03
5.021	22.83	6.23	5.8	4.33	5.57	0.84	44.03
5.056	22.83	6.23	5.57	4.34	5.39	0.82	44.04
5.112	22.83	6.23	5.07	4.33	5.17	0.98	44.04
5.186	22.83	6.23	5.11	4.34	4.96	0.91	44.04
5.244	22.83	6.23	5.3	4.34	4.84	0.69	44.03
5.285	22.83	6.23	4.84	4.35	4.77	0.85	44.04
5.315	22.83	6.23	4.96	4.37	4.74	0.91	44.04
5.331	22.83	6.23	5.65	4.39	4.72	0.83	44.04
5.348	22.83	6.23	5.26	4.4	4.62	1.0	44.04
5.394	22.83	6.23	5.04	4.41	4.47	1.09	44.04
5.46	22.83	6.23	5.49	4.42	4.29	0.78	44.04
5.529	22.83	6.23	5.91	4.43	4.18	0.93	44.04
5.591	22.83	6.23	5.0	4.45	4.08	0.92	44.04
5.639	22.83	6.23	5.26	4.46	4.04	0.98	44.04
5.648	22.83	6.23	5.19	4.47	4.07	0.96	44.04
5.66	22.83	6.23	5.07	4.48	4.0	1.1	44.04
5.715	22.83	6.23	4.88	4.49	3.25	1.18	44.04
5.755	22.83	6.23	5.19	4.48	3.67	0.88	44.04
5.769	22.83	6.23	5.46	4.49	3.75	0.93	44.04
5.77	22.83	6.23	5.3	4.5	3.84	0.89	44.04

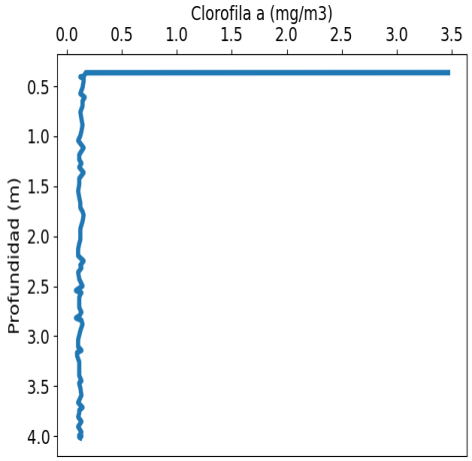
Nombre: CTD E11 - Punto 011 **Fecha: 06/10/2021** **Hora: 08:10:25**

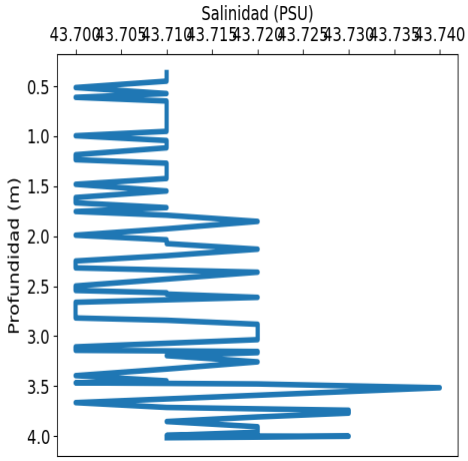


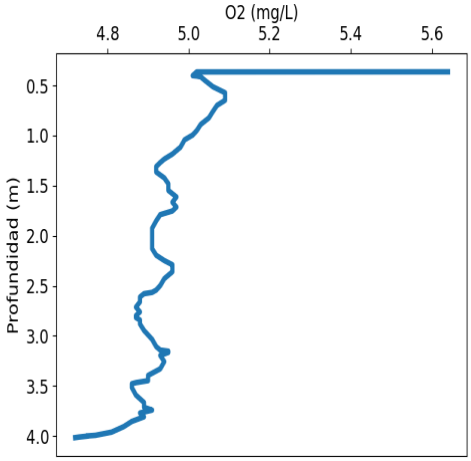


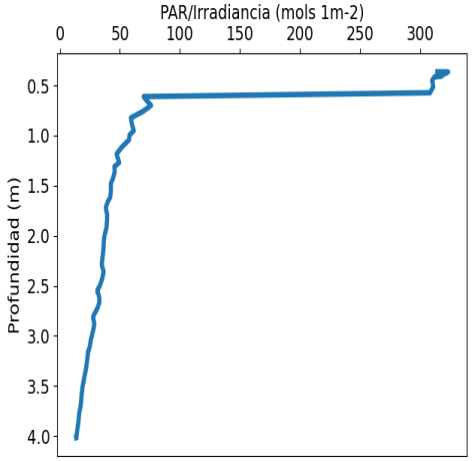












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.18	6.1	0.88	4.72	13.44	0.08	43.7
PROF (metros)	0.365	0.365	0.406	4.016	4.001	2.543	0.513
MÁXIMO	22.22	22.22	3.74	5.64	323.35	3.47	43.74
PROF (metros)	2.713	0.364	0.414	0.364	0.365	0.364	3.516

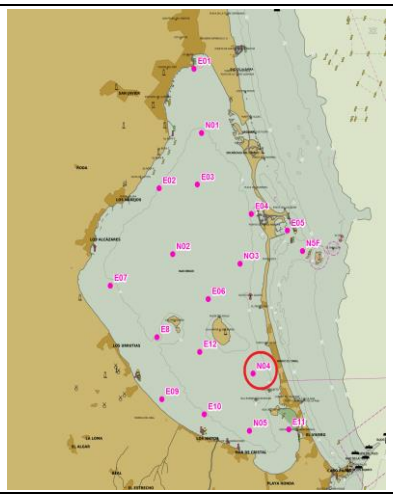
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E11 - Punto 011	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.18	6.1	2.62	5.08	190.02	0.35	43.71
1 - 2m	22.2	6.11	2.73	4.95	43.84	0.12	43.71
2 - 3m	22.21	6.11	2.81	4.91	32.68	0.12	43.71
3 - 4m	22.22	6.11	2.8	4.88	19.29	0.11	43.71
4 - 5m	22.22	6.11	2.5	4.73	13.53	0.11	43.72

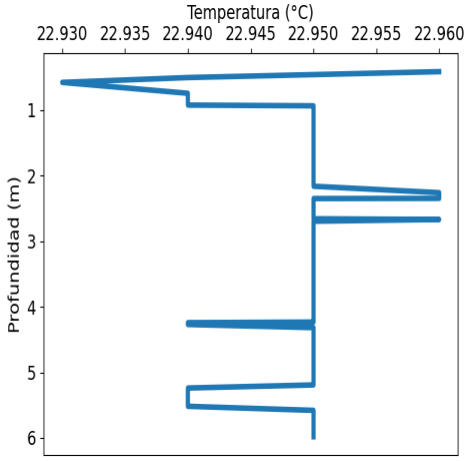
OBSERVACIONES GENERALES

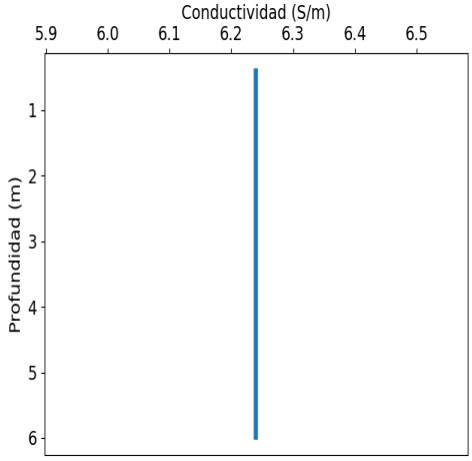
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.364	22.2	6.11	2.82	5.64	314.33	3.47	43.71
0.365	22.18	6.1	2.82	5.02	323.35	0.17	43.71
0.402	22.18	6.1	3.05	5.01	317.12	0.15	43.71
0.406	22.18	6.1	0.88	5.02	318.0	0.12	43.71
0.414	22.18	6.1	3.74	5.03	312.08	0.15	43.71
0.449	22.18	6.1	2.1	5.04	310.07	0.15	43.71
0.513	22.18	6.1	2.63	5.06	310.93	0.14	43.7
0.573	22.18	6.1	2.4	5.09	308.27	0.12	43.71
0.611	22.18	6.1	2.82	5.09	69.83	0.16	43.7
0.648	22.18	6.1	2.63	5.09	72.16	0.14	43.71
0.699	22.18	6.1	2.71	5.07	76.02	0.14	43.71
0.759	22.18	6.1	2.63	5.06	69.28	0.12	43.71
0.824	22.18	6.11	2.71	5.05	59.16	0.13	43.71
0.889	22.19	6.11	2.59	5.03	60.1	0.14	43.71
0.951	22.19	6.11	2.67	5.02	61.57	0.13	43.71
0.995	22.19	6.11	2.75	5.01	58.1	0.12	43.7
1.043	22.19	6.11	2.52	4.99	57.62	0.1	43.71
1.116	22.19	6.11	2.59	4.98	51.6	0.15	43.71
1.185	22.19	6.11	2.59	4.96	47.25	0.11	43.7
1.235	22.2	6.11	2.75	4.94	48.57	0.11	43.7
1.27	22.2	6.11	2.63	4.93	49.42	0.13	43.71
1.31	22.2	6.11	2.78	4.92	45.53	0.11	43.71
1.364	22.2	6.11	2.71	4.92	45.73	0.15	43.71
1.423	22.2	6.11	2.78	4.94	44.38	0.11	43.71
1.481	22.2	6.11	2.71	4.95	42.49	0.11	43.7
1.548	22.2	6.11	2.71	4.95	42.6	0.1	43.71
1.613	22.2	6.11	2.98	4.97	42.05	0.11	43.7
1.666	22.2	6.11	2.82	4.96	39.8	0.12	43.7
1.714	22.2	6.11	2.98	4.97	38.39	0.12	43.71
1.753	22.2	6.11	2.63	4.96	38.75	0.14	43.7
1.79	22.2	6.11	2.56	4.93	39.45	0.15	43.71
1.852	22.2	6.11	2.82	4.92	39.3	0.14	43.72
1.926	22.2	6.11	2.75	4.91	38.76	0.12	43.71
1.99	22.2	6.11	2.86	4.91	37.37	0.12	43.7
2.036	22.2	6.11	2.9	4.91	36.74	0.12	43.71
2.074	22.2	6.11	3.01	4.91	36.57	0.11	43.71
2.13	22.2	6.11	2.67	4.91	36.35	0.1	43.72

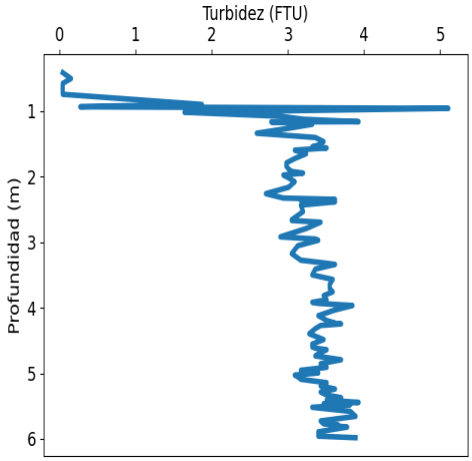
2.195	22.21	6.11	2.82	4.92	35.84	0.1	43.71
2.248	22.21	6.11	2.75	4.94	35.29	0.15	43.7
2.29	22.21	6.11	2.75	4.96	34.93	0.12	43.7
2.317	22.21	6.11	3.01	4.96	35.53	0.13	43.7
2.36	22.21	6.11	2.9	4.96	36.51	0.1	43.72
2.429	22.21	6.11	2.86	4.94	35.28	0.11	43.71
2.498	22.21	6.11	2.75	4.93	33.4	0.14	43.7
2.543	22.21	6.11	2.71	4.92	31.3	0.08	43.7
2.566	22.21	6.11	2.9	4.91	31.41	0.13	43.71
2.579	22.21	6.11	2.86	4.89	32.09	0.12	43.71
2.612	22.21	6.11	2.75	4.88	32.85	0.11	43.72
2.661	22.21	6.11	2.86	4.88	33.01	0.11	43.7
2.713	22.22	6.11	2.82	4.87	31.69	0.11	43.7
2.761	22.22	6.11	2.75	4.88	29.77	0.13	43.7
2.798	22.22	6.11	2.44	4.87	28.06	0.11	43.7
2.818	22.22	6.11	2.86	4.87	27.66	0.08	43.7
2.841	22.22	6.11	2.71	4.88	28.17	0.13	43.71
2.881	22.22	6.11	2.82	4.88	28.77	0.14	43.72
2.946	22.22	6.11	2.86	4.89	27.76	0.12	43.72
3.035	22.22	6.11	2.67	4.91	25.95	0.1	43.72
3.107	22.22	6.11	2.78	4.92	24.97	0.1	43.7
3.142	22.22	6.11	2.63	4.93	24.13	0.13	43.7
3.153	22.22	6.11	2.94	4.95	23.5	0.11	43.72
3.165	22.22	6.11	2.78	4.95	23.47	0.09	43.72
3.195	22.22	6.11	2.9	4.93	23.29	0.09	43.71
3.257	22.22	6.11	2.86	4.94	22.66	0.11	43.72
3.329	22.22	6.11	2.67	4.93	21.81	0.11	43.71
3.395	22.22	6.11	2.82	4.9	20.7	0.11	43.7
3.447	22.22	6.11	2.78	4.9	19.91	0.13	43.71
3.467	22.22	6.11	2.71	4.87	19.77	0.11	43.7
3.478	22.22	6.11	2.78	4.86	19.37	0.11	43.72
3.516	22.22	6.11	2.86	4.86	18.87	0.12	43.74
3.591	22.22	6.11	2.82	4.87	18.14	0.13	43.72
3.665	22.22	6.11	3.01	4.89	17.67	0.1	43.7
3.713	22.22	6.11	2.98	4.89	17.2	0.14	43.71
3.741	22.22	6.11	2.86	4.91	16.61	0.11	43.73
3.77	22.22	6.11	2.82	4.88	16.19	0.11	43.73
3.808	22.22	6.11	2.75	4.89	15.86	0.1	43.72
3.854	22.22	6.11	2.82	4.86	15.55	0.13	43.71
3.906	22.22	6.11	2.98	4.84	14.96	0.1	43.72
3.961	22.22	6.11	2.71	4.81	14.3	0.13	43.72
3.993	22.22	6.11	2.67	4.77	14.1	0.11	43.71
3.999	22.22	6.11	2.59	4.75	13.96	0.13	43.72
4.001	22.22	6.11	2.59	4.75	13.44	0.11	43.73
4.01	22.22	6.11	2.52	4.73	13.53	0.11	43.72
4.016	22.22	6.11	2.4	4.72	13.62	0.12	43.71

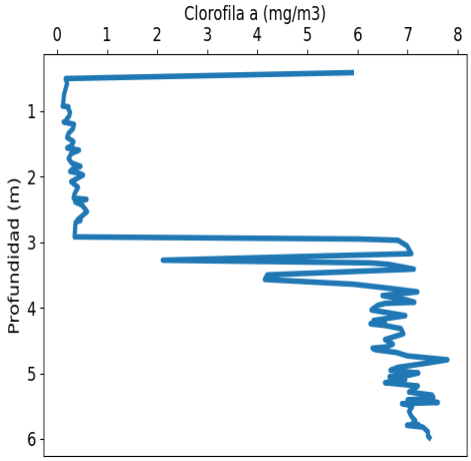
Nombre: CTD N04 - Punto 012 **Fecha: 06/10/2021** **Hora: 08:10:48**

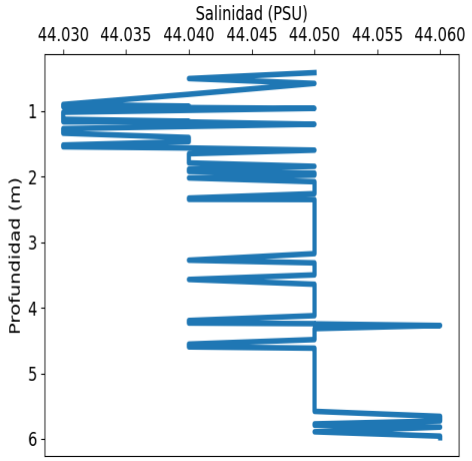


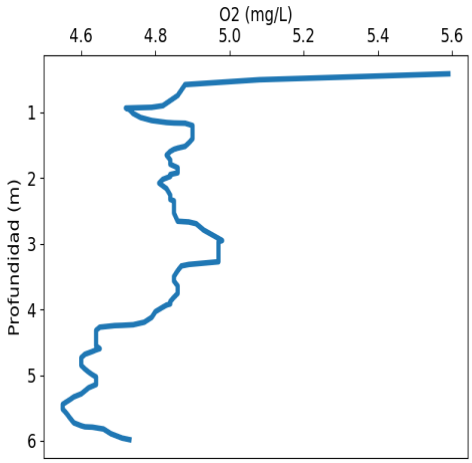


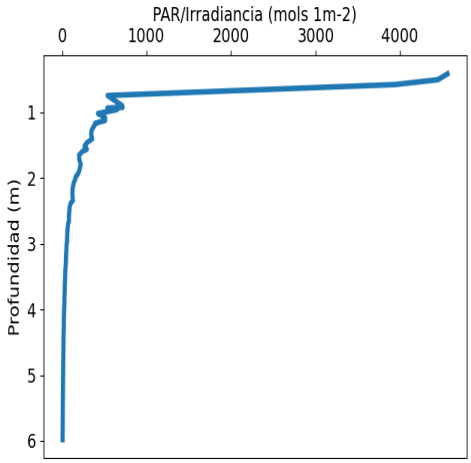












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.93	6.24	0.04	4.55	5.13	0.11	44.03
PROF (metros)	0.577	0.413	0.413	5.444	5.892	0.923	0.898
MÁXIMO	22.96	22.96	5.11	5.59	4562.4	7.8	44.06
PROF (metros)	0.413	0.413	0.958	0.413	0.413	4.793	4.27

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N04 - Punto 012	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.94	6.24	1.01	4.93	2012.45	0.89	44.04
1 - 2m	22.95	6.24	3.12	4.85	306.41	0.29	44.04
2 - 3m	22.95	6.24	3.18	4.88	97.89	1.09	44.05
3 - 4m	22.95	6.24	3.43	4.87	34.69	6.12	44.05
4 - 5m	22.95	6.24	3.45	4.66	16.3	6.72	44.05
5 - 6m	22.95	6.24	3.54	4.61	8.19	7.14	44.05

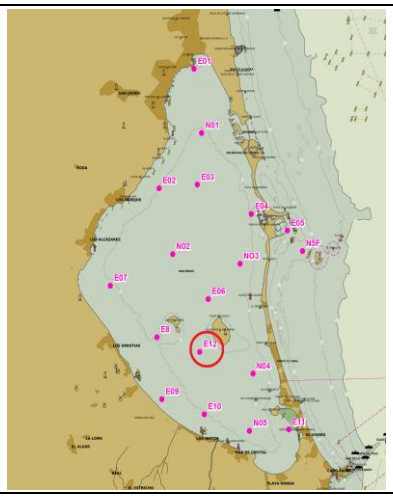
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 3 - 4m, 4 - 5m, 5 - 6m con los valores 6.12, 6.72, 7.14 respectivamente

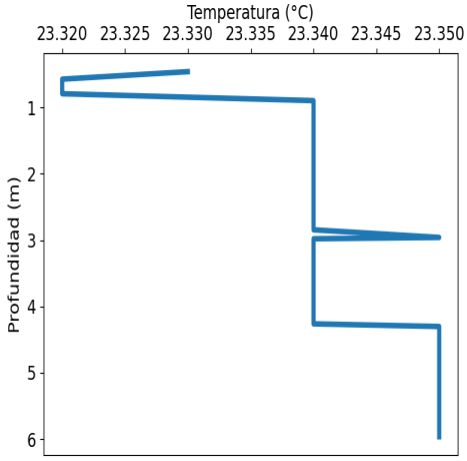
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.413	22.96	6.24	0.04	5.59	4562.4	5.89	44.05
0.503	22.94	6.24	0.15	5.08	4448.6	0.17	44.04
0.577	22.93	6.24	0.04	4.88	3936.2	0.2	44.05
0.743	22.94	6.24	0.04	4.86	537.55	0.14	44.04
0.898	22.94	6.24	1.87	4.82	710.58	0.12	44.03
0.923	22.94	6.24	0.57	4.79	716.86	0.11	44.04
0.934	22.95	6.24	0.27	4.72	535.81	0.23	44.03
0.958	22.95	6.24	5.11	4.73	651.58	0.22	44.05
1.017	22.95	6.24	1.64	4.74	423.58	0.26	44.03
1.078	22.95	6.24	2.9	4.76	508.46	0.24	44.03
1.124	22.95	6.24	3.2	4.79	508.93	0.19	44.03
1.154	22.95	6.24	3.78	4.83	421.43	0.19	44.04
1.161	22.95	6.24	3.93	4.85	415.51	0.19	44.03
1.165	22.95	6.24	2.78	4.88	390.76	0.13	44.04
1.2	22.95	6.24	3.32	4.9	381.63	0.34	44.05
1.267	22.95	6.24	2.98	4.9	350.19	0.32	44.03
1.337	22.95	6.24	2.59	4.9	342.8	0.23	44.03
1.402	22.95	6.24	3.36	4.9	355.5	0.2	44.04
1.465	22.95	6.24	3.47	4.89	289.57	0.33	44.04
1.517	22.95	6.24	3.4	4.88	264.3	0.3	44.03
1.544	22.95	6.24	3.32	4.86	285.51	0.25	44.03
1.562	22.95	6.24	3.51	4.85	292.34	0.2	44.04
1.595	22.95	6.24	3.09	4.84	239.95	0.44	44.05
1.65	22.95	6.24	3.24	4.83	199.43	0.28	44.04
1.723	22.95	6.24	3.09	4.84	204.3	0.23	44.04
1.79	22.95	6.24	2.98	4.84	220.03	0.29	44.04
1.842	22.95	6.24	2.98	4.86	209.92	0.47	44.05
1.884	22.95	6.24	3.01	4.86	203.54	0.31	44.04
1.92	22.95	6.24	3.05	4.86	193.25	0.26	44.04
1.945	22.95	6.24	3.2	4.84	184.36	0.43	44.05
1.975	22.95	6.24	2.94	4.84	162.11	0.52	44.05
2.019	22.95	6.24	3.01	4.82	154.66	0.42	44.04
2.077	22.95	6.24	3.09	4.81	136.21	0.28	44.05
2.161	22.95	6.24	3.01	4.83	123.12	0.42	44.05
2.259	22.96	6.24	2.71	4.84	121.53	0.35	44.05

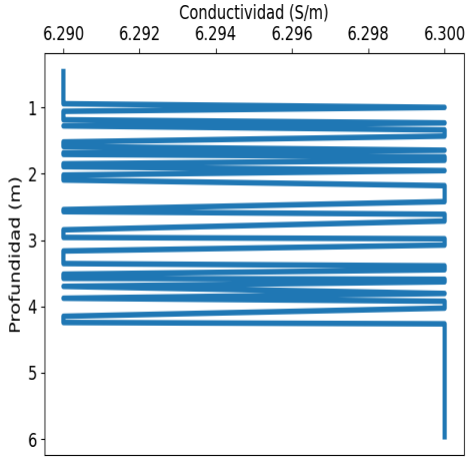
2.326	22.96	6.24	2.94	4.84	126.04	0.33	44.04
2.346	22.96	6.24	3.62	4.85	125.86	0.59	44.04
2.349	22.95	6.24	3.28	4.85	121.39	0.4	44.05
2.362	22.95	6.24	3.17	4.85	112.9	0.53	44.05
2.384	22.95	6.24	3.62	4.85	100.54	0.36	44.05
2.434	22.95	6.24	3.17	4.85	90.14	0.5	44.05
2.533	22.95	6.24	3.2	4.85	82.76	0.6	44.05
2.657	22.95	6.24	3.05	4.86	78.99	0.41	44.05
2.668	22.96	6.24	3.05	4.89	79.8	0.47	44.05
2.695	22.95	6.24	3.43	4.91	70.13	0.37	44.05
2.791	22.95	6.24	3.24	4.93	62.69	0.36	44.05
2.918	22.95	6.24	2.9	4.97	58.64	0.35	44.05
2.951	22.95	6.24	3.36	4.98	60.63	6.04	44.05
2.97	22.95	6.24	3.4	4.97	55.99	6.81	44.05
3.054	22.95	6.24	3.13	4.97	51.34	6.99	44.05
3.174	22.95	6.24	3.05	4.97	46.45	7.08	44.05
3.274	22.95	6.24	3.17	4.97	44.5	2.11	44.04
3.315	22.95	6.24	3.47	4.89	43.86	6.26	44.05
3.338	22.95	6.24	3.62	4.87	41.88	6.63	44.05
3.41	22.95	6.24	3.36	4.86	37.42	7.13	44.05
3.498	22.95	6.24	3.32	4.85	35.13	4.2	44.05
3.568	22.95	6.24	3.59	4.85	33.53	4.15	44.04
3.641	22.95	6.24	3.55	4.86	31.42	5.93	44.05
3.707	22.95	6.24	3.55	4.86	30.5	6.69	44.05
3.757	22.95	6.24	3.59	4.86	29.27	7.2	44.05
3.814	22.95	6.24	3.47	4.85	27.26	6.5	44.05
3.879	22.95	6.24	3.51	4.84	26.14	6.98	44.05
3.916	22.95	6.24	3.32	4.84	26.15	7.14	44.05
3.933	22.95	6.24	3.4	4.83	25.75	6.55	44.05
3.965	22.95	6.24	3.85	4.82	24.41	6.4	44.05
4.033	22.95	6.24	3.62	4.8	22.39	6.28	44.05
4.12	22.95	6.24	3.4	4.79	20.73	6.96	44.05
4.194	22.95	6.24	3.51	4.77	20.12	6.32	44.04
4.233	22.95	6.24	3.62	4.74	20.25	6.55	44.04
4.242	22.94	6.24	3.59	4.71	20.57	6.26	44.05
4.246	22.94	6.24	3.7	4.69	20.2	6.27	44.05
4.27	22.94	6.24	3.43	4.65	19.38	6.55	44.06
4.318	22.95	6.24	3.36	4.64	18.43	6.87	44.05
4.396	22.95	6.24	3.28	4.64	16.94	6.92	44.05
4.485	22.95	6.24	3.47	4.64	15.84	6.55	44.05
4.554	22.95	6.24	3.32	4.64	15.3	6.71	44.04
4.597	22.95	6.24	3.32	4.65	15.07	6.58	44.04
4.616	22.95	6.24	3.36	4.64	14.92	6.3	44.05
4.64	22.95	6.24	3.51	4.63	14.54	6.36	44.05
4.682	22.95	6.24	3.43	4.61	14.01	6.78	44.05
4.734	22.95	6.24	3.36	4.6	13.56	7.0	44.05
4.793	22.95	6.24	3.7	4.6	12.93	7.8	44.05
4.853	22.95	6.24	3.43	4.6	12.38	7.31	44.05
4.908	22.95	6.24	3.51	4.61	11.97	6.81	44.05
4.954	22.95	6.24	3.17	4.62	11.54	6.66	44.05
4.994	22.95	6.24	3.4	4.63	11.26	7.22	44.05
5.027	22.95	6.24	3.09	4.64	11.07	7.04	44.05
5.053	22.95	6.24	3.13	4.64	10.93	6.64	44.05
5.091	22.95	6.24	3.17	4.64	10.51	6.96	44.05
5.143	22.95	6.24	3.51	4.64	10.21	6.55	44.05
5.192	22.95	6.24	3.43	4.62	9.86	7.21	44.05
5.239	22.94	6.24	3.62	4.61	9.58	7.13	44.05
5.285	22.94	6.24	3.43	4.6	9.24	7.03	44.05

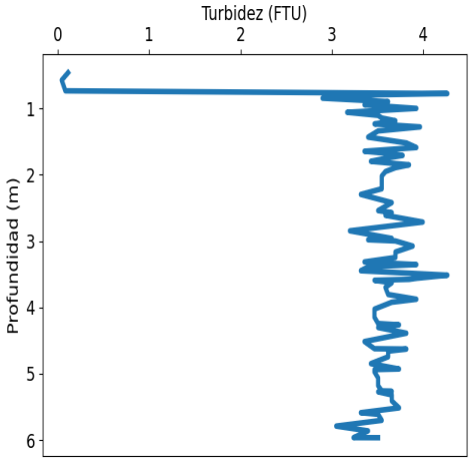
5.331	22.94	6.24	3.51	4.58	8.96	7.49	44.05
5.371	22.94	6.24	3.7	4.57	8.79	7.52	44.05
5.407	22.94	6.24	3.51	4.56	8.54	7.0	44.05
5.444	22.94	6.24	3.93	4.55	8.39	7.61	44.05
5.463	22.94	6.24	3.47	4.55	8.34	6.89	44.05
5.479	22.94	6.24	3.82	4.55	8.18	7.0	44.05
5.518	22.94	6.24	3.32	4.55	7.89	7.09	44.05
5.58	22.95	6.24	3.82	4.56	7.51	7.03	44.05
5.656	22.95	6.24	3.89	4.57	7.22	7.08	44.06
5.726	22.95	6.24	3.43	4.58	7.07	7.16	44.06
5.771	22.95	6.24	3.47	4.6	6.93	7.09	44.05
5.787	22.95	6.24	3.66	4.61	6.91	7.23	44.05
5.792	22.95	6.24	3.55	4.63	6.79	6.99	44.05
5.82	22.95	6.24	3.78	4.66	6.49	7.31	44.06
5.892	22.95	6.24	3.4	4.68	5.13	7.41	44.05
5.958	22.95	6.24	3.4	4.71	5.93	7.41	44.06
5.982	22.95	6.24	3.89	4.73	6.03	7.44	44.06

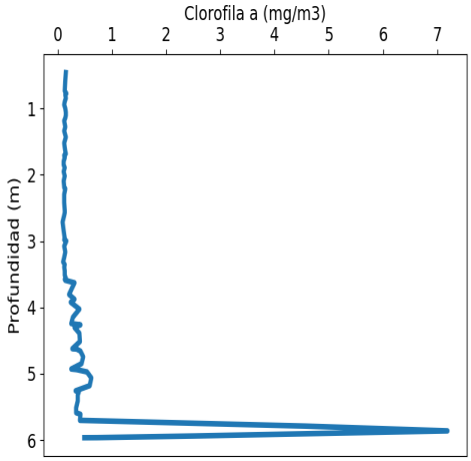
Nombre: CTD E12 - Punto 013 **Fecha: 06/10/2021** **Hora: 08:10:50**

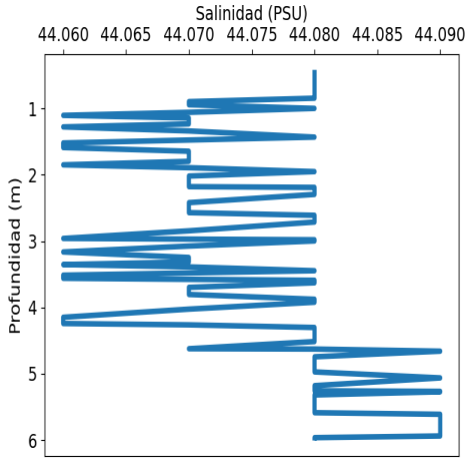


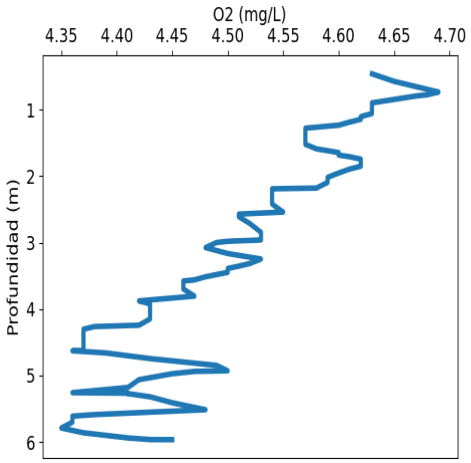


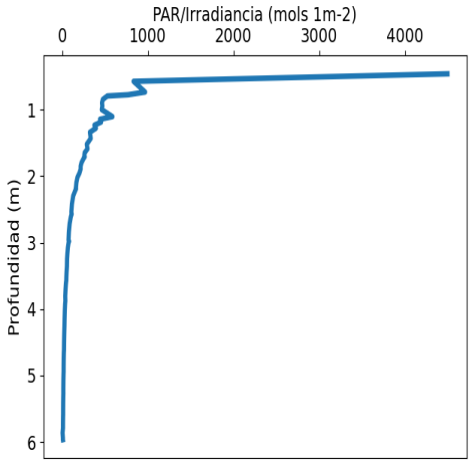












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.32	6.29	0.04	4.35	3.69	0.09	44.06
PROF (metros)	0.573	0.46	0.573	5.79	5.862	2.713	1.104
MÁXIMO	23.35	23.35	4.27	4.69	4497.3	7.19	44.09
PROF (metros)	2.96	0.999	0.775	0.734	0.46	5.862	4.66

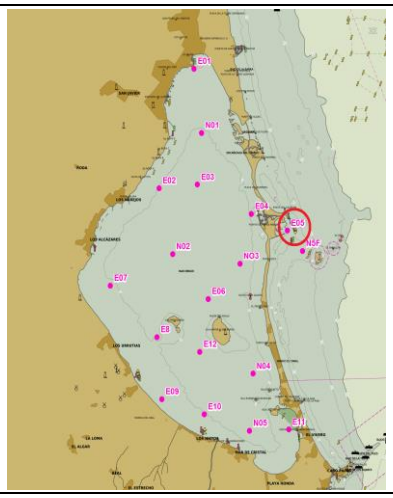
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E12 - Punto 013	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.33	6.29	2.42	4.65	1051.02	0.14	44.08
1 - 2m	23.34	6.29	3.61	4.6	327.74	0.13	44.07
2 - 3m	23.34	6.3	3.56	4.54	117.55	0.12	44.07
3 - 4m	23.34	6.29	3.7	4.48	47.89	0.17	44.07
4 - 5m	23.35	6.3	3.57	4.42	20.94	0.37	44.08
5 - 6m	23.35	6.3	3.48	4.4	10.11	1.25	44.08

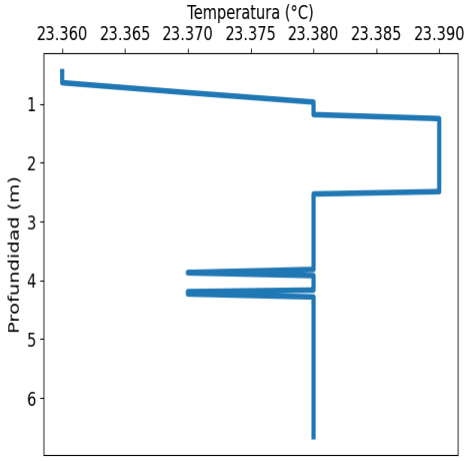
OBSERVACIONES GENERALES

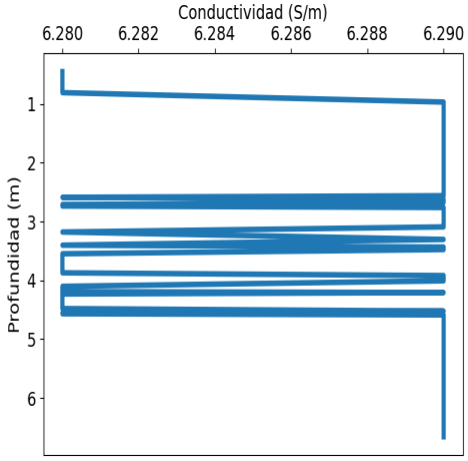
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.46	23.33	6.29	0.11	4.63	4497.3	0.15	44.08
0.573	23.32	6.29	0.04	4.65	832.26	0.14	44.08
0.734	23.32	6.29	0.08	4.69	967.36	0.13	44.08
0.775	23.32	6.29	4.27	4.68	767.77	0.16	44.08
0.793	23.32	6.29	3.51	4.67	526.94	0.14	44.08
0.845	23.33	6.29	2.9	4.65	473.87	0.15	44.08
0.897	23.34	6.29	3.62	4.63	464.09	0.13	44.07
0.944	23.34	6.29	3.36	4.63	468.41	0.12	44.07
0.999	23.34	6.3	3.93	4.63	461.19	0.14	44.08
1.058	23.34	6.29	3.17	4.63	531.6	0.15	44.07
1.104	23.34	6.29	3.51	4.62	585.82	0.15	44.06
1.144	23.34	6.29	3.55	4.62	440.51	0.14	44.07
1.186	23.34	6.29	3.7	4.61	454.09	0.12	44.07
1.233	23.34	6.3	3.47	4.6	375.14	0.13	44.07
1.278	23.34	6.29	3.97	4.57	393.76	0.14	44.06
1.339	23.34	6.3	3.51	4.57	323.13	0.12	44.07
1.432	23.34	6.3	3.4	4.57	332.39	0.15	44.08
1.52	23.34	6.29	3.82	4.57	286.17	0.12	44.06
1.589	23.34	6.29	3.93	4.58	295.06	0.13	44.06
1.645	23.34	6.3	3.36	4.6	261.98	0.14	44.07
1.683	23.34	6.29	3.66	4.6	257.89	0.15	44.07
1.708	23.34	6.29	3.78	4.61	262.41	0.12	44.07
1.744	23.34	6.3	3.62	4.62	244.73	0.13	44.07
1.797	23.34	6.3	3.43	4.62	224.87	0.11	44.07
1.85	23.34	6.29	3.85	4.62	214.49	0.11	44.06
1.893	23.34	6.29	3.7	4.61	214.54	0.13	44.07
1.952	23.34	6.3	3.59	4.6	200.83	0.11	44.08
2.019	23.34	6.29	3.55	4.59	176.91	0.13	44.07
2.094	23.34	6.29	3.55	4.59	165.11	0.11	44.07
2.179	23.34	6.3	3.55	4.58	158.95	0.12	44.07
2.19	23.34	6.3	3.55	4.54	160.8	0.12	44.08
2.211	23.34	6.3	3.55	4.54	153.52	0.14	44.08
2.296	23.34	6.3	3.32	4.54	127.59	0.12	44.08
2.42	23.34	6.3	3.66	4.54	112.84	0.12	44.07
2.54	23.34	6.29	3.51	4.55	106.15	0.13	44.07
2.571	23.34	6.29	3.66	4.51	109.8	0.13	44.07

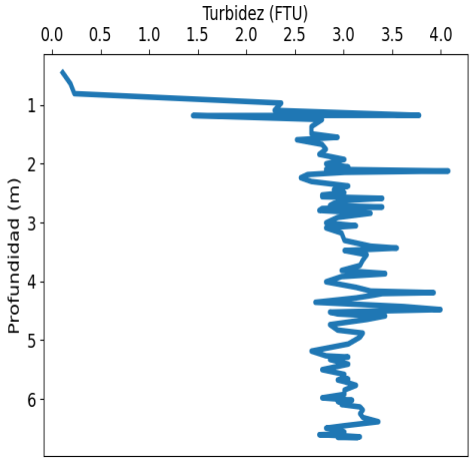
2.611	23.34	6.3	3.59	4.51	99.98	0.12	44.08
2.713	23.34	6.3	4.0	4.52	86.4	0.09	44.08
2.845	23.34	6.29	3.2	4.53	77.18	0.11	44.07
2.96	23.35	6.29	3.66	4.53	73.19	0.13	44.06
2.98	23.34	6.3	3.4	4.5	80.67	0.12	44.08
2.998	23.34	6.3	3.7	4.49	74.11	0.16	44.08
3.075	23.34	6.3	3.89	4.48	65.5	0.12	44.07
3.164	23.34	6.29	3.7	4.5	59.96	0.14	44.06
3.247	23.34	6.29	3.7	4.53	56.0	0.12	44.07
3.314	23.34	6.29	3.36	4.52	54.91	0.1	44.07
3.354	23.34	6.29	3.93	4.51	54.53	0.13	44.06
3.389	23.34	6.3	3.4	4.5	52.97	0.12	44.07
3.447	23.34	6.3	3.32	4.5	50.27	0.13	44.08
3.514	23.34	6.29	4.27	4.48	48.18	0.13	44.06
3.561	23.34	6.29	3.93	4.47	47.33	0.15	44.06
3.577	23.34	6.29	3.85	4.46	46.61	0.13	44.07
3.591	23.34	6.3	3.47	4.46	44.91	0.14	44.08
3.629	23.34	6.3	3.66	4.46	42.22	0.31	44.08
3.698	23.34	6.29	3.59	4.46	38.8	0.27	44.07
3.805	23.34	6.3	3.62	4.47	34.75	0.21	44.07
3.877	23.34	6.29	3.93	4.42	36.17	0.31	44.08
3.922	23.34	6.3	3.66	4.43	33.18	0.24	44.08
4.026	23.34	6.3	3.47	4.43	29.72	0.4	44.07
4.149	23.34	6.29	3.47	4.43	27.17	0.28	44.06
4.243	23.34	6.29	3.51	4.42	25.77	0.25	44.06
4.263	23.34	6.3	3.74	4.38	25.52	0.42	44.07
4.303	23.35	6.3	3.51	4.37	24.52	0.31	44.08
4.389	23.35	6.3	3.82	4.37	22.8	0.4	44.08
4.515	23.35	6.3	3.36	4.37	20.9	0.41	44.08
4.623	23.35	6.3	3.47	4.37	20.0	0.27	44.07
4.628	23.35	6.3	3.82	4.36	19.5	0.35	44.08
4.66	23.35	6.3	3.62	4.39	18.31	0.42	44.09
4.745	23.35	6.3	3.62	4.43	16.93	0.47	44.08
4.848	23.35	6.3	3.43	4.49	16.07	0.44	44.08
4.929	23.35	6.3	3.74	4.5	15.88	0.25	44.08
4.938	23.35	6.3	3.47	4.47	16.02	0.35	44.08
4.973	23.35	6.3	3.47	4.45	15.03	0.54	44.08
5.063	23.35	6.3	3.51	4.42	13.58	0.62	44.09
5.18	23.35	6.3	3.51	4.41	12.69	0.59	44.08
5.258	23.35	6.3	3.55	4.36	12.59	0.33	44.08
5.266	23.35	6.3	3.66	4.41	13.0	0.36	44.09
5.273	23.35	6.3	3.51	4.41	12.67	0.39	44.09
5.32	23.35	6.3	3.66	4.43	11.86	0.37	44.08
5.41	23.35	6.3	3.66	4.45	10.94	0.37	44.08
5.515	23.35	6.3	3.74	4.48	10.39	0.34	44.08
5.588	23.35	6.3	3.32	4.38	10.31	0.34	44.08
5.612	23.35	6.3	3.51	4.36	9.7	0.42	44.09
5.703	23.35	6.3	3.55	4.36	8.77	0.41	44.09
5.79	23.35	6.3	3.05	4.35	8.59	4.57	44.09
5.862	23.35	6.3	3.4	4.37	3.69	7.19	44.09
5.939	23.35	6.3	3.28	4.41	7.58	2.52	44.09
5.964	23.35	6.3	3.24	4.43	7.62	0.73	44.08
5.965	23.35	6.3	3.51	4.45	7.74	0.49	44.08

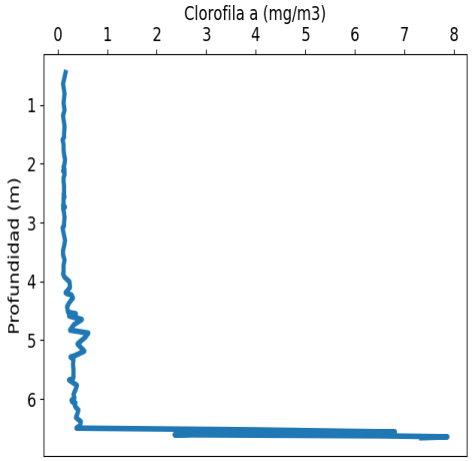
Nombre: CTD E06 - Punto 014 **Fecha: 06/10/2021** **Hora: 08:10:32**

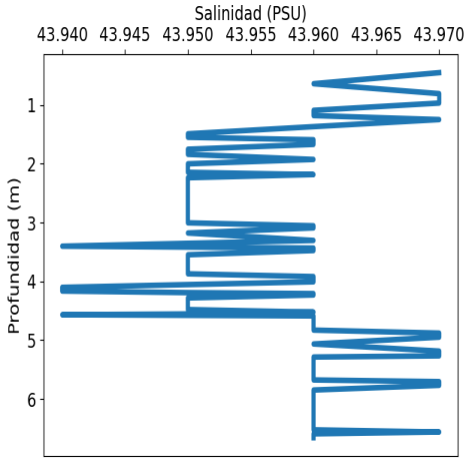


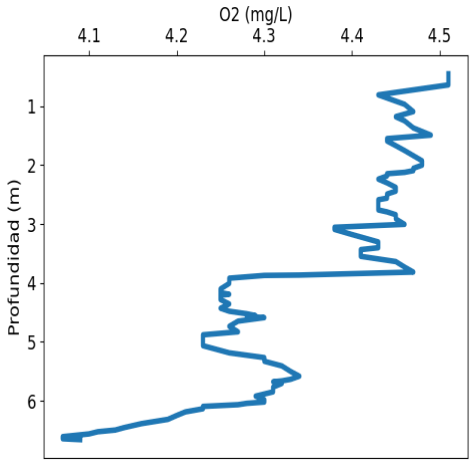


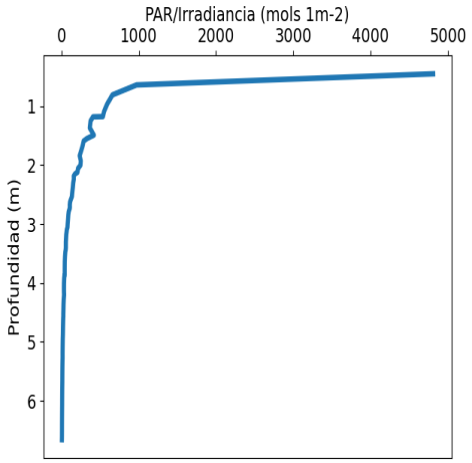












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.36	6.28	0.11	4.07	6.14	0.1	43.94
PROF (metros)	0.45	0.45	0.45	6.607	6.658	1.591	3.401
MÁXIMO	23.39	23.39	4.08	4.51	4810.0	7.87	43.97
PROF (metros)	1.248	0.967	2.122	0.45	0.45	6.643	0.45

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E06 - Punto 014	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.37	6.28	0.72	4.48	1758.54	0.13	43.97
1 - 2m	23.39	6.29	2.71	4.46	358.06	0.13	43.96
2 - 3m	23.38	6.29	2.98	4.44	143.31	0.13	43.95
3 - 4m	23.38	6.28	3.14	4.4	53.77	0.12	43.95
4 - 5m	23.38	6.29	3.21	4.26	26.61	0.29	43.95
5 - 6m	23.38	6.29	2.95	4.3	12.47	0.33	43.96
6 - 7m	23.38	6.29	3.05	4.16	7.67	2.6	43.96

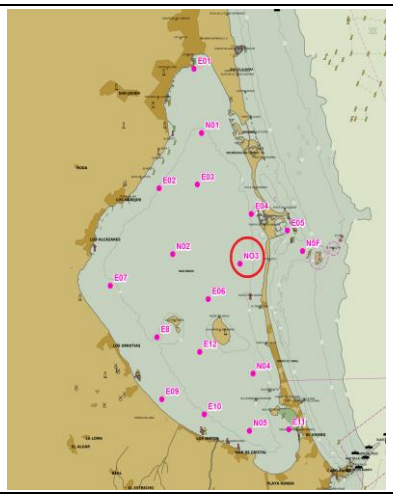
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 6 - 7m con los valores 2.6 respectivamente

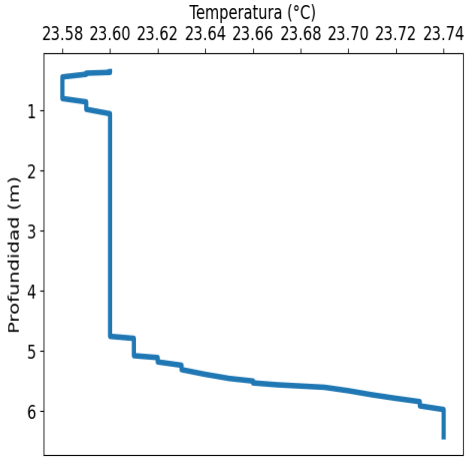
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.45	23.36	6.28	0.11	4.51	4810.0	0.16	43.97
0.638	23.36	6.28	0.19	4.51	972.98	0.11	43.96
0.807	23.37	6.28	0.23	4.43	660.85	0.14	43.97
0.967	23.38	6.29	2.36	4.46	590.31	0.12	43.97
1.091	23.38	6.29	2.29	4.47	551.43	0.14	43.96
1.176	23.38	6.29	3.78	4.45	536.43	0.11	43.96
1.18	23.38	6.29	1.45	4.45	409.02	0.11	43.96
1.248	23.39	6.29	2.78	4.46	377.76	0.12	43.97
1.368	23.39	6.29	2.67	4.47	367.48	0.14	43.96
1.49	23.39	6.29	2.67	4.49	419.48	0.13	43.95
1.549	23.39	6.29	2.94	4.44	329.71	0.13	43.95
1.591	23.39	6.29	2.52	4.44	287.57	0.1	43.96
1.67	23.39	6.29	2.78	4.45	274.48	0.12	43.96
1.752	23.39	6.29	2.82	4.46	256.58	0.12	43.95
1.839	23.39	6.29	2.75	4.47	236.2	0.13	43.95
1.926	23.39	6.29	3.01	4.48	250.52	0.15	43.96
2.0	23.39	6.29	2.82	4.48	246.83	0.14	43.95
2.053	23.39	6.29	3.05	4.47	215.54	0.12	43.95
2.093	23.39	6.29	2.82	4.47	210.84	0.14	43.95
2.122	23.39	6.29	4.08	4.46	207.4	0.11	43.95
2.145	23.39	6.29	3.01	4.44	178.56	0.14	43.95
2.183	23.39	6.29	2.63	4.44	159.72	0.14	43.96
2.237	23.39	6.29	2.56	4.43	160.54	0.12	43.95
2.301	23.39	6.29	2.67	4.44	152.59	0.12	43.95
2.377	23.39	6.29	3.05	4.45	147.52	0.13	43.95
2.441	23.39	6.29	2.9	4.45	142.21	0.13	43.95
2.49	23.39	6.29	3.01	4.44	138.41	0.13	43.95
2.53	23.38	6.29	2.78	4.44	136.21	0.12	43.95
2.56	23.38	6.29	2.78	4.44	128.57	0.14	43.95
2.587	23.38	6.28	3.4	4.43	120.41	0.12	43.95
2.625	23.38	6.29	3.01	4.43	111.85	0.12	43.95
2.673	23.38	6.29	2.9	4.43	108.36	0.12	43.95
2.709	23.38	6.28	2.86	4.43	108.94	0.11	43.95
2.735	23.38	6.28	3.4	4.43	107.28	0.15	43.95

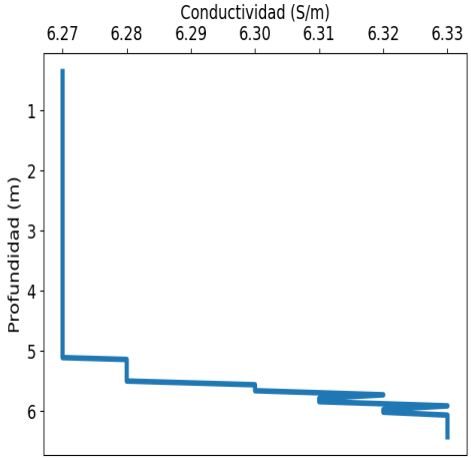
2.76	23.38	6.29	2.78	4.43	101.17	0.11	43.95
2.793	23.38	6.29	2.75	4.44	94.18	0.12	43.95
2.841	23.38	6.29	3.28	4.45	89.64	0.13	43.95
2.912	23.38	6.29	2.94	4.45	86.06	0.14	43.95
3.004	23.38	6.29	2.82	4.46	80.65	0.13	43.95
3.054	23.38	6.29	3.13	4.38	78.37	0.13	43.96
3.09	23.38	6.29	2.82	4.38	70.77	0.1	43.96
3.177	23.38	6.28	2.98	4.4	62.81	0.12	43.95
3.303	23.38	6.29	3.01	4.43	57.73	0.15	43.96
3.401	23.38	6.28	3.28	4.43	57.43	0.13	43.94
3.433	23.38	6.29	3.55	4.41	55.59	0.12	43.96
3.475	23.38	6.29	3.01	4.41	50.28	0.11	43.96
3.547	23.38	6.28	3.24	4.41	46.45	0.11	43.95
3.636	23.38	6.28	3.2	4.45	43.54	0.14	43.95
3.729	23.38	6.28	3.17	4.46	42.76	0.12	43.95
3.814	23.38	6.28	2.98	4.47	42.51	0.12	43.95
3.865	23.37	6.28	3.43	4.34	42.62	0.12	43.95
3.871	23.37	6.28	3.43	4.3	39.25	0.11	43.95
3.918	23.38	6.29	2.98	4.26	35.8	0.13	43.96
4.007	23.38	6.29	2.82	4.26	33.18	0.24	43.96
4.101	23.38	6.28	3.13	4.25	32.54	0.25	43.94
4.164	23.38	6.28	3.28	4.25	33.1	0.19	43.94
4.191	23.37	6.28	3.93	4.26	34.09	0.16	43.95
4.207	23.37	6.29	3.4	4.25	33.79	0.19	43.96
4.231	23.37	6.28	3.32	4.25	32.36	0.28	43.96
4.281	23.38	6.28	3.13	4.25	29.76	0.31	43.95
4.355	23.38	6.28	2.71	4.26	27.52	0.24	43.95
4.428	23.38	6.28	3.62	4.25	26.45	0.19	43.95
4.479	23.38	6.28	4.0	4.26	25.58	0.2	43.95
4.522	23.38	6.29	2.86	4.28	24.72	0.21	43.96
4.553	23.38	6.28	2.94	4.29	24.76	0.37	43.95
4.567	23.38	6.28	3.09	4.28	24.64	0.29	43.94
4.587	23.38	6.29	3.43	4.3	23.68	0.23	43.96
4.647	23.38	6.29	3.24	4.27	22.31	0.49	43.96
4.735	23.38	6.29	2.86	4.26	20.82	0.33	43.96
4.828	23.38	6.29	2.94	4.27	19.76	0.25	43.96
4.879	23.38	6.29	3.2	4.23	19.08	0.62	43.97
4.948	23.38	6.29	3.17	4.23	17.41	0.56	43.97
5.064	23.38	6.29	3.05	4.23	16.13	0.4	43.96
5.185	23.38	6.29	2.67	4.26	15.1	0.54	43.97
5.266	23.38	6.29	2.82	4.3	15.22	0.34	43.97
5.286	23.38	6.29	3.05	4.3	14.79	0.26	43.96
5.328	23.38	6.29	2.86	4.3	14.08	0.32	43.96
5.407	23.38	6.29	3.05	4.32	13.14	0.31	43.96
5.501	23.38	6.29	2.78	4.33	12.42	0.32	43.96
5.581	23.38	6.29	3.01	4.34	12.02	0.32	43.96
5.634	23.38	6.29	2.98	4.33	11.78	0.32	43.96
5.661	23.38	6.29	3.05	4.32	11.76	0.29	43.96
5.676	23.38	6.29	2.94	4.31	11.65	0.23	43.96
5.704	23.38	6.29	3.01	4.32	11.32	0.28	43.97
5.767	23.38	6.29	3.13	4.31	10.67	0.39	43.97
5.847	23.38	6.29	3.01	4.31	10.16	0.36	43.96
5.92	23.38	6.29	3.01	4.29	9.79	0.32	43.96
5.98	23.38	6.29	2.78	4.3	9.49	0.34	43.96
6.02	23.38	6.29	3.09	4.3	9.4	0.28	43.96
6.042	23.38	6.29	2.94	4.28	9.38	0.29	43.96
6.065	23.38	6.29	3.01	4.27	9.28	0.36	43.96
6.094	23.38	6.29	2.98	4.23	9.05	0.34	43.96

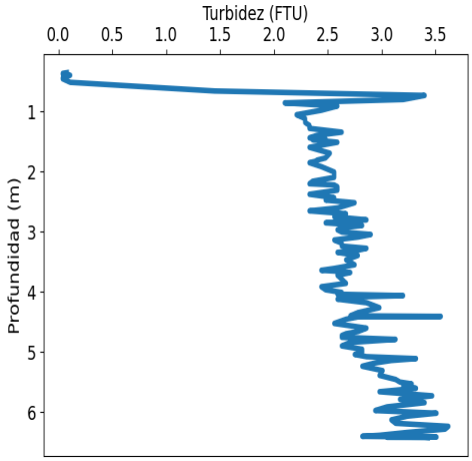
6.134	23.38	6.29	3.17	4.23	8.78	0.36	43.96
6.187	23.38	6.29	3.2	4.21	8.46	0.42	43.96
6.248	23.38	6.29	3.17	4.2	8.12	0.4	43.96
6.314	23.38	6.29	3.2	4.19	7.81	0.37	43.96
6.386	23.38	6.29	3.36	4.16	7.51	0.47	43.96
6.454	23.38	6.29	3.01	4.14	7.3	0.45	43.96
6.495	23.38	6.29	2.82	4.13	7.29	0.38	43.96
6.524	23.38	6.29	2.94	4.11	7.18	3.91	43.96
6.561	23.38	6.29	3.01	4.1	6.95	6.81	43.97
6.592	23.38	6.29	2.98	4.08	6.92	2.92	43.96
6.607	23.38	6.29	2.75	4.07	6.82	2.36	43.96
6.626	23.38	6.29	3.01	4.07	6.61	6.53	43.96
6.643	23.38	6.29	3.17	4.07	6.41	7.87	43.96
6.651	23.38	6.29	2.94	4.08	6.25	7.6	43.96
6.658	23.38	6.29	3.13	4.09	6.14	7.34	43.96

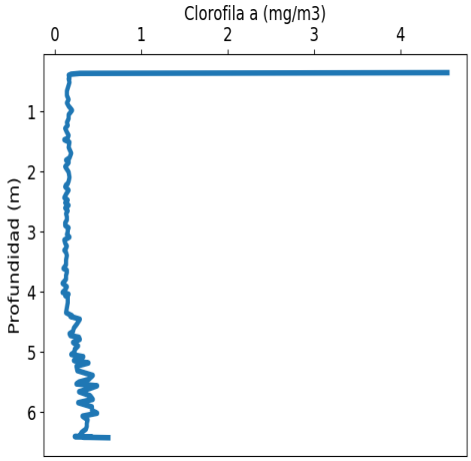
Nombre: CTD N03 - Punto 015 **Fecha: 06/10/2021** **Hora: 09:10:50**

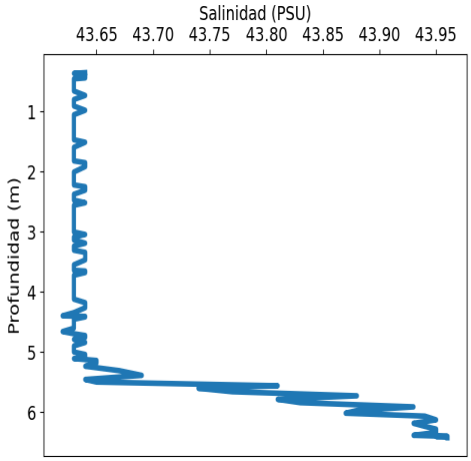


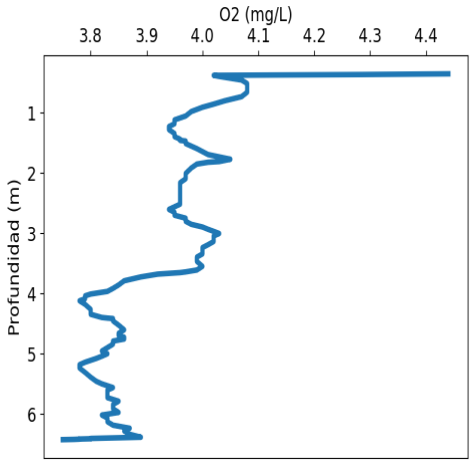


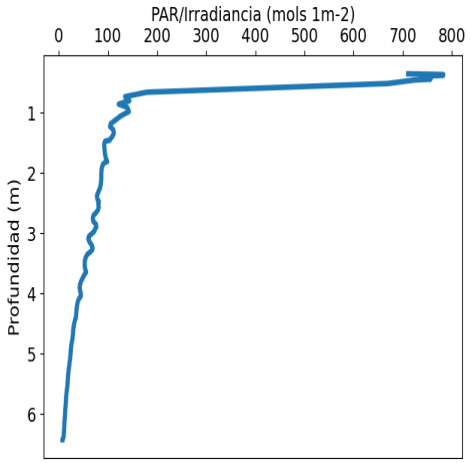












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.58	6.27	0.04	3.75	7.23	0.09	43.62
PROF (metros)	0.438	0.35	0.362	6.423	6.419	3.855	4.395
MÁXIMO	23.74	23.74	3.62	4.44	783.23	4.54	43.96
PROF (metros)	5.971	5.91	6.234	0.35	0.362	0.35	6.4

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N03 - Punto 015	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.59	6.27	1.2	4.09	463.71	0.51	43.63
1 - 2m	23.6	6.27	2.4	3.98	101.77	0.15	43.63
2 - 3m	23.6	6.27	2.56	3.97	78.9	0.14	43.63
3 - 4m	23.6	6.27	2.65	3.96	56.21	0.13	43.63
4 - 5m	23.6	6.27	2.8	3.83	32.91	0.2	43.63
5 - 6m	23.67	6.29	3.1	3.82	18.01	0.34	43.73
6 - 7m	23.74	6.33	3.27	3.82	9.41	0.38	43.94

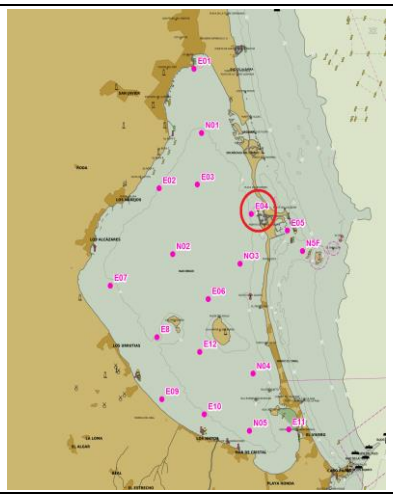
OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 3.98, 3.97, 3.96, 3.83, 3.82, 3.82 respectivamente.

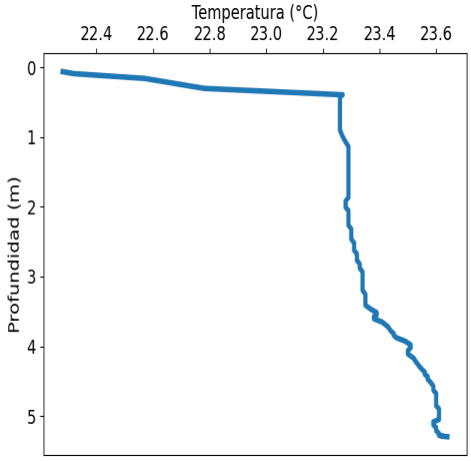
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.35	23.6	6.27	0.08	4.44	711.57	4.54	43.64
0.362	23.6	6.27	0.04	4.28	783.23	0.29	43.63
0.375	23.59	6.27	0.04	4.02	782.86	0.19	43.64
0.393	23.59	6.27	0.11	4.03	737.25	0.16	43.64
0.438	23.58	6.27	0.04	4.06	757.17	0.17	43.64
0.453	23.58	6.27	0.04	4.07	724.21	0.16	43.63
0.511	23.58	6.27	0.11	4.08	670.42	0.17	43.63
0.655	23.58	6.27	1.45	4.08	179.22	0.14	43.63
0.729	23.58	6.27	3.4	4.07	134.89	0.14	43.64
0.797	23.58	6.27	3.2	4.04	143.77	0.16	43.63
0.853	23.59	6.27	2.1	4.02	121.87	0.14	43.63
0.905	23.59	6.27	2.59	4.0	138.99	0.16	43.63
0.976	23.59	6.27	2.44	3.98	142.84	0.2	43.64
1.05	23.6	6.27	2.21	3.97	126.01	0.16	43.63
1.115	23.6	6.27	2.29	3.95	115.6	0.16	43.63
1.179	23.6	6.27	2.29	3.95	105.61	0.14	43.63
1.226	23.6	6.27	2.33	3.94	104.22	0.15	43.63
1.277	23.6	6.27	2.33	3.94	110.87	0.12	43.63
1.34	23.6	6.27	2.63	3.95	112.04	0.14	43.63
1.393	23.6	6.27	2.4	3.95	108.81	0.16	43.63
1.435	23.6	6.27	2.33	3.96	104.66	0.15	43.63
1.455	23.6	6.27	2.48	3.96	103.04	0.13	43.63
1.466	23.6	6.27	2.36	3.97	94.6	0.11	43.63
1.508	23.6	6.27	2.59	3.97	92.39	0.17	43.64
1.592	23.6	6.27	2.33	3.99	92.9	0.16	43.63
1.69	23.6	6.27	2.52	4.01	94.2	0.19	43.63
1.768	23.6	6.27	2.48	4.05	96.3	0.17	43.63
1.806	23.6	6.27	2.4	4.03	98.6	0.13	43.63
1.818	23.6	6.27	2.4	4.01	94.64	0.16	43.63
1.848	23.6	6.27	2.33	3.99	89.96	0.16	43.64
1.913	23.6	6.27	2.44	3.98	87.39	0.12	43.64

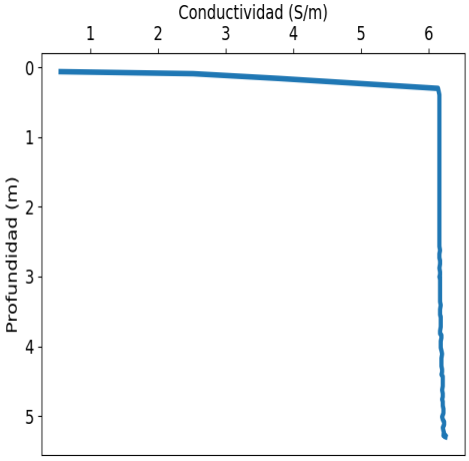
2.003	23.6	6.27	2.56	3.97	86.46	0.16	43.63
2.092	23.6	6.27	2.56	3.97	86.48	0.17	43.63
2.157	23.6	6.27	2.36	3.96	85.82	0.16	43.63
2.198	23.6	6.27	2.33	3.96	85.27	0.15	43.63
2.218	23.6	6.27	2.56	3.96	84.46	0.13	43.63
2.248	23.6	6.27	2.59	3.96	83.82	0.12	43.64
2.305	23.6	6.27	2.59	3.96	80.77	0.16	43.64
2.373	23.6	6.27	2.33	3.96	77.57	0.13	43.63
2.43	23.6	6.27	2.56	3.96	78.55	0.11	43.63
2.47	23.6	6.27	2.48	3.96	81.56	0.15	43.63
2.514	23.6	6.27	2.75	3.96	80.3	0.12	43.64
2.557	23.6	6.27	2.67	3.95	81.39	0.16	43.63
2.601	23.6	6.27	2.59	3.94	80.13	0.12	43.63
2.649	23.6	6.27	2.33	3.95	76.59	0.15	43.63
2.697	23.6	6.27	2.67	3.95	70.75	0.13	43.63
2.747	23.6	6.27	2.56	3.97	69.12	0.14	43.63
2.799	23.6	6.27	2.86	3.97	70.28	0.14	43.63
2.848	23.6	6.27	2.48	3.98	75.73	0.12	43.63
2.893	23.6	6.27	2.82	4.0	76.31	0.12	43.63
2.931	23.6	6.27	2.63	4.01	73.56	0.16	43.63
2.965	23.6	6.27	2.59	4.02	72.08	0.15	43.63
3.001	23.6	6.27	2.63	4.03	67.52	0.15	43.63
3.042	23.6	6.27	2.9	4.02	61.74	0.14	43.64
3.085	23.6	6.27	2.78	4.02	59.92	0.17	43.63
3.134	23.6	6.27	2.56	4.02	62.06	0.11	43.63
3.187	23.6	6.27	2.63	4.01	66.48	0.12	43.64
3.235	23.6	6.27	2.63	4.0	68.75	0.14	43.63
3.272	23.6	6.27	2.86	4.0	68.07	0.13	43.63
3.304	23.6	6.27	2.78	4.0	64.44	0.11	43.63
3.34	23.6	6.27	2.59	4.0	58.88	0.13	43.64
3.392	23.6	6.27	2.78	3.99	54.9	0.14	43.64
3.464	23.6	6.27	2.67	3.99	52.79	0.13	43.64
3.546	23.6	6.27	2.75	4.0	52.66	0.13	43.63
3.607	23.6	6.27	2.56	3.99	54.14	0.1	43.63
3.638	23.6	6.27	2.44	3.97	55.52	0.14	43.63
3.65	23.6	6.27	2.56	3.96	55.16	0.14	43.64
3.675	23.6	6.27	2.71	3.92	52.85	0.14	43.64
3.721	23.6	6.27	2.59	3.89	49.74	0.13	43.63
3.786	23.6	6.27	2.63	3.86	45.75	0.13	43.63
3.855	23.6	6.27	2.67	3.85	42.89	0.09	43.63
3.912	23.6	6.27	2.44	3.84	42.5	0.14	43.63
3.962	23.6	6.27	2.48	3.83	43.73	0.12	43.63
4.006	23.6	6.27	2.63	3.8	44.75	0.09	43.63
4.036	23.6	6.27	2.59	3.79	44.94	0.16	43.63
4.059	23.6	6.27	3.2	3.79	43.37	0.12	43.63
4.085	23.6	6.27	2.71	3.79	40.98	0.15	43.63
4.118	23.6	6.27	2.59	3.78	39.22	0.15	43.63
4.177	23.6	6.27	2.86	3.79	37.48	0.15	43.64
4.26	23.6	6.27	2.98	3.8	36.06	0.14	43.64
4.342	23.6	6.27	2.78	3.8	35.37	0.13	43.63
4.395	23.6	6.27	2.71	3.82	34.93	0.2	43.62
4.405	23.6	6.27	3.55	3.83	34.78	0.18	43.64
4.413	23.6	6.27	2.78	3.84	33.78	0.2	43.64
4.452	23.6	6.27	2.67	3.84	32.54	0.29	43.63
4.522	23.6	6.27	2.56	3.85	30.58	0.26	43.63
4.6	23.6	6.27	2.86	3.86	29.3	0.22	43.63
4.657	23.6	6.27	2.78	3.85	28.97	0.21	43.62
4.693	23.6	6.27	2.67	3.85	28.47	0.17	43.63

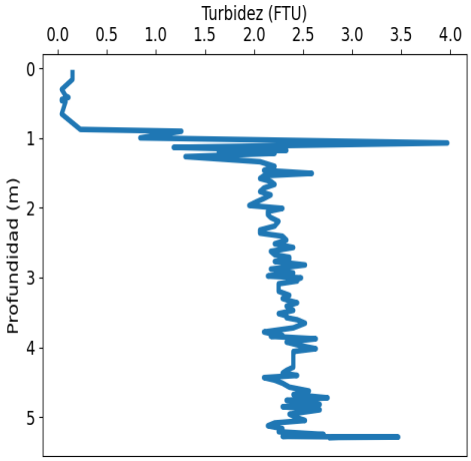
4.723	23.6	6.27	2.63	3.86	28.06	0.18	43.64
4.753	23.6	6.27	2.63	3.86	27.64	0.28	43.64
4.787	23.61	6.27	3.13	3.84	26.93	0.29	43.63
4.838	23.61	6.27	2.71	3.84	25.74	0.21	43.64
4.896	23.61	6.27	2.63	3.83	24.85	0.27	43.63
4.952	23.61	6.27	2.82	3.82	24.24	0.23	43.63
4.997	23.61	6.27	2.82	3.83	23.95	0.23	43.63
5.038	23.61	6.27	2.75	3.82	23.36	0.19	43.64
5.075	23.61	6.27	2.86	3.81	23.07	0.33	43.64
5.107	23.62	6.27	3.32	3.8	22.64	0.3	43.63
5.138	23.62	6.28	3.09	3.79	22.0	0.22	43.65
5.179	23.62	6.28	2.94	3.78	21.35	0.39	43.65
5.234	23.63	6.28	2.82	3.78	20.43	0.25	43.64
5.307	23.63	6.28	3.01	3.79	19.43	0.26	43.67
5.386	23.64	6.28	2.98	3.8	18.56	0.44	43.69
5.454	23.65	6.28	3.13	3.81	18.12	0.39	43.64
5.497	23.66	6.28	3.17	3.82	17.74	0.28	43.65
5.528	23.66	6.29	3.28	3.83	17.5	0.25	43.73
5.559	23.67	6.3	3.2	3.84	16.9	0.49	43.81
5.601	23.69	6.3	3.32	3.83	16.3	0.41	43.74
5.658	23.7	6.3	2.98	3.83	15.54	0.28	43.77
5.726	23.71	6.32	3.47	3.83	14.79	0.41	43.88
5.785	23.72	6.31	3.17	3.85	14.52	0.44	43.81
5.84	23.73	6.31	3.4	3.84	13.91	0.27	43.83
5.91	23.73	6.33	3.05	3.84	13.24	0.43	43.93
5.971	23.74	6.32	2.94	3.85	12.87	0.43	43.88
6.015	23.74	6.32	3.51	3.82	12.54	0.49	43.87
6.064	23.74	6.33	3.24	3.83	12.02	0.32	43.94
6.126	23.74	6.33	3.09	3.83	11.49	0.38	43.95
6.183	23.74	6.33	3.13	3.84	11.18	0.37	43.93
6.234	23.74	6.33	3.62	3.87	10.82	0.37	43.94
6.28	23.74	6.33	3.59	3.86	10.58	0.36	43.95
6.335	23.74	6.33	3.24	3.87	10.09	0.31	43.95
6.383	23.74	6.33	2.98	3.89	9.64	0.29	43.93
6.4	23.74	6.33	2.82	3.81	8.49	0.32	43.96
6.403	23.74	6.33	3.01	3.8	8.24	0.23	43.95
6.408	23.74	6.33	3.4	3.8	7.89	0.33	43.96
6.412	23.74	6.33	3.51	3.78	7.79	0.43	43.96
6.413	23.74	6.33	3.28	3.78	7.75	0.43	43.96
6.415	23.74	6.33	3.05	3.78	7.47	0.33	43.96
6.419	23.74	6.33	3.4	3.77	7.23	0.46	43.96
6.423	23.74	6.33	3.43	3.75	7.25	0.62	43.96

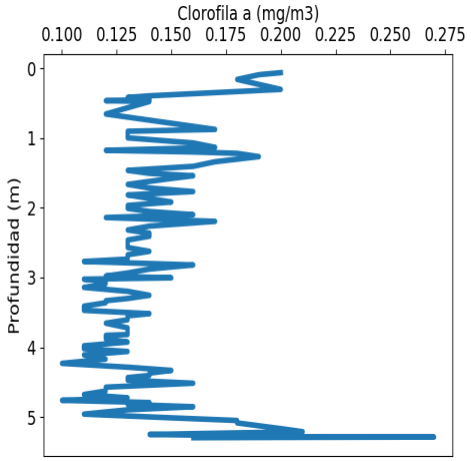
Nombre: CTD E04 - Punto 016 **Fecha: 06/10/2021** **Hora: 09:10:41**

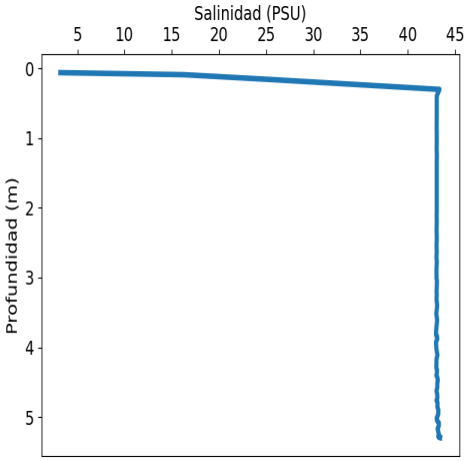


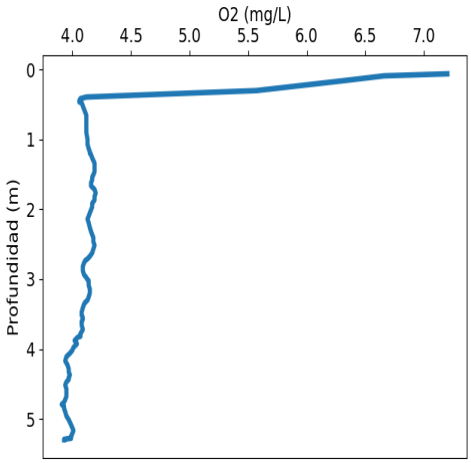


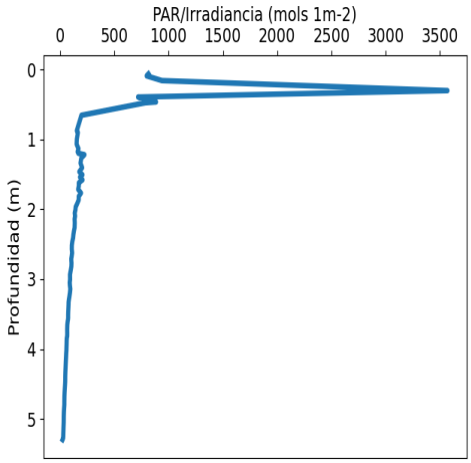












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.28	0.56	0.04	3.91	22.8	0.1	3.2
PROF (metros)	0.062	0.062	0.302	4.792	5.296	4.23	0.062
MÁXIMO	23.64	23.64	3.97	7.2	3569.4	0.27	43.43
PROF (metros)	5.296	5.282	1.07	0.062	0.302	5.287	5.296

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E04 - Punto 016	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.03	5.26	0.25	4.82	832.95	0.15	36.6
1 - 2m	23.29	6.16	2.13	4.17	179.16	0.15	43.07
2 - 3m	23.31	6.16	2.24	4.14	115.5	0.14	43.06
3 - 4m	23.39	6.17	2.35	4.09	75.03	0.12	43.06
4 - 5m	23.57	6.2	2.42	3.95	45.11	0.13	43.11
5 - 6m	23.61	6.23	2.56	3.98	28.71	0.19	43.27

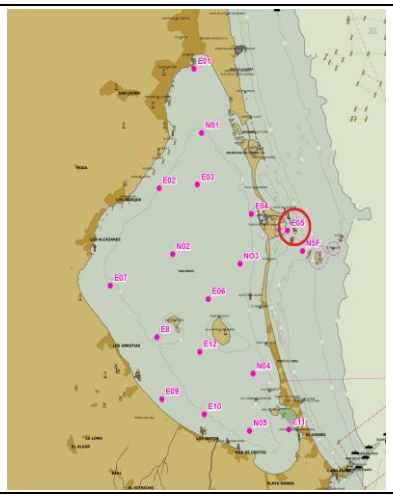
OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 4 - 5m, 5 - 6m con los valores 3.95, 3.98 respectivamente.

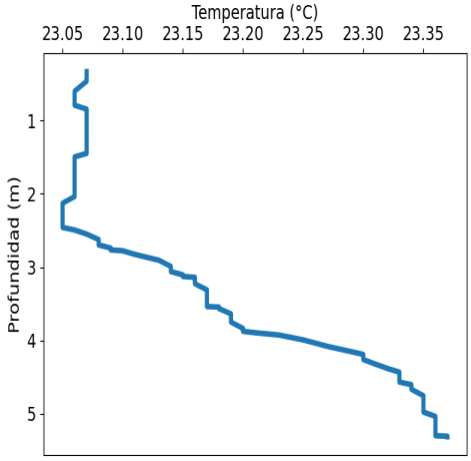
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.062	22.28	0.56	0.15	7.2	813.95	0.2	3.2
0.091	22.32	2.52	0.15	6.66	797.15	0.19	16.28
0.159	22.57	3.78	0.15	6.32	938.65	0.18	25.31
0.302	22.78	6.14	0.04	5.57	3569.4	0.2	43.36
0.394	23.27	6.16	0.08	4.12	718.19	0.14	43.07
0.417	23.26	6.16	0.11	4.07	799.92	0.13	43.07
0.446	23.26	6.16	0.04	4.06	853.16	0.14	43.07
0.464	23.26	6.16	0.04	4.06	884.78	0.12	43.07
0.476	23.26	6.16	0.08	4.08	784.86	0.14	43.07
0.655	23.26	6.16	0.04	4.12	196.41	0.12	43.07
0.876	23.26	6.16	0.23	4.12	153.59	0.17	43.06
0.902	23.26	6.16	1.26	4.12	164.04	0.13	43.07
0.997	23.27	6.16	0.84	4.13	154.19	0.13	43.07
1.07	23.28	6.16	3.97	4.13	152.14	0.16	43.07
1.133	23.29	6.16	1.18	4.14	169.41	0.17	43.06
1.176	23.29	6.16	2.33	4.15	161.29	0.12	43.06
1.199	23.29	6.16	1.64	4.15	168.7	0.16	43.07
1.219	23.29	6.16	2.21	4.16	224.56	0.18	43.08
1.266	23.29	6.16	1.3	4.17	195.63	0.19	43.08
1.339	23.29	6.16	2.06	4.19	187.9	0.17	43.07
1.405	23.29	6.16	2.21	4.19	202.93	0.16	43.07
1.463	23.29	6.16	2.1	4.19	176.58	0.13	43.07
1.506	23.29	6.16	2.59	4.18	205.82	0.14	43.07
1.54	23.29	6.16	2.1	4.17	182.75	0.16	43.07
1.579	23.29	6.16	2.06	4.17	206.63	0.15	43.07
1.621	23.29	6.16	2.17	4.16	172.3	0.14	43.07
1.664	23.29	6.16	2.21	4.16	172.58	0.13	43.07
1.716	23.29	6.16	2.1	4.19	166.53	0.14	43.07
1.767	23.29	6.16	2.06	4.2	193.02	0.16	43.07
1.815	23.29	6.16	2.17	4.19	171.7	0.13	43.07
1.866	23.29	6.16	2.1	4.19	171.3	0.14	43.07
1.917	23.28	6.16	2.02	4.17	157.99	0.15	43.07
1.966	23.28	6.16	1.95	4.17	143.54	0.13	43.07
2.008	23.28	6.16	2.29	4.16	141.16	0.13	43.07

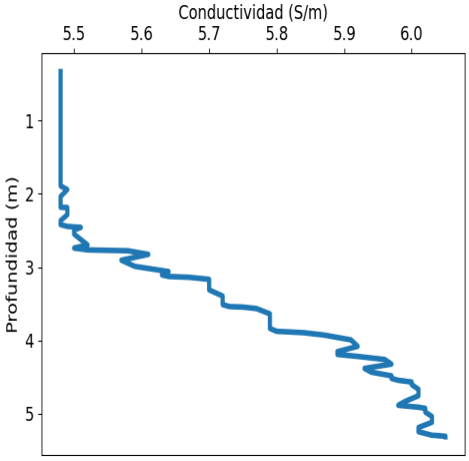
2.053	23.29	6.16	2.14	4.15	134.77	0.14	43.07
2.098	23.29	6.16	2.14	4.14	137.99	0.16	43.06
2.139	23.29	6.16	2.17	4.13	133.55	0.12	43.06
2.194	23.29	6.16	2.25	4.14	134.99	0.17	43.07
2.262	23.29	6.16	2.21	4.15	133.62	0.14	43.06
2.318	23.3	6.16	2.06	4.16	126.77	0.13	43.05
2.363	23.3	6.16	2.06	4.17	122.52	0.14	43.06
2.407	23.3	6.16	2.29	4.18	119.74	0.14	43.07
2.462	23.3	6.16	2.33	4.18	112.53	0.13	43.07
2.516	23.31	6.16	2.21	4.19	108.08	0.13	43.05
2.569	23.31	6.16	2.4	4.18	107.66	0.13	43.05
2.624	23.31	6.17	2.17	4.17	110.8	0.14	43.07
2.673	23.32	6.16	2.21	4.15	106.64	0.13	43.05
2.709	23.32	6.16	2.36	4.13	102.78	0.13	43.04
2.735	23.32	6.16	2.36	4.11	103.33	0.13	43.05
2.769	23.32	6.17	2.21	4.1	104.95	0.11	43.08
2.819	23.33	6.17	2.52	4.09	103.69	0.16	43.06
2.878	23.33	6.16	2.17	4.09	97.38	0.14	43.04
2.934	23.34	6.17	2.4	4.1	91.15	0.13	43.04
2.978	23.34	6.17	2.14	4.12	91.49	0.12	43.05
3.004	23.34	6.16	2.48	4.13	91.79	0.15	43.04
3.023	23.34	6.17	2.44	4.14	90.35	0.11	43.06
3.049	23.34	6.17	2.44	4.14	88.55	0.12	43.09
3.089	23.34	6.17	2.25	4.14	90.19	0.12	43.08
3.141	23.34	6.17	2.25	4.15	94.01	0.11	43.07
3.197	23.34	6.17	2.25	4.15	90.33	0.13	43.05
3.254	23.35	6.17	2.36	4.14	85.27	0.14	43.07
3.3	23.35	6.17	2.29	4.13	80.56	0.13	43.05
3.332	23.35	6.17	2.36	4.11	78.1	0.12	43.05
3.361	23.35	6.17	2.44	4.1	77.9	0.12	43.09
3.41	23.35	6.18	2.33	4.09	76.56	0.11	43.11
3.47	23.37	6.17	2.4	4.08	74.72	0.11	43.06
3.517	23.39	6.17	2.25	4.08	73.96	0.14	43.02
3.549	23.39	6.17	2.33	4.09	74.16	0.13	43.05
3.575	23.38	6.18	2.33	4.09	72.95	0.13	43.08
3.605	23.38	6.18	2.44	4.08	69.62	0.13	43.11
3.654	23.41	6.18	2.52	4.08	66.36	0.12	43.08
3.721	23.43	6.18	2.4	4.09	65.21	0.13	43.03
3.78	23.44	6.17	2.1	4.07	65.6	0.13	43.0
3.817	23.45	6.17	2.21	4.07	65.15	0.13	42.99
3.828	23.45	6.18	2.29	4.05	63.41	0.12	43.02
3.842	23.45	6.19	2.17	4.04	61.65	0.12	43.1
3.878	23.46	6.19	2.63	4.02	60.49	0.12	43.13
3.925	23.49	6.18	2.33	4.04	59.94	0.13	42.99
3.978	23.51	6.18	2.48	4.01	58.82	0.11	43.01
4.02	23.51	6.18	2.63	4.0	58.21	0.11	43.03
4.06	23.5	6.19	2.4	3.98	56.36	0.13	43.08
4.109	23.5	6.2	2.4	3.95	55.05	0.11	43.14
4.169	23.52	6.19	2.4	3.94	53.09	0.12	43.04
4.23	23.53	6.19	2.4	3.96	51.35	0.1	43.04
4.285	23.54	6.19	2.4	3.97	49.93	0.13	43.02
4.331	23.55	6.2	2.33	3.97	48.61	0.15	43.1
4.37	23.56	6.2	2.29	3.98	47.86	0.14	43.08
4.403	23.56	6.19	2.44	3.97	47.35	0.14	43.03
4.434	23.57	6.21	2.1	3.97	47.38	0.13	43.14
4.471	23.57	6.21	2.21	3.95	46.87	0.13	43.18
4.515	23.58	6.21	2.29	3.94	45.36	0.16	43.13
4.571	23.59	6.21	2.36	3.95	43.12	0.12	43.13

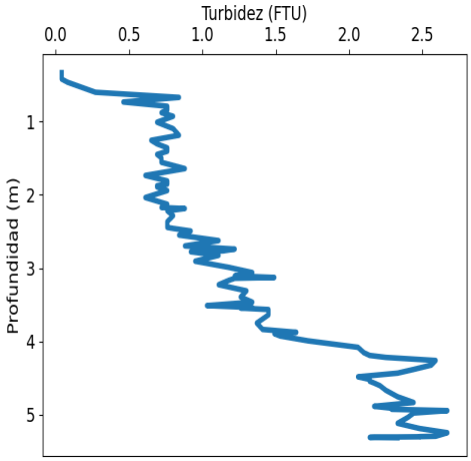
4.626	23.59	6.2	2.56	3.95	41.14	0.12	43.04
4.677	23.6	6.21	2.4	3.95	39.86	0.11	43.12
4.724	23.6	6.21	2.75	3.94	39.4	0.13	43.14
4.76	23.6	6.2	2.33	3.93	39.01	0.1	43.04
4.792	23.6	6.21	2.56	3.91	39.04	0.14	43.15
4.819	23.6	6.21	2.67	3.93	38.11	0.13	43.15
4.852	23.6	6.21	2.29	3.93	36.59	0.16	43.13
4.896	23.61	6.22	2.67	3.94	34.98	0.13	43.24
4.958	23.61	6.22	2.36	3.95	33.74	0.11	43.23
5.011	23.61	6.2	2.44	3.97	33.41	0.15	43.07
5.049	23.61	6.21	2.52	3.98	33.1	0.18	43.09
5.084	23.59	6.23	2.21	3.99	32.26	0.18	43.3
5.125	23.59	6.23	2.14	4.0	31.31	0.19	43.29
5.166	23.6	6.21	2.29	4.01	30.55	0.2	43.16
5.21	23.6	6.22	2.25	4.0	29.58	0.21	43.23
5.249	23.61	6.23	2.71	3.99	28.93	0.14	43.3
5.277	23.61	6.22	2.29	3.99	27.78	0.2	43.23
5.282	23.62	6.25	2.75	3.96	25.96	0.16	43.4
5.287	23.62	6.25	3.47	3.95	24.92	0.27	43.41
5.292	23.63	6.24	2.86	3.93	23.96	0.2	43.32
5.296	23.64	6.25	2.78	3.93	22.8	0.16	43.43

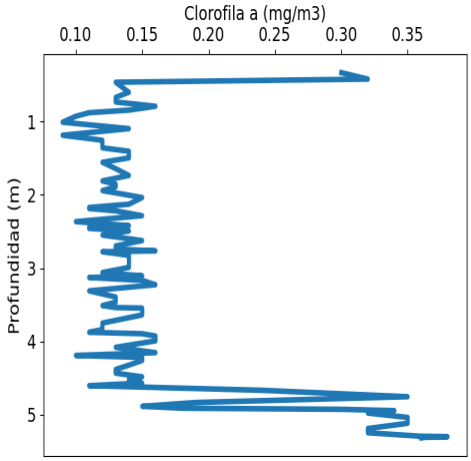
Nombre: CTD E05 - Punto 017 **Fecha: 06/10/2021** **Hora: 09:10:30**

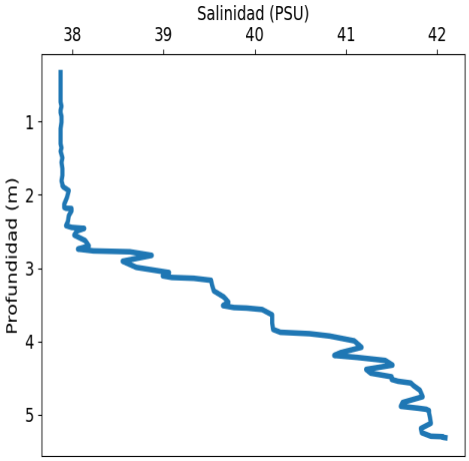


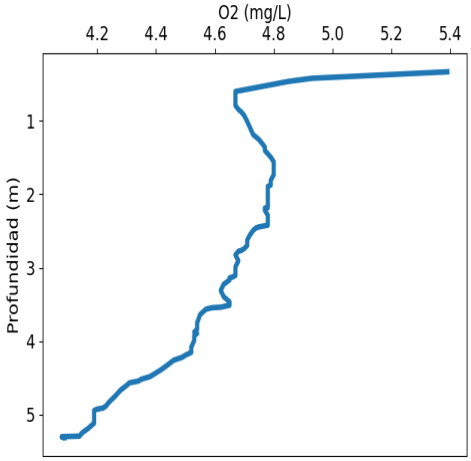


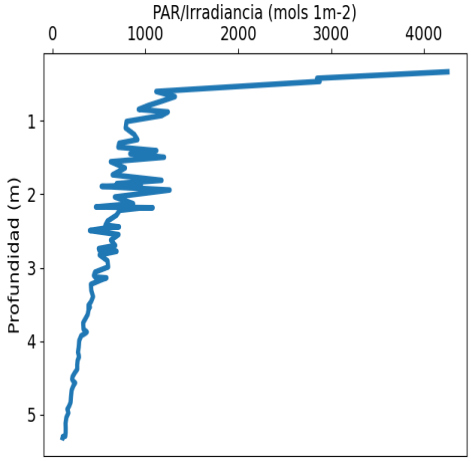












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	23.05	5.48	0.04	4.08	108.26	0.09	37.87
PROF (metros)	2.127	0.33	0.33	5.304	5.317	1.007	0.33
MÁXIMO	23.37	23.37	2.67	5.39	4252.0	0.38	42.09
PROF (metros)	5.31	5.31	4.947	0.33	0.33	5.302	5.317

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E05 - Punto 017	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.07	5.48	0.48	4.79	1796.0	0.16	37.87
1 - 2m	23.06	5.48	0.73	4.77	860.13	0.12	37.89
2 - 3m	23.07	5.51	0.89	4.74	652.84	0.13	38.15
3 - 4m	23.18	5.74	1.36	4.6	403.55	0.13	39.86
4 - 5m	23.33	5.97	2.29	4.35	224.9	0.18	41.52
5 - 6m	23.36	6.03	2.41	4.13	126.89	0.35	41.97

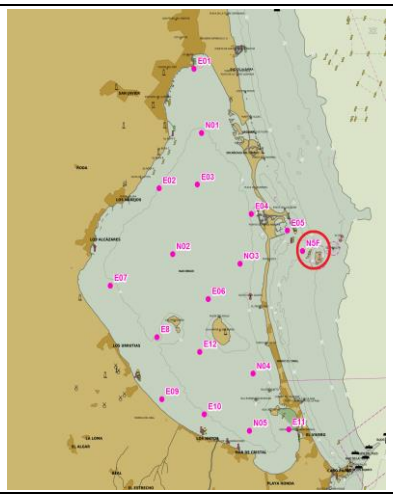
OBSERVACIONES GENERALES

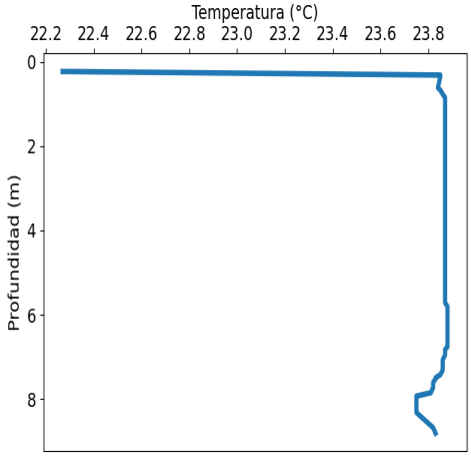
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.33	23.07	5.48	0.04	5.39	4252.0	0.3	37.87
0.418	23.07	5.48	0.04	4.93	2848.1	0.32	37.87
0.461	23.07	5.48	0.08	4.85	2876.6	0.13	37.87
0.598	23.06	5.48	0.27	4.67	1116.3	0.14	37.87
0.668	23.06	5.48	0.84	4.67	1318.2	0.13	37.87
0.731	23.06	5.48	0.46	4.67	1172.8	0.13	37.87
0.789	23.06	5.48	0.76	4.67	1031.5	0.16	37.88
0.842	23.07	5.48	0.76	4.68	927.62	0.14	37.87
0.877	23.07	5.48	0.72	4.69	1242.2	0.11	37.87
0.926	23.07	5.48	0.8	4.7	1174.7	0.1	37.88
1.007	23.07	5.48	0.69	4.71	796.96	0.09	37.88
1.095	23.07	5.48	0.8	4.72	786.87	0.14	37.87
1.185	23.07	5.48	0.84	4.73	880.69	0.09	37.87
1.254	23.07	5.48	0.65	4.75	914.38	0.12	37.87
1.303	23.07	5.48	0.69	4.76	717.53	0.12	37.87
1.357	23.07	5.48	0.76	4.77	708.27	0.12	37.88
1.404	23.07	5.48	0.76	4.77	1118.4	0.14	37.87
1.447	23.07	5.48	0.69	4.78	836.13	0.14	37.88
1.494	23.06	5.48	0.72	4.79	1201.4	0.14	37.89
1.555	23.06	5.48	0.72	4.8	626.84	0.12	37.88
1.641	23.06	5.48	0.88	4.8	780.33	0.13	37.89
1.734	23.06	5.48	0.61	4.8	646.91	0.14	37.89
1.809	23.06	5.48	0.76	4.79	1173.9	0.12	37.88
1.853	23.06	5.48	0.76	4.79	691.73	0.13	37.89
1.874	23.06	5.48	0.69	4.79	952.23	0.13	37.89
1.891	23.06	5.48	0.69	4.78	528.53	0.13	37.9
1.941	23.06	5.49	0.76	4.78	1261.1	0.12	37.96
2.036	23.06	5.48	0.61	4.78	670.57	0.15	37.94
2.127	23.05	5.48	0.76	4.78	868.12	0.14	37.91
2.172	23.05	5.48	0.72	4.78	466.57	0.11	37.91
2.183	23.05	5.48	0.84	4.78	1079.2	0.11	37.93
2.186	23.05	5.49	0.88	4.77	947.17	0.11	37.99
2.218	23.05	5.49	0.76	4.77	722.7	0.13	37.99
2.284	23.05	5.49	0.8	4.78	689.01	0.15	37.96
2.365	23.05	5.48	0.76	4.78	591.96	0.1	37.95
2.42	23.05	5.48	0.76	4.78	569.88	0.14	37.93

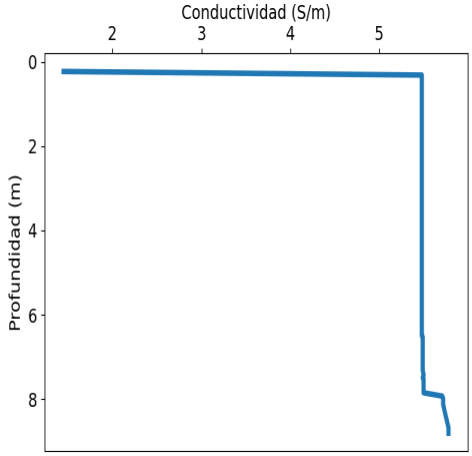
2.444	23.05	5.49	0.76	4.75	716.36	0.11	37.99
2.458	23.05	5.51	0.8	4.74	579.6	0.11	38.13
2.493	23.06	5.5	0.92	4.73	402.34	0.14	38.05
2.549	23.07	5.5	0.84	4.72	710.58	0.12	38.02
2.624	23.08	5.51	1.11	4.71	628.44	0.15	38.14
2.697	23.08	5.52	0.88	4.71	675.57	0.13	38.18
2.74	23.09	5.5	1.22	4.7	498.2	0.13	38.06
2.765	23.09	5.52	1.14	4.69	504.94	0.16	38.23
2.777	23.1	5.58	0.92	4.68	689.97	0.12	38.63
2.826	23.11	5.61	1.11	4.67	507.05	0.14	38.87
2.906	23.13	5.57	0.95	4.68	592.1	0.14	38.55
2.99	23.14	5.59	1.18	4.67	599.28	0.14	38.7
3.061	23.14	5.64	1.34	4.67	457.25	0.12	39.06
3.106	23.15	5.63	1.22	4.67	445.33	0.15	38.99
3.128	23.15	5.64	1.49	4.66	458.74	0.11	39.09
3.139	23.16	5.67	1.22	4.65	580.95	0.12	39.33
3.167	23.16	5.7	1.18	4.65	522.68	0.15	39.52
3.227	23.16	5.7	1.11	4.63	413.02	0.16	39.53
3.311	23.17	5.7	1.3	4.62	417.44	0.11	39.55
3.395	23.17	5.72	1.26	4.63	436.85	0.13	39.66
3.465	23.17	5.72	1.34	4.65	414.36	0.13	39.71
3.512	23.17	5.72	1.03	4.65	386.71	0.12	39.65
3.539	23.17	5.73	1.34	4.62	403.37	0.13	39.77
3.546	23.18	5.75	1.26	4.59	386.35	0.15	39.91
3.566	23.18	5.77	1.45	4.57	389.31	0.15	40.08
3.639	23.19	5.79	1.45	4.55	378.46	0.15	40.19
3.751	23.19	5.79	1.37	4.54	330.01	0.12	40.19
3.838	23.2	5.79	1.41	4.54	333.32	0.12	40.2
3.877	23.2	5.8	1.64	4.53	369.45	0.11	40.28
3.896	23.21	5.84	1.49	4.54	351.32	0.15	40.6
3.928	23.23	5.87	1.53	4.53	308.77	0.16	40.82
3.994	23.25	5.91	1.72	4.53	287.37	0.16	41.09
4.082	23.27	5.92	2.06	4.52	282.15	0.13	41.17
4.155	23.29	5.89	2.1	4.52	273.78	0.16	40.94
4.193	23.3	5.89	2.14	4.5	282.55	0.1	40.87
4.22	23.3	5.92	2.25	4.49	284.78	0.15	41.12
4.262	23.3	5.96	2.59	4.46	270.37	0.15	41.43
4.325	23.31	5.97	2.56	4.44	265.78	0.14	41.51
4.384	23.32	5.93	2.44	4.42	266.21	0.13	41.22
4.435	23.33	5.94	2.33	4.4	238.84	0.13	41.27
4.485	23.33	5.97	2.06	4.38	215.84	0.15	41.5
4.521	23.33	5.97	2.14	4.35	211.14	0.14	41.5
4.546	23.33	5.98	2.14	4.34	222.28	0.14	41.57
4.57	23.33	6.0	2.17	4.31	244.16	0.15	41.71
4.606	23.34	6.0	2.21	4.3	225.87	0.11	41.74
4.669	23.34	6.01	2.25	4.28	205.92	0.24	41.81
4.757	23.35	6.01	2.33	4.26	199.11	0.35	41.84
4.836	23.35	5.99	2.44	4.24	194.46	0.19	41.62
4.888	23.35	5.98	2.17	4.23	178.56	0.15	41.6
4.914	23.35	6.01	2.29	4.22	166.76	0.18	41.79
4.929	23.35	6.02	2.29	4.2	159.24	0.3	41.88
4.947	23.35	6.02	2.67	4.19	164.11	0.34	41.91
4.98	23.35	6.02	2.44	4.19	170.99	0.32	41.91
5.04	23.36	6.03	2.4	4.19	149.51	0.35	41.92
5.12	23.36	6.03	2.33	4.19	140.35	0.35	41.93
5.191	23.36	6.01	2.48	4.17	141.75	0.32	41.82
5.249	23.36	6.01	2.67	4.15	141.42	0.32	41.83
5.297	23.36	6.03	2.59	4.14	137.7	0.36	41.93

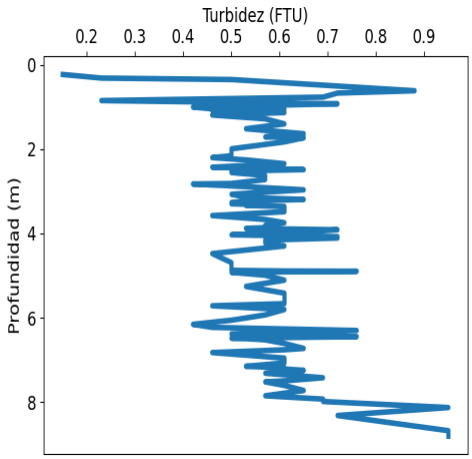
5.302	23.36	6.04	2.48	4.09	112.4	0.38	42.04
5.304	23.36	6.04	2.48	4.08	113.87	0.38	42.06
5.31	23.37	6.05	2.17	4.08	114.58	0.37	42.06
5.313	23.37	6.05	2.14	4.09	109.04	0.36	42.07
5.317	23.37	6.05	2.33	4.09	108.26	0.36	42.09

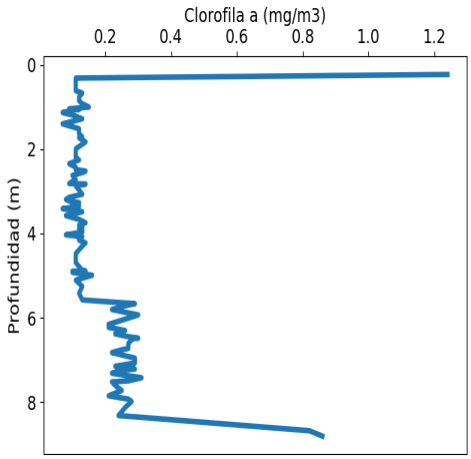
Nombre: CTD N5F - Punto 018 **Fecha: 06/10/2021** **Hora: 09:10:58**

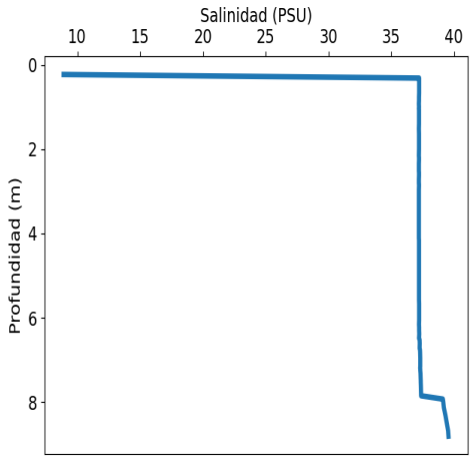


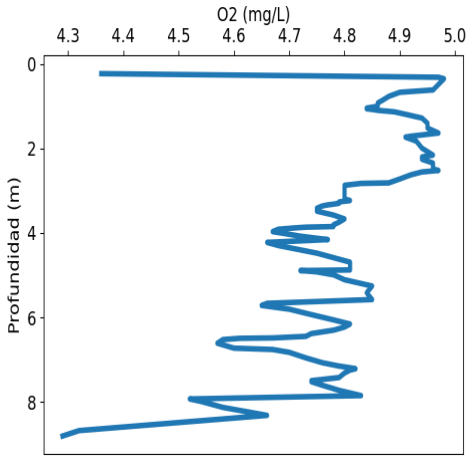


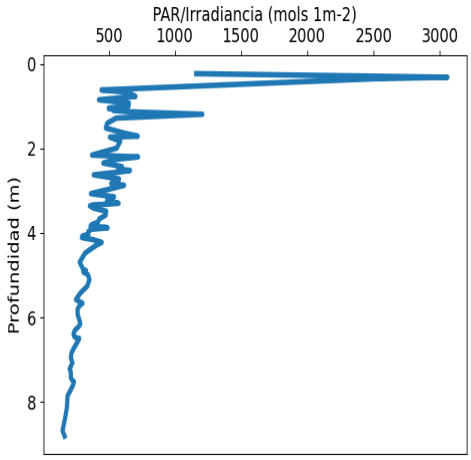












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.27	1.45	0.15	4.29	151.78	0.07	8.9
PROF (metros)	0.231	0.231	0.231	8.807	8.678	1.134	0.231
MÁXIMO	23.88	23.88	0.95	4.98	3058.9	1.24	39.57
PROF (metros)	5.805	8.678	8.129	0.351	0.316	0.231	8.807

DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N5F - Punto 018	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	23.66	4.98	0.52	4.85	1200.16	0.26	33.68
1 - 2m	23.87	5.48	0.55	4.9	613.37	0.11	37.22
2 - 3m	23.87	5.48	0.53	4.91	549.77	0.11	37.21
3 - 4m	23.87	5.48	0.57	4.77	442.39	0.11	37.21
4 - 5m	23.87	5.48	0.58	4.74	337.74	0.12	37.22
5 - 6m	23.87	5.48	0.58	4.76	293.52	0.2	37.22
6 - 7m	23.88	5.49	0.57	4.7	251.56	0.26	37.26
7 - 8m	23.83	5.53	0.62	4.75	211.77	0.26	37.6
8 - 9m	23.79	5.76	0.9	4.46	169.38	0.55	39.41

OBSERVACIONES GENERALES

DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.231	22.27	1.45	0.15	4.36	1160.9	1.24	8.9
0.316	23.85	5.48	0.23	4.97	3058.9	0.11	37.23
0.351	23.85	5.48	0.5	4.98	2510.7	0.11	37.23
0.617	23.84	5.48	0.88	4.96	445.64	0.11	37.23
0.672	23.85	5.48	0.72	4.9	643.32	0.13	37.23
0.768	23.86	5.48	0.69	4.88	702.88	0.12	37.22
0.85	23.87	5.48	0.23	4.87	426.34	0.12	37.22
0.926	23.87	5.48	0.72	4.86	652.63	0.13	37.21
1.003	23.87	5.48	0.42	4.86	649.92	0.15	37.22
1.046	23.87	5.48	0.46	4.84	500.05	0.09	37.21
1.063	23.87	5.48	0.61	4.84	501.09	0.12	37.22
1.078	23.87	5.48	0.46	4.85	634.88	0.09	37.22
1.099	23.87	5.48	0.57	4.86	535.43	0.09	37.22
1.134	23.87	5.48	0.61	4.89	655.82	0.07	37.22
1.192	23.87	5.48	0.46	4.91	1207.9	0.1	37.22
1.282	23.87	5.48	0.57	4.94	557.34	0.13	37.22
1.403	23.87	5.48	0.61	4.95	489.04	0.07	37.22
1.518	23.87	5.48	0.53	4.95	477.95	0.12	37.21
1.636	23.87	5.48	0.65	4.97	614.47	0.12	37.22
1.711	23.87	5.48	0.57	4.92	720.36	0.13	37.22
1.732	23.87	5.48	0.65	4.91	508.58	0.12	37.22
1.83	23.87	5.48	0.61	4.93	587.72	0.14	37.22
1.994	23.87	5.48	0.5	4.94	560.06	0.11	37.22
2.158	23.87	5.48	0.5	4.96	373.84	0.11	37.21
2.202	23.87	5.48	0.46	4.94	722.03	0.11	37.22
2.257	23.87	5.48	0.53	4.94	559.02	0.12	37.22
2.347	23.87	5.48	0.61	4.96	458.74	0.09	37.21
2.43	23.87	5.48	0.46	4.96	600.39	0.11	37.21
2.488	23.87	5.48	0.65	4.96	572.66	0.11	37.21
2.521	23.87	5.48	0.5	4.97	661.31	0.14	37.21
2.557	23.87	5.48	0.5	4.94	585.14	0.13	37.22
2.625	23.87	5.48	0.57	4.92	386.08	0.1	37.22
2.723	23.87	5.48	0.57	4.9	578.4	0.11	37.21

2.816	23.87	5.48	0.5	4.88	562.01	0.09	37.21
2.828	23.87	5.48	0.42	4.83	519.18	0.14	37.22
2.873	23.87	5.48	0.5	4.8	617.03	0.11	37.22
2.966	23.87	5.48	0.65	4.8	500.98	0.12	37.21
3.071	23.87	5.48	0.5	4.8	365.61	0.13	37.21
3.145	23.87	5.48	0.53	4.8	541.05	0.09	37.21
3.195	23.87	5.48	0.65	4.8	503.65	0.08	37.21
3.233	23.87	5.48	0.53	4.81	487.46	0.09	37.21
3.267	23.87	5.48	0.5	4.79	532.46	0.12	37.21
3.298	23.87	5.48	0.5	4.79	575.45	0.12	37.21
3.319	23.87	5.48	0.57	4.78	489.84	0.1	37.21
3.336	23.87	5.48	0.53	4.77	383.32	0.11	37.21
3.361	23.87	5.48	0.61	4.76	357.57	0.12	37.21
3.414	23.87	5.48	0.61	4.75	385.9	0.07	37.21
3.486	23.87	5.48	0.61	4.75	481.29	0.13	37.21
3.577	23.87	5.48	0.46	4.78	477.4	0.08	37.21
3.669	23.87	5.48	0.57	4.8	429.12	0.12	37.21
3.747	23.87	5.48	0.61	4.79	418.41	0.14	37.21
3.807	23.87	5.48	0.57	4.78	370.22	0.12	37.21
3.849	23.87	5.48	0.57	4.78	362.24	0.13	37.21
3.864	23.87	5.48	0.57	4.73	478.95	0.13	37.21
3.881	23.87	5.48	0.53	4.71	492.34	0.12	37.21
3.913	23.87	5.48	0.72	4.68	369.45	0.13	37.21
3.969	23.87	5.48	0.65	4.67	345.99	0.13	37.21
4.033	23.87	5.48	0.5	4.7	346.79	0.08	37.21
4.077	23.87	5.48	0.72	4.72	300.1	0.13	37.21
4.11	23.87	5.48	0.72	4.74	297.53	0.12	37.21
4.158	23.87	5.48	0.57	4.77	381.45	0.12	37.22
4.224	23.87	5.48	0.57	4.66	447.61	0.14	37.22
4.298	23.87	5.48	0.61	4.68	403.18	0.13	37.22
4.479	23.87	5.48	0.46	4.75	321.26	0.11	37.22
4.692	23.87	5.48	0.5	4.81	280.91	0.11	37.22
4.876	23.87	5.48	0.5	4.81	309.42	0.13	37.22
4.891	23.87	5.48	0.61	4.72	329.1	0.14	37.22
4.897	23.87	5.48	0.76	4.73	320.66	0.1	37.22
4.923	23.87	5.48	0.5	4.75	308.42	0.1	37.22
4.991	23.87	5.48	0.57	4.78	344.23	0.16	37.22
5.108	23.87	5.48	0.61	4.8	354.6	0.11	37.22
5.257	23.87	5.48	0.53	4.85	339.08	0.13	37.22
5.417	23.87	5.48	0.61	4.84	288.1	0.12	37.22
5.577	23.87	5.48	0.61	4.85	252.33	0.13	37.22
5.666	23.87	5.48	0.61	4.66	302.33	0.29	37.23
5.716	23.87	5.48	0.46	4.65	281.24	0.26	37.23
5.805	23.88	5.48	0.61	4.7	265.16	0.22	37.23
5.933	23.88	5.48	0.57	4.74	265.34	0.3	37.23
6.058	23.88	5.48	0.5	4.78	278.64	0.25	37.23
6.156	23.88	5.48	0.42	4.81	285.31	0.21	37.22
6.228	23.88	5.48	0.46	4.8	269.69	0.21	37.23
6.302	23.88	5.48	0.76	4.78	244.78	0.26	37.23
6.382	23.88	5.48	0.5	4.74	234.94	0.23	37.24
6.448	23.88	5.48	0.76	4.73	239.17	0.27	37.23
6.485	23.88	5.48	0.5	4.67	254.09	0.3	37.22
6.494	23.88	5.48	0.53	4.61	276.91	0.28	37.24
6.524	23.88	5.49	0.57	4.58	275.18	0.28	37.27
6.61	23.88	5.49	0.61	4.57	258.85	0.27	37.28
6.727	23.88	5.49	0.65	4.6	237.08	0.27	37.27
6.759	23.88	5.49	0.61	4.67	232.51	0.25	37.3
6.826	23.87	5.49	0.46	4.7	220.39	0.22	37.31

6.957	23.87	5.49	0.61	4.73	214.24	0.29	37.32
7.072	23.86	5.49	0.61	4.76	226.29	0.29	37.32
7.151	23.86	5.49	0.53	4.79	215.39	0.23	37.32
7.19	23.86	5.49	0.61	4.81	210.31	0.26	37.31
7.215	23.86	5.49	0.61	4.82	204.82	0.29	37.32
7.247	23.86	5.49	0.65	4.81	208.56	0.25	37.32
7.315	23.86	5.49	0.57	4.8	214.94	0.22	37.34
7.423	23.85	5.5	0.69	4.79	213.55	0.31	37.35
7.496	23.83	5.49	0.61	4.74	226.6	0.27	37.36
7.521	23.83	5.5	0.57	4.74	238.01	0.22	37.36
7.606	23.82	5.5	0.61	4.76	230.47	0.23	37.37
7.725	23.82	5.5	0.65	4.79	210.89	0.25	37.38
7.85	23.81	5.5	0.57	4.83	189.92	0.21	37.39
7.929	23.75	5.71	0.69	4.52	187.9	0.27	39.12
7.986	23.75	5.72	0.69	4.54	187.16	0.28	39.15
8.129	23.75	5.72	0.95	4.58	184.36	0.26	39.2
8.318	23.75	5.74	0.72	4.66	174.51	0.24	39.33
8.678	23.82	5.78	0.95	4.32	151.78	0.82	39.54
8.807	23.83	5.78	0.95	4.29	166.88	0.86	39.57