RESULTADOS

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

Fecha: Lunes 18/10/2021

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:

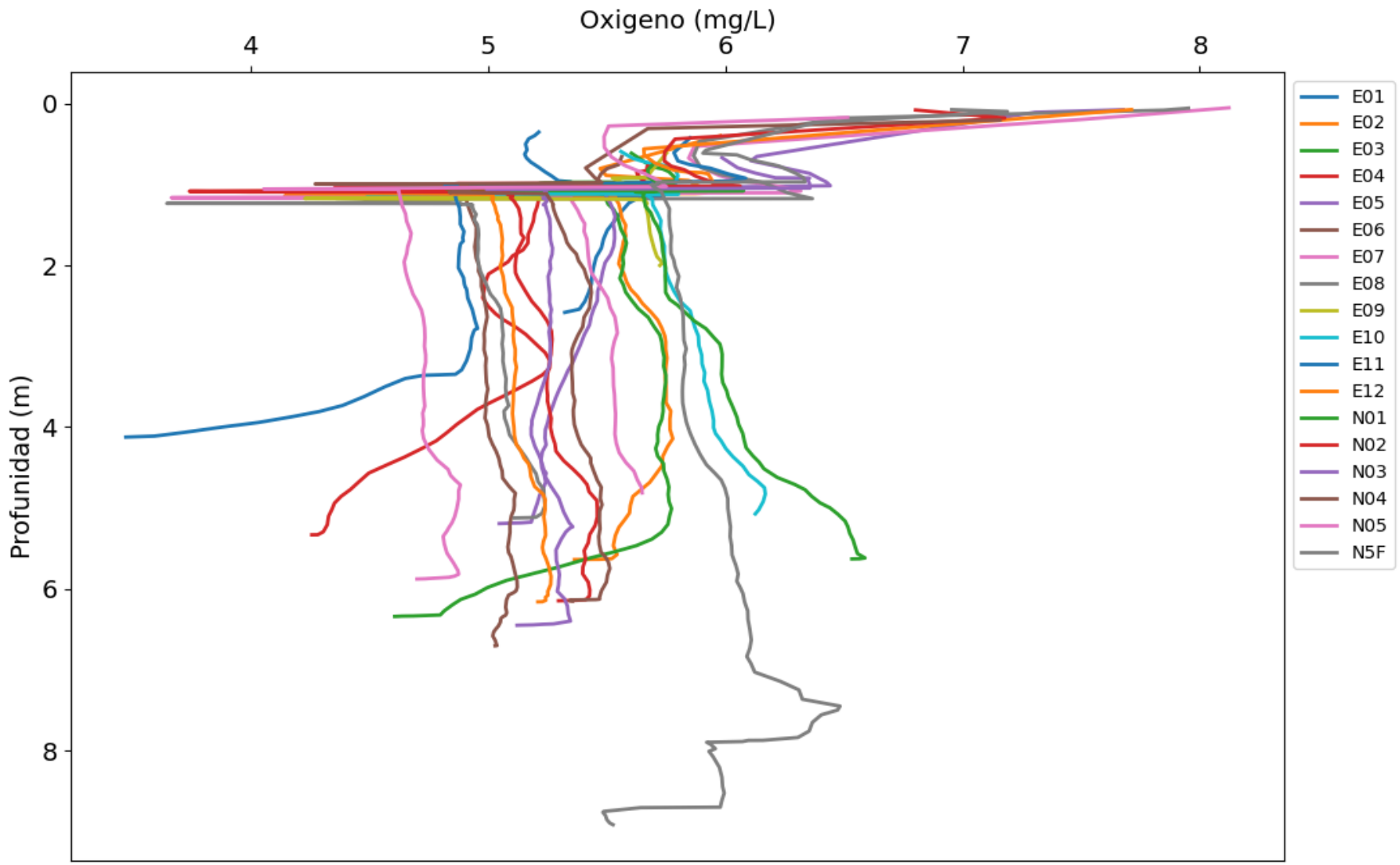
OBSERVACIONES GENERALES

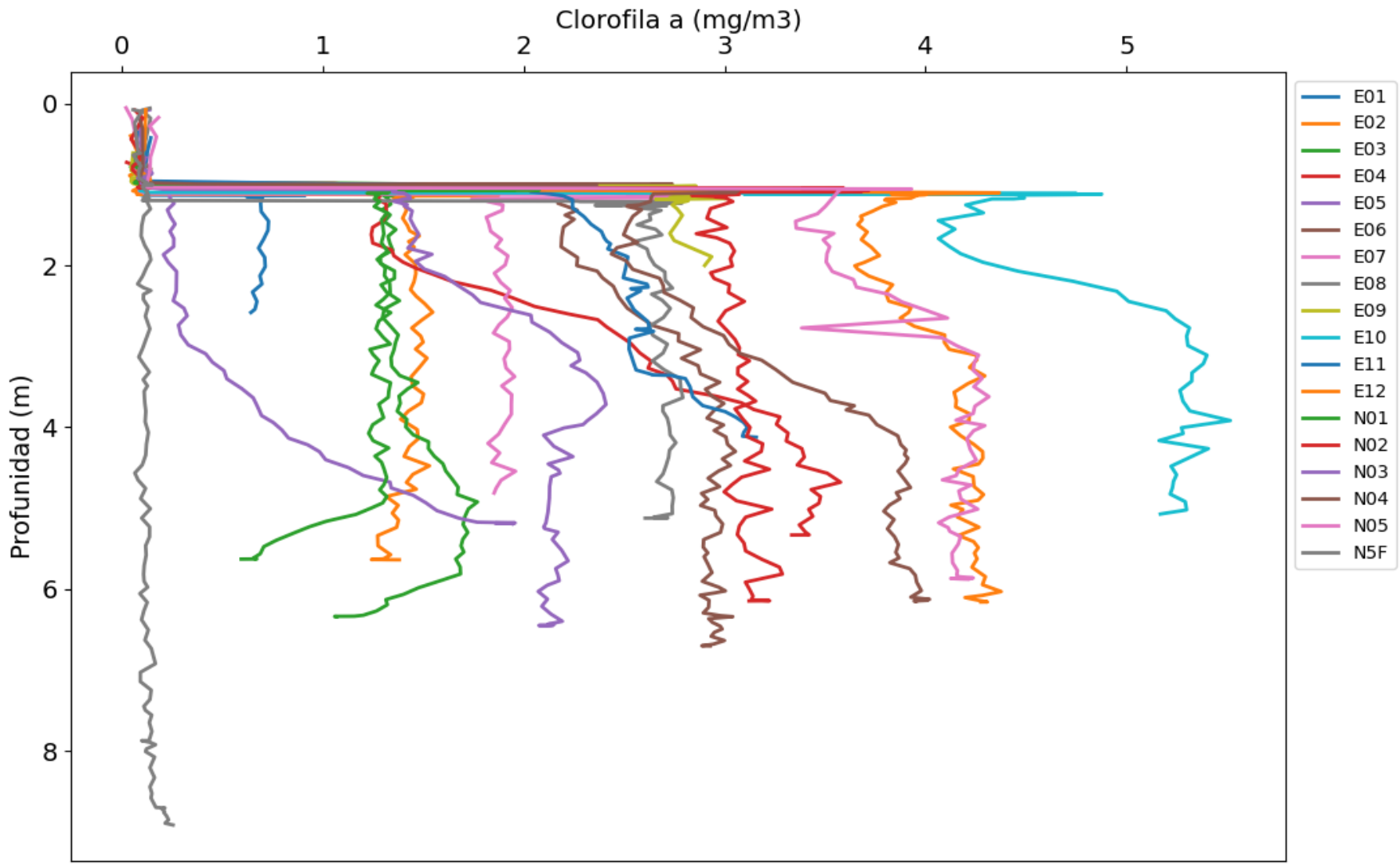
Se realiza **UNA SALIDA** en barco para muestreo por la mañana, en horario de 08:00 a 11:00 horas.

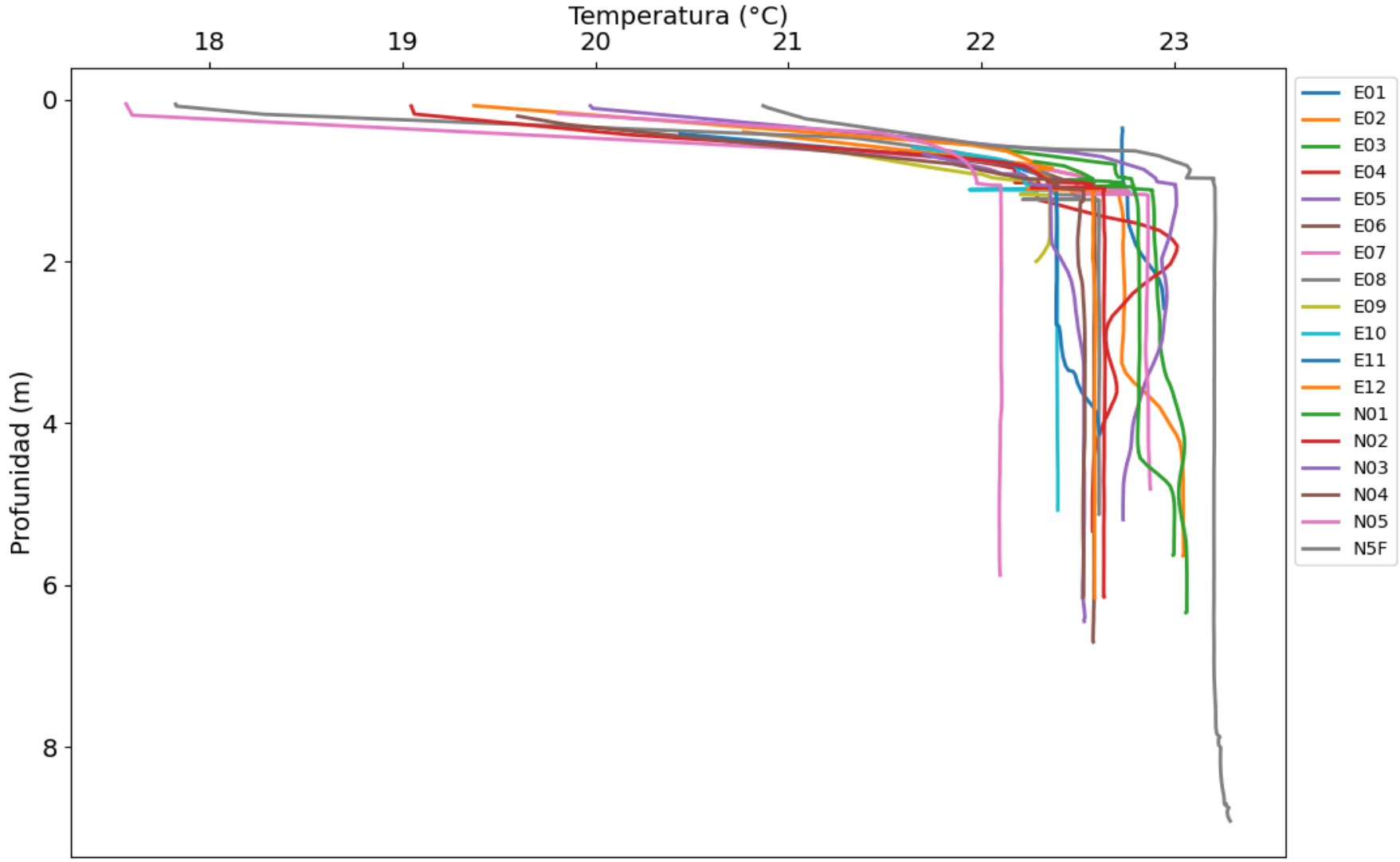
Salida desde el puerto de Lo Pagán, con los técnicos y un patrón del IMIDA.

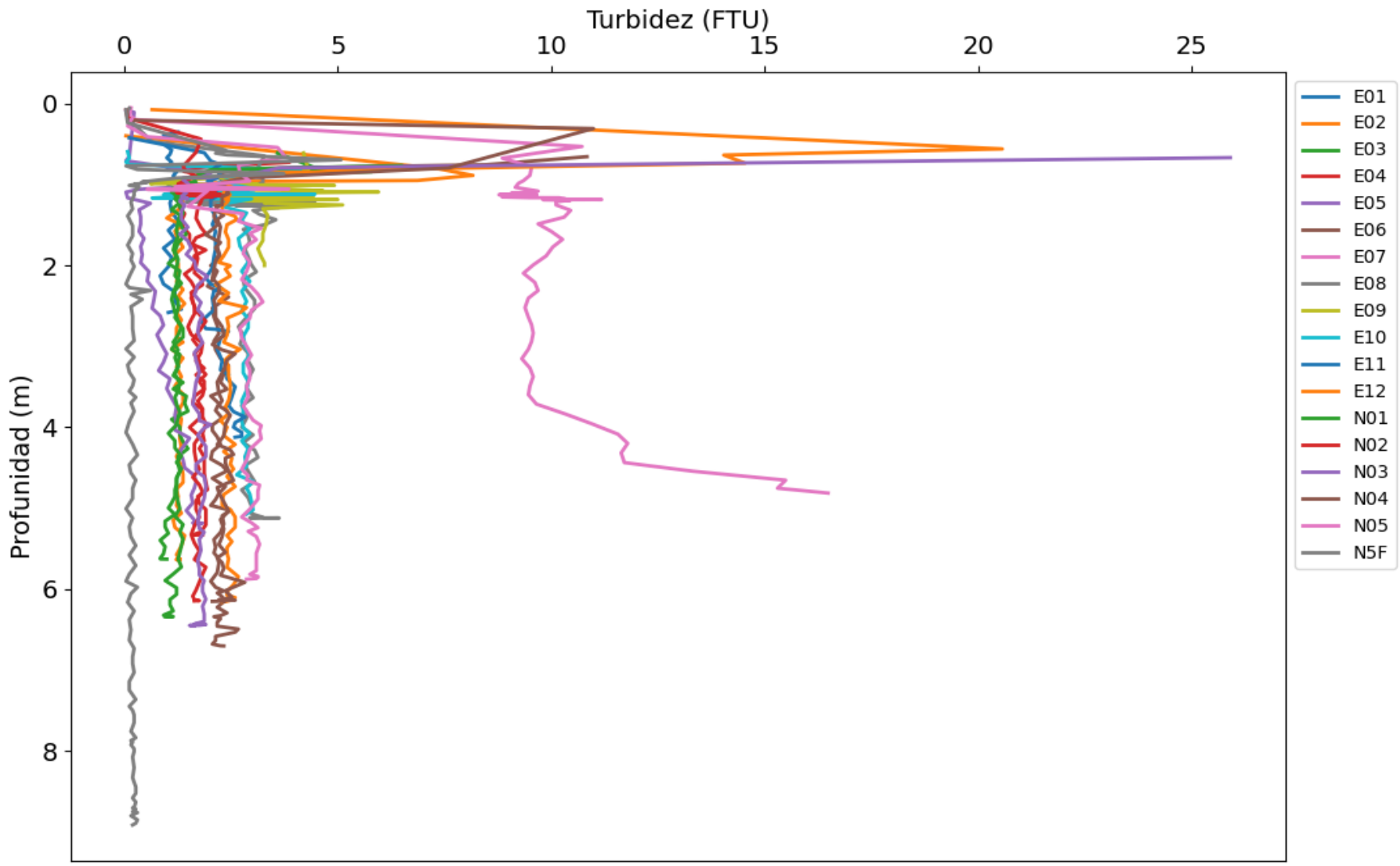
ORDEN	Punto	D. Secchi	Hora	Fondo	Viento (km/h)	Dirección	Sonda
1	E01	2.60	08:10	SI	0		2.60
2	N01	3.60	08:18	NO	0		5.60
3	E03	3.40	08:26	NO	0		6.30
4	E02	3.30	08:35	NO	0		5.60
5	N02	2.40	08:42	NO	4		6.10
6	E07	1.10	08:52	NO	6		4.70
7	E08	2.10	09:23	NO	8-10		5.10
8	E09	1.70	09:30	NO	8-10		1.70
9	E10	2.00	09:36	NO	8-10		5.00
10	N05	1.80	09:43	NO	8-10		5.70
11	E11	2.30	09:54	NO	8-10		4.20
12	N04	1.90	10:01	NO	8-10		6.10
13	E12	2.10	10:07	NO	8-10		6.10
14	E06	2.40	10:18	NO	8-10		6.70
15	N03	2.80	10:25	NO	8-10		6.40
16	E04	3.20	10:33	NO	0		5.30
17	E05	5.00	10:39	NO	0		5.00
18	N5F	9.80	10:50	SI	0		9.80

FICHA GENERAL DE MUESTREOS PARA OXÍGENO, TURBIDEZ, CLOROFILA Y TEMPERATURA **FECHA: 18-10-2021**

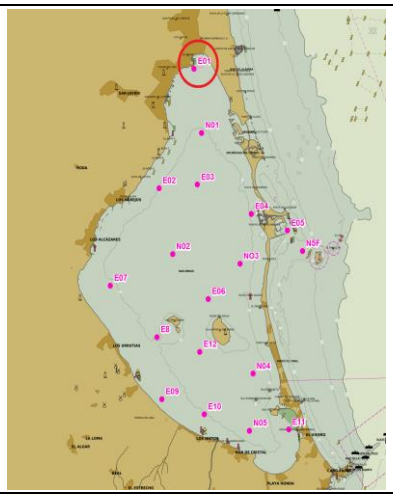


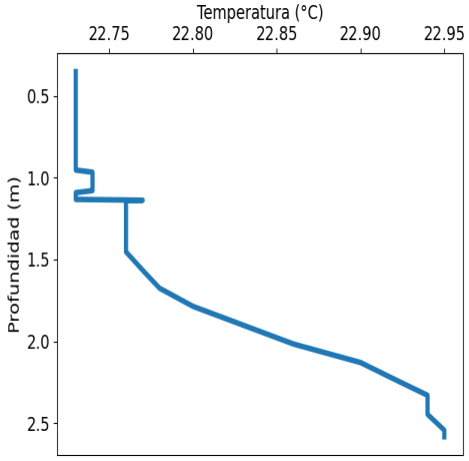

Clorofila a (mg/m3)
0
1
2
3
4
5
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

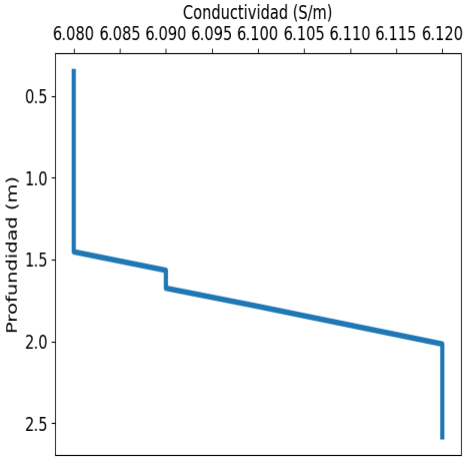

Temperatura (°C)
18
19
20
21
22
23
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

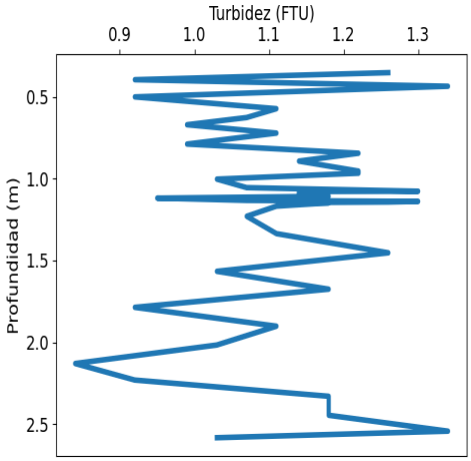

Turbidez (FTU)
0
5
10
15
20
25
Profunidad (m)
0
2
4
6
8
E01
E02
E03
E04
E05
E06
E07
E08
E09
E10
E11
E12
N01
N02
N03
N04
N05
N5F

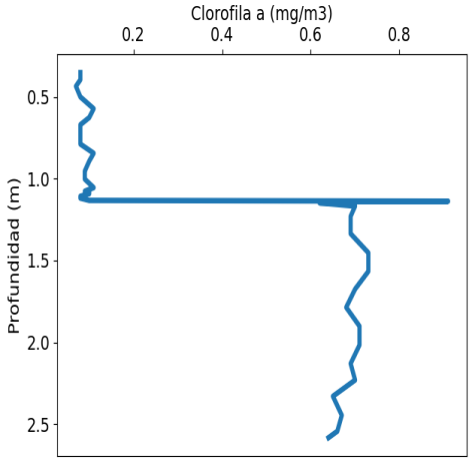
Nombre: CTD E01 - Punto 001 **Fecha: 18/10/2021** **Hora: 07:10:30**

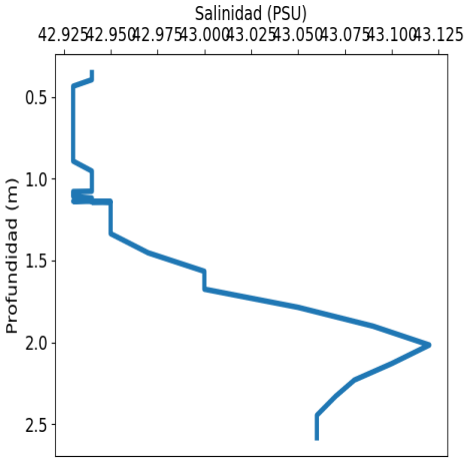


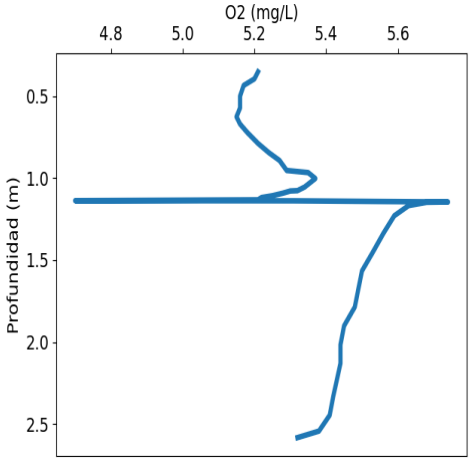


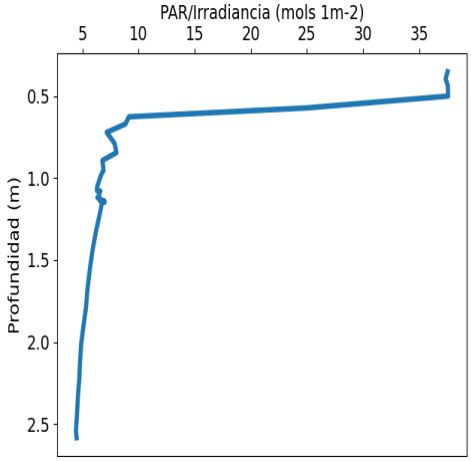


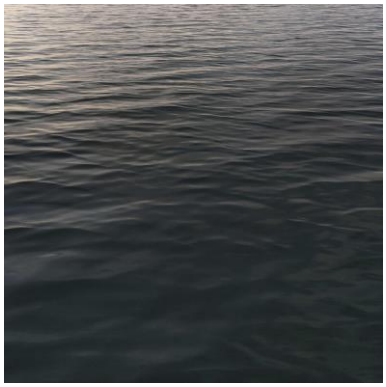












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.73	6.08	0.84	4.7	4.43	0.07	42.93
PROF (metros)	0.353	0.353	2.129	1.138	2.542	0.436	0.436
MÁXIMO	22.95	22.95	1.34	5.74	37.59	0.91	43.12
PROF (metros)	2.542	2.016	0.436	1.146	0.501	1.138	2.016

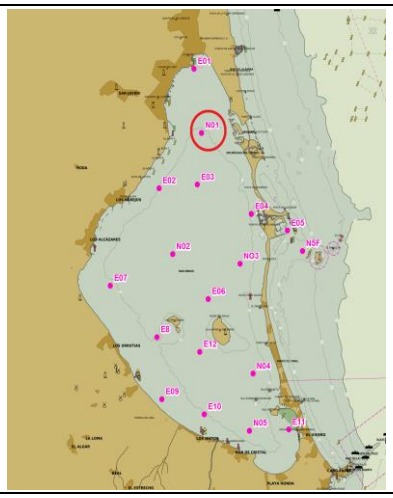
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E01 - Punto 001	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.73	6.08	1.12	5.21	18.2	0.09	42.93
1 - 2m	22.76	6.08	1.13	5.41	6.31	0.48	42.96
2 - 3m	22.92	6.12	1.07	5.41	4.64	0.67	43.08

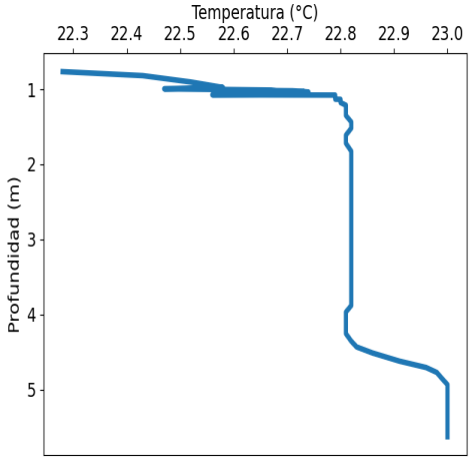
OBSERVACIONES GENERALES

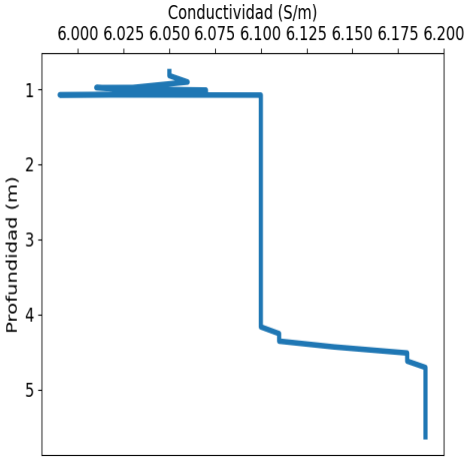
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.353	22.73	6.08	1.26	5.21	37.54	0.08	42.94
0.396	22.73	6.08	0.92	5.2	37.37	0.08	42.94
0.436	22.73	6.08	1.34	5.17	37.56	0.07	42.93
0.501	22.73	6.08	0.92	5.16	37.59	0.08	42.93
0.573	22.73	6.08	1.11	5.16	24.99	0.11	42.93
0.627	22.73	6.08	1.07	5.15	9.15	0.1	42.93
0.671	22.73	6.08	0.99	5.16	8.84	0.08	42.93
0.722	22.73	6.08	1.11	5.18	7.17	0.08	42.93
0.789	22.73	6.08	0.99	5.21	7.87	0.08	42.93
0.845	22.73	6.08	1.22	5.24	8.04	0.11	42.93
0.893	22.73	6.08	1.14	5.27	6.79	0.1	42.93
0.954	22.73	6.08	1.22	5.29	6.89	0.09	42.94
0.967	22.74	6.08	1.22	5.35	6.76	0.09	42.94
1.003	22.74	6.08	1.03	5.37	6.56	0.09	42.94
1.055	22.74	6.08	1.07	5.34	6.31	0.11	42.94
1.077	22.74	6.08	1.3	5.32	6.3	0.09	42.94
1.079	22.74	6.08	1.14	5.3	6.61	0.1	42.93
1.092	22.73	6.08	1.14	5.28	6.49	0.1	42.93
1.108	22.73	6.08	1.18	5.25	6.5	0.08	42.93
1.119	22.73	6.08	0.95	5.22	6.34	0.08	42.94
1.133	22.73	6.08	1.07	5.21	6.71	0.1	42.94
1.138	22.77	6.08	1.26	4.7	6.57	0.91	42.93
1.139	22.76	6.08	1.3	5.31	6.94	0.71	42.95
1.143	22.76	6.08	1.26	5.55	6.71	0.7	42.94
1.146	22.76	6.08	1.14	5.74	7.0	0.69	42.95
1.148	22.76	6.08	1.18	5.68	6.76	0.62	42.95
1.168	22.76	6.08	1.11	5.63	6.7	0.7	42.95
1.23	22.76	6.08	1.07	5.59	6.52	0.69	42.95
1.336	22.76	6.08	1.11	5.56	6.18	0.69	42.95
1.453	22.76	6.08	1.26	5.53	5.88	0.73	42.97
1.566	22.77	6.09	1.03	5.5	5.65	0.73	43.0
1.675	22.78	6.09	1.18	5.49	5.46	0.7	43.0
1.786	22.8	6.1	0.92	5.48	5.33	0.68	43.05
1.901	22.83	6.11	1.11	5.45	5.1	0.71	43.09
2.016	22.86	6.12	1.03	5.44	4.89	0.71	43.12
2.129	22.9	6.12	0.84	5.44	4.79	0.69	43.1
2.23	22.92	6.12	0.92	5.43	4.72	0.7	43.08
2.329	22.94	6.12	1.18	5.42	4.61	0.65	43.07
2.445	22.94	6.12	1.18	5.41	4.52	0.67	43.06

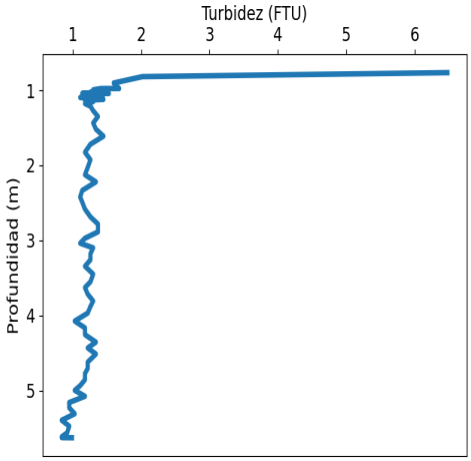
2.542	22.95	6.12	1.34	5.38	4.43	0.66	43.06
2.582	22.95	6.12	1.03	5.32	4.49	0.64	43.06

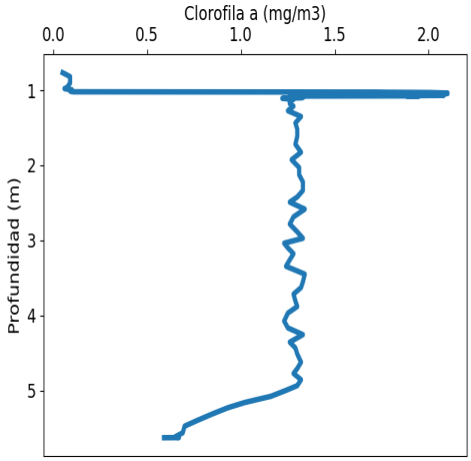
Nombre: CTD N01 - Punto 002 **Fecha: 18/10/2021** **Hora: 07:10:02**

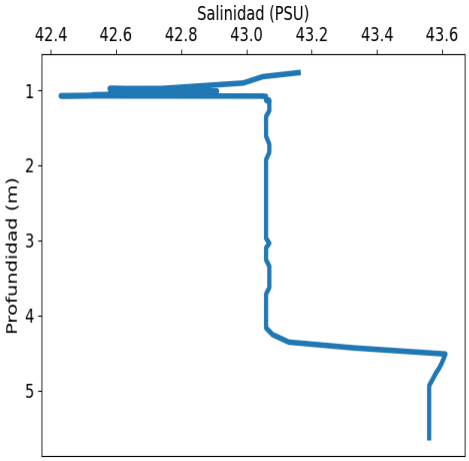


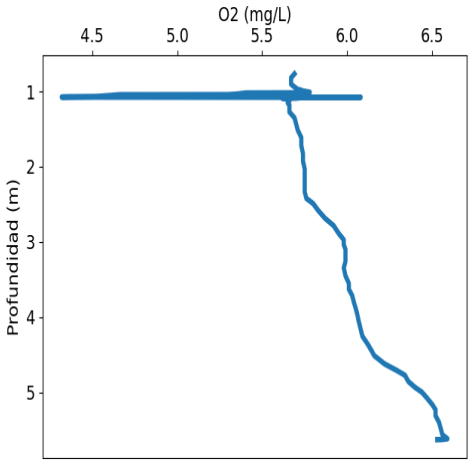


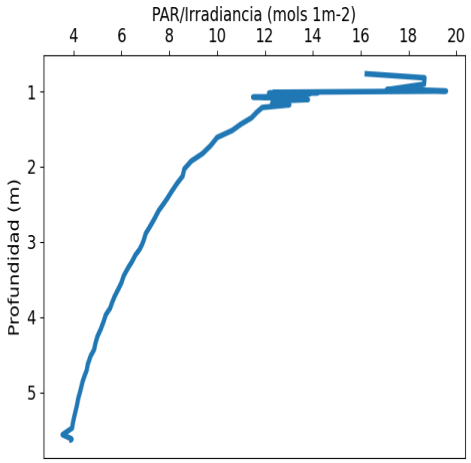












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.28	5.99	0.84	4.32	3.54	0.05	42.43
PROF (metros)	0.766	1.075	5.396	1.075	5.563	0.766	1.075
MÁXIMO	23.0	23.0	6.49	6.59	19.57	2.1	43.61
PROF (metros)	4.935	4.707	0.766	5.617	0.995	1.038	4.514

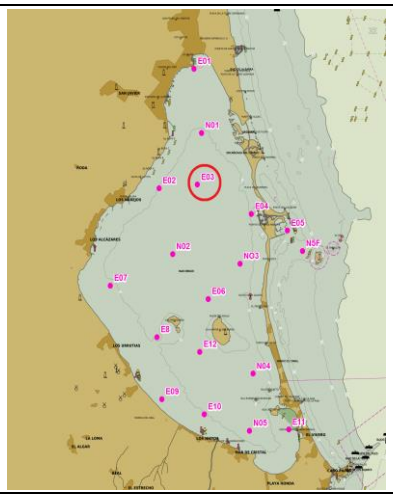
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N01 - Punto 002	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.47	6.04	2.42	5.7	18.08	0.08	42.88
1 - 2m	22.75	6.08	1.29	5.41	12.28	1.44	42.92
2 - 3m	22.82	6.1	1.23	5.83	7.77	1.3	43.06
3 - 4m	22.82	6.1	1.24	6.01	6.09	1.28	43.06
4 - 5m	22.9	6.16	1.19	6.23	4.7	1.28	43.4
5 - 6m	23.0	6.19	0.94	6.54	3.96	0.79	43.56

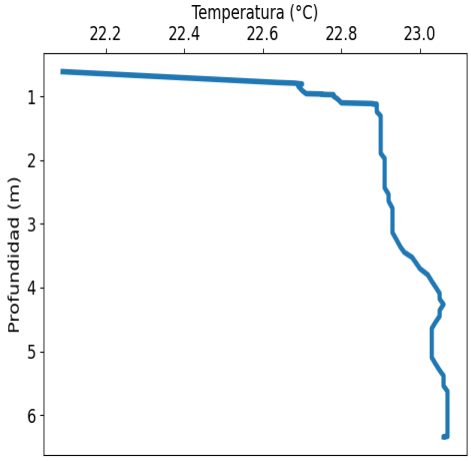
OBSERVACIONES GENERALES

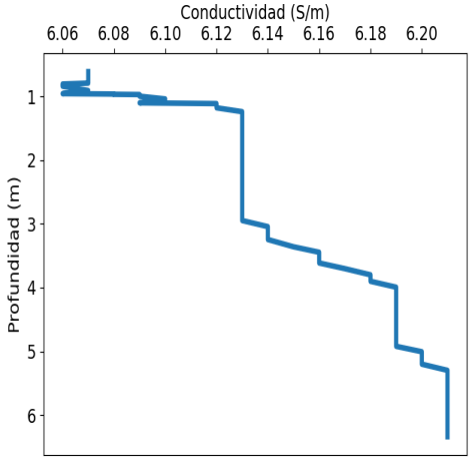
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.766	22.28	6.05	6.48	5.69	16.25	0.05	43.16
0.819	22.43	6.05	2.02	5.67	18.67	0.09	43.05
0.904	22.52	6.06	1.6	5.67	18.65	0.09	42.99
0.977	22.58	6.03	1.68	5.71	17.09	0.07	42.74
0.978	22.55	6.01	1.41	5.72	18.25	0.06	42.58
0.995	22.47	6.02	1.3	5.74	19.57	0.1	42.74
1.011	22.67	6.07	1.37	5.78	12.37	0.09	42.91
1.019	22.68	6.07	1.3	5.73	14.2	0.1	42.9
1.021	22.71	6.07	1.37	5.4	12.17	0.11	42.88
1.025	22.72	6.07	1.26	5.4	13.53	1.72	42.89
1.027	22.73	6.07	1.37	5.38	12.64	1.77	42.89
1.031	22.73	6.07	1.37	5.37	13.87	2.0	42.88
1.038	22.74	6.07	1.3	5.34	12.69	2.1	42.88
1.039	22.74	6.07	1.37	5.33	13.65	1.94	42.89
1.042	22.74	6.07	1.14	5.31	12.83	1.79	42.88
1.043	22.74	6.07	1.53	5.29	12.99	1.85	42.87
1.044	22.7	6.03	1.34	4.66	12.5	2.1	42.58
1.048	22.69	6.03	1.34	4.64	12.89	2.01	42.63
1.054	22.68	6.03	1.26	4.61	12.26	1.94	42.64
1.057	22.68	6.03	1.3	4.59	12.82	1.96	42.58
1.06	22.67	6.02	1.45	4.57	12.26	2.03	42.53
1.069	22.66	6.02	1.3	4.53	12.82	2.08	42.53
1.073	22.56	6.0	1.3	4.36	11.59	1.88	42.47
1.075	22.56	5.99	1.3	4.32	11.5	1.95	42.43
1.078	22.79	6.1	1.22	6.08	11.93	1.26	43.05
1.079	22.79	6.1	1.22	6.01	12.96	1.27	43.05
1.081	22.79	6.1	1.26	5.73	11.95	1.29	43.06
1.089	22.79	6.1	1.34	5.7	13.02	1.3	43.06
1.092	22.79	6.1	1.22	5.62	13.06	1.29	43.06
1.097	22.79	6.1	1.11	5.64	13.38	1.33	43.06
1.101	22.79	6.1	1.18	5.66	13.31	1.32	43.06
1.108	22.79	6.1	1.22	5.66	13.8	1.22	43.06
1.122	22.79	6.1	1.45	5.66	12.79	1.28	43.06
1.133	22.79	6.1	1.18	5.65	12.42	1.27	43.07
1.135	22.8	6.1	1.22	5.65	12.9	1.27	43.06
1.152	22.8	6.1	1.3	5.65	12.3	1.26	43.07

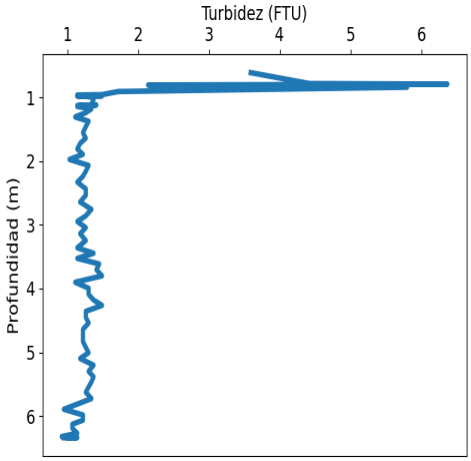
1.178	22.8	6.1	1.18	5.66	13.02	1.26	43.07
1.213	22.81	6.1	1.26	5.66	11.89	1.28	43.07
1.273	22.81	6.1	1.3	5.66	11.67	1.25	43.07
1.35	22.81	6.1	1.37	5.69	11.44	1.32	43.06
1.436	22.82	6.1	1.3	5.7	10.99	1.29	43.06
1.519	22.82	6.1	1.34	5.71	10.63	1.3	43.06
1.612	22.81	6.1	1.45	5.73	10.0	1.3	43.06
1.72	22.81	6.1	1.26	5.73	9.73	1.29	43.07
1.826	22.82	6.1	1.18	5.74	9.39	1.32	43.07
1.926	22.82	6.1	1.26	5.74	8.92	1.27	43.06
2.03	22.82	6.1	1.22	5.75	8.63	1.31	43.06
2.126	22.82	6.1	1.18	5.75	8.56	1.31	43.06
2.221	22.82	6.1	1.34	5.75	8.33	1.33	43.06
2.335	22.82	6.1	1.14	5.75	8.09	1.33	43.06
2.422	22.82	6.1	1.11	5.76	7.92	1.3	43.06
2.491	22.82	6.1	1.14	5.8	7.77	1.26	43.06
2.584	22.82	6.1	1.18	5.83	7.56	1.34	43.06
2.687	22.82	6.1	1.26	5.87	7.39	1.28	43.06
2.783	22.82	6.1	1.37	5.92	7.22	1.26	43.06
2.887	22.82	6.1	1.37	5.95	7.02	1.3	43.06
2.972	22.82	6.1	1.18	5.98	6.94	1.33	43.06
3.038	22.82	6.1	1.11	5.98	6.86	1.23	43.07
3.1	22.82	6.1	1.3	5.99	6.76	1.25	43.06
3.178	22.82	6.1	1.26	5.99	6.58	1.28	43.06
3.259	22.82	6.1	1.26	5.99	6.45	1.26	43.06
3.345	22.82	6.1	1.18	5.98	6.28	1.24	43.07
3.45	22.82	6.1	1.3	5.99	6.1	1.34	43.07
3.552	22.82	6.1	1.26	6.01	5.99	1.33	43.07
3.629	22.82	6.1	1.18	6.01	5.87	1.32	43.07
3.716	22.82	6.1	1.22	6.03	5.73	1.28	43.06
3.808	22.82	6.1	1.3	6.04	5.61	1.29	43.06
3.881	22.82	6.1	1.26	6.05	5.53	1.3	43.06
3.969	22.81	6.1	1.22	6.06	5.35	1.25	43.06
4.075	22.81	6.1	1.03	6.07	5.24	1.23	43.06
4.166	22.81	6.1	1.18	6.08	5.13	1.25	43.06
4.256	22.81	6.11	1.18	6.09	5.0	1.33	43.08
4.356	22.82	6.11	1.34	6.12	4.91	1.26	43.13
4.433	22.83	6.14	1.22	6.14	4.86	1.29	43.33
4.514	22.86	6.18	1.34	6.16	4.72	1.3	43.61
4.622	22.91	6.18	1.22	6.22	4.6	1.32	43.6
4.707	22.96	6.19	1.22	6.29	4.55	1.3	43.59
4.773	22.98	6.19	1.18	6.34	4.47	1.28	43.58
4.856	22.99	6.19	1.18	6.36	4.38	1.32	43.57
4.935	23.0	6.19	1.11	6.4	4.32	1.3	43.56
4.998	23.0	6.19	1.03	6.44	4.27	1.24	43.56
5.077	23.0	6.19	1.18	6.47	4.2	1.16	43.56
5.16	23.0	6.19	0.95	6.5	4.15	1.02	43.56
5.23	23.0	6.19	0.95	6.52	4.1	0.93	43.56
5.31	23.0	6.19	1.03	6.52	4.04	0.85	43.56
5.396	23.0	6.19	0.84	6.54	3.98	0.77	43.56
5.475	23.0	6.19	0.95	6.55	3.94	0.7	43.56
5.563	23.0	6.19	0.92	6.56	3.54	0.69	43.56
5.617	23.0	6.19	0.84	6.59	3.91	0.65	43.56
5.627	23.0	6.19	0.84	6.56	3.9	0.67	43.56
5.628	23.0	6.19	0.88	6.55	3.91	0.64	43.56
5.629	23.0	6.19	0.99	6.53	3.9	0.59	43.56

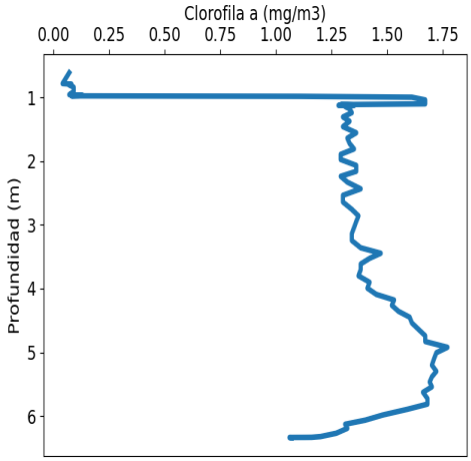
Nombre: CTD E03 - Punto 003 **Fecha: 18/10/2021** **Hora: 07:10:26**

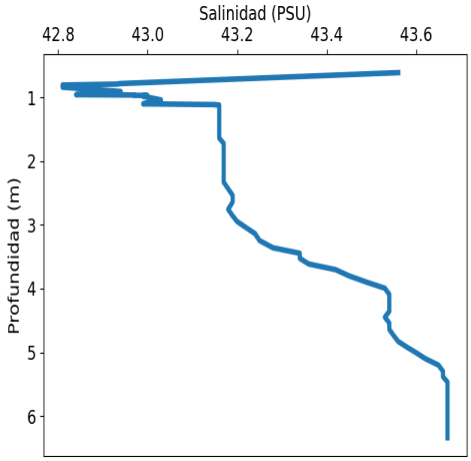


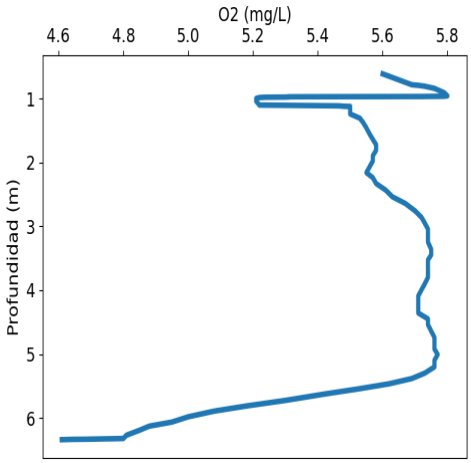


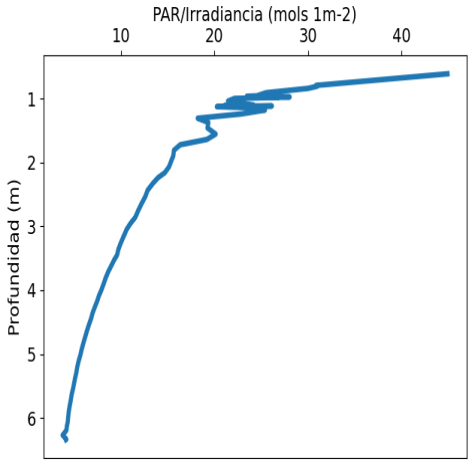


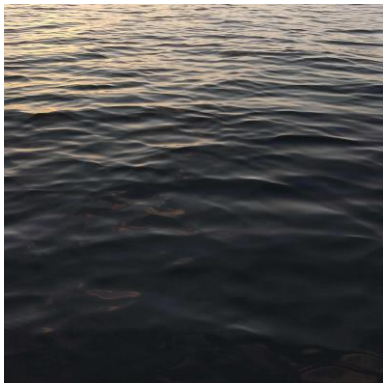












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	22.09	6.06	0.92	4.61	3.76	0.04	42.81
PROF (metros)	0.614	0.808	6.322	6.34	6.27	0.785	0.808
MÁXIMO	23.07	23.07	6.37	5.8	44.94	1.77	43.67
PROF (metros)	5.627	5.299	0.794	0.959	0.614	4.922	5.466

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	22.7	6.08	2.31	5.53	28.01	0.26	42.98
1 - 2m	22.88	6.12	1.24	5.49	20.75	1.36	43.15
2 - 3m	22.92	6.13	1.24	5.63	12.94	1.34	43.18
3 - 4m	22.98	6.16	1.28	5.74	9.25	1.39	43.36
4 - 5m	23.04	6.19	1.29	5.74	6.7	1.6	43.55
5 - 6m	23.06	6.21	1.26	5.49	4.95	1.67	43.66
6 - 7m	23.07	6.21	1.06	4.75	4.12	1.2	43.67

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)
0.614	22.09	6.07	3.59	5.6	44.94	0.07	43.56
0.785	22.64	6.07	4.42	5.69	31.68	0.04	42.94
0.794	22.68	6.07	6.37	5.71	30.9	0.08	42.93
0.808	22.7	6.06	2.14	5.73	31.0	0.07	42.81
0.842	22.69	6.06	5.8	5.76	30.02	0.09	42.81
0.91	22.7	6.07	1.72	5.79	25.54	0.09	42.94
0.959	22.71	6.06	1.49	5.8	24.54	0.07	42.84
0.965	22.75	6.08	1.14	5.79	23.47	0.09	42.97
0.969	22.75	6.08	1.22	5.72	26.08	0.13	42.97
0.973	22.76	6.09	1.37	5.33	24.55	0.11	43.0
0.974	22.77	6.09	1.26	5.31	25.76	0.1	42.99
0.976	22.78	6.09	1.14	5.31	28.06	0.09	42.99
0.978	22.78	6.09	1.49	5.3	26.34	0.08	42.99
0.98	22.78	6.09	1.14	5.24	26.84	0.37	42.99
0.985	22.78	6.09	1.26	5.22	26.28	1.1	42.99
0.999	22.78	6.09	1.34	5.21	22.16	1.61	43.0
1.042	22.79	6.1	1.37	5.21	21.45	1.67	43.03
1.103	22.8	6.09	1.34	5.22	24.16	1.67	42.99
1.115	22.88	6.12	1.34	5.46	21.01	1.29	43.15
1.117	22.88	6.12	1.34	5.47	26.16	1.32	43.15
1.122	22.88	6.12	1.41	5.48	24.81	1.35	43.16
1.124	22.89	6.12	1.18	5.5	20.68	1.34	43.16
1.127	22.89	6.12	1.22	5.5	25.31	1.28	43.16
1.128	22.89	6.12	1.14	5.5	20.26	1.35	43.16
1.145	22.89	6.12	1.14	5.5	23.74	1.31	43.16
1.181	22.89	6.12	1.34	5.5	25.42	1.33	43.16
1.242	22.89	6.13	1.26	5.5	22.88	1.34	43.16
1.309	22.9	6.13	1.11	5.53	18.21	1.3	43.16
1.376	22.9	6.13	1.3	5.54	19.36	1.33	43.16
1.461	22.9	6.13	1.26	5.55	19.26	1.3	43.16
1.557	22.9	6.13	1.22	5.56	20.14	1.36	43.16
1.641	22.9	6.13	1.26	5.57	19.2	1.32	43.16
1.724	22.9	6.13	1.18	5.58	16.35	1.33	43.17
1.811	22.9	6.13	1.14	5.58	15.67	1.35	43.17
1.895	22.9	6.13	1.22	5.57	15.61	1.29	43.17

1.976	22.91	6.13	1.03	5.57	15.39	1.29	43.17
2.069	22.91	6.13	1.3	5.56	15.15	1.36	43.17
2.161	22.91	6.13	1.26	5.55	14.7	1.36	43.17
2.24	22.91	6.13	1.22	5.57	13.97	1.29	43.17
2.331	22.91	6.13	1.14	5.58	13.41	1.32	43.17
2.436	22.91	6.13	1.26	5.61	12.86	1.38	43.18
2.538	22.92	6.13	1.26	5.63	12.6	1.3	43.19
2.643	22.92	6.13	1.18	5.67	12.22	1.3	43.19
2.758	22.93	6.13	1.34	5.7	11.84	1.34	43.18
2.86	22.93	6.13	1.26	5.72	11.54	1.37	43.19
2.949	22.93	6.13	1.14	5.73	11.06	1.36	43.2
3.045	22.93	6.14	1.26	5.74	10.63	1.35	43.22
3.139	22.93	6.14	1.18	5.74	10.35	1.34	43.24
3.247	22.94	6.14	1.26	5.74	10.03	1.34	43.25
3.361	22.95	6.15	1.14	5.75	9.73	1.38	43.28
3.447	22.96	6.16	1.37	5.75	9.6	1.47	43.34
3.527	22.98	6.16	1.14	5.74	9.28	1.42	43.34
3.615	22.99	6.16	1.45	5.74	8.98	1.38	43.36
3.704	23.0	6.17	1.41	5.74	8.67	1.38	43.42
3.801	23.02	6.18	1.49	5.74	8.39	1.37	43.45
3.902	23.03	6.18	1.11	5.73	8.15	1.42	43.49
3.995	23.04	6.19	1.3	5.72	7.92	1.41	43.53
4.092	23.05	6.19	1.3	5.71	7.64	1.45	43.54
4.18	23.05	6.19	1.37	5.71	7.44	1.53	43.54
4.264	23.06	6.19	1.49	5.71	7.21	1.52	43.54
4.358	23.05	6.19	1.26	5.71	6.97	1.55	43.54
4.45	23.05	6.19	1.26	5.74	6.8	1.6	43.53
4.54	23.04	6.19	1.3	5.74	6.58	1.61	43.54
4.641	23.03	6.19	1.22	5.75	6.36	1.64	43.54
4.741	23.03	6.19	1.22	5.76	6.16	1.67	43.55
4.831	23.03	6.19	1.22	5.76	5.98	1.67	43.56
4.922	23.03	6.19	1.26	5.76	5.81	1.77	43.58
5.007	23.03	6.2	1.3	5.77	5.68	1.72	43.6
5.098	23.03	6.2	1.18	5.76	5.5	1.71	43.62
5.202	23.04	6.2	1.37	5.76	5.33	1.7	43.65
5.299	23.05	6.21	1.3	5.73	5.22	1.72	43.66
5.384	23.06	6.21	1.37	5.69	5.09	1.7	43.66
5.466	23.06	6.21	1.34	5.62	4.98	1.69	43.67
5.542	23.06	6.21	1.3	5.53	4.88	1.7	43.67
5.627	23.07	6.21	1.26	5.42	4.74	1.66	43.67
5.726	23.07	6.21	1.34	5.3	4.63	1.68	43.67
5.813	23.07	6.21	1.14	5.18	4.52	1.68	43.67
5.894	23.07	6.21	0.95	5.08	4.43	1.59	43.67
5.983	23.07	6.21	1.22	5.0	4.36	1.48	43.67
6.065	23.07	6.21	1.22	4.95	4.31	1.4	43.67
6.129	23.07	6.21	1.07	4.88	4.22	1.31	43.67
6.193	23.07	6.21	1.07	4.85	4.17	1.32	43.67
6.27	23.07	6.21	1.14	4.81	3.76	1.27	43.67
6.322	23.07	6.21	0.92	4.8	4.11	1.2	43.67
6.334	23.07	6.21	0.99	4.68	4.14	1.16	43.67
6.335	23.07	6.21	1.11	4.65	4.13	1.13	43.67
6.336	23.07	6.21	0.99	4.64	4.12	1.06	43.67
6.339	23.06	6.21	1.14	4.62	4.13	1.06	43.67
6.34	23.06	6.21	0.95	4.61	4.12	1.07	43.67

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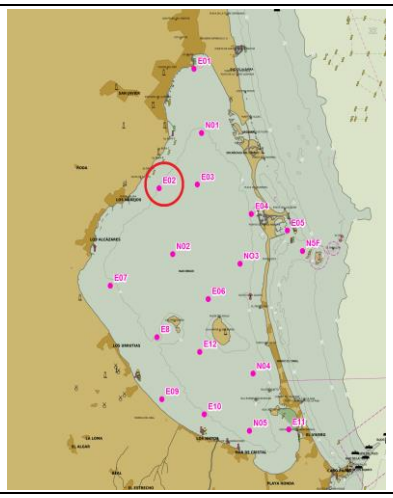

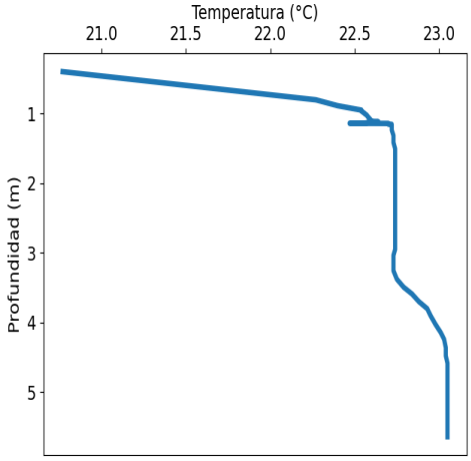

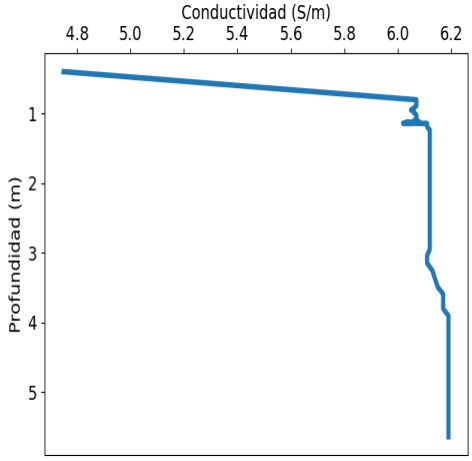

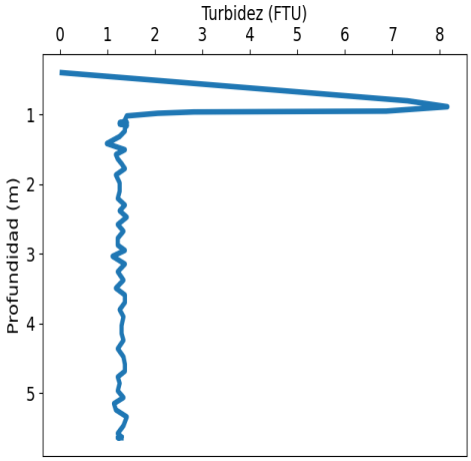

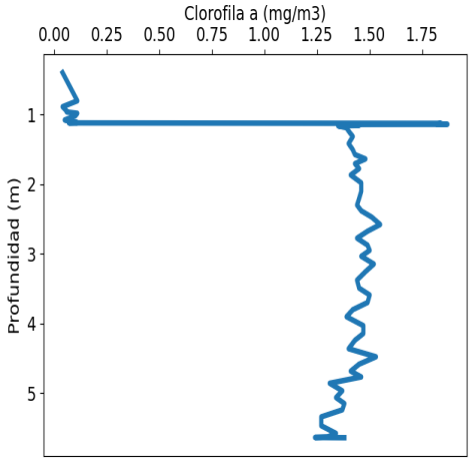

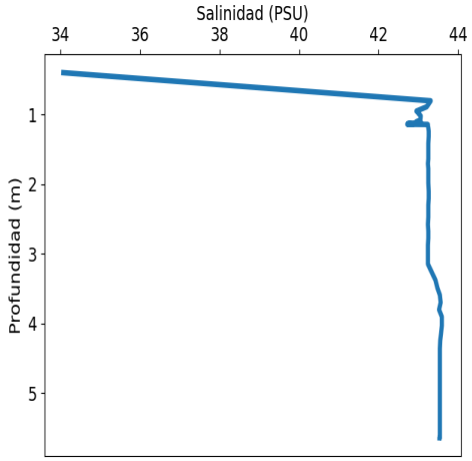

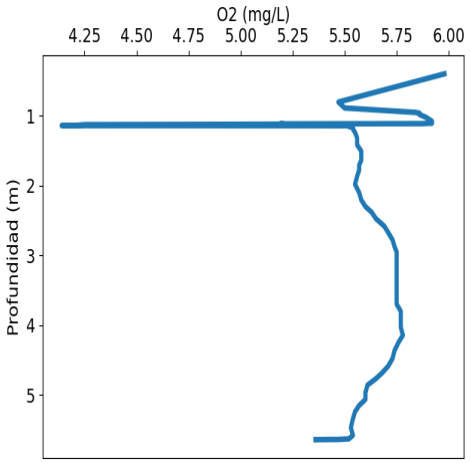

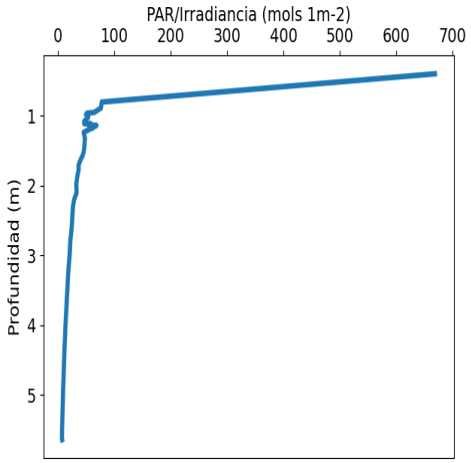

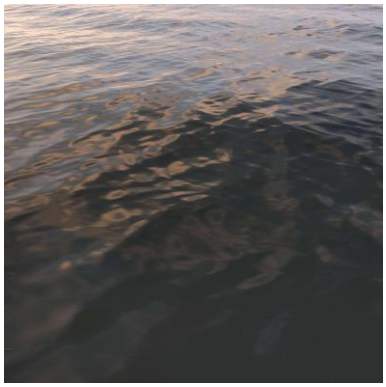

VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	20.77	4.75	0.04	4.14	7.35	0.04	34.07
PROF (metros)	0.399	0.399	0.399	1.14	5.575	0.399	0.399
MÁXIMO	23.05	23.05	8.16	5.98	668.56	1.87	43.59
PROF (metros)	4.582	3.901	0.888	0.399	0.399	1.139	3.901

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	22.18	5.84	4.55	5.75	164.79	0.07	41.59
1 - 2m	22.67	6.09	1.32	5.37	50.96	1.18	43.12
2 - 3m	22.74	6.12	1.29	5.67	25.42	1.48	43.25
3 - 4m	22.81	6.15	1.28	5.75	17.06	1.46	43.44
4 - 5m	23.03	6.19	1.29	5.7	11.16	1.43	43.55
5 - 6m	23.05	6.19	1.27	5.5	7.82	1.32	43.54

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)
0.399	20.77	4.75	0.04	5.98	668.56	0.04	34.07
0.803	22.27	6.07	7.32	5.47	77.7	0.11	43.31
0.888	22.4	6.07	8.16	5.5	76.45	0.04	43.21
0.951	22.54	6.05	6.87	5.84	64.64	0.06	42.95
0.963	22.54	6.06	2.82	5.86	51.6	0.06	43.0
0.982	22.55	6.06	2.06	5.86	49.8	0.11	43.0
1.02	22.57	6.07	1.41	5.89	53.85	0.1	43.06
1.078	22.59	6.07	1.37	5.92	46.82	0.05	43.05
1.106	22.6	6.06	1.34	5.92	47.99	0.09	42.94
1.112	22.6	6.07	1.41	5.87	46.76	0.09	42.97
1.116	22.64	6.08	1.26	5.19	59.02	0.11	43.06
1.12	22.64	6.08	1.41	5.21	53.99	0.07	43.07
1.127	22.58	6.03	1.3	4.25	55.96	1.84	42.74
1.138	22.56	6.05	1.26	4.21	55.59	1.82	42.86
1.139	22.51	6.02	1.37	4.15	68.59	1.87	42.72
1.14	22.47	6.03	1.37	4.14	61.28	1.87	42.83
1.142	22.7	6.11	1.3	5.53	57.63	1.43	43.23
1.145	22.7	6.11	1.41	5.53	62.85	1.38	43.24
1.153	22.7	6.11	1.41	5.52	63.2	1.4	43.24
1.156	22.72	6.11	1.37	5.54	58.44	1.45	43.24
1.162	22.72	6.11	1.41	5.54	64.1	1.35	43.24
1.19	22.72	6.11	1.37	5.54	57.1	1.39	43.25
1.237	22.72	6.12	1.37	5.55	45.71	1.4	43.26
1.315	22.73	6.12	1.26	5.56	48.06	1.42	43.26
1.416	22.73	6.12	0.99	5.56	47.24	1.4	43.25
1.505	22.74	6.12	1.37	5.58	46.22	1.42	43.25
1.574	22.74	6.12	1.18	5.58	43.72	1.43	43.25
1.637	22.74	6.12	1.22	5.58	39.89	1.48	43.25
1.705	22.74	6.12	1.3	5.57	36.77	1.43	43.24
1.776	22.74	6.12	1.37	5.57	36.84	1.45	43.25
1.867	22.74	6.12	1.18	5.56	34.6	1.41	43.25
1.98	22.74	6.12	1.26	5.55	32.62	1.46	43.25
2.101	22.74	6.12	1.26	5.57	33.3	1.46	43.26
2.204	22.74	6.12	1.22	5.58	28.74	1.45	43.26
2.299	22.74	6.12	1.37	5.6	26.8	1.44	43.25
2.381	22.74	6.12	1.26	5.63	26.14	1.46	43.25

2.472	22.74	6.12	1.41	5.65	25.52	1.51	43.25
2.578	22.74	6.12	1.22	5.69	24.83	1.55	43.24
2.674	22.74	6.12	1.34	5.71	23.73	1.49	43.25
2.774	22.74	6.12	1.22	5.73	22.23	1.44	43.25
2.874	22.74	6.12	1.22	5.74	21.58	1.49	43.24
2.949	22.74	6.12	1.37	5.75	21.27	1.5	43.24
3.034	22.73	6.11	1.11	5.75	20.49	1.46	43.24
3.145	22.73	6.11	1.37	5.75	19.38	1.52	43.24
3.255	22.73	6.13	1.22	5.75	18.4	1.48	43.33
3.376	22.75	6.14	1.34	5.75	17.55	1.44	43.43
3.491	22.79	6.15	1.18	5.75	16.94	1.45	43.48
3.589	22.84	6.17	1.37	5.75	16.18	1.5	43.54
3.697	22.88	6.17	1.37	5.75	15.52	1.49	43.56
3.8	22.93	6.17	1.26	5.77	14.93	1.42	43.52
3.901	22.95	6.19	1.34	5.77	14.18	1.39	43.59
4.029	22.98	6.19	1.3	5.77	13.35	1.47	43.59
4.142	23.01	6.19	1.3	5.78	12.92	1.47	43.57
4.239	23.03	6.19	1.34	5.76	12.34	1.43	43.55
4.36	23.04	6.19	1.22	5.74	11.67	1.4	43.54
4.476	23.04	6.19	1.34	5.73	11.22	1.53	43.54
4.582	23.05	6.19	1.37	5.71	10.77	1.45	43.54
4.682	23.05	6.19	1.37	5.68	10.41	1.41	43.54
4.765	23.05	6.19	1.22	5.65	10.1	1.46	43.54
4.856	23.05	6.19	1.26	5.61	9.62	1.31	43.54
4.964	23.05	6.19	1.22	5.6	9.22	1.37	43.54
5.061	23.05	6.19	1.34	5.6	8.97	1.34	43.54
5.147	23.05	6.19	1.14	5.57	8.7	1.38	43.54
5.237	23.05	6.19	1.18	5.55	8.36	1.37	43.54
5.338	23.05	6.19	1.41	5.54	8.03	1.27	43.54
5.465	23.05	6.19	1.34	5.53	7.62	1.27	43.54
5.575	23.05	6.19	1.22	5.54	7.35	1.34	43.54
5.626	23.05	6.19	1.3	5.52	7.39	1.3	43.54
5.634	23.05	6.19	1.22	5.47	7.39	1.24	43.54
5.635	23.05	6.19	1.26	5.42	7.39	1.29	43.54
5.636	23.05	6.19	1.22	5.39	7.37	1.32	43.53
5.637	23.05	6.19	1.3	5.36	7.41	1.38	43.53

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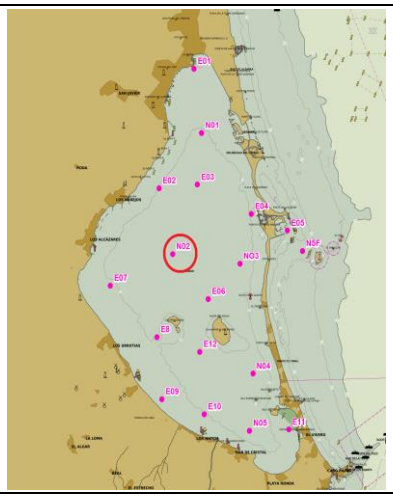
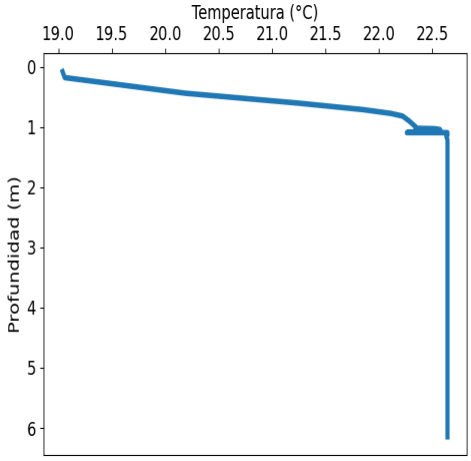
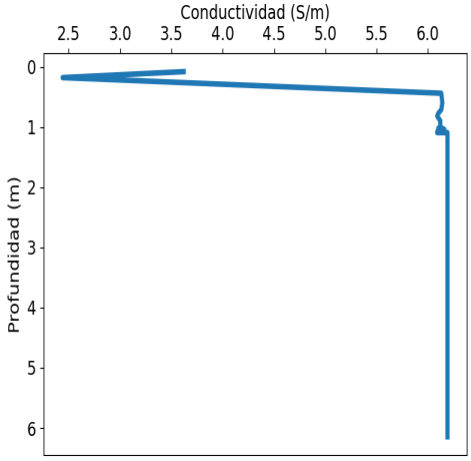
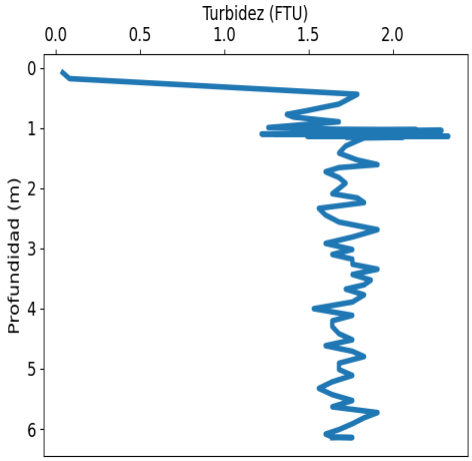
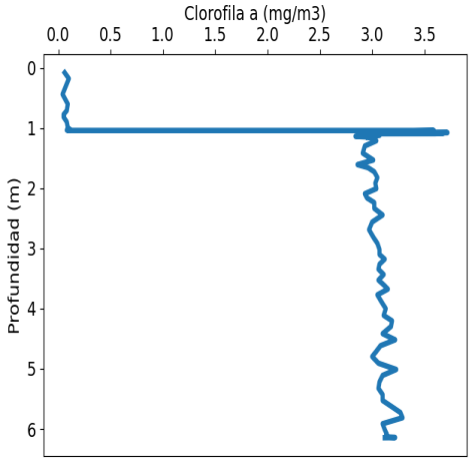
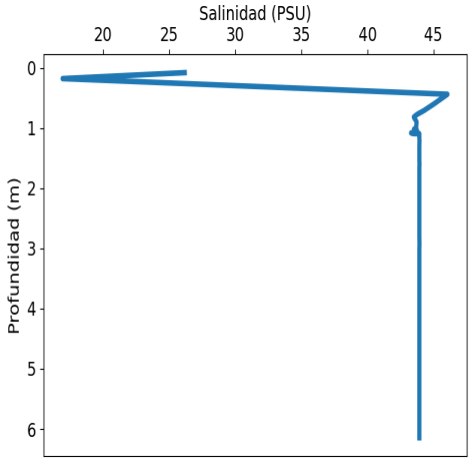


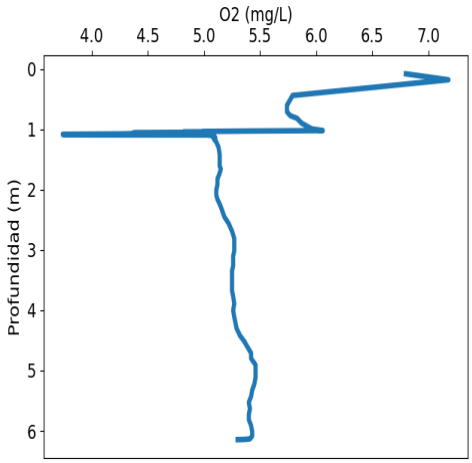


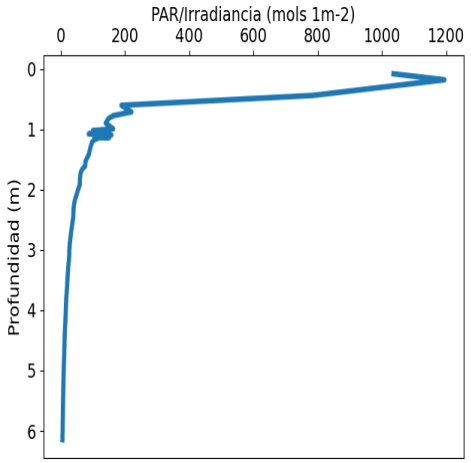












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.04	2.44	0.04	3.74	5.7	0.04	16.92
PROF (metros)	0.08	0.179	0.08	1.083	6.086	0.439	0.179
MÁXIMO	22.64	22.64	2.33	7.18	1194.8	3.72	46.06
PROF (metros)	1.094	1.094	1.137	0.179	0.179	1.076	0.439

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	21.15	5.43	1.2	6.08	449.18	0.07	39.24
1 - 2m	22.58	6.17	1.77	4.89	106.14	2.82	43.81
2 - 3m	22.64	6.19	1.7	5.18	39.79	3.01	43.93
3 - 4m	22.64	6.19	1.78	5.26	22.19	3.09	43.93
4 - 5m	22.64	6.19	1.69	5.35	12.92	3.11	43.93
5 - 6m	22.64	6.19	1.72	5.43	7.93	3.15	43.93
6 - 7m	22.64	6.19	1.67	5.37	6.02	3.16	43.93

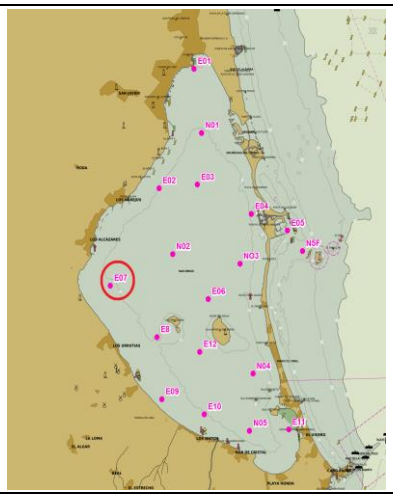
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 2.82, 3.01, 3.09, 3.11, 3.15, 3.16 respectivamente

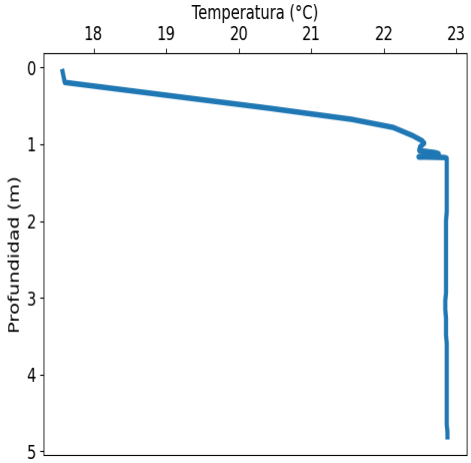
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.08	19.04	3.62	0.04	6.8	1036.1	0.06	26.17
0.179	19.06	2.44	0.08	7.18	1194.8	0.1	16.92
0.439	20.19	6.13	1.79	5.79	784.14	0.04	46.06
0.602	21.24	6.14	1.68	5.74	189.17	0.09	45.02
0.711	21.85	6.13	1.49	5.74	220.49	0.08	44.27
0.774	22.11	6.1	1.37	5.77	164.19	0.05	43.76
0.818	22.22	6.09	1.41	5.83	149.76	0.05	43.51
0.897	22.28	6.12	1.68	5.87	140.38	0.08	43.72
0.992	22.34	6.12	1.26	5.96	163.62	0.09	43.69
1.021	22.34	6.1	1.68	6.06	100.73	0.11	43.52
1.028	22.52	6.15	2.14	5.46	136.94	0.11	43.71
1.035	22.54	6.15	1.91	4.99	108.69	0.08	43.73
1.041	22.54	6.15	1.41	4.98	111.42	0.09	43.74
1.042	22.57	6.16	2.29	4.82	109.06	3.59	43.75
1.051	22.56	6.16	2.02	4.81	110.87	3.39	43.75
1.052	22.57	6.15	1.68	4.66	100.96	3.52	43.72
1.055	22.57	6.15	1.72	4.38	117.35	3.52	43.72
1.073	22.58	6.16	1.64	4.35	113.45	3.4	43.73
1.076	22.55	6.12	2.14	4.25	87.43	3.72	43.45
1.082	22.47	6.09	1.79	3.76	106.89	3.54	43.3
1.083	22.4	6.1	1.95	3.74	127.24	3.5	43.49
1.085	22.29	6.1	1.41	3.74	104.78	3.68	43.55
1.093	22.26	6.09	2.06	3.99	122.41	3.6	43.51
1.094	22.64	6.19	1.6	5.03	158.4	3.07	43.93
1.096	22.64	6.19	1.45	5.04	118.31	2.99	43.93
1.099	22.64	6.19	1.22	5.05	106.96	3.01	43.93
1.1	22.64	6.19	1.6	5.06	113.82	3.07	43.93
1.102	22.64	6.19	1.3	5.09	116.62	3.02	43.93
1.105	22.64	6.19	1.45	5.08	136.24	3.07	43.93
1.122	22.64	6.19	2.25	5.08	106.2	3.07	43.93
1.134	22.64	6.19	1.49	5.1	151.47	2.98	43.93
1.136	22.63	6.19	1.98	5.1	129.2	2.91	43.93
1.137	22.63	6.19	2.33	5.09	114.03	2.84	43.93

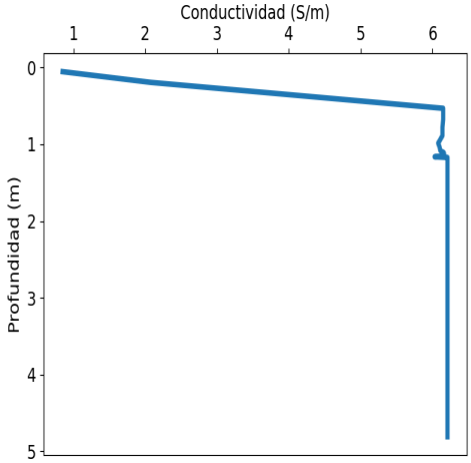
1.148	22.63	6.19	1.72	5.1	108.33	2.95	43.93
1.155	22.63	6.19	2.06	5.1	114.29	2.95	43.93
1.164	22.63	6.19	1.83	5.09	107.06	3.0	43.93
1.211	22.64	6.19	1.79	5.11	97.83	3.04	43.94
1.298	22.64	6.19	1.72	5.13	93.08	2.93	43.93
1.417	22.64	6.19	1.68	5.14	87.61	2.91	43.93
1.532	22.64	6.19	1.79	5.14	77.29	3.01	43.93
1.608	22.64	6.19	1.91	5.14	76.56	2.86	43.94
1.658	22.64	6.19	1.68	5.15	67.64	2.96	43.93
1.727	22.64	6.19	1.6	5.14	62.08	3.02	43.93
1.823	22.64	6.19	1.68	5.12	60.05	3.05	43.93
1.916	22.64	6.19	1.72	5.12	59.73	3.03	43.93
2.007	22.64	6.19	1.68	5.11	54.04	3.04	43.93
2.092	22.64	6.19	1.64	5.11	49.12	2.93	43.93
2.161	22.64	6.19	1.79	5.12	45.09	2.95	43.93
2.239	22.64	6.19	1.83	5.14	41.95	3.02	43.93
2.335	22.64	6.19	1.56	5.16	40.09	3.02	43.93
2.445	22.64	6.19	1.6	5.18	39.48	3.1	43.93
2.562	22.64	6.19	1.68	5.22	36.62	3.0	43.93
2.689	22.64	6.19	1.91	5.25	33.1	2.97	43.93
2.811	22.64	6.19	1.76	5.27	30.26	3.01	43.93
2.917	22.64	6.19	1.6	5.27	28.2	3.05	43.94
3.019	22.64	6.19	1.76	5.27	27.08	3.07	43.93
3.101	22.64	6.19	1.64	5.26	26.88	3.07	43.93
3.179	22.64	6.19	1.76	5.26	25.71	3.12	43.93
3.264	22.64	6.19	1.76	5.26	24.04	3.07	43.93
3.346	22.64	6.19	1.91	5.25	23.07	3.06	43.93
3.434	22.64	6.19	1.76	5.25	21.92	3.11	43.93
3.527	22.64	6.19	1.87	5.25	20.92	3.06	43.93
3.606	22.64	6.19	1.83	5.25	20.22	3.11	43.93
3.677	22.64	6.19	1.72	5.25	19.32	3.15	43.93
3.772	22.64	6.19	1.83	5.26	17.93	3.05	43.93
3.891	22.64	6.19	1.76	5.27	16.97	3.09	43.93
4.002	22.64	6.19	1.53	5.26	16.22	3.13	43.93
4.113	22.64	6.19	1.76	5.27	15.34	3.11	43.93
4.204	22.64	6.19	1.64	5.28	14.77	3.19	43.93
4.298	22.64	6.19	1.64	5.29	13.68	3.18	43.93
4.417	22.64	6.19	1.68	5.32	12.77	3.1	43.93
4.519	22.64	6.19	1.76	5.36	12.33	3.22	43.93
4.617	22.64	6.19	1.6	5.39	11.78	3.08	43.93
4.71	22.64	6.19	1.76	5.42	11.4	3.04	43.93
4.798	22.64	6.19	1.83	5.42	10.78	3.0	43.93
4.908	22.64	6.19	1.68	5.46	10.09	3.06	43.93
5.012	22.64	6.19	1.68	5.46	9.65	3.23	43.93
5.111	22.64	6.19	1.76	5.46	9.17	3.1	43.93
5.218	22.64	6.19	1.64	5.45	8.82	3.07	43.93
5.326	22.64	6.19	1.56	5.43	8.33	3.06	43.93
5.43	22.64	6.19	1.64	5.42	7.99	3.1	43.93
5.528	22.64	6.19	1.76	5.4	7.67	3.1	43.93
5.633	22.64	6.19	1.64	5.41	7.29	3.19	43.93
5.728	22.64	6.19	1.91	5.4	7.08	3.27	43.93
5.814	22.64	6.19	1.83	5.4	6.8	3.29	43.93
5.914	22.64	6.19	1.76	5.42	6.55	3.1	43.93
6.011	22.64	6.19	1.68	5.43	6.33	3.12	43.93
6.086	22.64	6.19	1.6	5.43	5.7	3.14	43.93
6.133	22.64	6.19	1.64	5.41	6.1	3.13	43.93
6.143	22.64	6.19	1.76	5.36	6.01	3.22	43.93
6.144	22.64	6.19	1.68	5.33	6.02	3.22	43.93

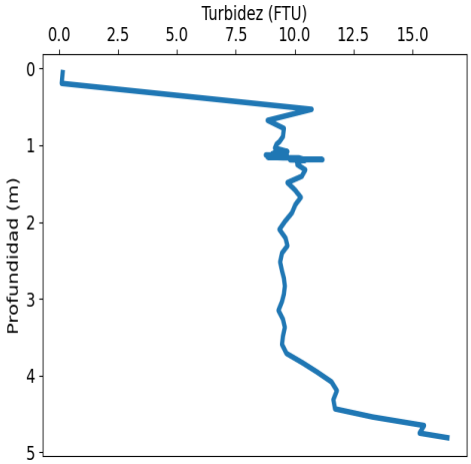
6.146	22.64	6.19	1.64	5.3	5.97	3.12	43.93

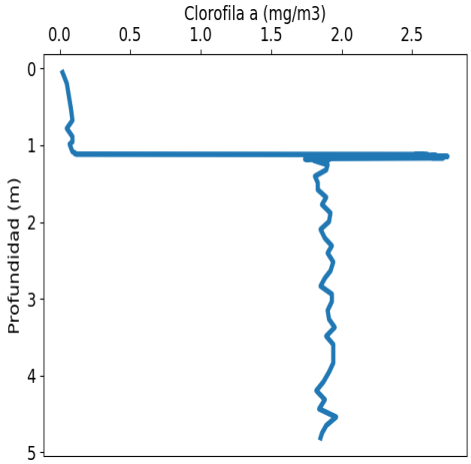
Nombre: CTD E07 - Punto 006 **Fecha: 18/10/2021** **Hora: 08:10:10**

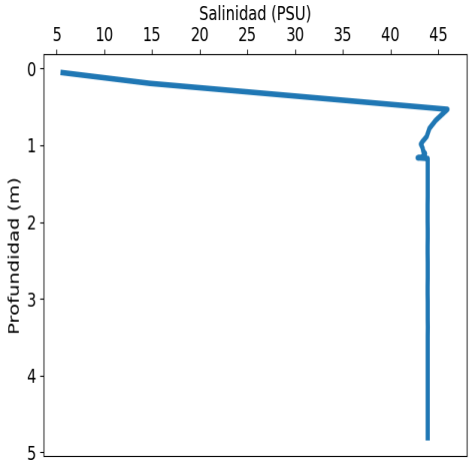


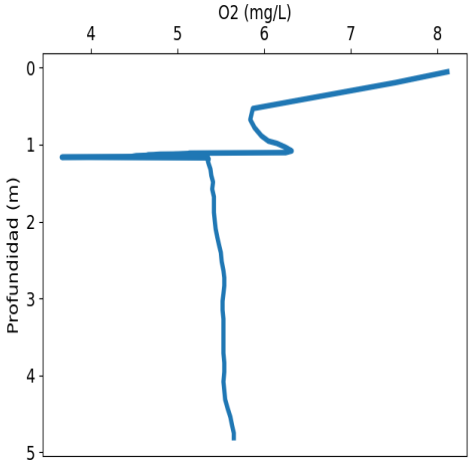


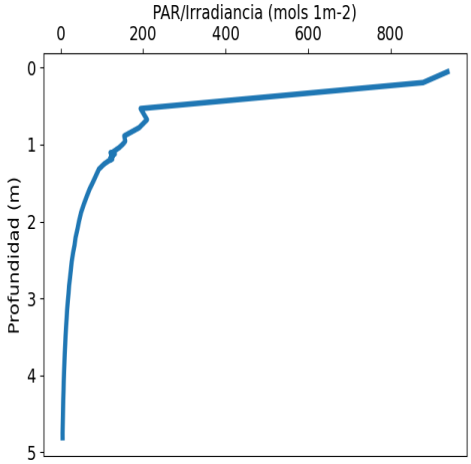












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	17.57	0.85	0.11	3.66	4.9	0.02	5.63
PROF (metros)	0.053	0.053	0.193	1.164	4.753	0.053	0.053
MÁXIMO	22.88	22.88	16.48	8.12	937.99	2.75	45.95
PROF (metros)	4.753	1.172	4.813	0.053	0.053	1.145	0.531

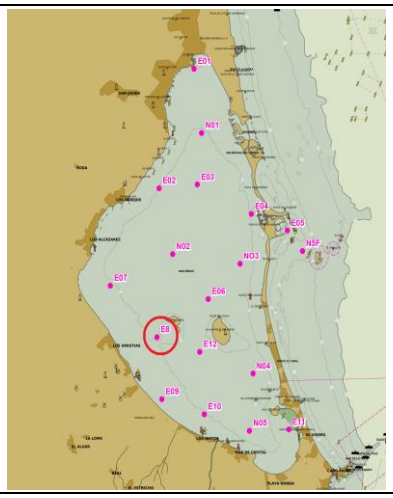
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E07 - Punto 006	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	20.85	4.96	7.18	6.43	359.37	0.07	35.68
1 - 2m	22.77	6.17	9.76	5.19	112.03	1.81	43.66
2 - 3m	22.86	6.21	9.51	5.51	28.49	1.9	43.87
3 - 4m	22.86	6.21	9.75	5.53	12.57	1.92	43.88
4 - 5m	22.87	6.21	13.41	5.59	6.06	1.87	43.88

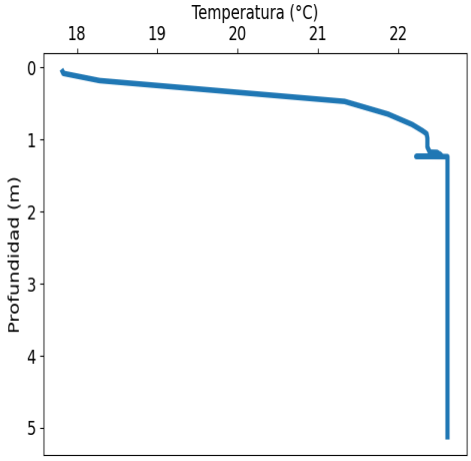
OBSERVACIONES GENERALES

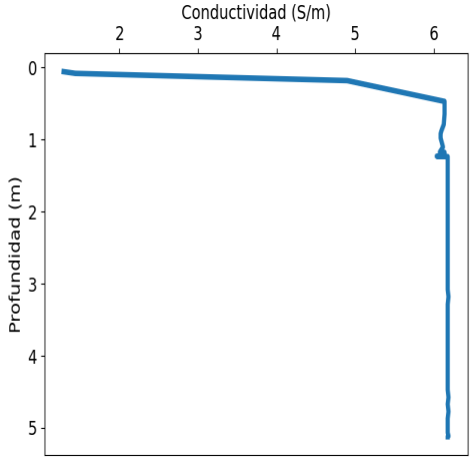
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.053	17.57	0.85	0.15	8.12	937.99	0.02	5.63
0.193	17.6	2.08	0.11	7.52	878.85	0.05	14.79
0.531	20.43	6.15	10.72	5.87	194.01	0.08	45.95
0.675	21.56	6.15	8.85	5.84	209.67	0.09	44.72
0.78	22.13	6.14	9.54	5.89	190.49	0.05	44.06
0.887	22.4	6.14	9.5	5.97	154.44	0.09	43.77
0.954	22.53	6.1	9.35	6.05	156.86	0.09	43.32
0.985	22.56	6.08	9.23	6.15	152.66	0.07	43.16
1.036	22.5	6.1	9.16	6.25	142.84	0.08	43.35
1.082	22.49	6.11	9.69	6.32	130.65	0.09	43.42
1.104	22.67	6.15	9.23	6.25	124.9	0.11	43.6
1.105	22.68	6.15	9.08	6.08	120.97	0.11	43.57
1.111	22.72	6.16	9.38	5.14	127.48	0.11	43.59
1.116	22.73	6.16	9.04	5.12	127.45	0.12	43.58
1.121	22.75	6.16	9.65	5.01	131.68	2.58	43.59
1.122	22.75	6.16	9.54	4.97	130.37	2.52	43.56
1.123	22.75	6.15	9.23	4.96	129.08	2.61	43.53
1.125	22.76	6.16	9.5	4.8	129.35	2.53	43.54
1.127	22.76	6.16	8.77	4.77	123.52	2.58	43.56
1.131	22.76	6.16	9.31	4.72	129.14	2.59	43.55
1.133	22.72	6.14	9.38	4.66	125.86	2.67	43.42
1.14	22.72	6.14	9.65	4.64	127.74	2.63	43.47
1.145	22.7	6.13	9.35	4.52	124.41	2.75	43.42
1.155	22.72	6.14	8.85	4.47	125.39	2.66	43.48
1.163	22.49	6.03	9.5	3.69	121.36	2.64	42.82
1.164	22.48	6.05	10.18	3.66	126.07	2.72	42.98
1.172	22.83	6.21	10.26	5.35	121.81	1.87	43.88
1.175	22.85	6.21	10.3	5.35	125.08	1.78	43.88
1.181	22.86	6.21	10.34	5.35	121.22	1.74	43.88
1.182	22.87	6.21	10.26	5.35	122.52	1.76	43.88
1.187	22.87	6.21	11.18	5.36	119.99	1.91	43.88
1.188	22.87	6.21	9.8	5.35	125.31	1.82	43.88
1.193	22.87	6.21	10.45	5.35	123.69	1.8	43.88
1.214	22.87	6.21	10.11	5.35	115.76	1.83	43.88
1.253	22.87	6.21	10.11	5.36	105.51	1.9	43.88
1.32	22.87	6.21	10.45	5.38	92.84	1.89	43.88
1.404	22.87	6.21	10.3	5.39	85.72	1.81	43.88

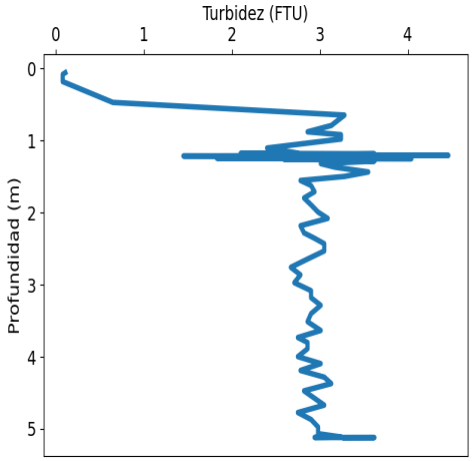
1.487	22.87	6.21	9.69	5.41	78.66	1.83	43.88
1.579	22.87	6.21	10.0	5.4	70.35	1.83	43.88
1.679	22.87	6.21	10.26	5.42	63.1	1.89	43.88
1.773	22.87	6.21	10.03	5.42	56.64	1.86	43.87
1.882	22.87	6.21	9.88	5.42	49.84	1.92	43.87
1.995	22.86	6.21	9.58	5.43	44.83	1.91	43.87
2.097	22.86	6.21	9.35	5.44	41.05	1.85	43.88
2.21	22.86	6.21	9.61	5.46	36.36	1.88	43.88
2.311	22.86	6.21	9.69	5.48	33.81	1.93	43.87
2.405	22.86	6.21	9.46	5.5	30.43	1.9	43.87
2.522	22.86	6.21	9.38	5.51	27.04	1.94	43.88
2.638	22.86	6.21	9.46	5.53	24.81	1.92	43.88
2.733	22.86	6.21	9.54	5.54	22.92	1.88	43.88
2.836	22.86	6.21	9.58	5.54	20.69	1.85	43.87
2.941	22.86	6.21	9.54	5.53	19.26	1.93	43.87
3.037	22.85	6.21	9.46	5.52	17.63	1.93	43.88
3.153	22.85	6.21	9.31	5.52	15.89	1.9	43.88
3.268	22.86	6.21	9.5	5.53	14.64	1.91	43.88
3.374	22.86	6.21	9.58	5.53	13.37	1.95	43.89
3.489	22.86	6.21	9.5	5.53	12.16	1.89	43.88
3.597	22.87	6.21	9.46	5.53	11.31	1.94	43.88
3.714	22.87	6.21	9.65	5.53	10.25	1.94	43.88
3.838	22.87	6.21	10.34	5.54	9.38	1.94	43.88
3.957	22.87	6.21	10.95	5.54	8.52	1.91	43.88
4.085	22.87	6.21	11.56	5.53	7.7	1.87	43.88
4.199	22.87	6.21	11.79	5.54	7.24	1.82	43.88
4.317	22.87	6.21	11.64	5.55	6.56	1.88	43.88
4.437	22.87	6.21	11.71	5.58	6.1	1.84	43.88
4.543	22.87	6.21	13.31	5.61	5.71	1.96	43.88
4.654	22.87	6.21	15.49	5.63	5.27	1.89	43.88
4.753	22.88	6.21	15.3	5.65	4.9	1.86	43.88
4.813	22.88	6.21	16.48	5.65	4.96	1.85	43.88

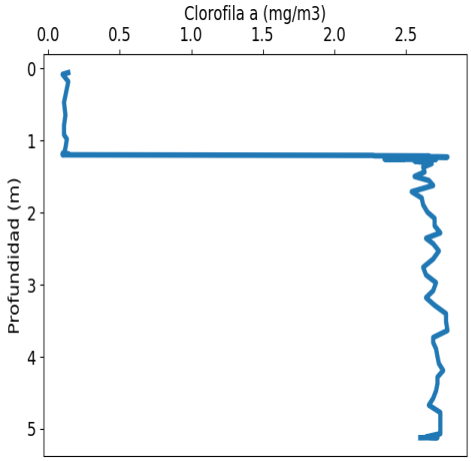
Nombre: CTD E08 - Punto 007 **Fecha: 18/10/2021** **Hora: 08:10:23**

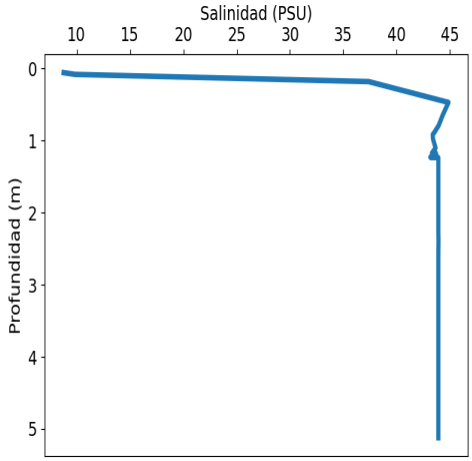


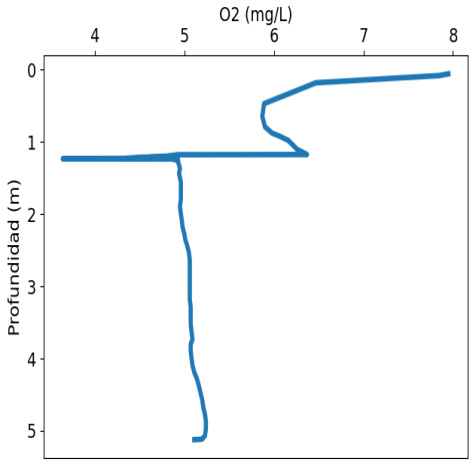


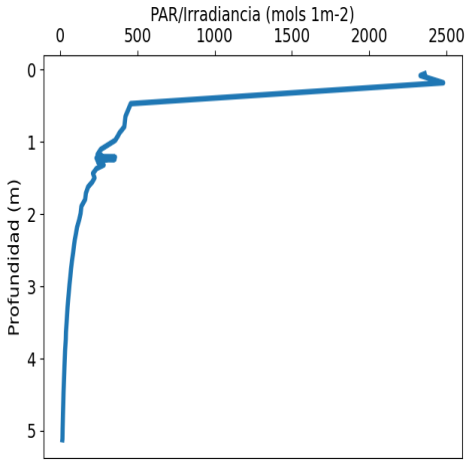


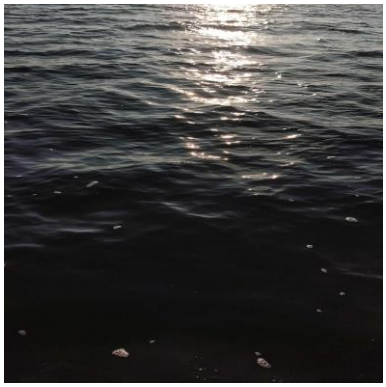












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	17.82	1.29	0.08	3.64	14.75	0.1	8.77
PROF (metros)	0.058	0.058	0.082	1.235	5.123	0.082	0.058
MÁXIMO	22.61	22.61	4.46	7.95	2479.5	2.79	44.87
PROF (metros)	1.237	3.18	1.206	0.058	0.182	1.229	0.471

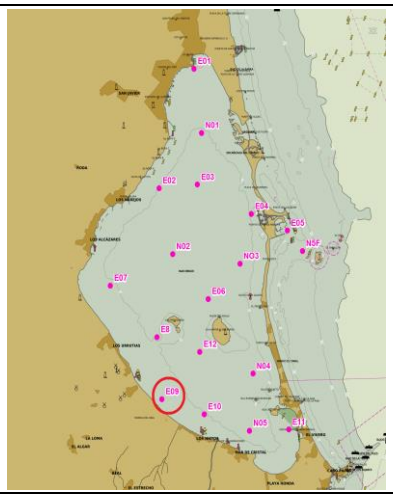
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E08 - Punto 007	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	20.7	4.93	1.85	6.46	1064.54	0.12	35.51
1 - 2m	22.55	6.16	2.98	4.82	253.62	2.23	43.78
2 - 3m	22.61	6.18	2.88	5.03	87.96	2.69	43.92
3 - 4m	22.61	6.18	2.88	5.07	41.63	2.72	43.92
4 - 5m	22.61	6.18	2.94	5.18	22.02	2.72	43.92
5 - 6m	22.61	6.18	3.21	5.17	15.11	2.68	43.92

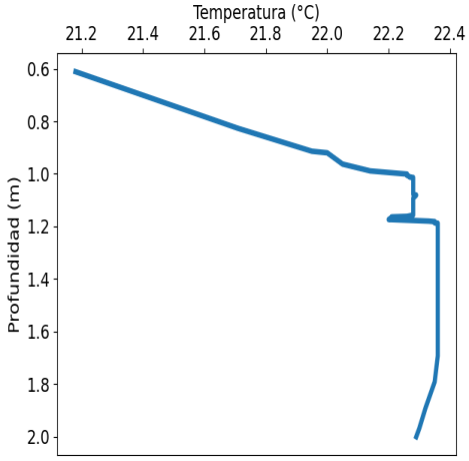
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m con los valores 2.23, 2.69, 2.72, 2.72, 2.68 respectivamente

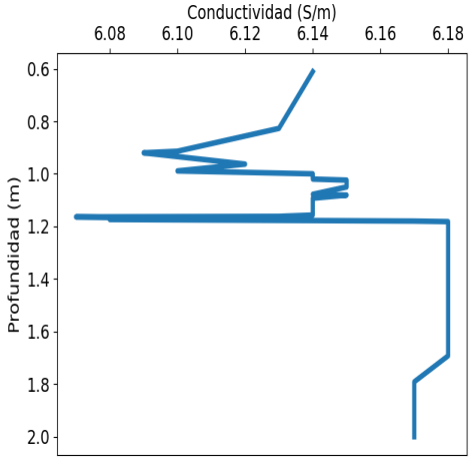
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.058	17.82	1.29	0.11	7.95	2359.5	0.14	8.77
0.082	17.83	1.44	0.08	7.85	2332.3	0.1	9.84
0.182	18.28	4.9	0.08	6.47	2479.5	0.14	37.38
0.471	21.33	6.14	0.65	5.89	457.36	0.11	44.87
0.647	21.87	6.14	3.28	5.87	423.09	0.12	44.33
0.791	22.17	6.13	3.13	5.9	415.61	0.11	43.95
0.879	22.3	6.1	2.86	5.98	383.32	0.11	43.58
0.919	22.35	6.09	3.24	6.06	373.93	0.11	43.39
0.979	22.36	6.09	3.24	6.16	356.24	0.13	43.42
1.104	22.36	6.12	2.4	6.26	263.57	0.12	43.66
1.175	22.39	6.08	2.75	6.37	242.24	0.11	43.31
1.178	22.48	6.14	2.1	4.92	249.19	0.1	43.7
1.184	22.48	6.14	3.62	4.89	266.39	0.14	43.71
1.198	22.51	6.14	2.94	4.8	257.95	0.1	43.68
1.206	22.52	6.14	4.46	4.63	257.53	2.27	43.68
1.211	22.52	6.14	2.59	4.6	355.5	2.28	43.68
1.214	22.52	6.14	1.45	4.48	274.8	2.66	43.64
1.218	22.53	6.14	2.21	4.46	282.48	2.64	43.66
1.223	22.52	6.14	1.87	4.41	235.33	2.46	43.63
1.226	22.53	6.14	3.62	4.36	284.19	2.73	43.63
1.229	22.53	6.14	3.66	4.36	260.59	2.79	43.63
1.23	22.49	6.09	3.43	4.03	329.55	2.51	43.25
1.231	22.24	6.04	2.17	3.66	284.78	2.49	43.16
1.235	22.22	6.05	3.62	3.64	245.75	2.54	43.26
1.237	22.61	6.18	2.67	4.89	283.2	2.51	43.92
1.242	22.61	6.18	3.55	4.88	352.55	2.53	43.92
1.243	22.61	6.18	2.98	4.88	321.48	2.44	43.92
1.245	22.61	6.18	1.83	4.89	276.91	2.42	43.92
1.247	22.61	6.18	3.59	4.92	298.16	2.45	43.92
1.249	22.61	6.18	3.13	4.92	274.48	2.46	43.92
1.252	22.61	6.18	4.04	4.93	271.82	2.48	43.92
1.254	22.61	6.18	2.9	4.93	240.9	2.49	43.92
1.256	22.61	6.18	2.86	4.93	242.02	2.44	43.92
1.258	22.61	6.18	2.59	4.93	268.62	2.35	43.92

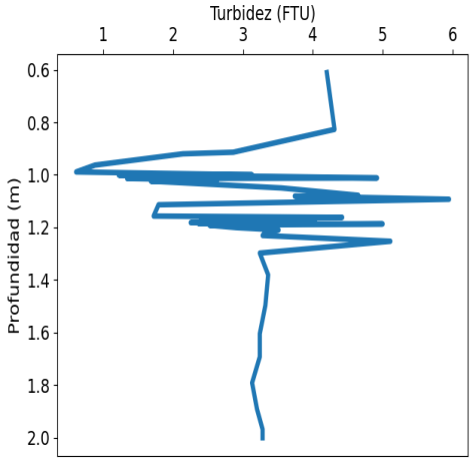
1.263	22.61	6.18	2.86	4.92	272.77	2.71	43.92
1.269	22.61	6.18	3.4	4.93	254.92	2.64	43.92
1.285	22.61	6.18	3.62	4.93	246.66	2.56	43.92
1.32	22.61	6.18	3.01	4.94	282.02	2.68	43.92
1.369	22.61	6.18	3.17	4.95	235.93	2.62	43.92
1.436	22.61	6.18	3.55	4.94	212.66	2.63	43.92
1.498	22.61	6.18	3.28	4.95	223.06	2.56	43.92
1.554	22.61	6.18	2.78	4.96	208.7	2.66	43.92
1.623	22.61	6.18	2.9	4.96	181.27	2.69	43.92
1.71	22.61	6.18	2.94	4.96	167.07	2.54	43.92
1.797	22.61	6.18	2.82	4.96	162.22	2.61	43.92
1.892	22.61	6.18	2.9	4.95	137.93	2.62	43.92
1.993	22.61	6.18	2.98	4.96	132.51	2.65	43.92
2.08	22.61	6.18	3.09	4.97	123.32	2.7	43.92
2.182	22.61	6.18	2.78	4.98	109.77	2.7	43.92
2.281	22.61	6.18	2.82	5.0	101.72	2.74	43.92
2.356	22.61	6.18	2.94	5.01	95.02	2.64	43.93
2.431	22.61	6.18	3.05	5.03	90.23	2.69	43.93
2.532	22.61	6.18	3.05	5.05	84.54	2.73	43.92
2.644	22.61	6.18	2.86	5.06	77.07	2.69	43.92
2.759	22.61	6.18	2.67	5.06	70.75	2.62	43.92
2.864	22.61	6.18	2.78	5.06	66.28	2.64	43.92
2.972	22.61	6.18	2.71	5.06	60.94	2.71	43.92
3.083	22.61	6.18	2.9	5.06	56.46	2.69	43.92
3.18	22.61	6.19	2.9	5.06	52.48	2.64	43.92
3.286	22.61	6.18	3.01	5.07	48.4	2.7	43.92
3.402	22.61	6.18	2.9	5.07	44.96	2.78	43.92
3.513	22.61	6.18	2.86	5.07	41.79	2.78	43.92
3.635	22.61	6.18	3.01	5.08	37.98	2.79	43.92
3.733	22.61	6.18	2.75	5.09	36.8	2.69	43.92
3.802	22.61	6.18	2.86	5.07	34.81	2.69	43.92
3.889	22.61	6.18	2.86	5.07	32.31	2.71	43.92
3.998	22.61	6.18	2.75	5.08	30.32	2.72	43.92
4.095	22.61	6.18	3.01	5.09	28.52	2.73	43.92
4.19	22.61	6.18	2.78	5.11	26.97	2.76	43.92
4.283	22.61	6.18	3.05	5.14	25.35	2.72	43.92
4.372	22.61	6.18	3.13	5.16	23.88	2.72	43.92
4.473	22.61	6.18	2.82	5.18	22.18	2.71	43.92
4.576	22.61	6.19	2.94	5.2	21.06	2.69	43.92
4.671	22.61	6.18	3.05	5.21	19.88	2.66	43.92
4.774	22.61	6.19	2.75	5.23	18.53	2.74	43.92
4.87	22.61	6.18	2.9	5.24	17.51	2.74	43.92
4.974	22.61	6.18	2.98	5.24	16.34	2.74	43.92
5.067	22.61	6.18	2.98	5.23	15.67	2.74	43.92
5.113	22.61	6.19	3.24	5.2	15.23	2.64	43.92
5.119	22.61	6.18	2.94	5.17	15.05	2.68	43.92
5.121	22.61	6.18	3.62	5.14	14.84	2.72	43.92
5.123	22.61	6.18	3.28	5.11	14.75	2.6	43.92

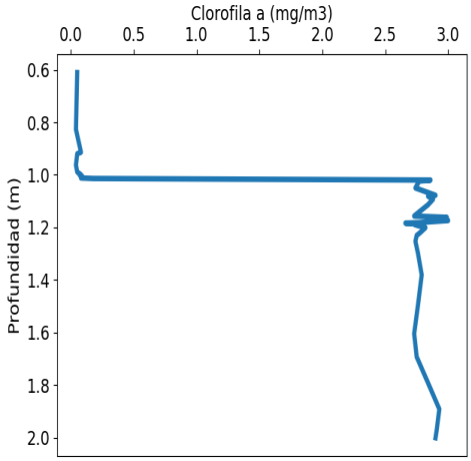
Nombre: CTD E09 - Punto 008 **Fecha: 18/10/2021** **Hora: 08:10:00**

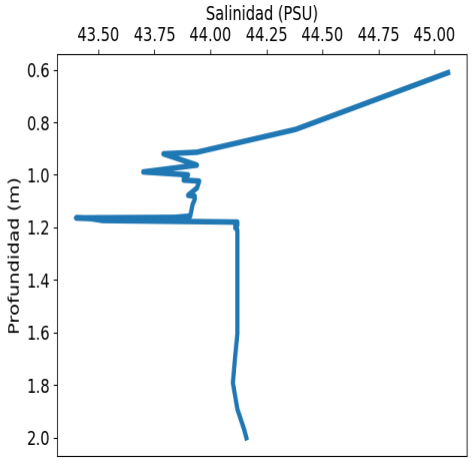


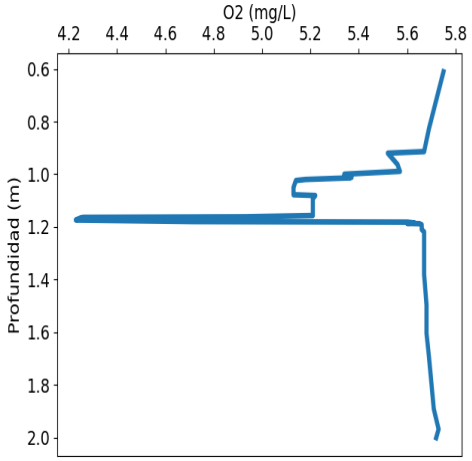


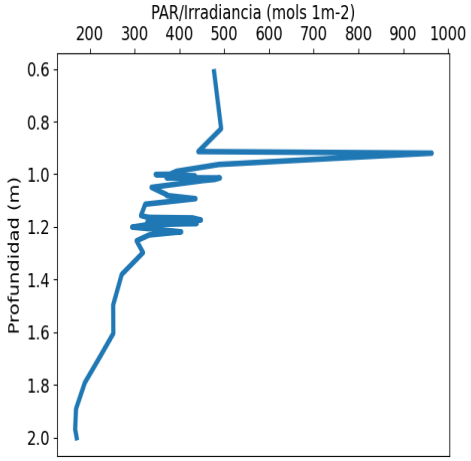












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.18	6.07	0.61	4.23	167.22	0.04	43.4
PROF (metros)	0.611	1.164	0.989	1.174	1.969	0.827	1.164
MÁXIMO	22.36	22.36	5.95	5.75	963.56	3.0	45.06
PROF (metros)	1.188	1.182	1.093	0.611	0.92	1.174	0.611

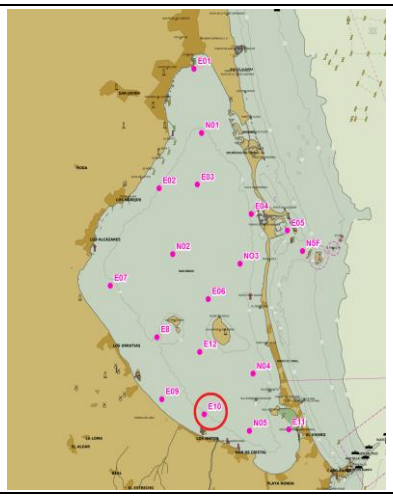
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E09 - Punto 008	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	21.84	6.11	2.5	5.63	543.07	0.05	44.14
1 - 2m	22.31	6.15	3.29	5.36	347.86	2.39	43.98
2 - 3m	22.29	6.17	3.28	5.72	170.51	2.9	44.16

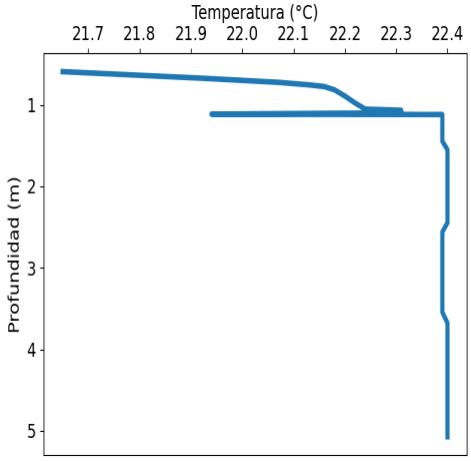
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m con los valores 2.39, 2.9 respectivamente

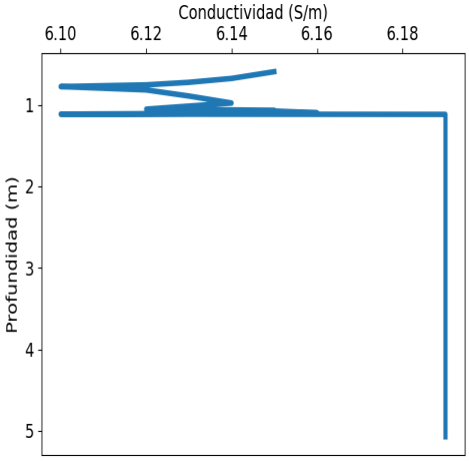
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.611	21.18	6.14	4.2	5.75	477.51	0.05	45.06
0.827	21.71	6.13	4.31	5.69	493.26	0.04	44.38
0.914	21.95	6.1	2.86	5.67	442.24	0.08	43.94
0.92	22.0	6.09	2.14	5.52	963.56	0.05	43.79
0.963	22.05	6.12	0.88	5.56	488.37	0.04	43.94
0.989	22.14	6.1	0.61	5.57	393.49	0.05	43.7
1.0	22.25	6.14	3.13	5.34	378.99	0.08	43.9
1.001	22.26	6.14	1.22	5.34	346.95	0.07	43.9
1.006	22.26	6.14	3.4	5.34	434.72	0.09	43.88
1.012	22.27	6.14	4.92	5.37	432.81	0.08	43.89
1.013	22.27	6.14	3.51	5.36	371.08	0.13	43.89
1.014	22.28	6.14	1.34	5.36	490.75	0.18	43.89
1.02	22.28	6.14	2.63	5.18	478.62	2.86	43.88
1.024	22.28	6.15	1.68	5.14	453.45	2.77	43.95
1.05	22.28	6.15	3.55	5.13	337.75	2.74	43.94
1.078	22.28	6.14	4.65	5.13	372.02	2.9	43.9
1.081	22.29	6.15	3.74	5.22	372.37	2.84	43.93
1.093	22.28	6.14	5.95	5.21	436.04	2.88	43.93
1.114	22.28	6.14	1.79	5.21	323.72	2.84	43.92
1.157	22.28	6.14	1.72	5.21	314.26	2.73	43.91
1.162	22.26	6.13	4.42	4.93	325.08	2.99	43.84
1.164	22.21	6.07	2.4	4.26	333.63	2.91	43.4
1.166	22.21	6.08	3.4	4.25	429.32	2.98	43.46
1.174	22.2	6.08	4.0	4.23	448.33	3.0	43.52
1.18	22.33	6.17	2.48	4.72	359.65	2.82	44.12
1.182	22.35	6.18	2.25	5.6	328.41	2.78	44.11
1.184	22.35	6.18	4.04	5.62	364.85	2.66	44.11
1.185	22.35	6.18	2.36	5.63	369.19	2.7	44.11
1.187	22.35	6.18	5.0	5.6	438.88	2.74	44.11
1.188	22.36	6.18	4.65	5.65	420.26	2.73	44.12
1.192	22.36	6.18	2.52	5.66	328.03	2.75	44.12
1.201	22.36	6.18	2.9	5.66	294.38	2.82	44.11
1.21	22.36	6.18	3.51	5.66	351.65	2.8	44.12
1.219	22.36	6.18	3.32	5.67	404.12	2.78	44.12
1.231	22.36	6.18	3.28	5.67	332.32	2.75	44.12
1.253	22.36	6.18	5.11	5.67	304.44	2.74	44.12
1.298	22.36	6.18	3.24	5.67	318.81	2.76	44.12
1.381	22.36	6.18	3.36	5.67	271.19	2.79	44.12

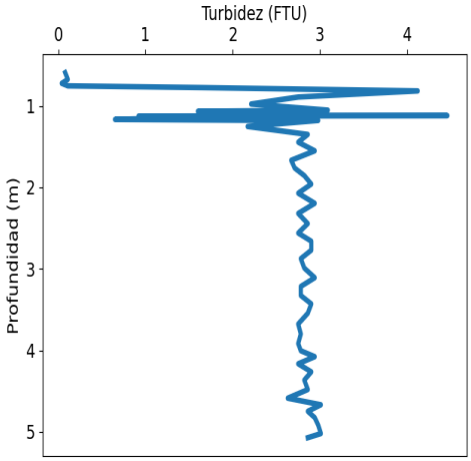
1.497	22.36	6.18	3.32	5.68	252.1	2.76	44.12
1.605	22.36	6.18	3.24	5.68	252.45	2.73	44.12
1.693	22.36	6.18	3.24	5.69	222.9	2.75	44.11
1.792	22.35	6.17	3.13	5.7	188.86	2.84	44.1
1.892	22.32	6.17	3.2	5.71	169.09	2.93	44.12
1.969	22.3	6.17	3.28	5.73	167.22	2.91	44.15
2.001	22.29	6.17	3.28	5.72	170.51	2.9	44.16

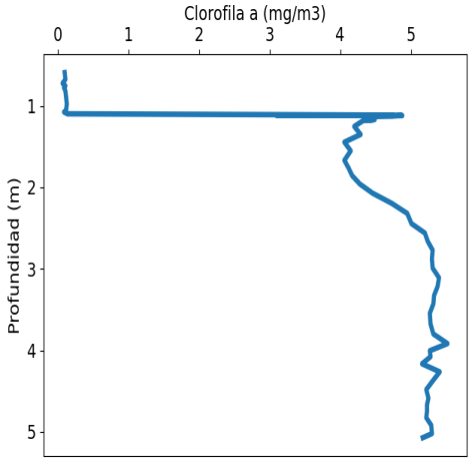
Nombre: CTD E10 - Punto 009 **Fecha: 18/10/2021** **Hora: 08:10:36**

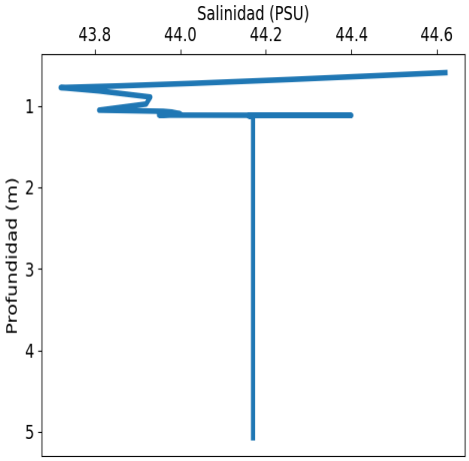


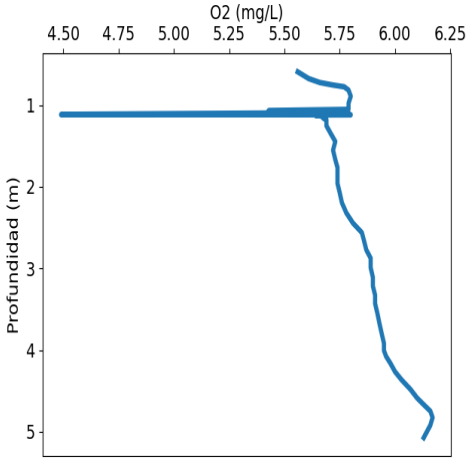


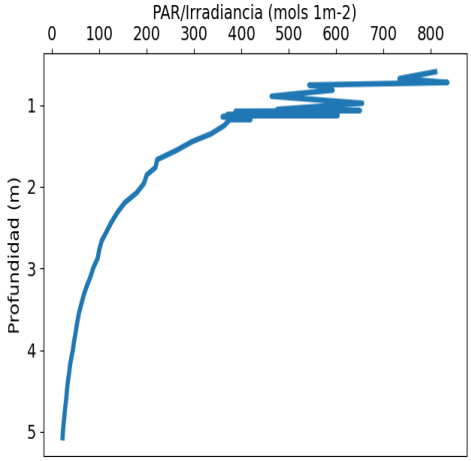












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.65	6.1	0.04	4.49	21.97	0.07	43.72
PROF (metros)	0.593	0.776	0.724	1.117	5.072	0.724	0.776
MÁXIMO	22.4	22.4	4.46	6.17	835.55	5.52	44.62
PROF (metros)	1.552	1.117	1.12	4.826	0.724	3.917	0.593

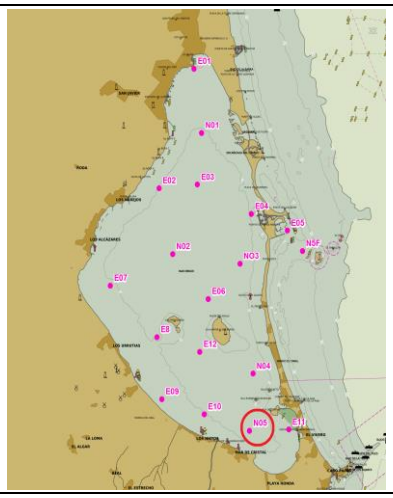
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E10 - Punto 009	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.06	6.13	1.38	5.71	651.36	0.11	44.02
1 - 2m	22.34	6.18	2.48	5.56	372.6	3.56	44.13
2 - 3m	22.39	6.19	2.83	5.83	121.65	5.06	44.17
3 - 4m	22.39	6.19	2.82	5.92	60.73	5.35	44.17
4 - 5m	22.4	6.19	2.86	6.07	32.56	5.26	44.17
5 - 6m	22.4	6.19	2.94	6.13	22.2	5.23	44.17

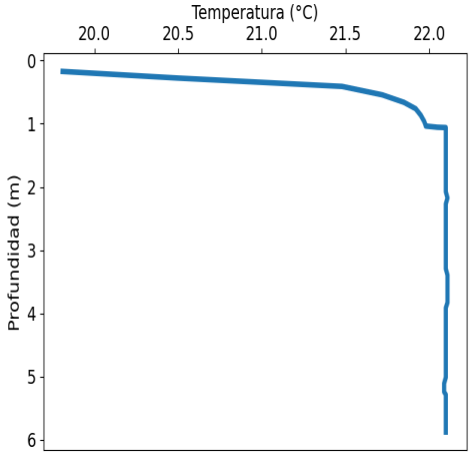
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m con los valores 3.56, 5.06, 5.35, 5.26, 5.23 respectivamente

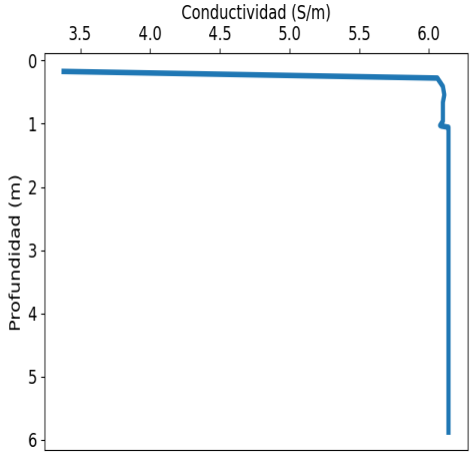
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.593	21.65	6.15	0.08	5.56	809.62	0.1	44.62
0.676	21.93	6.14	0.11	5.61	734.01	0.11	44.26
0.724	22.07	6.13	0.04	5.66	835.55	0.07	44.03
0.755	22.13	6.12	0.11	5.72	543.31	0.11	43.86
0.776	22.16	6.1	1.64	5.77	576.39	0.09	43.72
0.817	22.18	6.12	4.12	5.79	592.92	0.11	43.81
0.892	22.2	6.13	2.75	5.8	463.76	0.12	43.93
0.978	22.22	6.14	2.21	5.79	655.36	0.13	43.92
1.053	22.24	6.12	3.09	5.79	475.96	0.12	43.81
1.067	22.31	6.15	1.6	5.43	650.67	0.11	43.96
1.076	22.31	6.15	2.9	5.43	387.51	0.09	43.98
1.098	22.31	6.16	2.52	5.42	404.21	0.14	44.0
1.114	21.94	6.1	3.05	4.5	402.25	4.75	43.95
1.117	22.15	6.19	2.33	4.49	403.09	3.1	44.4
1.119	22.39	6.19	2.44	5.8	409.4	4.88	44.16
1.12	22.39	6.19	4.46	5.67	369.36	4.82	44.17
1.126	22.39	6.19	0.92	5.64	603.74	4.73	44.16
1.131	22.39	6.19	1.95	5.67	429.82	4.46	44.17
1.144	22.39	6.19	1.45	5.67	359.98	4.48	44.17
1.167	22.39	6.19	0.65	5.68	414.36	4.49	44.17
1.178	22.39	6.19	2.36	5.69	419.0	4.44	44.17
1.179	22.39	6.19	2.98	5.69	375.23	4.33	44.17
1.253	22.39	6.19	2.17	5.69	363.08	4.2	44.17
1.351	22.39	6.19	2.86	5.71	336.11	4.29	44.17
1.446	22.39	6.19	2.75	5.73	296.16	4.06	44.17
1.552	22.4	6.19	2.94	5.72	263.45	4.15	44.17
1.668	22.4	6.19	2.67	5.73	221.92	4.06	44.17
1.764	22.4	6.19	2.71	5.74	218.3	4.12	44.17
1.856	22.4	6.19	2.82	5.74	199.76	4.17	44.17
1.96	22.4	6.19	2.9	5.74	193.92	4.28	44.17
2.072	22.4	6.19	2.75	5.75	178.89	4.46	44.17
2.196	22.4	6.19	2.94	5.76	153.23	4.73	44.17
2.32	22.4	6.19	2.75	5.78	137.19	4.95	44.17
2.445	22.4	6.19	2.86	5.81	124.15	5.01	44.17

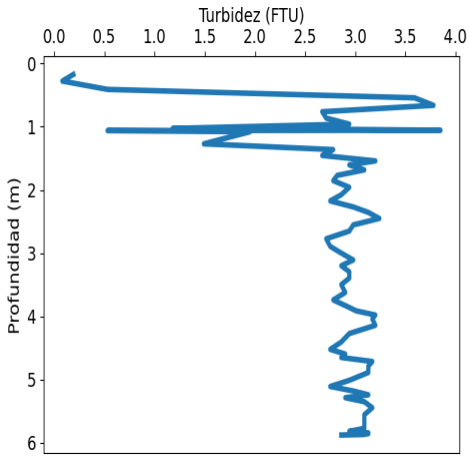
2.561	22.39	6.19	2.75	5.85	113.92	5.2	44.17
2.661	22.39	6.19	2.9	5.86	104.75	5.24	44.17
2.771	22.39	6.19	2.9	5.87	99.5	5.31	44.17
2.875	22.39	6.19	2.78	5.89	96.19	5.3	44.17
2.991	22.39	6.19	2.82	5.89	87.02	5.31	44.17
3.109	22.39	6.19	2.94	5.9	80.5	5.4	44.17
3.216	22.39	6.19	2.78	5.9	73.12	5.38	44.17
3.327	22.39	6.19	2.78	5.91	66.54	5.33	44.17
3.43	22.39	6.19	2.9	5.91	61.96	5.32	44.17
3.545	22.39	6.19	2.86	5.92	56.6	5.27	44.17
3.677	22.4	6.19	2.75	5.93	52.47	5.28	44.17
3.799	22.4	6.19	2.78	5.94	49.1	5.32	44.17
3.917	22.4	6.19	2.75	5.95	45.56	5.52	44.17
4.005	22.4	6.19	2.78	5.95	43.6	5.27	44.17
4.078	22.4	6.19	2.94	5.96	41.01	5.28	44.17
4.165	22.4	6.19	2.75	5.98	38.24	5.16	44.17
4.264	22.4	6.19	2.9	6.0	36.16	5.41	44.17
4.365	22.4	6.19	2.82	6.03	33.6	5.32	44.17
4.481	22.4	6.19	2.86	6.07	31.37	5.22	44.17
4.587	22.4	6.19	2.63	6.1	29.82	5.25	44.17
4.668	22.4	6.19	3.01	6.13	28.33	5.23	44.17
4.748	22.4	6.19	2.86	6.16	26.72	5.23	44.17
4.826	22.4	6.19	2.94	6.17	25.47	5.22	44.17
4.919	22.4	6.19	2.98	6.16	23.8	5.29	44.17
5.021	22.4	6.19	3.01	6.14	22.43	5.3	44.17
5.072	22.4	6.19	2.86	6.13	21.96	5.17	44.17

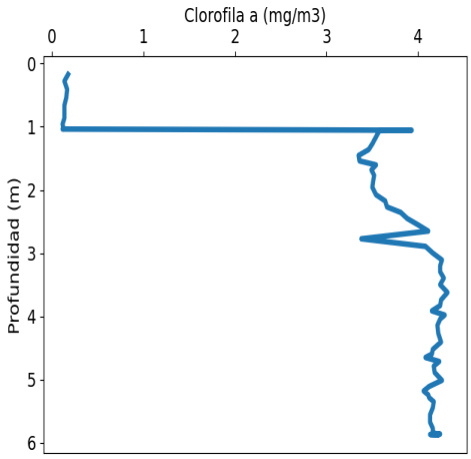
Nombre: CTD N05 - Punto 010 **Fecha: 18/10/2021** **Hora: 08:10:18**

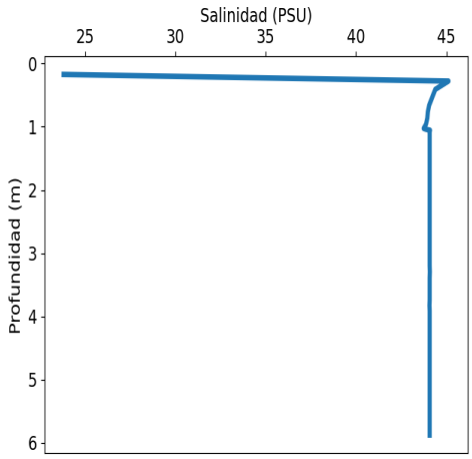


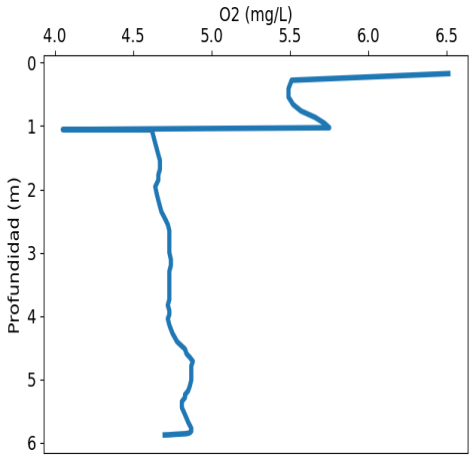


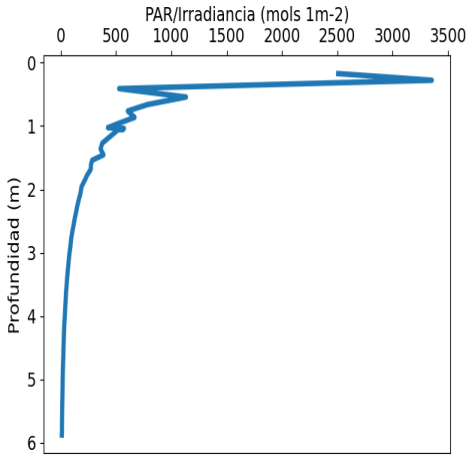












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.81	3.38	0.08	4.05	9.42	0.12	23.82
PROF (metros)	0.173	0.173	0.278	1.056	5.877	0.959	0.173
MÁXIMO	22.11	22.11	3.85	6.51	3354.5	4.32	45.11
PROF (metros)	2.174	1.056	1.056	0.173	0.278	3.622	0.278

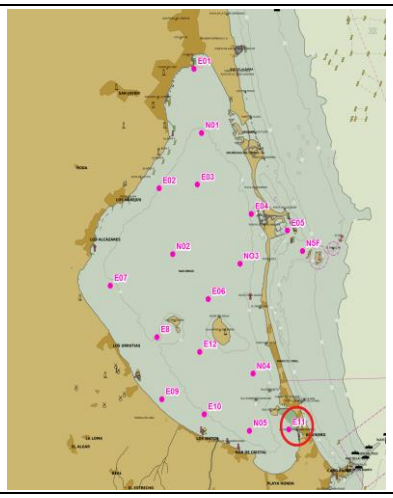
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N05 - Punto 010	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	21.4	5.76	2.06	5.68	1262.38	0.15	41.67
1 - 2m	22.08	6.13	2.49	4.72	368.79	3.04	44.03
2 - 3m	22.1	6.14	2.92	4.7	123.49	3.83	44.07
3 - 4m	22.1	6.14	2.94	4.73	52.27	4.25	44.07
4 - 5m	22.1	6.14	3.01	4.81	25.2	4.19	44.07
5 - 6m	22.1	6.14	3.02	4.82	12.22	4.16	44.07

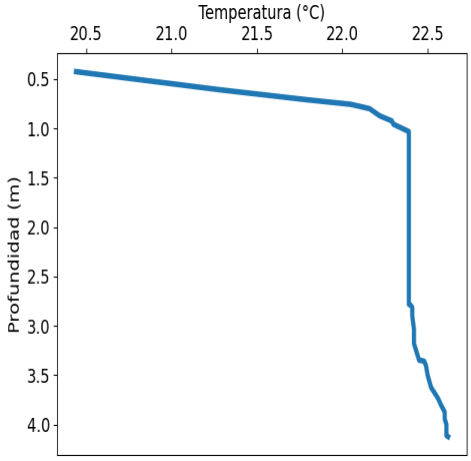
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m con los valores 3.04, 3.83, 4.25, 4.19, 4.16 respectivamente

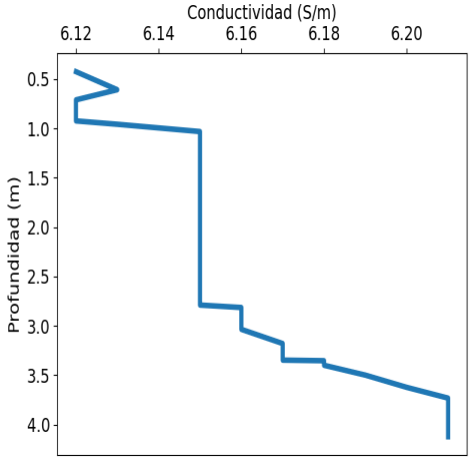
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.173	19.81	3.38	0.19	6.51	2507.8	0.18	23.82
0.278	20.5	6.06	0.08	5.51	3354.5	0.14	45.11
0.41	21.48	6.1	0.53	5.49	527.06	0.17	44.38
0.543	21.72	6.11	3.59	5.49	1132.2	0.16	44.2
0.662	21.85	6.1	3.78	5.52	782.32	0.14	44.04
0.763	21.92	6.1	2.67	5.57	605.42	0.14	43.97
0.864	21.95	6.1	2.71	5.66	667.32	0.14	43.94
0.959	21.97	6.1	2.94	5.72	522.44	0.12	43.87
1.027	21.98	6.08	1.18	5.75	425.55	0.13	43.74
1.037	21.98	6.09	2.56	5.14	571.6	0.12	43.83
1.056	22.05	6.14	3.85	4.05	563.71	3.93	44.09
1.061	22.1	6.14	0.53	4.62	504.94	3.58	44.07
1.08	22.1	6.14	1.95	4.62	503.77	3.57	44.07
1.271	22.1	6.14	1.49	4.64	375.05	3.5	44.07
1.362	22.1	6.14	2.78	4.65	359.48	3.46	44.07
1.455	22.1	6.14	2.67	4.66	385.9	3.35	44.07
1.541	22.1	6.14	3.2	4.67	283.6	3.36	44.07
1.604	22.1	6.14	2.94	4.67	273.46	3.54	44.07
1.683	22.1	6.14	3.09	4.67	271.13	3.49	44.07
1.77	22.1	6.14	2.82	4.66	239.62	3.52	44.07
1.853	22.1	6.14	2.78	4.66	217.69	3.51	44.07
1.958	22.1	6.14	2.94	4.64	187.6	3.5	44.07
2.076	22.1	6.14	2.86	4.65	176.34	3.54	44.07
2.174	22.11	6.14	2.75	4.66	160.95	3.64	44.07
2.269	22.1	6.14	2.98	4.67	148.37	3.66	44.07
2.356	22.1	6.14	3.13	4.68	138.63	3.81	44.07
2.451	22.1	6.14	3.24	4.7	127.12	3.88	44.07
2.553	22.1	6.14	2.98	4.72	116.67	4.0	44.07
2.651	22.1	6.14	2.94	4.73	106.1	4.11	44.07
2.773	22.1	6.14	2.71	4.73	94.12	3.38	44.07
2.893	22.1	6.14	2.75	4.73	87.33	4.08	44.07
2.999	22.1	6.14	2.86	4.73	79.32	4.16	44.07
3.108	22.1	6.14	2.98	4.74	72.33	4.26	44.07
3.199	22.1	6.14	2.86	4.74	67.83	4.24	44.07

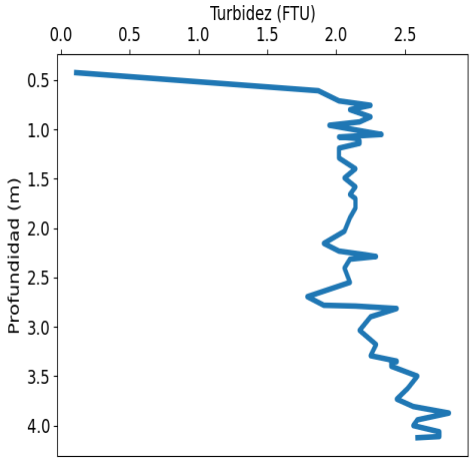
3.294	22.1	6.14	2.94	4.73	62.26	4.24	44.08
3.395	22.11	6.14	2.94	4.73	57.73	4.28	44.07
3.498	22.11	6.14	2.86	4.73	53.33	4.24	44.07
3.622	22.11	6.14	2.9	4.73	47.61	4.32	44.07
3.74	22.11	6.14	2.78	4.73	44.32	4.25	44.07
3.829	22.11	6.14	2.9	4.72	41.27	4.24	44.06
3.913	22.1	6.14	3.01	4.73	38.66	4.15	44.07
3.979	22.1	6.14	3.2	4.73	37.35	4.29	44.07
4.042	22.1	6.14	3.17	4.72	34.92	4.24	44.07
4.141	22.1	6.14	3.2	4.73	31.66	4.21	44.07
4.272	22.1	6.14	2.94	4.75	28.81	4.22	44.07
4.406	22.1	6.14	2.86	4.78	26.12	4.25	44.07
4.522	22.1	6.14	2.75	4.83	24.31	4.16	44.07
4.596	22.1	6.14	2.9	4.84	23.65	4.15	44.07
4.65	22.1	6.14	2.86	4.86	22.55	4.08	44.07
4.714	22.1	6.14	3.17	4.88	21.44	4.23	44.07
4.787	22.1	6.14	3.13	4.87	20.09	4.17	44.07
4.887	22.1	6.14	3.13	4.87	18.47	4.18	44.07
5.012	22.1	6.14	2.94	4.87	16.94	4.26	44.07
5.109	22.09	6.14	2.75	4.86	16.44	4.12	44.07
5.18	22.09	6.14	2.98	4.85	15.6	4.06	44.07
5.241	22.09	6.14	3.13	4.83	15.04	4.11	44.07
5.286	22.1	6.14	2.9	4.83	14.6	4.12	44.07
5.35	22.1	6.14	3.09	4.81	13.7	4.17	44.07
5.445	22.1	6.14	3.17	4.81	12.73	4.16	44.07
5.556	22.1	6.14	3.09	4.83	11.9	4.13	44.07
5.674	22.1	6.14	3.09	4.85	11.12	4.13	44.07
5.771	22.1	6.14	3.09	4.87	10.73	4.16	44.07
5.818	22.1	6.14	2.94	4.87	10.54	4.16	44.07
5.842	22.1	6.14	3.13	4.86	10.19	4.16	44.07
5.856	22.1	6.14	3.13	4.84	9.95	4.2	44.07
5.862	22.1	6.14	3.09	4.8	9.62	4.24	44.07
5.868	22.1	6.14	3.09	4.76	9.62	4.13	44.07
5.874	22.1	6.14	2.94	4.73	9.51	4.17	44.07
5.877	22.1	6.14	2.86	4.7	9.42	4.21	44.07

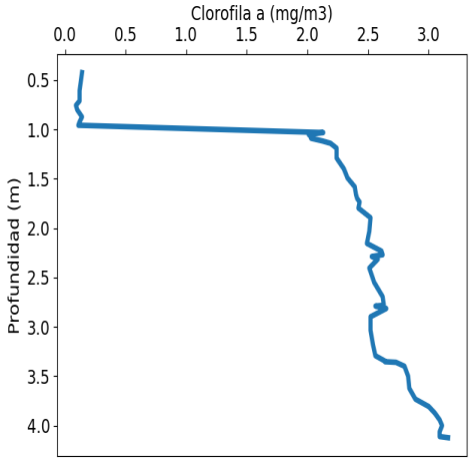
Nombre: CTD E11 - Punto 011 **Fecha: 18/10/2021** **Hora: 08:10:20**

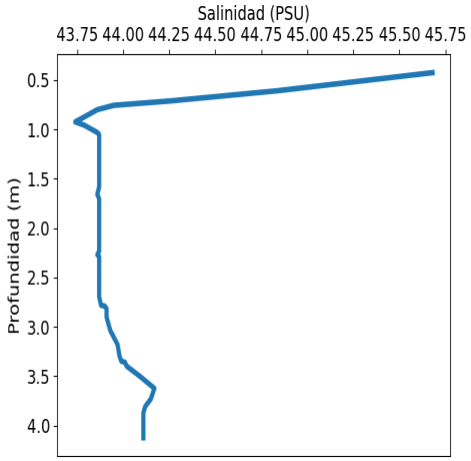


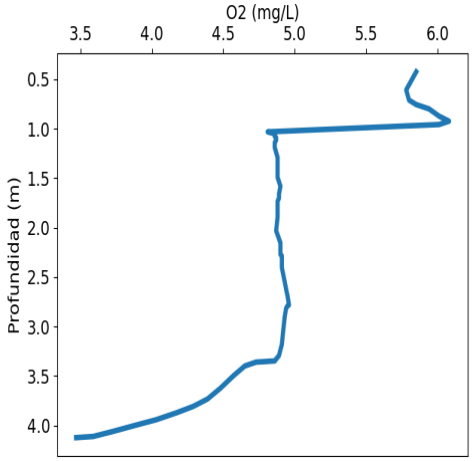


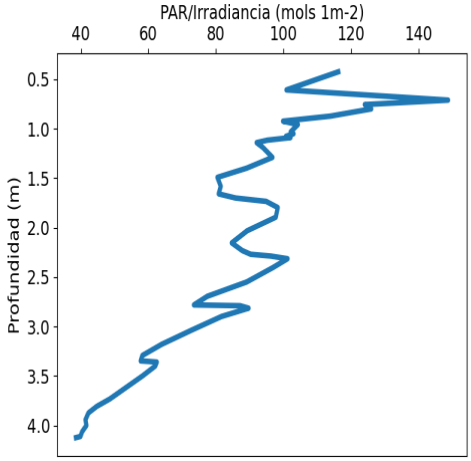












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	20.44	6.12	0.11	3.47	38.56	0.09	43.74
PROF (metros)	0.424	0.424	0.424	4.123	4.123	0.755	0.923
MÁXIMO	22.62	22.62	2.82	6.08	148.65	3.16	45.68
PROF (metros)	4.123	3.732	3.873	0.923	0.71	4.123	0.424

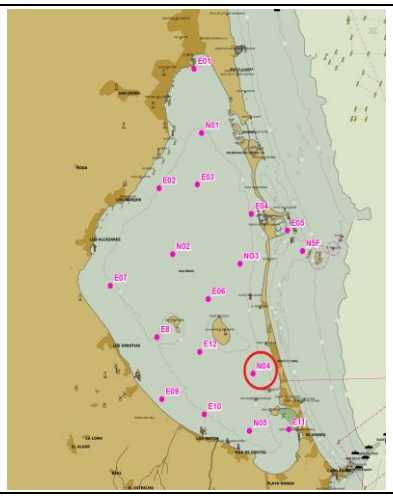
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E11 - Punto 011	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	21.82	6.12	1.84	5.92	116.67	0.12	44.24
1 - 2m	22.39	6.15	2.13	4.87	93.36	2.26	43.87
2 - 3m	22.39	6.15	2.1	4.92	88.03	2.57	43.88
3 - 4m	22.5	6.19	2.46	4.59	55.83	2.78	44.05
4 - 5m	22.61	6.21	2.66	3.67	40.12	3.11	44.11

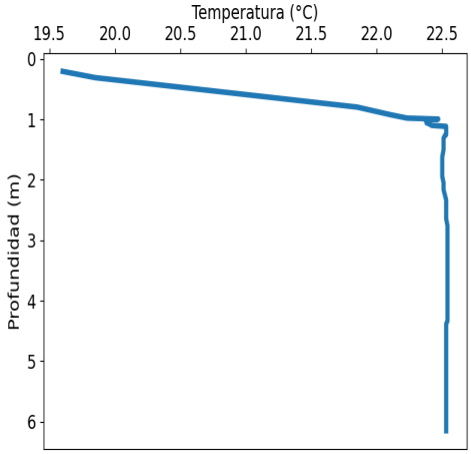
OBSERVACIONES GENERALES
HIPOXIA en la(s) columna(s) de agua 4 - 5m con los valores 3.67 respectivamente. CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m con los valores 2.26, 2.57, 2.78, 3.11 respectivamente

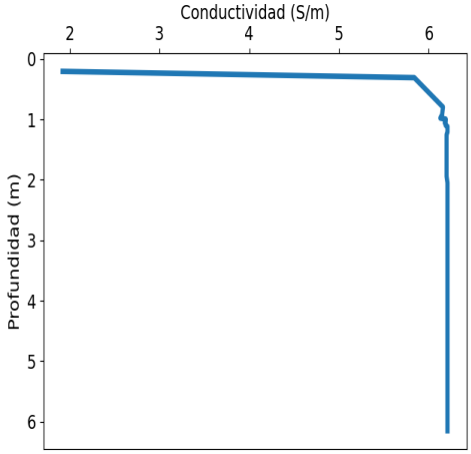
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.424	20.44	6.12	0.11	5.85	116.16	0.14	45.68
0.607	21.28	6.13	1.87	5.78	100.82	0.12	44.84
0.71	21.8	6.12	2.02	5.8	148.65	0.12	44.26
0.755	22.05	6.12	2.25	5.85	123.98	0.09	43.95
0.799	22.16	6.12	2.1	5.94	125.92	0.1	43.86
0.872	22.22	6.12	2.25	6.01	113.79	0.14	43.79
0.923	22.29	6.12	2.17	6.08	99.8	0.12	43.74
0.957	22.3	6.13	1.95	6.01	104.24	0.11	43.79
1.031	22.39	6.15	2.25	4.81	102.07	2.13	43.86
1.05	22.39	6.15	2.33	4.86	102.95	2.01	43.87
1.076	22.39	6.15	2.02	4.86	100.68	2.03	43.87
1.089	22.39	6.15	2.14	4.87	102.05	2.03	43.87
1.115	22.39	6.15	2.17	4.87	95.21	2.12	43.87
1.14	22.39	6.15	2.17	4.86	92.0	2.19	43.87
1.189	22.39	6.15	2.02	4.86	93.86	2.24	43.87
1.289	22.39	6.15	2.02	4.88	96.7	2.24	43.87
1.398	22.39	6.15	2.14	4.88	89.06	2.3	43.87
1.491	22.39	6.15	2.06	4.88	80.41	2.33	43.87
1.581	22.39	6.15	2.14	4.9	81.4	2.39	43.87
1.658	22.39	6.15	2.1	4.89	80.78	2.4	43.86
1.7	22.39	6.15	2.14	4.89	85.8	2.41	43.87
1.734	22.39	6.15	2.14	4.88	94.82	2.43	43.87
1.796	22.39	6.15	2.14	4.88	98.26	2.42	43.87
1.894	22.39	6.15	2.1	4.88	97.67	2.52	43.87
2.031	22.39	6.15	2.06	4.87	89.21	2.51	43.87
2.154	22.39	6.15	1.91	4.9	84.64	2.49	43.87
2.232	22.39	6.15	2.02	4.9	87.79	2.61	43.87
2.269	22.39	6.15	2.21	4.9	90.25	2.62	43.86
2.287	22.39	6.15	2.29	4.91	96.21	2.53	43.87
2.314	22.39	6.15	2.1	4.91	101.17	2.58	43.87
2.404	22.39	6.15	2.06	4.91	96.79	2.51	43.87
2.549	22.39	6.15	2.1	4.93	89.06	2.55	43.87
2.694	22.39	6.15	1.79	4.95	77.41	2.62	43.87

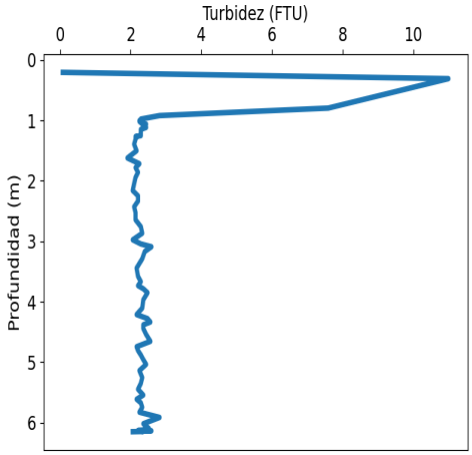
2.781	22.39	6.15	1.91	4.96	73.44	2.63	43.88
2.789	22.4	6.15	2.14	4.95	87.1	2.56	43.9
2.814	22.41	6.16	2.44	4.94	89.64	2.65	43.91
2.898	22.41	6.16	2.25	4.93	81.61	2.52	43.91
3.035	22.42	6.16	2.17	4.92	72.83	2.52	43.93
3.179	22.42	6.17	2.29	4.91	63.94	2.54	43.97
3.292	22.44	6.17	2.25	4.89	58.21	2.56	43.98
3.347	22.45	6.17	2.44	4.86	57.7	2.64	43.99
3.353	22.47	6.18	2.44	4.8	60.28	2.64	44.0
3.359	22.48	6.18	2.4	4.73	62.49	2.73	44.01
3.399	22.49	6.18	2.4	4.65	62.03	2.8	44.02
3.499	22.5	6.19	2.59	4.57	58.25	2.83	44.09
3.623	22.52	6.2	2.52	4.48	53.1	2.84	44.17
3.732	22.56	6.21	2.44	4.39	48.58	2.89	44.15
3.807	22.58	6.21	2.56	4.29	44.72	3.0	44.12
3.873	22.6	6.21	2.82	4.17	42.26	3.05	44.11
3.942	22.6	6.21	2.59	4.03	41.38	3.09	44.11
4.0	22.61	6.21	2.56	3.88	41.66	3.11	44.11
4.063	22.61	6.21	2.75	3.72	40.39	3.09	44.11
4.111	22.61	6.21	2.75	3.59	39.89	3.09	44.11
4.123	22.62	6.21	2.59	3.47	38.56	3.16	44.11

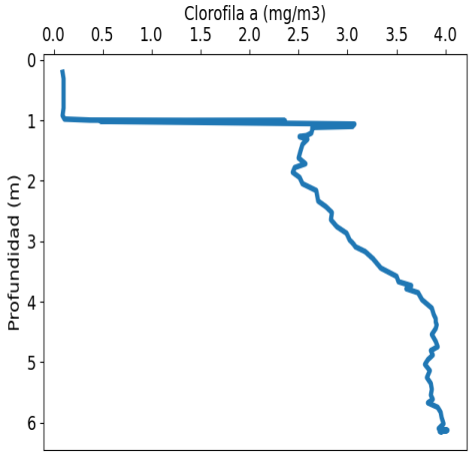
Nombre: CTD N04 - Punto 012 **Fecha: 18/10/2021** **Hora: 09:10:34**

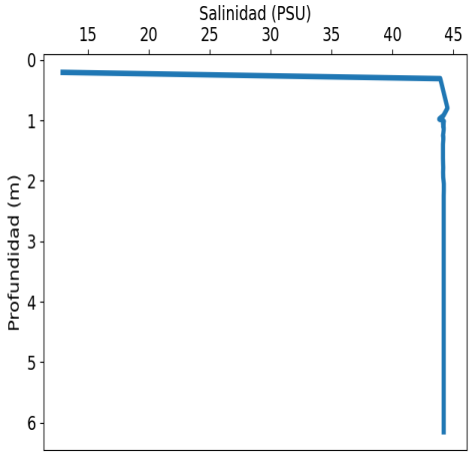


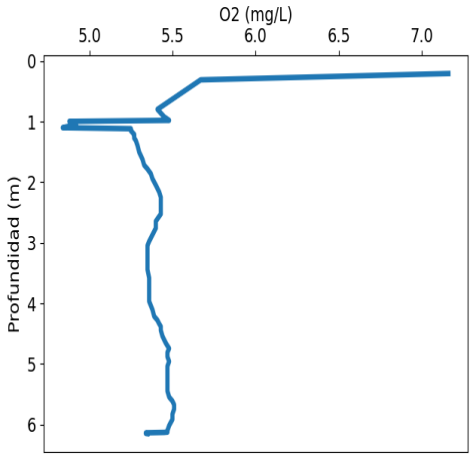


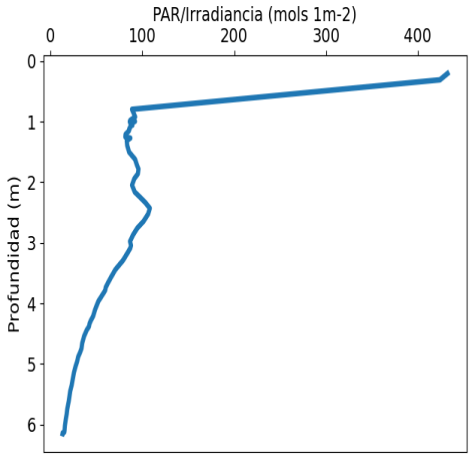












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.6	1.92	0.08	4.84	13.16	0.09	12.91
PROF (metros)	0.205	0.205	0.205	1.099	6.151	0.205	0.205
MÁXIMO	22.54	22.54	10.99	7.16	432.31	4.02	44.52
PROF (metros)	2.758	1.116	0.309	0.205	0.205	6.126	0.796

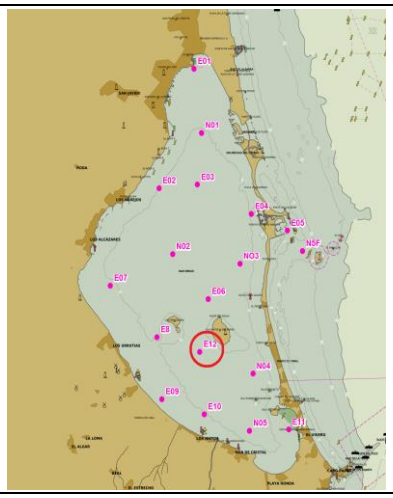
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N04 - Punto 012	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	21.35	5.4	4.36	5.67	202.72	0.14	38.91
1 - 2m	22.48	6.2	2.23	5.19	87.59	2.5	44.17
2 - 3m	22.53	6.21	2.16	5.41	96.83	2.8	44.21
3 - 4m	22.54	6.21	2.34	5.36	69.5	3.42	44.21
4 - 5m	22.53	6.21	2.36	5.44	38.26	3.88	44.21
5 - 6m	22.53	6.21	2.34	5.48	21.26	3.87	44.21
6 - 7m	22.53	6.21	2.34	5.41	14.23	3.97	44.21

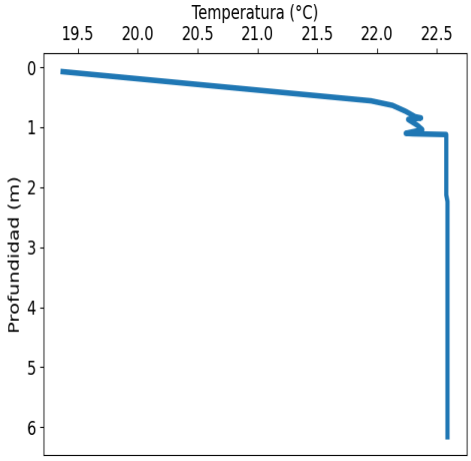
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 2.5, 2.8, 3.42, 3.88, 3.87, 3.97 respectivamente

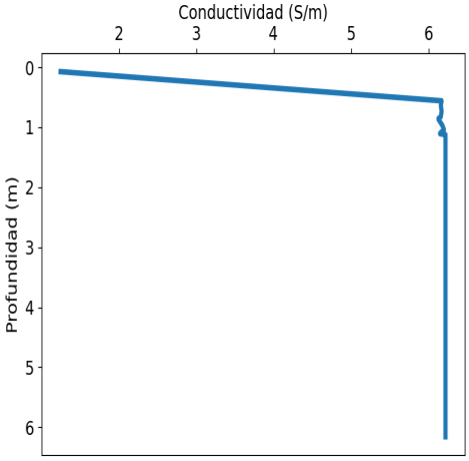
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.205	19.6	1.92	0.08	7.16	432.31	0.09	12.91
0.309	19.85	5.84	10.99	5.67	424.08	0.1	43.93
0.796	21.85	6.16	7.59	5.41	88.76	0.1	44.52
0.92	22.1	6.15	2.82	5.45	92.26	0.09	44.19
0.978	22.23	6.13	2.29	5.48	86.84	0.11	43.84
0.995	22.47	6.19	2.36	4.88	92.09	0.37	44.08
1.004	22.37	6.18	2.25	4.91	86.36	2.36	44.15
1.016	22.39	6.19	2.25	4.89	86.74	0.48	44.23
1.058	22.38	6.18	2.33	4.92	89.23	2.92	44.15
1.061	22.39	6.19	2.44	4.9	87.25	3.07	44.21
1.099	22.42	6.19	2.4	4.84	86.66	3.05	44.16
1.116	22.53	6.21	2.44	5.25	85.82	2.64	44.21
1.149	22.53	6.21	2.29	5.25	85.52	2.64	44.21
1.21	22.53	6.21	2.29	5.27	81.71	2.63	44.18
1.252	22.53	6.2	2.29	5.27	81.46	2.58	44.15
1.266	22.52	6.2	2.14	5.27	85.72	2.51	44.16
1.271	22.52	6.2	2.17	5.27	86.98	2.51	44.18
1.312	22.51	6.2	2.14	5.28	83.06	2.59	44.18
1.394	22.51	6.2	2.1	5.29	83.56	2.54	44.15
1.502	22.51	6.2	2.17	5.3	85.62	2.52	44.15
1.622	22.5	6.2	1.91	5.32	92.15	2.5	44.15
1.717	22.5	6.2	2.25	5.33	94.14	2.57	44.16
1.781	22.5	6.2	2.14	5.35	95.83	2.46	44.17
1.859	22.5	6.2	2.21	5.37	95.21	2.44	44.16
1.943	22.5	6.2	2.14	5.38	91.2	2.51	44.17
2.048	22.51	6.21	2.1	5.4	88.8	2.54	44.22
2.16	22.51	6.21	2.06	5.42	91.7	2.68	44.22
2.248	22.52	6.21	2.21	5.43	97.6	2.69	44.21
2.335	22.53	6.21	2.21	5.43	103.24	2.7	44.21
2.429	22.53	6.21	2.1	5.43	108.18	2.78	44.21
2.524	22.53	6.21	2.14	5.43	106.34	2.84	44.21
2.644	22.53	6.21	2.14	5.4	101.36	2.83	44.21
2.758	22.54	6.21	2.29	5.4	94.49	2.89	44.21

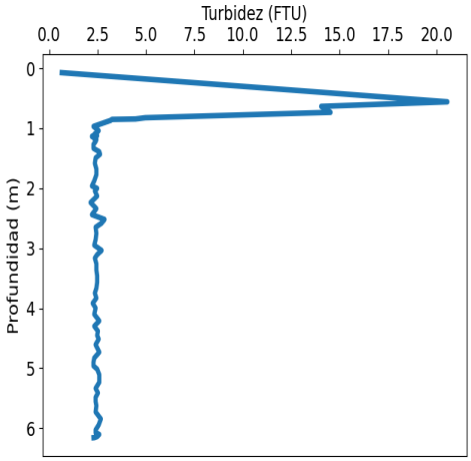
2.867	22.54	6.21	2.33	5.38	90.0	2.99	44.21
2.976	22.54	6.21	2.06	5.36	86.62	3.02	44.21
3.044	22.54	6.21	2.29	5.35	87.65	3.06	44.21
3.091	22.54	6.21	2.59	5.35	86.8	3.08	44.21
3.171	22.54	6.21	2.4	5.35	83.74	3.18	44.21
3.289	22.54	6.21	2.33	5.35	79.04	3.26	44.21
3.444	22.54	6.21	2.17	5.35	70.61	3.34	44.21
3.58	22.54	6.21	2.21	5.36	65.5	3.5	44.21
3.669	22.54	6.21	2.29	5.36	62.37	3.52	44.21
3.734	22.54	6.21	2.21	5.36	60.21	3.65	44.21
3.786	22.54	6.21	2.36	5.36	59.55	3.6	44.21
3.851	22.54	6.21	2.48	5.36	56.9	3.72	44.21
3.967	22.54	6.21	2.36	5.36	52.08	3.76	44.21
4.106	22.54	6.21	2.33	5.38	48.49	3.86	44.21
4.213	22.54	6.21	2.17	5.39	46.42	3.88	44.21
4.28	22.54	6.21	2.48	5.41	44.04	3.9	44.21
4.336	22.54	6.21	2.56	5.42	42.51	3.9	44.21
4.382	22.53	6.21	2.36	5.43	41.9	3.91	44.21
4.444	22.53	6.21	2.36	5.43	39.36	3.9	44.21
4.542	22.53	6.21	2.44	5.44	36.61	3.86	44.21
4.656	22.53	6.21	2.56	5.46	34.55	3.9	44.21
4.745	22.53	6.21	2.17	5.48	33.76	3.92	44.21
4.808	22.53	6.21	2.21	5.47	32.28	3.85	44.21
4.882	22.53	6.21	2.29	5.47	30.18	3.87	44.21
4.959	22.53	6.21	2.36	5.48	29.02	3.82	44.21
5.037	22.53	6.21	2.44	5.47	27.38	3.79	44.21
5.14	22.53	6.21	2.25	5.47	25.58	3.84	44.21
5.255	22.53	6.21	2.33	5.47	24.2	3.81	44.21
5.352	22.53	6.21	2.29	5.47	23.07	3.85	44.21
5.449	22.53	6.21	2.21	5.47	21.47	3.86	44.21
5.545	22.53	6.21	2.36	5.48	20.58	3.85	44.21
5.614	22.53	6.21	2.17	5.5	19.92	3.87	44.21
5.673	22.53	6.21	2.29	5.51	19.15	3.82	44.21
5.747	22.53	6.21	2.33	5.51	18.25	3.92	44.21
5.828	22.53	6.21	2.25	5.5	17.63	3.95	44.21
5.915	22.53	6.21	2.82	5.5	16.66	3.96	44.21
6.019	22.53	6.21	2.36	5.48	15.71	3.98	44.21
6.099	22.53	6.21	2.52	5.47	15.31	3.93	44.21
6.126	22.53	6.21	2.33	5.47	15.04	4.02	44.21
6.131	22.53	6.21	2.21	5.45	14.52	3.95	44.21
6.137	22.53	6.21	2.59	5.35	13.68	4.0	44.21
6.139	22.53	6.21	2.25	5.34	13.22	4.01	44.21
6.147	22.53	6.21	2.36	5.34	13.22	3.94	44.21
6.151	22.53	6.21	2.06	5.35	13.16	3.95	44.21

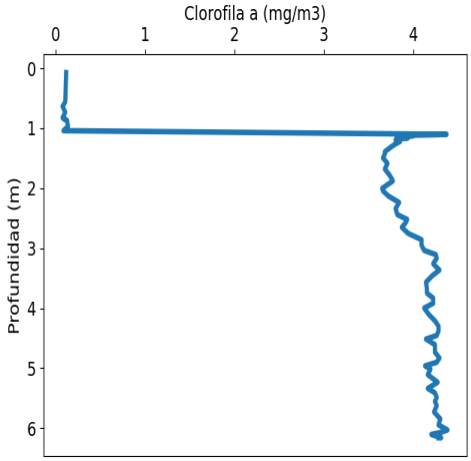
Nombre: CTD E12 - Punto 013 **Fecha: 18/10/2021** **Hora: 09:10:51**

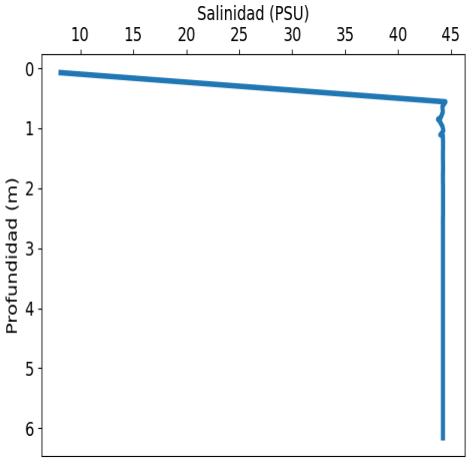


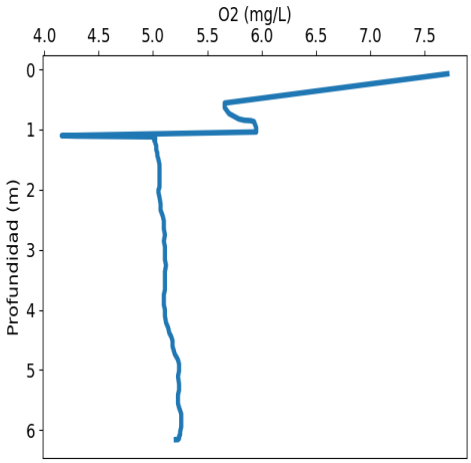


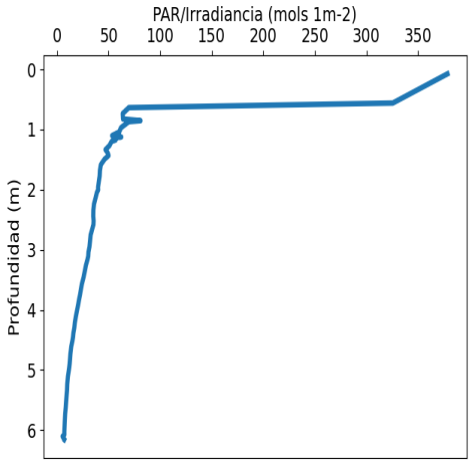












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.37	1.25	0.65	4.16	5.45	0.08	8.13
PROF (metros)	0.075	0.075	0.075	1.103	6.104	0.637	0.075
MÁXIMO	22.59	22.59	20.56	7.71	378.55	4.38	44.47
PROF (metros)	2.239	1.123	0.561	0.075	0.075	6.03	0.561

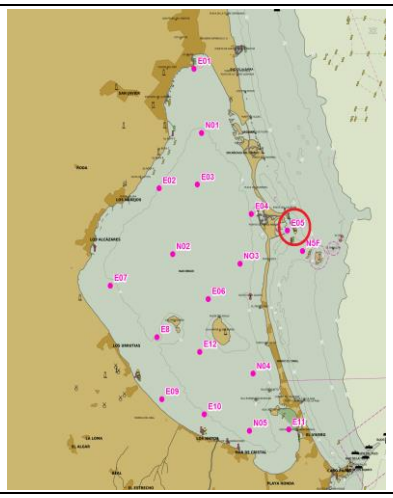
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E12 - Punto 013	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	21.92	5.61	7.54	6.01	132.36	0.11	40.07
1 - 2m	22.54	6.21	2.38	5.0	51.16	3.68	44.21
2 - 3m	22.59	6.22	2.44	5.08	35.35	3.86	44.23
3 - 4m	22.59	6.22	2.44	5.11	25.2	4.2	44.23
4 - 5m	22.59	6.22	2.43	5.18	14.8	4.23	44.23
5 - 6m	22.59	6.22	2.5	5.24	9.14	4.23	44.23
6 - 7m	22.59	6.22	2.42	5.24	6.73	4.28	44.23

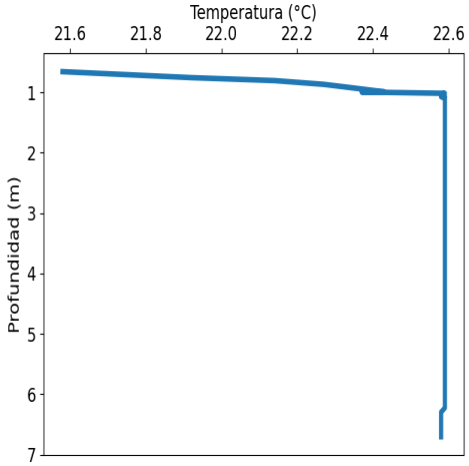
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 3.68, 3.86, 4.2, 4.23, 4.23, 4.28 respectivamente

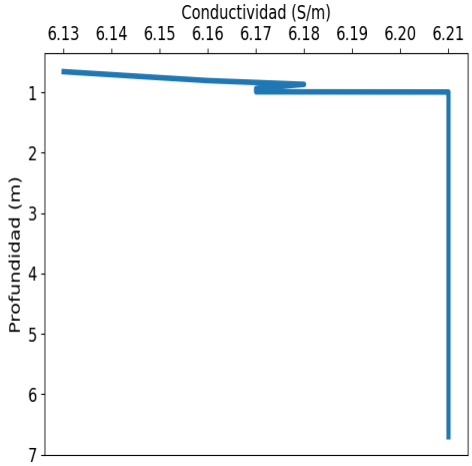
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.075	19.37	1.25	0.65	7.71	378.55	0.12	8.13
0.561	21.95	6.17	20.56	5.66	325.53	0.11	44.47
0.637	22.13	6.16	14.04	5.66	69.73	0.08	44.18
0.736	22.24	6.17	14.53	5.7	63.73	0.11	44.22
0.826	22.32	6.16	4.96	5.79	64.03	0.08	44.01
0.847	22.37	6.14	4.46	5.84	76.96	0.11	43.81
0.854	22.34	6.13	3.24	5.9	81.01	0.1	43.76
0.871	22.26	6.13	3.17	5.93	69.62	0.13	43.88
0.971	22.34	6.18	2.29	5.95	62.1	0.14	44.19
1.042	22.38	6.2	2.56	5.95	60.35	0.09	44.27
1.103	22.24	6.15	2.33	4.16	53.44	4.37	44.05
1.11	22.3	6.15	2.33	4.29	58.64	4.24	43.98
1.123	22.58	6.22	2.36	5.01	55.56	3.83	44.23
1.125	22.58	6.22	2.48	5.01	62.34	4.0	44.23
1.135	22.58	6.22	2.21	5.02	56.43	3.94	44.23
1.14	22.58	6.22	2.21	5.02	57.21	3.95	44.23
1.158	22.58	6.22	2.44	5.02	54.6	3.94	44.23
1.169	22.58	6.22	2.33	5.02	55.44	3.93	44.23
1.177	22.58	6.22	2.33	5.01	56.76	3.81	44.23
1.193	22.58	6.22	2.44	5.02	53.39	3.8	44.23
1.222	22.58	6.22	2.4	5.02	52.28	3.85	44.24
1.271	22.58	6.22	2.29	5.03	50.75	3.79	44.24
1.336	22.58	6.22	2.29	5.03	47.03	3.73	44.24
1.393	22.58	6.22	2.59	5.04	49.31	3.68	44.23
1.434	22.58	6.22	2.63	5.04	50.0	3.68	44.23
1.497	22.58	6.22	2.4	5.05	46.03	3.66	44.23
1.587	22.58	6.22	2.36	5.06	42.53	3.71	44.24
1.681	22.58	6.22	2.44	5.06	41.68	3.68	44.24
1.776	22.58	6.22	2.44	5.06	41.39	3.73	44.23
1.879	22.58	6.22	2.33	5.06	40.5	3.77	44.23
1.963	22.58	6.22	2.21	5.06	39.84	3.69	44.24
2.004	22.58	6.22	2.48	5.05	39.98	3.65	44.24
2.046	22.58	6.22	2.36	5.05	38.76	3.66	44.24

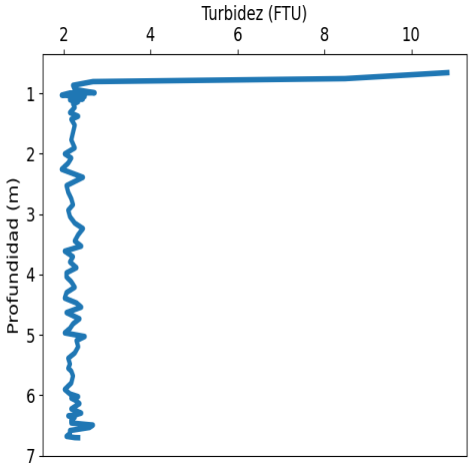
2.131	22.58	6.22	2.48	5.06	37.55	3.72	44.24
2.239	22.59	6.22	2.14	5.07	35.93	3.84	44.24
2.341	22.59	6.22	2.44	5.07	35.31	3.8	44.24
2.441	22.59	6.22	2.21	5.09	35.2	3.82	44.24
2.521	22.59	6.22	2.86	5.1	35.53	3.93	44.23
2.582	22.59	6.22	2.71	5.1	35.37	3.91	44.23
2.652	22.59	6.22	2.4	5.1	34.27	3.87	44.23
2.753	22.59	6.22	2.44	5.11	32.67	3.94	44.23
2.859	22.59	6.22	2.4	5.1	32.07	4.09	44.23
2.95	22.59	6.22	2.33	5.11	31.53	4.09	44.23
3.038	22.59	6.22	2.71	5.11	30.55	4.12	44.23
3.108	22.59	6.22	2.48	5.11	30.3	4.25	44.23
3.166	22.59	6.22	2.36	5.11	29.57	4.26	44.23
3.26	22.59	6.22	2.44	5.12	28.06	4.22	44.23
3.365	22.59	6.22	2.44	5.11	26.89	4.29	44.23
3.46	22.59	6.22	2.48	5.11	25.79	4.21	44.23
3.568	22.59	6.22	2.48	5.11	24.17	4.14	44.23
3.667	22.59	6.22	2.44	5.11	23.16	4.15	44.23
3.749	22.59	6.22	2.36	5.1	22.37	4.15	44.23
3.832	22.59	6.22	2.44	5.1	21.38	4.22	44.23
3.918	22.59	6.22	2.25	5.1	20.53	4.22	44.23
3.998	22.59	6.22	2.4	5.11	19.59	4.12	44.23
4.102	22.59	6.22	2.33	5.11	18.41	4.17	44.23
4.212	22.59	6.22	2.59	5.12	17.36	4.24	44.23
4.3	22.59	6.22	2.33	5.14	16.81	4.28	44.23
4.382	22.59	6.22	2.52	5.15	15.97	4.28	44.23
4.454	22.59	6.22	2.48	5.17	15.55	4.26	44.23
4.515	22.59	6.22	2.56	5.18	14.99	4.14	44.23
4.608	22.59	6.22	2.4	5.18	13.88	4.24	44.23
4.733	22.59	6.22	2.59	5.2	13.03	4.24	44.23
4.831	22.59	6.22	2.33	5.23	12.61	4.29	44.23
4.901	22.59	6.22	2.29	5.24	12.28	4.26	44.23
4.962	22.59	6.22	2.29	5.24	11.88	4.13	44.23
5.016	22.59	6.22	2.48	5.24	11.44	4.19	44.23
5.108	22.59	6.22	2.59	5.23	10.64	4.16	44.23
5.235	22.59	6.22	2.59	5.24	9.97	4.27	44.23
5.337	22.59	6.22	2.4	5.24	9.75	4.16	44.23
5.412	22.59	6.22	2.52	5.23	9.39	4.24	44.23
5.487	22.59	6.22	2.4	5.23	9.08	4.26	44.23
5.555	22.59	6.22	2.4	5.23	8.79	4.24	44.23
5.625	22.59	6.22	2.44	5.24	8.51	4.26	44.23
5.729	22.59	6.22	2.4	5.26	7.96	4.23	44.23
5.846	22.59	6.22	2.67	5.26	7.61	4.3	44.23
5.945	22.59	6.22	2.56	5.26	7.36	4.28	44.23
6.03	22.59	6.22	2.4	5.25	7.16	4.38	44.23
6.076	22.59	6.22	2.4	5.25	7.2	4.29	44.23
6.104	22.59	6.22	2.59	5.24	5.45	4.2	44.23
6.14	22.59	6.22	2.48	5.24	6.71	4.27	44.23
6.158	22.59	6.22	2.33	5.23	6.91	4.31	44.23
6.159	22.59	6.22	2.29	5.21	6.98	4.28	44.23

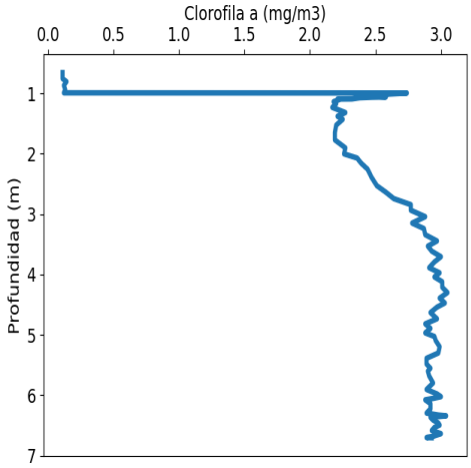
Nombre: CTD E06 - Punto 014 **Fecha: 18/10/2021** **Hora: 09:10:37**

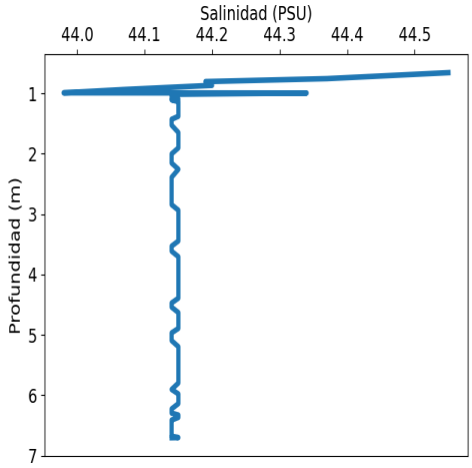


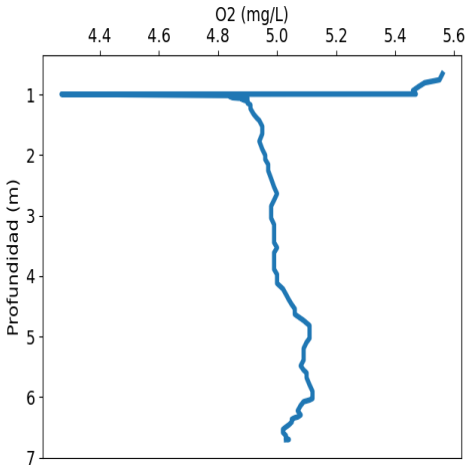


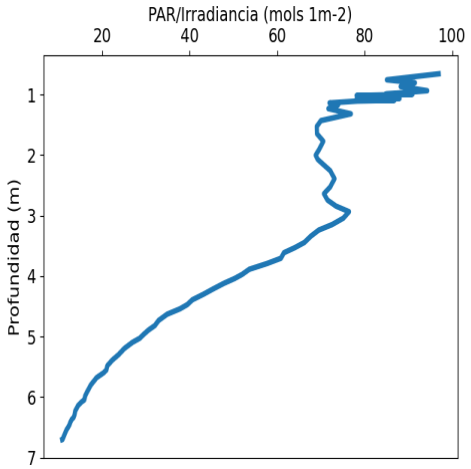












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.58	6.13	1.95	4.27	10.92	0.11	43.98
PROF (metros)	0.657	0.657	1.03	0.994	6.702	0.657	0.991
MÁXIMO	22.59	22.59	10.83	5.56	96.91	3.05	44.55
PROF (metros)	1.016	0.994	0.657	0.657	0.657	4.299	0.657

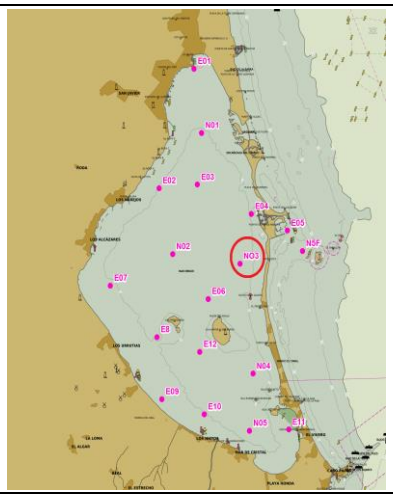
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E06 - Punto 014	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.15	6.17	4.47	5.33	90.24	0.5	44.24
1 - 2m	22.59	6.21	2.21	4.9	77.12	2.32	44.14
2 - 3m	22.59	6.21	2.13	4.98	71.81	2.52	44.14
3 - 4m	22.59	6.21	2.23	4.99	63.73	2.92	44.15
4 - 5m	22.59	6.21	2.17	5.06	38.73	2.96	44.15
5 - 6m	22.59	6.21	2.2	5.1	21.55	2.93	44.15
6 - 7m	22.58	6.21	2.27	5.06	13.09	2.95	44.14

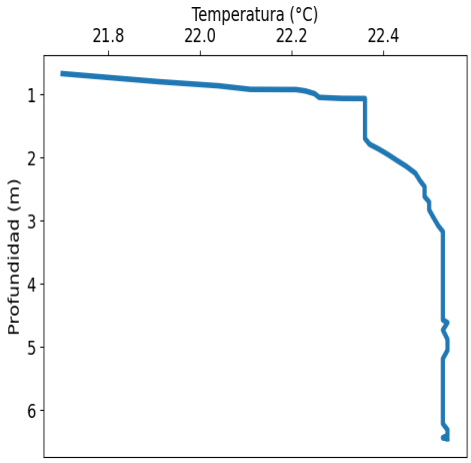
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 1 - 2m, 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 2.32, 2.52, 2.92, 2.96, 2.93, 2.95 respectivamente

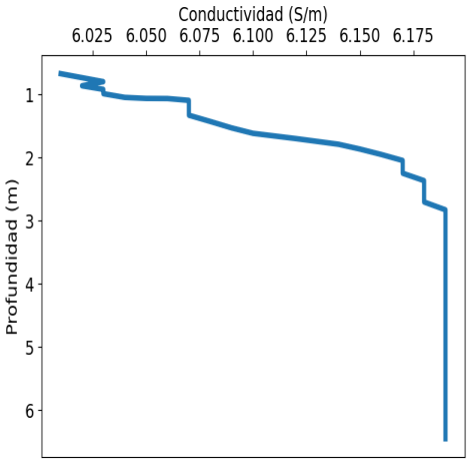
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.657	21.58	6.13	10.83	5.56	96.9	0.11	44.55
0.756	21.92	6.15	8.47	5.55	85.07	0.11	44.37
0.805	22.14	6.16	2.67	5.5	91.49	0.14	44.19
0.867	22.27	6.18	2.21	5.48	88.2	0.12	44.2
0.936	22.36	6.17	2.25	5.46	94.29	0.13	44.07
0.991	22.43	6.17	2.71	5.47	84.83	0.12	43.98
0.994	22.37	6.21	2.14	4.27	90.92	2.74	44.34
1.016	22.59	6.21	2.02	4.87	78.15	2.57	44.14
1.03	22.58	6.21	1.95	4.86	82.93	2.52	44.14
1.032	22.58	6.21	2.02	4.84	83.97	2.57	44.14
1.051	22.58	6.21	2.48	4.85	81.99	2.53	44.14
1.059	22.58	6.21	2.29	4.87	82.58	2.58	44.14
1.064	22.59	6.21	2.21	4.9	87.98	2.47	44.14
1.072	22.58	6.21	2.14	4.88	85.74	2.38	44.14
1.092	22.59	6.21	2.44	4.89	78.01	2.32	44.14
1.094	22.59	6.21	2.17	4.89	86.8	2.21	44.15
1.107	22.59	6.21	2.14	4.9	78.3	2.22	44.14
1.138	22.59	6.21	2.33	4.9	71.96	2.18	44.15
1.171	22.59	6.21	2.21	4.91	73.94	2.2	44.15
1.232	22.59	6.21	2.25	4.91	71.7	2.17	44.15
1.318	22.59	6.21	2.14	4.92	76.86	2.27	44.15
1.379	22.59	6.21	2.33	4.93	73.14	2.21	44.15
1.43	22.59	6.21	2.17	4.94	70.02	2.25	44.14
1.526	22.59	6.21	2.25	4.95	69.07	2.2	44.14
1.648	22.59	6.21	2.21	4.95	69.12	2.19	44.15
1.771	22.59	6.21	2.17	4.94	70.56	2.19	44.15
1.903	22.59	6.21	2.25	4.95	69.63	2.27	44.15
2.002	22.59	6.21	2.02	4.96	68.81	2.26	44.14
2.071	22.59	6.21	2.17	4.96	69.28	2.36	44.14
2.154	22.59	6.21	2.1	4.97	70.54	2.39	44.14
2.257	22.59	6.21	1.95	4.97	72.13	2.44	44.15
2.39	22.59	6.21	2.44	4.98	73.12	2.47	44.14
2.528	22.59	6.21	2.06	4.99	72.11	2.51	44.14

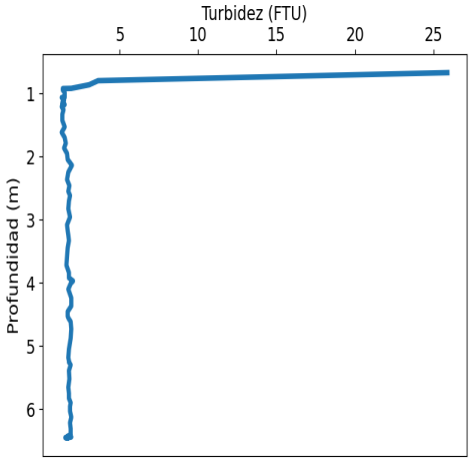
2.638	22.59	6.21	2.1	5.0	70.7	2.58	44.14
2.743	22.59	6.21	2.17	4.99	71.51	2.64	44.14
2.843	22.59	6.21	2.21	4.98	73.46	2.77	44.14
2.935	22.59	6.21	2.1	4.98	76.43	2.77	44.15
3.042	22.59	6.21	2.14	4.98	75.13	2.88	44.15
3.148	22.59	6.21	2.25	4.99	72.56	2.78	44.15
3.239	22.59	6.21	2.44	4.99	69.52	2.87	44.15
3.34	22.59	6.21	2.33	4.99	67.71	2.88	44.15
3.444	22.59	6.21	2.25	4.99	66.23	2.97	44.15
3.53	22.59	6.21	2.4	5.0	64.04	2.9	44.14
3.613	22.59	6.21	2.02	4.99	61.57	2.93	44.14
3.705	22.59	6.21	2.21	4.99	60.86	3.0	44.15
3.792	22.59	6.21	2.14	4.99	57.7	2.95	44.15
3.887	22.59	6.21	2.29	4.99	53.66	2.91	44.15
3.972	22.59	6.21	2.06	5.0	52.01	2.99	44.15
4.04	22.59	6.21	2.06	5.0	50.29	2.95	44.15
4.119	22.59	6.21	2.17	5.0	47.86	3.01	44.15
4.211	22.59	6.21	2.25	5.02	45.42	3.01	44.15
4.299	22.59	6.21	2.06	5.03	43.2	3.05	44.15
4.391	22.59	6.21	2.02	5.04	40.66	2.99	44.15
4.471	22.59	6.21	2.29	5.05	39.49	3.03	44.14
4.54	22.59	6.21	2.4	5.06	37.84	2.97	44.14
4.63	22.59	6.21	2.06	5.06	34.88	2.92	44.15
4.733	22.59	6.21	2.36	5.09	32.94	2.97	44.15
4.817	22.59	6.21	2.21	5.11	32.08	2.88	44.15
4.892	22.59	6.21	2.14	5.11	30.62	2.92	44.15
4.966	22.59	6.21	2.02	5.11	29.48	2.88	44.14
5.026	22.59	6.21	2.48	5.11	28.65	2.95	44.14
5.094	22.59	6.21	2.29	5.1	26.98	2.96	44.14
5.195	22.59	6.21	2.33	5.09	25.13	2.99	44.15
5.299	22.59	6.21	2.25	5.09	23.78	2.98	44.15
5.387	22.59	6.21	2.1	5.09	22.38	2.89	44.15
5.482	22.59	6.21	2.14	5.08	21.22	2.89	44.15
5.552	22.59	6.21	2.1	5.09	21.01	2.92	44.15
5.599	22.59	6.21	2.17	5.1	20.35	2.9	44.15
5.678	22.59	6.21	2.21	5.1	18.78	2.91	44.15
5.796	22.59	6.21	2.17	5.11	17.49	2.94	44.15
5.903	22.59	6.21	2.02	5.12	16.69	2.89	44.14
5.977	22.59	6.21	2.14	5.12	16.18	2.97	44.15
6.022	22.59	6.21	2.33	5.12	16.05	3.0	44.15
6.047	22.59	6.21	2.17	5.11	15.96	2.95	44.15
6.075	22.59	6.21	2.25	5.09	15.41	2.88	44.15
6.137	22.59	6.21	2.36	5.08	14.57	2.92	44.15
6.225	22.59	6.21	2.17	5.07	13.92	2.92	44.14
6.294	22.58	6.21	2.4	5.08	13.74	2.89	44.14
6.327	22.58	6.21	2.25	5.07	13.57	2.98	44.15
6.34	22.58	6.21	2.1	5.06	13.48	3.04	44.15
6.365	22.58	6.21	2.25	5.05	13.14	2.92	44.15
6.41	22.58	6.21	2.17	5.05	12.81	2.94	44.14
6.458	22.58	6.21	2.17	5.04	12.58	2.98	44.14
6.493	22.58	6.21	2.67	5.03	12.32	2.99	44.14
6.532	22.58	6.21	2.59	5.02	11.97	2.95	44.14
6.583	22.58	6.21	2.14	5.02	11.66	2.93	44.14
6.635	22.58	6.21	2.14	5.03	11.36	3.0	44.14
6.679	22.58	6.21	2.06	5.03	11.12	2.94	44.14
6.7	22.58	6.21	2.25	5.04	11.0	2.89	44.15
6.702	22.58	6.21	2.33	5.03	10.92	2.93	44.14

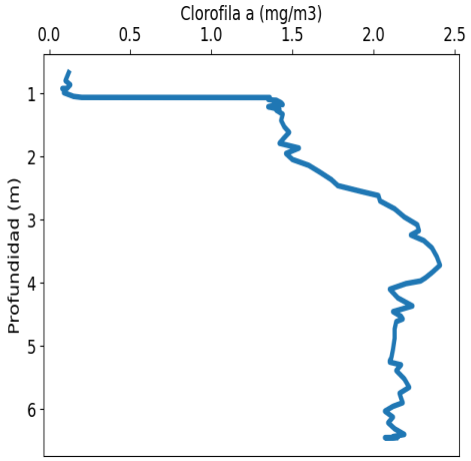
Nombre: CTD N03 - Punto 015 **Fecha: 18/10/2021** **Hora: 09:10:53**

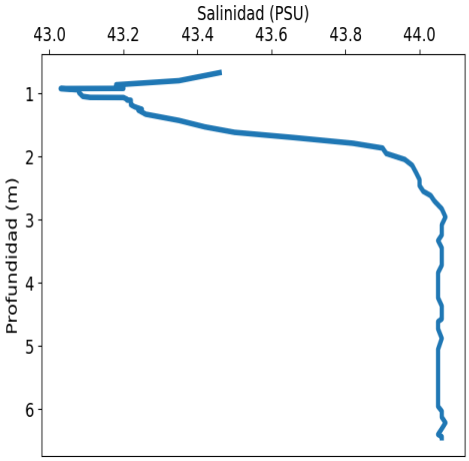


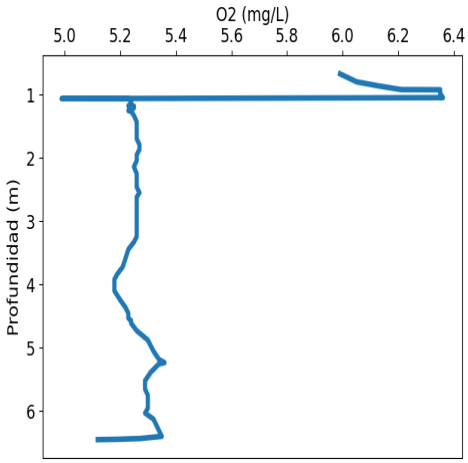


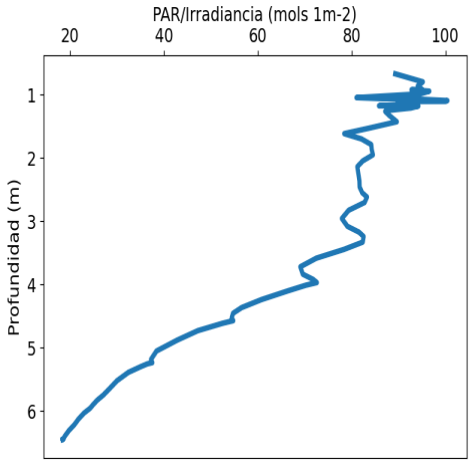












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.7	6.01	1.3	4.99	18.41	0.08	43.03
PROF (metros)	0.669	0.669	1.063	1.061	6.444	0.921	0.921
MÁXIMO	22.54	22.54	25.9	6.36	100.43	2.41	44.07
PROF (metros)	4.611	2.825	0.669	1.045	1.092	3.718	2.955

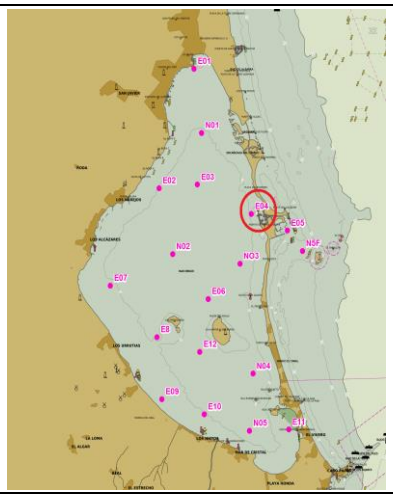
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD N03 - Punto 015	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.07	6.03	5.53	6.2	93.93	0.1	43.2
1 - 2m	22.36	6.08	1.42	5.29	88.2	1.3	43.36
2 - 3m	22.48	6.18	1.76	5.26	81.4	1.86	44.01
3 - 4m	22.53	6.19	1.72	5.22	75.96	2.32	44.06
4 - 5m	22.53	6.19	1.82	5.23	56.06	2.16	44.06
5 - 6m	22.53	6.19	1.78	5.31	31.46	2.15	44.05
6 - 7m	22.53	6.19	1.77	5.24	19.47	2.12	44.06

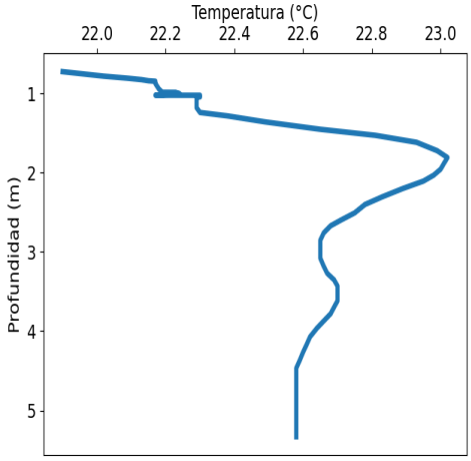
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 3 - 4m, 4 - 5m, 5 - 6m, 6 - 7m con los valores 2.32, 2.16, 2.15, 2.12 respectivamente

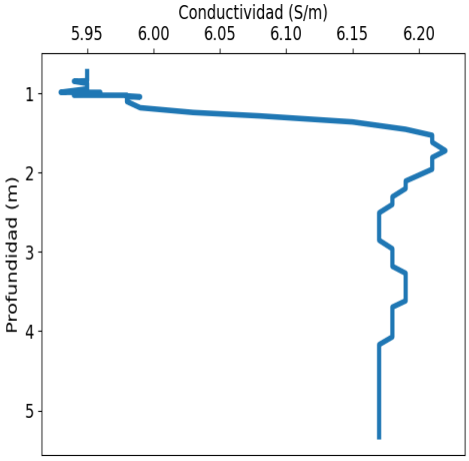
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.669	21.7	6.01	25.9	5.99	89.29	0.12	43.46
0.796	21.91	6.03	3.62	6.05	95.19	0.1	43.35
0.861	22.04	6.02	3.05	6.13	94.09	0.13	43.18
0.918	22.11	6.03	1.91	6.21	95.06	0.11	43.2
0.921	22.21	6.03	1.37	6.35	92.75	0.08	43.03
0.943	22.23	6.03	1.37	6.35	96.57	0.1	43.08
0.986	22.25	6.03	1.49	6.35	94.58	0.09	43.08
1.045	22.26	6.04	1.49	6.36	81.03	0.15	43.09
1.061	22.31	6.05	1.49	4.99	86.54	0.2	43.11
1.063	22.36	6.06	1.3	5.23	92.37	1.36	43.2
1.092	22.36	6.07	1.41	5.24	100.43	1.35	43.21
1.104	22.36	6.07	1.45	5.24	100.05	1.38	43.21
1.106	22.36	6.07	1.45	5.24	89.85	1.4	43.22
1.146	22.36	6.07	1.34	5.24	91.66	1.43	43.22
1.174	22.36	6.07	1.49	5.23	85.82	1.44	43.22
1.177	22.36	6.07	1.34	5.25	94.25	1.4	43.22
1.209	22.36	6.07	1.3	5.25	92.64	1.35	43.23
1.25	22.36	6.07	1.41	5.23	87.39	1.42	43.25
1.262	22.36	6.07	1.41	5.24	87.15	1.4	43.24
1.327	22.36	6.07	1.34	5.25	88.04	1.44	43.26
1.426	22.36	6.08	1.34	5.26	89.64	1.43	43.35
1.528	22.36	6.09	1.49	5.26	83.68	1.45	43.42
1.614	22.36	6.1	1.3	5.26	78.42	1.48	43.5
1.697	22.36	6.12	1.49	5.26	82.09	1.45	43.66
1.787	22.37	6.14	1.56	5.27	84.19	1.42	43.82
1.863	22.39	6.15	1.45	5.27	84.28	1.54	43.9
1.949	22.41	6.16	1.64	5.26	84.54	1.46	43.91
2.044	22.43	6.17	1.68	5.26	82.39	1.5	43.96
2.136	22.45	6.17	1.95	5.25	81.22	1.6	43.98
2.246	22.47	6.17	1.72	5.26	81.44	1.67	43.99
2.363	22.48	6.18	1.64	5.26	81.67	1.74	44.0
2.458	22.49	6.18	1.79	5.26	81.71	1.78	44.0
2.548	22.49	6.18	1.72	5.27	82.26	1.92	44.01

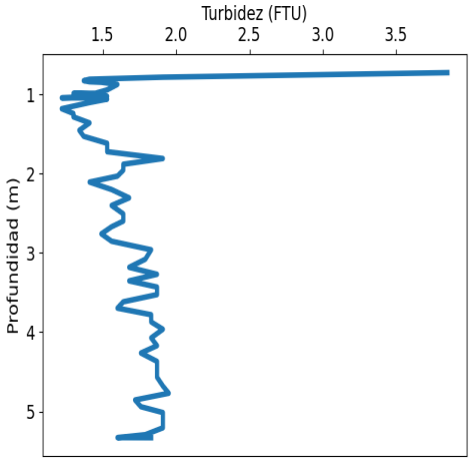
2.615	22.49	6.18	1.83	5.26	83.28	2.03	44.03
2.701	22.5	6.18	1.76	5.26	82.78	2.04	44.04
2.825	22.5	6.19	1.72	5.26	79.37	2.13	44.06
2.955	22.51	6.19	1.83	5.26	77.92	2.19	44.07
3.078	22.52	6.19	1.64	5.26	79.1	2.27	44.06
3.171	22.53	6.19	1.68	5.26	81.58	2.28	44.06
3.239	22.53	6.19	1.72	5.26	82.56	2.23	44.06
3.328	22.53	6.19	1.76	5.25	82.37	2.31	44.05
3.443	22.53	6.19	1.68	5.23	78.39	2.36	44.06
3.582	22.53	6.19	1.64	5.22	72.48	2.39	44.06
3.718	22.53	6.19	1.6	5.21	69.07	2.41	44.06
3.835	22.53	6.19	1.76	5.19	69.6	2.36	44.05
3.918	22.53	6.19	1.76	5.18	71.81	2.32	44.05
3.967	22.53	6.19	2.02	5.18	72.6	2.29	44.05
4.009	22.53	6.19	1.87	5.18	70.25	2.2	44.05
4.098	22.53	6.19	1.72	5.18	66.43	2.1	44.05
4.236	22.53	6.19	1.91	5.2	60.8	2.15	44.05
4.363	22.53	6.19	1.91	5.22	56.56	2.24	44.06
4.453	22.53	6.19	1.68	5.23	54.73	2.12	44.06
4.528	22.53	6.19	1.68	5.23	54.44	2.17	44.06
4.569	22.53	6.19	1.76	5.24	54.79	2.18	44.06
4.611	22.54	6.19	1.87	5.24	52.48	2.14	44.05
4.727	22.53	6.19	1.91	5.26	47.24	2.13	44.05
4.876	22.54	6.19	1.87	5.3	42.86	2.13	44.06
5.049	22.54	6.19	1.76	5.32	38.42	2.12	44.05
5.182	22.53	6.19	1.72	5.34	37.25	2.11	44.05
5.232	22.53	6.19	1.76	5.36	37.54	2.1	44.05
5.252	22.53	6.19	1.76	5.34	36.46	2.1	44.05
5.296	22.53	6.19	1.87	5.33	35.06	2.17	44.05
5.386	22.53	6.19	1.76	5.31	32.44	2.14	44.05
5.518	22.53	6.19	1.79	5.29	30.01	2.19	44.05
5.651	22.53	6.19	1.72	5.29	28.32	2.22	44.05
5.746	22.53	6.19	1.76	5.3	27.07	2.16	44.05
5.825	22.53	6.19	1.76	5.3	25.8	2.17	44.05
5.895	22.53	6.19	1.87	5.3	24.93	2.18	44.05
5.953	22.53	6.19	1.83	5.3	24.28	2.12	44.05
6.029	22.53	6.19	1.83	5.29	22.98	2.07	44.06
6.123	22.53	6.19	1.91	5.32	21.81	2.12	44.06
6.212	22.53	6.19	1.83	5.33	20.93	2.09	44.07
6.307	22.54	6.19	1.87	5.34	19.74	2.13	44.06
6.397	22.54	6.19	1.87	5.35	18.86	2.19	44.05
6.432	22.53	6.19	1.64	5.27	18.64	2.12	44.06
6.437	22.53	6.19	1.91	5.23	18.47	2.15	44.06
6.444	22.54	6.19	1.79	5.19	18.41	2.13	44.06
6.446	22.54	6.19	1.76	5.16	18.45	2.12	44.06
6.447	22.54	6.19	1.64	5.14	18.41	2.09	44.06
6.448	22.54	6.19	1.53	5.13	18.46	2.07	44.06
6.449	22.54	6.19	1.64	5.12	18.42	2.14	44.06

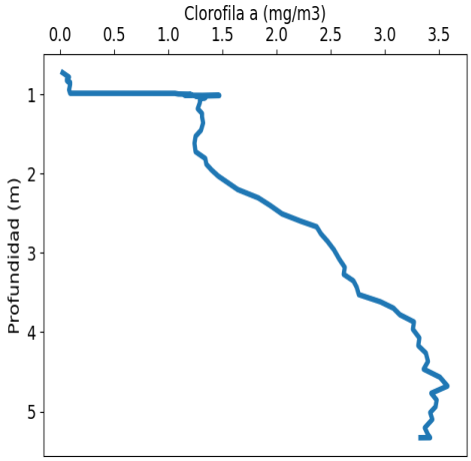
Nombre: CTD E04 - Punto 016 **Fecha: 18/10/2021** **Hora: 09:10:02**

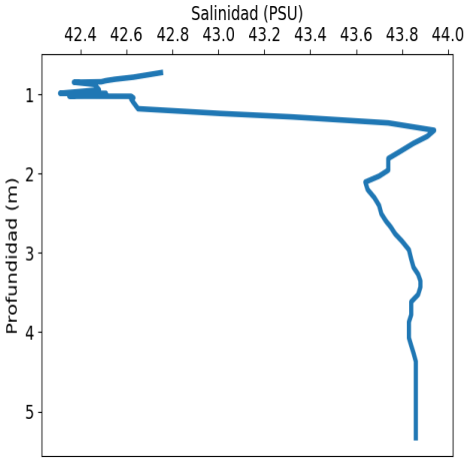


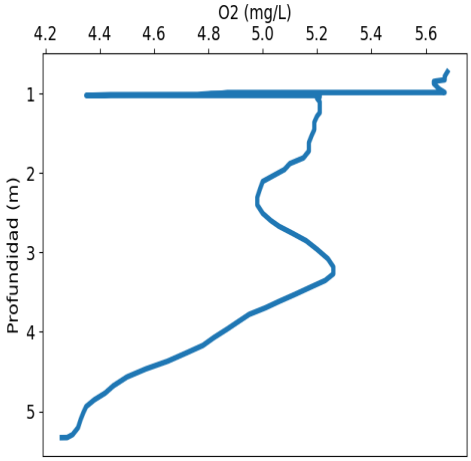


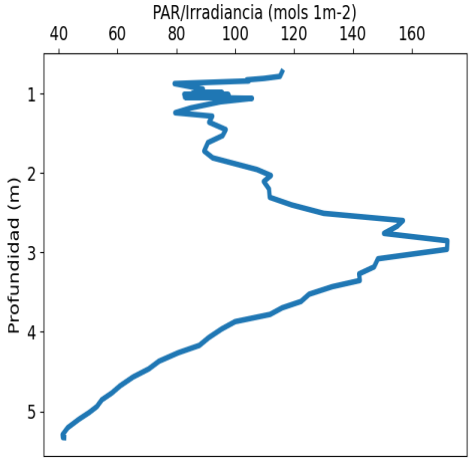












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	21.9	5.93	1.22	4.26	41.36	0.02	42.31
PROF (metros)	0.727	0.987	1.045	5.331	5.293	0.727	0.987
MÁXIMO	23.02	23.02	3.85	5.68	172.02	3.58	43.94
PROF (metros)	1.81	1.724	0.727	0.727	2.853	4.679	1.454

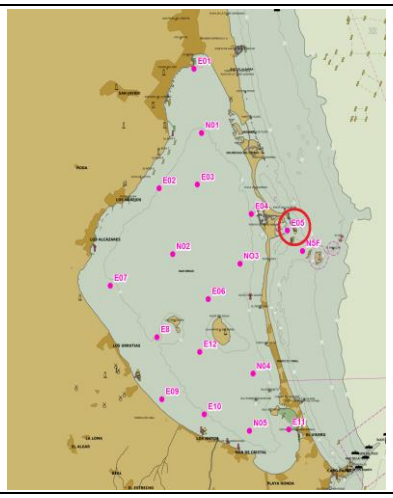
DATOS MEDIOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
CTD E04 - Punto 016	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0 - 1m	22.14	5.95	1.68	5.45	97.88	0.33	42.51
1 - 2m	22.49	6.06	1.43	5.06	92.04	1.29	43.06
2 - 3m	22.78	6.18	1.6	5.05	136.38	2.04	43.72
3 - 4m	22.68	6.18	1.78	5.1	125.74	2.89	43.85
4 - 5m	22.59	6.17	1.84	4.56	69.6	3.42	43.86
5 - 6m	22.58	6.17	1.82	4.3	44.19	3.4	43.86

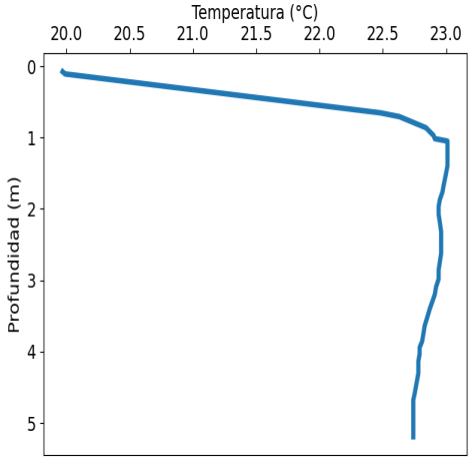
OBSERVACIONES GENERALES
CLOROFILA elevada en la(s) columna(s) de agua 2 - 3m, 3 - 4m, 4 - 5m, 5 - 6m con los valores 2.04, 2.89, 3.42, 3.4 respectivamente

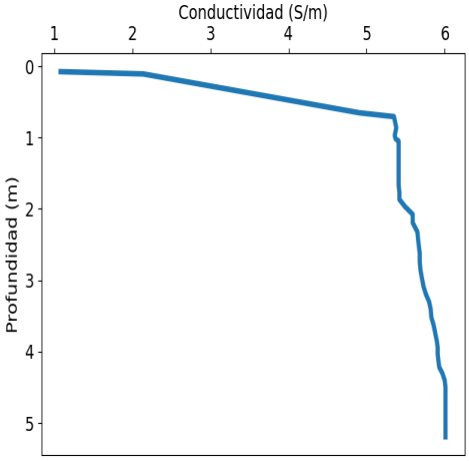
DATOS DETALLADOS PARA CADA VARIABLE EN TODA LA COLUMNA DE AGUA							
Profundidad (m)	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/L)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m3)	Salinidad (PSU)
0.727	21.9	5.95	3.85	5.68	115.87	0.02	42.75
0.784	22.02	5.95	1.91	5.67	115.17	0.08	42.63
0.81	22.09	5.95	1.41	5.67	109.75	0.06	42.55
0.828	22.13	5.95	1.37	5.67	103.88	0.06	42.51
0.842	22.15	5.95	1.41	5.64	104.58	0.07	42.49
0.848	22.17	5.94	1.49	5.63	99.75	0.09	42.37
0.875	22.17	5.95	1.6	5.63	79.36	0.09	42.46
0.944	22.18	5.95	1.53	5.65	89.02	0.08	42.48
0.987	22.19	5.93	1.45	5.67	86.22	0.09	42.31
0.988	22.23	5.96	1.3	4.87	95.54	1.06	42.51
0.996	22.23	5.96	1.41	4.85	85.48	1.09	42.51
0.999	22.23	5.96	1.49	4.81	89.98	1.19	42.5
1.003	22.24	5.96	1.34	4.8	89.79	1.21	42.51
1.01	22.23	5.96	1.37	4.77	82.64	1.18	42.47
1.013	22.23	5.96	1.41	4.76	97.7	1.15	42.49
1.015	22.2	5.94	1.34	4.44	90.65	1.47	42.38
1.024	22.17	5.94	1.41	4.35	87.82	1.25	42.35
1.025	22.3	5.98	1.53	5.21	86.2	1.29	42.62
1.033	22.3	5.98	1.37	5.21	88.82	1.3	42.62
1.045	22.3	5.99	1.22	5.21	98.04	1.34	42.63
1.046	22.29	5.98	1.45	5.2	82.87	1.33	42.62
1.061	22.29	5.98	1.53	5.2	105.68	1.29	42.62
1.104	22.29	5.98	1.41	5.21	94.93	1.29	42.63
1.182	22.29	5.99	1.22	5.21	84.89	1.27	42.65
1.242	22.3	6.03	1.3	5.21	79.58	1.31	43.01
1.285	22.38	6.08	1.3	5.2	92.2	1.31	43.32
1.361	22.49	6.15	1.41	5.19	91.09	1.32	43.74
1.454	22.65	6.19	1.34	5.19	96.77	1.3	43.94
1.53	22.81	6.21	1.37	5.18	95.7	1.25	43.91
1.618	22.93	6.21	1.53	5.17	90.69	1.24	43.85
1.724	22.99	6.22	1.53	5.17	89.42	1.25	43.79
1.81	23.02	6.21	1.91	5.15	92.34	1.34	43.74
1.882	23.01	6.21	1.64	5.1	99.71	1.35	43.74
1.957	23.0	6.21	1.64	5.08	107.38	1.4	43.74

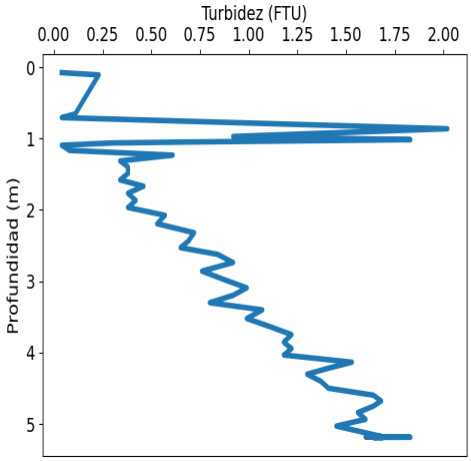
2.032	22.98	6.2	1.6	5.04	112.11	1.46	43.7
2.107	22.95	6.19	1.41	5.0	109.65	1.54	43.64
2.201	22.89	6.19	1.56	4.99	111.44	1.64	43.65
2.306	22.83	6.18	1.68	4.98	111.67	1.83	43.68
2.402	22.78	6.18	1.56	4.98	119.13	1.94	43.7
2.508	22.75	6.17	1.64	5.0	130.01	2.05	43.71
2.599	22.71	6.17	1.64	5.03	156.93	2.22	43.73
2.671	22.68	6.17	1.56	5.06	154.91	2.37	43.75
2.76	22.66	6.17	1.49	5.11	150.45	2.41	43.77
2.853	22.65	6.17	1.56	5.16	172.02	2.47	43.8
2.961	22.65	6.18	1.83	5.2	171.86	2.53	43.83
3.08	22.65	6.18	1.79	5.24	148.41	2.58	43.84
3.182	22.66	6.18	1.68	5.26	147.11	2.63	43.85
3.27	22.67	6.19	1.87	5.26	142.01	2.62	43.87
3.353	22.69	6.19	1.68	5.23	142.28	2.71	43.88
3.431	22.7	6.19	1.87	5.18	132.91	2.74	43.88
3.526	22.7	6.19	1.87	5.12	125.05	2.76	43.87
3.617	22.7	6.19	1.64	5.06	122.3	2.96	43.84
3.697	22.69	6.18	1.6	5.01	115.92	3.08	43.84
3.78	22.68	6.18	1.83	4.95	111.8	3.14	43.84
3.871	22.66	6.18	1.83	4.91	99.94	3.27	43.83
3.963	22.64	6.18	1.91	4.87	95.39	3.26	43.83
4.072	22.62	6.18	1.83	4.82	90.98	3.32	43.83
4.17	22.61	6.17	1.87	4.78	87.79	3.31	43.84
4.263	22.6	6.17	1.76	4.72	80.6	3.38	43.85
4.369	22.59	6.17	1.87	4.65	74.11	3.4	43.86
4.466	22.58	6.17	1.87	4.57	70.62	3.36	43.86
4.568	22.58	6.17	1.87	4.5	65.29	3.51	43.86
4.679	22.58	6.17	1.91	4.45	60.9	3.58	43.86
4.77	22.58	6.17	1.95	4.42	58.05	3.43	43.86
4.855	22.58	6.17	1.72	4.38	54.68	3.48	43.86
4.94	22.58	6.17	1.76	4.35	53.0	3.47	43.86
5.014	22.58	6.17	1.91	4.34	50.42	3.42	43.86
5.1	22.58	6.17	1.91	4.33	46.9	3.44	43.86
5.206	22.58	6.17	1.91	4.32	43.11	3.37	43.86
5.293	22.58	6.17	1.79	4.3	41.36	3.4	43.86
5.33	22.58	6.17	1.6	4.28	41.45	3.42	43.86
5.331	22.58	6.17	1.83	4.26	41.92	3.33	43.86

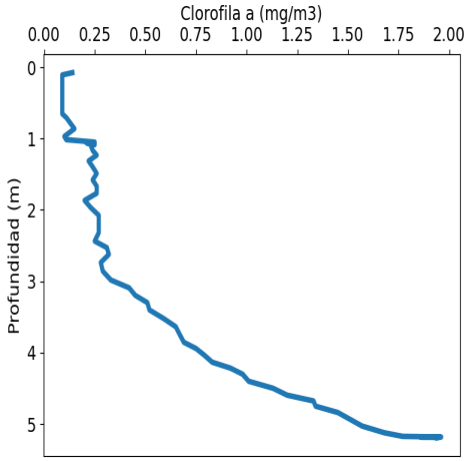
Nombre: CTD E05 - Punto 017 **Fecha: 18/10/2021** **Hora: 09:10:27**

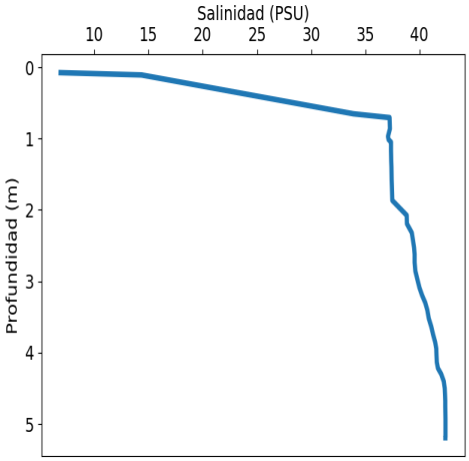


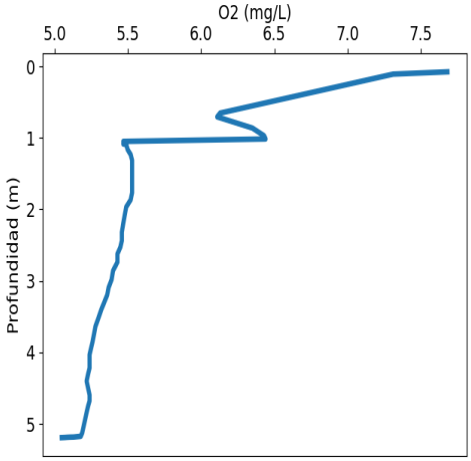


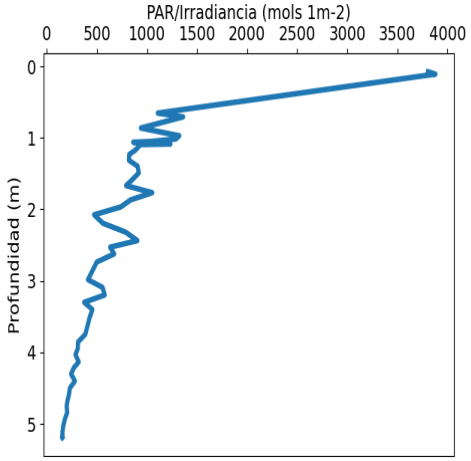












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	19.97	1.08	0.04	5.05	152.14	0.09	6.87
PROF (metros)	0.077	0.077	0.077	5.192	5.184	0.109	0.077
MÁXIMO	23.01	23.01	2.02	7.68	3880.0	1.96	42.41
PROF (metros)	1.05	4.499	0.863	0.077	0.109	5.182	4.934

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	21.8	4.04	0.56	6.67	2069.23	0.11	27.8
1 - 2m	22.99	5.41	0.45	5.57	933.64	0.23	37.45
2 - 3m	22.95	5.66	0.73	5.44	599.82	0.29	39.39
3 - 4m	22.85	5.83	1.06	5.31	422.57	0.58	40.86
4 - 5m	22.76	5.98	1.48	5.23	240.02	1.14	42.14
5 - 6m	22.74	6.01	1.66	5.13	155.98	1.84	42.4

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)
0.077	19.97	1.08	0.04	7.68	3805.2	0.14	6.87
0.109	19.99	2.14	0.23	7.31	3880.0	0.09	14.34
0.654	22.48	4.91	0.11	6.13	1107.3	0.09	33.93
0.707	22.63	5.35	0.04	6.11	1361.3	0.11	37.25
0.863	22.84	5.38	2.02	6.35	938.86	0.15	37.28
0.971	22.9	5.36	0.92	6.43	1322.7	0.1	37.1
1.016	22.91	5.37	1.83	6.44	1288.0	0.11	37.16
1.05	23.01	5.41	0.65	5.47	1049.1	0.25	37.38
1.062	23.01	5.41	0.3	5.48	862.7	0.21	37.38
1.086	23.01	5.41	0.11	5.47	1234.2	0.25	37.38
1.094	23.01	5.41	0.04	5.49	934.31	0.23	37.38
1.166	23.01	5.41	0.08	5.5	889.09	0.24	37.38
1.233	23.01	5.41	0.61	5.52	823.05	0.26	37.39
1.314	23.01	5.41	0.34	5.53	820.2	0.22	37.4
1.397	23.01	5.41	0.38	5.53	906.57	0.24	37.42
1.49	23.0	5.41	0.38	5.53	919.06	0.26	37.43
1.58	22.99	5.41	0.34	5.53	856.53	0.24	37.44
1.668	22.98	5.41	0.46	5.53	791.81	0.26	37.46
1.767	22.97	5.42	0.38	5.53	1053.2	0.26	37.48
1.867	22.95	5.42	0.42	5.52	837.88	0.2	37.5
1.966	22.94	5.49	0.38	5.49	738.96	0.23	38.13
2.076	22.94	5.59	0.57	5.48	472.55	0.27	38.83
2.194	22.95	5.59	0.53	5.47	560.58	0.27	38.85
2.32	22.96	5.65	0.72	5.46	789.24	0.27	39.3
2.437	22.96	5.66	0.69	5.46	904.27	0.25	39.42
2.529	22.96	5.67	0.65	5.45	632.68	0.31	39.51
2.623	22.96	5.68	0.84	5.43	672.91	0.32	39.56
2.737	22.95	5.68	0.92	5.43	498.89	0.28	39.56
2.858	22.94	5.69	0.76	5.4	456.09	0.29	39.63
2.983	22.94	5.71	0.88	5.39	411.2	0.33	39.83
3.092	22.92	5.73	0.99	5.37	557.08	0.42	40.01
3.197	22.91	5.76	0.92	5.36	578.93	0.45	40.25
3.3	22.89	5.8	0.8	5.34	373.58	0.51	40.54
3.401	22.87	5.82	1.07	5.32	455.35	0.52	40.73
3.522	22.85	5.83	0.99	5.3	425.95	0.59	40.87
3.637	22.83	5.86	1.11	5.28	405.34	0.65	41.1

3.748	22.82	5.88	1.22	5.27	384.29	0.67	41.27
3.855	22.81	5.9	1.18	5.26	312.16	0.69	41.46
3.942	22.79	5.91	1.22	5.25	310.43	0.75	41.56
4.033	22.79	5.91	1.18	5.24	286.64	0.79	41.58
4.134	22.78	5.92	1.53	5.24	318.81	0.83	41.61
4.217	22.78	5.93	1.41	5.24	269.25	0.92	41.71
4.302	22.78	5.97	1.3	5.23	242.64	0.98	42.02
4.401	22.77	6.0	1.37	5.22	281.3	1.01	42.25
4.499	22.76	6.01	1.41	5.23	230.95	1.13	42.34
4.596	22.75	6.01	1.64	5.24	220.69	1.2	42.37
4.677	22.74	6.01	1.68	5.24	206.82	1.33	42.39
4.75	22.74	6.01	1.64	5.23	198.56	1.34	42.39
4.839	22.74	6.01	1.56	5.22	203.97	1.45	42.4
4.934	22.74	6.01	1.6	5.21	180.6	1.51	42.41
5.029	22.74	6.01	1.45	5.2	164.42	1.57	42.41
5.123	22.74	6.01	1.6	5.19	155.96	1.68	42.41
5.173	22.74	6.01	1.68	5.18	158.62	1.77	42.41
5.182	22.74	6.01	1.6	5.14	155.67	1.96	42.41
5.184	22.74	6.01	1.79	5.13	152.14	1.92	42.4
5.185	22.74	6.01	1.83	5.11	156.06	1.86	42.4
5.187	22.74	6.01	1.68	5.09	152.81	1.93	42.4
5.19	22.74	6.01	1.64	5.07	153.55	1.94	42.4
5.192	22.74	6.01	1.68	5.05	154.62	1.94	42.4

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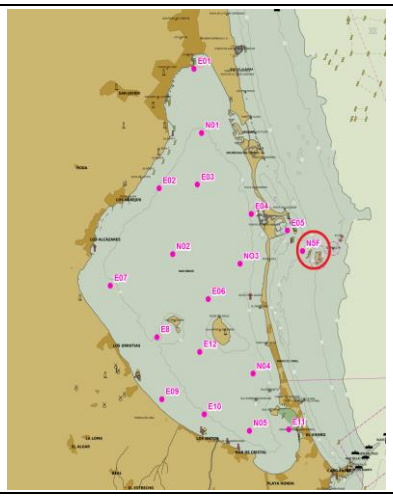
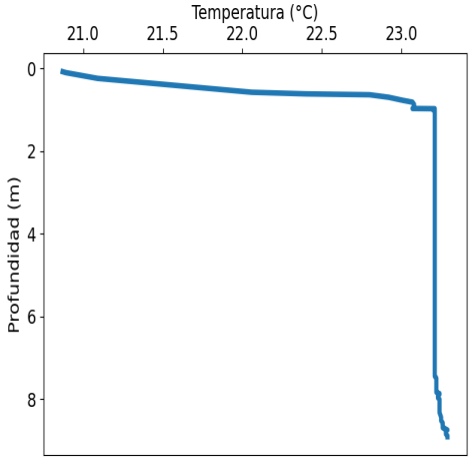
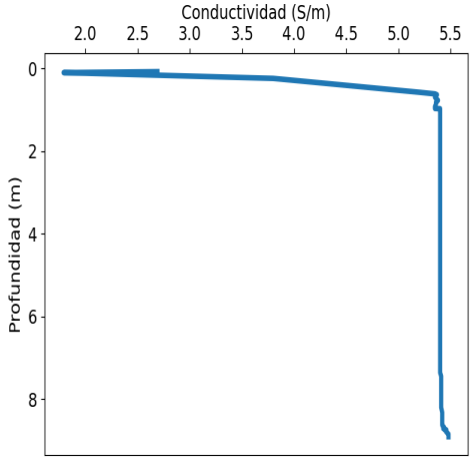
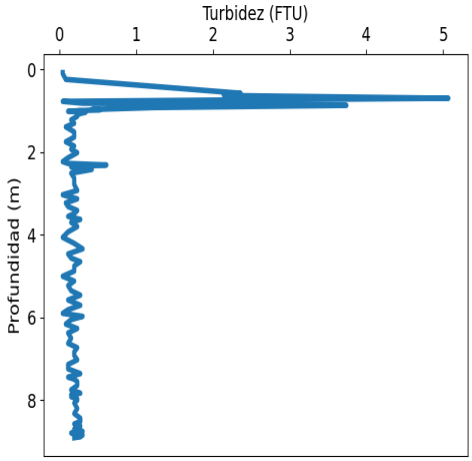
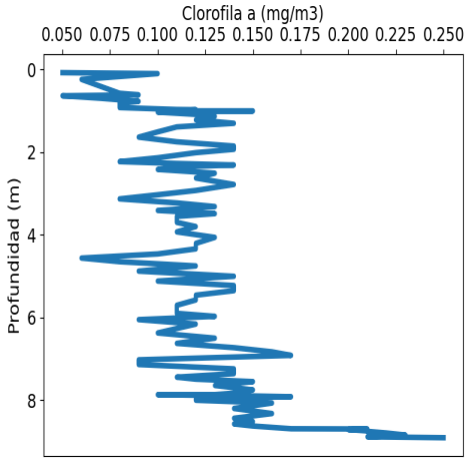
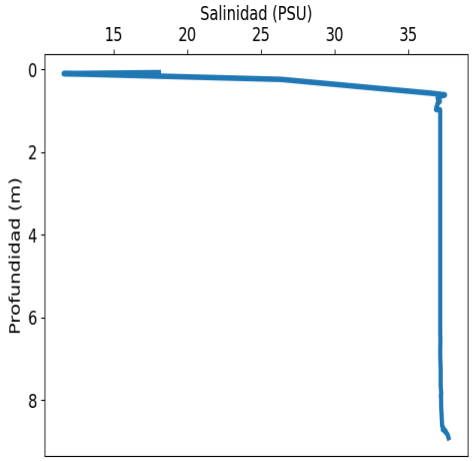


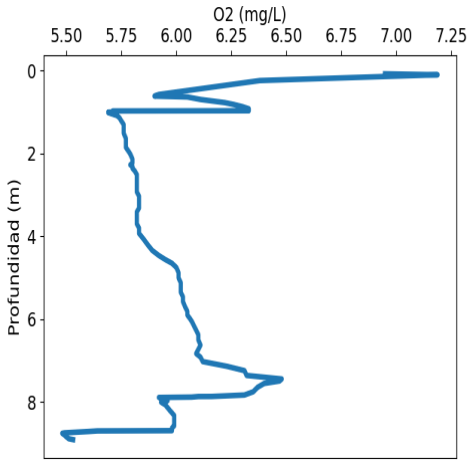


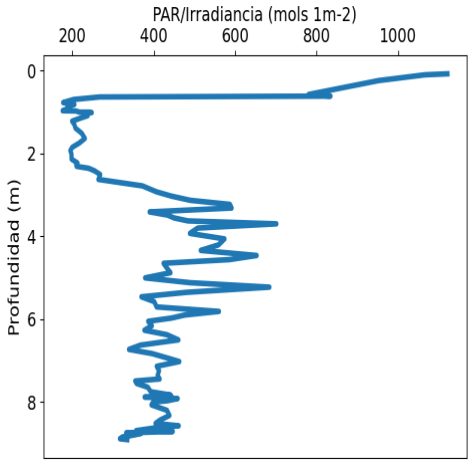












VALORACIÓN PRELIMINAR DE DATOS: NIVELES MÍNIMOS Y MÁXIMOS PARA CADA VARIABLE							
	Temp. (°C)	Conductividad (S/m)	Turbidez (FTU)	Oxígeno (mg/l)	PAR/Irradiancia (mols-1m-2)	Clorofila (mg/m^3)	Salinidad (PSU)
MÍNIMO	20.87	1.79	0.04	5.48	175.97	0.05	11.61
PROF (metros)	0.076	0.099	0.076	8.761	0.968	0.076	0.099
MÁXIMO	23.29	23.29	5.07	7.19	1121.3	0.25	37.72
PROF (metros)	8.75	8.85	0.696	0.099	0.076	8.914	8.914

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	22.43	4.75	1.41	6.28	489.74	0.08	32.8
1 - 2m	23.21	5.4	0.19	5.74	220.85	0.12	37.16
2 - 3m	23.21	5.4	0.22	5.81	257.63	0.11	37.16
3 - 4m	23.21	5.4	0.16	5.82	506.01	0.11	37.16
4 - 5m	23.21	5.4	0.18	5.93	522.72	0.1	37.16
5 - 6m	23.21	5.4	0.16	6.03	469.06	0.12	37.16
6 - 7m	23.21	5.4	0.16	6.1	397.65	0.12	37.16
7 - 8m	23.22	5.41	0.19	6.22	410.65	0.13	37.2
8 - 9m	23.26	5.44	0.23	5.77	386.89	0.18	37.4

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)
0.076	20.87	2.69	0.04	6.95	1121.3	0.05	18.08
0.099	20.89	1.79	0.04	7.19	1066.3	0.1	11.61
0.239	21.09	3.8	0.08	6.38	952.23	0.06	26.37
0.575	22.06	5.2	2.36	5.92	779.97	0.08	36.59
0.614	22.4	5.35	2.14	5.9	834.19	0.09	37.49
0.635	22.8	5.37	2.4	6.05	266.89	0.05	37.28
0.696	22.92	5.35	5.07	6.11	202.84	0.07	36.98
0.771	23.01	5.38	0.04	6.22	177.12	0.09	37.14
0.815	23.07	5.36	0.3	6.26	205.2	0.08	36.98
0.868	23.08	5.36	3.74	6.3	188.16	0.08	36.95
0.921	23.08	5.35	1.22	6.33	187.81	0.08	36.9
0.968	23.07	5.35	0.42	6.33	175.97	0.11	36.87
0.973	23.21	5.4	0.53	5.71	208.7	0.12	37.15
1.001	23.2	5.4	0.23	5.71	217.09	0.11	37.16
1.003	23.21	5.4	0.3	5.69	241.68	0.15	37.16
1.004	23.21	5.4	0.19	5.7	235.87	0.12	37.16
1.012	23.21	5.4	0.11	5.69	247.75	0.11	37.16
1.032	23.21	5.4	0.34	5.7	232.18	0.1	37.16
1.086	23.21	5.4	0.23	5.73	237.9	0.12	37.16
1.133	23.21	5.4	0.23	5.74	223.83	0.13	37.16
1.219	23.21	5.4	0.15	5.75	199.25	0.12	37.16
1.302	23.21	5.4	0.19	5.76	204.92	0.14	37.16
1.389	23.21	5.4	0.08	5.76	207.64	0.11	37.16
1.51	23.21	5.4	0.19	5.76	222.8	0.1	37.16
1.637	23.21	5.4	0.19	5.77	230.84	0.09	37.16
1.75	23.21	5.4	0.08	5.77	216.64	0.11	37.16
1.853	23.21	5.4	0.19	5.77	199.48	0.14	37.16
1.931	23.21	5.4	0.15	5.78	194.91	0.14	37.16
2.013	23.21	5.4	0.23	5.79	197.91	0.12	37.16
2.137	23.21	5.4	0.11	5.8	197.91	0.1	37.16
2.23	23.21	5.4	0.04	5.8	212.71	0.08	37.16
2.275	23.21	5.4	0.11	5.79	209.33	0.11	37.16
2.311	23.21	5.4	0.61	5.8	210.26	0.14	37.16

2.358	23.21	5.4	0.15	5.8	239.95	0.11	37.16
2.419	23.21	5.4	0.42	5.81	254.44	0.1	37.16
2.51	23.21	5.4	0.15	5.82	268.56	0.13	37.16
2.627	23.21	5.4	0.19	5.82	263.87	0.12	37.16
2.783	23.21	5.4	0.19	5.82	371.94	0.14	37.16
2.928	23.21	5.4	0.23	5.82	407.03	0.12	37.16
3.032	23.21	5.4	0.04	5.83	443.99	0.1	37.16
3.132	23.21	5.4	0.23	5.83	489.61	0.08	37.16
3.23	23.21	5.4	0.08	5.83	586.9	0.11	37.16
3.318	23.21	5.4	0.11	5.83	591.27	0.13	37.16
3.412	23.21	5.4	0.23	5.82	389.59	0.1	37.16
3.489	23.21	5.4	0.19	5.82	433.92	0.13	37.16
3.556	23.21	5.4	0.11	5.82	449.37	0.11	37.16
3.629	23.21	5.4	0.27	5.82	483.63	0.11	37.16
3.7	23.21	5.4	0.15	5.82	701.25	0.11	37.16
3.802	23.21	5.4	0.23	5.83	507.99	0.12	37.16
3.931	23.21	5.4	0.11	5.83	488.59	0.11	37.16
4.064	23.21	5.4	0.04	5.85	573.72	0.13	37.16
4.209	23.21	5.4	0.19	5.87	558.76	0.12	37.16
4.342	23.21	5.4	0.3	5.89	515.11	0.12	37.16
4.465	23.21	5.4	0.11	5.92	652.78	0.1	37.16
4.565	23.21	5.4	0.15	5.95	585.27	0.06	37.16
4.653	23.21	5.4	0.27	5.98	423.78	0.08	37.16
4.755	23.21	5.4	0.19	6.0	431.11	0.12	37.16
4.881	23.21	5.4	0.19	6.01	441.22	0.09	37.16
5.006	23.21	5.4	0.04	6.01	378.46	0.14	37.16
5.122	23.21	5.4	0.19	6.02	488.82	0.1	37.16
5.23	23.21	5.4	0.11	6.02	684.07	0.14	37.16
5.354	23.21	5.4	0.15	6.02	481.73	0.14	37.16
5.463	23.21	5.4	0.27	6.03	369.36	0.12	37.16
5.579	23.21	5.4	0.11	6.03	401.04	0.12	37.16
5.708	23.21	5.4	0.27	6.04	406.94	0.11	37.16
5.816	23.21	5.4	0.11	6.05	560.19	0.11	37.16
5.903	23.21	5.4	0.04	6.05	476.18	0.11	37.16
5.976	23.21	5.4	0.3	6.06	443.79	0.13	37.16
6.055	23.21	5.4	0.15	6.07	385.99	0.09	37.16
6.163	23.21	5.4	0.08	6.08	395.41	0.12	37.16
6.27	23.21	5.4	0.23	6.09	376.71	0.11	37.16
6.378	23.21	5.4	0.11	6.1	432.01	0.1	37.16
6.504	23.21	5.4	0.15	6.1	460.66	0.13	37.17
6.63	23.21	5.4	0.11	6.11	367.31	0.11	37.17
6.734	23.21	5.4	0.23	6.1	338.93	0.14	37.16
6.835	23.21	5.4	0.19	6.09	395.77	0.16	37.16
6.921	23.21	5.4	0.19	6.11	426.05	0.17	37.16
7.028	23.21	5.4	0.23	6.12	462.91	0.09	37.17
7.142	23.21	5.4	0.11	6.23	407.03	0.09	37.18
7.247	23.21	5.4	0.11	6.31	413.02	0.14	37.19
7.363	23.21	5.4	0.27	6.32	409.3	0.14	37.19
7.448	23.21	5.41	0.11	6.48	414.55	0.11	37.19
7.497	23.22	5.41	0.19	6.47	354.27	0.12	37.19
7.556	23.22	5.41	0.23	6.4	357.73	0.15	37.19
7.649	23.22	5.41	0.23	6.37	385.45	0.13	37.19
7.757	23.22	5.41	0.15	6.35	392.58	0.15	37.21
7.836	23.22	5.41	0.27	6.31	441.43	0.14	37.23
7.871	23.24	5.41	0.15	6.16	411.39	0.13	37.22
7.872	23.24	5.41	0.15	6.1	443.58	0.1	37.21
7.886	23.24	5.41	0.19	6.07	377.23	0.12	37.2
7.895	23.23	5.41	0.19	5.92	407.5	0.14	37.21

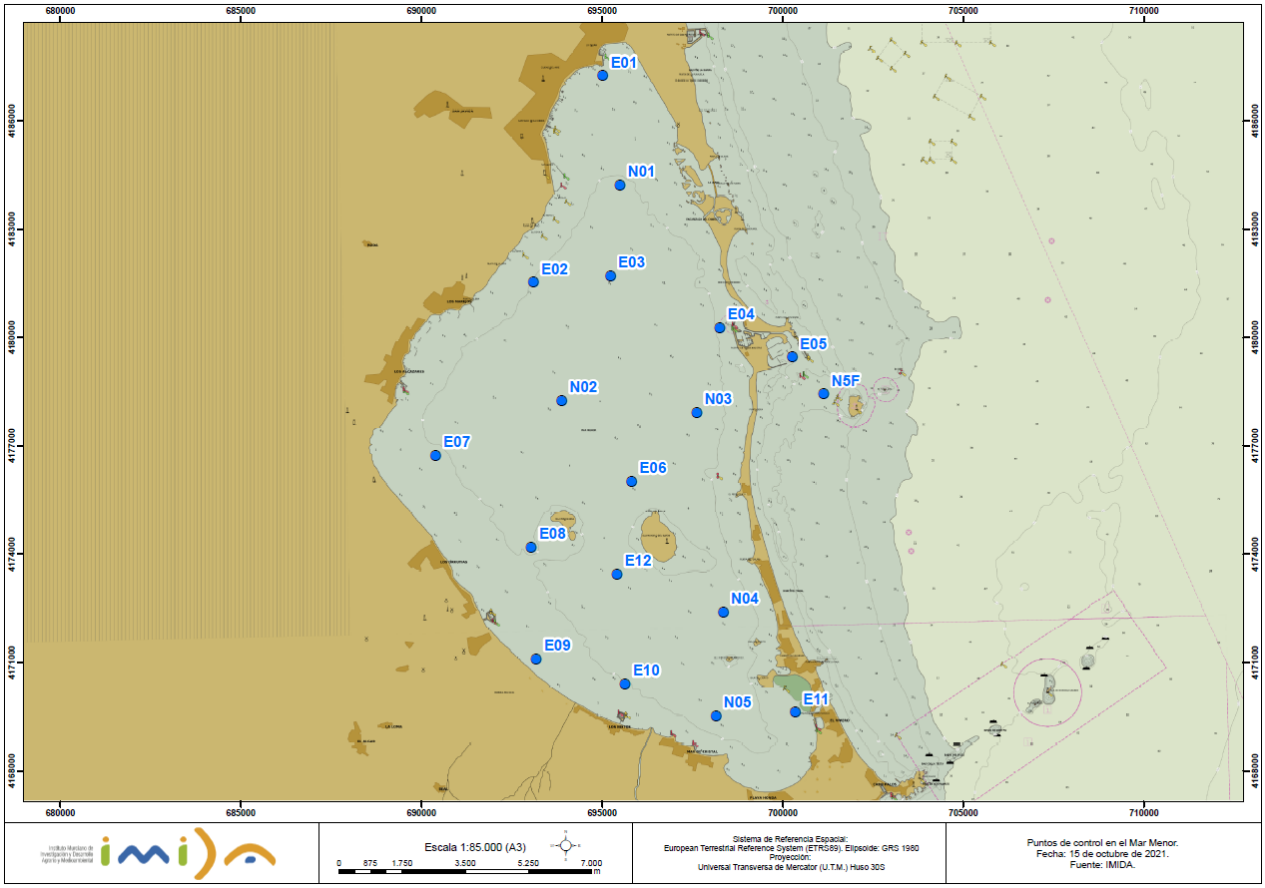
7.922	23.23	5.41	0.15	5.94	458.85	0.17	37.21
7.974	23.23	5.41	0.23	5.96	433.62	0.12	37.22
8.007	23.24	5.41	0.23	5.93	398.26	0.12	37.22
8.074	23.24	5.41	0.19	5.95	394.13	0.16	37.22
8.206	23.24	5.41	0.23	5.97	432.31	0.14	37.23
8.329	23.24	5.42	0.19	5.99	438.57	0.16	37.25
8.443	23.25	5.42	0.27	5.99	415.13	0.14	37.26
8.523	23.25	5.42	0.27	5.99	404.12	0.15	37.28
8.58	23.26	5.42	0.19	5.99	461.41	0.14	37.28
8.631	23.26	5.42	0.27	5.98	402.43	0.15	37.29
8.697	23.26	5.44	0.23	5.98	356.24	0.17	37.4
8.703	23.27	5.43	0.19	5.64	399.92	0.21	37.35
8.717	23.27	5.43	0.27	5.6	446.78	0.2	37.33
8.75	23.29	5.46	0.19	5.49	332.01	0.21	37.52
8.761	23.28	5.45	0.3	5.48	369.1	0.21	37.48
8.8	23.28	5.46	0.15	5.49	352.38	0.22	37.58
8.85	23.28	5.48	0.3	5.5	322.6	0.23	37.68
8.892	23.29	5.48	0.27	5.51	316.67	0.21	37.7
8.914	23.29	5.48	0.19	5.53	335.02	0.25	37.72

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.

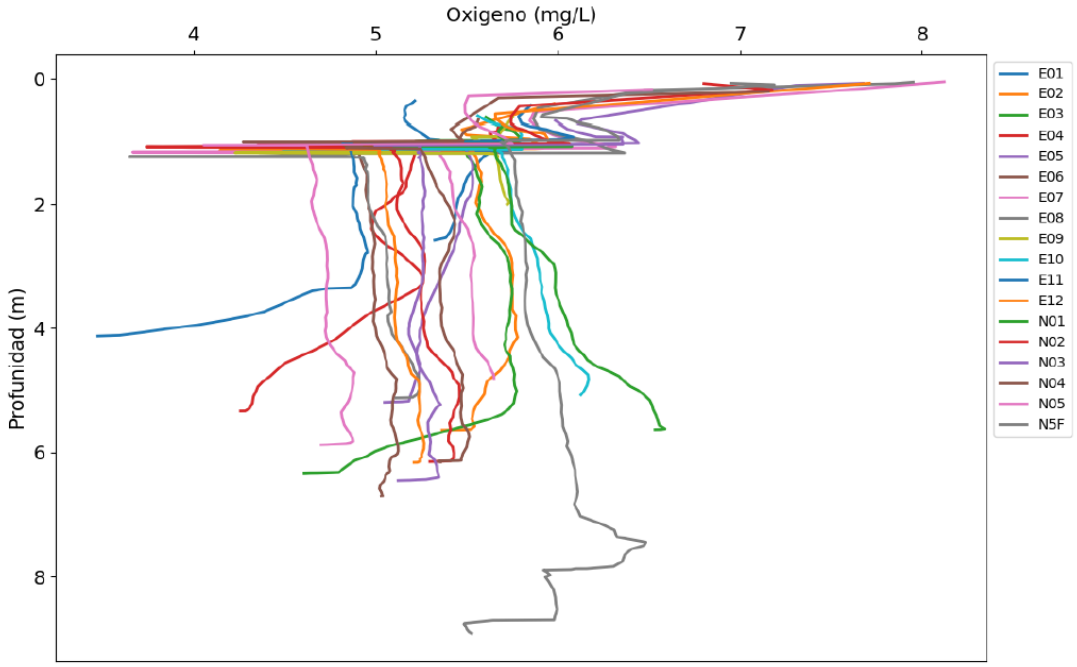
Instalaciones del IMIDA de La Alberca: Diseño y puesta en marcha de la encuesta para la toma de datos, procesamiento, tratamiento, análisis de datos, cartografía y maquetación.

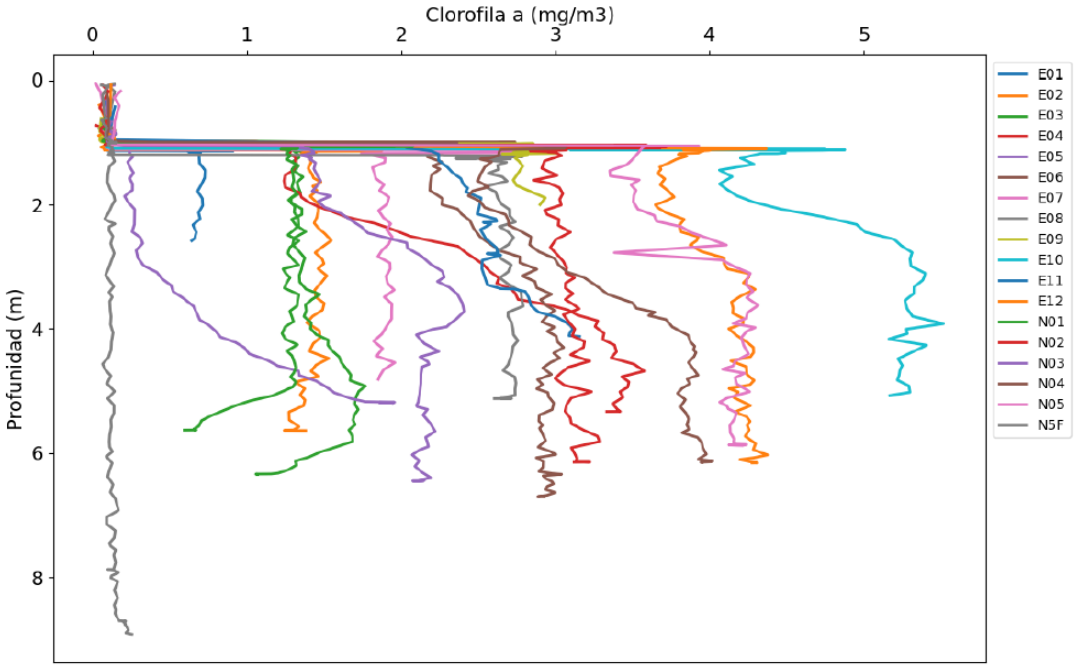
Mar Menor: El IMIDA ha muestreado un total de 18 puntos con el CTD, previamente establecidos por el grupo de monitorización.



SITUACIÓN GENERAL

Las medidas en el primer metro de las diferentes variables han dado problemas. hoy solo se ha registrado ligera hipoxia en el punto E11 a partir de los 4 m. Los valores de clorofila se mantienen en valores altos (superiores a 2 mg/m3) en varias estaciones.


Oxigeno (mg/L)
4
5
6
7
8
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


Clorofila a (mg/m3)
0
1
2
3
4
5
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