



Universitat d'Alacant
Universidad de Alicante

Departament de Ciències del Mar i Biologia Aplicada
Departamento de Ciencias del Mar y Biología Aplicada

PROGRAMA DE VIGILANCIA AMBIENTAL DEL VERTIDO DE LA IDAM DEL NUEVO CANAL DE ALICANTE:

Control de salinidad del medio receptor: octubre - diciembre de 2022

VALORACIÓN: La salinidad durante el mes de noviembre y diciembre ha superado los niveles establecidos en alguna de las estaciones lo que se comunicó para que se adoptaran las medidas oportunas.

Este informe ha sido realizado bajo mi dirección, y para que conste a los efectos oportunos, firmo el presente escrito

En Alicante a 17 de enero de 2023

Fdo: Dr. José Luis Sánchez Lizaso

1.- Localización de los sensores:

En la figura 1 se indica la posición de los sensores de registro de salinidad y temperatura en el límite superior de la pradera de *Posidonia oceanica*.

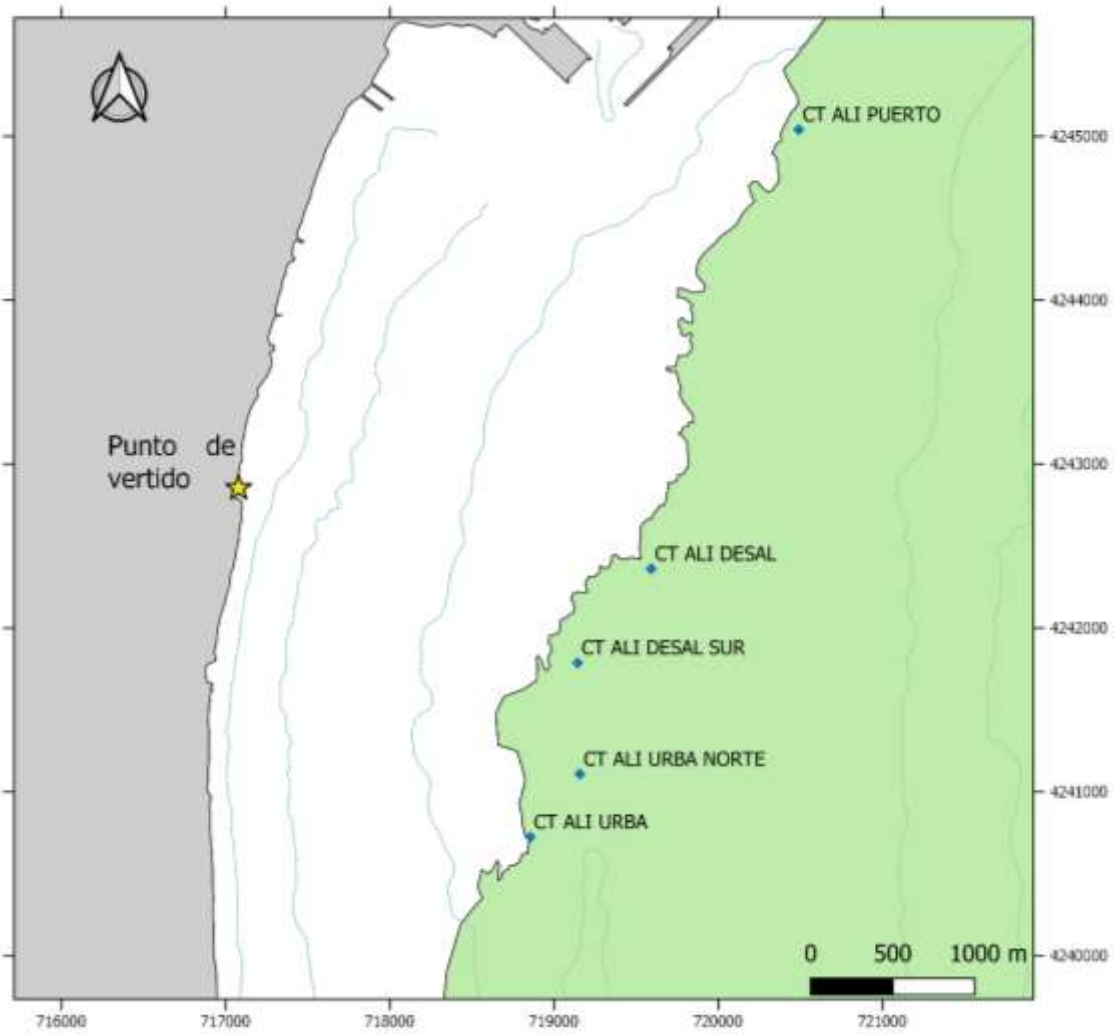


Figura 1: Posición de los sensores de conductividad y temperatura (CTs).

Mediciones de salinidad y temperatura en el medio receptor durante el trimestre:

Octubre 2022:

Salinidad (UPS):

| Localidad | Media | Máximo | Mínimo | % > 38.3 | % > 38.5 | % > 40 |
|------------------|-------|--------|--------|----------|----------|--------|
| 1 Control Puerto | | | | | | |
| 2 Desaladora | 37,50 | 38,05 | 35,55 | 0,00 | 0,00 | 0 |
| 3 Desaladora Sur | 37,96 | 38,28 | 29,20 | 0,00 | 0,00 | 0 |
| 4 Urbanova Norte | 37,66 | 38,07 | 31,39 | 0,00 | 0,00 | 0 |
| 5 Urbanova | 37,77 | 38,18 | 31,39 | 0,00 | 0,00 | 0 |

| Localidad | Media | Máximo | Mínimo | % > 38.5 | % > 39.5 | % > 49 |
|-----------|-------|--------|--------|----------|----------|--------|
| Vertido | 6,18 | 47,63 | 0,06 | 10,72 | 9,45 | 0,00 |

Temperatura (°C):

| Localidad | Media | Máximo | Mínimo |
|------------------|-------|--------|--------|
| 1 Control Puerto | 23,66 | 24,12 | 23,08 |
| 2 Desaladora | 23,95 | 24,44 | 23,32 |
| 3 Desaladora Sur | 23,98 | 24,48 | 23,32 |
| 4 Urbanova Norte | 23,98 | 24,51 | 23,29 |
| 5 Urbanova | 24,00 | 24,51 | 23,33 |
| Vertido | 23,38 | 27,46 | 19,12 |

Noviembre 2022:

Salinidad (UPS):

| Localidad | Media | Máximo | Mínimo | % > 38.3 | % > 38.5 | % > 40 |
|------------------|--------------|---------------|---------------|--------------------|--------------------|------------------|
| 1 Control Puerto | 38,58 | 38,99 | 30,56 | 95,75 | 68,44 | 0,00 |
| 2 Desaladora | 35,66 | 38,70 | 26,83 | 6,06 | 1,99 | 0,00 |
| 3 Desaladora Sur | 38,46 | 39,26 | 33,33 | 71,23 | 52,76 | 0,00 |
| 4 Urbanova Norte | 37,92 | 38,53 | 31,00 | 13,93 | 0,29 | 0,00 |
| 5 Urbanova | 37,40 | 38,00 | 31,07 | 0,00 | 0,00 | 0,00 |

| Localidad | Media | Máximo | Mínimo | % > 38.5 | % > 39.5 | % > 49 |
|------------------|--------------|---------------|---------------|--------------------|--------------------|------------------|
| Vertido | 38,23 | 64,14 | 25,50 | 44,76 | 37,62 | 1,12 |

Temperatura (°C):

| Localidad | Media | Máximo | Mínimo |
|------------------|--------------|---------------|---------------|
| 1 Control Puerto | 20,72 | 23,39 | 17,90 |
| 2 Desaladora | 20,85 | 23,46 | 18,12 |
| 3 Desaladora Sur | 20,83 | 23,61 | 18,06 |
| 4 Urbanova Norte | 20,81 | 23,61 | 18,17 |
| 5 Urbanova | 20,84 | 23,61 | 18,09 |
| Vertido | 20,51 | 28,00 | 17,67 |

Diciembre 2022:

Salinidad (UPS):

| Localidad | Media | Máximo | Mínimo | % > 38.3 | % > 38.5 | % > 40 |
|------------------|--------------|---------------|---------------|--------------------|--------------------|------------------|
| 1 Control Puerto | 36,48 | 39,00 | 21,03 | 45,57 | 45,19 | 0 |
| 2 Desaladora | 32,75 | 38,81 | 24,64 | 13,89 | 3,54 | 0 |
| 3 Desaladora Sur | 35,78 | 39,21 | 26,66 | 25,38 | 20,34 | 0 |
| 4 Urbanova Norte | 38,12 | 38,54 | 36,83 | 15,58 | 1,29 | 0 |
| 5 Urbanova | 38,13 | 38,62 | 29,49 | 60,09 | 21,26 | 0 |

| Localidad | Media | Máximo | Mínimo | % > 38.5 | % > 39.5 | % > 49 |
|------------------|--------------|---------------|---------------|--------------------|--------------------|------------------|
| Vertido | 34,09 | 58,43 | 15,05 | 18,07 | 14,16 | 0,42 |

Temperatura (°C):

| Localidad | Media | Máximo | Mínimo |
|------------------|--------------|---------------|---------------|
| 1 Control Puerto | 17,33 | 18,40 | 16,20 |
| 2 Desaladora | 17,37 | 18,37 | 16,14 |
| 3 Desaladora Sur | 17,46 | 18,29 | 16,08 |
| 4 Urbanova Norte | 17,45 | 18,33 | 15,88 |
| 5 Urbanova | 17,51 | 18,32 | 16,16 |
| Vertido | 17,33 | 21,04 | 15,58 |

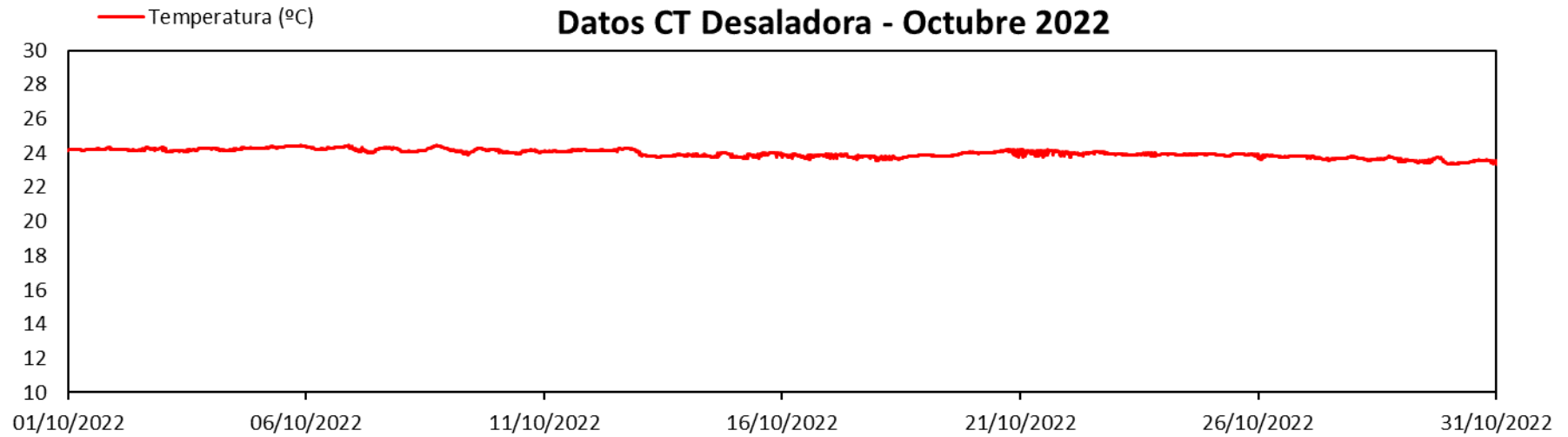
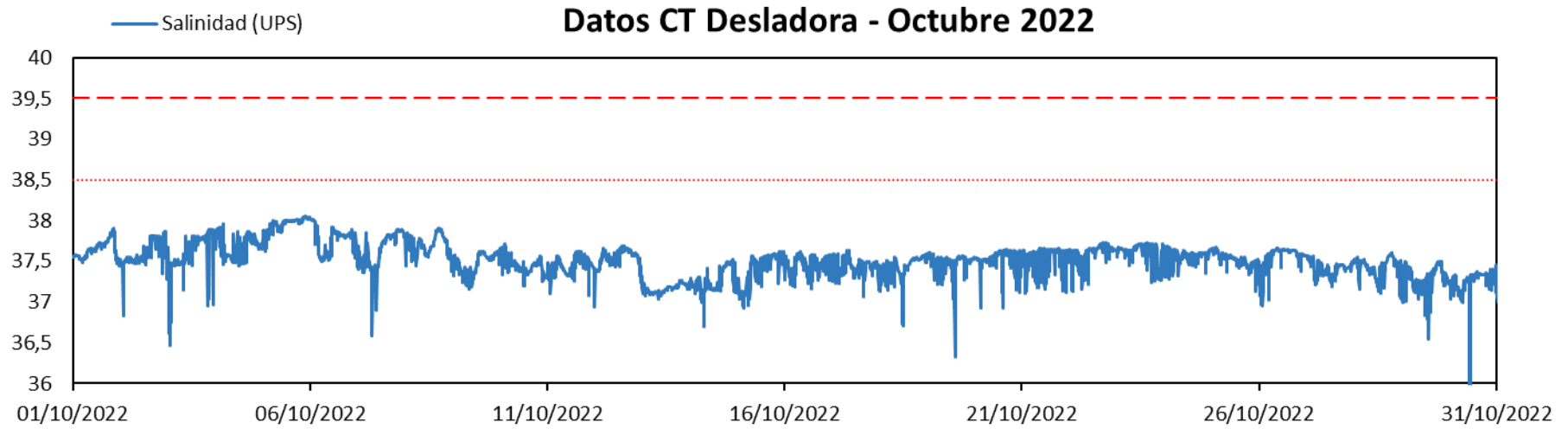
Régimen de funcionamiento de las desalinizadoras

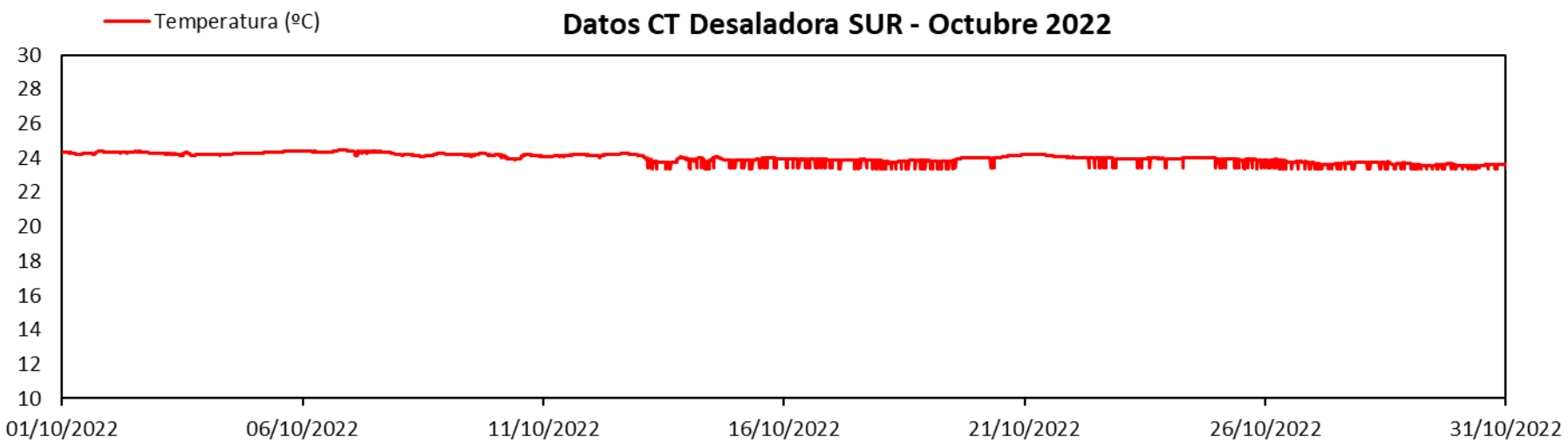
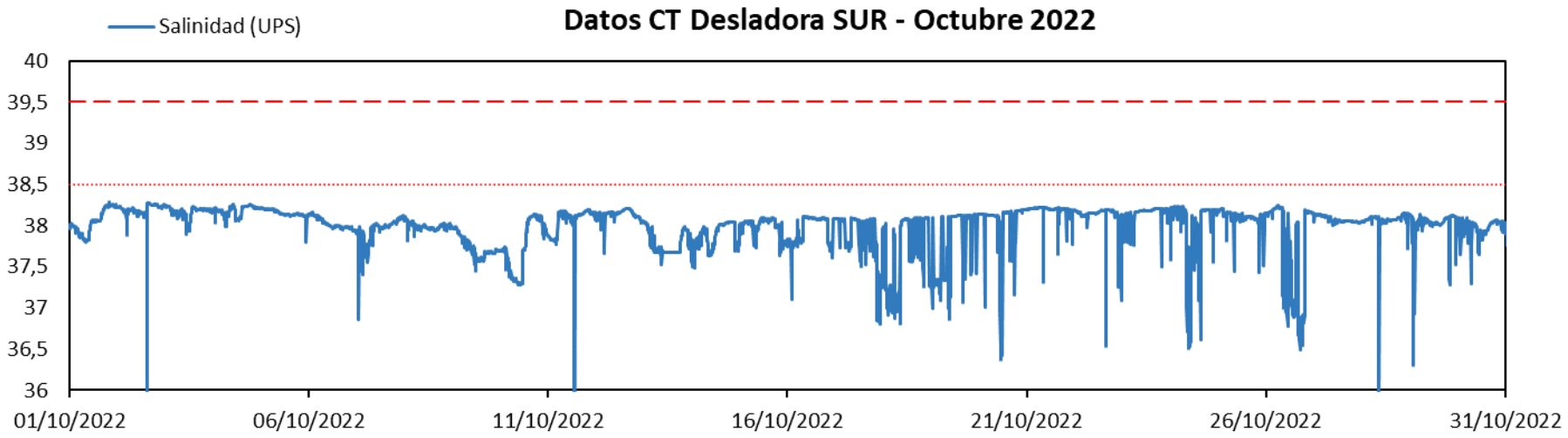
| | Producción Alicante I (m ³ /día) | Producción Alicante II (m ³ /día) | Rechazo Alicante I (m ³ /día) | Rechazo Alicante II (m ³ /día) | CAUDAL vertido (m ³ /h) | CAUDAL Dilución (m ³ /h) | RELACIÓN de dilución |
|------------|---|--|--|---|------------------------------------|-------------------------------------|----------------------|
| 01/10/2022 | 24.094 | 37.388 | 29.405 | 56.858 | 3594,29 | 17506,32 | 4,87 |
| 02/10/2022 | 24.186 | 39.052 | 29.552 | 53.620 | 3465,50 | 17475,63 | 5,04 |
| 03/10/2022 | 23.984 | 32.117 | 29.129 | 43.418 | 3022,79 | 17510,00 | 5,79 |
| 04/10/2022 | 30.166 | 41.219 | 37.374 | 45.085 | 3435,79 | 19369,63 | 5,64 |
| 05/10/2022 | 33.662 | 36.219 | 41.600 | 59.576 | 4215,67 | 19377,80 | 4,60 |
| 06/10/2022 | 32.594 | 39.958 | 39.870 | 53.408 | 3886,58 | 19375,97 | 4,99 |
| 07/10/2022 | 32.809 | 37.883 | 40.068 | 53.706 | 3907,25 | 19379,64 | 4,96 |
| 08/10/2022 | 41.181 | 40.100 | 50.582 | 50.601 | 4215,96 | 19392,66 | 4,60 |
| 09/10/2022 | 39.867 | 37.915 | 48.476 | 44.952 | 3892,83 | 19429,26 | 4,99 |
| 10/10/2022 | 41.340 | 33.206 | 50.569 | 48.398 | 3022,79 | 17510,00 | 5,79 |
| 11/10/2022 | 35.462 | 37.033 | 43.135 | 53.708 | 3435,79 | 19369,63 | 5,64 |
| 12/10/2022 | 32.512 | 37.916 | 40.034 | 52.492 | 4215,67 | 19377,80 | 4,60 |
| 13/10/2022 | 18.839 | 38.535 | 23.067 | 44.327 | 3886,58 | 19375,97 | 4,99 |
| 14/10/2022 | 17.739 | 36.749 | 22.291 | 53.684 | 3907,25 | 19379,64 | 4,96 |
| 15/10/2022 | 16.333 | 39.818 | 20.098 | 58.552 | 4215,96 | 19392,66 | 4,60 |
| 16/10/2022 | 16.033 | 35.117 | 19.721 | 53.843 | 3892,83 | 19429,26 | 4,99 |
| 17/10/2022 | 15.534 | 37.295 | 19.146 | 53.377 | 3021,79 | 17177,00 | 5,68 |
| 18/10/2022 | 22.010 | 38.902 | 27.747 | 53.610 | 3389,88 | 19233,21 | 5,67 |
| 19/10/2022 | 24.136 | 36.398 | 29.418 | 42.847 | 3011,04 | 19634,40 | 6,52 |
| 20/10/2022 | 31.200 | 37.798 | 38.535 | 51.823 | 3764,92 | 21308,20 | 5,66 |
| 21/10/2022 | 31.771 | 39.827 | 39.038 | 52.455 | 3812,21 | 25527,45 | 6,70 |
| 22/10/2022 | 45.665 | 37.219 | 55.742 | 55.692 | 4643,08 | 26708,97 | 5,75 |
| 23/10/2022 | 47.253 | 39.574 | 58.319 | 43.069 | 4224,50 | 22886,01 | 5,42 |
| 24/10/2022 | 33.954 | 33.849 | 41.462 | 47.772 | 3718,08 | 21207,00 | 5,70 |
| 25/10/2022 | 34.967 | 33.958 | 42.884 | 58.005 | 4203,71 | 20970,67 | 4,99 |
| 26/10/2022 | 37.387 | 32.873 | 46.010 | 45.963 | 3832,21 | 21052,33 | 5,49 |
| 27/10/2022 | 33.875 | 39.119 | 41.817 | 55.179 | 4041,50 | 22867,00 | 5,66 |
| 28/10/2022 | 37.114 | 37.942 | 45.718 | 52.771 | 4103,71 | 23539,67 | 5,74 |
| 29/10/2022 | 41.183 | 37.461 | 50.317 | 44.030 | 3931,13 | 23568,67 | 6,00 |
| 30/10/2022 | 43.028 | 40.161 | 52.532 | 54.620 | 4464,67 | 20447,00 | 4,58 |
| 31/10/2022 | 22.531 | 37.023 | 27.921 | 58.218 | 3589,13 | 18908,67 | 5,27 |

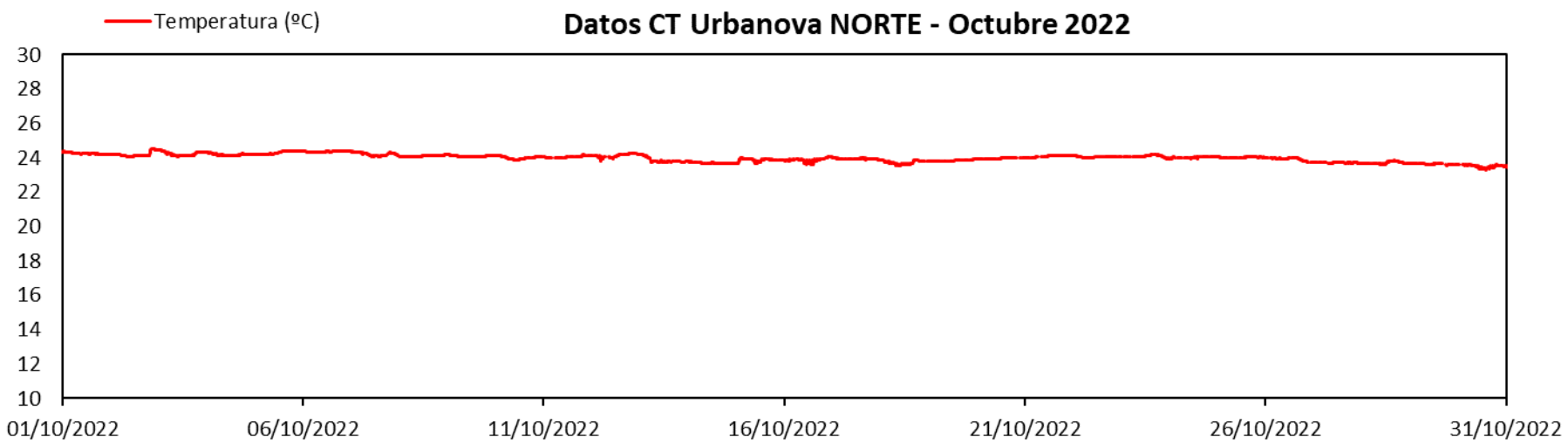
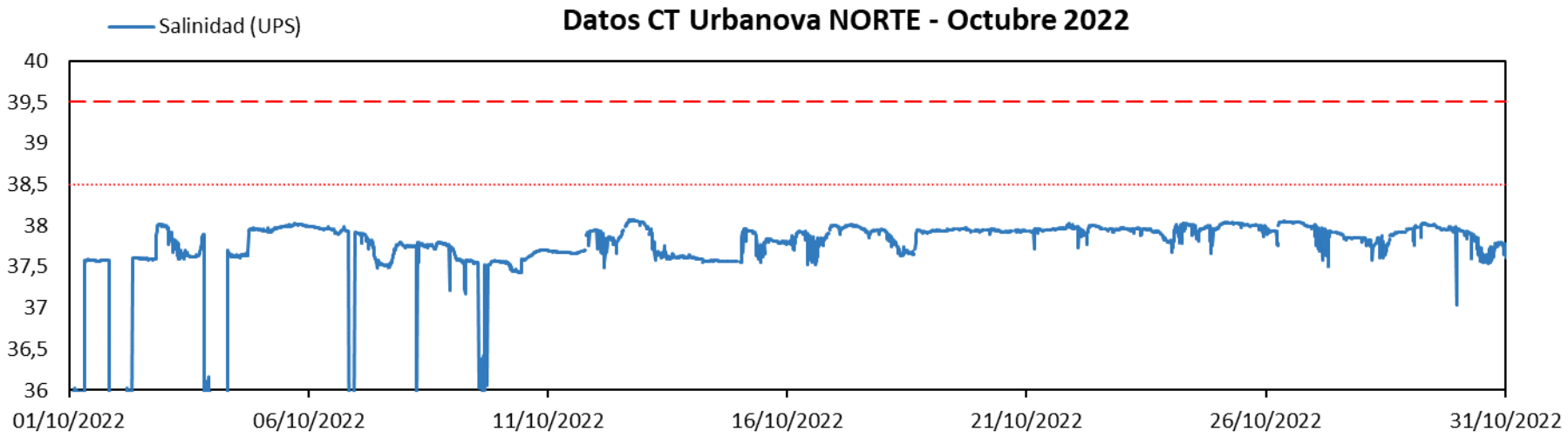
| | Producción Alicante I (m³/día) | Producción Alicante II (m³/día) | Rechazo Alicante I (m³/día) | Rechazo Alicante II (m³/día) | CAUDAL vertido (m³/h) | CAUDAL Dilución (m³/h) | RELACIÓN de dilución |
|------------|--|---|---|--|---|--|-----------------------------|
| 01/11/2022 | 23.988 | 38.932 | 29.528 | 51.977 | 3396,04 | 18892,00 | 5,56 |
| 02/11/2022 | 21.948 | 36.912 | 26.984 | 49.142 | 3171,92 | 18902,00 | 5,96 |
| 03/11/2022 | 24.517 | 37.980 | 30.123 | 50.130 | 3343,88 | 17350,00 | 5,19 |
| 04/11/2022 | 19.200 | 31.608 | 23.404 | 52.204 | 3150,33 | 16091,00 | 5,11 |
| 05/11/2022 | 22.734 | 31.661 | 27.978 | 44.064 | 3001,75 | 16113,00 | 5,37 |
| 06/11/2022 | 20.297 | 38.966 | 25.048 | 55.762 | 3367,08 | 16562,00 | 4,92 |
| 07/11/2022 | 16.644 | 45.759 | 20.056 | 40.826 | 2536,75 | 11620,00 | 4,58 |
| 08/11/2022 | 16.627 | 36.220 | 20.208 | 45.853 | 2752,54 | 18084,67 | 6,57 |
| 09/11/2022 | 23.404 | 27.477 | 28.664 | 64.250 | 3871,42 | 20432,00 | 5,28 |
| 10/11/2022 | 25.358 | 39.266 | 44.276 | 52.776 | 4043,83 | 11697,33 | 2,89 |
| 11/11/2022 | 20.979 | 30.738 | 30.854 | 47.093 | 3247,79 | 6968,33 | 2,15 |
| 12/11/2022 | 23.192 | 39.434 | 36.547 | 45.130 | 3403,21 | 7015,00 | 2,06 |
| 13/11/2022 | 23.606 | 37.926 | 28.938 | 50.852 | 3324,58 | 7003,33 | 2,11 |
| 14/11/2022 | 26.237 | 33.863 | 31.862 | 60.043 | 3829,38 | 7005,00 | 1,83 |
| 15/11/2022 | 24.195 | 32.222 | 29.923 | 43.554 | 3061,54 | 6962,00 | 2,27 |
| 16/11/2022 | 26.450 | 30.408 | 32.752 | 47.351 | 3337,63 | 6815,00 | 2,04 |
| 17/11/2022 | 24.063 | 38.908 | 29.427 | 52.193 | 3400,83 | 6834,00 | 2,01 |
| 18/11/2022 | 23.816 | 34.756 | 29.097 | 45.593 | 3112,08 | 6879,00 | 2,21 |
| 19/11/2022 | 23.855 | 38.262 | 29.437 | 51.673 | 3379,58 | 6868,00 | 2,03 |
| 20/11/2022 | 23.449 | 37.791 | 28.809 | 59.799 | 3692,00 | 7451,00 | 2,02 |
| 21/11/2022 | 29.521 | 38.289 | 35.968 | 53.096 | 3829,38 | 7005 | 1,83 |
| 22/11/2022 | 33.916 | 36.906 | 42.367 | 50.140 | 3061,54 | 6962 | 2,27 |
| 23/11/2022 | 40.592 | 36.978 | 49.852 | 46.066 | 3337,63 | 6815 | 2,04 |
| 24/11/2022 | 43.937 | 38.291 | 53.891 | 59.510 | 3400,83 | 6834 | 2,01 |
| 25/11/2022 | 40.375 | 37.750 | 48.443 | 52.812 | 3112,08 | 6879 | 2,21 |
| 26/11/2022 | 47.055 | 37.418 | 58.751 | 49.844 | 3379,58 | 6868 | 2,03 |
| 27/11/2022 | 46.251 | 37.739 | 56.941 | 59.142 | 3692 | 7451 | 2,02 |
| 28/11/2022 | 47.625 | 37.057 | 57.991 | 43.520 | 3829,38 | 7005 | 1,83 |
| 29/11/2022 | 47.577 | 27.272 | 58.383 | 46.578 | 3061,54 | 6962 | 2,27 |
| 30/11/2022 | 48.814 | 39.822 | 59.606 | 48.951 | 3337,63 | 6815 | 2,04 |

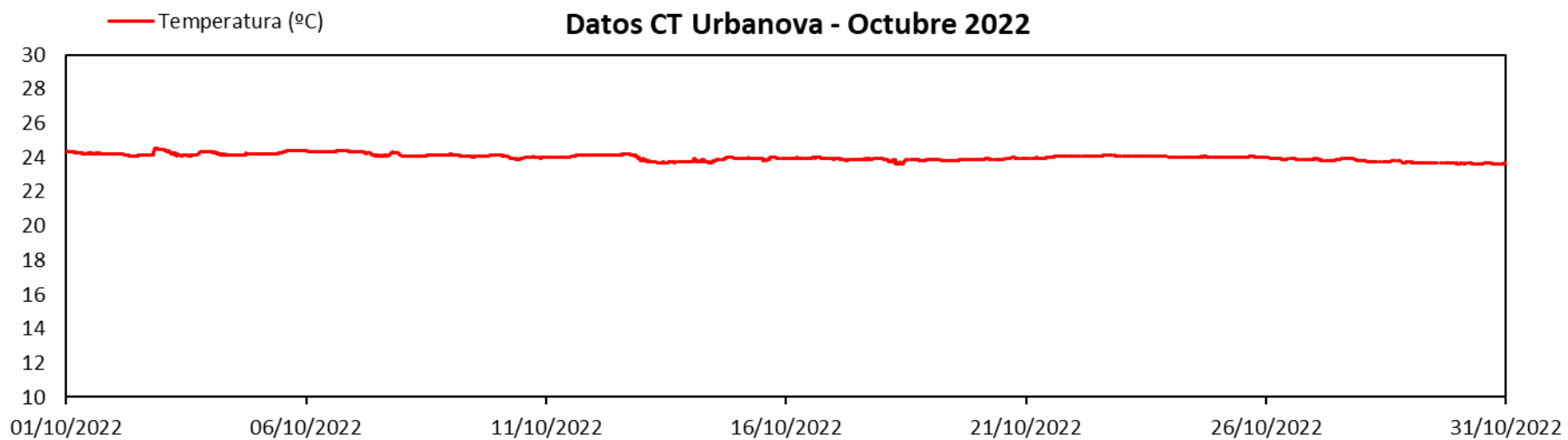
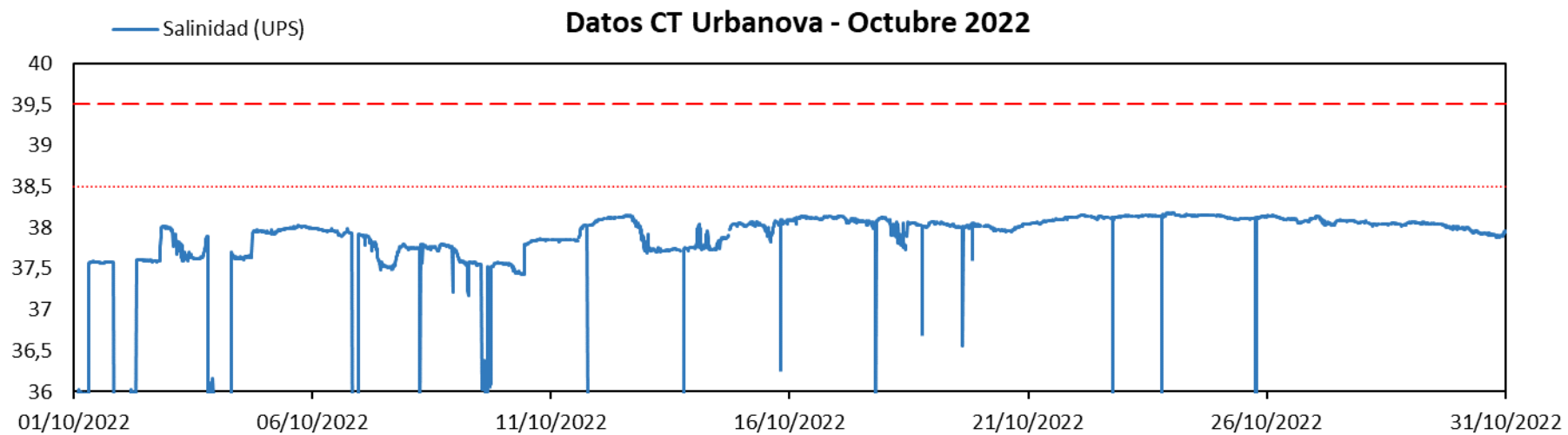
| | Producción Alicante I (m³/día) | Producción Alicante II (m³/día) | Rechazo Alicante I (m³/día) | Rechazo Alicante II (m³/día) | CAUDAL vertido (m³/ h) | CAUDAL Dilución (m³/ h) | RELACIÓN de dilución |
|------------|--|---|---|--|--|---|-----------------------------|
| 01/12/2022 | 46.098 | 37.390 | 56.926 | 55.530 | 3400,83 | 6834 | 2,01 |
| 02/12/2022 | 44.317 | 38.189 | 54.359 | 48.477 | 3112,08 | 6879 | 2,21 |
| 03/12/2022 | 47.723 | 37.044 | 58.505 | 48.098 | 3379,58 | 6868 | 2,03 |
| 04/12/2022 | 45.892 | 39.947 | 56.160 | 54.901 | 3692 | 7451 | 2,02 |
| 05/12/2022 | 40.830 | 37.609 | 50.059 | 53.805 | 3829,38 | 7005 | 1,83 |
| 06/12/2022 | 33.446 | 39.160 | 41.278 | 53.353 | 3061,54 | 6962 | 2,27 |
| 07/12/2022 | 31.867 | 37.272 | 39.057 | 53.541 | 3337,63 | 6815 | 2 |
| 08/12/2022 | 27.327 | 33.704 | 33.253 | 44.818 | 3400,83 | 6834 | 2 |
| 09/12/2022 | 24.069 | 35.256 | 29.595 | 55.528 | 3112,08 | 6879 | 2 |
| 10/12/2022 | 17.576 | 39.306 | 21.585 | 53.697 | 3379,58 | 6868 | 2 |
| 11/12/2022 | 16.213 | 37.638 | 19.703 | 52.592 | 3692 | 7451 | 2 |
| 12/12/2022 | 9.895 | 35.614 | 12.057 | 47.729 | 3829,38 | 7005 | 1,83 |
| 13/12/2022 | 7.621 | 36.260 | 9.339 | 50.422 | 3061,54 | 6962 | 2,27 |
| 14/12/2022 | 14.794 | 36.312 | 18.936 | 56.327 | 3337,63 | 6815 | 2 |
| 15/12/2022 | 12.783 | 34.177 | 16.062 | 52.147 | 3400,83 | 6834 | 2 |
| 16/12/2022 | 8.273 | 38.309 | 10.097 | 55.137 | 3112,08 | 6879 | 2 |
| 17/12/2022 | 7.894 | 33.994 | 9.782 | 51.624 | 3379,58 | 6868 | 2 |
| 18/12/2022 | 8.337 | 36.954 | 10.123 | 45.869 | 3692 | 7451 | 2 |
| 19/12/2022 | 8.177 | 35.951 | 10.059 | 55.694 | 3829,38 | 7005 | 1,83 |
| 20/12/2022 | 8.025 | 38.896 | 9.883 | 53.246 | 3061,54 | 6962 | 2,27 |
| 21/12/2022 | 8.149 | 33.008 | 9.911 | 47.805 | 3337,63 | 6815 | 2 |
| 22/12/2022 | 11.078 | 34.574 | 13.886 | 48.934 | 3400,83 | 6834 | 2 |
| 23/12/2022 | 14.280 | 39.088 | 17.580 | 48.070 | 3112,08 | 6879 | 2 |
| 24/12/2022 | 18.778 | 32.847 | 23.368 | 51.542 | 3379,58 | 6868 | 2 |
| 25/12/2022 | 17.680 | 37.920 | 21.640 | 57.974 | 3692 | 7451 | 2 |
| 26/12/2022 | 15.984 | 37.827 | 19.598 | 49.233 | 3829,38 | 7005 | 1,83 |
| 27/12/2022 | 16.358 | 30.413 | 20.363 | 43.902 | 3061,54 | 6962 | 2,27 |
| 28/12/2022 | 19.951 | 39.571 | 23.129 | 53.447 | 3337,63 | 6815 | 2 |
| 29/12/2022 | 8.858 | 32.514 | 9.652 | 50.133 | 3400,83 | 6834 | 2 |
| 30/12/2022 | 7.856 | 39.455 | 9.711 | 56.523 | 3112,08 | 6879 | 2 |
| 31/12/2022 | 7.986 | 38.104 | 9.681 | 54.643 | 3379,58 | 6868 | 2 |

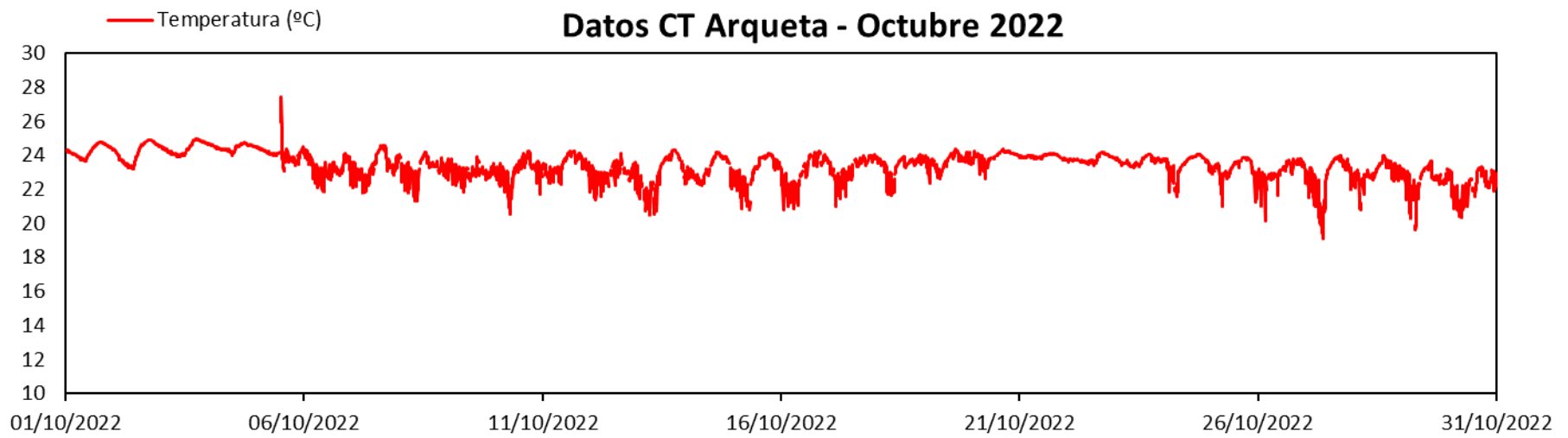
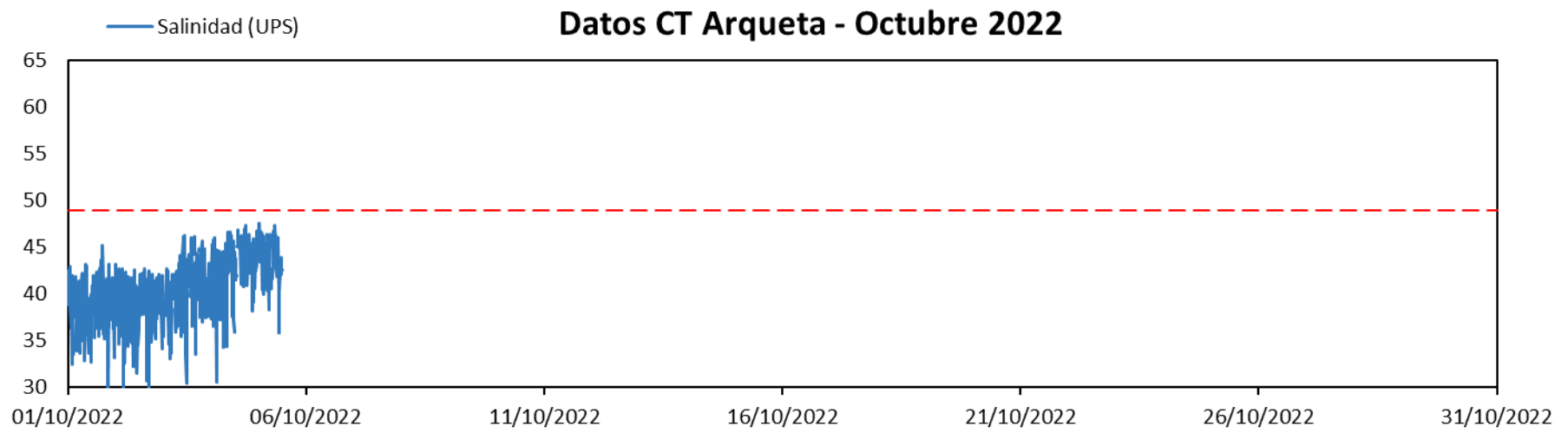
Datos mensuales – Octubre 2022:



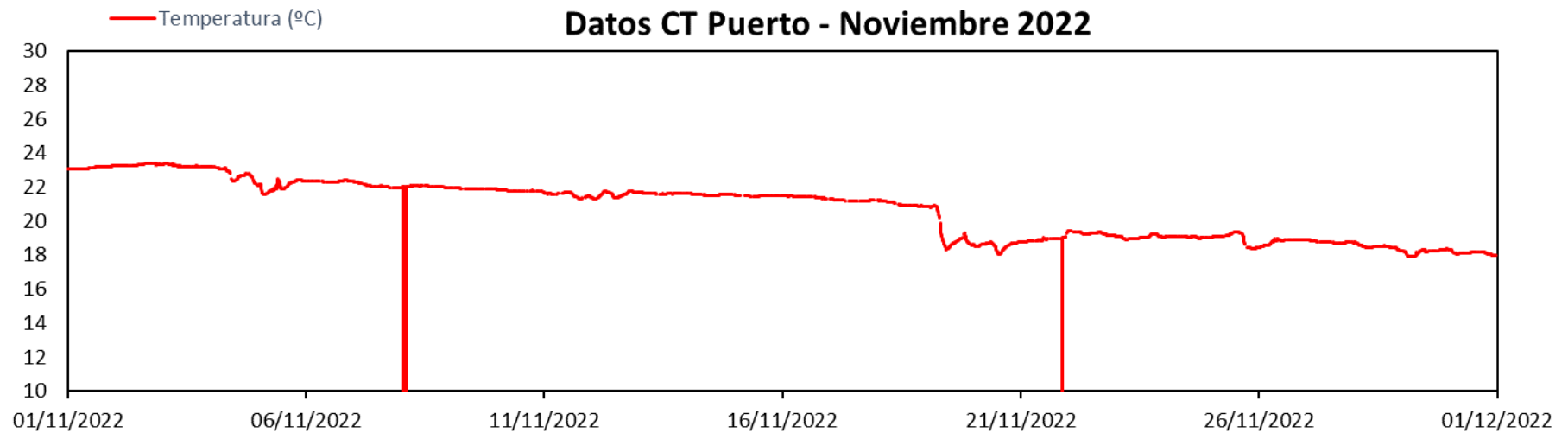
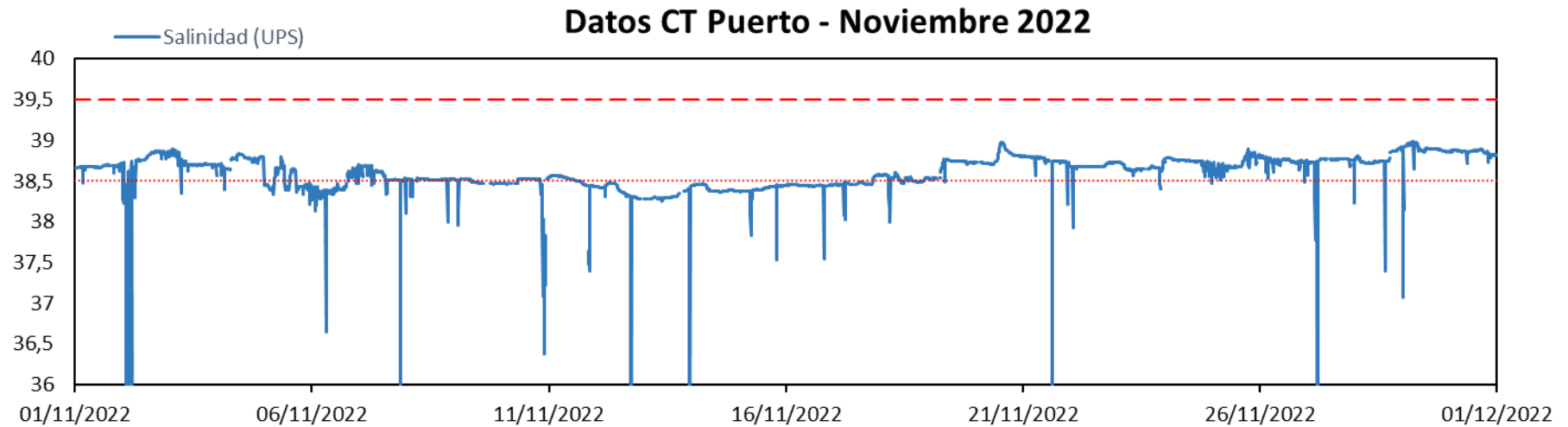




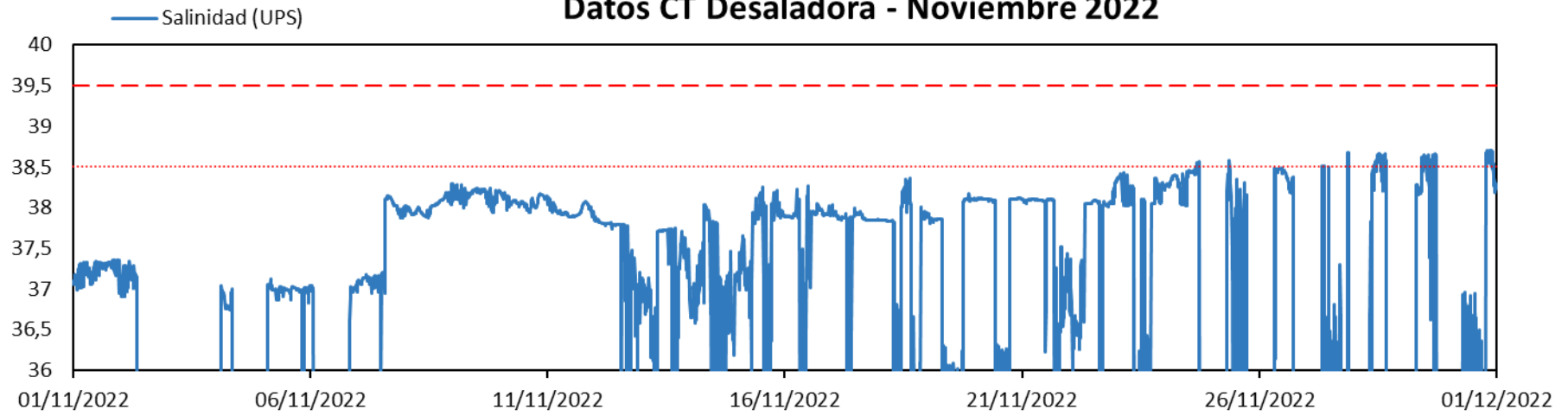




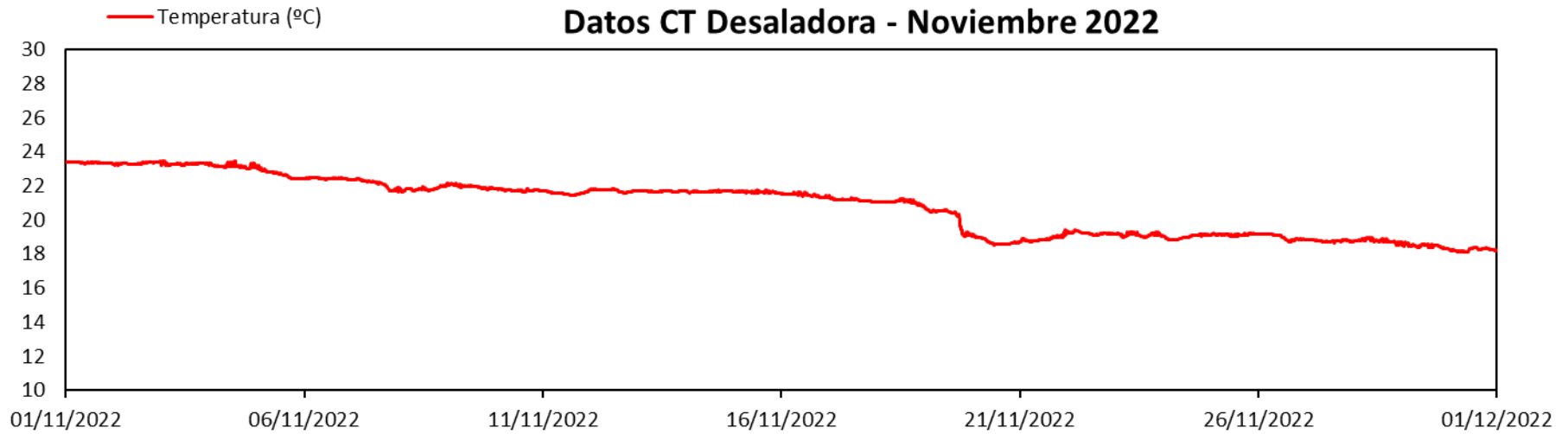
Datos mensuales – Noviembre 2022:



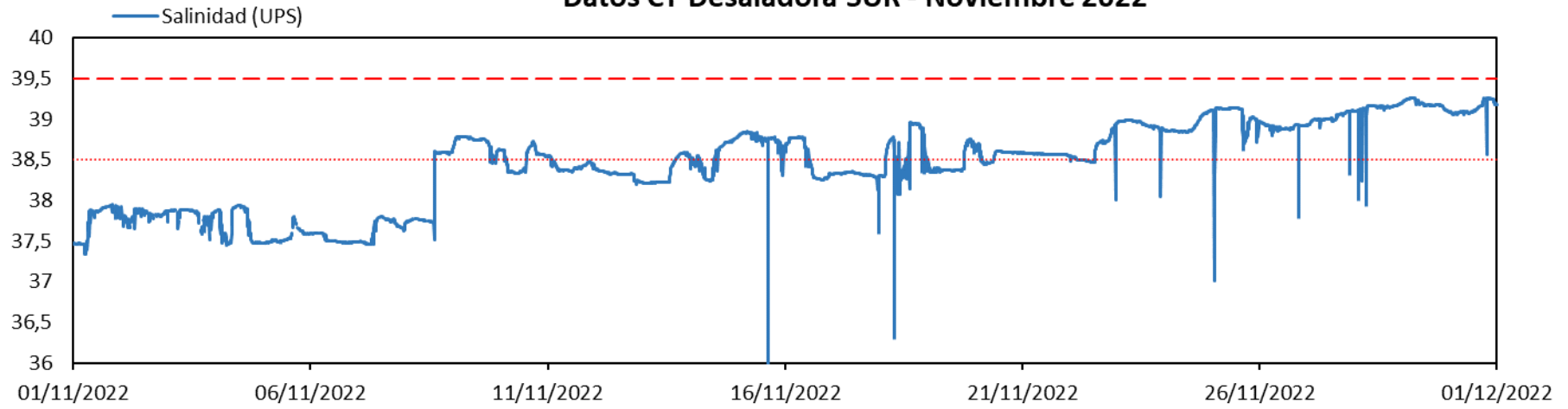
Datos CT Desaladora - Noviembre 2022



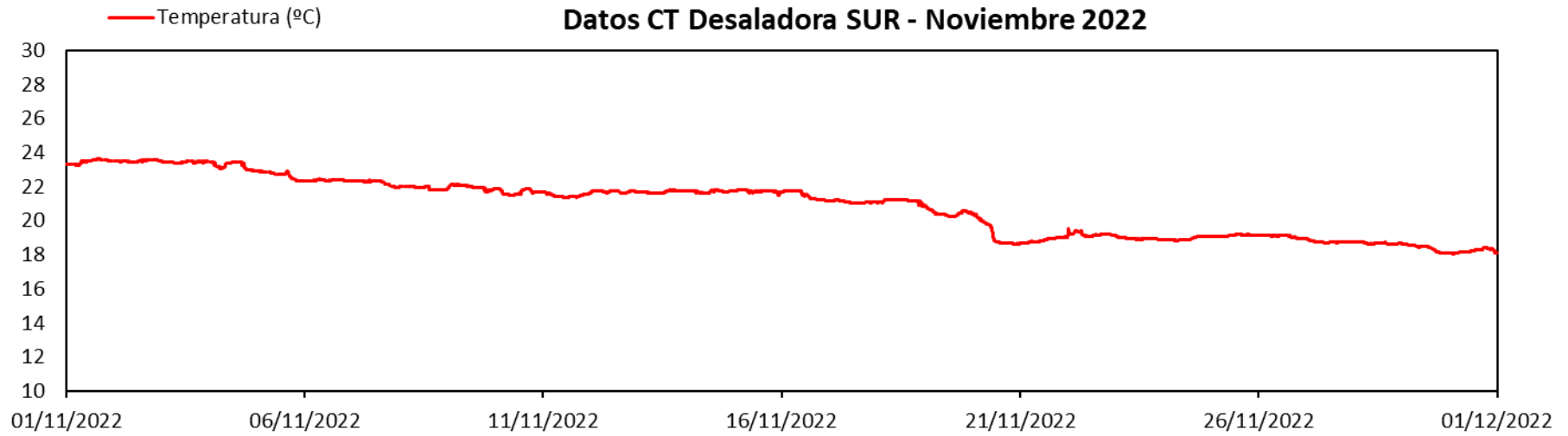
Datos CT Desaladora - Noviembre 2022



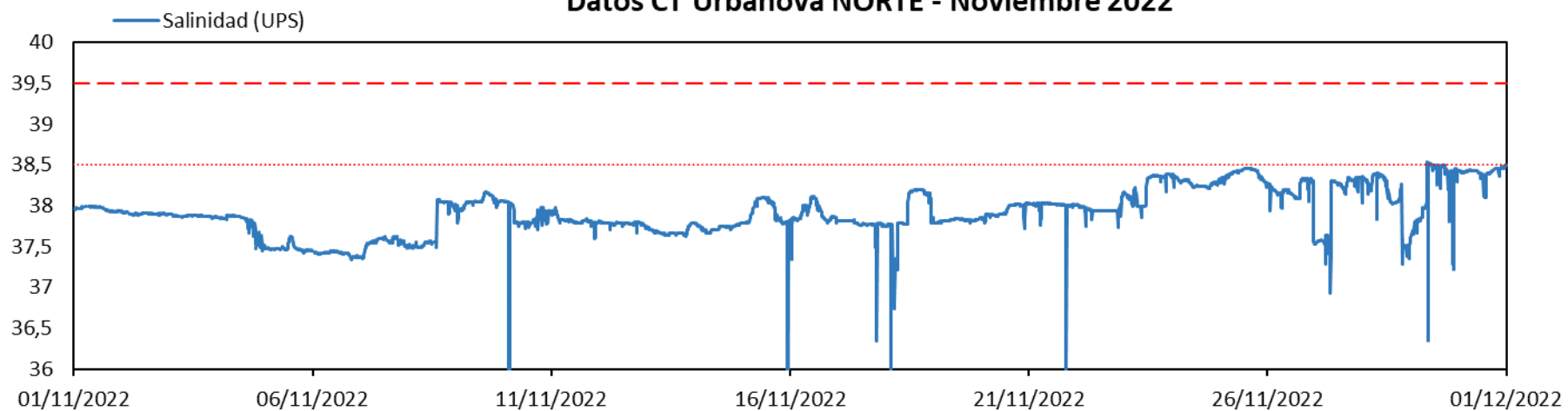
Datos CT Desaladora SUR - Noviembre 2022



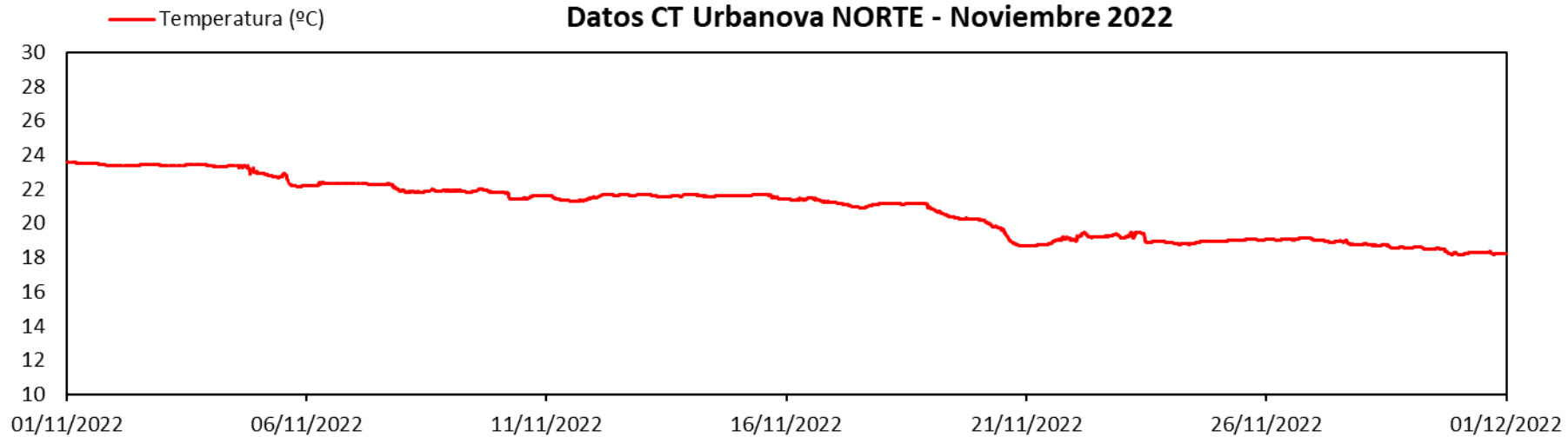
Datos CT Desaladora SUR - Noviembre 2022



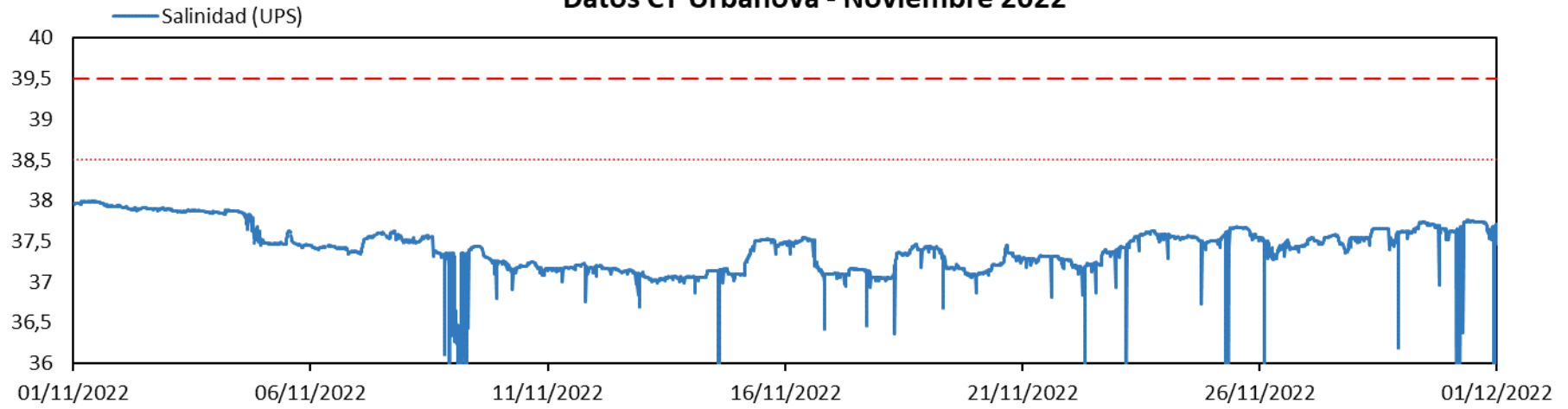
Datos CT Urbanova NORTE - Noviembre 2022



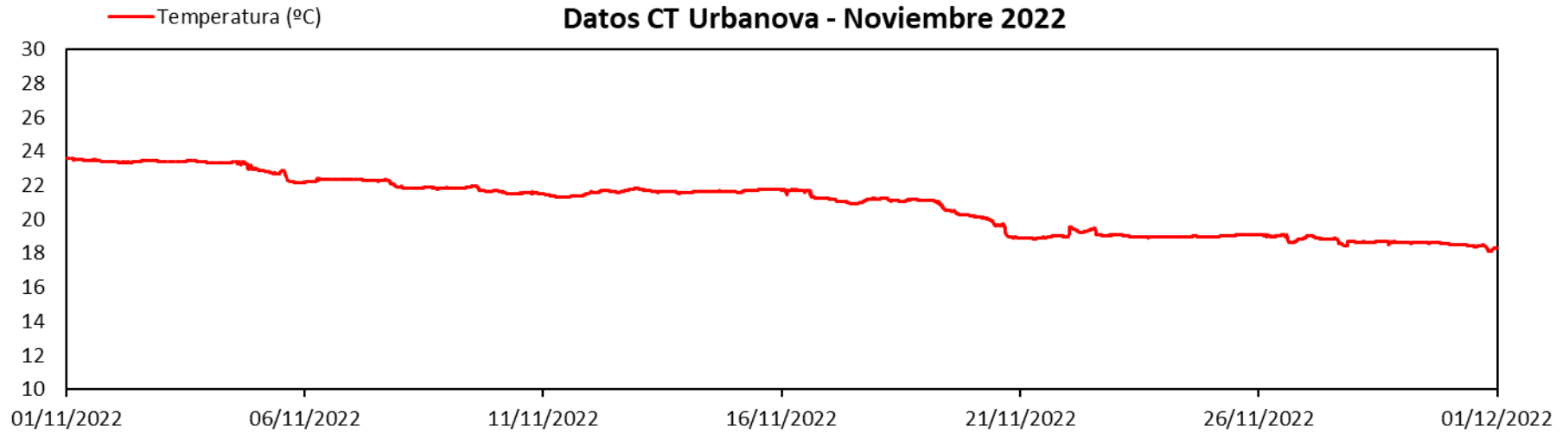
Datos CT Urbanova NORTE - Noviembre 2022

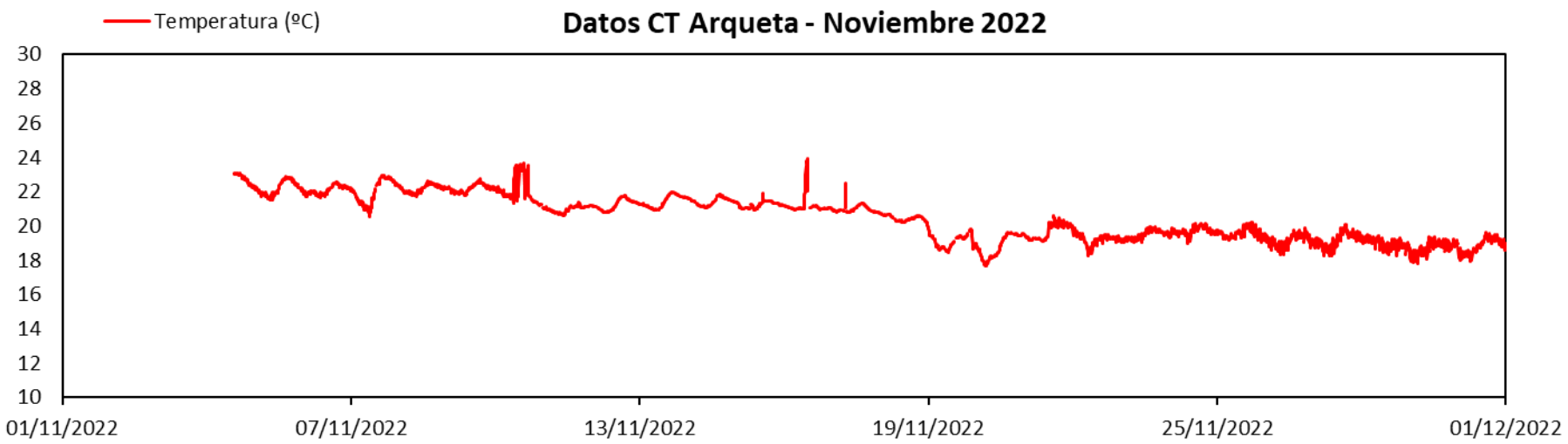
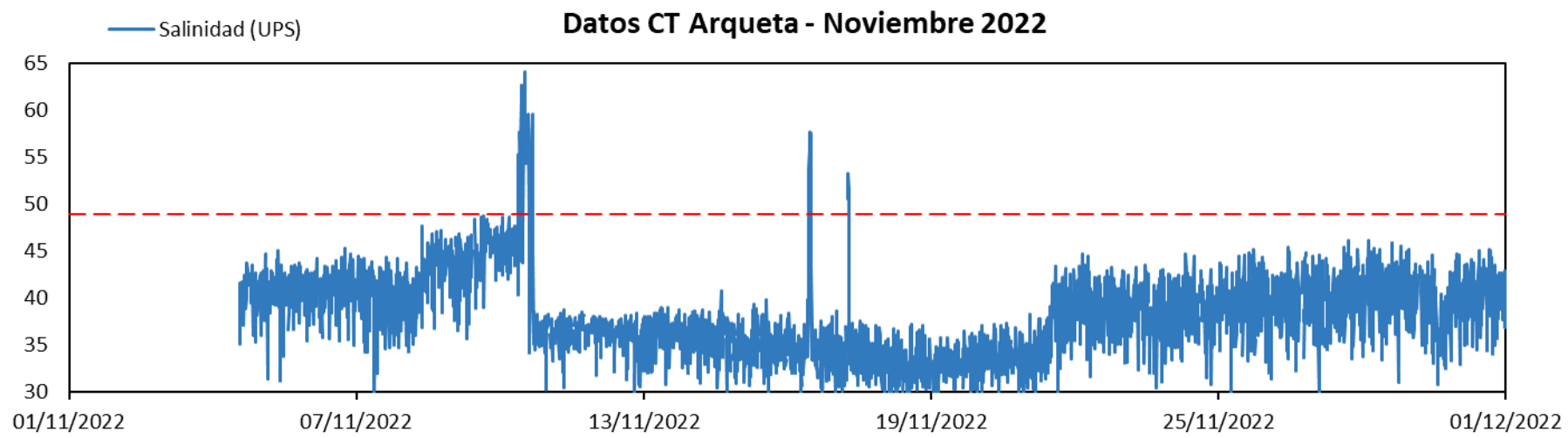


Datos CT Urbanova - Noviembre 2022



Datos CT Urbanova - Noviembre 2022





Datos mensuales – Diciembre 2022:

