Marine-coastal waters monitoring campaign

Monitoring campaign along Veneto coast was carried out november 9th, 12th and 14th, in collaboration with Venice Coastal Guard.

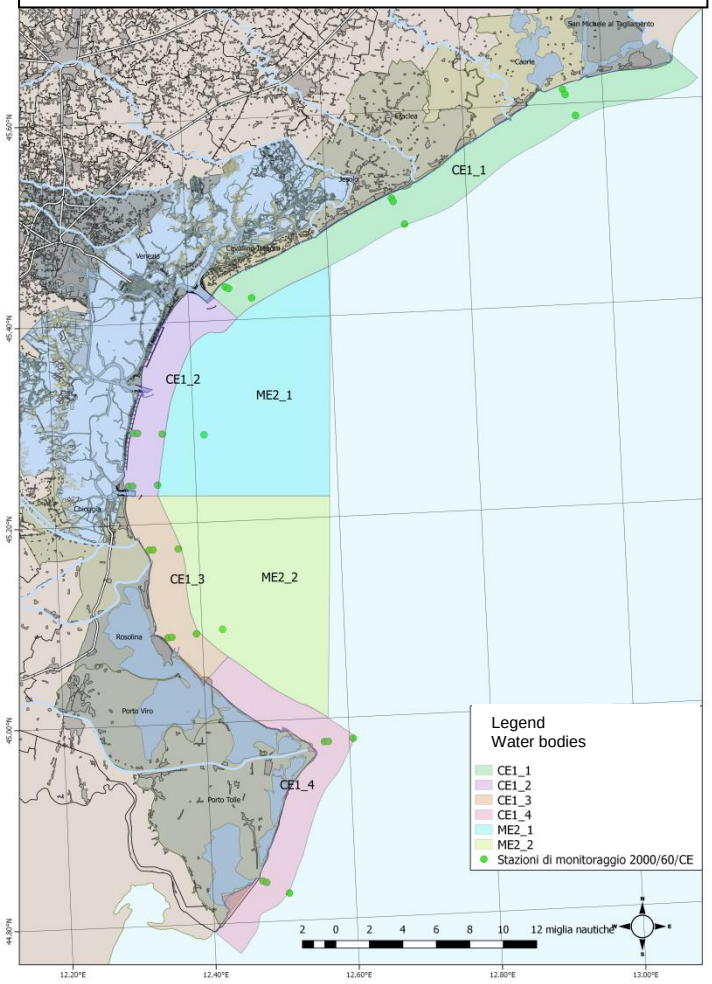
Considerations on the parameters detected

Following the exceptional precipitation of 27-30 October, the marine waters of the Veneto region were affected by substantial river inflows as shown by the satellite images, Figg.1-2 (Sentinel-2 Copernicus Project, Sentinel Hub EO Browser).
The salinity distribution map (Fig. 3) shows how the values, measured by means of a multiparametric probe during the monitoring campaign, are higher in the area north of Sottomarina than in the south area where the dilution is more pronounced even offshore.
In the stretch of coast affected by the Po di Tolle (loc. Barricata) the lowest values of surface salinity were detected (3.2 PSU).
The table below shows the superficial values of the main physico-chemical parameters averaged by body of water.
The water temperature is lower in correspondence with the areas affected by the fluvial contributions; the values of chlorophyll and dissolved oxygen are normal.

	Water Bodies					
Parameters	**CE1_1**	**CE1_2**	**CE1_3**	**CE1_4**	**ME2_1**	**ME2_2**
Water temperature °C	16.75	16.47	15.17	14.75	16.54	15.61
Salinity PSU	33.63	28.52	18.66	12.56	28.48	25.11
Dissolved oxygen %	93.74	103.82	95.03	90.26	104.60	98.27
Dissolved oxygen ppm	7.43	8.53	8.52	8.46	8.59	8.39
pH	8.16	8.18	8.07	8.05	8.25	8.22
Chlorophill "a" µg/l	0.88	2.40	2.03	2.03	2.38	1.98
Turbidity FTU	4.24	3.33	5.31	10.26	3.24	4.42

The transparency values, detected by Secchi disk, are on average less than one meter in the Po Delta area and higher in the coasts north of the Venice Lagoon. The observations made with underwater camera did not show any critical issues.

Water bodies and marine-coastal water monitoring network



Sentinel-2 Image

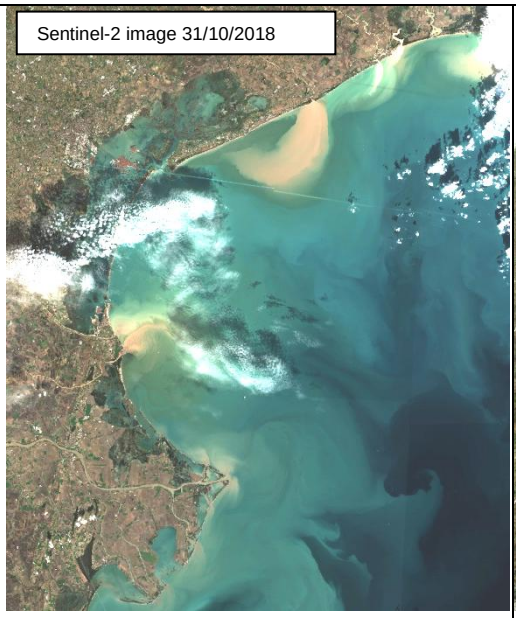


Fig. 1

Fig. 2

Salinity distribution maps

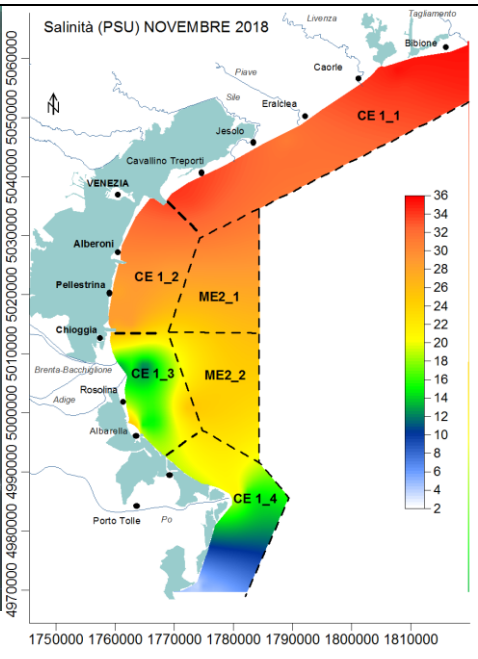


Fig. 3

Servizio Centro Veneto Acque Marine e Lagunari
Tel. 049-7393727 e-mail: oaa@arpa.veneto.it