

Web-tool for data/image storing and querying

Deliverable D_5.2.6

Contributing partners:

LP – UNIPD DICEA

PP1 – CNR IGG

Table of contents

Table of contents	1
1. Introduction	2
2. Webtool structure.....	3

1. Introduction

A website <https://most.dicea.unipd.it/> has been developed within the LP domain to store graphical information developed within MoST and to store, query, and download the dataset with the main hydrological parameters and records acquired by the monitoring network established in the Venice site (i.e., the dataset that can be “only” visualized through the MoST App). The webtool is not intended to be a comprehensive collection of the whole dataset acquired and analyses developed in the MoST project but more to show a selection of the most important graphical elaborations that highlight in a glance and in a simple and short time-consuming way the main outcomes. The home page of the website is shown in Figure 1.

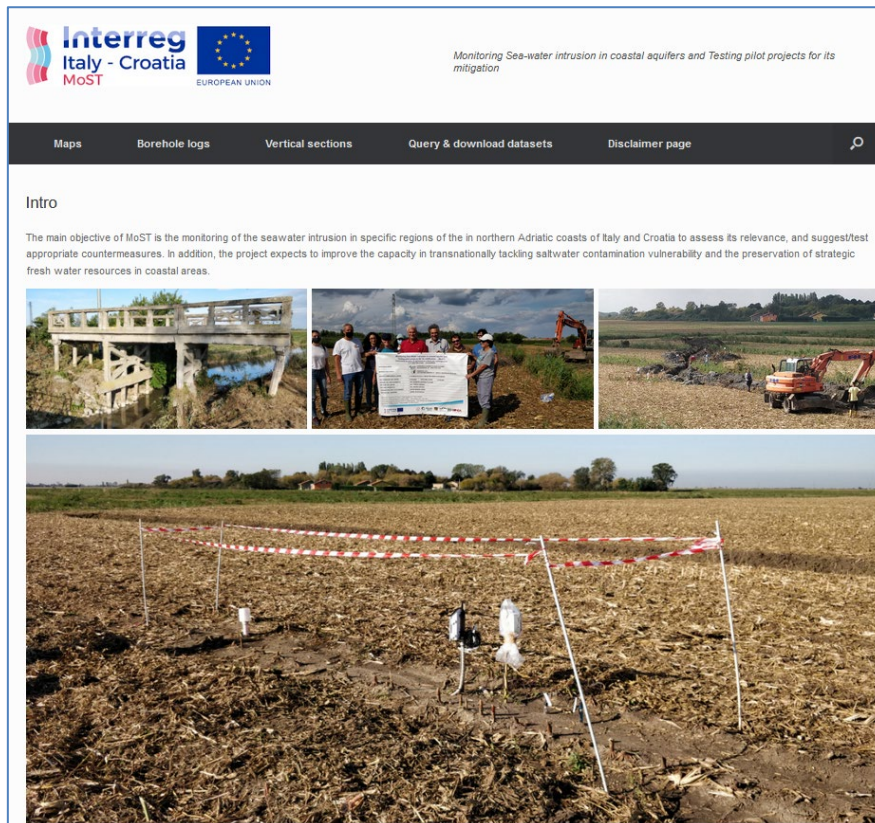


Figure 1 – Homepage of the MoST webtool developed in DICEA and hosted in the University of Padova server (<https://most.dicea.unipd.it/>)

2. Webtool structure

The website, which is accessible by any browser, is structured with various pages as follows:

- Maps:
 - “regional” scale:
 - Hydro-geo-morphological map
 - Vulnerability map (Figure 2)
 - Location of the monitoring sites
 - “local” scale:
 - Location of the monitoring sites
 - Yearly crop production (Figure 3)

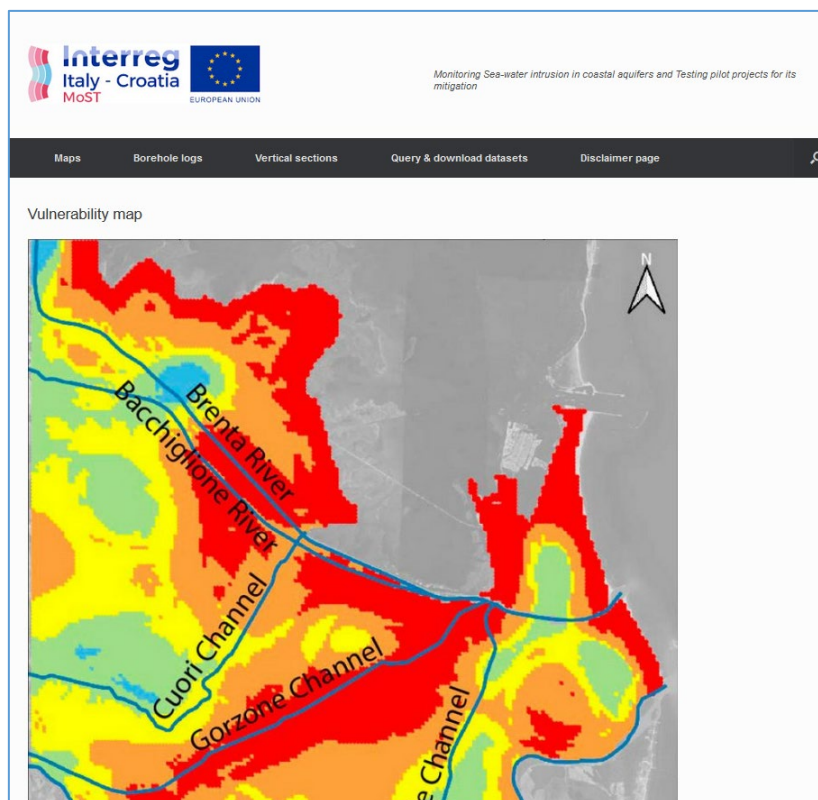


Figure 2 – MoST webtool: the webpage <https://most.dicea.unipd.it/vulnerability-map/> showing the vulnerability map to saltwater intrusion developed in the project



Figure 3 – MoST webtool: the webpage <https://most.dicea.unipd.it/yearly-crop-production/> showing the productivity of the pilot site as measured in the year 2021.

- Borehole logs:
 - Lithostratigraphic dataset
- Vertical sections:
 - Hydrogeological sections
 - ERT sections (Figure 4)
- Query & download datasets:

- MoST App datasets: the webtool provides a direct access to the MoST App to visualize and query the past dataset and the present records collected by the instrumentations deployed in the pilot site.
- Other data manually collected:
 - Depth to the water level
 - Saltwater concentration in the aquifer
 - Saltwater concentration in the watercourses (Figure 5)
- Disclaimer page: how to use the data collected by the various groups and give “right” to the “data owner”

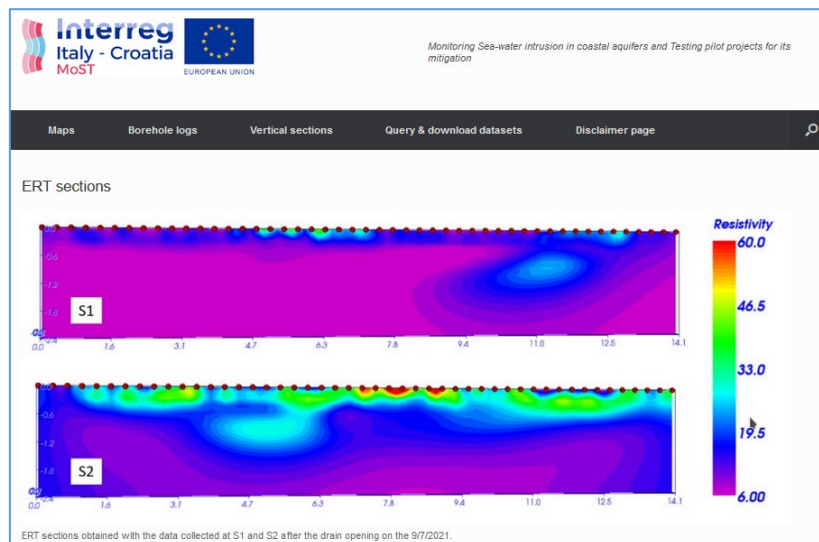


Figure 4 – MoST webtool: the webpage <https://most.dicea.unipd.it/ert-sections/> showing ERT sections obtained with the data collected at S1 and S2 after the drain opening on the 9/7/2021.



Figure 5 – MoST webtool: the webpage <https://most.dicea.unipd.it/ert-sections/> allowing query the monitoring dataset

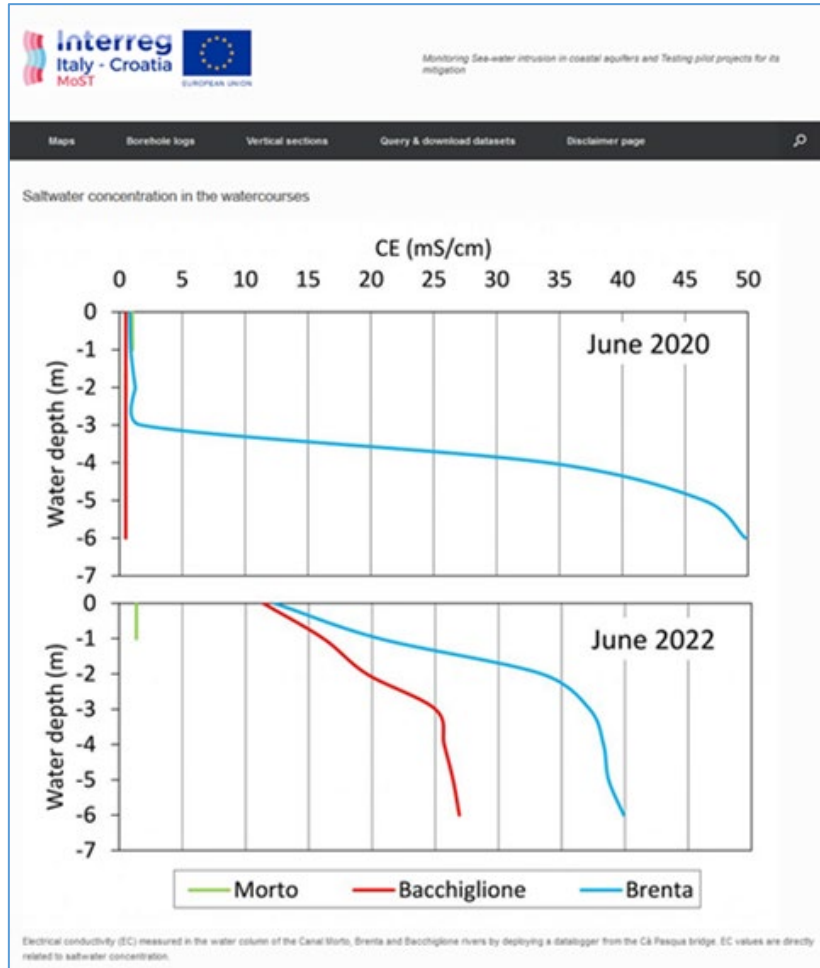


Figure 6 – MoST webtool: the webpage <https://most.dicea.unipd.it/saltwater-concentration-in-the-watercourses/> showing the electrical conductivity (EC) measured in the water column of the Canal Morto, Brenta and Bacchiglione rivers by deploying a datalogger from the Cà Pasqua bridge. EC values are directly related to saltwater concentration. Notice the worst condition in summer 2022 with respect to those in summer 2020.