App for real-time saltwater values to be used by farmers and public authorities

Deliverable D_5.2.5

Contributing partners:

LP – UNIPD DICEA

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1. Introduction

The MoST App (developed for Android systems only) will allow to take under control and check constantly the behavior of the main hydrological parameters acquired by the monitoring network established in the Venice site.

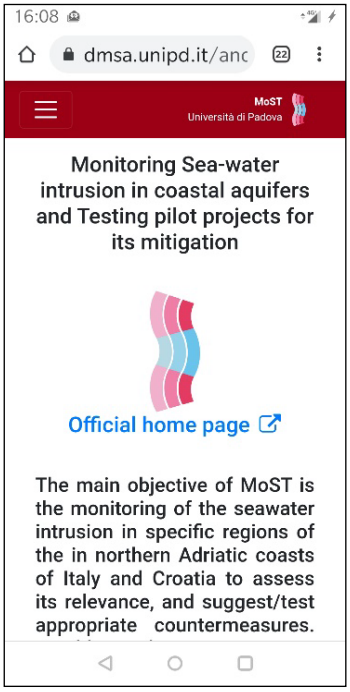
The App is downloadable from the website https://most.dicea.unipd.it/ . The two main goals of the App are:

- Visualization of the hydrological parameters recorded in the MoST Venice site;
- Real-time surveillance of key parameters and alarming system.

2. The App MoST structure and functionality

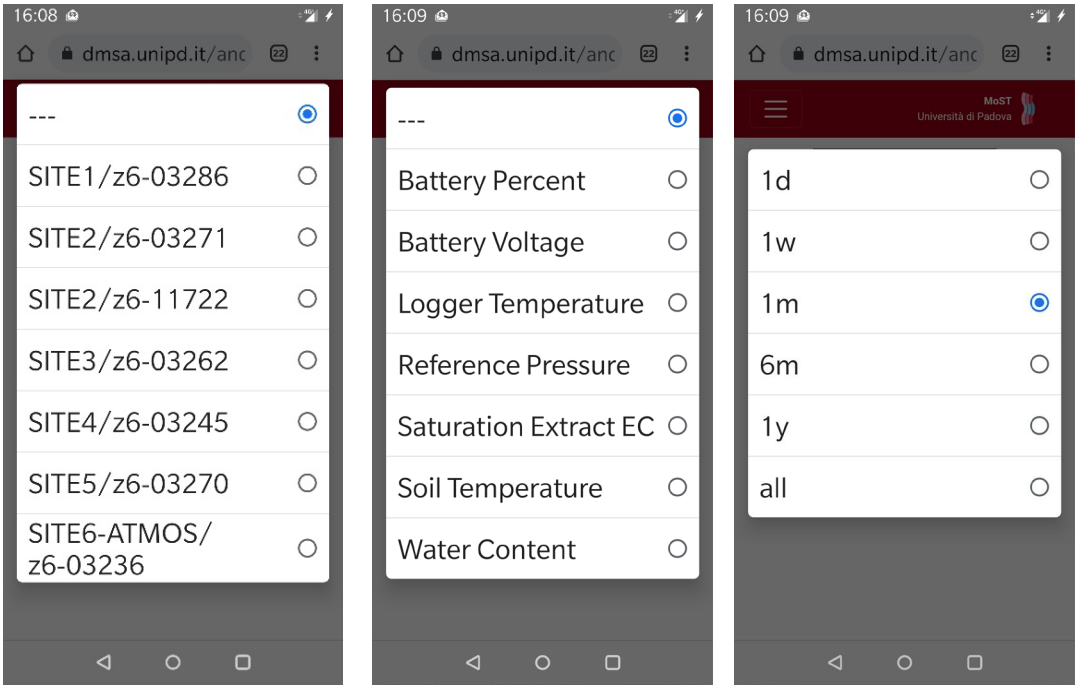
The App MoST is composed by four main pages:

- Main page: an introduction to the Most



- Partner page: it contains information about the MoST partners

- Site page: it allows to visualize the behavior versus time of the various sensors monitoring the hydrological parameters and remotely transmitting the recorded information. Selection is carried out based on: a) the name of the monitoring station, b) the parameter of interest (e.g., capillary pressure, rainfall, wind, saturation); and c) the time interval of interest (1 day, 1 week, 1 month, 6 months, 1 year, the whole dataset)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dmsa.unipd.it/anc

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SITE2/z6-03271
SITE2/z6-11722
SITE3/z6-03262
SITE4/z6-03245
SITE5/z6-03270
SITE6-ATMOS/
z6-03236
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dmsa.unipd.it/anc

Battery Percent
Battery Voltage
Logger Temperature
Reference Pressure
Saturation Extract EC
Soil Temperature
Water Content
16:09
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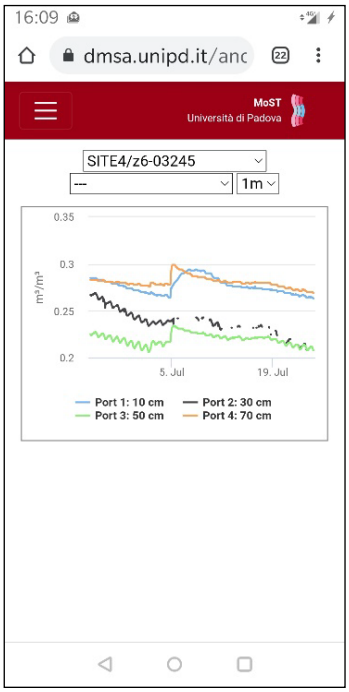
MoST
Università di Padova
1d
1w
1m
6m
1y
all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dmsa.unipd.it/anc
MoST
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SITE4/z6-03245

1m
0.35
0.3
0.25
0.2
m³/m³
5. Jul
19. Jul
Port 1: 10 cm
Port 2: 30 cm
Port 3: 50 cm
Port 4: 70 cm

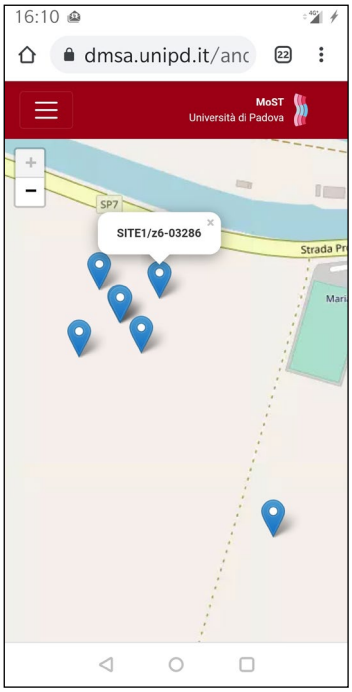
The various profiles can be selected / unselected simply clicking on the curve legend, zoom can be changed playing on the touchscreen, the exact date, sensor depth/elevation, parameter value can be obtained touching the screen in the point of interest.

The sensors presently available refer to:

a) the stations established within the crop fields;
b) the water level and water conductivity monitoring stations that will be established by Consorzio di Bonifica Adige-Euganeo in the Morto Channel (in front of the MoST recharge drain).

The future plan is to add the depth to the water level and conductivity measurements collected by CNR in the deep boreholes The curves are updated hourly.

- Map page: it allows to select the monitoring site of interest from a map using the touchscreen



The MoST App will automatically send an alarming message as soon as a set of selected parameters (e.g., sat concentration in the Morto channel, water content in a crop field station) will reach a (maximum or minimum) threshold.: