Manual for an efficient use of the intelligent traffic management system

Ca' Foscari University of Venice

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WP2: Project communication and capitalization activities

ACT 2.4: Thematic meetings

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INTRODUCTION

The software application for the intelligent traffic management system is available at this URL: http://web.ecomobility.dsi.unive.it/
No authentication is required.

The main page of the application is illustrated in Figure 1. It is based on a *map* that can be centered in Rijeka or Venice, according to the user preferences. Over the map a layer of points is displayed. Each point refers to the exact location of a station that monitors environmental data (PM_{10} and NO_2). Once clicked on the point, the application gives access to the data monitored by the specific station.
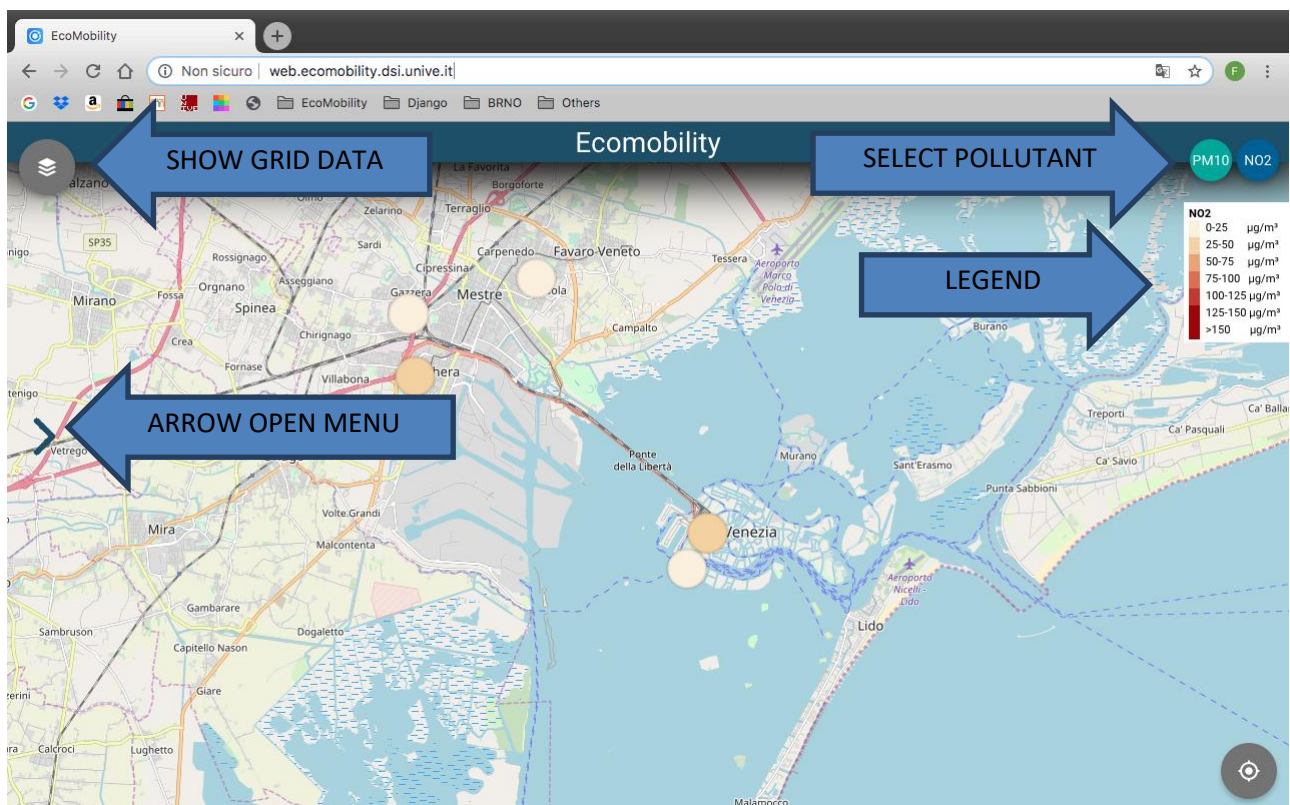

Figure 1 - Main page

The color of the point refers the *last pollution data sample* measured by the corresponding station. The color legend is displayed on the top-right corner of the screen.

On the top of the legend, user can find a couple of buttons useful to change the type of pollutant to display. Once changed, the legend and all the stations colors will change accordingly.

ACCESSESSING AND VISUALIZING POLLUTION DATA

Clicking on one of the circles representing monitoring stations, the page shown in Figure 2 will be displayed.

Figure 2 – Data plots collected by a station

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This page shows the main information about the station and the plots of the pollution measures collected during the last day (blue line). We also show the data mean (pink line) and the limit value (red line). Plots can be hidden to enlarge the other.

Under each plot there is a button to access the historical data about that pollutant and station. The plot is very similar to the previously discussed ones, but in addition the user can change the span of time simply interacting with it (swipe/ pinch to zoom, etc.).
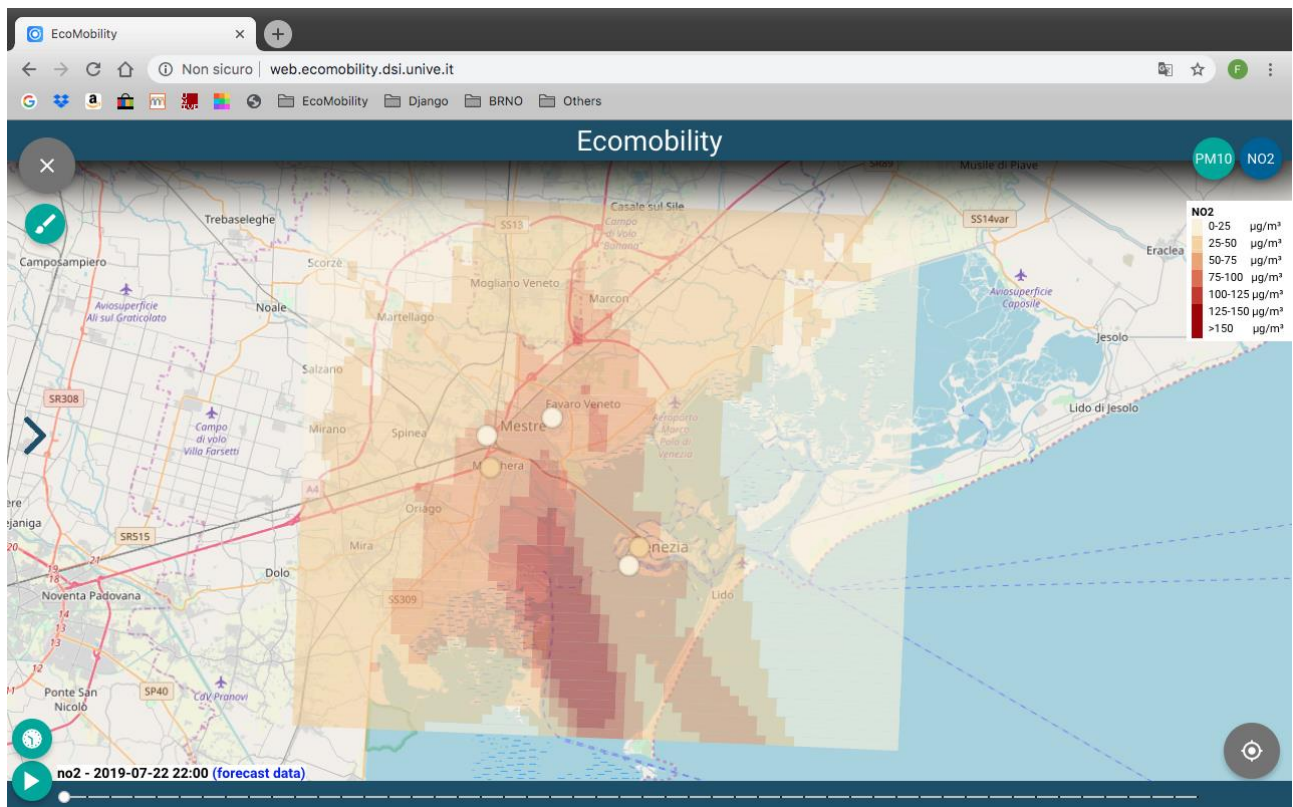

Figure 3 - Grid data

ACCESSESSING AND VISUALIZING GRID-BASED DATA ABOUT PLLUTION DISPERSION

On the top-left corner of the main page there is a button that triggers the visualization of the grid data.[1] Once this button is tapped, the page illustrated in Figure 3 appears.

The grid-based layer on top of the map shows the distribution of the pollutant, and buttons are present to interact with this visualized grid (bottom-left). The bottom slider allows the user to check the forecast grids for the next 72 hours and the play/pause button (on the bottom-left corner) triggers the automatic progression of the slider bar (one step each 3 seconds).

On the top of the play/pause button there is a button (with the clock) that allows the user to look the historical grid data. The way to interact with the historical data is the same as the forecast one.

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[1] The grid-based data are only available for the Venetian zone.