Demand Prediction and Management Tool Step-by-step Training Guide

Transport Sector Consorcio Regional de Transportes Publicos Regulares de Madrid (RTM) - Spain



Content Overview

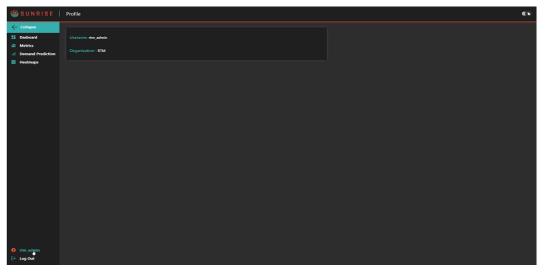


This step-by-step guide helps users navigate the Demand Prediction and Management Tool to analyse forecast data and manage uploads. It forms part of the training materials provided for the solution, alongside the <u>training video</u> for the Consorcio Regional de Transportes Publicos Regulares de Madrid (Spain) pilot in the Transport Sector.



Login & Interface







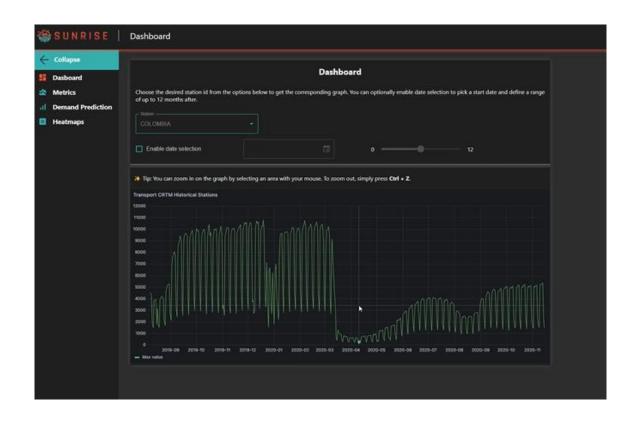
+ Begin by entering your credentials on the login screen.

+ Select the "Remember Me" option if you wish to stay signed in on future visits.

+ After logging in, the main dashboard loads, featuring a left-hand sidebar with navigation links and a toggle to switch between dark and light themes.

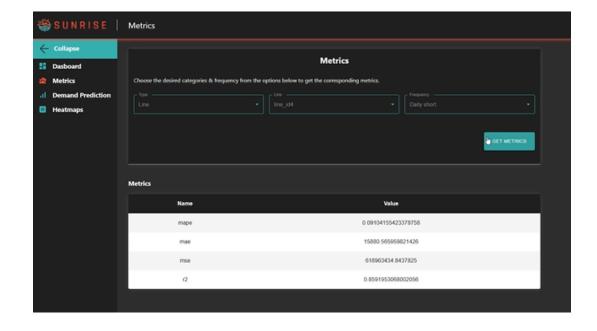
Dashboard Page





- + Use the dropdown to select a Metro station in Madrid, Spain.
- + Explore interactive time series graphs of uploaded transport-related data (E.g. trends and variations across passenger data).
- + You can zoom into specific time ranges (e.g., COVID lockdown) and use Ctrl + Z to reset the view to its default zoom level.

Metrics Page

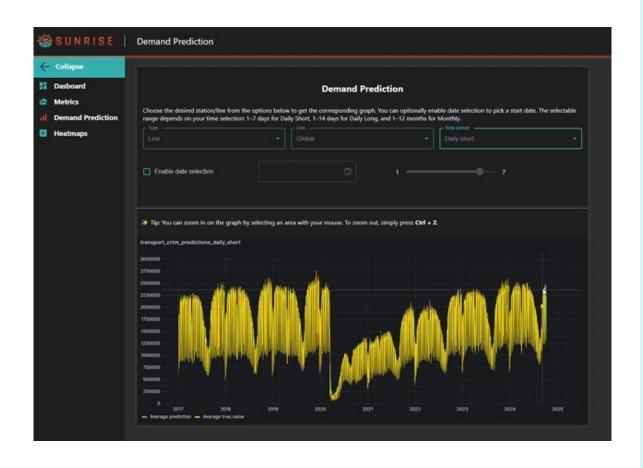




- Navigate to the Metrics section to evaluate model performance.
- + Choose the type of model (station-level or line-level) and select a specific line to refine results.
- + Use the frequency dropdown to set prediction horizon and aggregation (e.g., hourly, daily).
- + Access performance metrics such as:
 - RMSE (Root Mean Squared Error)
 - MAPE (Mean Absolute Percentage Error)
 are displayed in a structured table for easy comparison.

Demand Prediction Page

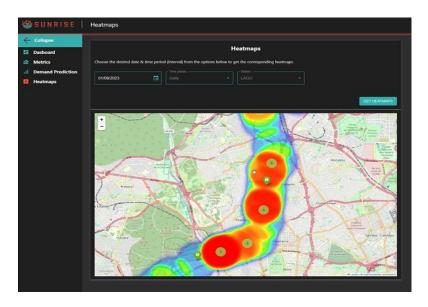


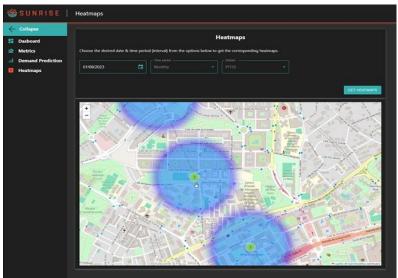


+ Go to the Demand Prediction page and select the type (line or station) and the time period to view upcoming demand projections (daily short, daily long and monthly).

- + A **forecast graph** shows future demand.
- + You can zoom in and use Ctrl + Z to reset the view to its default zoom level.

Heatmaps





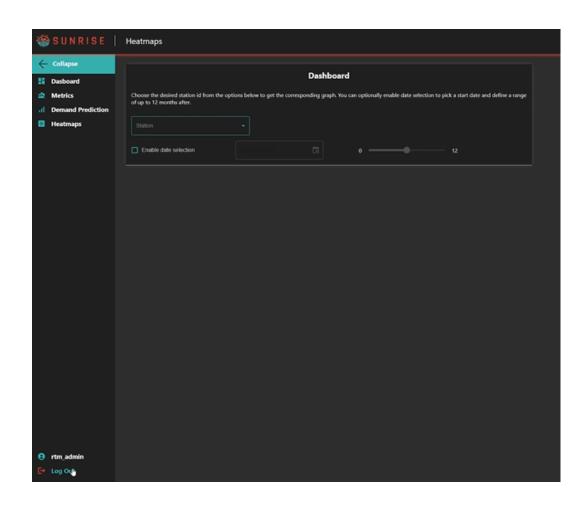


- + Navigate to the **Heatmaps** section to explore metro demand by line.
- + Select a specific **date** within the historical data range.

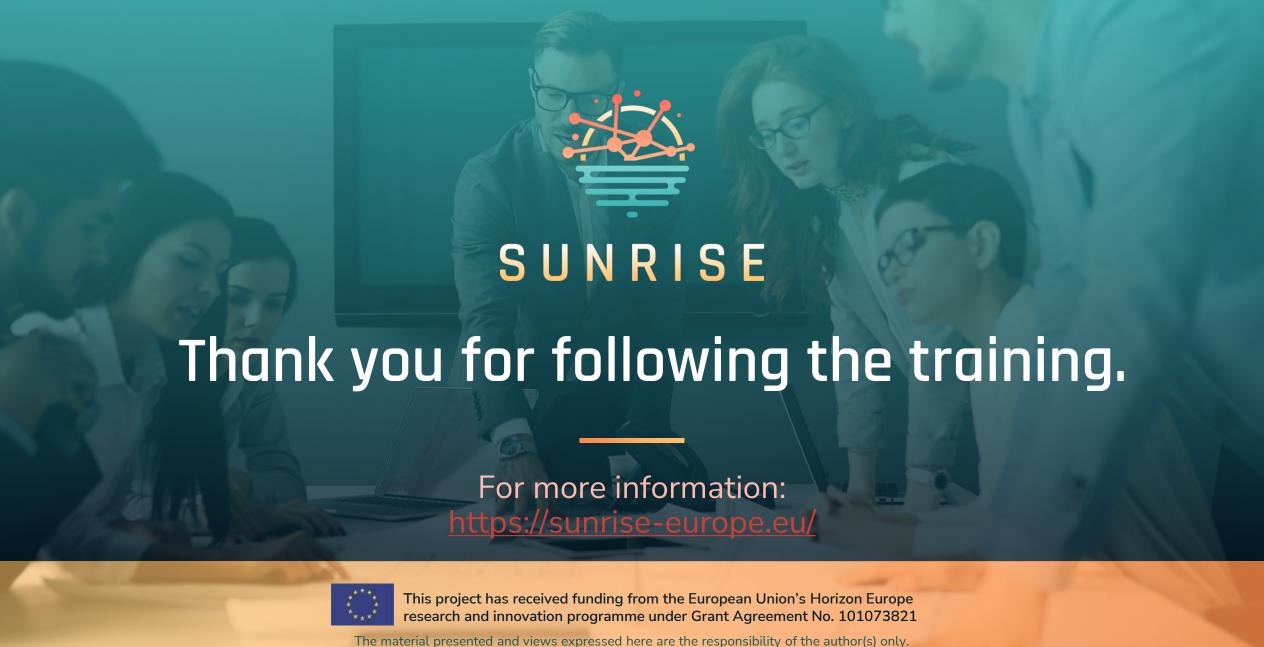
 Use the dropdown to choose an aggregation level (e.g., hourly, daily).
- + An interactive heatmap appears, displaying the **passenger volumes** across the network by line for the selected period. Select a station to center the map.
- + This view helps identify peak usage times, trends, and anomalies in demand across the network. You can zoom and use Ctrl + Z to reset the view.

Logout





+ When finished, simply click to **log out** and end your session securely.



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