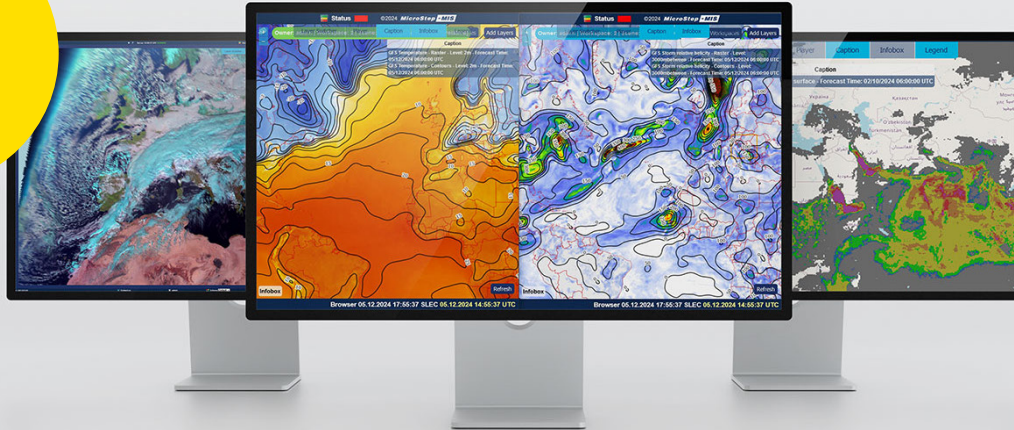


# IMS4 Weather Studio

IMS4 Weather Studio is a distinctive tool designed for processing, analyzing, and graphically presenting a wide range of forecast and observational data.

**New  
features**



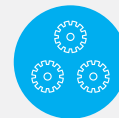
Web IMS4 application



Supports standard  
meteorological formats



Visualizes observational  
and forecast data



Many tools for the operational  
work of a weather forecaster

The easy-to-use tool provides convenient way for objective analysis and displaying of complex data – data outputs from Numeric Weather Prediction models (NWP), objective analysis data from weather stations, radars, satellites.

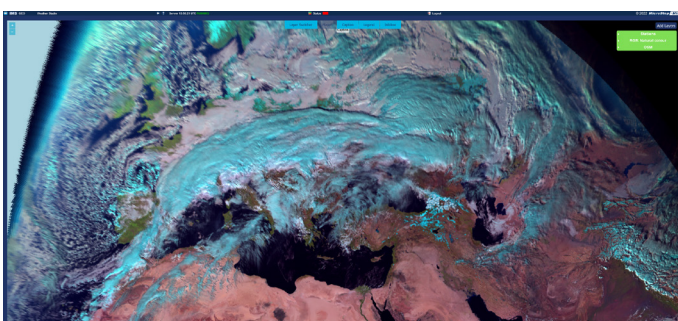
IMS4 Weather Studio can be used by meteorological institutions, forecasting services, crisis centers, airports, and many other users.

## Layered maps

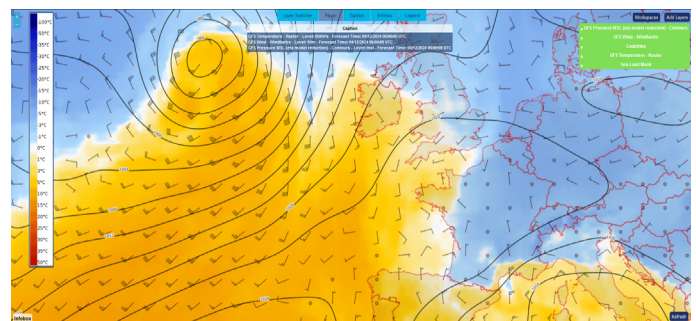
The IMS4 Weather Studio allows easy creating, viewing and

printing of the layered maps. The layers include among others:

- Topography
- Actual or historical weather data from SYNOP and METAR bulletins
- Actual upper air data based on TEMP, PILOT and AMDAR data
- NWP model outputs
- Satellite and radar information
- Lightning locations



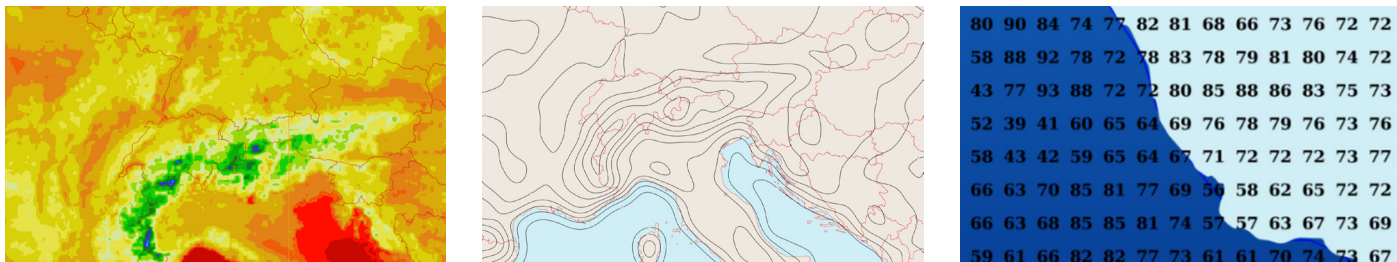
RGB natural color (Contains EUMETSAT product, 2023)



Model data layers in contours and raster

## Weather data

Weather data can be displayed as numeric values at selected locations or grid points, or interpolated in the forms of color gradient fields, isolines and wind barbs.



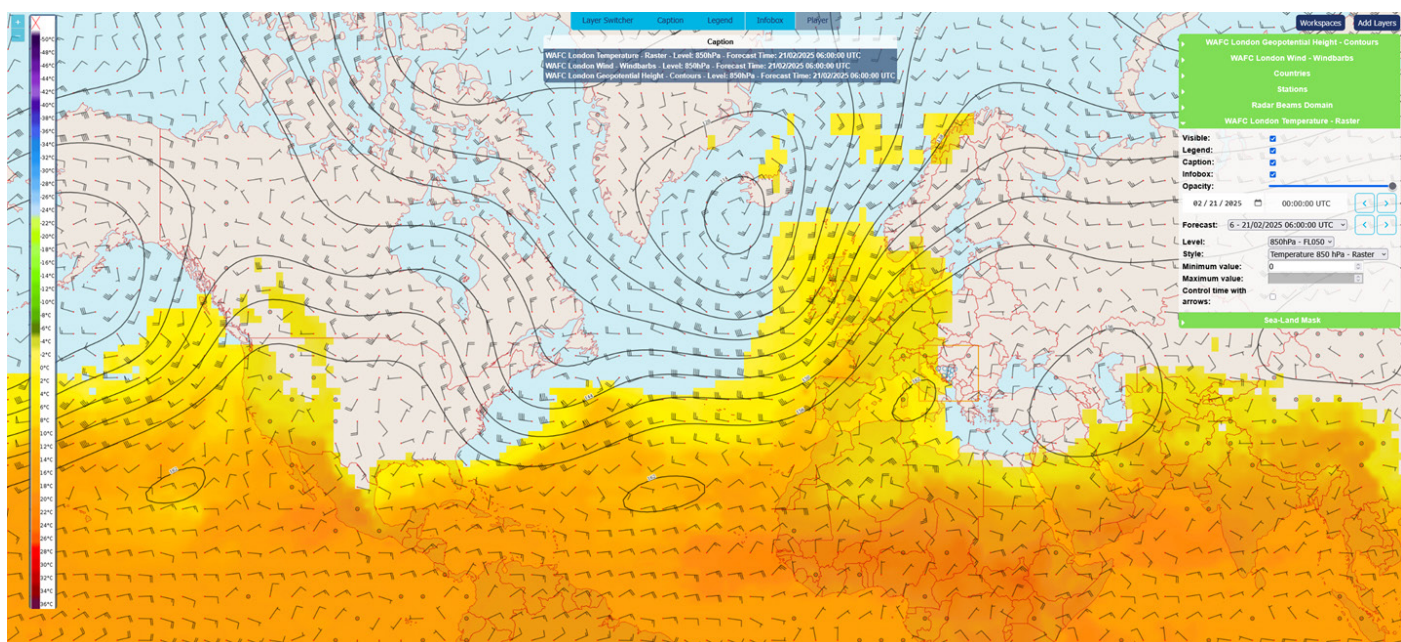
*Different types of visualization of model data*

## Wide range of layer settings

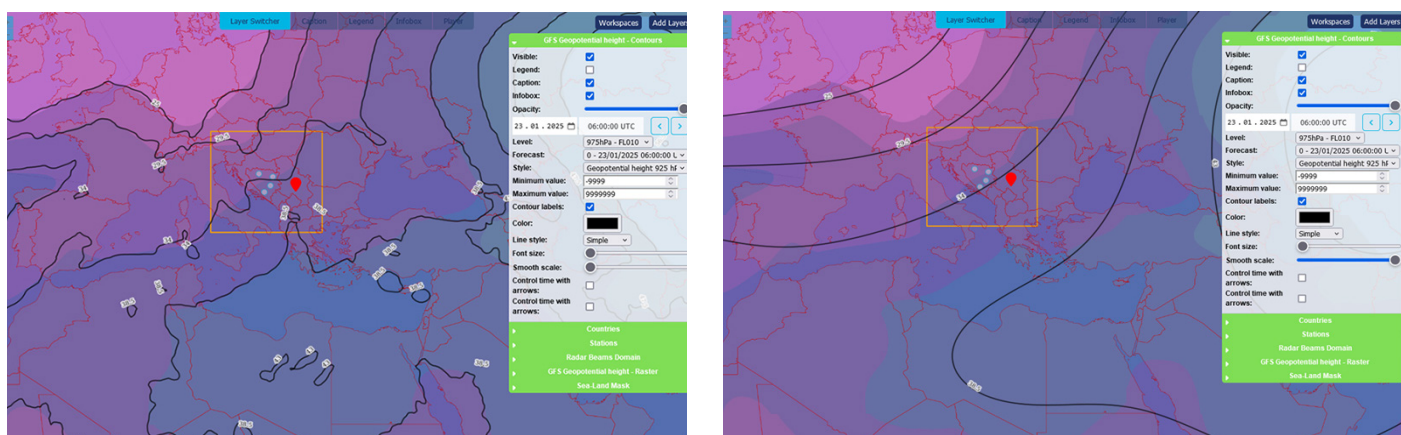
Each layer allows customization by providing a wide choice of setting options allowing to analyze multi-layered maps in the most convenient way:

- Opacity

- Color settings of isolines, grids, windbarbs, parameters in Bjerkness scheme
- Parameter filters
- Density of isolines, grids and windbarbs
- Isolines smooth scale settings and others



*Example of using filtering temperature data (Show values above 0 °C)*



*Example of changing the smoothing scale for isolines*

## Image sequences

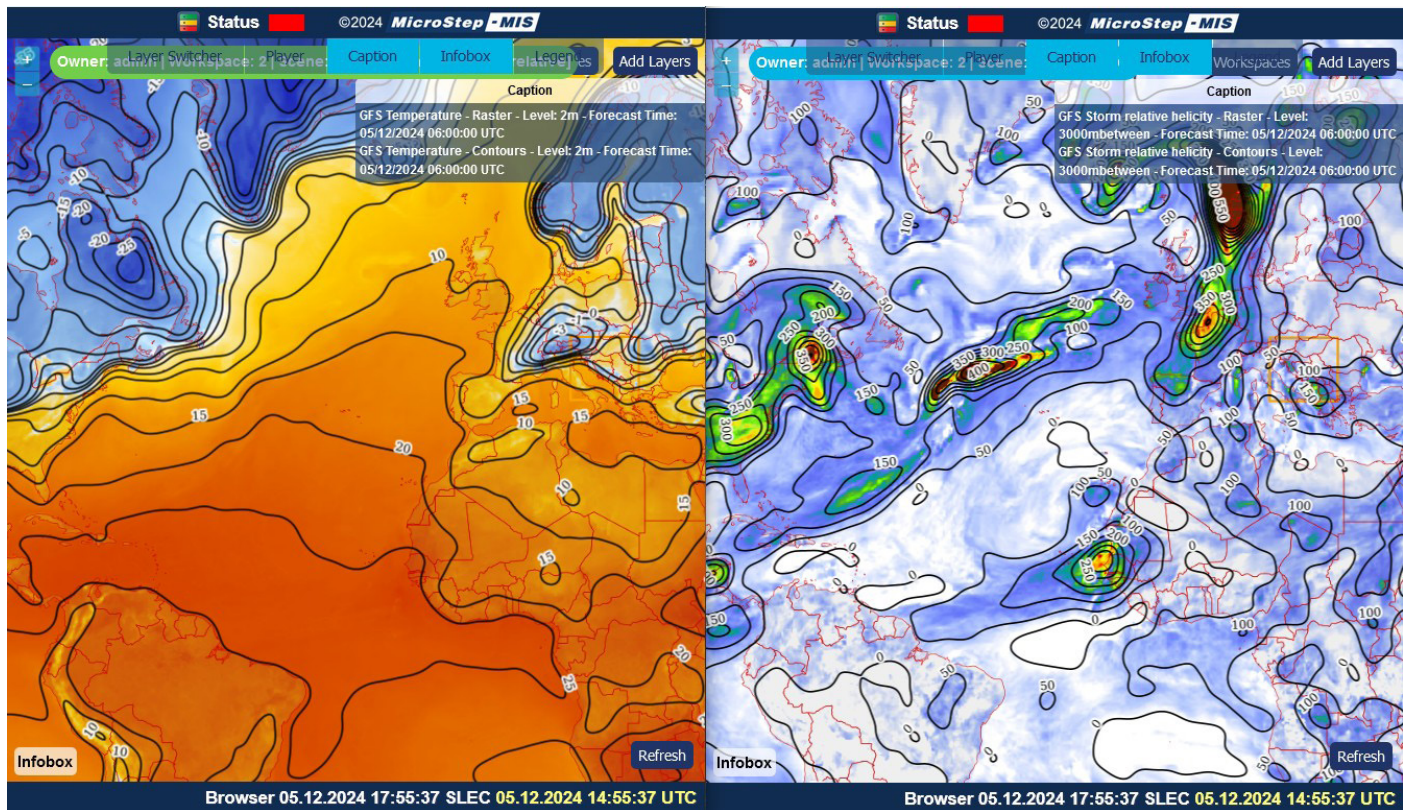
The multi-layered scene can be viewed in one selected moment or as an animated sequence. Animations can be exported to video formats.

## WorkSpaces

The Weather Studio allows to store / restore the workspace for the convenient access to the pre-configured charts with a

specific set of parameters and settings. The same workspace maybe available for different clients.

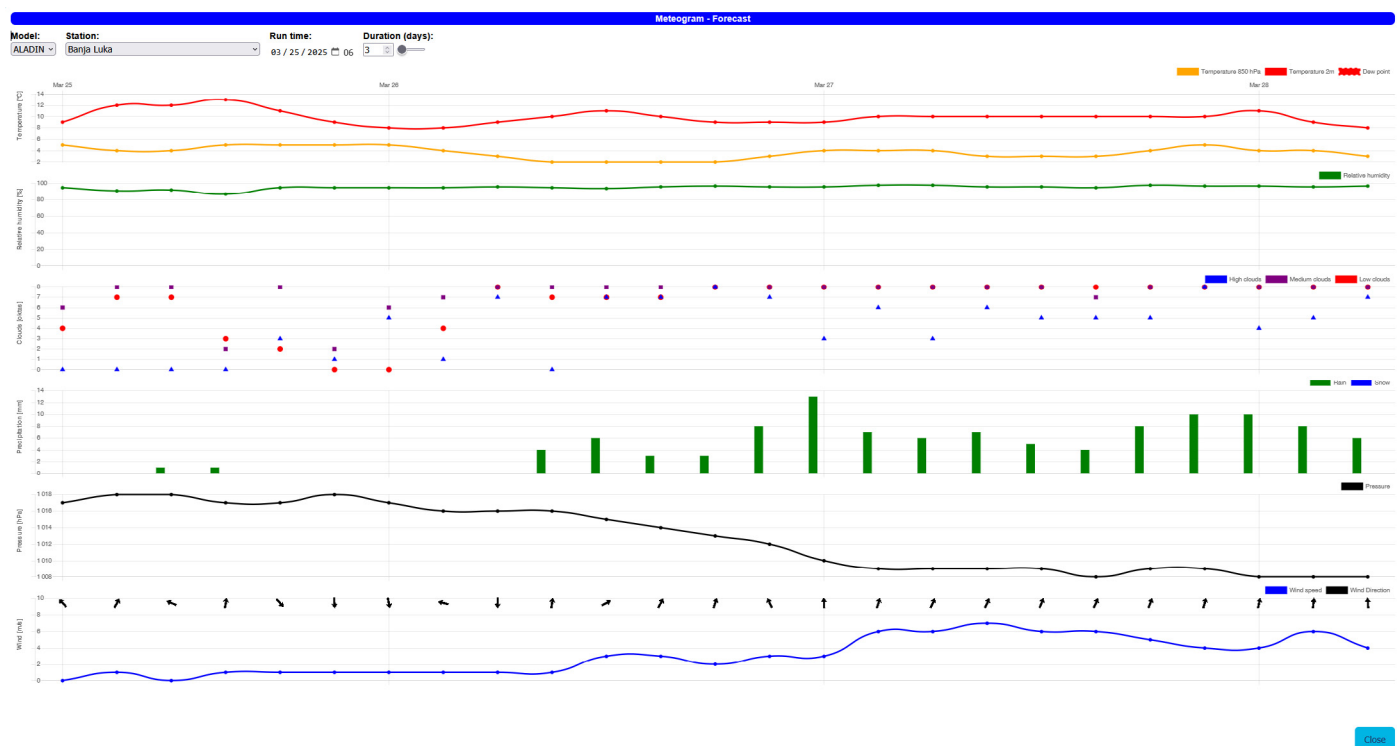
This function also allows to open two or more windows in the synchronized mode, which makes it possible to synchronize windows in projection, space, and time.



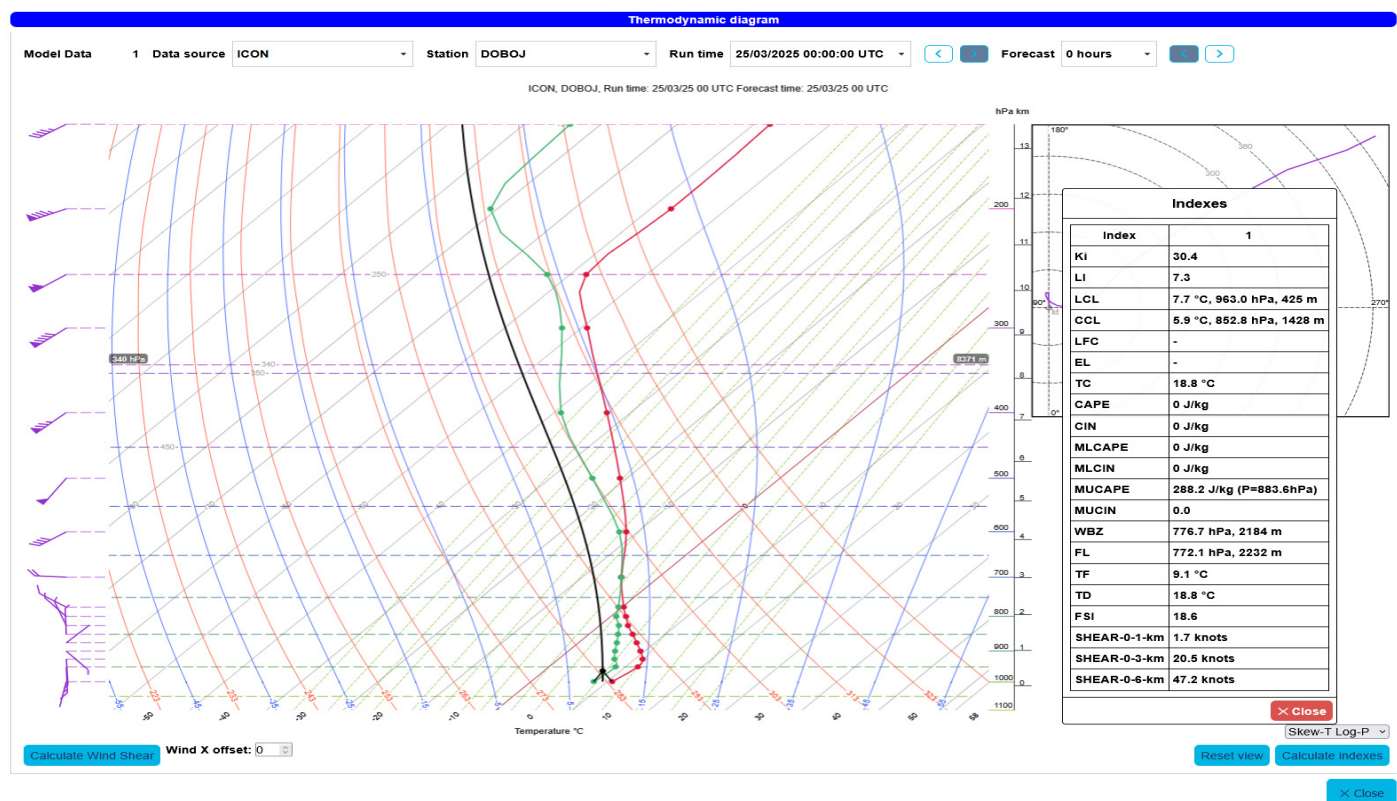
## Graphs and tables

The application provides a wide range of types of two-dimensional data analysis from various sources, such as data observations and NWP models:

- Meteograms (graph and table)
- Time sections
- Cross sections
- 4 types of interactive thermodynamic diagram
- Verification meteograms with model data and measurement



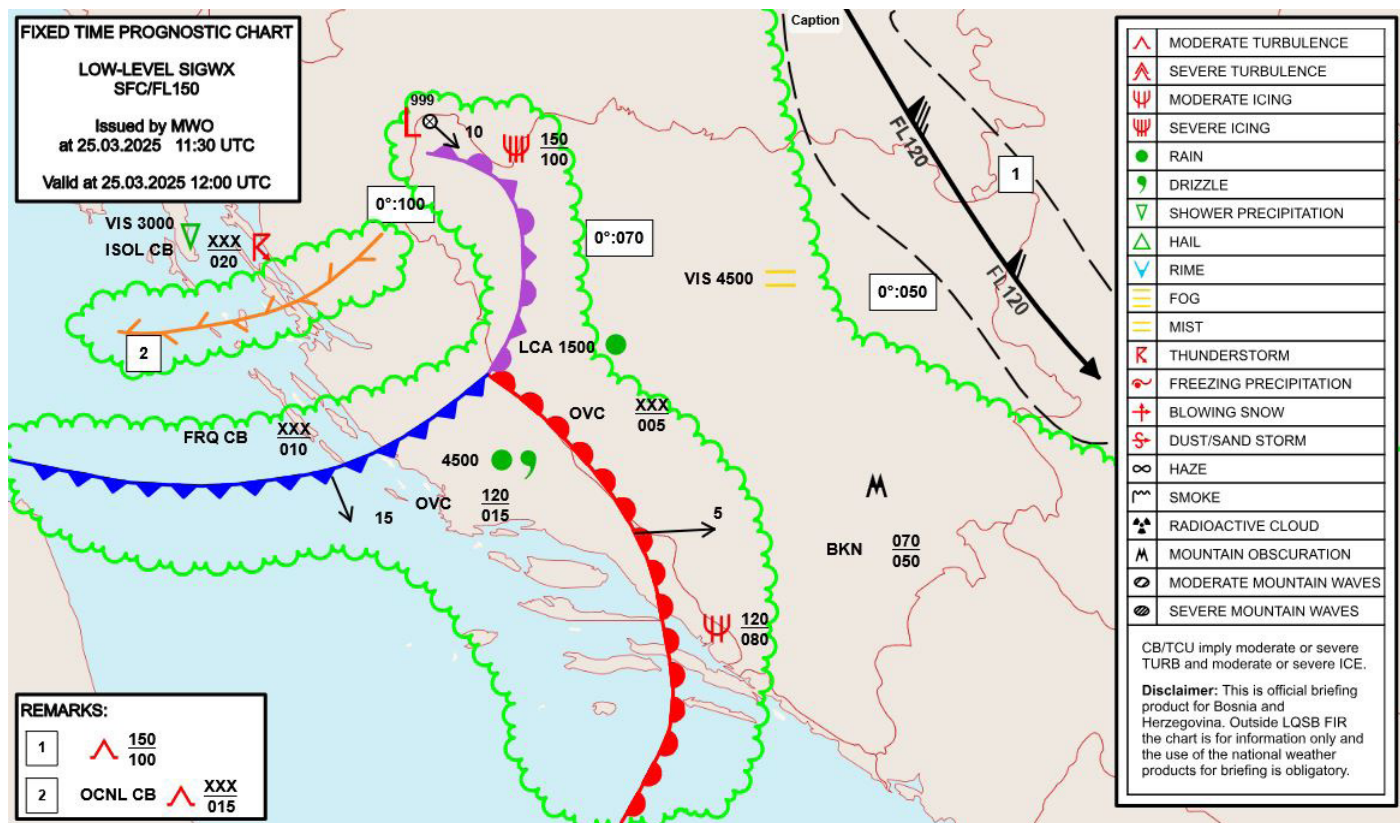
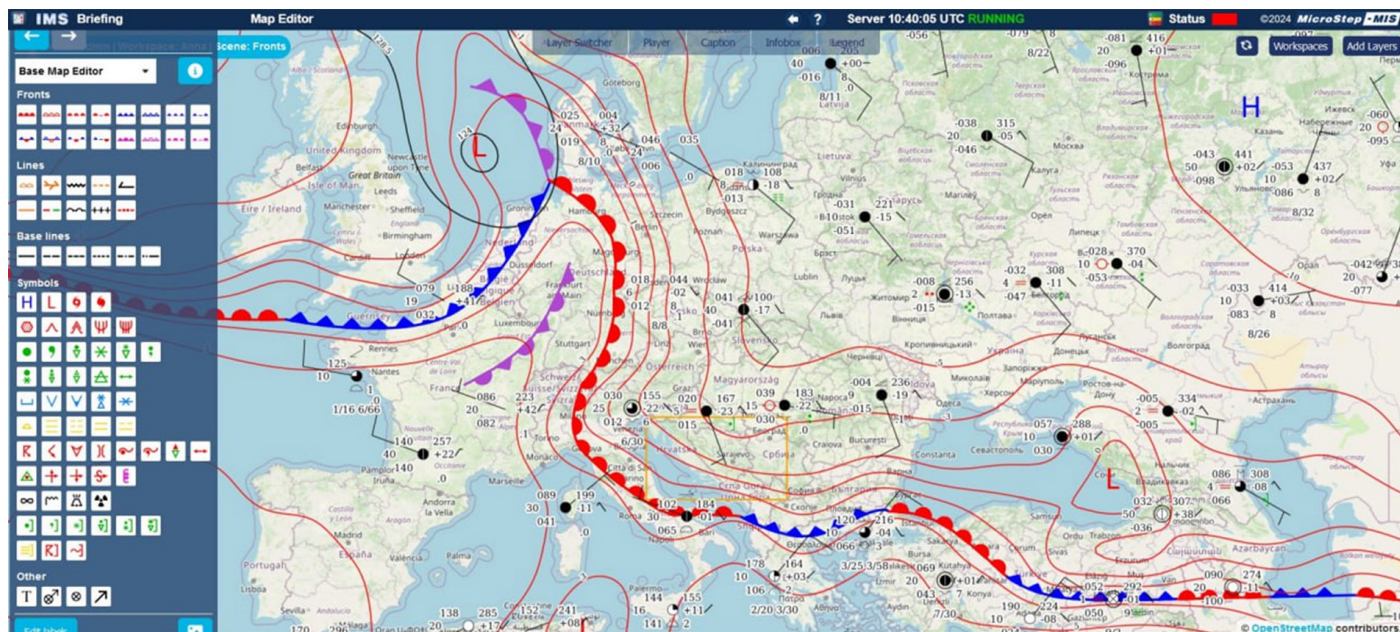
Interactive meteogram



Thermodynamic diagram

## Map Editor

Map Editor enables to add atmospheric fronts, lines and symbols on the any map types for the purpose of synoptic analysis.



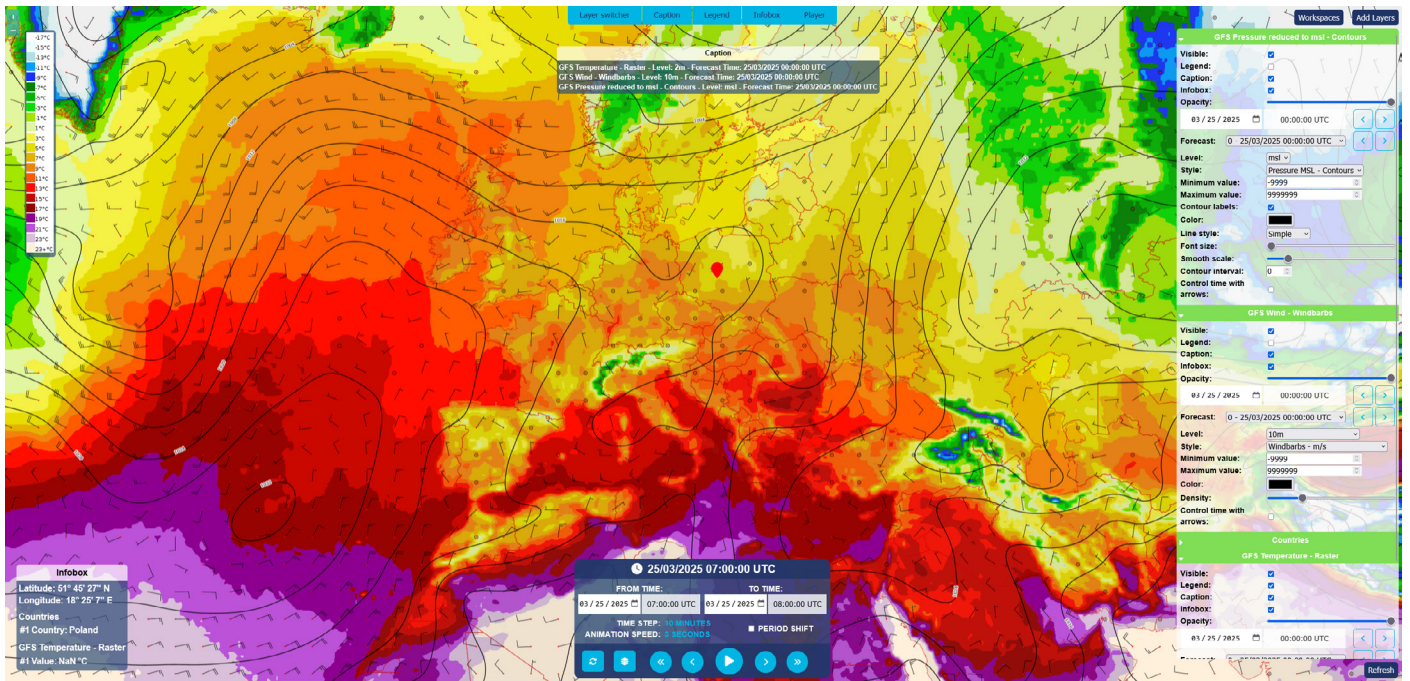
Map Editor has a LL SIGWX mode for creation low-level significant weather charts.

### Cartographic projections & topographic data

The Weather Studio supports different cartographic projections: Mercator, Stereographic projection. Various background images are available to be placed behind or in front of grid lines, including world relief, countries, satellite views.

### Output

The Weather Studio offers export of images, maps and animated sequences into PNG and Geotiff.



*Workspace with a player, layers settings windows, infobox about information at a specific point*