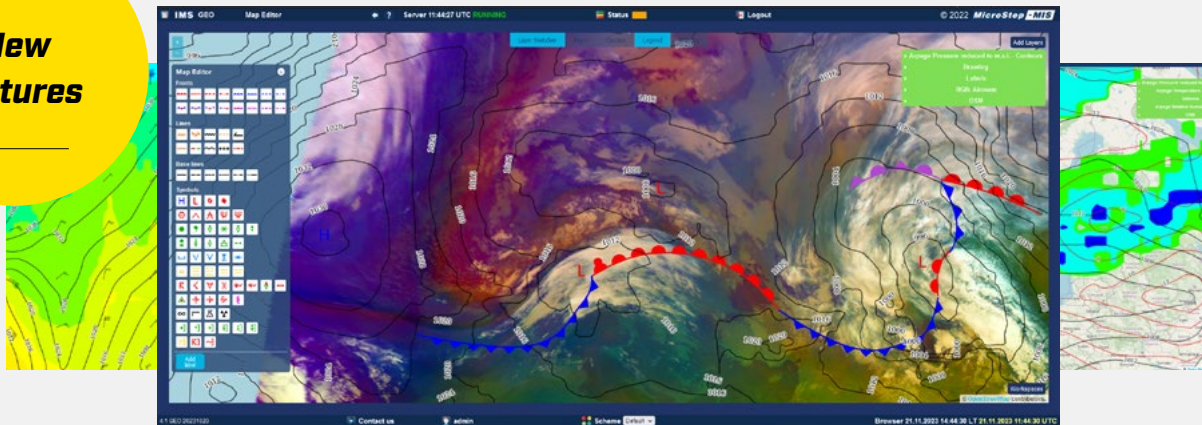


# IMS4 Weather Studio

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

**New features**



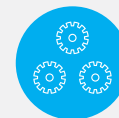
IMS4 web application



Supports standard meteorological formats



Visualizes both observational and forecast data



Offers a range of tools to support the operational work of weather forecasters

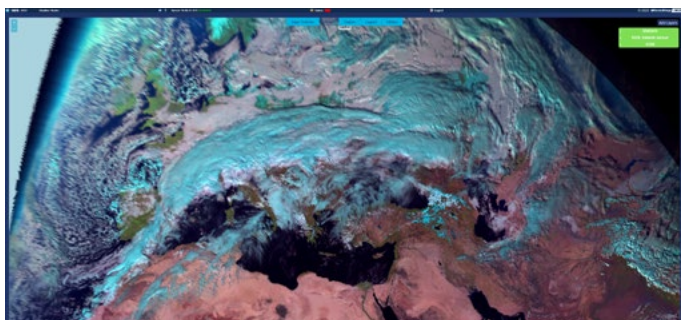
The user-friendly tool offers a convenient means for objectively analyzing and displaying complex data, including outputs from Numeric Weather Prediction models (NWP) and objective analysis data from weather stations, radars, and satellites. IMS4 Weather Studio is suitable for use by meteorological institutions, forecasting services, crisis centers, airports, and various other users.

- Topography
- Actual or historical weather data from SYNOP, METAR, PILOT and TEMP
- NWP model outputs
- Satellite and radar information
- Lightning locations

## Layered maps

The Studio facilitates the easy creation, viewing, and printing of layered maps. The layers encompass, among others:

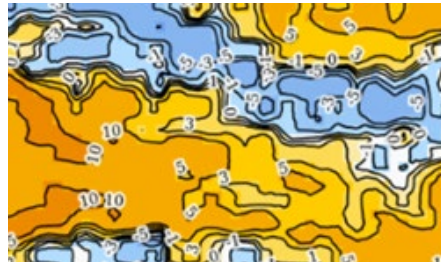
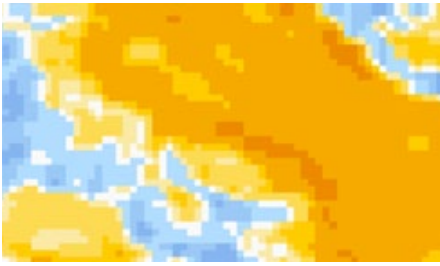
Each layer offers customization through provided settings, enabling the analysis of multi-layered maps in the most convenient manner.



RGB natural color (Contains EUMETSAT product, 2023)



Model data layers in contours and raster



80	90	84	74	77	82	81	68	66	73	76	72	72
58	88	92	78	72	78	83	78	79	81	80	74	72
43	77	93	88	72	72	80	85	88	86	83	75	73
52	39	41	60	65	64	69	76	78	79	76	73	76
58	43	42	59	65	64	67	71	72	72	72	73	77
66	63	70	85	81	77	69	56	58	62	65	72	72
66	63	68	85	85	81	74	57	57	63	67	73	69
59	61	66	82	82	77	73	61	61	70	74	73	67

Different types of visualization of model data

Weather data

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

Image sequences

The multi-layered scene can be viewed at a specific moment or as an animated sequence. Animations can be exported to various video formats.

WorkSpaces

WeatherStudio enables the storage and restoration of workspaces, providing convenient access to pre-configured charts with specific sets of parameters and settings. The same workspace can be made available for different clients. This function also allows the opening of two or more windows in

synchronized mode, enabling synchronization in projection, space, and time.

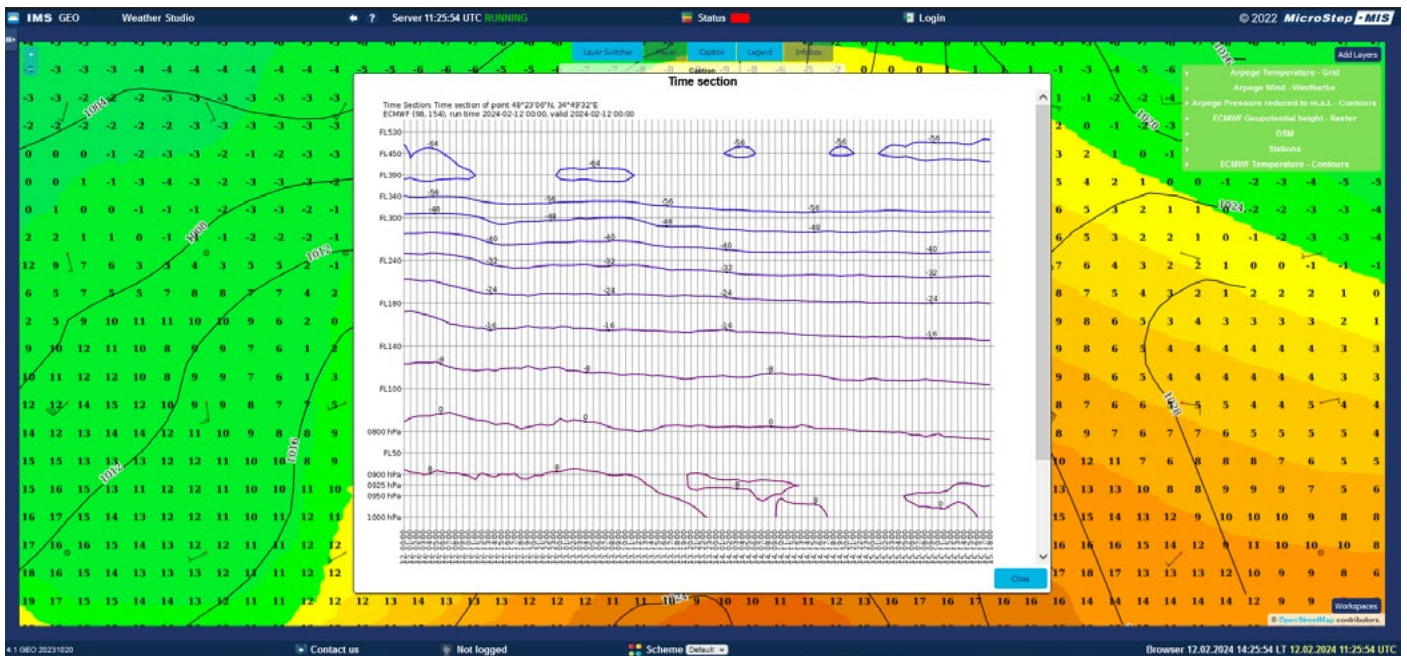
Cartographic projections & topographic data

The IMS4 Weather Studio supports various cartographic projections, including Mercator and Stereographic projection.

Different background images, such as world relief, countries, and satellite views, can be placed behind or in front of grid lines in the IMS4 Weather Studio.

Output

The IMS4 Weather Studio provides the option to export images, maps, and animated sequences into PNG and Geotiff formats.



Time section of air temperature based on model data

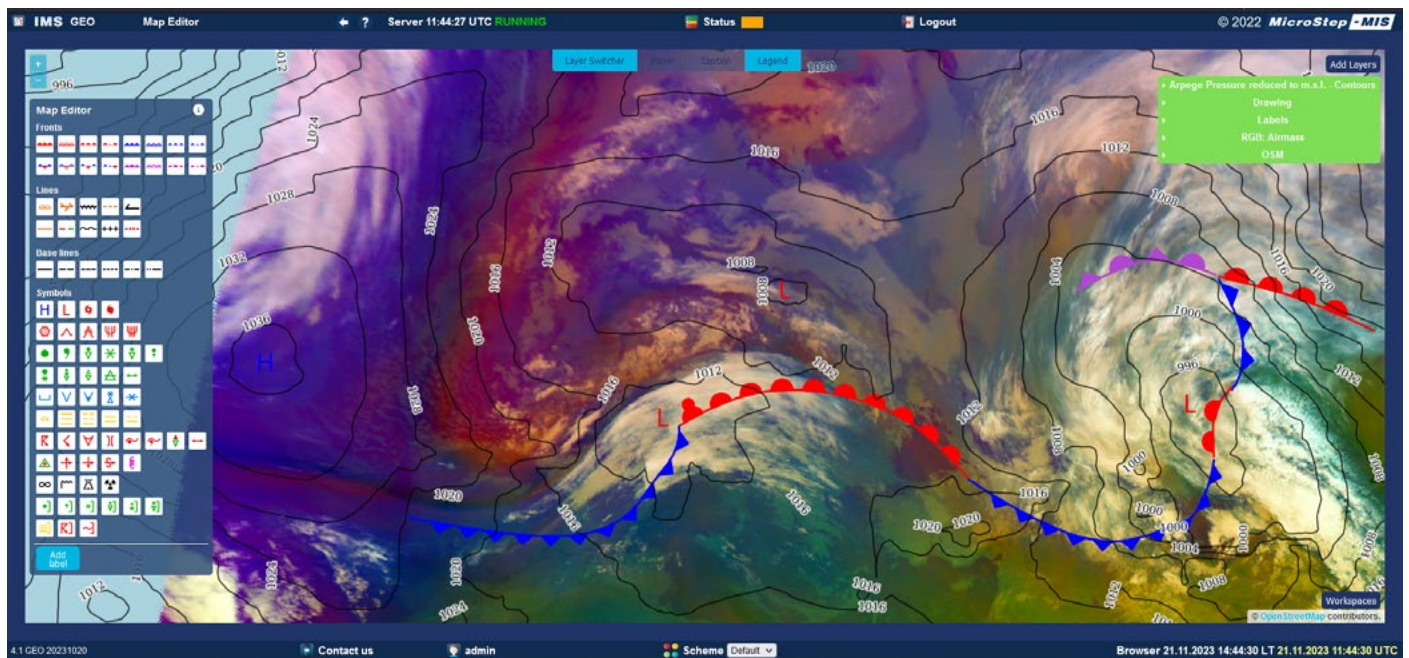
Graphs and tables

The application offers a broad spectrum of two-dimensional data analysis types from diverse sources, including data observations and NWP models:

- Topography
- Meteograms (graph and table)
- Time sections
- Cross sections
- Four types of thermodynamic diagram
- Meteograms with model data and measurement (graph and table)

## Map Editor

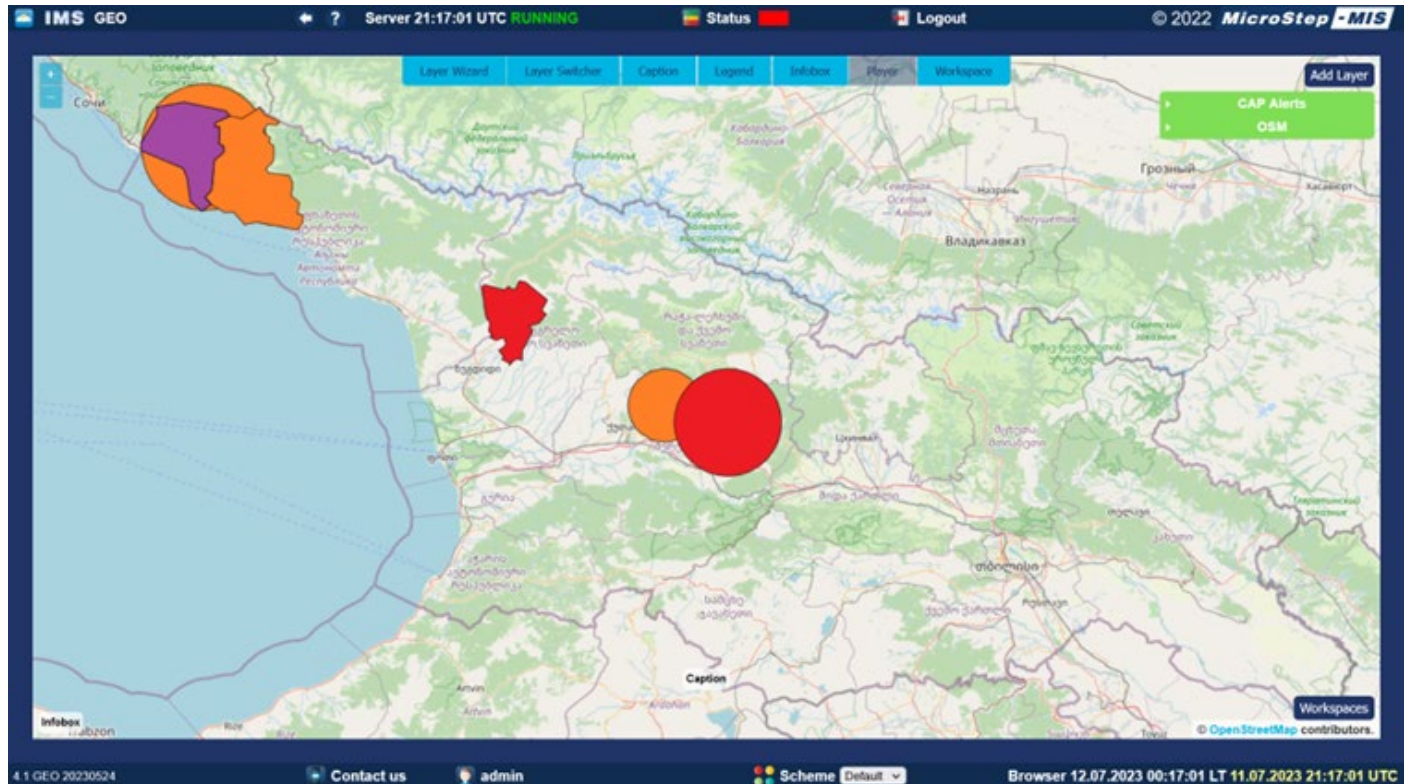
The Map Editor allows users to add atmospheric fronts, lines, and symbols to any map type for synoptic analysis purposes.



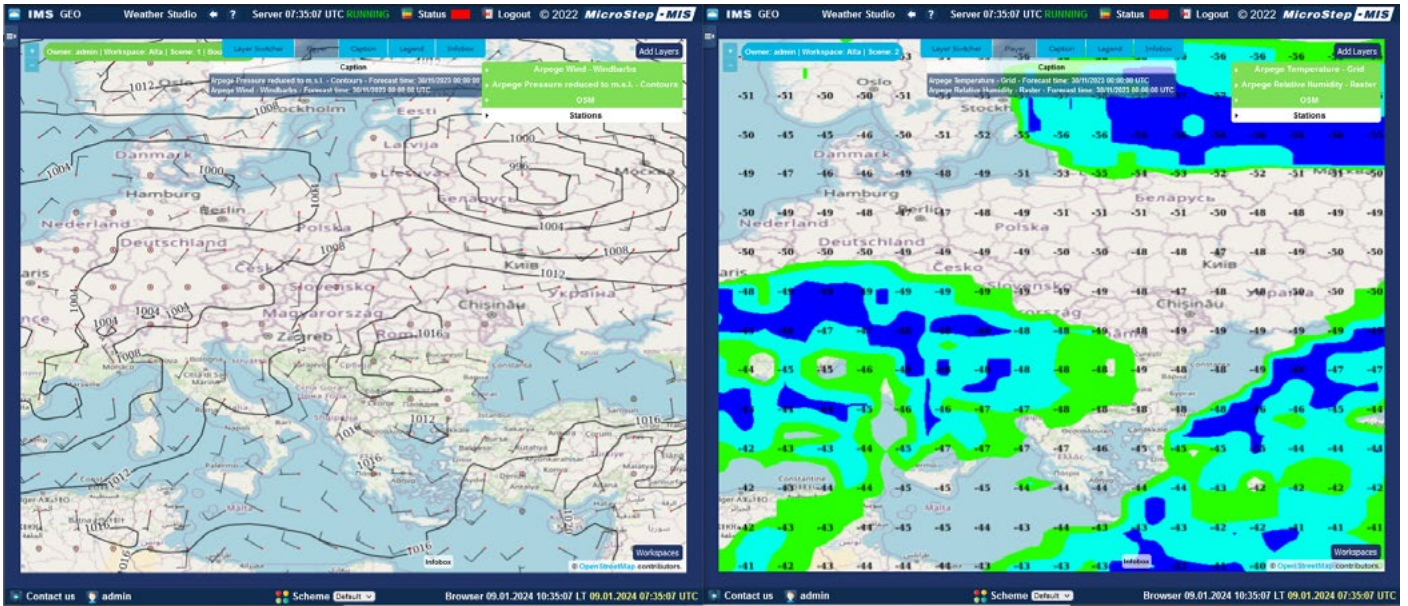
Frontal analysis in Map Editor (Contains EUMETSAT product, 2023)

## CAP

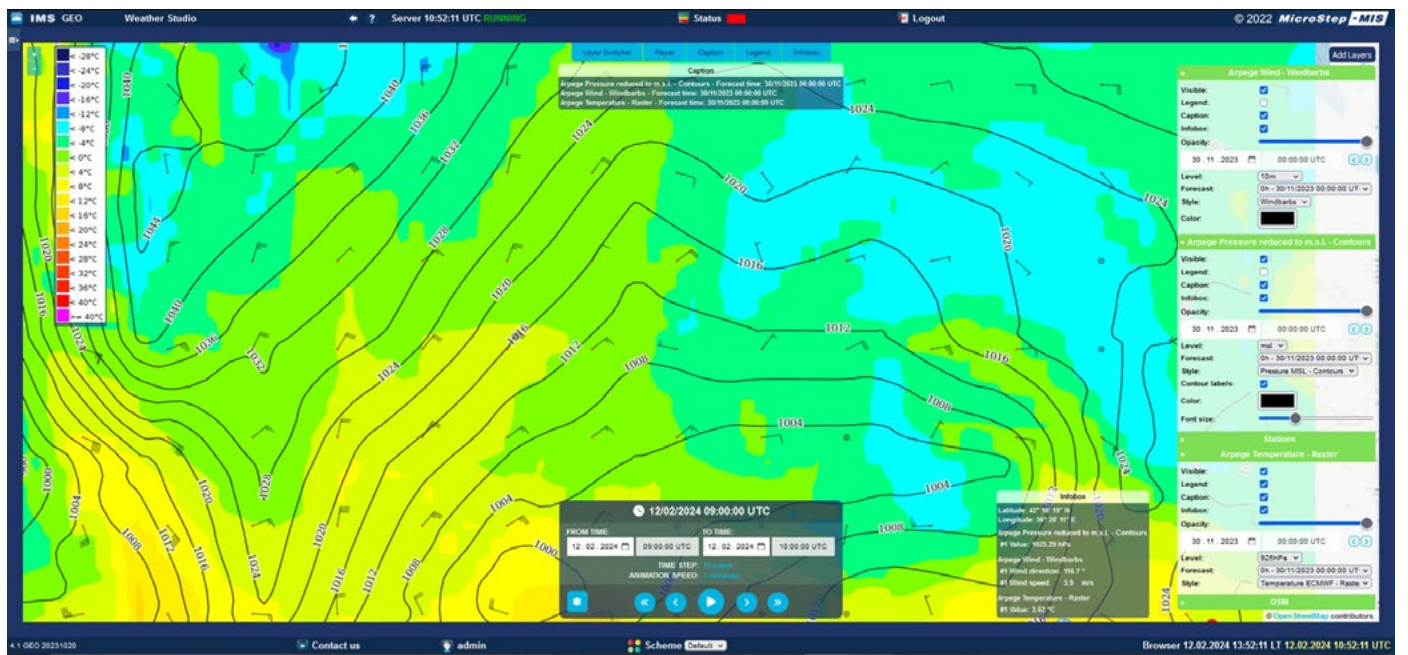
The CAP layers represent the visualization of alerts following the Common Alerting Protocols.



Visualization of the Common Alerting Protocols alerts



*Synchronized in space and time scenes*



*Workspace featuring a player, layer settings windows, and an infobox providing information at a specific point*