

Situational awareness scenario for prevention and strategic actions

Specialized in the production of mission-critical meteorology software and systems, IACIT developed MIND - Meteorological Integrated & Nowcasting for Decision-making.

MIND is an intelligent system that facilitates the management and use of large volumes of meteorological data and different types of sensors during operational meteorological activities. The system diagnoses the meteorological context and generates warnings about event areas that require attention.

MIND offers several resources for data analysis and exploration, which help to provide a quick response in an operational environment.

In this way, MIND assists natural disaster prevention operations, air traffic control, civil and military operations planning, agribusiness, oil and gas operations, as well as the management of water and energy resources.

With a user-friendly and multilingual interface, MIND is a complete integrated situational awareness system for meteorological centers. Its flexibility allows interoperability with other meteorological systems.

All system functionality and its users are easily managed by intuitive administrative tools, which also assist in issuing reports and visual alerts. Equipped with an advanced GIS platform, products can be viewed in customizable layers and in Mosaic format, with recording and playback capabilities, as well as video wall compatibility.

In the ATC version, MIND works as a Command and Intelligence platform for Air Traffic Control Centers, generating warnings about conditions that may affect aircraft in flight, as well as landing and takeoff operations.

Among the automatic alerts generated are Preventive Route Deviation, Severe Convective Weather Alerts, Turbulence, Aeronautical Messages, in addition to various information resulting from the fusion of data from the available sensors.

In addition to alerts, the system has tools that streamline and automate forecasting activities for Aeronautical Meteorologists, such as METAR, TAF, SIGMET and VOLMET.



MIND | Meteorological Integrated & Nowcasting for Decision-making

Main Characteristics

- The platform processes a large volume of data from integrated sensors and, using artificial intelligence, combines this information to provide a solid and accurate basis for more assertive decision-making;
- Modular platform allowing customization for different types of application;
- Display of generated products in customizable layers;
- Possibility of viewing products in Mosaic format;
- Generation of products from volumetric data of weather
- Generation of combined products using different types of sensors;
- Allows interoperability with other systems via SWIM bus;
- Support in decision making;
- Creating user profiles;
- Log operations for reporting.













