

Info-Electronics Systems Inc.

2025 Newsletter

December 2025

Info-Electronics Systems (IES), a Montreal-based company has more than four decades of international experience in software development and systems integration for Meteorology, Hydrology, Environment and Remote Sensing projects. It has been an exciting 2 years at IES with many ongoing projects and newly awarded contracts from 2024 all nearing conclusion this year. Here is a summary of our recent events:

IES & HYDS complete project for Early Warning System (EWS) project in Tonga



In December 2025, IES and HYDS successfully completed the Site Acceptance Tests (SAT) of their fully Integrated Forecasting Platform (IFP) and Early Warning System for the Tonga Meteorological Service (TMS). Built on IES's Met-WebGIS platform and Argos from HYDS, the system represents a major advancement in Tonga's national forecasting and warning capabilities. The integrated platform provides forecasters with a single, intuitive environment to seamlessly access, visualize, and analyze diverse meteorological data sources, including in-situ and remotely sensed observations as well as Numerical Weather Prediction (NWP) model outputs. It enables the efficient creation and rapid dissemination of high-quality forecasts and warnings to key stakeholders such as government authorities, media, aviation, marine users, and the general public. Beyond weather services, the platform also strengthens national resilience by supporting the rapid dissemination of tsunami warnings and volcanic information, helping protect lives, infrastructure, and livelihoods.



IES, HYDS and Tonga Meteorological Service (TMS) complete Site Acceptance Tests



System Training session at TMS offices

Site acceptance completed with ANAM

In January 2025, IES was awarded a contract by the World Meteorological Organization (WMO) for the supply, delivery and installation of a complete system aimed at data integration, visualization, surveillance, and weather forecasting for the Agence Nationale de la météorologie (ANAM) in Burkina Faso. IES is proud to share that the Site Acceptance Tests (SAT) and user training were successfully completed and the system is fully operational on schedule.



Site acceptance with IES team at ANAM in Burkina Faso

Upgrades to IES WebGIS

Our WebGIS package has the capability to be set up as a Decision Support System for applications such as Hydro-met events monitoring, disaster management, or Aviation weather assistance. This year, we will be upgrading our existing system to support: The latest WMO Information System (**WIS 2.0**); ICAO Meteorological Information Exchange Model (**IWXXM**); Improved Flight folder functionality and enhanced user management in our latest version.

Ongoing work for Dust and Sand Storm Monitoring Alert System

The Kingdom of Saudi Arabia (KSA) is deploying a state-of-the-art Dust and Sandstorm Monitoring System to enhance public safety and transportation. The system will utilize a network of approximately 600 Automatic Weather Stations (AWS), equipped with advanced meteorological sensors strategically installed throughout the country to detect, monitor, and track dust and sand conditions, particularly along major highways. To further strengthen monitoring capabilities, a select number of mobile LIDAR sensors will provide high-resolution insights into dust and sandstorm events. IES will deliver its WebGIS platform to manage the entire data lifecycle with real-time data acquisition, processing, storage, visualization, and reporting across the complete monitoring network. The system will also automatically generate intelligent alerts based on multiple parameters, supporting rapid and informed decision-making. A dedicated mobile application will empower the public with real-time route mapping and visibility of current dust and sand conditions.



WebGIS application for Sand Storm Monitoring

AMDAR System for Saudi Arabia

The global Aircraft Meteorological Data (AMDAR) observing system was initiated by WMO and its members more than thirty years ago, in cooperation with aviation partners. The objective of the AMDAR program is to automatically capture and transmit meteorological data from the aircraft platform to support improved weather forecasts and applications for aviation and the wider community. Working with our partner Nudhum, the scope of the project includes the reception of AMDAR data from participating Airlines, processing it, encoding it into WMO AMDAR format for distribution on GTS and for local use, such as integration with Numerical Weather Prediction models and real-time display. AMDAR data will be delivered by airlines like Saudi Arabian Airlines (Saudia) through the airline Data Service Provider (DSP), and our system will process these messages into WMO BUFR bulletins.

IES to deploy Aviation WebGIS system in Kenya

In collaboration with our local partner, New Edge Solutions Ltd., IES was awarded a contract to supply a Secure Aviation Data Information Service (SADIS) and Aeronautical Meteorological Online Pre-Flight Web-Based Briefing System for the Kenya Meteorological Department. The proposed solution will be built on the WAWS-WebGIS platform and will be installed at 10 airports and Aviation Meteorology offices around the country. The Factory Acceptance Tests were completed with success in June 2025 at our head office in Montreal. The objective is to complete the final deployment in Kenya by the end of 2025.



IES booth at Met Tech 2025 Conference in Vienna, Austria

IES brings more than 40 years of proven expertise in the design and delivery of advanced environmental science-based systems. The company has successfully contributed to major hydro-meteorological and disaster management projects worldwide. Among its achievements is the development of the IMDPS, which enabled the collection and processing of meteorological imagery from India's INSAT satellite to support national weather forecasting operations. IES also delivered a comprehensive Flood Forecasting Network for India's Central Water Commission, integrating 55 Automatic Weather Stations (AWS) along two major rivers and transmitting real-time data to centralized receiving stations for enhanced flood monitoring and early warning.

To learn more about our services and products, we invite you to visit our website and get in touch with us at: