

Info-Electronics Systems Inc.

2024 Newsletter

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 year at IES with many ongoing projects and newly awarded contracts in 2024. Here is a summary of the year's events so far.



EARLY WARNINGS FOR ALL

The UN Global Early Warning Initiative for the Implementation of Climate Adaptation



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

Under the Pacific Resilience Program (PREP) initiative, the World Bank awarded IES and HYDS a contract to implement for the Tonga Meteorological Service (TMS) an Integrated Forecasting Platform (IFP) based on the Met-WebGIS product from IES, and Argos from HYDS. This integrated platform will enable weather forecasters to access and assess assorted weather observations, both in situ and remotely sensed, and data from Numerical Weather Prediction (NWP) models. The system will prepare and distribute a selection of forecast and warning products and provide services to various clients including the government, media, aviation, marine, and the public. The platform could also be utilized to disseminate tsunami warnings, and volcanic information rapidly. **Once implemented, it will provide TMS a uniquely integrated Forecasting Work Station and Multi-Hazard Early Warning System.**

H-AWOS network in India completed

The India Meteorology Department (IMD) is responsible for providing Met Services to its helicopter operations which generally include Heliports and small air strips. IES, in collaboration with OSI, provided a completely integrated system for 10 AWOS for different sites all over India. The station sensors provided measurements for pressure, temperature, humidity, wind (speed and direction), visibility, Present Weather sensors, and a camera.

Upcoming 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

IES to deploy its Aviation WebGIS system in Kenya

In collaboration with our local partner, New Edge Solutions Ltd., IES has been 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 IES WAFS-WebGIS system, which will be performing all the reception, ingestion, decoding, storing, handling, displaying and printing functions.

The system will be installed at 10 airports and Aviation Meteorology offices around the country in compliance with the aviation meteorology information standards, guidelines and recommendations as stipulated by ICAO and WMO

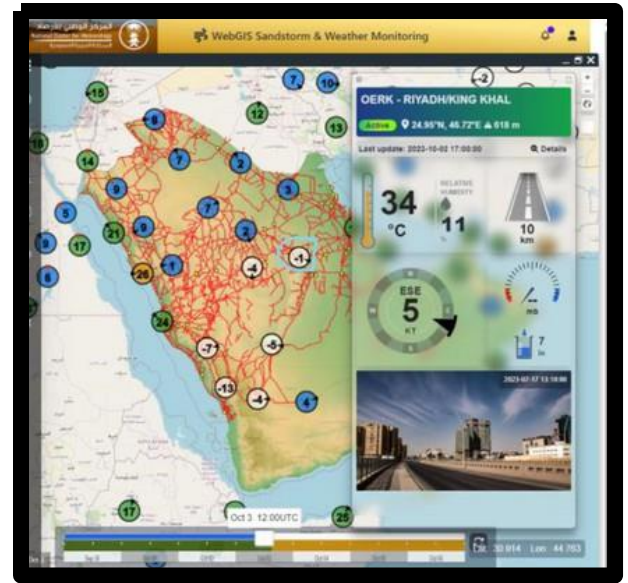
Davis weather stations

As an authorized reseller of Davis Weather stations in Canada and India, IES continued this year to provide the Davis VantagePro precision weathers solutions to a variety of customers. IES is also looking forward, in the near future, to expanding an existing network of agriculture weather stations to an important customer in Canada.

Ongoing work for Dust and Sand Storm Monitoring Alert System

The Kingdom of Saudi Arabia (KSA) will put together a Dust and Sandstorm Monitoring System using a network of 600 automatic weather station (AWS) which uses its meteorological sensors spread across the territory to detect and follow the presence of dust or sand in the air along the country's highways. Adding to the AWS network, a small number of mobile LIDAR sensors will obtain more in-depth information of the storm events.

IES will be providing its WebGIS solution to perform all the reception, ingestion, decoding, storing, displaying and printing functions for the entire network. The system will also generate alerts based on a combination of parameters. We will also be providing a mobile application to allow general public users to map their routes on their devices and view the current conditions along the route.



WebGIS application for Sand Storm Monitoring

IES visits Gulf Region

In March 2024, IES visited the UAE, Qatar, Oman, and Kuwait and had meetings with the top management of the Meteorological Services of those countries to explore how IES can provide its high-quality services and products to their countries. We are looking forward to continuing discussions this year.



IES President Dr. Harinder Ahluwalia, and Vice President Mr. Jaspal Ahluwalia visiting with National Center of Meteorology (NCM) of UAE

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 Saudia formerly known as Saudi Arabian Airlines, Fly NAS, etc. through the airline Data Service Provider (DSP), and our system will process these messages into WMO BUFR bulletins.

IES prides itself on its strong experience and knowledge in Environmental Science-based Systems Development for over 40 years. IES has been involved in some major Hydro-Meteorological projects and Disaster Management Projects worldwide, including the development of IMDPS that collected and processed imagery from India's INSAT satellite for weather forecasting. As well as the Flood Forecasting Network for India's Central Water Commission which involved the integration of 55 AWS' along 2 major rivers and transmitting the data to the central receive stations.

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

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IES booth at the American Meteorological Services conference in Baltimore, Maryland in January 2024