Web-Based Hurricane Evacuation System
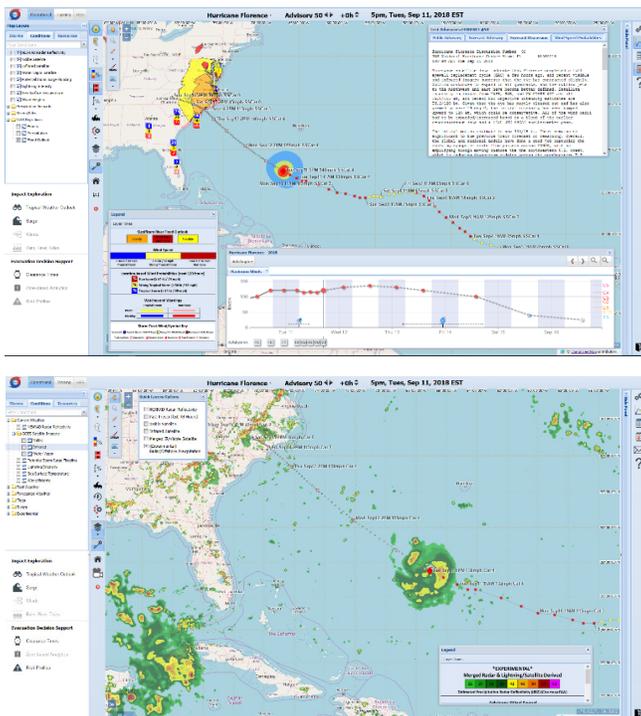
EMERGENCY MANAGER DECISION SUPPORT PLATFORM

The National Hurricane Program's Technology Modernization effort includes the creation of a web-based decision support platform targeted to state, local, and tribal emergency managers. This platform, known as Web-Based HURREVAC (hvx.hurrevac.com), was funded by the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) and built as an open source platform to enable emergency managers to access system capabilities on any device.

WEB APP ADVANTAGES

Delivering web-based hurricane evacuation planning and decision-making capabilities provides distinct advantages over Windows-only desktop legacy applications:

- **No installation required,** and no executable file is copied to your machine. Any emergency manager with a modem web browser can use the system.

- **No administrator privileges needed**

- The system is available from **any device** capable of running an internet browser such as Chrome or Firefox, Edge or Internet Explorer.

- **Flexible design** supports popular web standards and can easily ingest a variety of products for map display.

WEB APP CONSIDERATIONS

S&T developed the system to allow access to key information products even when the user's internet connection is down or unreliable. Even though web apps do not have full access to the storage capabilities of the user's machine, the system takes advantage of a variety of browser mechanisms for saving data locally. New products and features are continuing to be integrated into the system, such as: Tools for creating/editing exercise storms for training, adaptive risk profiles, and full Hurricane Evacuation System (HES) integration.

ONLINE CAPABILITIES

When a stable internet connection is available, users can access a wide variety of information products, including:

- Current and archived storms (all products)

- Live weather conditions

- Evacuation zones, clearance time tables, timing guidance, and studies

- High-quality base maps

- Integrated training

- Storm Surge Explorer with new high-resolution grids

OFFLINE EXPERIENCES

When the internet is lost during an active storm, the system will continue to provide access to previously downloaded data. This includes current and previous storm tracks, wind rings, wind swath and text advisories. These key products will allow the user to visualize and analyze data for the currently active threat.