

Sharing Weather Analysis and Disaster Products with Esri Tools

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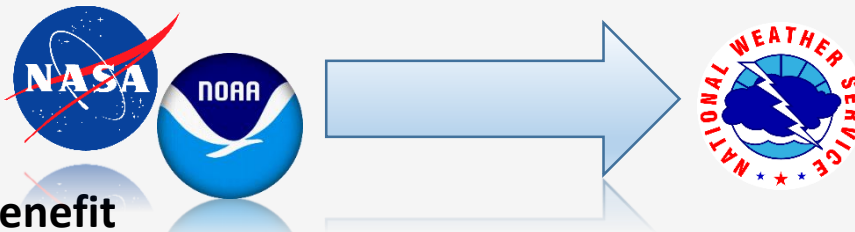


Short-term Prediction Research & Transition (SPoRT) Center

SPoRT is focused on transitioning unique NASA and NOAA observations and research capabilities to the operational weather community to improve short-term weather forecasts on a regional and local scale.

- close collaboration with numerous WFOs and National Centers across the country
- SPoRT activities began in 2002, first products to AWIPS in 2003
- co-funded by NOAA since 2009 through satellite “proving ground” activities

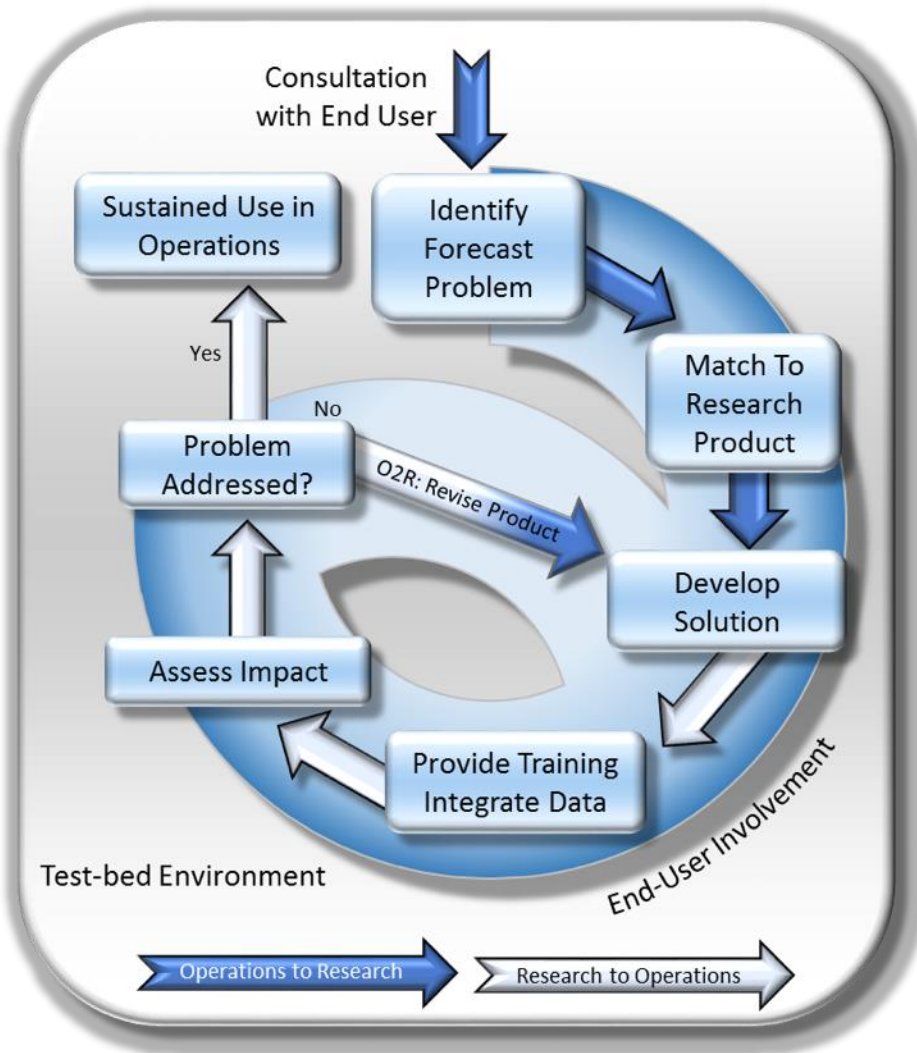
Proven paradigm for transition of research and experimental data to “operations”



Benefit

- demonstrate capability of NASA and NOAA experimental products to weather applications and societal benefit
- prepares forecasters for use of data from next generation of operational satellites (JPSS, GOES-R)

SPoRT Paradigm for R2O Success



Keys to success

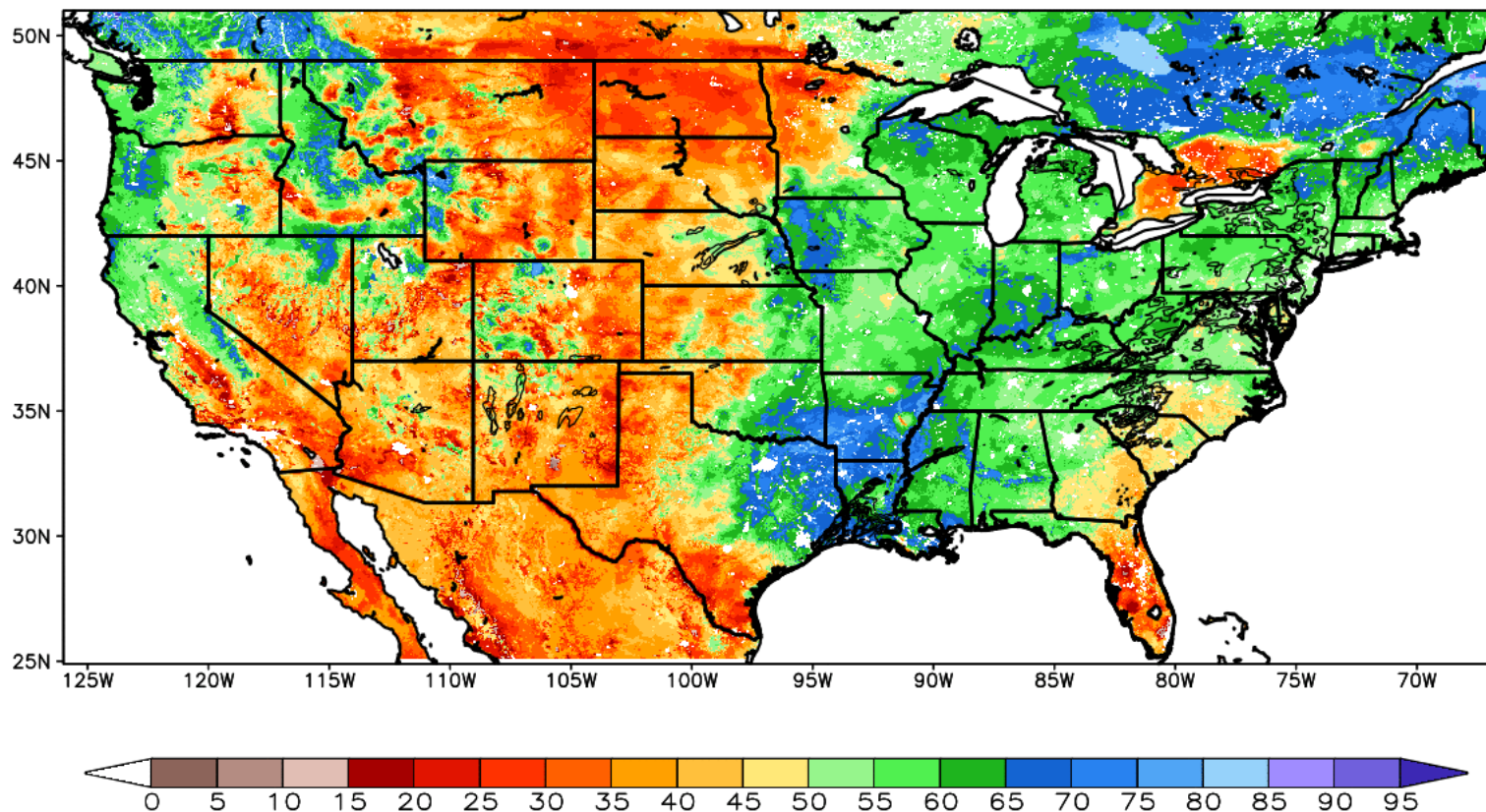
- **Involve** end users throughout the entire process.
- **Develop** end-user appropriate training on how to understand and correctly use the solution that has been developed
- **Assess** impact of solution on operations

A successful transition occurs when a new capability has a predominately positive impact on the forecast problem and is used “operationally” in the end users decision support system.

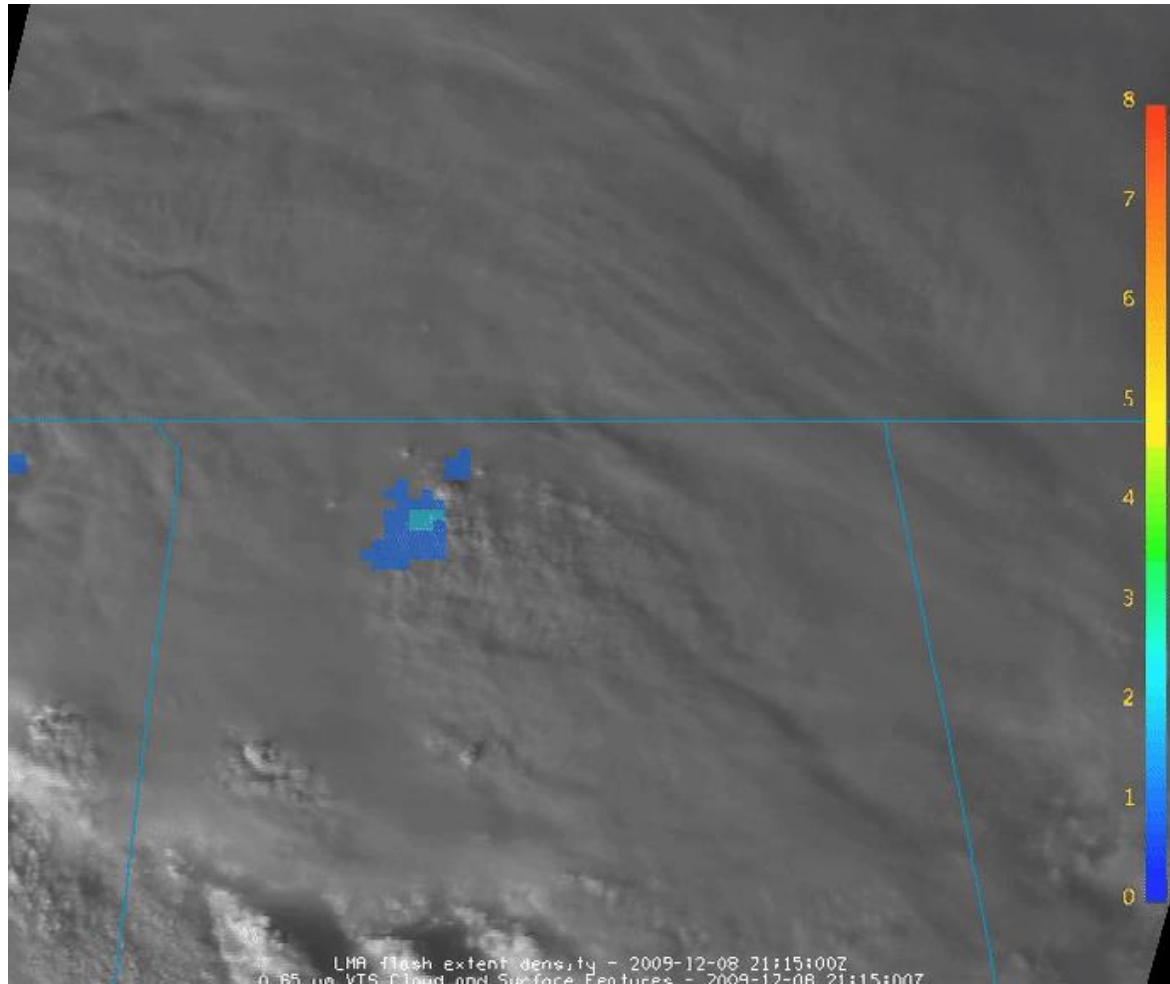
“Operational” use means regular or sustained use of data / products to make decisions

Land Surface Modeling

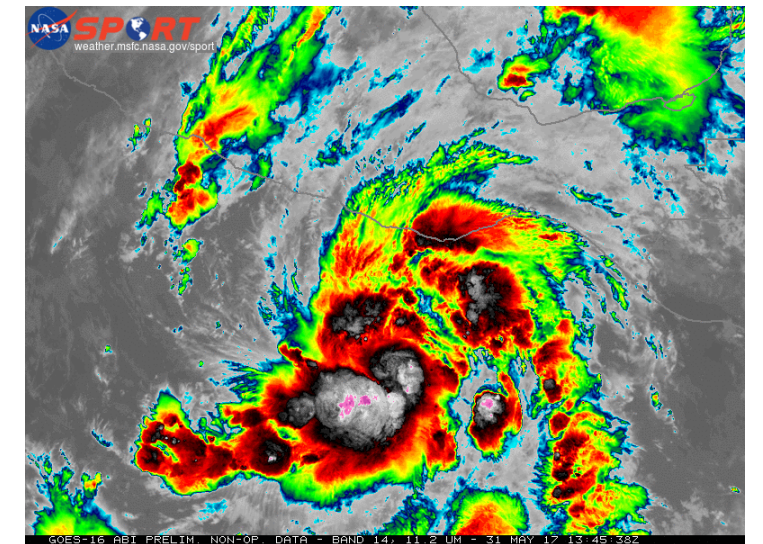
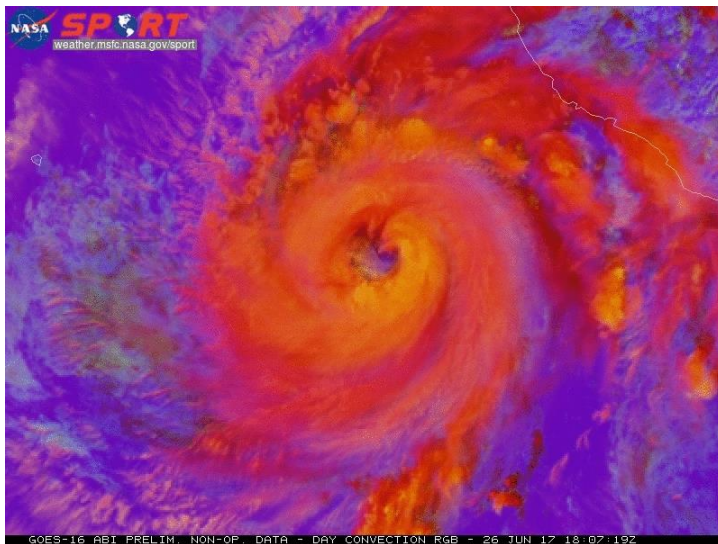
Column-Integrated Relative Soil Moisture (available water; %) valid 12z 01 May 2016
Precipitation in previous hour (1,2,5,10,15,20,25 mm contours)



Lightning



Satellite Remote Sensing



SPoRT Esri Web Demo

NASA Applied Sciences Disasters Program

- Disasters Applications area promotes the use of Earth observations to improve prediction of, preparation for, response to, and recovery from natural and technological disasters.

Formulation
Implementation
Primary Ops
Extended Ops

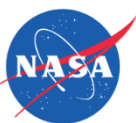
Terra sees Spill on May 24m 2010

Deepwater Horizon Oil Spill, 2010

Alabama Georgia
Louisiana Mississippi Florida
Gulf Stream
Loop Current
Cuba

Earthquakes Volcanoes Landslides Floods Fires Land Subsidence

Multi-hazard and Global



Disasters Esri Web Demo