NWS Central Processing Update

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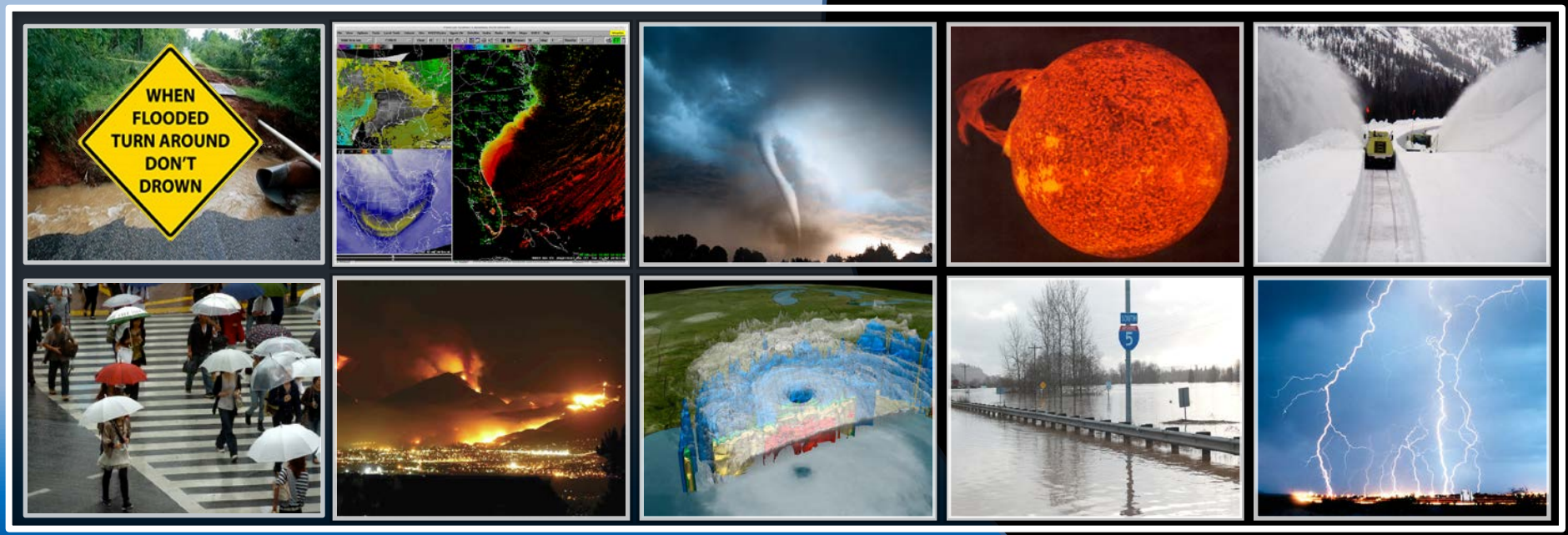
January 11, 2018 • Austin, TX



NOAA's High Performance Computing Locations and Systems

Fairmont, WV
Development HPC
- Theia (3,076 Tflops)

Princeton, NJ
Climate Post-Processing & Analysis

Boulder, CO
Development HPC
- Jet (1,103 Tflops)

Reston, VA
- Primary (4,200 Tflops)

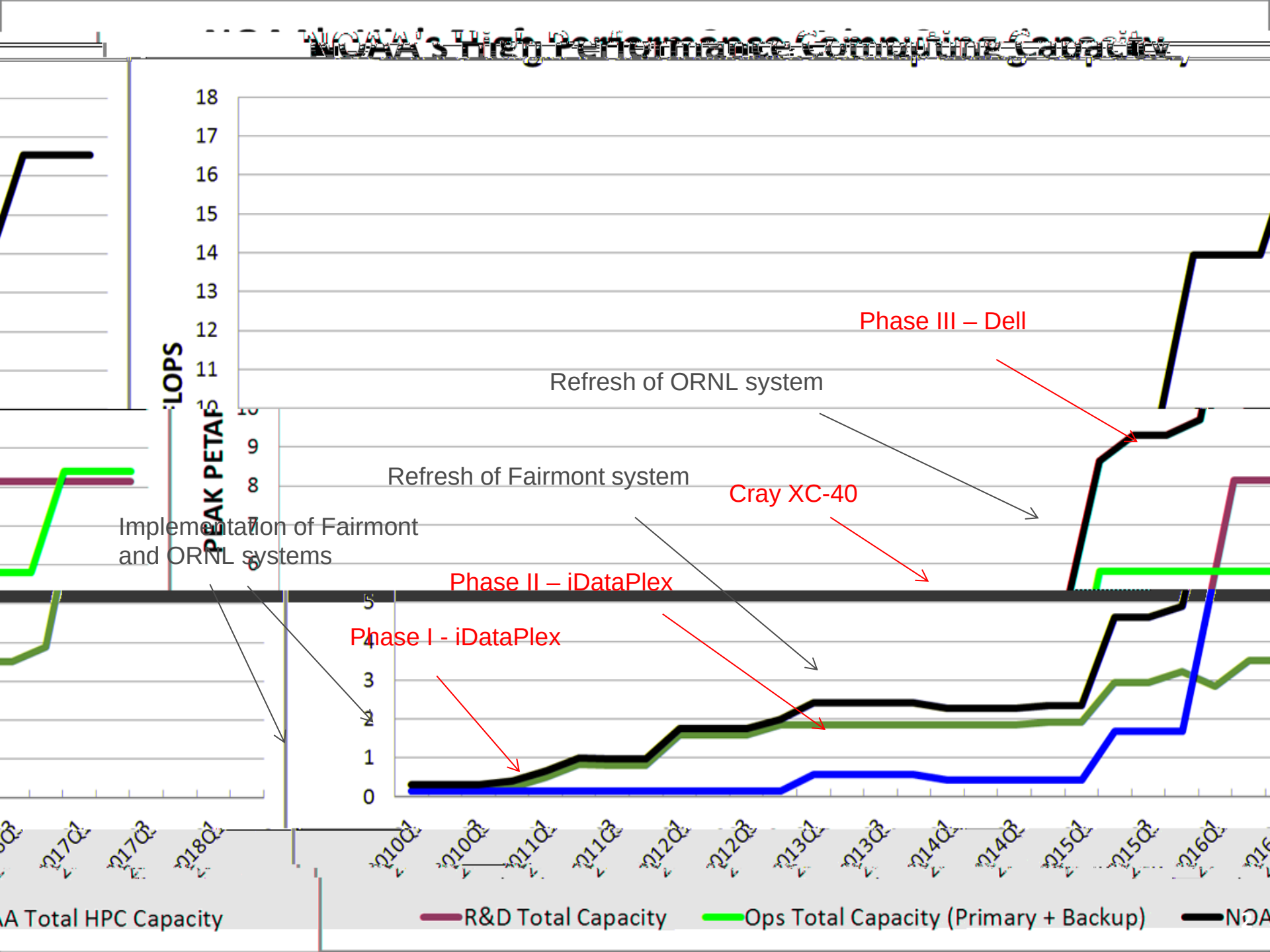
Oak Ridge, TN
Research HPC
- Gaea (4,020 Tflops)

Orlando, FL
- Backup/Development (4,200 Tflops)

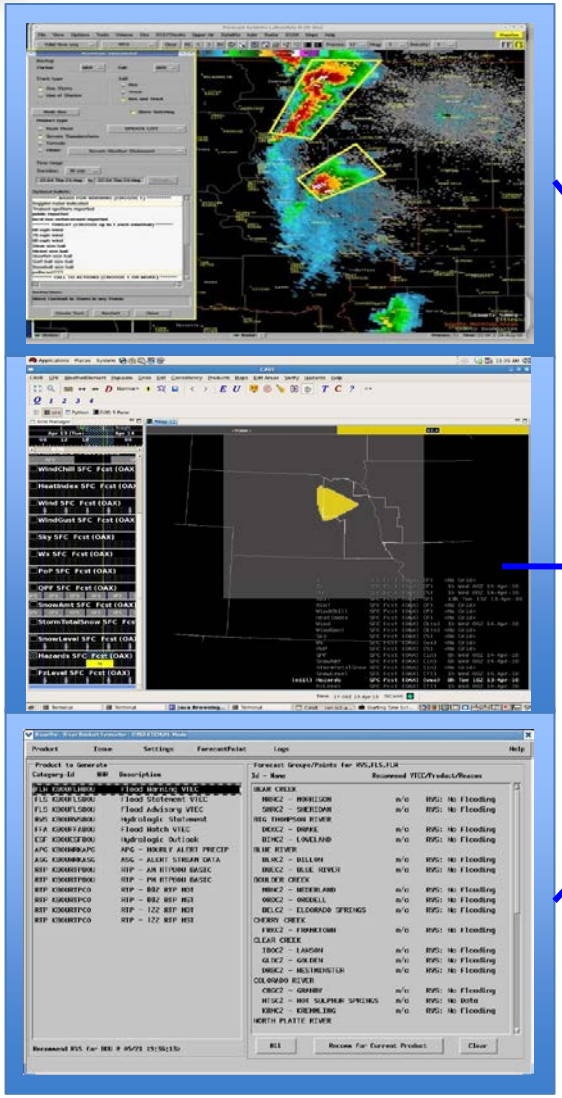
☆ Operational HPC Systems

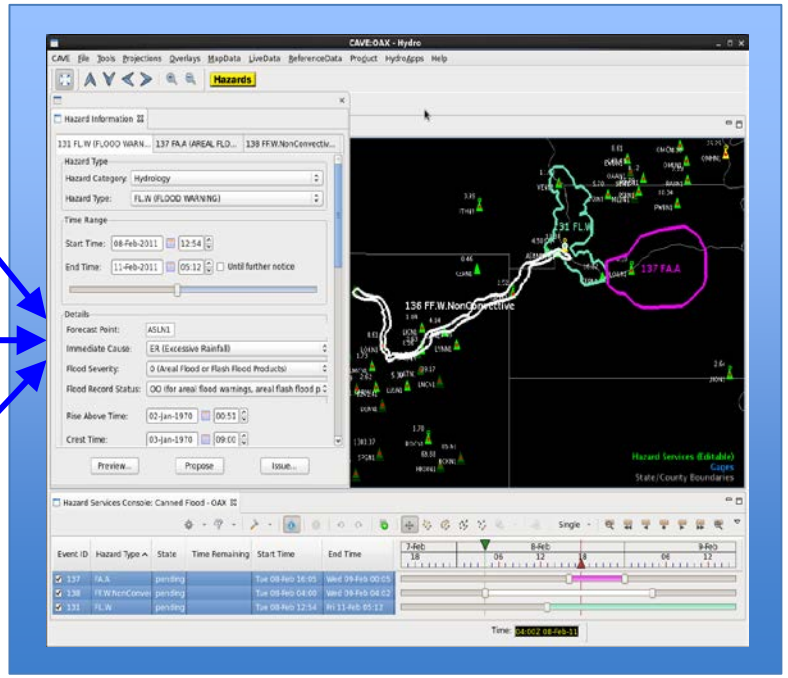
▭ Research and Development (R&D) HPC Systems

NOAA's High Performance Computing Capacity



AWIPS Improvements
Hazard Services

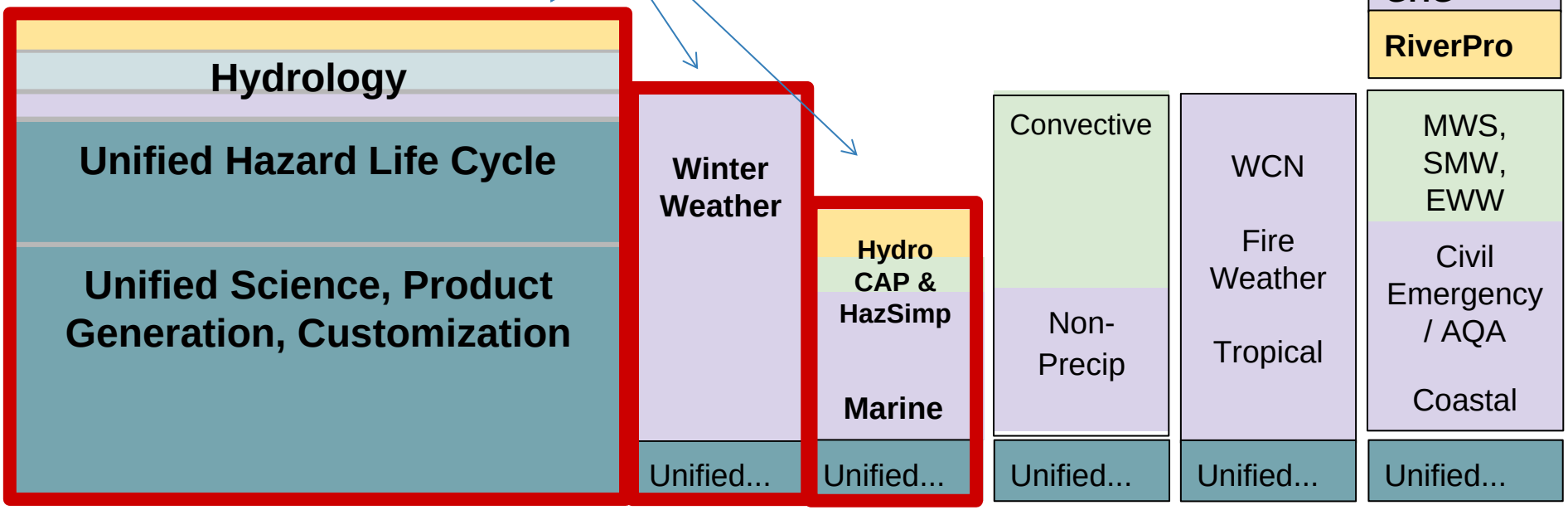




AWIPS Improvements
Hazard Services

In Progress Now

For each hazard category, Recommenders, Meta Information, and Products need to be implemented.



AWIPS Improvements
National Centers Integration with AWIPS

- Integrate capabilities between field and national offices
- Consolidate hardware and software baselines to create common operational picture enabling a fully integrated field structure

AWIPS Improvements
National Centers Integration with AWIPS

Q2 FY18

Complete assessment - AWIPS capabilities gap to migrate National Center processing

Q3 FY18

Initiate development - address capabilities gap

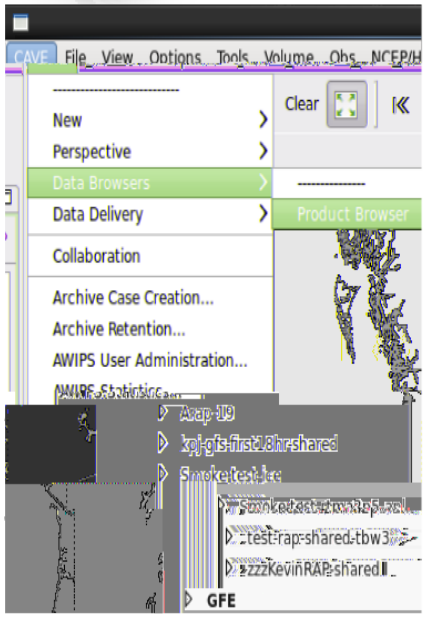
Ongoing/Future Work - TBD on Outcome of Above

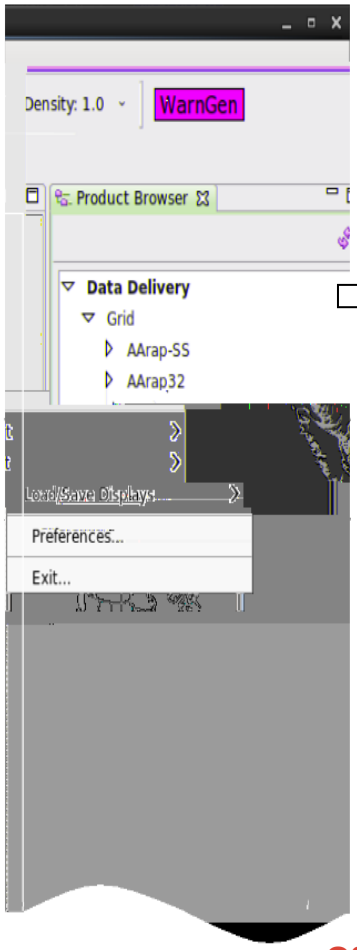
Complete assessment & documentation - pre/post processing systems integrated with NAWIPS/AWIPS at National Centers

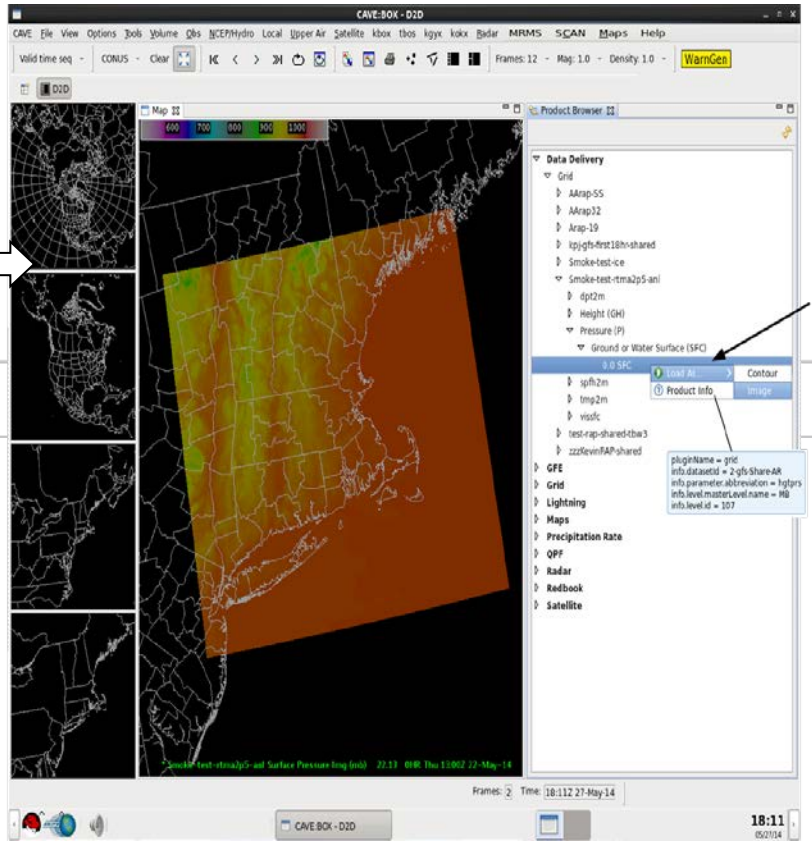
Document AWIPS requirements – National Centers Continuity of Operations systems & testbed activities

NAWIPS Merger: Analysis for functions performed by D2D, GFE, Hazard Services (Evolve Task)

AWIPS Improvements
Data Delivery







Late Jan 18

- Local site testing with NOMADS
- OCLO developing training

Q2 FY18

MADIS data access to local sites

Q3 FY18

Satellite-derived products available

THANK YOU!