

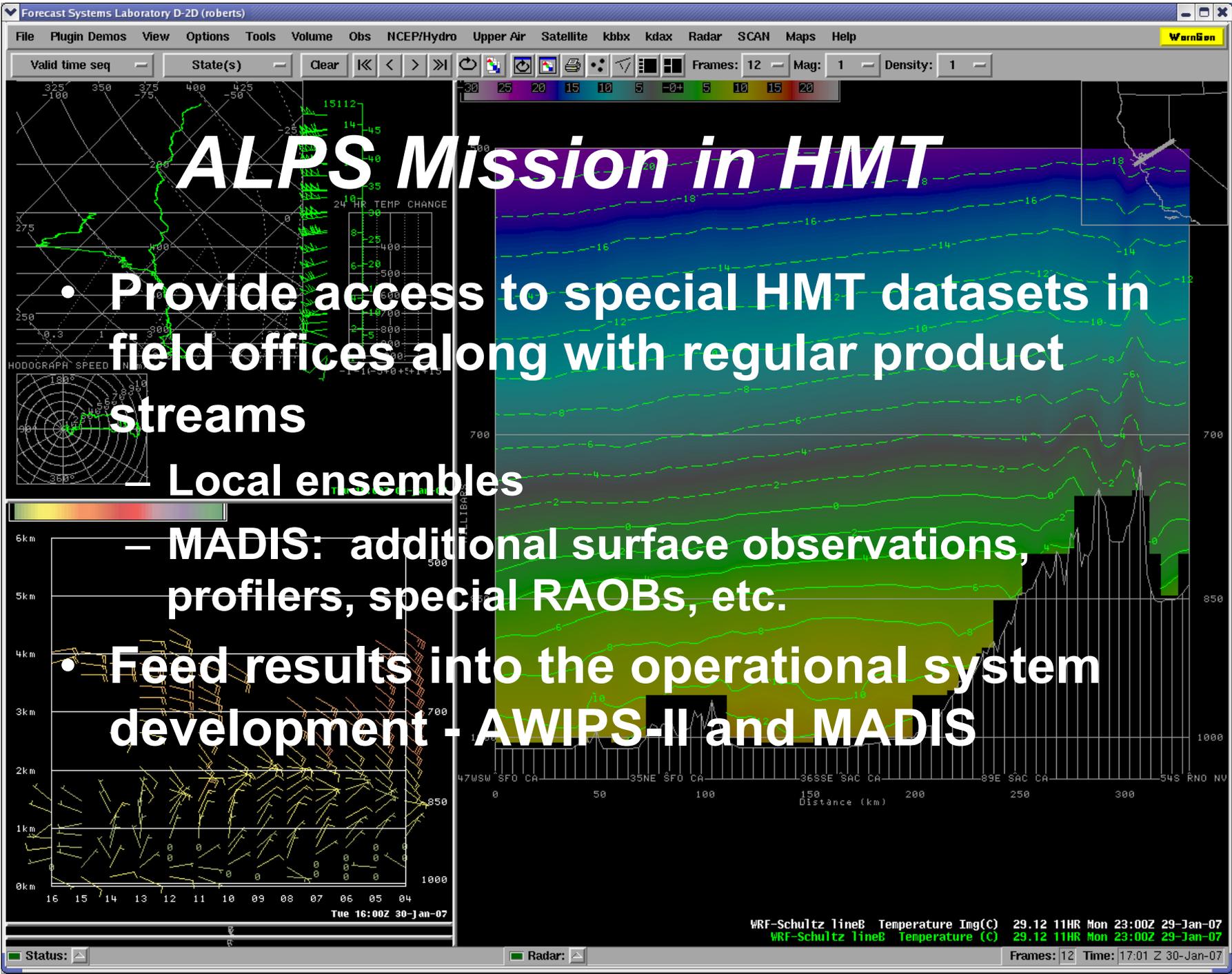
# **HMT Advanced Linux Prototype System (ALPS) and Implications for AWIPS-II**

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# ALPS Mission in HMT

- Provide access to special HMT datasets in field offices along with regular product streams

– Local ensembles

– MADIS: additional surface observations, profilers, special RAOBs, etc.

- Feed results into the operational system development - AWIPS-II and MADIS

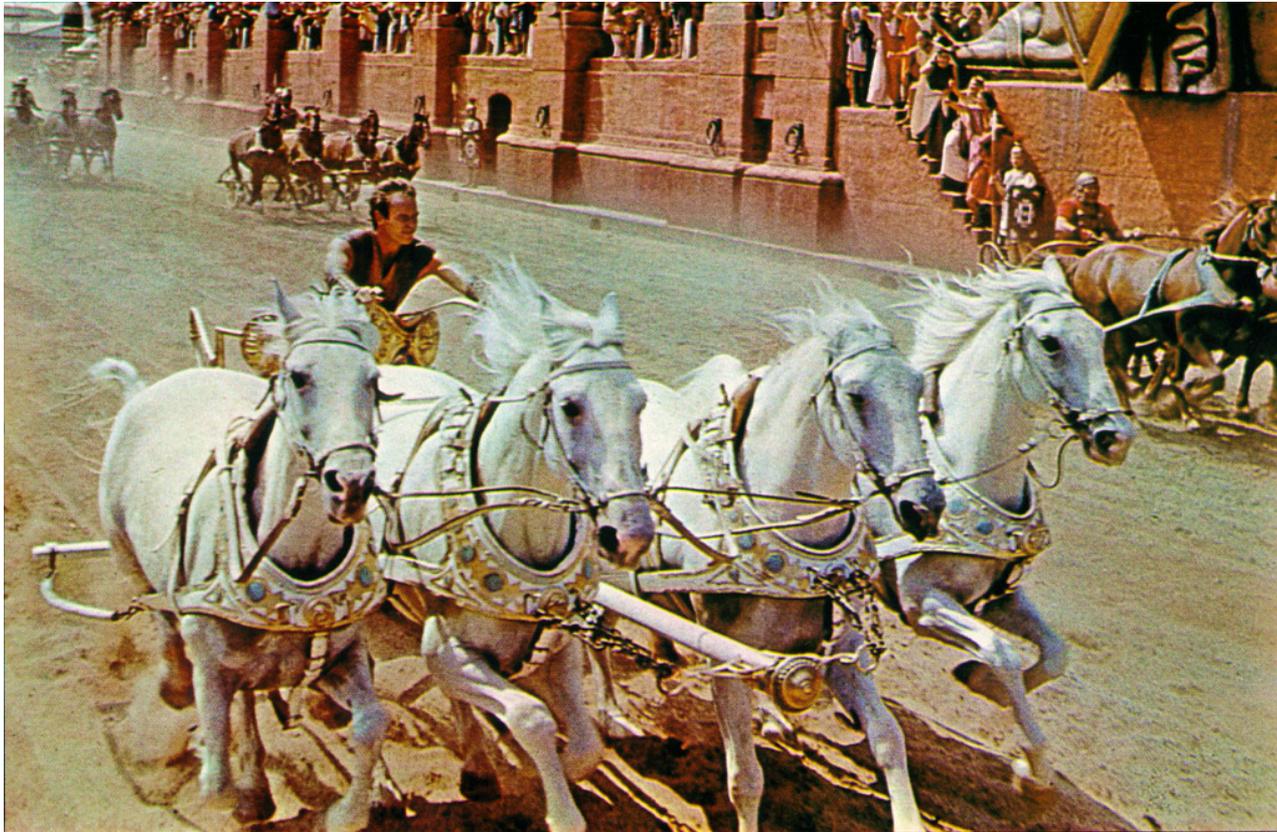
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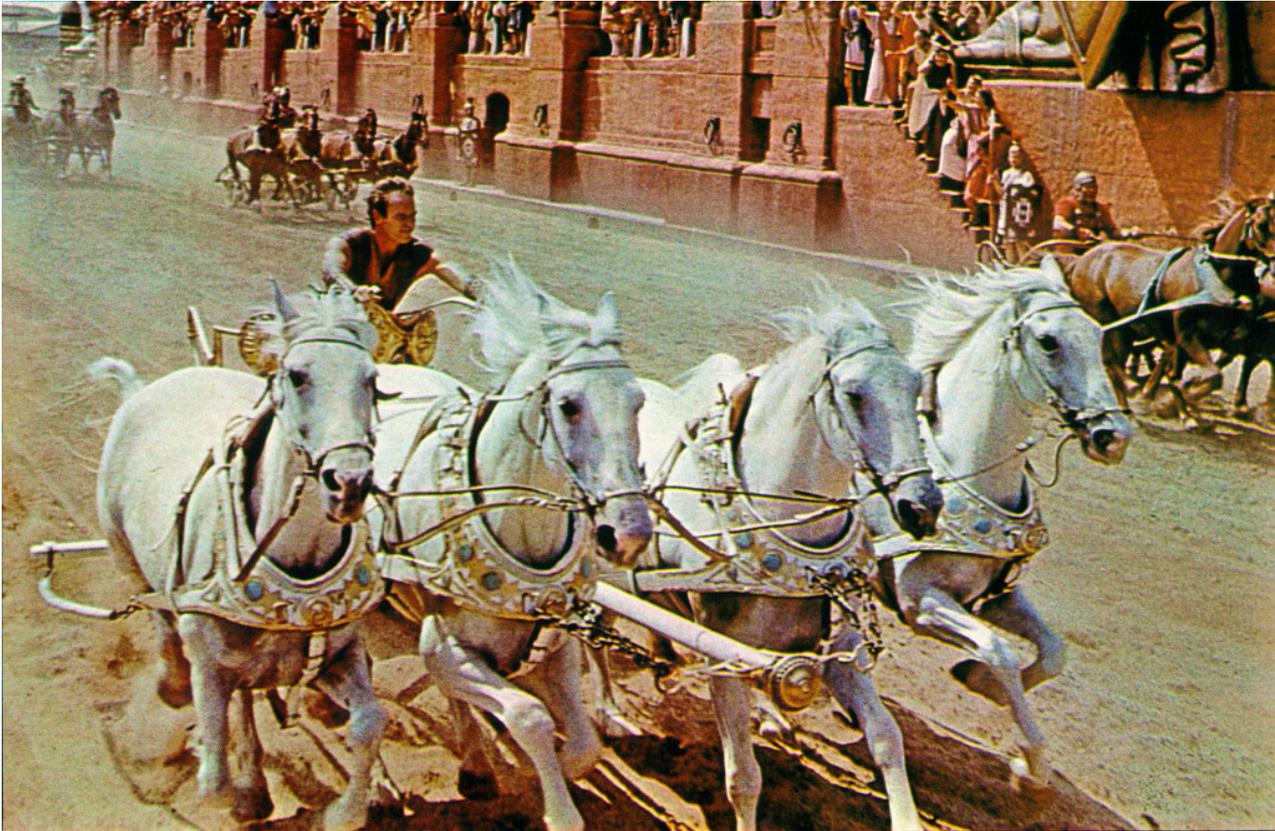
# Research to Operations to Research

# *Operations*



Science - Technology - Operational  
Requirements - End Users

# *Research*



Science - Technology - Publications -  
End Users

# *Research*



R-2-  
O-2-R



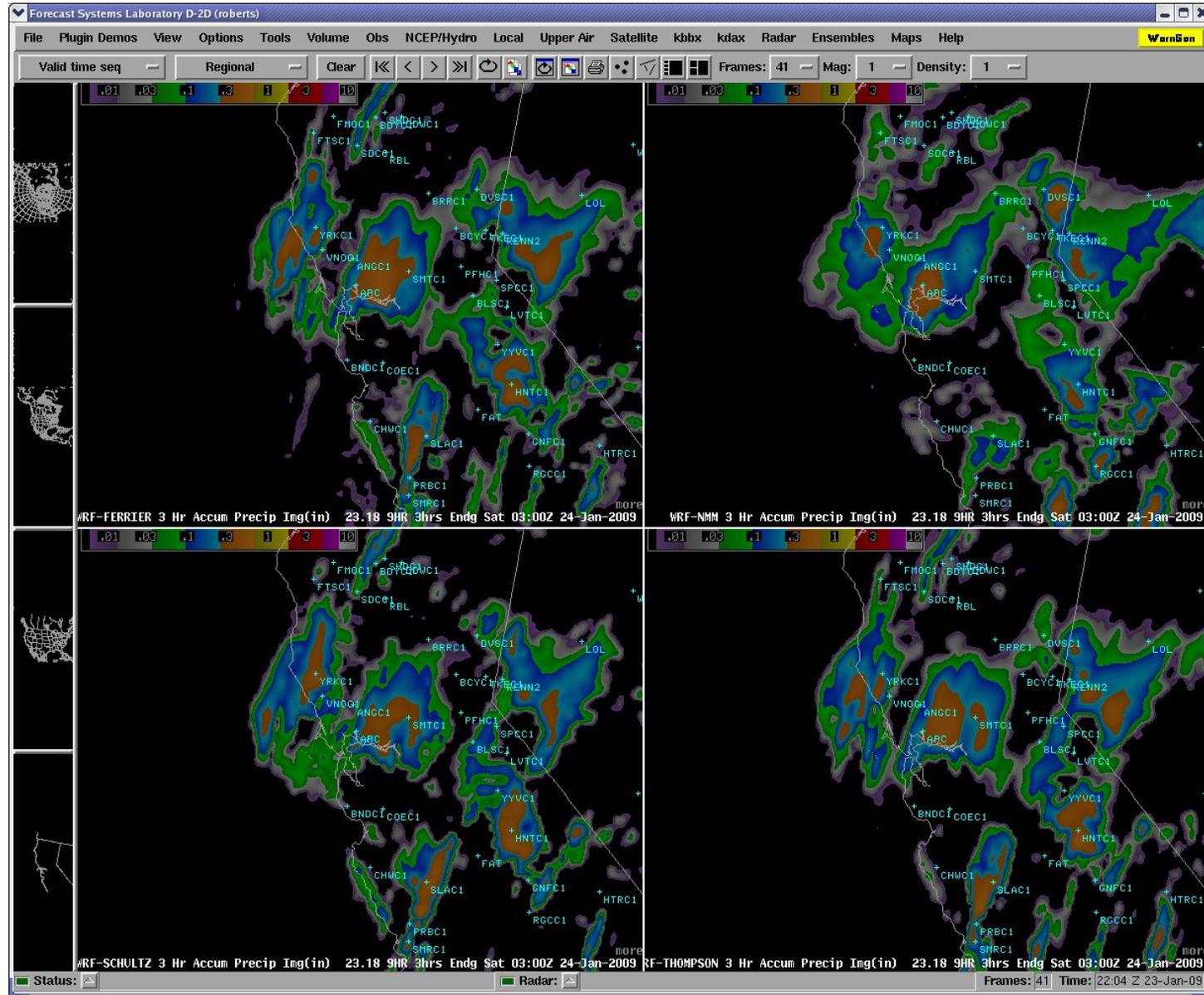
*Operations*



# ALPS deployed at WFOs and the California-Nevada River Forecast Center (CNRFC)

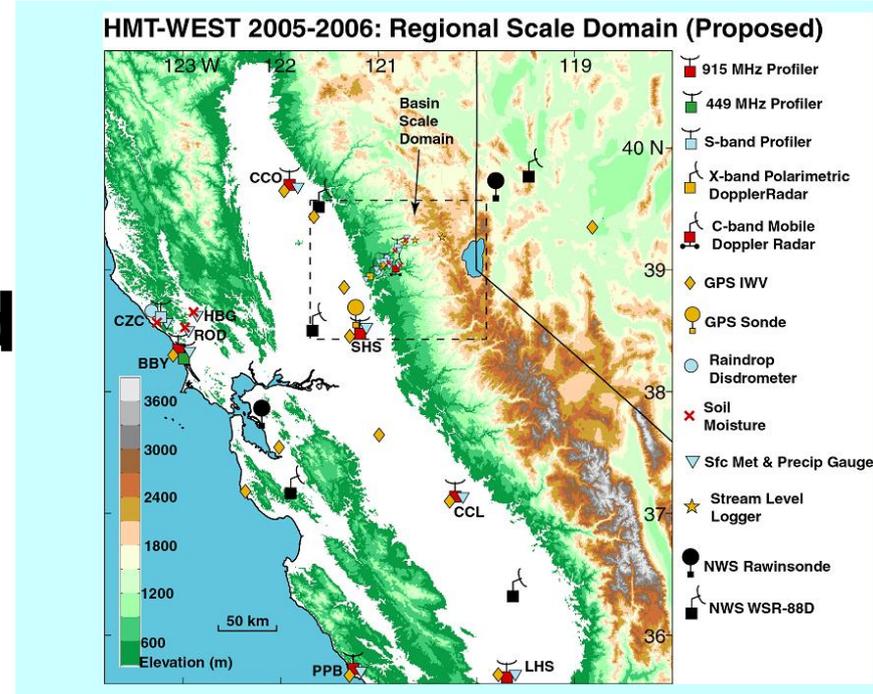


# ALPS Ensemble Display Example



# HMT-West Early Results

- Ensemble model fields expanded to cover entire CNRFC and WFO spatial and temporal forecast domains.
- Ensemble model improvements



# HMT Results continued

- **Distributed database model tested**
  - **Initial “Fat Client/Thin Server” (OpenDAP) model replaced with a “Thin Client/Fat Server” model.**
  - ***Already feeding into the AWIPS-II “data delivery” design***
- **MADIS successfully delivering additional surface and upper-air data via LDAD**



New Client/Server Model

# 10/11 HMT-West Plans

- “Smart Push” of gridded fields for GFE use
  - Demonstrate another push/pull capability that could be useful for AWIPS-II development
  - Which ensemble fields would be most useful?
- Other types of data for “smart pull”:
  - Additional ensemble fields (including flux field)
  - High-Resolution Rapid Refresh (HRRR) (which fields?)
  - Others (e.g. larger scale HMT deterministic run)?
  - Global Satellite for “movable” scale
- Verification display(s)

