

MET Direction and Workshop Goals

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Thank You

Support for MET is provided by
the Developmental Testbed Center (DTC),
NOAA
and
the Air Force Weather Agency (AFWA).



Sources of direction for MET development

- MET verification advisory group (VAG)
- AFWA
- DTC needs
- NOAA projects
 - Hydrometeorology testbed (HMT)
 - Hazardous weather testbed (HWT)
 - DTC ensemble testbed
- DTC visitor projects selected by DTC science advisory board
- MET users

The Verification Advisory Group

Mike Baldwin - Purdue

Chris Davis - NCAR

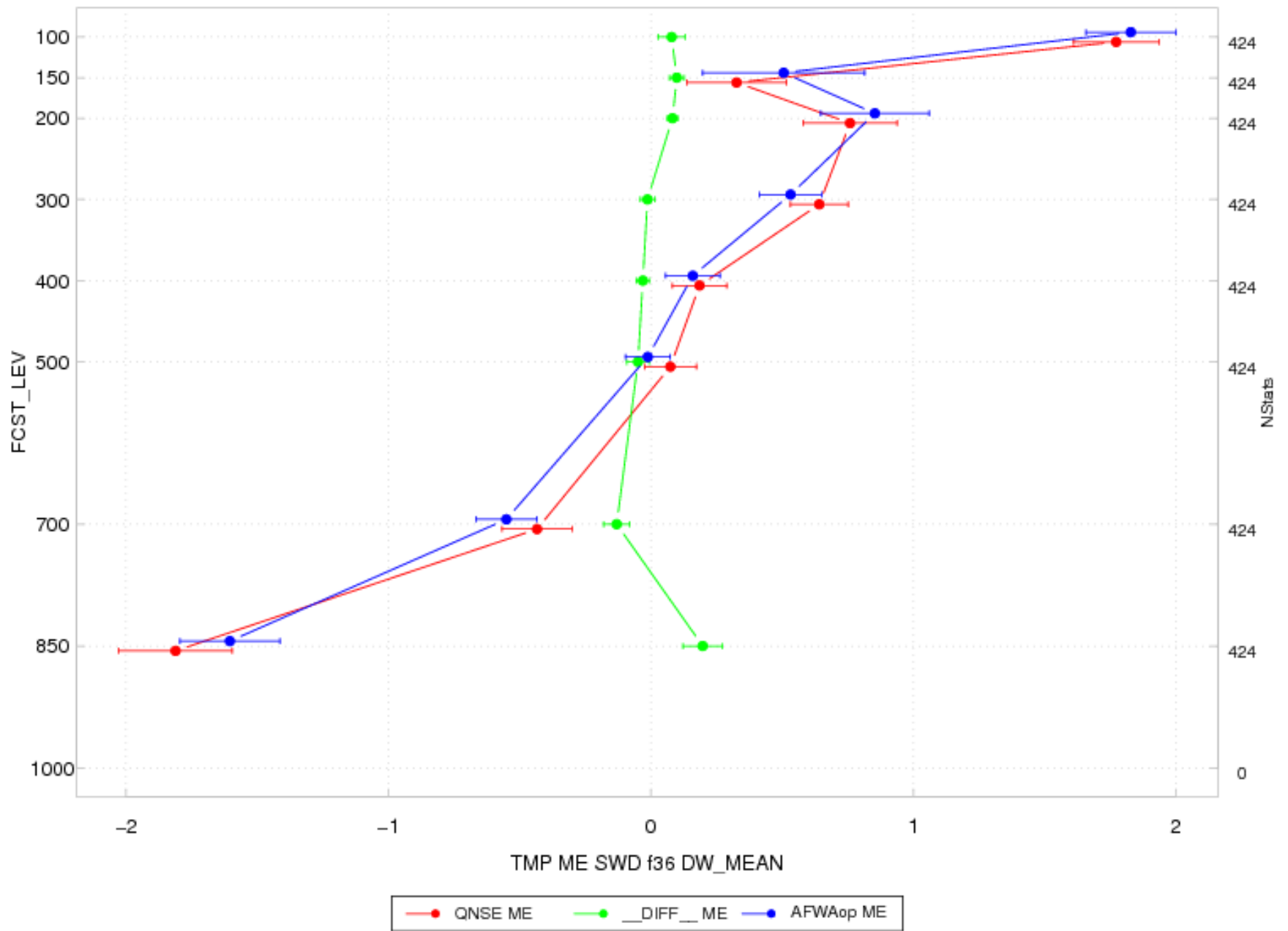
Geoff DiMego - NCEP

Beth Ebert - BOM

Jason Knievel - NCAR

Matt Sittel - AFWA

TMP ME SWD f36 DW_MEAN vs. FCST_LEV





HWT 2008

- Introduce Objective Evaluation



HWT 2009

- Realtime system
- Address scientific question



HMT 2010

- 1st Ensemble evaluation
- Satellite data into MET



HWT 2010

- Add Ensemble methods
- AWC/HPC present



HMT 2011

- Refine Ensemble methods
- Data Impact Studies

etc...



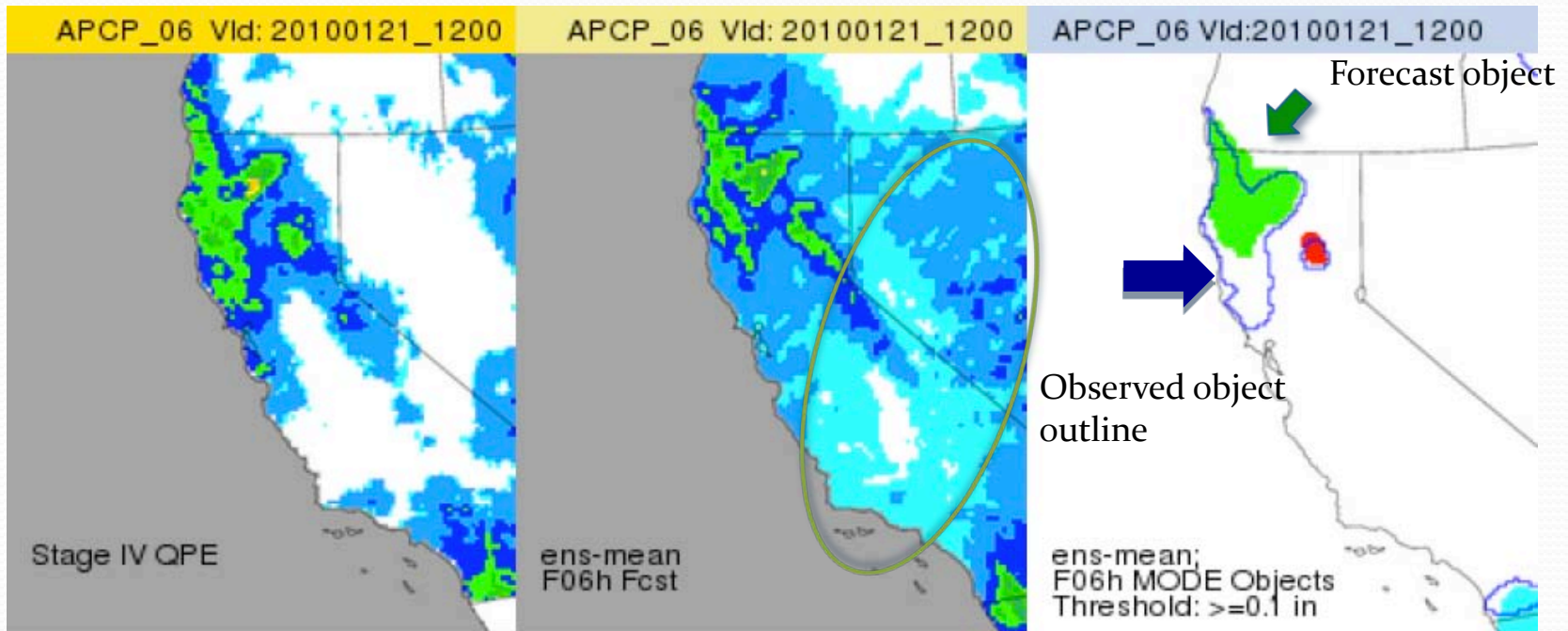
DTC
Ensemble
Testbed

A large green rectangular box on the right side of the diagram, representing the DTC Ensemble Testbed. It is connected to the central process boxes by double-headed green arrows.



Object-based verification of an ensemble mean forecast

- Observed object area is nearly twice that of the forecast object
 - (244 vs. 126 grid squares).
- Forecast object is almost nearly encompassed by the observed object (intersection area: 114 grid squares).
- The **low level precip** (a common artifact of forecast averaging) is ignored.



Workshop Goals – Cloud Verification

- Identify techniques beyond current MET capability that would be a value add for users
 - What algorithms?
 - Which users?
 - Value added?
 - Priority
- Specifically interested in:
 - Simulated satellite products
 - Cloud microphysics scheme diagnostic studies
 - Use of other WWMCA-like products out there
- How should we handle in-situ obs?
- Ways to diagnose observational uncertainty

Workshop Goals – Verification through Time

- Specify some ways to look at forecasts through time.
 - Updating forecasts for a single event.
 - Series for a fixed lead time.
 - Tracing objects (e.g. hurricanes or thunderstorms) through time.
 - More ?
- Define “Goodness” for each (probably not a single quantity).
- Discuss ways to measure goodness.
- Does timing of observations come into play?
- Keep ensemble and spatial forecasts in mind in addition to deterministic.

Attendee Introductions

- **Name**
- **Affiliation**
- **What do you hope to get from Workshop?**
- **Favorite book or movie.**

