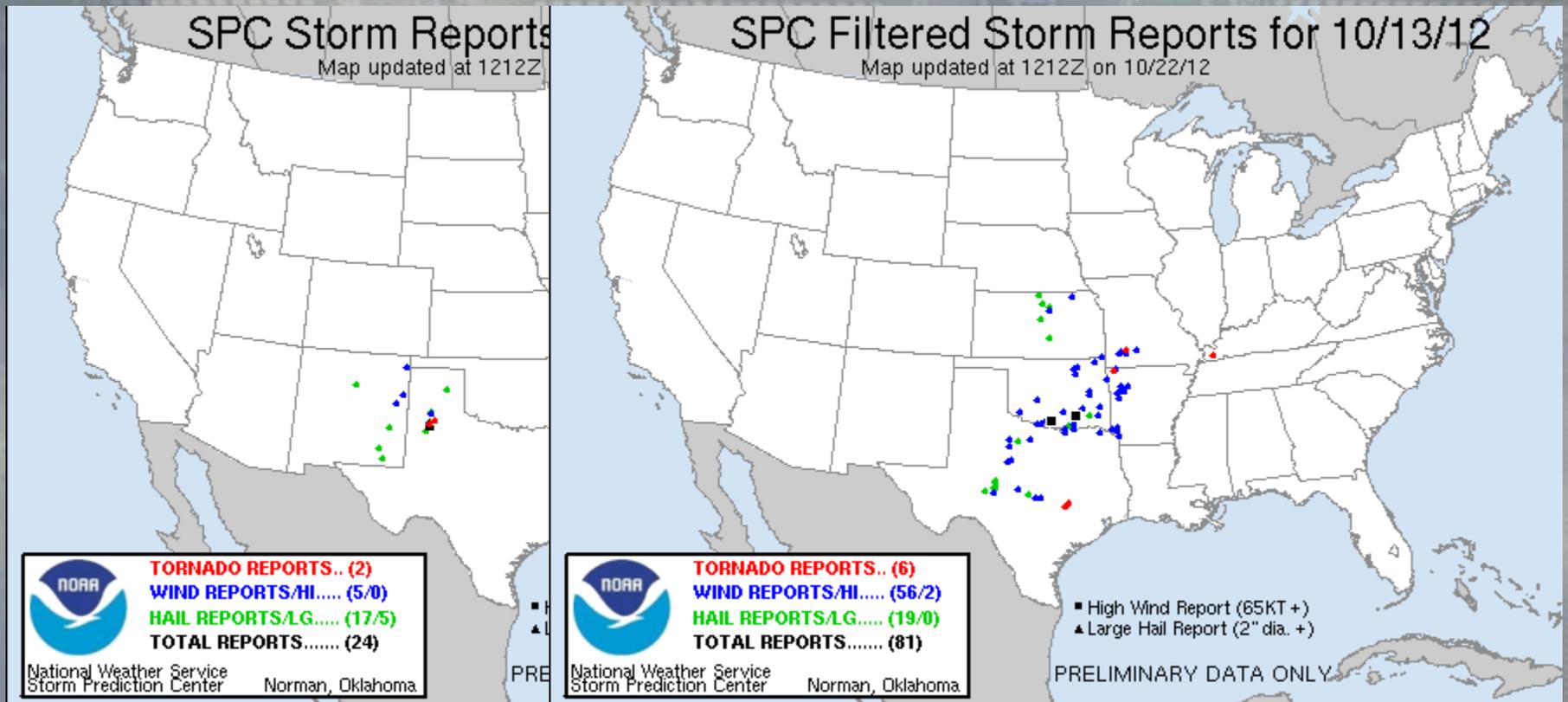


# LAPS, AWIPS II and the Short Term Forecast Update

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- Mid/Upper level system crossing the US



# October 15, 1980

- *Forecasting an Unusual Weather Event in Colorado: 15 October 1980*, Weaver and Brown, Focus on Forecasting, WAF, October 1982
- Forecast accurate in general sense
  - Threat of thunder, rain, snow in the mountains, locally heavy.
- Coarse upper air observation resolution
- LFM forecast – one-dot versus two-dot
- Short term tools available:
  - Satellite – GOES 3
  - Radar – WSR 57
  - Hourly surface observations – 10



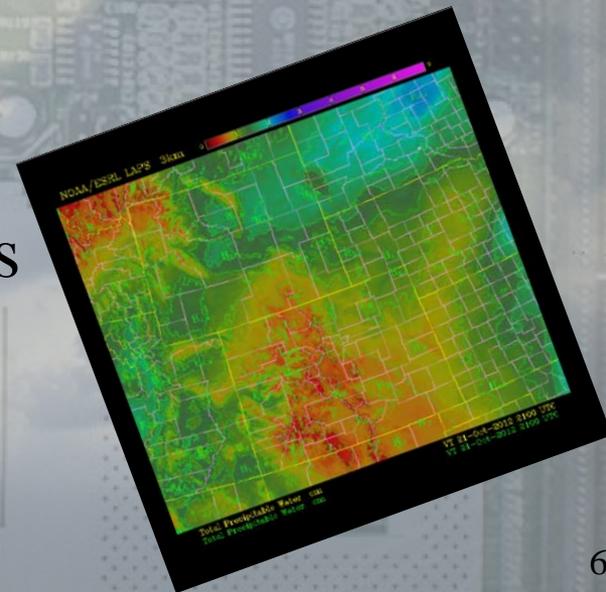
# Weaver and Brown, 1982

- Proof of concept for mesoscale improvements
- PROFS
- Integration of data
- Real time mesonet data
- Identification and monitoring of meso-scale gradients
- **Real time analysis**

- Response and reaction
  - Geographic location of synoptic features
  - Attention to evolution of gradients
- Confidence in high resolution forecasts available
- Confidence in surface data, satellite and radar, LAPS analyses
- Pattern recognition

# LAPS

- Basic fields are popular in forecast offices
  - CIN, CAPE, T, Td, moisture
- Cloud analysis fields very popular at Boulder
- To maximize LAPS use
  - Local champion
  - Easy interaction with data
  - Move beyond standard parameters



# AWIPS II

## Eric Thaler

- LAPS isn't working!
  - LAPS is working...
  - Data ingest and processing
  - Display challenges
  - Format changes
  - Model and domain changes
- Sorely missed during the convective season
- Champion needed more than ever



# Short Term Forecasts

- Enhanced Short Term Forecasts
  - Hourly parameter resolution
  - 1-3 hour update cycle
- Decision Support
  - Meso- to micro-scale
- Analysis and verification scheme for initialization and first-hour forecasts

# Take Away

- WFOs like and need LAPS.
- AWIPS II is a [*short term?*] challenge.
- **MUST** be in AWIPS.
- Local champion critical.
- Robust LAPS can/will play a pivotal role in decision support and enhanced short term forecasting.
- Would like more flexibility.
  - Domain and model background choices

# WFO Boulder wants to Help!

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