

NWS Welcome



2nd LAPS USER WORKSHOP

23-25 October, 2012



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Weather Ready Nation

- *Society is prepared for and responds to weather-dependent events*



- Goal: Improve weather decision services for events that threaten lives and livelihoods

Purpose

- Need accurate numerical analysis of fine scale weather phenomena
 - Improve real-time assessment of the current state of the atmosphere
 - Enable NWP for time scales of several hours
 - Improve the short range prediction of all types of high impact weather
- Local Analysis and Prediction System (LAPS) is a tool to help us reach our goal

LAPS Applications

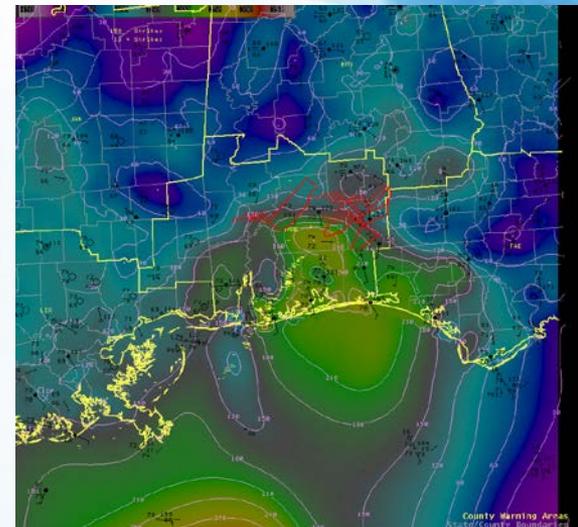
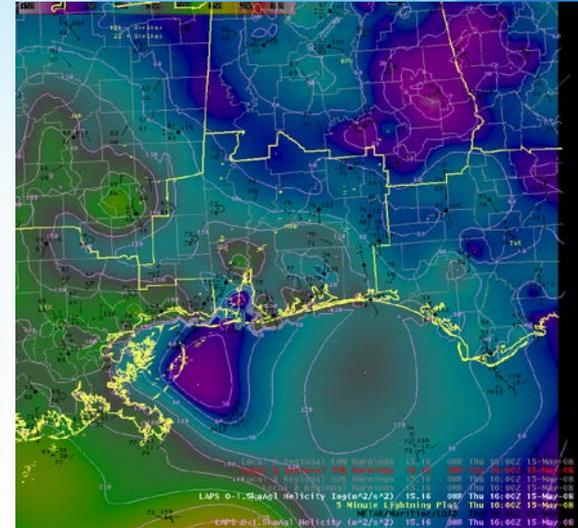
- Enhancing situational awareness
 - Provides a more detailed assessment of the state of the atmosphere
- Tool for improving short term forecasts
 - Assist in forecast verification and improve forecaster confidence
- Improve understanding by NWS staff

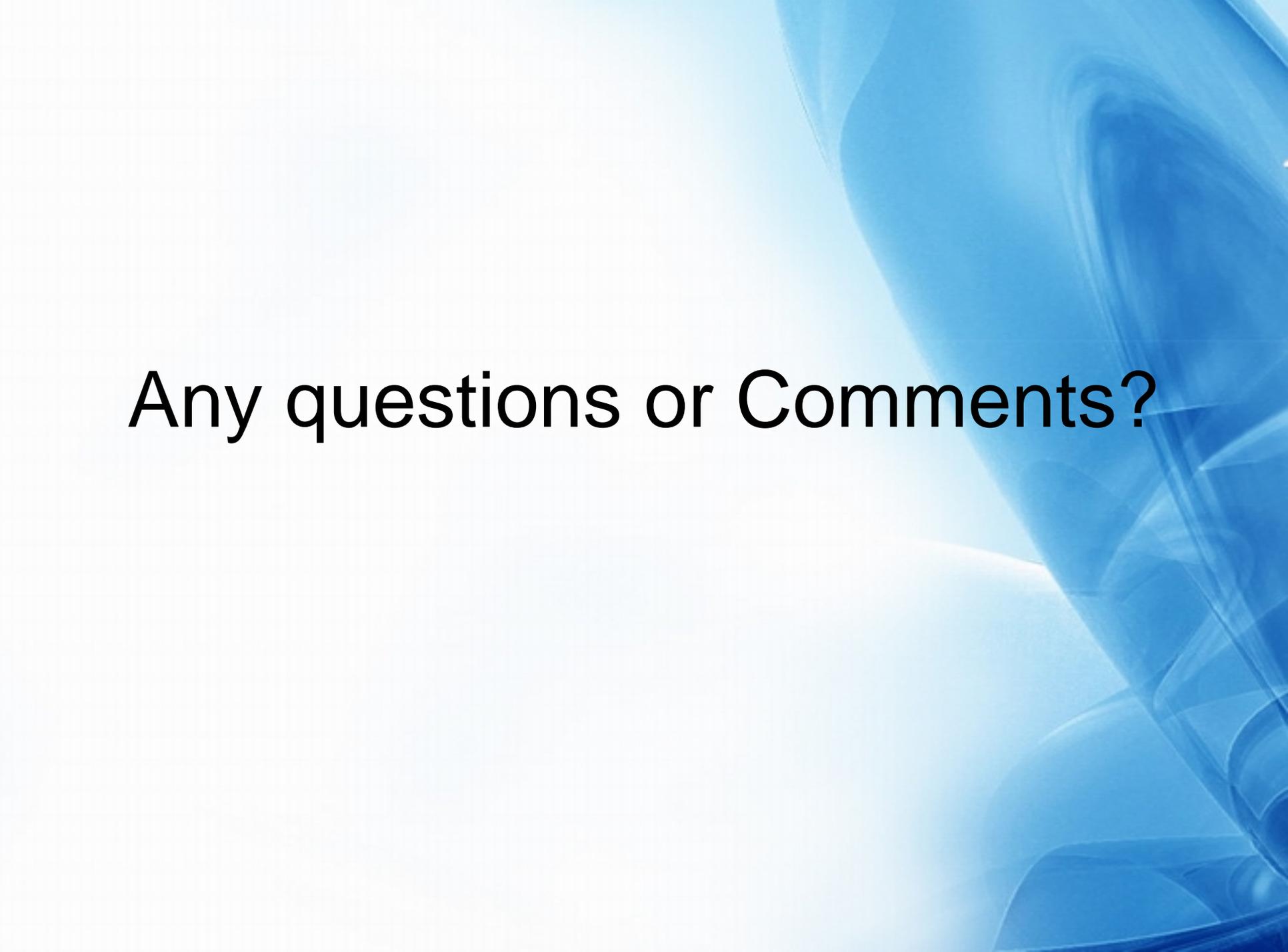
Short Term Forecast Applications

- Severe Weather Analysis
 - Highlight convective potential and instability
- Winter Weather Analysis
 - Real time wind analysis, quickly identify areas of Ageostrophic vertical circulations and frontogenesis
- Atmospheric Rivers
 - Identify moisture trends, synoptic-forced systems
- Assist in aviation forecasts, temperature trends, marine weather forecasts
- Used in GFE to represent the observed conditions (eg., Sfc temp)
 - Diurnal T and Td grids can be generated from this grid for up to six hours

LAPS – Anticipation of SVR WX

- Used as a real-time situational forecasting tool
- Highlight real-time severe weather trends
- Increase forecaster awareness may lead to increase lead time
 - Note: Graphic from 2010 LAPS Conference, *Role of LAPS in NWS*





Any questions or Comments?