Pre-Campaign Forecast, Friday April 8th

Submitted by kbowley on Fri, 04/08/2011 - 12:25

- Central Facility

Long-wave trough over central California continues to dig along the Pacific coast today, while slight threat of convective storms remains in place for this afternoon. CAPE will build this afternoon over central Oklahoma, which coupled with sufficient surface moisture may result in storm activity this evening. The dry line should hold its ground until Sunday morning, which coupled with moderate CAPE may form storms in the evening Saturday prior to the chance for more widespread precipitation associated with fropa Sunday morning. Primary concerns for today and Saturday are the existence of any capping inversion preventing convection, while concerns for Sunday morning primarily focus on the extent of precipitation formed prior to fropa.

Forecasts

Time of Day:
Afternoon
Day 0:
04/06/2011
Forecast for Day 0:

Potential for convective storms today has built over the past few model runs, with CAPE values over central and western Oklahoma increasing from run to run. 12UTC model soundings for this afternoon are suggesting little existence of a capping inversion by 21 UTC, though a forcing mechanism may be lacking to kick-off convection, unless some dry line motion can interact with these high-CAPE regions. If storms form to the SSW, gust front-induced cells appear likely, so regions to the southwest should be monitored for activity.

Day 1:
04/07/2011
Forecast for Day 1:

All eyes will be out west as our trough digs through the four-corners region. Some chance for convection and severe weather in the afternoon, though model soundings don't look quite as promising as for Day 0. Once again, the forcing source will be the dry line, which continues to stay nearly-stationary. Good moisture will continue to be in place however, and low to moderate CAPE values are forecasted in the region, so the environment is still favorable if some sort of kick is provided.

Day 2:
04/08/2011
Forecast for Day 2:

The trough will finally begin its propagation through Oklahoma in the morning hours Sunday. Cyclonic circulation forming in NW Kansas/SW Nebraska will provide a mechanism for dry line propagation eastward through Oklahoma in the morning. Low CAPE will be in place, but the dry line may produce enough motion to build a line of showers or storms passing through SGP in the 09-15 UTC time frame. Models aren't providing a lot of moisture, but it's hard to argue against no precipitation given the larger-scale forcing and the available moisture in place.

Extended Outlook:

Early next week looks quiet in the wake of the frontal passage, with moisture return not expected until Wednesday.