

Morning Forecast, Monday, May 2

Submitted by avarble on Tue, 05/03/2011 - 10:47

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This morning brought some virga over the SGP site, likely forced by vorticity advection well to the southwest and deep convection well to the south. All precipitation is far to the southeast. Cold air advection from the northwest at mid levels is bringing in drier air and killing any chances for virga, let alone precipitation. There is a very slight chance for convective showers this evening as the trough axis rotates overhead, but dry air and lack of surface heating after the sun sets may quickly eliminate this threat. The next few days look sunny and warmer with no chance of any precipitation. The next chance of precipitation comes Friday into Saturday as lee cyclogenesis pulls moisture northward over Oklahoma and produces a possible cold front/dryline that will pass through the area. This is a possible target for both the Citation and the ER-2 but is a long way out and thus, just needs to be monitored as the week progresses.

Forecasts

Time of Day:

Morning

Day 0:

05/02/2011

Forecast for Day 0:

We agreed at the 5 PM meeting yesterday (May 1) that we would monitor the weather early this morning and meet at 7 AM due to the potential of a Citation flight over the SGP site. We agreed that there was virga advecting over the site, but that very dry lower levels would prevent any precipitation from occurring. The frontal boundaries from the surface up through 700 mb are much farther to the south than yesterday and thus, precipitation is expected to remain farther south and east. Upper level forcing also looked displaced to the south with cold air advection winning the battle over our area. Thus, we chose to not fly the Citation. This was a wise decision as we can now see clearing to the west already as of 17Z and virga is well to the southeast. Potential exists for a convective shower to push into the area this evening if the trough progresses a bit quicker than anticipated, but very likely the sun will set and that combined with rather dry air in place will eliminate this potential.

Day 1:

05/03/2011

Forecast for Day 1:

Conditions look very cold in the morning but warming into the low 70s by afternoon with a chance of cumulus later in the day. No precipitation.

Day 2:

05/04/2011

Forecast for Day 2:

Conditions will be similar to Day 1, but a bit warmer and drier. No precipitation.

Extended Outlook:

The next chance for precipitation looks to be Friday into Saturday as weak lee cyclogenesis occurs to our northwest. A warmer and more moist airmass should be advected northward at low levels if this verifies. As the surface cyclone moves east and intensifies, we would expect a cold front to move southeastward providing the possible surface forcing necessary for convective initiation. A dry line situation is possible as well. This is a long way off in the

forecast and thus, the timing and location of such an event is still up in the air. Being the only possible event in the near future, this situation should be monitored closely by forecasters as the week progresses.

Attached files:

1. [MC3E Weather Briefing 20110502.ppt](#)