

Mission Scientist report for 23 April 2011

Submitted by srutledge on Sat, 04/23/2011 - 11:14

Flight Date:

Sat, 04/23/2011

Mission Scientist report for 23 April, 2011, 1600 Z

This morning's call began with a debrief of yesterday's mission. A full debrief report, written right after the mission is available on the portal. This morning's debrief focused on instrument and coordination issues from yesterday's mission. The aircraft coordination was good. We did have VHF radio communication problems but these may have been due to the long ranges we were trying to communicate over. The ER-2 pilot was able to relay instructions to UND and that helped immensely. Cell phone comms were maintained with the ER-2. We continue to evaluate the VHF radio at SGP. The ER-2 pilot (Tim Williams) described a problem on the plane were a DC power spike that took the HWRAP off line for approximately 20 mins. HIRAP, AMPR and CoSMIR data are being examined today. The UND reported that the 2D-C and the CPI were down. They are working on those instruments now. In summary, the mission yesterday was a success. Good OU Prime radar data were obtained on the southern portion of the line the aircraft were working. Aircraft made coordinated passes in the forward anvil and the ER-2 made excellent passes over the convective line.

Instrument status: Aircraft as described above. Soundings are up. N-pol is up. OU-Prime is up. All three DOE X-bands are up. C-SAPR cannot do RHI's but is doing the full PPI scan. Ka/W is down. DOE Ka is operational. DOE soundings will go to high frequency (6/day) starting at midnight tonight.

Forecast discussion and plans: The models are very divergent. There is a possibility of elevated convection near/over SGP between 12-16Z Sunday. The WRF and GFS develop a more substantial system overnight Sunday into Monday. We must wait for another set of model simulations before we make decisions. Therefore we will issue an update this afternoon by 21Z. Our current thinking is that we might have the UND aircraft work elevated convection around SGP Sunday from 12-15Z. Both aircraft would then be used for the overnight event Sunday-Monday. We will decide on takeoff times for the larger event by 21Z today.