

Radarscientist Form

(Updated 31 May 2019)

Flight ID 20190710H1 Storm AL02 (Pre-Berry)

HRD Radar Scientist (Aircraft/Ground) Reason / N. Griffin

AOC Radar Operator Mike Mascara

The aircraft radar scientist is responsible for data collection from all radar systems on his/her assigned aircraft, working with the ground radar scientist to ensure successful transmission of all radar products from the aircraft in a timely manner, and contributing to mission science by communicating real-time radar products to the LPS. Specific responsibilities are detailed in the *Aircraft Radar Support Guide* located on the radar workstation desktop and in the flight bag.

§ Pre-flight Notes.

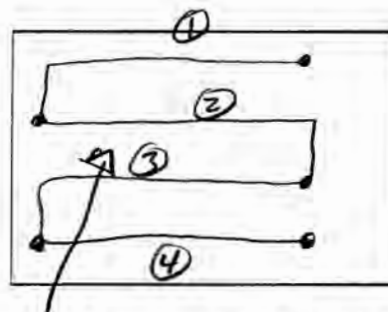
Indicate below any existing radar instrumentation issues, pre-flight radar repairs or other instrumentation issues (e.g., GPS swapout) that might impact radar data collection or analyses. If none, then simply write NONE below.

(Problem w/ trackpad at radar workstation. Had it replaced after takeoff.)

§ Pre-flight Setup with Ground Radar Scientist.

Preferably before the planeside briefing, establish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

- Communicate any pre-flight issues noted above.
- Confirm latest flight pattern. Sketch to the right.
Indicate legs constituting proposed analyses.
- Go through Steps 1-3 of Aircraft Radar Support Guide.



Hardwire analysis center
at 88W 28.5N for all
legs. Hopefully cover bulk
of TDR data within 500x500 km

§ In-flight Setup with Ground Radar Scientist.

After radar recording has begun, reestablish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

- Go through Steps 4-7 of Aircraft Radar Support Guide.

Indicate below any issues identified during Steps 4-7, in particular any radar instrumentation issues evident in the radar displays. If none, then simply write NONE below.

Decided not to run for ProcSend until after we verify a good analysis.

§ In-pattern Radar and Weather Event Log.

Indicate below any radar down times or significant weather observations that might be helpful for interpreting radar analyses (e.g., flight through sparse shallow convection).

| Time (HHMMSS) | Event (Radar or Weather) |
|---------------|--|
| 1st E-W leg | Some low-midlevel conv., but very spotty |
| 2nd E-W leg | Seeing more strat above FL, still spotty echo at lower levels (out of window) |
| 3rd E-W leg | deep refl. still spotty (but had to deviate around more) |
| 4th E-W leg | lots of stratiform on this leg; tried to point cells both N and S of flight track (some dev. to N to better capture N cells) |
| | Turned TDR off ~ 251635 UTC |
| | |

§ End-of-Flight Shutdown with Ground Radar Scientist.

Once the aircraft exits the system, reestablish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

- Go through "NEAR END OF FLIGHT" Steps 1-5 of Aircraft Radar Support Guide.

If you recorded "N" for Analysis Sent at any point during the flight, please detail the situation below. If there are any other *mission-critical* issues pertaining to the radar systems not documented above, please note them here. If none, then simply write NONE below.

Ended up switching from IBST = 4 → 15 after first analysis ... too much noise near FL in analysis
Possible range delay issue (or something else)

Why is the spurious data $\frac{1}{2}$ distance from FL to surface ... spurious data ... Bobby suggests aircraft reflection? Will send pics of display to J.G. and D.P

Returned to IBST 4 after 2nd analysis

Not sure about data retrieval.

Ran makearchive-whole.

