Radar Scientist Form

(Updated 31 May 2019)

Flight ID 20190915H1 **Storm** Humberto

HRD Radar Scientist (Aircraft/Ground) Alvey / Gamache

AOC Radar Operator Wernecke

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.

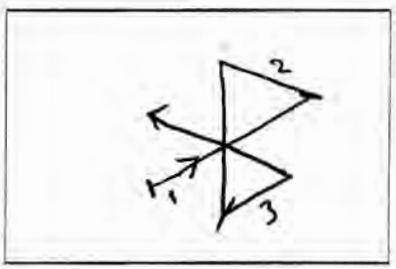
Indicate below any existing radar instrumentation issues, pre-flight radar repairs or other instrumentation issues (e.g., GPS swapout) that might impact radar data collection or analyses. If none, then simply write NONE below.

None

∮ Pre-flight Setup <u>with</u> 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.



∮ 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.

We accidentally ran radarsync -u instead of -a for half a second so redid steps 2,3,7 just to be safe

∮ 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)	
215200	large stratiform region E/NE of broken eyewall" -	limited turbulence
215700	high 50s dBZ w/ outer convective band	
221000	strong stratiform 50+ dBZ or decaying convection to SW	
221700	exited stratiform; some shallow convection & isolated cells around	
2350	deep convection to our NE/right w/ ~40 dBZ 12-14 km	lightning fo

∮ 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

None

Jobfile Parameters for Automated TDR Analysis

FLIGHT ID: **Aircraft Radar Scientist:**

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound Track	Outbound Track	Event Type	Max Radius if not 250 km	Horiz. spacing if not 2 km	Accept. for Graphics?	Analysis Sent?
				Time	Latitude	Longitude							
HHMMSS	HHMMSS	Deg	Kts	HHMMSS	Decimal Deg	Decimal Deg	Azimuth (deg)	Azimuth (deg)	IN/TS/ H/MH			(Y/N)	(Y/N)
211310	220240	360	5	213714	29.18	78.00	65	65	TS			y	y
	222930	360	5						TS				
222930	232460	~~360~~ 110*	5	225709	29.14	77.91	170	170	TS			y	y
	234730						[illegible]	[illegible]	TS				
234730	004015	75	5	001423	29.21	77.81	300	300	TS			y	y

*not storm motion → appears to be a S wibble