

Lead Project Scientist

Storm or Project Chris Experiment type TDR
Flight ID 20180709#2 Mission ID 0903A Chris

Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft from the Field Program Director.
3. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Review field program safety checklist
 - c. Arrange ground transportation schedule when deployed.
 - d. Determine equipment status.
4. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
5. Determine from AOC flight director the mission designation and whether aircraft has operational fix responsibility
6. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
7. Report status of aircraft, systems, necessary on-board supplies and crews to Field Program Director.
8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drops.
9. Make sure each HRD flight crew member has a life vest.
10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

In-Flight

1. Confirm from AOC flight director that satellite data link is operative (information).
2. Confirm camera mode of operation.
3. Confirm data recording rate.
4. Request AOC flight director to leave radar in non-sector mode for initial Figure 4.
5. Once at IP, request AOC flight director adjust radar tilt to minimize sea clutter.
6. Complete Lead Project Scientist Form.
7. Check in occasionally with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

1. Debrief scientific crew
2. Gather completed forms for mission and turn in to data manager at HRD.
3. Obtain a copy of the Dropsonde raw and processed files from the AVAPS operator on thumb drive.
4. Obtain a copy of the radar LF files from the radar technician on thumb drive.
5. Obtain a copy of the tar'ed radar TA files from the radar scientist on thumb drive.
6. Obtain a copy of serial flight data and raw NetCDF file on thumb drive from the data technician.
7. Obtain a copy of SFMR data on thumb drive from the data technician.
8. Obtain a copy of DMT data on thumb drive from the data technician.
9. Report landing time, aircraft, crew, and mission status to the Field Program Director.
10. Determine next mission status, if any, and brief crews as necessary
11. Prepare written mission summary using **Mission Summary** form.

Lead Project Scientist Check List

Storm or Project Chris Experiment name TDR
 Flight ID 20180709H2 Mission ID 0903A Chris

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Alaka</u>	Flight Director	<u>Henning</u>
Radar/Workstation	<u>Marks</u>	Pilots	<u>Price/Pidra/Abitbol</u>
	<u>—</u>	Navigator	
Cloud Physics	<u>—</u>	Systems Engineer	<u>Keystack/Darby</u>
	<u>Christophersen</u>	Data Technician	<u>Richards</u>
Dropwindsonde	<u>—</u>	Electronics Technician	<u>T. Lynch</u>
AXBT/AXCP	<u>—</u>	Other	
Photographer/Observer s/Guests	<u>Tyler Young (Hallings)</u>		

B. Take-off and Landing Times and Locations:

Take-Off: _____ UTC Location: LAL
 Landing: _____ UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

TDR Defining Flights (see plots)

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E. — Equipment Status (Up ↑, Down ↓, Not Available N/A, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / CDs / Expendables / Printouts
Radar/LF	↑↑	↑		
Doppler Radar/TA	↑↑	↑		5 analyses
Cloud Physics	↑	↑		
Data System	↑	↑		
GPS sondes	↑	↑		
AXBT/AXCP	—	—		
Ozone instrument	—	—		
Workstation	↑	↑		
Cameras	↑	till done		

REMARKS:

WSRA had to be restarted.

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Lead Project Scientist Event Log

Date 7/9/18

Flight ID 20180709H2 LPS Alaka/Marks

Time	Event	Position	Comments
202517	TO	LAL 28082.15	
2040	TDR	turned on	
220223	(1)	30.7, -74.6	TK 310 206 drop #1
2225	6	32.25 74.5	drop #3
2252	(2)	34.05 74.5	drop #5
2325	(3)	32.3 76.5	drop #6
2353	6	32.25 74.33	drop #8
0015	(4)	32.25 72.32	drop #10
0031	(5)	33.33 73.0	drop #11
005526	6	32.15 74.35	wave #2 is new 030 - 210
0117	(6)	31.05 75.6	
0147	(7)	31.05 73.0	climb to 12,000'
0213	6	32.25 74.33	
0225	(8)	32.9 75.1	truncate leg at 30nm desced to 8,000'

FL 8000'

FL 10000'

9
6

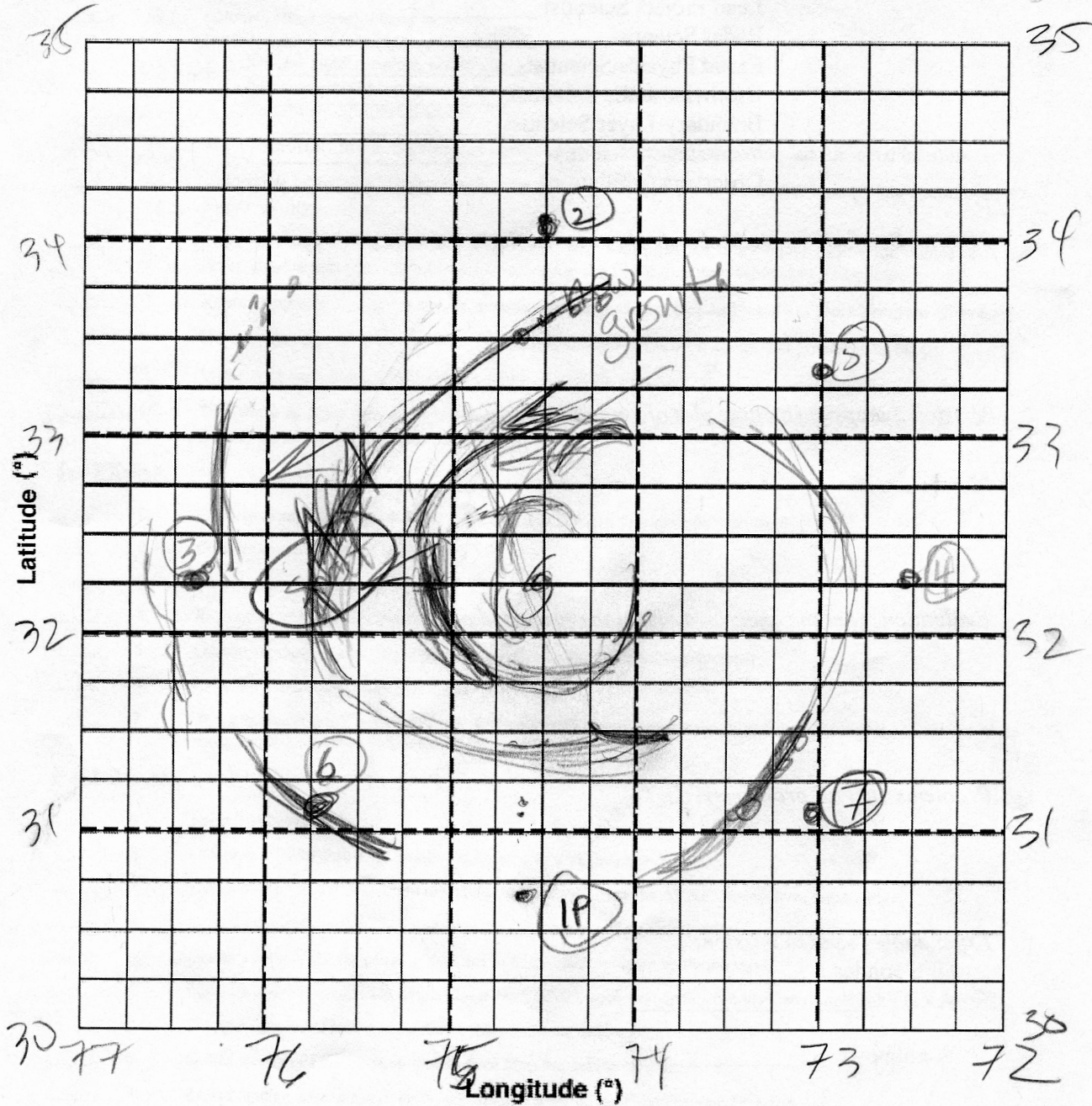
1

appears that bands are rotating clockwise

Observer's Flight Track Worksheet

Date 7/9/18 Flight 20180709H2 Observer Marks

family NB of G and then swapily 35 down w



- wave #2 asymmetry clearly evident
- wave #2 preceded by wave #1
from Unk to H