

Lead Project Scientist Check List

Storm or Project PTC 9

Experiment name EMC TOR

Flight ID 20190913H2

Mission ID _____

A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist	Bucci	Flight Director	LUNDRY/PARRISH
Radar	ALVEY	Pilot	DIDIER
Workstation		Pilot	ROSSI/LEGIDAKES
Cloud Physics		Navigator	RICHARDS
Dropsonde	ABERSON	Systems Engineer	HEYSTEK/SANCHEZ
Dropsonde		Data Technician	NAEHER
AXBT/AXCP		Electronics Technicians	WARNECKE MCALLISTER
Observer/Guest	CHANG	Flight Engineer	
Observer/Guest			

B. Take-off and Landing Times and Locations:

Take-Off: 2111 UTC Location: Lakeland, FL

Landing: _____ UTC Location: Lakeland, FL

Number of Eye Penetrations: N/A

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
/				
/				
/				
/				
/				

D. Mission Briefing:

PTC 9 located east of Bahamas has disorganized convection and multiple low level centers. Mid level ^{center} appear with convection (and an old decaying mid off to the SE). Experiencing moderate shear and not expected to intensify quickly. Butterfly pattern anchored on NHC center keeps convection NE (clear SW)

Storm or Project _____ Experiment name

Flight ID

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

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

REMARKS:

- Initial sonde station down (switch to station 2)
- 10 minute take off delay for mechanical issues
- Anchored center on NHC SPM estimate
 - ↳ will adjust center passes to storm motion

Lead Project Scientist Event

Date Flight ID LPS

Time	Event	Position	Comments
221833	carah	25°38' 76°59'	Primary Teal ↓ Backup Teal ??
222237	IP/sonde	25°36' 76°54'	good sonde ✓ shallow cu
222615	light little rain/verga		
223540	midpt sonde	25.6 75.95	good sonde stable shallow cu cirrus over
2244	live cam shows rain	25.6 75.28	anvil/stratiform (TDR) rain ↑ NOT ON MMR
224900	center drop delayed	25.6 74.9	winds @ 15 kts
225135	center	25.6 74.75	
225500	pattern change		extended outbound 105 n mi from center
230500	midpt sonde		strato deck
231000	convective line	25.6 73.25	14 km towers
231130	lightning!		
231652	endpt sonde	25.6 72.79	exiting light stratiform 30 kt SFC
233200	downwind		stratiform on left side for majority of downwind
234400	endpt sonde	27.2 73.9	lol - he accidentally launched sonde instead of clicking ICS com
240000	midptsonde delayed		in convection

20 00 36 dropped 26.35 74.53

Lead Project Scientist Event

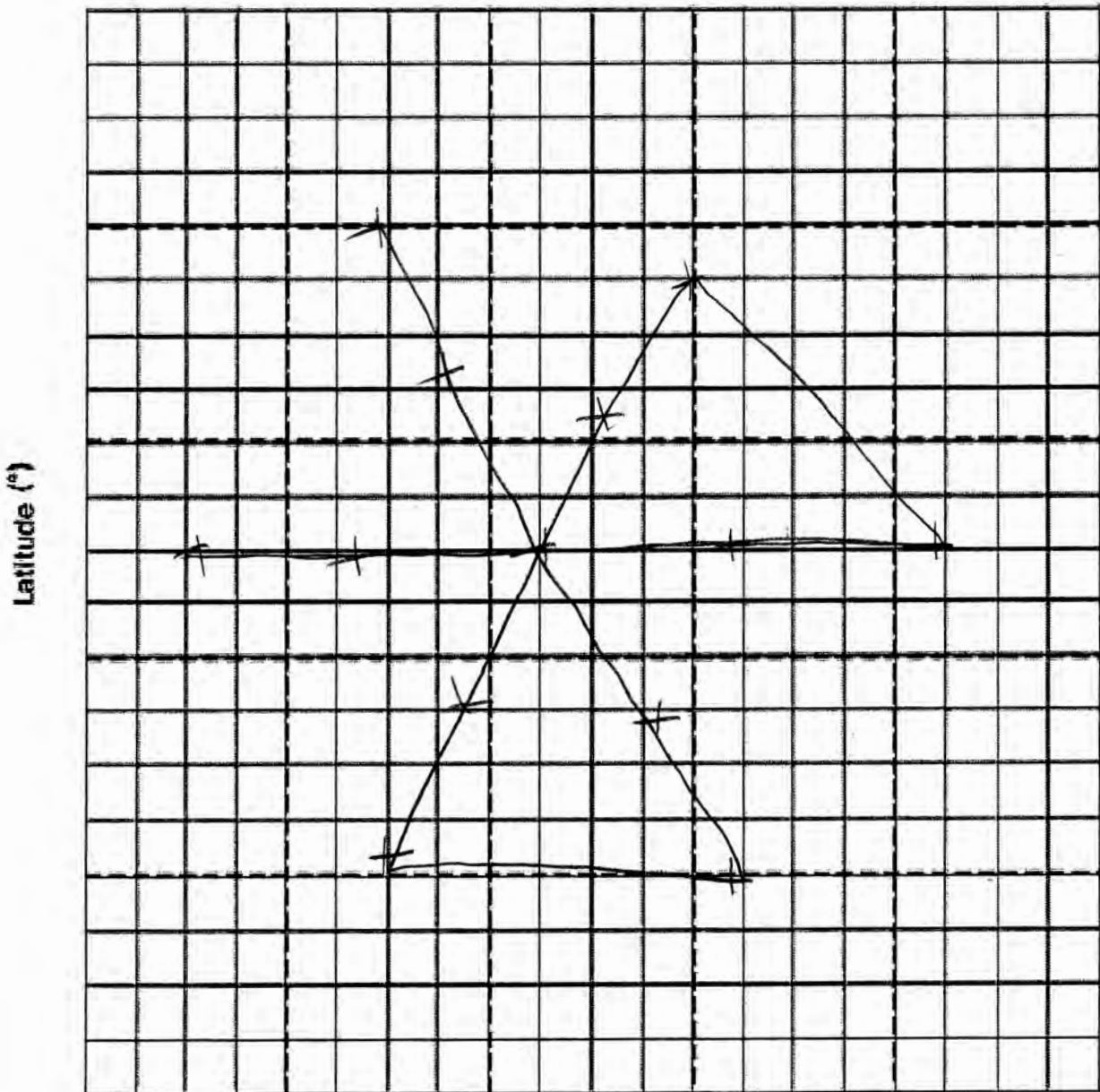
Date Flight ID LPS

Time	Event	Position	Comments
001312	mark center sonde for NHE dropped	25.55 74.95	not as nice a center fix (no hunting)
0024	midpt sonde	24°52' 75°22'	no precip fast fall (16-17 m/s)
0025	midpt sonde	24°48' 75°25'	back up sonde good sonde
0030	convection in quadrant	SE	IR sat. indicates growing convection w/ lightning in our SE portion of
003400	10 kts flight level	SW quad	pattern → 10-15 kts less than NE quad
003625	end pt sonde	24°7' 75°50'	good sonde mid level dry air on sat.
005700	growing convection	SW quad	6-8 km up to 65 dBZ
0058	end pt turn	24°21' 74°8'	turn early to avoid
005928	sonde	24°24' 74°9'	good sonde
010949	midpt sonde		good sonde
012200	center sonde	25.6 74.9	missed to the west good sonde
013200	mid pt sonde	26°26' 75°28'	good sonde
014400	end pt sonde	EP	good sonde

Observer's Flight Track Worksheet

Date _____ Flight _____ Observer _____

Use highlighter to draw freehand on chart



Longitude (°)

ends 6

mids 6

HFIP center 1

NHC center 2

Mission Summary

Scientific Crew (4 RF)

Lead Project Scientist Bucci
Radar Scientist AIVCY
Cloud Physics Scientist
Dropwindsonde Scientist Aberson
Boundary-Layer Scientist
Workstation Scientist
Observers (affiliation) Chang / NESDIS

Mission Briefing: (include sketch of proposed flight track or page #)

sample PTC9 for EMC and transmit sondes and radar, Butterfly pattern @ 10k w/ ends, mids, 1 center. Anchor to NHC 5 PM center estimate

Mission Synopsis: (include plot of actual flight track)

TD 9 was upgraded at SPM. Butterfly pattern completed as planned. Dropped 2 center sondes for NHC b/c Teal could not complete fix mission.

Evaluation: (did the experiment meet the proposed objectives?)

All sondes and radar analyses transmitted
Radar helped NHC forecasters

Problems: (list all problems)

- Mechanical problems delayed take off by 10 min
- Aberson identified ASPEN bug w/ sonde location

Expendables used in mission:

	Deployed	Good	Bad
GPS sondes :			
AXBTs :			
Sonobuoys:			
UAVs			