

Flight ID
Preflight

080830I

Lead Project Scientist

Storm Gustav

LPS

Whithorn

- ☒ 1. Participate in general mission briefing.
- ☒ 2. Determine specific mission and flight requirements for assigned aircraft.
- ☒ 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- ☒ 4. 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.
- ☒ 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- ☒ 5. 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.
- ☒ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami).
- ☒ 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- ☒ 7. Make sure each HRD flight crew members have life vests
- ☒ 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.
- ☒ 8. Collect "mess" fee (\$2.00) from all on-board HRD flight crew members.

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. Complete Lead Project Scientist Form.
- ☒ 5. Check in 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. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- ☐ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- ☐ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ☐ 5. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- ☐ 6. Obtain a copy of the all VHS videos from aircraft cameras (3-4 approx.). Turn in with completed forms.
- ☐ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.
- ☐ 8. Determine next mission status, if any, and brief crews as necessary.
- ☐ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- ☐ 10. Prepare written mission summary using Mission Summary form (due to Field Program Director a week after the flight).

Mission ID: 1407A GUSTAV

Lead Project Scientist Check List

Storm or Project Gustav Experiment name TDR
Date _____ Aircraft _____ Flight ID 080830I

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Whitman</u>	Flight Director	<u>Parry</u>
Radar	<u>Leghten</u>	Pilots	<u>Nelson, Newman, Ehardt</u>
Workstation	<u>Zhang</u>	Navigator	<u>Gallagher</u>
Cloud Physics		Systems Engineer	<u>Lynch</u>
Photographer/Observer /Guests	<u>ABC News</u>	Data Technician	<u>Smith</u>
Dropwindsonde	<u>Pule</u>	Electronics Technician	
AXBT/AXCP		Other	

B. Take-off and Landing Times and Locations:

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

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

TDR in Gustav, S. of Cuba. Butterfly pattern w/ Cuba overflight clearance.

E. —Equipment Status (Up ↑, Down ↓, Not Available —, 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	✓			
Videography	✓			

REMARKS:

- AXBT signal recorded on DAT.
- 20 BTs
- ~10 DropSondes
- SFR high-bank maneuver.
- Plot Alt 12000' pressure

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

Time	Event	Position	Comments
0805	1A/50FF	KMCF	
094120	IP/BT①	21.48 82.20	Begin Leg 1
	GPS①		SST 29.7 shallow
095122	BT②	20.83 81.78	Dnd
100123	BT③/GPS②/Eye	20.34 81.31	MSLP 959/SST 29.2
101614	BT④	19.48 80.78	MSST 29.3
102750	BT⑤/GPS③	18.81 80.39	29.0 SST
103435	BT⑥	19.24 80.13	28.7 SST
104130	BT⑦	19.83 79.87	Dnd 23.6?
104536	BT⑧	20.12 79.78	SST 28.4
105130	BT⑨/GPS④	20.61 79.69	SST 28.9
105230	turn W	20.63 79.75	Begin Leg 2
110237	BT⑩	20.62 80.55	SST 29.1
1112			changed AXPT type
111525	BT⑪	20.58 81.52	eye 29.0
112729	BT⑫	20.59 82.43	
114023	BT⑬/GPS⑤	20.51 83.36	End leg 2 29.3 SST
114940	BT⑭	19.88 82.95	
115547	GPS⑥	19.42 82.68	Rawband Prop
115859	BT⑮/GPS 17	19.22 82.06	Turn to NE heading
120100			Begin Leg 3
124131	BT⑯	20.15 82.03	SST 29.2
122330	BT⑰	21.76 81.71	Eye 29.2
122814	GPS ⑧	21.03 81.55	NE Eyeball same
123114	BT⑱	21.20 81.45	29.3 SST
124117	BT⑲/GPS⑨	21.75 81.19	29.1 Shallow
124549			RTB

PK Sfc
wind 41 m/s

End leg 1 ←

MSLP 955
motion
320/14

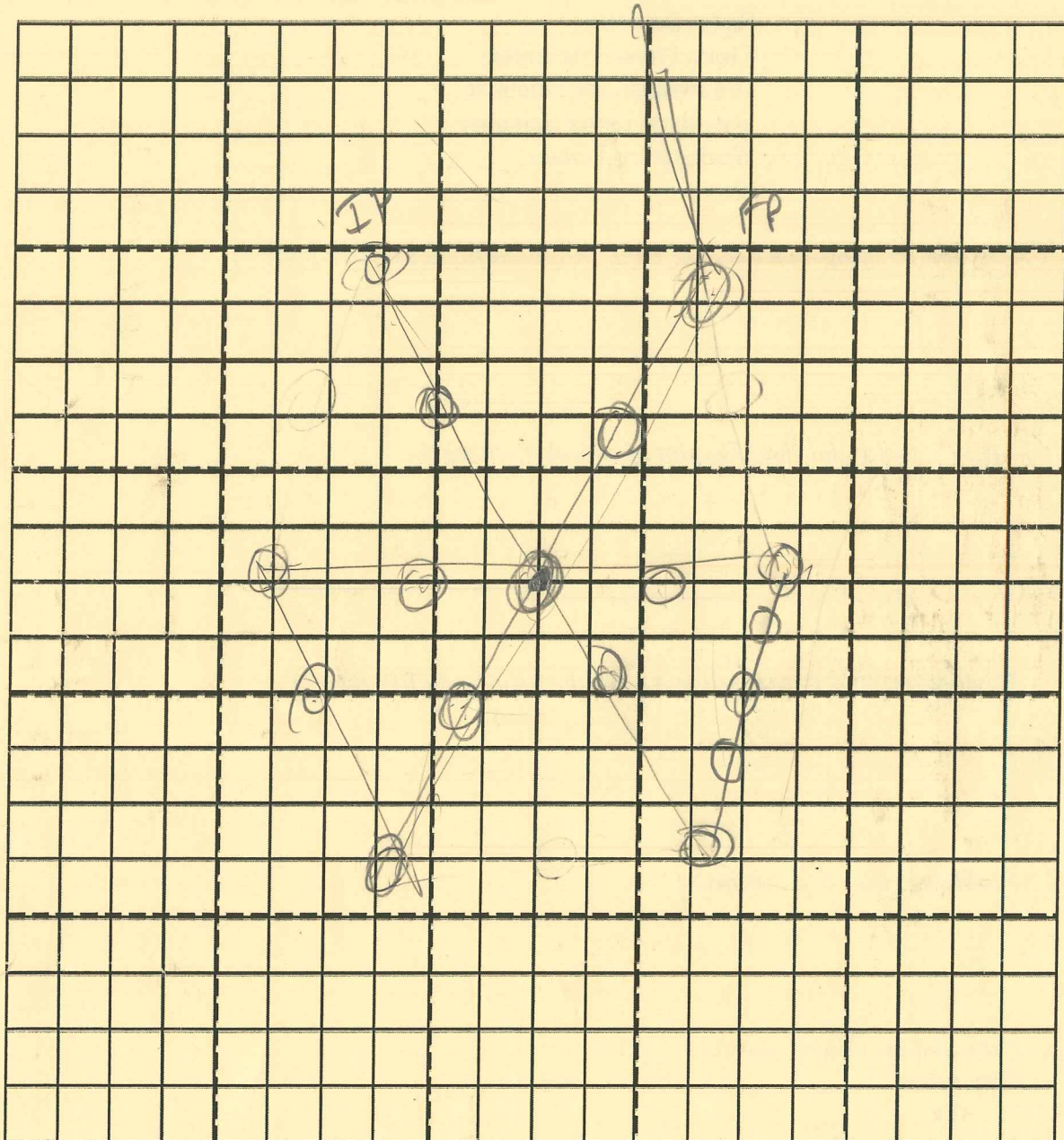
MSLP 955

End
leg 3

Observer's Flight Track Worksheet

Date _____ Flight _____ Observer _____

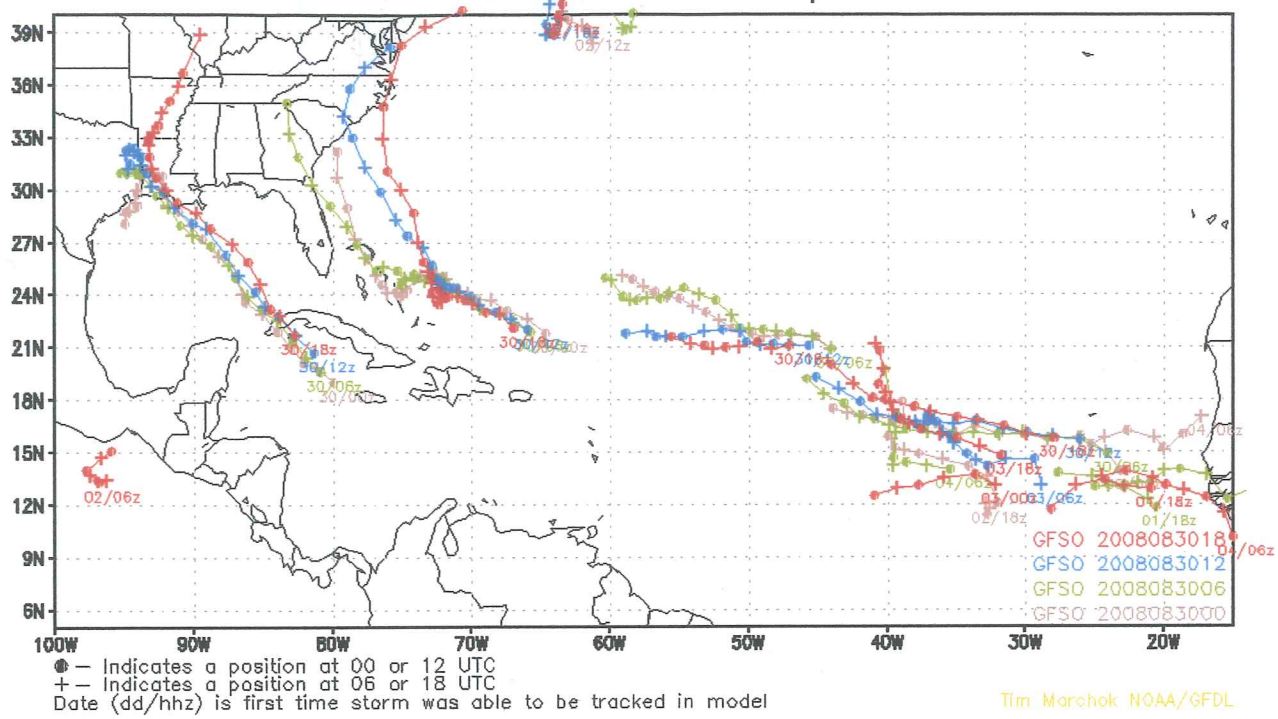
Latitude (°)



1 extra
at same
pattern

Longitude (°)

Model Forecast Storm Tracks Forecasts from 2008083018 and the previous 24 hours





Parking Passes

10 AM
5 pm

1030

Turn Pt	Type	Fix/Point	Latitude	Elev	Aspd	Altitude	MH	TH	Leg Time	Leg Dist
DTD		Descriptio	Longitude	MV	Bank	Wind	MC	TC	Clock Tim	Total Dist
1		KMCF/A	N 27 50.96	14FT	270T	12000M	189	185	00+00+00	0.0
	*M	MACDILL	W082 31.27	4.5W			189	185	00:00:00	0.0
2		SRQ	N 27 23.42	20FT	270T	12000M	189	185	00+06+07	27.6
	*M SRQ	SARASOT	W082 33.82	4.4W			189	185	00:06:07	27.6
3		VIOLA V57	N 26 57.06	unk	270T	12000M	159	155	00+06+27	29.1
	*M VIOLA	VIOLA	W082 19.94	4.5W			159	155	00:12:34	56.6
4		PINTS V57	N 26 48.17	unk	270T	12000M	134	130	00+03+04	13.8
	*M PINTS	PINTS	W082 08.15	4.6W			134	130	00:15:38	70.4
5		RSW V579	N 26 31.79	25FT	270T	12000M	135	130	00+05+38	25.3
	*M RSW	LEE CO	W081 46.55	4.8W			135	130	00:21:16	95.7
6		HICUP V22	N 26 24.82	unk	270T	12000M	185	181	00+01+33	7.0
	*M HICUP	HICUP	W081 46.64	4.8W			185	181	00:22:49	102.7
7		MARCI V2	N 25 53.46	unk	270T	12000M	185	181	00+06+57	31.3
	*M MARC	MARCI	W081 47.04	4.7W			185	181	00:29:46	133.9
8		RIGOR V2	N 25 07.36	unk	270T	12000M	185	181	00+10+13	46.0
	*M RIGO	RIGOR	W081 47.57	4.5W			185	181	00:39:59	179.9
9		STING V22	N 24 52.90	unk	270T	12000M	185	181	00+03+12	14.4
	*M STING	STING	W081 47.78	4.5W			185	181	00:43:11	194.3
10		EYW V225	N 24 35.15	10FT	270T	12000M	185	181	00+03+56	17.7
	*M EYW	KEY WEST	W081 48.03	4.4W			185	181	00:47:07	212.0
11		UVA	N 23 01.48	300FT	270T	12000M	173	168	00+21+11	95.3
	*M UVA	VARDER	W081 27.22	4.4W			173	168	01:08:18	307.3
12		UCL G448	N 21 36.30	100FT	270T	12000M	187	183	00+18+53	85.0
	*M UCL	CAYO LAR	W081 31.96	4.1W			187	183	01:27:11	392.3
13		TR0033301	N 21 34.81	unk	250T	12000M	272	268	00+10+03	41.8
	*M IP		W082 16.83	3.6W			272	268	01:37:14	434.1
14		TR0013050	N 20 03.70	unk	250T	12000M	153	150	00+25+12	105.0
	*M GUST		W081 20.51	3.9W			153	150	02:02:26	539.1
15		TR0031501	N 18 32.28	unk	250T	12000M	154	150	00+25+12	105.0
	*M 3		W080 25.26	4.3W			154	150	02:27:38	644.1
16		TR0030901	N 20 03.11	unk	250T	12000M	035	030	00+25+12	105.0
	*M 4		W079 28.97	5.1W			035	030	02:52:50	749.1
17		TR0013050	N 20 03.70	unk	250T	12000M	276	271	00+25+12	105.0
	*M 5		W081 20.51	3.9W			276	271	03:18:02	854.1
18		TR0032701	N 20 03.11	unk	250T	12000M	274	270	00+25+12	105.0
	*M 6		W083 12.04	2.8W			274	270	03:43:14	959.1
19		TR0032101	N 18 32.28	unk	250T	12000M	152	149	00+25+12	105.0
	*M 7		W082 15.76	3.1W			152	149	04:08:26	1064.1
20		TR0013050	N 20 03.70	unk	250T	12000M	033	030	00+25+12	105.0
	*M 8		W081 20.51	3.9W			033	030	04:33:38	1169.1
21		TR0030301	N 21 34.81	unk	250T	12000M	034	030	00+25+12	105.0
	*M 9		W080 24.18	4.8W			034	030	04:58:50	1274.1
22		PERLA/W	N 21 34.83	unk	290T	12000M	275	270	00+04+58	24.0
	*M PERL	PERLA	W080 49.98	4.5W			275	270	05:03:48	1298.2
23		UCL	N 21 36.30	100FT	290T	12000M	277	272	00+08+06	39.1
	*M	CAYO LAR	W081 31.96	4.1W			277	272	05:11:54	1337.3
24		UVA G448	N 23 01.48	300FT	290T	12000M	007	003	00+17+35	85.0
	*M	VARDER	W081 27.22	4.4W			007	003	05:29:29	1422.3
25		EYW	N 24 35.15	10FT	290T	12000M	353	349	00+19+43	95.3
	*M	KEY WEST	W081 48.03	4.4W			353	349	05:49:12	1517.6

Turn Pt	Type	Fix/Point	Latitude	Elev	Aspd	Altitude	MH	TH	Leg Time	Leg Dist
	DTD	Descriptio	Longitude	MV	Bank	Wind	MC	TC	Clock Tim	Total Dist
26		STING V22	N 24 52.90	unk	290T	12000M	005	001	00+03+40	17.7
*M		STING	W081 47.78	4.5W			005	001	05:52:52	1535.3
27		RIGOR V2	N 25 07.36	unk	290T	12000M	005	001	00+02+59	14.4
*M		RIGOR	W081 47.57	4.5W			005	001	05:55:51	1549.7
28		MARCI V2	N 25 53.46	unk	290T	12000M	005	001	00+09+31	46.0
*M		MARCI	W081 47.04	4.7W			005	001	06:05:22	1595.7
29		HICUP V22	N 26 24.82	unk	290T	12000M	005	001	00+06+28	31.3
*M		HICUP	W081 46.64	4.8W			005	001	06:11:50	1626.9
30		RSW V225	N 26 31.79	25FT	290T	12000M	005	001	00+01+26	7.0
*M		LEE CO	W081 46.55	4.8W			005	001	06:13:16	1633.9
31		PINTS V57	N 26 48.17	unk	290T	12000M	315	310	00+05+14	25.3
*M		PINTS	W082 08.15	4.6W			315	310	06:18:30	1659.2
32		VIOLA V57	N 26 57.06	unk	290T	12000M	315	310	00+02+51	13.8
*M		VIOLA	W082 19.94	4.5W			315	310	06:21:21	1673.0
33		SRQ V579	N 27 23.42	20FT	290T	12000M	339	335	00+06+01	29.1
*M		SARASOT	W082 33.82	4.4W			339	335	06:27:22	1702.0
34		MCF/T	N 27 51.67	14FT	290T	12000M	010	005	00+05+51	28.3
*M	KMCF	MACDILL	W082 30.81	4.5W			010	005	06:33:13	1730.3

