

NOAA Aircraft Operations Center - NOAA 49 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20180806N1	FLT #:		AC:	Twining	Scientists:		Pressure		Dropsondes		
From:	PHNL	ETD:		CP(s):	Waddington			A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:		Nav(s):	Fritzler			Wx Station Takeoff				
Block Time		Flight Time		FE(s):				A/C Land		BTs		
In:		In:		FD(s):	Sears	Visitors:		Wx Station Land		Good	Bad	Sent
Out:	1717	Out:	1729	SEB:	Flaherty			Storm Number ID:				
Total:		Total:		SSA:	McAlister			(ie: AL072012)				
Sponsoring Org:				AVAPS:	Underwood			TCPOD/WSPOD Mission				
Program:					Defeo			(ie: NOAA2 2418A SANDY)				
Purpose:					Lynch, C			OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS			Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X								
SCIENCE MISSION WITHIN BDRY LAYER				X								
LACK OF PRECIPITATION				X								
RELATIVE HUMIDITY ≥ 80%				X								
LARGE AIR-SEA TEMP GRADIENT				X								
HIGH SURFACE WINDS				X								
LONG FETCH / DURATION OF SFC WND				X								
SEA SALT ACCRETION FORECAST				X								
SEA SALT ACCRETION OBSERVED												

Additional Remarks:

*Highlighted items must be completed before departure.

Cockpit Gmax:

Gmin:

APPENDIX 2 – GIV QC Checklist

Flight ID:	20180806N1
Flight Director(s):	Sears

Pressure Comparison		
	T/O	Land
Aircraft	1014.1	1012.9
Tower	1014.1	1013.1

UWZ.d mean: ____0.01

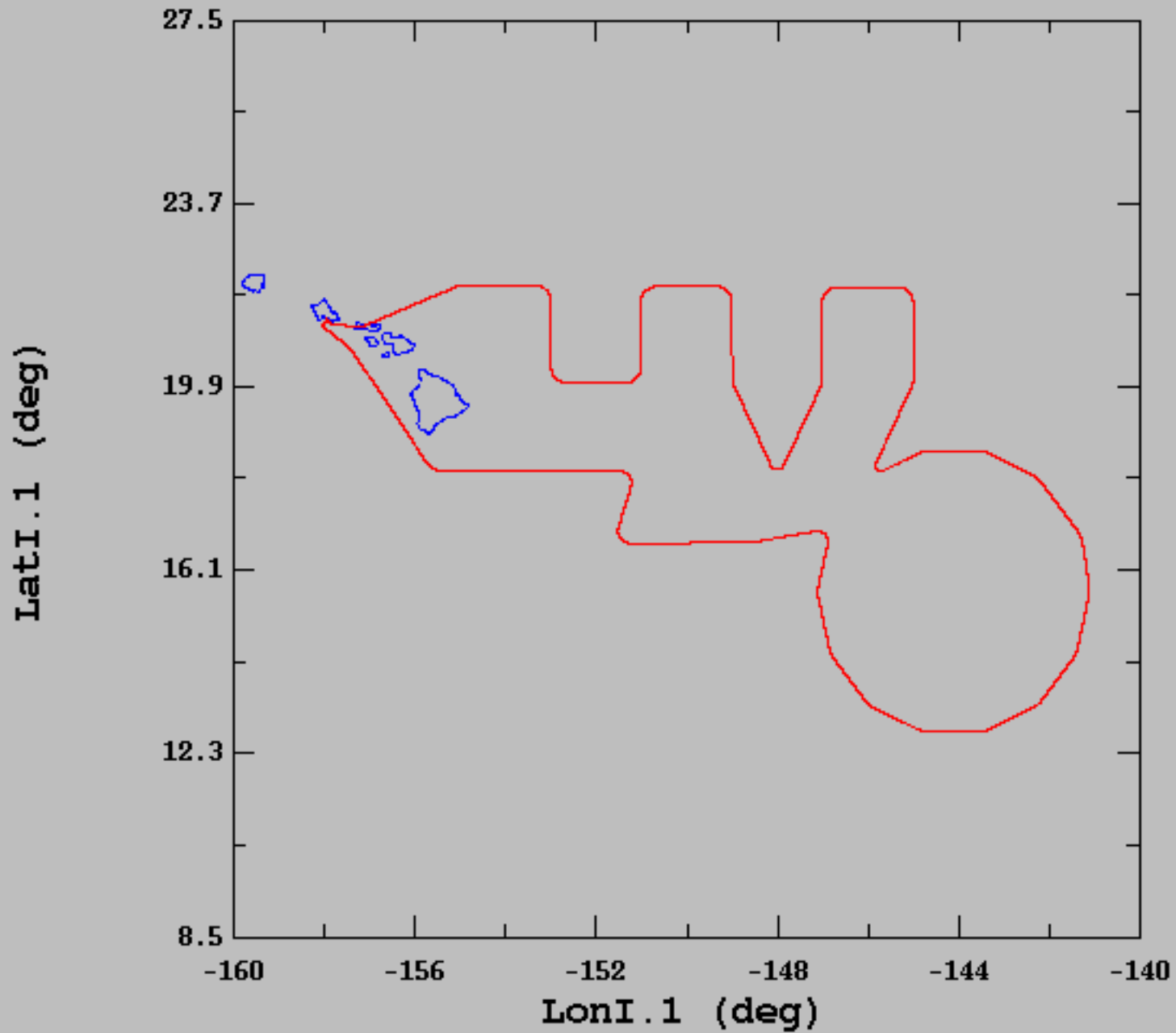
	Raw 1Hz Mean File Parameters				C File Parameters	
<input checked="" type="checkbox"/> Accelerometer	AccAXI.1	AccAYI.1	AccAZI.1		AccZref	
	AccAXI.2	AccAYI.2	AccAZI.2			
	AccAXI.3	AccAYI.3	AccAZI.3			
<input checked="" type="checkbox"/> Altitude	AltGPS.1	AltI.1	AltPaADDU.1	AltBCADDU.1	ALTref	
	AltGPS.2	AltI.2	AltPaADDU.2	AltBCADDU.2	ALTPA.d	
	AltGPS.3	AltI.3	AltRA.1		ALTGA.d	
<input checked="" type="checkbox"/> Ground Speed	GsXI-GPS.1	GsXI.1	GsGPS.1	GsXGPS.1	GSXref	
	GsXI-GPS.2	GsXI.2	GsGPS.2	GsXGPS.2	GSYref	
	GsYI-GPS.1	GsXI.3		GsYGPS.1	GSZref	
	GsYI-GPS.2	GsYI.1	GsZI.1	GsYGPS.2		
	GsZI-GPS.1	GsYI.2	GsZI.2	GsZGPS.1		
	GsZI-GPS.2	GsYI.3	GsZI.3	GsZGPS.2		
<input checked="" type="checkbox"/> Lat/Lon	LatGPS.1	LatI.1	LonGPS.1	LonI.1	LATref	
	LatGPS.2	LatI.2	LonGPS.2	LonI.2	LONref	
	LatGPS.3		LonGPS.3			
<input checked="" type="checkbox"/> Pressure	PDALPHA.1	PQALPHA.1	PQM.1	PSM.1	PDALPHAref	PQMref
	PDALPHA.2	PQALPHA.2	PQM.2	PSM.2	PDBETAref	PQ.c
	PDBETA.1	PQBETA.1	PQM.11	PSM.11	PQALPHAref	PSMref
	PDBETA.2	PQBETA.2			PQBETAref	PS.c
<input checked="" type="checkbox"/> Air Speed	CasADDU.1	TasADDU.1	IasADDU.1		IAS.d	TAS.d
<input checked="" type="checkbox"/> Pitch/Roll	PitchI.1	PitchRateI.1	RollI.1	RollRateI.1	PITCHref	
	PitchI.2	PitchRateI.2	RollI.2	RollRateI.2	ROLLref	
	PitchI.3	PitchRateI.3	RollI.3	RollRateI.3		
<input checked="" type="checkbox"/> Temp/Dewpt	TTM.1	TTM.11	TDM.1		TD.c	TTMref
	TTM.2	TTM.13	TDM.2		TDMref	TA.d
	TTM.3	TTM.4	TDM.11			
<input checked="" type="checkbox"/> Miscellaneous (must check)					UWZ.d	WS.d
					DPJ_WSZ	WD.d
					HUM	

Mission Documents:

<input checked="" type="checkbox"/>	Error Summary
<input checked="" type="checkbox"/>	Crew Manifest
<input checked="" type="checkbox"/>	QC checklist
<input checked="" type="checkbox"/>	Dropwindsonde Log(s) – AVAPS and FD if completed
<input checked="" type="checkbox"/>	Miscellaneous FD notes

NOTES:

2018-08-06, 16:40:35-25:27:11



	mean	sigma	min	max
— LatI.1 (deg), 1 s/sec	18.84	2.69	12.74	22.01
— LonI.1 (deg), 1 s/sec	-149.84	5.24	-158.02	-141.10

N49RF AVAPS DROP LOG

Lead Tech: Gabe Defeo

Project: Hurricane 2018 Mission: Hector Flight ID: 20180806N1Take Off: 1730Z Landing: _____ Flt Dir: Seas Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	163313037	1	-0.1	1758	NGU	NWS	Point 1	✓
2	163025060	2	-0.9	1814	↓	↓	Point	✓
3	163313054	3	-0.6	1830	↓	↓	Point 3	✓
4	163325023	4	-0.3	1845			Point 4	✓
5	163325059	1	0.0	1900			Point 5	✓
6	163325051	2	-0.1	1914			Point 6	✓
7	163325057	3	-0.1	1930			Point 7	✓
8	163325013	4	-0.2	1947			Point 8	✓
9	163313186	1	-0.3	2004			Point 9	✓
10	164015155	2	-0.6	2021			Point 10	✓
11	163815121	3	-0.3	2036			Point 11	✓
12	163815041	4	-0.2	2050			Point 12	✓
13	162825057	1	-1.7	2106			Point 13	✓
14	163313179	2	-0.1	2116			Point 14	✓
15	162825022	3	0.0	2126			Point 15	✓
16	163325047	4	-0.2	2137			Point 16	✓
17	163 815 079	1	+0.2	2147			Point 17	✓
18	163 325 055	2	-0.2	2159			Point 18	✓
19	162 715 055	3	-0.4	2210			Point 19	✓
20	163 325 063	4	-0.2	2221			Point 20	✓
21	163 325 061	1	-0.3	2232			Point 21 - Fast Fall	✓
22	163 313 052	2	0.0	2234			Point 21 backup	✓
23	163 535 042	3	+0.3	2242			Point 22	✓
24	163313192	4	-0.2	2253			Point 23	✓
25	163 535 045	1	0.0	2304			Point 24	✓
26	163325034	2	-0.4	2315			Point 25	✓
27	163 535 024	3	+0.2	2323			Point 26	✓
28	163 255 090	4	-0.2	2338			Point 27	✓
29	163525052	1	-0.4	2349			Point 28	✓
30	163313038	2	0.0	0002			Point 31 - 29+ 30 skip	✓
31	163 815 113	3	-0.1	0011			Point 32	✓
32	163 255 124	4	+0.2	0022			Point 33	✓
33	163 845 141	1	+0.2	0033			Point 34	✓
34	162 745 036	2	0.0	0045			Point 35	✓

N49RF AOC G^r ropwindsonde Log

Flight ID: 20180806N1

Flight Director: FLAHERTY/SEARS

33/34

Mission ID: 0310E HECTOR

Storm/Track: HURRICANE HECTOR

Pg ___ of ___

Drop #	Ob #	Sonde ID	Drop Time (UTC)	Lat (°N)	Lon (°E)	Wx Cond.	L5/R5?	SFC Prs (mb)	Last Wind Alt (m)	Comments	Ch #	SatComm failures	KWBC #
1	1	13037	1759	22.2	-154.7	SCT BLW	RS	1015.9		Corrected for SFC WIND	1		1836
2	2	25060	1814	21.6	-153.0	SCT BLW	RS	1015.8		RAW	2		1909
3	3	13054	1830	20.0	-152.6	"	RS	1015.0			3		1926
4	4	25023	1845	20.3	-151.0	"	RS	1015.2			4		1931
5	5	25059	1900	22.0	-150.6	"	RS	1016.3		RAW	1		1934
6	6	25051	1914	21.6	-149.0	"	RS	1015.4		RAW FOR SFC WINDS	2	RAW (FL WIND)	2000
7	7	25057	1930	19.9	-148.9	"	"	1014.3		RAW FL WINDS	3		2007
8	8	25013	1947	18.2	-148.0	"	"	1012.8			4		2009
9	9	13186	2004	20.1	-147.0	"	"	1014.1			1		2045
10	10	15155	2021	22.0	-146.6	"	"	1014.6		RAW FL WINDS	2		2050
11	11	15121	2036	21.6	-145.0	"	"	1014.8		RAW FL WINDS	3		2103
12	12	15011	2050	19.9	-145.0	"	"	1012.8		" " "	4		2110
13	13	25057	2106	18.2	-145.7	"	"	1011.2		RAW FL WINDS	1		2144
14	14	13179	2116	18.6	-144.7	"	"	1011.3		RAW	2		2146
15	15	25022	2126	18.6	-143.3	BRN BLW	"	1011.3			3		2215
16	16	25047	2137	17.9	-142.1	"	"	1009.9			4		2224
17	17	15079	2147	17.0	-141.4	"	"	1009.7			1		2235
18	18	25055	2159	15.6	-141.1	OVC BLW	"	1007.7			2		2238
19	19	15055	2210	14.3	-141.5	OVC BLW	"	1007.4			3		2244
20	20	25063	2221	13.3	-142.3	BRN BLW	"	1007.1			4		2303
21						BRN BLW				FAST?	1	BAD SONDE	
22	21	13052	2234	12.8	-143.8	BRN BLW	"	1007.5		BACK UP	2		2314
23	22	35047	2242	12.8	-144.9	SCT BLW	"	1007.4			3		2323
24	23	13192	2253	13.4	-146.0	BRN BLW	"	1007.6			4		2332
25	24	35045	2304	14.5	-146.8	OVC BLW	"	1008.4			1		2336
26	25	25034	2315	15.8	-147.0	SCT BLW	"	1008.9			2		2352
27	26	35024	2323	16.8	-146.9	FRW BLW	"	1009.7			3		2355
28	27	55090	2338	16.7	-148.7	SCT BLW	"	1009.7			4		0001
29	28	25052	2349	16.7	-150.1	SCT BLW	"	1010.6		RAW FL WINDS	1		0012
30	29	13038	0002	17.0	-151.5	SCT BLW	"	1010.7			2		0031
31	30	15113	0011	18.1	-151.2	"	"	1011.7		FIXED SFC WINDS	3		0036
32	31	55124	0022	18.2	-152.6	"	"	1012.4			4		0047
33	32	45141	0033	18.2	-154.1	"	"	1012.3		RAW	2	RAW FL WINDS	0108
34	33		0045			FEW BLW	"	1011.2		LAST RPT	2		0112

N49RF ERROR SUMMARY
Hurricane Hector

Flight ID: 20180806N1

Sensor or System -----	Number or Name -----
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.1
Vertical Accelerometer	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2018/MET/20180806N1

Local Met Data	Takeoff PHNL (1728Z)	Landing PHNL (0121Z)
Dynamic Corrections		Yes
AttackAngleIntercept		3.97801
AttackAngleSlope		3.86172
SlipAngleIntercept		0.1258
SlipAngleSlope		6.69941
AttackAngleIntercept2		5.04641
AttackAngleSlope2		5.4187
SlipAngleIntercept2		0.905
SlipAngleSlope2		6.78464

Notes:

There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.
Wind and humidity data are suspect.
Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	34	33	33
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Sears

Phone #: 863.500.3986

ACAT-4 Version = 7.1