



Flight Director: Hathaway / Flaherty  
Phone #: 863-500-3911

ACAT-4 Version = 7.3

## G-IV QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	20200916N1
Flight Director(s):	Hathaway / Flaherty
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	0.05

Pressure Comparison		
	T/O	Land
Aircraft	1014.6	1011.6
Tower	1012.0	1009.9

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

FLID_Mission_Documents.pdf	
<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"/>	Flight Track
<input checked="" type="checkbox"/>	Miscellaneous FD Notes

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/> X

NOTES:
<p><b>DPJ_WSZ has an unusual gap in data between hours one and two of the flight.</b></p> <p><b>AltRA.1 has multiple significant dropouts and should not be used as absolute altitude.</b></p> <p><b>Occasional spikes in multiple sensors in CDO due to turbulence.</b></p> <p><b>PQBeta.1 and PQBeta.2 are unrepresentative with unusual drop outs.</b></p> <p><b>When examined at high resolution, data from the three inertials shows "stairstepping" for all parameters for brief intervals (generally less than 15 seconds).</b></p> <p><b>TDM.1 &amp; TDM.2 were unrepresentative for the cruise portion of the mission above 41K and also for intervals at low altitudes. Consider all relative humidity values to be considered suspect.</b></p> <p><b>TTM.3 has a small amplitude (magnitude 0.2 - 0.3 deg C) unnatural oscillation with a period of roughly 30 seconds.</b></p> <p><b>TTM.1 was used for calculation of Ambient Temperature (TA) and other derived parameters.</b></p> <p><b>There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.</b></p> <p><b>Takeoff/Landing data: Data during landing and takeoff are potentially suspect...</b></p> <p><b>It is recommended that ground data not be used for scientific analysis.</b></p>

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20200916N1	FLT #:		AC:	Mansour	Scientists:	Pressure		Dropsondes ~28-35		
From:	TISX	ETD:	1600~6.5	CP(s):	Nardi		A/C Takeoff		Good	Bad	Sent
To:	TISX	ETA:	2230		Varwig				28	3	28
Block Time		Flight Time		Nav(s):		ASOS Takeoff	BTs				
In:	2237Z	Land:	2231Z	FE(s):		A/C Land	Good	Bad	Sent		
Out:	1546	T/O:	1554Z	FD(s):	Mathaway	ASOS Land	0	0	0		
Total:	6.9	Total:	6.6	Flaherty	Visitors:						
Sponsoring Org:	HRD/ONR			SEB:		Storm Number ID:		AL 202020			
Program:	Hurricane 2020-PRX			SSA:	Defeo	(ie: AL072012)					
Purpose:	Hurricane Teddy			AVAPS:	Hartberger	TCPOD/WSPOD Mission		NOAA9 WBDA TEDDY			
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP
VOLCANIC ASH											
SCIENCE MISSION WITHIN BDRY LAYER											
LACK OF PRECIPITATION											
RELATIVE HUMIDITY ≥ 80%											
LARGE AIR-SEA TEMP GRADIENT											
HIGH SURFACE WINDS											
LONG FETCH / DURATION OF SFC WND											
SEA SALT ACCRETION FORECAST											
SEA SALT ACCRETION OBSERVED											
Gmax:				Gmin:				*Highlighted items must be completed before departure.			
Remarks:											

AOC GPS Dropwindsonde Log (updated Mar 2019)

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Flight ID: 20200916M1

ASPEN Operator/Flight Director(s): FLAHERTY / HATHAWAY

Mission ID: NOAA9 WBDJA TEDDY

Storm Name/Track: HURRICANE TEDDY

PG 1 of 1

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (m/r last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / OC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	1729	20806	1	24	55	SCT BLW	1014.1		1752	N
2	2	1739	—	2	—	—	"	—	TAG	—	—
3	3	1749	50417	3	24	52.1	"	1013.2		1818	N
4	<del>4</del>	1800	—	4	—	—	—	—	FAST FALL	—	(Y)
5	4								TAG		N
6	3										N
7	6										N
8	7										N
9	8										N
10	9										N
11	10	1903	—	—	—	—	—	—	TAG	—	N
12	11	1913	20812	4	18.2	51.0	OCV BLW	1000.2		1945	N
13	12	1921	20815	1	18.1	50.0	"	999.5		1952	N
14	13	1928	61089	2	17.4	49.6	"	997.5		1955	N
15	14	1934	50234	3	16.7	49.3	"	999.9		1957	N
16	15	1942	20839	4	16.0	49.7	"	1001.5		2004	N
17	16	1948	20821	5	15.4	50.2	"	1001.0		2027	N
18	17	1954	51040	6	15.4	51.0	"	1001.4		2030	N
19	18	2001	20157	7	15.5	51.7	"	1001.8		2031	N
20	19	2007	30014	8	16.1	52.2	"	1002.4		2033	N
21	20	2013	40417	1	16.8	52.6	"	1002.4		2035	N
22	21	2018	10868	2	17.3	52.4	"	1002.4		2037	N
23	22	2023	20811	3	17.8	52.2	"	1002.2		2040	N
24	23	2028	—	4	—	—	—	—	BAD ↓	—	(Y)
25	24	2029	—	5	—	—	—	—	BAD ↓	—	(Y)
26	25	2032	61090	6	18.1	52.0	"	1001.3	BACK UP	2048	(Y)
27	26	2041	10246	1	17.9	53.0	BKN BLW	1004.4		2047	N
28	27	2049	50233	7	17.9	54.0	SCT BLW	1006.9		2050	N
29	28	2057	30156	2	17.9	55.0	"	1007.5		2052	N
30	29	2105	40398	3	17.9	56.0	"	1008.8		2054	N
31	30	2113	20926	4	17.9	57.0	"	1009.4	LAST REPORT	2057	N
32											
33											
34											
35											
36											
37											
38											

ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

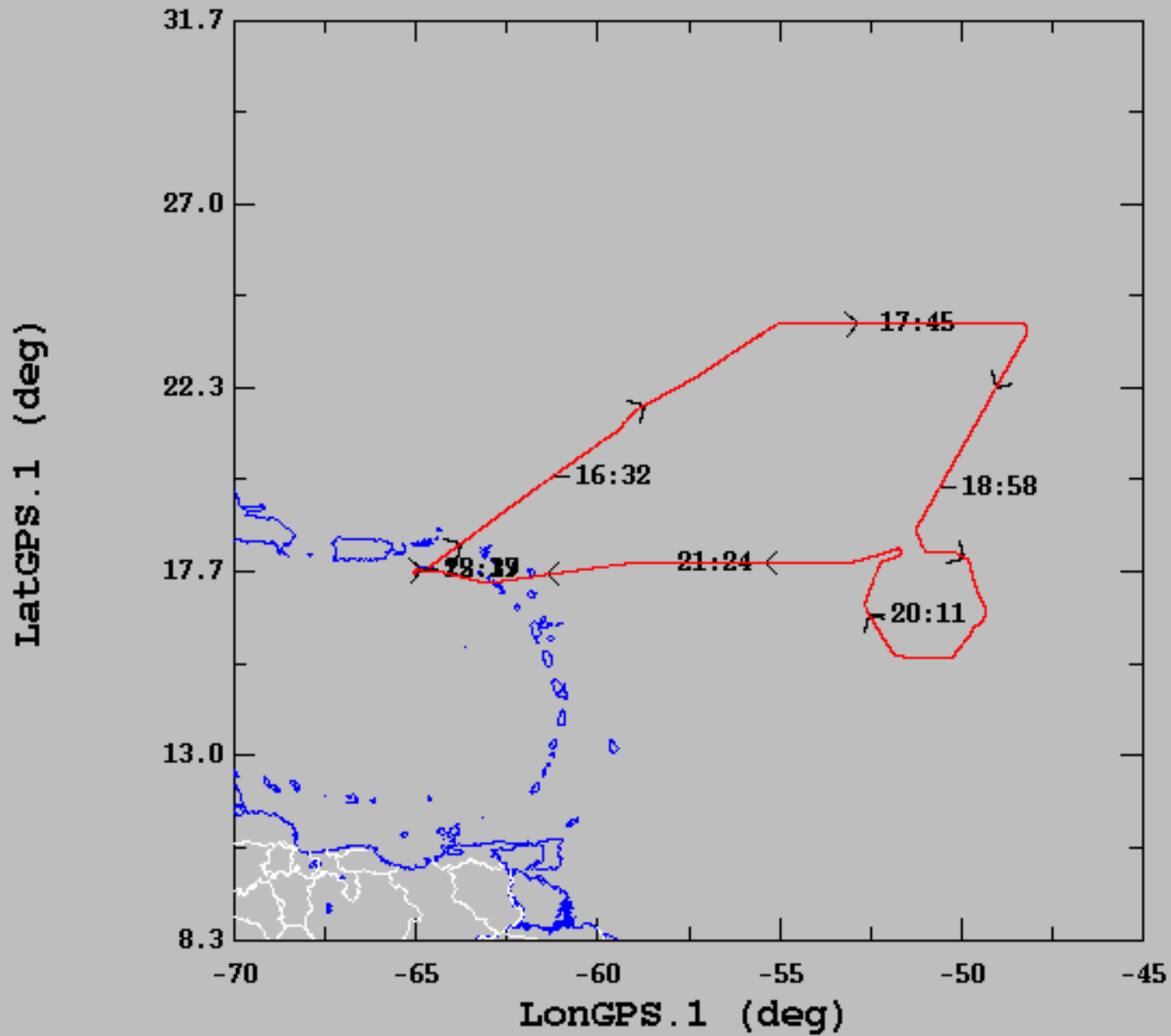
Obs Xmitted

Obs Missed

# of sondes launched

# of bad sondes

2020-09-16, 15:19:32-22:37:45



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	19.37	2.58	15.44	24.00
— LongGPS.1 (deg), 1 s/sec	-56.34	5.66	-65.04	-48.15