

N43RF ERROR SUMMARY  
20200731I2

Flight ID: 20200731I2

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.2
Vertical Accelerometer	AccZfilterI-
GPS.1	
Altimeter	AltGPS.2
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/2020/MET/20200731I2
Local Met Data	Takeoff KLAL (1957Z) Landing KLAL (0000Z)
Dynamic Corrections	Yes
AttackAngleIntercept	0.122351
AttackAngleSlope	6.0273
SlipAngleIntercept	0.214857
SlipAngleSlope	7.10815

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Notes:

There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

GPS.3 intermittent failures. GPS.4 unavailable. PitchI.3 and RollI.3 unavailable. TTM.3 inoperative. TDM.1 persistent warm bias. Multiple data spikes on TDM.2, particularly between 2000-2010Z. TDM.3 inoperative. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	10	8	8
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter / Holmes

Phone #: 863-500-3901

ACAT-4 Version = 7.3

**U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest**

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20200731I2	FLT #:	20-58	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Mitchell		A/C Takeoff	1010.3	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Rannenberg		ASOS Takeoff	KLAL 1950Z 1010.7 mb	8	2	8
Block Time		Flight Time		NAV:	Richards/B		A/C Land	1011.0	BTs		
In:	3:21	Land:	3:13	FE(s):	Darby		ASOS Land	KLAL 0249Z 1012.0 mb	0	0	0
Out:	19:51	T/O:	19:58	FD(s):	Lalonde	Visitors:	Storm Number ID:		AL092020		
Total:	7.5	Total:	7.3	SSA:	Mascaro		(ie: AL072012)				
Sponsoring Org:	EMC			SEB:		TCPOD/WSPOD Mission		NOAA3 1009A ISAIAS			
Program:	PRX					(ie: NOAA2 2418A SANDY)					
Purpose:	TDR Mission #2 Hurricane Isaias				MX:		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X			1				
SCIENCE MISSION WITHIN BDRY LAYER				X							
LACK OF PRECIPITATION				X			2				
RELATIVE HUMIDITY ≥ 80%			X								
LARGE AIR-SEA TEMP GRADIENT				X			3				
HIGH SURFACE WINDS			X								
LONG FETCH / DURATION OF SFC WND			X				4				
SEA SALT ACCRETION FORECAST				X							
SEA SALT ACCRETION OBSERVED				X			Pennies:	4 Hurricane Pennies			

\*Highlighted items must be completed before departure.

Remarks:


## P-3 QC Checklist

Flight ID:	20200731I2
Flight Director(s):	Carpenter / Holmes
UWZ.d mean:	0.03

Pressure Comparison		
	T/O	Land
Aircraft	1010.3	1011.0
Tower	KLAL 1950Z 1010.7 mb	KLAL 0249Z 1012.0 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 X AltGPS.3 X AltGPS.4	✓ Alti-GPS.1 ✓ Alti-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	✓ AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	✓ AltRA1.c ✓ AltRA2.c
✓ Ground Speed	✓ GsXI-GPS.1 ✓ GsXI-GPS.2	✓ GsYI-GPS.1 ✓ GsYI-GPS.2	✓ GsZI-GPS.1 ✓ GsZI-GPS.2		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 X LatGPS.3 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 X LonGPS.3 X LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	✓ PDLAPHAref ✓ PDBETAref ✓ PQALPHAref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ lasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 X PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 X PitchRateI.3	✓ RollI.1 ✓ RollI.2 X RollI.3	✓ RollRateI.1 ✓ RollRateI.2 X RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 X TTM.3	✓ TDM.1 ✓ TDM.2 ✓ TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

FLID_Mission_Documents.pdf:	
✓	Error Summary
✓	Crew Manifest
✓	QC Checklist
✓	Dropwindsonde Log(s) - AVAPS and FD if completed
✓	Flight Track
X	Miscellaneous FD Notes

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

NOTES:
<p>GPS.3 intermittent failures. GPS.4 unavailable.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 inoperative.</p> <p>TDM.1 persistent warm bias. Multiple data spikes TDM.2, particularly 2000-2010Z. TDM.3 inoperative.</p> <p>TRadU.1 inoperative.</p> <p>Humidity values impacted by TDM.2 data spikes.</p>

### AVAPS Drop Log

Project: 2020 Hurricanes Mission: Hurricane Isidis Flight ID: 20200731Z2  
 Take Off: 2000Z Landing: 0308Z Flt Dir: Comcast Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	192230963	1	0.0	2133Z	NGH	NWS	IP, IB	✓
2	193420282	2	0.0	2147Z			Center #1	✓
3	191920415	3	0.0	2159Z			Bad RH, MP, OB	X
4	193430527	4	-0.5	2211Z			EP, OB, spotty RH	✓
5	192230880	5	0.0	2250Z			EP, IB, no launch defect	✓
6	191930257	6	-0.5	2251Z			EP, IB, back up	✓
7	192230965	7	0.0	2302Z			MP, IB,	✓
8	192230962	8	-0.5	2313Z			Center #2	✓
9	192231140	1	0.0	2327Z			MP, OB	✓
10	19252115	2	0.0	0215Z			AVAPS test, north of storm	✓
11		3						
12		4						
13		5						
14		6						
15		7						
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9/10  
2020-58

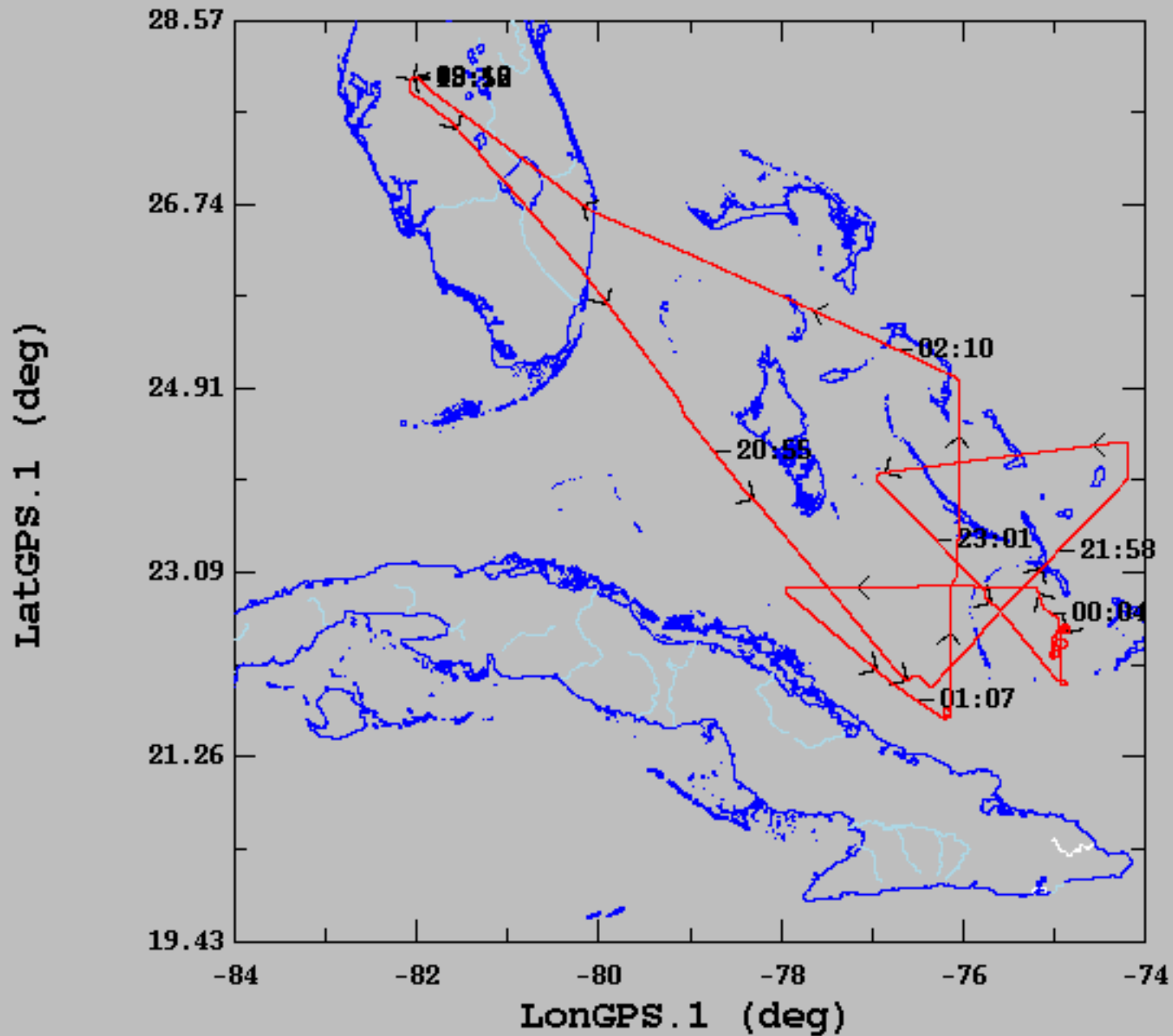
NOAA P-3 GPS Dropwindsonde Scientist Log (MS Word version 2020)

Storm \_ISIAIS Flight ID 20200731I2 Dropsonde Scientist \_Sellwood AVAPS Operator \_Underwood

Mission ID \_0809A (ex. 0101A)

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Dir/Spd (deg/kt)	Lowest Wind Hgt (m)	SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	30963	2133	21.98	76.3	1007	340/12	10	X	IP NW	1
<b>Comments good no issues</b>										
2	20282	2147	22.7	75.59	990	120/31	10	X	Center leg 1	2
<b>Comments good no issues</b>										
3	Xxxxxx	2159	23.34	74.9	n/a	n/a	n/a	X	Mid outbound	X
<b>Comments bad RH cut out at 900mb – not transmitted</b>										
4	30527	2211	23.96	74.3	1011	120/19	10	X	EP NE	3
<b>Comments good no issues</b>										
5	Xxxxxx	2250	XXXX	XXXX	XXXX	XXXX	n/a	X	EP NW inbound	X
<b>Comments no launch detect</b>										
6	30257	2251	23.95	76.87	1010	75/33	10	X	EP NW inbound	4
<b>Comments good no issues</b>										
7	30965	2302	23.38	76.27	1006	65/57	10	X	Mid inbound	5
<b>Comments good no issues</b>										
8	30962	2313	22.83	75.74	990	130/49	10	X	Center leg 2	6
<b>Comments good no issues</b>										
9	31160	2327	22.1	75.03	1007	190/30	10	X	Mid SE	7
<b>Comments reset end time to 340.0</b>										
<b>Comments</b>										

2020-07-31, 18:50:00-27:13:21



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	24.56	2.12	21.64	27.99
— LonGPS.1 (deg), 1 s/sec	-77.81	2.57	-82.07	-74.17