

N43RF ERROR SUMMARY  
20200801I2

Flight ID: 20200801I2

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.3
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/20200801I2
Local Met Data	Takeoff KLAL (2048Z) Landing KLAL (0320Z)
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.4 unavailable. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.1 persistent warm bias. TDM.2 multiple data spikes throughout mission. TDM.3 inoperative. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	13	12	12
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:	20200801I2	FLT #:	20-60	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2100Z	CP(s):	Mitchell		A/C Takeoff	1008.2	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Rannenberg		ASOS Takeoff	KLAL 2050Z 1008.7 mb	12	1	12
Block Time		Flight Time		NAV:	Richards/B		A/C Land	1010.3	BTs		
In:	3:28	Land:	3:21	FE(s):	Darby		ASOS Land	KLAL 0350Z 1010.3 mb	0	0	0
Out:	20:40	T/O:	20:49	FD(s):	Lalonde	Visitors:	Storm Number ID:		AL092020		
Total:	6.8	Total:	6.5	SSA:	Mascaro		(ie: AL072012)				
Sponsoring Org:	EMC			SEB:		TCPOD/WSPOD Mission		NOAA3 1609A ISAIAS			
Program:	PRX					(ie: NOAA2 2418A SANDY)					
Purpose:	TDR Mission #4 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			2				
LACK OF PRECIPITATION				X			3				
RELATIVE HUMIDITY ≥ 80%			X				4				
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				X			Pennies:	3 TS Pennies			

\*Highlighted items must be completed before departure.

Remarks:

## P-3 QC Checklist

Flight ID:	20200801I2
Flight Director(s):	Carpenter / Holmes
UWZ.d mean:	0.03

Pressure Comparison		
	T/O	Land
Aircraft	1008.2	1010.3
Tower	KLAL 2050Z 1008.7 mb	KLAL 0350Z 1010.3 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 ✓ 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 ✓ LatGPS.3 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ 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	X TDM.1 ✓ TDM.2 X 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.4 unavailable.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 inoperative.</p> <p>TDM.1 exhibits persistent warm bias. TDM.2 multiple data spikes throughout mission. TDM.3 inoperative.</p> <p>TRadU.1 inoperative.</p> <p>Moisture quantities questionable throughout mission, particularly during TDM.2 data spikes.</p>

# AVAPS Drop Log

Project: 2020 Hurricanes Mission: Tsaiaas Flight ID: 20200801I2  
 Take Off: 2049Z Landing: 0310Z Flt Dir: Carpenter Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	194941032	1	0.0	2141Z	NGU	NWS	TP, IB, bad winds	ix
2	194941031	2	0.0	2145Z			IP, IB, backup	✓
3	195021050	3	0.0	2155Z			MP, IB	✓
4	195030162	4	0.0	2344Z			MP, OB	✓
5	194941044	5	0.0	2358Z			EP, OB	✓
6	195030226	6	-0.7	0014Z			EP, IB	✓
7	194941041	7	-0.6	0023Z			MP, IB	✓
8	194941038	8	-0.5	0035Z			Center	✓
9	192450954	1	0.0	0048Z			MP, OB	✓
10	192450949	2	0.0	0101Z			EP, OB	✓
11	194940922	3	-0.7	0131Z			EP, IB	✓
12	192231159	4	0.0	0145Z			MP, IB	✓
13	195010484	5	-1.0	0240Z			EP, OB, NW quad	✓
14								
15								
16								
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23								
24								
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26								
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31								

Gip 11/12 20-60

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

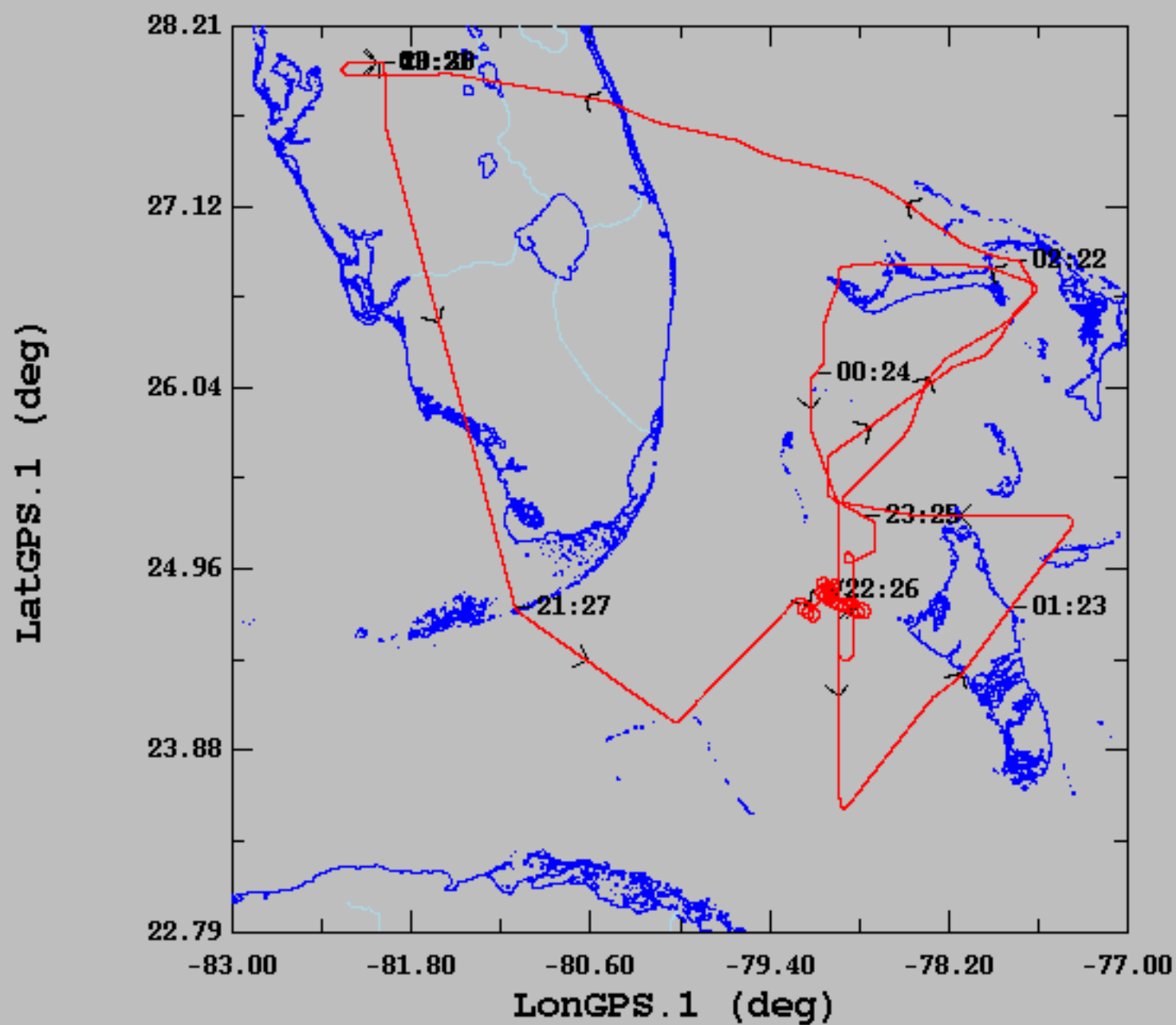
Storm ISAIAS Flight ID 20200801I2 Dropsonde Scientist Sellwood AVAPS Operator Underwood

Mission ID 1609A (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 CH 1	194941032	2141	24.05	-80.05	1008	300/17	10		IP SW inbound	X
<b>Comments: shady winds released back up Removed first 20 seconds of lat/lon winds and locations look okay below that but lots of high wind error flags – not transmitted</b>										
2 CH 2	194941031	2145	24.18	-79.86	1007	325/22	10			1
<b>Comments: backup for IP drop Ended sonde at 227.75 (post splash data)</b>										
3 CH 3	195021050	2155	24.68	-79.32	1004	320/29	10		Mid inbound	2
<b>Comments: No manual QC good drop</b>										
4 CH 4	195030162	2344	25.07	-78.32	1007	90/42	10		Mid outbound	3
<b>Comments: No manual QC good drop</b>										
5 CH 5	194941044	2358	26.61	-77.62	1010	110/33	12		EP NE	4
<b>Comments: Ended 226.50 (post splash data)</b>										
6 CH 6	195030226	0014	26.75	-78.93	1011	75/30	12		EP N inbound	5
<b>Comments: Ended 223.75 (post splash data)</b>										
7 CH 7	194941041	0023	26.18	-79.04	1009	60/29	12		Mid inbound	6
<b>Comments: Ended 227.0</b>										
8 CH 8	194941938	0035	25.35	-78.94	998	45/38	10		Center	7
<b>Comments: No manual QC good drop</b>										
9 CH 1	192450954	0048	24.44	-78.93	1007	240/26	10		Mid outbound	8

<b>Comments:</b>										
10 CH 2	192450949	101	23.56	-78.92	1009	250/24	10		EP S	9
<b>Comments</b> <b>Good drop no manual QC</b>										
11 CH 3	194940922	131	25.21	-77.37	1010	130/38	10		EP E inbound	10
<b>Comments</b> <b>Good drop no manual QC</b>										
12 CH 4	1922313159	145	25.28	-78.39	1003	155/44	10		Mid EW inbound	11
<b>Comments</b> <b>Good drop no manual QC</b>										
13	195010484	240	27.39	-79.23	1013	80/25	10		Extra drop NW	12
<b>Comments</b> <b>Removed last line ... final report</b>										
14										
<b>Comments</b>										
15										
<b>Comments</b>										
16										
<b>Comments</b>										
17										
<b>Comments</b>										

2020-08-01, 19:30:00-27:21:03



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	26.05	1.39	23.53	27.99
— LongGPS.1 (deg), 1 s/sec	-79.72	1.52	-82.26	-77.36