

Dropsondes	17	17	17
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 - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20201003H1	FLT #:	21-2	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0900Z	CP(s):	Mitchell	Zawislak, Jon (HRD)	A/C Takeoff	1009.9	Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Shaw	Chang, Paul (NESDIS)	ASOS Takeoff		KLAL 0950Z 1009.8 mb	17	0
Block Time		Flight Time		NAV:	Richards/B	ASOS Land		1012.4		BTs	
In:	15:22	Land:	15:17	FE(s):	Darby		A/C Land		1012.4	Good	Bad
Out:	8:37	T/O:	8:45	FD(s):	Heystek	ASOS Land		KLAL 1450Z 1011.5 mb		0	0
Total:	6.8	Total:	6.5	SSA:	Mascaro		Visitors:		Storm Number ID:		
Sponsoring Org:		NWS / EMC			AVAPS:	Warnecke	(ie: AL072012)		AL252020		
Program:		PRX			SEB:		TCPOD/WSPOD Mission		NOAA2 0425A GAMMA		
Purpose:		TDR Mission #1 TD25 / TS Gamma			MX:		(ie: NOAA2 2418A SANDY)				
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:	3 TS Pennies			
						*Highlighted items must be completed before departure.					
Remarks:											

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	20201003H1
Flight Director(s):	Carpenter / Holmes
Mission:	Tasked/Operational
UWZ.d mean:	0.19 post-processing

Pressure Comparison		
	T/O	Land
Aircraft	1009.9	1012.4
Tower	KLAL 0950Z 1009.8 mb	KLAL 1450Z 1011.5 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 ✓ 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			
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3 ✓ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✓ LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 X PDALPHA.2 ✓ PDBETA.1 X PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	X PQM.1 ✓ PQM.2 ✓ PQM.3 X 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			
✓ 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 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1			
✓ 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)	X

NOTES:
<p>PDAlpha.2 and PDBeta.2 inoperative.</p> <p>PQM.1 and PQM.4 temporarily failed at ~1045-1100Z and again ~1415-1500Z, likely due to icing.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.2 deviates lower than TTM.1 temporarily between 1035-1050Z. TTM.3 unavailable.</p> <p>TDM.1 and TDM.2 trend well with each other, but TDM.2 becomes less responsive during the transit at higher altitude, between 0900-1030Z.</p> <p>TDM.1 unrealistic spike during descent at ~1508Z. TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

AVAPS Drop Log

Project: AURR 20 Mission: TS Gamma #1 Flight ID: 20201003H1
 Take Off: 0845Z Landing: _____ Flt Dir: Holms/Carpeker Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	201620154	1	Ø	1007	Jaw	KWS		✓
2	201630297	2	Ø	1016				✓
3	201740083	3	Ø	1026				✓
4	201620179	4	Ø	1036				✓
5	201740643	5	Ø	1047				✓
6	201630295	6	Ø	1105				✓
7	201630210	7	Ø	1118				✓
8	201620175	8	Ø	1130			Center	✓
9	201730186	1	Ø	1143				✓
10	201740704	2	Ø	1155				✓
11	201740687	3	Ø	1223				✓
12	201630209	4	Ø	1234				✓
13	201630257	5	Ø	1314			Center	✓
14	201840214	6	Ø	1330				✓
15	201620124	7	Ø	1342				✓
16	201620340	8	Ø	1412				✓
17	201740700	1	Ø	1435				✓
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

Drop Station Operator Notes

Charge \$\$ To Options **(DO NOT USE FUNDING CODES)**:
AOC, NWS, HRD, NESDIS, IR/SST, AR, STAN (Stanford), SAT (JPSS/NESDIS/HRD)

AVAPS Pre-Flight Check:

- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and Full Flight ID (example: 20120823N2).
- Verify the Frequency band allocation as required:
Band A: 53rd WRS - Band B: N42RF - Band C: N43RF - Band D: N49RF - Band E: Unallocated
- Select the **GPS Reference** tab from the **Soundings Displays** page and verify good GPS data
- Perform a prelaunch check on each channel, look for reasonable data and no CRC error status lights.
- Verify data is available on Remote AVAPS, then terminate the sonde.
- Verify the AVAPS Data mission folder has been created
- **Verify AVAPS PC Time is correct – if time is off by >4sec, no data will display**
- **Early launch detects are caused usually by remanufactured sondes with the chute riser line not properly coiled below the PCB ear. This may also cause fast falls. If this is suspected, repack the riser line as time permits**
- **Perform RH Regeneration on all sondes – Multiple RD41 sondes may be processed at once**

AVAPS Launch:

- Select a sonde frequency in the Green band and away from other sondes
- Enter sonde pressure error offset if 0.4mB or greater using cabin pressure sensor – warning, this can not be used during a climb
- **If the Cal lab pressure standard and the cabin pressure standard match, apply pressure offset +/- 0.1 mB**
- **Wait until GPS available (green) on the pre-launch screen before continuing.**
- Select "begin data collection" and verify good data with winds prior to putting sonde in launch tube
- On N42 & N43, remove about ½ of the ribbon. Do not shorten the ribbon on N49. Loosen ribbon and extend end of ribbon to near, but not over, the sensor end of the sonde. Place excess orange tape on end of ribbon to form a pocket.
- Place the sonde in the launch tube, sensor arm up, with the power pin socket facing right
- Verify the sonde is actively tracking GPS data prior to launch and **no early launch detect**

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm **Gamma** Flight ID **Z02000341** Dropsonde Scientist **Zawisurk** AVAPS Operator **Wanbeck** Page# **1 of 2**
 Mission ID **0425A** (exp. 0213A) Dropsonde Scientist **Zawisurk** AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Wall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
1	201620154	100711	24.99	88.99	1013.5	036	130		10, SONDE W/ FRONT BAR.	1
Comments										
2	201630297	101655	24.31	88.39	1011.6	038	120		SONDE W/ FRONT BAR	2
Comments										
3	201740083	102629	23.40	87.79	1009.9	042	136		SONDE W/ FRONT BAR	3
Comments										
4	201620179	103620	22.92	87.19	1008.3	041	128		SONDE W/ FRONT BAR	4
Comments										
5	201740643	104725	22.25	86.40	1008.0	047	120		SONDE W/ FRONT BAR	5
Comments										
6	201630295	116533 100002	21.12	86.13	1006.2	073	136		IF FIG. 4 NITE	6
Comments										
7	201630210	111800	20.36	86.58	1000.2	088	139		NO FIG. 4 NITE	7
Comments										
8	201620175	113000	19.65	87.01	986.6	201	118		CHRA 1	8
Comments										
9	201730186	114346	18.67	87.09	1002.5	245	130		MP S	9
Comments										
10	201704076	115544	17.85	87.10	1005.1	267	128		ER S	10
Comments										

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm AL25/609110 Flight ID 20201005H1 Dropsonde Scientist Zachary AVAPS Operator Wesley Page# 2012
 Mission ID 0425A (exp. 0213A) Dropsonde Scientist Zachary AVAPS Operator Wesley

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc. Pressure (mb)	Wind closest to		SST (°C)	Eye/EyeWall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
11	201740687	122322	19.29	85.52	1003.7	175	129			11
Comments										
12	201630209	123448	19.53	86.38	1000.0	130	138			12
Comments										
13	201630257	131414	19.83	87.16	989.5	262	112			13
Comments										
14	201840216	133016	20.28	86.06	1002.9	130	130			14
Comments										
15	201620126	134252	20.85	85.83	1006.5	085	138			15
Comments										
16	201620340	141201	22.91	84.73	1009.7	062	124			16
Comments										
17	201740700	143545	24.95	83.61	1012.0	068	120			17
Comments										

Comments

Comments

Comments

Comments

Comments

Comments

Comments

Comments

Comments

Comments

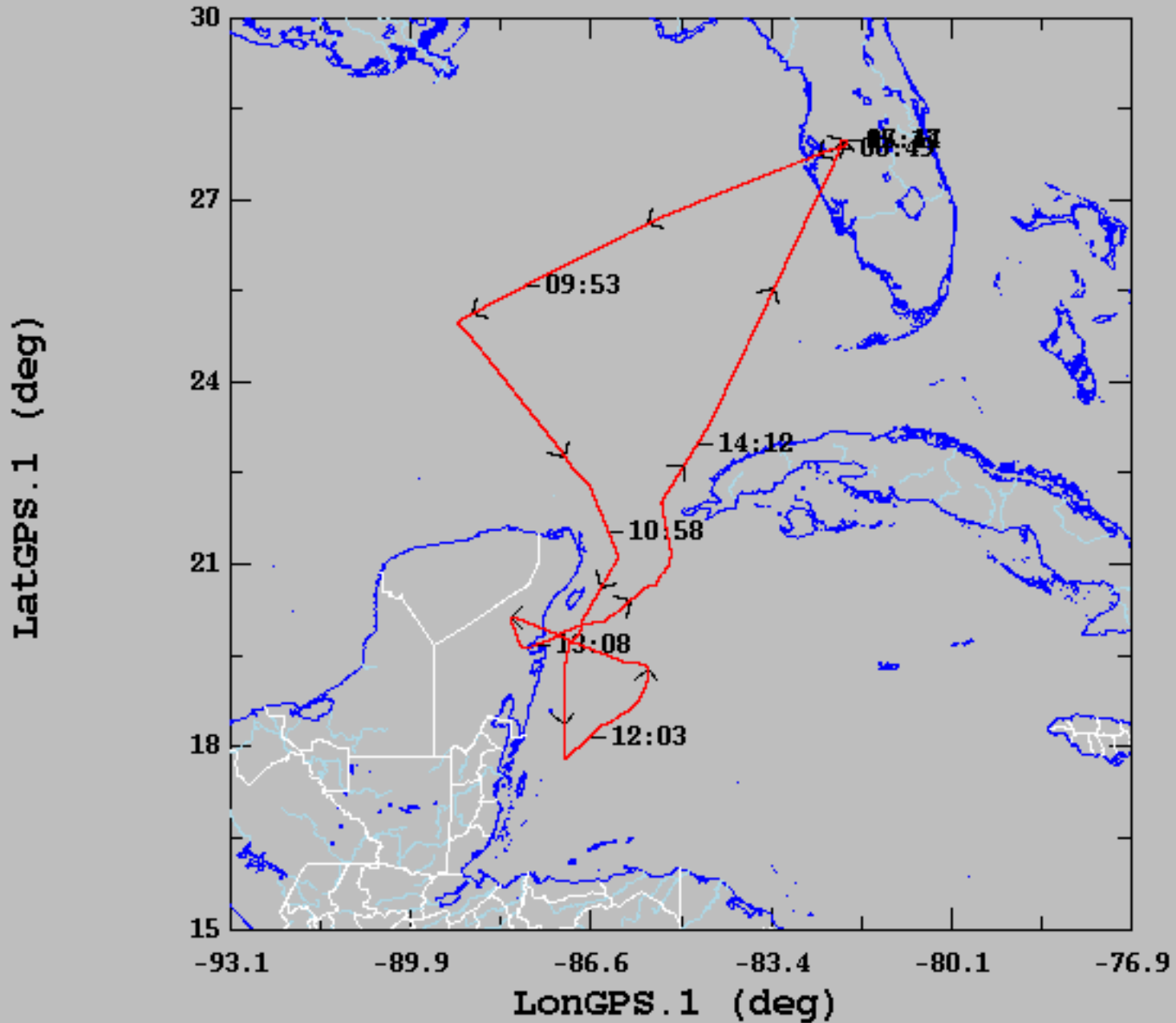
Comments

Comments

Comments

Comments

10/03/2020, 07:44:33-15:17:23



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	23.39	3.40	17.81	27.99
— LongGPS.1 (deg), 1 s/sec	-85.34	2.09	-89.00	-81.99