

N43RF ERROR SUMMARY
20210430I1

Flight ID: 20210430I1

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	AccZfilterI-
GPS.1	
Altimeter	AltGPS.1
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/2021/MET/20210430I1

Local Met Data	Takeoff KLAL (1325Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.122351
AttackAngleSlope		6.0273
SlipAngleIntercept		0.214857
SlipAngleSlope		7.10815

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 failed at ~1445Z. GPS.4 unavailable. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.2 unavailable. TDM.3 inoperative. TRadU.1 unavailable. PSM.1 is ~10 mb lower than PSM.2 at higher altitudes.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	10	9	1
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter

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:	2021043011	FLT #:	21-15	AC:	Rossi	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1330Z	CP(s):	Rannenberg		A/C Takeoff	1013.7	Good	Bad	Sent
To:	KLAL	ETA:	1730Z		Stateler						
Block Time		Flight Time		NAV:	Utama		ASOS Takeoff	KLAL 1345Z 1013.6 mb	9	1	1
In:	15:20	Land:	15:11	FE(s):	Darby				BTs		
Out:	13:18	T/O:	13:26	FD(s):	Carpenter		A/C Land	1013.5	Good	Bad	Sent
Total:	2.0	Total:	1.8	SSA:	Richards/T.	Visitors:	ASOS Land	KLAL 1450Z 1013.3 mb	0	0	0
Sponsoring Org:		AOC			AVAPS:	McAlister	Storm Number ID:		N/A		
Program:		PFT			SEB:	Woods, Cody (OBS)	(ie: AL072012)				
Purpose:		Dropsonde test flight.				Knebel, Nathan (OBS)	TCPD/WSPD Mission		NOAA3 WXWXA TRAIN		
					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:	N/A			
						*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:	20210430I1
Flight Director(s):	Carpenter
Mission:	Equipment Checkout
UWZ.d mean:	0.04

Pressure Comparison		
	T/O	Land
Aircraft	1013.7	1013.5
Tower	KLAL 1345Z 1013.6 mb	KLAL 1450Z 1013.3 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 ✗ 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 ✗ 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 ✓ 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 ✗ PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 ✗ PitchRateI.3	✓ RollI.1 ✓ RollI.2 ✗ RollI.3	✓ RollRateI.1 ✓ RollRateI.2 ✗ RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 ✗ TTM.3	✓ TDM.1 ✗ TDM.2 ✗ TDM.3	✓ TRadD.1 ✓ TRadS.1 ✗ 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
✗ Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☒
Errors (note)	☒

NOTES:
GPS.3 failed at ~1445Z. AltGPS.4 unavailable. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.2 unavailable. TDM.3 inoperative. PSM.1 is ~10 mb lower than PSM.2 at higher altitude. TRadU.1 unavailable.

AVAPS Drop Log

Project: Sonde Test Flt

Mission: _____

Flight ID: 20210430I1

Take Off: 1330Z

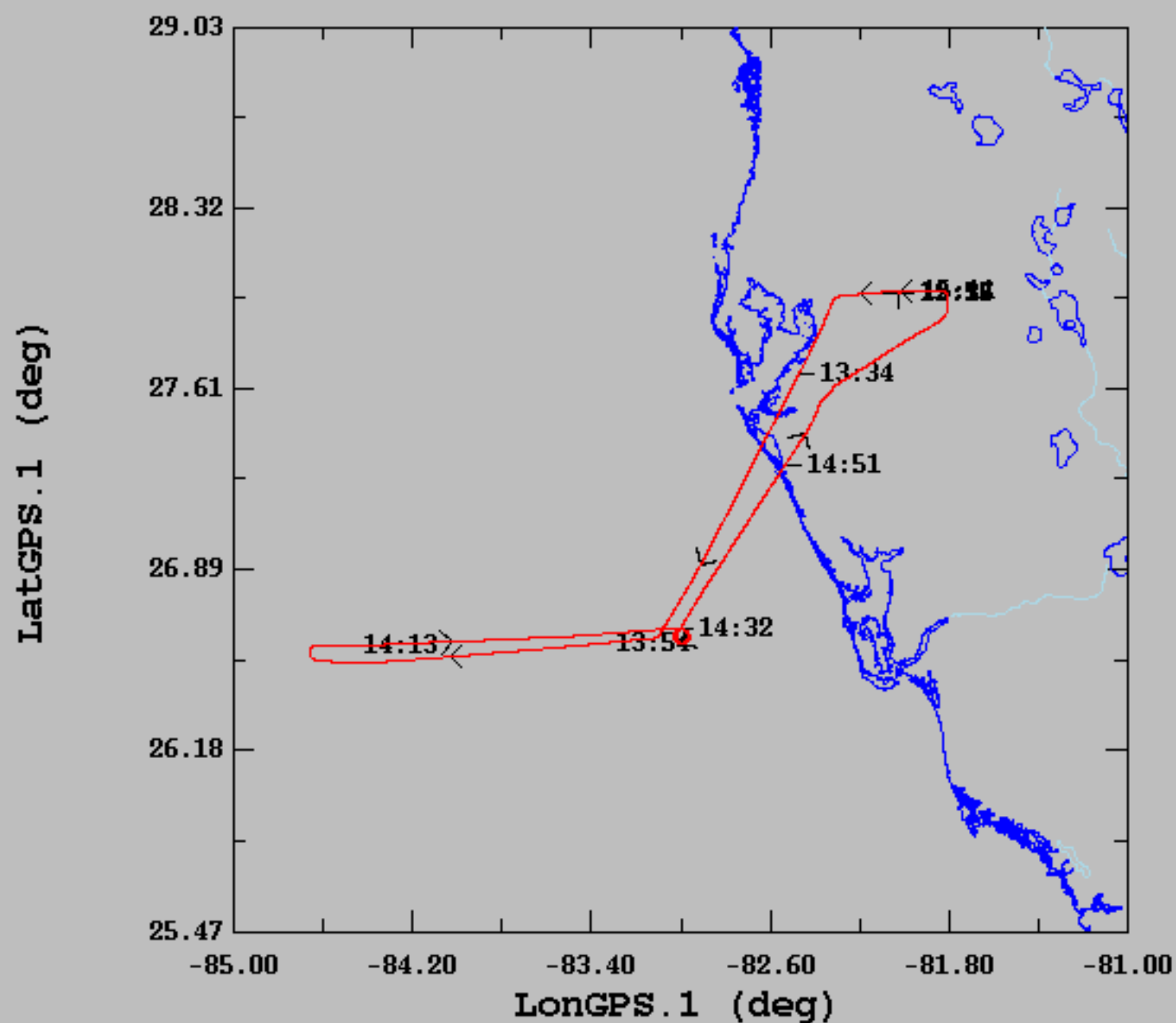
Landing: _____

Flt Dir: J. Carpenter

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	205030595	1	-0.7	1356	MAC	AOC	PTU MOD FW2.11.0	
2	204840554	2	-0.6	1356	MAC	AOC	FW 2.10.3	
3	204951757	3	-0.5	1356	MAC	AOC	PTU MOD FW2.11.0	
4	204540580	4	-0.3	1356	MAC	AOC	FW 2.10.3	
X 5	205030606	5	-0.7	1356	MAC	AOC	PTU MOD FW2.11.0	NO launch Detect
6	203250856	6	-0.3	1356	MAC	AOC	FW 2.10.3	
7	204951751	1	-0.4	1419	MAC	AOC	PTU MOD FW2.11.0	
8	204260867	2	-0.2	1419	MAC	AOC	FW 2.10.3	
9	205021340	3	-0.2	1419	MAC	AOC	PTU MOD FW2.11.0	
10	204270018	4	-0.2	1420	MAC	AOC	FW 2.10.3	
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	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.34	0.62	26.53	27.99
LonGPS.1 (deg), 1 s/sec	-82.73	0.81	-84.66	-81.80