

N43RF ERROR SUMMARY  
20240617I1

Flight ID: 20240617I1

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.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/2024/MET/20240617I1

Local Met Data	Takeoff KLAL (1712Z)	Landing KLAL (1938Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.179211
AttackAngleSlope		5.88163
SlipAngleIntercept		0.15
SlipAngleSlope		6.89472

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 and GPS.4 inop from the beginning of the flight until 1747 UTC  
A couple of SFMR CH4 brightness temperature spikes, but no apparent impact

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	3	3	3
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Zawislak  
Phone #: 305-707-4359

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION					
FLT ID:	20240617I1	FLT #:	FY24-	AC:	Keith	Scientists:	Pressure		Dropsondes			
From:	KLAL	ETD:	1300L / 1700Z	CP(s):	Taraboletti		A/C Takeoff	1012.1	Good	Bad	Sent	
To:	KLAL	ETA:	1600L / 2000Z						3	0	3	
Block Time		Flight Time		NAV:	Utama		ASOS Takeoff	1012.8	BTs			
Out:	17:03	T/O:	17:12	FE(s):	Tyson		A/C Land	1009.5	Good	Bad	Sent	
In:	19:43	Land:	19:38	FD(s):	Dittoe				0	0	0	
					Zawislak		ASOS Land	1010.4				
Total:	2.7	Total:	2.4	SSA:	Richards	Visitors:						
				AVAPS:	Patel / Kotz		Storm Number ID:		N/A			
Sponsoring Org:	NHC			SEB:			(ie: AL072012)					
Program:	PRX							TCP0D/WSP0D Mission		NOAA3 WXWXA TRAIN		
Purpose:	Intercomparison with 53rd WRS							(ie: NOAA2 2418A SANDY)				
				MX:			OBSERVATIONS					
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP		
VOLCANIC ASH				X	53rd Intercomparison Flight Completed Successfully		1					
SCIENCE MISSION WITHIN BDYR 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:					

\*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	No instrument issues noted.
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Flight ID:	20240617/1
Flight Director(s):	Zawislak
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	-0.08

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1012.1	1009.5
Airfield	1012.8	1010.4

This form uses:
_B.nc

SFMR Serial Unit	3
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Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZfilter-GPS.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZfilter-GPS.2		
	✓ AccAXI-GPS.1	✓ AccAYI-GPS.1	✓ AccAZI-GPS.1			
	✓ AccAXI-GPS.2	✓ AccAYI-GPS.2	✓ AccAZI-GPS.2			
✓ Altitude	✓ AltGPS.1	✓ AltI-GPS.1	✓ AltPaADDU.1	✓ AltRA.1	✓ ALTref	✓ AltRA1.c
	✓ AltGPS.2	✓ AltI-GPS.2	✓ AltBCADDU.1	✓ AltRA.2	✓ ALTPA.d	✓ AltRA2.c
	X AltGPS.3				✓ ALTGA.d	
	X AltGPS.4					
✓ Ground Speed	✓ GsXI-GPS.1	✓ GsYI-GPS.1	✓ GsZI-GPS.1		✓ GSXref	
	✓ GsXI-GPS.2	✓ GsYI-GPS.2	✓ GsZI-GPS.2		✓ GSYref	
					✓ GSZref	
✓ Location	✓ LatGPS.1	✓ LatI-GPS.1	✓ LonGPS.1	✓ LonI-GPS.1	✓ LATref	
	✓ LatGPS.2	✓ LatI-GPS.2	✓ LonGPS.2	✓ LonI-GPS.2	✓ LONref	
	X LatGPS.3		X LonGPS.3			
	X LatGPS.4		X LonGPS.4			
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PQMref	
	✓ PDALPHA.2	✓ PQBETA.1	✓ PQM.2	✓ PSM.2	✓ PQ.c	
	✓ PDBETA.1		✓ PQM.3	✓ PTM.1	✓ PSMref	
	✓ PDBETA.2		✓ PQM.4		✓ PS.c	
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRatI.1	✓ RollI.1	✓ RollRatI.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRatI.2	✓ RollI.2	✓ RollRatI.2	✓ ROLLref	
	inop PitchI.3	inop PitchRatI.3	inop RollI.3	inop RollRatI.3		
✓ Temperature, Dewpoint, Radiometers	✓ TTM.1	✓ TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref
	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d
	inop TTM.3	inop TDM.3	inop TRadU.1		✓ HUM	
✓ Wind and Pressure		✓ CH 1 TB	✓ CH 4 TB		✓ UWZ.d	✓ WS.d
✓ SFMR	SFMR	✓ CH 2 TB	✓ CH 5 TB		✓ PSURF	✓ WD.d
		✓ CH 3 TB	✓ CH 6 TB		✓ WS SFMR	✓ RAIN RATE SFMR

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

QC Key:	
Valid	✓
Errors (see NOTES)	X
Sensor Inoperative	inop

NOTES:
GPS.3 and GPS.4 inop from beginning of the flight until 1747 UTC A couple of SFMR CH 4 brightness temperature spikes, but no apparent impact

# AVAPS Drop Log

Project: \_\_\_\_\_

Mission: 53<sup>RD</sup> INTERCOMPARISON

Flight ID: 2024061711

Take Off: \_\_\_\_\_

Landing: \_\_\_\_\_

Flt Dir: JZ

Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	221350572	1	-0.8	1749	AP	AOL	lost signal in ACS AVAPS good	✓
2	221410030	2	-0.7	1754	AK	AOL		✓
3	221830429	3	-0.5	1806	HK/AP	AOL		✓
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## NOAA P-3 GPS Dropwindsonde Scientist Log (MS Word version 2020)

Flight ID 20240617I1 Storm        CAL/COMP        Dropsonde Scientist Sellwood, Aberson, Sippel and Alaka

The lead project scientist (LPS) on the P3 is responsible for determining the distribution patterns for dropwindsonde releases. Predetermined desired data collection patterns are illustrated on the flight patterns. However, these patterns often are required to be altered because of clearance problems, etc. Operational procedures are contained in the operator's manual. On the G-IV the sole HRD person is designated the LPS. The following list contains more general supplementary procedures to be followed. (Check off or initial.)

### Preflight

- n.a   1. Determine the status of the AVAPS and HAPS or workstation. Report results to the LPS.
- n.a   2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- n.a   3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.
- n.a   4. Complete the appropriate preflight set-up and checklists.

### In-Flight

- n.a   1. Operate the system as specified in the operator's manual.
- n.a   2. Ensure the AOC flight director is aware of upcoming drops.
- n.a   3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
- X   4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

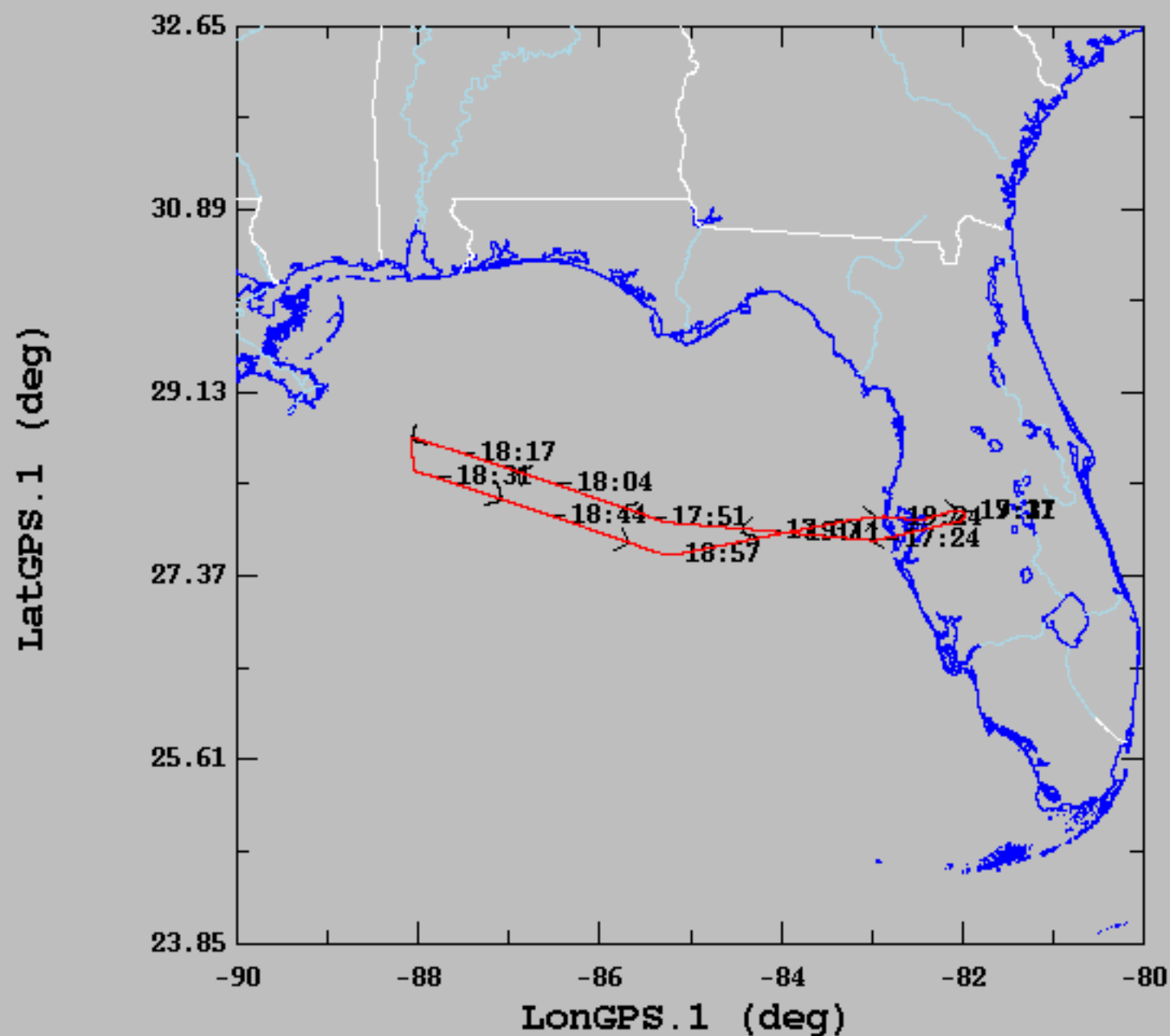
### Post flight

- X   1. Complete Dropwindsonde Scientist Log.
- n.a   2. Brief the LPS on equipment status and turn in completed forms, dropwindsonde data tapes, DVDs, or CDs.  
[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- X   3. Copy all raw and processed dropsonde files to portable drive for archival
- n.a   4. Debrief at the base of operations.
- n.a   5. Determine the status of future missions and notify MGOc as to where you can be contacted.

<b>Mission ID</b>	<b>WXWXA_TRAIN (ex. 0101A)</b>	<b>Take Off</b>	<b>Lakeland</b>	<b>Landing</b>	<b>Lakeland</b>
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[illegible]

06/17/2024, 17:11:00-19:37:57



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.99	0.28	27.57	28.70
LongGPS.1 (deg), 1 s/sec	-85.00	1.89	-88.07	-81.97