N42RF Error Summary
Flight ID 20240520H1
Flight Directory: acdata/2024/MET/20240520H1

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dew Point Temperature 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

Local Met Data

Take off: KLAL (21:44Z	Landing: KLAL 04:29Z	
Dynamic Corrections		Yes
Attack Angle Intercept		0.050058
Attack Angle Slope		5.32015
Slip Angle Intercept		0.165
Slip Angle Slope		6.66754

Notes:
There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.
Take off/landing data are potentially suspect. It is recommended that ground data is not to be used for scientific analysis.
PDALPHA.2 and PDBETA.2 sensors not installed.
PQM.1 has large negative spikes at 22:23 and 00:08.
PQM.4 not representative.
TDM.3 not installed.
Flight was conducted for SFMR Calibration and Scientific Systems shake down – data should not be used for research purposes.

Expendables

Type	# deployed	# good	# transmitted
Dropsondes	9	9	4
Test sondes	0	0	0
AXBTs	0	0	0
UAS	0	0	0

Flight Director: KALEN / ZAWISLAK Phone: 863-500-3962

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION

FLT ID:	20240520H1	FLT #:	
From:	KLAL	ETD:	2030Z
To:	KLAL	ETA:	0330Z
Block Time		Flight Time	
In:	4:38	Land:	4:29
Out:	21:35	T/O:	21:44
Total:	**7.1**	Total:	**6.8**
Sponsoring Org:	AOC		
Program:	PSM		
Purpose:	SFMR & TDR Calibrations		

CREW MANIFEST

AC:	Rannenberg	Scientists:
CP(s):	Taraboletti	
NAV:	Dunford	
FE(s):	Tyson	
	Dittoe	
FD(s):	Kalen	
	Zawislak	
SSA:	McAlister	Visitors:
AVAPS:	Keller	Goodstein (OBS)
SEB:	Kotz (IFT)	Ellis (OBS)
	S. Paul (IFT)	
MX:		

MISSION INFORMATION

Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff		9	0	4
ASOS Takeoff		BTs		
		Good	Bad	Sent
A/C Land		-	-	-
ASOS Land				
Storm Number ID:		N/A		
(ie: AL072012)				
TCPOD/WSPOD Mission		NOAA2 WXWXA TAIN		
(ie: NOAA2 2418A SANDY)				

AS REQUIRED BY ORM

	Y	N
VOLCANIC ASH		x
SCIENCE MISSION WITHIN BDRY LAYER	x	
LACK OF PRECIPITATION	x	
RELATIVE HUMIDITY ≥ 80%		x
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

REMARKS

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
Pennies:			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.

Flight ID:	20240520H1
Flight Director(s):	KALEN / ZAWISLAK
Mission:	Tasked/Operational
UWZ.d mean:	0.06

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1006.3	1010.6
Airfield	1006.3	-

This form uses:
_A.nc

SFMR Serial Unit	#

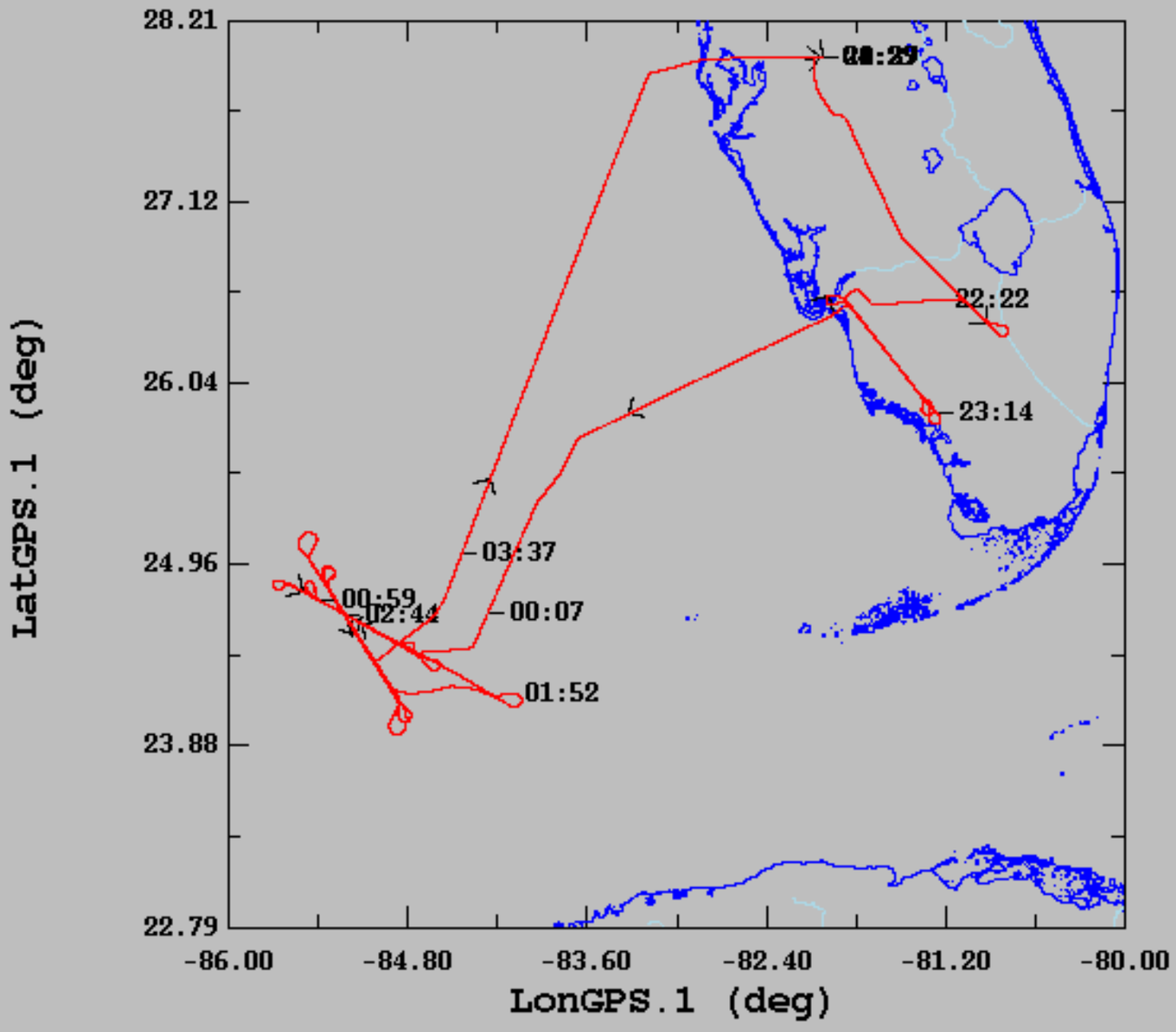
Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZfilter-GPS.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZfilter-GPS.2		
	✓ AccAXI-GPS.1	✓ AccAYI-GPS.1	✓ AccAZI-GPS.1			
	✓ AccAXI-GPS.2	✓ AccAYI-GPS.2	✓ AccAZI-GPS.2			
✓ Altitude	✓ AltGPS.1	✓ AltI-GPS.1	✓ AltPaADDU.1	✓ AltRA.1	✓ ALTref	✓ AltRA1.c
	✓ AltGPS.2	✓ AltI-GPS.2	✓ AltBCADDU.1	✓ AltRA.2	✓ ALTPA.d	✓ AltRA2.c
	✓ AltGPS.3	✓ AltRA1.c		✓ ALTPA.d	✓ ALTGA.d	
	✓ AltGPS.4	✓ AltRA2.c		✓ ALTGA.d		
✓ 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	
	✓ LatGPS.3		✓ LonGPS.3			
	✓ LatGPS.4		✓ LonGPS.4			
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	x PQM.1	✓ PSM.1	✓ PQMref	
	inop PDALPHA.2	✓ PQBETA.1	✓ PQM.2	✓ PSM.2	✓ PQ.c	
	✓ PDBETA.1		✓ PQM.3	✓ PTM.1	✓ PSMref	
	inop PDBETA.2		x PQM.4		✓ PS.c	
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRateI.1	✓ RollI.1	✓ RollRateI.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRateI.2	✓ RollI.2	✓ RollRateI.2	✓ ROLLref	
	✓ PitchI.3	✓ PitchRateI.3	✓ RollI.3	✓ RollRateI.3		
✓ Temperature, Dewpoint,	✓ TTM.1	✓ TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref
Radiometers	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d
	✓ TTM.3	inop TDM.3	✓ TRadU.1		✓ HUM	
✓ Wind and Pressure		x CH 1 TB	x CH 4 TB		✓ UWZ.d	✓ WS.d
✓ SFMR	SFMR	x CH 2 TB	x CH 5 TB		✓ PSURF	✓ WD.d
		x CH 3 TB	x CH 6 TB		x WS SFMR	x 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:
PDALPHA.2 AND PDBETA.2 sensors not installed for flight
PQM.1 has large negative spikes at 22:23 and 00:08.
TDM.3 not installed
SFMR Calibration and Science Shakedown flight. Data should not be used for scientific research

05/20/2024, 20:37:11-28:29:36



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	25.83	1.36	23.94	27.99
LonGPS.1 (deg), 1 s/sec	-83.50	1.54	-85.69	-80.77