

N49RF ERROR SUMMARY
20240730 N1

Flight ID: 20240730N1

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	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2024/MET/20240730N1

Local Met Data	Takeoff KLAL (1336Z)	Landing KLAL (1818Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept		0.925
SlipAngleSlope		6.56381
AttackAngleIntercept2		4.97461
AttackAngleSlope2		5.40351
SlipAngleIntercept2		0.71
SlipAngleSlope2		6.22549

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.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	2	2	2
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 #: 8635003901

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240730N1	FLT #:		AC:	Bhatnagar	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1330	CP(s):	Pawlenko		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1800						2	0	2
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	18:23	Land:	18:18	FE(s):			A/C Land		Good	Bad	Sent
Out:	13:20	T/O:	13:37	FD(s):	Carpenter		ASOS Land				
Total:	5.1	Total:	4.7	SSA:	Defeo	Visitors:	Storm Number ID:		WXWXA TRAIN		
Sponsoring Org:		PHS		AVAPS:	Lynch		(ie: AL072012)				
Program:				SEB:	Vargas		TCP0D/WSP0D Mission				
Purpose:		TDR/INE and Wind Validation		MX:	Kotz (Observer)		(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH							1				
SCIENCE MISSION WITHIN BDY LAYER											
LACK OF PRECIPITATION							2				
RELATIVE HUMIDITY ≥ 80%											
LARGE AIR-SEA TEMP GRADIENT							3				
HIGH SURFACE WINDS											
LONG FETCH / DURATION OF SFC WND							4				
SEA SALT ACCRETION FORECAST											
SEA SALT ACCRETION OBSERVED							Pennies:				
						*Highlighted items must be completed before departure.					
Remarks:											

G-IV QC Checklist

Overall Assessment

Minor instrument issue(s) - no mission impact.

Flight ID:	20240730N1
Flight Director(s):	Carpenter/de Solo
Mission:	Equipment Checkout
UWZ.d mean:	-0.12

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1014.8	
Airfield		

This form uses:

[A.nc](#)

Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZI.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZI.2		
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.3	✓ AccZI.3		
✓ Altitude	✓ AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2		
	✓ AltGPS.3	✓ AltI.3	INOP AltRA.1			
✓ Ground Speed	✓ GsXI.1	✓ GsYI.1	✓ GsZI.1	✓ GsGPS.1	✓ GSXref ✓ GSYref ✓ GSZref	
	✓ GsXI.2	✓ GsYI.2	✓ GsZI.2	✓ GsGPS.2		
	✓ GsXI.3	✓ GsYI.3	✓ GsZI.3			
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1			
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2			
✓ Location	✓ LatGPS.1	✓ LatI.1	✓ LongGPS.1	✓ LonI.1	✓ LATref ✓ LONref	
	✓ LatGPS.2	✓ LatI.2	✓ LongGPS.2	✓ LonI.2		
	✓ LatGPS.3	✓ LatI.3	✓ LongGPS.3	✓ LonI.3		
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c	
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2		
	✓ PDBETA.1	✓ PQBETA.1				
	✓ PDBETA.2	✓ PQBETA.2				
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1			✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRatel.1	✓ RollI.1	✓ RollRatel.1	✓ PITCHref ✓ ROLLref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RollI.2	✓ RollRatel.2		
	✓ PitchI.3	✓ PitchRatel.3	✓ RollI.3	✓ RollRatel.3		
✓ Temperature / Dewpoint	✓ TTM.1	✓ TTM.4	✗ TDM.1		✓ TD.c	✓ TTMref
	INOP TTM.2		✓ TDM.2		✓ TDMref	✓ TA.d
	✓ TTM.3				✗ HUM	
✗ Wind					✓ UWZ.d	✗ WS.d ✗ WD.d

FLID_Mission_Documents.pdf:

- ✓

 Error Summary
- ✓

 Crew Manifest
- ✓

 QC Checklist
- ✓

 Dropwindsonde Log(s) - AVAPS and FD, if completed
- ✓

 Flight Track

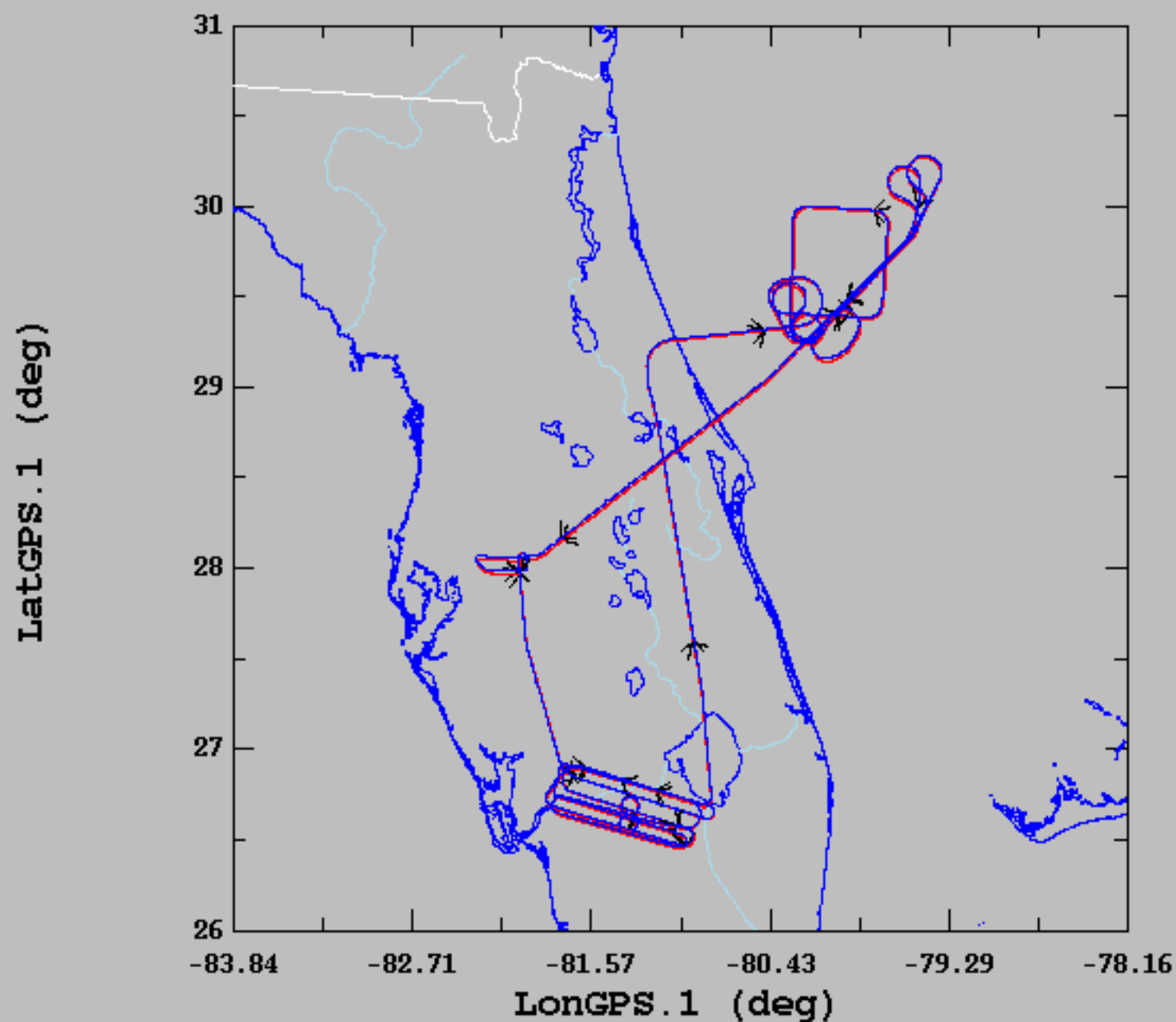
QC Key:

Valid	✓
Errors (see NOTES)	✗
Sensor Inoperative	inop

NOTES:

The purpose of this flight was to validate the accuracy of the flight level winds. Several inconsistencies were found.

07/30/2024, 12:42:20-18:23:07



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	28.01	1.21	26.46	30.28
LongGPS.1 (deg), 1 s/sec	-81.07	0.82	-82.30	-79.34
LatI.1 (deg), 1 s/sec	28.00	1.21	26.45	30.27
LonI.1 (deg), 1 s/sec	-81.07	0.82	-82.29	-79.34

AVAPS Drop Log

Project: HX 2024

Mission: TDR / INE / CAL

Flight ID: 20240730N1

Take Off: _____

Landing: _____

Flt Dir: Sofia

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	230351470	1	-0.9	16:27	JD	AdC		✓
2	233710307	2	-0.5	16:32	JD			✓
3	230551215	3	-0.4		JD		No Drop	
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