

N42RF ERROR SUMMARY
20240603H1

Flight ID: 20240603H1

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.3
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/20240603H1

Local Met Data	Takeoff KLAL (1039Z)	Landing KDCA (1303Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.32804
AttackAngleSlope		6.09319
SlipAngleIntercept		0.25
SlipAngleSlope		6.641
AttackAngleIntercept2		2.06219
AttackAngleSlope2		5.99068
SlipAngleIntercept2		0.125
SlipAngleSlope2		6.9873

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.
I.3 for Pitch and Roll, TTM.3, and TDM.3 not operational.
TRadU.1 has erroneous data throughout the flight and should not be used.
PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other "C" file parameters checked are from the _A file.
PQM.1 unrepresentative between 1201 - 1242
TTM.3 inop
TTM.1 has large spike at 1227 - also affects TD.c
TDM.2 unrepresentative from take off until 1127
TDM.3 inop
SFMR Data inop - REPO flight over land to DC

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Drosondes	0	0	0
Test sondes	0	0	0

AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: KALEN
Phone #: 863-500-3962

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240603H1	FLT #:		AC:	Doremus	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1030Z	CP(s):	Rannenberg		A/C Takeoff		Good	Bad	Sent
To:	KDCA	ETA:	1300Z		Keith				-	-	-
Block Time		Flight Time		NAV:	Utama	ASOS Takeoff		BTs			
In:	13:08	Land:	13:03	FE(s):	Stokes			Good	Bad	Sent	
Out:	10:30	T/O:	10:40	FD(s):	Kalen	A/C Land		-	-	-	
Total:	2.6	Total:	2.4	SSA:	McAlister	Visitors:	ASOS Land				
Sponsoring Org:		OMAO		AVAPS:		Kahn (OBS)	Storm Number ID:		N/A		
Program:		PFT				Talbert (OBS)	(ie: AL072012)				
Purpose:	DC HAT			SEB:		Dye (OBS)	TCPD/WSPD Mission		NOAA2 WXWXA TRAIN		
						(ie: NOAA2 2418A SANDY)					
				MX:	Ripp		OBSERVATIONS				
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:				
						*Highlighted items must be completed before departure.					
Remarks:											

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	20240603H1
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	0.28

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1012.7	1014.4
Airfield	1011.2	1014.7

This form uses:
_Anc

SFMR Serial Unit	#	2
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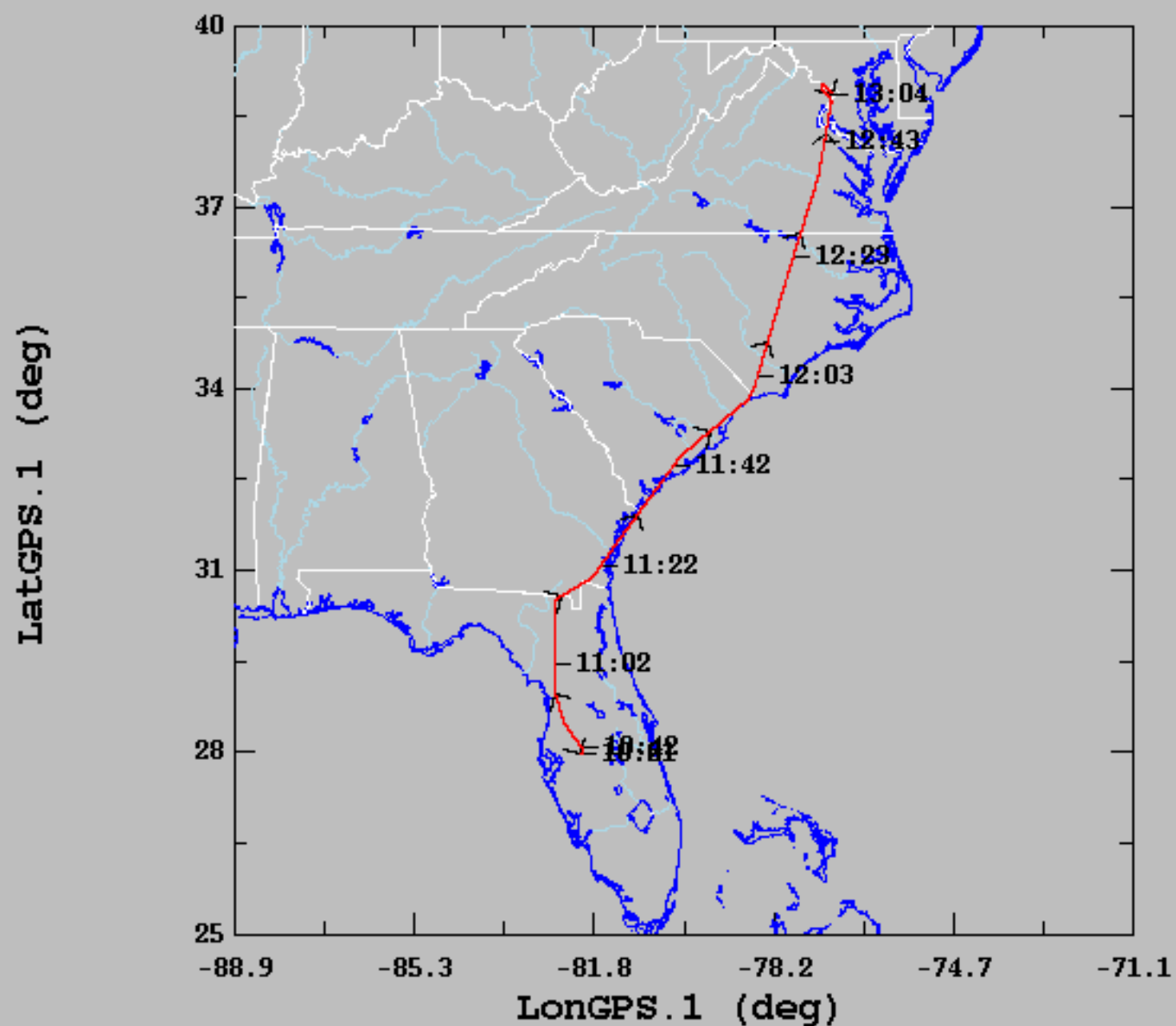
Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZfilter-GPS.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZfilter-GPS.2		
	✓ AccAXI-GPS.1	✓ AccAYI-GPS.1	✓ AccAZI-GPS.1			
	✓ AccAXI-GPS.2	✓ AccAYI-GPS.2	✓ AccAZI-GPS.2			
✓ Altitude	✓ AltGPS.1	✓ AltI-GPS.1	✓ AltPaADDU.1	✓ AltRA.1	✓ ALTref	✓ AltRA1.c
	✓ AltGPS.2	✓ AltI-GPS.2	✓ AltBCADDU.1	✓ AltRA.2	✓ ALTPA.d	✓ AltRA2.c
	✓ 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	✓ 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	✓ PitchRatel.1	✓ RollI.1	✓ RollRatel.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RollI.2	✓ RollRatel.2	✓ ROLLref	
	inop PitchI.3	inop PitchRatel.3	inop RollI.3	inop RollRatel.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	x TRadU.1		✓ HUM	
✓ Wind and Pressure		inop CH 1 TB	inop CH 4 TB		✓ UWZ.d	✓ WS.d
✓ SFMR	SFMR	inop CH 2 TB	inop CH 5 TB		✓ PSURF	✓ WD.d
		inop CH 3 TB	inop CH 6 TB		inop WS SFMR	inop 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

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06/03/2024, 10:01:29-13:04:05



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	32.58	3.76	27.98	39.02
LongGPS.1 (deg), 1 s/sec	-80.11	2.08	-82.55	-77.04