

N42RF ERROR SUMMARY
20240130H1

Flight ID: 20240130H1

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.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/20240130H1

Local Met Data	Takeoff PANC (1527Z)	Landing PANC (0058Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0
AttackAngleSlope		6.07576
SlipAngleIntercept		0.235
SlipAngleSlope		7.01112
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.

Electrical oscillations noted in PDAlpha.1 and .2. PDAlpha.2 intermittently inop mid-flight. PQM.1 and PQM.4 inoperative. PSM.1 likely affected by icing mid-flight. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.1 exhibits a few unrepresentative data spikes. TDM.3 inoperative. TDM.2 biased warm at high altitudes. TRadU.1 unavailable. Frequent unrealistic supersaturations due to TDM.2 warm bias.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Drosondes	18	18	0

Test sondes	0	0	0
AXBTS	1	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter
 Phone #: 863-500-3901

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240130H1	FLT #:	24-	AC:	Keith	Scientists:	Pressure		Dropsondes		
From:	PANC	ETD:	0615L / 1515Z	CP(s):	Wood	Chang, Paul	A/C Takeoff	991.1	Good	Bad	Sent
To:	PANC	ETA:	1615L / 0115Z		Palmer	Jelenak, Zorana			18	0	0
Block Time		Flight Time		NAV:	Miller		ASOS Takeoff	PANC 1553Z 990.2 mb	BTs		
Out:	15:13	T/O:	15:28	FE(s):	Tyson		A/C Land	1003.9	Good	Bad	Sent
In:	1:06	Land:	0:59	FD(s):	Wysinger						
					Carpenter		ASOS Land	PANC 0053Z 1000.0 mb	0	1	0
Total:	9.9	Total:	9.5	SSA:	McAlister	Visitors:					
Sponsoring Org:		NESDIS		AVAPS:	Richards	Martha Sanders	Storm Number ID:		N/A		
Program:		PED		SEB:	Dunford (NAV)	Georgina Kiedrowski	(ie: AL072012)				
Purpose:		OWW Mission 4			Meier (NAV)		TCPOD/WSPOD Mission		NOAA2 WXWXC OCEANWINDS04		
				MX:	Ripp (FE)		(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 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:	N/A			
							*Highlighted items must be completed before departure.				
Remarks:		microswift buoy serial 069 released									

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	20240130H1
Flight Director(s):	Carpenter
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	0

Pressure Comparison		
	T/O	Land
Aircraft	991.1	1003.9
Tower	PANC 1553Z 990.2 mb	PANC 0053Z 1000.0 mb

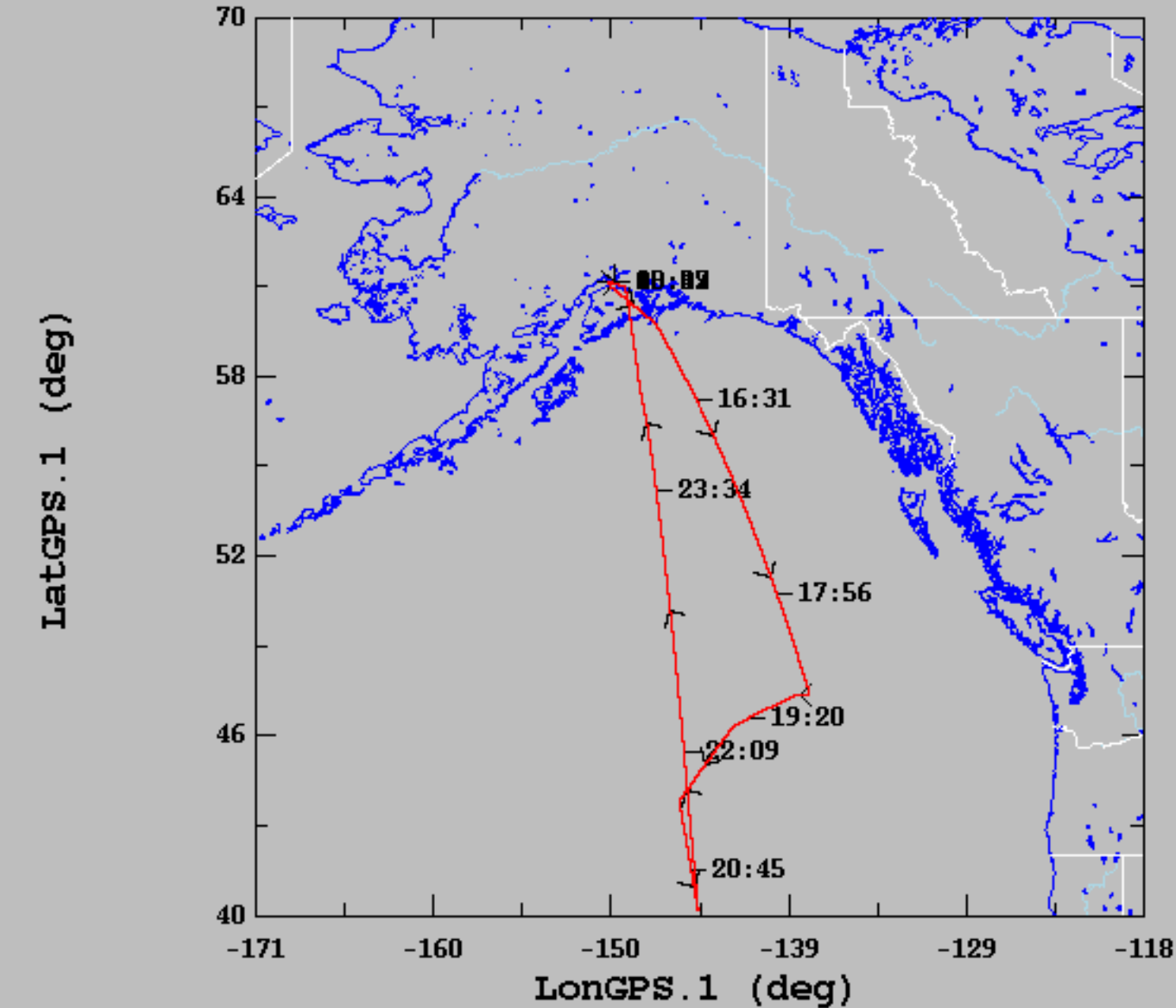
	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ 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	✓ IasADDU.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:
PDAlpha.1 and PDAlpha.2 exhibit electrical oscillatory behavior throughout flight. PDAlpha.2 intermittently inop mid-flight. PQM.1 and PQM.4 inoperative. PSM.1 likely affected by icing mid-flight. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.1 exhibits a few unrepresentative data spikes. TDM.2 biased warm at higher altitude. TDM.3 inoperative. TRadU.1 unavailable. Frequent unrealistic supersaturations due to TDM.2 set as TDMref.

01/30/2024, 13:42:44-24:59:04



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	52.20	6.92	40.15	61.17
LonGPS.1 (deg), 1 s/sec	-145.76	3.31	-150.40	-138.49