

N42RF ERROR SUMMARY
20240119H1

Flight ID: 20240119H1

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/20240119H1

Local Met Data	Takeoff KPHX (1743Z)	Landing PANC (0042Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.305
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 GPS.2. Electrical oscillations noted in PDAlpha.1 and .2. PQAlpha.1 inoperative until after takeoff. PQM.1 inoperative. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. 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 -----
Dropsondes	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: Carpenter / Englert
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:	20240119H1	FLT #:	24-	AC:	Keith	Scientists:	Pressure		Dropsondes		
From:	KPHX	ETD:	1700Z / 1000L	CP(s):	Wood	Chang, Paul	A/C Takeoff	980.0	Good	Bad	Sent
To:	PANC	ETA:	2300Z / 1500L		Palmer	Sapp, Joe			0	0	0
Block Time		Flight Time		NAV:	Miller	Sans Souci (MX)	ASOS Takeoff	KPHX 1751Z 978.6 mb	BTs		
Out:	17:17	T/O:	17:32	FE(s):	Tyson	Vega (MX)	A/C Land	1007.1	Good	Bad	Sent
					Wysinger	Moreno (MX)			0	0	0
In:	0:46	Land:	0:42	FD(s):	Carpenter		ASOS Land	PANC 0053Z 1004.9 mb	0	0	0
					Englert						
Total:	7.5	Total:	7.2	SSA:	McAlister	Visitors:					
Sponsoring Org:		NESDIS		AVAPS:	Richards		Storm Number ID:		N/A		
					Stokes (FE)		(ie: AL072012)				
Program:		PED		SEB:	Dunford (NAV)		TCPOD/WSPOD Mission		NOAA2 WXWXE TRAIN		
Purpose:		Repo. to PANC			Utama (PM)		(ie: NOAA2 2418A SANDY)				
				MX:	Decker		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X			1				
SCIENCE MISSION WITHIN BDY LAYER				X							
LACK OF PRECIPITATION				X							
RELATIVE HUMIDITY ≥ 80%			X				2				
LARGE AIR-SEA TEMP GRADIENT			X								
HIGH SURFACE WINDS				X							
LONG FETCH / DURATION OF SFC WND				X			3				
SEA SALT ACCRETION FORECAST				X							
SEA SALT ACCRETION OBSERVED				X							
							4				
							Pennies:	N/A			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	20240119H1
Flight Director(s):	Carpenter / Englert
Mission:	Ferry
UWZ.d mean:	-0.35

Pressure Comparison		
	T/O	Land
Aircraft	980.0	1007.1
Tower	KPHX 1751Z 978.6 mb	PANC 0053Z 1004.9 mb

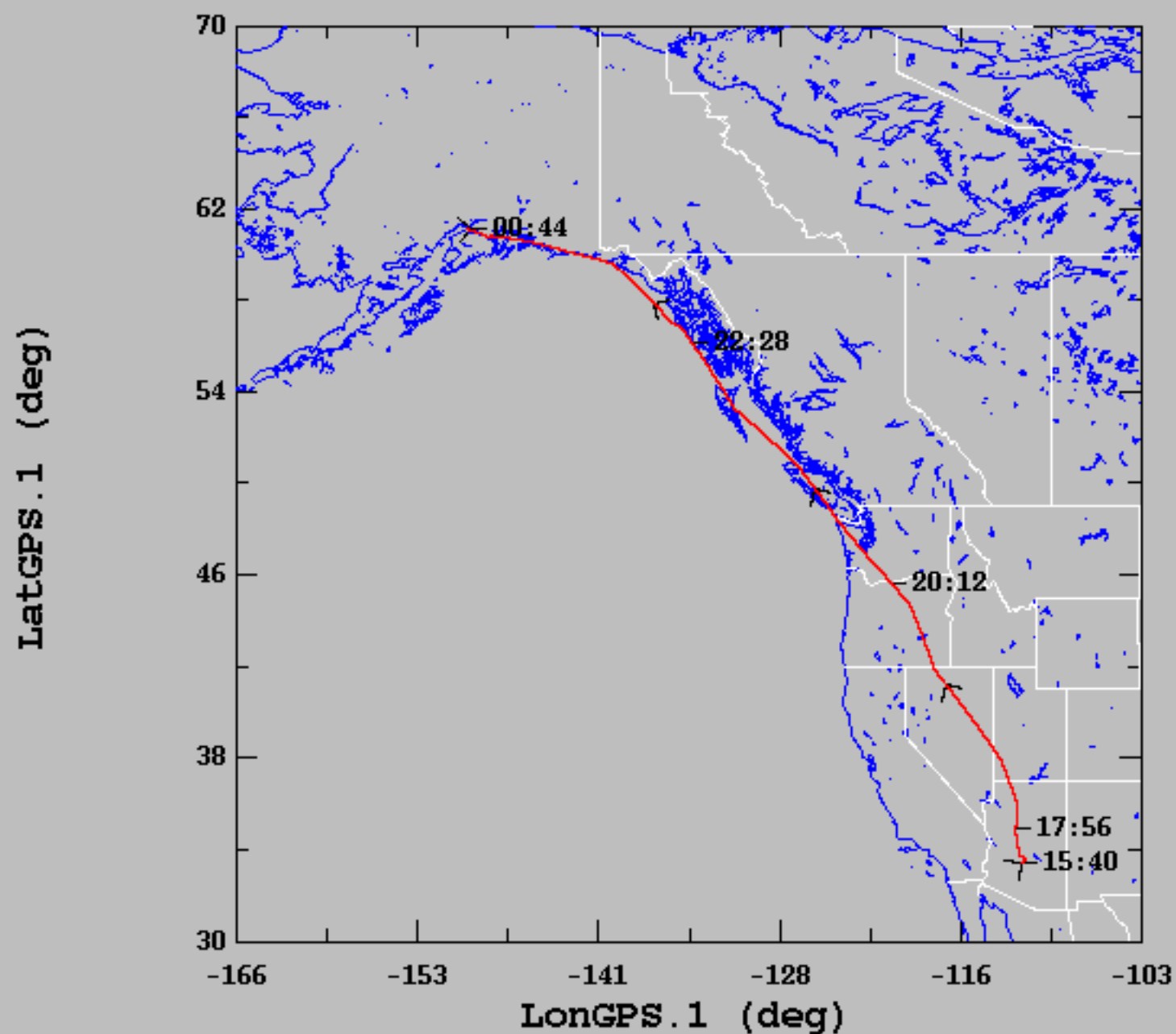
	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ 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	X 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 X PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 X PitchRateI.3	✓ RollI.1 ✓ RollI.2 X RollI.3	✓ RollRateI.1 ✓ RollRateI.2 X RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 X TTM.3	✓ TDM.1 ✓ TDM.2 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X 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
X Dropwindsonde Log(s) - AVAPS and FD if completed
✓ Flight Track
X Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☒
Errors (note)	X

NOTES:
Electrical oscillations noted in GPS.2. Electrical oscillations noted in PDalpha.1 and .2. PQAlpha.1 inoperative until after takeoff. PQM.1 inoperative. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.3 inoperative. TDM.2 biased warm at high altitudes. TRadU.1 unavailable. Frequent unrealistic supersaturations due to TDM.2 set as TDMref exhibiting warm bias.

01/19/2024, 15:40:35-24:44:45



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	46.08	10.10	33.43	61.17
LongGPS.1 (deg), 1 s/sec	-124.65	12.20	-150.25	-111.84