

N49RF ERROR SUMMARY
20231207N1

Flight ID: 20231207N1

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	AccZI.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/2023/MET/20231207N1

Local Met Data	Takeoff PHNL (1959Z)	Landing PHNL (0345Z)
Dynamic Corrections		Yes
AttackAngleIntercept		4.95911
AttackAngleSlope		5.43613
SlipAngleIntercept		1.06
SlipAngleSlope		6.97813
AttackAngleIntercept2		5.05753
AttackAngleSlope2		5.52397
SlipAngleIntercept2		0.931
SlipAngleSlope2		6.57562

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.

PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _BC file is not produced; all other "C" file parameters checked are from the _B file.

All dew point and humidities suspect

Altra.1 inop

AltGPS.1 and .2 stair step

AltGPS.1 has periodic (seconds) gaps in data

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	30	30	30
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0

AXCTDs	0	0	0
UAS	0	0	0

Flight Director: KALEN / DE SOLO
Phone #: 863-500-3962

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:	20231207N1	FLT #:		AC:	WADDINGTON	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1930Z	CP(s):	PAWLENKO		A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:	0330Z					30	0	30	
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	3:50	Land:	3:45	FE(s):			A/C Land		Good	Bad	Sent
Out:	19:45	T/O:	20:00	FD(s):	KALEN		ASOS Land		-	-	-
					DE SOLO						
Total:	8.1	Total:	7.8	SSA:	DEFEO / DYKEMAN	Visitors:					
				AVAPS:	KELLER		Storm Number ID:		N/A		
Sponsoring Org:				SEB:			(ie: AL072012)				
Program:	PAR						TCP0D/WSP0D Mission		NOAA9 07WSC IOP07		
Purpose:	ATMOSPHERIC RIVERS						(ie: NOAA2 2418A SANDY)				
				MX:			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:

G-IV QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	20231207N1	Pressure Comparison		
Flight Director(s):	KALEN / DE SOLO		T/O	Land
Mission:	Tasked/Operational	Aircraft	1016.9	1013.9
UWZ.d mean:	0.08	Tower	1015.5	1012.8

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ 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	x AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1		✓ ALTref	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2		✓ ALTPA.d	
	✓ AltGPS.3	✓ AltI.3	x AltRA.1			✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1	✓ GsYI.1	✓ GsZI.1	✓ GsGPS.1		✓ GSXref	
	✓ GsXI.2	✓ GsYI.2	✓ GsZI.2	✓ GsGPS.2		✓ GSYref	
	✓ GsXI.3	✓ GsYI.3	✓ GsZI.3			✓ GSZref	
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1				
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2				
✓ Lat / Lon	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1		✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2		✓ LONref	
	✓ LatGPS.3	✓ LatI.3	✓ LonGPS.3	✓ LonI.3			
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1		✓ PDLAPHaref	✓ PQMref
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2		✓ PDBETAref	✓ PQ.c
	✓ PDBETA.1	✓ PQBETA.1				✓ PQALPHaref	✓ PSMref
	✓ PDBETA.2	✓ PQBETA.2				✓ PQBETAref	✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.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	
	✓ PitchI.3	✓ PitchRatel.3	✓ RollI.3	✓ RollRatel.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TTM.4	✓ TDM.1			✓ TD.c	✓ TTMref
	x TTM.2		✓ TDM.2			✓ TDMref	✓ TA.d
	✓ TTM.3						
✓ Misc. (Must check)						✓ UWZ.d	✓ WS.d
						✓ DPJ_WSZ	✓ WD.d
						✓ HUM	

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:
PDALPHaref, PDBETAref, PQALPHaref, PQBETAref, and DPJ_WSZ are not provided since _BC file is not produced; all other "C" file parameters checked are from the _B file. All dew point and humidities suspect AltRA.1 inop AltGPS.1 and .2 stair step AltGPS.1 has periodic (seconds) gaps in data

AOC GPS Dropwindsonde Log (updated June 2023)

Flight ID: _____ ASPEN Operator/Flight Director(s): _____

Mission ID: _____ Storm Name/Track: _____ PG ____ of ____

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°W)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1											
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8											
9											
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38											

ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

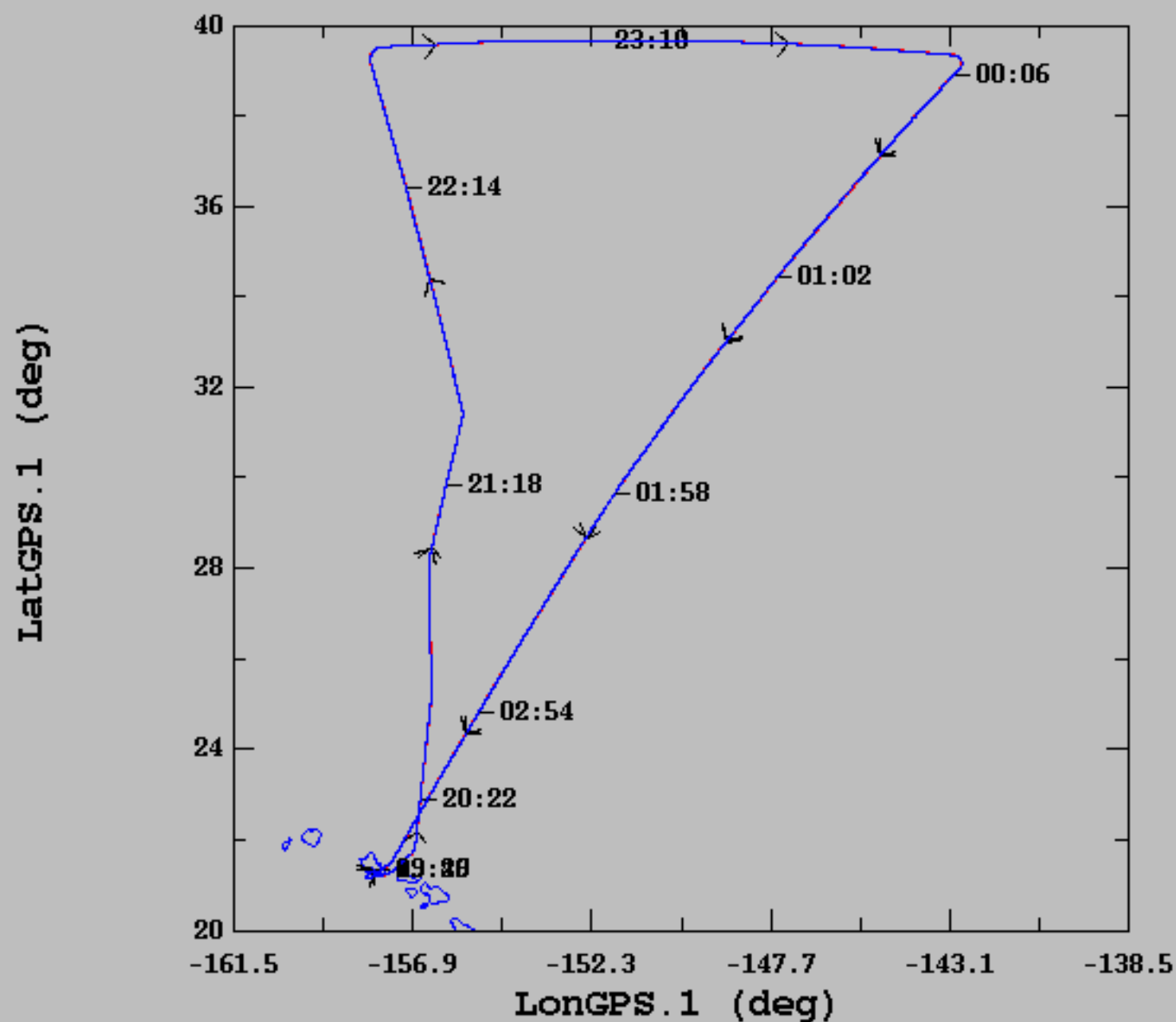
Obs
Xmitted

Obs
Missed

of sondes
launched

of bad
sondes

12/07/2023, 19:26:29-27:49:57



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	30.89	6.55	21.12	39.67
LonGPS.1 (deg), 1 s/sec	-153.21	4.60	-158.11	-142.73
LatI.1 (deg), 1 s/sec	30.89	6.55	21.12	39.66
LonI.1 (deg), 1 s/sec	-153.20	4.60	-158.10	-142.73