

N49RF ERROR SUMMARY
20200215N1

Flight ID: 20200215N1

Sensor or System -----	Number or Name -----
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.1
Vertical Accelerometer	AccZI.2
Altimeter	AltGPS.2
INE Selection	2
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/2020/MET/20200215N1

Local Met Data	Takeoff KPDX (1915Z)	Landing KPDX (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		3.97801
AttackAngleSlope		3.86172
SlipAngleIntercept		1.258
SlipAngleSlope		6.69941
AttackAngleIntercept2		5.04641
AttackAngleSlope2		5.41847
SlipAngleIntercept2		0.905
SlipAngleSlope2		6.78464

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.

PDBETA.2 running slightly higher than PDBETA.1

PQBETA.2 running slightly higher than PQBETA.1

TDM.1 and TDM.2 appear unrepresentative. Consider all flight level humidity to be suspect.

WS.d and WD.d unrepresentative and inaccurate.

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
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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: Hathaway / Henning
Phone #: 863-500-3911

ACAT-4 Version = 7.2.2

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20200215 NI	FLT #:		AC:	Ron Moyers	Scientists:	Pressure		Dropsondes		
From:	KPDX	ETD:	1915Z	CP(s):	Doug Machtyre	David Lavers Tashiana	A/C Takeoff		Good	Bad	Sent
To:	KPDX	ETA:	0115Z		Matthew Nardi		ASOS Takeoff		30	0	30
Block Time		Flight Time		Nav(s):			ASOS Takeoff		BTs		
In:	0220Z	Land:	0217Z	FE(s):			A/C Land		Good	Bad	Sent
Out:	1908Z	T/O:	1915Z	FD(s):	Nikki Hamanay Rich Henning	Visitors:	ASOS Land				
Total:	7.2	Total:	7.0	SEB:			Storm Number ID:				
Sponsoring Org:	EMC			SSA:	Gabe Defeo		(ie: AL072012)				
Program:	PAR			AVAPS:	Jeff Hartberger		TCPOD/WSPOD Mission		NOAA9 09WSE TRACK99		
Purpose:	AR2020* 6				Steven Paul		(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					✓						
SCIENCE MISSION WITHIN BDY LAYER					✓						
LACK OF PRECIPITATION					✓						
RELATIVE HUMIDITY ≥ 80%					✓						
LARGE AIR-SEA TEMP GRADIENT					✓						
HIGH SURFACE WINDS					✓						
LONG FETCH / DURATION OF SFC WND					✓						
SEA SALT ACCRETION FORECAST					✓						
SEA SALT ACCRETION OBSERVED					✓						
Gmax:				Gmin:		*Highlighted items must be completed before departure.					
Remarks:				KEUG, PANC, PACT, KH10 - Alternates							

G-IV QC Checklist

Flight ID:	20200215N1
Flight Director(s):	Hathaway / Henning

UWZ.d mean:	0.19
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Pressure Comparison		
	T/O	Land
Aircraft	1022.7	1017.5
Tower	1021.6	1016.8

	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	☒ AltGPS.1	☒ AltI.1	☒ AltPaADDU.1	☒ AltBCADDU.1	☒	☒ ALTref	
	☒ AltGPS.2	☒ AltI.2	☒ AltPaADDU.2	☒ AltBCADDU.2	☒	☒ ALTPA.d	
	☒ AltGPS.3	☒ AltI.3	☒ 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	☐ GsGPS.3	☒	☒ GSZref	
	☒ GsXGPS.1	☒ GsYGPS.1	☒ GsZGPS.1				
	☒ GsXGPS.2	☒ GsYGPS.2	☒ GsZGPS.2				
	☐ GsXGPS.3	☐ GsYGPS.3	☐ GsZGPS.3				
☐ 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	☒	☒ PDALPHAref	☒ 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	☒ CasADDU.2	☒ TasADDU.1	☒ TasADDU.2	☒	☒ IAS.d	☒ TAS.d
☐ Pitch / Roll	☒ PitchI.1	☒ PitchRateI.1	☒ RollI.1	☒ RollRateI.1	☒	☒ PITCHref	
	☒ PitchI.2	☒ PitchRateI.2	☒ RollI.2	☒ RollRateI.2	☒	☒ ROLLref	
	☒ PitchI.3	☒ PitchRateI.3	☒ RollI.3	☒ RollRateI.3	☒		
☐ Temp / Dewpt	☒ TTM.1	☒ TTM.4	☐ TDM.1		☒	☒ TTMref	
	☐ TTM.2		☐ TDM.2		☒	☒ 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:

PDBETA.2 running slightly higher than PDBETA.1
PQBETA.2 running slightly higher than PQBETA.1
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AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20200215N1 ASPEN Operator/Flight Director(s): HENNING/HATHAWAYMission ID: 09WSE Storm Name/Track: TRACK 99 PG of

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN #	KWBC #	Sonde Issues?
1	1	2033	0731	1	39.2	129.5	OCST	1027.8	250 mb 500 mb SFC 10695 5796 275/16	2053	✓
2	2	2044	1042	2	40	130.4		1026.9	10685 5787 270/16	2104	✓
3	3	2056	0152	3	40.9	131.4		1026.0	10668 5773 230/15	2117	✓
4	4	2108	1018	4	41.8	132.4	✓	1024.6	10640 5751 250/18	2130	✓
5	5	2121	1019	1	42.7	133.4		1022.4	10609 5726 260/25	2143	✓
6	6	2133	1021	2	43.6	134.4		1020.1	10571 5688 270/16	2153	✓
7	7	2144	0994	3	44.3	135.5		1021.3	10544 5664 075/6	2204	✓
8	8	2154	0993	4	43.6	136.5		1020.5	10576 5688 260/12	2217	✓
9	9	2205	0992	1	42.7	137.5		1022.6	10617 5716 245/20	2239	✓
10	10	2216	1014	2	41.8	138.5		1023.4	10651 5742 250/15	2243	✓
11	11	2227	1012	3	40.8	139.4		1024.7	10680 5762 225/18	2249	✓
12	12	2238	0995	4	39.9	140.3		1025.9	10698 5785 235/17	2300	✓
13	13	2249	0991	1	38.9	141.2		1027.3	10728 5806 235/18	2317	✓
14	14	2259	0419	2	38.2	142.0		1026.9	10744 5813 230/14	2320	✓
15	15	2309	0897	3	39.0	142.7		1025.8	10714 5790 220/17	2331	✓
16	16	2319	1010	4	40.0	143.5		1023.4	10670 5754 220/21	2346	✓
17	17	2329	1037	1	41.0	144.2		1023.1	10644 5732 255/15	0000	✓
18	18	2340	0759	2	42.0	144.9		1021.9	10587 5693 035/12	0002	✓
19	19	2350	1034	3	43	145.7		1024.5	10543 5668 025/15	0015	✓
20	20	2359	1017	4	44	146.3		1025.4	10484 5645 010/22	0018	✓
21	21	0008	1054	1	44.8	145.2		1025.1	10471 5643 005/14	0029	✓
22	22	0015	0917	2	45.5	144.2		1024.9	10420 5614 340/13	0035	✓
23	23	0023	1055	3	46.2	143		1024.9	10389 5601 330/14	0042	✓
24	24	0031	1009	4	46.9	141.7		1024.1	10349 5574 305/12	0059	✓
25	25	0038	1043	1	47.5	140.5		1023.4	10309 5552 285/16	0101	✓
26	26	0046	0898	2	48.2	139.2		1022.7	10274 5525 275/16	0115	✓
27	27	0054	0564	3	48.9	137.9		1020.2	10217 5479 270/24	0118	✓
28	28	0102	0508	4	49.7	136.4		1018.7	10176 5448 280/24	0124	✓
29	29	0113	0634	1	49.3	134		1020.5	10194 5465 280/22	0138	✓
30	30	0125	0479	2	49	131.5		1020.2	10208 5472 275/11	0147	✓
31											
32											
33											
34											
35											
36											
37											
38											

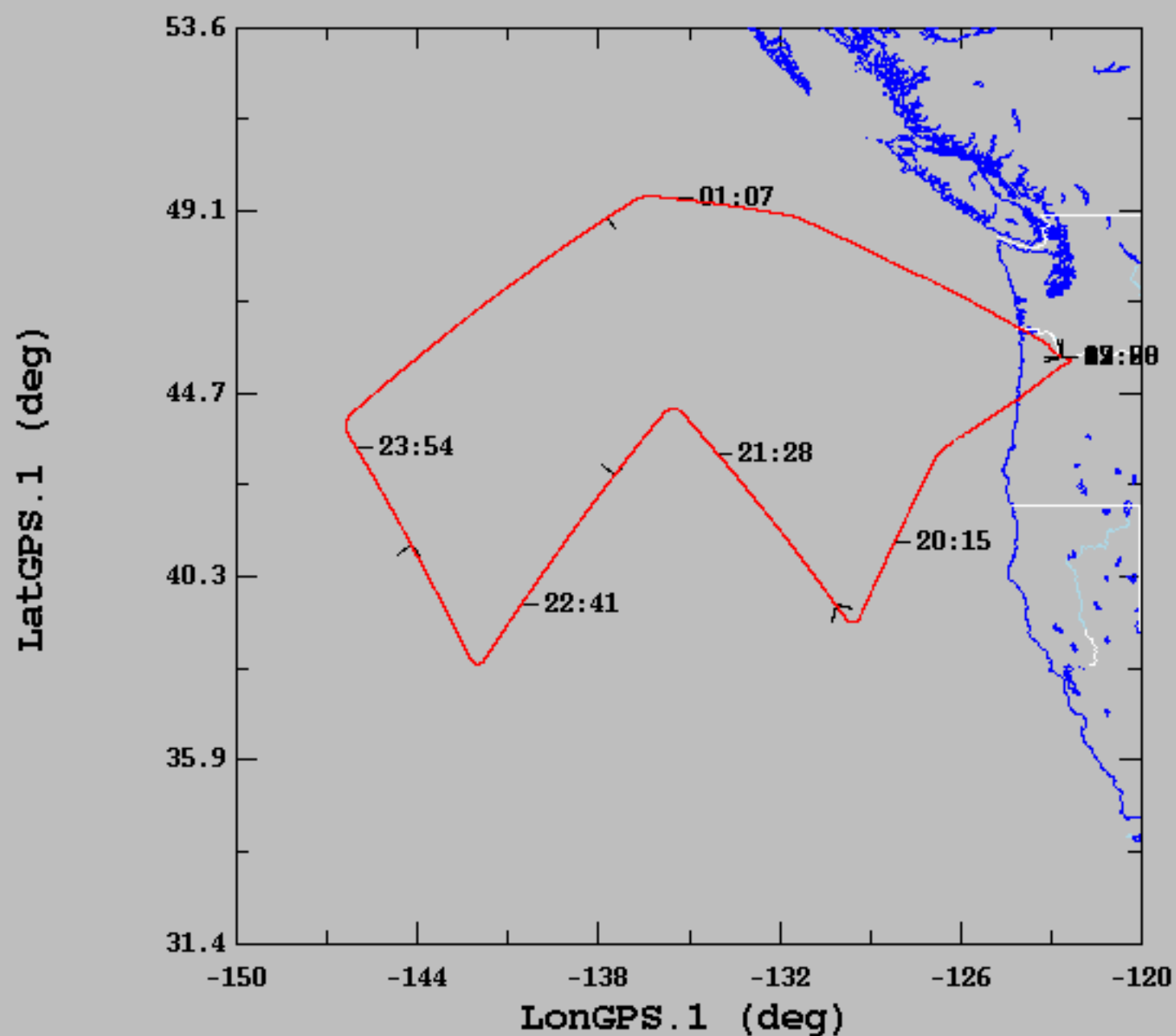
LAST

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

COMMENTS:

Obs
XmittedObs
Missed# of sondes
launched# of bad
sondes

02/15/2020, 17:50:11-26:20:05



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	43.96	2.98	38.19	49.48
LongGPS.1 (deg), 1 s/sec	-132.73	7.92	-146.34	-122.30