

N49RF ERROR SUMMARY
20200220N1

Flight ID: 20200220N1

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/20200220N1
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Local Met Data	Takeoff KPDX (1856Z)	Landing KPDX (0320Z)
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.

AltRA.1 contains sporadic dropouts in transit that could be unrepresentative.

Pdbeta.2 running slightly higher than Pdbeta.1

Pqbeta.2 running slightly higher than pqbeta.1

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

WS.d and WD.d unrepresentative and inaccurate.

There were no measurements made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing Data: Data during takeoff and landing 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
Test sondes	0		0
AXBTs	0		0
AXCPs	0		0
AXCTDs	0		0
UAS	0		0

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

ACAT-4 Version = 7.3

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20200220N1	FLT #:		AC:	RON MOYERS	Scientists:	Pressure		Dropsondes		
From:	KPDX	ETD:	1900Z	CP(s):	Lindsey Norman	Vijay Tallapragada	A/C Takeoff		Good	Bad	Sent
To:	KPDX	ETA:	0300Z		Matthew Nardi						
Block Time		Flight Time		Nav(s):			ASOS Takeoff		BTs		
In:	0323Z	Land:	0320Z	FE(s):			A/C Land		Good	Bad	Sent
Out:	1850Z	T/O:	1850Z	FD(s):	Nikki Hathaway	Visitors:	ASOS Land				
Total:	8.6	Total:	8.4		Rich Henning						
Sponsoring Org:		EMC		SEB:		Adam Hutchinson	Storm Number ID:				
Program:		PAR					(ie: AL072012)				
Purpose:		AR2020*7		SSA:	Gabe Defeo		TCPOD/WSPOD Mission		NOAA9 10WSE TRACK99		
					Jeff Hartberger		(ie: NOAA2 2418A SANDY)				
				AVAPS:	Steven Paul		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				✓							
SCIENCE MISSION WITHIN BDRY 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:	20200220N1
Flight Director(s):	Hathaway/Henning

UWZ.d mean:	0.16
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Pressure Comparison		
	T/O	Land
Aircraft	1024.3	1022.7
Tower	1023.3	1022.2

	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		☒ TD.c	☒ TTMref
	☐ 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:

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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.

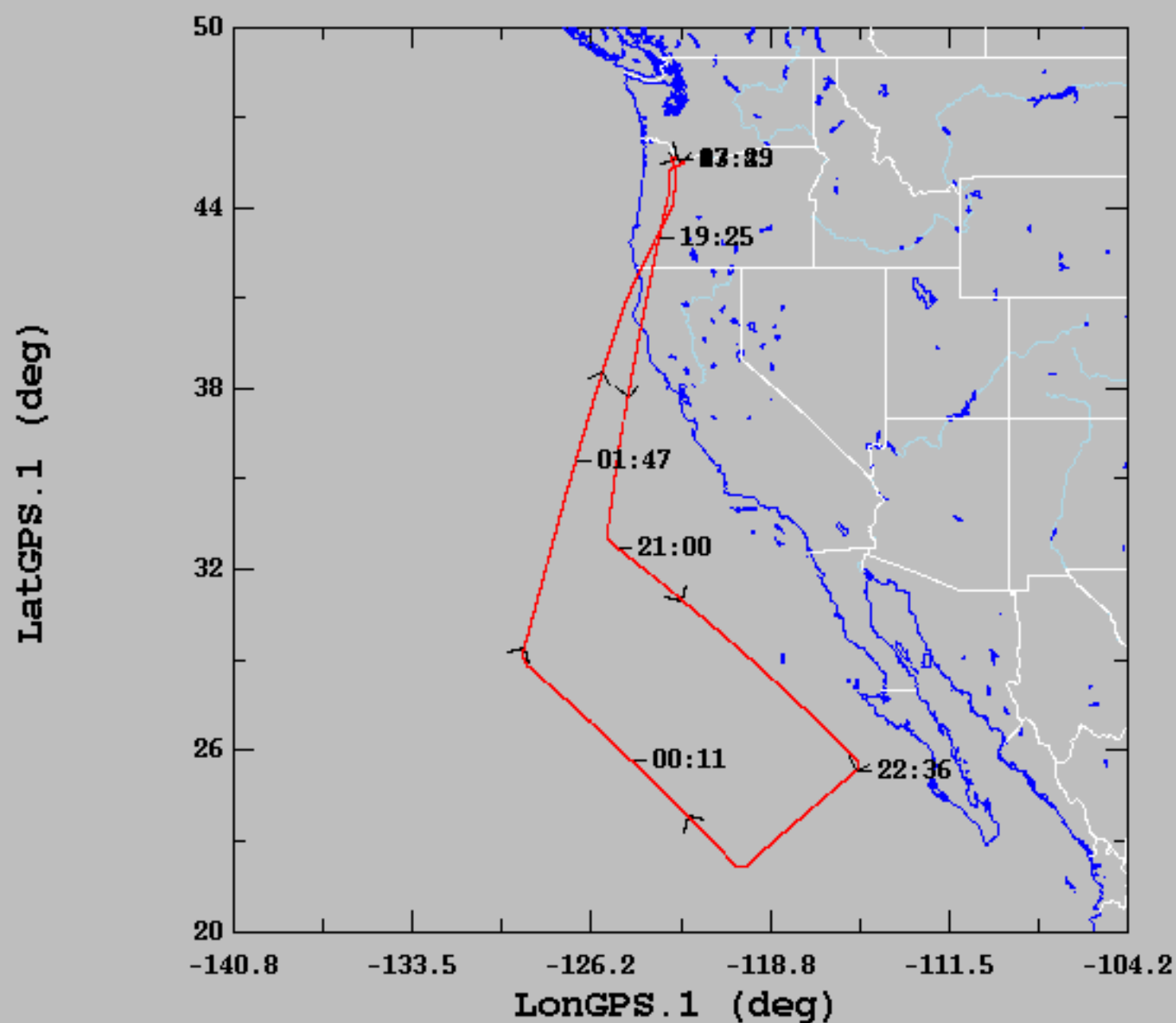
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2020-02-20, 17:49:22-27:23:13



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	34.44	7.83	22.12	45.67
LongGPS.1 (deg), 1 s/sec	-123.12	3.23	-128.92	-115.18

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20200220N1

ASPEN Operator/Flight Director(s):

HENNING / HATHAWAY

PG ___ of ___

Mission ID: 10 WSE

Storm Name/Track:

TRACK 99

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/OC/ASPEN Edits	WIND	KWBC #	Sonde Issues?
1	1	2028	0251	1	36	125	UCST	1020.5	10392 5632	145/07	2051	✓
2	2	2038	0639	2	35	125.2		1019.7	10405 5629	150/05	2057	✓
3	3	2047	0616	3	34	125.3		1019.1	10420 5631	115/06	2105	✓
4	4	2057	0451	4	33	125.4		1019.1	10442 5638	110/9	2116	✓
5	5	2107	0478	1	32.2	124.3		1019.5	10489 5661	130/6	2142	✓ LLD
6	6	2116	0493	2	31.6	123.3		1018.4	10546 5676	100/4	2145	✓
7	7	2126	0323	3	30.8	122.2	↓	1018.1	10609 5700	075/09	2148	✓ ABNF
8	8	2136	0321	4	30.1	121.1	BKN	1018.3	10669 5727	035/9	2157	✓
9	9	2145	0475	1	29.3	120	↓	1017.8	10722 5747	030/9	2216	✓
10	10	2155	0476	2	28.6	119.8	↓	1017.6	10764 5772	050/8	2219	✓
11	11	2205	0324	3	27.8	118	↓	1017.5	10797 5800	015/6	2234	✓
12	12	2215	0815	4	27.1	117		1017.4	10824 5818	335/3	2237	✓
13	13	2224	0786	1	26.3	116	CLR	1016.6	10843 5829	335/4	2301	✓
14	14	2233	1057	2	25.5	115.2	CLR	1016.6	10862 5848	300/11	2302	✓
15	15	2246	0783	3	24.6	116.3	CLR	1016.3	10862 5843	340/10	2307	✓
16	16	2259	0641	4	23.8	117.5	BKN	1017.1	10872 5849	060/5	2322	✓
17	17	2312	1061	1	22.9	118.8	↓	1017.5	10873 5848	015/5	2343	✓
18	18	2325	1568	2	22.1	120	↓	1016.8	10875 5844	320/3	2347	✓
19	19	2335	0642	3	22.8	121	SCT	1017.3	10858 5836	010/6	0001	✓
20	20	2346	0017	4	23.7	122	UCST	1017.1	10829 5813	115/3	0008	✓ LLD
21	21	2355	0457	1	24.4	122.9		1017.5	10792 5797	210/1	0015	✓
22	22	0005	1079	2	25.2	123.9	BKN	1017.8	10752 5772	295/5	0030	✓
23	23	0015	0595	3	26.0	124.9	↓	1018.2	10705 5756	275/10	0041	✓
24	24	0026	0596	4	26.7	125.9	↓	1017.0	10632 5729	295/6	0055	✓
25	25	0036	0775	1	27.5	126.9	SCT	1016.5	10560 5698	300/10	0057	✓
26	26	0046	0144	2	28.3	128	BKN	1016.3	10513 5661	300/15	0109	✓ LLD
27	27	0056	0784	3	29	128.9	BKN	1017.0	10472 5621	260/11	0124	✓ LLD
28	28	0104	0357	4	30	128.7	BKN	1016.7	10416 5586	360/31	0146	✓
29	29	0111	0031	1	31	128.3	UCST	1018.2	10406 5595	355/28	0157	✓
30	30	0119	0490	2	32	128	UCST	1017.9	10380 5577	360/25	0159	✓

Flagged
as
LLD

LAST