

N49RF ERROR SUMMARY
20200308N1

Flight ID: 20200308N1

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	AccZI.2
Altimeter	AltGPS.3
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/20200308N1

Local Met Data	Takeoff KPDX (1900Z)	Landing KPDX (0250Z)
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.

GsGPS.3 unavailable. TTM.2 unavailable. Both TDM sensors performed poorly at all altitudes. All moisture quantities should be considered suspect.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	29	29	29
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

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

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:	20200308N1	FLT #:	20-30	AC:	MacIntyre	Scientists:	Pressure		Dropsondes		
From:	KPDX	ETD:	1900Z	CP(s):	Mansour		A/C Takeoff	1018.7	Good	Bad	Sent
To:	KPDX	ETA:	0300Z		Nardi		ASOS Takeoff	KPDX 1900Z 1017.8 mb	29	0	29
Block Time		Flight Time		NAV:			ASOS Land	1017.4	BTs		
In:	2:57	Land:	2:50	FE(s):			A/C Land	1017.4	Good	Bad	Sent
Out:	18:54	T/O:	19:01	FD(s):	Carpenter		ASOS Land	KPDX 0253Z 1017.1 mb	0	0	0
Total:	8.05	Total:	7.82	SSA:	Miller		Visitors:	Storm Number ID:		IOP15	
Sponsoring Org:		NWS		AVAPS:	Patel	David Bishop	(ie: AL072012)		NOAA9 15WSE TRACK99		
Program:		PAR		SEB:	Underwood		TCPOD/WSPOD Mission				
Purpose:		Atmospheric Rivers Mission #12		MX:			(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 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

Flight ID:	20200308N1
Flight Director(s):	Carpenter / Holmes

UWZ.d mean:	0.17 post-processing
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Pressure Comparison		
	T/O	Land
Aircraft	1018.7	1017.4
Tower	KPDX 1900Z 1017.8 mb	KPDX 0253Z 1017.1 mb

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1			✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2				
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.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	X GsGPS.3		✓ GSZref	
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1				
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2				
	X GsXGPS.3	X GsYGPS.3	X GsZGPS.3				
✓ Lat / Lon	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1		✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2		✓ LONref	
	✓ LatGPS.3		✓ LonGPS.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	✓ PitchRateI.1	✓ RolI.1	✓ RollRateI.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRateI.2	✓ RolI.2	✓ RollRateI.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRateI.3	✓ RolI.3	✓ RollRateI.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TTM.4	X TDM.1			X TD.c	✓ TTMref
	X TTM.2		X TDM.2			X TDMref	✓ TA.d
	✓ TTM.3						
✓ Misc. (Must check)						✓ UWZ.d	✓ WS.d
						✓ DPJ_WSZ	✓ WD.d
						X HUM	

FLID_Mission_Documents.pdf:	
✓	Error Summary
✓	Crew Manifest
✓	QC Checklist
✓	Dropwindsonde Log(s) - AVAPS and FD if completed
✓	Flight Track
X	Miscellaneous FD Notes

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

NOTES:
GsGPS.3 unavailable. TTM.2 unavailable. Both dewpoint sensors performed poorly at all altitudes. All moisture quantities suspect.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20200308N1

ASPEN Operator/Flight Director(s): Holmes (ASPEN/FS), Carpenter (FDT)

Mission ID: 15WSE IOP15

Storm Name/Track: Track 99

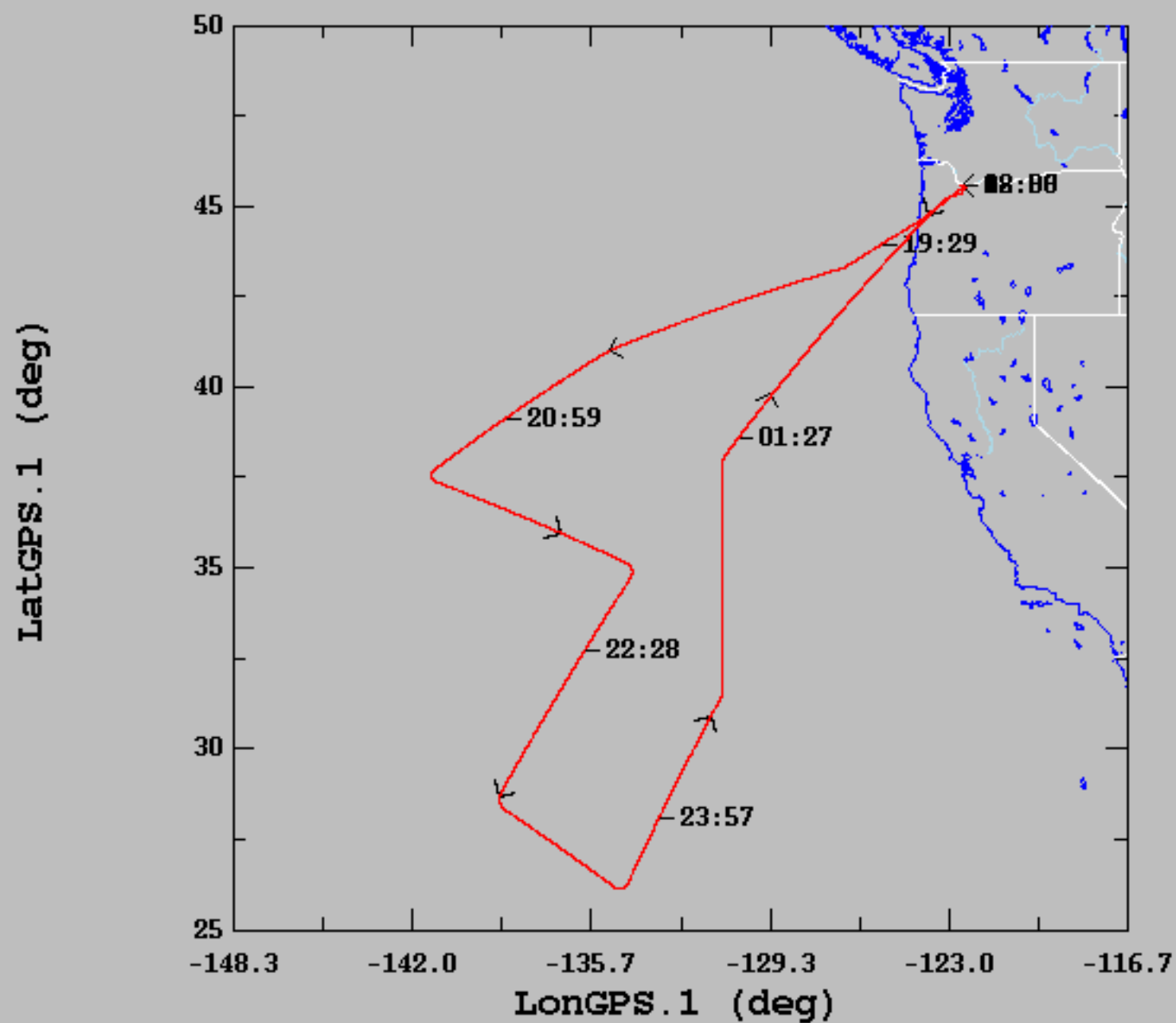
PG 1 of 1

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 Edits	KWBC #	Sonde Issues?
1	1	203254	20233	1	4099N	13502W	VMI	1010	11648 5522		
2	2	204309	30967	2	4033N	13636W	"	1009	11667 5529 PL		
3	3	205225	50392	3	3964N	13771W	"	1011	11707 5543 PM		
4	4	210129	40111	4	3894N	13899W	"	1011	11734 5542 P		
5	5	211040	41097	1	3851N	14026W	"	1015	11787 5568 P999		
6	6	211844	20269	2	3751	14125W	"	1016	11827 5588 PT		
7	7	213815	30993	3	3654N	13841W	"	1006	11699 5463 P1x10 did not hit SFC		
8	8	214820	10457	4	3605N	13694W	"	1003	11658 5412		
9	9	215830	40711	1	3553N	13516W	"	1001	11625 5384 P44		
10	10	220802	40491	2	3494N	13112W	"	1000	11604 5367 PL		
11	11	221748	40425	3	3387N	13494W	"	1002	11611 5377 PM		
12	12	222725	40697	4	3384N	13576W	"	1003	11641 5388 P9		
13	13	223728	20511	1	3176N	13654W	"	1006	11697 5439 P77P		
14	14	224747	40170	2	3067N	13747W	"	1007	11732 5438 PT		
15	15	225808	41629	3	2954N	13822W	"	1008	11788 5529 P5		
16	16	230755	40710	4	2852N	13924W	"	1008	11856 5578 P77P		
17	17	231332	40709	1	2766N	14047W	"	1000	11865 5577 PL		
18	18	232940	10625	2	2684N	13997W	"	1009	11869 5578 PL		
19	19	234001	41347	3	2615N	13952W	"	1009	11883 5590 P-		
20	20	234908	45005	4	2711N	13833W	"	1007	11808 5547 PL6		
21	21	235907	540916	1	2823N	13314W	"	1006	11749 5518 PL		
22	22	000859	41035	2	2933N	13744W	"	1005	11701 5491 PL		
23	23	001848	40169	3	3041N	13172W	"	1005	11663 5470 P-		
24	24	002842	30994	4	3152N	13101W	"	1005	11633 5447 P-		
25	25	003906	40587	1					no PM data the column 9 is not w/ wind data		
26	26	004929	40713	2	3411N	13100W	VI	1002	11594 5383 PL6		
27	27	010034	50069	3	3549N	12100W	"	1003	11606 5430 P9		
28	28	011035	41150	4	3671N	12100W	"	1005	11616 5493		
29	29	012121	40700	1	3201N	13092W	"	1008	11614 5510		
30											
31											
32											
33											
34											
35											
36											
37											
38											

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

Obs
XmittedObs
Missed# of sondes
launched# of bad
sondes

03/08/2020, 18:00:36-26:56:20



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	37.77	6.07	26.13	45.60
LongGPS.1 (deg), 1 s/sec	-131.31	5.60	-141.26	-122.43