

N49RF ERROR SUMMARY
20200306N1

Flight ID: 20200306N1

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/20200306N1

Local Met Data	Takeoff KPDX (1946Z)	Landing KPDX (0335Z)
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. Both dewpoint sensors performed poorly at all altitudes, and all moisture quantities should be considered suspect.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	31	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: 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:	20200306N1	FLT #:	20-28	AC:	MacIntyre	Scientists:	Pressure		Dropsondes		
From:	KPDX	ETD:	1930Z	CP(s):	Mansour		A/C Takeoff	1015.9	Good	Bad	Sent
To:	KPDX	ETA:	0330Z		Nardi		ASOS Takeoff	KPDX 1945Z 1015.1 mb	30	1	30
Block Time		Flight Time		NAV:			ASOS Land	1012.1	BTs		
In:	3:42	Land:	3:35	FE(s):			A/C Land	1012.1	Good	Bad	Sent
Out:	19:40	T/O:	19:47	FD(s):	Carpenter		ASOS Land	KPDX 0335Z 1011.4 mb	0	0	0
Total:	8.03	Total:	7.80	SSA:	Miller	Visitors:	Storm Number ID:		IOP13		
Sponsoring Org:	NWS			AVAPS:	Patel	James, John	(ie: AL072012)		NOAA9 13WSE TRACK99		
Program:	PAR			SEB:	Underwood	Hecht, Chad	TCPOD/WSPOD Mission				
Purpose:	Atmospheric Rivers Mission #10			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 BDY 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:	20200306N1
Flight Director(s):	Carpenter / Holmes

UWZ.d mean:	0.13 post-processing
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Pressure Comparison		
	T/O	Land
Aircraft	1015.9	1012.1
Tower	KPDX 1945Z 1015.1 mb	KPDX 0335Z 1011.4 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	✓ PitchRatel.1	✓ RolI.1	✓ RollRatel.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RolI.2	✓ RollRatel.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRatel.3	✓ RolI.3	✓ RollRatel.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. Both dewpoint sensors performed poorly at all altitudes. All moisture quantities suspect.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20200306M

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

Mission ID: TOP 13 T

Storm Name/Track: TRACK 99

PG ___ of ___

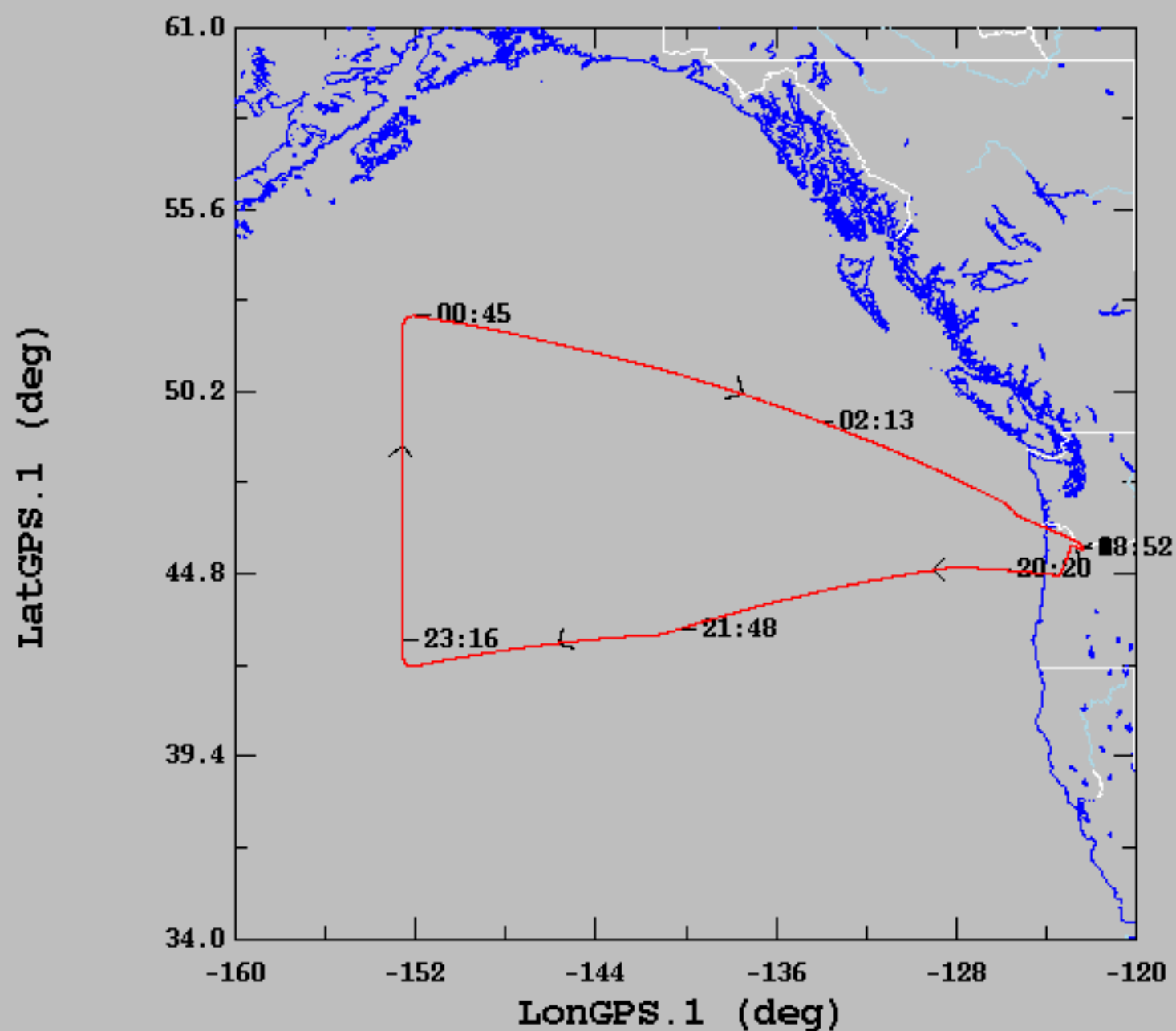
Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Pres (mb)	H64T Comments / Issues / QC / ASPEN Edits		KWBC #	Sonde Issues?	F 6
									200 mb	500 mb			
1	1	203148	40271	1	45N	12802W	VML	1015	11543	5379			✓
2	2	204110	40292	2	4755N	12950W	VML	1014	11514	5339			✓
3		205022	10619	3			VML		Fast Fall				
4	3	215147	40283	4	4765N	13122W	VML	1015	11517	5319	BU		✓
5	4	205925	30237	1				1015	11508	5305			✓
6	5	210832	40868	2	4430N	13390W	"	1017	11528	5327			✓
7	6	211744	50509	3	440N	13535W	"	1018	11533	5355			✓
8	7	212641	40276	4	4383N	13679W	"	1019	11546	5393			✓
9	8	213536	20798	1	4356N	13820W	"	1020	11564	5432			✓
10	9	214438	40284	2	4330N	13961W	"	1021	11595	5477			✓
11	10	215358	40272	3	4300N	14101W	"	1023	11626	5517			✓
12	11	220444	40877	4	4293N	14268W	"	1022	11644	5541			✓
13	12	221528	40285	1	4283N	14433W	"	1023	11677	5576			✓
14	13	222618	40205	2	4271N	14598W	"	1022	11700	5586			✓
15	14	223721	40293	3	4256N	14764W	"	1023	11741	5613			✓
16	15	224814	40275	4	4240N	14927W	"	1024	11780	5634			✓
17	16	225916	20793	1	4220N	15080W	"	1023	11804	5646			✓
18	17	230959	20795	2	423N	15238W	"	1024	11846	5669			✓
19	18	231953	40273	3	4318N	15350W	"	1019	11801	5626	Large cloud		✓
20	19	233050	40866	4	4435N	15250W	"	1018	11768	5599			✓
21	20	234142	20472	1	4551N	15250W	"	1016	11720	5557			✓
22	21	235227	40334	2	4668N	15250W	"	1013	11649	5490			✓
23	22	000302	40704	3	4785N	15250W	"	1012	11609	5424			✓
24	23	001331	40638	4	4901N	15250W	"	1010	11558	5366			✓
25	24	002356	40717	1	5018N	15250W	"	1008	11512	5325			✓
26	25	003412	30995	2	5134N	15250W	"	1005	11485	5309			✓
27	26	004332	50044	3	5239N	15231W	"	1004	11463	5311			✓
28	27	005130	20624	4	5230N	15059W	"	1003	11442	5306			✓
29	28	010017	31056	1			"	1006	11443	5321	h.f. 56	✓	✓
30	29	010908	10779	2			"	1006	11426	5324			✓
31	30	011800	50284	3	5150N	14498W	"	1009	11436	5346			✓
32													
33													
34													
35													
36													
37													
38													

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

03/06/2020, 18:52:22-27:41:30



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	46.36	3.02	42.06	52.45
LonGPS.1 (deg), 1 s/sec	-137.63	11.17	-152.50	-122.31