

N49 Error Summary

Overall Assessment: Minor instrument issue(s) - minimal mission impact

Flight ID: 20210122N1 **Mission ID:** 02WSC IOP03 **Mission Type:** Tasked/Operational

T/O Time: 2054Z PHNL **Landed:** 0445Z PHNL

Flight Director(s): Henning, Lundry **QC performed by:** Henning, Lundry **Phone #:** 863-500-3898

Expendable Counts

	Deployed	Good	Bad	Trasmitted
Dropsonde	35	30	5	30
AXBTs	0	0	0	0
UAS	0			

Information on Meteorological Sensors

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Prob	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2
Dynamic Corrections	Yes
Attack Angle Intercept	3.97
Attack Angle Slope	3.86
Slip Angle Intercept	1.258
Slip Angle Slope	6.69941
Attack Angle Intercept 2	5.05753
Attack Angle Slope 2	5.52397
Slip Angle Intercept 2	0.931
Slip Angle Slope 2	6.57562

QC Checklist

	PSM.1	PSM.2	Average PSM	Station Pressure
Takeoff	1017.0	1017.31	1017.16	1016.8
Landing	1015.56	1016.58	1016.07	1015.8
UWZ Mean:	0.11			

QC Key	Not checked(n/a)	Reference (R)	Valid(/)	Errors(X)								
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	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		
	/	GsXIGPS.1	/	GsYIGPS.1	/	GsZIGPS.1						
	/	GsXIGPS.2	/	GsYIGPS.2	/	GsZIGPS.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	/	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	X	TDM.1			X	TD.c	/	TTMref
	n/a	TTM.2			X	TDM.2			X	TDMref	/	TA.d
	X	TTM.3										
Misc.									/	UWZ.d	/	WS.d
									/	DPJ_WSZ	/	WD.d
									X	HUM		

QC/Data Comments:

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.

All humidity data is suspect

AltRA is unreliable

TTM.3 displays an unnatural oscillation

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210122N1	FLT #:		AC:	Moyers	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	0300Z	CP(s):	Varwig	Cao, Bing	A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:	1900Z								
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	450	Land:	445	FE(s):			A/C Land		Good	Bad	Sent
Out:	2041	T/O:	2054	FD(s):	Henning						
Total:	8.2	Total:	6.1	SSA:	Miller	Visitors:	ASOS Land				
				AVAPS:	Paul						
Sponsoring Org:	Scripps / UCSD			SEB:			Storm Number ID:		N/A		
Program:	PAR						(ie: AL072012)				
Purpose:	AR Mission #1						TCPOD/WSP0D Mission		02WSC IOPO3		
				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											
LACK OF PRECIPITATION							2				
RELATIVE HUMIDITY ≥ 80%											
LARGE AIR-SEA TEMP GRADIENT							3				
HIGH SURFACE WINDS											
LONG FETCH / DURATION OF SFC WND							4				
SEA SALT ACCRETION FORECAST											
SEA SALT ACCRETION OBSERVED							Pennies:	N/A			

*Highlighted items must be completed before departure.

Remarks:

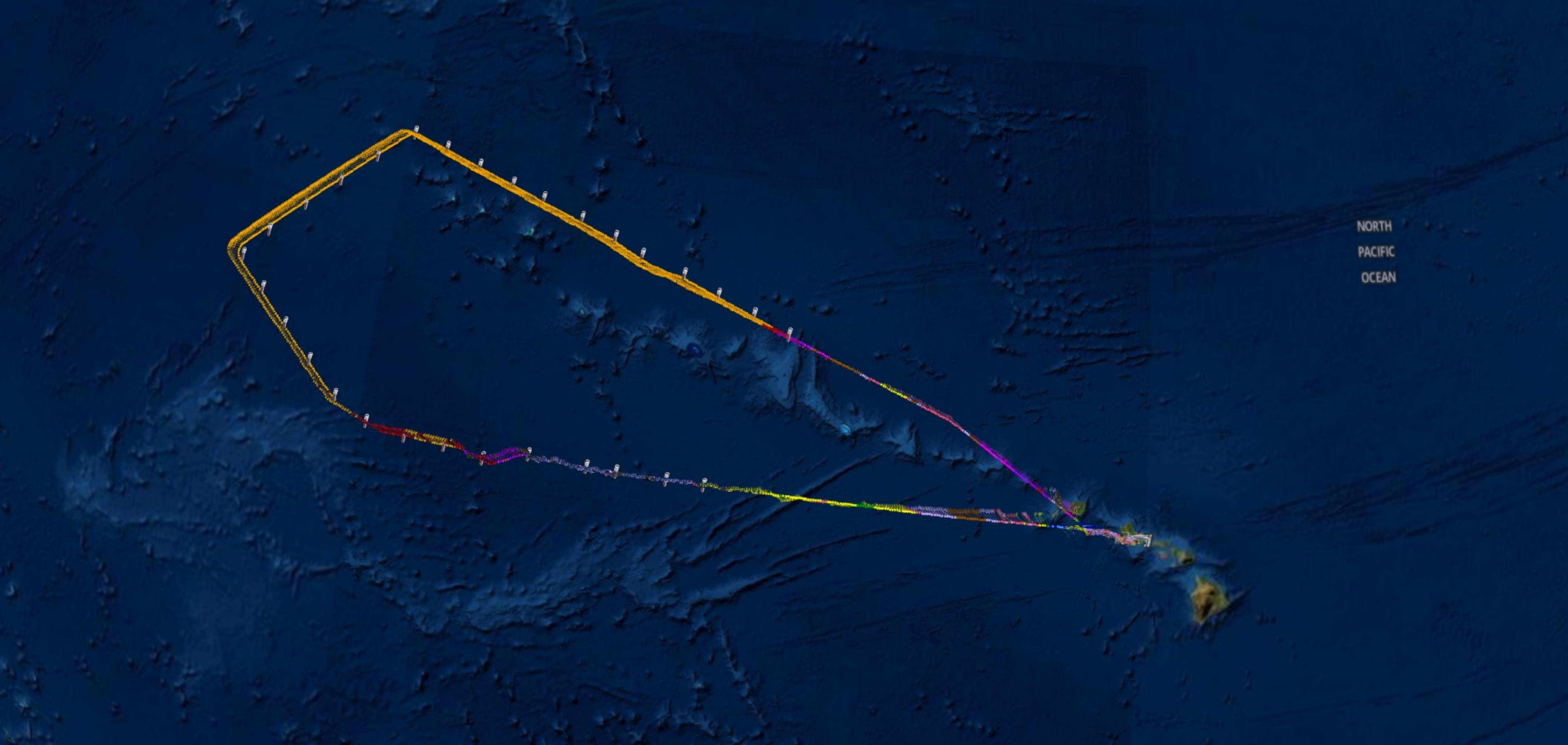
AOC GPS Dropwindsonde Log (updated Mar 2013)

Flight ID: 20210122N1 ASPEN Operator/Flight Director(s): Lundry / Henning

Mission ID: 02WSC Storm Name/Track: IOP03 PG ___ of ___

Sonde #	Ob #	Site & Time PPT T UUAZ	Sonde ID (I 4 Aspen)	Chan. #	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	01	222808	540050	1	26.0047	-168.0128	undercast	1019.8	no SFC winds		
2	02	223734	440051	2	26.4049	-169.0630	undercast	1019.6			
3	03	224718	310168	3	26.8047	-170.1294	" "	1020.8			
4	04	225723	730018	4	27.2048	-171.1965		1020.3			
5	-	230740	440052	1					noisy winds @ launch		X
6	05	230931	540049	2	27.5081	-172.4443		1019.5			
7	06	231752	540092	3	27.9524	-173.3060		1022.5			
8	07	232746	431818	4	28.3225	-174.4509		1022.6			
9	-	233747	210057	1					Fast fall?		X
10	08	233852	540052	2	28.7089	-175.6642	BKN	1023.3			
11	09	234751	210059	3	29.0207	-176.6464	BKN	1024.0			
12	10	235753	540046	4	29.3534	-177.7616	BKN	1024.4			
13	11	000757	150503	1	29.6885	-178.8847		1024.5			
14	12	001803	651035	2	29.9538	-179.9879		1025.2			
15	13	002902	318115	3	29.2090	-178.6660		1022.8			
16	14	004029	440022	4	28.4026	-177.9223		1021.9			
17	15	005155	540061	1	27.6060	-176.9319		1020.5			
18	-	010420	730059	2					late		X
19	16	010424	730115	3	26.7441	-175.8859		1020.1			
20	17	011407	431768	4	25.9814	-175.1630		1019.1			
21	18	012143	540100	1	25.1985	-176.0568		1017.0			
22	19	012941	431811	2	24.4037	-175.0493		1016.5			
23	20	013756	431817	3	23.6006	-178.0531		1014.9			
24	21	014624	520218	4	22.8060	-179.0396		1013.7			
25	22	015430	210058	1	22.2944	-179.8916		1012.8	Last 00Z		
26	23	020254	311637	2	22.0995	-178.1682		1013.7			
27	24	021102	311596	3	22.0552	-177.4734		1013.4			
28	25	021907	240573	4	21.8783	-176.3099		1011.9			
29	26	022905	651022	1	22.1543	-174.9850		1012.4			
30	-	022153	240574	2					no launch		X
31	-	023937	431766	3					Fast Fall		X
32	27	024049	520287	4	22.0086	-173.2966		1013.9			
33	28	024641	520297	2	22.0195	-172.4578		1013.1			
34	29	025631	730060	1	22.0288	-171.0529		1013.4			
35	3	030359	520260	3	21.9996	-169.9838		1012.9			
36											
37											
38											

COMMENTS: ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived
 Obs Xmitted: 30 Obs Missed: 0 # of sondes launched: 35 # of bad sondes: 5



NORTH
PACIFIC
OCEAN