

N49 Error Summary

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

Flight ID: 20210127N1 **Mission ID:** 07WSC IOP08 **Mission Type:** Tasked/Operational

T/O Time: 1851Z PHNL **Landed:** 0235Z PHNL

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

Expendable Counts

	Deployed	Good	Bad	Trasmitted
Dropsonde	23	22	1	22
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	1017.12	1017.95	1017.54	1016.8
Landing	1015.55	1016.61	1016.08	1015.8
UWZ Mean:	0.13			

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:

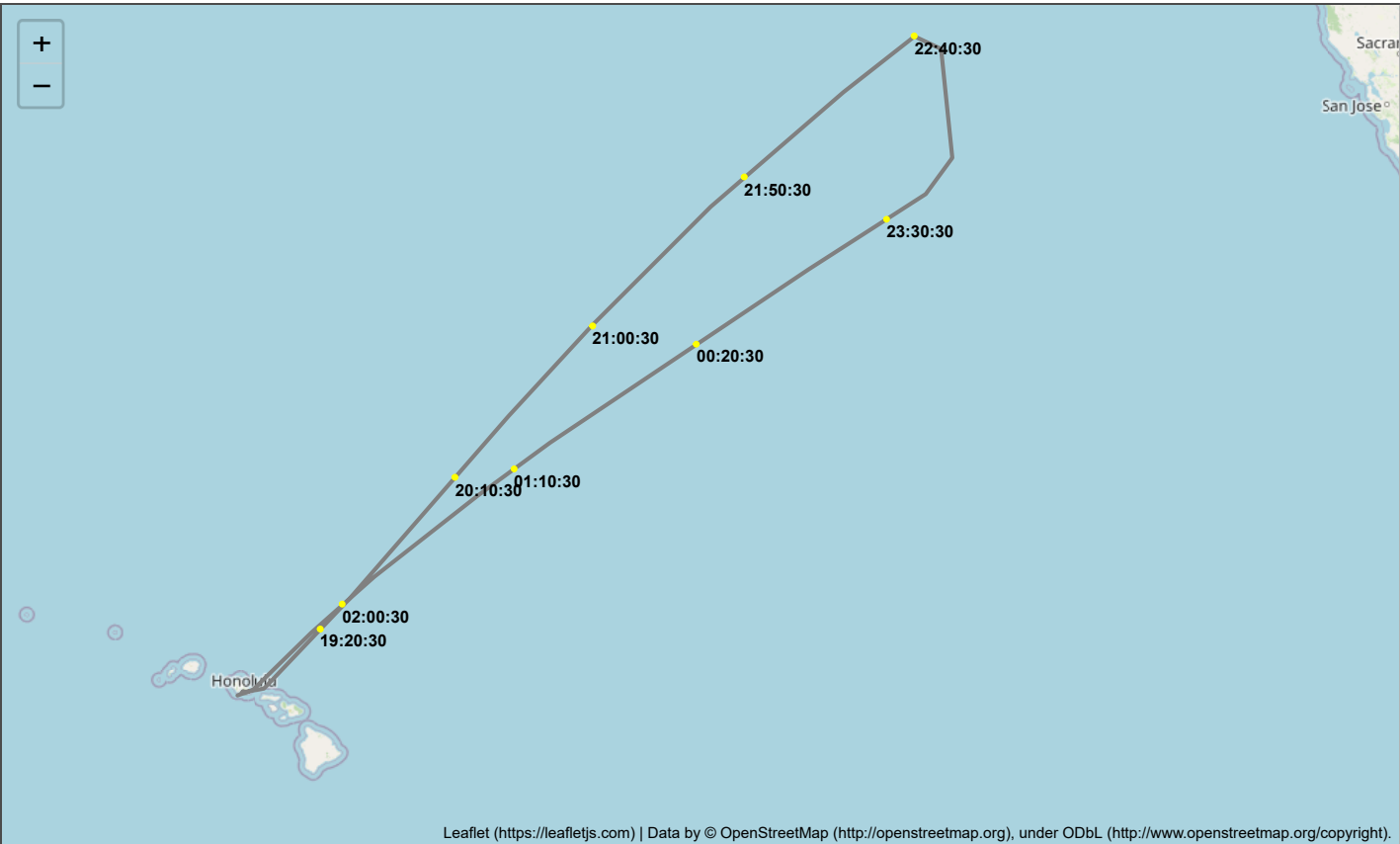
There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

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:	20210127N1	FLT #:		AC:	Moyers	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	0300Z	CP(s):	Varwig		A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:	1900Z							22	1
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	250	Land:	245	FE(s):			A/C Land		Good	Bad	Sent
Out:	1840	T/O:	1851	FD(s):	Henning		ASOS Land				
					Lundry						
Total:	8.2	Total:	7.9	SSA:	Miller	Visitors:					
Sponsoring Org:		Scripps / UCSD		AVAPS:	Paul		Storm Number ID:		N/A		
Program:		PAR					(ie: AL072012)				
Purpose:		AR Mission #6		SEB:			TCP0D/WSP0D Mission		07WSC I0P08		
							(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 BDYR 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 2019)

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Flight ID: 20210127N1ASPEN Operator/Flight Director(s): Lundry / HenningMission ID: 07 WSCStorm Name/Track: IOP08

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 Edits	KWBC #	Sonde Issues?
✓1	01	213709	651052	1	34.5092	-143.4885		1021.1			
✓2	02	214455	720649	2	35.0910	-142.7004		1021.2			
✓3	03	215233	730093	3	35.6595	-141.9083		1020.2			
✓4	04	220014	730084	4	36.2237	-141.1068		1019.2			
✓5	05	220810	721725	1	36.7934	-140.2685		1018.1			
✓6	06	221601	730094	2	37.3414	-139.4545		1017.3	20 m/s		
✓7	07	222402	740023	3	37.8891	-138.6070		1014.9	10-15K 12 m/s		
✓8	08	223159	720082	4	38.4392	-137.7406		1014.0			
✓9	09	223933	910401	1	38.9702	-136.8734		1012.8			
✓10	10	910406	910406	2	39.3132	-136.0890		1010.2	10 m/s splash		
✓11	11	225043	740675	3	38.6860	-135.8982		1010.4			
✓12	12	225035	830388	4	37.8798	-135.7108		1011.0			
✓13	13	230225	451394	1	37.0789	-135.6808		1010.5			
✓14	14	230814	910402	2	36.2871	-135.5988		1010.4			
15	15	231404	910353	3	35.5180	-135.4061		1011.8			
16	16	454110	454110	4	35.0109	-136.4782		1013.0			
17	17	232856	451410	1	34.5198	-137.4127		1014.8			
18	—		350259	2					No Launch		
19	18	233828	510231	3	33.8816	-138.6358		1016.2			
20	19	234351	510190	4	33.5252	-139.7974		1016.3			
21	20	235137	721723	1	33.0119	-140.2380		1018.2			
22	21	235903	830649	2	32.5018	-141.1116		1017.8			
23	22	000641	235540	3	31.9997	-138.375		1019.5	LAST REPORT		
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ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

Obs
MissedObs
Missed# of sondes
launched# of bad
sondes