

N42RF ERROR SUMMARY
20201026H2 0928A ZETA

Flight ID: 20201026H2

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.2
Vertical Accelerometer	AccZfilterI-
GPS.1	
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/2020/MET/20201026H2

Local Met Data	Takeoff KLAL (2000Z)	Landing KLAL (0228Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.307
AttackAngleSlope		6.07515
SlipAngleIntercept		0.237
SlipAngleSlope		7.04607
AttackAngleIntercept2		2.06219
AttackAngleSlope2		5.99068
SlipAngleIntercept2		0.125
SlipAngleSlope2		6.9873

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.

See QC Checklist for more remarks

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	20	18	18
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Lundry
Phone #: 868-500-3898

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20201026H2	FLT #:	2	AC:	Rossi	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1200	CP(s):	Doremus		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	2000		Keith				18	2	18
Block Time		Flight Time		NAV:	Freeman	ASOS Takeoff		BTs			
In:	2:35	Land:	2:28	FE(s):	LaLonde			A/C Land	Good	Bad	Sent
Out:	19:47	T/O:	20:01	FD(s):	Lundry	ASOS Land	0	0	0		
Total:	6.8	Total:	6.5	SSA:	Richards	Visitors:	Storm Number ID:		AL282020		
Sponsoring Org:				AVAPS:	McAlister	(ie: AL072012)					
Program:				SEB:		TCPOD/WSPOD Mission		NOAA2 0928A ZETA			
Purpose:				MX:		(ie: NOAA2 2418A SANDY)					
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH							1				
SCIENCE MISSION WITHIN BDRY LAYER					x						
LACK OF PRECIPITATION					x		2				
RELATIVE HUMIDITY ≥ 80%				x			3				
LARGE AIR-SEA TEMP GRADIENT					x						
HIGH SURFACE WINDS					x		4				
LONG FETCH / DURATION OF SFC WND					x						
SEA SALT ACCRETION FORECAST					x						
SEA SALT ACCRETION OBSERVED					x		Pennies:	3 cat 1 pennies			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	No instrument issues noted.
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Flight ID:	20201026H2
Flight Director(s):	Lundry
Mission:	Tasked/Operational
UWZ.d mean:	0.22

Pressure Comparison		
	T/O	Land
Aircraft	1011.8	1014.7
Tower	1009.7	1012.6

		Raw 1Hz Mean File Parameters				C File Parameters	
<input checked="" type="checkbox"/>	Accelerometer	<input checked="" type="checkbox"/> AccAXI.1 <input checked="" type="checkbox"/> AccAXI.2 <input checked="" type="checkbox"/> AccAXI-GPS.1 <input checked="" type="checkbox"/> AccAXI-GPS.2	<input checked="" type="checkbox"/> AccAYI.1 <input checked="" type="checkbox"/> AccAYI.2 <input checked="" type="checkbox"/> AccAYI-GPS.1 <input checked="" type="checkbox"/> AccAYI-GPS.2	<input checked="" type="checkbox"/> AccAZI.1 <input checked="" type="checkbox"/> AccAZI.2 <input checked="" type="checkbox"/> AccAZI-GPS.1 <input checked="" type="checkbox"/> AccAZI-GPS.2	<input checked="" type="checkbox"/> AccZfilter-GPS.1 <input checked="" type="checkbox"/> AccZfilter-GPS.2	<input checked="" type="checkbox"/> AccZref	
<input checked="" type="checkbox"/>	Altitude	<input checked="" type="checkbox"/> AltGPS.1 <input checked="" type="checkbox"/> AltGPS.2 <input checked="" type="checkbox"/> AltGPS.3 <input checked="" type="checkbox"/> AltGPS.4	<input checked="" type="checkbox"/> AltI-GPS.1 <input checked="" type="checkbox"/> AltI-GPS.2	<input checked="" type="checkbox"/> AltPaADDU.1 <input checked="" type="checkbox"/> AltBCADDU.1	<input checked="" type="checkbox"/> AltRA.1 <input checked="" type="checkbox"/> AltRA.2	<input checked="" type="checkbox"/> ALTref <input checked="" type="checkbox"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d	<input checked="" type="checkbox"/> AltRA1.c <input checked="" type="checkbox"/> AltRA2.c
<input checked="" type="checkbox"/>	Ground Speed	<input checked="" type="checkbox"/> GsXI-GPS.1 <input checked="" type="checkbox"/> GsXI-GPS.2	<input checked="" type="checkbox"/> GsYI-GPS.1 <input checked="" type="checkbox"/> GsYI-GPS.2	<input checked="" type="checkbox"/> GsZI-GPS.1 <input checked="" type="checkbox"/> GsZI-GPS.2		<input checked="" type="checkbox"/> GSXref <input checked="" type="checkbox"/> GSYref <input checked="" type="checkbox"/> GSZref	
<input checked="" type="checkbox"/>	Lat / Lon	<input checked="" type="checkbox"/> LatGPS.1 <input checked="" type="checkbox"/> LatGPS.2 <input checked="" type="checkbox"/> LatGPS.3 <input checked="" type="checkbox"/> LatGPS.4	<input checked="" type="checkbox"/> LatI-GPS.1 <input checked="" type="checkbox"/> LatI-GPS.2	<input checked="" type="checkbox"/> LonGPS.1 <input checked="" type="checkbox"/> LonGPS.2 <input checked="" type="checkbox"/> LonGPS.3 <input checked="" type="checkbox"/> LonGPS.4	<input checked="" type="checkbox"/> LonI-GPS.1 <input checked="" type="checkbox"/> LonI-GPS.2	<input checked="" type="checkbox"/> LATref <input checked="" type="checkbox"/> LONref	
<input checked="" type="checkbox"/>	Pressure	<input checked="" type="checkbox"/> PDALPHA.1 <input type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input type="checkbox"/> PDBETA.2	<input checked="" type="checkbox"/> PQALPHA.1 <input type="checkbox"/> PQBETA.1	<input checked="" type="checkbox"/> PQM.1 <input checked="" type="checkbox"/> PQM.2 <input checked="" type="checkbox"/> PQM.3 <input checked="" type="checkbox"/> PQM.4	<input checked="" type="checkbox"/> PSM.1 <input checked="" type="checkbox"/> PSM.2 <input checked="" type="checkbox"/> PTM.1	<input checked="" type="checkbox"/> PDLAPHaref <input checked="" type="checkbox"/> PDBETAref <input checked="" type="checkbox"/> PQALPHAref <input checked="" type="checkbox"/> PQBETAref	<input checked="" type="checkbox"/> PQMref <input checked="" type="checkbox"/> PQ.c <input checked="" type="checkbox"/> PSMref <input checked="" type="checkbox"/> PS.c
<input checked="" type="checkbox"/>	Air Speed	<input checked="" type="checkbox"/> CasADDU.1	<input checked="" type="checkbox"/> TasADDU.1	<input checked="" type="checkbox"/> IasADDU.1		<input checked="" type="checkbox"/> IAS.d <input checked="" type="checkbox"/> TAS.d	
<input checked="" type="checkbox"/>	Pitch / Roll	<input checked="" type="checkbox"/> PitchI.1 <input checked="" type="checkbox"/> PitchI.2 <input type="checkbox"/> PitchI.3	<input checked="" type="checkbox"/> PitchRateI.1 <input checked="" type="checkbox"/> PitchRateI.2 <input type="checkbox"/> PitchRateI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <input type="checkbox"/> RollI.3	<input checked="" type="checkbox"/> RollRateI.1 <input checked="" type="checkbox"/> RollRateI.2 <input type="checkbox"/> RollRateI.3	<input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref	
<input checked="" type="checkbox"/>	Temp / Dewpt	<input checked="" type="checkbox"/> TTM.1 <input checked="" type="checkbox"/> TTM.2 <input type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2 <input type="checkbox"/> TDM.3	<input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 <input type="checkbox"/> TRadU.1		<input checked="" type="checkbox"/> TD.c <input checked="" type="checkbox"/> TDMref	<input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d
<input type="checkbox"/>	Misc. (Must check)					<input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> DPJ_WSZ <input checked="" type="checkbox"/> HUM	<input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d

FLID_Mission_Documents.pdf:
<input checked="" type="checkbox"/> Error Summary
<input checked="" type="checkbox"/> Crew Manifest
<input checked="" type="checkbox"/> QC Checklist
<input type="checkbox"/> Dropwindsonde Log(s) - AVAPS and FD if completed
<input checked="" type="checkbox"/> Flight Track
<input type="checkbox"/> Miscellaneous FD Notes

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/> X

NOTES:
<p>PQM.1 and PQM.4 offset for about an hour 5 hours into the flight, not the ref and went back in line by end of flight</p> <p>Slight drop out in data, most likely cause of higher UWZ value.</p>

NOAA P-3 GPS Dropwindsonde Scientist Log (MS Word version 2020)

Storm _ZETA Flight ID _20201026H2 Dropsonde Scientist _Sellwood AVAPS Operator _MAC

Mission ID _0928A (ex. 0101A)

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Dir/Spd (deg/kt)	Lowest Wind Hgt (m)	SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	201520938	2143	21.45	-86.34	1005.4	95/32	10			1
Comments: IP North										
2	201740677	2156	20.57	-86.33	1000.1	90/51	10			2
Comments: Midpoint inbound leg 1 North to South										
3	185130093	2209	19.65	-86.24	984.1	170/18	10			3
Comments: Center										
4	201520326	2213	19.40	-86.24	991.5	230/49	10			4
Comments: RMW outbound leg 1 (S)										
5	203250058	2223	18.74	-86.24	1000.3	220/26	10			6
Comments: Midpoint outbound leg 1 removed flight level and first 2 RH points										
6		2236								X
Comments: Endpoint outbound leg 1 – late GPS – not transmitted back up launched										
7	201740659	2237	17.84	-86.39	1004.2	220/26	10			7
Comments: Backup for drop 6 Post splash data ended at 275.75 removed flight level and first 2 RH points fast fall for 17 seconds ASPEN flagged for exceeding WE threshold										
8	194320260	2303	18.85	-84.86	1005.3	155/30	10			8
Comments: Endpoint inbound leg 2 SE removed top 2 RH post splash data ended at 290.0 deep dry layer										
9	202520419	2317	19.38	-85.78	1001.1	155/40	10			9
Comments: Midpoint inbound leg2 (SE to NW) saturated throughout sounding										

10	201740090	2326	19.74	-86.41	988.6	200/40	10			10
Comments: RMW inbound leg 2 (SE) post splash data ended 282.75 – not caught by ASPEN										
11	201740704	2329	19.88	-86.52	983.9	135/08	10			11
Comments: Center #2										
12	201440299	2332	20.00	-86.74	989.7	035/48	10			13
Comments: RMW outbound leg 2 (NW) removed first 5 RH										
13	202270528	2338	20.21	-87.17	997.4	030/42	10			14
Comments: Endpoint leg 2 NW – no midpoint drop short leg due to land -13m/s fall speed but not a fast fall										
14	194820807	2350	19.54	-87.24	998.5	300/43	WL150			15
Comments: Endpoint leg 3 inbound (SW to NE) Ended 270.0 last wind 14m										
15	201450476	2358	19.82	-86.72	986.9	260/25	10			
Comments: RMW leg 3 inbound SW – looks more like a center drop post splash data ended at 278.0										
16	201630243	0000	19.91	-86.60	983.0	006/50	10			16
Comments: Center #3										
17		0003								X
Comments: RMW leg 3 outbound (NE) LLD backup launched not transmitted										
18	202330413	0003	20.03	-86.41	989.8	130/66	10			17
Comments: backup for RMW leg 3 outbound (NE)										
19	202621381	0017	20.47	-85.56	1005.3	125/42	10			19
Comments: Midpoint outbound leg 3										
20	202520373	0026	20.77	-84.98	1006.9	125/36	10			20
Comments: Endpoint outbound leg 3										



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