

N42RF ERROR SUMMARY
 20240706H1

Flight ID: 20240706H1

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	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/2024/MET/20240706H1

Local Met Data	Takeoff KLAL (0818Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.32804
AttackAngleSlope		6.09319
SlipAngleIntercept		0.25
SlipAngleSlope		6.641
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.

I.3 for Pitch and Roll, TTM.3, and TDM.3 not operational.

TRadU.1 has erroneous data throughout the flight and should not be used. PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other "C" file parameters checked are from the _A file.

PTM.1 has significant drop outs during transit altitudes and a short time on station - majority of data while in storm not affected

Large spike in all altitude parameters at 12:51 - due to convective burst
 SFMRRAINRATE drop outs at 10:10-10:22, 11:10-11:15, and 12:17-12:52

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	18	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: KALEN
Phone #: 863-500-3962

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240706H1	FLT #:		AC:	RANNENBERG	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0800Z		WOOD	ZHANG, J.	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z	CP(s):	TARABOLETTI	SELLWOOD			ASOS Takeoff		18
Block Time		Flight Time		NAV:	SCHAEFER / MEIER		BTs				
In:	15:11	Land:	15:03	FE(s):	WYSINGER		A/C Land		Good	Bad	Sent
Out:	8:11	T/O:	8:19	FD(s):	TYSON				ASOS Land		-
Total:	7.0	Total:	6.7	SSA:	RICHARDS, T.	Visitors:	Storm Number ID:				AL022024
Sponsoring Org:	NWS			AVAPS:	PATEL / SANTONI		(ie: AL072012)		NOAA3 2402A BERYL		
Program:	PRX			SEB:			TCPOD/WSPOD Mission				
Purpose:	TROPICAL STORM BERYL TDR			MX:			(ie: NOAA2 2418A SANDY)		NOAA3 2402A BERYL		
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number			
VOLCANIC ASH					X		1	6	1038Z	999 MB	
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:	0			
						*Highlighted items must be completed before departure.					
Remarks:											

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	20240706H1
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	0.24

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1009.3	1013.0
Airfield	1008.5	1011.0

This form uses:
_A.nc

SFMR Serial Unit	1
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Parameters	Raw				Derived, Corrected & Reference	
<input checked="" type="checkbox"/> Acceleration	<input checked="" type="checkbox"/> AccAXI.1	<input checked="" type="checkbox"/> AccAYI.1	<input checked="" type="checkbox"/> AccAZI.1	<input checked="" type="checkbox"/> AccZfilter-GPS.1	<input checked="" type="checkbox"/> AccZref	
	<input checked="" type="checkbox"/> AccAXI.2	<input checked="" type="checkbox"/> AccAYI.2	<input checked="" type="checkbox"/> AccAZI.2	<input checked="" type="checkbox"/> AccZfilter-GPS.2		
	<input checked="" type="checkbox"/> AccAXI-GPS.1	<input checked="" type="checkbox"/> AccAYI-GPS.1	<input checked="" type="checkbox"/> AccAZI-GPS.1			
	<input checked="" type="checkbox"/> AccAXI-GPS.2	<input checked="" type="checkbox"/> AccAYI-GPS.2	<input checked="" type="checkbox"/> AccAZI-GPS.2			
<input checked="" type="checkbox"/> Altitude	<input checked="" type="checkbox"/> AltGPS.1	<input checked="" type="checkbox"/> AltI-GPS.1	<input checked="" type="checkbox"/> AltPaADDU.1	<input checked="" type="checkbox"/> AltRA.1	<input checked="" type="checkbox"/> ALTref	<input checked="" type="checkbox"/> AltRA1.c
	<input checked="" type="checkbox"/> AltGPS.2	<input checked="" type="checkbox"/> AltI-GPS.2	<input checked="" type="checkbox"/> AltBCADDU.1	<input checked="" type="checkbox"/> AltRA.2	<input checked="" type="checkbox"/> ALTPA.d	<input checked="" type="checkbox"/> AltRA2.c
	<input checked="" type="checkbox"/> AltGPS.3				<input checked="" type="checkbox"/> ALTGA.d	
	<input checked="" type="checkbox"/> AltGPS.4					
<input checked="" type="checkbox"/> Ground Speed	<input checked="" type="checkbox"/> GsXI-GPS.1	<input checked="" type="checkbox"/> GsYI-GPS.1	<input checked="" type="checkbox"/> GsZI-GPS.1		<input checked="" type="checkbox"/> GSXref	
	<input checked="" type="checkbox"/> GsXI-GPS.2	<input checked="" type="checkbox"/> GsYI-GPS.2	<input checked="" type="checkbox"/> GsZI-GPS.2		<input checked="" type="checkbox"/> GSYref	<input checked="" type="checkbox"/> GSZref
<input checked="" type="checkbox"/> Location	<input checked="" type="checkbox"/> LatGPS.1	<input checked="" type="checkbox"/> LatI-GPS.1	<input checked="" type="checkbox"/> LonGPS.1	<input checked="" type="checkbox"/> LonI-GPS.1	<input checked="" type="checkbox"/> LATref	
	<input checked="" type="checkbox"/> LatGPS.2	<input checked="" type="checkbox"/> LatI-GPS.2	<input checked="" type="checkbox"/> LonGPS.2	<input checked="" type="checkbox"/> LonI-GPS.2	<input checked="" type="checkbox"/> LONref	
	<input checked="" type="checkbox"/> LatGPS.3		<input checked="" type="checkbox"/> LonGPS.3			
	<input checked="" type="checkbox"/> LatGPS.4		<input checked="" type="checkbox"/> LonGPS.4			
<input checked="" type="checkbox"/> Pressure Sensors	<input checked="" type="checkbox"/> PDALPHA.1	<input checked="" type="checkbox"/> PQALPHA.1	<input checked="" type="checkbox"/> PQM.1	<input checked="" type="checkbox"/> PSM.1	<input checked="" type="checkbox"/> PQMref	
	<input checked="" type="checkbox"/> PDALPHA.2	<input checked="" type="checkbox"/> PQBETA.1	<input checked="" type="checkbox"/> PQM.2	<input checked="" type="checkbox"/> PSM.2	<input checked="" type="checkbox"/> PQ.c	
	<input checked="" type="checkbox"/> PDBETA.1		<input checked="" type="checkbox"/> PQM.3	<input checked="" type="checkbox"/> PTM.1	<input checked="" type="checkbox"/> PSMref	
	<input checked="" type="checkbox"/> PDBETA.2		<input checked="" type="checkbox"/> PQM.4		<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"/> PitchRatel.1	<input checked="" type="checkbox"/> RollI.1	<input checked="" type="checkbox"/> RollRatel.1	<input checked="" type="checkbox"/> PITCHref	
	<input checked="" type="checkbox"/> PitchI.2	<input checked="" type="checkbox"/> PitchRatel.2	<input checked="" type="checkbox"/> RollI.2	<input checked="" type="checkbox"/> RollRatel.2	<input checked="" type="checkbox"/> ROLLref	
	<input checked="" type="checkbox"/> inop PitchI.3	<input checked="" type="checkbox"/> inop PitchRatel.3	<input checked="" type="checkbox"/> inop RollI.3	<input checked="" type="checkbox"/> inop RollRatel.3		
<input checked="" type="checkbox"/> Temperature, Dewpoint, Radiometers	<input checked="" type="checkbox"/> TTM.1	<input checked="" type="checkbox"/> TDM.1	<input checked="" type="checkbox"/> TRadD.1		<input checked="" type="checkbox"/> TD.c	<input checked="" type="checkbox"/> TTMref
	<input checked="" type="checkbox"/> TTM.2	<input checked="" type="checkbox"/> TDM.2	<input checked="" type="checkbox"/> TRadS.1		<input checked="" type="checkbox"/> TDMref	<input checked="" type="checkbox"/> TA.d
	<input checked="" type="checkbox"/> inop TTM.3	<input checked="" type="checkbox"/> inop TDM.3	<input checked="" type="checkbox"/> inop TRadU.1		<input checked="" type="checkbox"/> HUM	
<input checked="" type="checkbox"/> Wind and Pressure <input checked="" type="checkbox"/> SFMR		<input checked="" type="checkbox"/> CH 1 TB	<input checked="" type="checkbox"/> CH 4 TB		<input checked="" type="checkbox"/> UWZ.d	<input checked="" type="checkbox"/> WS.d
	SFMR	<input checked="" type="checkbox"/> CH 2 TB	<input checked="" type="checkbox"/> CH 5 TB		<input checked="" type="checkbox"/> PSURF	<input checked="" type="checkbox"/> WD.d
		<input checked="" type="checkbox"/> CH 3 TB	<input checked="" type="checkbox"/> CH 6 TB		<input checked="" type="checkbox"/> WS SFMR	<input checked="" type="checkbox"/> x RAIN RATE SFMR

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

QC Key:	
Valid	<input checked="" type="checkbox"/>
Errors (see NOTES)	<input checked="" type="checkbox"/>
Sensor Inoperative	<input checked="" type="checkbox"/>

NOTES:

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AVAPS Drop Log

Project: T.S.

Mission: Beryl

Flight ID: 202407061

Take Off: 1400

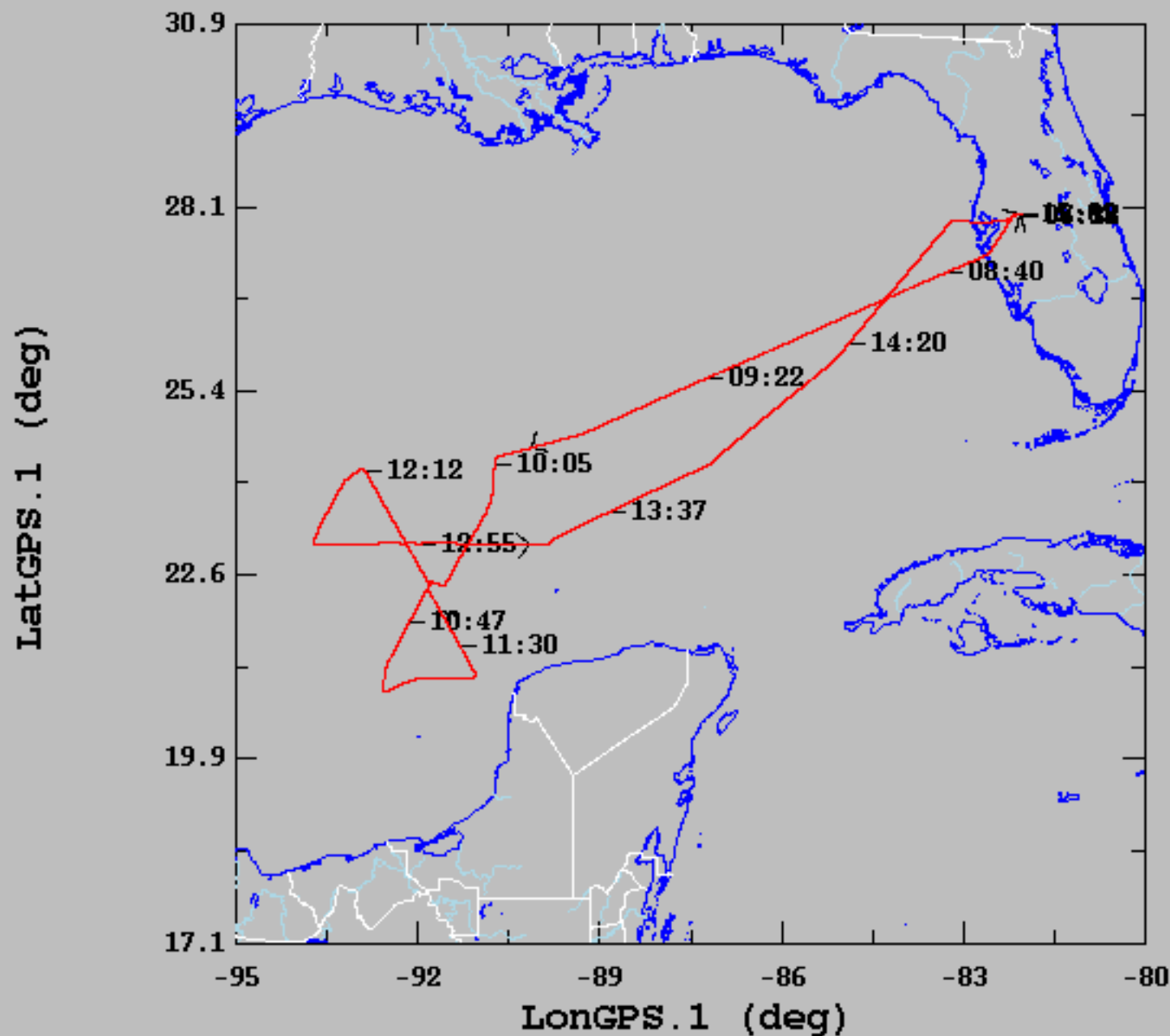
Landing: 12.00

Flt Dir: Quinn

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	221740652	1	0.8	1011	ASR	NWS	IP1 RD4	✓
2	221740665	2	1.0	1024		NWS	MP1 RD4	✓
→ 3	230610056	3	-0.7	1038		NWS	Center R	✓
4	230650044	4	-1.1	1044		NWS	QP1	✓
5	230650116	5	0.2	1055		NWS	MP1	
FL 6	230710641	6	-0.5	1102		NWS	EP1	
7	230351480	7	-1.0	1124		NWS	IP2	
8	230340080	8	-1.0	1135		NWS	MP2	
9	230940040	1	-0.7	1142		NWS	QP2	
10	230940877	2	-1.1	1145		NWS	center	
11	230530842	3	-1.2	1154		NWS	QP0	
12	230421367	4	-0.7	1201		NWS	MP2	
SL 13	230650170	5	-1.0	1213		NWS	EP2	✓
14	230530844	6	-1.5	1232		NWS	IP3	
15	230931839	7	-1.4	1244		NWS	MP3 ??	
16	230650137	8	-0.5	1252		NWS	CTR3	✓
17	230710569	1	-0.9	1310		NWS	MP3	✓
TL 18	230740583	2	-0.9	1323		NWS	EP3	✓
19								
20		4						
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

07/06/2024, 06:32:59-15:02:55



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	25.05	2.31	20.88	27.99
— LongGPS.1 (deg), 1 s/sec	-87.47	4.20	-93.71	-82.01