



AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Kalen / Henning  
Phone #: 863-500-3962

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:	20210815N1	FLT #:		AC:	Waddington	Scientists:	Pressure		Dropsondes		
From:	TNCA	ETD:		CP(s):	De Triquet		A/C Takeoff		Good	Bad	Sent
To:	TNCA	ETA:		NAV:					<b>27</b>	<b>5</b>	<b>27</b>
Block Time		Flight Time		FE(s):			ASOS Takeoff		BTs		
In:	<b>2124Z</b>	Land:	<b>2122Z</b>	FD(s):	Henning		A/C Land		Good	Bad	Sent
Out:	<b>1457Z</b>	T/O:	<b>1505Z</b>	FD(s):	Kalen		ASOS Land				
Total:	<b>6.5</b>	Total:	<b>6.3</b>	SSA:	Miller	Visitors:					
Sponsoring Org:		HRD / ONR		AVAPS:	Patel		Storm Number ID:				
Program:				SEB:			(ie: AL072012)				
Purpose:		Hurricane Research		MX:			TCPOD/WSPOD Mission		<b>WA07A GRACE</b>		
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					x		<b>1</b>				
SCIENCE MISSION WITHIN BDRY LAYER					x						
LACK OF PRECIPITATION					x		<b>2</b>				
RELATIVE HUMIDITY ≥ 80%					x						
LARGE AIR-SEA TEMP GRADIENT					x		<b>3</b>				
HIGH SURFACE WINDS					x						
LONG FETCH / DURATION OF SFC WND					x		<b>4</b>				
SEA SALT ACCRETION FORECAST					x						
SEA SALT ACCRETION OBSERVED					x		<b>Pennies:</b>				

\*Highlighted items must be completed before departure.

Remarks:

## G-IV QC Checklist

<b>Flight ID:</b>	<b>20210815N1</b>
<b>Flight Director(s)</b>	<b>Kalen / Henning</b>

<b>UWZ.d mean:</b>	<b>-0.02</b>
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Pressure Comparison		
	T/O	Land
<b>Aircraft</b>	<b>1013.5</b>	<b>1008.1</b>
<b>Tower</b>	<b>1009.8</b>	<b>1009.8</b>

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

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
<input checked="" type="checkbox"/>	Miscellaneous FD Notes

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

NOTES:
.1 and .2 GPS parameters data "stair steps"
PDBETA.1 & PDBETA.2 unrepresentative due to spare radome
PQBETA.1 & PQBETA.2 unrepresentative due to spare radome
All flight level wind speed and direction suspected errors due to spare radome
TTM.3 & TTM.4 oscillate
TDM.1 trending ~5 deg C warm

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20210815N1

ASPEN Operator/Flight Director(s): KALEN / HENNING

Mission ID: WBO7A

Storm Name/Track: GRACE

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 Issue?
1	1	153927	30675	1	15.7	68.5	UCST	1013.2	<u>SFC WIND</u> 075/13	1606	✓
2	2	154914	40504	2	14.9	67.6	CDO	1012.7	160/07	1612	✓
3	3	160328	31211	3	14.7	66.1	CDO	1012.2	160/15	1628	✓
4				4			NO LAUNCH DETECT				
5	4	161620	20666	1	15.2	64.6	CDO	1012.4	155/10	1648	✓
6	5	162642	30037	2	15.9	63.5	CDO	1014.0	175/12	1650	✓
7				3			FAST FALL				
8	6	164242	40493	4	17.6	63.5	CDO	1014.0	180/15	1708	✓
9	7	165424	20669	1	19.0	63.7	CDO	1015.5	110/25	1715	✓
10	8	170200	30663	2	19.5	64.5	CDO	1014.5	115/21	1722	✓
11	9	171030	60644	3	19.9	65.4	UCST	1013.9	110/21	1732	✓
12	10	171846	30036	4	20.4	66.4	BKN	1014.6	085/23	1743	✓
13	11	172745	30039	1	19.9	67.4	SCT	1013.4	085/23	1801	✓
14	12	173442	40503	2	19.5	68.1	SCT	1012.6	060/22	1812	✓
15	13	174234	30040	3	19.1	69.0	BKN	1012.0	040/15	1816	✓
16	14	175926	40782	4	17.4	68.1	CDO	1010.8	075/18	1819	✓
17	15	181121	30103	1	17.5	66.6	CDO	1010.7	100/20	1843	✓
18	16	182249	40497	2	16.4	65.9	CDO	1011.9	145/20	1848	✓
19	17	183426	30618	3	17.5	65.1	CDO	1012.3	155/12	1901	✓
20	18	184352	30672	4	17.7	64.0	CDO	1014.6	130/18	1916	✓
21	19	185546	40481	1	18.9	63.6	CDO	1014.4	135/10	1920	✓
22				2			LATE LAUNCH DETECT				
23	20	190500	31121	3	19.7	64.4	CDO	1014.6	170/27	1932	✓
24	21	191406	40116	4	20.1	65.4	CDO	1014.6	120/29	1935	✓
25	22	192802	40924	1	19.8	67.1	BKN	1013.0	LST WIND 18 m	1956	✓
26	23	195025	31208	2	19.5	69.7	BKN	1012.6	040/6	2021	✓
27				3			NO LAUNCH DETECT				
28	24	200154	40119	4	19.4	68.4	CDO	1011.6	085/20	2038	✓
29				1			VERY LATE LAUNCH DETECT				
30	25	201418	31036	2	18.6	67.4	CDO	NO HEIGHTS		2047	✓
31	26	203516	30661	3	16.6	68.2	BKN	1008.7	160/15	2103	✓
32	27	204533	30056	4	15.7	68.9	BKN	1009.8	LAST 190/1 KNOT REPORT	2107	✓
33											
34											
35											
36											
37											
38											

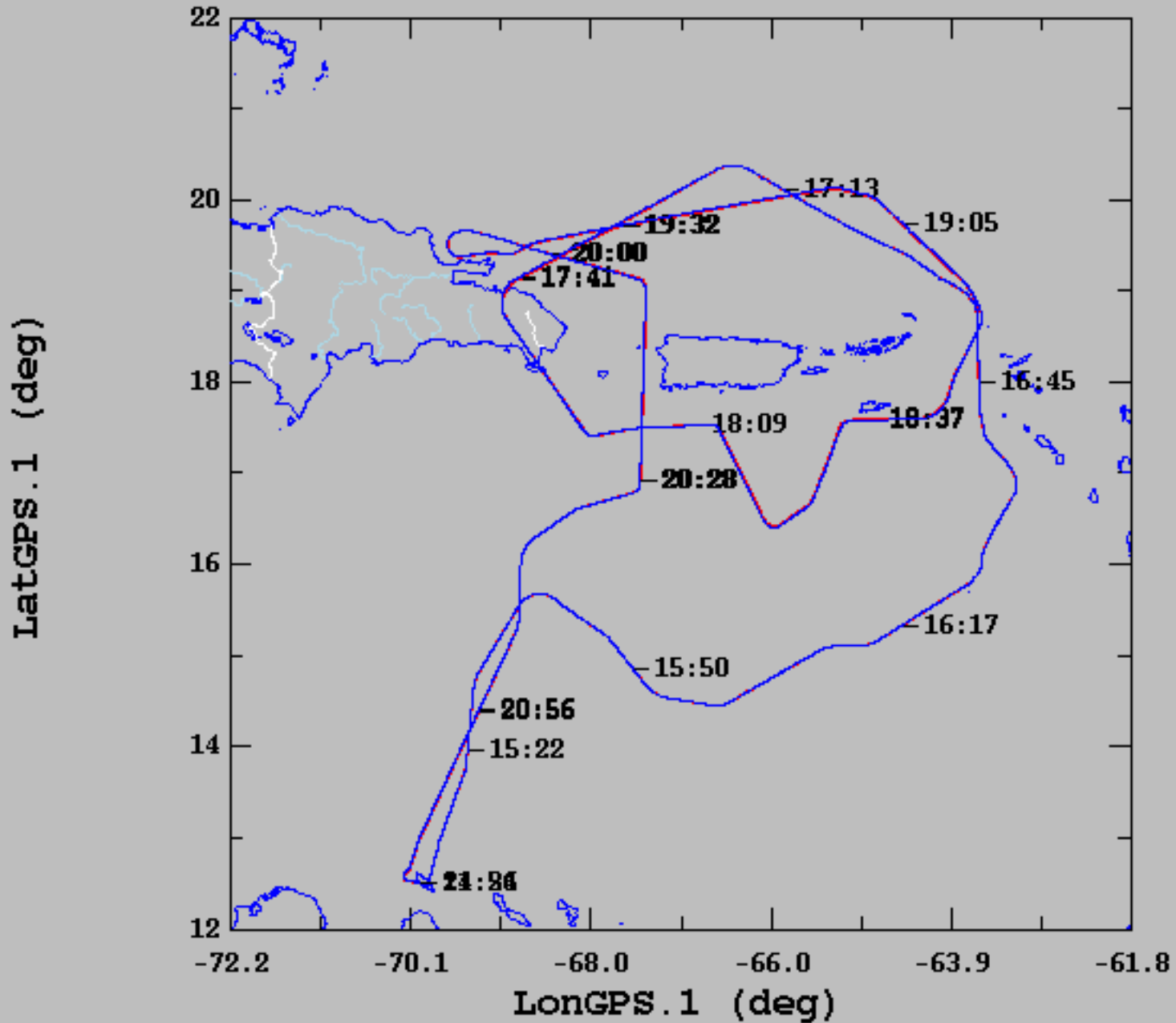
ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

Obs Xmitted 27 Obs Missed 0 # of sondes launched 32 # of bad sondes 5



2021-08-15, 14:26:34-21:24:19



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	16.78	2.56	12.49	20.37
— LongGPS.1 (deg), 1 s/sec	-67.24	2.20	-70.21	-63.09
— LatI.1 (deg), 1 s/sec	16.78	2.56	12.48	20.37
— LonI.1 (deg), 1 s/sec	-67.24	2.19	-70.21	-63.09