



AXBTS	1	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:	20240812H1	FLT #:		AC:	Abitbol	Scientists:		Pressure		Drosondes			
From:	TBPB	ETD:	1645L / 2045Z	CP(s):	Wood	Aberson (HRD)		A/C Takeoff		Good	Bad	Sent	
To:	TBPB	ETA:	2345L / 0345Z		Taraboletti	Chang (NESDIS)				20	0	20	
Block Time		Flight Time		NAV:	Utama / Dunford	Jelenak (NESDIS)		ASOS Takeoff		BTs			
In:	3:01	Land:	2:56	FE(s):	Stokes	Sapp (NESDIS)				Good	Bad	Sent	
Out:	20:27	T/O:	20:41	FD(s):	Kalen			A/C Land		0	1	0	
Total:	6.6	Total:	6.3	SSA:	McAlister	Visitors:		ASOS Land		Storm Number ID: (ie: AL072012)	AL052024		
Sponsoring Org:	NWS			SEB:			TCPOD/WSPOD Mission		(ie: NOAA2 2418A SANDY)		NOAA2 0405A ERNESTO		
Program:	PRX												
Purpose:	TDR TS ERNESTO			MX:									
AS REQUIRED BY ORM				Y	N	REMARKS				Fix Number	Obs Number	Fix Time	SLP
VOLCANIC ASH					x					1			
SCIENCE MISSION WITHIN BDYR 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:			
												*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:	20240812H1
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	0.21

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1005.5	-
Airfield	1004.2	1006.9

This form uses:	
_A.nc	

SFMR Serial Unit	3
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Parameters	Raw				Derived, Corrected & Reference	
<input checked="" type="checkbox"/> Acceleration	<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"/> Location	<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 Sensors	<input checked="" type="checkbox"/> PDALPHA.1 <input checked="" type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input checked="" type="checkbox"/> PDBETA.2	<input checked="" type="checkbox"/> PQALPHA.1 <input checked="" 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 <span style="color: red;">x</span> PTM.1	<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 <span style="color: blue;">inop</span> PitchI.3	<input checked="" type="checkbox"/> PitchRateI.1 <input checked="" type="checkbox"/> PitchRateI.2 <span style="color: blue;">inop</span> PitchRateI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <span style="color: blue;">inop</span> RollI.3	<input checked="" type="checkbox"/> RollRateI.1 <input checked="" type="checkbox"/> RollRateI.2 <span style="color: blue;">inop</span> RollRateI.3	<input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref	
<input checked="" type="checkbox"/> Temperature, Dewpoint, Radiometers	<input checked="" type="checkbox"/> TTM.1 <input checked="" type="checkbox"/> TTM.2 <span style="color: blue;">inop</span> TTM.3	<input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2 <span style="color: blue;">inop</span> TDM.3	<input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 <span style="color: blue;">inop</span> TRadU.1	<input checked="" type="checkbox"/> TD.c <input checked="" type="checkbox"/> TDMref <input checked="" type="checkbox"/> HUM <input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d		
<input checked="" type="checkbox"/> Wind and Pressure <input checked="" type="checkbox"/> SFMR	SFMR	<span style="color: red;">x</span> CH 1 TB <span style="color: red;">x</span> CH 2 TB <span style="color: red;">x</span> CH 3 TB	<span style="color: red;">x</span> CH 4 TB <span style="color: red;">x</span> CH 5 TB <span style="color: red;">x</span> CH 6 TB	<input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> PSURF <span style="color: red;">x</span> WS SFMR		<input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d <span style="color: red;">x</span> 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)	<span style="color: red;">x</span>
Sensor Inoperative	<span style="color: blue;">inop</span>

### NOTES:

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.  
 PQM.1 has large negative spike at 23:35-23:38  
 PTM.1 inop  
 SFMR TB, WS SFMR, and RAIN RATE SFMR data should be used with caution as additional assessment occurs

# AVAPS Drop Log

Project: HX2024

Mission: PTC 5

Flight ID: 20240812HH

Take Off: \_\_\_\_\_

Landing: \_\_\_\_\_

Flt Dir: Kalen

Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	232320059	1	-0.5	2128	RK4	NWS	IPI	✓
2	233640825	2	-0.5	2139	RK	NWS	MP	✓
3	234220220	3	-1.2	2151	RK	NWS	Combo	✓
4	233640235	4	-1.0	2203	RK	NWS	MP	✓
5	232320052	5	0	2211	RK	NWS	EPI	✓
6	233824629	6	-0.8	2247Z	NGU	NWS	IP 2	✓
7	234220073	7	-1.0	2258Z		NWS	MP	✓
8	233824718	8	-0.4	2311Z		NWS	"Center"	✓
9	232050557	1	-1.2	2325Z			MP	✓
10	234210377	2	0.0	2336Z			EP 2	✓
11	234220482	3	-0.6	2357	RK		IP3	✓
12	232020815	4	0	0008	RK		MP	✓
13	231720886	5	-0.7	0022	RK		faux center	✓
14	234210400	6	-0.3	0033	RK		MP	✓
15	233630609	7	-1.0	0045	RK4		EP3	✓
16	233630606	8	-0.7	0123Z	NGU		IP4	✓
17	234210391	1	-1.0	0131Z			MP	✓
18	234220233	2	-1.0	0142Z			"Center"	✓
19	234220074	3	+0.2	0154Z			MP	✓
20	234210399	4	-0.1	0204Z			EP4	✓
21								
22								
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31								

## Dropwindsonde Scientist Log

<b>Storm:</b>	ERNESTO	<b>Flight ID:</b>	240812H1	<b>Mission ID:</b>	0405A	<b>Takeoff:</b>	2141 Z	<b>Landing:</b>	0310 Z
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<b>Dropsonde Scientist(s):</b>	Kaplan	<b>AVAPS Operator:</b>	
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### Pre-flight

- ✓ Discuss the pattern with the Lead Project Scientist (LPS) and ensure that enough dropsondes are onboard.
- ✓ Complete the appropriate pre-flight set-up of your workstation and ASPEN (see [Dropsonde Processing Guide](#)).

### In-flight

- ✓ Ensure the Flight Director is aware of upcoming drops and whether a backup is requested in case of failure.
- ✓ Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal.
- ✓ Prioritize processing of center drops and report MSLP and surface wind speed and direction to the Flight Director.
- ✓ Fill in the Dropwindsonde Scientist log as drops are released and processed.
- ✓ Copy completed ASPEN files (e.g., FRD, netCDF, Skew-t, WMO txt, BUFR) into the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.

### Once “science is complete”...

- ✓ Make synoptic map plots in ASPEN and copy them to the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.
- ✓ Ensure ASPEN files have been sent to the ground by locating and verifying all files in the “FLIGHTID” folder within the “FRD” folder on the workstation desktop.
- ✓ Archive ASPEN\_DATA and RAW\_DATA into a folder named with the FLIGHTID within the “Season Dropsonde Archive” folder on the workstation desktop and upload the same directories into StormName/FLIGHTID/Dropsonde/ folder on Drive.
- ✓ Download this Dropwindsonde Scientist Log as “PDF” and upload completed PDF and Google Doc to the StormName/FLIGHTID/Dropsonde/ folder within the “Mission Reports” directory in the HFP Google Drive.

Storm: &lt;&lt;STORM NAME&gt;&gt;

Flight ID: &lt;&lt;YYYYMMDDA#&gt;&gt;

Mission ID: &lt;&lt;WXWXA&gt;&gt;

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	232320059	212823	14.92	56.63	1010.6	150/24	10			1
Comments: Good sonde										
2	233640825	213949	15.51	57.24	1010.5	147/13	10		Midpoint SE	2
Comments: Good sonde										
3	234220226	215119	16.07	57.82	1009.9	45/12	10		Near center	3
Comments: near center. end of drop changed by 0.25 s. Good sonde.										
4	233640235	220315	16.74	58.39	1011.3	76/23	10		Midpoint NW	4
Comments: end of drop set to 256.0. Good sonde.										
5	232320052	221124	17.23	58.73	1009.9	75/25	10			5
Comments: end of drop set to 254.0. Good sonde.										
6	233824629	224708	15.03	59.45	1010.9	45/7	10			6
Comments: Good sonde.										
7	234220073	225802	15.56	58.90	1010.6	153.05	10		Midpoint SE	7
Comments: set end of drop at 257.0. Good sonde.										
8	233824718	231124	16.20	58.25	1008.6	65/13	10		Near Center	8
Comments: Good sonde.										
9	232050557	232504	16.82	57.60	1011.8	113/25	10		Midpoint NE	9
Comments: set end of drop at 245.25. Noisy RH but did not flag any of the values.										
10	234210377	233642	17.36	57.03	1012.6	102/25	10			10
Comments: Good sonde.										

Storm: &lt;&lt;STORM NAME&gt;&gt;

Flight ID: &lt;&lt;YYYYMMDDA#&gt;&gt;

Mission ID: &lt;&lt;WXWXA&gt;&gt;

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
11	234220482	235759	17.96	58.38	1012.9	90/21	10		Endpoint N.	11
Comments: set end of drop at 261.25.										
12	232020815	000845	17.22	58.38	1009.7	89/22	10		Midpoint N.	12
Comments:										
13	231720886	002225	16.28	58.31	1009.7	143/21	10		Near center	13
Comments: set end of drop at 251.75.										
14	234210400	003349	15.46	58.30	1010.3	170/09	10		Midpoint S.	14
Comments: Noisy RH but didn't flag any values.										
15	33630609	004558	14.61	58.3	1012.5	170/17	10		Endpoint S.	15
Comments: set end of drop at 236.25.										
16	233630606	012309	16.39	57.09	1013.0	150/20	10		Endpoint E.	16
Comments: Good sonde.										
17	234210391	013136	16.39	57.78	1012.4	134/28	10			17
Comments: Set end of drop at 255.0										
18	234220233	014246	16.40	58.69	1009.7	130/27	10		Near center	18
Comments: Good sonde.										
19	234220074	015434	16.40	59.65	1011.0	63/15	10			19



Storm: <<STORM NAME>>

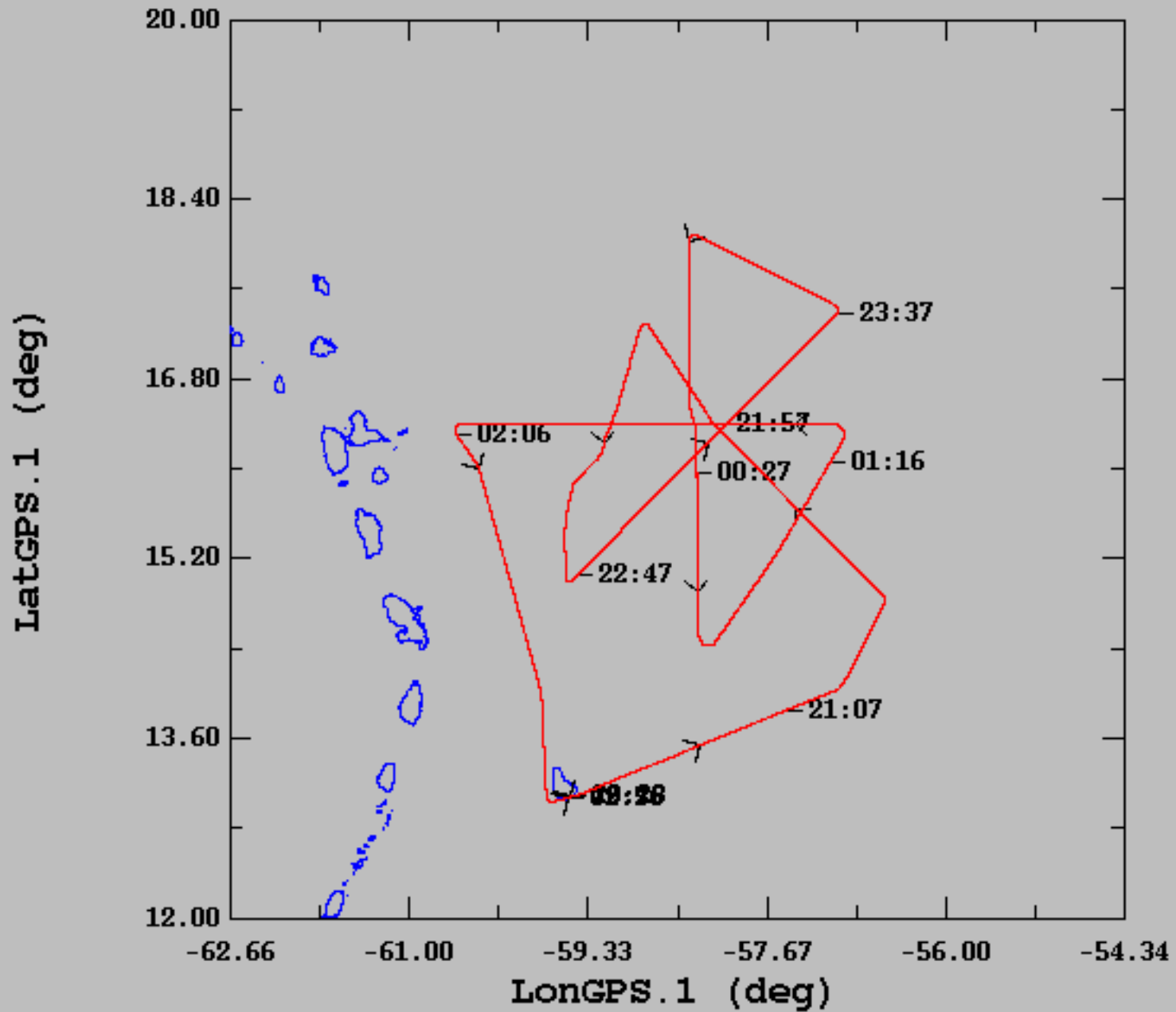
Flight ID: <<YYYYMMDDA#>>

Mission ID: <<WXWXA>>

Comments:										
20	234210399	020419	16.39	60.45	1012.1	30/20	10		Last report	20
Comments:										

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
Comments:										
Comments:										
Comments:										
Comments:										
Comments:										
Comments:										
Comments:										

08/12/2024, 19:28:19-26:56:26



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	15.27	1.49	13.03	18.08
— LonGPS.1 (deg), 1 s/sec	-58.61	0.99	-60.56	-56.56