N42RF ERROR SUMMARY
Ocean Heat Content - Pre NATE

Flight ID: 20171005H1

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/2017/MET/20171005H1

Local Met Data	Takeoff KLAL (1334Z)	Landing KLAL (2007Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.35256
AttackAngleSlope		6.11627
SlipAngleIntercept		0.23
SlipAngleSlope		6.9614

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

pdalpha.2 is not correctly reading. Pdalpha.1 is reference. INE2 pitch is 0.2 higher than INE1, INE1 is correct and used in calculations. Tdm.2 is invalid from 172917Z – 173236Z, but still used as reference due to cleaner readings than tdm.1 Tdm.3 is several degrees too warm.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Expendable Type	# deployed	# good	# transmitted
Dropsondes	0	0	0
Test sondes	0	0	0
AXBTs	20	0	0
AXCPs	24	0	0
AXCTDs	5	0	0
UAS	0	0	0

Flight Director: Williams
Phone #: 863-500-3987

APPENDIX 1 – P3 QC Checklist

Flight ID:	20171005H1
Flight Director(s):	Williams

Pressure Comparison		
	T/O 1336	**Land** 2009
Aircraft	**1009.9 (2)**	**1007.2 (2)**
Tower	**1010.2**	**1007.9**

UWZ.d mean: _0.05__

	Raw 1Hz Mean File Parameters				C File Parameters	
x Accelerometer	AccAXI.1	AccAYI.1	AccAZI.1	AccZfilter-GPS.1	AccZref	
	AccAXI.2	AccAYI.2	AccAZI.2	Acc-Zfilter-GPS.2		
	AccAXI-GPS.1	AccAYI-GPS.1	AccAZI-GPS.1			
	AccAXI-GPS.2	AccAYI-GPS.2	AccAZI-GPS.2			
x Altitude	AltGPS.1	AltI-GPS.1	AltPaADDU.1	AltRA.1	ALTref	AltRA1.c
	AltGPS.2	AltI-GPS.2	AltBCADDU.1	AltRA.2	ALTPA.d	AltRA2.c
	AltGPS.3				ALTGA.d	
	AltGPS.4					
x Ground Speed	GsXI-GPS.1	GsYI-GPS.1	GsZI-GPS.1		GSXref	
	GsXI-GPS.2	GsYI-GPS.2	GsZI-GPS.2		GSYref	
					GSZref	
x Lat/Lon	LatGPS.1	Lati-GPS.1	LonGPS.1	Loni-GPS.1	LATref	
	LatGPS.2	Lati-GPS.2	LonGPS.2	Loni-GPS.2	LONref	
	LatGPS.3		LonGPS.3			
	LatGPS.4		LatGPS.4			
x Pressure	PDALPHA.1	PQALPHA.1	PQM.1	PSM.1	PDALPHAref	PQMref
	PDALPHA.2	PQBETA.1	PQM.2	PSM.2	PDBETAref	PQ.c
	PDBETA.1		PQM.3	PTM.1	PQALPHAref	PSMref
	PDBETA.2		PQM.4		PQBETAref	PS.c
x Air Speed	CasADDU.1	TasADDU.1	IasADDU.1		IAS.d	TAS.d
x 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		
x Temp/Dewpt	TTM.1	TDM.1	TRadD.1		TD.c	TTMref
	TTM.2	TDM.2	TRadS.1		TDMref	TA.d
	TTM.3	TDM.3	TRadU.1			
x Miscellaneous (must check)					UWZ.d	WS.d
					DPJ_WSZ	WD.d
					HUM	

Mission Documents:

X	Error Summary
X	Crew Manifest
X	QC checklist
X	Dropwindsonde Log(s) – AVAPS and FD if completed
X	Miscellaneous FD notes

NOTES: pdalpha.2 is not correctly reading. Pdalpha.1 is reference. INE2 pitch is 0.2 higher than INE1, INE1 is correct and used in calculations. Tdm.2 is invalid from

172917Z – 173236Z, but still used as reference due to cleaner readings than tdm.1
Tdm.3 is several degrees too warm.

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION

FLT ID:	20171005H1	**FLT #:**	
From:	KLAL	**ETD:**	1400Z
To:	KLAL	**ETA:**	2100Z

Block Time		**Flight Time**	
In:	2015	In:	2009
Out:	1328	Out:	1336
Total:	6.8	Total:	6.6

Sponsoring Org:	HRD
Program:	Ocean Heat Content
Purpose:	TS Nate

CREW MANIFEST

AC:	Price	**Scientists:**
CP(s):	Mitchell	
	Rees	Zhang, Jun HRD
Nav(s):		Wadler, Joshua
	Sloan	Jaimes, Benjamin
FE(s)	Heystek	
	Sanchez	
FD(s):	Williams	
		Visitors:
SEB:	Warnecke	Obs: Kevin Doremus
		Obs: Brian Richards
SSA:	Mascaro	
AVAPS:	Patel	

MISSION INFORMATION

Pressure		**Dropsondes**		
		Good	Bad	Sent
A/C Takeoff				
Wx Station Takeoff		**BTs**		
		Good	Bad	Sent
A/C Land				
Wx Station Land				

Storm Number ID: (ie: AL072012)	AL162017
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 WA16A NATE

AS REQUIRED BY ORM	Y	N
VOLCANIC ASH		X
SCIENCE MISSION WITHIN BDRY LAYER		x
LACK OF PRECIPITATION		x
RELATIVE HUMIDITY ≥ 80%	x	
LARGE AIR-SEA TEMP GRADIENT		X
HIGH SURFACE WINDS	x	
LONG FETCH / DURATION OF SFC WND	x	
SEA SALT ACCRETION FORECAST		X
SEA SALT ACCRETION OBSERVED		

REMARKS

20 BT's 90/60 deep

24 CRS

5 CTD's 85%

10G

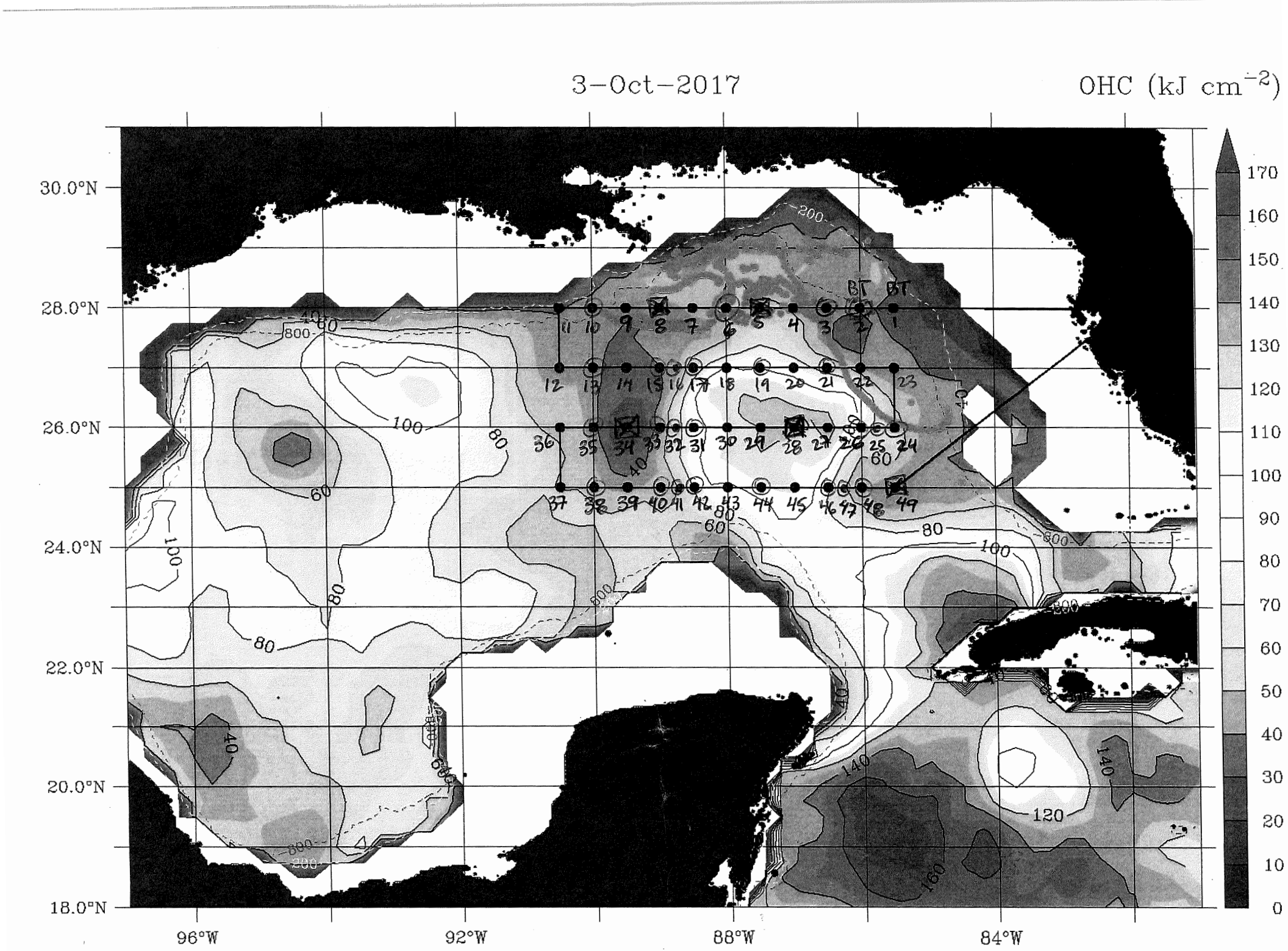
OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP

Additional Remarks:

*Highlighted items must be completed before departure.

Cockpit Gmax: Gmin:


3-Oct-2017
OHC (kJ cm^{-2})
30.0°N
28.0°N
26.0°N
24.0°N
22.0°N
20.0°N
18.0°N
96°W
92°W
88°W
84°W
BT
BT
1
2
3
4
5
6
7
8
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11
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13
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200
800
100
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60
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120
140
160
170
150
130
110
90
70
50
30
10
0

Playback Log

Flight Number 20171005H1

Takeoff Time _____ Landing Time _____

Storm _____ Team _____

Drop Number	AXCTD AXBT AXCP	Channel Number	Serial Number	Actual Drop Time	Actual Latitude	Actual Longitude	SST	H26	Marantz Track Number	File Name	Comments
~~26~~	~~CP~~	16	14091054								
~~27~~	~~BT$_D$~~	14	—								
~~28~~	~~CTD~~	12	13041180								
~~29~~	~~BT$_D$~~	16	—								
~~30~~	~~BT~~	12	—								
~~31~~	~~CP~~	16	14091066								
~~32~~	~~CP~~	12	10091021								
~~33~~	~~CP~~	14	15061008								
~~34~~	~~CTD~~	16	13041204								
~~35~~	~~CP~~	12	10071021								
~~36~~	~~BT$_D$~~	14	—								
~~37~~	~~BT~~	12	—								
~~38~~	~~CP~~	16	14091073								
~~39~~	~~BT~~	12	—								
~~40~~	~~CP~~	14	14101011								
41	~~CP~~	16	10081031								
~~42~~	~~CP~~	12	11021034								
43	~~BT$_D$~~	14	—								
~~44~~	~~CP~~	16	14091102								
~~45~~	~~BT$_D$~~	14	—								
~~46~~	~~CP~~	12	13021025								
~~47~~	~~CP~~	16	14101002								
48	~~CP~~	14	14091031								
~~49~~	~~CTD~~	12	13041131								

Playback Log

ATX 151: 20 (10 deep)
AXCTD: 5 (2 CH12 / 2 CH14 / 1 CH16)
AXCP: 24 (7 CH12 / 7 CH14 / 10 CH16)

Flight Number 20171005H1

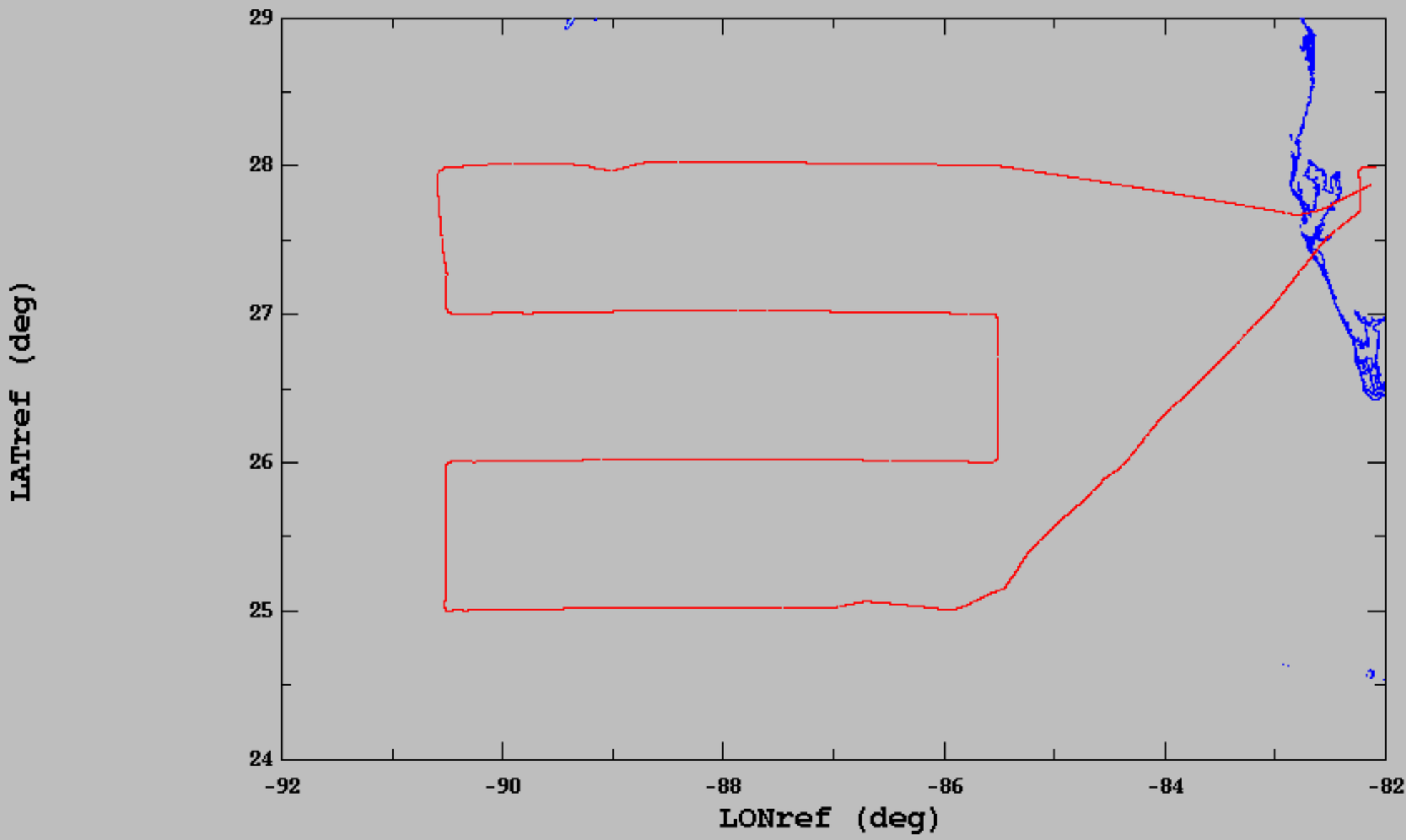
Takeoff Time _____ Landing Time _____

Storm _____ Team _____

Drop Number	AXCTD AXBT AXCP	Channel Number	Serial Number	Actual Drop Time	Actual Latitude	Actual Longitude	SST	H26	Marantz Track Number	File Name	Comments
~~1~~	~~BT~~	12	—								
~~2~~	~~BT$_D$~~	14	—								
~~3~~	~~CP~~	16	14091103								
~~4~~	~~BT~~	12	—								
~~5~~	~~CTD~~	14	13041190								
~~6~~	~~CP~~	16	140910911								
~~7~~	~~BT~~	12	—								
~~8~~	~~CTD~~	14	13041184								
~~9~~	~~BT~~	12	—								
~~10~~	~~CP~~	16	14091100								
~~11~~	~~BT~~	12	—								
~~12~~	~~BT~~	12	—								
~~13~~	~~CP~~	14	15061007								
~~14~~	~~BT$_D$~~	16	—								
~~15~~	~~CP~~	12	09081046								
~~16~~	~~CP~~	14	14091101								
~~17~~	~~CP~~	16	14101009								
~~18~~	~~BT~~	12	—								
~~19~~	~~CP~~	14	15061018								
~~20~~	~~BT$_D$~~	16	—								
~~21~~	~~CP~~	12	09081053								
~~22~~	~~BT$_D$~~	14	—								
~~23~~	~~BT$_D$~~	16	—								
~~24~~	~~CP~~	14	15061021								
~~25~~	~~CP~~	12	10101012								

Ocean Heat Content Pre Nate

2017-10-05, 13:40:00-20:08:00



	mean	sigma	min	max
LATref (deg), 1 s/sec	26.63	1.08	25.00	28.02
LONref (deg), 1 s/sec	-87.00	2.45	-90.59	-82.07