E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

_____ 1. Participate in general mission briefing.

_____ 2. Determine specific mission and flight requirements for assigned aircraft.

_____ 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist and CARCAH unless briefed otherwise by field program director.

_____ 4. Contact HRD members of crew to:

a. Assure availability for mission.
b. Arrange ground transportation schedule when deployed.
c. Determine equipment status.

_____ 5. Meet with AOC flight crew at least 90 minutes before takeoff, provide copies of flight requirements, and provide a formal briefing for the flight director, navigator, and pilots.

_____ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 In-Flight

_____ 1. Confirm from AOC flight director that satellite data link is operative (information).

_____ 2. Confirm camera mode of operation.

_____ 3. Confirm data recording rate.

_____ 4. Complete Form E-2.

E.2.3 Postflight

_____ 1. Debrief scientific crew.

_____ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).

_____ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

_____ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.

_____ 5. Determine next mission status, if any, and brief crews as necessary.

_____ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

_____ 7. Prepare written mission summary.

On-Board Lead Project Scientist Check List

Date 9/23/02 Aircraft N43RF Flight ID 020923I

A. Participants: Post-Isidore

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	P. Black	Flight Director	B. DAMIANO
Cloud Physics	~~	Pilots	D. Tenessen, H. Halvorsen, M. Silah
Radar	E. Zipser	Navigator	C. Newman
Workstation		Systems Engineer	T. Lynch, J. Smith
~~Photographer/Observer~~ SRA	E. Walsh	Data Technician	D. Sanseri
~~Omegasonde~~ GPS	E. Zipser	Electronics Technician	R. Tong
AXBT/AXCP/Guest	Lt. Shay, T. Cook, S. Guhin	~~Other~~ Flight Engineer	J. Curry

Take-Off: 1703Z Location: MacDill

Landing: _____ Location: _____ Number of Eye Penetrations: _____

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

C. Mission Briefing:

Lead Project Scientist Event Log

Date 23 Sept 02 Flight 020923I LPS P. Black

Turn Pt	Drop #	Time	Event	Position	Comments
①	1.	174815	CTD14①, GPS1	25 51 8415	GPS good SST = 28.5 CTD good
	2.	175510	CP12②	2537 8438	
		1757	SFMR TB's	bad mo	SFWS
			94 116 129	128 123 118	
		1759	reset SFMR		
	3.	180132	CTD14③	2523 8459	CTD good SST = 28.9 MLD = 50m
	4.	180800	CP16④	2510 8521	CP good
	5.	181404	CTD12⑤, GPS2	2457 8542	GPS good CTD good
		1800	radar syst	froze up	
		1815	radar back up		
	6.	182040	CP14⑥	2443 8605	
	7.		CTD16⑦		
	8.		CP12⑧		
	9.	184005	CTD14⑨	2404 8709	CTD good
②	10.	184704	CP12⑩, GPS3	2347 8731	turn pt 2
		1842	SFMR TB's		
			94 122 126	127 124 118	
	11.	185148	BT14⑪	2332 8737	SST = 28.6 MLD = 40m
	12.	185819	BT12⑫	2310 8744	SST = 28.0
③	13.	190527	BT14⑬, GPS4		GPS good SST = 26.6 MLD = 40m
	14.	191112	BT16⑭	2240 8732	SST = 17.0

Lead Project Scientist Event Log

Date ______________ Flight 020923 I LPS G Black

	Time	Event	Position	Comments
15.	191717	BT 12 [5]	2231 8715	SST = 26.5
16.	192317	BT 12 [6]	2222 8658	SST = 29.1
17.	192901	CP 14 (11)	2212 8641	cp good depth = 150m and
18.	193455	CP 16 (12)	2204 8625	45 kt FLWS – quieting but no signal
19.	194110	CP 12 (13)	2154 8607	cp fail
		SFMR 6.86 + 7.22 have more noise + are		
		in general larger TB's + 5164 also		
		~~6.86~~ 6.35 highest TB (lowest volts) (= 1.5)		
		6.86 highest volts, lowest TB (1.9N)		
20.	194648	CP 14 (14)	2146 8552	cp good – strong NNE mag current
21.	195228	CP 16 (15)	2136 8534	wire break at 100m strong current shear
22.	195800	CTD (14) (16)	2127 8518	SST ≈ 28.9
23.	200300	CP 12 (17)	2118 8501	cp good SST ≈ 29.0
24.	200906	CTD 16 (18)	2110 8444	CTD fail
(4) 25.	201425	CP 14 (19) GPS 5	2059 8438	GPS good cp quieting but no signal – DUD
26.	202021	BT 12 [7]	2050 8455	SST = 28.8
27.	202721	BT 14 [8]	2041 8519	SST = 29.1 D_{26} = 180m
28.	203432	BT 12 [9]	2030 8544	SST = 29.2 d_{26} = 160m
29.	204112	BT 14 [10]	2021 8607	SST = 28.9 d_{26} = 150m
(5) 30.	204756	CP 12 (20) GPS 6	2016 8621	winds good, cp good
	2044	strong, then	bend parallel	to coast along

shelf break

Lead Project Scientist Event Log

Date ____________ Flight 020923I LPS P Black

	Time	Event	Position	Comments
31.	205109	CTD14 (21)	2030 8622	good CTD
32.	205525	CP16 (22)	2048 8625	cp good
33.	205944	CTD14 (23)	2108 8627	near strong band - wind at sfc near cal
34.	210423	CP12 (24)	2128 8630	wire break 100
35.	210823	CP14 (25)	2148 8630	wire break 100m
36.	211252	CP12 (26)	2205 8630	
37.	211707	CP16 (27)	2224 8631	no agar stream now ~ 50kt
38.		CTD14 (28)		
39.		CP16 (29)		
40.		CTD14 (30)		
41.		CP 12 (31)		
42.		CTD14 (32)		
43.		CP 12 (33)		
(6) 44.	214028	BT14 [11] GPS7	2400 8628	SST = 27.4
45.		BT12 [12]		
46.		BT [13]		
(7) 47.	222656	CTD14 (34) GPS8	2400 8333	GPS good CTD good SST = 28.9
48.	223353	CP16 (35)	2343 8354	good CP
49.	224138	CTD14 (36)	2327 8417	SST = 27.9 d_{26} = 120m
50.	224858	CP12 (37)	2310 8439	Cp ~~good~~ quieting only DVD
51.	225630	CTD14 (38)	2254 8501	SST = 28.2 CTD good

2400 8626 SST = 27.4

214028

Lead Project Scientist Event Log

Date _____ Flight 020923I LPS R Black

	Time	Event	Position	Comments
52.	230350	CP16 (39)	2238 8524	fail
53.	231135	CTD14 (40)	2222 8547	good
~~54.~~	~~231352~~	~~CP12 (41)~~	~~2222 8547~~	
~~55.~~		~~BT14, GPS~~		
54.	231843	CP12 (41), BT14 [14]	2205 8608	CP + BT good
(8) 55.	232418	BT14 [15], GPS 9	2158 8626	60 kt winds, 10m/sec
~~56.~~	2321	cutting thru	major band	SST ~ 26.0
56.	232840	BT12 [16]	2208 8644	fail, dud
57.	233330	CP14 (42)	2227 8657	bad agar
(9) 58.	234754	CTD16, (43) GPS10	2252 8707	big cell just south
				GPS good, CTD good in strong cell
59.	235329	CP12 (44)		CP good
60.	000025	BT16 [17]	2312 8625	fail, dud
61.	000720	CP14 (45)	2327 8601	good
62.	001340	CTD16, (46) GPS 11	2339 8539	
	0014	SFMR started	working better after flying thru heavy rain	
		and moderate turbulence	- only temporary	
62.	002035	CP12 (47)	2353 8516	CP good
63.	002456	CTD14 (48)	2405 8454	SST ~ 28.9 CTD good
64.	003340	BT14 ~~[16] [17]~~	2418 8431	SST ~ 28.4 Brecor BT2
65	003938	BT14 GPS12	2432 8408	GPS good SST ~ 28.5

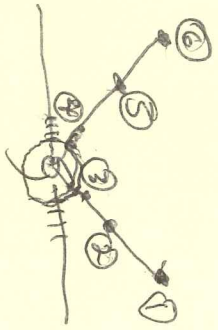
BT1 lost signal
BT2 continued receiving with noise spikes

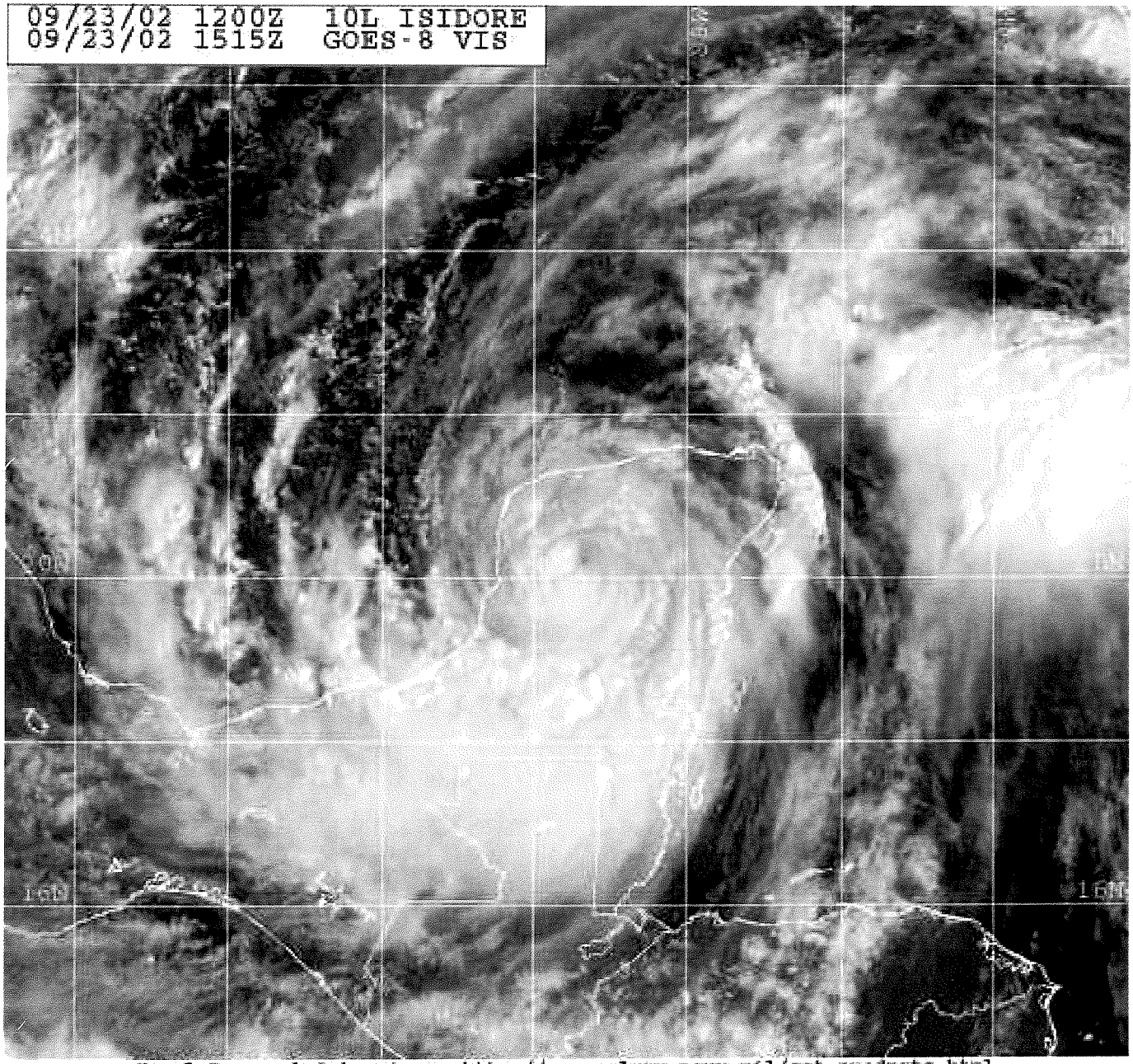
is 0.3C warmer than BT1 @ BT2 has many noise spikes; BT1 is clean

D. Equipment Status (Up, Down, Not Available, Not Used)

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft			
Radar/LF			
Radar/TA (Doppler)			
Cloud Physics			
Data System			
Omegasondes			
AXBT/AXCP			
Workstation			
Videography			

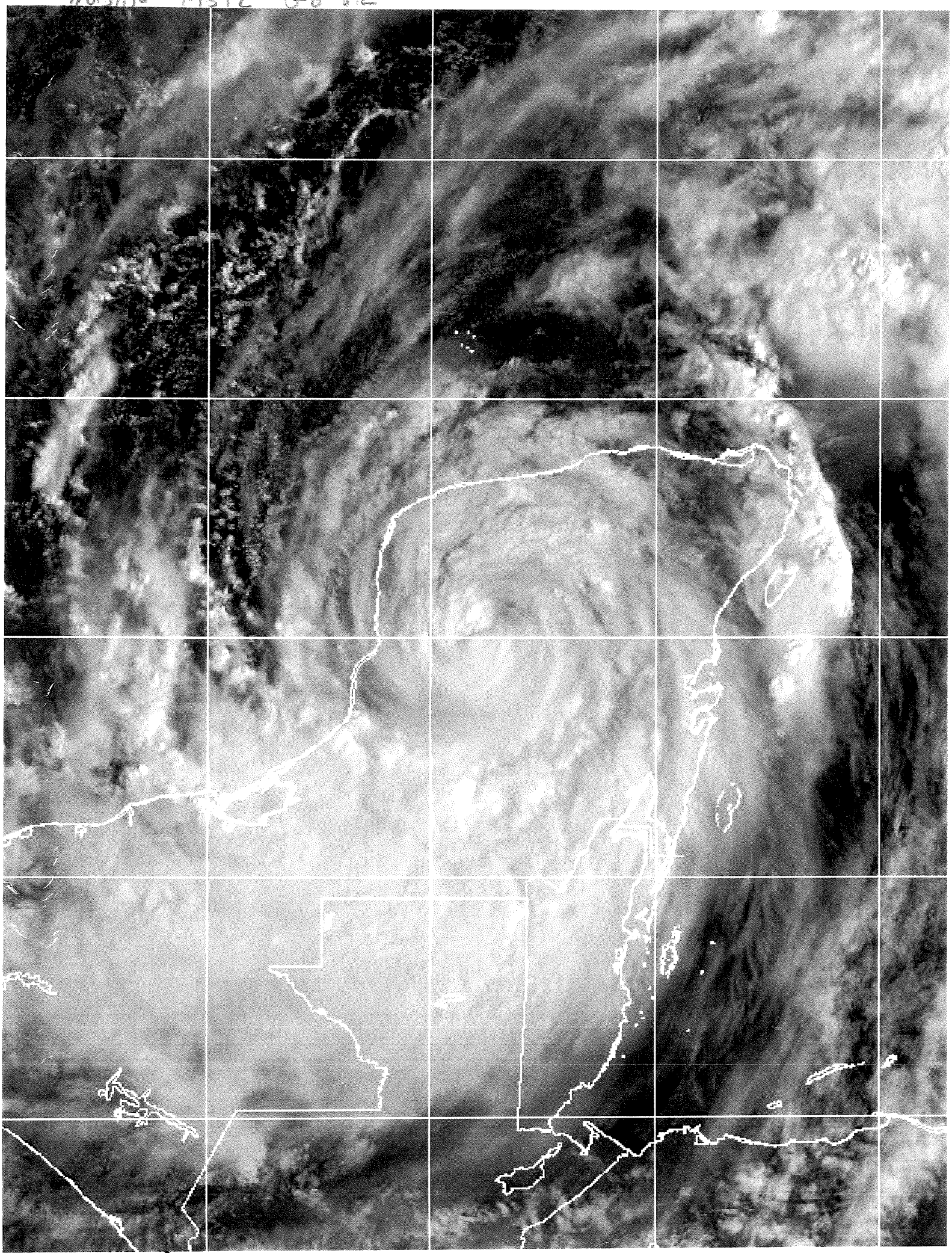
REMARKS:

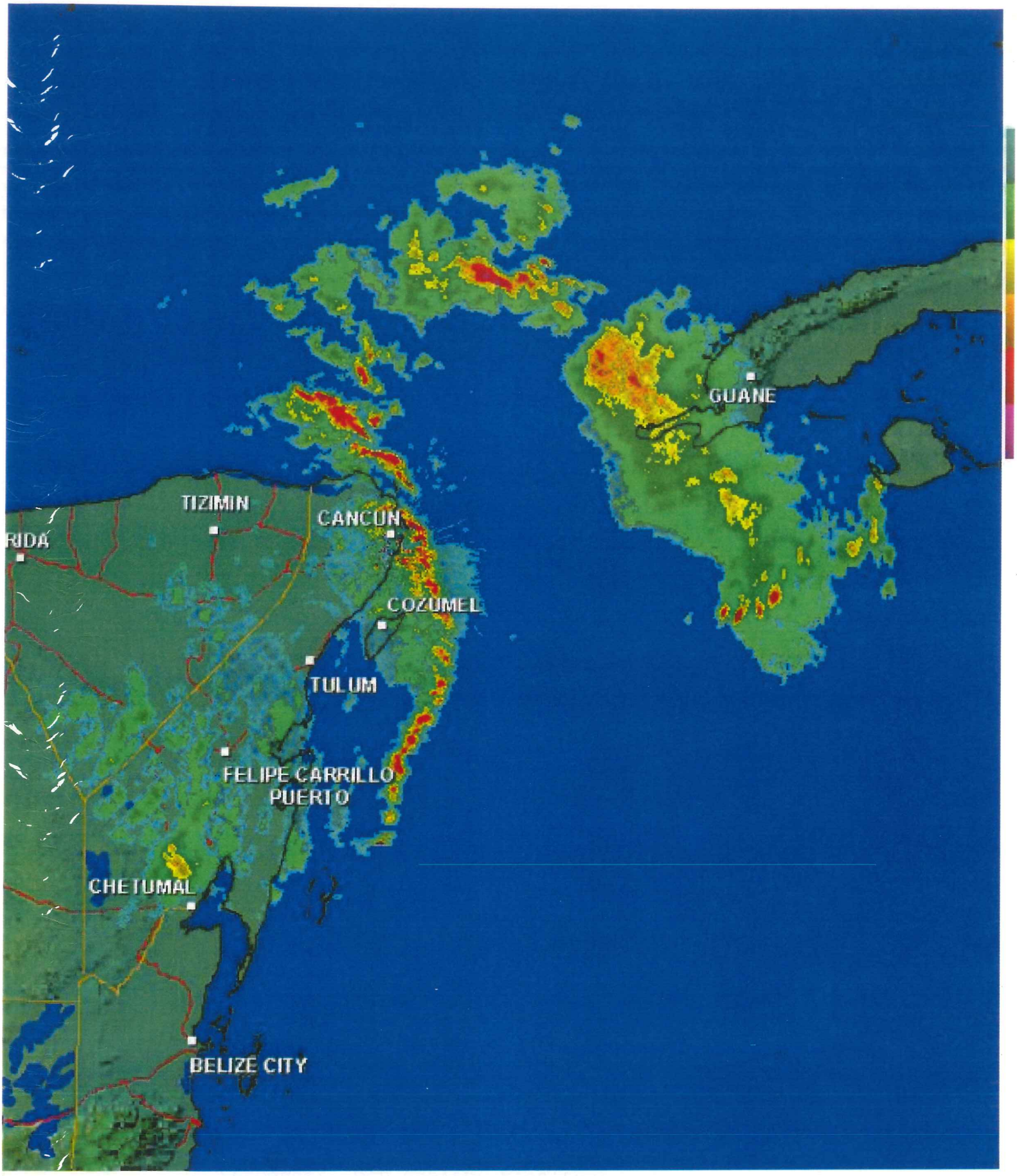




Naval Research Laboratory http://www.nrlmry.navy.mil/sat_products.html
<— Visible (Sun elevation at center is 48 degrees) —>

9/23/02 1439Z G-8 VIZ




GUANE
TIZIMIN
CANCUN
RIDA
COZUMEL
TULUM
FELIPE CARRILLO
PUERTO
CHETUMAL
BELIZE CITY