

Flight ID
Preflight

Lead Project Scientist

Storm 06FFA Wave

LPS S. Munillo

080924H1

- 84 1. Participate in general mission briefing.
- 84 2. Determine specific mission and flight requirements for assigned aircraft.
- 84 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- 84 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Review field program safety checklist
 - c. Arrange ground transportation schedule when deployed.
 - d. Determine equipment status.
- 84 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- 84 5. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
- 84 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami).
- 84 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- 84 7. Make sure each HRD flight crew members have life vests
- 84 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.
- 84 8. Collect "mess" fee (\$2.00) from all on-board HRD flight crew members.

In-Flight

- 84 1. Confirm from AOC flight director that satellite data link is operative (information).
- 84 2. Confirm camera mode of operation.
- 84 3. Confirm data recording rate.
- 84 4. Complete Lead Project Scientist Form.
- 84 5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

- 84 1. Debrief scientific crew.
- 84 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- 84 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.]
- 84 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- 84 5. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- 84 6. Obtain a copy of the all VHS videos from aircraft cameras (3-4 approx.). Turn in with completed forms.
- 84 7. Obtain a copy of CD with all flight data. Turn in with completed forms.
- 84 8. Determine next mission status, if any, and brief crews as necessary.
- 84 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- 84 10. Prepare written mission summary using **Mission Summary** form (due to Field Program Director a week after the flight).

Lead Project Scientist Check List

Storm or Project AL93 Experiment name 06FFA WAVE
 Date 9/24/08 Aircraft NOAA 42 Flight ID 080924 H1
N42RF

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Murillo</u>	Flight Director	<u>A.B. Damiano</u>
<u>Ocean Winds - P. Chang</u> Radar	<u>Murillo</u>	Pilots	<u>M. Nelson S. Pierce</u>
	<u>Sellwood</u>		<u>A. Girimonte</u>
Workstation	<u>Sellwood</u>	Navigator	<u>Siegel</u>
Cloud Physics	<u>Aberson</u>	Systems Engineer	<u>S. Wade</u>
Photographer/Observer	<u>M. Sweeney</u>	Data Technician	<u>Jim Roles</u>
/Guests			
Dropwindsonde	<u>Sellwood/Murillo</u>	Electronics Technician	<u>Basko & B. Olney</u>
AXBT/AXCP	<u> </u>	Other - <u>J. Manus</u> <u>Z. Jelenak</u>	<u>Leonard Miller</u>

B. Take-off and Landing Times and Locations:

Take-Off: 195110 UTC Location: MacDill

Landing: 041215 UTC Location: MacDill

Number of Eye Penetrations:

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Sfc Wind
<u>9/24/08 18z</u>	<u>21.0°</u>	<u>70.6°</u>	<u>1006 mb</u>	<u>30 kt</u>
<u>9/25/08 03z</u>	<u>21.2°</u>	<u>70.5°</u>	<u>1006 mb</u>	
<u>9/25/08 06z</u>	<u>22.1°</u>	<u>69.3°</u>	<u>1005 mb</u>	

D. Mission Briefing:

Ocean Winds mission.

E. —Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / Cds /Expendables/ Printouts
Radar/LF	↓	↓	↓	
Doppler Radar/TA	↑	↑	↑	
Cloud Physics	—	—	—	
Data System	↑	↑	↑	
GPS sondes	↑	↑	↑	
AXBT/AXCP	O	O	O	
Ozone instrument	↑	↑	↑	
Workstation	↑	↑	↑	
Videography	↑	↑	↑	

REMARKS: See following page.

Lead Project Scientist Event Log

Date 080924 Flight 080924H1 LPS S. Munillo

Time	Event	Position	Comments
195110	take off from MacDill AFB		
	the plan is to do a figure four over ALG3 and then a few legs for P. Chang		
	ALG3 remains a broad area of low pressure N of Hispanola, system lacks a well-defined		
	sfc circulation, upper level winds are only marginally favorable for development		
2015Z	trough to the west of system. Most of the deep convection is East over PR.		
2123z	Started tail radar	Start recording ~2127z	
2223	reached IP		
222325	turn 90° from		
222439	GPS drop launched at IP no scatters	good sonde 21.50° 72.26°	
	~8,000 ft. flight level winds ~10 kt		
	Sonde #1 352/12	sfc pressure 1006 mb	
225223z	center drop @ wind dir 335°	3 kts flight level winds	still heading 91°, good sonde
	21° 30.2' 70° 20.5'	(21.50° 70.31°)	
	center drop 21.50° #2	70.41° from sonde	1005.8 mb, 76/6 kts @ sfc (10m)
	east point 68.40		
231610	turn point towards NW (327°)	21.50° 68.70°	
	flight lvl winds 19 kts / 150°		
233601	turn to the south	22.17N 69.52° W	177° flight level winds 18 kts 90°
	~30 kts @ sfc		
23516	cross "center"	2134° 67.50°	flight level wind 9.3 kts / 335°
235901	turn to 90°	cut southern leg short for P. Chang	
001124	doing a loop	now heading south	164° ~180°
001647	215° flight track		
001140	190° flight track		

Lead Project Scientist Event Log

Date 080924

Flight 080924H1

LPS Munillo

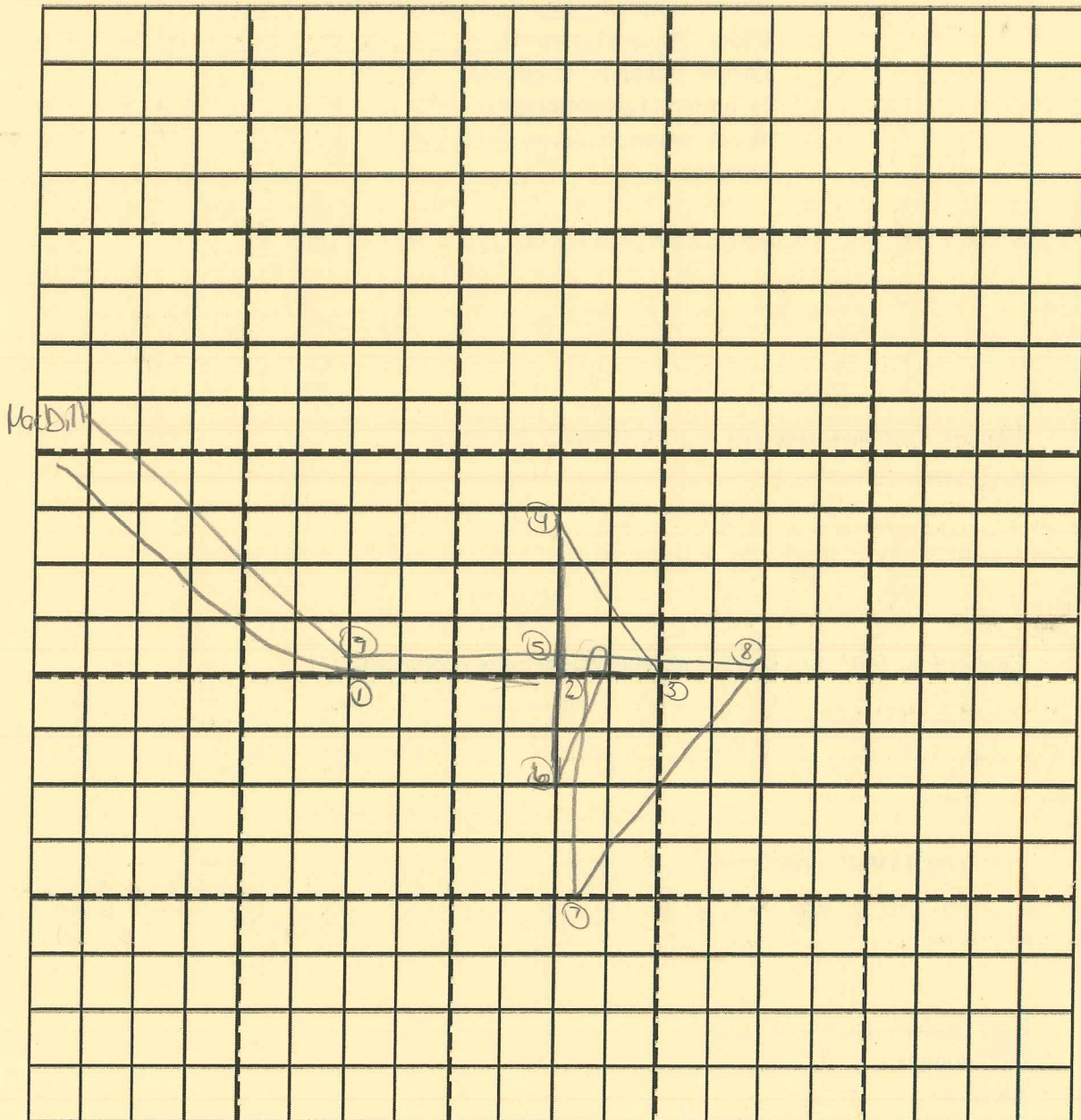
Time	Event	Position	Comments
001916z	sonde launched #3	"center"	21.318° 69.261
	sfc 119/1928		flight lvl winds 3.9 kt
003501	turn NE (34°)		
	21.30 68.00		
005650	21.34 68.12° turn to west 270°		flight lvl winds 10 kts
005944z	drop @ turn #4	21.57° 68.09°	1007mb @ sfc w/ sfc winds
	very moist sonde in convection		of 55°/12 kt @ 5m.
011643	"center" drop #5	21.69° 69.27	
	69.301 21.685	good sonde	1007mb @ sfc w/ sfc
			winds 102°/16 kt @ 10m
013037z	drop #5 "endpoint"	flight lvl 46°/11 kts	still tracking 270° (west)
	tail doppler waiting well no scatters in this area		
	21.699° 70.341°W		
	sfc. 1007.3mb	w/ sfc winds 86°/10 kt	
020111z	tail radar shot down.		
	3 radar analyses sent along w/ super obs.		
	jet streak would pass so to cause baroclinic development		
	storm is in the right entrance region of jet streak		
	favorable location for transverse circulation		
041215z	landed c MacDill		

baroclinic/jet streak dynamics
barotropic/convective dynamics

Observer's Flight Track Worksheet

Date 080924 Flight 080924 H1 ^{LPS} Observer Murillo

Latitude (°)



Longitude (°)

Mission Summary

Storm name

YYMMDDA# Aircraft 4²RF

080924H1

Scientific Crew (4²RF)

Lead Project Scientist Munillo / Abenson

Radar Scientist Munillo / Sellwood

Cloud Physics Scientist _____

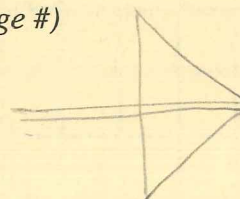
Dropwindsonde Scientist Sellwood

Boundary-Layer Scientist _____

Workstation Scientist Sellwood

Observers _____

Mission Briefing: (include sketch of proposed flight track or page #)



Mission Synopsis: (include plot of actual flight track)

See attached map.

Evaluation: (did the experiment meet the proposed objectives?)

We sampled AL93 and were able to submit 3 radar analyses / 3 open obs.
We also dropped 6 sondes. Some were in areas where we had no
scatters.

Problems: (list all problems) LF radar still down. We are still using the borrowed
track ball mouse from Jim Roles since ours is broken on the workstation.

Expendables used in mission:

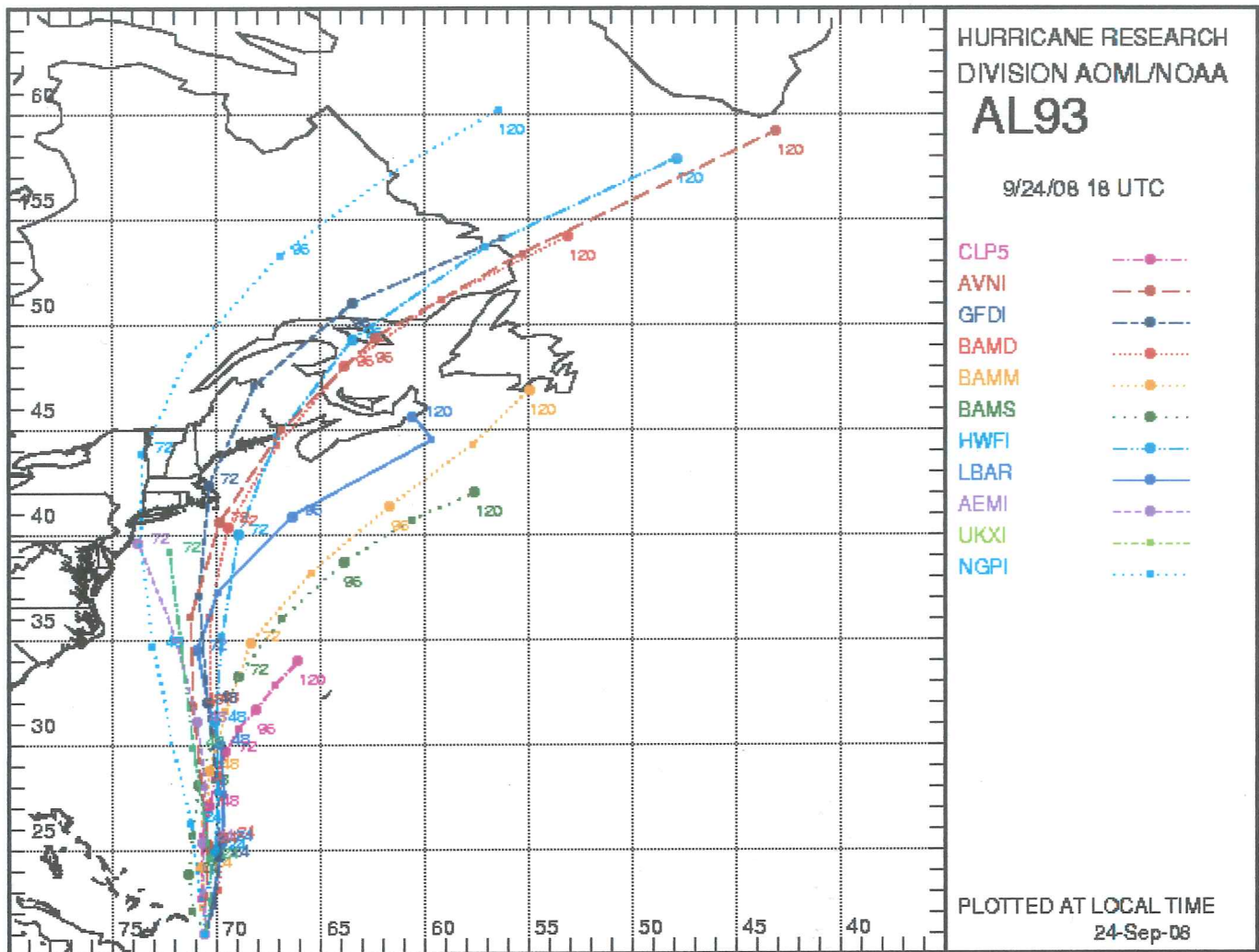
GPS sondes : 6

AXBTs :

Sonobuoys:

AL93 DAY 2A





* ATLANTIC SHIPS INTENSITY FORECAST *

* GOES/OHC INPUT INCLUDED *

* INVEST AL932008 09/24/08 18 UTC *

TIME (HR)	0	6	12	18	24	36	48	60	72	84	96	108	120
V (KT) NO LAND	30	31	32	34	37	40	47	52	55	58	58	52	48
V (KT) LAND	30	31	32	34	37	40	47	52	55	58	58	52	48
V (KT) LGE mod	30	30	30	31	31	33	35	38	40	40	38	36	35
SHEAR (KTS)	18	23	23	15	12	16	5	23	29	43	46	33	32
SHEAR DIR	242	225	244	242	228	245	220	227	225	237	257	257	222
SST (C)	28.8	28.5	28.3	28.1	28.1	28.5	28.7	28.2	27.0	25.7	20.5	15.8	14.6
POT. INT. (KT)	147	142	140	138	138	144	148	142	127	115	84	72	70
ADJ. POT. INT.	133	127	126	125	124	130	132	126	113	102	77	68	67
200 MB T (C)	-53.3	-52.8	-52.5	-52.3	-52.0	-52.2	-52.2	-53.0	-53.2	-54.6	-55.7	-56.8	-57.8
TH_E DEV (C)	11	11	11	10	10	10	8	7	5	3	1	0	0
700-500 MB RH	61	58	58	57	57	48	52	50	50	48	52	60	58
GFS VTEX (KT)	12	12	12	12	13	12	13	12	13	16	18	13	12
850 MB ENV VOR	53	61	52	48	45	34	45	-5	24	10	22	20	45
200 MB DIV	32	19	39	38	46	35	70	52	87	71	12	19	60
LAND (KM)	136	208	279	384	489	723	881	721	685	570	380	255	16
LAT (DEG N)	21.0	21.7	22.3	23.3	24.2	26.3	28.8	31.6	34.9	38.2	41.4	44.3	46.9
LONG (DEG W)	70.6	70.7	70.7	70.8	70.8	70.6	70.4	69.6	68.4	65.5	61.7	57.7	55.0
STM SPEED (KT)	7	7	8	10	10	12	13	16	18	21	21	18	16
HEAT CONTENT	63	53	43	37	38	27	21	17	16	0	0	0	0

FORECAST TRACK FROM BAMM INITIAL HEADING/SPEED (DEG/KT): 350/ 9 CX,CY: -1/ 9

T-12 MAX WIND: 30 PRESSURE OF STEERING LEVEL (MB): 784 (MEAN=625)

GOES IR BRIGHTNESS TEMP. STD DEV. 100-300 KM RAD: 23.5 (MEAN=20.0)

% GOES IR PIXELS WITH T < -20 C 50-200 KM RAD: 20.0 (MEAN=68.6)

INDIVIDUAL CONTRIBUTIONS TO INTENSITY CHANGE

	6	12	18	24	36	48	60	72	84	96	108	120
SAMPLE MEAN CHANGE	1.	2.	3.	4.	6.	8.	9.	10.	11.	12.	12.	13.
SST POTENTIAL	0.	1.	1.	2.	5.	9.	14.	17.	20.	20.	20.	19.
VERTICAL SHEAR	1.	1.	2.	3.	5.	6.	6.	5.	2.	1.	0.	-2.
PERSISTENCE	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	0.	0.
200/250 MB TEMP.	0.	0.	-1.	-1.	-2.	-2.	-2.	-2.	-2.	-1.	2.	5.
THETA_E EXCESS	0.	0.	0.	0.	0.	-1.	-1.	-3.	-4.	-7.	-9.	-12.
700-500 MB RH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	-1.
GFS VORTEX TENDENCY	0.	0.	0.	0.	-1.	0.	-1.	-1.	2.	3.	-1.	-2.
850 MB ENV VORTICITY	0.	0.	1.	1.	1.	1.	1.	1.	1.	1.	0.	1.
200 MB DIVERGENCE	0.	0.	0.	1.	1.	2.	3.	4.	5.	5.	5.	5.
ZONAL STORM MOTION	0.	0.	0.	0.	0.	-1.	-1.	-1.	-2.	-2.	-3.	-3.
STEERING LEVEL PRES	0.	-1.	-1.	-1.	-2.	-3.	-3.	-4.	-5.	-4.	-4.	-3.
DAYS FROM CLIM. PEAK	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.
SUB-TOTAL CHANGE	1.	3.	5.	8.	11.	18.	23.	26.	28.	28.	23.	20.
SATELLITE ADJUSTMENTS												
MEAN ADJUSTMENT	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-2.
GOES IR STD DEV	1.	1.	2.	2.	2.	1.	1.	0.	0.	0.	0.	0.
GOES IR PIXEL COUNT	-1.	-1.	-2.	-2.	-2.	-2.	-1.	1.	2.	2.	2.	0.
OCEAN HEAT CONTENT	0.	0.	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.
TOTAL ADJUSTMENT	0.	0.	-1.	-1.	-1.	-1.	-1.	0.	0.	0.	0.	-2.
TOTAL CHANGE (KT)	1.	2.	4.	7.	10.	17.	22.	25.	28.	28.	22.	18.

** 2008 ATLANTIC RI INDEX AL932008 INVEST 09/24/08 18 UTC **

(25 KT OR MORE MAX WIND INCREASE IN NEXT 24 HR)

12 HR PERSISTENCE (KT): 0.0 Range:-45.0 to 30.0 Scaled/Wgtd Val: 0.6/ 1.1

850-200 MB SHEAR (KT) : 18.3 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.5/ 0.8

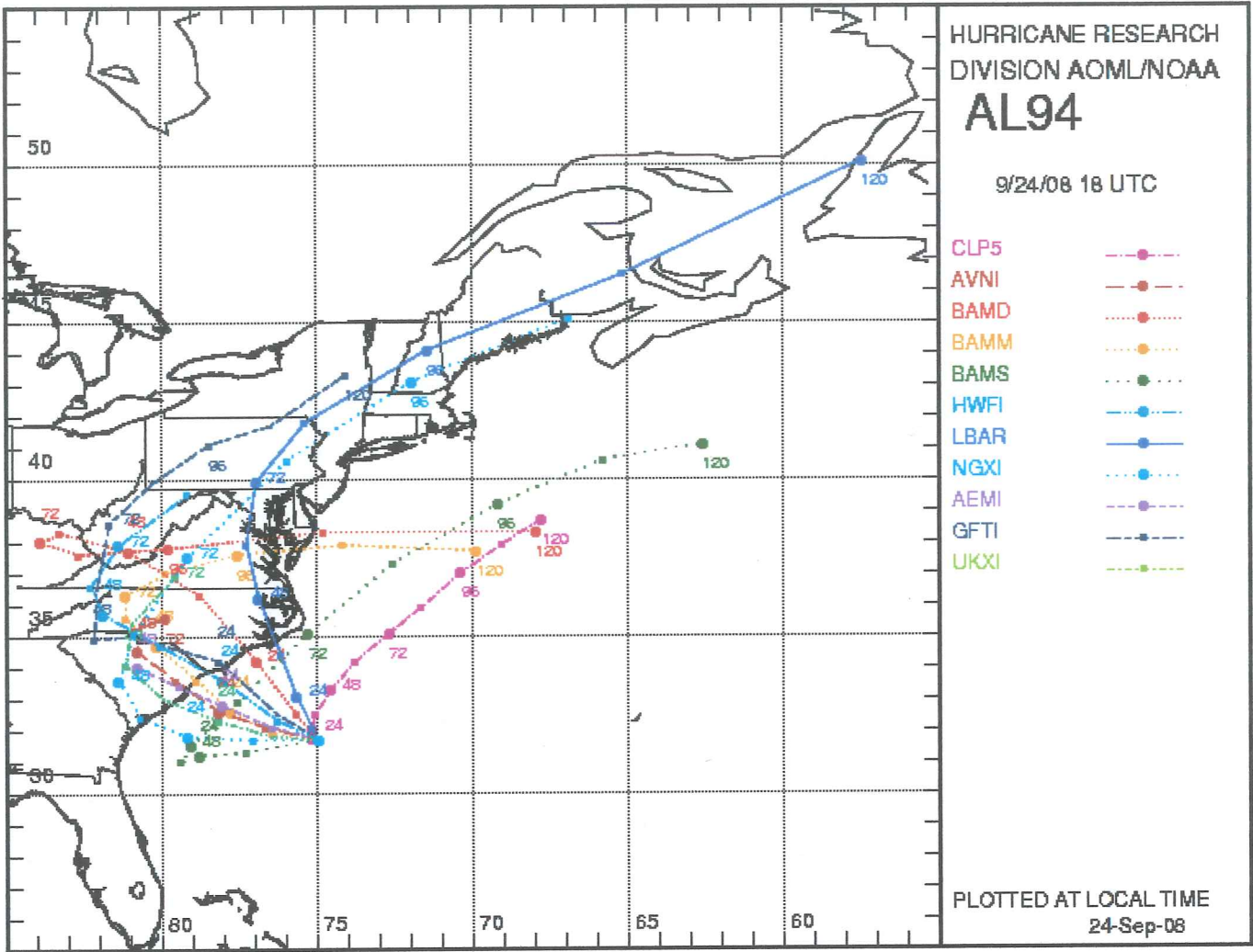
D200 (10**7s-1) : 34.8 Range:-20.0 to 149.0 Scaled/Wgtd Val: 0.3/ 0.5

POT = MPI-VMAX (KT) : 97.2 Range: 25.1 to 130.7 Scaled/Wgtd Val: 0.7/ 0.8

850-700 MB REL HUM (%): 72.4 Range: 56.0 to 88.0 Scaled/Wgtd Val: 0.5/ 0.2
% area w/pixels <-30 C: 15.0 Range: 17.0 to 100.0 Scaled/Wgtd Val: 0.0/ 0.0
STD DEV OF IR BR TEMP : 17.7 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.5/ 0.7
Heat content (KJ/cm2) : 46.8 Range: 0.0 to 132.0 Scaled/Wgtd Val: 0.4/ 0.0

Prob of RI for 25 kt RI threshold= 4% is 0.3 times the sample mean(12.3%)
Prob of RI for 30 kt RI threshold= 3% is 0.3 times the sample mean(7.8%)
Prob of RI for 35 kt RI threshold= 1% is 0.3 times the sample mean(4.5%)

ANNULAR HURRICANE INDEX (AHI) AL932008 INVEST 09/24/08 18 UTC ##
STORM NOT ANNULAR, SCREENING STEP FAILED, NPASS=5 NFAIL=2 ##
AHI= 0 (AHI OF 100 IS BEST FIT TO ANN. STRUC., 1 IS MARGINAL, 0 IS NOT ANNULAR) ##
ANNULAR INDEX RAN NORMALLY



* ATLANTIC SHIPS INTENSITY FORECAST *

* GOES/OHC INPUT INCLUDED *

* INVEST AL942008 09/24/08 18 UTC *

TIME (HR)	0	6	12	18	24	36	48	60	72	84	96	108	120
V (KT) NO LAND	55	56	58	60	61	63	63	59	56	52	46	40	32
V (KT) LAND	55	56	58	60	61	63	38	30	28	27	28	28	20
V (KT) LGE mod	55	57	59	60	60	62	38	30	28	27	28	31	30
SHEAR (KTS)	31	31	32	31	30	29	21	20	28	35	48	63	64
SHEAR DIR	231	240	244	233	217	211	198	234	220	231	235	252	265
SST (C)	28.4	28.5	28.6	28.6	28.5	28.1	26.8	25.2	24.6	24.5	23.5	23.6	25.6
POT. INT. (KT)	139	142	144	144	142	137	121	104	99	100	95	97	113
ADJ. POT. INT.	114	118	119	119	118	114	100	86	83	85	83	85	99
200 MB T (C)	-54.4	-54.0	-53.8	-54.2	-53.6	-53.7	-54.4	-55.2	-55.6	-56.1	-56.2	-56.0	-56.1
TH_E DEV (C)	5	4	2	0	2	0	2	0	2	1	4	2	4
700-500 MB RH	43	39	38	43	40	38	36	35	37	36	32	31	29
GFS VTEX (KT)	17	17	19	21	20	18	16	11	9	8	LOST	LOST	LOST
850 MB ENV VOR	92	90	102	148	148	130	144	98	58	36	18	-24	-49
200 MB DIV	38	38	37	48	62	53	30	17	19	4	-14	-19	-20
LAND (KM)	371	322	272	209	152	13	-156	-291	-351	-346	-160	94	408
LAT (DEG N)	31.7	31.8	31.9	32.3	32.6	33.6	34.7	35.6	36.3	37.0	37.6	37.9	37.7
LONG (DEG W)	75.0	75.8	76.5	77.2	77.8	78.9	80.2	81.2	81.2	79.9	77.6	74.2	69.9
STM SPEED (KT)	4	6	6	7	6	7	7	4	4	8	12	15	17
HEAT CONTENT	25	35	45	46	30	0	9999	9999	9999	9999	9999	0	0

FORECAST TRACK FROM BAMM INITIAL HEADING/SPEED (DEG/KT): 235/ 2 CX,CY: -1/ 0

T-12 MAX WIND: 50 PRESSURE OF STEERING LEVEL (MB): 587 (MEAN=625)

GOES IR BRIGHTNESS TEMP. STD DEV. 100-300 KM RAD: 24.5 (MEAN=20.0)

% GOES IR PIXELS WITH T < -20 C 50-200 KM RAD: 35.0 (MEAN=68.6)

INDIVIDUAL CONTRIBUTIONS TO INTENSITY CHANGE

	6	12	18	24	36	48	60	72	84	96	108	120
SAMPLE MEAN CHANGE	1.	2.	3.	4.	6.	8.	9.	10.	11.	12.	12.	13.
SST POTENTIAL	0.	1.	1.	2.	2.	0.	-2.	-4.	-6.	-7.	-9.	-9.
VERTICAL SHEAR	-1.	-1.	-2.	-2.	-3.	-2.	-2.	-2.	-2.	-4.	-7.	-12.
PERSISTENCE	1.	1.	1.	2.	2.	2.	1.	1.	1.	1.	0.	0.
200/250 MB TEMP.	0.	1.	1.	1.	2.	3.	4.	6.	9.	11.	13.	14.
THETA_E EXCESS	0.	-1.	-2.	-3.	-4.	-6.	-9.	-12.	-15.	-18.	-20.	-21.
700-500 MB RH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
GFS VORTEX TENDENCY	0.	1.	2.	2.	1.	-1.	-5.	-7.	-9.	-9.	-9.	-9.
850 MB ENV VORTICITY	0.	1.	2.	3.	4.	6.	7.	7.	7.	7.	6.	5.
200 MB DIVERGENCE	0.	0.	1.	1.	2.	2.	2.	2.	2.	1.	0.	0.
ZONAL STORM MOTION	0.	0.	0.	0.	0.	-1.	-1.	-1.	-2.	-2.	-3.	-3.
STEERING LEVEL PRES	0.	0.	0.	0.	0.	1.	0.	1.	1.	1.	0.	0.
DAYS FROM CLIM. PEAK	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.
SUB-TOTAL CHANGE	2.	4.	7.	9.	11.	11.	6.	2.	-3.	-8.	-14.	-21.
SATELLITE ADJUSTMENTS												
MEAN ADJUSTMENT	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-2.
GOES IR STD DEV	0.	0.	-1.	-1.	-1.	-1.	0.	0.	0.	0.	0.	0.
GOES IR PIXEL COUNT	-1.	-1.	-1.	-1.	-1.	-1.	0.	1.	2.	2.	2.	0.
OCEAN HEAT CONTENT	0.	0.	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.
TOTAL ADJUSTMENT	-1.	-2.	-2.	-3.	-3.	-3.	-2.	-1.	0.	0.	0.	-2.
TOTAL CHANGE (KT)	1.	3.	5.	6.	8.	8.	4.	1.	-3.	-8.	-15.	-23.

** 2008 ATLANTIC RI INDEX AL942008 INVEST 09/24/08 18 UTC **

(25 KT OR MORE MAX WIND INCREASE IN NEXT 24 HR)

12 HR PERSISTENCE (KT): 5.0 Range:-45.0 to 30.0 Scaled/Wgtd Val: 0.7/ 1.2

850-200 MB SHEAR (KT) : 31.2 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.1/ 0.2

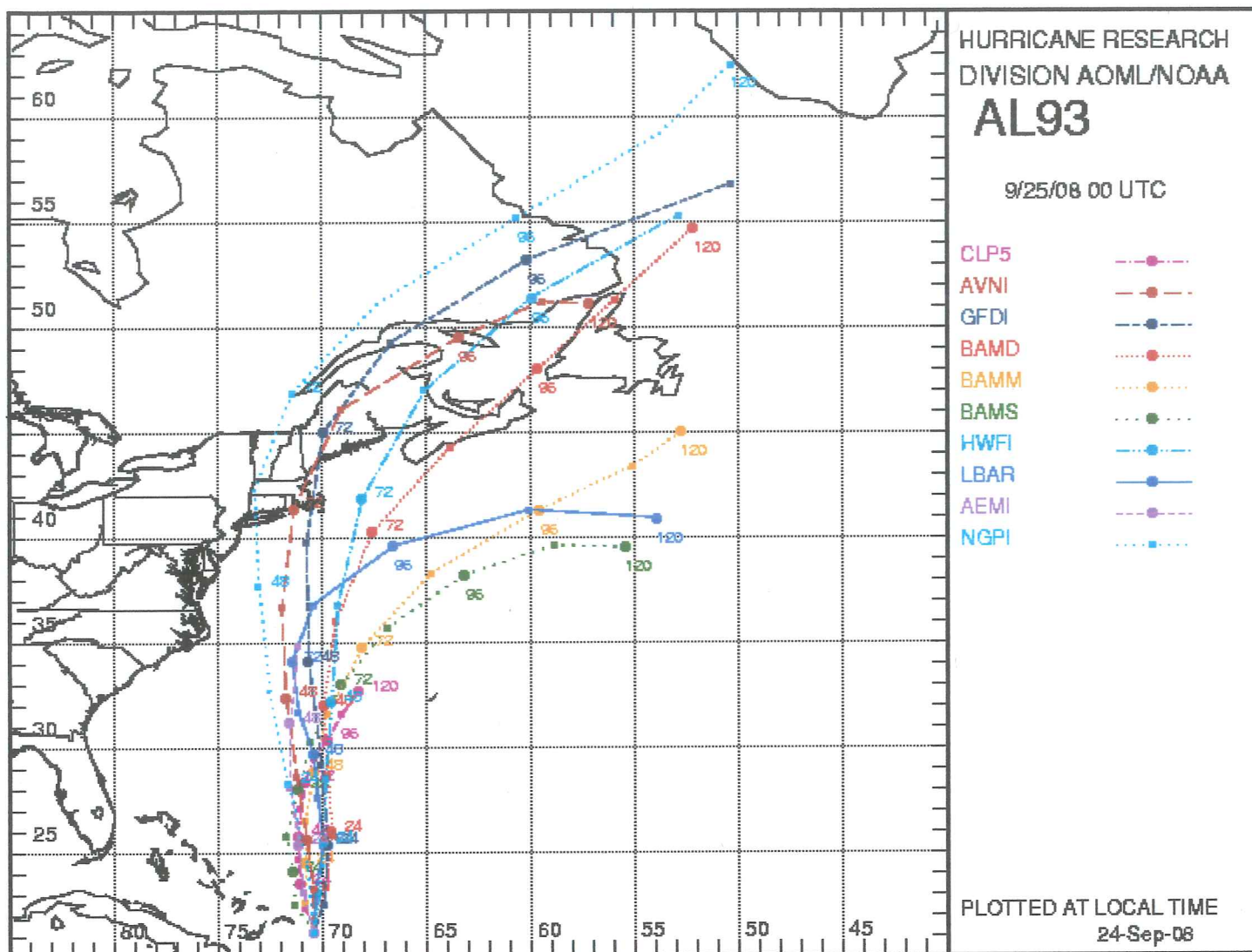
D200 (10**7s-1) : 44.6 Range:-20.0 to 149.0 Scaled/Wgtd Val: 0.4/ 0.6

POT = MPI-VMAX (KT) : 62.7 Range: 25.1 to 130.7 Scaled/Wgtd Val: 0.4/ 0.4

850-700 MB REL HUM (%): 58.8 Range: 56.0 to 88.0 Scaled/Wgted Val: 0.1/ 0.0
% area w/pixels <-30 C: 24.0 Range: 17.0 to 100.0 Scaled/Wgted Val: 0.1/ 0.0
STD DEV OF IR BR TEMP : 20.3 Range: 35.1 to 3.2 Scaled/Wgted Val: 0.5/ 0.6
Heat content (KJ/cm2) : 36.2 Range: 0.0 to 132.0 Scaled/Wgted Val: 0.3/ 0.0

Prob of RI for 25 kt RI threshold= 10% is 0.8 times the sample mean(12.3%)
Prob of RI for 30 kt RI threshold= 3% is 0.3 times the sample mean(7.8%)
Prob of RI for 35 kt RI threshold= 1% is 0.3 times the sample mean(4.5%)

ANNULAR HURRICANE INDEX (AHI) AL942008 INVEST 09/24/08 18 UTC ##
STORM NOT ANNULAR, SCREENING STEP FAILED, NPASS=2 NFAIL=5 ##
AHI= 0 (AHI OF 100 IS BEST FIT TO ANN. STRUC., 1 IS MARGINAL, 0 IS NOT ANNULAR) ##
ANNULAR INDEX RAN NORMALLY



* ATLANTIC SHIPS INTENSITY FORECAST *

* GOES/OHC INPUT INCLUDED *

* INVEST AL932008 09/25/08 00 UTC *

TIME (HR)	0	6	12	18	24	36	48	60	72	84	96	108	120
V (KT) NO LAND	30	31	32	35	37	42	48	52	56	57	58	56	55
V (KT) LAND	30	31	32	35	37	42	48	52	56	57	58	56	55
V (KT) LGE mod	30	30	30	30	31	31	34	37	39	40	38	36	36
SHEAR (KTS)	25	28	20	14	18	10	16	24	38	41	38	29	21
SHEAR DIR	229	243	240	237	235	254	223	241	235	238	264	250	234
SST (C)	28.7	28.4	28.2	28.1	28.1	28.5	28.7	28.2	27.0	25.7	21.9	18.0	14.8
POT. INT. (KT)	145	141	139	138	138	144	148	141	128	115	90	75	69
ADJ. POT. INT.	129	127	125	124	123	129	132	126	114	104	82	70	65
200 MB T (C)	-52.7	-52.4	-52.3	-52.0	-52.1	-52.5	-52.9	-53.6	-54.1	-55.5	-55.9	-56.8	-57.2
TH_E DEV (C)	12	11	11	10	11	9	8	7	6	3	1	0	0
700-500 MB RH	59	57	57	57	52	54	52	49	45	52	57	53	42
GFS VTEX (KT)	12	12	12	13	13	13	13	13	13	15	17	16	19
850 MB ENV VOR	50	41	35	37	36	26	30	11	32	27	-7	37	60
200 MB DIV	16	41	35	46	30	66	48	64	60	41	59	25	12
LAND (KM)	159	235	311	416	522	744	866	706	713	580	452	378	190
LAT (DEG N)	21.2	21.9	22.6	23.6	24.5	26.5	28.9	31.6	34.8	38.3	41.3	43.4	45.0
LONG (DEG W)	70.5	70.7	70.9	70.9	70.9	70.9	70.5	69.8	68.1	64.8	59.6	55.1	52.8
STM SPEED (KT)	6	7	9	9	9	11	13	15	20	23	22	15	12
HEAT CONTENT	60	49	39	36	37	26	21	17	15	1	0	0	0

FORECAST TRACK FROM BAMM INITIAL HEADING/SPEED (DEG/KT): 340/ 6 CX,CY: -1/ 6

T-12 MAX WIND: 30 PRESSURE OF STEERING LEVEL (MB): 684 (MEAN=625)

GOES IR BRIGHTNESS TEMP. STD DEV. 100-300 KM RAD: 23.6 (MEAN=20.0)

% GOES IR PIXELS WITH T < -20 C 50-200 KM RAD: 20.0 (MEAN=68.6)

INDIVIDUAL CONTRIBUTIONS TO INTENSITY CHANGE

	6	12	18	24	36	48	60	72	84	96	108	120
SAMPLE MEAN CHANGE	1.	2.	3.	4.	6.	8.	9.	10.	11.	12.	12.	13.
SST POTENTIAL	0.	1.	1.	2.	5.	9.	14.	17.	20.	20.	20.	19.
VERTICAL SHEAR	0.	1.	2.	3.	4.	5.	4.	2.	-1.	-1.	-2.	-3.
PERSISTENCE	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	0.	0.
200/250 MB TEMP.	0.	0.	-1.	-1.	-2.	-2.	-2.	-2.	-1.	0.	3.	6.
THETA E EXCESS	0.	0.	0.	0.	0.	-1.	-1.	-2.	-4.	-6.	-9.	-11.
700-500 MB RH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	-1.
GFS VORTEX TENDENCY	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.	2.	4.
850 MB ENV VORTICITY	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
200 MB DIVERGENCE	0.	0.	0.	0.	1.	2.	3.	4.	4.	5.	4.	4.
ZONAL STORM MOTION	0.	0.	0.	0.	0.	-1.	-1.	-1.	-2.	-2.	-3.	-3.
STEERING LEVEL PRES	0.	0.	0.	0.	-1.	-1.	-1.	-2.	-2.	-2.	-2.	-1.
DAYS FROM CLIM. PEAK	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
SUB-TOTAL CHANGE	1.	3.	5.	8.	13.	19.	23.	26.	27.	28.	26.	27.
SATELLITE ADJUSTMENTS												
MEAN ADJUSTMENT	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-2.
GOES IR STD DEV	1.	1.	2.	2.	2.	1.	1.	0.	0.	0.	0.	0.
GOES IR PIXEL COUNT	-1.	-1.	-2.	-2.	-2.	-2.	-1.	1.	2.	2.	2.	0.
OCEAN HEAT CONTENT	0.	0.	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.
TOTAL ADJUSTMENT	0.	0.	-1.	-1.	-1.	-1.	-1.	0.	0.	0.	0.	-2.
TOTAL CHANGE (KT)	1.	2.	5.	7.	12.	18.	22.	26.	27.	28.	26.	25.

** 2008 ATLANTIC RI INDEX AL932008 INVEST 09/25/08 00 UTC **

(25 KT OR MORE MAX WIND INCREASE IN NEXT 24 HR)

12 HR PERSISTENCE (KT): 0.0 Range: -45.0 to 30.0 Scaled/Wgtd Val: 0.6/ 1.1

850-200 MB SHEAR (KT): 21.2 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.4/ 0.7

D200 (10**7s-1) : 33.6 Range:-20.0 to 149.0 Scaled/Wgtd Val: 0.3/ 0.5
 POT = MPI-VMAX (KT) : 95.9 Range: 25.1 to 130.7 Scaled/Wgtd Val: 0.7/ 0.8
 850-700 MB REL HUM (%): 72.0 Range: 56.0 to 88.0 Scaled/Wgtd Val: 0.5/ 0.2
 % area w/pixels <-30 C: 13.0 Range: 17.0 to 100.0 Scaled/Wgtd Val: 0.0/ 0.0
 STD DEV OF IR BR TEMP : 14.3 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.7/ 0.9
 Heat content (KJ/cm2) : 44.2 Range: 0.0 to 132.0 Scaled/Wgtd Val: 0.3/ 0.0

Prob of RI for 25 kt RI threshold= 4% is 0.3 times the sample mean(12.3%)
 Prob of RI for 30 kt RI threshold= 3% is 0.3 times the sample mean(7.8%)
 Prob of RI for 35 kt RI threshold= 1% is 0.3 times the sample mean(4.5%)

ANNULAR HURRICANE INDEX (AHI) AL932008 INVEST 09/25/08 00 UTC ##
 ## STORM NOT ANNULAR, SCREENING STEP FAILED, NPASS=4 NFAIL=3 ##
 ## AHI= 0 (AHI OF 100 IS BEST FIT TO ANN. STRUC., 1 IS MARGINAL, 0 IS NOT ANNULAR) ##
 ## ANNULAR INDEX RAN NORMALLY

* ATLANTIC SHIPS INTENSITY FORECAST *

* GOES/OHC INPUT INCLUDED *

* INVEST AL942008 09/25/08 00 UTC *

TIME (HR)	0	6	12	18	24	36	48	60	72	84	96	108	120
V (KT) NO LAND	55	55	56	58	59	62	60	58	56	51	45	39	30
V (KT) LAND	55	55	56	58	59	45	33	29	28	28	31	25	16
V (KT) LGE mod	55	55	56	57	58	45	32	28	27	28	28	32	31
SHEAR (KTS)	27	30	26	26	30	20	23	18	29	40	56	63	68
SHEAR DIR	248	243	239	219	208	200	217	243	231	231	243	254	265
SST (C)	28.4	28.5	28.6	28.5	28.4	27.5	25.8	24.6	24.3	23.3	21.8	21.4	22.5
POT. INT. (KT)	139	142	144	143	141	129	110	99	99	94	88	87	92
ADJ. POT. INT.	114	118	119	119	118	108	92	83	84	82	79	79	82
200 MB T (C)	-54.0	-53.9	-53.9	-53.4	-53.9	-54.6	-55.1	-55.8	-56.1	-56.2	-56.0	-55.9	-55.8
TH E DEV (C)	4	2	0	3	1	0	1	0	2	0	4	1	2
700-500 MB RH	45	43	48	45	43	43	42	41	38	41	38	38	34
GFS VTEX (KT)	18	19	20	21	20	19	15	12	8	6	LOST	LOST	LOST
850 MB ENV VOR	93	93	141	142	134	144	119	101	59	57	10	-48	-46
200 MB DIV	26	30	67	77	65	45	25	25	5	3	12	12	-21
LAND (KM)	360	297	238	165	94	-76	-239	-353	-391	-234	2	202	411
LAT (DEG N)	31.6	31.9	32.1	32.6	33.1	34.3	35.4	36.2	37.0	38.0	39.1	39.8	39.8
LONG (DEG W)	75.4	76.1	76.8	77.4	78.0	79.4	80.6	81.4	80.5	78.3	74.9	70.2	65.6
STM SPEED (KT)	4	6	7	7	8	8	6	4	8	12	16	18	18
HEAT CONTENT	28	40	47	38	11	9999	9999	9999	9999	9999	0	0	0

FORECAST TRACK FROM BAMB INITIAL HEADING/SPEED (DEG/KT):235/ 2 CX,CY: -1/ 0

T-12 MAX WIND: 55 PRESSURE OF STEERING LEVEL (MB): 586 (MEAN=625)

GOES IR BRIGHTNESS TEMP. STD DEV. 100-300 KM RAD: 21.0 (MEAN=20.0)

% GOES IR PIXELS WITH T < -20 C 50-200 KM RAD: 16.0 (MEAN=68.6)

INDIVIDUAL CONTRIBUTIONS TO INTENSITY CHANGE

	6	12	18	24	36	48	60	72	84	96	108	120
SAMPLE MEAN CHANGE	1.	2.	3.	4.	6.	8.	9.	10.	11.	12.	12.	13.
SST POTENTIAL	0.	1.	1.	2.	1.	-1.	-3.	-5.	-7.	-9.	-11.	-12.
VERTICAL SHEAR	0.	-1.	-1.	-1.	-1.	0.	1.	1.	0.	-2.	-5.	-10.
PERSISTENCE	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	0.	0.
200/250 MB TEMP.	0.	1.	1.	1.	2.	3.	5.	8.	11.	13.	15.	16.
THETA_E EXCESS	-1.	-1.	-2.	-3.	-5.	-7.	-9.	-12.	-16.	-18.	-20.	-22.
700-500 MB RH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
GFS VORTEX TENDENCY	0.	1.	1.	1.	0.	-3.	-6.	-9.	-12.	-13.	-13.	-12.
850 MB ENV VORTICITY	0.	1.	2.	3.	4.	5.	7.	7.	7.	7.	6.	5.
200 MB DIVERGENCE	0.	0.	1.	1.	2.	3.	3.	3.	2.	2.	2.	1.
ZONAL STORM MOTION	0.	0.	0.	0.	0.	-1.	-1.	-1.	-2.	-2.	-3.	-3.
STEERING LEVEL PRES	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	0.
DAYS FROM CLIM. PEAK	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
SUB-TOTAL CHANGE	1.	3.	5.	7.	9.	8.	5.	1.	-5.	-10.	-16.	-23.
SATELLITE ADJUSTMENTS												
MEAN ADJUSTMENT	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-2.
GOES IR STD DEV	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GOES IR PIXEL COUNT	-1.	-1.	-2.	-2.	-2.	-2.	-1.	1.	2.	2.	2.	0.
OCEAN HEAT CONTENT	0.	0.	0.	0.	0.	0.	-1.	-1.	-1.	-1.	-1.	-1.
TOTAL ADJUSTMENT	-1.	-2.	-2.	-3.	-3.	-3.	-2.	-1.	0.	0.	0.	-2.
TOTAL CHANGE (KT)	0.	1.	3.	4.	7.	5.	3.	1.	-4.	-10.	-16.	-25.

** 2008 ATLANTIC RI INDEX AL942008 INVEST 09/25/08 00 UTC **

(25 KT OR MORE MAX WIND INCREASE IN NEXT 24 HR)

12 HR PERSISTENCE (KT): 0.0 Range:-45.0 to 30.0 Scaled/Wgtd Val: 0.6/ 1.1

850-200 MB SHEAR (KT) : 27.8 Range: 35.1 to 3.2 Scaled/Wgtd Val: 0.2/ 0.4

D200 (10**7s-1) : 53.0 Range:-20.0 to 149.0 Scaled/Wgted Val: 0.4/ 0.6
 POT = MPI-VMAX (KT) : 62.6 Range: 25.1 to 130.7 Scaled/Wgted Val: 0.4/ 0.4
 850-700 MB REL HUM (%): 60.8 Range: 56.0 to 88.0 Scaled/Wgted Val: 0.1/ 0.1
 % area w/pixels <-30 C: 5.0 Range: 17.0 to 100.0 Scaled/Wgted Val: 0.0/ 0.0
 STD DEV OF IR BR TEMP : 14.1 Range: 35.1 to 3.2 Scaled/Wgted Val: 0.7/ 0.9
 Heat content (KJ/cm2) : 32.8 Range: 0.0 to 132.0 Scaled/Wgted Val: 0.2/ 0.0

Prob of RI for 25 kt RI threshold= 4% is 0.3 times the sample mean(12.3%)
 Prob of RI for 30 kt RI threshold= 3% is 0.3 times the sample mean(7.8%)
 Prob of RI for 35 kt RI threshold= 1% is 0.3 times the sample mean(4.5%)

ANNULAR HURRICANE INDEX (AHI) AL942008 INVEST 09/25/08 00 UTC ##
 ## STORM NOT ANNULAR, SCREENING STEP FAILED, NPASS=2 NFAIL=5 ##
 ## AHI= 0 (AHI OF 100 IS BEST FIT TO ANN. STRUC., 1 IS MARGINAL, 0 IS NOT ANNULAR) ##
 ## ANNULAR INDEX RAN NORMALLY