Web-ATCF

Presenter

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Providence Software

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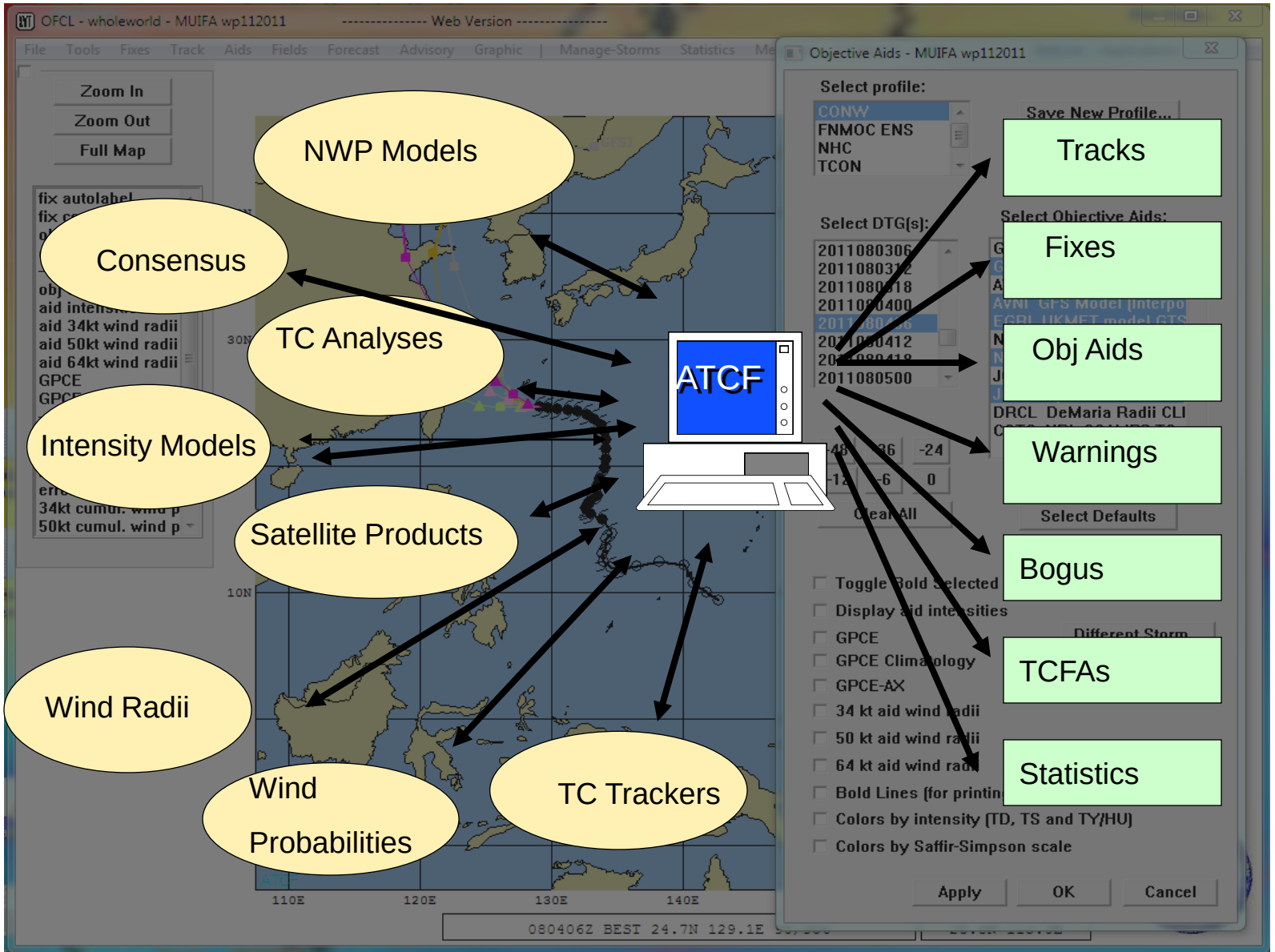
NRL TC Page group

Acknowledgment: HFIP, USN

Outline

- What is ATCF?
- What is Web-ATCF?
- Web-ATCF examples
- Links and passwords

Automated Tropical Cyclone Forecast System (ATCF)



ATCF Requirements Meeting

- Annual meeting to discuss requirements
- Participants include NRL, JTWC, CPHC, NHC, and FWC-Norfolk
- Discuss completed tasks
- Add new tasks
- Prioritize open tasks

FY11 Completed Tasks	70
FY12 New Tasks	50
Total Open Tasks	135

Web-ATCF Specifics

- ATCF is for TC forecasters (e.g., NHC)
- Web-ATCF is for situational awareness, training, research
- Server is at NRL, updated near real-time
- Works on most Windows and Linux systems
- Uses Java Web Start (3 minute installation)

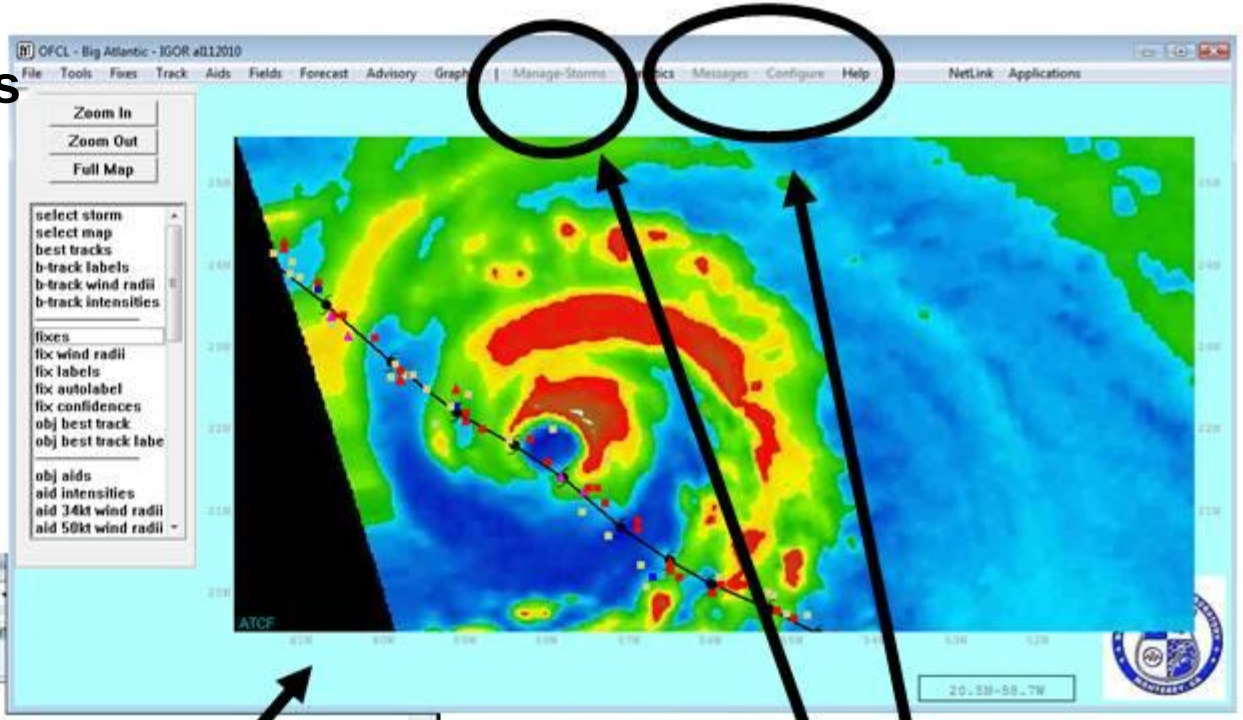
Web-ATCF "Display Only" Mode

-Situational awareness

-Training

-Demonstrations

-Research

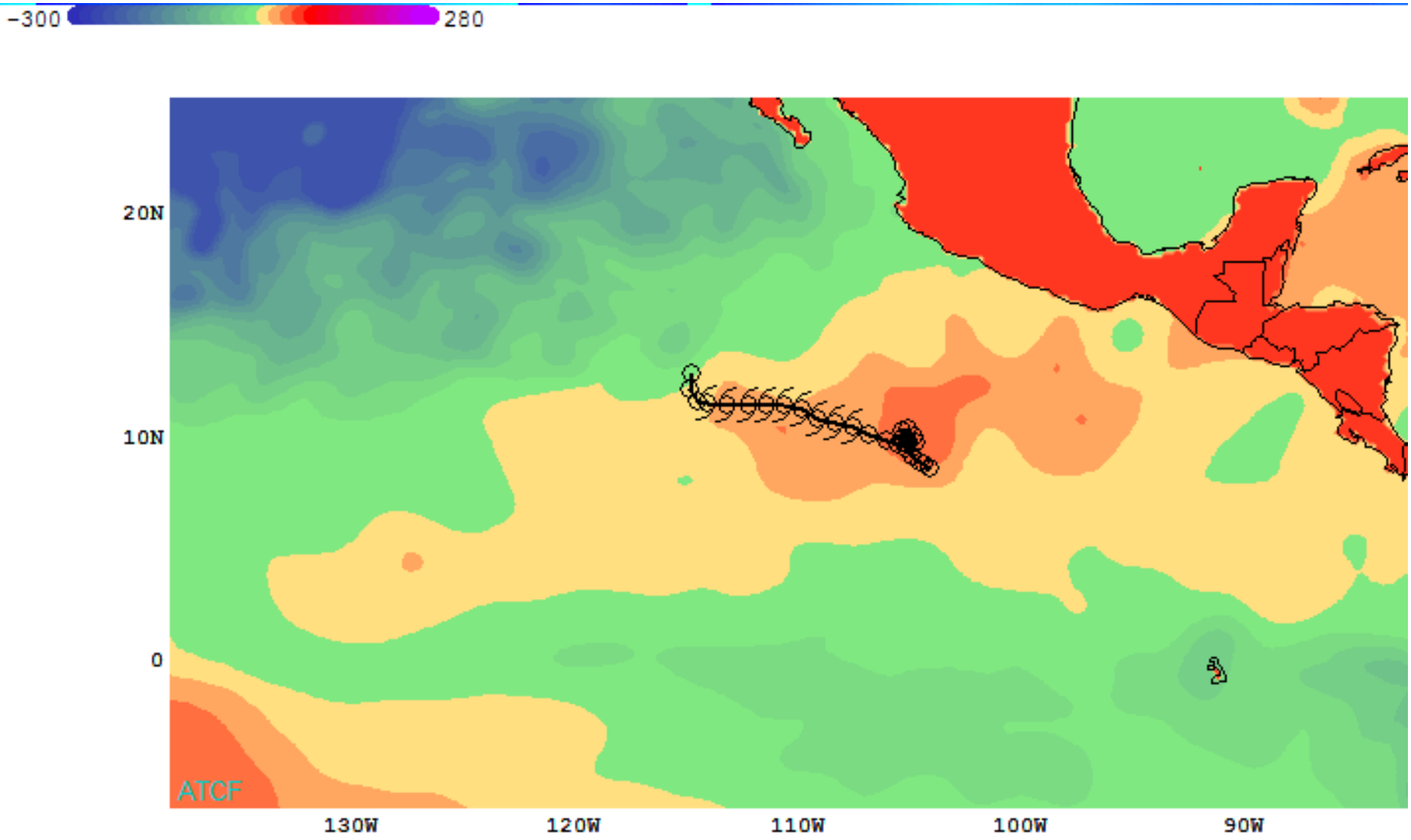


Disabled Menu Items

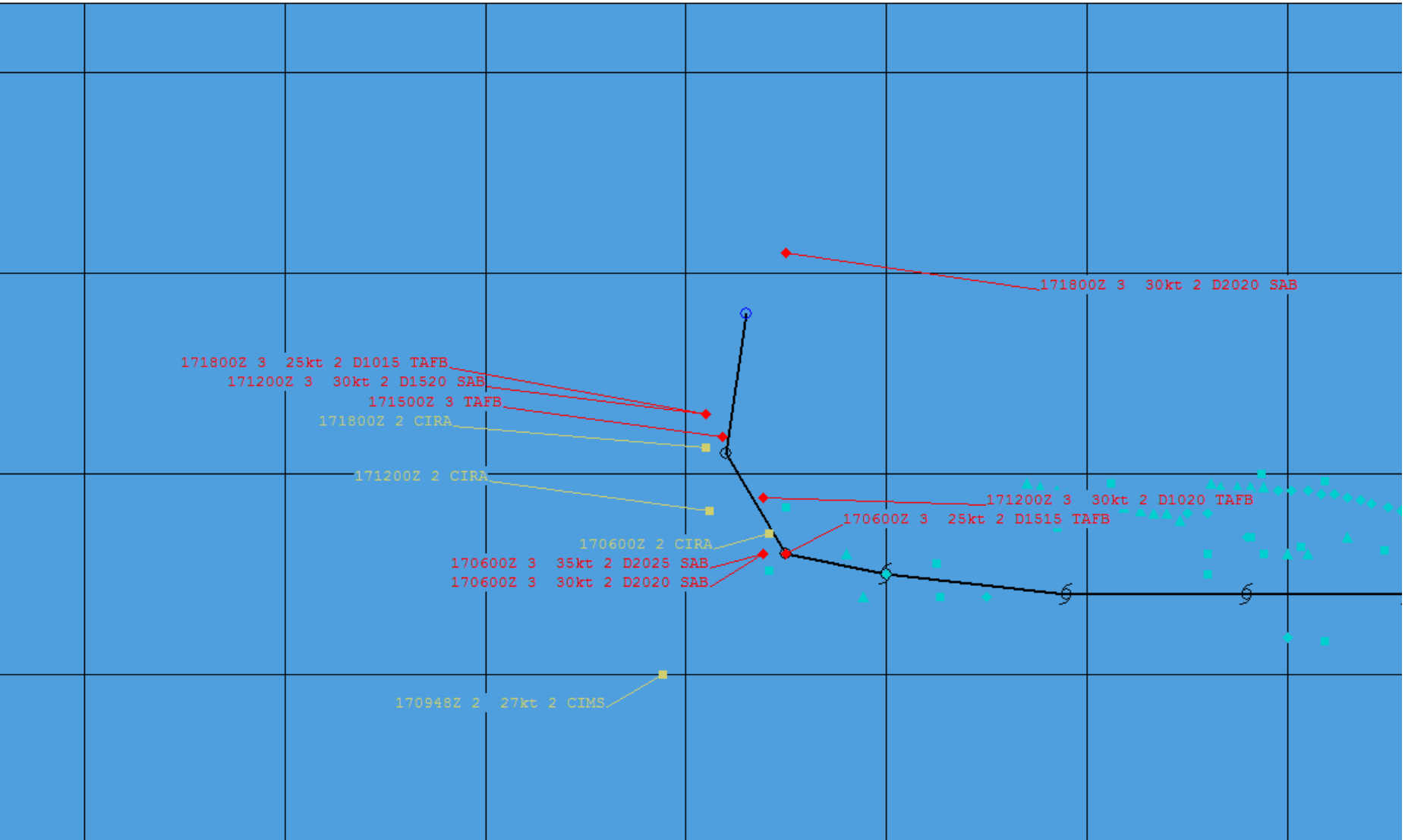
Demo

Disabled functions throughout application. Allows no advisories, no communication with web pages, no storm file updates. Near real-time updates on live tropical cyclones.

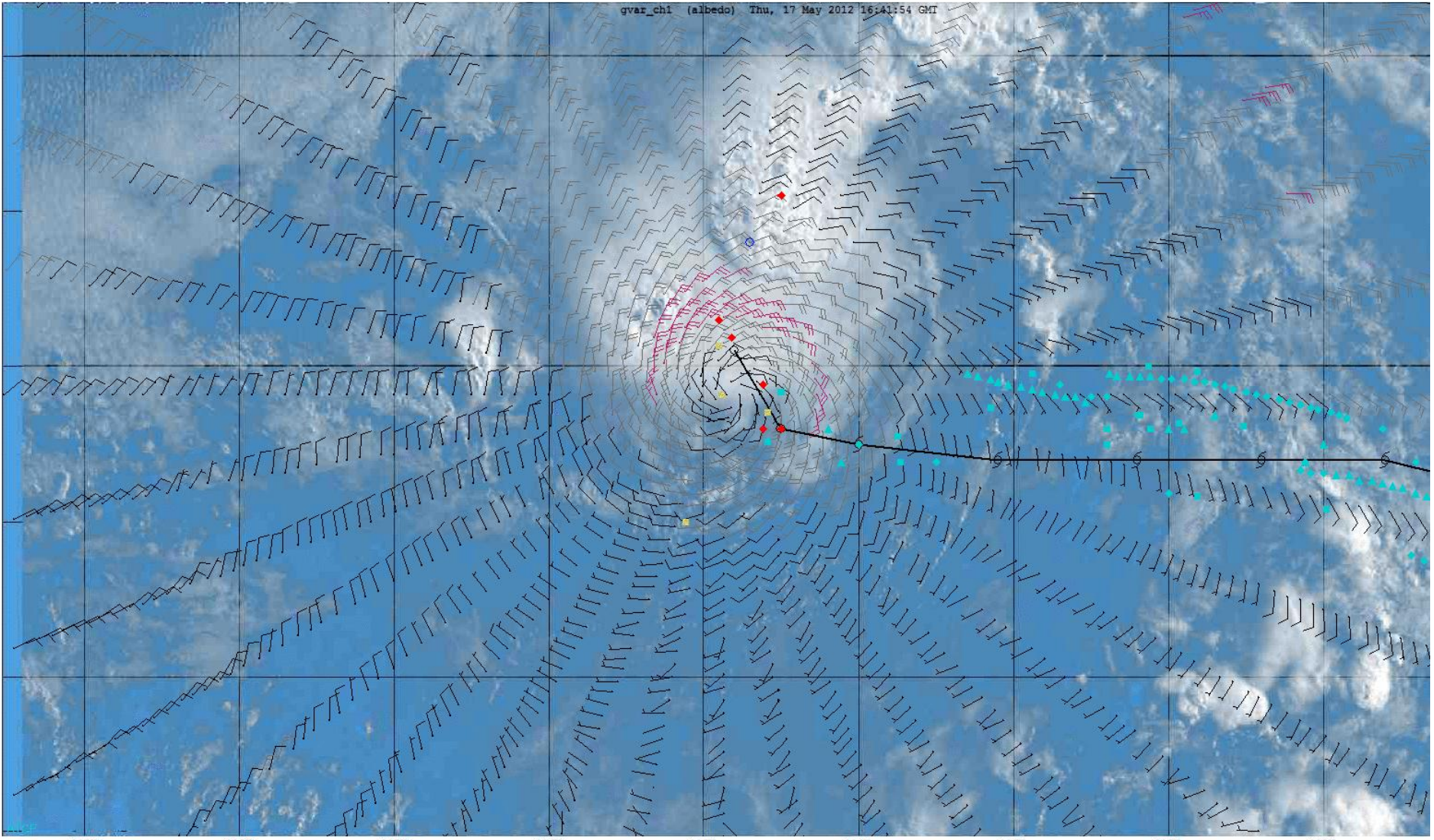
Aletta (01E) with NCODA Ocean Heat Content (Kj/cm**2)



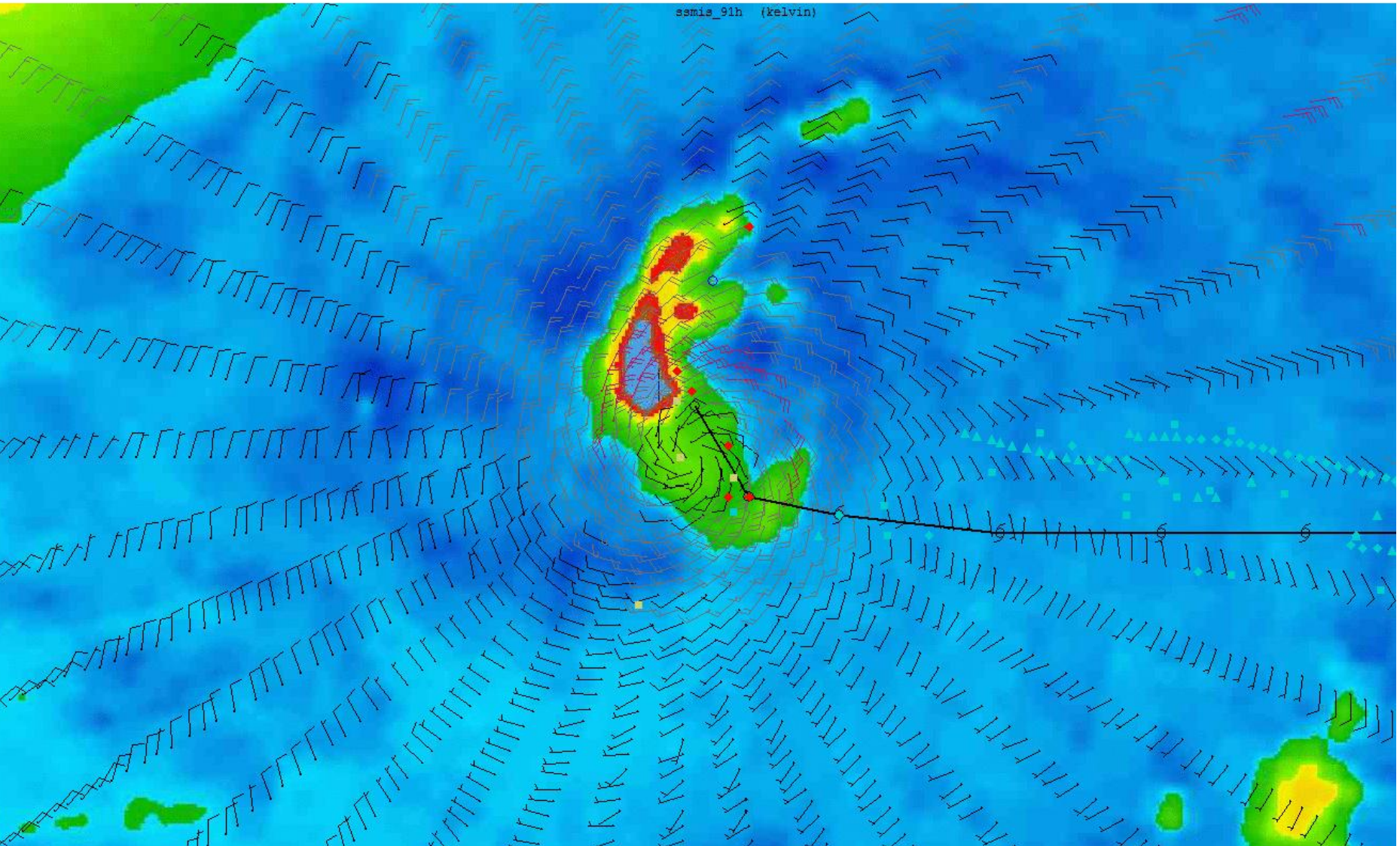
Fixes with Labels



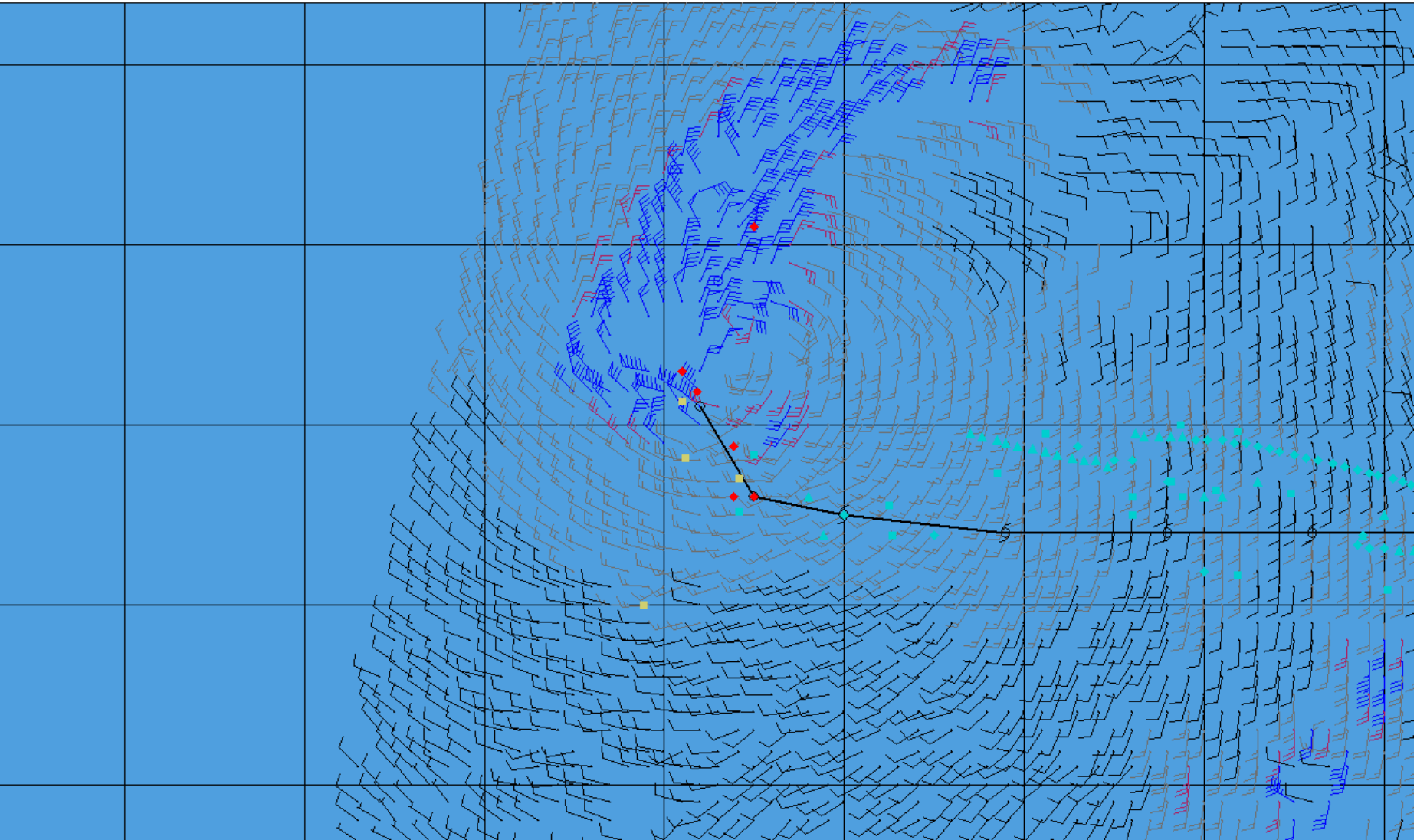
CIRA Wind Analysis with Vis Image



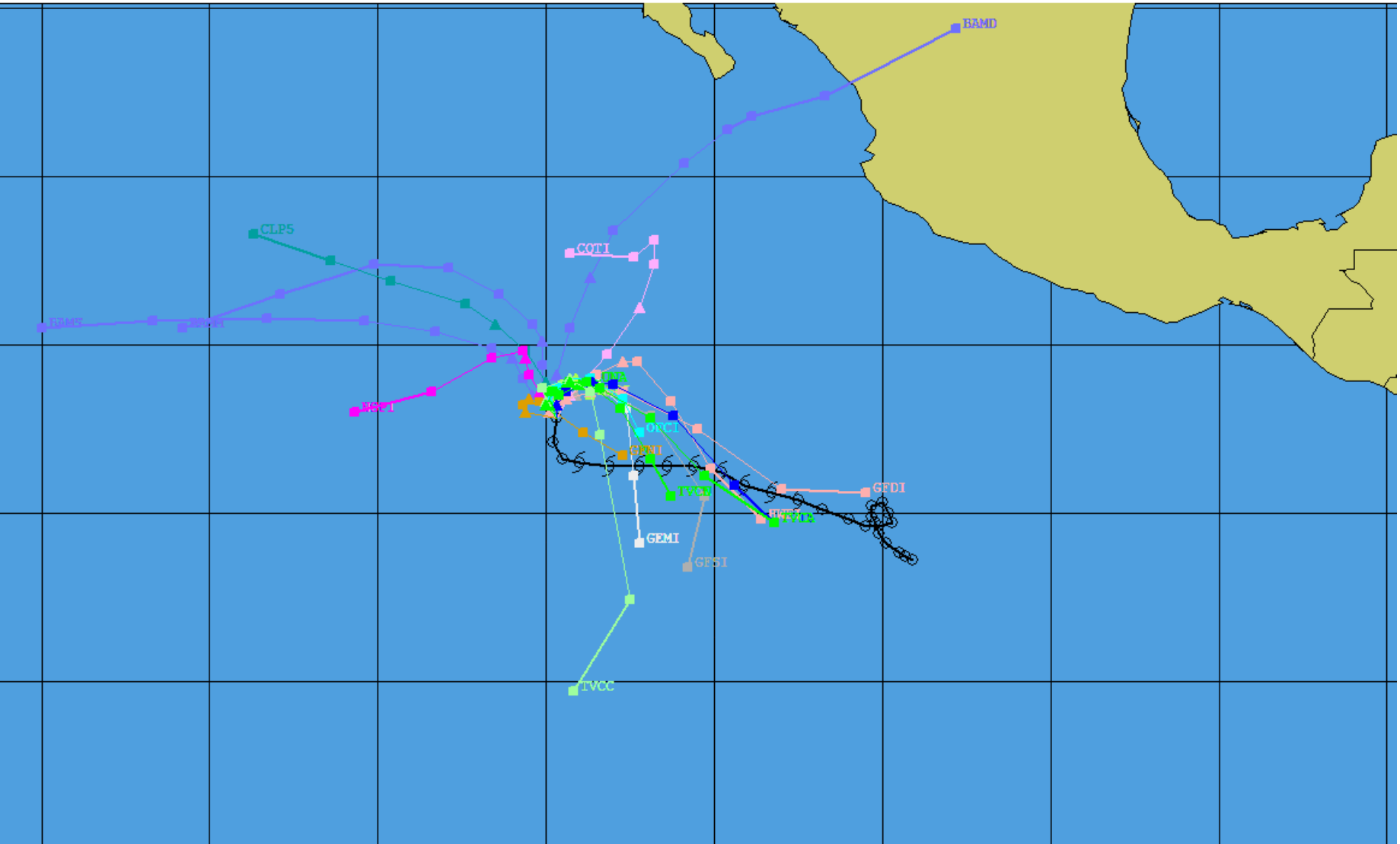
CIRA Wind Analysis with SSMIS Image



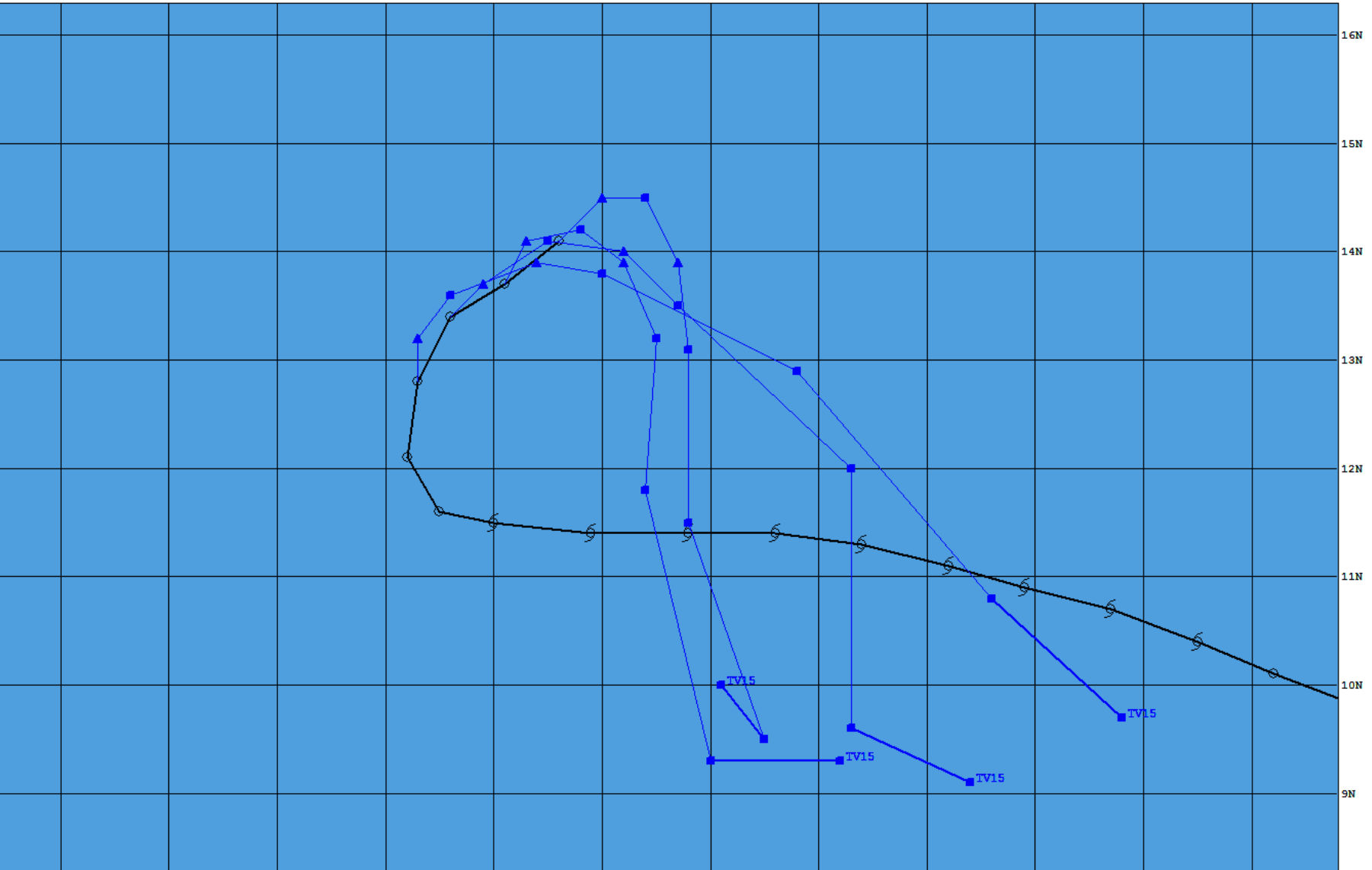
Scatterometer pass over 01E



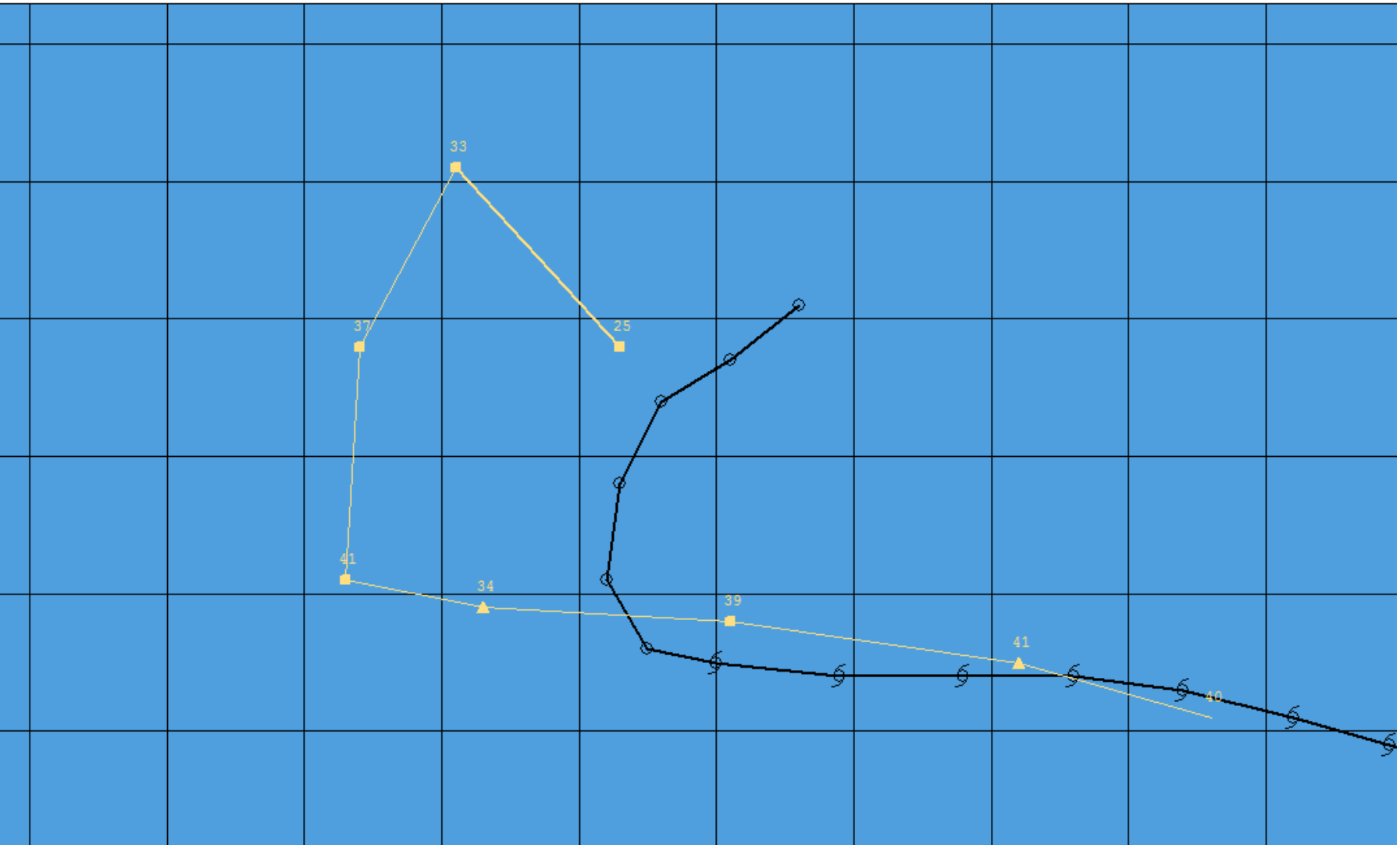
Current Objective Aid Tracks



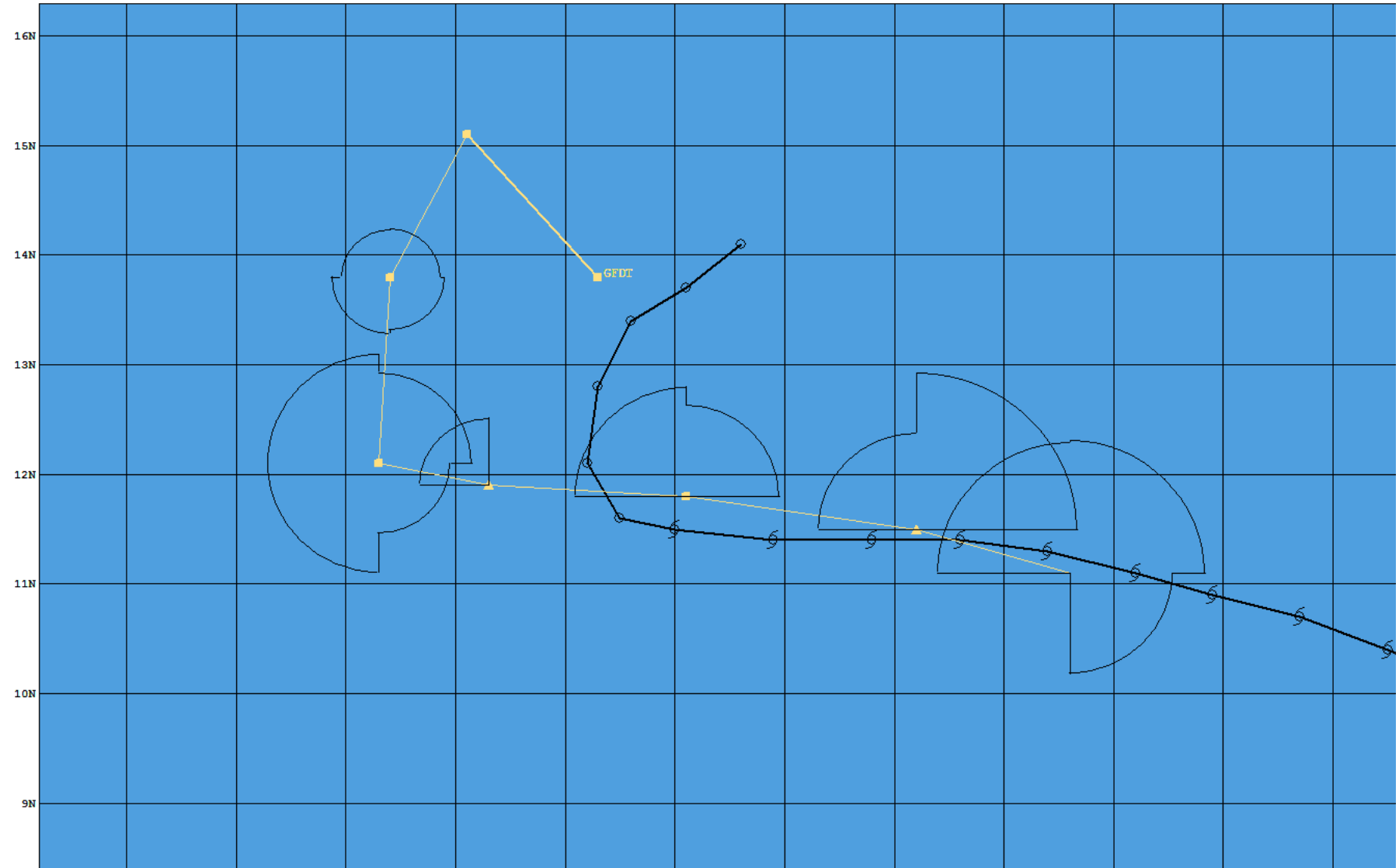
Objective Aid Forecast Time Sequence



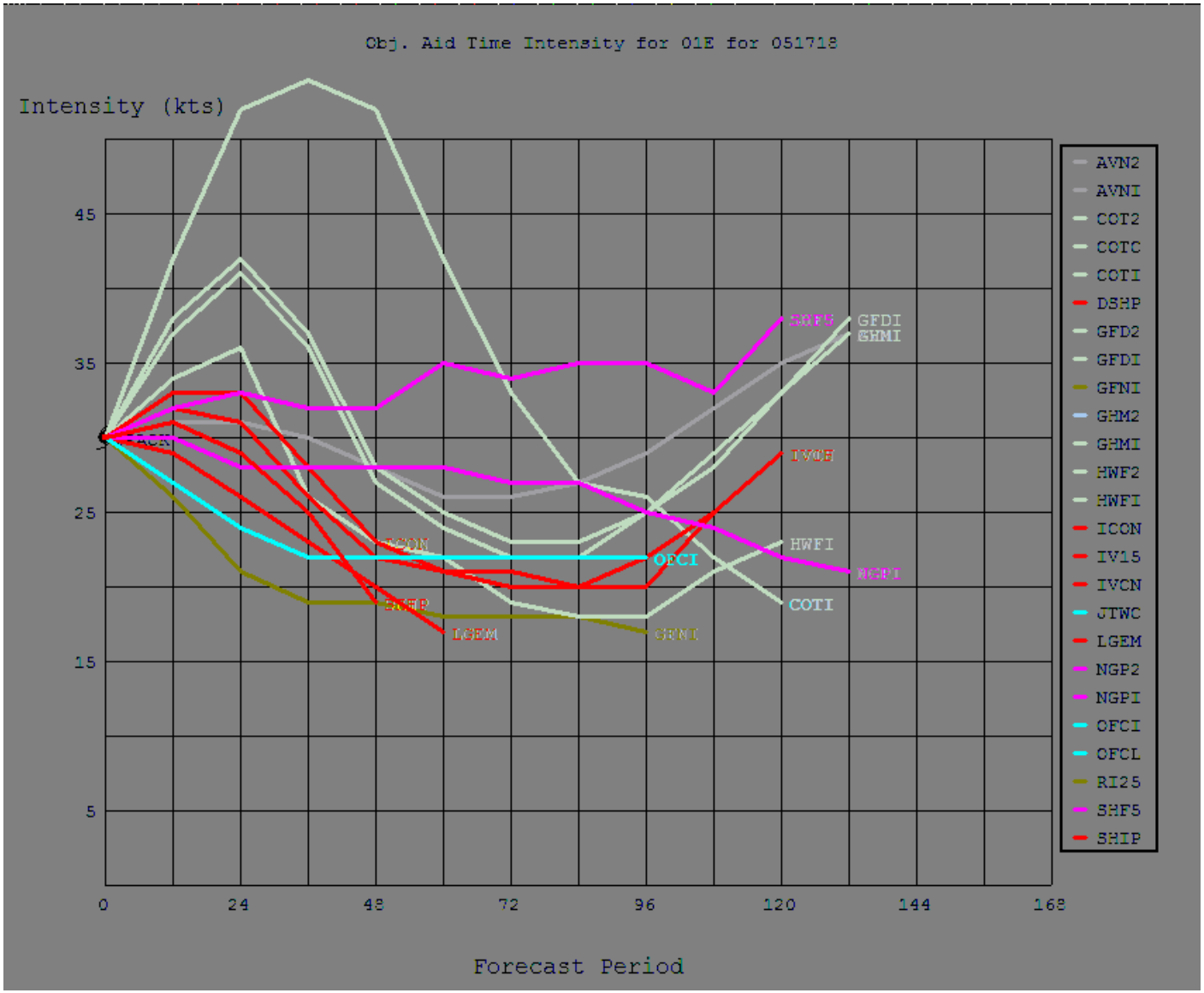
Objective Aid Plot with Intensity



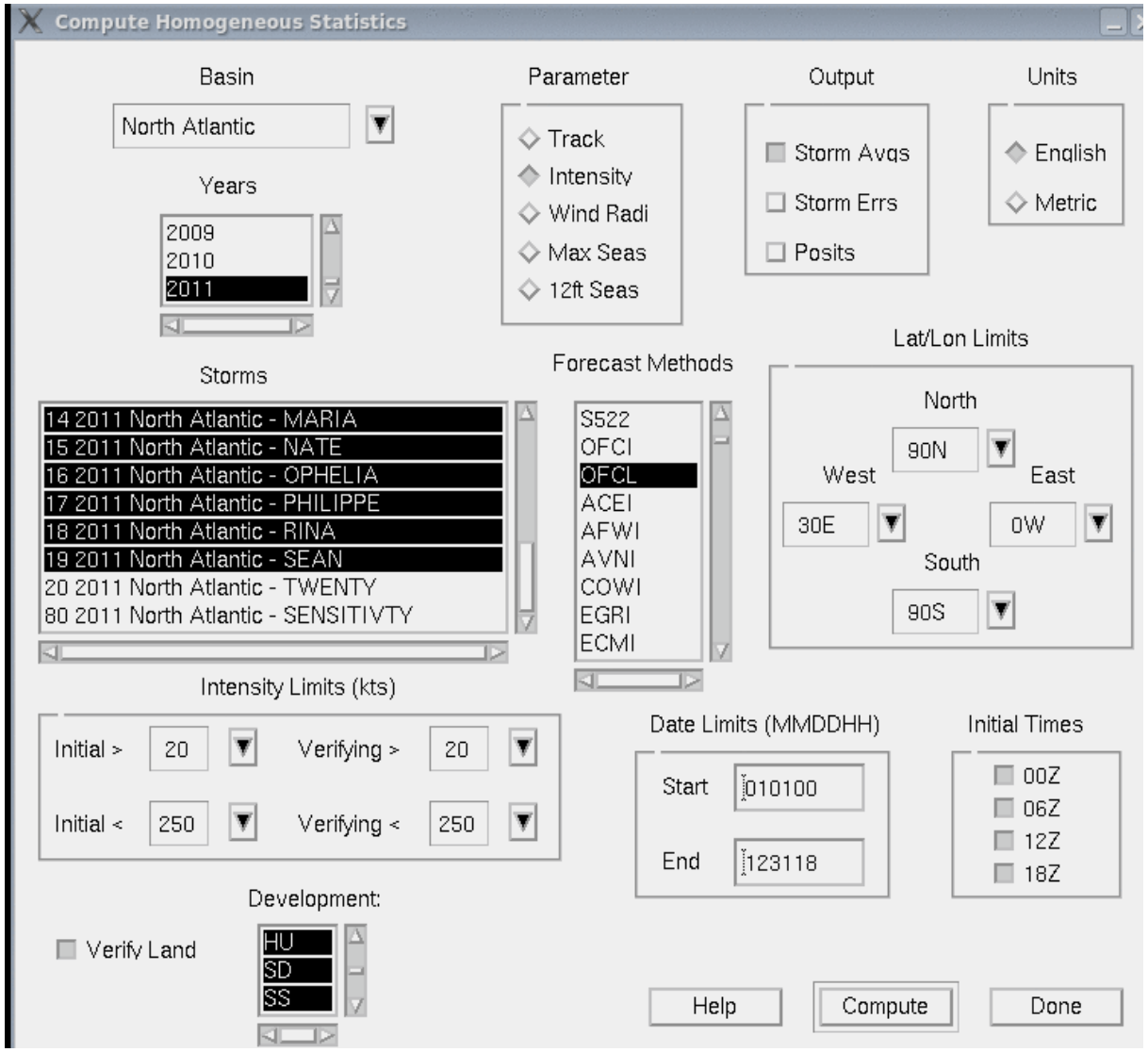
Objective Aid Wind Radii



Time vs Intensity Graph



Homogeneous Statistics Dialog



Track Forecast Statistics

average track errors (NM) FOR HOMOGENEOUS SAMPLE

	00	12	24	36	48	72	96	120	144	168
TVCN	11.9	29.3	45.9	62.7	79.3	119.6	180.1	267.6	292.4	322.2
TV15	11.9	29.4	45.3	58.3	71.7	111.1	169.1	245.5	257.6	322.2
#CASES	325	272	244	219	195	158	130	108	67	58

ERROR STANDARD DEVIATION (NM) FOR HOMOGENEOUS SAMPLE

	00	12	24	36	48	72	96	120	144	168
TVCN	11.2	17.9	28.3	36.3	46.5	77.9	108.1	144.4	152.2	167.5
TV15	11.2	18.4	29.2	35.8	46.5	77.7	106.8	136.1	138.9	167.5
#CASES	325	272	244	219	195	158	130	108	67	58

TVCN=operational consensus at NHC
TV15= HFIP 1.5 consensus

Intensity Forecast Statistics

AVERAGE INTENSITY ERRORS (KT) FOR HOMOGENEOUS SAMPLE

	00	12	24	36	48	72	96	120	144	168
IVCN	3.1	6.7	9.3	11.1	12.2	16.1	15.5	14.8	0.0	0.0
IVCR	3.1	6.6	9.1	10.7	11.5	15.1	14.2	13.7	0.0	0.0
IV15	3.1	6.7	9.2	10.8	11.9	15.7	14.2	13.1	0.0	0.0
#CASES	217	180	159	143	128	104	86	79	0	0

ERROR STANDARD DEVIATION (KT) FOR HOMOGENEOUS SAMPLE

	00	12	24	36	48	72	96	120	144	168
IVCN	3.4	5.2	7.2	8.2	9.2	11.4	11.1	11.2	0.0	0.0
IVCR	3.4	5.1	7.0	7.8	8.9	11.0	10.7	11.1	0.0	0.0
IV15	3.4	5.1	7.0	7.9	8.9	11.1	10.7	9.8	0.0	0.0
#CASES	217	180	159	143	128	104	86	79	0	0

AVERAGE INTENSITY BIAS (KT) FOR HOMOGENEOUS SAMPLE

	00	12	24	36	48	72	96	120	144	168
IVCN	-1.2	0.5	1.7	3.8	5.8	9.2	11.2	10.9	0.0	0.0
IVCR	-1.2	0.2	1.2	2.9	4.6	7.7	9.5	9.5	0.0	0.0
IV15	-1.2	-0.6	0.2	1.6	2.9	5.1	5.6	5.6	0.0	0.0
#CASES	217	180	159	143	128	104	86	79	0	0

IVCN=operational intensity consensus at NHC
IV15= HFIP 1.5 intensity consensus
IVCR=NRL real-time consensus (IVCN aids + COTI + RI aid)

Web-ATCF Access

- http://www.nrlmry.navy.mil/atcf_web/xvtnet/hfip/xvtnet.html
- Temporary password is !hfip! (will work for one week)
- Recommend viewing 3 short training videos at bottom of page
  - Web-ATCF and objective aids
  - General overview
  - Imagery overlay

Questions?