20080909H1 Scientist Log (Marks)
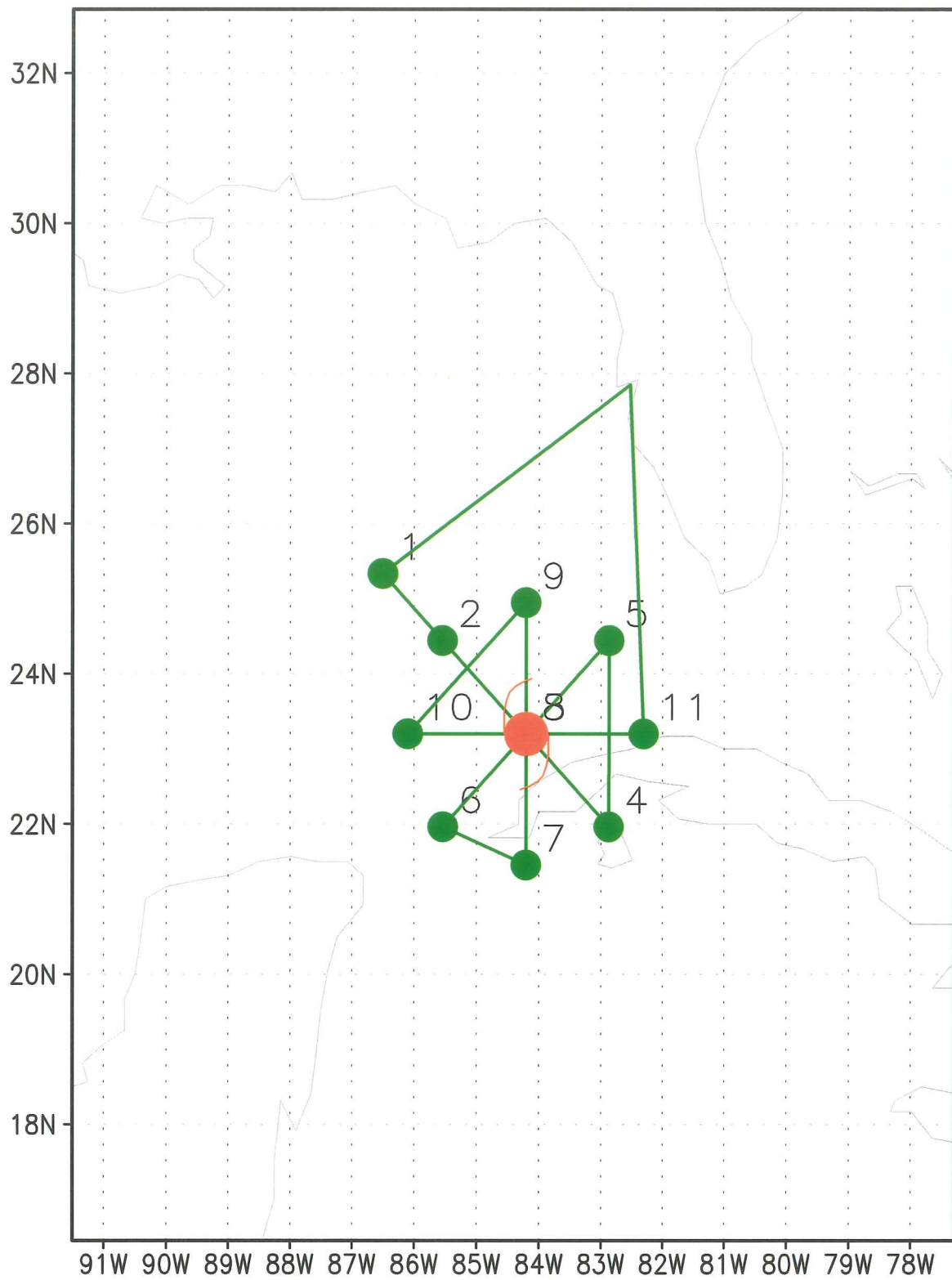
Time	Comment
200932	TO MacDill
204755	AXBT launch #1 channel 12 SST 27.5 very shallow mixed layer
205755	AXBT launch #2 channel 12 SST 27.7 deeper mixed layer
210620	IF 180 nm NW of center turn TK 135 AXBT#3/drop#1 combo SST 27.0 noisy signal
211000	radar system down
211400	start descent to 8000 ft RA
212300	at 8 kft
212430	Start 1st leg drop combo channel 12 SST 27.6 AXBT#4, Drop#2 Point (1) 105 NW
2155	entering outer band 15 nm NW of center nice TA too bad LF no joy!
215647	eyewall drop#3 in NW eyewall
215830	near center, too close to shore for eye drop fix 22 57, 83 45 penetration#1
215900	climb to 10 kft to cross Cuba
221100	feet wet S of Cuba
221800	abeam of Isle of Youth TK 135 to SE point (2) 105 SE shallow water SFMR in Gulf of Batabano drop #4
222720	turn N just outside a small intense rainband picking our way N past Havanna
224700	TK N just abeam of Havana picking through outer convective band
230200	TK SW to center at point (3) drop#5 just WSW EYW
231300	small isolated eyewall surrounded by big outer ring of a rainband 80 nm out AF fix 22 49 83 53
232345	dropsonde #6 NE eyewall
232624	in eye dropsonde #7 penetration#2
232825	drop#8 in SW eyewall TK SW to point 4 105 SW center. Then P. Chang will take over.
233955	approaching outer band launch dropsonde #9 and prototype as well
235400	end leg at point (4) drop #10 TK 045 to center
001900	dropsonde #11 in SW eyewall - experimental drop only
002100	center fix TK 045 center 23 05, 84 03 penetration#3
002320	dropsonde #12 NE eyewall still small isolated center
003500	turn tk 225 to center
004840	in center turn TK 0 for 50 nm center fix 23 04, 84 06
005210	drop #13 in N Eyewall
011400	center turn tk 270 23 06, 84 08 968 mb 300/07 motion penetration#4
011999	drosonde#14 in W eyewall
013449	dropsonde#15 in 50 NM out on South side. Now tracing inbound
014411	eye penetration#5
015245	AXBT #5 launch
020100	dropsonde#16 launch TK 291
020400	Doppler crashed 0152__
020800	tracking under ASCAT satellite ... trk 290 from center
021000	launched another AXBT #6
022500	turn TK 110 back to center. Got a good underpass of ASCAT
024000	dropsonde #17 35 nm out
024600	center fix 23 10, 84 17 penetration#6
025110	dropsonde #18 in WNW eyewall plus a prototype (did not work)
025500	turn tk back to eye TK 110 penetration#7
030420	center fix dropsonde #19 TK N to Tampa STorm motion 293/7

Dropsondes -- 19 regular plus 3 experimental prototypes
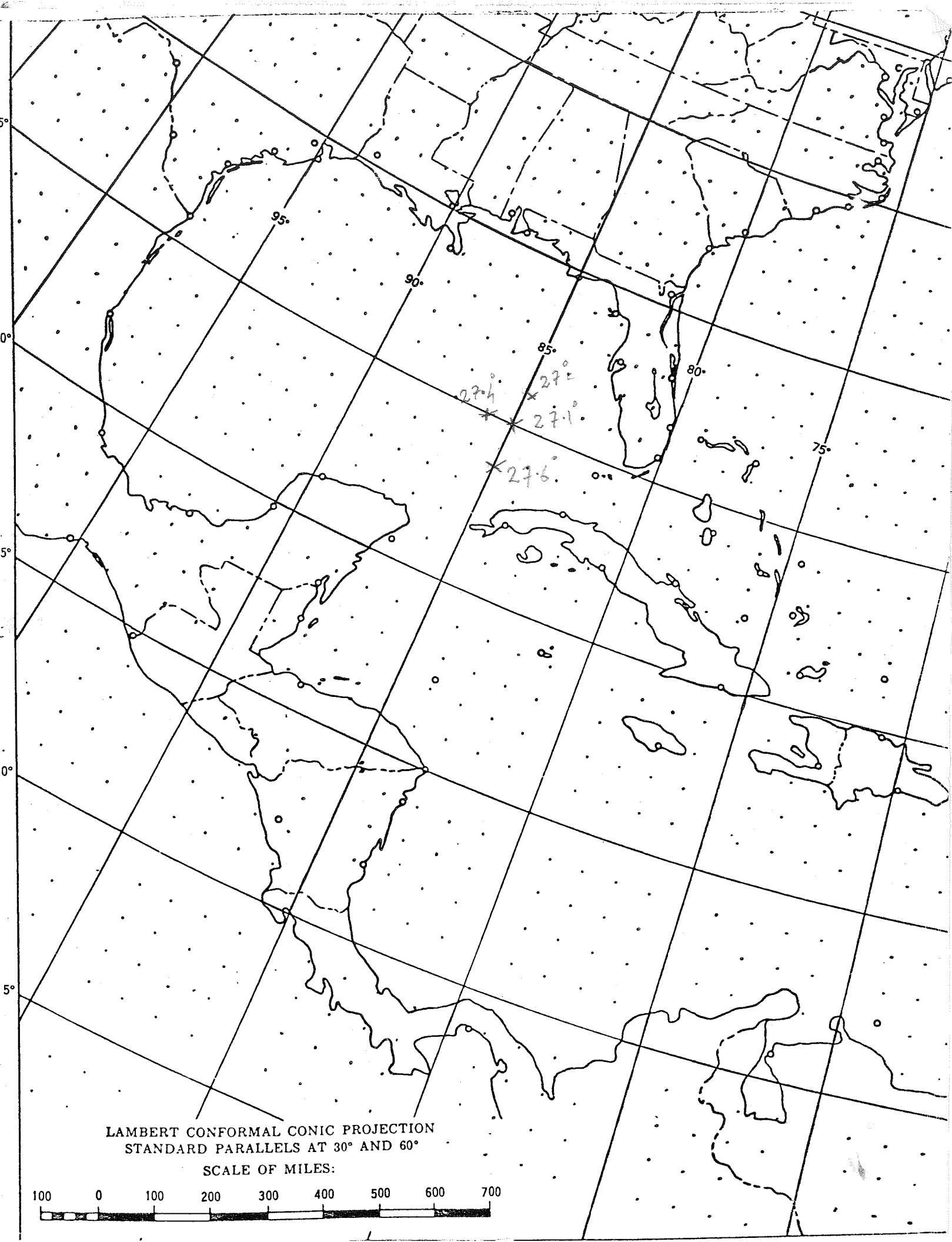AXBT -- 6
Penetrations -- 7
Radar tapes -- 3

Average Flight Level Wind Over 30 Seconds (knots)
0 5 10 15 20 25 30 35 40 45 50 55 60+

95°

90°

85°

27.4 27.0

27.1

27.6

80°

75°

LAMBERT CONFORMAL CONIC PROJECTION
STANDARD PARALLELS AT 30° AND 60°

SCALE OF MILES:

100   0   100   200   300   400   500   600   700

Hurricane IKE Forecast Discussion

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000
WTNT44 KNHC 080900
TCDAT4
HURRICANE IKE DISCUSSION NUMBER  29
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL    AL092008
500 AM EDT MON SEP 08 2008
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CUBAN RADAR OBSERVATIONS INDICATE THAT THE CENTER OF IKE CONTINUES
MOVING WESTWARD OVER CENTRAL CUBA. THE EYE IS STILL VISIBLE BUT
THE EYEWALL IS NOW ENTIRELY OVER LAND AND ITS STRUCTURE HAS DEGRADED
OVER THE PAST FEW HOURS. THE INITIAL INTENSITY IS LOWERED TO 90
KT. THE OFFICIAL FORECAST AGAIN SHOWS LESS WEAKENING OVER LAND
THAN INDICATED BY THE DECAY SHIPS MODEL...IN THE EVENT THAT THE
CENTER EMERGES OVER WATER SOONER THAN FORECAST. IF IKE FOLLOWS THE
FORECAST TRACK IT WILL BE OVER LAND FOR ABOUT 36 HOURS...AND WOULD
ALMOST SURELY BE WEAKER IN THE SOUTHEASTERN GULF THAN SHOWN HERE.
NEVERTHELESS...THE ENVIRONMENT IN THE GULF IS EXPECTED TO BE VERY
CONDUCIVE TO RESTRENGTHENING WITH A VERY DIFLUENT LIGHT SHEAR UPPER
WIND PATTERN AND WARM WATERS BELOW. THE MAJOR UNKNOWN IS HOW
DISRUPTED IKE WILL BE WHEN IT EMERGES.

THERE HAS BEEN NO SIGNIFICANT CHANGE TO THE FORECAST TRACK. IKE'S
TRAJECTORY IS EXPECTED TO BEND GRADUALLY TO THE RIGHT AS THE STORM
NEARS A WEAKNESS IN THE SUBTROPICAL RIDGE OVER THE NEXT COUPLE OF
DAYS...AND THE GUIDANCE MODELS ARE TIGHTLY CLUSTERED THROUGH 72
HOURS. AFTER THAT...THE GFS IS AN OUTLIER IN CALLING FOR A SHARP
SHORT WAVE TROUGH TO MOVE THROUGH THE PLAINS STATES ON DAYS 4-5.
THE GFDL AND HWRF...WHICH USE THE GFS FOR BOUNDARY CONDITIONS...MAY
BE PICKING UP ON THAT AND SHOW A BEND TO THE RIGHT AT THE END OF
THE FORECAST PERIOD. THE OTHER GLOBAL MODELS...SUCH AS THE
ECMWF...SHOW MUCH MORE RIDGING OVER THE EASTERN UNITED STATES AT
THOSE RANGES AND HAVE A MORE WESTWARD TRACK. EVEN THOUGH THE GFDL
HAS PERFORMED VERY WELL WITH IKE SO FAR...I'VE CHOSEN NOT TO ADJUST
THE TRACK EASTWARD··GIVEN THAT THE LARGE-SCALE FIELDS IN THE GFS
HAVE NO SUPPORT FROM THE OTHER MODELS. IT IS STILL TOO SOON TO
KNOW WHAT PORTION OF THE GULF COAST WILL ULTIMATELY BE AFFECTED BY
IKE.

FORECAST POSITIONS AND MAX WINDS

```
INITIAL     08/0900Z 21.2N  77.3W    90 KT...INLAND
 12HR VT    08/1800Z 21.6N  79.0W    75 KT...INLAND
 24HR VT    09/0600Z 22.4N  81.2W    65 KT...INLAND
 36HR VT    09/1800Z 23.1N  83.0W    60 KT...EMERGING INTO GULF
 48HR VT    10/0600Z 23.9N  84.5W    75 KT
 72HR VT    11/0600Z 25.5N  87.0W    90 KT
 96HR VT    12/0600Z 27.0N  90.0W   100 KT
120HR VT    13/0600Z 28.5N  93.0W   100 KT
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Hello all,

I just wanted to make a few points, since generally it appears the present crews have someone who knows what to do for the analysis and superobs.

1) Always remember to run check_ftp.pl from /home/hrd on the HP workstation. ÊThis automatically ftp's files. ÊIf it appears to hang up, end it, and start the script again.

2) Don't use Gamache account on ftp to ftp to hrd/incoming/gamache. ÊUse anonymous. ÊOtherwise the files never get moved to the correct directories. ÊIf you want to ftp directly to the pub/hrd/gamache subdirectory that is the correct one, do it if you must.

3) To run Doppler analysis software from the Mac:

Êa) Start X11. ÊKill the first window it opens up, and select a new terminal from the X11/applications submenu. ÊThis sets the correct path for everything to work.

Êb) Êtype "xhost+" in the xterm window, to allow the HP to open Xwindows on the Mac

Êc) On 42, "telnet 10.42.16.187" and login with hrd account

Êd) On 43, "telnet 10.43.16.188" and login with hrd account

Êe) Once logged in type "export DISPLAY=10.xx,16.yyy:0.0" where xx is either 42 or 43, and yyy is the IP of the Mac. ÊYou can find this IP by looking in the network system preferences on the Mac

Êf) After exporting display, type "xterm -sb -sl 20000 &" and it will open a new terminal on the Mac from which you can run software. ÊTo be sure xhosting is correct, type "export DISPLAY=10.xx.16.yyy:0.0" in this window as well.

Êg) You can now run xwindows software from here, such as radar_slicer (in fact since Mac is little endian, this is the way to look at the bigendian .w files on HP)

Êh) jobfile_display may put up a blank black window. ÊIn that case click around in lower left corner till you find the hurricane/tropical storm toggle switch, this should flush the wind. ÊAfterward make sure you have correctly selected hurricane or tropical storm (hurricane in Ike).

Êi) for each run check ALL entries at the top of the menu, ALL the first column, and ALL the entries down to the radius (max radius) parameter that allows you to set the max radius of the analysis. ÊAnything below that or in 3rd column should not be changed.

Êj) If you want to see the quality controlled analyses as they are done use ja_graphics instead of ja and you can watch ja do its job

Hope this helps.

Thanks, John

All,

In reference to the two problems you had yesterday with sondes:

1. ÊRepeatedly sending out the same tempdrop message:

You must manually overwrite the tempdrop.dat file at the end of each sonde. When you exit out of EDITSONDE after it is processed (16 in the main menu), it will ask you if you want to overwrite tempdrop.dat. ÊThe default is *NO*. ÊYou must overwrite the default in order to save the new tempdrop.dat file. ÊSo, you must answer 'yes' in order to get the new tempdrop.dat file out.

If you want to check that a new tempdrop.dat file is there each time before you send it out, you can open a terminal:

cd sondedata cat tempdrop.dat

This will show you what is in the current tempdrop.dat file.

I believe that this is the problem you are having. ÊLet me know if this doesn't work. ÊI will be on x-chat to help out.

2. ÊNo END in .avp file.

There is a red screen that shows the status of the various sondes. ÊEach sonde will have a STA line (start), LAU (launch) and END (end). ÊThe AVAPS operators keep a backup sonde ready, so, for some sondes, there will be STA and END, with no LAU.

You can look at a sonde before you get the END, but do not process it for transmission. ÊOnly process a sonde for transmission after the END shows up on the red screen. ÊIf the END shows up on the red screen but EDITSONDE says that there is still no end of drop, there could be transmission problems. ÊYou have two options at that point:

A. ÊTry to process the sonde. ÊIf the sonde clearly reported to the surface, just process it and send it out.

B. ÊIf you try the above, and the sonde did not reach the surface, you should get a new copy of the sonde from the AVAPS operator. ÊThere are two ways to do this:

1. ÊSome AVAPS operators know how to retransmit a sonde to HAPS. ÊIf they know how to do this, this is the easiest. 2. ÊGet the sonde D-file (the name of the file has the 9-digit sonde ID) onto a thumb drive, download it to the mac, then ftp it to HAPS and place it in the sondedata subdirectory. ÊYou must rename the D-file to have the same form as the other files (gNNNNNNNNN.avp), where NNNNNNNNN is the 9-digit sonde ID.

Let me know if you have any questions. ÊYou can print these instructions out at the hotel or on the plane so you have it.

Sim