

AWIPS OB2 Release Notes

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**For more information concerning AWIPS functionality, please refer to the AWIPS User's Manual online at:
<http://isl715.nws.noaa.gov/awipsdoc>**

1.0 D2D/TEXT/OTHER APPLICATIONS

1.1 AWIPS Verification Program (AVP)

- ! **Problem:** If the Verification Editor is left open, fields can be edited even after the cccVERxxx message is formatted. **(DR 5202)**
If the Verification Editor is left open over a period of time when one or more messages are formatted and transmitted (around 1130Z and 2330Z), the formatted and transmitted runs will still be editable. The Verification Editor window does not update to indicate the change in status of the runs from U to F or T. It is possible that users may think they are editing values that the cccVERxxx message recipients will get when they are really not.
- Workaround:** Close the Verification Editor and reopen it if it has been open over the period of time when the formatting and transmitting of messages occurs (around 1130Z and 2330Z).
- ! **Problem:** The Last Obs Ceiling and Visibility values are editable for Snow Only and Public Stations. **(DR 5203)**
Stations set up in the AVP as Public and Snow Only have "NA" in the rows for Ceiling and Visibility except the first field, Last Obs. The Last Obs field is editable, but the others in the row are not. For Snow Only stations, these fields are "MSNG". When trying to edit and save these values for Snow Only stations, an error message pops up: "VerScreen::write(): saved failed, status = 2011". Clicking OK and changing the values back to "MSNG" allows the user to continue. For Public stations, the application ingests values for the Last Obs fields. They can be edited as desired. The values are formatted into the cccVERxxx messages sent to NCEP.
- Workaround:** Edit both the Last Obs fields to "MSNG", and no extra data will appear in the formatted messages.
- ! **Problem:** The Verification Editor does not check between different parameters for valid observation values. **(DR 5205)**
The Verification Editor allows the user to save combinations of meteorological parameter values that are not allowed in observations. A user can save the following combinations that are not allowed in observations: A definite Ceiling with a Cloud Amount of "CLR" or "SCT", a Wind Spd > 6 Knots with "VRBL" Wind Dir, a Wind Spd > 0 with a Wind

Dir "0", 12-Hr Snow > 0 with POP/(in) = "0.00", and Obs6h Wind Spd (greatest in a six hour time window) < Obs Wind Spd.

Workaround: Users should check to make sure the values they are editing are correct.

- ! **Problem:** Uninitialized CCFMEF variables from IFPS are not set to Missing. **(DR 10031)**

Forecast values from the IFPS digital forecast matrix that have the IFPS special value for MISSING may not be set to the AVP's MSNG value or other valid values when extracted from the DFM cube, processed, and written to the AVP database. For example, IFPS missing Cloud Amounts are incorrectly set to the illegal value of zero.

Workaround: Use the Verification Matrix Editor to enter valid and correct values.

- ! **Problem:** Verification does not transmit if KBLU is used as one of the verification stations. **(DR 12710)**

When station KBLU is used, the Create_AEV_Message log reports the following:
LOG-STATUS: Log file opened on host ds1-tbdw at Tue Jun 3 11:30:48 2003
11:30:48.621 fillin_elements.ecpp PROBLEM: ERROR in function fillin_elements:
AEV_Station_Type not found for station_id = 8110.
The station_id 8110 is KBLU.

Workaround: Do not use KBLU as one of your verification stations.

1.2 Climate

- ! **Problem:** Some Climate Report Format selections should not be allowed. **(DR 7004)**
In the Report Format GUI, some fields concerning last year's data should not be user-selectable, such as "normals" and "departure from normal".

Workaround: None.

- ! **Problem:** Resultant wind is not output in the NWWS product when selected. **(DR 7007)**
When all wind elements for the NWR monthly report are selected, the resultant wind is not output in the NWWS product, although it is output to the NWR product.

Workaround: Take the resultant wind value from the NWR product and edit it into the NWWS product if desired.

- ! **Problem:** The NWWS version of Climate attempts to transmit deleted products. **(DR 7011)**

If the user creates an NWWS product, but then decides to delete the product using the Climate editor, the product is deleted as expected. However, the program continues to

request *transferNWWWS.pl* to transmit the product out over the NWWWS. Since the product no longer exists, the *transferNWWWS.pl* script generates an error message.

Workaround: None. However, since the product no longer exists, no product is transmitted and the *transferNWWWS.pl* script just generates an error message. This error occurs only once per deleted product.

- ! **Problem:** Sky cover is not enhanced with SCP observations. **(DR 7442)**
The sky cover value in the climate products is not enhanced with satellite information. Therefore, for most ASOS stations, this value represents only the lowest 12,000 feet.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** The crons that determine when and how the Climate program runs should be separate from *ingest.crontab.ds1*. **(DR 7756)**
Most sites need to change the times of execution of their climate programs from the baseline *ingest.crontab.ds1*. *Ingest.crontab.ds1* is used for standard execution times of programs, but the climate program is user-configurable.

Workaround: Edit the Climate entries directly in *ingest.crontab.ds1* as necessary.

- ! **Problem:** Missing data in GUIs should be displayed as M. **(DR 7923)**
Missing data are stored in the database under various values, such as 9999, 9999.0, -9999, and 99. The stored data should not be changed, but the display of these data in the GUI should be M.

Workaround: None.

- ! **Problem:** Warning messages from database changes should be improved. **(DR 7925)**
The Quality Control Climate Database warning messages need to be improved to provide the users with more informative and useful messages.

Workaround: None.

- ! **Problem:** Snowfall estimate is output as 0 instead of missing. **(DR 8195)**
The snowfall estimate may appear as 0 despite the fact that precip is reported and the maximum temperature is less than 32 F.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** Eliminate extra record for annual normals. **(DR 8815)**
When the Initialize Climate Database GUI is launched with the "Annual" option, the GUI contains "First" and "Last" buttons. These buttons are useful for "Daily", "Monthly", and

"Seasonal" records. However, for "Annual", since there is only one annual record per station, both buttons need not be active.

Workaround: None.

- ! **Problem:** The monthly program does not retrieve the correct dates from the database. (DR 10639)

The monthly climate program retrieves the correct maximum and minimum temperatures, max 24 hr precip, and max snowfall and snow depth for the month, but does not retrieve the correct dates associated with these values. The date is instead read from the MSM. Also, the year of the MSM is not read. Instead, the climate program assumes that the value in the database is the current year.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** Some monthly average sunshine data is missing from the F6 product. (DR 10682)

The F6 product summarizes the total number of minutes of sunshine, and should give the average number of minutes of sunshine and the average percentage of possible sunshine, but the last two fields are missing from the final product.

Workaround: Edit the final product manually as necessary.

- ! **Problem:** SG (snow grains) are incorrectly stored as hail in the database. (DR 12074)
SG observations are stored in the database as hail, but should be stored as snow.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** The monthly climate program incorrectly calculates the number of days with precip ≥ 0.0 and the number of days with snow ≥ 0.0 . Also, the program should be modified to accept days with precip or snow $\geq T$. (DR 12219)

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** Selecting Edit Climate Product on the Linux text workstation causes the NWR Browser and NWWS Review windows to appear on the Linux graphics monitor. (DR 12279)

When Climate is run manually from a Linux graphics monitor, selecting Edit Climate Product (when new appears) on the text workstation causes the NWR Browser and NWWS Review windows to appear on the graphics monitor where the climate program was originally executed. These windows should appear on the text workstation as they did in previous releases.

Workaround: Simply use the NWR Browser and NWWS Review windows on the graphics monitor when they appear there.

- ! **Problem:** The Initialize Climate GUI does not accept a monthly record snow depth of T. (DR 12429)

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** Climate should not allow the rerun of the monthly climate product if new records have been set. (DR 12551)

The monthly climate should follow the same paradigm as the daily climate by not allowing the report to be rerun if a new record has been set.

Workaround: Use caution when rerunning the monthly climate product for a month in which a record was set.

- ! **Problem:** The snowfall liquid equivalent is incorrectly rounded to nearest tenth of an inch. (DR 12553)

The snowfall liquid equivalent is rounded to the nearest tenth of an inch, but instead should be reported to the hundredth of an inch. This is true for the liquid equivalent of the current month, as well as since July 1 (the start of the annual period).

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** The MM/DD/HH is missing from the max storm total precip value. (DR 12554)

In the NWWS product output, the date associated with the maximum storm total precip is missing in the text.

Workaround: Edit the product manually as necessary before transmission.

1.3 Color Curve/Blinking/Image Combination

- ! **Problem:** User-created color curve becomes distorted when combining images. (DR 1298)

Create a new color curve, one that shades the freezing line on surface temperature for example. If that image is then combined with another image, the newly created curve becomes distorted, i.e., the shaded region that before the combination highlighted the freezing line now shades a different and larger range of temperatures on the part of the combined image. This is due to the 4-bit + 4-bit image combination algorithm.

Workaround: None.

! **Problem:** The toggling of a combined image does not always work properly. **(DR 2677)**

Workaround: Click on the legend several times, until it works properly again.

! **Problem:** There are two anomalies when changing color curves of images in 4-panels. **(DR 8052)**

1) When changing color curves of images in 4-panel displays, if the color curve of the upper left image is chosen to be modified, the first attempt to modify it fails. The color curve remains the default.

2) When changing color curves of images in 4-panel displays, if the images in all four panels are chosen to be modified, the first attempt to modify the color curves fails; only the color curve in the bottom right panel is modified, but it is modified incorrectly.

Both of these problems occur whether the user uses the image properties window to change the entire color curve, or the edit color window is used to modify a section of the color curve. In addition, selecting "Load to the Pane" does not allow color curves to be loaded to a pane of choice - the selection always goes to the bottom right image.

Workaround: Try the modifications again. The second attempt at modifying the single and multiple color curves succeeds.

! **Problem:** The color enhancement on a GOES sounder product is infrequently incorrect. **(DR 10782)**

The color enhancement on the GOES sounder product DPI Total Precipitable water is infrequently reversed. The problem always occurs in the lower right hand portion of the image.

Workaround: None.

! **Problem:** The Graphic Color Chooser/Centroid does not work correctly after the color bars are moved in HSB mode. **(DR 10894)**

On the Linux workstation, load a graphic into the large pane and bring up the Color Chooser tool. Select HSB, move any of the Color Bars (Hue, Saturation, or Brightness), and then move the Centroid around. At this point, the user cannot manually move the Centroid into the green area. If the user switches back to RGB mode, the Centroid still cannot be used correctly. This problem only occurs on the Linux workstation.

Workaround: The user can still select any color using the Color Bars.

! **Problem:** Data Scale does not work for combined or multiloop products. **(DR 11438)**
When using Data Scale from the D2D Options menu, the product selected is displayed on its native scale. For example, data from a non-local radar will display on a map encompassing its range. However, when using Data Scale, if the user selects a combined

or multiload product, such as Z/V, 4-panel satellite or radar, or a model family, the scale adaptation does not work.

Workaround: None.

1.4 Exiting D2D

- ! **Problem:** D2D cannot be closed while it is iconified. **(DR 1543)**
If the D2D is iconified, selecting mouse button one and selecting Close from the menu does not close the D2D.

Workaround: Double click on the D2D icon to restore it, and then select Exit from the File menu.

1.5 Hourly Weather Roundup (HWR)

- ! **Problem:** The HWR HTML Help page does not display because Netscape is unable to find the file named /awips/adapt/hwr/doc/html/doc/html/index.html. **(DR 12187)**

Workaround: Refer to the User's Manual and System Manager's Manual for the latest information on the HWR application.

- ! **Problem:** The HWR help available via Netscape is out of date. **(DR 12367)**

Workaround: Refer to the User's Manual and System Manager's Manual for the latest information on the HWR application.

1.6 Local Analysis and Prediction System (LAPS)

- ! **Problem:** LAPS infrequently does not run for an hour due to an *lga* crash. **(DR 6385)**
The LAPS *lga* executable may crash when it cannot access RUC data. However, most of the time when *lga* cannot use RUC data, there is no crash and *lga* just tries to use Eta data.

Workaround: None. This problem occurs rarely and LAPS works the next hour.

- ! **Problem:** LAPS relocalization does not indicate if it succeeded or failed. **(DR 6407)**
There is no indication when the LAPS relocalization is done. The user receives no notification if it succeeded or failed.

Workaround: Look at the logs in /data/fxa_local/laps/log to see if it was successful.

! **Problem:** The confirmation message when relocalizing using the LAPS Tool GUI is not clear. (DR 6524)

The LAPS Tool GUI has a Confirmation window that appears when the user selects Localize LAPS. The window looks like it is intended to tell the user not to run the localization when the LAPS cron is running. The window says: "Procedure takes ten minutes. Consider that it is hh:mm and LAPS usually runs at :20 after the hour." The box does not indicate when LAPS ends or tell the user to check on AS2 to see if it is done. It could show specific times that the localization should not be run.

Workaround: LAPS localization should not be run during the LAPS cron run, which is usually between 20 and 30 minutes after the hour.

! **Problem:** The LAPS tool for displaying data used for current analysis does not work for a short time after 0Z. (DR 7774)

The LAPS tool for displaying data used for current analysis indicates that the files that it needs to view are not found for a short period of time after 0Z. If the tool GUI is opened shortly after 0Z, the data that were used in the previous run cannot be viewed until LAPS runs again around 0020Z.

Workaround: View the logs manually through a Telnet window, or wait until LAPS is finished to view the 0020Z LAPS run logs.

! **Problem:** LAPS cannot handle two template files. (DR 9562)

If there are two template files in the LAPS directory, for example a template file and a template.orig file resulting from site changes, LAPS fails to run successfully.

Workaround: Move the template.orig file to another directory for safe keeping.

1.7 Local Storm Report (LSR)

! **Problem:** There are inconsistencies with LSR report products displayed on D2D. (DR 10605)

When a user creates an LSR from within the LSR GUI and saves or transmits the report, a netCDF file is created for display on D2D. There are three LSR entries on the menu on D2D: Office, Local, and Region. When the netCDF file is created, the Local and Region green times update, but the Office green time does not. When the user loads the Local or Region product, nothing is displayed, but if the user selects Office, the report just created is displayed.

Workaround: View the LSR products from your site by using the Office menu item, but be aware that the green time will not update.

! **Problem:** The cities list for LSR is not valid for marine reports. (DR 10834)

There are a few options within the LSR GUI where a report can be received from a source that does not have a location in the LSRcities.txt file. These sources include Buoy, Coast Guard, and Ship. There are no buoy stations within the Location list that can be selected, but a location is needed before the event can be saved. This results in a ship calling in a storm report and a location over land being needed to save the event. Either a lat/lon option should be added, or buoy markers should be included in LSRcities.txt. This problem also affects how events are displayed on D2D.

Workaround: None.

- ! **Problem:** Remarks do not appear in the LSR product when saved to the event log before preview. **(DR 11731)**

On the HP workstation, any remarks that are entered as part of an event only display in the preview window when the Save Event and Preview for Transmission button is selected from the Create/Edit Event tab in the LSR GUI. If the event is saved only using the Save Event tab and previewed selecting the Preview Selected Events for Transmission button from the Event log tab, the remarks do not appear in the preview window. This error does not occur on the Linux workstation.

Workaround: Use the Save Event and Preview for Transmission button to save and preview products before transmission.

- ! **Problem:** Very close spotter locations may cause the LSR GUI to crash. **(DR 11893)**
On the HP workstation, when two spotter locations are very close together (i.e., the lat/lon pairs are very similar) in the spotters.dat file, the LSR GUI may not run successfully. This problem does not occur on the Linux workstation.

Workaround: Use the Linux workstation to launch the LSR GUI if this problem occurs. However, most sites will probably not encounter this problem.

- ! **Problem:** An unusually long entry in the Initials box can crash the LSR GUI. **(DR 12677)**
Normally the initials box should only contain a few characters. However, if a user inputs a long string of characters in the box, the LSR GUI can crash. Other instances of long strings result in a message stating "Event Save Unsuccessful."

Workaround: Limit the number of characters entered in the box to the user's initials or name.

- ! **Problem:** The free text in the LSR product is in lower case letters. **(DR 12896)**
The free text should appear in upper case letters, like the rest of the text.

Workaround: None.

! **Problem:** LSR does not handle counties that are in more than one CWA correctly. (DR 12914)

This results in LSR operating with many cities missing or not recognized.

Workaround: Edit the product manually as necessary before transmission.

1.8 Looping/Sampling/Swapping Panes/Zooming

! **Problem:** Straight map lines sometimes disappear when zoomed. (DR 4415)
If the user zooms in sufficiently (usually max on WFO scale), map lines may disappear. This seems to happen when neither end of a line segment is on the display.

Workaround: The map line can be made to reappear by roaming the display or zooming back out.

! **Problem:** Two skew-T sampling problems. (DR 8196)

1) If a user has lat/lon sampling on, then displays a skew-T chart, the sample includes lat/lon information appropriate for the scale that was previously displayed. It cannot be turned off, since there is no lat/lon sampling button in the pop-up (appropriately).

2) The theta/theta-e readout in skew-T samples includes a degree sign in front of the K. There should not be a degree sign there.

Workaround: Turn lat/lon sampling off before displaying a skew-T.

! **Problem:** Sampling of blinking images is incorrect. (DR 8198)

When sampling a blinking image, a sort of reverse video effect occurs under the sample text.

Workaround: The effect is transitory, going away if an auto-update occurs or something is toggled off and on.

! **Problem:** Swapping 4-panels in 3-pane layout produces incorrect display times. (DR 8226)

In 3-pane layout, when swapping the 4-panel VIL Density procedure (0.5 reflectivity, Comp Ref., VIL, ET) from large pane to small pane, the displayed times in the small pane all default to the time noted in the upper left panel (in this case, that for the 0.5 reflectivity). Thus, for all but a few seconds of each volume scan, the times noted for the volumetric images in the top right (CR) and lower two bottom panels (VIL and ET) are incorrect. It appears that the displayed time, for a 4-panel display, defaults to the time stamp of that image in the upper left-hand panel. The products in the other panels do not update until the upper left panel updates.

Workaround: None.

! **Problem:** Swapping panes eliminates overlays more than 7 frames from the end of the loop. (DR 12761)

The following is an example of this problem: Load multiple (>7) frames of satellite data into the main pane. Step back greater than 7 frames, choose Inventory load mode, and load METARs to create an overlay. Swap into small pane (if looping is on, notice default loop is most recent 7 frames no matter how many were originally loaded). Swap the data back into main pane to restore the original conditions. Then, step back to the frame where the METARs were overlaid over the satellite, and the overlay is no longer present. This does not happen when the overlay is less than 7 frames back, possibly because that information is still stored by the loop in the small pane. This can happen when other data types are overlaid as well.

Workaround: Avoid swapping overlays such as this into the small pane if possible. This problem does not occur when overlaying products over the entire loop.

1.9 Map Features/Legends

! **Problem:** The Hide Legends feature does not work correctly when there are no time varying images or overlays being displayed. (DR 2678)

Workaround: Use the Hide Legends feature only when time varying data are displayed.

! **Problem:** Large panes do not load correctly the first time D2D is launched after login. (DR 7409)

When logging into a workstation, then launching D2D, the map background in the large pane does not load correctly. The large pane loads with a little 2 x 3 inch CONUS map background in the top left corner, and the rest of the pane is black. The large pane stays this way until the mouse is run over the miniature map background or the menu bar. At that point, the large pane fills up with several of these miniature map backgrounds, then quickly switches to the correct map configuration.

Workaround: None, but no operational impact. The problem disappears as soon as the mouse is run over the pane. In addition, the problem only happens when D2D is launched the first time after logging into a workstation.

1.10 NCEP/Redbook Graphics

! **Problem:** Some NCEP Model Graphics products have errors. (DR 707)
Bad MRF MeanRH and AVN 850-500 Thickness data cause the UKMO, ECMWF, and S-blend 6-10 500 height products to be centered over Africa when they should appear over the pole.

Workaround: None. OST is working with NCEP on the Redbook Graphics issues.

- ! **Problem:** Some NCEP model products have different times on product dates, product legends, and green times. **(DR 2479)**
Some NCEP model products have product times (in the upper left corner), product legends, and green times that all differ from one another. The products are: From the Model Graphics cascading menu in the Upper Air menu, MRF 0-5 Wave 500 hgt, 120h UKMO 500 hgt, 120h ECMWF 500 hgt, and 6-10 day 500mb Height. From the National Centers models cascading menu in the NCEP/Hydro menu, NGM Moist Conv.

Workaround: None.

- ! **Problem:** Several Redbook Graphics products have incorrect date time groups on the WMO headers. **(DR 4142)**
Several Redbook Graphics (RBGs) date time groups (DTG) on their product's WMO Header are not correct. The DTG time should be the cycle time (also called basis time) for the forecast or analysis. For example, a 12 hr forecast of a product with a valid time of 09/00Z will have a cycle of 081200 (08/12Z). The AWIPS CP assumes the product WMO header date time group (TTAAii CCCC DDHHMM) will always be the cycle time and uses this information to "time stamp" the product which is key to time matching the product with other data types. The WMO DTG is created at the product generation source point which is typically at NCEP/NCO. An inventory of RBGs with the DTG problem has been accomplished and forwarded to NCEP. The methodology for checking to see if the WMO header of the RBG is the cycle time is to compare the AFOS label valid time with the AWIPS valid time label. Another way is to **cat** the file and compare the AWIPS DTG on the RBG file name with what appears in the file dump resulting from the **cat**.

Workaround: None.

- ! **Problem:** Text is curved on some Redbook Graphics products. **(DR 9614)**
On some Redbook Graphics products, some of the text displayed for the products is curved on the D2D display. This makes the text more difficult to read. Some products that have this problem include the 3-7, 6-10, and 8-14 Day Heat Index Fcst, West Atlantic Fonts/Press Fcst, and North Atlantic Surface Analysis.

Workaround: None.

- ! **Problem:** Text is misplaced on some Redbook Graphics products. **(DR 9661)**
The placement of text strings in SPC Redbook Graphics products on AWIPS is incorrect. A lot of text is being misplaced in the upper left hand corner of the display. This misplacement of text can result in some users misinterpreting SPC products.

Workaround: None. Use care when viewing Redbook Graphics products that have the text misplaced on them.

1.11 NMAP

- ! **Problem:** The Radar selection menu barely fits on the screen. **(DR 12114)**
When loading radar data, the user is presented with subcategories of data submenus that get added to the bottom of the selection panel. In order to select the accept button at the bottom of the panel, the user must drag the selection panel to the very top of the screen. This makes the very top edge of the accept button available for selection.

Workaround: The accept button is barely viewable, but is selectable, when the panel is moved to the very top of the screen.

1.12 NOAA Weather Radio (NWR) Browser and Editor

- ! **Problem:** The creation time is incorrect on some transmitted products from the NWREditor. **(DR 7822)**
To bring up a product in the NWREditor, the user can select a product in the NWRBrowser and select edit. If he then selects a different product via the text identifier command line, and changes all the message header attributes, the product creation time does not change to the new time. It is skipped in the assigning of the new message header values, and the product ends up going out with the creation time of the product first called up in the NWREditor, or with a blank creation time if the NWREditor was brought up on a non-voice ready product that was sent to the CRS in error.

Workaround: None.

- ! **Problem:** The Expiration time is set to the current time in the NWREditor by default. **(DR 12825)**
The NWREditor sets the expiration time of CRS-bound products back to the current time by default.

Workaround: Before saving a product to pending or transmitting a product, manually edit the expiration time for the product to the correct time. Be especially aware of this problem during severe weather mode to ensure that warning products edited in the NWREditor are not sent to the CRS with the current time as the expiration time and then get dropped.

1.13 Procedures/History List

- ! **Problem:** The top bundle in the history list cannot be altered. **(DR 6916)**

Workaround: Clear the screen and the top bundle becomes the second bundle, and it can then be altered.

1.14 Product Maker

- ! **Problem:** The “*mb” option in Product Maker does not work properly. **(DR 2436)**
When loading a product in the Product Maker using “*mb”, only two frames display. Neither frame has a pressure label. The second has a time stamp of -251868HR Thu 00Z 01-Jan-70.

Workaround: None.

- ! **Problem:** The “<” and “>” operators have problems with contoured fields. **(DR 3453)**
The Product Maker has a problem displaying the following field, and other fields with the < operator: (Height[ETA,,,500mb,*]) < (5460). The field is displayed such that the contours closest to 5460 are broken up. An image displayed for this field appears blocky and discontinuous around 5460.

Workaround: None.

- ! **Problem:** Product Maker - specific humidity field display problems. **(DR 3856)**
Product Maker has problems when displaying spec_hum (specific humidity) added to spec_hum. The tight gradient of contours is unusually straight, carving a vertical line from Canada through MT, ID, UT, AZ, and Mexico. This problem was found on AVN, ETA, RUC, and NGM, with RUC displaying a blank space instead of condensed contours.

Workaround: None.

- ! **Problem:** Product Maker is not able to calculate values of parameters at specific latitudes and longitudes. **(DR 4669)**
For example, a user could enter an equation of Temp,Eta, 90,40,500,12 to calculate the temperature at 500mb at 90W, 40N for the 12hr Eta forecast. When loaded, the word “Loaded” appears in the Status/Value line, but no value is returned, and nothing appears on the D2D.

Workaround: Some of these values may be obtained by loading the product as an image in the Volume Browser and sampling. Then the value sampled may be manually put into the Product Maker for additional calculations.

- ! **Problem:** Product Maker problem computing part of an equation. **(DR 6464)**
A site had a problem running the following macro with product maker:

```
(((ddx(Height[ETA,,,304K,*]))*(u[ETA,,,304K,*])+  
(ddy(Height[ETA,,,304K,*]))*(v[ETA,,,304K,*]))*(100))+  
(ddt(Height[ETA,,,304K,*]))*(100))
```

"This is a macro to show isentropic lifting hence areas of lifting and areas of decent."

The problem lies in the last part of the equation: `ddt(Height[ETA,,,304K,*])` You can successfully compute the `ddx` or `ddy` of `(Height[ETA,,,304K,*])`, and you can successfully compute the `ddt` of most other isentropic parameters (e.g. `ddt(RH[ETA,,,304K,*])`), but when you try to compute `ddt(Height[ETA,,,304K,*])`, you get the error "insufficient grid points for derivatives".

Workaround: None.

- ! **Problem:** Product Maker has problems with satellite imagery. **(DR 8162)**
The Product Maker displays satellite information (not the actual image) incorrectly. For example, the IR_window image is displayed with its correct color curve, but the color curve legend is in counts from 0-255 instead of in degrees C. When the image is sampled, those same "counts" are returned, as if it were a visible image. Also, the visible imagery legend (and sample) goes from -50 to +300, instead of 0-255.

Workaround: None.

1.15 Radar

- ! **Problem:** Some D2D radar windows report abnormal exit when closed. **(DRs 5972, 8946, 10468)**
When some D2D radar windows, such as RMR, the OTR, Alert Request, or RPS windows, are opened, worked with, and then closed, sometimes a message appears in the D2D status bar or as a Red Banner Message stating that the window exited abnormally. There appear to be no adverse affects from this message though.

Workaround: None. There is no operational impact.

- ! **Problem:** Confusing exit message in Alert Area Request window. **(DR 8197)**
When exiting the Alert Area Request window, the user may get a Warning! Dialog window saying that the user has not saved the edits. This window includes a button labeled 'Press "Exit" to exit before exiting'.

Workaround: None needed. Simply press the button to exit.

- ! **Problem:** The All Tilts product sometimes does not update properly. **(DR 8287)**
The All Tilts radar product sometimes updates with the wrong data. For example, if the 1.5 SRM is displayed, sometimes the .5 SRM comes in as an update.

Workaround: Reload the product to display the current version. The product also will auto-update with the correct version with the next volume scan.

! **Problem:** RCS and VCS products update all panes when loaded. **(DR 10595)**
Both products are only available via OTR. When they are loaded, all RCS or VCS panes are updated with the latest product. So, for example, if three windows are loaded with an RCS product all at different times, and the user does a OTR and gets the latest RCS, when it is available all three panes are updated.

Workaround: None.

! **Problem:** Radar menus update inconsistently when products are not available. **(DR 11014)**
If an elevation is requested and is not available, the next lowest elevation is provided, which is by design. However, sometimes both the requested elevation and the elevation provided are updated with a current time on the menu. The product is stored twice under both elevations, but is the same product. This happens most consistently with the DZ product (8-bit Reflectivity).

Workaround: None. Be aware that the radar menus may sometimes be inconsistent in cases such as these.

! **Problem:** The check box for the SRM option in the RPS list editor is unavailable on HP. **(DR 11361)**
On the HP workstation, in the RPS List Editor, when the user selects to add SRM, the check box next to (to the left of) "Use average speed and direction of currently identified storms" is cutoff due to the window size being too small, and the window cannot be resized. Thus, the user cannot be sure what the SRM will be using for storm speed/direction. On the Linux workstation, the edge of the box that becomes highlighted when you make that choice is visible.

Workaround: Use the Linux D2D for this function.

! **Problem:** HP radar printouts have clutter around the edges. **(DR 11426)**
Printouts of radar images done on the HP workstation have 1 to 4 inches of closely packed lines around the border of the product which do not appear in the actual product. Printouts done on the Linux workstation show no such problem.

Workaround: Use the Linux workstation to print out radar images.

! **Problem:** The Radar Mosaic product does not display properly. **(DR 11494)**
When the .5 refl radar mosaic product is zoomed, the display around the site's dedicated radar shows a 'doughnut' of missing data in the 1-2 nm range and data in the 0-1 nm range.

Workaround: Use the non-mosaic version of this product from the site's dedicated radar. The 'doughnut' problem does not occur on this product.

- ! **Problem:** Retention of ULR products with different parameters within the database is not possible. **(DR 11975)**
 - 1) If multiple requests are issued via the OTR and routine requests, only the last is retained in the database. If the user enters more than one ULR product into the RPS list, only the last entry is retained. AWIPS should allow retention of products with different parameters (top and bottom of the ULR) within the database, and should have the Inventory expanded so that the user is aware of the differences in the products.
 - 2) This non-retention of the parameter information prevents looping of individual parameter sets. Instead, the loop contains all of the products retained within the database.

Workaround: None.

- ! **Problem:** Range rings sometimes display incorrect values. **(DR 12261)**

Sometimes radar range rings display incorrect values. This has been observed most often when range rings are displayed over a radar product for the first time in a D2D session. The range rings display a large magnitude negative number for km above ground level.

Workaround: Clear the display pane and reload the radar product and range rings. This time the range rings will display correctly.

- ! **Problem:** The MRU/SRM all elevation request may limit the ORPG list without the user realizing it. **(DR 12499)**

The MRU and SRM all elevation request is seen as a single line in the RPS list by the *RadarServer*, but the product actually contains more than nine different products. This could mean that as AWIPS radar ingest capabilities approach the limits imposed by the ORPG (about 90 products currently), an RPS list that on the AWIPS side appears to be within the ORPG limits may in reality be too long on the ORPG side. This problem becomes more obvious as the user adds more 'All product' requests.

Workaround: Use care to ensure that this problem is taken into account when creating RPS lists containing products with multiple elevations, so that the maximum number of products allowed is not exceeded.

- ! **Problem:** Displaying a radar cross section product can crash the display pane on the Linux workstation. **(DR 12780)**

On the Linux workstation, displaying a radar cross section product causes the display pane to crash and restart if an image was displayed in the pane immediately prior to displaying the cross section.

Workaround: Clear the pane before displaying a radar cross section.

! **Problem:** The DHR product does not auto-update. **(DR 12803)**
The DHR product fails to auto-update even though the current RPS List has the product and product is being received.

Workaround: Reload the DHR product manually to display the most recent version.

! **Problem:** The dialRadar/ORPGReqMgr only returns one elevation of a multiple elevation MRU request. **(DR 12830)**
When a user performs a request for multiple elevations of the MRU product, only a single elevation is returned before the dialRadar/ORPGReqMgr exits. The *DialServer* should keep track of the number of MRUs that have been received based on the number of elevations to ensure that all requested data have been received before exiting.

Workaround: Perform a request for each elevation desired individually.

1.16 Record Climate

! **Problem:** The RER (record climate) product has an improper line break in the Mass Media Header. **(DR 12919)**

The header lines of the RER product are currently produced like this:

```
RECORD EVENT REPORT  
NATIONAL WEATHER SERVICE OFFICE NAME  
0628 PM EDT  
TUE JUL 22 2003
```

However, they should look like this:

```
RECORD EVENT REPORT  
NATIONAL WEATHER SERVICE OFFICE NAME  
0628 PM EDT TUE JUL 22 2003
```

Workaround: None.

1.17 Surface

! **Problem:** Plots of 3 hour pressure change from the METARs do not match the change in pressure in METAR plots. **(DR 3173)**

There is a problem with the treatment of pressure change on the METAR station plot.

The pressure change typically shows a rise or drop in the last three hours, but the pressure change variables are not matching the pressure variables. Furthermore, when the actual pressure change is large, there seem to be greater errors in the pressure change depiction. For small actual pressure changes, the pressure change depiction is correct or just slightly off.

Workaround: None.

- ! **Problem:** Russian Upper Air data are not processed by AWIPS. **(DR 4943)**

Workaround: None.

- ! **Problem:** There is a QPF scale display problem. **(DR 6173)**
Currently, the RFC QPF products are only available at the Regional Scale or below. The problem is that most of the sites in the list are outside that scale, but are still selectable. As a result, the user may select a product and it will load, but the user will not be able to see the data. The menu should grey out stations not accessible at a particular scale. Also the RFC QPF should be displayable at the CONUS scale or below.

Workaround: None.

- ! **Problem:** The FFG Mosaic product produces errors in the *IGC_Process* log. **(DR 9167)**
When loading FFG Mosaics from the Hydro section of the NCEP/Hydro menu, the *IGC_Process* log reports errors. There is one RFC with old data, and there are errors reported for each RFC that does not have data as old as the old data. It does not appear that this prevents any valid data from loading. Here is a sample of the errors seen:
IGC_Process 9582 999808650.703837 20:37:30.703 BUG: Error opening file:
/data/fxa/img/SBN/netCDF/HRAP/FFG/CBRFC/3hr/20010725_1200.multi
IGC_Process 9582 999808650.718507 20:37:30.718 BUG: Error opening file:
/data/fxa/img/SBN/netCDF/HRAP/FFG/LMRFC/3hr/20010725_1200.multi
IGC_Process 9582 999808650.720652 20:37:30.720 BUG: Error opening file:
/data/fxa/img/SBN/netCDF/HRAP/FFG/MARFC/3hr/20010725_1200.multi
IGC_Process 9582 999808650.723665 20:37:30.723 BUG: Error opening file:
/data/fxa/img/SBN/netCDF/HRAP/FFG/MBRFC/3hr/20010725_1200.multi

Workaround: None, but no operational impact.

- ! **Problem:** Menus for Synoptic data must be manually created at CONUS sites. **(DR 11063)**
CONUS sites who turn on the *SynopticDecoder* must manually create the menu items for these data.

Workaround: Create a file in /data/fxa/customFiles called <site>-preserveMenuItems.txt (or append to the existing file if already present). Edit in entries for the menus for the Synoptic data (refer to the file on an OCONUS site for guidance). On each workstation, run a localization for tables (/awips/fxa/data/localization/scripts/mainScript.csh f - tables). Restart D2D and verify that the new menu items now exist.

! **Problem:** Western Pacific hurricane reports are improperly decoded. **(DR 11476)**
The hurricane tracks product reads the TCP products for Western Pacific storms. However, the value for sustained wind is incorrect on the resultant plots. Instead of extracting the sustained wind from the TCPWPx product, the NE quadrant radius of 34kt winds is what is plotted.

Workaround: View the TCPWPx product in a text window to determine the correct value for the sustained wind.

! **Problem:** Moving maritime reports plot incorrectly when the wind group is missing. **(DR 11877)**
When the wind group is missing from a maritime report, the report is plotted incorrectly on D2D. Instead of not plotting the wind barb, AWIPS takes the temperature group and interprets it as the wind group, and the temperature is then not plotted. Subsequent data in the report (dewpoint, SLP, etc) are plotted correctly.

Workaround: None.

! **Problem:** The lightning plot sometimes displays incorrectly during periods of intermittent data. **(DR 12063)**
The following scenario describes the problem. Lightning data were received during the 1200 time frame, but not during the 1100 hour or the 1300 hour. The current time is 1350 UTC. Requesting the one-hour lightning plot displays 1200 lightning in the legend, but displays nothing in the main pane (the empty 1100 time). Since there is no lightning so far for the 1300 hour, there is no netCDF file for it. The display generation seems to interpret a one hour request as "display the hour previous to the most recent existing netCDF file", which is from 1200 in this case, so it displays the empty 1100 data file but places 1200 in the legend, but not with the data that exists from the 1200 hour.

Workaround: Load shorter time-projection plots, such as 15 minute lightning. However, be aware that the problem could exist for those plots as well if the data are sufficiently intermittent.

! **Problem:** The heat indices displayed on the D2D product are sometimes off by a degree at some locations on the display. **(DR 12260)**
On any given display of the product, a few locations may show this error. The error is not specific to any particular location or region.

Workaround: None, but the majority of locations on any display will not suffer from this problem. When in doubt, consult the Hourly Weather Roundup product for the correct value.

! **Problem:** The TPC HurWind products load slowly on the HP workstation. **(DR 12633)**

On HP, it takes about 25-30 seconds to load the TPC Hurricane wind products on D2D.

Workaround: Use the Linux workstation, as the products load much faster there.

- ! **Problem:** The current Drought/Wetness and Crop Moisture Index products on D2D are not available. **(DR 12809)**
The products that display are from 2002.

Workaround: None.

- ! **Problem:** On Linux, MOS sampled on D2D has extra characters. **(DR 12818)**
When a MOS plot is loaded on D2D from the Forecast data menu in the NCEP/Hydro menu, it can be sampled. The text of the MOS plot appears. However, on the Linux workstation, at the end of the lines of the products, there are boxes. Most lines have two boxes. Some lines have one box.

Workaround: No data are lost, so there is minimal operational impact. Simply ignore the extra box characters.

1.18 System for Convection Analysis and Nowcasting (SCAN) and Flash Flood Monitoring Program (FFMP)

- ! **Problem:** The FFMP Basin Table can lag the D2D display. **(DR 10642)**
If FFMP is not loaded as the first product in the D2D IGC pane, it is possible for the basin table to fall behind by one volume scan. For example, this happens when the first product loaded is DHR. The DHR image in the D2D will update at about the same time that the *FFMPprocessor* gets triggered and begins its cycle. If the DHR was loaded first (with FFMP loaded after), the interactive depictable associated to the extension (basin table) will try to refresh itself when the DHR image gets updated, but the data is not there yet to use since the *FFMPprocessor* is not finished with its cycle yet (and has not issued the notification for the FFMP data).

Workaround: Be sure FFMP is loaded first in the D2D pane when displaying it along with other products.

- ! **Problem:** There are problems with the SCAN New Event Warning/Indication box. **(DR 12627)**
In OB2, the SCAN New Event Warning/Indication box was made to pop up to the left of the main D2D display pane, rather than in the middle of the screen as had been the case previously. However, there are still problems with the message box. The popup window is now larger, and thus takes up more screen space. The window cannot be moved or minimized, and now covers up two of the small D2D panes. In addition, on the Linux

workstation, any additional windows that are up always go behind the SCAN window when moved over it.

Workaround: Acknowledge the SCAN message window to close it. Additionally, users can change how often the message window appears. Set the threshold alarm time to a very large number to make the window pop up only rarely (or not at all). Set the time to a smaller number to make it pop up more often than the default (30 minutes). Execute the following steps to change the threshold alarm time:

1. Start up a SCAN cell table
2. Select the Configuration button
3. Select Alarm Time Setup
4. Enter numbers (in minutes) for Cell, Meso, and TVS
5. Select OK

Note, these instructions are also available in the popup window under the Configure button.

- ! **Problem:** False rate of change alarms may be generated for CAPE. **(DR 12863)**
When CAPE is not available, it defaults in the SCAN table to a large negative number (which CAPE would never truly be). However, this negative number is then erroneously taken into account when real CAPE values appear, which results in the generation of a false rate of change alarm.

Workaround: None.

- ! **Problem:** FFMP does not correctly handle counties that are in more than one CWA. **(DR 12913)**
This results in FFMP operating with many basins missing or not recognized.

Workaround: None.

1.19 Text Alarms/Warnings

- ! **Problem:** The *textNotificationServer* sometimes loses contact with a text workstation. **(DR 6489)**
On rare occasions, the alarm/alert and update obs functions on a particular text workstation stop working. Alarm/alerts and update obs are not received even though the products are coming in. Once this happens, that particular text workstation will no longer receive alarm/alert and update obs notifications until it is restarted. The Monitoring Controller window continues to receive alarms on the same text workstation while this problem is occurring. This problem also prevents WarnGen messages from reaching the text workstation. When "Create Text" is selected in the WarnGen window, the product is sent to WWA, but never gets to the text workstation. The WarnGen text window does not pop up, and the product cannot be called up using WRKWG# from a text window.

Workaround: Log out and back into the affected text workstation. The problem does not affect the other text workstations' alarm/alert, update obs, or WarnGen functions.

1.20 Text Product

- ! **Problem:** WMO Header DFUS1 is not categorized properly. **(DR 3017)**
This text product, GGFFOFUS, is categorized incorrectly by AWIPS as a gridded product.

Workaround: None. This product has an incorrect header, assigned at the NWS Gateway.

- ! **Problem:** Duplicate TAFs are being stored. **(DR 7587)**
Some TAF products are being stored in the database more than once, because they have different headers. Some of these are individual TAFs that also appear in a collective. Some are contained in several collectives that have different WMO headers. The *CollDBDecoder* processes all of these, and because the headers are different, the decoder stores all of them. The duplicate filter does not work because the products are, in fact, different.

Workaround: None.

- ! **Problem:** Multiple versions of a text product are stored if different products under the same WMO ID are repeated. **(DR 10643)**
At SEW, multiple versions of SEACGRNMW are being stored. There are about five different products that are coming in under the SXUS40 header. Sometimes the set of five distinct products repeats. To the site, this appears to be duplicate product storage, but the duplicate text filter is not catching it because it only looks at the most recent version stored under the AFOS PIL.

Workaround: None.

- ! **Problem:** The **textdb -v** command does not work correctly when used on the workstations. **(DRs 12728, 12729)**
The **textdb -v** command does not work correctly when issued from the command line on the workstations. The versioning does not succeed, and it can cause the *TextDB_Server - Read* process to crash.

Workaround: Execute the **textdb -v** command only from the DS.

- ! **Problem:** Infrequent duplicate text storage can still occur. **(DR 12745)**
Infrequently, the storage of locally produced text products in the textDB is delayed long enough that the SBN version of the product arrives back at the site before local storage

occurs. This can result in the same product being stored to the database twice. It is most noticeable for warnings, because as a result, the warning is stored twice in the textDB and duplicate NOAA Weather Radio alarms sound.

Workaround: None, but this should occur even more rarely in OB2 due to other DR fixes for duplicate product storage.

1.21 Text Workstation

- ! **Problem:** Help function is incorrect in Text Browser for international origin. **(DR 3886)**
There are a couple of discrepancies with International sites. In the node section, the help function gives Wisconsin Rapids, WI for ISW. This is correct for the US KISW, but incorrect for the International site. The other discrepancy is choosing ICO as the node and CO1 under MTR. Using the help function on this, the user gets Rivers in Colorado. However, ICO is the International site Columbia.

Workaround: None. The data can be retrieved by typing in the AFOS PILs in the AFOS Cmd command line for these products.

- ! **Problem:** Site will receive a requested product regardless of version if product WMO ID is unknown. **(DR 4137)**
With the Request/Reply function, if a site requests a product that cannot be found in the WMO ID table, the request will go out with XXX for the WMO ID and CCCC, and the site will receive the product back from the remote site even if it is the same version of the product as that already in the requesting site's database. The request is still sent, but the remote site will satisfy the request even if it has no newer versions. If the remote site sends the same version back, the requesting site will write it to the database as if it were a newer version, resulting in duplicate copies of the product in the database. The requesting site should instead receive a message back from the remote site stating no newer versions of the product were found.

Workaround: None, but minimal operational impact.

- ! **Problem:** The Change All button on the text workstation spell checker does not work if there are numbers. **(DR 6388)**
The Change All function on the text workstation spell checker does not work if there are numbers attached to (no white-space between) the word that is being corrected.

Workaround: Use the Change button instead.

- ! **Problem:** Request/Reply returns the same product more than once. **(DR 6408)**

If a site requests and receives a product from another site and then requests the same product again from the same site, the product is sent to the requesting site again and is stored in the text database. The result is duplicate products in the text database.

Workaround: None.

- ! **Problem:** There are Text DB retrieval anomalies. **(DR 6460)**
 - 1) Sometimes if a product is retrieved by AFOS PIL, the newest product displays, but if the same product is retrieved by WMO ID, the second-newest product is displayed. Sometimes, the reverse is true: if a product is retrieved by AFOS PIL, the second-newest product is retrieved, but when the product is retrieved by WMO ID, the newest product is retrieved.
 - 2) Sometimes if a product is retrieved by WMO ID, a window pops up saying "the data in the database is incorrect", even though the product can be retrieved by AFOS PIL.
 - 3) Frequently a pop-up Error window appears saying "An error occurred reading AWIPS:XXXXXX. This could be either a network or a database error. Sorry, no further information is available."
 - 4) Monitoring the *TextDB_Server -Write* log shows many, many "NOAFOSPIL" entries.

Workaround: None.

- ! **Problem:** Menus appear in the wrong place when the text window is maximized, then moved, after using the AFOS Browser. **(DR 8317)**

If a user maximizes a text window, then uses the AFOS Browser, and then moves the text window, the text window menus will pop up in the original location of the text window. This makes it very difficult to navigate through menu options.

Workaround: Close the text window and reopen it.

- ! **Problem:** D2D-launched text window spell checker does not work on Linux. **(DR 9793)**

The spell check feature in a text window launched from the D2D on a Linux workstation does not work. When the spell checker is accessed, a error message appears saying, "Error: error writing "file43":broken pipe."

Workaround: Use a text window on the HP workstation if the spell checker is needed.

- ! **Problem:** The Text Script Commands Netscape Help is not available. **(DR 10125)**

The Scripts Help feature on the Text window is not available, because the /html directory that contains the help information is missing. Choosing Help launches Netscape, but a message is then displayed stating:
"Netscape is unable to find the file or directory named /awips/fxa/data/html/"

Workaround: None.

- ! **Problem:** An error occurs if too many entries are returned for a text browser request. **(DR 10156)**

When the user selects a CCC and NNN from the AFOS text browser, it extracts all matching entries from afosMasterPIL, concatenates them into a string, and issues the command `textdb -t {string}` to get the list of latest inventory for each product. If the number of entries returned for this request exceeds approximately 1100 entries, the text browser reports a “list too long” error. With this error, no inventory times are returned, but the user is still able to select products after dismissing the error dialog. This problem is seen mostly when requesting MAV and MEX products.

Workaround: None, but little operational impact. Simply dismiss the error dialog and select a product to display it.

- ! **Problem:** A spinning stopwatch did not go away in the text window. **(DR 11160)**
After an error returned from selecting a SPOT report in the WMO search GUI, the cursor changed to a spinning stopwatch and did not go away until a successful product was retrieved from fxatext database.

Workaround: Load another product in the text window to erase the spinning stopwatch.

- ! **Problem:** Only one entry is displayed in the text window for an AWIPS ID request. **(DR 11322)**

There is only one entry displayed in the text window when using the AWIPS ID to get the latest products. However, several entries are returned when using the command line for the same request. For example, in the text window, the request for AWIPS ID = MTRBOS, results in:

SAUS41 KBOX MTRBOS 311554

However, from the command line, the result is:

`textdb -ri MTRBOS`

6

SAUS41 KBOX 311554 - MTRBOS BOSMTRBOS

SAUS70 KBOS 311600 RRE MTRBOS BOSMTRBOS

SAUS80 KBOS 151300 - MTRBOS BOSMTRBOS

SPUS70 KBOS 291226 - MTRBOS BOSMTRBOS

SPUS80 KBOS 100229 - MTRBOS BOSMTRBOS

ZZZZZZ ZZZZ 000000 - MTRBOS BOSMTRBOS

Workaround: Use the command line to get the full range of results available.

- ! **Problem:** The text window does not display the BBB field. **(DR 11323)**
The text window does not display the BBB field if the latest product has only one copy in the text database. It only shows the BBB field if there is more than one copy (duplicates) for the latest product. If more than one copy exists for the latest product, and the product

does not have a BBB field, the text window displays "NOR" for the BBB field, which does not conform with required format.

Workaround: None.

- ! **Problem:** The WMO TTAAii box in the text window expects six characters. **(DR 11325)**

If the WMO ID being used is less than six characters, no result is returned when the <Enter> key is selected.

Workaround: None.

- ! **Problem:** The text window still looks at siteCommission.txt before transmitting every product. **(DR 11807)**

The text window still looks at the file /data/fxa/workFiles/wanMsgHandling/siteCommission.txt before transmitting every product, to see if the site is in commissioned mode or not. This seems like unnecessary overhead at this point. If users want a text workstation or site to not transmit real products to sites, they can disable that capability using the Text Message Intercept feature.

Workaround: None, but little operational impact.

- ! **Problem:** A zombie *textdb* process is created when requesting a text product that has no data. **(DR 12597)**

When a user requests to view in a text window a product that has no data in the database, e.g., -5:WBCSWRVA, or one that does not exist, e.g., WBCSWRLWX, a *textdb* process is spawned by the text window to create a message on the screen alerting the user that there is no data for that product, and to log that fact in /data/logs/fxa/display/xt*/<date>. This *textdb* process then goes zombie. However, there appear to be no adverse affects to the system from this problem other than that.

Workaround: None should be necessary, as full functionality is retained despite this problem. If necessary, reboot the workstation to clear the zombie process(es).

- ! **Problem:** The text window can become too large to use on the Linux graphics workstation. **(DR 12607)**

If a user executes the following steps, a text window launched from the Tools menu on a Linux graphics workstation can become so large that the menu and sizing controls cannot be accessed:

1. Load a relatively large product such as FRH62.
2. Resize the window vertically so that it takes up nearly the whole display.
3. Change the font size to large.

The menu and size controls at the top become inaccessible, and the window goes too far down to be resized.

Workaround: Kill the window from the Gnome control bar or by issuing a kill command in a terminal window. To avoid the problem, use mouse button two to drag the border of the window to the desired position. Then the menu and size controls will always be accessible and the window can easily be resized.

! **Problem:** Highlighted text is virtually unreadable in the Linux text workstation text windows. **(DR 12694)**

When text is highlighted in a text window on the Linux text workstation, the background is a whitish-yellow color and the text is white, making the text virtually unreadable.

Workaround: Use the text window on the Linux graphics screen or on the HP workstation when it is necessary to highlight text.

1.22 Tools

! **Problem:** “Forecast Time” vs. “Inventory Time”. **(DR 1611)**

When using Inventory load mode, in the Select Forecast and Inventory dialog box, the forecast times and inventory times match only for the first inventory time listed.

Workaround: The forecast time the user loads can be determined manually from the Inventory time and the hour forecast (HR) section of the Forecast time section.

! **Problem:** Time setting problems. **(DR 12344)**

Three problems are evident with the D2D time-setting mechanism.

1. When a user selects Set time on D2D, specifies a time in the past, deselects Freeze time at this position, and selects OK, the clock sets back as it should. However, the display does not pay attention to the time on the clock, instead loading current data. (The behavior is correct if Freeze time at this position is left in its default selected state.)
2. If a user sets the time back, then brings up the Set time dialog to adjust the time, the current real time is displayed in the dialog. Instead, the Set time radio button should be selected and the previously set displaced time should be displayed.
3. If Freeze time is selected, the format of the clock on the display changes from hh:mm Z dd-mmm-yy to dd-mm-yy hh:mm Z. The same format should be used in all cases, letting the white on black or yellow on black color be the cue that the time displayed is not the current time.

Workaround: None.

1.23 Upper Air

- ! **Problem:** Profiler horizontal and vertical variance data are missing. **(DR 3513)**
Profiler horizontal and vertical variance fields are not included as part of the normal data stream that AWIPS receives. These data will have to be included in the normal AWIPS data stream before they can be viewable on AWIPS.
Workaround: None.

- ! **Problem:** Label magnification problem with hodograph. **(DR 5170)**
When working with the Interactive Skew-T and Hodograph, if the user zooms in over the hodograph and toggles Helicity/Storm Inflow on from the Skew-T controls window, the values/labels do not reduce when the user zooms back out.
Workaround: Once zoomed back out, toggle on and off the Helicity/Storm Inflow to force it to reduce magnification.

- ! **Problem:** The Interactive Skew-T calculates energy incorrectly when there is a mid-tropospheric inversion. **(DR 6226)**
The Interactive Skew-T program only accounts for one Level of Free Convection (LFC). If there happens to be a mid-tropospheric inversion, which will create a second area of negative energy and a second LFC, the second area is ignored.
Workaround: Edit the sounding to eliminate the second inversion.

- ! **Problem:** The MRF Mean RH product in the Upper Air menu has spurious lines displayed and the model times in the legend are incorrect. **(DR 7143)**
Workaround: None.

- ! **Problem:** Cannot add a new vertex to the Hodograph. **(DR 8324)**
A new vertex cannot be added to the Hodograph in Interactive Skew-T mode. When mouse button three is clicked over the hodograph line, a menu pops up with “Add Vertex”. If Add Vertex is selected, a new vertex appears, but as soon as the mouse button is released, it disappears.
Workaround: None.

- ! **Problem:** The profiler perspective product displays slightly differently in the small pane. **(DR 10329)**
The profiler perspective product plots winds on a staff with 10 height ticks (including the surface) in the large pane. When swapped into a small pane, the staff has 11 ticks, until the height of the pane is changed, at which point it then returns to 10.

Workaround: Ensure that the display shows 10 height ticks by viewing this product only in the large pane, or in a small pane that has been resized.

- ! **Problem:** The KMXR sounding is not displayed above 300 mb. **(DR 11367)**
Sounding data for KMXR do not display for levels above 300 mb, even though the data are being decoded and stored.

Workaround: View the raw sounding data from the corresponding text products on the text workstation.

- ! **Problem:** MDCRS Availability Plus Marks are not visible on HP. **(DR 12726)**
The MDCRS 1 and 6 Hour Availability Plots do not display the plus marks on HP. Only the asterisks display. On Linux, both the pluses and the asterisks display.

Workaround: Use the Linux workstation to view the plus marks.

1.24 Volume Browser/Grid Products

- ! **Problem:** Differences noted between N-AWIPS and AWIPS QPF fields. **(DR 658)**
A difference was noted in the AVN model QPF fields when comparing WFO-A displays with the N-AWIPS display. The discrepancy involved the 60-72 hour projections. Essentially, when displaying the 12Z run of the AVN model, the WFO-A system indicated that close to 2 inches of rain would be received in the DCA area while N-AWIPS indicated all rain would pass to the south.

Workaround: None. COMET is performing an analysis of AWIPS vs. N-AWIPS displays. This is a long-term effort.

- ! **Problem:** Eta Model Precipitation error. **(DR 1092)**
The Eta Precipitation field differs from the current PCGRIDDS product in that AWIPS shows a .01 contour where PCGRIDDS shows 0.

Workaround: None. COMET is performing an analysis of AWIPS versus other system displays. This is a long-term effort.

- ! **Problem:** Erroneous differences between the 6hr/24hr MesoEta Precip. **(DR 1328)**
Discrepancies have been observed between the 6hr and 24hr MesoEta precip plots ending at the same time, such as the amount on the 6hr plot being greater than the amount on the 24 hr plot.

Workaround: None.

- ! **Problem:** NCEP grid and coding problems for Eta model. **(DR 1629)**

The resultant data from the Eta ingest has the maximum and minimum temperatures off by twelve hours. This also results in a steady temperature trace. The data is sent from NCEP in this format.

Workaround: The NWS Office of Science and Technology (OST) is working with NCEP on a number of data issues, including this one.

- ! **Problem:** The small map in the Volume Browser Time Series products does not change to accommodate new point locations. **(DR 2398)**
If a product is loaded, for example, for the west area of the CONUS, and then a second product is loaded for the east area of CONUS, the small reference map does not change to include the location of the second product.

Workaround: None.

- ! **Problem:** Problems with temporal resolution of AVN in 500mb Comparison. **(DR 4266)** There is an inconsistency in the temporal resolution of the AVN model run. If the user loads AVN on the N American scale, the resolution is 3 hours. At the CONUS scale, a resolution of 6 hours is displayed. The inconsistency arises with the 500mb Comparison on the CONUS scale. The AVN appears with a temporal resolution of 3 hours. This may cause some confusion because the Eta and NGM plots are unable to time-match the intermediate fields.

Workaround: None. It does not seem problematic to have the AVN loading the 3hr resolution on the CONUS scale, that just gives more data. The user may select products to load in an order that the AVN products are forced to time match the other models in the 500mb comparison product.

- ! **Problem:** Some NHEM scale AVN data are missing past 48 hours. **(DR 7118)**
The logs show data that come in at the 6-hour increments (including 54, 66, 80, 92, etc), but on D2D they are only viewable every 12 hours after 54 hours.

Workaround: None. At CONUS sites, the CONUS AVN data are available. However, the OCONUS sites do not get that CONUS data.

- ! **Problem:** Wave Watch III is missing coastal data. **(DR 8494)**
The display of the NOAA Wave Watch III (GWW) global model wave height forecast data in D2D is missing grid values for the coastal area of the grid domain out to approximately 100km offshore in some places. This problem of missing data is also apparent in the GFESuite display of the global Wave Watch III model forecasts. This is due to the interpolation of the data from course grids to higher spatial resolution grids on AWIPS.

Workaround: None.

- ! **Problem:** GWW color editor changes get overwritten by auto-update. **(DR 10032)**
Display wave height fields as an image for the GWW model. Using the color editor, block fill a portion of the data (e.g., make 4-6 meters black). After the display auto-updates to the next model run, either the color fill values change, or the color fill changes get reset to default.

Workaround: Perform the color fill again on the new model image.

- ! **Problem:** Two units problems with the Diff function in the Volume Browser. **(DR 10785)**
 - 1) The result of the Diff function on surface temperature and dewpoint (either plan view or time series) should be the same as dewpoint depression. However, the units do not come out right.
 - 2) If the user does a Diff of variable vs height of vorticity and divergence, the scale is not labeled in a useful way. If the user overlays this Diff on those undiffed fields, the result is just a straight line.

Workaround: None. Be wary of the results of the Diff function in these situations.

- ! **Problem:** A Tcl error is displayed when selecting Show Detailed Inventory. **(DR 11436)**
When using time series in the Volume Browser, when the user right clicks to “Show Detailed Inventory”, a Tcl error occurs. The following error is displayed:
Error: called :show_inventory" with too many arguments.

Workaround: None.

- ! **Problem:** The regional wave model grids for the Western North Atlantic are shifted slightly to the north. **(DR 11740)**
The regional wave model grids for the Western North Atlantic that are sent over the SBN on AWIPS grid 238 have an error with the Latitude location. This results in the grids being displayed on D2D shifted one-half degree to the north of their actual location.

Workaround: None. The grids need to be fixed at generation before transmission over the SBN.

- ! **Problem:** The AVN boundary layer and surface winds are the same on CONUS and lower scales. **(DR 12371)**
When selecting the AVN surface wind fields, only the boundary layer winds display on the CONUS scale and below.

Workaround: Use a different model to view these wind fields.

1.25 Warning Generation (WarnGen)

- ! **Problem:** WarnGen lists independent VA cities as counties in some products. **(DR 1394)**

Severe High Wind Warning, Flash Flood Watches, and Flood Warnings show the independent cities of Virginia as counties. DC is listed as a county in Maryland in Blizzard, Blowing Dust, Blowing Snow, Flood Watch, Dense Fog Advisory, Freeze Warning, and Frost Advisory WarnGen products.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** WarnGen is not working for long-fuse warnings at PHI. **(DR 1458)**
PHI CWA currently does not include counties when long-fuse warnings are issued.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** For RNK, some WarnGen areas are wrong. **(DR 3591)**
For some WarnGen warnings, the affected areas are inconsistent and sometimes wrong. For example, there seem to be several independent cities in southern VA not included in the list of affected areas. Also, a FFW that included Henry County also listed Martinsville, a city in Henry County, as Martinsville County and included the city of Martinsville as within Martinsville County.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** WarnGen logs to the previous day if a new session is loaded after the previous session overlaps breaklog. **(DR 7486)**
If a WarnGen session is loaded continuously in a pane before, during, and after the breaklog, any new WarnGen sessions launched in that same pane are logged to the previous day's logs.

Workaround: None, but no operational impact.

- ! **Problem:** WarnGen sometimes formats times with redundant time zones. **(DR 11957)**
Some sites that have part of their CWA using daylight time and part not get redundant time zone descriptions from WarnGen during standard time such as:
* UNTIL 535 PM EST (535 PM EST)

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** The pathcast option is in the wrong place in the WarnGen GUI for tornado warning. **(DR 12529)**

When attempting to create a tornado warning in WarnGen, the "BASIS FOR WARNING" section states to choose 1 from the list of options. The "pathcast" phrase appears in this section along with "Doppler Radar indicated..." and all the other possibilities. The "pathcast" phrase should be moved to another section since it is valid to select this with another "BASIS FOR WARNING" option.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** A zombie *textdb* process is created when the WarnGen QC function displays a message on the screen. **(DR 12676)**

When the WarnGen QC finds an error in a created text product, a message window is displayed to the user on the text workstation indicating the nature of the problem. The *textdb* process used to create this message window then goes zombie. However, there appear to be no adverse affects to the system from this problem other than that.

Workaround: None should be necessary, as full functionality is retained despite this problem. If necessary, reboot the workstation to clear the zombie process(es).

2.0 INTERACTIVE FORECAST PREPARATION SYSTEM (IFPS)/WATCH WARNING ADVISORY (WWA)

- ! **Problem:** The wrong time zone is sometimes used in the WWA text. **(DR 9622)**
When a site has zones/counties in different time zones, the time identifier used is always that of the site's time zone. If the zones/counties formatted are in a different time zone, that time zone should be used in all time formatting. If the zones/counties formatted are in both, then both times should be printed, with the second in parentheses (). Dateline time should also be accounted for.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** WWA crashes if launched after GFE on a workstation. **(DR 10471)**
If WWA is launched on a workstation that already has GFE running, WWA fails to start up and crashes. However, if WWA is started first, and then GFE is started, both applications do run concurrently. WWA can even be exited and restarted successfully with GFE still running, as long as WWA was the first of the two applications to be launched.

Workaround: If both WWA and GFE need to be run on the same workstation, be sure that WWA is launched first.

- ! **Problem:** It is not possible to deselect products in the WWA GeoViewer. **(DR 11153)**

Clicking in the WWA GeoViewer on a county with an active product selects the products in the WWA Monitor. However, clicking again in the WWA GeoViewer does not deselect the products.

Workaround: Go into the WWA Monitor and deselect the products one by one.

- ! **Problem:** Variable substitutions do not work in the WWA template files. **(DR 12029)**
The code framework for variable substitutions in WarnGen does not work in WWA. Specifically, the variable substitutions do not work in WWA, and the optional bullets do not get expanded.

Workaround: None.

- ! **Problem:** The Headline Editor window displays too small and has to be resized. **(DR 12185)**
The Headline Editor window pops-up at a very small size the first time it is displayed in a WWA session. The window should pop-up at a default reasonable size.

Workaround: Resize the window to a larger size manually.

- ! **Problem:** When NEW is selected on the WWA Monitor, the WWA Composer appears with the previous product's attributes. **(DR 12266)**
When NEW is selected from the WWA Monitor, the Composer opens with the previously edited product's attributes. If a different Watch/Warning/Advisory/Statement is selected, the attributes refresh correctly, but if the user creates another product using the same Watch/Warning/Advisory/Statement, the old attributes continue to show in the Composer (including the last product's creation time). Selecting Restart in the Composer, after making changes, also causes the Composer to revert to the last transmitted product's attributes. This can cause user confusion.

Workaround: Close WWA and re-open it to clear the problem (reset WWA).

- ! **Problem:** Expiration messages are not generated for the NWR. **(DR 12339)**
Expiration messages are not being generated for the NWR. These messages are supposed to be generated automatically when a WWA product is about to or has expired to inform NWR listeners that the WWA is no longer in effect.

Workaround: Use the NWREditor to create and transmit the Expiration message as necessary.

- ! **Problem:** The Linux desktop menu does not have an entry to launch the WWA admin interface. **(DR 12428)**

Workaround: Launch the interface from the command line by running:
/awips/adapt/ifps/bin/linux/WWAAdmin.sh.

- ! **Problem:** WWA often fails to launch on the Linux text workstation due to a memory shortage. (DR 12437)

Workaround: Run WWA on the Linux text workstation only if nothing else is running on it, or run WWA on a graphics screen of the Linux workstation.

- ! **Problem:** The NWR program often produces blank Summary messages. (DR 12523)

Workaround: Use the NWREditor to create and transmit the Summary message as necessary.

- ! **Problem:** Past Overview/Synopsis and Descriptive Free Text can get written to New products. (DR 12721)

New WWA products get old Overview/Synopsis and Descriptive Free Text added to them if the associated old hazard is highlighted in the WWA Monitor when New is selected.

Workaround: Ensure that no Hazards are highlighted in the WWA monitor when creating New products.

- ! **Problem:** VTEC shared file lock should be unique for product types, not WWA sessions. (DR 12741)

Current WWA design prevents the user from having more than one transmit window open at one time, anywhere on the network (i.e., any WWA). Although such a lock is necessary to promote VTEC/ETN database integrity, a smarter lock needs to be developed to only lock out like products rather than any product open in a transmit window. Also, to support this change a more descriptive window should display when criteria is reached. Currently the message displayed says, "A WWA transmit product pending. Please try again later". This message should read something like, "PDXWSWPDX transmit currently pending. Please finish or exit active transmit and try again".

Workaround: Ensure that only one transmit window is open at a time when using WWA.

- ! **Problem:** A headline editor is needed for non-segmented products. (DR 12777)

OB2 & OB3 WWA will continue to support the non-segmented product format. In WWA OB2 forecasters generating segmented based products are provided the option of operational editing, template based, headlines in a presented headline GUI. In OB2, new OS policy was to only support the segmented format and discontinue the non-segmented

product format. This policy/solution was delayed and therefore operational headline editing, not currently supported, for non-segmented products is needed.

Workaround: Edit products manually as necessary before transmission.

3.0 HYDROLOGY

3.1 HydroBase

! **Problem:** Hydrobase rating curve window display and crest history display problems.

(DR 12841)

1) When the Rating Curve window is opened, the "Remove Shift" button is active even if there are no shifts to remove. It should be greyed out if there is nothing to remove to be consistent with other windows in the application.

2) The values in the Active Rating Curve including Shift section can be highlighted along with the values in the base USGS rating curve below. However, only values in the base USGS rating curve can be changed directly.

3) In the Crest History window, the graphical display of historical river crests sometimes shows all river crests in one horizontal line when crests are sorted by flow. Different stages values are not shown graphically. This seems to occur when the first value in the tabular list has a missing stage value.

Workaround: 1) None needed. There is no impact if a user selects the button.

2) The values can be changed in the base USGS rating curve below.

3) Look at the values in the table or sort the crests by Stage or Date to view them graphically, or change the missing value at the top of the list.

3.2 HydroMap/Multisensor Precipitation Estimate (MPE)

! **Problem:** The legacy Damcat help button does not work. **(DR 10008)**

The help files are not displayed when the help button in the legacy Damcat is selected.

The help files are in /awips/hydroapps/whfs/local/data/app/damcat, but Damcat is looking for them in /help.

Workaround: The help files can be viewed directly using a Telnet window in the /awips/hydroapps/whfs/local/data/app/damcat directory.

! **Problem:** MPE time lapse uses a large amount of CPU time. **(DR 11026)**

If the user selects a time lapse in the MPE GUI, the GUI window, and the other applications on the workstation, begin to respond very slowly. The MPE application consumes most of the available CPU time on the workstation.

Workaround: Do not use time lapse on the MPE standalone GUI. Instead, use it only on the HydroMap with MPE GUI.

- ! **Problem:** It is not possible to print color screen prints of hmap_mpe on the Linux workstation. **(DR 12685)**
The *print_image* script, which is used when doing screen prints of hmap_mpe, does not support the optional use of color printing on the Linux workstation.

Workaround: Use the HP workstation to print such screen prints.

- ! **Problem:** HMAP/MPE sometimes crashes when time lapse is started. **(DR 12843)**
The crash most often occurs when a time lapse is started, then ended, and a new time lapse is started for more hours than the original time lapse, or when a time lapse for a large number of hours (e.g., 24) is started.

Workaround: Exit and restart HMAP/MPE before starting a time lapse for more hours than the one that was just ended, and limit all time lapses to less than 24 hours if possible.

3.3 National Weather Service River Forecast System (NWSRFS)

- ! **Problem:** NWSRFS IFP does not display colors as designed when alert request window is up. **(DR 4240)**
When running NWSRFS IFP on a monitor on which an Alert Request window is displayed, the NWSRFS IFP window sometimes does not display the colors as designed. This makes some data in the application unreadable for the user. This was noted in the Forecast Group Topology and IFP Plot windows, and may be a problem in other windows too.

Workaround: This is a color-contention problem. Close the alert window and restart NWSRFS IFP. Minimal operational impact.

- ! **Problem:** In RFCWide, the Find feature in the Help windows does not work. **(DR 7689)**
In RFCWide, if you select Find in any of the Help windows, the Find command does not work. The following message appears in the Telnet window:

```
/awips/hydroapps/rfc/rfctest_511/precip_proc/input/rfcwide/help/helpKeyword_file was not found!  
sh: /home/oper/.ifp_files/local/helpSearch_file: Cannot create the specified file.
```

There is no .ifp_files directory under /home/oper, and there is no helpKeyword_file under /awips/hydroapps/rfc/precip_proc/input/rfcwide/help or in the corresponding rfctest_511 directory.

Workaround: None.

- ! **Problem:** IFP infrequently crashes when loading new forecast groups. **(DR 11142)**

Workaround: Relaunch IFP and the forecast groups should load successfully the second time.

3.4 RiverPro

- ! **Problem:** On Linux, the radio buttons in the Modify Product Settings window do not line up with the buttons. **(DR 11460, formerly part of DR 10546)**

In the Linux version of RiverPro, the rows of radio buttons in the Modify Product Settings window do not line up with the choices at the left of the rows.

Workaround: Use care when selecting the radio buttons. Rows can be counted from the top, as can the choices to the left of the rows. Alternatively, use the HP version of RiverPro to modify product settings.

- ! **Problem:** The RiverPro GMT location time zone does not work. **(DR 11652, formerly part of DR 11362)**

The time zone GMT0GMT may not be correctly used. For example, a location is set to GMT0GMT with data at 11:00Z. Create a product for this location in RiverPro using location time zone, and the time in the product created is 12 PM when it should have been 11 AM.

Workaround: Edit the product manually as necessary before transmission.

- ! **Problem:** RiverPro VTEC Begin and End times do not change when users modify the Action code. **(DR 12580)**

The Begin and End times for VTEC products require missing values based upon the action code and when flooding began. When users modify the action code in the VTEC Settings window in RiverPro, the Begin and End times do not change to reflect the missing values when required. If users change the action code, and then create and send out a product without changing these times, the begin and end times will be wrong. Either the times should change when the action code is changed, or the user should be warned that a change to these times will be needed.

Workaround: Edit the product manually as necessary before transmission.

3.5 SiteSpecific

- ! **Problem:** On Linux, SiteSpecific does not start from HydroMap when HydroMap is started from D2D. **(DR 10665)**

If the user selects HydroView from the Hydro Apps submenu in the NCEP/Hydro menu of D2D, and then starts SiteSpecific from the LiveData menu of HydroMap, SiteSpecific does not start.

Workaround: On Linux, start SiteSpecific from the Gnome AWIPS menu or by command line. Alternatively, use SiteSpecific on the HP workstation.

! **Problem:** SiteSpecific does not start from the D2D NCEP/Hydro menu on Linux. **(DR 11401)**

SiteSpecific does not start from the Hydro Apps submenu in the NCEP/Hydro menu on D2D on the Linux workstation. The D2D indicates that SiteSpecific terminated.

Workaround: Start SiteSpecific from the AWIPS menu on the Linux workstation, or use SiteSpecific on the HP workstation.

3.6 WHFS

! **Problem:** The *readenv.sh* script produces a message in terminal windows when called by WHFS scripts. **(DR 10363)**

When the */awips/fxa/readenv.sh* script is called by WHFS scripts such as *rpf_issue*, *shf_issue*, and *start_hmap_mpe*, the following message appears in the diagnostic terminal window in the RiverPro or TimeSeries windows:

"test: argument expected"

These WHFS scripts are run with a korn shell. This message only occurs on the HP workstation when the script is run from the korn shell.

Workaround: None, but there is no operational impact. This message has no effect on the WHFS scripts and applications.

! **Problem:** The Thresholds for Recoms: radio button sometimes does not change correctly. **(DR 12460)**

In HydroBase on the Linux workstation, in the RiverPro Forecast Groups/Points window, the Thresholds for Recoms: radio button sometimes does not change to Warning (MONitor) value when it is selected.

Workaround: Select Stage/Flow CATEGORIES and then select the Warning (MONitor) value again. It then works.

! **Problem:** Choosing duplicate values when editing cross section pairs in Damcat fails. **(DR 12561)**

When editing cross section pairs and choosing values of point number and pair number that are duplicates of values that already exist, the Damcat interface returns an error.

Workaround: Avoid duplication of combinations of point number and pair number when editing cross section pairs.

- ! **Problem:** Damcat error checking message meanings are not self-evident to users. **(DR 12629)**

The Damcat error checking returns messages to the user, but the messages are not easily understood. Some examples include "dam_elev = -nan" and "down_distance_from_dam or down_mann_oc not defined".

Workaround: Consult the OHD documentation for assistance if necessary.

4.0 LOCAL DATA ACQUISITION AND DISSEMINATION (LDAD)

4.1 BBS Interface

- ! **Problem:** BBS download requires both UNIX account and LdadScheduler user. **(DR 2470)**

Workaround: Ensure that a UNIX account for BBS has a matching LdadScheduler user setup with a protocol selected in the protocol selection area. If a mismatch exists, the error referencing /ldad/bin/sz permissions will be displayed to the external user attempting to download data.

- ! **Problem:** Xmodem and Ymodem BBS download adds extraneous characters. **(DR 3605)**

While using the LDAD BBS X and Y modem protocols, extraneous characters are added to the downloaded files. The extra characters are added at the end of the file.

Workaround: Use Kermit or Zmodem protocols for download.

- ! **Problem:** Problems occur during downloads using Zmodem protocol in LDAD BBS. **(DR 4089)**

When using the Zmodem protocol to download in the LDAD BBS, the product requested is downloaded from the LDAD server as well as other products that are in the BBS menu. The product that is requested gets downloaded first, then the cursor goes to the next product listed in the menu and downloads that product. This process repeats multiple times.

Workaround: None. There is no operational impact.

- ! **Problem:** Zmodem is incorrectly identified as user protocol. **(DR 4237)**

Users with a protocol of Kermit, Xmodem, or Ymodem appear to change from their respective protocols to Zmodem after a Zmodem user has logged into the BBS.

Workaround: Re-save the user information.

- ! **Problem:** Xmodem receive does not work in the BBS. **(DR 11869)**
Within the BBS, downloading a file to the local computer does not work using Xmodem. An error message is received stating "Error limit exceeded".

Workaround: Use any other type of transfer, such as Kermit, Ymodem, or Zmodem.

4.2 Configuration/System

- ! **Problem:** Two "Thank You" messages appear when modifying LDAD config files through Netscape. **(DR 5323)**
When editing and saving LDAD configuration files through the LDAD administration section of Netscape, two "Thank You" messages are displayed instead of one.

Workaround: None. This is only a cosmetic problem. Functionality is not affected.

- ! **Problem:** The *routerStoreNetcdf* and *routerLdadDecoder* processes crash when they encounter unidentifiable or bad products. **(DRs 8581, 9719)**
When *routerStoreNetcdf* tries to process a product which is not listed in the appropriate configuration files, i.e. *LdadPatterns.txt* and/or *LDADinfo.txt*, it crashes instead of simply rejecting the product. For example, this was observed at KCRP when *routerStoreNetcdf* encountered a *msas_qc.TCOON* product. The site's *LdadPatterns.txt* did not contain an entry for '*msas_qc*', and *LDADinfo.txt* did not list a description file name corresponding to *msas_qc.TCOON*. The process failed with a Signal 11 segmentation violation. Similarly, if a bad piece of TCOON data is received by the *routerLdadDecoder* process, the process hangs and stops processing any data. CPU usage on the server goes to over 90%, and subsequent incoming data queues up in */data/fxa/LDAD/Raw*.

Workaround: Try to ensure that all products that are expected to be processed are in the appropriate configuration files. For problems due to bad data, delete the bad piece of data and restart the affected process.

- ! **Problem:** Some LDAD servers are not able to use ntpd to keep time in sync. **(DR 10035)**
At several sites, the network time protocol daemon on LS1 is failing to connect to the firewall's ntpd. This means that the time on the LS is not keeping in synch with the time on the rest of the AWIPS system and the NCF.

Workaround: Occasionally (every few months), check to see if the time on the LS is in synch with AS1. If it is not, use the **date** command to set the time equal to that of AS1. Alternatively, configure the LS to receive the time from the local router. In the `/etc/ntp.conf` file, set the preferred time server to be the local router IP.

4.3 Emergency Manager Decision Support (EMDS - Web Dissemination)

- ! **Problem:** Files are reported as missing when EMDS is launched from a browser. (**DR 7099**)

When EMDS is launched from a browser, it requests files that do not exist on the LS1 web server. The LS1 fasttrack error log reports:
can't find /data/ldad/emwww/htdocs/localConfig/Graphic.mnu (No such file or directory)
can't find /data/ldad/emwww/htdocs/localConfig/Probe.mnu (No such file or directory)
can't find /data/ldad/emwww/htdocs/localConfig/Scroll.mnu (No such file or directory)
can't find /data/ldad/emwww/htdocs/localConfig/Text.mnu (No such file or directory)
can't find /data/ldad/www/htdocs/icons/grytxtr5.jpg (No such file or directory)
These files are not in the specified location on LS1.

Workaround: None, but no operational impact. EMDS still runs successfully from a browser despite these errors.

- ! **Problem:** The *hmIngest* process intermittently fails to process obs data. (**DRs 7270, 10554**)

Two or three hours each day, on average, the *hmIngest* process fails to successfully process the hourly METAR netCDF file due to EOFExceptions or NullPointerExceptions. Thus, on these hours, no graphical observation data is available to the user.

Workaround: Use the text pane to view the text versions of the METARs or to refer to the SWR products.

- ! **Problem:** Adding a new menu item in the configurator sometimes gives the wrong color and parent. (**DR 7370**)

When a user adds a new menu item in the configurator, sometimes the menu item is given the wrong color and parent. The menu item is off by a line or more when viewed in the menu.

Workaround: This is an infrequent problem. If the menu item is hard to read or does not respond, use the configurator to delete and recreate it.

- ! **Problem:** The *LocalizeWWW.pl* script does not clean up `/tmp/stationFiles` after running. (**DR 8092**)

Running *LocalizeWWW.pl* creates a /tmp/stationFiles directory on LS1 that it never removes. This causes an error message to appear the next time the script is run.

Workaround: Remove the directory manually before running *LocalizeWWW.pl* again if desired. However, the error message has no impact on the success of the script.

- ! **Problem:** The *PostConfigure.pl* script has an rcp error. **(DR 8094)**
As part of its operation, *PostConfigure.pl* tries to copy a file onto the DS from the LS, but fails, stating "rcp: /awips/ldad/data/: No such file or directory".

Workaround: None. However, this does not seem to cause any problems, so ignore the error message when it occurs a line before "Finished: Remotely modifying the Graphic.mnu and pollForData.conf files."

- ! **Problem:** The installation welcome window has overwritten text. **(DR 8818)**
When installing EMDS on a PC, a set of windows appears before installing, as with any other software installation, stating what is being installed, where it is being installed, accepting the licence agreement, etc. With the EMDS install, the first screen that appears is a welcome screen, stating that this is government software, there are treaties to follow, etc. Some of the text on this screen is overwritten and blanked out by other text in the screen, because the window is not large enough to accommodate all the text. All the other initial windows are scrollable, but this one is not.

Workaround: None.

- ! **Problem:** The EMDS application cannot be placed in the Add/Remove menu during installation. **(DR 8819)**
During the EMDS install on a PC, an error message appears stating 'Unable to create an entry for this application in the Control Panel Add/Remove property list. You need administrator privileges to do this.' The Add/Remove list is a Windows list that enables users to easily remove installed applications.

Workaround: To remove EMDS from the PC, remove the directory C:\Program Files\EMDS and all its subdirectories, and delete any desktop icons for the application.

- ! **Problem:** Switching between Probe methods back to the Draw Area Probe method crashes the display pane. **(DR 8901, 10397)**
There are several different methods by which data can be probed in EMDS. Once a probe session has begun, the user can freely switch from one probe method to another within the same probe session, with the exception of Draw Area to Probe. The user can use Draw Area to Probe successfully if it is the first method selected during a probe session. However, within the same probe session, if the user chooses a different probe method first, and then chooses Draw Area, or uses Draw Area first, switches to another method,

and then back to Draw Area, the graphics pane being used for the Probe crashes. The pane goes completely black and loses all of its displayed data and menu items.

Workaround: Select the Clear button to restart the crashed pane.

- ! **Problem:** Adding new parameters to a probe list is not always successful. **(DR 8902)**
While using probe, the user can remove or add items to the list of parameters being probed (e.g., remove temperature or add wind). Sometimes, when a parameter is added to the list, there is a lag until it fully becomes part of the list. Normally, an added parameter takes effect on the next move within a probe session (e.g. choose a different county to probe). The parameter is added to the list with its respective values. However, if a particular parameter is added to the list for the first time during an EMDS session, and a time series graph is being displayed in the Probe window, a new line for the parameter is added to the list, but the name and values all say N/A. The name and values do not fill in until the NEXT probe move is made. The data is there though, as you can graph a time series of the N/A data, and actual data does graph, although the name of the data is N/A.

Workaround: Choose another county/zone/etc to probe, and the N/As will fill in with the name and values of the parameter.

- ! **Problem:** Accumulation of numerous product versions may prevent product display in the text pane. **(DR 9049)**
As new versions of a product are received by EMDS, they are appended to the java file for access via the text pane of the EMDS GUI. If enough product versions are appended to a file, the overall product becomes too large to display in the text pane. In these cases, the java console window indicates the product has been loaded, and the menu choice becomes checked, but the text pane remains blank. If there are only a small number of versions of a particular product, or if there are several versions but each individual product is small, the product does display in the text pane.

Workaround: The EMDS site administrator can delete the file for a particular text product in the /data/ldad/public/javadata directory on LS1, and allow it to repopulate as new versions of the product come in. This makes the product displayable for a while, but it is possible that the overall file will again become too large to display as products continue to append.

- ! **Problem:** Newly arrived product versions are not always displayable in the text pane. **(DR 9050)**
Normally, when a new version of a text product is received by EMDS, it is appended to the java file and is then displayable in the text pane. However, currently this only works for watch/warning products. With all other text products (e.g., observations, statements, forecasts), new versions of the products are received and processed, but are not displayable in the text pane during the current GUI session. Users are only able to display

the latest versions of these products that had already been processed before the GUI session was started.

Workaround: To view newer versions of text products that have been received since the current GUI session was started, exit the GUI and restart it. At that point, all recently received product versions will be displayable, but subsequent versions that are received during this new GUI session will not be displayable until the GUI is again exited and restarted.

- ! **Problem:** The observed wind barb parameter is not displayable on the graphics pane. **(DR 9056)**

When attempting to load Wind Barb from the Observations -> metar menu of the graphics pane, the following error occurs in the java console window:

"Could not fetch parm from server. Either gray text error in MenuDyna or Incompatible file format data/vobs-metar-WindVector-national-0103080720...dat = null"

The product does not display in the graphics pane.

Workaround: Users can get wind information from the metar obs and hourly weather roundup products in the text pane.

- ! **Problem:** Clearing a probe area on the graphics pane by toggling the menu item also toggles the map background. **(DR 9057)**

Many products can be cleared from the graphics pane by selecting the menu item again to toggle the product off. Probe areas that have been outlined on the graphics pane can be cleared in such a manner. However, when the probe action menu item is selected to toggle off the probe area, the map background is also toggled off, leaving a display with no background. This seems to happen most often when the counties map background is displayed, which is the default map background.

Workaround: The map background can be easily toggled back on by selecting the appropriate map background from the Geography menu.

- ! **Problem:** Replacing displayed images with ones that have not yet been displayed causes a traceback. **(DR 9069)**

An image displayed in the graphics pane can be replaced with another image by selecting the new image from the menu. If it is the first time in the current EMDS GUI session that the new image has been loaded, the java console window reports tracebacks as follows:

Exception occurred during event dispatching: java.lang.NullPointerException

This occurs especially if any of the animation tool bar buttons have been selected, such as looping. In addition to the tracebacks, the animation function stops, and often the cursor becomes a paintbrush painting the screen with the new image as it is moved about the screen.

Workaround: Select another tool bar button and the image will load and display successfully. No other negative effects have been seen. Once the product is loaded once, the problem no longer occurs for that product if it is loaded again during the current session.

- ! **Problem:** MenuConfigurator reports an error on startup. **(DR 9084)**
When the MenuConfigurator is started, in the java console window, the following error is reported:

MenuDyna.java 258 ERROR: IOException = java.io.IOException: Cannot find URL
Cont

ext=http://140.188.2.141/localizations/BOX/wkspc and spec=Xtensibl.mnu

This is because the file is actually Xtensibl.frm. This does not seem to cause any problems with editing Text menus in the configurator, but it may cause problems when editing and creating graphics products and map backgrounds.

Workaround: None.

- ! **Problem:** Newer NWS sites are not in map background and may not be configured. **(DR 9085)**

The newer NWS AWIPS sites that were added to the deployment, namely Key West, Huntsville, and sites in Maine and Indiana, are not included in the map background NWS Forecast Offices. They may also therefore not be set up as configurable sites. If that is the case, web dissemination will not be localizable to these sites.

Workaround: Manually edit localization files from other sites to tailor them to the new sites.

- ! **Problem:** Text Scroller bars sometimes crash. **(DR 9086)**

Infrequently, when under moderate usage, the text scroller bars crash. The java console window reports NullPointerException errors and tracebacks. From this point on, no watch/warning headers will scroll across the text bars until the EMDS GUI is logged out and restarted. However, the products DO appear in the text and graphics panes, and the Beep sound DOES still beep, so all that is missing is the visible header scroll.

Workaround: Exit and restart the EMDS GUI.

- ! **Problem:** The *hmIngest* process does not process leftover files in /data/ldad/hmIngest. **(DR 9174)**

If *hmIngest* fails to process files in /ldad/data/hmIngest for any reason, when proper processing resumes, *hmIngest* does not process those leftover files. Instead it merely resumes processing with new products as they come in. So, unlike a decoder, which cleans out its input directory, the products that *hmIngest* missed the first time are not retrieved, and thus are lost. The products are eventually purged.

Workaround: None.

- ! **Problem:** The list of files to synch is blank if too many files are involved. **(DR 9175)**
During a synchronization, EMDS checks to see which files on the user's PC need to be synched with those on the LS. Once this list of files is determined, the user is given the list of files to be synched and asked if he wants to synch. If the number of files to be synched is too large, no list of files is presented to the user. The window tells the user the following files are to be synched, but then does not list any files. This could cause confusion, and possibly cause the user to choose not to synch when he should.

Workaround: If the synch window appears, asking if you want to synch, but does not list any files to be synched, choose yes to perform the synch.

- ! **Problem:** The scroll bar in the menu configurator GUI does not scroll. **(DR 9176)**
In the menu configurator GUI, the user can expand menus in the headers to see the sub-items. However, if the menus are expanded down such that they exceed the length of the window, the scroll bar does not allow you to scroll down to see the other menus.

Workaround: Contract some of the menus in order to see the lower ones.

- ! **Problem:** Sampled text does not wrap at edge of pane. **(DR 9232)**
When sampling in the graphics pane, the sampled text adjusts and displays to the right or left of the cursor as necessary to be displayed in the pane. However, if the text is still too long, it displays to the edge of the pane and then gets cut off. The rest of the text does not wrap, and thus is not displayable.

Workaround: None. The extent of the impact caused by this problem will depend on the monitor size and screen resolution of each user's monitor.

- ! **Problem:** Latest text products are not always available upon EMDS GUI start-up. **(DR 9233)**
When the EMDS GUI is brought up, most text products that can be displayed in the text pane display the most recent version(s) of the products. Sometimes, however, one of the products does not display the most recent version, but instead displays an older version.

Workaround: Exit and restart the EMDS GUI.

- ! **Problem:** Running EMDS as a java applet does not work with Netscape 6.X. **(DR 9653)**
Running EMDS as a java applet through a web browser does not work if run from any version of Netscape browser 6.

Workaround: Use Netscape version 4.7 or older or any version of Internet Explorer to bring up the java applet form of EMDS.

! **Problem:** The wind direction angle definition is different between GFE and EMDS for LAPS. (DR 10029)

The GFE uses a wind direction angle defined clockwise from the positive Y - axis, but the EMDS uses a wind direction defined counter-clockwise from the positive X - axis. As a result, the displayed wind directions for the same data will be different.

Workaround: Use the GFE wind directions. They are correct.

! **Problem:** The link for HP developers is incorrect. (DR 11226)

On the Download Page of the EMDS web page, there is a link to go to HP for more information on HP-UX. However, this link has been changed by HP. The new link is <http://www.hp.com/go/developers>.

Workaround: Use the new link to view information for HP developers.

! **Problem:** Synchronization from within the EMDS GUI does not work. (DR 11353)

There are basically three ways to synchronize the EMDS application: 1) use the synchex application, 2) synch as the first step to bringing up the EMDS GUI, or 3) synch from within the EMDS GUI using the Synchronize Application menu item from the File menu of a graphics pane. This third method does not work. When it is chosen, the cursor momentarily goes to an hourglass, but then nothing happens. The java console window reports the following:

```
MenuDyna.java 538 ERROR: IOException on Bean instantiate: PAckage/Class Name =\ndadapp.util.syncBean
```

Workaround: Use either of the first two options noted above to synch the application.

! **Problem:** First time loading the Wind Vector contour product produces a java traceback. (DR 11354)

When the Local scale Wind Vector contour product is displayed on a graphics pane for the first time in an EMDS session, a java traceback scrolls in the java console window. However, the product does load successfully on the screen, and all subsequent displays of this product within the same EMDS session load without any java traceback. No other ill effects have been noticed from this error occurring.

Workaround: None, but no operational impact.

! **Problem:** The default webSiteName.txt file sometimes lists the wrong URL. (DR 11458)

The default website address that is presented to the user to connect to is sometimes wrong, especially when using ls1-<site>:8080. In this case, the URL displayed to the user has the full IP address except for the :8080/ at the end of it.

Workaround: Add the missing characters when prompted by the EMDS program for the URL to which to connect.

! **Problem:** Watch/Warning products sometimes scroll two headers per product. **(DR 12734, formerly DR 9025)**

When a watch/warning product is received by EMDS, it scrolls the header of the product across the appropriate scroll bar to alert the user as follows:

Tornado Warning 0: WWUS51 KBOX 081230

However, sometimes, in addition to the legitimate header, a second header scrolls for the product just issued, as follows:

Tornado Warning 1:....

This bogus header has no expiration time associated with it, so it continues to scroll for days after the real warning has expired (when a product expires, it stops scrolling).

Workaround: None. However, the real header is always scrolled in addition to the bogus header.

4.4 Fax

! **Problem:** LDAD Fax Message GUI Recipient allows overwrite of the Company field. **(DR 4125)**

The LDAD Fax Message GUI allows for 36 characters in the recipient field. When the entire field is used, the Company header of the fax cover sheet gets overwritten. This makes the last 9 characters of the Recipient field and the Company header on the fax cover sheet unreadable.

Workaround: Limit the number of characters used in the recipient field to 27.

! **Problem:** LDAD Fax Site Viewer and Editor GUI generates Tcl invalid command stack trace. **(DR 4203)**

When a user selects Contents from the help menu of the LDAD Fax Sites GUI (Configure Auto Fax button menu), it generates a stack trace. Error: invalid command name "win_setCursor". This button works from other fax window help menus, but is not really useful since the help page that appears does not have any help on using the fax functionality.

Workaround: Bring up the Fax All menu and use its help menu.

! **Problem:** The Configure Autofax GUI does not display on the Linux text workstation. **(DR 12693)**

Workaround: Use the HP text workstation to bring up the Configure Autofax GUI.

4.5 Ingest and Display

- ! **Problem:** The Kermit collection and dissemination session templates are missing. (**DR 4147**)

There are no sample Kermit session templates. After creating a blank session file for a Kermit collection or dissemination, there were no templates to use. For example, using the ldadScheduler a user creates a user collect1 and a session file collect1_coll_sess and then the user copies ~ldad/data/XMTEST_COLL to ~ldad/data/collect1_coll_sess (for a Xmodem session). For Kermit collection and dissemination there are no templates.

Workaround: There are a few differences between the Xmodem templates and what a Kermit session file needs to be:

```
diff KERMIT_COLL XMTEST_COLL
< send "kermit -s <N>\r"
> send "sz -ev <N>\r"
< spawn kermit -r; set localId $spawn_id
> spawn rz -v; set localId $spawn_id
diff KERMIT_DISSEM XMTEST_DISSEM
< send "kermit -r \r"
> send "rz -v \r"
< spawn kermit -s <N>; set localId $spawn_id
> spawn sz -ev <N>; set localId $spawn_id
```

To change an Xmodem session file to a Kermit session file, copy the Xmodem session file to a new name, then change the lines listed above, changing the lines preceded by a ">" to the lines preceded by a "<".

- ! **Problem:** LDAD can only collect data from the home directory on the remote system. (**DR 4163**)

When attempting to collect data via the LDAD Scheduler using the protocols X, Y, Z modem or Kermit, the home directory of the user specified is the only directory on the remote machine that is available for collection. This problem is related to an incorrect session template file.

Workaround:

- (1) In the Acquisition session file perform the following:
Before the line that does the send on client system (e.g., send "/usr/local/bin/sx <N>\r") - enter the following: **send "cd remote_directory_name \r"**
- (2) In the Dissemination session file perform the following:
After the line that does the receive on client system (e.g., send "/usr/local/bin/rx\r") enter the following line: **send "cp <N> destination_directory_name \r"**.

- ! **Problem:** Baseline test Kermit, Xmodem, Ymodem, and Zmodem files need updating. **(DR 4167)**
The baselined test session files do not work. The baseline contains XMTEST_COLL, XMTEST_DISSEM, YMTEST_COLL, YMTEST_DISSEM, ZMTEST_COLL, and ZMTEST_DISSEM, and the ID of the Kermit baseline file is unknown. These files are incorrect in that they are missing some full path names due to insufficient environment, and missing variables and slashes necessary to support the database user entries.
Workaround: Create new session files on-site.

- ! **Problem:** The microArt system fails to deliver products to the local LDAD. **(DRs 8915, 10949)**
Three sites, LIX, APX, and RAH, have co-located microArt systems which dial into the LDAD to transfer products. These sites have experienced the following problem: the Upper Air system dials into LDAD successfully, but the transfer eventually times out and no products are ever received at the LDAD end. There is no indication that anything has been aborted by LDAD. The problem appears to be a timing issue related to the co-location of the two systems.
Workaround: Have the Upper Air systems dial into their backup LDAD sites.

- ! **Problem:** Multiple dial-out requests execute only once at PHI and OTX. **(DR 10590)**
At PHI and OTX, multiple dial-out requests execute successfully only on the first dial-out, and then doing nothing further. It is believed that there is some local condition at PHI and OTX that the *ldadServer* is not handling correctly. Whether this unknown local condition is itself erroneous is not known. If the local condition is OK, then there is a bug in LDAD such that it does not work properly even under certain correct conditions. If the local conditions are erroneous, then LDAD should detect that, handle the error, and log as needed.
Workaround: Perform multiple single requests to acquire the desired data.

- ! **Problem:** LDAD surface_qc plots do not show failed QC correctly. **(DRs 10625, 11079)**
Instead, once the plot is loaded, toggling on the bad QC menu causes all data to be displayed red, and toggling on the good QC menu causes all QC data to be displayed green.
Workaround: None.

- ! **Problem:** Products are dropped when multiple products are in an input buffer. **(DR 11136)**

The *suaReceiver* expects there to be only one product present in a single input buffer. However, in reality, it is possible to have more than one product present in a single input buffer. In this case, the *suaReceiver* processes the first product, but then drops all subsequent products in the buffer and does not process them.

Workaround: None.

4.6 Scheduler

- ! **Problem:** Collection of files using X, Y, and Zmodem protocols places extraneous characters in the files. **(DR 5162)**
When collecting data files using Xmodem, Ymodem, and Zmodem protocols through the LDAD Scheduler, extraneous characters are placed at the end of the files that are collected. In particular, a string of ^Z 's appears at the end of these files.

Workaround: There is no definite workaround, but sometimes an edit tool such as Wordpad can be used to remove the added characters.

- ! **Problem:** The LDAD Scheduler does not support interrogation of password-protected Sutron gauges. **(DR 8777)**
Sutron gauges have the capacity to require a username and password in order to be interrogated. The LDAD Scheduler currently does not have the capability to interrogate such a gauge.

Workaround: None, but such gauges should be rare.

4.7 Triggers

- ! **Problem:** The LDAD triggers template is too restrictive. **(DR 4865)**
Several entries in the LDAD triggers template do not create useful PILs when matched with the *ldadSiteConfig.txt* directives. For example, in the QC products (00nQCa), the XXX matches the local site ID, while the directive *ww1* used in the template may use the AFOS node for other reasons.

Workaround: Users need to go in and edit their triggers. Refer to the System Manager's Manual for more information on editing triggers.

5.0 SYSTEM

5.1 Archive Server

- ! **Problem:** Selecting from lists too rapidly generates an error message. **(DR 12054)**

There are two GUIs in the Archiver in which the user double-clicks elements in a selection list to move them over into a list of chosen items. If the user double-clicks two items in succession too fast, a popup error message appears. The two places where this happens are in the Select Dates to Store GUI and the Make CD or DVD GUI. The problem is not as bad in the Select Dates to Store GUI, since there is a maximum of seven selections to make, and usually users will be selecting only one or two of them. It is more troublesome in the Make CD or DVD GUI, since there may be a large number of files the user wants to copy to the CD.

Workaround: Select OK in the error message popup window to acknowledge the error, and then resume making selections from the list. Make selections more slowly to avoid the generation of the error message.

- ! **Problem:** The Archiver does not provide a time estimate or progress report while burning CDs and DVDs. **(DR 12057)**
When in the process of burning a CD or DVD, the Archiver GUI does not provide any kind of progress report or estimate of how long the operation is going to take. The application should capture the progress report generated by CD-Record and make that visible to the user. An initial estimate of how long the burn will take would also be useful.

Workaround: None.

5.2 Asynchronous Product Scheduler (APS)

- ! **Problem:** Products missing the WMO header cause queue backup in the *asynchScheduler*. **(DR 9180)**
When a product that is missing a WMO header is sent to the *asynchScheduler*, the log reports 'index out of range in TextString'. The *asynchScheduler* then begins to queue up products and starts reporting '<PIL> already exists in fifo'.

Workaround: Restart the *asynchScheduler* to resume processing of products.

5.3 Decoders

- ! **Problem:** The *MaritimeDecoder* does not decode Coast Guard reports. **(DR 3697)**
These reports are used by the Hourly Weather Roundup.

Workaround: None.

- ! **Problem:** LightningPlotInventory acquisition has a logic flaw. **(DR 4519)**
The constructor for the LightningPlotAccessor class uses a time range to obtain CG lightning data. It uses the LightningPlotInventory class to get the valid inventory from

that time range. However, if that time range overlaps the hour (ie: 1358 to 1404), the function `LightningPlotInventory::numRecords()` fails to count ANY lightning data. It fails because it uses the minutes as a loop variable, but when the end time minutes (04) is less than the start time minutes (58), the loop is never entered.

Workaround: There is a small chance of losing lightning data at the top of the hour. However, this is unlikely because no data selections currently on D2D cross hour boundaries.

5.4 Failover/Reboot

! **Problem:** When LS1 is not reachable, the DS failover takes a long time. **(DR 2136)**
When LS1 is not reachable, the time to failover the DS package takes at least 2 more minutes. The scripts `startLDAD.csh` and `stopLDAD.sh` have to time out to detect that the server is not reachable.

Workaround: None.

! **Problem:** First Red Banner is not received when failing back an AS swap package. **(DR 2494)**
When failing back either AS swap package to its primary, the first Red Banner message announcing a swap is in progress seldom appears on the D2Ds. The second Red Banner message announcing the swap is completed is successfully received.

Workaround: None. This does not affect the operation or success of the failover.

! **Problem:** The process monitor shows LAPS as being in a red state during a failover of AS1 to AS2. **(DR 3737)**
When AS1 is failed over to AS2, LAPS processes are not supposed to run. The process monitor reports this by showing LAPS processes as being in a down (red) state. This is correct, but this may make a site think it can restart the processes. This would be a mistake, causing other processes to be restarted but not fixing LAPS.

Workaround: None. Do not attempt to restart LAPS when either AS is in failover mode.

! **Problem:** Simpack failover is slow when DS1 is disconnected from the FDDI ring. **(DR 4562)**
When a Simpack failover is performed while DS1 is disconnected from the FDDI ring (or possibly also if it is powered off), the Simpack swap slows to a crawl, and the following time out message is displayed 4 times "rcmd: connect: ds1-<site>: connection timed out". The swap eventually completes, but this adds about 4 minutes to the swap time.

Workaround: If possible, ensure that DS1 is connected to the FDDI ring before performing a Simpack failover, even if DS2 is the primary Data Server at the moment.

- ! **Problem:** Process Monitor becomes confused during failover. (DR 4856)
During failover, the Process Monitor becomes confused about which system it is running on. As a result, processes are shown running on several systems.

Workaround: Ignore the monitor during the failover and then wait a few minutes for things to sync up.

- ! **Problem:** First attempt at using message handling after swapping to DS2 fails. (DRs 5090, 12600)
The first attempt to send a message from the text workstation via message handling after swapping to DS2 sometimes does not succeed. An error message pops up on the text workstation stating "Message Handling System error: no response from MhsServer". As a result, the product never gets sent out.

Workaround: The second and all subsequent attempts appear to be successful. Send a test message after swapping to DS2 to verify transmission.

- ! **Problem:** The LDAD *MakePROCpage* process sometimes hangs on a DS swap. (DR 5197)
The *MakePROCpage* (which runs on as1f) may hang on a DS swap causing the LDAD internal data monitor to stop updating. The process hangs on a call to *fping*. The problem seems to be that the *fping* call fails because of the momentary loss of NIS - in effect no hostnames can be resolved. Unfortunately *MakePROCpage* is unable to recover.

Workaround: Kill *MakePROCpage* and the *fping* process. The fxa cron will then restart the *MakePROCpage* process.

- ! **Problem:** The *asyncScheduler* sometimes fails to die or restart during AS swaps. (DR 5212)
The *asyncScheduler* at times does not die on AS1 during a swap to AS2, although it does start successfully on AS2. Other times, it dies during the swap but does not restart on the server that is starting the AS1 swap package.

Workaround: After a swap of the AS1 swap package, check each AS for the *asyncScheduler* process. If the process is found on the server that the package was swapped from, kill it. If the process is not found on the server that the package was swapped to, as fxa, type `/awips/fxa/bin/startAsyncScheduler`.

- ! **Problem:** WWA hangs during a DS failover. (DR 6013)

If the WWA application is running during a DS failover, it will hang and eventually crash.

Workaround: Restart WWA after a DS failover.

- ! **Problem:** IFPS has SQL errors after DS failover. **(DR 6014)**
If the IFPS master menu is running during a failover, the SQL commands issued by the Master Menu will fail after the failover.

Workaround: Any applications launched from the Master Menu are OK. Stop and restart IFPS to correct any problems.

- ! **Problem:** There are performance problems with Scan/Storm Cell Track when failed over to DS2. **(DR 6082)**
There is a performance problem with SCAN when the DS swap package is failed over to DS2. When the user launches the SCAN/Storm Cell track, it takes up to 3+ minutes to load. When run on DS1 it takes under a minute.

Workaround: None.

- ! **Problem:** Green times and auto-updating sometimes break after an AS1 swap to AS2. **(DR 6518)**
Green times may stop updating and auto-updating may break on all existing D2Ds after an AS1 swap to AS2.

Workaround: There are 2 workarounds:

- 1) Close out existing D2Ds and start new ones, which will then have green times and auto-updating working.
- 2) Bounce the *notificationServer*, after which green times and updating will work on existing D2Ds.

- ! **Problem:** *MetarDecoder* reports numerous errors for a period of time after a DS swap. **(DR 6521)**
After a DS1 swap to DS2, the *MetarDecoder* reports numerous errors for a period of time when trying to decode products. The period of time is about an hour.

Workaround: None. The METAR reports are stored successfully despite these errors.

- ! **Problem:** The /opt/informix partition becomes stale on the workstations during DS swap. **(DR 9078, formerly DRs 6519 and 7324)**
Some processes may remain connected to /opt/informix during a DS swap, causing the partition to become stale on one or more workstations. It has been known to occur when hydrology applications are running on the workstation.

Workaround: Kill the process(es) that is still accessing /opt/informix and execute the **umount/mount** commands.

- ! **Problem:** The *MetarDecoder* sometimes fails to re-register and loses data after a DS Swap. **(DR 9303)**
The decoder continues processing data, but then loses the data when the following errors occur in the decoder log:
17:23:51.222 METARroutines.C PROBLEM: NCF_FAIL Problem Storing the report-1
17:23:51.816 NetcdfPointData.C PROBLEM: unable to write lastInBin
17:23:51.817 METARroutines.C PROBLEM: Null pointer returned for netcdf file id from getFileHandleAndRecord.
17:35:03.195 C_hmHMU_logError.C BUG: ERROR, severity level MAJOR, in function/subroutine "store_report":
Report insert error for sequence number 0, SQLSTATE = 07003, SQLCODE = -404

Workaround: If the above errors are observed in the *MetarDecoder* log after a DS swap, kill the decoder and allow it to be restarted automatically by its DataController.

- ! **Problem:** The *EndAll reboot* script does not reboot the Linux workstations. **(DR 9312)**
The *EndAll reboot* command that reboots all site HP servers and workstations does not reboot the Linux workstations or servers.

Workaround: Reboot the Linux devices manually.

- ! **Problem:** Service Guard may generate core files during system reboot. **(DR 10418)**
If Service Guard does not handle a site system reboot smoothly, it may generate huge core files in ds1:/var/adm/crash/. This causes /var to fill to 100%. The INDEX file indicates a "TOC" error in these situations. This appears to only happen with K-series servers.

Workaround: The reboot completes successfully despite this problem. Simply remove the core files from /var to avoid filling up the disk space.

- ! **Problem:** WarnGen is very slow to create text if D2D is not restarted after a DS swap. **(DR 10678)**
If a D2D is not restarted after a DS swap occurs, a WarnGen session run from that D2D will take one to two minutes to create text on the text workstation when the Create Text button is selected in the WarnGen GUI.

Workaround: Restart all D2Ds after a DS swap occurs.

- ! **Problem:** Some WWA messages log to the DS swap package control log. **(DR 10683)**

Workaround: Refer to the DS swap control log in addition to the WWA log when analyzing WWA operation.

- ! **Problem:** SIMPACT failover does not execute cleanly when dsswap is on DS2. **(DR 11324)**

When executing a SIMPACT failover while the dsswap package is on DS2, the *CP_Reconfigure* script returns the following error:
rcmd: connect: ds1-osfw: Connection timed out.
The VIRs swap over, but the logical software links do not (in /awips/fxa/bin).

Workaround: Contact the NCF for assistance in re-establishing radar connectivity on SIMPACT 2.

- ! **Problem:** LSR may not function properly after a DS swap. **(DR 11969)**

Workaround: Log out of, and back into, the workstation and LSR will then function properly.

- ! **Problem:** Configure Autofax fails to send faxes while failed over on DS2. **(DR 12567)**

Workaround: Send faxes manually from the text windows.

- ! **Problem:** Verification is slow to launch on the Linux workstation when dsswap is running on DS2. **(DR 12587)**
The Verification Setup window and the Verification Matrix Editor take about a minute or two to launch on the Linux workstation when the dsswap package is running on DS2. The application launches within a few seconds on the HP workstations under the same conditions.

Workaround: Wait the required time for the windows to appear, or use the application on the HP workstation.

- ! **Problem:** Product send messages sometimes appear in the dsswap.control.log file. **(DR 12606)**

The following message may appear periodically in the dsswap.control.log:
Warning: some problems were encountered while sending the product.
Check the log for details.
These messages have yet to be found to be associated with any actual problems.

Workaround: None, simply ignore the messages.

- ! **Problem:** The *ingProcMon* process fails to stop on AS1 when failing the AS2 swap package back to AS2. **(DR 12639)**

The *ingProcMon* process for AS2 sometimes continues to run on AS1 following the failback of the AS2 swap package to AS2, in addition to starting up again on AS2. The process summary for AS2 in the Text row of the Netscape Monitor reports it being down.

Workaround: Kill the *ingProcMon* AS2 process running on AS1 after the swap is complete.

- ! **Problem:** Failing over the pxapps packages can prevent export of /pxdata. **(DR 12706)** For example, this can happen if px1apps is failed over to PX2, and then PX2 is rebooted. The result is that /px2data does not get exported from PX1, which then prevents access from the workstations and servers to /px2data. This could happen failing over in the other direction as well.

Workaround: Restart px2apps (or px1apps if going the other direction).

- ! **Problem:** The user (fxa, awipsusr, textdemo, etc...) environments are not automatically updated on the Linux workstations after a DS failback to DS1. **(DR 12732)** The /tmp/environs.* files do not get recreated on DS1 when the dsswap package is failed back from DS2 to DS1. This results in the WFOA applications remaining pointed at the DS2 database ONLINE_REP, instead of being repointed to the DS1 database ONLINE. This causes database access to fail for these applications.

Workaround: After a failback of the dsswap package to DS1, remove the /tmp/environs.* files on each Linux workstation and re-log-in to them.

- ! **Problem:** Occasionally some scheduled gauge collections fail after a DS fail-back. **(DR 12742)** Occasionally, after the dsswap package is failed back from DS2 to DS1, scheduled gauge collections may fail, resulting in repeated tell_co errors.

Workaround: Check all scheduled requests after a dsswap failback to DS1. If they are not working, reset them.

- ! **Problem:** The PXs may sometimes actually reboot twice when rebooted. **(DR 12769)** The problem is that the px#apps scripts execute an fuser on the /px#data partition when the cluster software is being stopped. However, the script does not check to see if the partition is currently mounted. If it is not, the script kills all root processes and causes another reboot. The px#apps scripts need to take this into account.

Workaround: No user action is necessary. This does not cause any other problems other than a second reboot of the device. The system logs will just look like a reboot was attempted twice.

- ! **Problem:** The PX failover scripts use DS1, but should use the DS floater. **(DR 12810)**

In the PX failover scripts, the exportfs command to allow root access to /px1data and /px2data is specifically set to DS1 instead of DS. The result is that on a failover, localization as root will fail.

Workaround: None, but minimal impact. Since localizations as root only occur during installs, and installs are only run with the DS's in primary mode, this problem should rarely occur.

! **Problem:** WWA messages sometimes appear in the dsswap.control.log file. **(DR 12819)**
The following message may appear periodically in the dsswap.control.log:
/awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd
[summary issue, summary followup, summary clear, summary cancel, summary followup
]
[issue, followup, upgrade, extend, expand, clear active, clear cancel, cancel, summary
issue, summary followup, summary clear, summary cancel]
[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0]
/awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd
[summary issue, summary followup, summary clear, summary cancel, summary followup
]
[issue, followup, upgrade, extend, expand, clear active, clear cancel, cancel, summary
issue, summary followup, summary clear, summary cancel]
[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0]
out fn: STOSUMNW1 --- /tmp/22096/STOSUMNW1
/awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd
[summary issue, summary followup, summary clear, summary cancel, summary followup
]
out fn: REVSUMNW2 --- /tmp/23740/REVSUMNW2
out fn: WRKSUMNW1 --- /tmp/29060/WRKSUMNW1
out fn: WRKSUMNW2 --- /tmp/29060/WRKSUMNW2
out fn: STOTORSTO — /tmp/1242/STOTORSTO_599
out fn: STOTORSTO — /tmp/2680/STOTORSTO_600
/awips/fxa/data/localizationDataSets/STO/nwr_tor_wrn.wwaProd
These messages have yet to be found to be associated with any actual problems.

Workaround: None, simply ignore the messages.

! **Problem:** The *PX_FMK.sh* script needs to handle check_mounts without questions. **(DR 12884)**
The *PX_FMK.sh* script may fail when it is called with the check_mounts option because it prompts the user, but the user cannot respond because it is being run from a script. The check_mounts option should exclude all user prompts.

Workaround: The only operational impact from this problem is that if a PX failover occurs while an AS or DS is also failed over, the failover will successfully restart ingest

on the other PX, but the *PX_FMK.sh* script may hang. If this occurs, kill the *PX_FMK.sh* script if it is running on the good PX.

5.5 General

- ! **Problem:** The mail cleanup script causes elm to fail. **(DR 6216)**
Previous attempts to control growth of mail accounts have created a problem for Elm users. When scripts are executed to clean up mail, they reduce based on line count and do not take into consideration message content. This causes the Elm mail application to fail, reporting file corruption.

Workaround: The Mail application does not have this problem. Use the Mail application or manually clean up the file in `/var/mail/<user>`.

- ! **Problem:** The GCC compiler is not working. **(DR 8260)**
The problem is a hardcoded path in the gcc executable based on where the compiler was built and installed. The compiler is looking for a spec file in `/opt/newwgcc` instead of `/opt/gcc`. Also there are two missing symbolic links in `/opt/binutils/lib`.

Workaround: To get the GCC compiler working, create the missing links, and add `/opt/gcc/bin` to the PATH.

- ! **Problem:** Logging in as oper on Linux produces a message indicating the tabs command is not found. **(DR 10431)**
The `/home/oper/.profile` produces the following message when the oper user logs into a Linux workstation:

```
ksh: /home/oper/.profile[17]: tabs: not found
```

The tabs command does not exist on the Linux operating system, but does exist on HP.

Workaround: This message does not cause any problems and can be ignored.

- ! **Problem:** The red banner window can get lost behind other windows. **(DR 11372)**
The Urgent message window (red banner) pops up to alert the D2D user to certain problems or events, such as a server swap is in progress, or a radar connection has gone down. If the user iconifies the window, a subsequent message will cause it to deiconify and appear in front so that the user can see it. However, if the user pushes the window behind other windows (e.g., by clicking on the title bar of D2D), new messages will not cause the window to come back to the front, possibly resulting in the user missing important information.

Workaround: If the user does not want to acknowledge a red banner message, but does want to remove it from the display screen, iconify it rather than bringing other windows to the front and burying it behind them.

- ! **Problem:** The *readenv* script may not recreate the */tmp/environs.** files in some cases on Linux. **(DR 11592)**

When the fxa environment changes and the *readenv* script is called, it recreates the *environs* files in */tmp*. However, in some cases this does not happen, and the files just get appended to. For example, if the *environs* files in */tmp* are owned by *awipsusr*, and the environment changes, the script logs into the Linux workstation as *fxa* and is unable to remove the files in */tmp*. Instead, the files get appended to. This could ultimately result in these files becoming very large, which would cause the sourcing of the environment to take time. There are two problems. First, the *-f* option for the *rm* command in *readenv.csh* is missing. Second the *-f* command for *rm* on Linux does not work the same way as it does on HP. The *-f* option for *rm* on Linux does not allow a user to delete a file owned by another user even if the permissions are *777*.

Workaround: None, but operational impact should be minimal. The *environs* files in */tmp* are remade every 30 days when the root cron cleans out */tmp*.

- ! **Problem:** The */home* and */dsdata* directories are sometimes mounted multiple times on the PXs. **(DR 11907)**

Through normal system operations, the */home* and */dsdata* directories may become mounted on the PXs multiple times. However, there is no operational impact from this, and no corrective action is required. The multiple mounts will clear up the next time the PXs are rebooted.

Workaround: None required.

- ! **Problem:** The Group ID for users (*gid 20*) is different from the default users group ID on Linux (*gid 100*). **(DR 12829)**

The group ID for users is different on the PX locally (*/etc/group*) than the NIS group ID (*yecat* group). The default Linux installation uses *gid 20* as the *games* group, but AWIPS uses that *gid* for users. This can cause confusion when using that group ID. This needs to be resolved to avoid confusion and to clear up ownership and access to files on Linux.

Workaround: This should not cause any problems with functionality or access. However, it will be a problem for anyone attempting to get to their own files from the PX. Remember that files from PX1 and PX2 with a group ID of users will show up as *games* because of this problem.

- ! **Problem:** Problem with the *openssh* startup script on HP. **(DR 12878)**
There is a problem with the */sbin/init.d/sshd* script for *openssh*. The script is missing an entry for *start_msg* and *stop_msg*. As a result, a usage message appears in the boot log

on the HP. This does not prevent ssh from starting, but it might cause confusion to the user.

Workaround: None needed.

- ! **Problem:** The permissions on the /awips/fxa/awipsusr directory on the Linux workstations are incorrect. **(DR 12910)**
The permissions are currently set to 755, but should be set to 775.

Workaround: None needed, there is no operational impact.

- ! **Problem:** Shutting down a PX cluster also disables networking. **(DR 12915)**
Shutting down the PX cluster software also shuts down NFS. NFS should not be shut down in this situation.

Workaround: No operational impact.

5.6 Localization/Installation

- ! **Problem:** Basin setup of localization should not run at an RFC. **(DR 8764)**
Since the RFCs do not have SCAN/FFMP, the basin setup parts of localization should not run. The errors that are output to the screen may confuse the user.

Workaround: Simply ignore the errors generated during the basin setup of localization if your site is an RFC.

- ! **Problem:** Design files and virtual field table do not handle dangling delimiter well. **(DR 9316)**
For both the code that parses the virtual field table for gridded data (i.e. virtualFieldTable.txt), and the code that parses design files for point data (e.g. metarStdDesign.txt), if one leaves an extra dangling delimiter at the end of the line, the code treats the dangling delimiter as an additional blank entry, and often causes behavior that the user does not expect and is very hard to diagnose. In the virtualFieldTable.txt file, the offending delimiter is a vertical bar. In the point data files, the offending delimiter is a space.

Workaround: When performing site modifications to the file types cited above, be sure that no dangling delimiters are introduced into the files.

- ! **Problem:** ICAT problems. **(DR 9833)**
The following problems exist with ICAT:
- Incorrect formatting of Volume Browser menus
- Duplicate handling of nationalData files

- 'Invisible' text in part of the GUI
- Parts of the GUI are not clear

Workaround: None.

- ! **Problem:** Setting up the ICAT environment is very difficult. **(DR 9834)**
The procedures for setting up the environment to run ICAT (environment variables, mounting CDs, exporting file systems, etc.) are very difficult and time-consuming.

Workaround: None.

- ! **Problem:** Localizations (*mainScript.csh*) run concurrently cause file contention. **(DR 10090)**
Attempting to run localizations on multiple workstations concurrently generates errors due to the naming convention of the temporary files the localization generates and uses. The localizations on each workstation try to use the same temp files (e.g., work.bcd, work2.bcd) that are stored in /awips/fxa/data/localization/nationalData.

Workaround: Do not run concurrent localizations on the servers or workstations.

- ! **Problem:** The LDAD trigger files are not site configurable. **(DR 10676)**
Currently the LDAD site trigger files are preset in the nationalData directory. Normally, files in this directory are baseline files and should not be modified. However, the LDAD trigger files often must be modified since they are not all-inclusive, and localization provides no mechanism for them to be overridden or appended to by files in localization/XXX or /data/fxa/customFiles. Additionally, there are cases when using certain ww1's (in ldadsiteConfig.txt) causes too many triggers or unused triggers to be created.

Workaround: Modify the LDAD trigger files in the nationalData directory as necessary. Be sure to save off any modified files prior to installations, and then replace the saved off files or merge them with the new baseline files as necessary.

- ! **Problem:** Localization creates unnecessary default RPS lists. **(DR 10697)**
During localization, default RPS lists are created for both dedicated and dial radars. However, only dedicated radars need default RPS lists. The dial radar default RPS lists that are created are not needed and cause localization to run longer than necessary.

Workaround: None. Simply ignore the default RPS lists that get created for dial radars.

- ! **Problem:** Linux CPs miss a file when the -radar localization is run on DS1. **(DR 10756)**
The CP reads some acq_wmo_parms.* files upon startup to control filtering of data. While most of these files are fairly static and are controlled as part of the national baseline, there is one exception. The acq_wmo_parms.sbn.radar file is created every time

a -radar localization is run on the DS. This file is created in /awips/hprt/data, which is no longer mounted on the Linux CP, whereas it was on the HP CP. While the file is recreated every time by the localization, this file only changes if changes are made to the dialRadars file. If changes are made to this file, the Linux CP will never know them.

Workaround: Run the script /home/awipsadm/Update_LinuxCP as root on DS1. This copies the file over to the Linux CPs and reloads the parms files.

! **Problem:** Procedures disappear from the D2D procedure menu after an install. **(DR 10808)**

Infrequently, site-created procedures are no longer available in the D2D procedure menu after an installation. The actual procedure files are still in /data/fxa, but they do not show up in the GUI.

Workaround: Recreate the procedures from scratch, and they will then appear in the procedure menu.

! **Problem:** After a localization on PX for grids, the *GribDecoder* logged errors. **(DR 11029)**

After running a localization on PX1 for grids, the *GribDecoder* wrote error messages to stdout while running. However, this did not seem to cause any problems with data processing.

Workaround: None, but no operational impact.

! **Problem:** The *mainScript.csh -auxFiles* localization does not always add the Eta BUFR Sounding pattern to the acq_patterns.txt file. **(DR 11196)**

When running the *./mainScript.csh -auxFiles* localization, the *createAuxFiles.csh* script is not always able to identify a pattern in the /data/fxa/nationalData/modelBufrAcq_patterns.template file to be added to the /awips/fxa/data/acq_patterns.txt file. The result is that the Eta BUFR sounding data is not ingested by AWIPS. For example, this problem occurs at some WR AWIPS sites. Using LOX as an example, LOX's latitude and longitude in the /awips/fxa/data/localizationDataSets/LOX/modelBufrClip.sup file is 34.30895615 and -119.472923. LOX should use the JUSB45 KWNO product, because LOX's latitude is between -30 and 42 and LOX's longitude is between -109 and -140. However, the *./mainScript.csh -auxFiles* localization was not able to identify any regionalized Eta BUFR data set in the modelBufrAcq_patterns.template file for LOX.

Workaround: The resolution for LOX was to change the latitude to a positive number. In the /data/fxa/nationalData/modelBufrAcq_patterns.template file the following line was changed from:

POINT ^JUSB45.* /ispan/bufr/modelSoundings # -30 -109 42 -140
to:

POINT ^JUSB45.* /ispan/bufr/modelSoundings # 20 -109 42 -140

With the modified modelBufrAcq_patterns.template file, the *./mainScript.csh -auxFiles* localization was able to locate a matching regionalized Eta BUFR Soundings data set for LOX and add the following entry to the */awips/fxa/data/acq_patterns.txt* file:

POINT ^JUSB45.* /ispan/bufr/modelSoundings

- ! **Problem:** Three chmod errors occur during the OB2 ADAPT install. **(DR 12170)**
Three chmod errors occur during the ADAPT install when WWA is being updated:
chmod: can't access /awips/adapt/ifps/bin/linux/WWAAdmin.sh
chmod: can't access /awips/adapt/ifps/bin/linux/WWAAdmin.tcl
chmod: can't access /awips/adapt/ifps/lib/libTktable2.8.so
This is because these files are new in OB2 and have not yet been installed when this chmod occurs, so the chmod fails.

Workaround: None needed.

- ! **Problem:** The */awips/fxa/data/wmoSiteInfo.txt* file is missing from the Linux workstations. **(DR 12705)**
This file is an NDM file, but it is needed for the radar localization in order to create the *acq_wmo_parms.sbn.radar* file for the CPs. Currently the file is only on DS1 and DS2. This will cause an error during the OB2 install, but it can be ignored.

Workaround: The error that occurs during the OB2 installation can be ignored. This DR has no operational impact for OB2.

- ! **Problem:** The *Setup_datafxa.sh* script creates radar and LAPS links to /dsdata instead of /data/fxa_local. **(DR 12886)**
The following links link to links instead of directly to the actual directories:
/data/fxa/radar should link to */data/fxa_local/radar*
/data/fxa/badradar should link to */data/fxa_local/badradar*
/data/fxa/tmp/radar should link to */data/fxa_local/tmp/radar*
/data/fxa/laps should link to */data/fxa_local/laps*

Workaround: None needed.

5.7 On-Line User's Guide

- ! **Problem:** Keyword links in Netscape Script help windows do not work. **(DR 4120)**
The Keyword section at the bottom of all Text Script Netscape help windows has dead end links. There appear to be no defined help pages for these key words.

Workaround: None.

5.8 Printing

- ! **Problem:** Four panel displays do not print correctly. **(DR 602)**
Printing a 4 panel display produces a mess of all contours plotted on a single map background. An information box appears indicating that printing 4 panel displays is not currently supported.

Workaround: None.

- ! **Problem:** RFCs cannot print to lp3. **(DR 12789)**

Workaround: Print to lp1 or lp2.

5.9 Product/Process/System Monitoring

- ! **Problem:** Netscape preferences need to be modified. **(DR 4213)**
The default setup for Netscape interprets files with extension .doc as MSWord files. Since there are no Word files in AWIPS, and AWIPS uses .doc for much of the internal documentation viewed with Netscape, the default preference set needs to be modified.

Workaround: There is no operational impact. The Netscape preferences can be modified manually to change the default preference so that .doc files are not related to MS Word.

- ! **Problem:** The Netscape Monitor sometimes stops working or reverts back to a previous date after a server swap. **(DR 4229)**
After server swaps, some panes of Netscape either stop updating from that point on, or revert back to a previous date and then resume updating normally after a few minutes.

Workaround: Reload the Netscape Monitor.

- ! **Problem:** Occasional missing process summary page **(DR 4496)**
Occasionally, the process summary page is missing one of the updates from a server.

Workaround: The missing process summary page will update within a few minutes with the next refresh of Netscape. To force a refresh sooner than that, hold down the shift key and select "Reload" from the Netscape menu.

- ! **Problem:** Netscape does not monitor all acquired grid data. **(DR 5040)**
Netscape does not monitor all of the grid data that are acquired by AWIPS.

Workaround: Users can determine when the latest Grid data were acquired by looking at the dates of the appropriate netCDF files under /data/fxa/Grid.

! **Problem:** Netscape does not monitor the *process_dpafiles* process. **(DR 5087)**
The Netscape Data Monitor does not notify users if *process_dpafiles* is down on the DS.

Workaround: Check for the process manually.

! **Problem:** Running the CPU history monitor from Netscape produces zombie processes. **(DR 5154)**
Running the CPU history monitor from the Ingest Processes section of Netscape produces a zombie csh process owned by fxa on that workstation, and a zombie *cpu-setup.sh* process owned by www on AS1.

Workaround: Both zombie processes die when the CPU history monitor is closed. These zombie processes do not appear to affect the operation of the Netscape, CPU history monitor, or the workstation.

! **Problem:** Monitor scripts do not work properly with Linux. **(DR 7459)**
The monitor scripts *startCtrlCpu.sh* and *xx_startProcMon.sh* check for a currently-running process and then start one if needed. However, the *ps -eaf* call in the scripts does not return enough of the ID in Linux to detect any currently-running processes, so multiple instances end up running on Linux systems.

Workaround: Kill the old versions of the processes if multiple versions are running.

! **Problem:** Netscape does not fully monitor the *AircraftDecoder* and *BufrDriver* processes. **(DR 11448)**
Netscape is not set to monitor the *AircraftDecoder*, and it is set to only monitor one of the *BufrDrivers*. Thus, if the *AircraftDecoder* or one of the *BufrDrivers* is down, Netscape will not report this. Also, the *AircraftDecoder* is not listed in the list of processes on AS1 affecting point ingest. The *BufrDriver* is listed as one process on this page, but should be listed as multiple individual processes.

Workaround: Use the **ps -ef** command on the appropriate server to determine if the processes are running.

! **Problem:** Netscape Disk Usage does not monitor the Linux devices. **(DR 12661)**
The DiskUsage Data section of the Netscape Data Monitor does not monitor the PXs or LXs.

Workaround: Use the **df** command on the appropriate device to check the disk usage.

! **Problem:** Two new web sites are not on the Netscape monitoring page. **(DR 12720)**
With the introduction of NDFD and IFPS SvcBu, two web sites have been developed to assist the sites in monitoring the contents of a central server. These web sites need to be added to the Netscape Monitoring Page. The URLs are:

NDFD -- <http://165.92.30.124:8080/ndfd>
IFPS Service Backup Configuration -- <http://165.92.25.16:90>

Workaround: Add these URLs to the Bookmarks to access them from the AWIPS Netscape.

5.11 Radar System

! **Problem:** The *RadarServer* does not accept additions to portInfo or wmoSiteInfo until it is restarted. **(DR 5621)**

If adding or deleting a site ID from portInfo.txt or wmoSiteInfo.txt, the *RadarServer* will not 'see' those changes until it is restarted.

Workaround: After modifying portInfo.txt or wmoSiteInfo.txt, kill the *RadarServer*. Then restart it on DS1 as fxa by typing:

/awips/fxa/bin/RadarServer &

Please note, if modifications (not additions or deletions of site ID) are made to portInfo.txt (such as number of products), then a registration msg will update the *RadarServer* and the server does not have to be bounced.

! **Problem:** When Exit is selected from Alert Areas tool, all the displayed graphics are cleared, not only those associated with the Alert Areas Editor. **(DR 6253)**

Workaround: Re-load all the graphics that are cleared.

! **Problem:** Too much radar data is being stored via the SBN. **(DR 6397)**

For many western sights, the dialRadars.txt file is quite large. The acq_wmo_parms.sbn.radar file, which tells the CP which radar products to keep from the SBN, is created from this file in addition to wmoSiteInfo.txt. All of this radar data is processed and stored on the system regardless of whether or not the site is utilizing all of the sites.

Workaround: Comment out or remove entries from acq_wmo_parms.sbn.radar for sites which are not being utilized or remove those sites from dialRadars.txt.

! **Problem:** Bogus startup of syncComms cs_config1. **(DR 6503)**

At a few sites, there were numerous *wfoApi* logs in /data/logs/fxa/<date> complaining about not being able to start up port 1 because it was not found in the portInfo.txt file. These sites did not have any radar lines connected to port 1.

Workaround: Issue an *icpReset0* to realign the port assignments.

! **Problem:** At some sites, *wfoApi* process uses > 90% CPU on the DS. (DRs 7801, 11653)

At some sites, a condition occasionally occurs whereby the *wfoApi* for port 4 hangs on DS1 and starts consuming large amounts of CPU time. If not killed, it can reach > 90% CPU time.

The following errors are the last entry in the 'hung' *wfoApi* process log:

Lost the connection for client 1

or

cs_error received for client 1

It is important to note that during the observed 'hangs', the line was cycling through a large number of disconnects/reconnects after processing several products, and it was determined that the Modulation Rate on the AWIPS modem was oscillating as well.

Workaround: Once a 'kill' is performed on the hung process, the line comes up and starts processing data again until the next time the *wfoApi* gets in that situation.

! **Problem:** The ORPG connection to AWIPS is not redundant. (DR 9939)

The ORPG only has one connection to AWIPS through the primary wave switch; there is no connection to the secondary wave switch. Thus, if the primary connection is lost, the ORPG connection to AWIPS will also be lost.

Workaround: None.

! **Problem:** The *restartRadar* process writes to fxa's mail. (DR 10386)

Workaround: None. Refer to fxa's mail for messages from *restartRadar* as necessary. Clean out fxa's mail manually if disk space becomes an issue.

! **Problem:** FTMs are issued by all sites with dedicated radar connections. (DR 10795)

All sites with a dedicated radar connection issue FTMs when that radar connection is down for maintenance or repair work. However, only the primary site for that radar needs to issue the FTM. For example, MOB is the primary site for the KMOB radar, and JAN has an associated feed. However, when the radar goes down for scheduled maintenance, both MOB and JAN issue FTMs. Even RFCs and Regional offices issue FTMs on the radars from which they have a feed. The result is that multiple FTMs are issued when a radar goes down for maintenance. The only time an associated site would need to issue the FTM is if the primary site is down.

Workaround: None. Ignore the multiple issuances of the FTM product.

! **Problem:** If dialed radar is not available for a specific elevation, another elevation is given. **(DR 10914)**
When dialing out for radar data, if a radar product is not available for the requested elevation, the nearest available elevation product may be returned by the dialed radar. For example, if a user requests a Velocity product from a dial site at the 5.3 level and that level is not available, the 6.0 elevation will be provided if it is available. While this is okay, there is no notification to the user indicating that the 5.3 elevation is not available and the 6.0 elevation will be provided. This problem can also arise in a similar fashion when performing multiple one-time requests.

Workaround: None. When dialing out for radar data, especially for elevations that are not commonly produced by the radar, be sure to note the elevation of the product that is received in the product legend. Also, users can consult the Radar Announcer to see what elevations have actually been received.

! **Problem:** The *dialRadar* process hangs and uses high CPU when it fails to disconnect. **(DR 11300, formerly DRs 6071, 9254)**
The *dialRadar* process often hangs when a clean disconnect cannot be achieved. The process then takes up most of the available CPU on DS1 until it is manually killed.

Workaround: Kill the *dialRadar* process manually when it hangs.

! **Problem:** The *RadarTextDecoder* reports an error when attempting to open an STImotion file. **(DR 12594)**
The *RadarTextDecoder* process reports the following for STI products received for the site's dedicated radars:
20:51:48.265 decodeRadarText.C EVENT: Processing file:
Graphic.2003050720514797.KAKQ
20:51:48.271 decodeRadarText.C EVENT: Processing code: 58
20:51:48.272 decodeRadarText.C EVENT: Generating Text Product.
20:51:48.288 textRoutines.C PROBLEM: Unable to open file
/data/fxa/radar/kakq/STImotion/20030507_2051: No such file or directory
20:51:48.296 textRoutines.C EVENT: Writing: WSRSTIAKQ
There is no STImotion directory, although there is an STI directory, and STI products are stored there successfully and are displayable on D2D. As the log shows, the WSRSTIXXX text product does store successfully despite this error message.

Workaround: None.

! **Problem:** The *RadarServer* retrieves the wrong local RPS list if the maintenance RPS list is missing. **(DR 12719)**
Normally, when a radar changes VCP mode, the *RadarServer* merges the correct national RPS list with the corresponding VCP mode local RPS list. However, problems occur if the local /data/fxa/radar/lists/*.maint RPS lists are missing. In that case, if the radar

changes from VCP 32 to VCP 11 for example, the *RadarServer* takes the correct storm national RPS list and reports that it merged it with the storm local RPS list, but in reality it merges it with the local clear-air RPS list, thus producing an incorrect resultant RPS list.

Workaround: Ensure that the maintenance RPS lists are always present in */data/fxa/radar/lists/*. Restore the maintenance RPS lists if they are missing. It may also be necessary to restart radar and/or manually resend the correct RPS list to correct the problem.

! **Problem:** The *wfoApi.StateInfo* file does not get updated completely when the VCP mode changes to VCP 11. **(DR 12837)**

If a dedicated radar is in VCP mode 21 and switches to VCP 11, the *RadarServer* does not change the fifth field for that radar in the */data/fxa/workFiles/wfoApi.StateInfo* file from 21 to 11. While radar functionality is not affected by this, this could cause confusion for a user looking at this file.

Workaround: None, but no operational impact.

! **Problem:** The *wfoApi* process can become hung. **(DR 12839)**

Infrequently, a dedicated radar's *wfoApi* process can become hung, creating *wfoApi* logs several times a minute reporting a 'null' port value.

Workaround: Execute the *stopRadar* script and then allow the fxa cron to re-establish the active ports.

! **Problem:** The One-Time Request for the CFC(34) radar product is never sent out. **(DR 12861)**

The radar product CFC(34) is requested through OTR every 6 hours by a cron job on DS1. However, the request is never sent out successfully due to incorrect arguments in the *sendOTR.cfc.sh* script.

Workaround: None.

! **Problem:** A PRR message 'storm' causes major workstation slowdowns. **(DR 12883)**

Problems with a site's radar can result in numerous PRR messages being sent to the AWIPS system. This message 'storm' results in a significant slowdown in workstation performance, to the point where the cursor does not respond to commands. For example, this occurred in one case where a site's dedicated radar was having pedestal faults and the radar was 'stuck' in elevation 3.5. The radar problem produced a firestorm of PRR messages in response to the AWIPS RPS List which was sent for every GSM received. The PRR messages caused both the *ORPGCommsMgr* and *RadarMsgHandler* processes to use high CPU time on DS1 and AS1 respectively.

Workaround: Kill the *ORPGCommsMgr* process to restore workstation performance until the radar problem causing the PRR message storm is fixed.

5.12 Site Specific/National Centers

- ! **Problem:** MEMMTR000 includes METARs it should not. **(DR 6740)**
KNAR reported that a MEMMTR000 request from a text window brought up additional METARs that should not be included (KAHN, KAKQ, KGDB, KJCT, KJUP). These were also listed in the text window browser. It appears that the file used to map the CCC with the NNN may be wrong at least for KNAR.

Workaround: None. The extra data can be ignored.

5.13 System Process/Log

- ! **Problem:** Decoder log messages. **(DR 1304)**
There are notices in the decoder logs that claim the decoder has not processed a message for periods of time. However, sometimes the times in the logs clearly show that this is not true. These decoder log messages appear when the logs are broken daily, as well as whenever data ingest is restarted.

Workaround: None. When debugging, ignore this message if the decoder log indicates other activity.

- ! **Problem:** The *stopIngest* scripts report minor error messages. **(DR 3518)**
For example, *stopIngest.** attempts to stop some processes twice, and thus gives multiple messages:
"/awips/fxa/bin/stopIngest.ds1[50]: kill: The number of parameters specified is not correct."
It usually kills the processes on the first attempt (but not always). The *stopIngest.ds1* and *stopLdadIngest* scripts also attempt to stop unowned processes (ldad *CommsRouter* and *DataController* versus the fxa version) and give the following error: "kill: 21030: Permission denied."
These errors are very minor, but could cause concern for users trying to troubleshoot logs.

Workaround: Ignore the error messages. They do not affect the outcome of the scripts.

- ! **Problem:** *DataController* logs stop, but do not restart. **(DR 5742)**
Sometimes one of the *DataController* logs terminates normally around 0Z, but fails to restart a new log for the new day. The processes are up and running, but new logs are not created.

Workaround: Stop and restart ingest to start the logs again.

- ! **Problem:** Certain WarnGen products produce PROBLEM message in *warnGenWish* log. **(DR 5956)**
When Create Text is selected on certain products in WarnGen, the following PROBLEM message appears in the *warnGenWish* log:
warnGenWish 16826 963596313.341968 17:38:33.341 PROBLEM: sendProduct():
GetCharstcsList() failed with 100 !
The products that this occurs with are: Blowing Dust Advisory, Blowing Snow Advisory, Coastal Flood Statement and Watch, Frost Advisory, Hurricane Local Statement, Severe Weather Statement, Snow/Blowing Snow Advisory, Special Weather Statement (Zones), and Urban/Small Stream Advisory.
- Workaround:** None. There appears to be no operational impact. The products still pop up on the text workstation, and are still forwarded to WWA.
- ! **Problem:** A child *acqserver* process times out causing lost products. **(DR 6487)**
The *acqserver* child process that listens for high priority WAN products sometimes times out and the *CommsRouter* closes its socket with the parent *acqserver* process. This seems to happen in about 10 minute intervals. During this time, the *acqserver* is still processing products, but the *CommsRouter* is unaware of the products that are being processed by the *acqserver*. Thus the products that are processed by the *acqserver* are lost by the system and do not get forwarded to the decoders or get stored into the database.
- Workaround:** None. After about 10 minutes, the *CommsRouter* opens a new socket with the parent *acqserver* and starts picking up the products again.
- ! **Problem:** The *notificationServer* may crash with longjmp and out of memory errors. **(DR 9029)**
Infrequently, the *notificationServer* may crash due to out of memory, with longjmp errors reported in the log.
- Workaround:** Restart the *notificationServer*. D2Ds may then need to be restarted to re-establish green times and auto-updating.
- ! **Problem:** The *distributeProduct* log is not writeable by non-awipsusr applications. **(DR 10151)**
The *distributeProduct* log has 664 permissions, so users not in the fxalpha group cannot write to it. Thus, the results of a *distributeProduct* transmission do not get logged in these instances. This problem generates an error in log files such as handleOUP, but the products are transmitted successfully.
- Workaround:** None, but little operational impact, as the products are transmitted successfully despite this error. To confirm successful transmission, consult the *msg_req.svr* log.

! **Problem:** The Announcer logs do not display the correct time stamps. **(DR 10825)**
The SYSTEM and RADAR Announcer logs in /data/fxa/workFiles should display the date at the beginning of each line, but instead are displaying a string of numbers.

Workaround: None.

! **Problem:** The *AircraftDecoder* process infrequently crashes. **(DR 10910)**
Infrequently, the *AircraftDecoder* has crashed with a Signal 11 segmentation violation. When this happens, the AS1 CPU idle time goes to 0%, with the *AircraftDecoder* process running at the top of the list.

Workaround: Kill the hung process and allow it to restart automatically. It will then resume processing successfully.

! **Problem:** An extra space after a pattern in the METARPatterns.txt file causes the *COMMS_ROUTER* to fail. **(DRs 11078, 10634)**
The *CommsRouter* *COMMS_ROUTER* process will not run if there is a space after any individual pattern line in the METARPatterns.txt file on DS1 and AS1.

Workaround: If site edits are made to this file, ensure that the last character in each line is the last character of the pattern, and that there is not a space after the last character of the pattern. Also, be aware that there is an operating system limit to the size of a pattern that can be handled. It is high enough that it should rarely be exceeded by site edits, but it is possible to exceed it.

! **Problem:** Error reported in *BufrDriver* goes soundings logs. **(DR 11172)**
The following error appears in the *BufrDriver* logs for the GOES soundings once or twice a day:

```
BufrDriver20332as1-tbdw002705:00:27:58.226 NetcdfPointData.C PROBLEM:  
nClientlessHandles 0 fileOpenCount 12
```

The log always shows the decoder successfully moving on to the next file after this message.

Workaround: None, but minimal operational impact.

! **Problem:** The master purge log reports - unlink 12hr FAILED: Not owner. **(DR 11412)**
The /data/logs/fxa/master.purge.log reports the following errors when purging some directories:

```
unlink 12hr FAILED: Not owner
```

However, files placed in these directories do get purged successfully.

Workaround: None, but no operational impact. Files in the affected directories get purged successfully despite this error.

! **Problem:** The *GribImgDecoder* has a memory leak when dealing with products containing a bad Bitmap. **(DR 11528)**
The *GribImgDecoder* experiences a memory leak when the decoder receives a product with a bad bitmap. It starts to leak memory and starts to use up all the memory on the DS. The following is seen in the log files:
14:10:45.629 GribImgRoutines.C EVENT: NCF_ENTRY [1/1] = YEIG98KWNH.20020911_121045.483 122533 bytes
14:10:46.352 GribData.C PROBLEM: Number of elements in the data array does not match the number of flagged values in the bitmap array.
14:10:46.353 Status.C PROBLEM: Status Code: 241 Invalid Bitmap
14:10:46.354 GribImgRoutines.C PROBLEM: NCF_FAIL YEIG98KWNH Problem with unpacking GRIB
14:10:46.371 GribImgRoutines.C EVENT:
/data/fxa/img/SBN/Raw/YEIG98KWNH.20020911_121045.483 renamed to
/data/fxa/img/SBN/Bad/YEIG98KWNH.20020911_121045.483
14:12:16.270 GribImgRoutines.C EVENT: NCF_ENTRY [1/1] = YEIM98KWNH.20020911_121216.047 122533 bytes
14:12:16.723 GribData.C PROBLEM: Number of elements in the data array does not match the number of flagged values in the bitmap array.
14:12:16.724 Status.C PROBLEM: Status Code: 241 Invalid Bitmap
14:12:16.725 GribImgRoutines.C PROBLEM: NCF_FAIL YEIM98KWNH Problem with unpacking GRIB
14:12:16.796 GribImgRoutines.C EVENT:
/data/fxa/img/SBN/Raw/YEIM98KWNH.20020911_121216.047 renamed to
/data/fxa/img/SBN/Bad/YEIM98KWNH.20020911_121216.047

Workaround: Remove the bad products from the Raw directory if necessary, and then kill the *GribImgDecoder* manually. It's *DataController* will then restart it automatically.

! **Problem:** The *tfrNarrowband2netCDF* process infrequently hangs and uses high CPU on AS2. **(DR 11645)**

Workaround: Kill the process manually.

! **Problem:** The *routerShefEncoder* and *routerStoreNetcdf* processes sometimes use high CPU on DS1 when they are processing data. **(DR 11669)**
Both processes are decoding data correctly according to their logs, and when not running the CPU usage on DS1 is fine.

Workaround: The *routerStoreNetcdf* process (and other programs that store netCDF data) can keep a certain number of files open at a time. The default is two, which seems to cause problems for certain types of LDAD products (UTMESNET is one). The default can be changed by setting the "max_open" attribute in "template" netCDF files. Because it works on the template file, this option can be set on a per-directory basis.

Sites should go ahead and do this for mesonet data (/data/fxa/LDAD/mesonet/netCDF/template). If there are still problems with CPU usage, the site should see what type of product is being processed at that time by looking in the log; the LDAD product type is in the filename. LDADinfo.txt has the product type to data directory mapping. The site should then set the max_open attribute for that directory.

Notes:

To set this attribute, one could change the source .cdl file and run ncgen:

```
// GLOBAL ATTRIBUTES:  
:max_open = 30;  
:title = "LDAD automated mesonet data ";  
:history = "revision: 1.1; date: 1998/06/23 16:00:00; author: odonnell";  
-----
```

(make backups of the .cdl and "template" files..)

```
> ncgen -o data/fxa/LDAD/mesonet/netCDF/template  
/awips/fxa/data/localization/nationalData/LDADmesonet.cdl
```

Alternatively, it might be easier to use one of the following Python scripts which work directly on the binary netCDF file. The shorter one just sets max_open to 30. The longer one can set max_open to any value and query the current value.

Longer one:

```
#!/usr/bin/env python  
from getopt import *  
from Scientific.IO.NetCDF import *  
import sys
```

```
QUERY = 1  
SET = 2  
DELETE = 3
```

```
def usage():  
    print >> sys.stderr, "Usage:  setMaxOpen -s <value> <netcdf file>..."  
    print >> sys.stderr, "(query) setMaxOpen [-q] <netcdf file>..."  
    #print >> sys.stderr, "(delete max_open attribute -- DOESN'T WORK RIGHT)"  
    setMaxOpen.py -d <netcdf file>..."
```

```
def main():  
    mode = QUERY  
    new_max_open_value = -1
```

```

try:
    #opts, args = getopt(sys.argv[1:], "dqs:", [])
    opts, args = getopt(sys.argv[1:], "qs:", [])
except GetoptError:
    usage()
    return 1

for opt, val in opts:
    if opt == '-s':
        mode = SET
        new_max_open_value = int(val)
    elif opt == '-q':
        mode = QUERY
    elif opt == '-d':
        mode = DELETE

if mode == SET and new_max_open_value > 30:
    print >> sys.stderr, "Warning: The actual number of open files will be limited to 30"

if not args:
    usage()
    return 1

for fn in args:
    pfx = fn + ':'
    try:
        file = NetCDFFile(fn, mode == QUERY and 'r' or 'r+')

        if mode == QUERY:
            try:
                # attributes are rep'd as arrays
                print pfx, file.max_open[0]
            except IndexError:
                print pfx, 'max_open not set'
            except AttributeError:
                print pfx, 'max_open not set'
        elif mode == SET:
            file.max_open = new_max_open_value
        elif mode == DELETE:
            try:
                # This segfaults..
                # del file.max_open

```

```

        # This sets the attribute to an empty string, which
        # should have the same affect as the attribute not
        # being present.
        file.max_open = []
    except AttributeError:
        pass
    file.sync() # close doesn't write (attributes) to disk :-P
    file.close()
except IOError, e:
    print >> sys.stderr, pfx, e

if __name__ == '__main__':
    sys.exit(main())

```

Shorter one:

```

#!/usr/bin/env python
from Scientific.IO.NetCDF import *
import sys

if __name__ == '__main__':
    for fn in sys.argv[1:]:
        file = NetCDFFile(fn, 'r+')
        file.max_open = 30
        file.sync()
        file.close()

```

! **Problem:** The *notificationServer* may not function properly if only one D2D is running. (DR 11682)

The *notificationServer* sometimes has client registration problems when only one D2D is running on the entire site. When this occurs, the following is seen in the *notificationServer* log:

```

2:51:04.890 NotificationServer.C EVENT: Client: ws2-tbw3/1076/7862 registered for
key: 6111
12:52:46.997 StaticTextDict.C EVENT: Rotating buffer cycled for file depictInfo.txt
12:52:47.089 DM_DepictableInfo.C PROBLEM: Unable to read DepictKey 2181358176
from dictionary
12:52:47.089 NotificationServer.C PROBLEM: ws2-tbw3/1072/7751 tried to register
invalid depict key: 2181358176 Ignoring ...

```

Then, if that lone D2D is shut down, the following is seen in the log:

```

12:55:43.061 NotificationServer.C EVENT: Received depict cancellation request. Client:
ws2-tbw3/1072/7751 Num keys: 8107
12:55:43.082 NotificationServer.C DIAG: Depictable never registered: 2181358176

```

13:01:08.012 NotificationServer.C EVENT: Received depict cancellation request. Client: ws2-tbw3/1086/7872 Num keys: 1
After that, the *notificationServer* hangs for about five minutes and starts using 80%+ of the CPU on AS1.

Workaround: This will mainly only be a problem after an install, or any other time when the system has to be totally logged out. After such an install, start two or more D2Ds together when first bringing the system back up. During normal operations, ensure that there are always at least two D2Ds running at the site at any given time.

! **Problem:** The *SynopticDecoder* process sometimes decodes the wrong date for products. **(DR 11928)**

The *SynopticDecoder* stores data with the wrong date when data from the last day of the month are processed on the first day of the month. This causes a few frames of data to be out of place since they have the wrong date.

Workaround: None, but the data are still displayable on D2D, they just may be presented out of order in the loop of frames.

! **Problem:** A PROBLEM message is sometimes reported in the *BufrDriver* logs. **(DR 12368)**

The following PROBLEM message is seen in the *BufrDriver* *goes* and *hdw* logs a few times per day:

```
09:57:43.546 NetcdfPointData.C PROBLEM: nClientlessHandles 0 fileOpenCount: 18
```

Workaround: None, but no operational impact. GOES and HDW products are still processed and stored successfully despite these messages.

! **Problem:** POES and GOES sounding data are stored twice at some sites. **(DR 12542)**

This is because the entries for these data are listed twice in the *acq_patterns.txt* file on PX2. The *acqserver* reports the following when processing this data:

```
acqserver 21928 00:28:26.520 EVENT: NCF_ENTRY: JUTX06 KNES 250027 Cat: POINT 104295 #85408234
```

```
acqserver 21928 00:28:26.520 EVENT: NCF_STORE: JUTX06 KNES stored in /data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295
```

```
acqserver 21928 00:28:26.520 EVENT: NCF_STORE: JUTX06 KNES stored in /data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295
```

```
acqserver 21928 00:28:26.521 PROBLEM: NCF_FAIL link failed 4: /data/fxa/tmp/point/JUTX06KNES.25002826.295
```

```
/data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295 File exists
```

The data are still stored and then processed by the appropriate *BufrDrivers* successfully despite this problem.

Workaround: None, but no operational impact.

! **Problem:** The *startAcarsProfiles.sh* script is in the fxa cron on PX1. (DR 12592)
The *acarsProfiles* process normally runs on PX2, started every ten minutes from an entry in the fxa cron. However, it is in the fxa cron on PX1 as well. This results in the script running every ten minutes and then failing because it is supposed to run on PX2, not PX1. This does not cause any significant problems though, as the script log just says it tried to start and failed.

Workaround: None needed.

! **Problem:** The grid product ZHUE12KWBN is stored twice on PX1. (DR 12596)
The grid product ZHUE12KWBN, which is the HPC Delta grids, is stored twice by the acqserver on PX1 as follows:

```
acqserver 19322 19:17:35.498 EVENT: NCF_ENTRY: ZHUE12 KWBN 081200 Cat:
GRID 15372 #225391651
```

```
acqserver 19322 19:17:35.498 EVENT: NCF_STORE: ZHUE12 KWBN stored in
/data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508_121735.372
```

```
acqserver 19322 19:17:35.498 EVENT: NCF_STORE: ZHUE12 KWBN stored in
/data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508_121735.372
```

```
acqserver 19322 19:17:35.578 PROBLEM: NCF_FAIL link failed 3:
/data/fxa/tmp/grid/ZHUE12KWBN.20030508_121735.372
```

```
/data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508_121735.372 File exists
```

This is because the *acq_patterns.txt* file picks up the product twice with the following entries:

```
GRID ^[YZ].[A-WYZ].*KWB.* /Grid/SBN/Raw
```

```
GRID ^Z.U.*KWBN /Grid/SBN/Raw
```

However, the product does get stored and subsequently processed successfully, and is displayable from the Volume Browser.

Workaround: None, but no operational impact.

! **Problem:** On AS2, a process connecting to the LDAD_ROUTER creates over 90 sendPing logs per day. (DR 12675)
On AS2, there is a process that creates a sendPing log in */data/logs/fxa/<currentday>* that logs a DEBUG message stating 'Connected to LDAD_ROUTER'. A new log stating this is created every 15 minutes, resulting in over 90 sendPing logs per day in the */data/logs/fxa/<currentday>* directory. This logging should be changed to collective logging so that all activity is logged to one log each day.

Workaround: None.

! **Problem:** There is an error in the root cron to remove core files from the Linux workstations. (DR 12828)

The **find** command used in the cron is unable to search subdirectories.

Workaround: If disk space begins to fill up on a Linux workstation, search subdirectories in the affected partition via the command line or manually to see if a core file is present.

- ! **Problem:** The *CollDBDecoder* hangs on a certain bad product. **(DR 12882)**
A product from Jamaica, USJM01 MKJP 150000/IJMMANKJP, has garbled characters at the end, which causes the *CollDBDecoder* process to hang. The end of the product looks like this:

```
74357 07016 77999 51515 10164 00054 10194 11034 11537=##  
}}A,P}}P}}A,P}}A}},)}}({}}##,  
N}}A}})}}##,  
##,
```

Workaround: Stop and restart the *CollDBDecoder*. Remove the bad product from the input directory if necessary.

- ! **Problem:** The *hmIngest* process sometimes logs excessively. **(DR 12912)**

The log sometimes repeatedly reports the following messages:

"Reading Frames Info from

file:/ldad/data/local/localizations/OAX/wkworkspace/Xstensibl.frm"

and

"IFPFileWriter.store DEBUG: mag[0][16]=13.754641,

dir[0][16]=8.130112,uData[0][0][16]= -1.9542, vData[0][0][16] = -13.6164"

These messages do not indicate problems, but can cause the log to become very large.

Workaround: If disk space becomes a problem, remove the previous days' *hmIngest* log files. Do not remove the log file of the currently active process.

5.14 Wide Area Network (WAN) Communication/Message Handling

- ! **Problem:** Requests are not queued when the *MhsRequestServer* is down. **(DR 3820)**
Requests that are made through the Request/Reply function when the *MhsRequestServer* is down are not acknowledged by the *MhsRequestServer* and are thus lost.

Workaround: None.

- ! **Problem:** MHS - error deleting nack file. **(DR 4090)**
The *MhsServer* errors when trying to delete a nack file after notifying the user. The error message is as follows:

```
02:06:05.768 MhsWfoProduct.C PROBLEM: Error deleting nack file:  
/data/fxa/mhs/nackq/TBW3-16123.doc: No such file or directory.
```

The reason is the file is actually named TBW3-16123-TBW4.doc.

Workaround: This should not be a problem, as the *MhsPurger* daily cleans out this directory. The *MhsServer* handles ack file names correctly and is able to delete them.

! **Problem:** A short WMO header is logged on inter-site coordination products. **(DR 9203)**

MHS thinks that products sent via WarnGen or WWA to neighboring sites via MHS are missing the first two characters of the WMO header. This can be seen in the *msgreq_svr* and *msgrcv_svr* log entries:

TBDW-333135 US66 KMTR 121903 should be WWUS66 KMTR 121903.

This does not affect processing of the products at the receiving site, but does make it difficult to track the products via the logs.

Workaround: None, but no operational impact.

6.0 OCONUS

6.1 Hydrology

! **Problem:** Alaska hydrology data is not ingested. **(DR 4534)**

A large portion of Alaska's hydrology (SHEF) data has a header of SRUS32.KWOH. This is not in the baseline `/awips/fxa/data/acq_patterns.txt` file. The Alaska sites have it in their `acq_patterns.txt` file, but this file will be replaced during the installs.

Workaround: The workaround is to add additional `acq_patterns` that they want to their `/awips/fxa/data/localization/<site>/<site>-acqPatternAddOns.txt` file.

6.2 Install/Localization

! **Problem:** Localization errors occur on the OCONUS system. **(DR 9527)**

The following errors are seen during localization on the OCONUS system:

```
running makeClipSupcs.sh
```

```
grep: can't open /awips/fxa/data/lampGrid%%nx%%ny.cdl
```

```
insufficient arguments for corners option.
```

Workaround: None, but no operational impact. These errors can be ignored.

! **Problem:** The `/awips.install/host_config_file` is incorrect for the GUM CPs. (DR 12792)

The GUM CP entries should show 4 demods, rather than 2:

```
cpsbn1-gum pr.awips.noaa.gov 165.92.174.50 4
```

```
cpsbn2-gum pr.awips.noaa.gov 165.92.174.51 4
```

This problem applies only to GUM and will be noticed only when a GUM CP is reloaded from an image.

Workaround: If a CP is reloaded from an image, edit the `host_config_file` for the appropriate entries and re-run `start_newhost`.

6.3 IFPS/WWA

! **Problem:** WWA at AFC exhibits highlighting problems in the Geo Viewer. (DR 10476)
On a test system localized to AFC, WWA exhibits some highlighting problems. At first, all desired zones are highlighted with no problems, but after creating new products or changing Color Key preferences in the Geo Viewer, some of the islands become un-highlighted. If the user then selects the zone adjacent to the mysteriously un-highlighted zone, that zone will become un-highlighted and the zone in question will become highlighted.

Workaround: None. Use care when highlighting the zones over the islands.

6.4 LAPS

! **Problem:** The `lvd_sat_ingest` script looks for westCONUS data. (DR 11214)
At OCONUS sites, the `lvd_sat_ingest` script looks for data in `/data/fxa/sat/SBN/netCDF/westCONUS`, but there are no files in this directory at these sites. The projections available at the OCONUS sites are different, and LAPS is not set up to use them. LAPS runs without any problems even though it cannot find the satellite data, but of course it is thus not using all of the data available to it.

Workaround: None.

6.5 Map Features/Legends

! **Problem:** State/County Boundaries Legend appears twice at Alaska sites. (DR 4524)

If “State/County” is selected from the “Maps” menu at State scale, a second State/County map legend appears in addition to the default State/County map feature. The two map features are almost identical and can be distinguished only by zooming in very close.

Workaround: Remove one of the duplicate map features manually if desired, but the presence of duplicates does not appear to cause any problems.

6.6 Product Maker

! **Problem:** Guam Product Maker sometimes distorts satellite images. **(DR 2263)**
Often in the Product Maker at Guam, if you load a satellite image, you get a distorted image consisting mainly of lines across the screen. The times that you do get a satellite image, if you load it for any scale below Hemisphere, you get an image that does not fit the scale you have chosen. It appears as though the Product Maker uses the Hemisphere scale image for all other scales. At any of the scales, if you try to zoom in, it does not adjust the image. In Hawaii, all satellite images that you try to display from the Product Maker are distorted in the manner described in the first sentence above.

Workaround: None.

! **Problem:** Longitude is not available far enough to the west in Product Maker. **(DR 2537)**
Choices in the Longitude menu of the Product Maker only go west to 180W. Longitudes beyond this are not available selections.

Workaround: None. Restrict longitude selections to 120W or less.

! **Problem:** Cannot load satellite images from Product Maker for Guam. **(DR 4459)**
The user cannot load any satellite images from Product Maker for Guam at any scale. When you try to load the image the following Tcl error is displayed:
Error:can't read "keyname": no such variable.

Workaround: None.

6.7 System Process/Log

! **Problem:** The *stopIngest.ds1.OCONUS* script has entries for processes that do not run at OCONUS sites. **(DR 11921)**
The script attempts to stop the *binLightningDecoder* and *TextCont4* processes even though they do not run at OCONUS sites.

Workaround: None, but minimal operational impact. The script attempts to stop these processes and fails to do so, but then continues on to the rest of the processes successfully.

6.8 Volume Browser/Grid Products

- ! **Problem:** Volume Browser has RUC40 listed in the source. **(DR 6436)**
The RUC40 model is listed in the Source menu of the Volume Browser at OCONUS sites. However, this model only covers CONUS sites, and thus is not displayable at OCONUS sites.

Workaround: None.

- ! **Problem:** AVN 225 Grids for Vertical Speed Shear are not decoded. **(DR 6527)**
The following error occurs in the *GribDecoder* for AVN 225 products:
16:11:35.372 GridAccessor1.C BUG: NCF_FAIL UNKNOWN field vss for avn225
LOG-STATUS: Recent traceback from same location in file suppressed.
16:11:35.373 GridAccessor1.C PROBLEM: Field lookup failed 68
16:11:35.373 GridRoutines.C PROBLEM: NCF_FAIL xtrn.awpav avn225 36 VSS
TROP (0 0) returned a bad status of 0 from storeGrid.

Workaround: Modify the cdl files locally and rerun the grid localization.