

AWIPS Build 5.1.2 D2D software release notes

These are changes from Build 5.1.1.

Note: These are working notes on FSL's part of the Build 5.1.2 work. Some items may be modified or removed before Build 5.1.2 hits the field. Official Release Notes will be posted at the NWS AWIPS site once the field release is ready.

Infrastructure

- Isentropic calculations are now done "on the fly," rather than when the grids arrive. (The faster algorithm introduced as a 4.3.3 patch allows this.) This will result in a reduction of the load on the data server, more timely processing of model grids, and smaller grid file size on the data disk. *Any local application that reads isentropic grids from the netCDF files will have to be modified, as those grids are no longer be available.*
- The appearance of wind barbs and streamlines is now governed by style rules.
- Style rules now can include a range of values to depict for contours, arrows, streamlines, and barbs.
- Text messages are now checked to ensure that duplicate headers are not sent. If a match is found (header plus time), an RRA (B, C, etc. as needed) will be attached to the header.

Graphics/image workstation

New features

- A cloud height sampling tool interpolates heights from gridded or sounding data, based on cloud-top temperature. You enable cloud-height sampling and select the data source via a pop-up menu over a window IR satellite image. A companion skew T is also available.
- [planned] New buoy data plots include wave height, steepness, and dominant period; swell height, direction, and period; and significant wave height. (Steepness will be in the Volume Browser; to date, the data to support the plots are not available.)
- Radar items:
 - A Radar Graphics Controls application program provides control over the appearance of storm track (STI), hail (HI), and TVS products. Attributes include number of storms (STI), track type, hail probability thresholds, and extended TVS display. You'll find this on your radar menus, in the Graphics pull-right. This affects display only (does not modify the underlying information), and so is workstation-specific.
- Non-FSL work that affects the UI:

- Under SCAN, the FFMP:<site> menus have a new FFMP Image entry and no longer include Accumulation, Precip-FFG Difference, or Precip/FFG Ratio submenus. The latter functions are now handled by a GUI launched from the FF icon at upper right.
- Field sites can now create a localapps.dtwmrc to populate a Local Applications menu on the root pop-up. This menu will not be overwritten by future installations.

Improvements

- Through a configuration variable, sites can modify the temperature range of the skew-T chart. (This is primarily intended to support Alaska Region offices, where the default charts are now 11.4 degrees "colder" than before.)
- New functions available for plan-view plots include specific humidity and equivalent potential temperature.
- Volume Browser:
 - Entries in the Product Selection List for time series now include the name of the point.
 - Labels of point-based displays now include the latitude and longitude of the point (in addition to showing the point on the inset map).
- Radar items:
- Radar archive:
- WarnGen items:
- Product Maker items:

Bug fixes

- Legends on Redbook graphics are easier to read, because the text area is blanked out again.
- Labels and legends on some Redbooks (e.g., Day 1 convective outlook) are now properly processed.
- Time labels on STP, CFC, USP, and storm products are now expressed in UTC.

Remaining bugs

This is the carry-over list for now...

- The default load mode (Valid Time Sequence or Latest Model Run) is restored after a swap, instead of whatever mode you had set when that information was in the large pane.
- Once you're in 4-panel mode, you stay there until explicitly **Clearing** the screen. If you select products on a different scale, you'll get the same thing loaded in each panel.
- Samples on skewT charts include a degree sign in front of K.
- If you turn lat/lon readout on, then bring up a skewT and sample it, you'll get lat/lon info for the previously displayed map (in addition to the chart information that you want). The pop-up correctly does not include the lat/lon toggle button, so you can't turn it off.

- Sounding plots are computing bad wet-bulb zero heights near the surface when there should be no wet-bulb zero crossing.
- The Product Maker provides access to satellite images only on the Northern Hemisphere, CONUS, and Regional scales.
- If you select MSLP as the field in the Product Maker, you must select a(ny) pressure level, in order to display it.
- When as1 fails over to as2, you see a red banner that tells you so, and says that you may need to restart in order to continue to get auto update and product time updates on the menus. In fact, this is not necessarily the case. To minimize the disruption for restarts, you should monitor radar or other frequently-updated products to see if you are getting notification of new products (display or menu update). Only if not should you restart the workstation.
- A torn-away Product Maker Source menu does not respond to scale changes. This can lead to one selecting a model source that is invalid for the scale.
- This is not really a bug, but the way the alert area request application works may be a little confusing.

The alert area request can display/edit only two areas at a time, one Area 1 and one Area 2. They can be for the same radar or, for those sites that have more than one dedicated connection, for different radars. For example, you can use Area 1 for radar A and Area 2 for radar B. However, if you start with Area 1 for radar A and then try to display/edit Area 1 for radar B it won't work; you must first clear the display and select another radar if you want to display/edit another Area 1.

New bugs

Text workstation

New features

- A proximity alarm feature is added, which extends the current alarm/alert capability to include notice when a specified product affecting a selected area arrives.
- If you attempt to resend a product (e.g., when TG asks you to retransmit your sounding), a dialog box will ask for confirmation.

New or remaining bugs

Again, the old list...

- The WarnGen window occasionally doesn't pop up automatically. Workaround: Request WRKWGx from any window. (The warning expiration reminder won't work in this case.)
- The text subsystem still uses 3-character station IDs. As a result, the Help function in the browser and the button-2 popup station ID info on METAR messages can't distinguish

between Kxxx and Pxxx. Usually, both are shown, leaving it to the user to figure out which one applies.

- Like many other products, pilot reports come in a collective and are stored under the site ID instead of your local CCC. Thus, a pilot report referenced to DHN would be stored as BHMPIRDHN. Some erroneously get stored by 2-letter state ID under your local CCC, e.g., PIRAK. Most of the latter are duplicated in the site-ID style.
- The "ss.NNN" construct does not work.

LDAD

New features

- While not part of D2D, the new Web-based dissemination interface is worth noting. This is the means by which outside users, such as emergency management officials, will access AWIPS-generated products.