

AWIPS Build OB1 D2D software release notes

These are changes from Build 5.2.2.

Note: These are working notes on FSL's part of the Build OB1 work. Some items may be modified or removed before OB1 hits the field. Official Release Notes will be posted at the NWS AWIPS site once the field release is ready.

Infrastructure

- Changes to the METAR decoder allow Russian METARs to be decoded and stored for display.
- A RAMOS-to-METAR translator allows RAMOS-format reports to be pulled into the METAR dataset.
- Support for ingest and display of local boundary layer profilers is now available. The only default implementation is for Juneau.

Graphics/image workstation

New features

- POES soundings are available. At WFOs, those processed include all soundings that fall within the Regional scale; at RFCs, those on the RFC scale; and at National Centers, all soundings. (The Time Options toggle introduced in 5.1.1 provides flexible access to subsets of the data, when more than 32 time projections are available.)
A selector on the Satellite menu, "POES Sounding Availability," displays a map of the currently available sounding locations. A map showing all possible (localized) sounding locations is on the Maps menu.
Sounding display (skew-T) is via the Volume Browser.
- MDCRS data are being ingested and are available for display. This includes availability plots, plan-view plots for various 5kft layers, and ascent/descent soundings. Sampling on the sounding includes information about time, height, pressure, and range/heading from airport. There's also a new map showing the airports at which soundings might be available.
- Radar items:
 - VAD winds (VWP product) now display via the Volume Browser. You'll find a VWP entry in the VB Source menu. If you select Sounding display (place a Point at the radar of interest), you'll see the winds on the hodograph. You can also use Time height or Var vs Hgt display methods for these data. New vertical scale choices 0-5km and 0-2.5km AGL may be useful for the latter.

- You can now add User Selectable Reflectivity (ULR) to the RPS list or request it via the One Time Request application. You specify the lower and upper levels for the layer.
- A new product, "High Res (8-bit) SRM," computes a storm-relative motion from the 8-bit velocity and the last motion tracked using either the Distance Speed tool or WarnGen.
- The "Radar Echo Classifier" products CLR and CLD (Clutter Likelihood Reflectivity and Doppler) are added to the radar menu. The text portion will be stored in the text database.
- Volume Browser:
 - New selections under Sfc/2D > Misc include Meteogram, Weather, and Cloud Decks. The first of these takes advantage of a new feature that stacks time series, rather than combining them on the same axis, which makes for easier reading and less confusion. The display range now also adjusts so, for example, T and Td share a common coordinate.
- Fire weather products are now supported by WarnGen. These include fire weather danger statement and red flag watch/warning. A new fire weather zones map is included.
- Non-FSL work that affects the UI:

Improvements

- The zoomable inset map added in 5.2.2 now takes wings. For MDCRS, when one zooms in, the flight track of the ascent/descent sounding is shown on the map.
- The local warnings graphic now includes VTEC labels.
- Volume Browser:
 - Data from GLERL sea state forecast grids are now available for display at Great Lakes area offices (APX, BUF, CLE, DLH, DTX, GRB, GRR, IWX, LOT, MKX, MPX, and MQT).
 - TPC hurricane grids were added in an OB1 patch. These are surface winds on Grid 226, primarily needed for GFE input.
- Radar items:
 - Color tables for the 8-bit radar products have been updated.
- Radar archive:
- WarnGen items:
- Product Maker items:

Bug fixes

- If you set SKEWT_MIN to a temperature higher than -30, the saturation adiabats at the right side of the diagram now display correctly. (?)

Remaining bugs

Our old list of not-quite-what-we-want features...

- 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.

Text workstation

New or remaining bugs

This is the standard bugs list. These have been around long enough that we could call them "undesirable features" at this point...

- The WarnGen window occasionally doesn't pop up automatically. Workaround: Request WRKWX 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.