

AWIPS Build 18.1.1 Informational Overview

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Welcome to the AWIPS Build 18.1.1 Informational Overview. I'm Stas Speransky from WDTD, and I will be introducing you to some of the significant changes in 18.1.1.

The screenshot displays a presentation player interface. On the left, there is a tabbed view with three tabs labeled 'Tab 1', 'Tab 2', and 'Tab 3'. The 'Image 2' content area is visible. To the right, under the heading 'Course Completion Info', there are two bullet points: '• Tabs - 4 Tabs (Including Introduction)' and '• Last Modified: Jun 27, 2017 at 09:43 AM'. Below this, the 'PROPERTIES' section lists three settings: 'Show interaction in menu as: [Single item](#)', 'Allow user to leave interaction: [At any time](#)', and 'Prev/Next player buttons go to: [Slide in presentation](#)'. At the bottom, there are two buttons: 'Edit in Engage' (with a green 'a' icon) and 'Edit Properties' (with a gear icon).

Go ahead and review the slides, and then access the references pages in the VLab from AWIPS LX workstations or the Internet. For a comprehensive list of all enhancements and bug fixes in 18.1 .1, see the Resources tab in the upper-right part of the player.

Learning Objectives

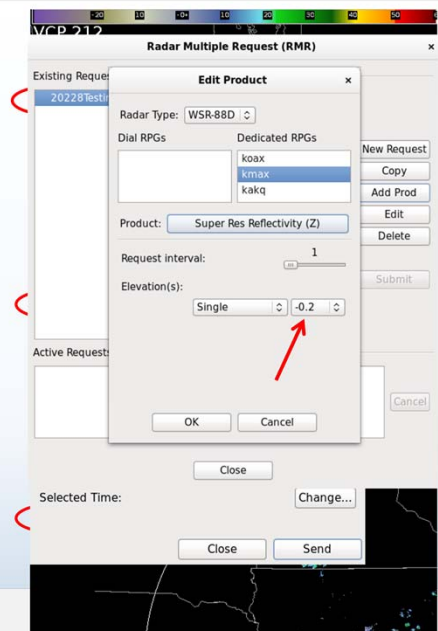
After taking this training you will be able to identify some of the more notable AWIPS changes in 18.1.1:

- WarnGen – preset threat area button
- Radar enhancements - MRLE, elevation scans below 0.5 degrees
- Model enhancements – NBM v3.1, NWPS rip current guidance
- Post Tropical Storm Report
- PGEN shared CAVE annotations
- Data Delivery – friendly naming
- ITOs/AWIPS Focal Points – Localization Perspective search, user roles update

The goal of this training is to provide a general awareness of the following new capabilities and recent changes, for forecasters, in around 10 minutes, including some additional material for focal points.

Radar: RPG 18 and 19 Support

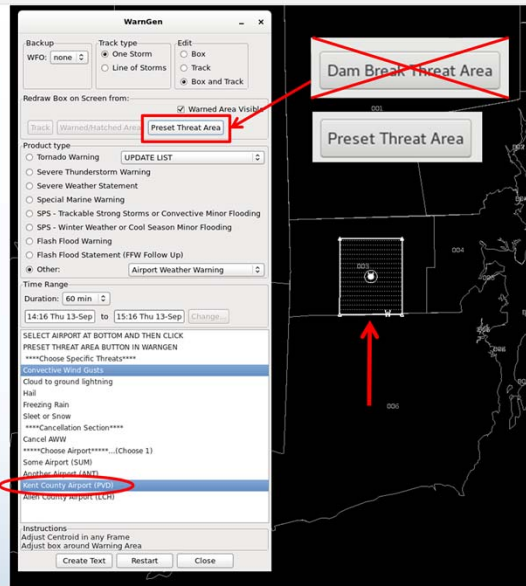
- Select sites can use elevation angles below standard 0.5 degrees (RPG 18)
- **MRLE** elevations start to be received by sites (RPG 18)
 - Full deployment in 2019 (RPG 19)
 - Rescan lowest “N” elevations
 - VCP 12, 212, 215
 - OTR & RMR to request MRLE cuts
 - Works with DMD



With RPG build 18, a few more sites are able to scan below the standard 0.5 degree elevation angles, and AWIPS 18.1.1 now supports this. Additionally, AWIPS supports the RPG build 18 Mid-Volume Rescan of Low Level Elevations (MRLE) capability that is anticipated to be fully deployed with RPG build 19 fielded in 2019. Instead of re-scanning for the lowest elevation like SAILS, MRLE gives the user the ability to re-scan the lowest “N” elevations (where N can be either 1,2,3 or 4) using VCP 12, 212, and 215. MRLE, like SAILS is applicable only for tilt based products. You will see MRLE or SAILS tilt labels for the extra tilts or no labels for the standard tilts in the corner of the editor in CAVE depending on the Dynamic Scanning Strategy selected for the VCP. With build 18.1.1, the One Time Request and Radar Multiple Requests GUIs have been modified to allow requesting MRLE cuts At/below a certain elevation as well as lowest N cuts. Additionally, users may request MRLE cuts of DMD.

WarnGen

- **Preset Threat Area button in WarnGen**
 - Airport Weather Warning
 - Dam Break
 - Burn Scar
- **Cancelled polygons update correctly**



In WarnGen, the prior Dam Break Threat area button is now labeled Preset Threat Area. The label was changed because the Airport Weather Warning uses the same WarnGen preset polygon template as the dam break product so it makes sense to have a more generic label. You can select either an airport or a dam from the list, then click Preset Threat Area and you should see the corresponding polygon appear in the editor display. WarnGen has had some problems displaying cancelled polygons in situations of partial cancellations, and that has now been fixed with 18.1.1. For instance this initial polygon would not display in older frames.

Forecast Enhancements

- **NWPS rip current guidance**
 - Delayed until late 2018
 - Post-install guide in [Resources](#) tab
- **National Blend of Models**
 - **CONUS** new data elements
 - Echo Tops, Simulations
 - **OCONUS** new data elements
 - Ceiling, Visibility

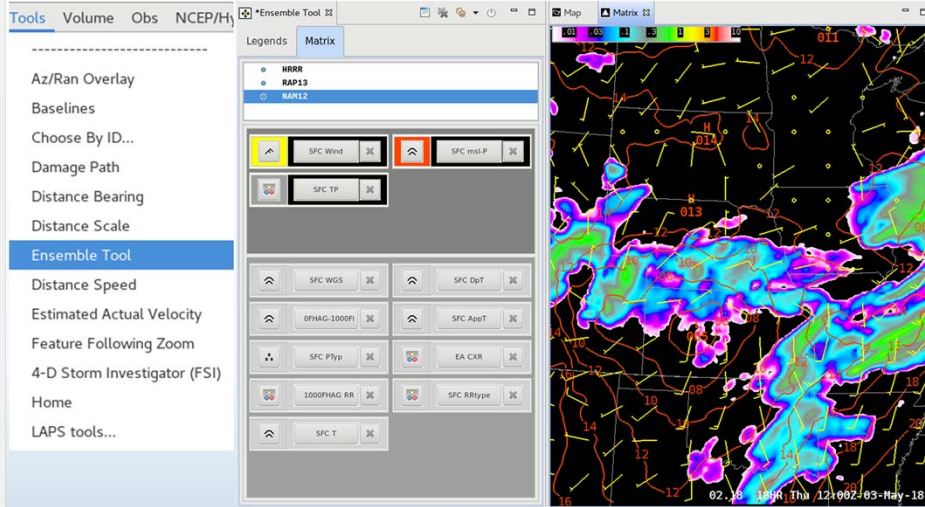
Used in Volume Browser and GFE

Rip Prob Sfc Fcst

18.1.1 comes with the ability to display new rip current output parameters in D2D as well as GFE. However, this implementation has been delayed until late 2018, so you will not be able to view it until then. The Forecast Decision Training Division plans to release training on this in early 2019. In the meantime, please refer to the NWPS Rip Current post-install guide linked in the Resources tab for more information. Also, the National Blend of Models has received an additional upgrade to include more data elements on the CONUS and OCONUS scales.

Forecast Enhancements (cont.)

- Ensemble Tool's Matrix Viewer now works correctly

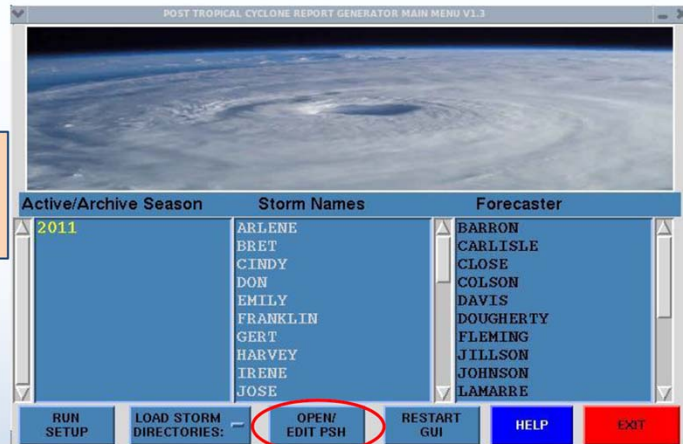


In prior builds, the Ensemble tool froze up upon engagement with the Matrix Viewer tab and the user then had to manually restart CAVE. In 18.1.1, this issue is now fixed. You can use the Matrix Viewer tab to load a set of model grids and then rapidly cycle through the different models. Please see the Matrix Viewer jobsheet in the VLab referenced at the end of this presentation.

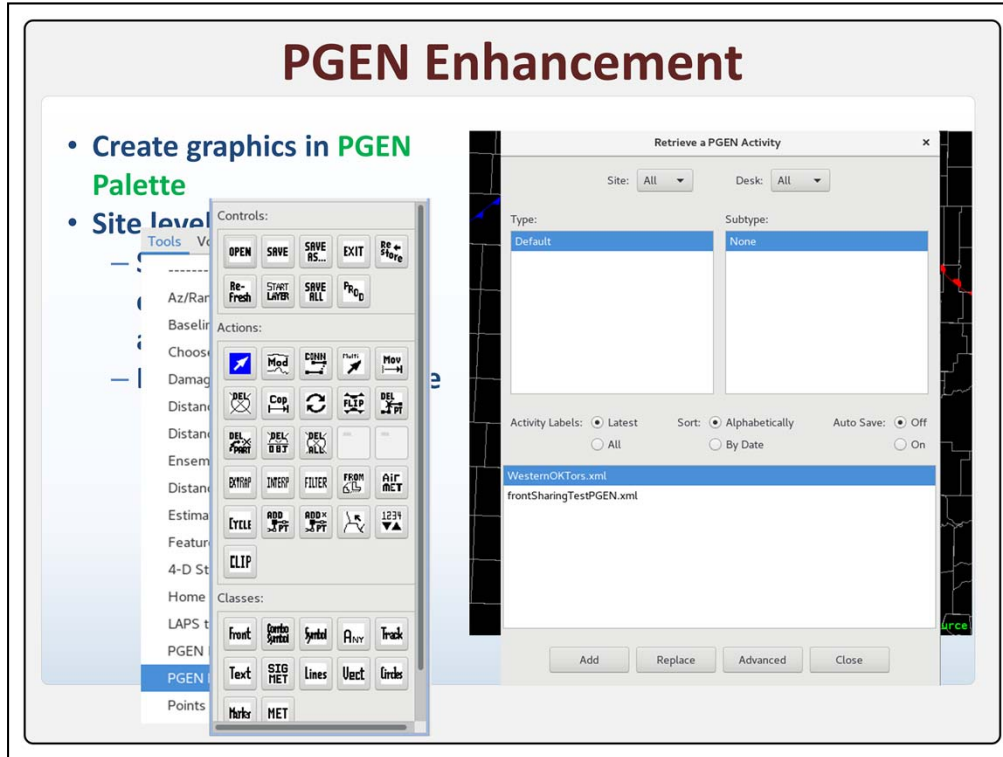
Post Tropical Storm Report

- **Post Tropical Cyclone Report Generator (PSH)**
– Automated method to gather post storm data

See Resources tab
for local app install



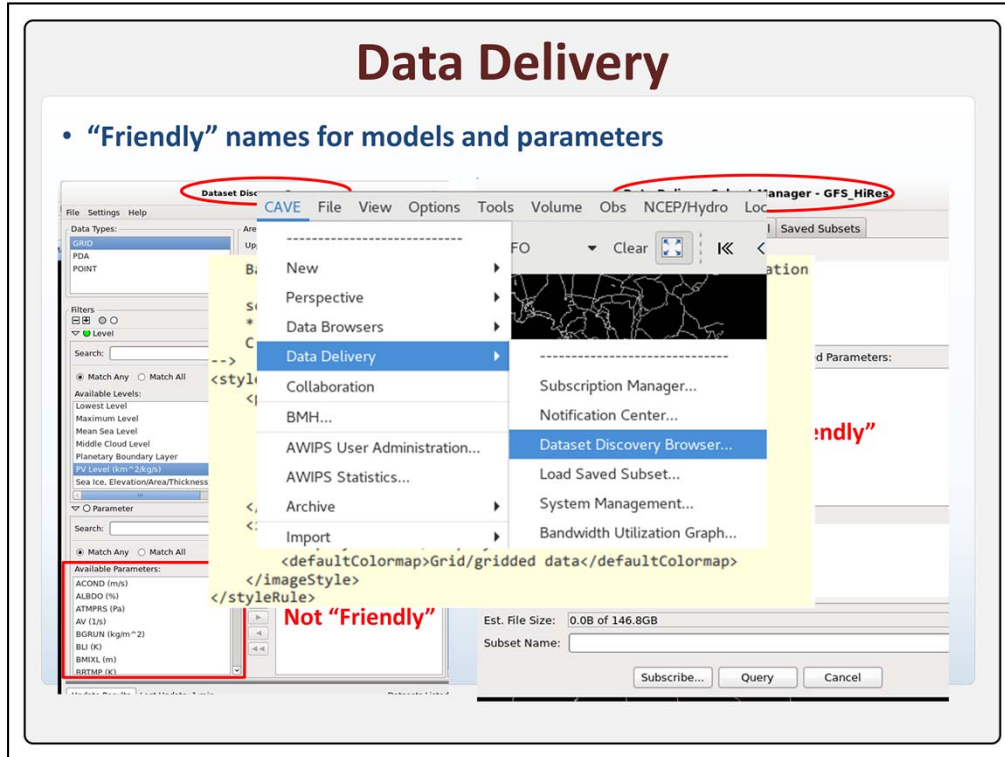
The Post Tropical Cyclone Report Generator (PSH) is a new automated application used to gather post storm data and create a report in a nationally standardized format. It is available in Build 18.1.1, and the Forecast Decision Training Division plans to release training for this in the 2019 tropical update. Please see the user guide in the Resources tab for more information.



In 18.1.1 a new PGEN Palette Tool is available from the D2D Tools menu. The PGEN Palette is designed to support future sharing of annotations between National Centers and WFOs, but you may find some internal uses for this new capability. With this tool, you can create graphics and annotations over any AWIPS data inside the map editor display. Graphics created with the PGEN Palette, such as fronts, text boxes, and other shapes can be saved as an XML and accessed by other users at your site. You can save your work as one user, then have another user open your saved file and add on to it. Each user will have to reload the saved graphic after every change as there is currently no auto-update feature. See the jobsheet in the VLab how to create a shared xml overlay.

Data Delivery

- “Friendly” names for models and parameters



Data Delivery is a new AWIPS subscription service that provides access to datasets not available from the Satellite Broadcast Network or SBN. A new friendly naming convention for model names and parameters has been added to Data Delivery in 18.1.1. This should make the names easier to identify. For model names, some of the newly added models will not have friendly names. For parameters, the Subset Manager GUI will have friendly names, but other areas like the Available Parameters subsection in the Data Discovery Browser will not. The parameters use the local gridImageryStyleRules naming convention and are written to the database with the new names after installing 18.1.1. Data ingested prior to 18.1.1 is stored in the database using the old naming convention.

Climate Perspective

- Pushed back to a future AWIPS build
 - But can still be accessed in the Open Perspective window

The screenshot displays the CAVE Climate interface. On the left, the 'Open Perspective' window is open, showing a tree view with 'Climate' selected. The main window, 'CAVE - Climate', contains the 'Climate Product Generation Monitor'. This monitor includes a 'Start a New Product' section with buttons for AM, IM, PM, MON, SEA, and ANN. Below this is the 'Current Product Process' section, which shows a progress bar and buttons for SUCCESS, DISPLAY, FORMAT, REVIEW, and SEND. At the bottom, there is a 'Product Process List' table.

Product	Run Type	Start Time	Stage	Status	Last Update	Waiting
MON	MANUAL	2017-08-18T13:48:03	DISPLAY	SUCCESS	2017-08-18T13:48:04	N/A
AM	MANUAL	2017-08-18T14:44:23	REVIEW	PENDING	2017-08-18T14:44:41	N/A
IM	AUTO	2017-08-18T12:25:00	DISPLAYED	FAILED	2017-08-18T12:45:02	N/A
AM	AUTO	2017-08-18T08:20:00	DISPLAYED	FAILED	2017-08-18T08:40:05	N/A
PM	AUTO	2017-08-17T20:30:00	DISPLAYED	FAILED	2017-08-17T20:30:03	N/A
AM	MANUAL	2017-08-17T19:42:00	DISPLAY	SUCCESS	2017-08-17T19:42:03	N/A

In 18.1.1, Forecasters will see the new Climate Perspective in the Open Perspective window in CAVE. However, the field implementation has been pushed back to a future AWIPS build so you're not suppose to use it yet. If you're interested in a preview of what to expect, please see the extra slide at the end of this presentation.

Under the Hood Changes For ITOs and Focal Points



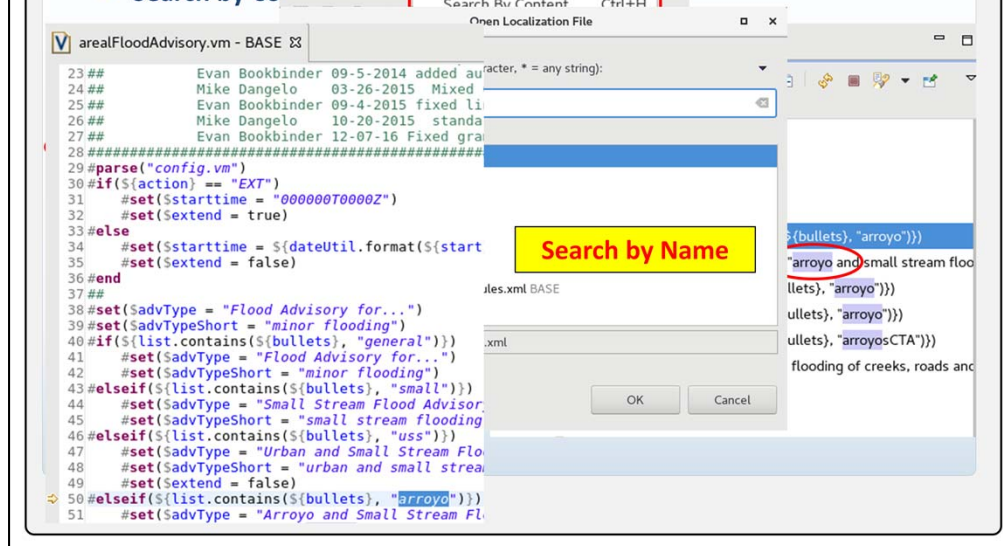
The following slides are for ITOs and Focal points. If you are a forecaster, you may skip these slides and advance to the summary slide.

For ITOs and Focal Points

- Search capability added to Localization Perspective

- Search by Name

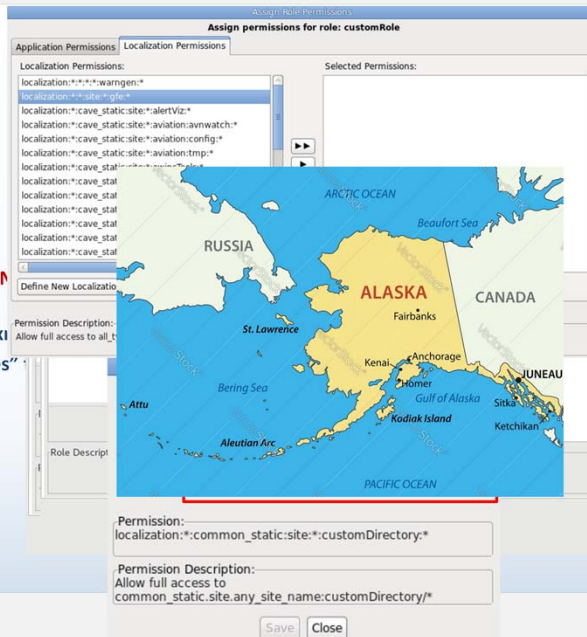
- Search by Co



The Localization Perspective has implemented a very useful search feature. You can either search by name or search by content. Searching by name matches the search to a file name and auto-fills to help you find the file you're looking for. Searching by content returns the matching string within the accordion structure of the AWIPS utility tree. You can search the whole utility tree or you can search inside certain applications. Searching by content also let's you see how multiple applications may be using certain fields. Both search methods return a link to the file, so you can load it in the localization perspective with a double click. Searching by Content goes a step further and highlights the line on which the searched content appears.

For ITOs and Focal Points

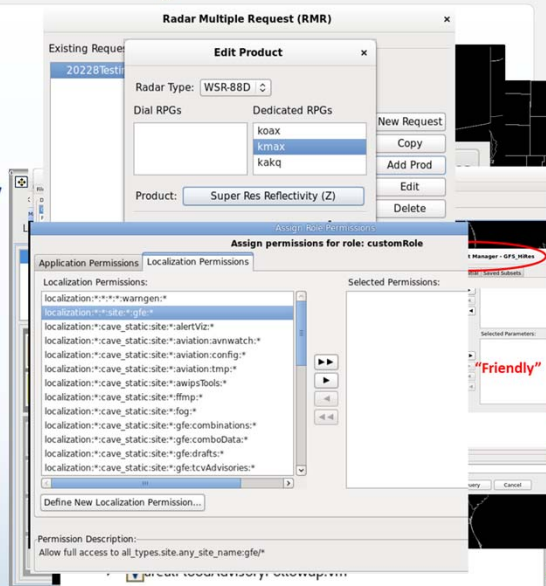
- User Roles replaced
 - Modified GUIs
 - Assign User Roles
 - Define Roles
 - Before installing 18.1.1, save copy of local **UserRoles.xml**
 - See [Living Release Notes](#)
- **geospatialConfig_ALASKA_MARINE.xml**
 - Alaska sites use instead of **geospatialConfig_MARINE.xml**
 - Add “Offshore Marine Zones” Maps xml files



The user roles framework and GUI have been replaced. You can access user roles within CAVE the same way as before by selecting User Administration from the CAVE pulldown menu. Under the User Roles tab, you will see all of your office's users listed and be able to select them and assign them specific roles. Under the Define Roles tab, you are able to modify roles, create new roles, and modify permissions of those roles. You can also create a new permission for a file. In order to do this you will need to locate the file within the utility tree directory structure, then enter the path information into the Define Localization Permission GUI. By default, awips admin users have retained permissions but everyone else has been set to awips user and you will need to reassign them roles. Make sure to save a copy of your local UserRoles.xml file before installing 18.1.1 and see the Living Release notes for further instructions. Finally, a geospatialConfig file unique to the Alaska Region has been added. If you are an Alaska site, make sure to edit your WarnGen configuration files to include this geospatialConfig_ALASKA_MARINE.xml file instead of the generic file and also add the Offshore Marine Zones to the maps xml files.

Summary

- Radar
 - Few more sites scan below 0.5 degrees
 - This build supports MRLE, full deployment 2019
- WarnGen
 - Cancelled polygons display correctly in Local warning display
 - Preset Threat Area button
- NBM new data elements
- NWPS rip current guidance
- Ensemble Tool Matrix Viewer now works
- Post Tropical Cyclone Report Generator (PSH)
- PGEN Palette
- Data Delivery
 - “Friendly” names
- Search the Localization Perspective
- User Roles framework modified



To summarize, with RPG Build 18, a few more sites will be able to scan below the standard 0.5 degree elevation. Additionally, Build 18 supports MRLE, with full deployment expected with Build 19 in 2019. The issue with displaying correct polygons in WarnGen as a result of cancelled warnings is now fixed. In WarnGen the prior Dam Break Threat area button is now labeled Preset Threat Area. The National Blend of Models has received additional enhancements to include more data elements. Also in 18.1.1, there are new rip current parameters available to view in D2D as well as GFE. However, there is a delay with the implementation so you will have to wait until late 2018 to view these. Official NWPS rip current guidance training will be available in 2019. The Matrix Viewer of the Ensemble Tool now works correctly. There is a new application called The Post Tropical Cyclone Report Generator (PSH) which automatically gathers post storm data and creates reports. There is an addition to PGEN called PGEN Palette. It is designed to support future sharing of annotations between National Centers and WFOs. For now, it allows for site level sharing at your local office. A new friendly naming convention in Data Delivery makes it easier to identify models and parameters. For focal points the Localization Perspective has a new search capability. The user roles framework has been heavily modified. Only awips admin users have retained permissions so make sure to reassign roles to all others.

Check Out VLab & Job Sheets

<https://vlab.ncep.noaa.gov/web/oclo/home>

RECENT TRAINING-RELATED AWIPS BUILD CHANGES

Here is some information about recent improvements in AWIPS builds worth noting:

OB18.1.1 (Sep 2018)

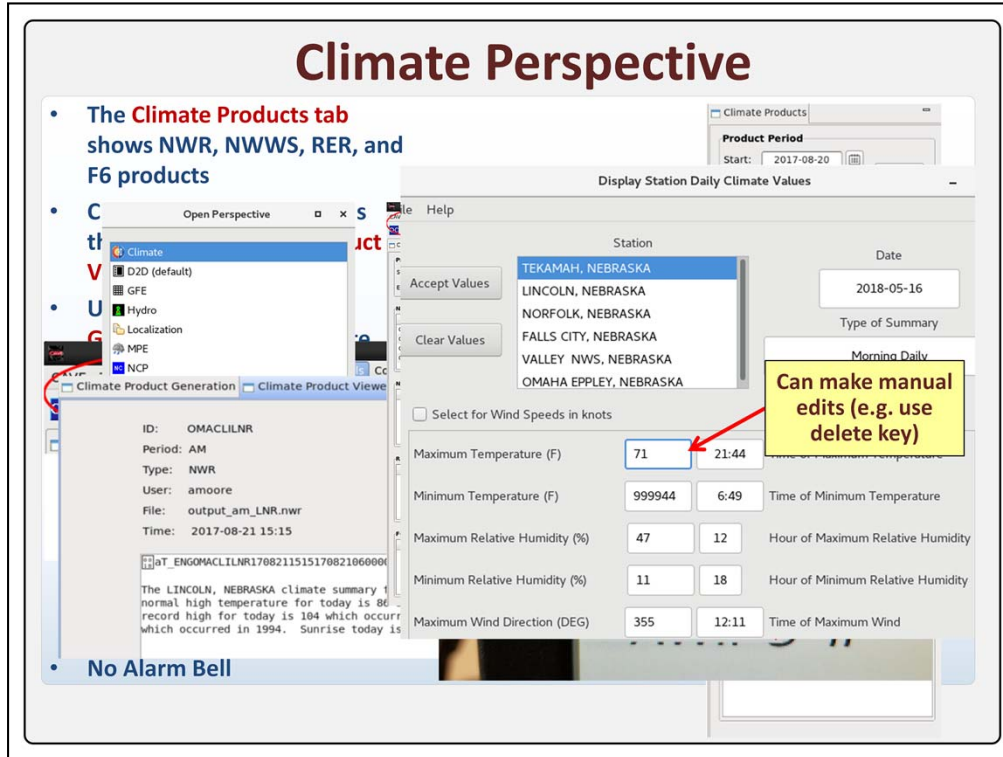
- 18.1.1 Informational Overview (speaker notes PDF, training in the CLC (Internet access only))
- Radar
 - Select sites can use elevation angles below 0.5 (Fig)
 - MRLE support, full deployment in 2019 (Fig)
- WarnGen
 - Cancelled polygons update correctly (Fig)
 - Preset Threat Area button replaces Dam Break Threat Area
- National Blend of Models additional data elements
- NWPS rip current guidance (Fig)
 - Training available in 2019
- Ensemble Tool's matrix viewer works correctly (Fig)
 - [Ensemble Tool Page](#) (New Matrix Viewer jobsheet)
- Post Tropical Cyclone Report Generator (PSH) (Fig)
 - Delayed until late 2018
 - Training available in 2019
- PGEN Palette
 - [New Jobsheet](#)
- Data Delivery
 - "Friendly" naming convention for models and parameters

Click Next to preview the Climate Perspective

You are now done with the AWIPS 18.1.1 Informational Overview.

Just enter this address in a browser on your LX workstation or on the Web and select the AWIPS Build Changes VLab page from the Forecaster References. From there, navigate to the 18.1.1 section, where you can check out the new jobsheets available for the Ensemble Tool as well as PGEN. Alternatively, you can right click on a product in the Product Legend in CAVE and select Reference on Product. This will bring up the AWIPS Interactive Reference search page. Type AWIPS Build Changes in the Keywords search then click Update and you should see the Build Changes Page as the top hit.

If you'd like a preview of the Climate Perspective, which has been pushed back to a future AWIPS build, click next to advance to the next slide. Let me know if you have any further questions, and good luck with the new 18.1.1 capabilities.



In 18.1.1 the Climate software tools used to generate and send out daily climate reports have been integrated as a new perspective in CAVE. To the user, the graphical interface and workflow is very similar. Only the locations of tools and commands are mapped out to new buttons, menus, and tabs as a result of the AWIPS integration. Once you load the Climate perspective from the perspective loader, there are three important tabs. The “Climate Products” tab on the left has a list of all the existing climate products. You can also search for previous products using the start and end dates. If you click on any of the NWR, NWWS, RER, or F6 products, they will be displayed using the “Climate Product Viewer” tab on the right. To generate climate data and products, you can use the menus at the top of the perspective, the buttons immediately underneath, or the buttons on the “Climate Product Generation” tab in the middle. Once the user starts generating a new product for the morning, intermediate, and afternoon daily periods, or the monthly, seasonal, or annual periods, the status of the product creation is displayed in the Climate Product Generation tab. The colored buttons are dynamic and can be selected to reveal more information about the status of specific tasks, including the Create, Display, Format, Review, and Send stages of product generation. During the transition to using the new Climate perspective, the old software will still be available until the Climate focal point completes configuration of the new software. There are some important caveats to mention, though. The Climate perspective uses a new database, so you need to use either the old or the new way. To use both, you would have to maintain separate climate databases. One of the notable improvements in the new version is the more standardized window interaction for

data adjustment, so there are no longer any limitations on using the delete key or manual typing restrictions like in the previous software. On a final note, in the new version, a silent AlertViz banner is triggered when the Climate software is run instead of the old Alarm Bell, so your focal point may want to set up a new alert popup banner. For more information on using the Climate perspective see the user guide linked in the Resources tab. For Focal Points, there are step by step instructions in that user guide on how to get it configured, but it's still being worked on.