


AWIPS Build 20.2.3

Informational Overview

Sarah Borg
Warning Decision Training Division



Slide 1 

Welcome

Duration: 00:00:11

Advance mode: Auto

AWIPS Build 20.2.3
Informational Overview

Sarah Borg
Warning Decision Training Division



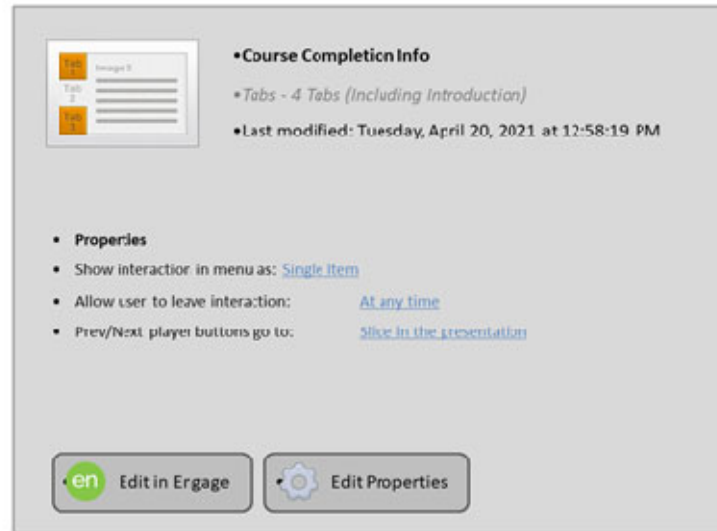
Notes:

Slide 2

Course Completion Info

Duration: 00:00:20

Advance mode: By user



The screenshot shows a configuration panel for a slide. On the left is a small thumbnail of the slide titled 'Ergage 2' with a 'Tab' indicator. To the right, under the heading 'Course Completion Info', are the following details:

- Course Completion Info
- Tabs - 4 Tabs (Including Introduction)
- Last modified: Tuesday, April 20, 2021 at 12:58:19 PM

Below this, under the heading 'Properties', are three settings:

- Show interaction in menu as: [Single Item](#)
- Allow user to leave interaction: [At any time](#)
- Prev/Next player buttons go to: [Slide in the presentation](#)

At the bottom of the panel are two buttons: 'Edit in Ergage' (with a green 'en' icon) and 'Edit Properties' (with a gear icon).

Notes:

Slide 3

Learning Objectives

Duration: 00:00:08

Advance mode: By user

Learning Objectives

After taking this training you will be able to identify some of the more notable AWFS changes in 20.2.3:

- Hazard Services enhancements
- Hydro Hazard Simplification
- IBW changes
- Multi-panel layouts
- Customized contour capabilities
- Faster time looping
- Previous, -1, -2 model runs can be loaded
- Radar: -0.2 degree elevations at KGJX, KFSX, and 0.2 at KDLH
- Satellite- improved data performance, alter bundles
- FFMP Basin Table works
- Frame count display
- AIR Reference on Products works in GFE, Hydro, MPE perspectives
- Improved time looping options
- Under the hood changes for ITOs and Focal Points

Notes:

The goal of this training is to provide a general awareness of the following new capabilities and recent changes in around 10 minutes.

Slide 4

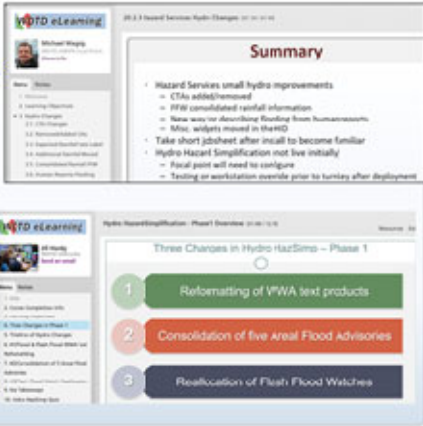
Hazard Services Hydro Changes

Duration: 00:00:40

Advance mode: Auto

Hazard Services Hydro Changes

- Hazard Services hydro changes training
 - [20.2.3 Hazard Services Hydro Changes](#)
- RiverPro Hazard generation discontinued
- Hydro HazSimp
 - Practice mode
 - Turnkey after deployment
 - [Hydro Hazard Simplification Phase 1 Overview](#)



Notes:

Build 20.2.3 brings forth a number of Hazard Services hydro changes. WDTD has released a training module detailing these changes along with a companion jobsheet. Click on this link to view the training. It's important to point out that RiverPro watch, warning, and advisory generation is discontinued in this build. Additionally, Hydro Hazard Simplification also arrives with 20.2.3 and your office can start testing this practice mode prior to the turnkey which will be shortly after the build is deployed. WDTD also has released a training module to aid in your transition. Click on this link to view the training.

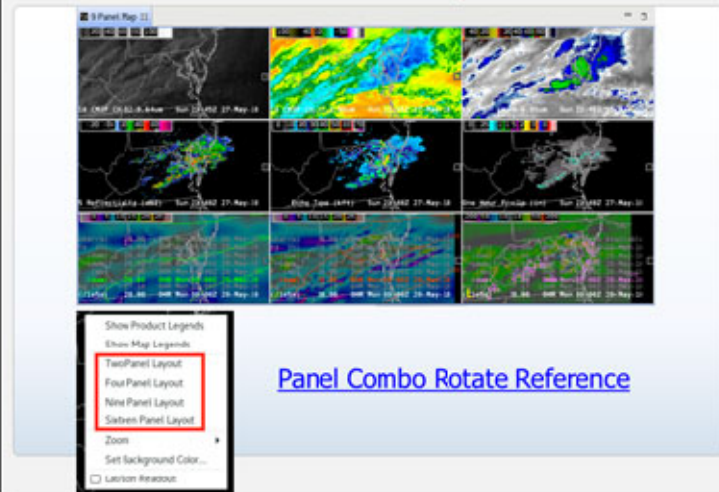
Slide 5

Multi-Panel Layouts

Duration: 00:00:23

Advance mode: Auto

Multi-Panel Layouts



[Panel Combo Rotate Reference](#)

Notes:

With 20.2.3, you now have the option to select a two, nine, and sixteen panel layout in addition to the four panel layout option that existed prior to this build. You can use the panel combo rotate to zoom in on each panel and cycle through them. Click on this Panel Combo Rotate Reference to review how to use it.

Slide 7

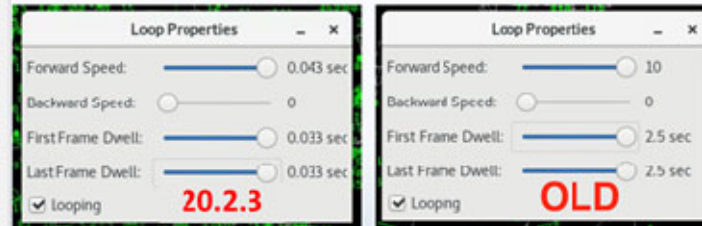
Time Looping Changes

Duration: 00:00:16

Advance mode: Auto

Time Looping Changes

- Faster looping - Up to 30 frames/sec



Setting	20.2.3	OLD
Forward Speed	0.043 sec	10
Backward Speed	0	0
First Frame Dwell	0.033 sec	2.5 sec
Last Frame Dwell	0.033 sec	2.5 sec
Looping	<input checked="" type="checkbox"/> looping	<input checked="" type="checkbox"/> Looping

Notes:

20.2.3 comes with faster looping, up to 30 frames per second. Keep in mind that having multiple products with high frame counts looping in the background may put more of a strain on machine performance than in prior builds.

Slide 8

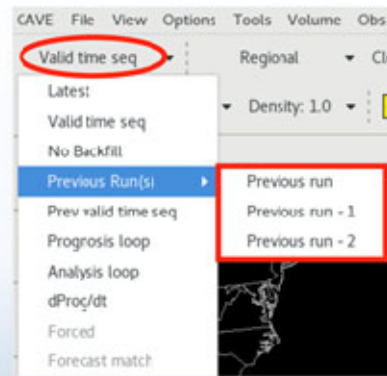
Display Previous 3 Model Runs

Duration: 00:00:24

Advance mode: Auto

Display Previous 3 Model Runs

- Choose to load each of the previous 3 model runs



Notes:

With 20.2.3, you now have more control over displaying previous model runs in D2D. From the valid time sequence pulldown menu in the CAVE toolbar you can select the previous run, previous run -1, or previous run -2 and then load a model of choice. Prior to 20.2.3, you only had the option of loading the 1 previous model run before the current.

Slide 9

IBW Change SVR/SVS and SPS

Duration: 00:01:02

Advance mode: Auto

IBW Change SVR/SVS and SPS

- Focal points c
- turnkey date
- New "Thunder
- "Destructive"
- New "H
- INDICAT
- New IB
- Hea
- New
- gust

```
LAT...LON (Latitude/longitude coordinate pair)
hazard area)
TIME...MOT...LOC (hhmmZ XXXDEG XXXT XXXX XXXX)
(Impact-Based "coded tag" section)
LANDSPOUT...POSSIBLE/OBSERVED (Optional)
```

WDTD Training:

- [Impact-Based Warning Content](#)
- [SPS for Near-Severe Storms](#)

The new IBW coded tag structure will appear in this format:

```
TORNADO...POSSIBLE (if selected)
THUNDERSTORM DAMAGE THREAT...CONSIDERABLE/DESTRUCTIVE (if selected)
HAIL THREAT...RADAR INDICATED/OBSERVED
MAX HAIL SIZE...K.KA IN
WIND THREAT...RADAR INDICATED/OBSERVED
MAX WIND GUST...XX MPH
```

Notes:

There are some significant changes in IBW WarnGen templates in 20.2.3. Focal points will configure files for testing in practice mode prior to the turnkey following full deployment. Some of the highlights of the changes in the SVR and SVS products include new thunderstorm damage threat tags with considerable or destructive tags triggered by windspeed and hail size values. There will be new hail threat and wind threat tags with radar indicated or observed values. IBW tags have also been added to SPS statements with tags for hail size, max wind gust, landspouts, and waterspouts, and the significant weather advisory headline has been removed. WDTD also has two short training modules in the CLC covering these changes: "Impact-Based Warning Content" and "SPS for Near-Severe Storms". For more information on the IBW changes, see the IBW Changes in the Resources tab."

Slide 10

Radar

Duration: 00:00:20

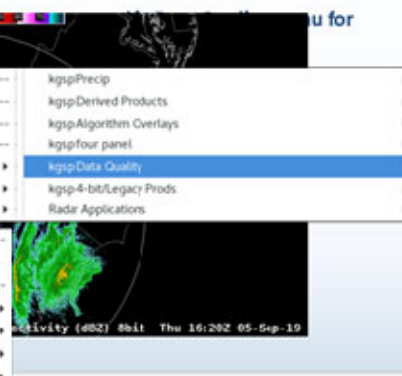
Advance mode: Auto

Radar

- -0.2 elevation at **KGJX** and **KFSX**
- 0.2 elevation at **KDLH**
- Dual Pol raw products for elevations 0.25 km, 0.5 dAz
VCP 212
MX: 66dBZ

Segment 2	...	kgspPrecip	▶
Segment 3	OLD	kgspDerived Products	▶
Segment 4		kgspAlgorithm Overlays	▶
Segment 5		kgspFour panel	▶
kgsp Power Removed Control		kgsp Data Quality	▶
kgsp Refl Clut Prob		kgsp 4-bit/Legacy Prods	▶
kgsp Vel Clut Prob		Radar Applications	▶

Segment 3	...		
Segment 4	20.2.3		
Segment 5			
kdh Power Removed Control			
kdh Refl Clut Prob			
kdh Vel Clut Prob			
kdh Dual Pol Raw Products			▶



Notes:

In 20.2.3, several more sites have added elevation scans below the standard 0.5 degrees. Additionally, dual pol raw products that were previously not available are now restored in the data quality menu for stations that ingest radar data below 0.5 degrees

Slide 11

FFMP

Duration: 00:00:14

Advance mode: Auto



Notes:

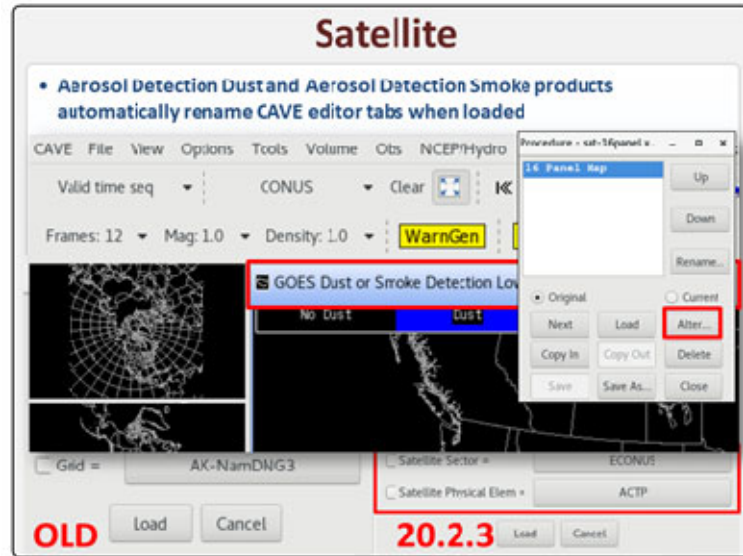
FFMP was broken in prior builds, specifically the ability to load the Basin Table. This has been fixed in 20.2.3 and you can now use FFMP again without issues.

Slide 12

Satellite

Duration: 00:00:32

Advance mode: Auto



Notes:

There are a few satellite changes in 20.2.3 worth mentioning. The aerosol detection dust and smoke derived products automatically rename the CAVE editor tabs when loaded. In past builds, loading and looping large volumes of satellite data would cause CAVE crashes and freezes. Some under the hood changes have improved performance in this area. Finally, you can now use the alter function in procedures to switch out satellite products just as you've been able to do with radar products.

Slide 13

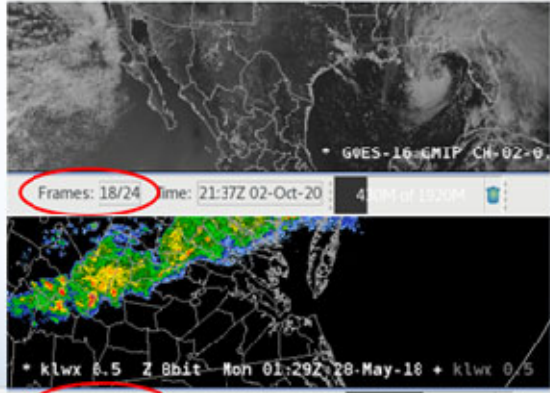
Frame Count Display

Duration: 00:00:10

Advance mode: Auto

Frame Count Display

- Current frame indicated in frame count



* GOES-16 GMIP CH-02-9

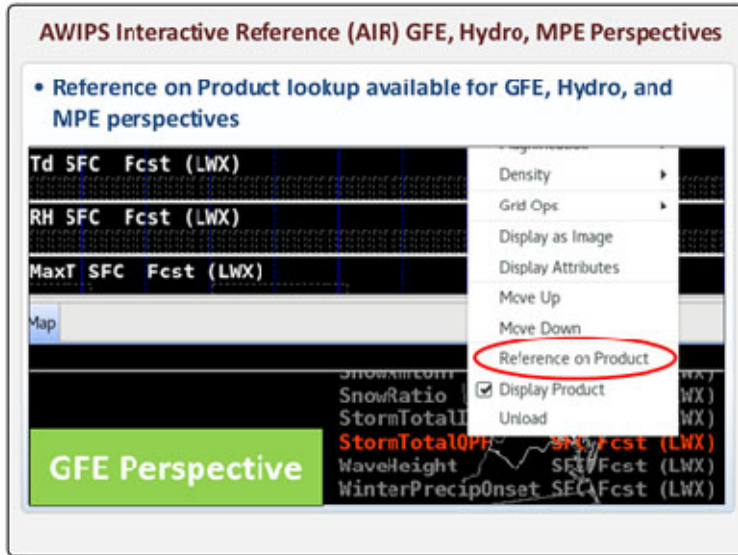
* klwx 8.5 Z 8bit Mon 01:29Z 28-May-18 + klwx 0.5

Notes:

In 20.2.3, you can now see the current frame number displayed at the bottom of the map editor window when you cycle through the data.

Slide 14
AWIPS Interactive Reference (AIR) GFE, Hydro, MPE Perspectives

Duration: 00:00:28
Advance mode: Auto

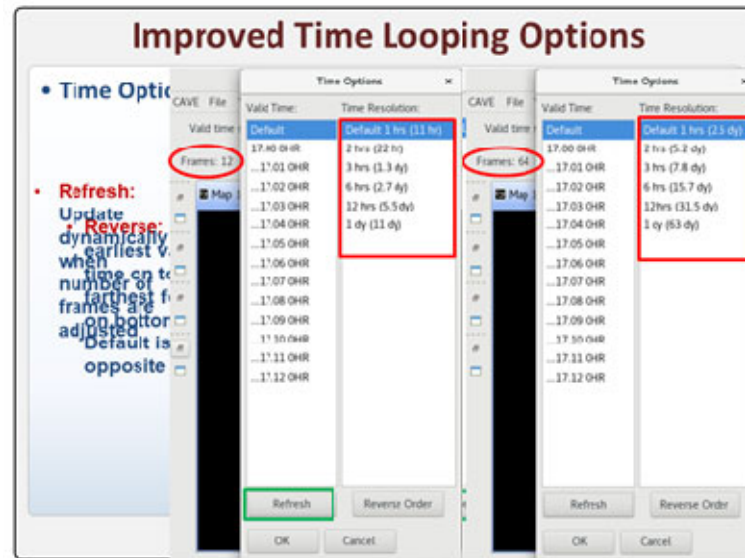


Notes:
In prior builds, you could only use the reference on product right click look up in the D2D perspective. With 20.2.3, you can use the AWIPS Interactive Reference or AIR to access reference and training material from the GFE, Hydro, and MPE perspectives. There are not many references currently registered with the new perspectives, but future references can now start being designed to leverage this.

Slide 15 Improved Time Looping Options

Duration: 00:00:19

Advance mode: Auto



Notes:

There are two extra time looping options available from the Time Options GUI when loading a product. First, you can reverse the order of times by clicking the Reverse button. Second, you can refresh the time resolution when adjusting the frame count by clicking the Refresh button.

Slide 16

ITOs and Focal Points

Duration: 00:01:29

Advance mode: Auto

ITOs and Focal Points

- 4 new GOES netcdf products: vis, shortwave IR, WV, longwave IR replace GOES-15 gini products
- BLU alert triggers added
- Unified dictionary
 - Hazard Services, GFE, collaboration, text workstation
 - /awips2/edex/data/utility/cave_static/site/X
- Script to clean up old tags for tdwrCollectionLimited
- FFMP broken in previous build – new fix, can
- Make TDWR requests for all cuts at/below lo
- Hazard Services focal point update HS site ov methods at installation to enable hydro oper
- see [20.2.3 Hazard Services Overview for Focal Points](#)



Notes:

There are a relatively large number of enhancements to review in the living release notes. Some of the major changes in this build focal points need to be aware of include: 4 new GOES netcdf products: visible, shortwave IR, water vapor, and longwave IR disseminated by PDA that will replace GOES-15 gini products. There is a fix for BLU alerts to send to Broadcast Message Handling (BMH) and NWRWAVES. Hazard Services and Collaboration now use the same dictionary as GFE and text workstation. There is a new script to clean up old tags for tdwrCollectionLimited. The FFMP table wouldn't launch correctly in one of the recent builds, and a fix has been implemented that prevents the problem. Sites who fixed this by removing ARIs should delete FFMPSourceConfig.xml and bounce EDEX to restore FFMP ARI. There is now a capability to make TDWR radar product requests for all cuts at or below the lowest N cuts. Finally, one of the most important focal point issues in 20.2.3 is that the Hazard Services focal point needs to update site overrides with new python methods during installation in order to enable hydro operations. The Hazard Services focal point should see the 20.2.3 overview for focal points in the CLC.

Slide 17

Summary

Duration: 00:00:48

Advance mode: Auto



Summary

- Hazard Services hydro changes
 - [20.2.3 Hazard Serv](#)
 - [Hydro Hazard Simp Overview](#)
- Multi panel layout
- Multi color and multi l
- Faster looping
- Display previous 3
- IBW Change SVR/S
 - 2 new training mo
- Radar
 - More stations bel
 - restored

The screenshot shows the software interface with a 'Loop Properties' dialog box open. The dialog box has the following settings:

Property	Value
Forward Speed	0.043 sec
Backward Speed	0
First Frame Dwell	0.033 sec
Last Frame Dwell	0.033 sec
Looping	<input checked="" type="checkbox"/>

Red circles highlight the 'Looping' checkbox and the 'Density: 1.0' dropdown menu in the background interface. The text '20.2.3' is overlaid in red on the screenshot.

Notes:

To summarize, there are a number of Hazard Services hydro changes in this build. WDTD has a couple of training modules to help with this transition. Click on these 2 links to access that training. With 20.2.3, you now have the option to select a two, nine, and sixteen panel layout. With 20.2.3, you now have more options to customize contours in D2D using the Localization Perspective. You can loop products faster with this build, up to 30 frames per second. You can also display the previous 3 model runs. There are some changes to IBW SVR/SVS and SPS products. More stations have been added to scan below 0.5 degrees and dual pol raw products have been restored.

Slide 18

Summary (Cont)

Duration: 00:00:42

Advance mode: Auto

Summary (Cont)

- FFMP basin table loads again
- Satellite
- A
- C
- U
- P
- Frame
- AWIP
- persp
- Time
- Turn

The screenshot shows the AWIPS software interface. At the top, a window titled 'FFMP Basin Table kmha' is open, displaying a table with columns for 'NAME', 'WTE', and 'FFMP'. Below this, a 'Procedure - sat-16panel.x' window is open, showing a table with columns for 'NAME', 'WTE', and 'FFMP'. At the bottom, a 'GFE Persp.' window is open, displaying a satellite image of a basin. A red box highlights the 'GFE Persp.' window, and another red box highlights the 'FFMP' column in the 'Procedure - sat-16panel.x' window.

NAME	WTE	FFMP
NC, West	0.44	-2.1
NC, Washington	0.00	-2.5

NAME	WTE	FFMP
FFMP	17.31 09H	2 km (1.7 dp)
REF	17.31 09H	3 km (2.6 dp)
REF	17.31 09H	6 km (5.2 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)
REF	17.00 09H	1 km (0.5 dp)

Notes:

The FFMP basin table loads again. Aerosol dust and smoke products automatically rename the CAVE editor tabs. You can also use the alter button on satellite products in the procedures window. The frame count can now be seen displayed at the bottom of the CAVE window. The AWIPS Interactive Reference or AIR right click option can now be used in all perspectives and not just D2D. The Time Looping Option GUI now includes refresh and reverse options. Don't forget that there will be turnkeys to implement Hydro HazSimp and IBW templates.

Slide 19

VLab & Job Sheets

Duration: 00:00:47

Advance mode: By user

Check Out VLab & Job Sheet

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

Welcome NWS - AWIPS Interactive Reference

RECENT TRAINING-RELATED AWIPS BUILD CHANGES

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

062023 (Apr 2023)

- AWIPS Build 20.2.3 Informational Overview in CLC (20min, CLC, non-CLC Web) Training
 - JobSheet Custom Contouring
- 20.2.3 Hazard Services Hydro Changes (30min, CLC, non-CLC Web) Training
 - JobSheet 20.2.3 Hazard Services Hydro Changes Walk Through
 - Hydro Haz Smp (CLC, non-CLC Web) Training
 - JobSheet Hydro Hazard Simplification Changes Walk Through
- Warning Content Impact Based Warning (25min, CLC, non-CLC Web) and SPS for Near Severe Storms (15min, CLC, non-CLC Web) Training
 - JobSheet WPT Changes (15min, CLC, non-CLC Web) Training

Magnification

- Move Up
- Move Down
- Change blinking...
- Reference in Product
- Unplay Product
- Unload

AWIPS Build Changes Current

This page contains a summary of AWIPS build changes that accompany the info.

Source: WDTD Aethan Thao Pham Approved: true

Contact: Sarah.Borg@noaa.gov

MRMS All Tolls

MRMS Products Guide

NGHARP

Notes:

You are now done with the AWIPS 20.2.3 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 20.2.3 section where you can access job sheets to practice new applications associated with this build. 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. Let me know if you have any further questions, and good luck with the new 20.2.3 capabilities.