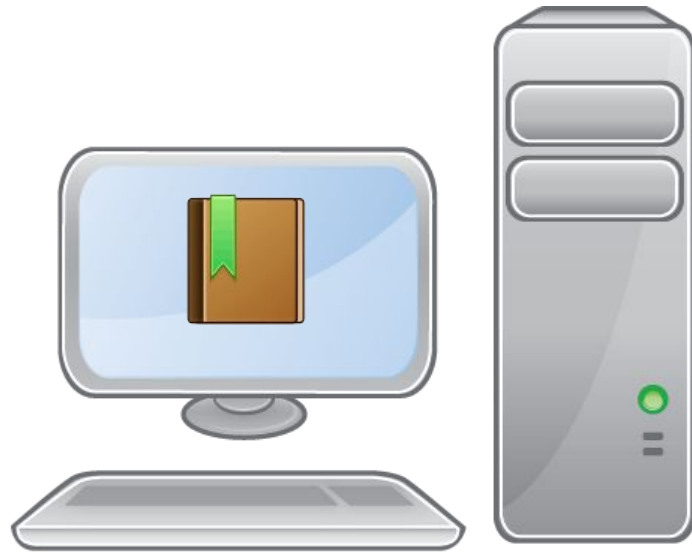


AWIPS Reference Training Plugin (Just in Time Training Plugin)



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NWS
MDL/DSB/CIRA

History of the project

- **Originally purposed at 2015 NOAA Satellite User Readiness Meeting**
- **Prototype developed at NASA SpoRT**
- **Tested at OPG Spring 2016**
- **Development moved to MDL with partnership with WDTD**

AWIPS

What is AWIPS?

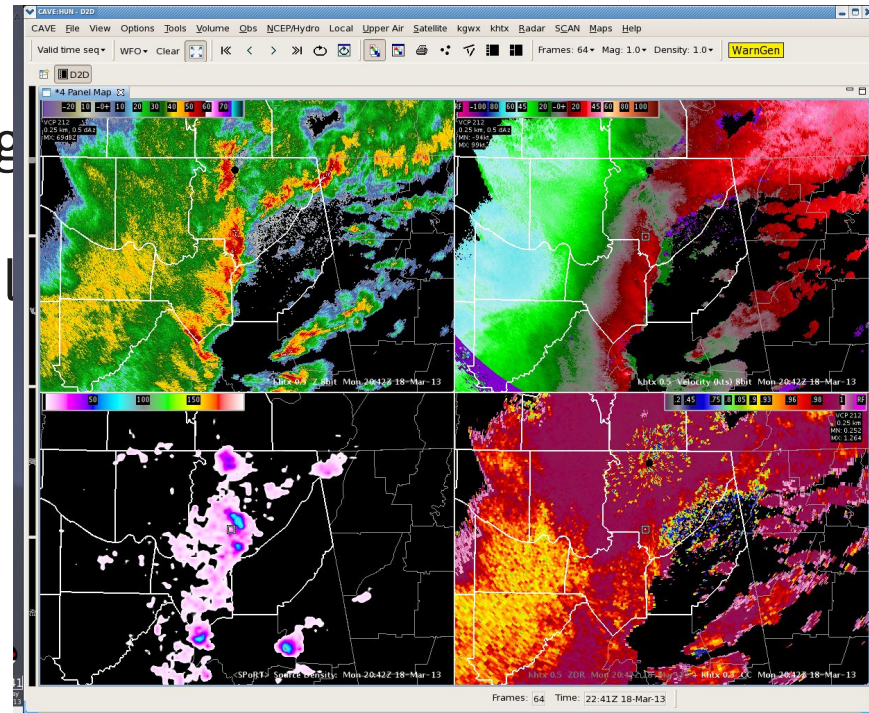
- Advanced Weather Information Processing System
- Ingest, visualization, forecast creation tool of National Weather Service

What is EDEX?

- Ingest, and Backend of AWIPS system

What is CAVE?

- Visualization portion of AWIPS



What is VLab?



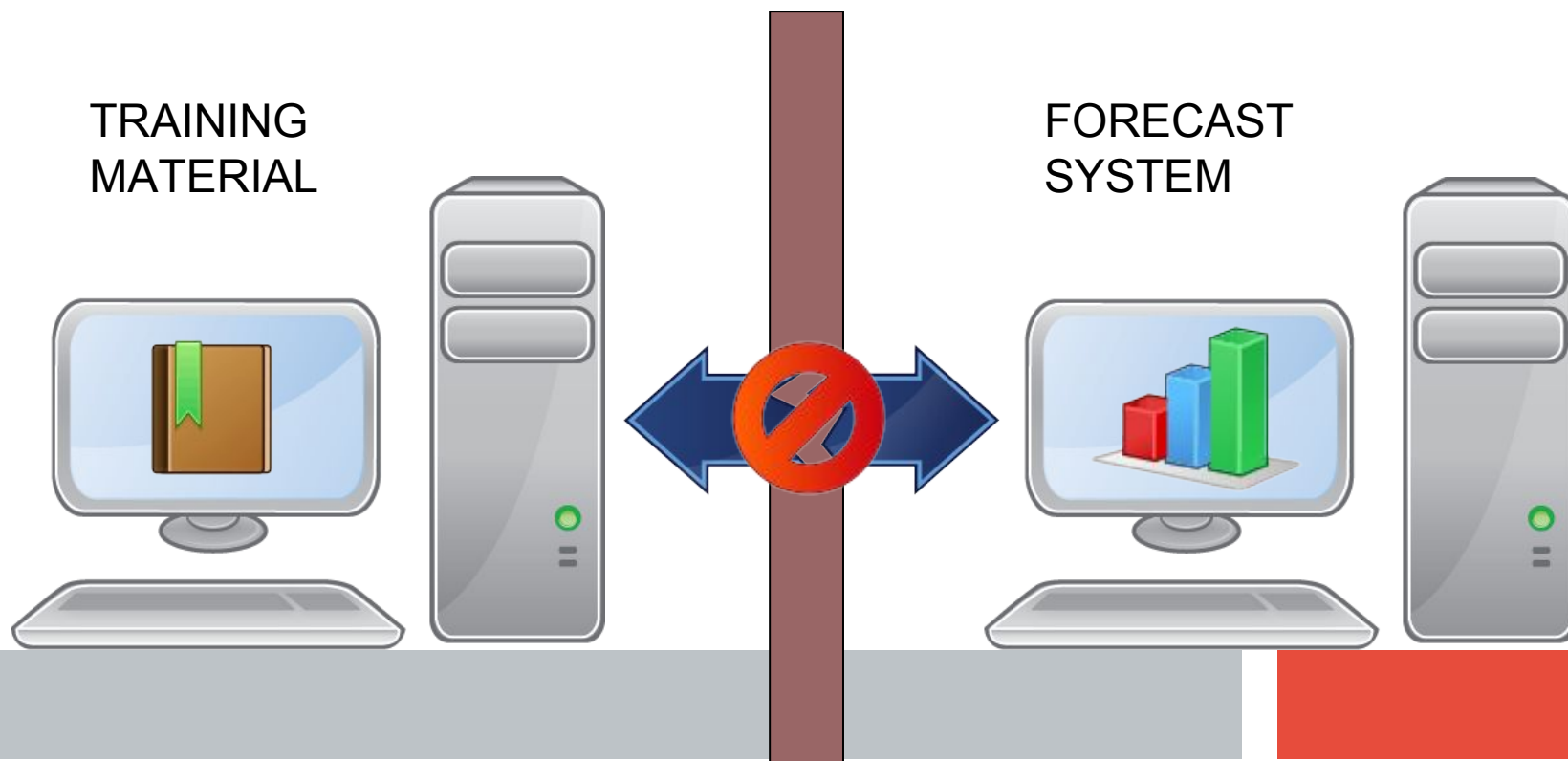
Virtual Lab Development Services (VLDS)

Virtual Lab Collaboration Services (VLCS)

- .VLCS uses platform called Liferay
- .VLCS supports communities through wiki, forums, document libraries, blogs, and web content.
- .VLCS supports science sharing and training

Need

- **Currently forecasters have different systems for composing the forecast versus reference and training material**
- **No method to lookup training on a meteorological product within AWIPS or WES**





Why is this a problem?

- **Warning Event Simulator (WES)**
 - Train how you work
 - Train on the system you use to do your work
- **Current system does not have integrated reference**
- **Having material on decision making system allows closer comparison**
- **Currently no easy way to search available training**
- **Training is spread across various locations**
- **Reference material for less frequent applications is sometimes hard to find**

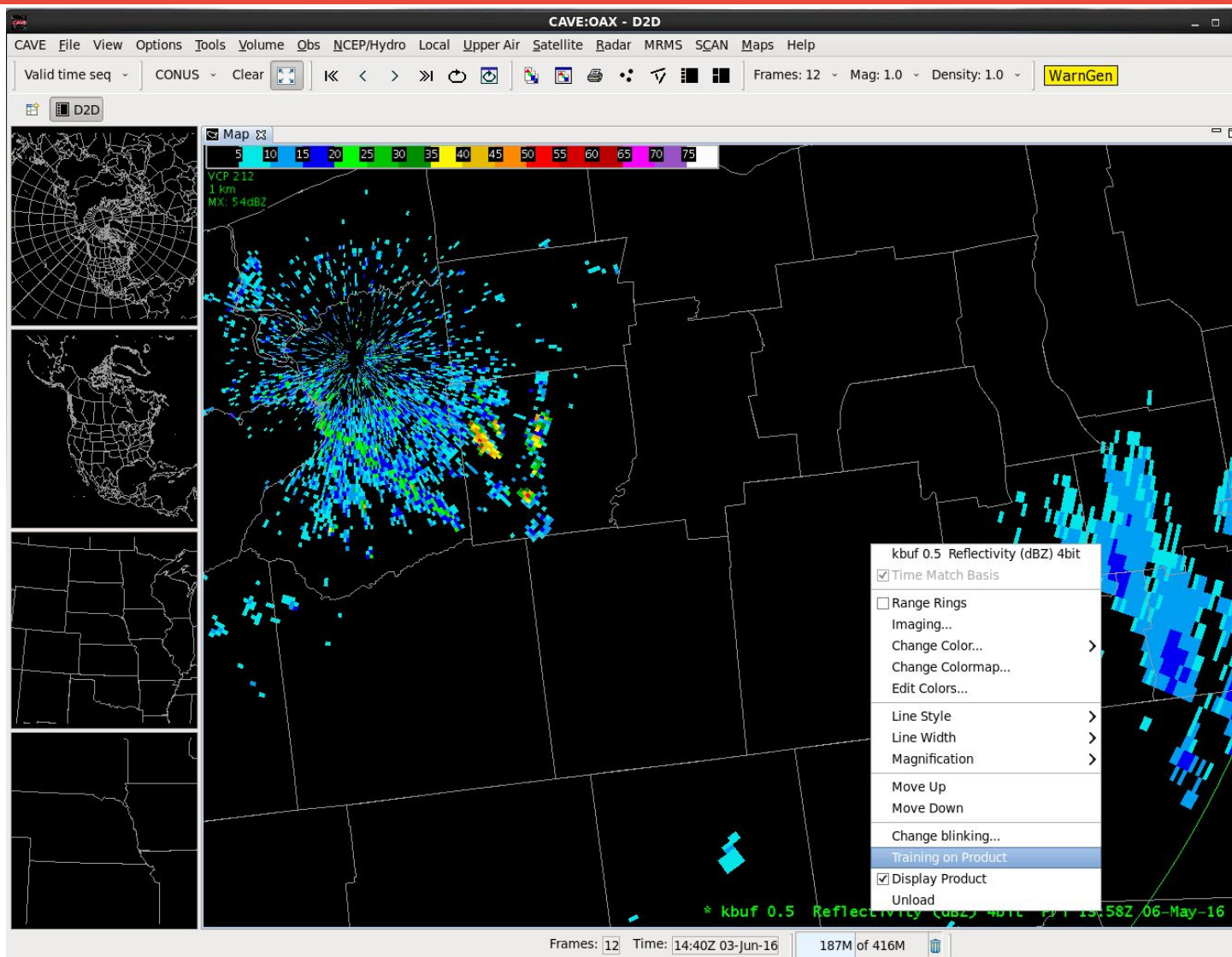
Other issues to address



- **Don't want to impose another set of training development tools**
- **Some materials are only regional or locally useful**
- **Need to provide a way for materials to be reused**
- **Provide feedback on materials**

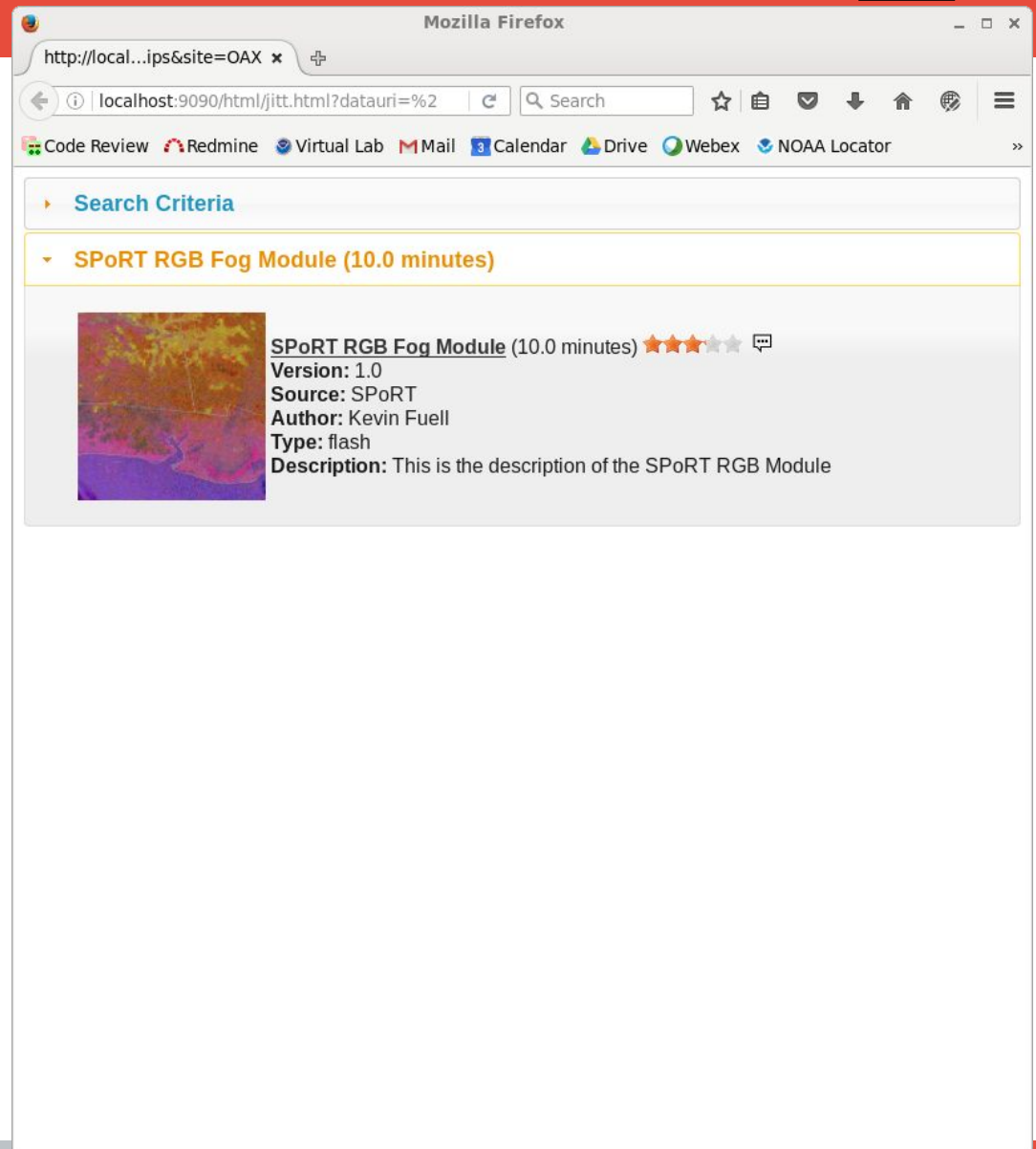
Accessing Training on a Product

1



Search Results

- Results are ordered by match score
- Results are accessible from AWIPS
- Material can be rated and commented upon



The screenshot shows a Mozilla Firefox browser window with the address bar displaying 'http://local...ips&site=OAX'. The page content includes a search bar, a navigation menu with links like 'Code Review', 'Redmine', 'Virtual Lab', 'Mail', 'Calendar', 'Drive', 'Webex', and 'NOAA Locator', and a search results section. The search criteria are expanded to show 'SPoRT RGB Fog Module (10.0 minutes)'. Below this, there is a thumbnail image of a fog module, followed by the title 'SPoRT RGB Fog Module (10.0 minutes)' with a 4-star rating and a comment icon. The details listed are: Version: 1.0, Source: SPoRT, Author: Kevin Fuell, Type: flash, and Description: This is the description of the SPoRT RGB Module.

The screenshot shows a Mozilla Firefox browser window with the following details:

- Browser Title:** module_RGB_Fog_20131115_NASA_SPoRT - Mozilla Firefox
- Address Bar:** localhost:9090/055bd0a0-34f6-4693-baf3-00b20d3144cf/1.0/
- Navigation:** Back, Forward, Home, Refresh, Stop, Print, Search, and a search bar containing 'apache.camel.Messa'.
- Bookmarks:** Development, CSU, Training, Connectivity, AWIPS.
- Page Header:** module_RGB_Fog_20131115_NASA_SPoRT (00:13 / 17:07) ATTACHMENTS
- Slide Content:**
 - Logo:** SPoRT (Space and Planetary Observations and Research Technologies)
 - Author:** Kevin Fuell, Meteorologist (with a profile picture and 'Bio'/'Email' links).
 - Outline:**
 - Welcome
 - Forecast Issue and Solution
 - Night-time Microphysics RGB
 - NTmicro: Fog vs Low Clouds
 - McCarthy Example: 11-15-13
 - VIIRS DNB Radiance
 - VIIRS Reflectance
 - Summary / Resources
 - Credits
 - Main Title:** RGB Imagery for Aviation and Cloud Analysis
 - Subtitle:** A module by NASA/SPoRT on the application of RGB Imagery
 - Created:** November 2013
 - Footer:** SPoRT logo, 'Transitioning Unique Data and Research Technologies to Operations', and the URL <http://weather.msfc.nasa.gov/sport>. The NASA logo is also present.
- Slide Navigation:** A control bar at the bottom shows 'SLIDE 1 OF 17', 'CLICK NEXT TO ADVANCE', a timer '00:13 / 00:13', and navigation buttons (back, forward, stop, refresh).

What is happening behind the scenes?



VIRTUAL LAB

WHERE GREAT IDEAS BECOME OPERATIONAL REALITY



Trainer
Develops
Training/
reference
material

Trainer
creates
material
on VLab

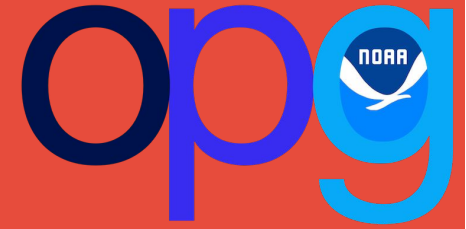


Forecaster
Searches for
training from
AWIPS

Benefits

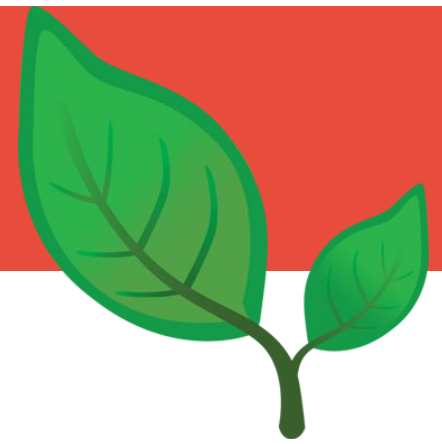


- **User initiates the search, but can change the parameters**
- **Sorting of material is various ways, such as:**
 - Keyword matching
 - By length of training
 - Source
- **Crowd sourcing**
 - Comments
 - Rating



- **(AWIPS Reference) Just in Time Training Plugin was integrated with new products for RGB satellite data**
- **Forecasters worked as in real-life forecasting**
- **Forecasters were shown how to use the plugin to access training and reference material**
- **Resounding success**
- **Forecasters asked how they could get this plugin at their site ASAP**

AWIPS Integration



- **Software was delivered with 16.4.1**
- **Development of VLab Interface is ongoing**
- **Appearing in offices in early Winter 2016 (currently scheduled for 12/8/16)**

How do training/reference developers add content?

Once VLab integration is deployed...

- 1. Training developers will create training/reference content on VLab**
- 2. Then create fill in a web page with some information about the training**
 - a. Title**
 - b. Description**
 - c. Keyword tags**
 - d. Duration**
 - e. Source**
 - f. Thumbnail**



Other Interesting Features



Training can be managed within Communities in VLab

- **Geotagging training**
- **Ratings**
- **Comments**
- **Versioning**
- **Flexibility**

Materials can be managed in communities

Satellite Community



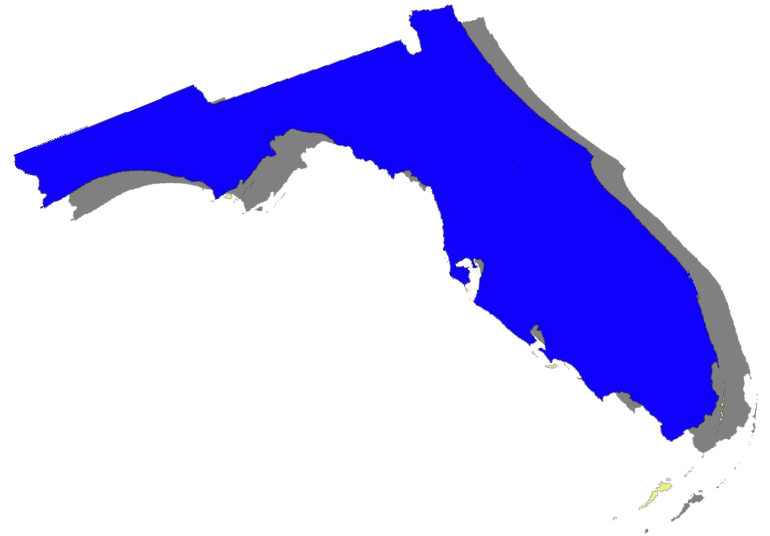
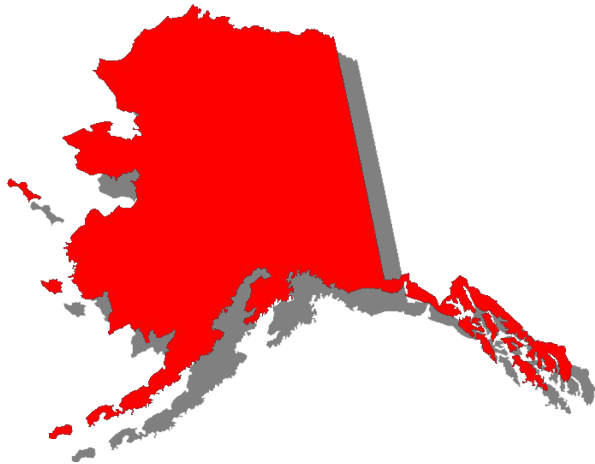
Radar Community



Geotagging Materials

Materials for Southeastern US may or may not be helpful in Alaska?

- **Searches contain view extent**



Ratings and Comments

- **Use VLab existing rating and comment system**
- **Provides feedback to other users**
- **Provides feedback to training/reference developers**



Versioning and Flexibility

- **VLab automatically has versioning**
- **Material developers can easily provide updates**
- **Material developers can adjust tags**
- **Users can view inside and outside of AWIPS**

Questions

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