

AWIPS II Future Applications

A WFO Perspective

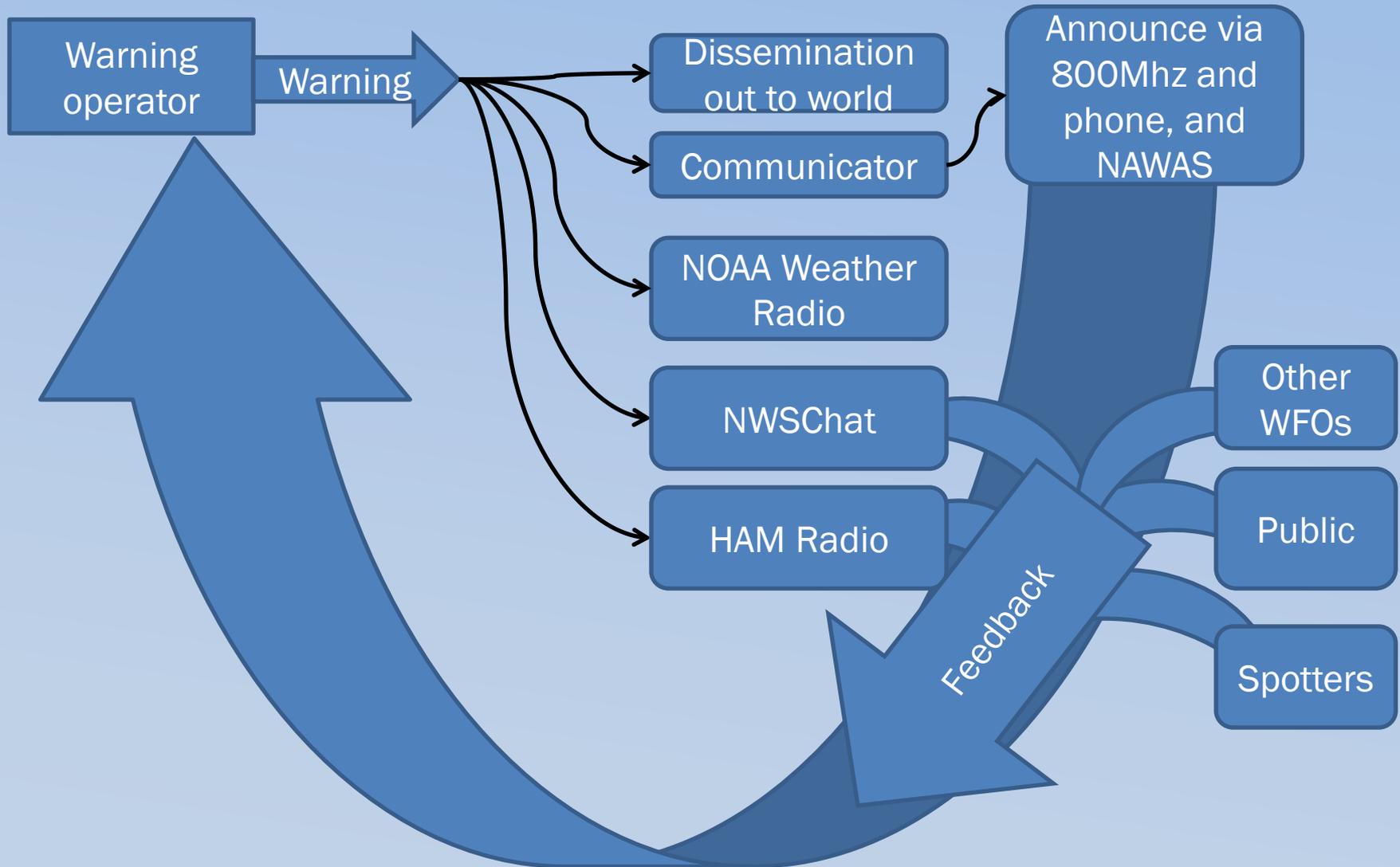
Jason Burks

Setup

- AWIPS II is very extendable
- Now what?
 - Limitless possibilities
 - New era of collaboration with partners
 - Can solve some issues
- Some of the things listed here may not be new and maybe addressed in another project.
- From one WFO's perspective
 - How did I come up with these ideas?

SITUATIONAL AWARENESS IN WARNING OPERATIONS

Warning Operations Feedback Loop

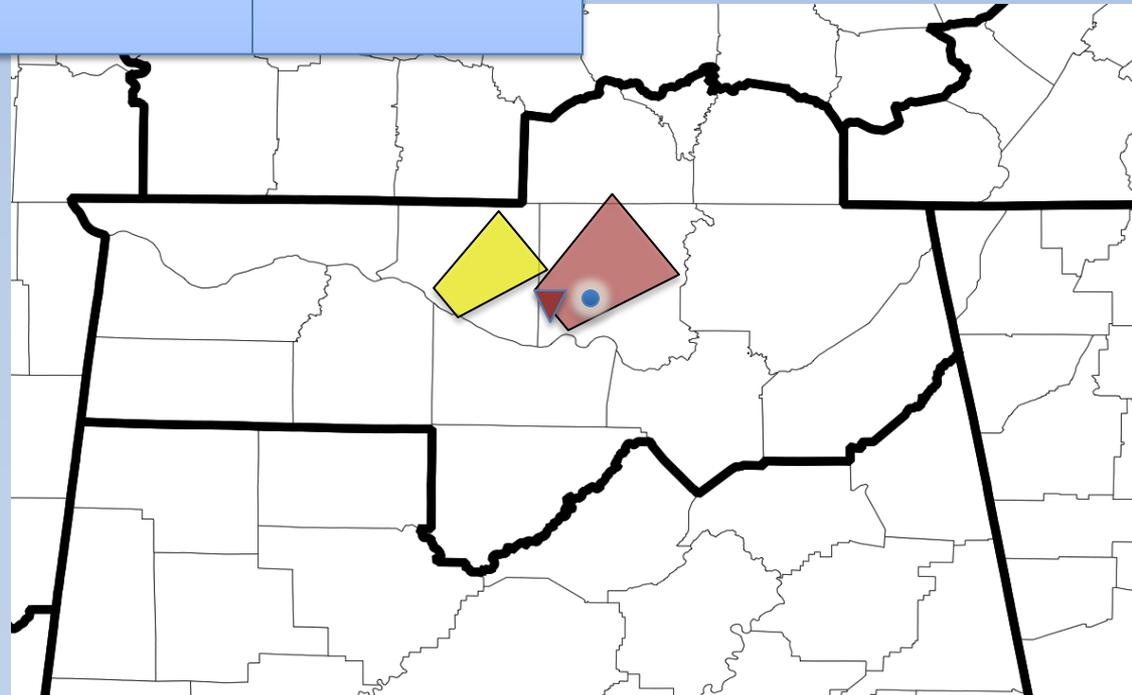


Situational Awareness in Convective Warning Operations

- Tracking of warnings and follow-ups
 - Expiration of products.
 - Issuing follow-up statements in timely manner.
- Ability to enter storm reports using right click on map, or geocoding, or selecting a spotter.
- Tracking/notification of incoming local storm reports (Should display on everyone's screen).
- Real-time verification on warnings with storm reports.
- Quick sectoring of CWA.
- Tablet focused display for Coordinator in medium to large events.
- Some of this is coming in next generation warning tool.

Hands off Situational Awareness Display

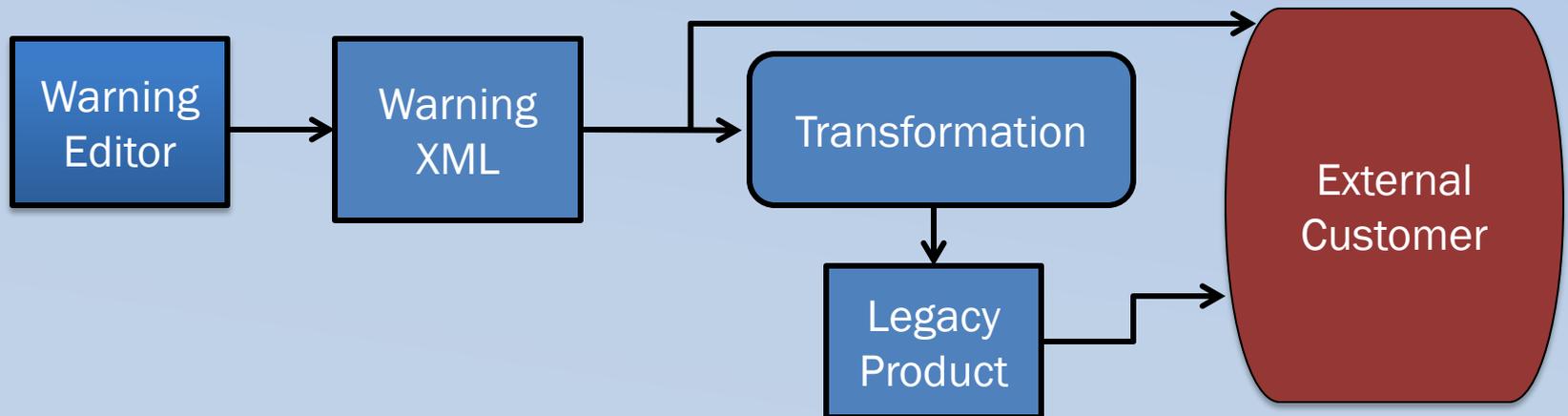
| Warning Type | Expiration Time | County | Verification |
|--------------|--------------------|---------------|---|
| TOR | 3/12/2012 15:13 | Madison, AL |  |
| SVR | 3/12/2012 15:15 | Limestone, AL | |



OTHER IMPROVEMENTS

XML Output for products

- Currently warning manipulated in tool, then post-edited in text format.
- Issue Warnings in XML
- Largest consumer of our products
 - COMPUTERS
 - Decoding text products for alerting is fragile.
 - Internally NWS could operate more efficiently.
 - External customers would likely move to it.
 - Legacy products could be generated from XML.
 - Follow-ups would be easier



XML Product Benefits

- Benefits of XML production
 - Validation before issuance
 - Better end user products
 - Can build more complex dissemination and decision systems
 - More reliable delivery systems: both public and private.

Better GIS interrogation

- Decision Support Services
 - Knowing location and thresholds of critical structures within CWA.
 - Nuclear Power Plants
 - Schools
 - Structures with large number of people, e.g. factories
 - Large Powerlines
 - Ability to display current end user thresholds
 - Hurricane Evacuation routes and community storm shelters

Online Warning Event Simulator

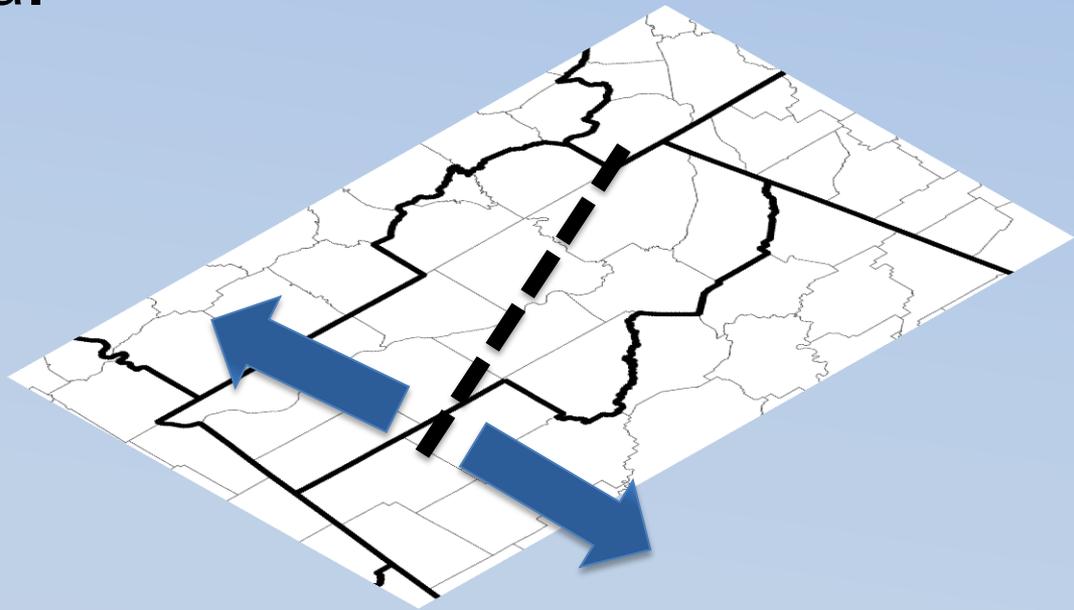
- Central Repository with cases.
- Useful for using with Analogs.
 - This setup looks just like event X.
 - Now I want to quickly look at event X and see the similarities.
- Maybe initially implemented in a thin client method.

Better Collaboration Tools

- Chat is good but we need more...
- Shared displays in WFO.
- Interactive drawing.
- Interactive editing.
- Extended to partners in the Emergency and Media communities.
- This is answered by the Collaboration Tool being developed at GSD, just wanted reiterate need.

More Dynamic cross sectioning

- Dynamically interact with Cross Sections
 - Right now cross sections are very static
 - Apply dynamic cross sections to model and analysis data.

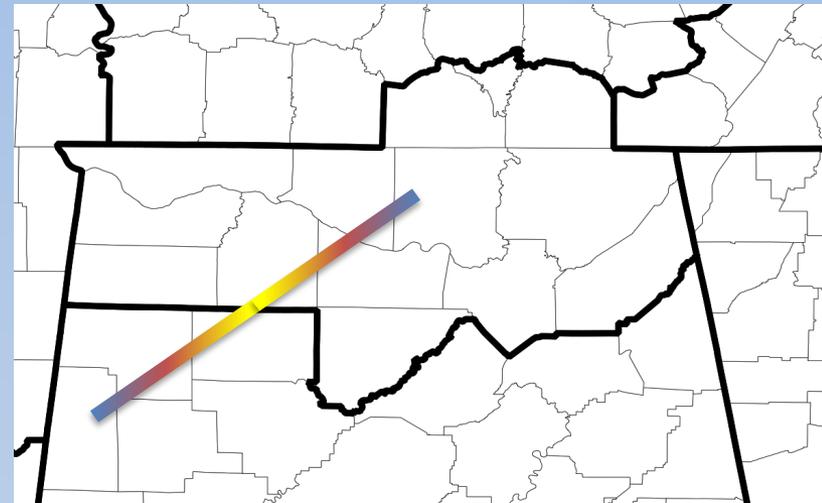


Integration of web available datasets from Social Media

- Integrate web datasets directly into AWIPS II
 - Twitter reports
 - Webcams
 - Spotter reports from the web
- These can be plotted on map to show location and time of post.

Storm Survey Help

- Storm Survey information integrated back into AWIPS
 - Allow follow-up decision support based on impacted areas.
 - Allow coordination of further surveys based data.
- Differencing mapping for track identification from satellites.



Questions?