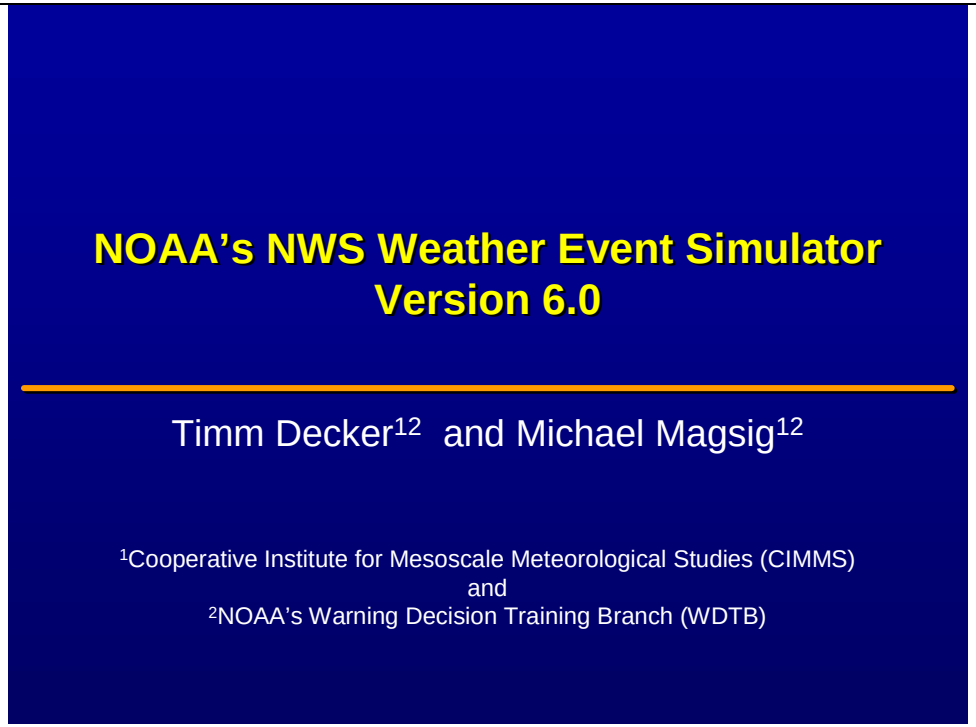


WES6.0

Presentation Details:

Slides: 29
Duration: 00:19:37
Filename: C:\Data\DeckerOther\WES\WES6.0\articulate_final\WES6.0.ppt

Presenter Details:

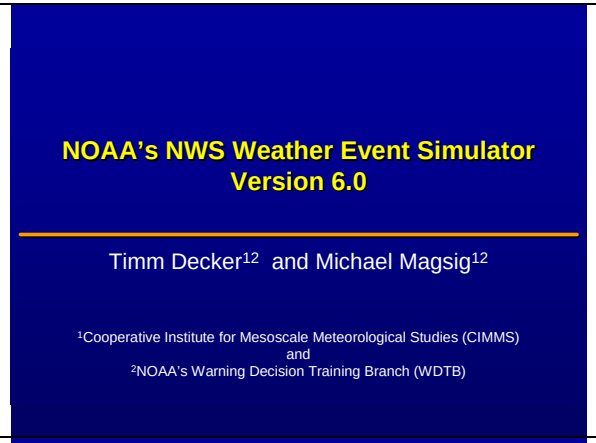
Name: Mike Magsig and Timm Decker
Title: WES Team Members
Email: michael.a.magsig@noaa.gov, timothy.b.decker@noaa.gov
Bio:

Slide 1

NOAA's NWS WES 6.0

Duration: 00:00:13

Advance mode: Auto



Notes:

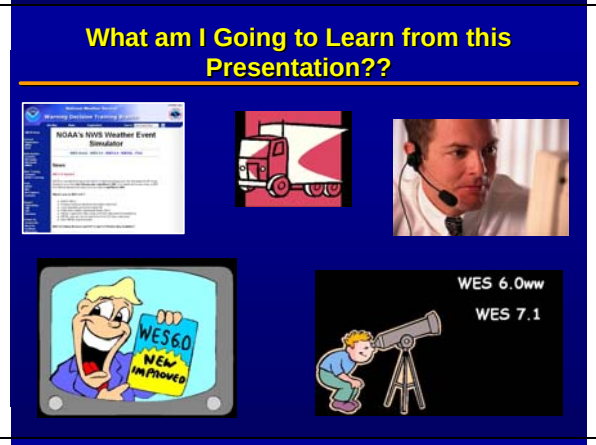
Welcome to the overview of NOAA's NWS Weather Event Simulator Version 6.0. Mike Magsig and Timm Decker, members of the WES team, will be telling you the latest WES6.0 information.

Slide 2

What am I Going to Learn ??

Duration: 00:00:20

Advance mode: Auto



Notes:

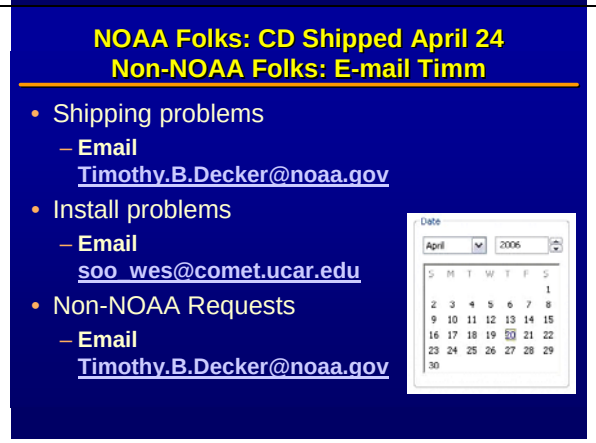
This presentation will provide you with 1) updated links to important WES websites and documents, 2) WES schedules and contact information for shipping / installation problems 3) what's new in WES6.0, and 4) changes for future WES builds.

Slide 3

Shipping Information

Duration: 00:00:36

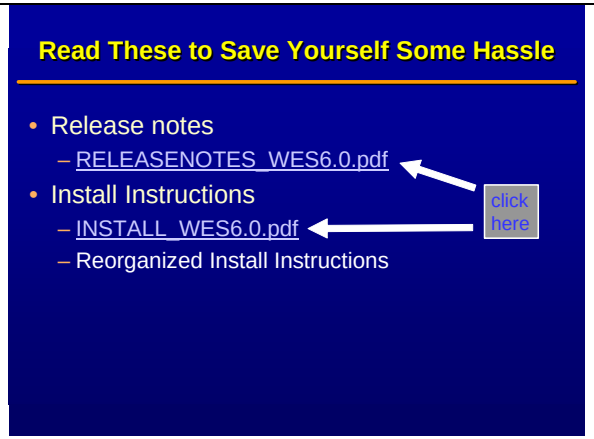
Advance mode: Auto



Notes:

CDs were shipped to NOAA folks on our distribution list on April 24, 2006 If you haven't received your CD by May 1, 2006 or you have any other shipping issues, contact Timm at Timothy.B.Decker@noaa.gov. For installation problems, send email to the soo_wes list. To subscribe to the soo_wes email list, email the SOO/STRC coordinator, Bob Rozumalski, at rozumal@ucar.edu.

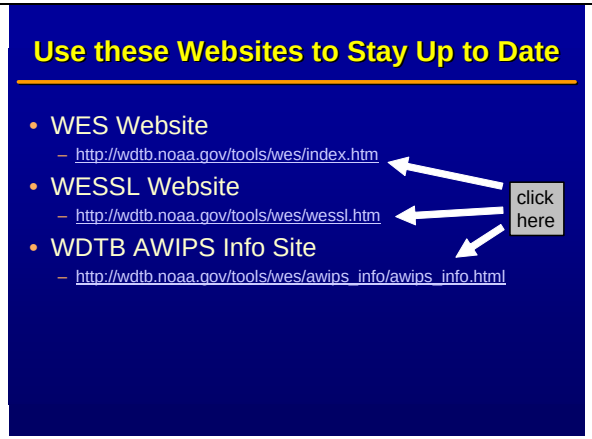
If you are not a member of a NOAA agency and would like to obtain WES 6.0, it is available via FTP for

		downloading and burning. Please E-mail Timm to get further instructions.
Slide 4 **WES 6.0 Documents** Duration: 00:00:16 Advance mode: Auto		**Notes:** For a complete overview of everything new in WES6.0, see the release notes. They are fairly short so we recommend clicking on the link and checking them out before you continue. This presentation covers most of the material found in the Release Notes. The install instructions, INSTALL_WES6.0.pdf, contain a lot of important information and tutorials for both the IT and the training facilitator. Check out what's inside by following the link to the table of contents. The install instructions are also available on your WES machine at /awips/fxa/INSTALL_WES6.0.pdf. Note that the Install instructions have been reorganized since WES5.0.

Slide 5

WDTB WES Websites

Duration: 00:00:46
Advance mode: Auto



Notes:

Since the release of WES 5.0, WDTB has initiated several WES related websites.

The WDTB WES website contains everything you need to know regarding the WES. There is information on past, present and future versions of the WES as well as links to all WES documentation. This is the site to monitor for information regarding WES patches or other WES maintenance. We are currently working on a comprehensive frequently asked questions page to help with you WES support questions.

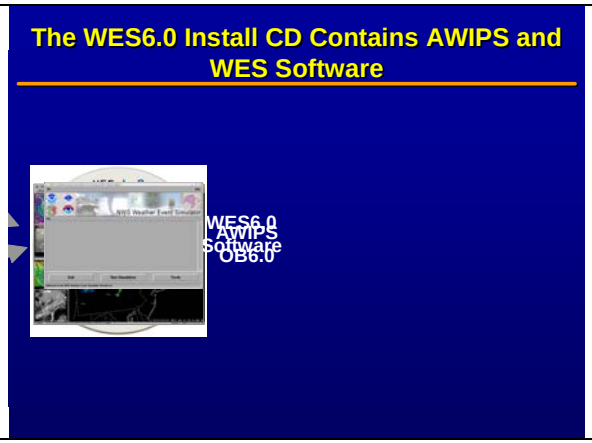
The WESSL website gives an overview of the WES Scripting Language. This includes user instructions and information on all WESSL functions.

The WDTB AWIPS info site is an internal WDTB site which contains the latest AWIPS information available to us. It presents links to important AWIPS documents and websites in an organized manner. Feel free to use this page for locating AWIPS information.

Slide 6

The WES 6.0 Install CD

Duration: 00:00:25
Advance mode: Auto



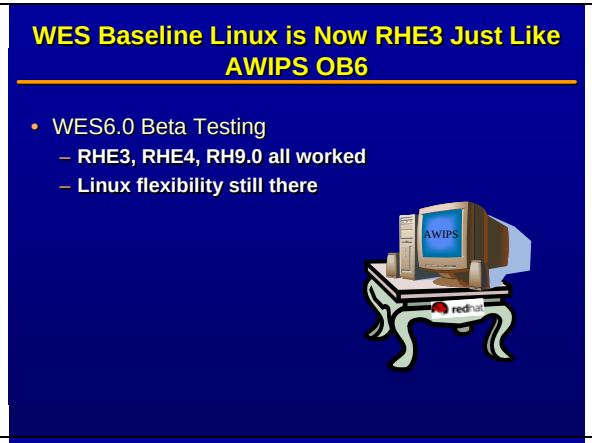
Notes:

Thanks for the overview on shipping and support, Timm. Now it is time to review what is inside WES6.0. The WES6.0 release CD comes with AWIPS OB6.0 (from the AWIPS release CDs) and WES6.0 software. The WES software is essentially a data pump and an interface to AWIPS.

Slide 7

WES Baseline Linux is Now RHE3

Duration: 00:00:21
Advance mode: Auto



Notes:

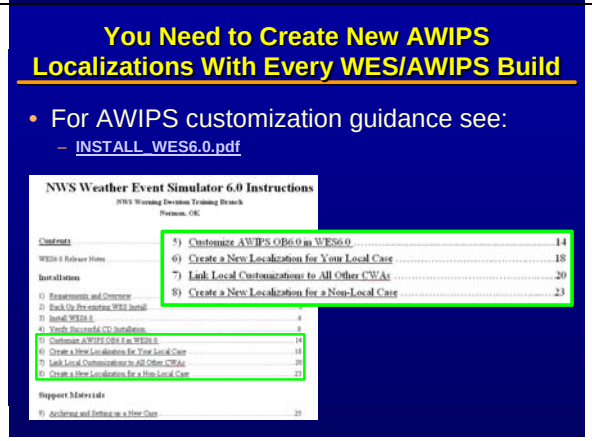
Thanks Timm. Now it is time to move on to some details of WES6.0.

The WES6.0 baseline Linux has changed to RHE3, in line with AWIPS 6.0. The WES6.0 beta test confirmed that other distributions of Linux still work, indicating Linux distribution flexibility continues to exist. We expect that other distributions like Fedora Core will continue to work.

Slide 8

Create New Localizations with Each Build

Duration: 00:00:26
Advance mode: Auto



Notes:

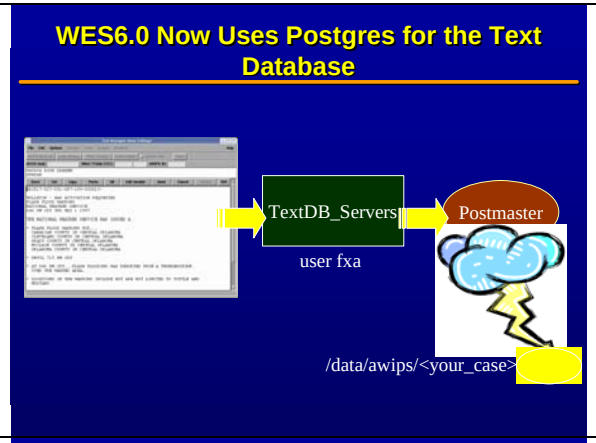
AWIPS customization is one of the biggest headaches for WES. Every time an AWIPS build is released (and WES is released), you have to recreate your localization for things to work right (among other things). Running old localizations with new data sets will often cause significant problems.

The install instructions come with sections detailing how to customize WES from an AWIPS, and also how to infuse your local AWIPS customizations into localizations from other CWAs. Follow these to train like you fight. These instructions were designed for collaboration with the local AWIPS focal point.

Slide 9

Postgres Text Database in WES 6.0

Duration: 00:00:20
Advance mode: Auto



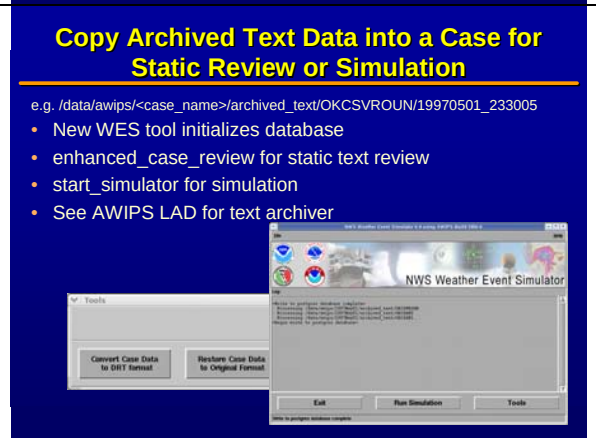
Notes:

One of the biggest changes in WES6.0 is the change to using Postgres for the Text Database instead of flat files. Now when you interact with the text database in WES, AWIPS will now utilize the TextDB_Servers as user fxa and the Postmaster as user Postgres to interact with the text database stored in /data/awips/<your_case>/pgdata. Migrating to postgres will likely open the doors for getting more text database functionality working with WES in the future.

Slide 10

Copy Archived Text Data into a Case

Duration: 00:00:53
Advance mode: Auto



Notes:

It is now possible to copy in archived text data for static review or for simulations. The new text data convention is to name the file with an AWIPS timestamp, and store the file in a directory containing the PIL name that is located in the /data/awips/<case_name>/archived_text directory. This example severe thunderstorm warning is stored in the archived_text/OKCSVROUN directory.

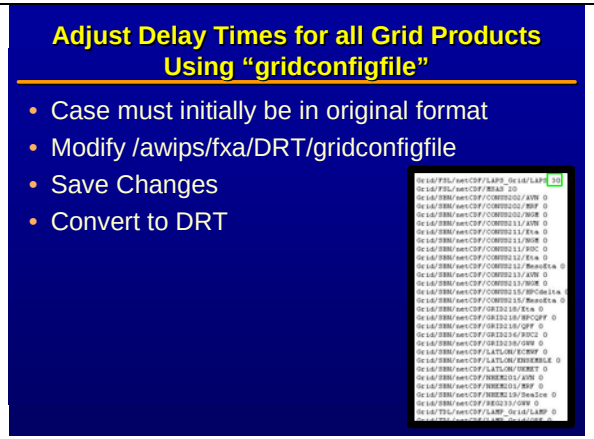
If you want to add text data to a case (or any data for that matter), your case should be in original format. You will use a simple WES tool under the “Tools” button to initialize the database. Once that is done, you can use enhanced_case_review to start D2D and view the text data, or you can use start_simulator and your text data will be incorporated into a simulation.

For more information on text archiving capabilities, see the AWIPS Local Applications Development and the WES6.0 installation guide.

Slide 11

Adjust Delay Times for all Grid Products

Duration: 00:00:39
Advance mode: Auto



Notes:

With WES 6.0, we have included a new configuration file which allows you to set specific delay times for each available grid product. For instance you can set a delay time of 20 which will cause a 12z grid product to appear at 1220z.

The default delay times are 20 minutes for LAPS and MSAS data. All other grid products have a default delay time of zero.

I'll show you a quick example of how to modify grid delay times using this file.

First, open for editing the file gridconfigfile located in the /awips/fxa/DRT directory

You will notice a path for each of the available gird products and at the end of each path there is a number. This is the delay time for that product. If we wanted to change the delay time for all LAPS products to 30 minutes, I would simply change the number at the end of the LAPS path from 20 to 30 and save my changes.

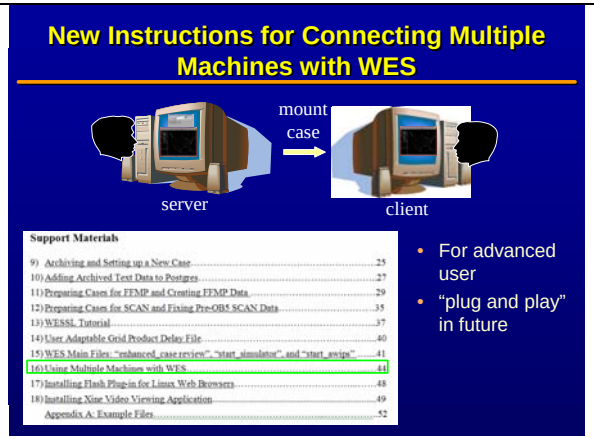
Now each time a case is converted to DRT format, this config file will be written into the case and the grid products will be delay accordingly.

It is important to note that if you make changes to this file, your case must then be converted to DRT format for the changes to take affect.

Slide 12

Adjust Delay Times for all Grid Products

Duration: 00:00:45
Advance mode: Auto



Notes:

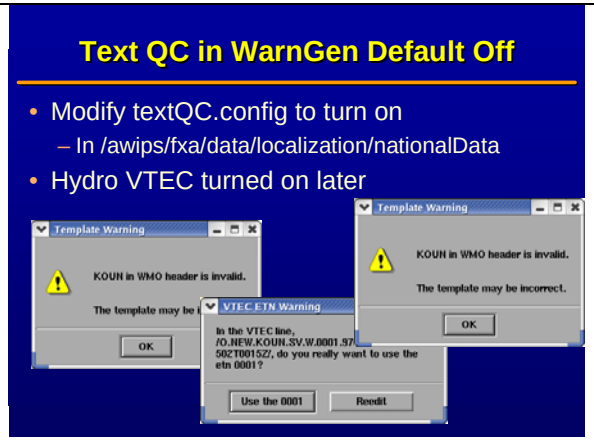
In WES6.0 there are new instructions for connecting multiple machines with WES. In this setup, one machine is treated as a server machine, and the other machine it treated as a client machine with the data case mounted from the server to the client. The WES and D2D is run on the server, and the D2D is run on the client. This would support pairing up forecasters through simulations if you have more than one machine.

See the Support Materials of the INSTALL_WES6.0.pdf for more information. These instructions are the first version, so they are intended for the more advanced user as it requires some manual configuration. A more "plug and play" version is planned for future WES builds.

Slide 13

Text QC in WarnGen Default Off

Duration: 00:00:29
Advance mode: Auto



Notes:

The textQC part of WarnGen continues to pop up numerous warning messages as it chokes on the templates we pull off of the release AWIPS CDs, and we still aren't sure why. The default qc checking is turned off. If you want to turn them on, change the /awips/fxa/data/localization/nationalData/textQC.config file like you have on your local system.

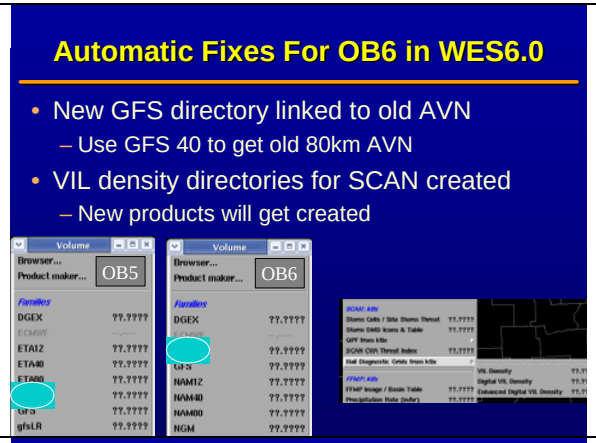
Also note that the Hydro VTEC turn key will need to be turned on later this year in sync with your real time system.

Slide 14

Automatic Fixes For OB6 in WES 6.0

Duration: 00:00:35

Advance mode: Auto



Notes:

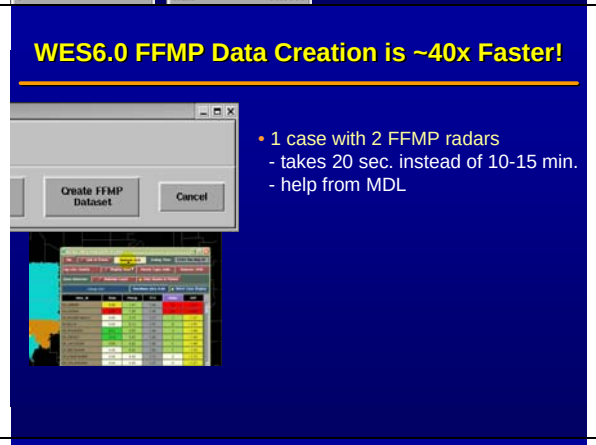
We fixed a couple of things in OB6 to make it easier to view archived AVN data and some of the new SCAN VIL density products. We linked the old GFS 80km AVN directory to the new 40km GFS directory to allow for viewing archived AVN data with OB6. We also create the VIL density directories needed for SCAN to create the new products if you have the archived input data (VIL, ET, DVIL, and EET).

Slide 15

FFMP Data Creation is ~40x Faster!

Duration: 00:00:16

Advance mode: Auto



Notes:

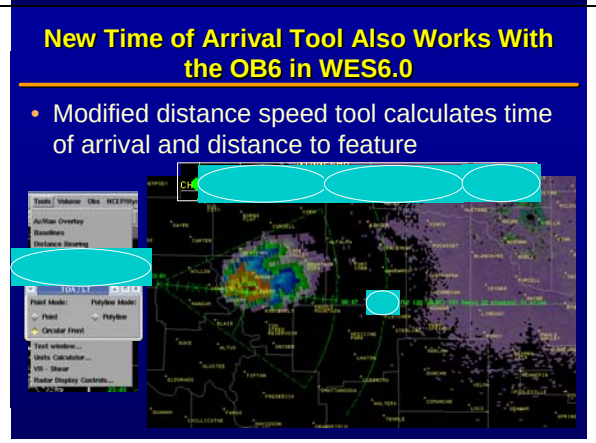
One small improvement in WES6.0 is that creating FFMP data in WES6.0 is significantly faster. Preliminary tests indicate 20x faster (less than a minute or two for a full 6 hour dataset from multiple radars in an archived case) thanks to MDL setting a flag for case generation use that disables a hardcoded delay needed for real-time use.

Slide 16

New Time of Arrival Tool

Duration: 00:00:53

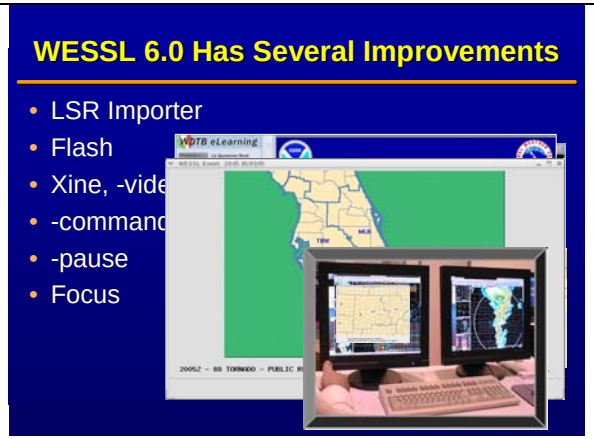
Advance mode: Auto



Notes:

Another nifty tool in OB6 that works with WES6.0 is the Time of Arrival Tool. After tracking movement of a storm, move the arrival point to the location to find out the arrival time, how long until arrival, and the distance to the tracked feature. In this image I've placed the dot at the location of the HAM network controller who frequently requests information for storms in his area while I am on the HAM shift duty. This tool also tracks polylines, and it should have a number of other uses.

Now that we have covered many of the improvements to WES6.0, I'll pass it back to Timm to talk about his

		WESSL improvements.
Slide 17 **WESSL 6.0 Has Several Improvements** Duration: 00:01:06 Advance mode: Auto		**Notes:** The 6.0 version of the WES Scripting Language (WESSL) has many improvements. There is now an LSR importer tool available in builder which allows you to create simulation popups directly from SPC Local Storm Report logs. We supply you with easy install instructions for a Flash plug-in that will allow WESSL to play articulate presentations. We also have included easy install instructions for the Xine video player. When Xine is installed, you can use the new –video tool in WESSL to launch video files. We have added a button which allows video, sound and commands to be replayed in the WESSL station log. The green “RUN WESSL COMMAND” button appears in any log entry containing a –command, -sound or –video WESSL command. A new Pause tool was added which allows a WESSL script to pause itself and colored banners which let the user know when a simulation is paused. We have also fixed the code so that the WESSL pop-up’s will not steal the focus if you are working in D2D.

Slide 18

LSR Importer Overview

Duration: 00:02:60
Advance mode: Auto

Notes:

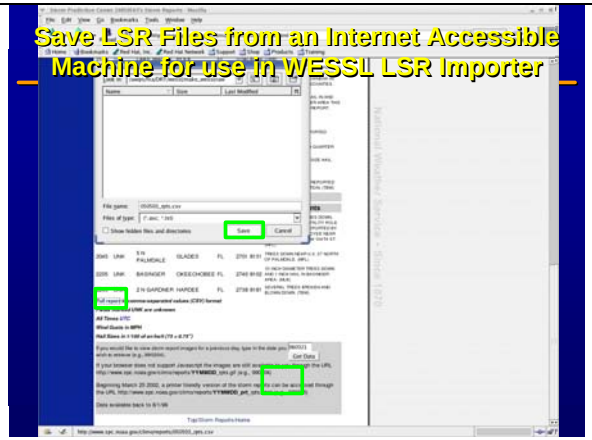
We have added an LSR Importer application from the Topeka, KS WFO which allows you to make WESSL pop-up's such as this using the time, text and location information in SPC's LSR logs. To use this application, first launch the WESSL builder.tcl application located in /awips/fxa/DRT/wessl/wessl. Under the file menu, select LSR Importer. This will pop up a calendar which is used to select the date of your desired LSR report. Use the calendar to select your date and then press the retrieve report button.

If your WES is connected to the internet, the LSR information will be automatically downloaded from the SPC website. If your WES is not connected to the internet, there is a simple procedure you can follow to download the reports on a different computer and save them to your WES box. View the next slide for more details. Note this procedure must be completed before selecting the LSR date. Note that you cannot access LSR's for dates prior to March 22, 2004.

Once the LSR has been retrieved, you will see the LSR filtering interface. This interface allows you to filter LSR's based on time and WFO. Using this interface, you can also assign a random delay time range to each LSR.

Here is a quick example of how the filter process works. Lets say that I only want to keep those LSR's valid between the hours of 1900 Z and 2200 Z. Simply adjust the slider bars in the Time Range section to match your desired times. Next, lets keep only those LSR's from WFO MFL and MLB. I select these two offices and move them over to the right column. This will eliminate all TBW LSR's from the WESSL script. Now lets set a random delay time for each LSR. By entering a 1 and an 8 here, each LSR will be delayed past it's valid time some random time between 1 and 8 minutes.

Once everything is set, press the Filter Reports

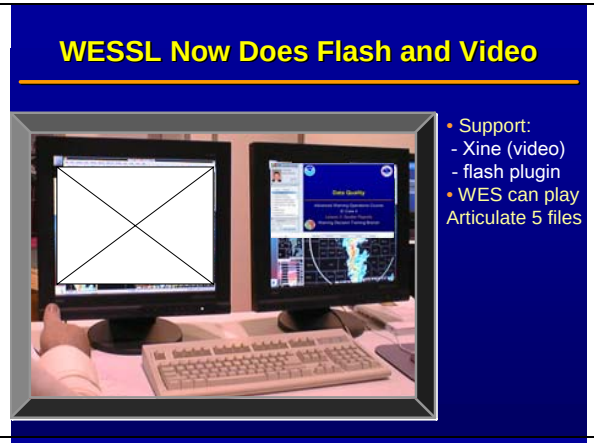
		button. This leaves only the LSR's that we wanted. You will notice that all reports from WFO TBW are gone as well as all reports prior to 19 Z and after 22 Z. You can filter the reports as many times as you like. Once you are done filtering, you will press the Make WESSL Script button to import all the LSR's into valid WESSL script in builder.tcl. Notice the delay time you specified is added to the end of each entry. When you run the wessl script, a map of the location and the LSR text are displayed. There are written instructions for the LSR importer on the WDTB WESSL website and in the DRT/wessl/docs directory.
Slide 19 **LSR Importer for Non-Internet WES 6.0** Duration: 00:01:14 Advance mode: Auto		**Notes:** If your WES machine is not connected to the internet there is still a way to use the LSR importer. Before you use the importer you will simply need to go to the SPC website and download the raw LSR's in csv format. Open up a browser and go the following address www.spc.noaa.gov/climo/. Go to the section on the bottom labeled "Storm report Data for past days. Enter in your date of interest and push the get data button. This will redirect you to a page with a map and description of each LSR for that day. At the bottom, right click on the link labeled "Full Report in comma-separated values (CSV) format. Simply save the .csv file into the /awips/fxa/DRT/wessl/make_wessl/raw directory and you are ready to go.

Slide 20

WESSL Now Does Flash and Video

Duration: 00:00:31
Advance mode: Auto

Flash movie: hose_flash.swf
Display : In Articulate player



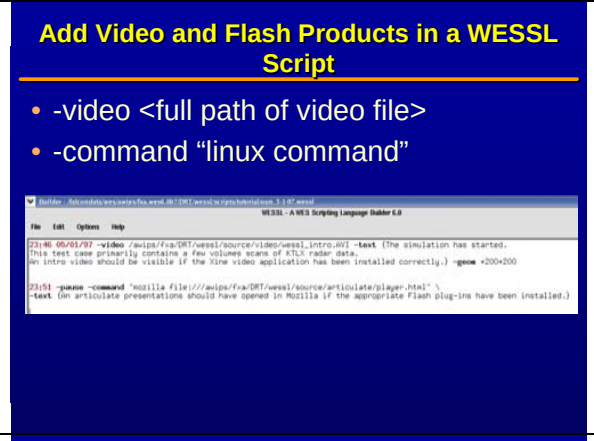
Notes:

The WES6.0 installation comes with video and flash capabilities for Redhat Enterprise 3 or 4. This will allow “Articulate Presentations” such as those developed for the Advanced Warning Operations Course to be incorporated into simulations. The WDTB will be working on rereleasing the core and severe tracks of AWOC with version 5 files in summer of 2006 for incorporation onto the WES. Video of subject matter experts or storm footage will now be possible to include in simulations as well.

Slide 21

Add Video and Flash in a WESSL Script

Duration: 00:00:30
Advance mode: Auto



Notes:

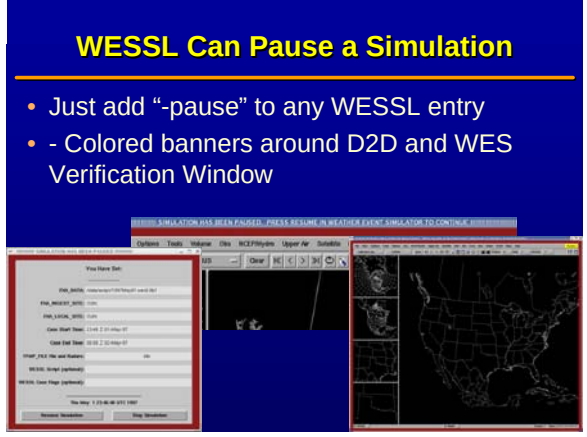
To play videos using Xine, we have added a –video wessl command. Simply type in –video and the full path of the video file in the WESSL script. This will start up Xine and immediately play your video file.

To play articulate presentations, you use the –command WESSL command that has always been in place. To initiate an Articulate presentation, have WESSL issue a command making mozilla start up the player.html file in the root articulate folder.

Slide 22

WESSL Can Pause a Simulation

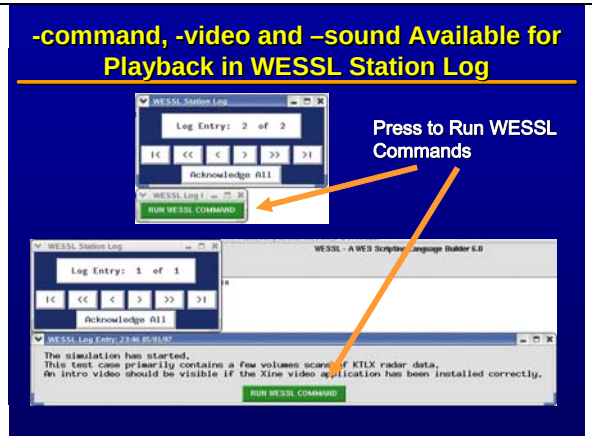
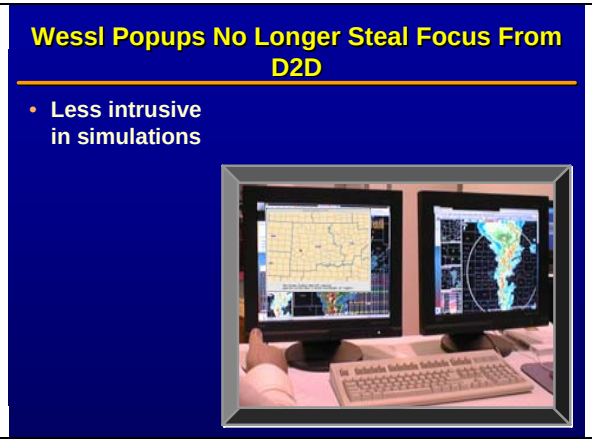
Duration: 00:00:45
Advance mode: Auto



Notes:

There were several additions to the pause capabilities in WESSL. First, we added a –pause WESSL command which allows a WESSL script to pause itself at a predetermined time. Simply add –pause in the wessl script at the time you want to pause. The user will un-pause the simulation by using the Resume Simulation button.

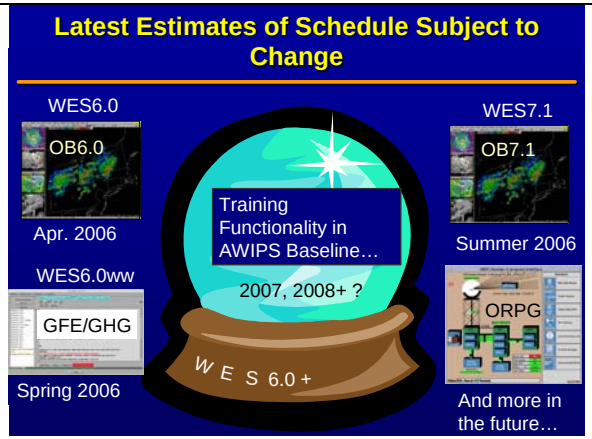
The other additions are the colored banners that help notify a user when a simulation is paused. Now, when you pause a simulation either by using the –pause command or pressing the pause button, a red banner

		will surround D2D and the WES verification window. The title of each window will also say that the simulation has been paused and inform the user to press the resume button to continue.
Slide 23 **More Commands Available for Playback** Duration: 00:00:31 Advance mode: Auto		**Notes:** In previous versions of WESSL, once a –command or –sound WESSL command was executed, that was the only time you could see it. Now we have sound, command and video all available for playback in the WESSL station log. As you page through the station log, if you come upon a WESSL log entry that contains either a -sound, -command or –video WESSL command, you will see a green button labeled “RUN WESSL COMMAND”. If you press this button, all –sound, -command and –video commands will immediately play.
Slide 24 **Wessl Popups No Longer Steal Focus** Duration: 00:00:18 Advance mode: Auto		**Notes:** Also the WES Scripting Language was improved to not steal focus from the D2D when launching popup images during a simulation. WESSL popups used to slightly interrupt D2D interrogation when images were popped up, even on separate monitors. Now that we are approaching the final stretch of this training, I’ll pass it back to Mike to conclude this training session.

Slide 25

Latest Estimates of Schedule

Duration: 00:01:23
Advance mode: Auto



Notes:

Thanks Timm, for the latest update with WESSL. Now I'll start to wrap up this presentation with a look ahead. Forecasting AWIPS and WES development timelines can be very difficult due to slips in AWIPS schedules, changing training priorities, and the nature of developing software functionality outside of the baseline development process. Take these estimates as a rough heads up about what is coming in the foreseeable future.

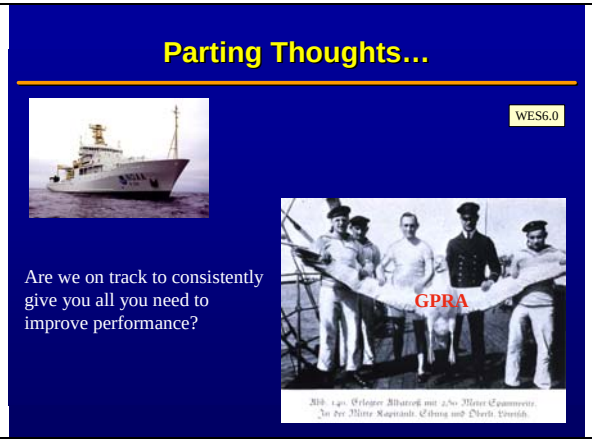
WES6.0 was released in April 2006, and support for GFE/GHG will be provided as part of Winter Weather AWOC. So watch out for a mini addition to WES, WES6.0ww, after the initial release. The next version of WES (7.1) will be associated with OB7, which is currently planned to be released in Summer 2006, followed by WES7.2/OB7.2 in Winter of 2006. WES8/OB8 will get even more interesting with three releases in one year.

Training functionality in AWIPS is still likely years away, though there will be a lot of planning in Summer 2006.

Slide 26

Parting Thoughts…

Duration: 00:00:15
Advance mode: Auto



Notes:

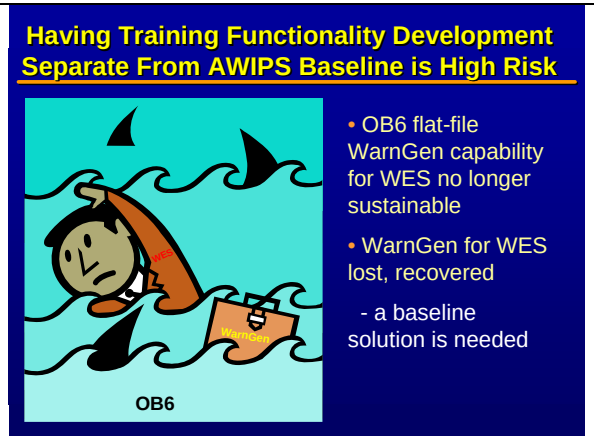
As another NOAA adventure pulls into port, I'd like to reflect upon a couple of big picture issues that are relevant to training development and AWIPS. Are we on track to consistently give you all you need to improve performance?

Slide 27

Training Functionality / AWIPS Baseline

Duration: 00:00:39

Advance mode: Auto



Notes:

Well, if you ask this chum, I'd say the answer is no. Having training functionality development separate from AWIPS baseline development is high risk. In OB6, the flat-file Wargen capability for WES was no longer sustainable. Warning generation capability in WES was lost and barely recovered in OB6. Luckily we were able to rescue WarnGen with WES using the new free Postgres database and some assistance from GSD/SEC.

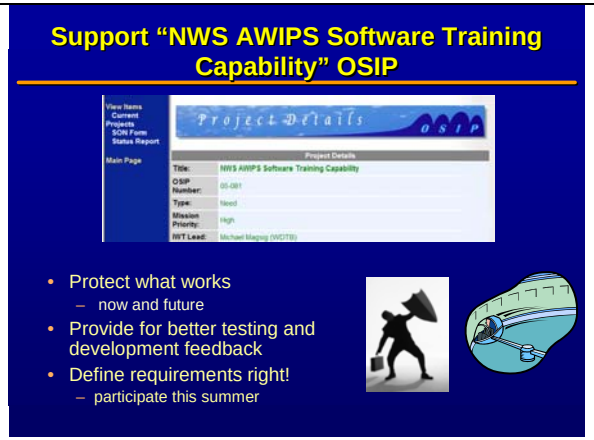
WES is still not officially part of the AWIPS baseline development or support. A baseline solution is still needed to prevent this type of loss of major functionality in the future.

Slide 28

Support AWIPS Training OSIP

Duration: 00:00:29

Advance mode: Auto



Notes:

I urge you to support the NWS AWIPS Software Training Capability submitted to the NWS Operations Services Improvement Plan (OSIP) for which I am IWT lead. This will help protect what is currently working now, and it will ensure future functionality has sufficient training functionality. It can also provide a mechanism for better testing, evaluation, and feedback in the development process.

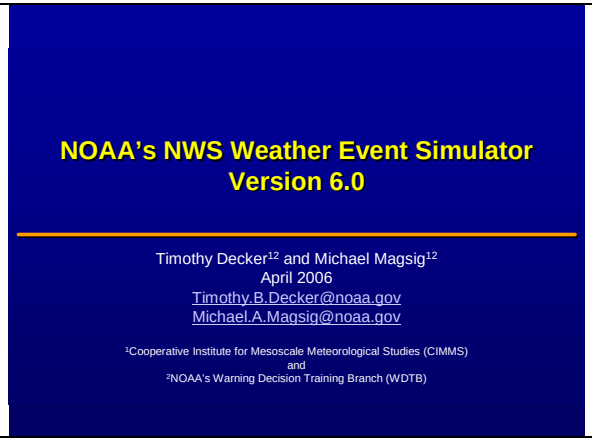
This summer as we formulate the concept of operations document and project planning, you will have an opportunity to help to clearly define the level of training functionality you need in AWIPS. I will be posting updates to the soo_wes list and perhaps other venues as I work with your regional headquarters' focal points. If you want more out of future training functionality, please join me this summer in this endeavor.

Slide 29

NOAA's NWS WES 6.0

Duration: 00:00:42

Advance mode: Auto



Notes:

This concludes the presentation on WES6.0. We hope you enjoyed the show. We really are interested in making future presentations more useful and entertaining, so please provide any feedback by email to Mike and Timm at the above email addresses. Until next time, Ciao!