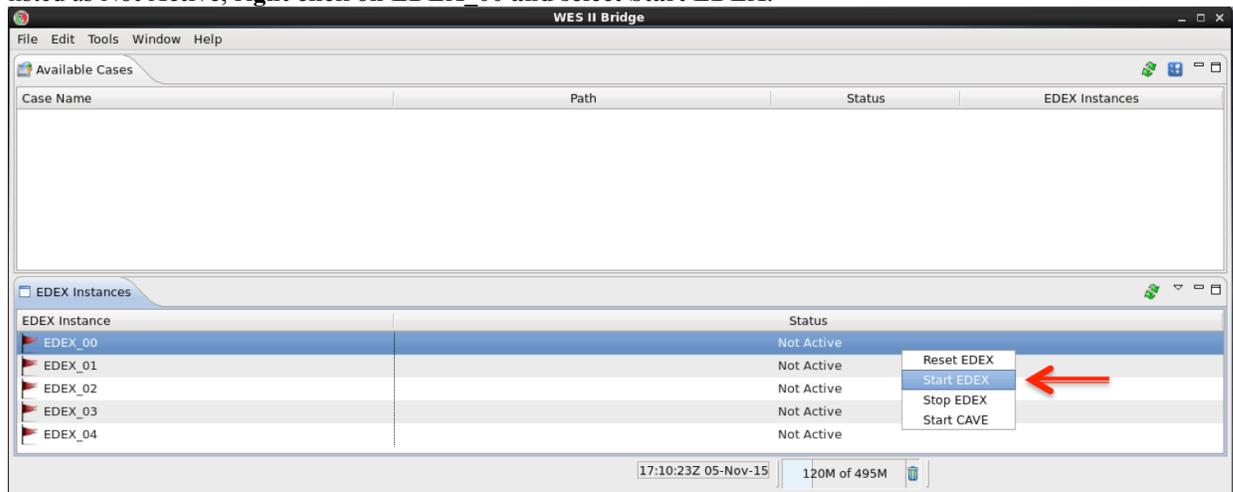


WES-2 Bridge Test Case Job Sheets

Task 1: Upload a small archived data case for event review (no simulation) and familiarize with simulation controls.

1. Right click on the desktop and select **Open in Terminal** to launch a shell window issue the following commands to list out the contents of an archived data case before the metadata is added:
 - a. **cd /data1/wes_cases** (note you can hit the tab key after starting to type out the paths and it will sometimes finish the command for you)
 - b. **ls WES_Test_Exercise_Case_14_2_4_20150725**
 - i. If a **localization** directory and/or a **caseMetaData.xml** file appear then this task has already been performed. If either of these is present, **see Step 24 before continuing.**
 - c. **ls WES_Test_Exercise_Case_14_2_4_20150725/Processed**
 - i. Note only some radar, satellite, warning, obs, grid, and ftmp data.
2. To start WES-2 Bridge, open a new shell window, **cd /w2b/wes** and type **./wes.sh** and hit **Enter**.
3. Once the WES II Bridge GUI loads, **check to see if EDEX_00 is Active** under the “EDEX Instances” list. **If it is listed as Not Active, right click on EDEX_00 and select Start EDEX.**



4. Under the **File** menu select **AWIPS Archive Case**,

File	Edit	Tools	Window	Help
New Case				Ctrl+N
AWIPS Archive Case				Shift+Ctrl+A
Merge Case				Ctrl+M
Utilities				>
Refresh View				F5
Restart				Ctrl+Alt+R
Exit				Ctrl+Alt+Q

and in the wizard first page:

- a. Click on **Browse** button and navigate to **/data1/wes_cases/** where you will select **WES_Test_Exercise_Case_14_2_4_20150725**.

- b. Check the “Use original archived data and do not copy to an alternate location” checkbox to leave the WES_Test_Exercise_Case_14_2_4_20150725 in its current location.

5. Click the **Next** button.

6. In the wizard second page enter the following:

- a. **Case Name: Exercise Case**
- b. **AWIPS II Version: 14.2.4** (this is used for tracking build dependencies)
- c. **Case Description: archiver filtered case with radar, satellite, obs, warnings and FFMP data** (this is useful documentation for later use)

7. Click **Next** button.

8. Under **WFOs** box, click on **Deselect All** button, and then select **OUN**.
 - a. note if you had a lot of data you may choose to filter the data loaded in WES by using the **Data Types** box.
9. Click the **Next** button.
10. On the wizard third page enter the following:
 - a. Note you may want to use the Set Date button to select the time from the calendar to ensure you don't make a typo. Also note you can hold down the arrows on the spinboxes to rapidly index to a number.
 - b. **Start Date: 2013-06-01 00:00**
 - c. **End Date: 2013-06-01 04:00**

11. Click the **Finish** button to create the case metadata.
 - a. When WES is done creating metadata for the case, you will see **Exercise Case** listed in the **Case Name** list of **Available Cases**, and it will have a status of **Not loaded**.
 - b. If you do not see your case listed, check under **Window** → **Preferences** and make sure **/data1/wes_cases** and **/data2** have been **added to your "Case directory paths"**

Case Name	Path	Status	EDEX Instances
Exercise Case	/data1/wes_cases/WES_Test_Exercise_Case_14_2_4_20150725	Not loaded	

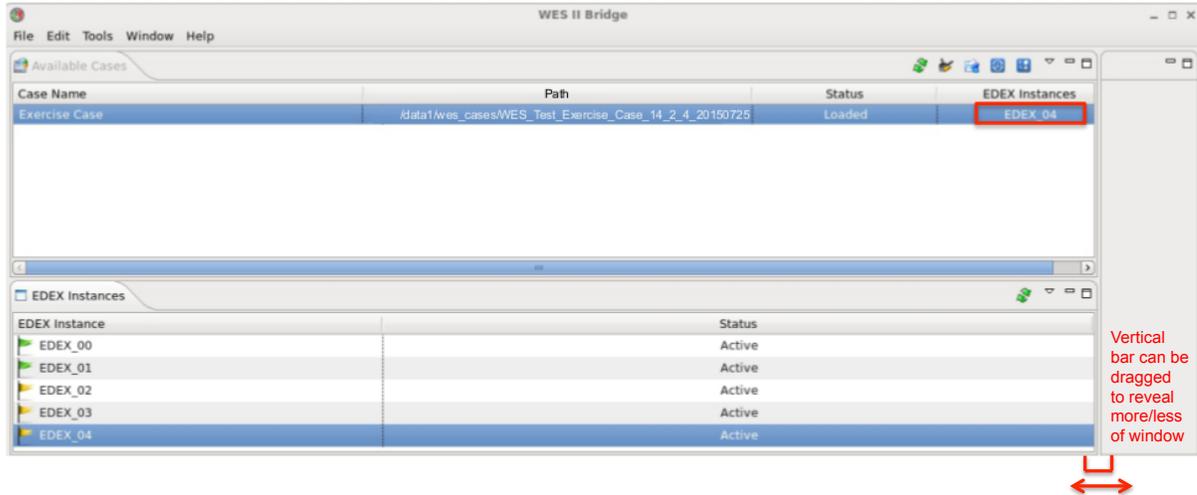
EDEX Instance	Status
EDEX_00	Active
EDEX_01	Active
EDEX_02	Active
EDEX_03	Active
EDEX_04	Active

12. In the shell window with the `WES_Test_Exercise_Case_14_2_4_20150725` issue the following commands to list out the contents of the case after the metadata is added:
 - a. **ls WES_Test_Exercise_Case_14_2_4_20150725**
 - i. note the caseMetaData.xml and the localizations folder
 - b. **ls WES_Test_Exercise_Case_14_2_4_20150725/localizations**
 - i. Note the localization utility tree and maps have been copied into the case from the AWIPS-2 installed on WES-2 Bridge.

13. Select the Exercise Case, right click on the row, and select Load Case.

- a. In the **Load Case** tab, review the metadata, and then click **Load** to load the records into the database.
 - i. This will take a minute or two, and the Progress Information bar will disappear when the data is loaded into an available EDEX instance.
 - ii. If there are no available EDEX instances, you will be prompted to unload an EDEX instance before being able to proceed.
 - iii. If no EDEX instances are running, WES II Bridge should prompt you to start one. You can also manually start one by right-clicking on an instance in the instance manager and choosing "Start EDEX".

14. Drag the vertical bar to the right, so you can see the Status of Exercise Case is Loaded and under EDEX Instances which EDEX instance the case is loaded on.



- a. When a case is Loaded, it can be quickly accessed for event review or simulation.

15. Right click on Exercise Case, and select Review.

16. In the Review Wizard, click Finish.

- a. Click **OK** if the **Low Available Memory for Application** window appears.
- b. CAVE will load with all the data visible, and after 1 minute will set the D2D clock to the end of the case for reference.
 - i. The D2D clock is not frozen and is moving forward past the end of the case, but has no impact.

17. Under the ktlx menu select All tilts base data, increase frame count to 64, and navigate through the data.

- a. Note this is static case review (no simulation), so the data doesn't update automatically.

18. Swap panes with an empty pane, and under the Obs menu select Local CWA Warnings and navigate through the data.

19. Swap panes with an empty pane, and under the Satellite menu select 4 panel (GOES M-Q) and navigate through the data.

20. Under the Upper Air menu, select Oklahoma City, OK and notice no data will load because this data type was not included in the archive case.

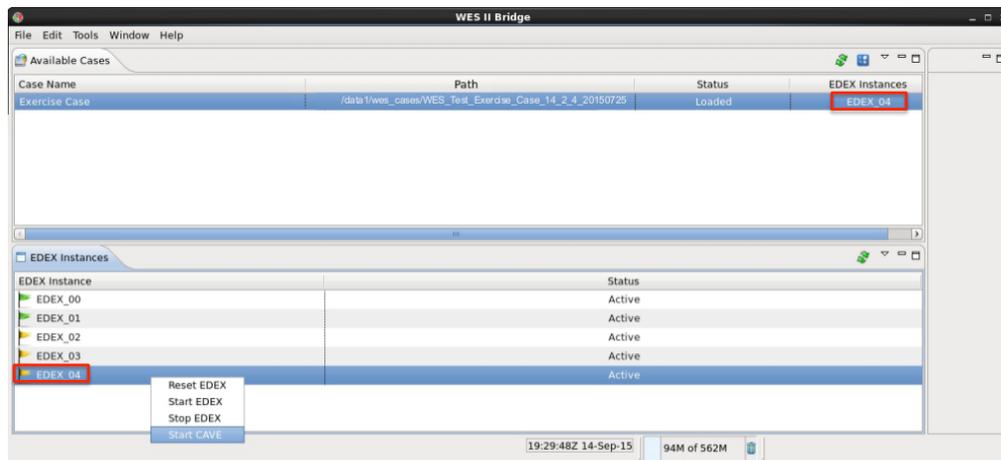
21. Click on the D2D clock and enter 2013-6-1 for the date and 1-30-00 for the time and select Freeze time at this position.



- a. Your CAVE clock should have yellow text with a black background when the time is frozen:

Time: 01:30Z 01-Jun-13

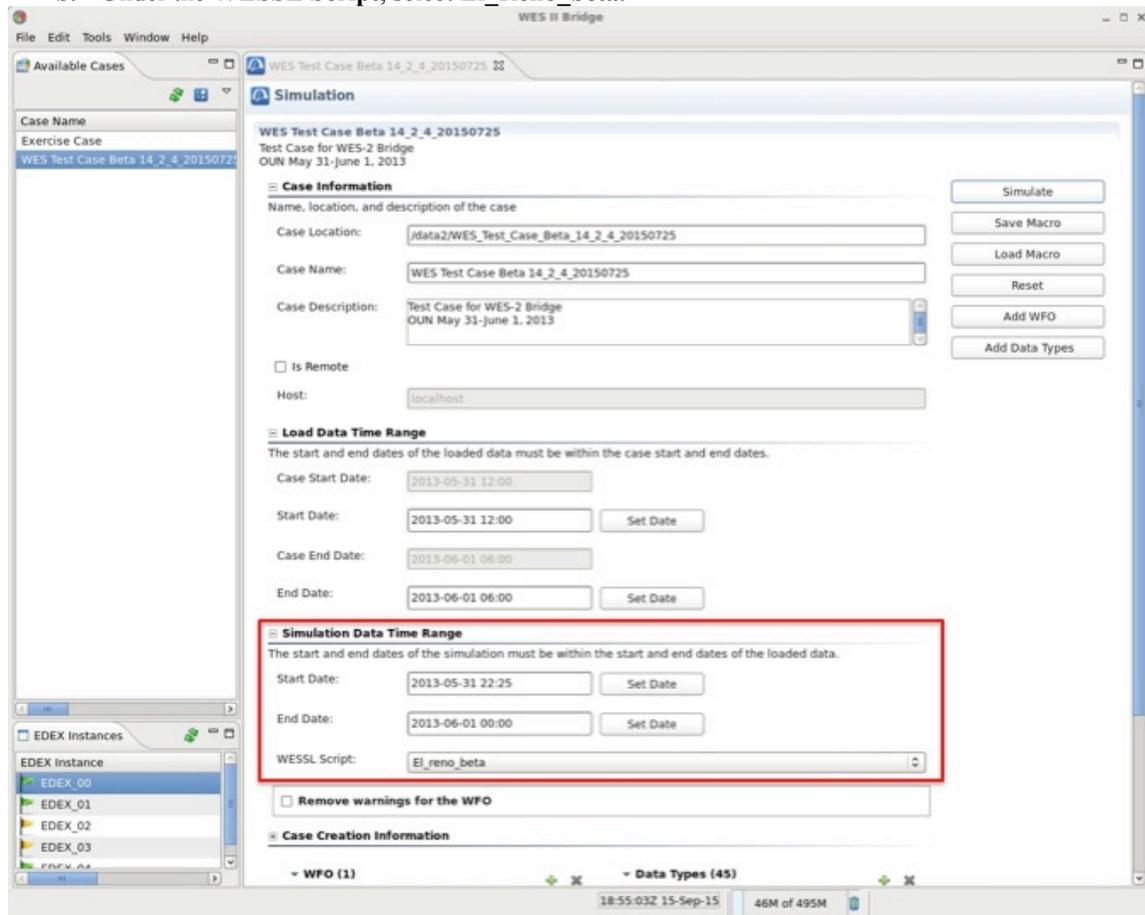
22. To launch another CAVE on this case, identify the EDEX Instance in the Case Name list of available cases (i.e. EDEX_04), and then in the EDEX Instances on the bottom left of the WES II Bridge, right click on the appropriate EDEX Instance row and select Start CAVE



- a. Click **OK** on the available memory popup window if it pops up, and when CAVE launches, **move the new CAVE to a new monitor.**
 - b. Note: You have to manually set the CAVE clock when using Start CAVE.
23. Load and view data on the new CAVE and verify it is the same data.
 24. Shut down CAVE and the Text Workstation.
 - a. Any active EDEX started above can remain running even after shutting down CAVE.
 25. As a final step, **navigate to /data1/wes_cases/WES_Test_Exercise_Case_14_2_4_20150725** and **remove the localizations** directory and the **caseMetaData.xml** file. This will reset this task for future users.

Task 2: Run a Simulation on a Case Not Loaded, the WES_Test_Case_14_2_4_20150725

1. Select the **WES_Test_Case_14_2_4_20150725** case in the Case Name tab, and **right click** and select **Simulation**.
2. In the **Simulation tab** (may need to move the vertical slider bar to see) enter the following:
 - a. **Simulation Data Time Range**
 - i. **Start Date: 2013-05-31 22:25**
 - ii. **End Date: 2013-06-01 00:00**
 - iii. **Note:** This task loads the whole case (no need to modify the Load Data Time Range). The Simulation Data Time Range will load a subset of the case for simulation.
 - b. Under the **WESSL Script**, select **EI_reno_beta**.

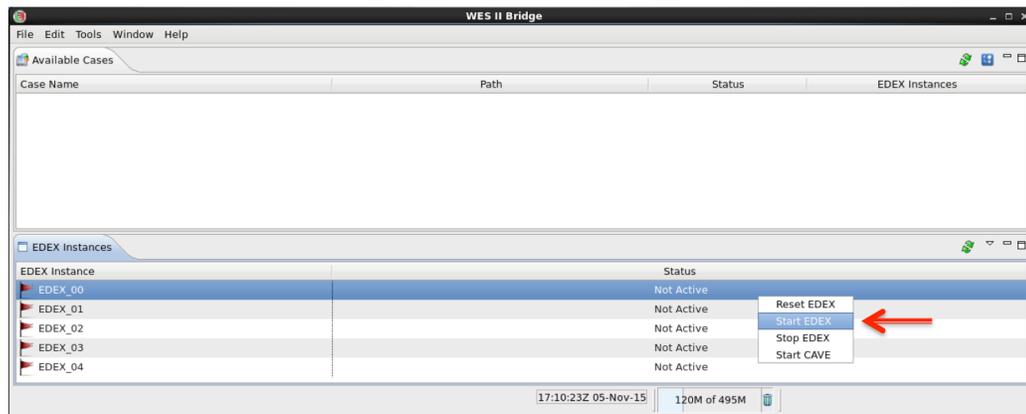


3. In the **upper-right part of the simulation tab** (may need to use scroll bars), click on the **Simulate** button.
 - a. The case will first be Loaded into an available EDEX which will take a minute or two.
 - b. If no EDEX instance is available you will need to unload a case by right clicking on a case name and selecting Unload.
4. Click **OK** on the available memory popup window if it pops up, and note when the WESSL2 window and Simulation Controls window pops up.
 - a. Ignore any error messages about "Requested map level(s)".
5. Click the **PLAY** button on the **Simulation Controls** window.
 - a. **Note:** You will be issuing a warning during this task. There is currently an issue where warnings will not display in D2D when running a simulation on a particular EDEX for the first time. To get around this, hit **STOP** under Simulation controls, close CAVE and the WESSL window, and repeat steps 1- 4. You will be able to view your warning in D2D on this EDEX in any future simulations.

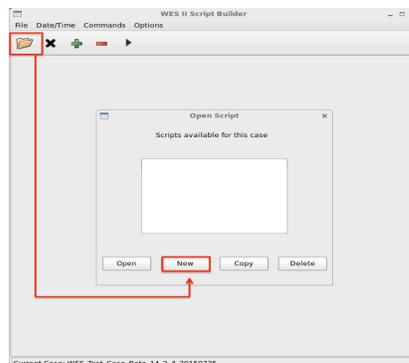
6. WESSL2 will pop up a new report every few minutes, and you can click on each one of the WESSL Events manually if you want to review them.
 - a. during the simulation you will receive text, image, and video popups relaying information from various sources on this day.
7. From the **ktlx** menu, select **0.5 Z+SRM8** and review the recent radar data.
8. Under the **CAVE** menu and **New** submenu select **Text Workstation**, and then **issue a tornado warning** with WarnGen (don't spend much time doing it, just for demonstration purposes), making sure to **select a basis for the warning** (radar detected, spotter, etc.) **and/or hail threat**.
 - a. If you receive a message about product expiration, **click the "Go Ahead" button**.
 - b. **If warning product does not display** in the Text Workstation after you select "Create Text" in Warngen, **navigate to CAVE → Preferences → Text Workstation** and make sure the **host matches the workstation name you are running WES II Bridge from**.
9. In a **new pane**, load the **Local CWA Warnings** plot from the **Obs** menu, and see your new warning.
10. The simulation will stop at 00:00:00.
 - a. After the simulation has stopped, shut down CAVE and WESSL.

Task 3: Build a WESSL Script, and Play it in a Simulation

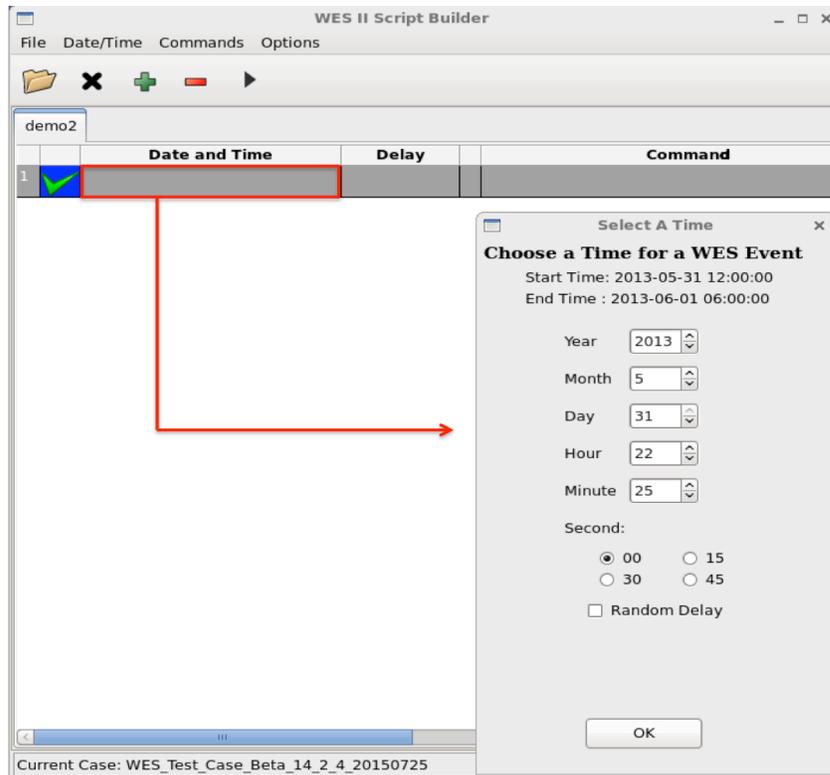
1. **Check to see if EDEX_00 is Active under the "EDEX Instances" tab. If it is listed as Not Active, right-click and select Start EDEX**



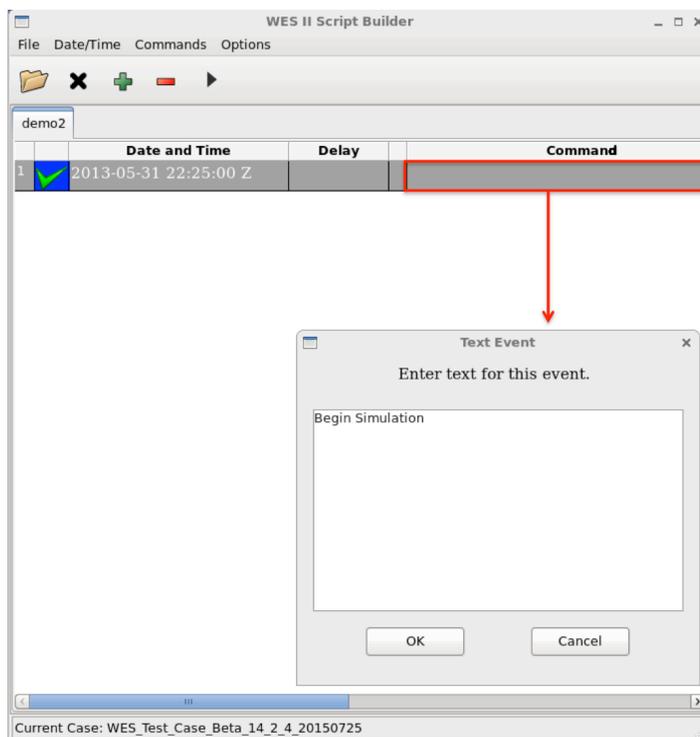
2. **Right-click on WES_Test_Case_14_2_4_20150725 and select Launch Script Builder.**
3. **Click on the folder icon, click the New button, and choose a name for your script.**



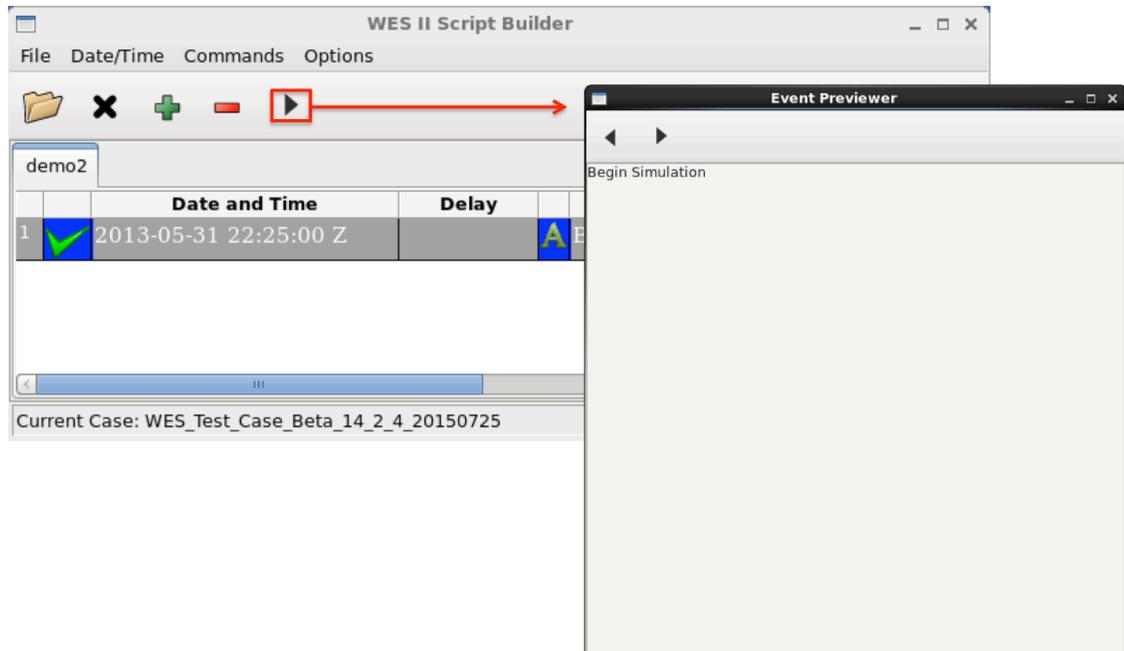
4. Double click on the **Date and Time** empty cell where you will enter in **2013-5-31-22-25** and click **OK**.



- a. Right-click in the **Command** box, and select **Text**.
b. Click in the box and type “Begin Simulation”, and click **OK**.



- c. Click on the **Play** button to preview the event text popup.



5. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-25** with the **15 Second checkbox** selected and click **OK**.
 - a. **Right-click** in the **Command** box, and select **Image**.
 - b. Click on the **Browse** button and **navigate to /data1/wes_cases/WES_Test_Case_14_2_4_20150725/wessl2/resources**.
 - c. Select **20130601_00_summary.png**, and click the **Open** button.
 - d. Click on the **backward then forward Play** buttons in the **Event Previewer** window already open, and the image will display.
6. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-28** with the **15 Second checkbox** selected and click **OK**.
 - a. **Right-click** in the **Command** box, and select **Video**.
 - b. Click on the **Browse** button and **navigate to /data1/wes_cases/WES_Test_Case_14_2_4_20150725/wessl2/resources**.
 - c. Select **Sequence_01.mov**, and click the **Open** button.
 - d. Click on the **backward then forward Play** buttons in the **Event Previewer** window already open, and the video will play.
7. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-35** with the **30 Second** selected and click **OK**.
 - a. **Right-click** in the **Command** box, and select **Map/Observation Event**.
 - b. Type in **35.47** for **Latitude** and **-98.35** for **Longitude** and **“Golf ball hail in Hinton, OK”**, in the **Report Text** and click **OK**.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the event text popup.

8. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-40** with the **45 Second** selected and click **OK**.
 - a. **Right-click** on the box with a **green checkmark**, and select **Pause** (will pause the simulation with this event).
 - b. **Right-click** in the **Command** box, and select **Presentation**.
 - i. **Presentation** launches the Firefox browser on the file you specify. This is useful for incorporating content such as Flash modules, web page, or Articulate/Camtasia content.
 - c. **Left-click** on the **Browse** button, and **navigate to /data1/wes_cases/WES_Test_Case_14_2_4_20150725/wessl2/resources**, select **Warning_LSR_Loop.html**, and click **Open** and **OK**.
 - d. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the debrief.

9. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-40** with the **45 Second** selected (same time as in previous step) and click **OK**.
 - a. **Right-click** in the **Command** box, and select **Text**.
 - b. **Enter in some text** saying the simulation has been paused and to click on the **PLAY** button to resume and click **OK**.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the event text popup.

10. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-41** with the **00 Second** selected and click **OK**.
 - a. **Right-click** in the **Command** box, and select **Presentation**.
 - b. **Left-click** on the **Browse** button, and **navigate to /data1/wes_cases/WES_Test_Case_14_2_4_20150725/wessl2/resources**, select **engage.html**, click **Open** and **OK**.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the debrief module.

11. After completing steps 3–9, your Script Builder window should be populated with events similar to this:

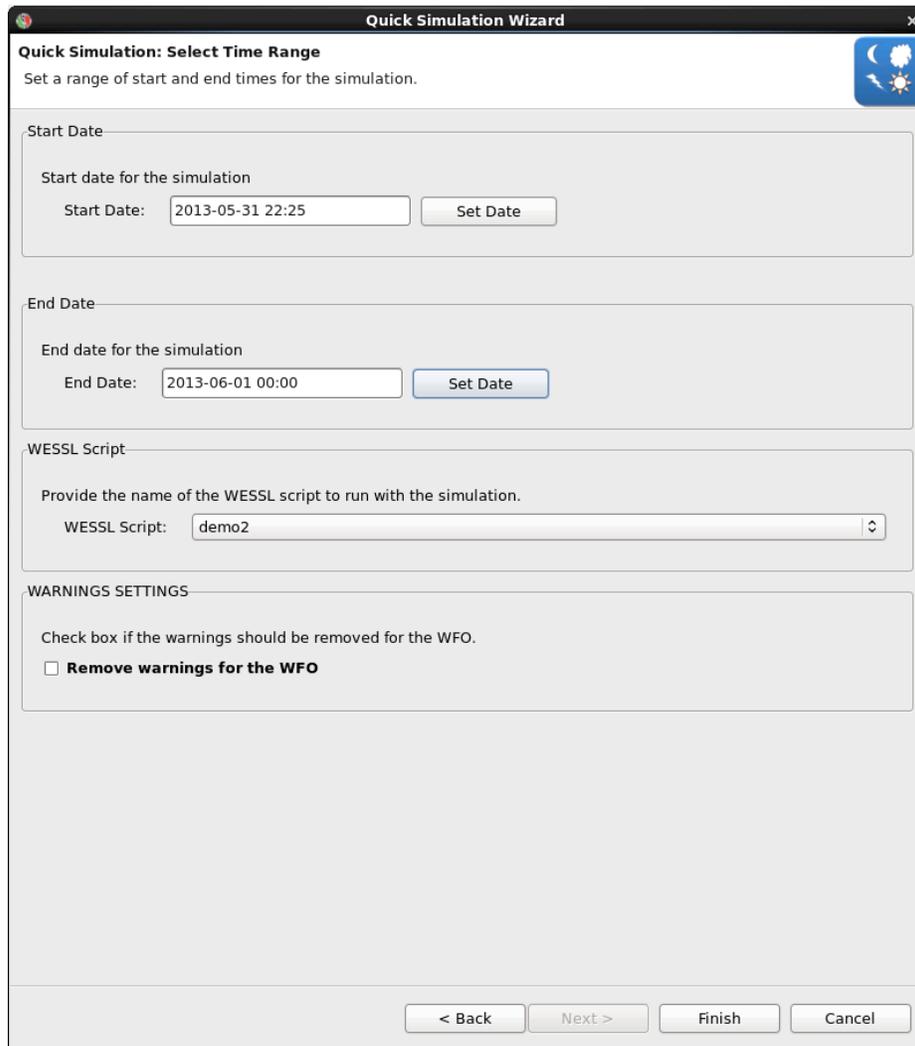
	Date and Time	Delay	Command	Option
1	2013-05-31 22:25:00 Z		Begin Simulation	Default
2	2013-05-31 22:25:15 Z		...resources/20130601_00_summary.png	Default
3	2013-05-31 22:28:15 Z		...1_Reno_resources/Sequence_01.mov	Default
4	2013-05-31 22:35:30 Z		Observation	Default
5	2013-05-31 22:40:45 Z		...les/LWX_Debrief/Warning_LSR_Loop.html	Default
6	2013-05-31 22:40:45 Z		Simulation paused. Click Play button to resu	Default
7	2013-05-31 22:41:00 Z		...teraction - Engage output/engage.html	Default

Current Case: WES_Test_Case_Beta_14_2_4_20150725

12. **Close** the **WES II Script Builder** and **Event Previewer** windows and click **Yes**.

13. Select the **WES_Test_Case_14_2_4_20150725** case in the Case Name tab, and **right click** and select **Quick Simulation** since you now have the case Loaded.

14. In the **Simulation** tab **Simulation Data Time Range** enter **2013-05-31 22:25** for the **Start Date** and **2013-05-31 00:00** for the **End Date**.



The screenshot shows a window titled "Quick Simulation Wizard" with a close button (X) in the top right corner. The window contains the following sections:

- Quick Simulation: Select Time Range**
Set a range of start and end times for the simulation.
- Start Date**
Start date for the simulation
Start Date:
- End Date**
End date for the simulation
End Date:
- WESSL Script**
Provide the name of the WESSL script to run with the simulation.
WESSL Script:
- WARNINGS SETTINGS**
Check box if the warnings should be removed for the WFO.
 Remove warnings for the WFO

At the bottom of the window, there are four buttons: "< Back", "Next >", "Finish", and "Cancel".

15. Under the **WESSL Script**, select the script name created in Step 3, and click the Finish button.
16. Click **OK** on the available memory popup window, and note when the WESSL2 window and Simulation Controls window pops up.
17. Click the **PLAY** button on the **Simulation Controls** window.
18. WESSL2 will pop up your events as you created them.