5 Verify Successful DVD Installation

5.1 Verify Flash and Xine Install

1. Login as user fxa.

2. Verify the Flash plugin installation by viewing the WES8.3 Flash verification presentation in a web browser:

e.g. **`firefox file:///awips/fxa/DRT/wessl/source/articulate/flash_verification/player.html`**

Note: Following a successful installation, there should be a "**yes**" in the browser under the "**Enabled**" column found by clicking "**Help**" and then "**About Plug-ins**". If the presentation fails to load, then review the manual Flash plugin installation in Section 22.

3. Verify the Xine installation by viewing an mpeg:

e.g. **`xine /awips/fxa/DRT/wessl/source/video/9jun05.mpg`**

Note: If Xine fails to load, then review the manual Xine installation in Section 23.

5.2 Install WES Test Case

1. In order to verify a successful installation, install the test case in **`/data/awips`** from the WES8.3 install DVD. After successfully viewing the test case data in Section 5.3, move on to Section 5.4 to run a simulation. If you experience problems viewing the test case, contact WES support before attempting to run a simulation.

Note: You will eventually need to create new localizations for all your old cases (see Sections 7 - 9) before you can fully display them in D2D with the OB8.3 AWIPS in WES8.3.
Note: All FFMP data need to be recreated with WES8.3. The format of the FFMP data changed again in OB8.3

2. As user fxa, load and mount the Weather Event Simulator 8.3 install DVD:

   e.g. **`mount /media/cdrecorder`** if the DVD doesn't automatically mount

3. To install the test case, change directory to the DVD device and run the **`wes83_testcase_install`** program:

   e.g. **`cd /media/cdrecorder`**

   e.g. **`./wes83_testcase_install`**

> **Note**: If you have previously installed a WES test case, you may see the message "**A case already exists in /data/awips/2006Aug24test**". Remove or move that case as directed.

4. After the case has been installed, some archived warning text products included in the test case will need to be inserted into a new Postgres database while the case is in "original format":

- Run **`start_simulator`**
- Click the "**Tools**" button
- Click the "**Write Archived Text to Database**" button
- Use the Select button to choose the **2006Aug24test** case for FXA_DATA and **ABR** as FXA_LOCAL_SITE
- Click "**OK**"
- The simulator will display "**Write to postgres database complete**" when finished
- Click "**Exit**"

> **Note**: This tool will write all text products stored in **`<data_case>/archived_text/<awips_pil>/YYYYMMDD_HHmmss`** to a postgres database stored in **`<data_case>/pgdata`**. For more information on archiving text and writing the text to a Postgres database, see Section 11.

5.3 Verify the Test Case in Enhanced Case Review Mode

1. Start D2D on the 2006Aug24test test case by typing **`enhanced_case_review`** at a shell prompt, hitting return, and:

- Select **2006Aug24test** as the FXA_DATA and **ABR** as the FXA_LOCAL_SITE
- Select the "**Start AWIPS Text Workstation Control**" checkbox
- Click the "**OK**" button
- Click "**Start**" on the D2D launcher

Note: The **`enhanced_case_review`** application starts up D2D and a few other AWIPS processes for text database access for FFMP and SCAN to work fully in static case review mode outside of a simulation. The **`enhanced_case_review`** script works with both "original" or "DRT" format cases, though the program cannot be run alongside the simulator (**`start_simulator`**) due to interference with the AWIPS processes. The **`/awips/fxa/DRT/start_awips`** program starts D2D during a simulation. For more on **`enhanced_case_review`** see Section 17.

Note: WarnGen, GFE and AvnFPS applications do not work in **`enhanced_case_review.`** Run a simulation to use these applications.

---

2. Ensure the Guardian application is running correctly and generate a test pop-up:

- After D2D starts up, there should be a bar below D2D containing several icons and two status bars
- Click the Guardian icon 
- The Guardian Configuration GUI should appear
- Close the Guardian Configuration GUI by pressing the "**x**" or the "**Close**" button
- In D2D, select **CONUS** scale and load **13u** under the **Satellite** menu
- A red Guardian pop-up should appear with a "**No Data Inventory**" message
- Close the pop-up by pressing the "**Close**" button or "**Acknowledge Last**"

3. Ensure the radar data for the first test case were loaded correctly by viewing the **All Tilts kabr Z/SRM8** radar data in D2D:

- Select **64** in the **Frames** menu
- Select **WFO** as the scale
- Under the **kabr** menu, select **All Tilts Z/SRM8**

- Step through a time loop of a single elevation angle by using the left/right arrow keys. Step through a volume scan vertically at a fixed time by using the up/down arrow keys.

Note: The data in this case contains a couple of hours of radar and satellite data, and some limited Grid and point data.

- Under the **Volume** menu find the **Std Env Data Package** section, and select **LAPS**. As you sample the radar data in time and space in D2D with the left mouse button, the environmental information (e.g. Wind, RH, T) should show up in the cursor readout. If you right click on the **Temperature** text in the legend and select a **Density** of **1**, you should see isotherms interpolated to the radar tilts.

- Under the **Volume** menu select **Popup SkewT**, and then right click on the main D2D pane and select **Laps** under the **Sample Cloud Heights/Radar Skew T** pullout menu. As you **sample** the radar data in time and space using the left mouse button, the popup SkewT should update with the height of the radar observation.

- Clear the D2D pane and close the Popup SkewT window

4. Use D2D to display polygons contained in the archived text data. This step assumes the archived warning text products in the 2006Aug24test case were written to the Postgres database (step 4 of Section 5.2)

- Clear the pane, select **12** in the **Frames** menu, select **WFO** scale, load a **0.5 Z/SRM8** from the **kabr** menu, and load **Local CWA Warnings** from under the **Obs** menu

- A warning polygon should display when stepping through the loop

- Clear the pane

- In the Text Workstation window click on "**Text 1**" on the Text Workstation Control (outside D2D), enter **FSDTORABR** in AFOS Cmd and hit return

- The text of an archived warning should appear

5. Display the FFMP data for kabr while in enhanced case review.

- In D2D, choose **WFO** scale and clear the pane

- Under the **SCAN** menu in D2D, navigate to the **FFMP** and **kabr** submenus, and select **FFMP kabr Display**

- Select **ABR** under the **CWA** menu. Then click "**Refresh D2D**"

- A colored county map should be visible in D2D, and the table contents should change.

- In the FFMP table select **All & Only Small Basins** from the **Layer** button, and select **ratio** from the **D2D** button. Then click **Refresh D2D**. The D2D should update with the ratio product (see text legend in upper left part of D2D) drawn for the basin scale.

- While in the basin Layer, left mouse click on any cell under the **NAME** column to zoom in on a basin. Then right click on the same cell to generate a time series for that basin.

- Clear the D2D pane.

Note: FFMP changed significantly in OB8.3 and WES8.3. See Section 12 for everything you need to know about FFMP in WES.

6. Display the SCAN storm cells table for kabr:

- In D2D, choose **WFO** scale and clear the pane

- Select **12** in the **Frames** menu

- Under the **SCAN** menu in D2D select **Storm Cells / Site Storm Threat** under the **SCAN:kabr** submenu. The KABR Cell Table should launch

- To remove the SCAN table, hit the **Clear** button in D2D

7. Display the SCAN DMD for kabr:

- Under the **SCAN** menu in D2D select **Storm DMD Icons & Table** under the **SCAN:kabr** submenu

- Right click on "**llVr**" for the DMD identifier 342 to launch a time-height display of DMD data

- Toggle the graphical display overlays by clicking on the "**Diam Overlay**" along with "**Legend**", "**Elev Angles**", and "**Vol Scan Poles**"

- Click "**Close**"

- In the DMD Table, select "**Link to Frame**" and navigate back and forth through time using the left and right arrow keys to view the DMD icons

- Left click and hover over a meso circle in D2D for a cursor readout of the data

- To unload the SCAN DMD table and D2D icon display, click the **Clear** button in D2D

8. Under the **kabr** menu, select **kabr Graphics**, and **Digital Mesocyclone (DMD)** to display the DMD data using the D2D DMD display option.

- Left click and hover over a meso circle in D2D for a cursor readout of the data.
- Navigate back and forth through time using the arrow keys to view the DMD icons

---

Note: For information on enabling SCAN functionality for your own case data please refer to Section 13.

---

9. Clear the main pane, and while on **WFO** scale select **All Tilts Z/SRM8** under the **kabr** menu. Step through the data, and zoom in on a storm to load FSI on (next step).

Note: You should always load FSI on a radar product to ensure FSI will launch correctly.

---

10. Under the **Tools** menu, select **4-D Storm Investigator (FSI)**

- Right click anywhere on the main pane and then click "**Continue"** in the FSI Time Entry Window (As explained below, this window may take a few seconds to appear). The FSI time entry window will come up in case review and contain a useful default based on the time entered in D2D or the beginning/end time of the available data. You can use this entry to specify the time to view using FSI.

Note: If you have more than one dedicated radar in your case, FSI will prompt you to select which radar to load. There is only one dedicated radar in the WES test case.

- Wait while WES creates an inventory of files and an FSI linear buffer. The first time FSI is launched on a radar in a case, this process can take fifteen seconds to one minute. After that, FSI will load much more quickly each time it is launched.
- Once FSI is loaded, navigate through time by using the arrow keys on the numeric keypad (make sure Num Lock is turned on). WES creates a four hour FSI linear buffer while in case review (for cases with greater than four hours of data).
- Turn cursor sampling on by clicking on the **magnifying glass button** in FSI. Move your mouse over the data to sample data in FSI.
- Toggle to velocity using the **"."** key on the numeric keypad. Recenter on some data at far range from the radar by left mouse clicking on the data in the upper left PPI

window and dragging it to the center of the PPI window. Roam over the velocity data, and note that the default sampling mode is not exact.

- Configure the “triangles” display option to make exact cursor sampling using the following instructions:

    - o click on the **wrench/screwdriver button** in FSI,

    - o click on the **Advanced Settings** disclosure triangle, select the **OpenGL** option, and select **“Use Triangles over Textures (Readout accuracy vs speed)”**,

    - o under the **“File”** menu select **“Save Settings”** and “**Exit”.** Now relaunch FSI in the same way as before and zoom in on velocity data to verify the cursor readout is exact.

Note: You have to save and exit for the triangles option to take effect. Also note that making cursor readout exact can decrease performance, particularly when looking at Super Resolution Data (not included in this test case).

- Move the cross section bar in the PPI (upper-left pane) by clicking the left mouse button on the **middle circle** and moving the mouse. The vertical cross section should dynamically update.

- Click the **“i”** key on the keyboard to toggle interpolation on and off.

- Click the **1** through **4** buttons on the upper left part of the keyboard to toggle between Z, V, SRM, and SW.

- Move the height of the CAPPI (upper-right pane) by selecting the **blue bar** on the right, and dragging it up and down. Note the data down samples to degraded resolution when it is moved.

- Pan the display in the “3D Flier” window (lower-right pane) holding down the left mouse button and dragging the mouse toward and away from you.

- Pitch and yaw the display in the “3D Flier” window (lower-right pane) by holding the shift key with one hand, holding down the left mouse button, and moving the mouse.

- Zoom in the “3D Flier” window by holding the middle mouse button and dragging the mouse toward and away from you.

- Exit FSI under the **File** menu

11. Shutdown D2D and the Text Workstation Control by selecting **Exit** under the **File** menus of D2D and the Text Workstation Control.

5.4 Verify AWIPS/WES in Simulation Mode

If you had problems viewing the test case in Section 5.3, please contact WES support (wes@infolist.nws.noaa.gov) before attempting to run a simulation in this section. In this section you will run a simulation using the test case. A simulation start time for this case (2205 UTC on August 24, 2006) has been set as the default along with a WESSL file setting and an ffmp tar file setting.

> **Note**: If you have not run a simulation before, click on the "**Help**" menu (upper right portion of the WES main window) and "**Instructions**" submenu, and follow the instructions under "Convert Case to DRT Format" and "Run Simulation".

1. Run **`start_simulator`**

2. Convert the 2006Aug24test case to "DRT format":

   e.g. click the "**Tools**" button, click the "**Convert Case Data to DRT Format**" button, select **2006Aug24test** as the FXA_DATA case location, click "**OK**" and click "**Convert**"

   Conversion to DRT format can take several minutes to complete

3. Load the **wes83_test_case_ABR** macro to run a simulation:

   e.g. click the "**Run Simulation**" button and the "**OK**" button in the D2D warning popup

   e.g. click the "**Load Saved Settings**" button, and select **wes83_test_case_ABR**, then click the "**OK**" button in the "**Load**" window followed by the "**OK**" button in the **Simulation Entry** window

4. Click the "**Run Simulation**" button when the Entry Verification window appears.

5. When the simulator prompts you to restart any D2D sessions, run **`start_awips`** in a new terminal. In the start_awips GUI select **2006Aug24test** as the case, and click the "**Start AWIPS Text Workstation Control**" checkbox.

6. Ensure the Guardian application is running correctly and generate a test pop-up:

- After D2D starts up, there should be a horizontal toolbar below the D2D window containing several icons and two status bars
- Click the Guardian icon 
- The Guardian Configuration GUI should appear

- Close the Guardian Configuration GUI by pressing "**x** "or the "**Close**" button
- Select **CONUS** scale and load **13u** under the **Satellite** menu.
- A red Guardian pop-up should appear with a "**No Data Inventory**" message
- Close the pop-up by pressing the "**Close**" button or "**Acknowledge Last**"

7. Select **WFO** scale, **64** frames, and **All Tilts Z/SRM8** from the **kabr** menu, and verify the display updates with new data (usually once per minute).

Note: Every 15 seconds the main WES window updates with data being processed, D2D displays should refresh shortly after the WES window lists the processed files.

- Toggle to the **SRM 8** product by selecting the "**.**" key on the numeric keypad.
- Under the **Tools** menu load **Radar Display Controls**
- Enter **280** degrees at **26** kts as the **SRM Custom Storm Motion**
- Trigger the display to update the new storm motion in the upper left of the main pane by zooming in on the storm or moving the center of the display

8. Verify that WESSL pop-up windows appear. Once the WESSL pop-ups appear, you can use the forward and backward buttons on the **WESSL Station Log** window to review previous WESSL windows.

9. Clear the main pane, and while on **WFO** scale select **All Tilts Z/SRM8** under the **kabr** menu

10. Under the **Tools** menu, select **4-D Storm Investigator (FSI)**

- Right click on a storm anywhere on the main pane
- Wait while FSI launches (it can take 5-10 seconds)

Note: During a simulation, the FSI time entry window does not appear. The FSI time entry window is only for case review.

- Once FSI is loaded, navigate through time by using the arrow keys on the number pad (make sure Num Lock is turned on). At the start of the simulation a two hour FSI linear buffer is created to allow viewing of the latest two hours of radar data in FSI, just like in a real time AWIPS.

- While viewing the reflectivity product, click on the **magnifying glass button** to turn on cursor sampling. Move the pointer over the data to verify sampling is working.
- Watch the product legend in the upper right part of the FSI display for when the tilts are processed in FSI each minute.
- Exit FSI under the **File** menu

11. Test create a warning with WarnGen in D2D:

- Clear the D2D pane and select a **WFO** scale map
- With no product loaded click on the "**WarnGen"** button in the upper right part of D2D
- Select **Tornado** for **Product Type** in the WarnGen popup window
- Move the "**Drag me to storm**" icon to somewhere in the center of the map
- Click on the "**Create Text**" button on WarnGen popup window
- A text window should appear if the text monitor was started with D2D
- Click "**Enter**" to modify the warning
- Replace the line at the bottom containing "**!**NAME/INITIALS**!**" with your initials
- Click the "**Send**" button
- In a new pane on WFO scale load **Local CWA Warnings** from the **Obs** menu in D2D

Note: If you load a new warning polygon over old product data you need to wait about a minute for the polygon to be displayed or you may need to select **Forced** for the time matching in the upper left part of D2D for the time matching to work.

---

12. After verifying the install was successful, shutdown D2D and the Text Workstation Control by selecting **Exit** under the **File** menus of D2D and the Text Workstation Control. Stop the simulation by pressing the **Stop Simulation** button on the WES control interface. Exit the simulator by clicking the **Exit** button on the main WES interface.

13. You may consider putting icons on the desktop to start the **`start_simulator`**, **`start_awips`**, and **`enhanced_case_review`** scripts. For **`start_simulator`**, you need to select "**Run in Terminal**" for the desktop icon to prevent spontaneous logouts when exiting the simulator.

Note: FFMP, SCAN and DMD data are unique for each simulation. These products are created every volume scan from their input files. Thus, these input files must exist in the case for FFMP, SCAN and DMD to work successfully during a simulation.

14. Verify the test warning text was saved. In the process of creating warnings, AWIPS writes the text to a file in the **<data_case>/textWSwork/$DISPLAY** directory where **$DISPLAY** is the DISPLAY variable that identifies the monitor where Text Workstation Control Monitor runs.

After each simulation, WES copies the **textWSwork** directory is copied to the **<data_case>/saved_textWSwork/textWSwork.<date>** directory (where **<date>** is the current actual time when the simulation ends.

e.g. **cd /data/awips/2006Aug24test/saved_textWSwork**

e.g. **ls** (to look for the latest directory)

e.g. **cd textWSwork.200712162234** (for example)

e.g. **ll –R *** (to look for a display directory like :0.1 with a KABR warning file)

e.g. **cd :0.0/saved** (for example)

e.g. **more KABRTORABR.wan20060824_220726** (for example)

5.5 Verify GFE / WES in Simulation Mode

1. Run a simulation using **start_simulator, with** the **wes83_GFE_test_case_ABR** macro. This enables GFE functionality with the2006Aug24test data (note the "**GFE**" in the macro name):

e.g. run **start_simulator**

e.g. click the "**Run Simulation**" button and the "**OK**" button in the D2D warning popup

e.g. click the "**Load Saved Settings**" button, and select **wes83_GFE_test_case_ABR**, then click the "**OK**" button in the **Load** window followed by the "**OK**" button in the **Simulation Entry** window.

e.g. click the "**Run Simulation**" button

Note: When a **GFE Directory** is selected in the simulation entry window, the IFPServer is launched with other AWIPS decoders. The IFPServer is required for GFE to work and can only be invoked during a simulation. When the simulation begins, GFE is purged of any new data files. The IFPServer takes a minute or two to start up, and requires a significant amount of resources to initialize, so your machine may temporarily slowed down.

2. After starting a simulation, start GFE in "**PRACTICE**" mode by running **`start_GFE`** in a new terminal.

Note: The "**`start_GFE`**" program, which is in your **`$PATH`**, launches GFE in practice mode (see **`/awips/fxa/DRT/start_GFE`** for more information). GFE only launches after the IFPServer is operational during a WES simulation. Once a simulation has been detected with a valid GFE directory, GFE may take a minute or two to start up as it waits for the IFPServer to initialize.

3. Set-up GFE and begin:

- When the GFE Startup popup appears, select **fxa** as the **User**, **gfeConfig** as the **Config**, and **practice** as the **Mode**, then click the "**Start**" button.

4. Populate your grids with the **RUC80**:

- Under the **Populate** menu, select **Copy All Grids From…**
- Select **RUC80 2421 (ABR)**, and click the "**OK**" button.
- Switch to the vertical mode by selecting the top left button with the vertical line in the box 
- Click on "**T SFC**" grid, and step through the images using the right arrow key

5. Test creating warning hazard grids:

- Under the **Hazards** menu, select **MakeHazard**
- Click and drag to select some counties in the county display and **"IP.W – SLEET WARNING**" as the hazard
- Adjust the **Hazard End Time** to **12z** on **Aug 25**, and click the "**Run**" button
- Click the "**Clear All**" button to clear the counties
- Select some other counties, and "**IS.W – ICE STORM WARNING**" as the hazard
- Adjust the **Hazard End Time** to **12z** on **Aug 25**, and click the "**Run/Dismiss**" button

- Under the **Hazards** menu, select **MergeHazards**

- Drag the vertical scroll bar down, select the **Hazards SFC** grid, and use the right arrow key to view the hazards

- Save the forecast grids by clicking on the **diskette** button  on the GFE interface, followed by clicking on the "**Save Weather Element(s)**" button

---

Note: Forecast grids must be saved for GFE to generate the hazard text

---

6. Test creating the warning hazard text:

- Under the **Products** menu, select **Formatter Launcher**

- Under the next **Products** menu on the GUI that appears, select the **Hazard** pullout menu, and the **Hazard_WSW (Winter Wx Product)**

- Click on the "**Run Formatter**" gear box button  , and your warning text will appear after a few seconds

- Modify or delete all the "**|***" placeholders in the warning text

- Click on the "**Transmit**" button, and then the "**Simulated Transmit**" button

---

Note: The GFE product text is saved in the **`<data_case>/GFESuite-case/<your_case_GFE_DIR>/products/PRACTICE`** directory. When the simulation exits, WES copies the text directory to **`<data_case>/saved_GFE_PRACTICE`** directory, with a time stamp based on the actual time.

---

7. Exit out of GFE, and shut down the simulation.

5.6 Test Creating New GFE Grids

Background: A tool exists within WES to use the AWIPS IFPServer to create a set of GFE default grids for incorporation into a WES simulation. Any such GFE datasets are selected from the WES main simulation entry window. When a GFE dataset is selected, WES starts the IFPServer in a simulation to allow the GFE to function. For more information on GFE in WES, please see Section 18.

1. Under the "**Tools**" button in start_simulator, click "**Create GFE Dataset**".

2. Select **2006Aug24test** as the FXA_DATA, **ABR** as the FXA_LOCAL_SITE, and **200608241505** (1505z on Aug 24, 2006) as the time to create the grids for, and click "**OK**".

> **Note**: The IFPServer usually takes a couple of minutes to start up before it launches the ifpInit process to create the actual grids. If ifpInit fails to launch, the WES times out after five minutes. Once the ifpInit starts, the WES Log window will read "**Monitoring ifpInit for completion**", and the status bar will read "**Creating Data**".

3. Wait for ifpInit to complete. For this small case, ifpInit will only take a minute or two, since it only creates a RUC80 set of grids. Normally it can take an hour or two for a full case. You may also choose to monitor the processes by running a **`top`** command in another shell window. The WES log window will read "**Finished creating GFE data**" when complete.

4. Once the GFE data is created, you can run a simulation to view the grids with GFE and create warnings.

- After selecting the "**Run Simulation**" button in **`start_simulator`**, click "**OK**" on the first popup, and then select the simulation details, including using the "**Select**" button next to **GFE Directory** to select the GFE data just created (note the **1505 UTC** simulation start time should match the GFE Directory data time)

- Click the "**OK**" button, and then the "**Run Simulation**" button on the popup Entry Verification Window to start the simulation

- In a shell window, type **`start_GFE`**, and follow Section 5.5 Steps 3-7 using the 15Z RUC80. When done, exit the Simulator by pressing the **Exit** button.

5.7 Verify AvnFPS in Simulation Mode

1. Run **`start_simulator`**

> **Note:** Like GFE, AvnFPS is only available during a simulation.

2. Load the **wes83_AvnFPS_test_case_ABR** macro to run a simulation:

   e.g. click the "**Run Simulation**" button and the "**OK**" button in the D2D warning popup

e.g. click the "**Load Saved Settings**" button, and select **wes83_AvnFPS_test_case_ABR**, then click the "**OK**" button in the Load window followed by the "**OK**" button in the Simulation Entry window

---

Note: Notice the entry section labeled "TAFs Directory". This entry specifies a directory containing the TAFs used to initialize the simulation. AvnFPS processes only run in simulation mode and only when the TAF directory is specified.

---

3. Click the "**Run Simulation**" button when the Entry Verification window appears.

4. After the simulation begins processing data, start the AvnFPS menu. The AvnFPS GUI launches after the AvnFPS decoders successfully start and after TAF data is ingested into AvnFPS:

   e.g. run **`start_avnfps`** in a separate terminal window.

5. Once the AvnFPS menu has loaded select **Default** and click the **"TAFs"** button to load the AvnFPS monitor GUI.

Note: In this example there are 4 TAF sites being monitored: KABR, KATY, KPIR, KMBG.

---

6. Load a TAF for KABR.

   e.g. click the "**KABR**" button (which should be orange in color) on the AvnFPS monitor

7. Edit the TAF.

   e.g. click the "**Text Editor**" button

   Make the following modifications to the TAF:

   - On the first line, change the wind speed and direction from **16013KT** to **20020KT**
   - Remove the entire second line
   - On the third line, change the valid time from **FM2200** to **FM2300**
   - On the fourth line, change the wind speed and direction from **18015KT** to **36030KT**

8. Send the TAF.

e.g. click the "**Syntax**" button on the top of the editor

e.g. click the "**Send**" button on the top of the editor

e.g. click "**OK**" in the transmit time GUI

e.g. close only the AvnFPS TAF editor window (not the monitor window)

9. Verify the edited TAF was sent and ingested into AvnFPS.

In the AvnFPS monitor window, check the following:

- The KABR button should no longer be orange in color
- The TAF time next to the KABR button should not be 2141. It should be a time after 2200.
- Click on the "**KABR**" button and verify the TAF shows all the edits made in step 7

10. After verifying the install was successful, shut down all AvnFPS windows, and exit the simulator. You may consider putting icons on the desktop to run the **`start_avnfps`** script. If you launch from an icon, you may need to select the run in terminal option, so you can see the status while starting.

11. Verify your edited TAF was saved.

- To simulate the process of sending TAFs, WES writes the TAF to a text file in the **`<data_case>/avnfps/archived_TAFs/previous_simulation`** directory

- After each simulation, WES copies the **`previous_simulation`** directory to a **`<data_case>/saved_tafs/<date>`** directory, where **`<date>`** is the actual time when the simulation ends:

  e.g. **`cd /data/awips/2006Aug24test/saved_tafs`**

  e.g. **`ls`** (to look for the latest directory)

  e.g. **`cd 200707042200`** (for example, if you ran the simulation July 4, 2007 at 2200)

  e.g. **`ls`** (to look at all the saved TAFs)

  e.g. **`more ABRTAFABR`** (for example)

Note: The latest TAF is always stored as **CCCTAFXXX** (e.g. **ABRTAFABR**). The TAF used to initialize the simulation is always stored as **CCCTAFXXX.init** (e.g. **ABRTAFABR.init**). The long filenames in the saved_tafs directory are the TAFs generated during the simulation (see Section 19.6).

Note: The TAF you just wrote will be used in the next section, so do not delete this file.

5.8 Verify AvnFPS in Simulation Mode using Previous TAFs

In the last section we started by using a TAF supplied in the WES test case. In this section, we will start a new simulation using the TAF you created in the previous simulation. This functionality can be useful when running a sequence of simulations.

1. Run **`start_simulator`**

2. Load the **wes83_AvnFPS_test_case_ABR** macro and then change the TAF entry to use the TAF from the previous simulation.

   e.g. click the "**Run Simulation**" button and the "**OK**" button in the D2D warning popup

   e.g. click the "**Load Saved Settings**" button, and select "**wes83_AvnFPS_test_case_ABR**", then click the "**OK**" button in the Load window

   e.g. click the **"Select"** button next to the "**Case Start Time**" entry section and change the minutes from **05** to **15** and then click **"OK"**

   e.g. click the **"Select"** button next to the **TAFs_Directory** entry section and select **previous_simulation** and then **"OK"**

   e.g. click the "**OK**" button in the **Simulation Entry** window

   Note: Selecting **previous_simulation** in the TAFs directory entry window initializes the current simulation with the TAFs issued during the last simulation.

3. Click the "**Run Simulation**" button when the Entry Verification window appears.

4. After the simulation begins processing data, start the AvnFPS menu:

   e.g. run **`start_avnfps`**

5. Once the AvnFPS menu had loaded, select **Default** and click the **"TAFs"** button

6. Load the TAF for KABR:

   e.g. click the "**KABR**" button on the AvnFPS monitor

7. Verify the initial TAF is the same as the latest TAF version in Section 5.7:

   e.g. click the "**Text Editor**" button

   Verify the following:

   - On the first line, the wind speed and direction is **20020KT**
   - On the second line, the valid time is **FM2300**
   - On the third line, the wind speed and direction is **36030KT**

8. After verifying the TAF is the same, shut down D2D, all AvnFPS windows, and exit the simulator.

5.9 Verification Completion

The next four sections cover customizing WES from a live AWIPS system.

The remainder of this document contains reference information including:

- Setting up cases
- The WES Scripting Language (WESSL)
- Using WES in a networked environment
- Manual installation of AWIPS freeware
- Manual installation of helper applications
- Configuration files