

**AWIPS II Statistics  
Test Procedures (Draft)**

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Prepared Under

Contract DG133W-05-CQ-1067  
Advanced Weather Interactive Processing System (AWIPS)   
Operations and Maintenance

Work Assignment 5

By:



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**Change History**

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| N/A | February 27, 2013 | ALL | Scott Nicholson | Initial Draft |
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**Acronyms and Abbreviations Used in This Document**

|  |  |
| --- | --- |
| AWIPS | Advanced Weather Interactive Processing System |
| CAVE | Common AWIPS Visualization Environment |
| CONUS | Continental United States; Contiguous United States |
| D2D | Display 2-Dimensional |
| EDEX | Enterprise Data EXchange |
| GUI | Graphical User Interface |

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| --- | --- | --- | --- |
| **Test Case Name** | AWIPS II Statistics | **Test Case Execution Engineer** |  |
| **Test Case Creation Engineer** | Scott Nicholson | **Test Platform Used** |  |
| **Date Test Case Created** | 12/14/2012 | **Release Version on Testbed** |  |
| **CI** |  | **Logged in User’s Role** |  |
| **Site Specific** |  | **Start Date / Time** |  |
| **TC Updated for Version** | 13.3.1 | **Completion Date/Time** |  |
| **Last Modified By** | Scott Nicholson | **Total Test Time** |  |
| **Executable Steps** | 54 | **Pass/Fail/Pending** |  |
| **Approximate Execution Time** | 30 minutes |  |  |

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| --- | --- |
| **Test Case Description:** | The AWIPS statistical framework allows for system performance statistics to be captured and analyzed. The data are viewable via a graph or csv file. This test case demonstrates the Statistics GUIs in CAVE. |
| ***Objective:*** | The objective of this test case is to demonstrate and test the Statistics GUIs in CAVE. |
| ***Assumptions and Constraints:*** | None. |
| ***Requirements:*** | None. |
| ***Data Input:*** | This test case requires the ingest of various types of data including model, satellite, radar, and observation products. |
| ***Prerequisite Conditions:*** | * Build 13.3.1 is installed on the AWIPS II testbed. |
| ***Pass Criteria:*** | This test case is considered passed upon successful execution of all the test steps contained in Section 1.0. |

# 1.0 – Statistics

This section demonstrates and tests the Statistics GUIs in CAVE on a Linux Workstation.

**Table 1 – Test Steps and Expected Results**

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| --- | --- | --- | --- | --- |
| **Step #** | **Action / Inputs** | **Expected Results** | **P/F** | **Comments** |
| **Statistics Display Control Dialog** |  |  |  |  |
|  | Start CAVE in the D2D perspective. | CAVE loads in the D2D perspective. |  |  |
|  | MB1 click **CAVE->AWIPS Statistics…** | The Statistics Display Control window opens. |  |  |
|  | In the Statistics Display Control dialog, MB1 click the **Select** **Date/Time** button. | A Calendar window opens. |  |  |
|  | The default Date/Time is set to 24 hours prior to the current date/time. Set the date to the current date. Then MB1 click the **OK** button. | The Calendar window closes. The Date/Time section updates to display the selected date/time. |  |  |
|  | In the Statistics Display Control dialog, set the following values:   * Graph Range: **1 hr** * **Start** radio button selected * Category: **Data Ingest Events** * Event Type: **Processing Events** * Event Attribute: **Processing Time** | The values are selected. |  |  |
|  | MB1 click the **Data Type** item in the Available Groups section. | The Data Type option is highlighted. The **Move selected item(s) right** button becomes active. |  |  |
|  | MB1 click the **Move selected item(s) right** button. | The Data Type item moves into the Selected Groups column. The Display button becomes active. |  |  |
|  | MB1 click the **Display** button. | A Processing Events window opens displaying the Processing Time data on a graph that starts at the selected date/time hour, extending an hour into the future. |  |  |
|  | Close the Processing Events window. | The Processing Events window closes. |  |  |
|  | In the Statistics Display Control dialog, MB1 click the **Select** **Date/Time** button. | A Calendar window opens. |  | Redmine DR #1426: The up and down arrow buttons are missing the arrow image in the Calendar window |
|  | Set the date and time to a date/time 6 hours in the past. Then MB1 click the **OK** button. | The Calendar window closes. The Date/Time section updates to display the selected date/time. |  |  |
|  | MB1 click the **Display** button. | A Processing Events window opens displaying the Processing Time data on a graph that starts at a date/time 6 hours in the past, extending one hour from the selected date/time. |  |  |
|  | Close the Processing Events window. | The Processing Events window closes. |  |  |
|  | In the Statistics Display Control dialog, MB1 click on the **Graph** **Range** dropdown menu and select **6 hr**. | 6 hr appears in the Graph Range dropdown menu bar. |  |  |
|  | Select Event Attribute: **Processing Latency**. | Processing Latency appears in the Event Attribute dropdown menu bar. |  |  |
|  | MB1 click the **Display** button. | A Processing Events window opens displaying the Processing Latency data on a graph that starts at a date/time 6 hours in the past, extending 6 hours from the selected date/time. |  |  |
|  | Close the Processing Events window. | The Processing Events window closes. |  |  |
|  | In the Statistics Display Control dialog, MB1 click the **Split** radio button. | The Split radio button is selected. |  |  |
|  | MB1 click the **Display** button. | A Processing Events window opens displaying the Processing Latency data on a graph with the set date/time in in the middle of the chart. The graph extends 3 hours prior to the selected date/time and 3 hours after the selected date/time. |  |  |
|  | Close the Processing Events window. | The Processing Events window closes. |  |  |
| **Processing Events Dialog** |  |  |  |  |
|  | In the Statistics Display Control dialog, MB1 click the **Start** radio button. | The Start radio button is selected. |  |  |
|  | From the Event Attribute dropdown menu, select **Processing** **Time**. | Processing Time appears in the Event Attribute dropdown menu bar. |  |  |
|  | MB1 click the **Display** button. | A Processing Events window opens displaying the Processing Time data on a graph that starts at a date/time 6 hours in the past, extending 6 hours from the selected date/time. |  |  |
|  | At the bottom of the Processing Events window, MB1 click the **double left arrow** button. | The graph updates, moving the display a full time period to the left (e.g., 6 hours earlier). |  |  |
|  | At the bottom of the Processing Events window, MB1 click the **double right arrow** button. | The graph updates, moving the display a full time period to the right (e.g., 6 hours later). |  |  |
|  | At the bottom of the Processing Events window, MB1 click the **single left arrow** button. | The graph updates, moving the display a half time period to the left (e.g., 3 hours earlier). |  |  |
|  | At the bottom of the Processing Events window, MB1 click the **single right arrow** button. | The graph updates, moving the display a half time period to the right (e.g., 3 hours later). |  |  |
| **Graph Menu** |  |  |  |  |
|  | Minimize the Statistics Display Control window. | The Statistics Display Control window is minimized. |  |  |
|  | In the Processing Events window, MB1 click **Graph** in the menu bar. Then select the **Show Display Control** menu item. | The Statistics Display Control window reappears. |  |  |
|  | Minimize the Statistics Display Control window. | The Statistics Display Control window is minimized. |  |  |
|  | In the Processing Events window, MB1 click **Graph** in the menu bar. Then unselect the **Display Grid Lines** checkbox. | The grid lines are removed from the graph. |  |  |
|  | In the Processing Events window, MB1 click **Graph** in the menu bar. Then select the **Display Grid Lines** checkbox. | The grid lines are returned to the graph. |  |  |
|  | In the Processing Events window, MB1 click **Graph** in the menu bar. Then unselect the **Display Data Lines** checkbox. | The data lines are removed from the graph. |  |  |
|  | In the Processing Events window, MB1 click **Graph** in the menu bar. Then select the **Display Data Lines** checkbox. | The data lines are returned to the graph. |  |  |
| **Graph Dropdown Menu** |  |  |  |  |
|  | In the Processing Events window, MB1 click the **Graph** dropdown menu in the bottom left corner. Then select **Minimum**. | The Processing Time graph updates to display the Minimum Processing Time data for the set period. |  |  |
|  | In the Processing Events window, MB1 click the **Graph** dropdown menu in the bottom left corner. Then select **Maximum**. | The Processing Time graph updates to display the Maximum Processing Time data for the set period. |  |  |
|  | In the Processing Events window, MB1 click the **Graph** dropdown menu in the bottom left corner. Then select **Sum**. | The Processing Time graph updates to display the Sum of the Processing Time data for the set period. |  |  |
|  | In the Processing Events window, MB1 click the **Graph** dropdown menu in the bottom left corner. Then select **Count**. | The Processing Time graph updates to display the Count data for the set period. |  | Redmine DR #1385: The y-axis label does not update to reflect the displayed data. |
|  | In the Processing Events window, MB1 click the **Graph** dropdown menu in the bottom left corner. Then select **Average**. | The Processing Time graph updates to display the Average Processing Time data for the set period. |  |  |
| **Selection Manager** |  |  |  |  |
|  | In the Groups panel, MB1 click the first 10 checkboxes such that they become unselected. | The unselected items are removed from the graph. The scale of the graph may update to better fit the displayed data if maximum values are removed from the graph. |  |  |
|  | MB1 click the **Selection Manager…** button. | The Selection Manager window opens. |  |  |
|  | Click the **arrow** next to pluginName. | The pluginName group expands to display the list of plugins in the Groups panel. |  |  |
|  | With all pluginName items checked, MB1 click the **Apply** button. | All checkboxes become checked in the Groups section of the Processing Events window. The previously unselected items are returned to the graph. The scale of the graph may update to better fit the displayed data if maximum values are removed from the graph. |  |  |
|  | In the Selection Manager window, MB1 click on the **pluginName** checkbox. | All plugins are unselected. |  |  |
|  | MB1 click the **Apply** button. | An Empty Graph window appears stating that no selections were made and will result in an empty graph. |  |  |
|  | MB1 click the **Yes** button to continue. | All checkboxes become unchecked in the Groups section of the Processing Events window. All items are removed from the graph. |  |  |
|  | In the Selection Manager window, MB1 click on the **pluginName** checkbox. | All plugins are selected. |  |  |
|  | MB1 click the **Apply** button. | All checkboxes become checked in the Groups section of the Processing Events window. The previously unselected items are returned to the graph. |  |  |
|  | In the Selection Manager window, MB1 click on 5 plugin checkboxes. | The 5 selected plugins are unselected. |  |  |
|  | MB1 click the **OK** button. | The Selection Manager window closes. The 5 selected plugin checkboxes are unchecked in the Groups section of the Processing Events window. The 5 unselected items are removed from the graph. The scale of the graph may update to better fit the displayed data if maximum values are removed from the graph. |  |  |
|  | MB1 click the **Selection** **Manager…** button. | The Selection Manager window opens. |  |  |
|  | With all checkboxes checked, MB1 click the **Cancel** button. | The Selection Manager window closes without any changes to the Processing Events window. |  |  |
| **File Menu** |  |  |  |  |
|  | In the Processing Events window, MB1 click **File**->**Quit**. | The Processing Events window closes. |  |  |
|  | Recall the Statistics Display Control window. Then MB1 click the **Close** button. | The Statistics Display Control window closes. |  |  |
| **Test Complete** |  |  |  |  |

# Appendix A – Requirements Verification Traceability Matrix (RVTM)

**Table 2 – Requirements Tested**

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| **Number** | **Description** | **Test Step(s)** |
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**Table 3 – Requirements Not Tested**

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| **Number** | **Description** | **Test Step(s)** |
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