



Altair

HyperWorks

Altair HVVH Tutorials 2019

HVVH-6010: Solution Tab - Result Comparison HW Template


In this tutorial, you will learn how to:

- Perform solver result verification across solver versions using Altair HyperWorks templates, which contain animation/contour and/or time history/plot data information.
- Result comparison for both the contour data and diff curve for plot data are done based on a user-selected data in the Altair HyperWorks template.
- This feature supports multiple clients and pages with multiple windows.

Step 1: Perform an Altair HyperWorks template comparison.


The Altair HyperWorks template contains both animation/contour and time history/plot data.

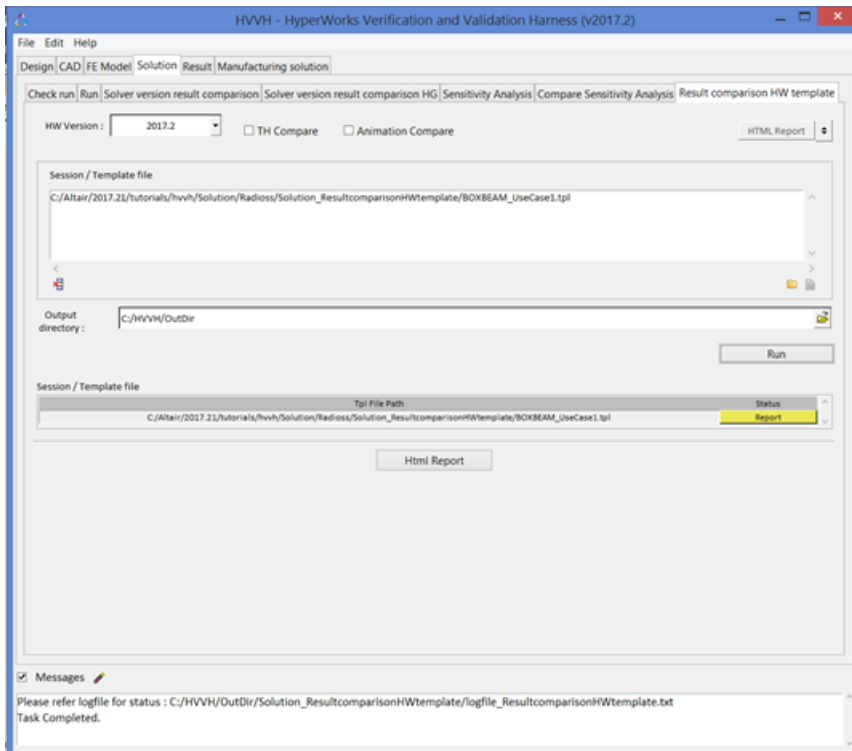
1. From the **Solution tab**, select the **Result comparison HW Template** tab.
2. Verify that the **TH Compare** and **Animation Compare** options are deactivated (turned off).
3. From the **HW Version** drop-down menu, select the Altair HyperWorks version.

4. Under the **Session/Template file** section, use the file browser icon, , to select the following file:

```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXB  
EAM_UseCase1.tpl.
```

You can also add the file directly using the add file icon,  .

5. Select the **Output directory** (C:/HVVH/OutDir) using the file browser icon,  .
6. Click **Run**.
7. In the **Messages** window, the details of status of run are displayed along with the log file location details.
8. Click **HTML Report** to view the HTML report.



HyperWorks Verification and Validation Harness

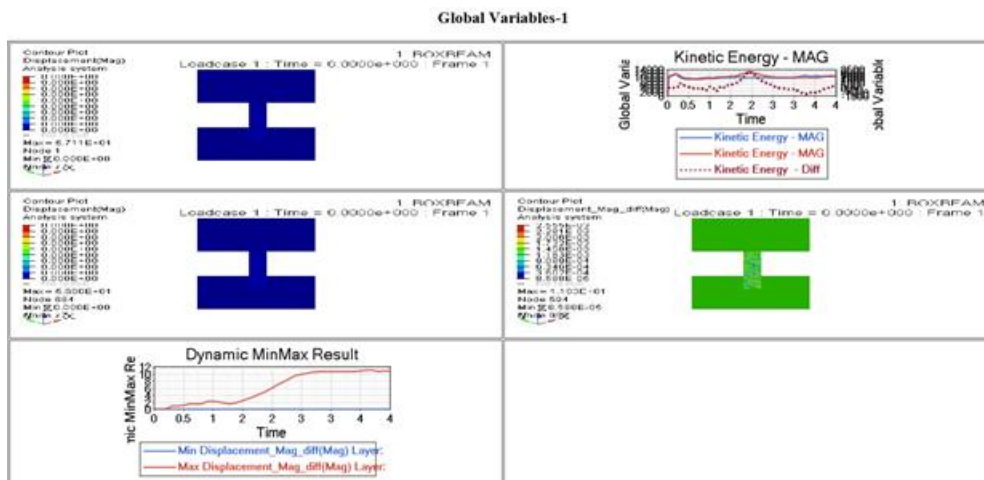
Solution - Result comparison HW template Report

HW Version : 2017.2

Tpl File Path	Status
C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_UseCase1.tpl	Report

TPL input files

C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_1/BOXBEAMA001
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_1/BOXBEAMA001
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMT01
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_1/BOXBEAMT01





Step 2: Perform an Altair HyperWorks template comparison for time history/plot data.

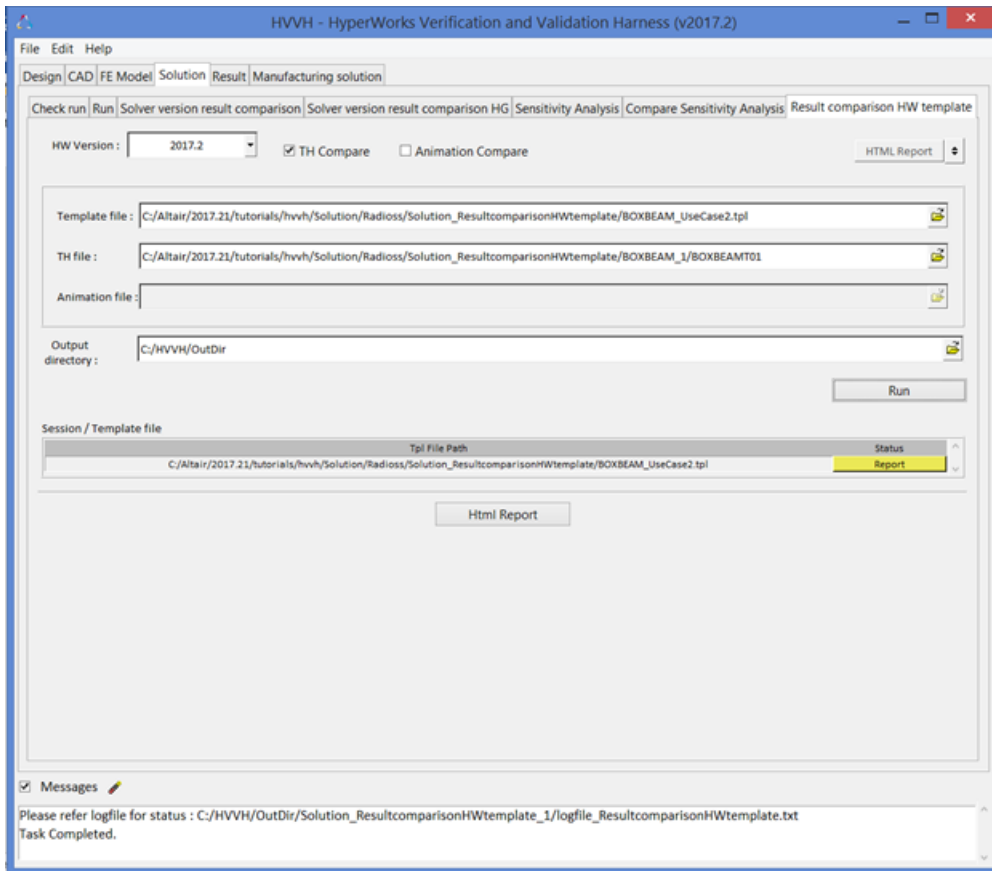
The Altair HyperWorks template contains one set of time history/plot data. The other set of time history/plot information can be loaded externally.

1. From the **Solution tab**, select the **Result comparison HW Template** tab.
2. Verify that the **TH Compare** is selected (on) and **Animation Compare** is deactivated (off).
3. From the **HW Version** drop-down menu, select the Altair HyperWorks version.
4. Under the **Template file** section, use the file browser icon, , to select the following file:

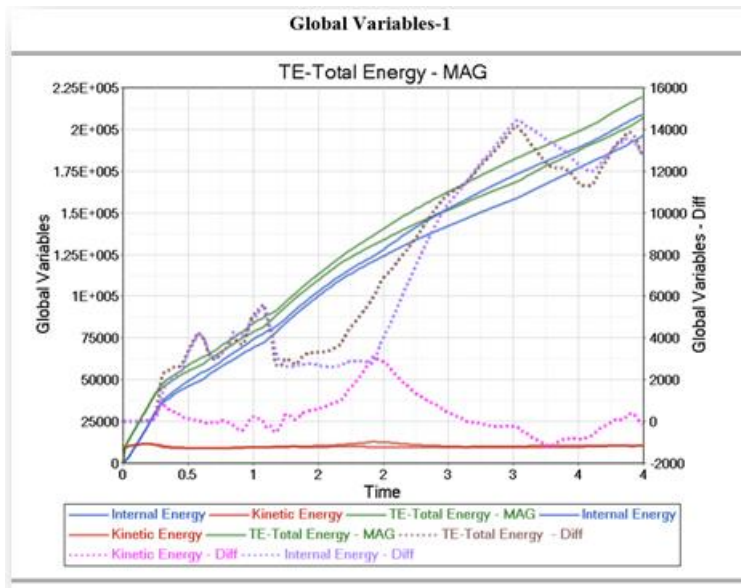
```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXB EAM_UseCase2.tpl.
```

You can also add the file directly using the add file icon, .
5. Under the **TH file** section, select the second set of time history/plot files from this location using the file browser icon, , or add the file directly using the add file icon, .

```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXB EAM_1\BOXBEAMT01.
```
6. Select the **Output directory** (C:/HVVH/OutDir) using the file browser icon, .
7. Click **Run**.
8. In the **Messages** window, the details of status of run are displayed along with the log file location details.
9. Click **HTML Report** to view the HTML report.



<u>HyperWorks Verification and Validation Harness</u>	
<u>Solution - Result comparison HW template Report</u>	
HW Version : 2017.2	
Tpl File Path	Status
C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_UseCase2.tpl	Report
TPL input files	
C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMT01	




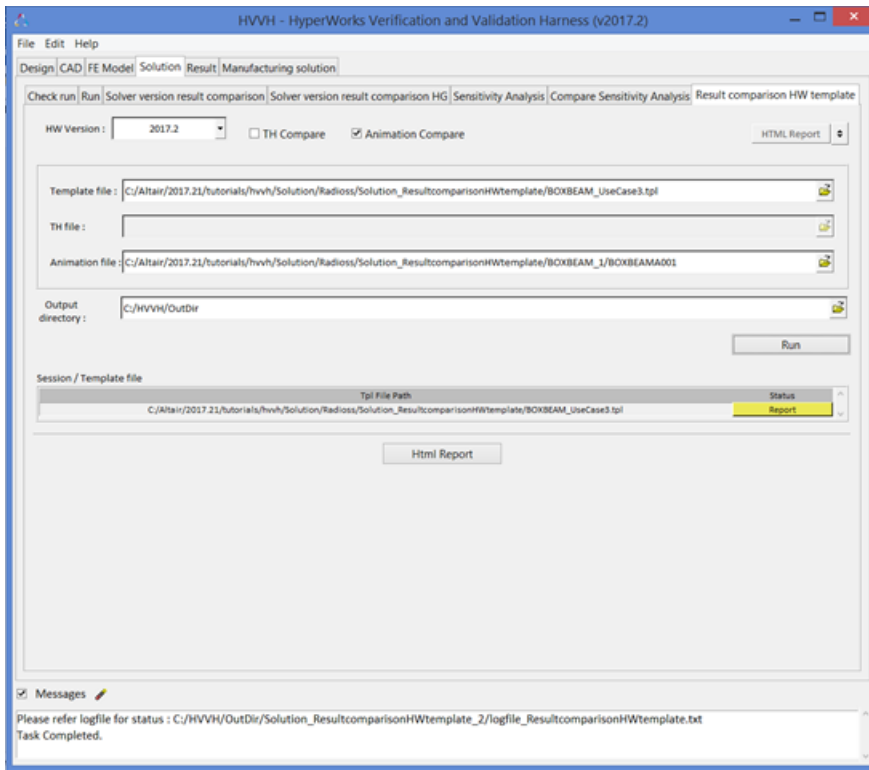
Step 3: Perform an Altair HyperWorks template comparison.

The Altair HyperWorks template contains one set of animation/contour data. The other set of animation/contour information can be loaded externally.

1. From the **Solution tab > Result comparison HW Template** tab, verify that the **TH Compare** option is off and the **Animation Compare** option is on.
2. From the **HW Version** drop-down menu, select the Altair HyperWorks version.
3. From the **Template file** field, select the following file:

```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXB
EAM_UseCase3.tpl.
```
4. From the **Animation file** field, select the second set of animation/contour file data:

```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXB
EAM_1\BOXBEAMA001.
```
5. Select the **Output directory** (C:/HVVH/OutDir) using the file browser icon, .
6. Click **Run**.
7. In the **Messages** window, the details of status of run are displayed along with the log file location details.
8. Click **HTML Report** to view the HTML report.



HyperWorks Verification and Validation Harness

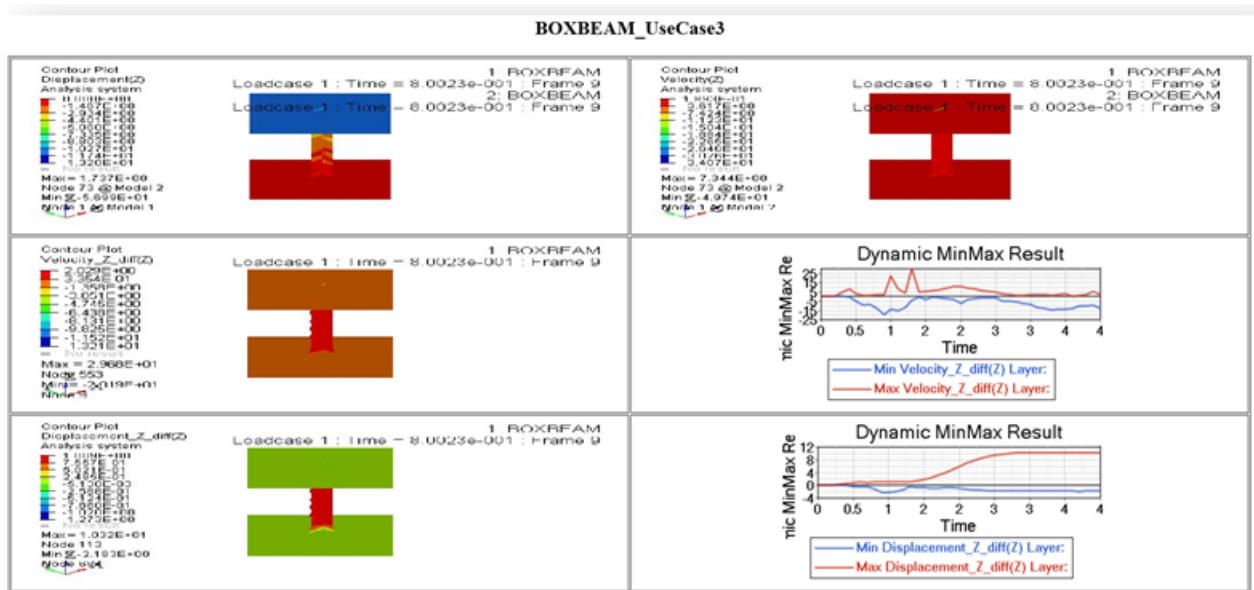
Solution - Result comparison HW template Report

HW Version : 2017.2

Tpl File Path	Status
C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_UseCase3.tpl	Report

TPL input files

C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001
 C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001



Step 4: Complete the steps to perform a Check Run.

The Altair HyperWorks template has one set of animation/contour and time history/plot data. The other set of animation/contour and time history/plot data can be externally loaded.

1. From the **Solution tab > Result comparison HW Template** tab, verify that the **TH Compare** and **Animation Compare** options are selected.
2. From the **HW Version** drop-down menu, select the Altair HyperWorks version.

3. From the **Template file** field, select the following file:


```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXBEAM_UseCase4.tpl.
```

4. From the **TH field**, select the second set of time history/plot file data:

```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXBEAM_1\BOXBEAMT01.
```

5. From the **Animation file** field, select the second set of animation/contour file data:

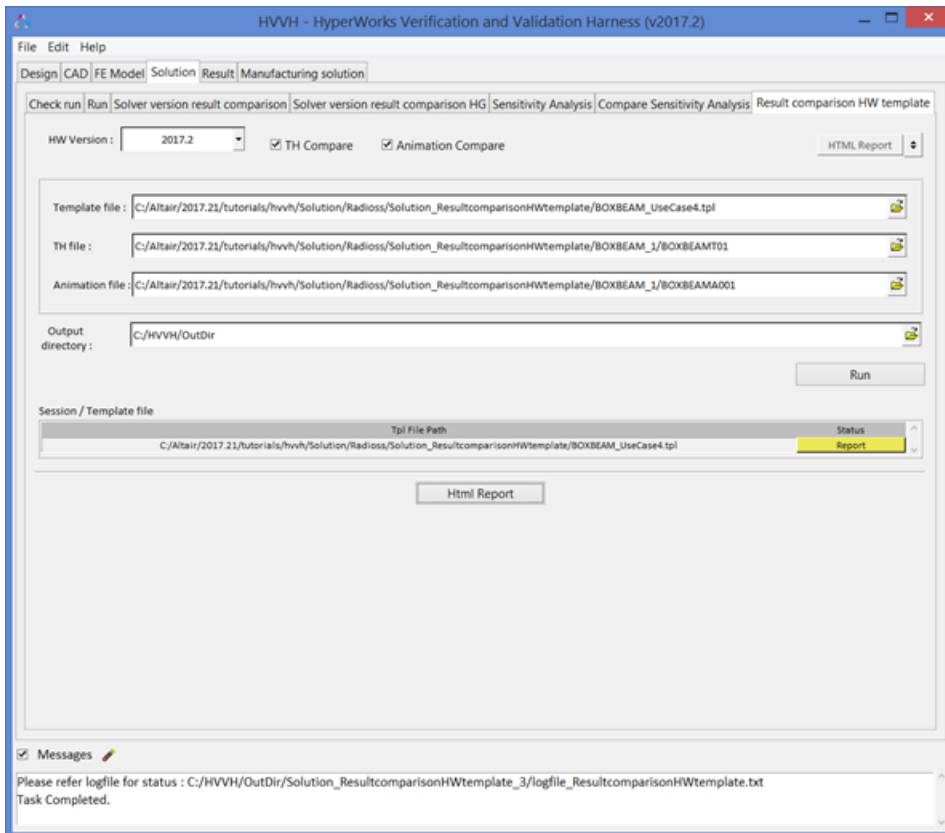
```
..\tutorials\hvvh\Solution\Radioss\Solution_ResultcomparisonHWtemplate\BOXBEAM_1\BOXBEAMA001.
```

6. Select the **Output directory** (C:\temp) using the file browser icon, .

7. Click **Run**.

8. In the **Messages** window, the details of status of run are displayed along with the log file location details.

9. Click **HTML Report** to view the HTML report.



HyperWorks Verification and Validation Harness

Solution - Result comparison HW template Report

HW Version : 2017.2

Tpl File Path	Status
C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_UseCase4.tpl	Report

TPL input files

C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001

C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMA001

C:/Altair/2017.21/tutorials/hvvh/Solution/Radioss/Solution_ResultcomparisonHWtemplate/BOXBEAM_0/BOXBEAMT01

