

ANSYS Transonic Flow over a Wing - Verification

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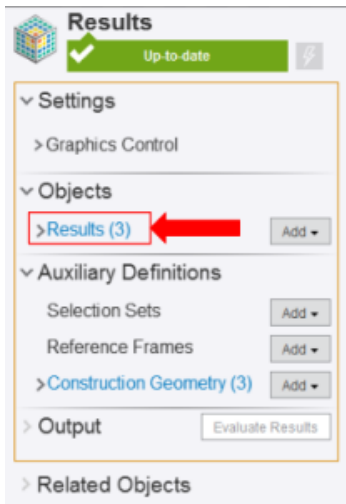
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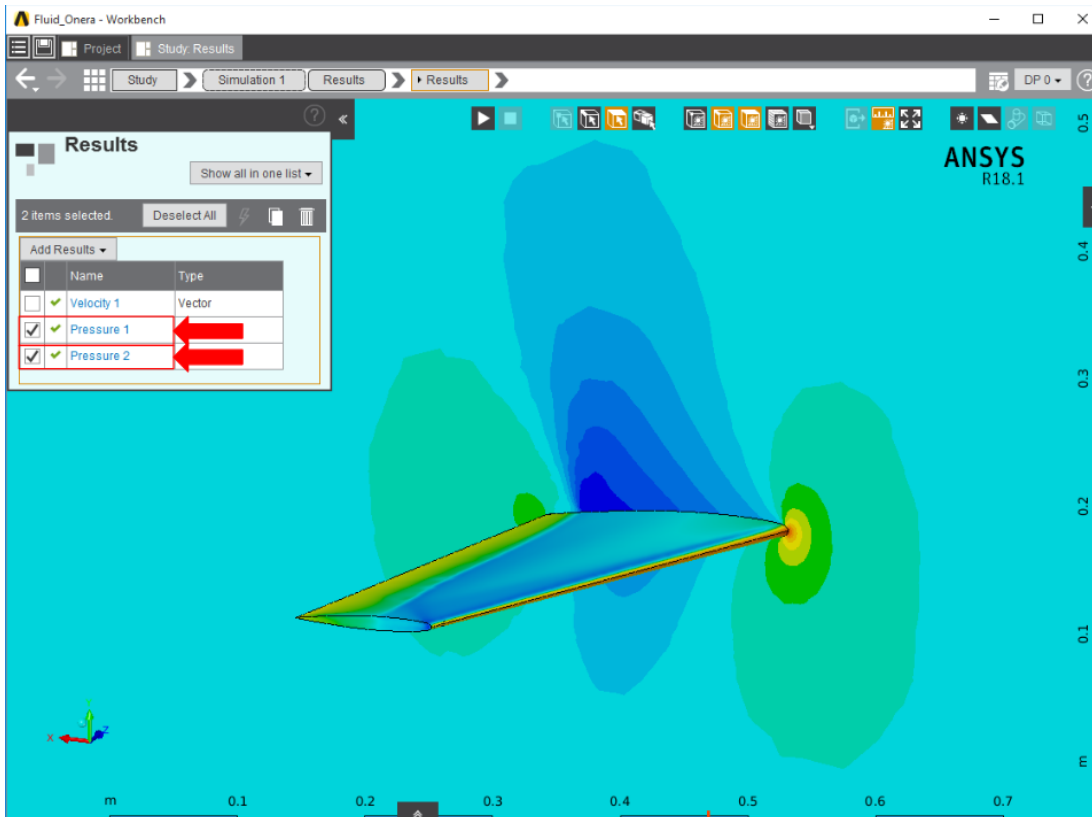
Verification & Validation

This tutorial will utilize NASA's extensive study of the ONERA M6 wing using. Below, the pressure contours on the surface and symmetry plane of the ONERA M6 wing are plotted using results from NASA's WIND code. These pressure contours can be compared to the ones created by AIM.

Return to the **Results** task in the Workflow, then click on **Results** in the panel.



Select both of the **Pressure** contours created earlier.



When the AIM contours are compared with the results from the NASA study, it is evident that the results are similar. The differences are due to the NASA mesh having a much higher resolution, with more than twice as many nodes and boundary layers as the AIM mesh. Refinement of the AIM mesh can be done to improve the correlation.

References

Gaultier, Sylvain. "L'aile ONERA-M6, Star De La CFD." ONERA - L'aile ONERA-M6, Star De La CFD. ONERA - The French Aerospace Lab, 25 May 2013. Web. 13 June 2017.

Slater, John W. "ONERA M6 Wing: Study #1." NASA. NASA, 30 Aug. 2002. Web. 15 June 2017.

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