Wind Turbine Blade - Numerical Solution

Author: Ben Mullen, Cornell University Problem Specification 1. Pre-Analysis & Start-Up 2. Geometry 3. Mesh 4. Physics Setup 5. Numerical Solution 6. Numerical Results 7. Verification & Validation Exercises Comments

Numerical Solution

A This tutorial is not being updated any more. We recommend that you follow <u>this newer tutorial</u> on fluid-structure analysis of a wind turbine blade. Thank you!

Deformation

To add deformation to the solution, first click **Solution (B5)** to add the solution sub menu to menu bar. Now in the solution sub menu click **Deformation > Total** to add the total deformation to the solution. It should appear in the outline tree.

Equivalent Stress

In the solution sub menu, select Stress > Equivalent (von-Mises). In the details pane, ensure Geometry is set to All Bodies.

Normal Stress

In the solution sub menu, select *Stress > Normal*. In the details pane, ensure *Orientation* is set to *X Axis*, and *Geometry* is set to *All Bodies*. Rename the Stress to **StressXX** by right clicking *Normal Stress* in the *Outline* window and selecting *Rename*.

We are ready to solve the simulation. Press 💈 Solve

Go to Step 6: Numerical Results

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