Modal Analysis of a Satellite - Numerical Solution

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Problem Specification

- 1. Pre-Analysis & Start-Up
- 2. Geometry
- 3. Mesh
- 4. Physics Setup
- 5. Numerical Solution
- 6. Numerical Results
- 7. Verification & Validation

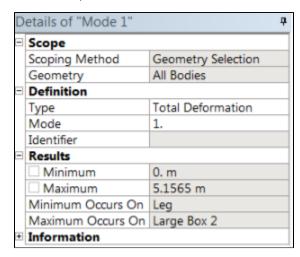
Exercises

Comments

Numerical Solution

In order to obtain modal shapes and their corresponding frequencies, we must insert a total deformation graphic for each mode we asked the solver to find in Analysis Settings. Do this by right clicking **Solution > Insert > Deformation > Total.**

Right click on the newly created **Total Deformation** tab and rename it **Mode 1**. We must assign each total deformation to a specific mode. Do this by selecting **Mode 1** and setting the **Mode** number under **Definition** to 1. Repeat this process for modes 2 through 5. The details window for Mode 1 deformation is pictured below.



Go to Step 6: Numerical Results

Go to all ANSYS Learning Modules