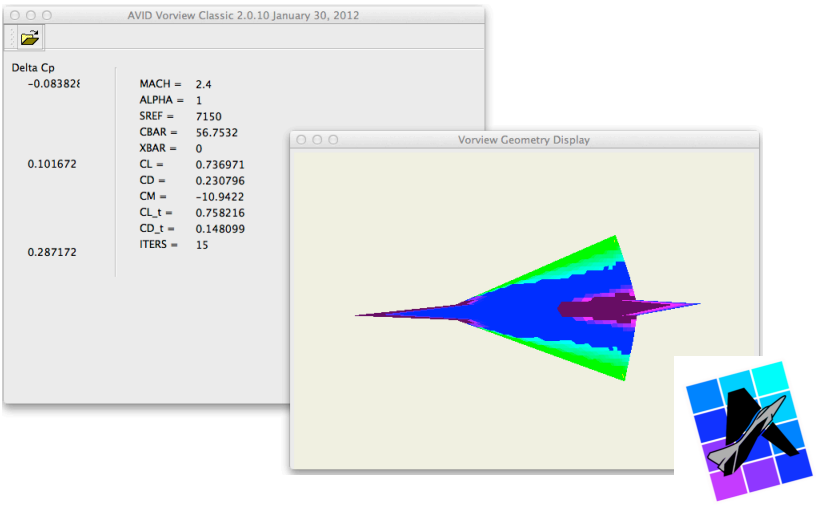

Results from AVID VorView

AVID VorView (Vortex Lattice Method) couples an intuitive graphical user interface with a powerful vortex lattice code, VORLAX. VORLAX is a thoroughly documented and validated potential flow code that is well suited for conceptual design of air vehicles. In addition to making analysis simple, AVID VorView also provides for easy input of geometry and visualization of results.

This software provides a direct link with AVID PAGE, a parametric aircraft geometry modeling tool. Air vehicle geometries may be imported into VorView from any source using standard hermite files. A vortex lattice, including taper, twist, dihedral and camber is created automatically from the input geometry. The user can then vary vortex density, vortex spacing, panel geometries, leading-edge suction and camber line shape with changes visualized instantaneously. After code execution, panel pressures are shown on the lattice for each flight condition, and tabulated force and moment results are printed to the screen. In addition to the aerodynamic outputs VorView also determines the longitudinal stability derivatives.

AVID VorView is capable of analyzing flight conditions from low-speed, incompressible flow to Mach 3.0. It can model any angle-of-attack and sideslip condition and can also model steady-state angular rates about any axis. AVID VorView's ease of use and rapid execution make it an ideal tool for conceptual parametric studies.

Better Geometry – Better Models Great Designs

AVID VorView

Features

- Automatic vortex lattice generation from parametric geometry.
- User control of vortex panel density and spacing.
- User control of leading-edge suction and camber line definition.
- Capable of analyzing a wide range of speeds (Mach 0.0 - 3.0), orientations and angular rates.
- Capable of analyzing round or sharp leading edges, including leading edge vortex configurations.
- Visualization of panel pressure distributions.
- Visual, intuitive user interface.

Benefits

The user is able to analyze the aerodynamic performance of wing geometries quickly over a wide range of flight states.

- Rapid analysis time
- Calculates aero forces and moments
- Handles symmetric and asymmetric geometries
- Calculates longitudinal stability derivatives

System Requirements

Minimum OS requirements:

- Windows 7
- Mac OS X 10.8

Graphics requirements:

- Graphics card that supports OpenGL