عنوان مقاله:

Application of Density Corrected Spalart-Allmaras Model to Flow Past Ogive Cylinder at High Angles of Attack

محل انتشار:

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خلاصه مقاله:

Computation of flow past high speed vehicles requires the use of a reliable turbulence model. Unfortunately, most of the turbulence models are developed for incompressible flows. Application of these models directly to high speed boundary layers with large density gradients can lead to significant errors in prediction of skin friction. Several compressibility corrections have been suggested in literature to predict these turbulent flows at high Mach numbers. In the present work, we have used two such corrections for the Spalart-Allmaras turbulence model and studied their performance at high angles-of-attack. Flow past an ogive cylinder is considered for the study.

کلمات کلیدی:

Allmaras, Spalart, High angle of attack, Turbulence modeling, Compressibility

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