三度空間剪切層大渦旋結構光學性質之數值模擬 蔡永培,謝國台 應用數學學系 工學院 kahsieh@chu. edu. tw

摘要

The basic vortex dynamics in a 3D plane free shear layer are investigated. Three dimensional Euler equations are solved directly using the second-order, explicit, MacCormack predictor-corrector and Godunov methods alternately. Detail description of the numerical algorithm, initial conditions and boundary conditions are given. The physical properties of spatially-developing free shear layer are discussed and the optical effects of coherent structures are identified.

關鍵字: 3D Free Shear Layer, Euler Equation