Inclined Jets in Cross Flow

By

Iftekhar Zaheer Naqavi

Advisors
Dr. E. Savory & Dr. R.J. Martinuzzi

Advanced Fluid Mechanics Research Group
Department of Mechanical and Materials Engineering
The University of Western Ontario

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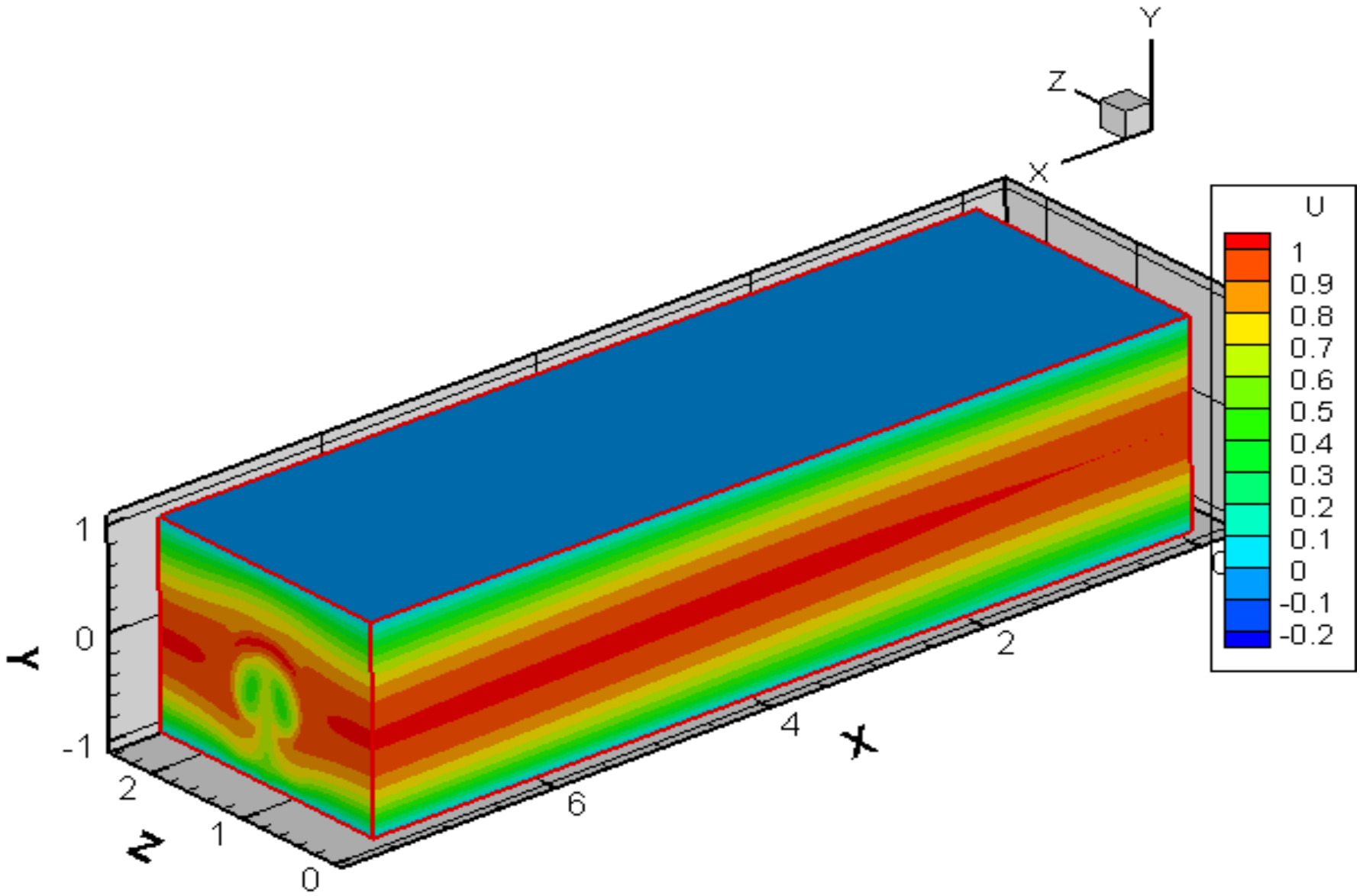
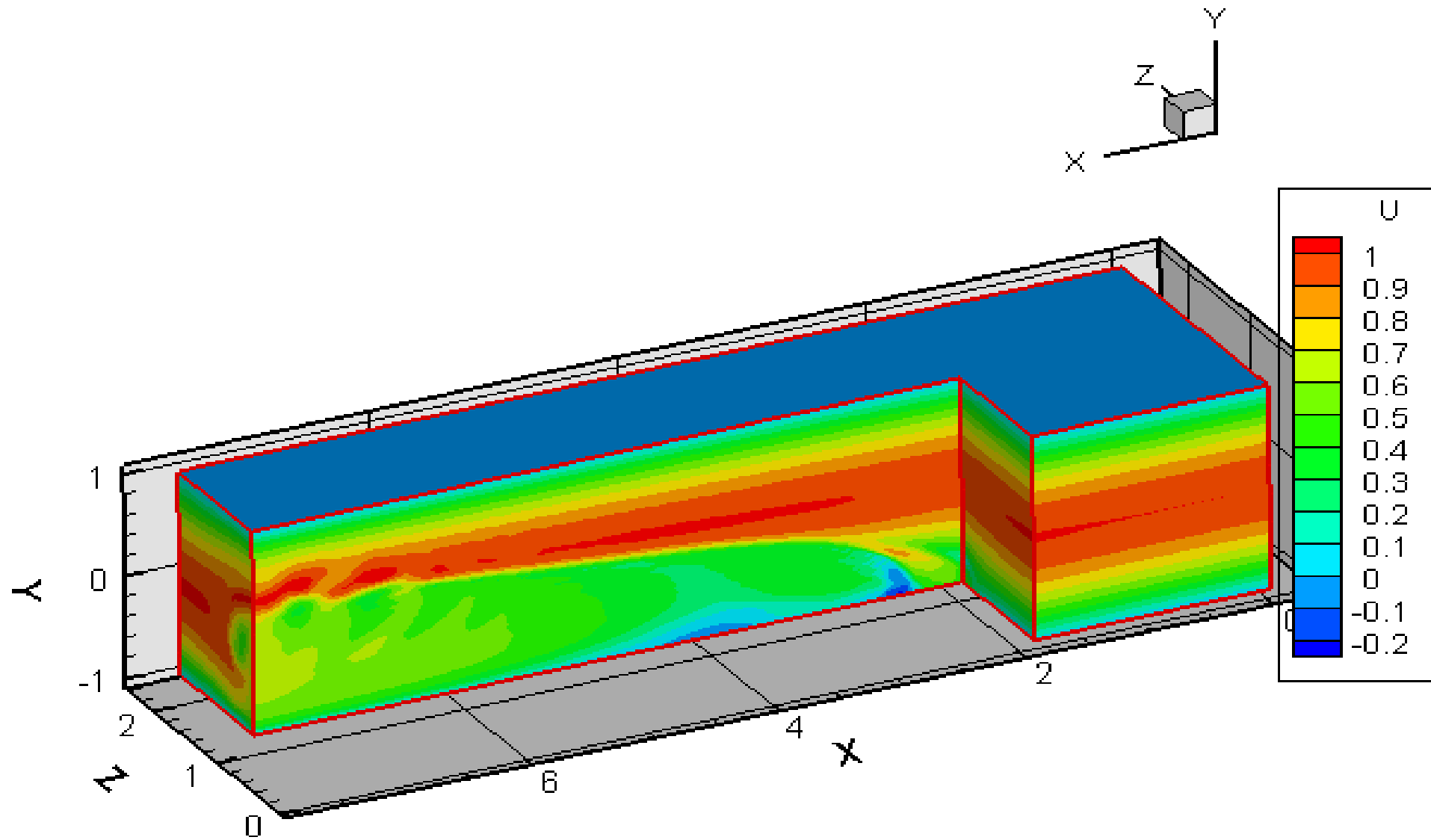
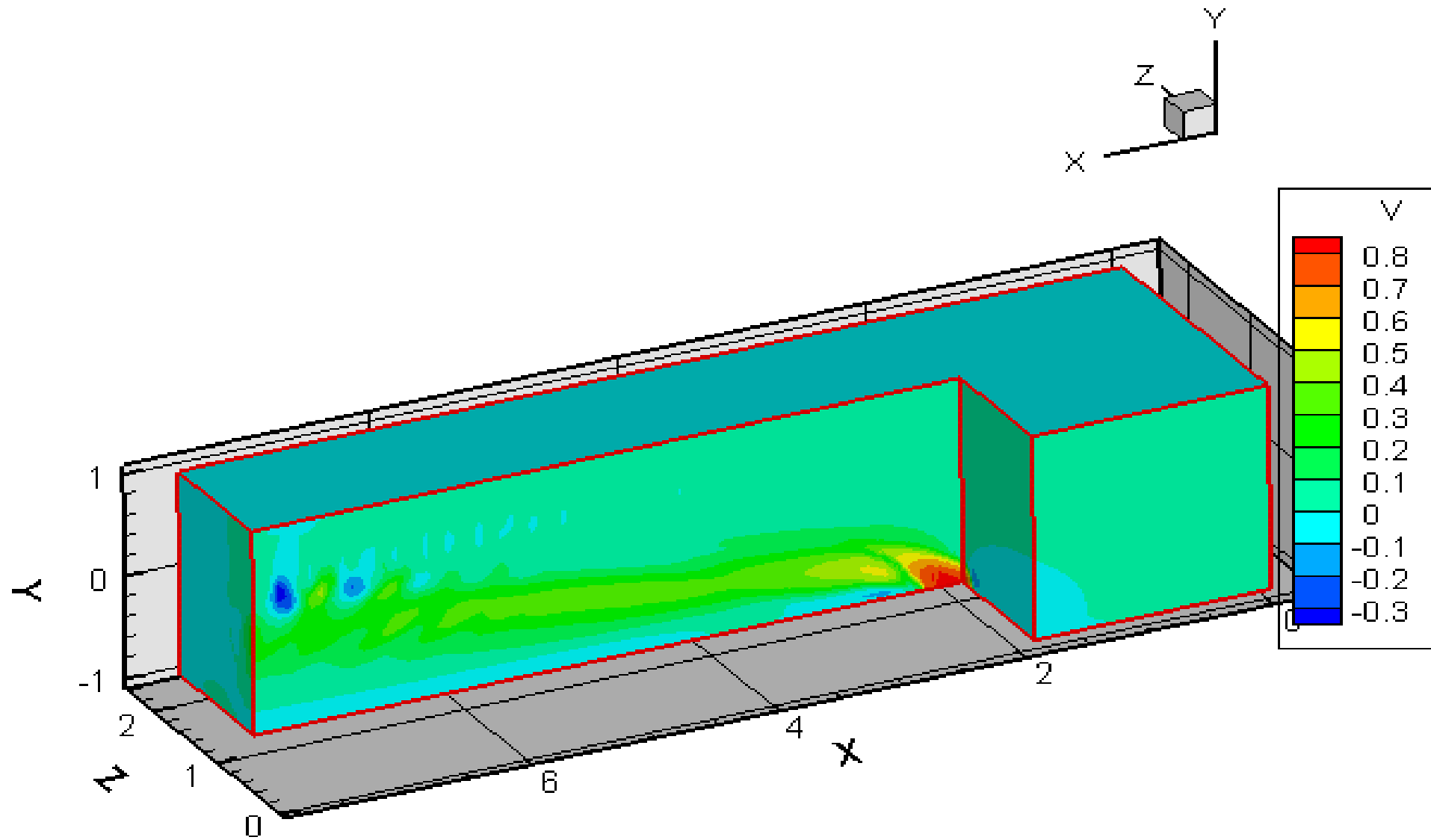
- **A 3D unsteady Navier-Stokes solver is developed.**
- **An inclined jet is introduced with its center at x=2 on the lower wall.**
- **One-seventh law velocity profile is chosen as inlet velocity for jet which is inclined at 60^{o}.**
- **Major flow features like counter rotating vortex pair is obtained.**



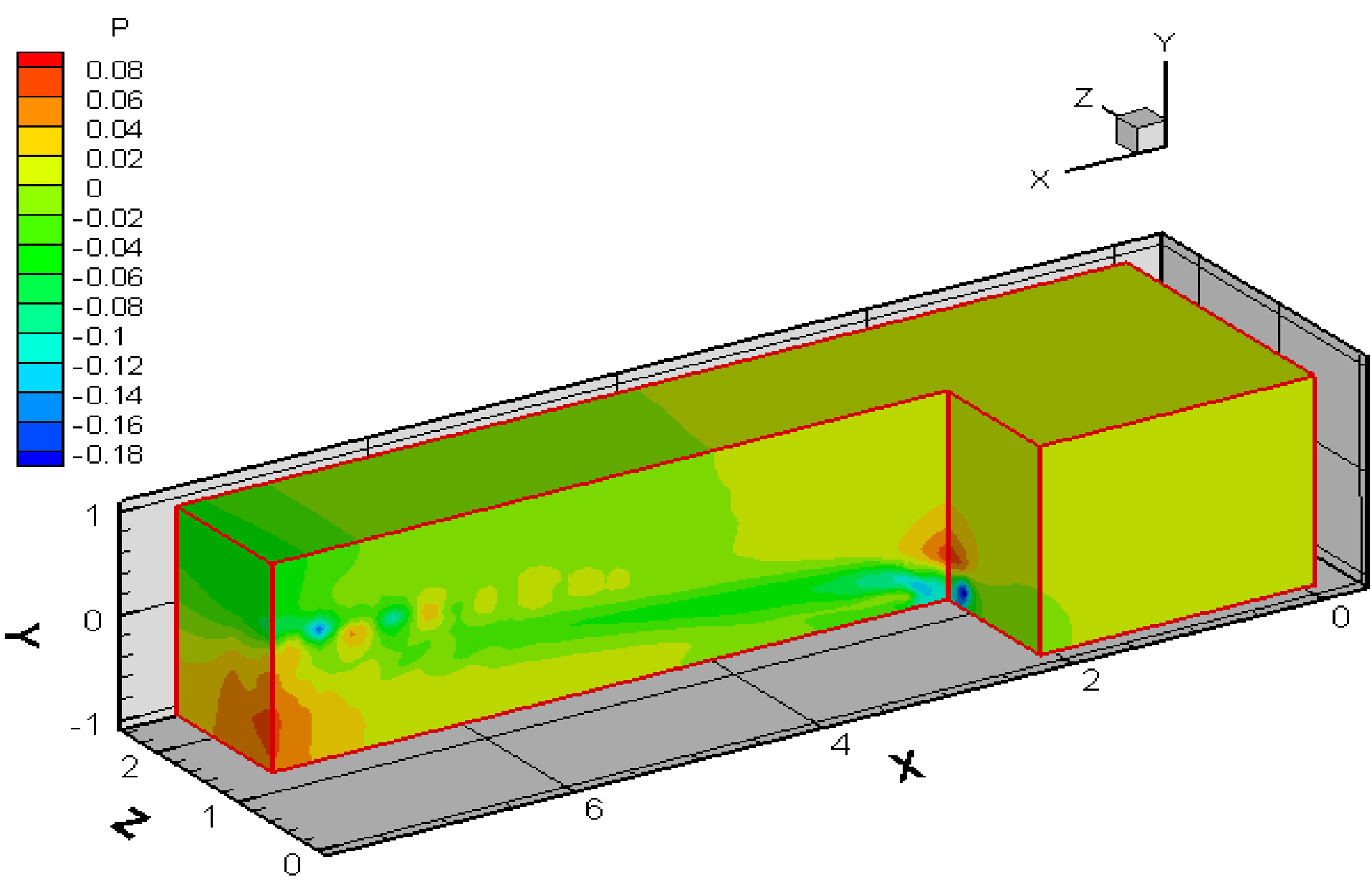
U-velocity 3D contours for jet in cross stream with exit plane.



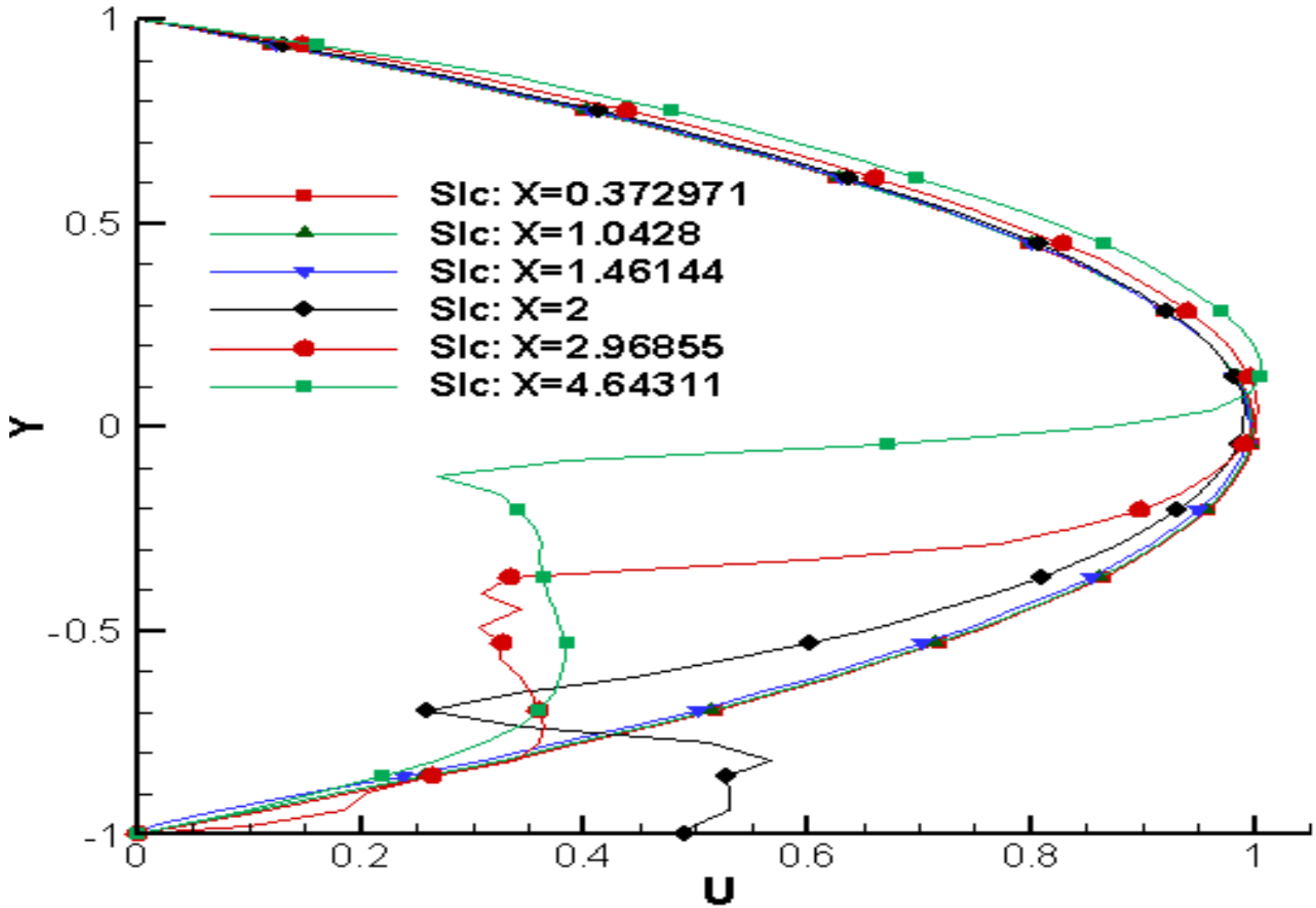
Interior of the domain for 3D U-velocity contour with the jet center at x=2.



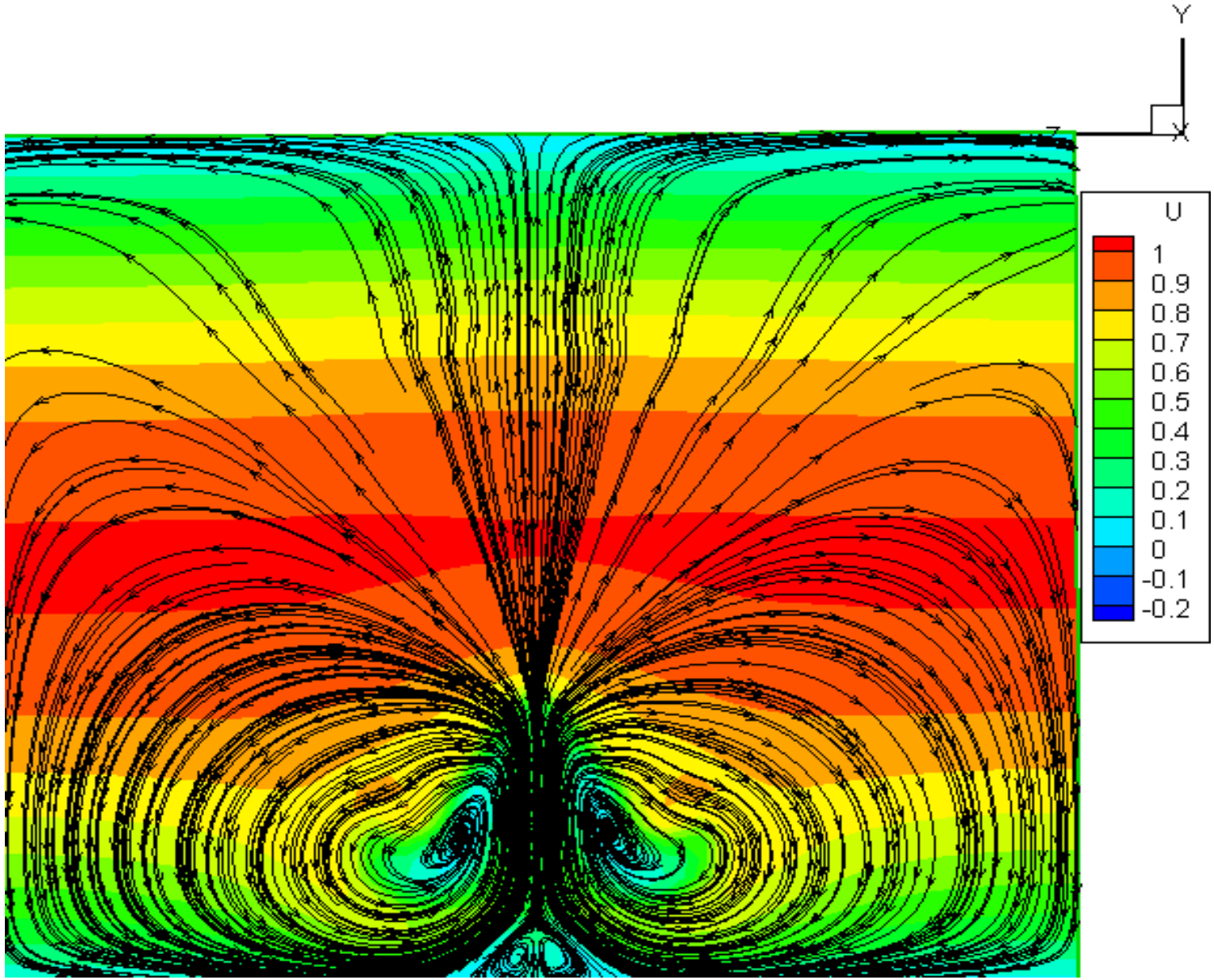
Interior of the domain for 3D V-velocity contour with the jet center at x=2.



Pressure Field.



U-Velocity profile along the channel at different locations, the jet center is at x=2.



Streamlines in y-z plane at x=3, showing counter rotating vortex pair.