Inclined Jets in Cross Flow with Non-Reflecting Boundary Conditions at Exit Plane

By

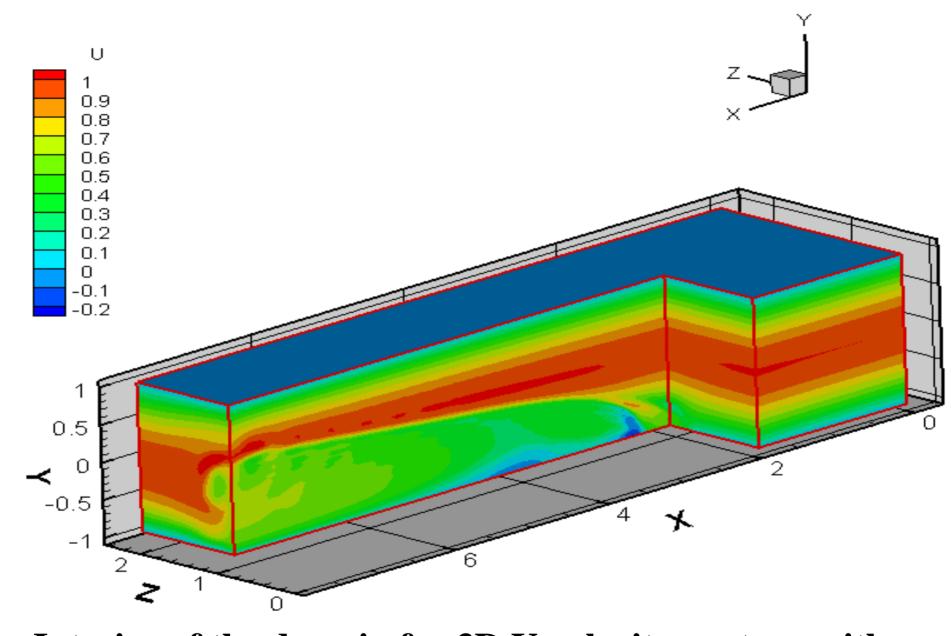
Iftekhar Zaheer Naqavi

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

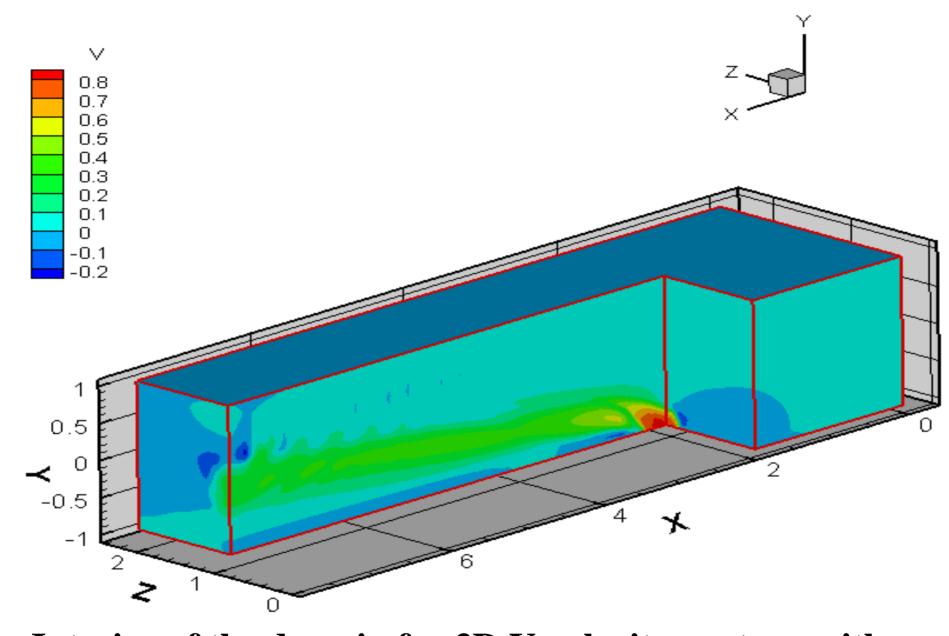
Advanced Fluid Mechanics Research Group
Department of Mechanical and Materials Engineering
The University of Western Ontario
August 2004



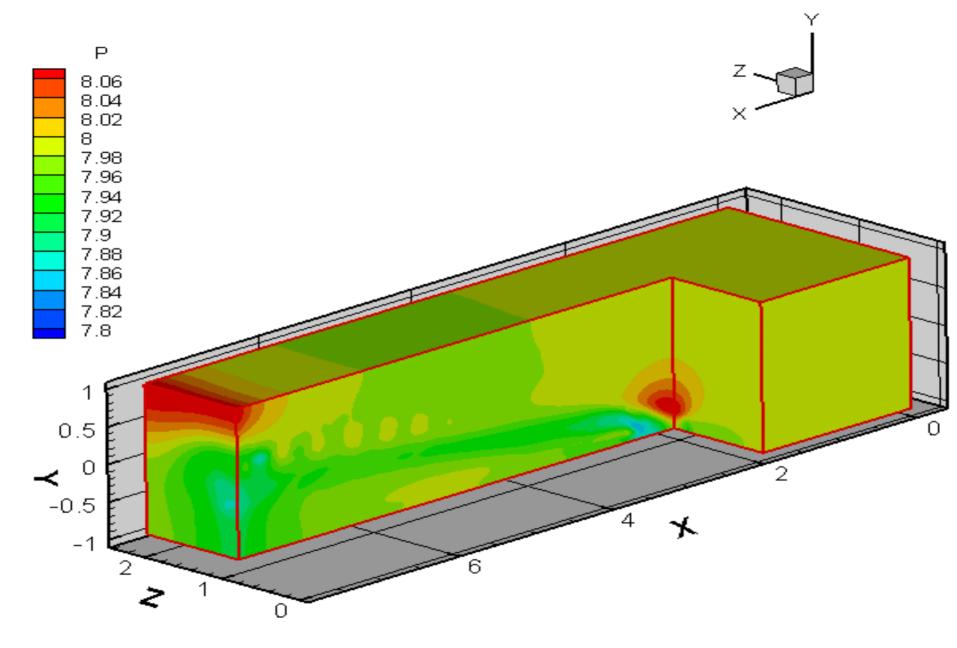
- •Calculations are being performed on a grid of size 64x100x120.
- •Due to large number of grid and very fine grid size requirement domain must be small.
- •At exit plane outflow type boundary conditions are not physically achieved. This results in distorted velocity and pressure field.
- •Here a non-reflecting type boundary condition is used to remedy this problem.



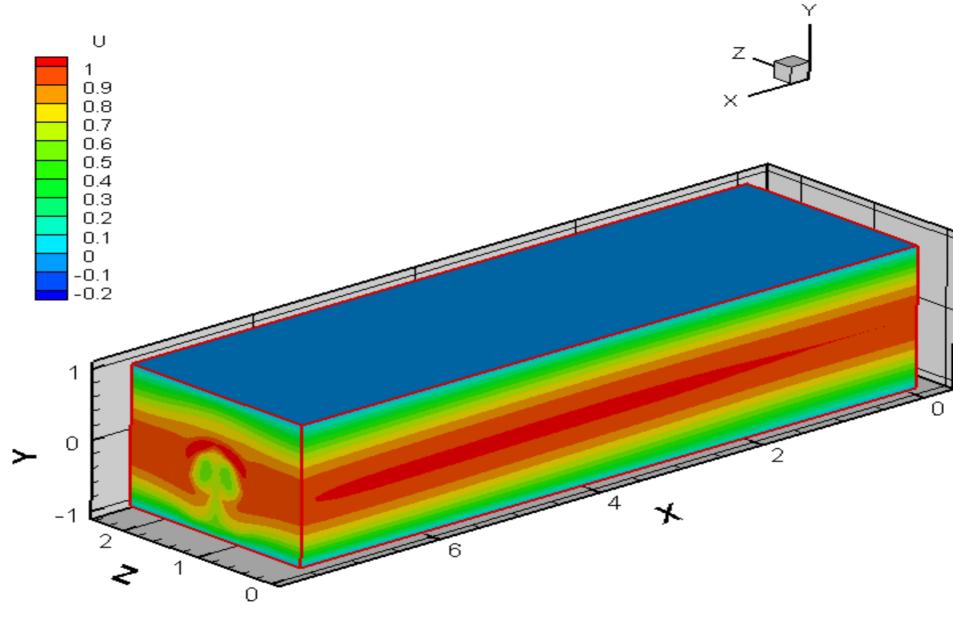
Interior of the domain for 3D U-velocity contour with the jet center at x=2.



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



Pressure Field.



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