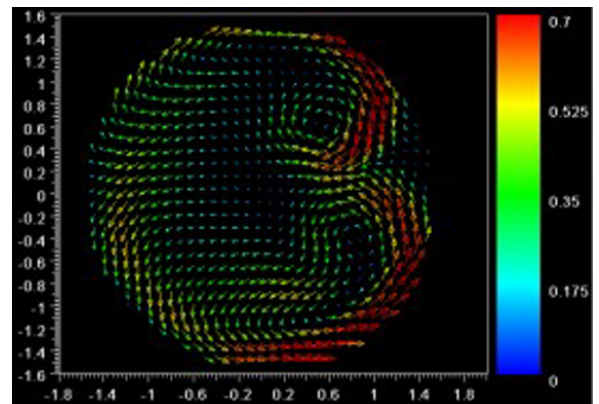


A State-of-the-Art DPIV System

PixelFlow™ is an easy to use, affordable, PC/NT/W2K based DPIV system capable of making accurate quantitative measurements within a full flow field. The system is composed of high quality commercially available components which include a PC, frame grabber, timing card, and a cross-correlation camera.

FEATURES

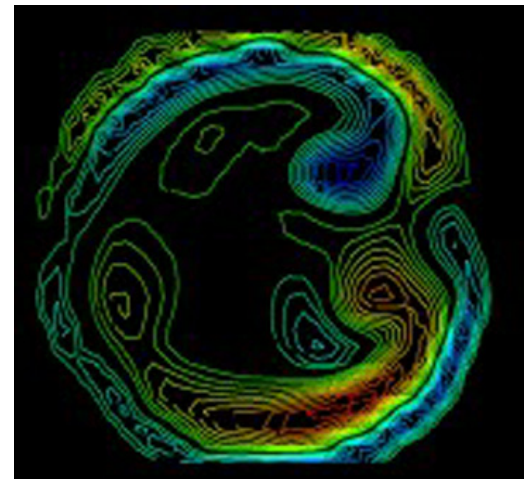
- Optimized FFT cross correlations using MMX technology
- Direct disk data acquisition
- Statistical package: averages, RMS, turbulent kinetic energies, turbulent shear stresses
- Advanced statistics: scalar-scalar and vector-scalar correlations
- Batch processing capability
- Laser induced Fluorescence package: laser sheet variation correction
- Timer/synchronizer: 200 ns minimum pulse separation (50 ns resolution)
- Camera in master or slave mode
- Movie making capability (AVI format)



Velocity field showing the cross section of a pulsatile flow in a aortic arch

APPLICATIONS

- Sub- to supersonic wind tunnel flow
- Hydrodynamic water tunnel/tow tank flow
- Biomedical fluid flow
- Bulk fluid and/or free surface flow
- Environmental fluid flows
- Fluid/structure interactions
- Turbulence analyses
- Mixing analyses with the LIF tools
- Internal combustion mixing analyses



Vorticity field corresponding to the velocity field shown above



LIF snapshot showing dye concentration within a vortex ring