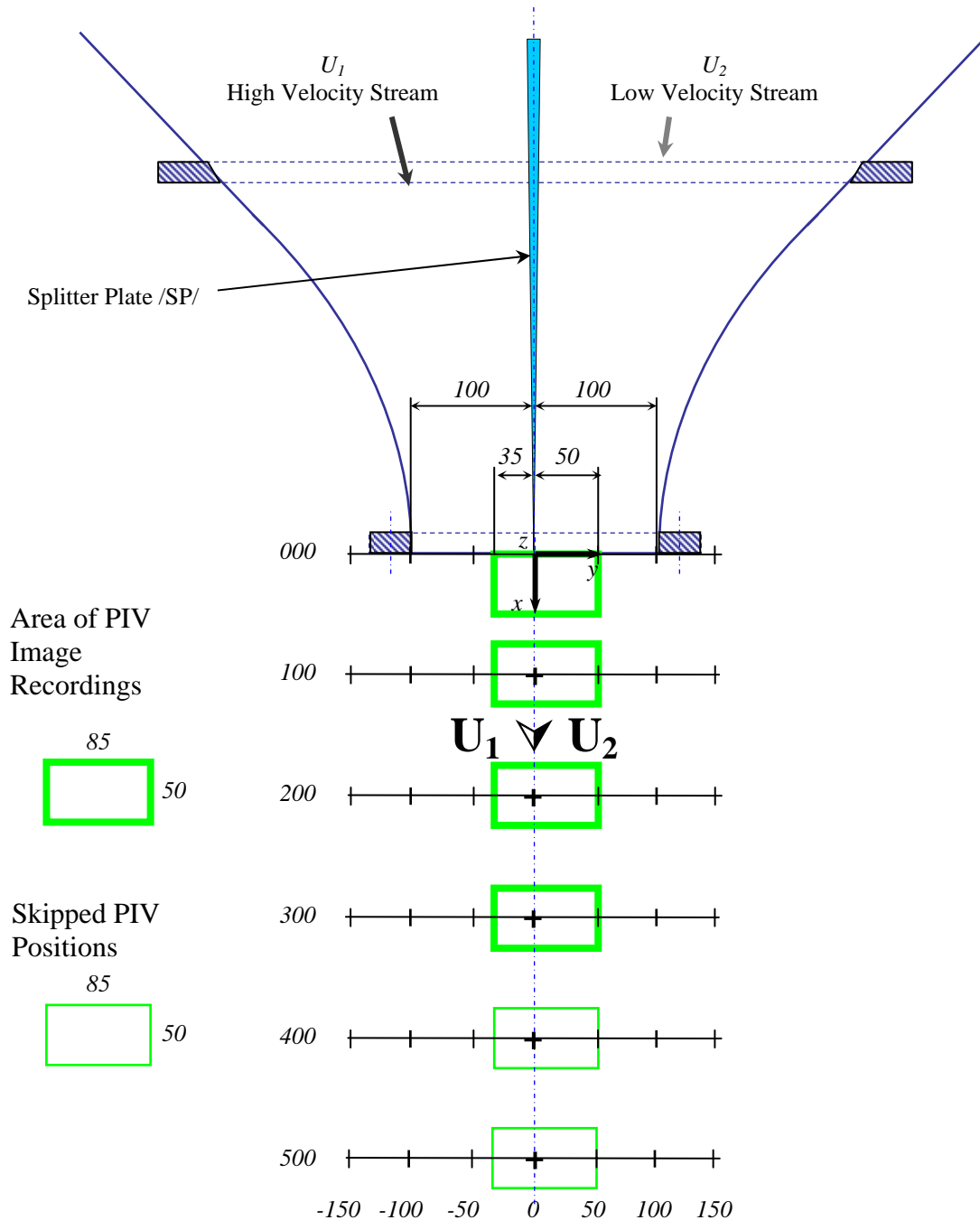


SINGLE PHASE FLOW

Particle Image Velocimetry RESULTS

100 images at 4 positions for 2 velocity ratios ($100 \times 4 \times 2 = 800$)
 Processing: u' , v' , U_{mean} , V_{mean} , RMS, T.I., Ω_z ,
 (159 \times 95) vectors in (1280 \times 768) pixel or \approx (85 \times 50) mm area



Test Section and Measurement Positions
dimensions in [mm]

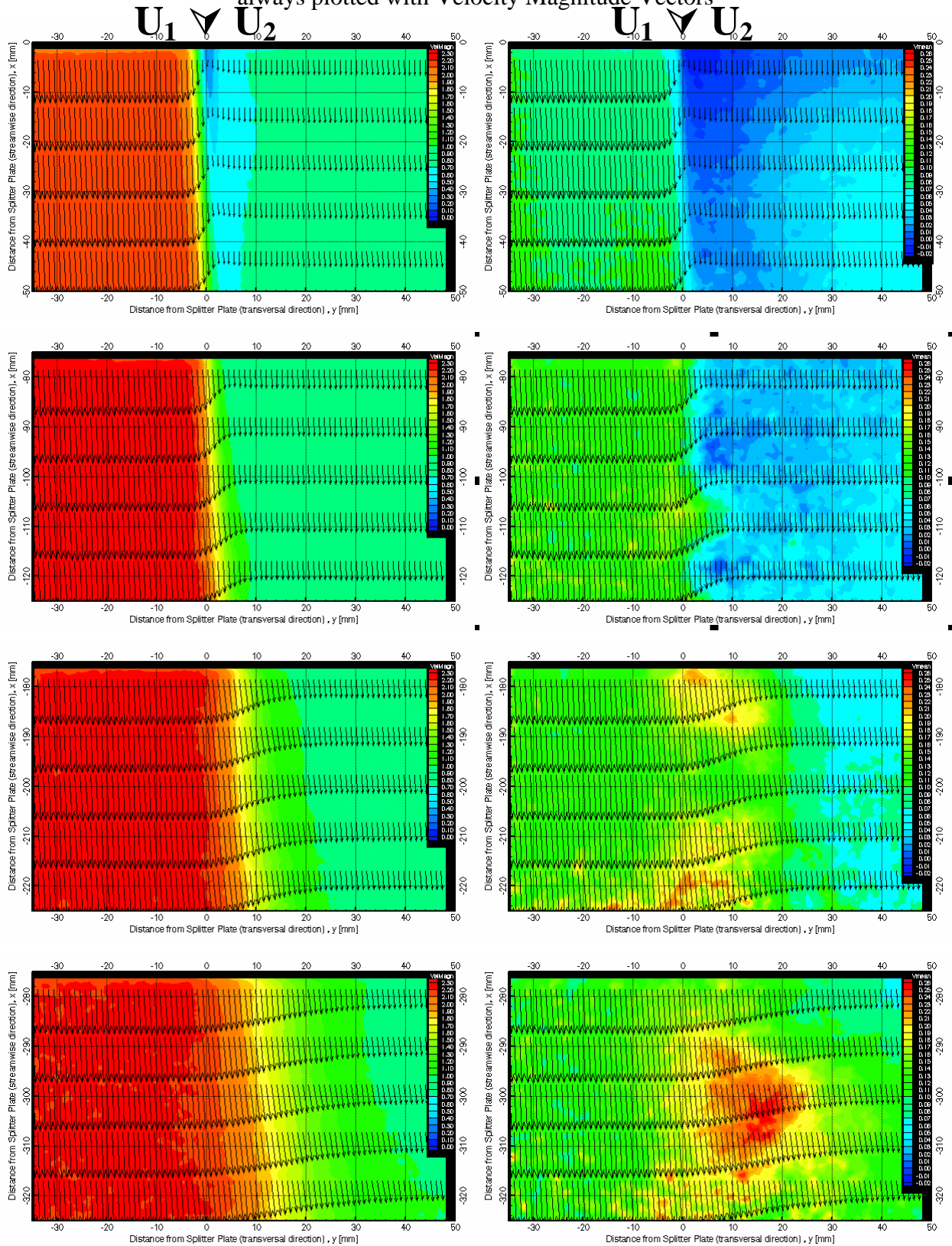
LEFT

Velocity Magnitude
[0, 0.1, ... 2.3] m/s

RIGHT

V_{mean} / y transversal /
[-0.02, -0.01, ... 0.26] m/s

always plotted with Velocity Magnitude Vectors

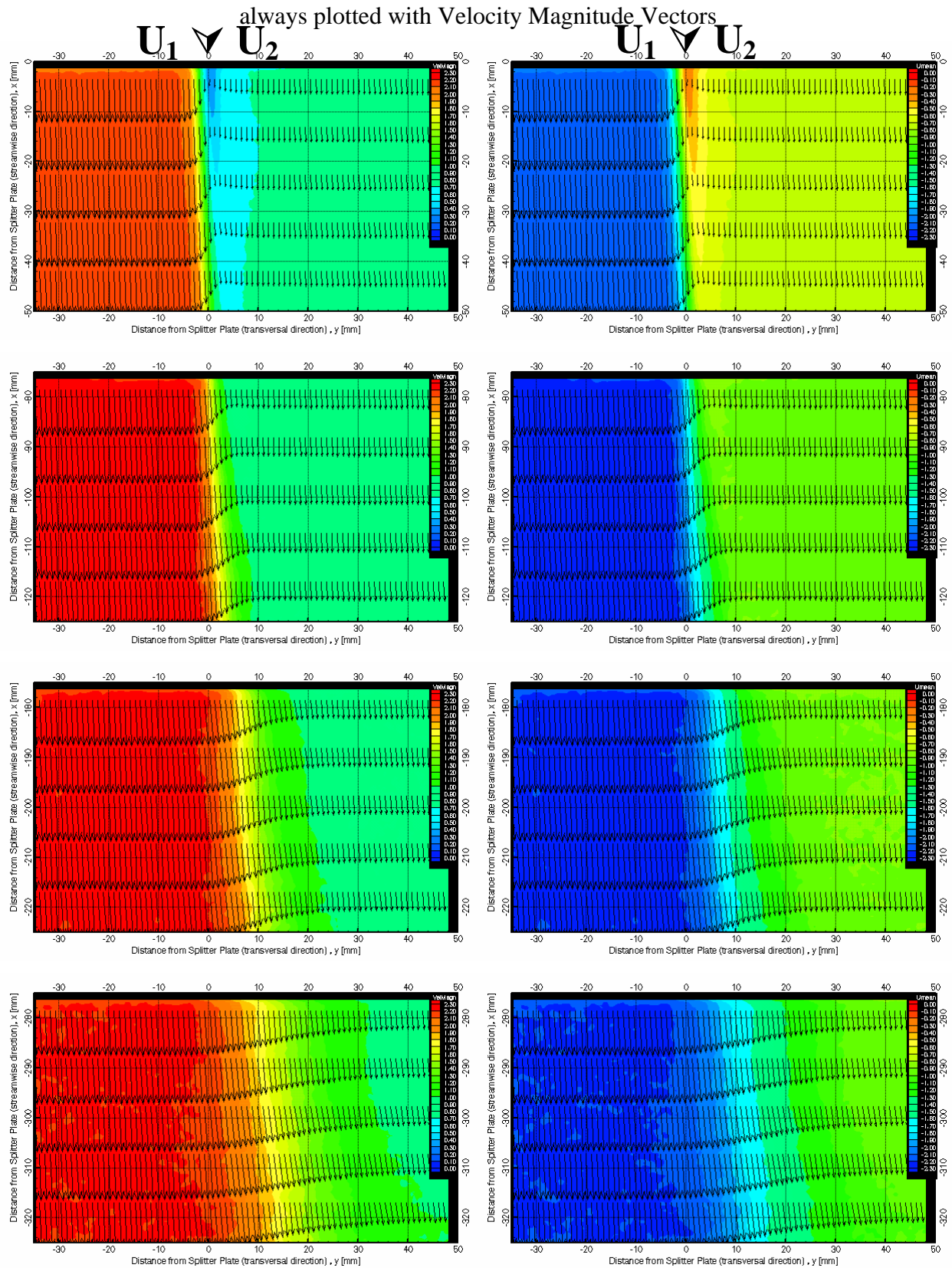


LEFT

Velocity Magnitude
[0, 0.1, ...+2.3] m/s

RIGHT

U_{mean} / x streamwise /
[-2.3, -2.2, ... 0] m/s



LEFT

u' streamwise fluct. comp.

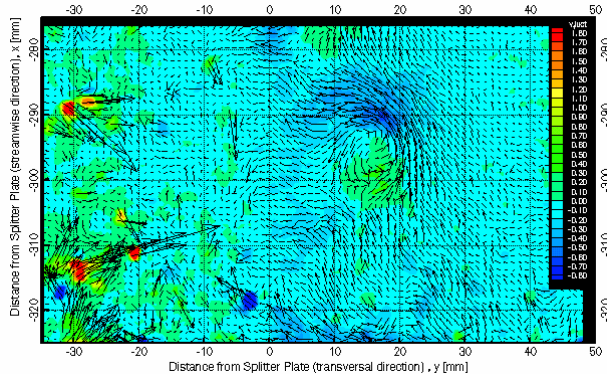
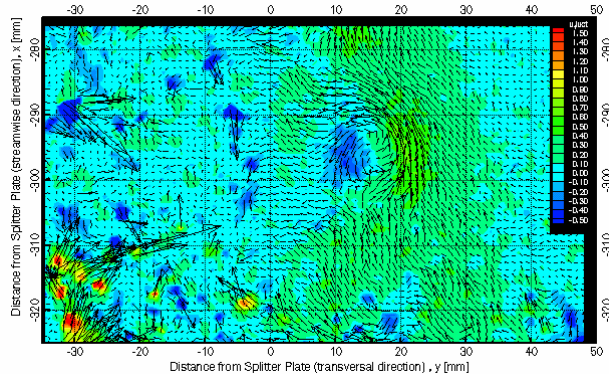
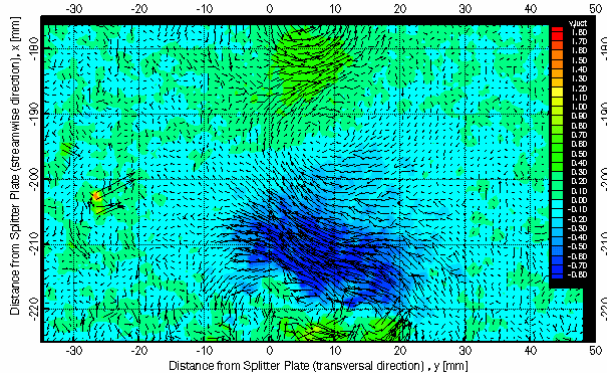
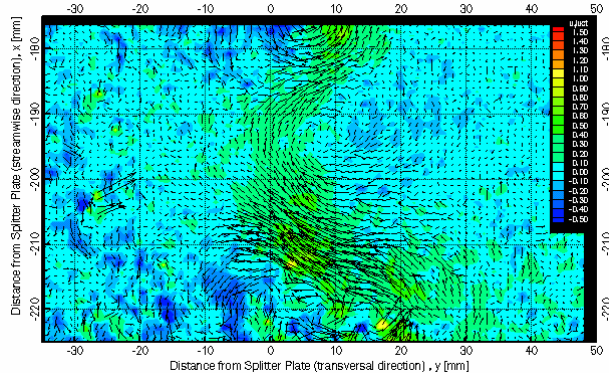
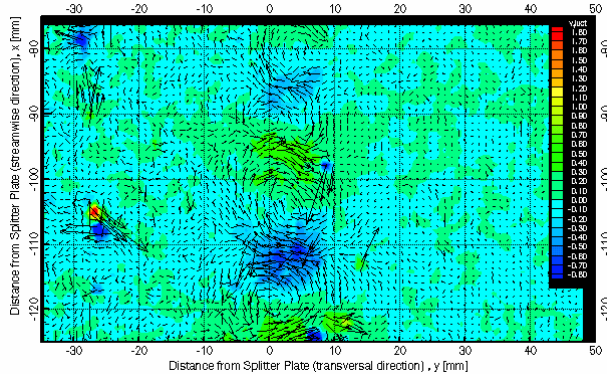
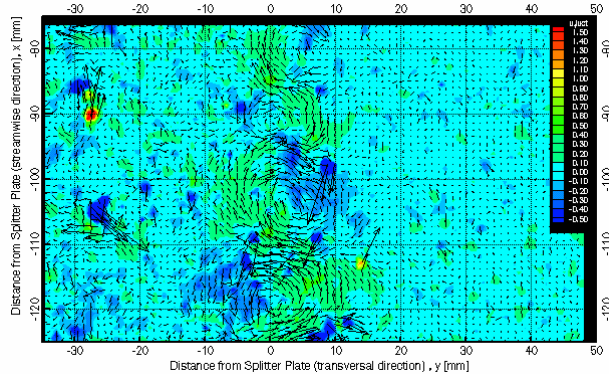
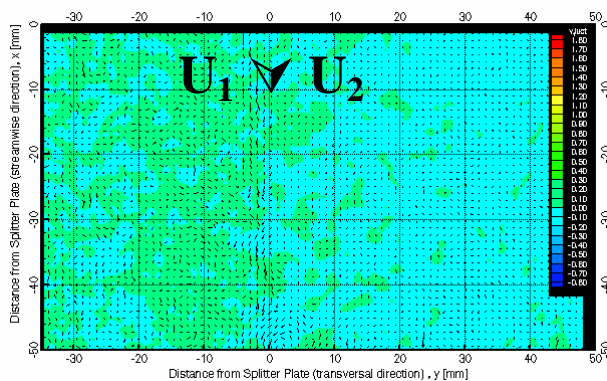
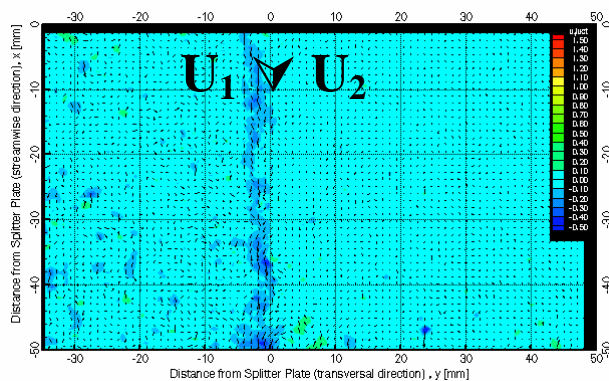
$[-0.5, -0.4, \dots +1.5]$ m/s

RIGHT

v' transversal fluct. comp.

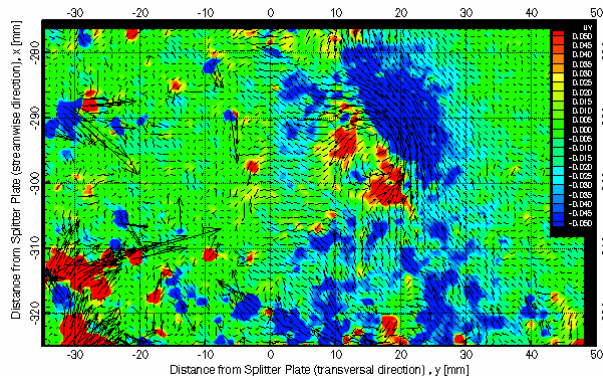
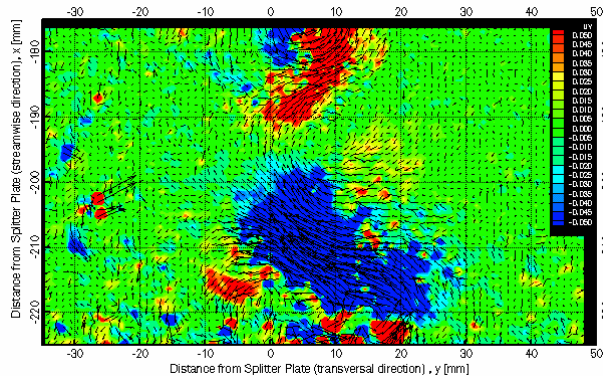
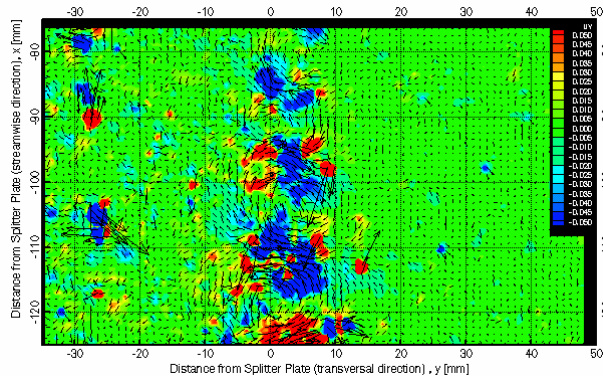
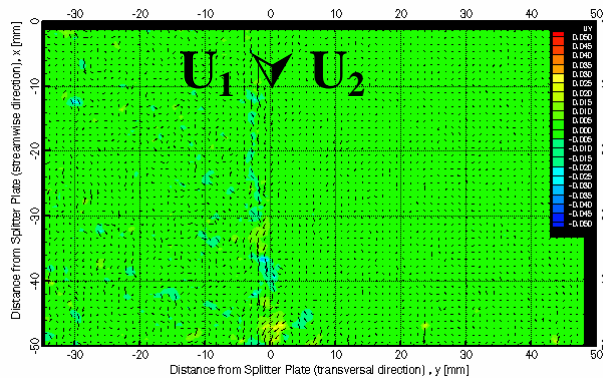
$[-0.8, -0.7, \dots +1.8]$ m/s

plotted with (u', v') fluctuating velocity vectors



LEFT

$u'v'$ fluctuating components
 $[-0.050, -0.045, \dots +0.050] \text{ m}^2/\text{s}^2$
 plotted with (u', v') fluctuating velocity vectors

**RIGHT**

Ω_z vorticity
 $[-25, -22.5 \dots +25] \text{ 1/s}$

