



Leading edge vortices of flow over an inclined delta wing

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A viscous three-dimensional flow over a sharp-edged delta wing (red) is visualized employing data of a Reynolds Averaged Navier-Stokes simulation at Reynolds number of 1.2 million and Mach 0.2 (Data courtesy: Markus Rütten). The flow direction is from right to left. The figure illustrates the formation of the leading-edge vortices at the delta wing. Our focus is the effective visualization of these vortices by illuminated stream lines (gray). A new method (Eichelbaum et al., 2012, TVCG) enables the rendering of ambient occlusion. With this technique, the three-dimensional perception of the lines is improved.