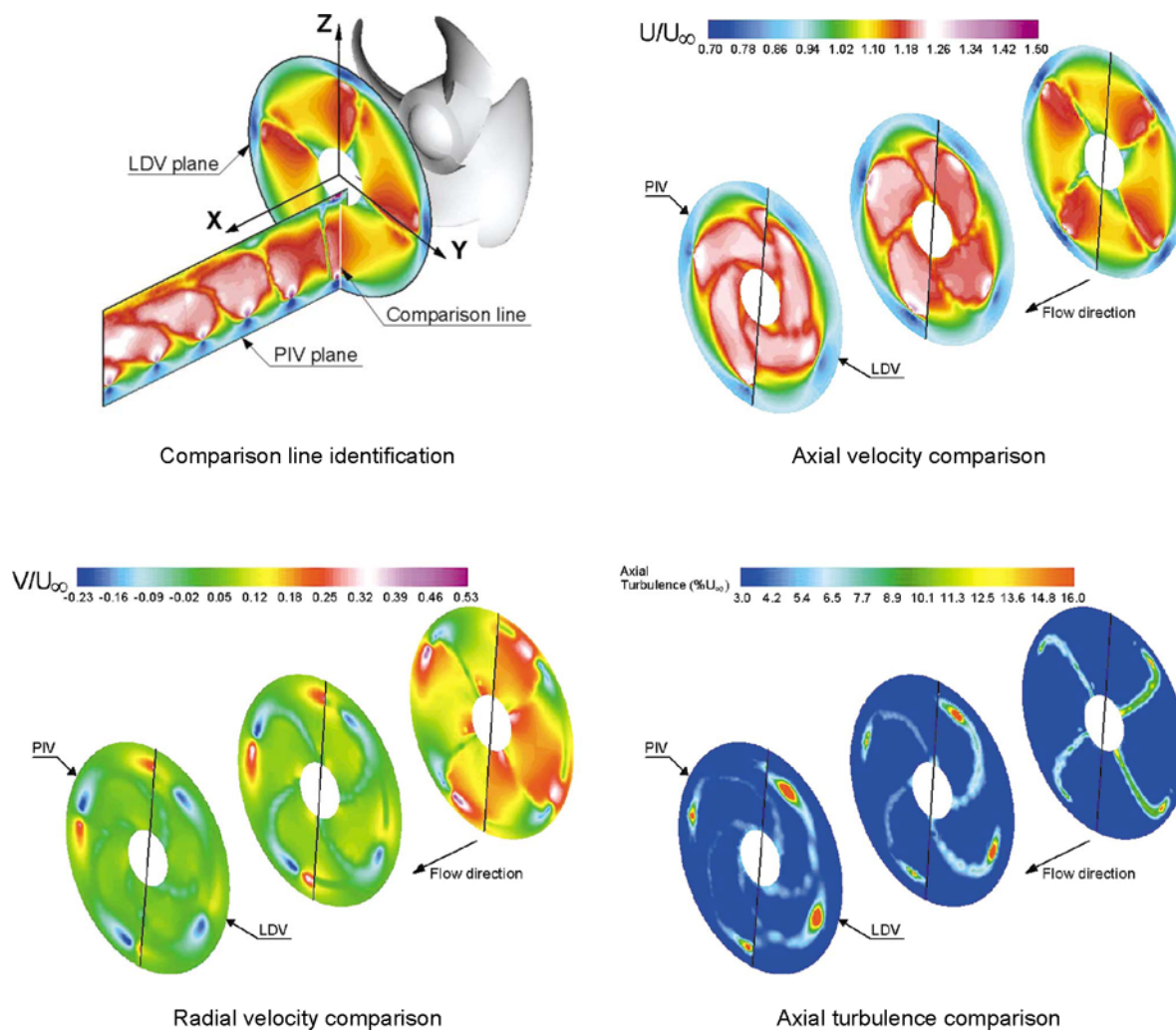


Comparison between PIV and LDV Techniques in the Analysis of a Propeller Wake

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Figures show the results of a propeller wake analysis by means of PIV and LDV techniques. Tests were performed at the propeller angular speed of 25 rps with the tunnel water velocity of 5 m/s, corresponding to an advance ratio $J = 0.88$ and a blade Reynolds $Re_{0.7R} = 1.2 \times 10^6$. Because of the availability of PIV and LDV measurement respectively along a longitudinal and a transversal plane of the wake, comparison was carried out just along the intersection line, in three sections of the downstream wake. Comparison points out a substantial agreement with a maximum error just along the blade and tip vortex traces.