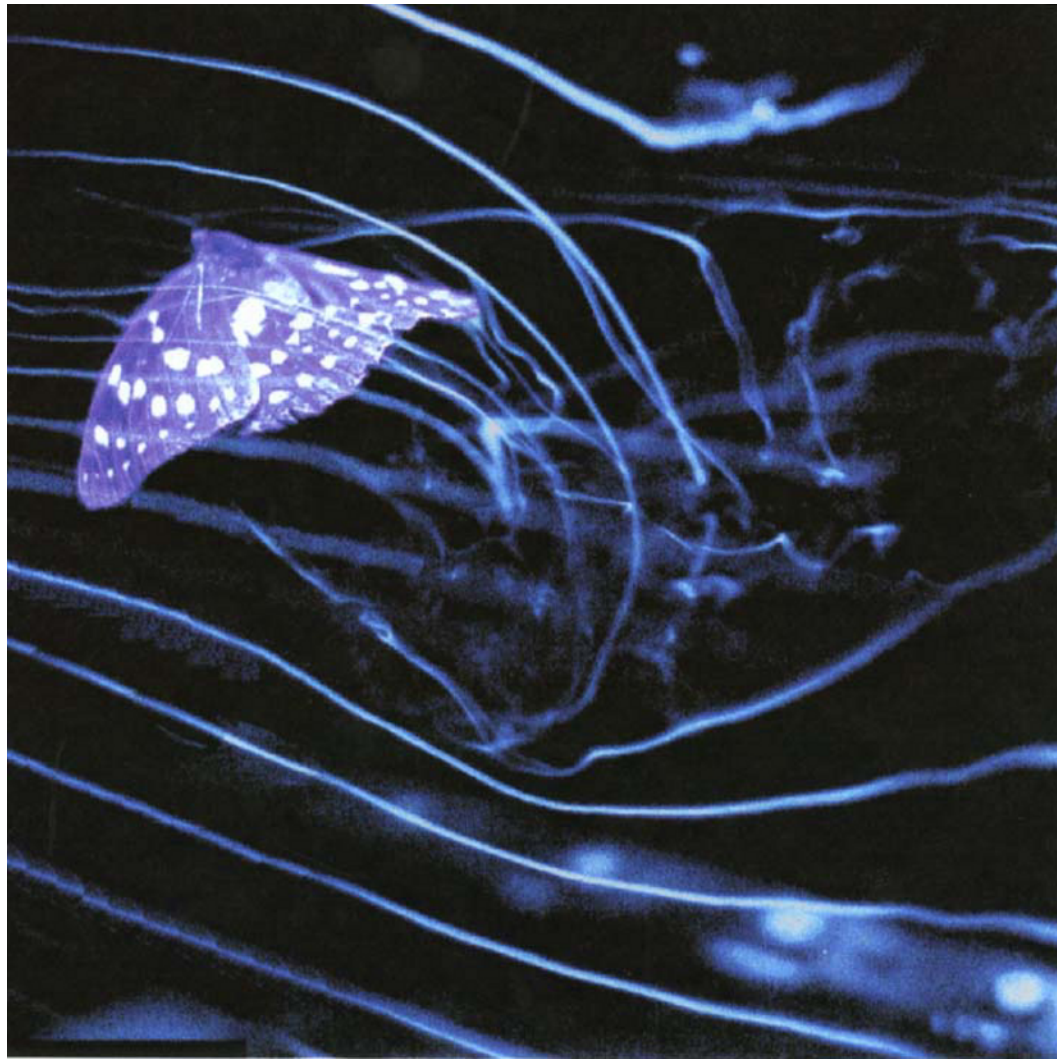


## Flow Visualization of Streak Lines around a Butterfly, *Sasakia charonda*

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Streak lines around a butterfly

This figure shows a set of streak lines around a butterfly, *Sasakia charonda* at an instant during the downstroke of the wing in a wind tunnel set up at the University of Shizuoka for Culture and Art. The butterfly was supported on a sting placed in the test section of the wind tunnel. The picture was printed from one of the frames captured by a high-speed video camera (Phantom V5.0) placed at the side of the test section. The streak lines were visualized by ejecting small drops of oil, Fog Juice, from two rows of nozzles arranged in a cross shape. The wind speed was 0.8 m/s and the wing beating frequency of the butterfly was 7.0 Hz. Shed vortices from the mid span of the wing and trailing vortices from the opposite wing tips are clearly visible. A strong downwash is generated in the wake by these vortices.