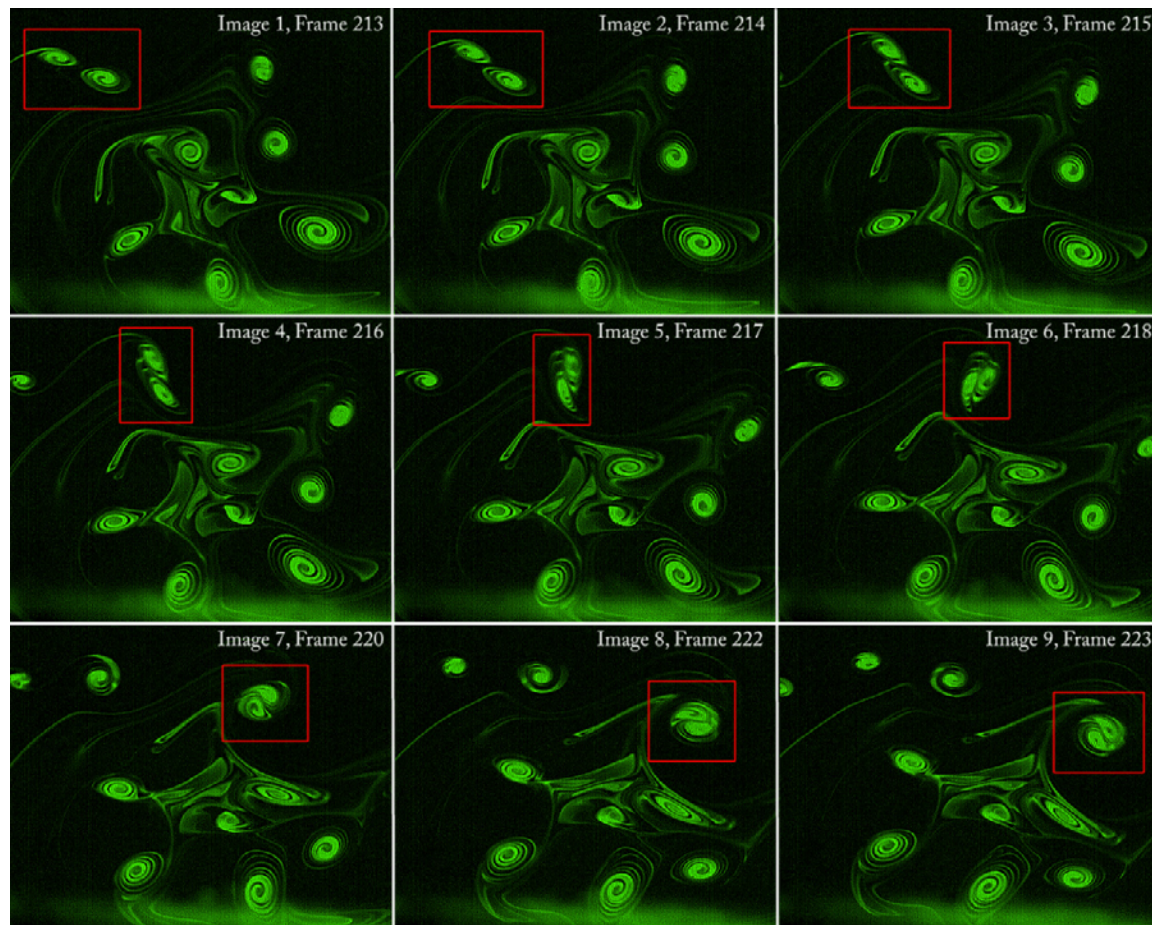## Vortex Pairing

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The progression of images represents transient airflow over a 5.08 cm (2.00 in) high fence. The flow images were acquired within a two-dimensional aircraft nacelle simulator. This simulator is 0.23 m high and 1.83 m wide (0.75 ft and 6.00 ft respectively). The main flow direction is left to right. Each image is labeled with the number of frames from the flow startup and with a number designating the order. The images progress from one to nine. Smoke was generated using incense sticks placed at the upstream corner of the fence. A 1000 W tungsten light and a high-speed digital camera were used to illuminate and acquire the smoke images at 240 frames per second (4.17 ms between frames).

Shear layer vortices can be seen forming and rolling up in the recirculation region behind the fence. The fence is located 2.54 cm (1.00 in) to the left of each image. This image sequence highlights within the red box the motion of two vortices undergoing a pairing interaction.