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Experimental measurements on a single sweeping jet¹ DAMIAN HIRSCH, EMILIO GRAFF, MORTEZA GHARIB, California Institute of Technology — "Sweeping jets" proved their effectiveness as Active Flow Control (AFC) actuators in improving the performance of vertical tails of generic and full-scale models. To gain further knowledge about the fundamental flow physics, the jets were investigated experimentally. The influence of a single jet on its surroundings was studied, especially the entrainment region. The results were compared to previous experiments to study the difference between a single isolated jet and multiple jets mounted on a vertical tail.

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