

Abstract Submitted
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Digital Aerodynamics FLAVIO NOCA, HEPIA / HES-SO University of Applied Sciences, GUILLAUME CATRY, WindShape — Conventional wind tunnels have a limited number of fans. They are generally programmed to all turn at the same speed, thus generating a uniform and permanent flow. We have developed a technology to shape the morphology of wind in space and time. It is based on a large number of fans (wind pixels), which are distributed arbitrarily in space and can be modulated individually in time. We will provide preliminary experimental measurements on the correlation between a given fan-speed distribution and the resulting flow pattern in the test section using PIV and multihole pressure probes.

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