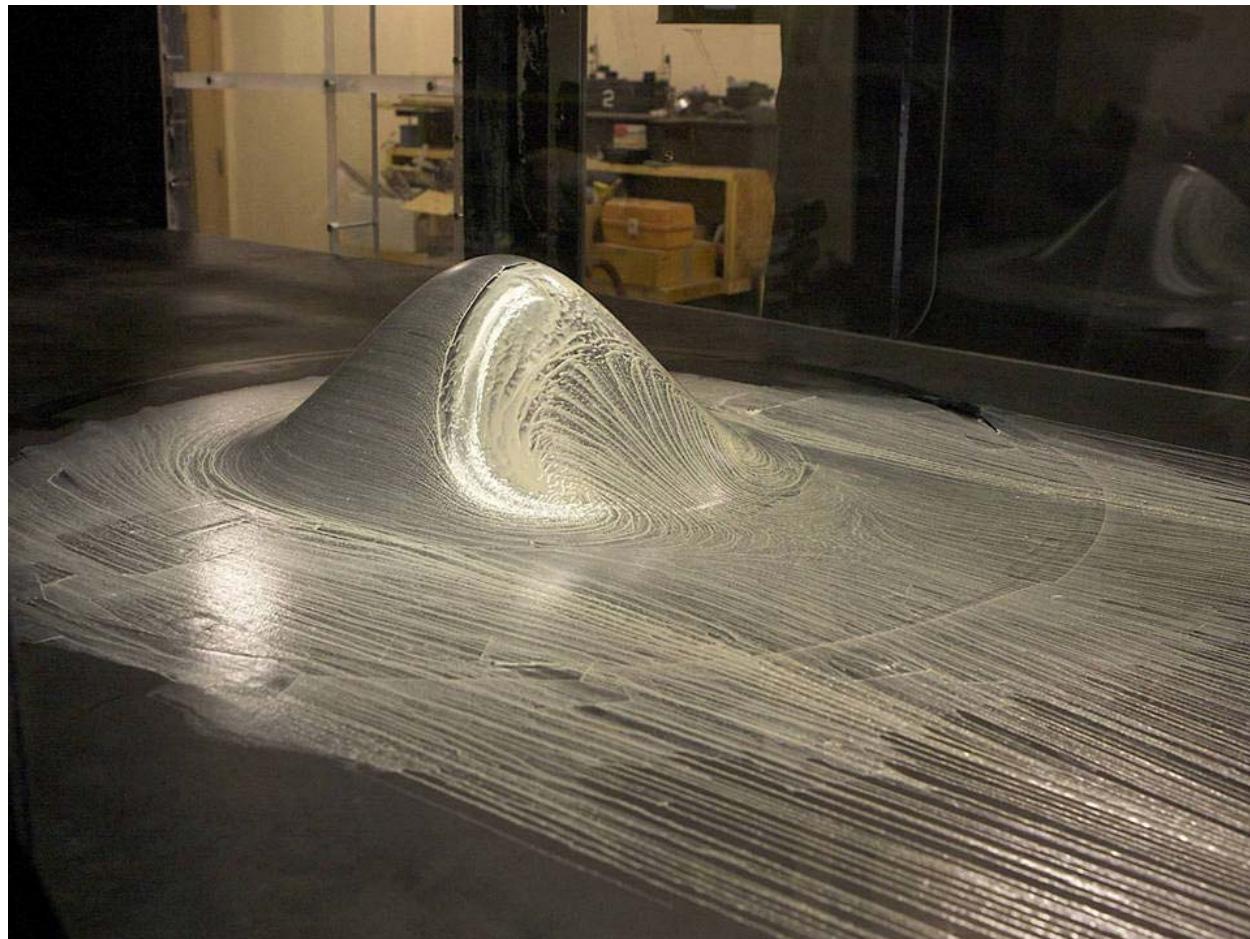


High-resolution LES of the airflow FAITH hill

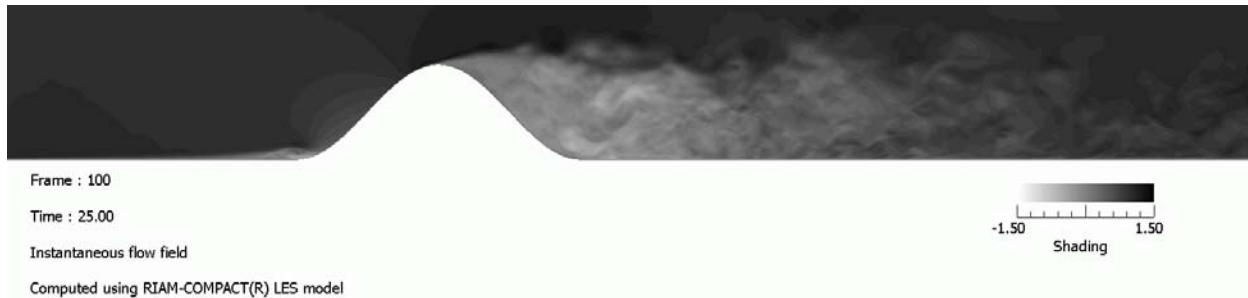


A series of experimental tests gathering various types of data is being conducted to better understand how air flows on and around the surface of an axisymmetric hill named "**FAITH**" (**F**undamental **A**eronautics **I**nvestigates **T**he **H**ill). In this image, the model is covered with an oil that shows flow patterns over the surface. The data sets will be used to develop and validate Computational Fluid Dynamics (CFD) methods. This work is being conducted by the Experimental Aero-Physics Branch at NASA's Ames Research Center, Moffett Field, Calif., and it is supported by the NASA Fundamental Aeronautics Program.

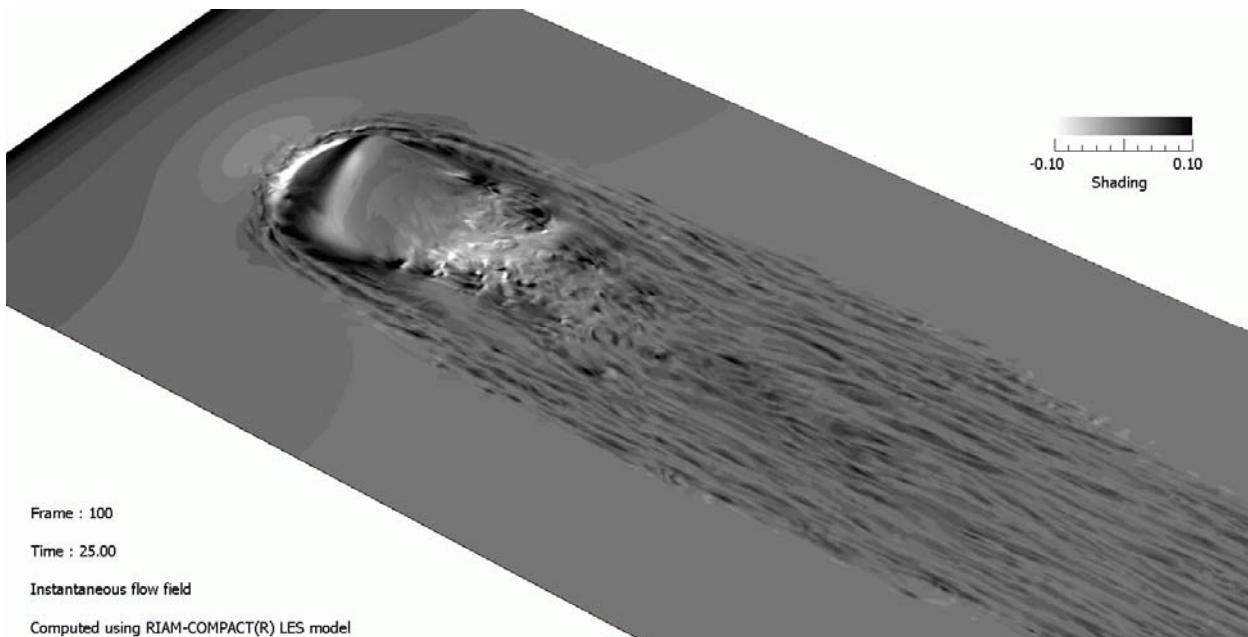
http://www.nasa.gov/centers/ames/multimedia/images/2012/iotw/FAITH_hill.html

<http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20120006656.pdf>

- 計算格子数: 1,001(x) × 501(y) × 301(z) (約1億5千万点)



スパン中央断面を通る主流方向(x)の流速分布図, $Re=10,000$



地面近傍における主流方向(x)の流速分布図, $Re=10,000$

問い合わせ先

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