

The RAE 2822 test case is at $M=0.734$, angle of incidence 2.79° , $Re\ 6.5 \times 10^6$
(full turbulent flow)

Uncertain parameters:

angle of incidence: standard deviation 0.1° ;
thickness-to-chord ratio: standard deviation 0.005 ;
Mach number: standard deviation 0.005

Contributors are expected to deal both with the case where these uncertainties have a uniform distribution and the case where they have a normal distribution.

Required outputs:

- Probability density functions, mean and standard deviation for:
pressure part of drag, lift and pitch moment coefficients (C_{Dp} , C_{Lp} and C_{mp})
- evaluation of relative importance of the uncertain parameters
- description of method used to obtain outputs
- cost of obtaining the outputs, as a multiple of the time taken for one deterministic flow solution

Analysis should use a RANS solver.

Moment reference centre (see geometry 'rae2822.ords'): $(x, z)=(0.25, 0)$.