

Flow Control

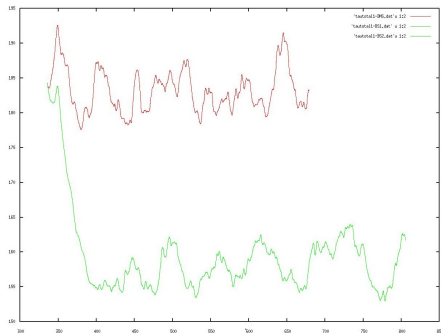
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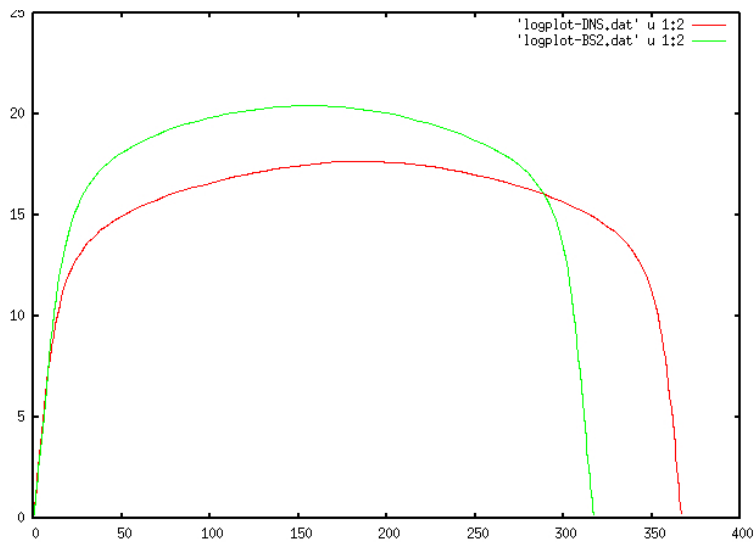
schemes at the wall

- Wall pressure has very little correlation with the v fluctuation at y^+10
- Very little improvement in correlation with the v fluctuation and downstream pressure
- streamwise velocity derivative $\frac{\partial u'}{\partial y}|_w$ slightly better with high-amplitude positive values likely to be associated with sweeps
- v control experiment based on $g_w = \left(\frac{\partial}{\partial z}\right) \frac{\partial w}{\partial y}|_w$ gave a 6% reduction

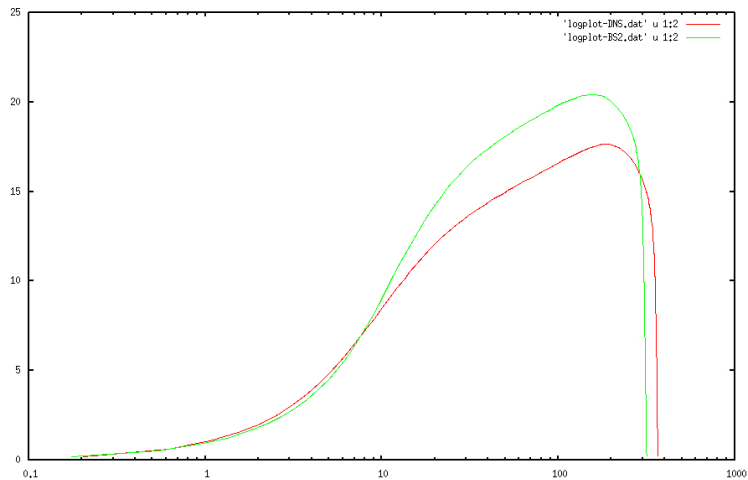


- no control - $Re_T = 183.2$, $C_f = 8.56 \times 10^{-3}$
- control - $Re_T = 158.4$, $C_f = 6.4 \times 10^{-3}$

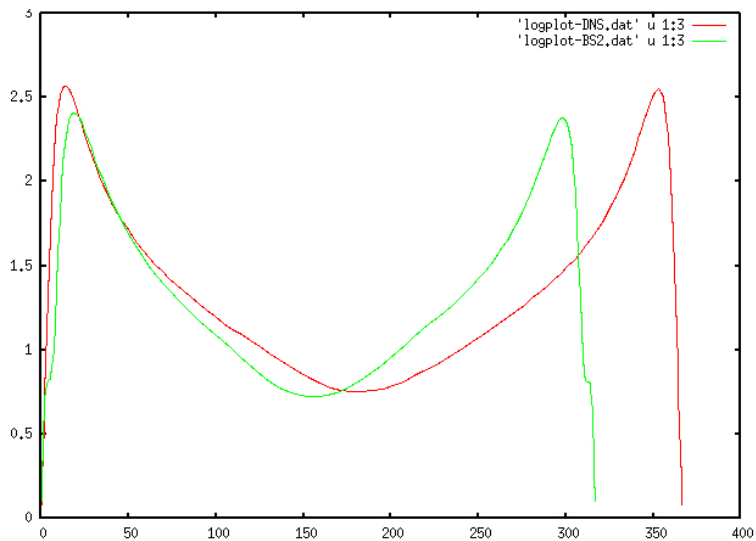
u^+ against y^+



u^+ against $\log y^+$



u' against y^+



u against y^+

