IMPERIAL

Comparison between n-factor computations

Víctor Ballester
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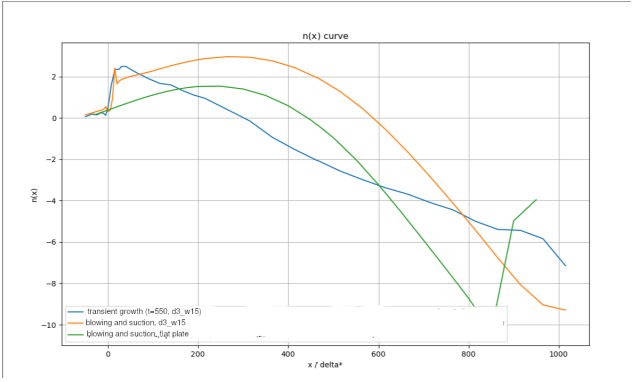
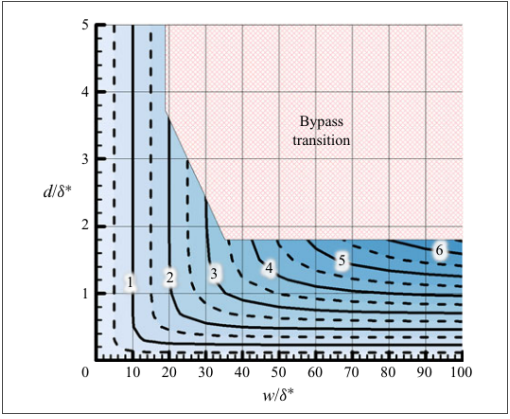
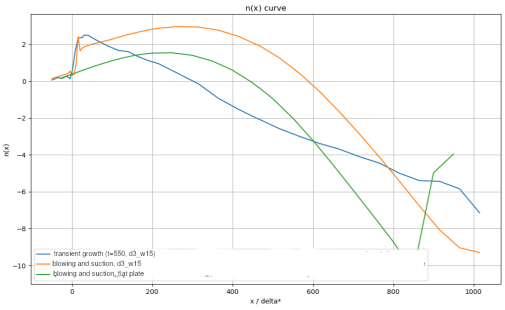


Comparison of the n factor with different methods



As we can see the ΔN factor that Jeff defined (as the difference between the n-factor with the gap and the n-factor without the gap) is more or less of the same order of magnitude as the experimental data.



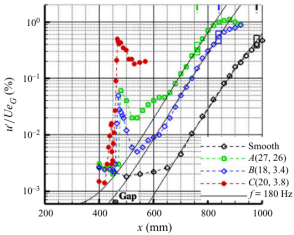


Figure 6. *Streamwise variation of the disturbance amplitude for four different conditions with x_G = 450 mm: smooth plate at U18, f = 178 Hz; case A($w/\delta^* = 27$, $d/\delta^* = 2.60$) at U18, f = 175 Hz; case B($w/\delta^* = 18$, $d/\delta^* = 3.45$) at U18, f = 183 Hz; case C($w/\delta^* = 20$, $d/\delta^* = 3.83$) at U22, f = 830 Hz. Symbols are measurements and thin lines are linear theory for U18. Rectangles show the measured transition locations.*

We also observe the small peak that we get in the n-factor with blowing and suction in the experimental data.

Neutral curve blasius profile

- I tried Blowing and Suction at $\omega = 0.09$.