Dimensional Stability Derivatives w.r.t θ_f at $V_{\text{trim}} = 5.14$ [m/s]

$X_{u_{\theta_f}} = -9.777\text{E}{+}00$

$X_{w_{\theta_f}} = 3.587\text{E}{-}03$

$X_{q_{\theta_f}} = 1.963\text{E}{-}26$

$X_{\theta_{\theta_f}} = 4.941\text{E}{-}324$