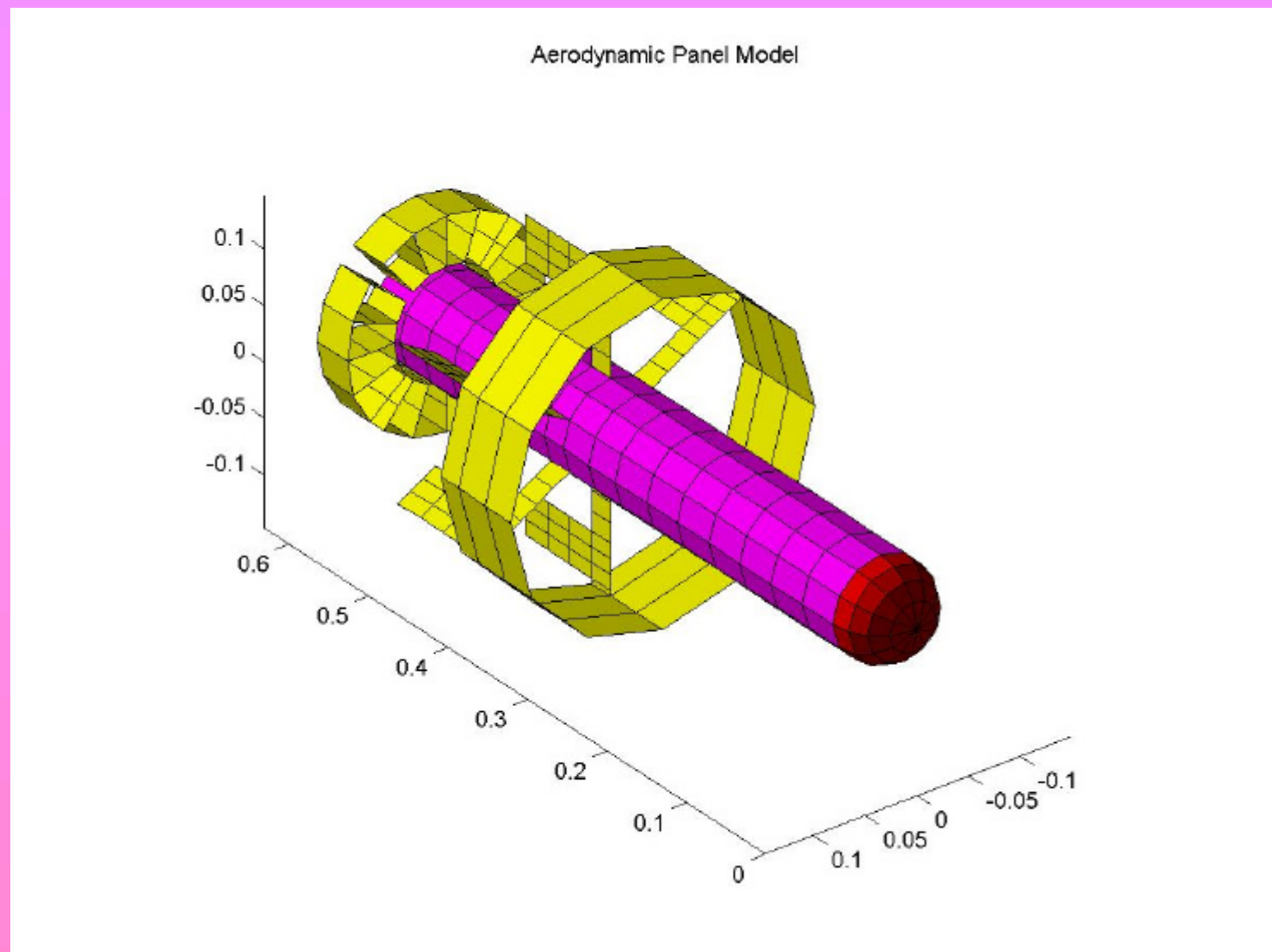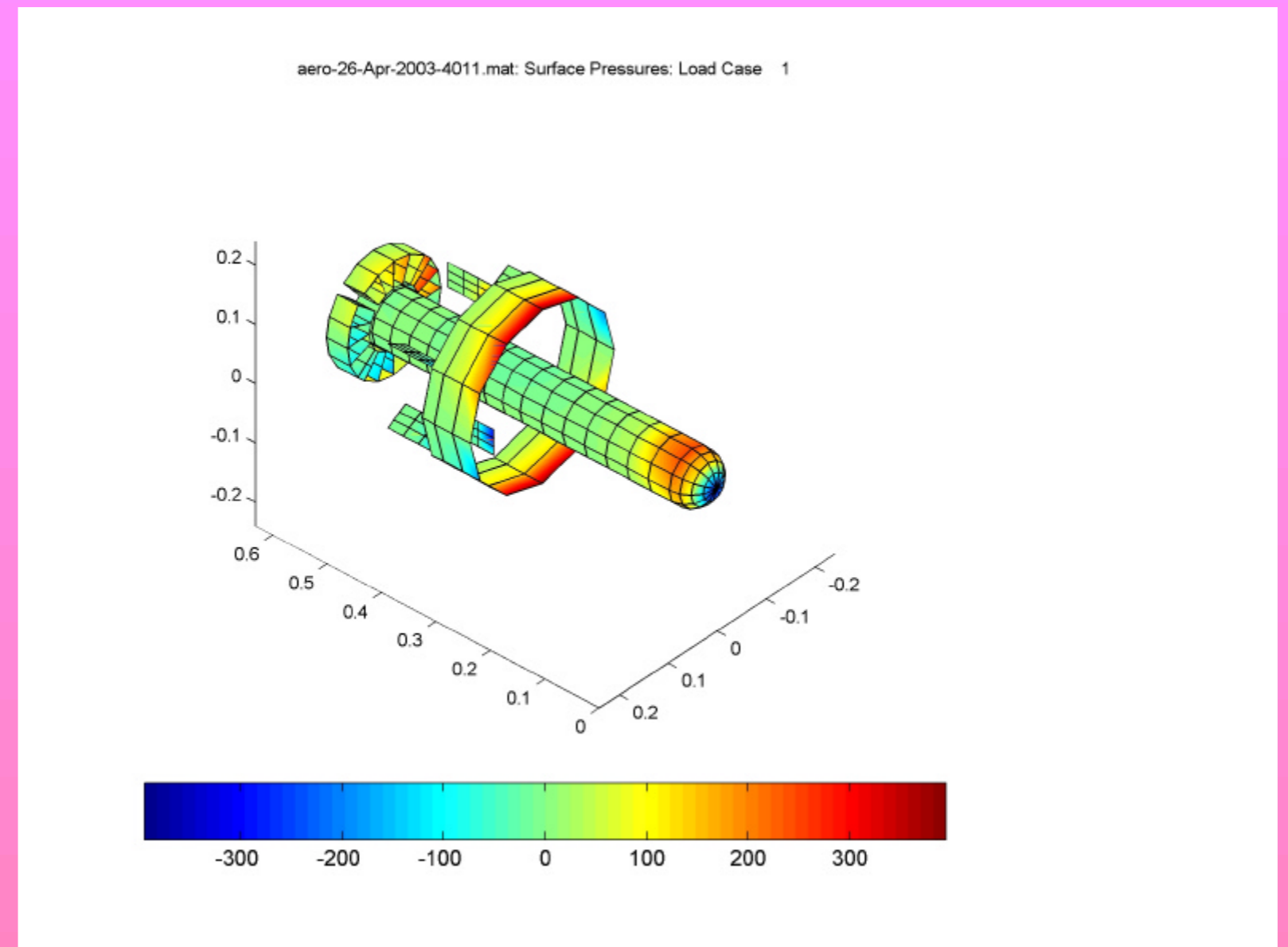# Aerodynamic Modelling, Simulation and Control Design for Fantail UAV: with Singapore Technologies Dynamics
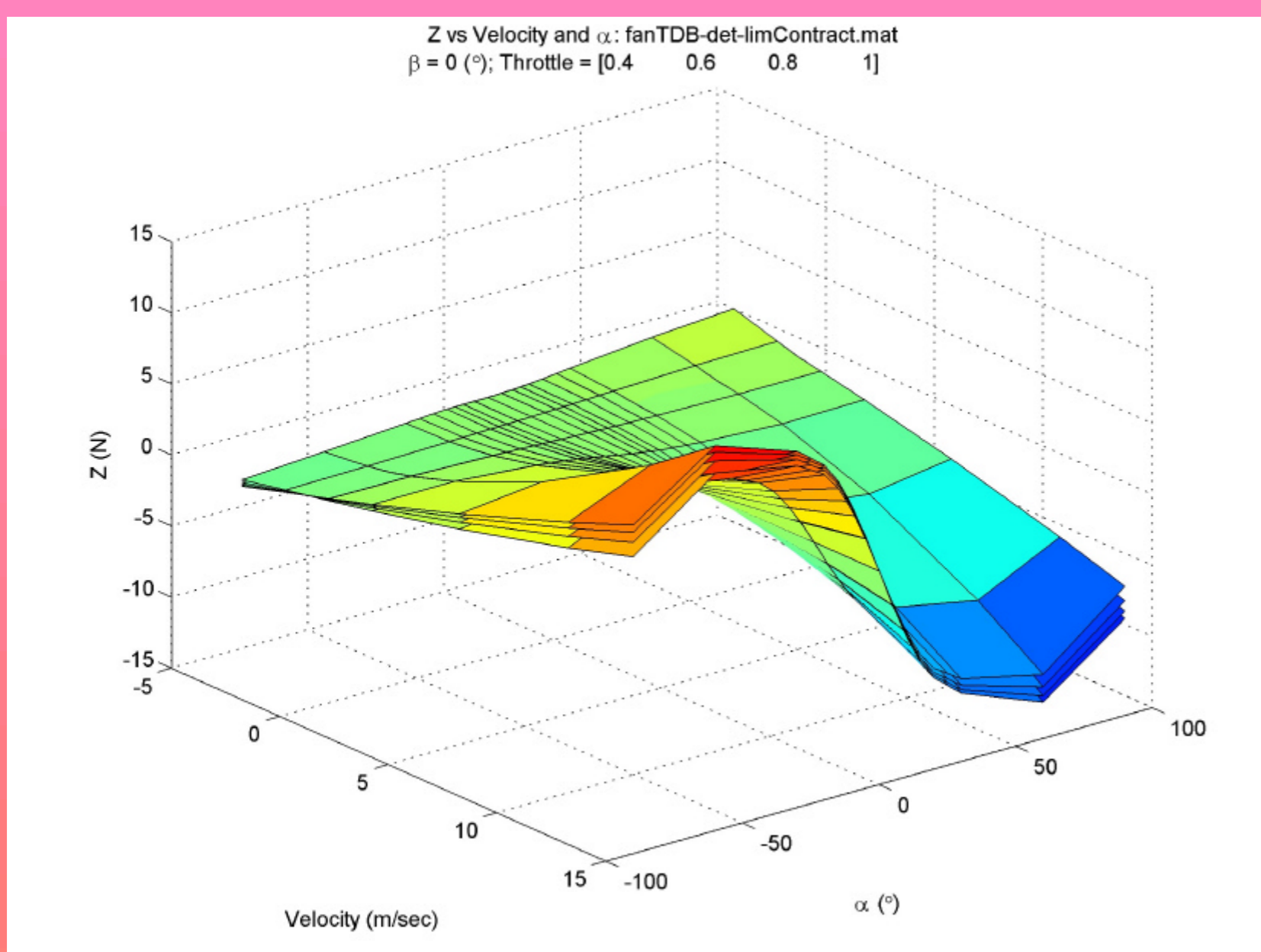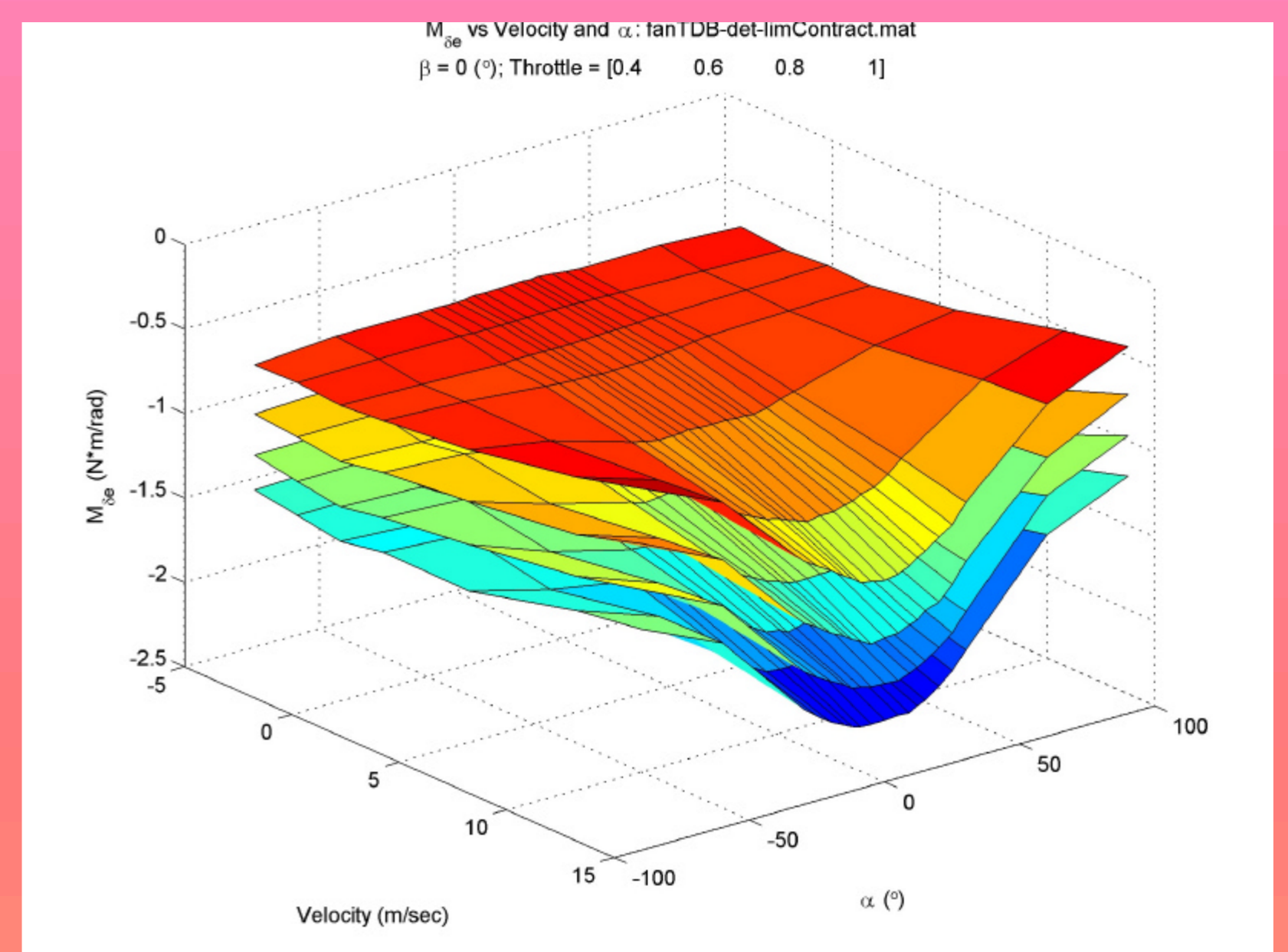
Dr Hugh Stone

Aerodynamic Panel Model
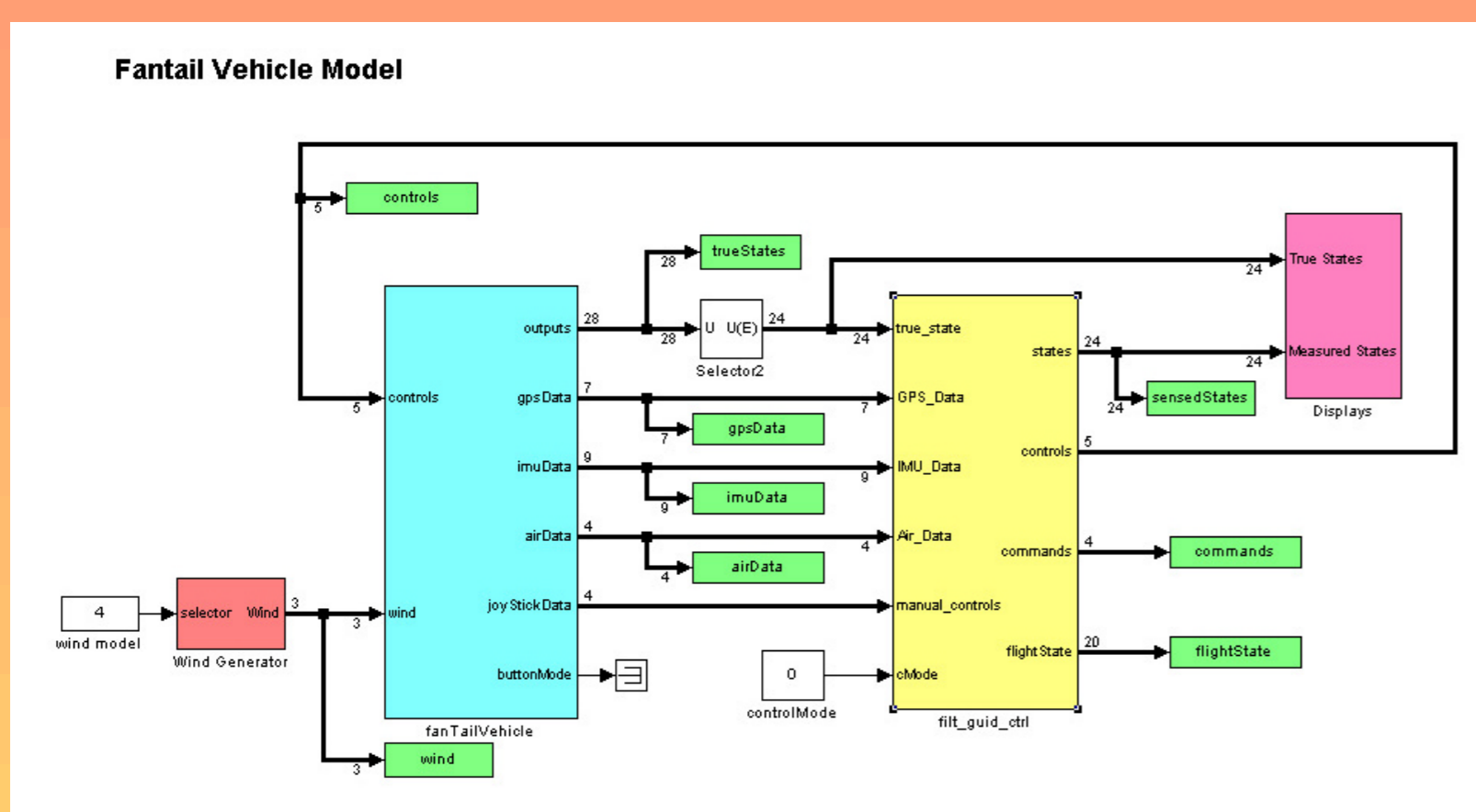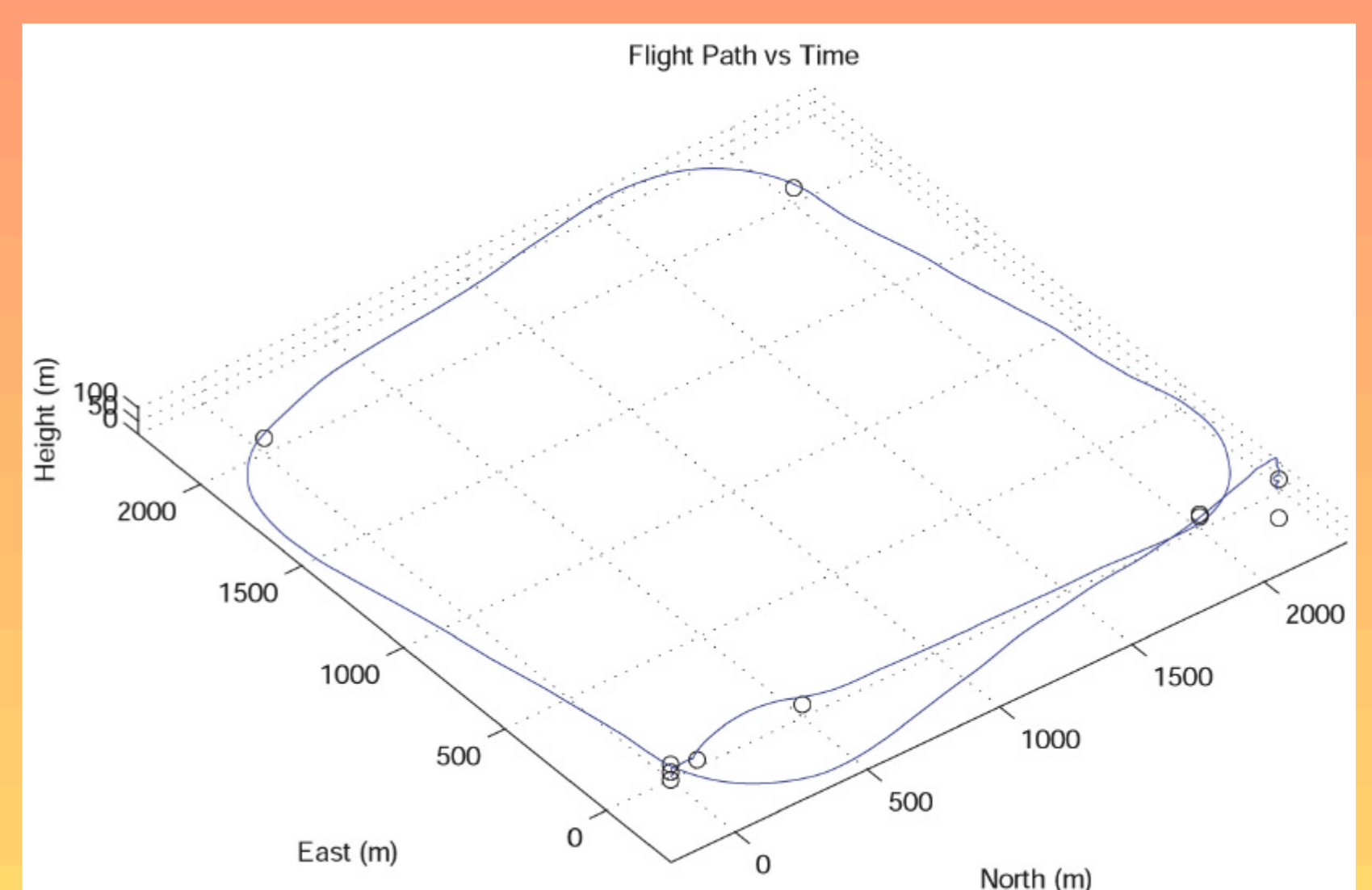

Pressure Field: Horizontal Flight

Low-Speed Aerodynamic Database: Z-Force vs V, α

Low-Speed Aerodynamic Database: $M_{\delta e}$-Moment vs V, α

Fantail Full 6-DOF Non-linear Simulation, with Sensor Errors, Wind etc.,.

Simulated Flight Path Including Vertical-Horizontal and Horizontal-Vertical Transitions