Flixan Examples

The following examples demonstrate the application of Flixan program to model and analyze in combination with Matlab a variety of flight vehicles.

1. An Apollo style long and flexible launch vehicle
2. Autonomous Landing of a Glider vehicle with fuel sloshing tanks
3. Fighter aircraft that is controlled by both, aero-surfaces and thrust vectoring
4. Large Flexible Space-Station that uses RCS and CMG control
5. Multi-Engine Shuttle type first stage liquid booster that uses differential throttling
6. Space Shuttle Ascent first stage analysis at Max-Q with flexibility and sloshing
7. Space Shuttle early Entry flight control analysis using aero-surfaces and RCS
8. Twin Booster rocket with slosh at high angle of attack
9. Momentum Biased Surveillance Satellite with RCS and Reaction Wheels
10. Shuttle Payload non-linear stability analysis using Coulomb dampers to attenuate flexibility
11. Analysis of a Single-Stage to Space vehicle with multiple engines and slosh
12. Single engine small rocket-plane in level flight
13. Missile with a single engine and a lifting wing
14. A fast maneuvering pointing Spacecraft that uses Single-Gimbal CMGs
15. Comet interceptor with divert thrusters