MISSION DESIGN SIMULATOR

Simulations software for next-gen space missions



MDS is a computationally accurate and photo-realistic space mission design simulator suited for simulating a multitude of complex mission scenarios in space including rendezvous and proximity operations (RPO).

The simulator is a comprehensive virtual environment where users can prototype and test their entire space missions in-real time using one software package. This is a fundamentally different approach compared to industry standard tools. MDS allows users to minimize errors as well as significantly reduce development time and costs through quick mission prototyping.

KEY FEATURES

- Simulation in real-time and faster
- Orbital mechanics simulation
- RPO & Docking simulation
- Moving ground assets simulation
- Mega-constellation design
- Monte Carlo analysis
- HIL/SIL simulation
- Synthetic visual data generation
- Matlab & Simulink integration
- External propagators: Tudat
- Python API









