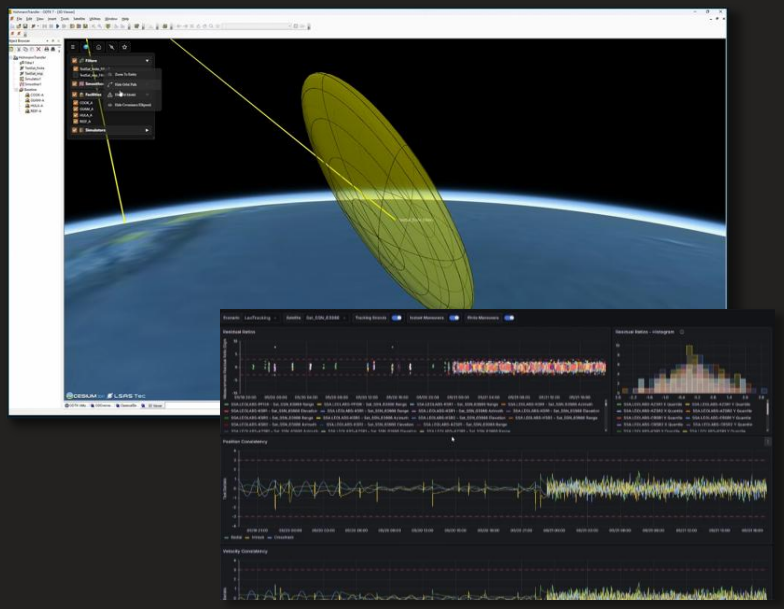
OrbitLens

OrbitLens is a modern visualization and analytics companion for Ansys ODTK, transforming ODTK-generated results into interactive 3D views, intuitive dashboards, and consolidated reports that help analysts understand orbital solutions more quickly and communicate them more clearly.

OVERVIEW

OrbitLens is an Ansys ODTK add-on, focused on the needs of orbital analysts. Delivering advanced 3D visualization and intuitive data dissemination tools, users can interactively review their processed ephemeris data, covariance ellipsoids, measurement summaries, and common orbit-analysis plots in one accessible interface.



FEATURES

Because it was designed to expand ODTK functionality, OrbitLens delivers both efficiency and usability enhancement for ODTK. Built with operational flight dynamics in mind, users can quickly analyze processed measurements and understand results.

- Interactive 3D Visualization
- Display ODTK-Generated Ephemerides
- Visualize Positional Covariance/Uncertainty
- Intuitive Dashboards and Enhanced Graphing
- OD-Overview and Measurement Summaries
- Classical Orbital-Element Trending
- Centralized Presentation of Commonly Reviewed ODTK Results

ENHANCED VISUALIZATION

The power of 3D visualization can't be overlooked. Three-dimensional trajectories, nearby objects, and uncertainty ellipsoids provide spatial context that is difficult to capture in tables or two-dimensional graphs Dynamic animation provides users with immediate understanding and insight of their orbits and gain a more immediate understanding of the quality

UNDERSTANDING RESULTS

OrbitLens automatically organizes and presents frequently used ODTK outputs, reducing the effort required to generate, open, and compare multiple data products. Analysts can review dashboard-style results with interactive visuals instead of relying solely on individual reports and traditional plots, making complex orbit-analysis results easier to explain to operators, engineers, customers, and decision-makers.

LEARN MORE

To learn more about our tools and how we can support your space operations and mission simulations, please visit our website or reach out to our sales and engineering team.

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