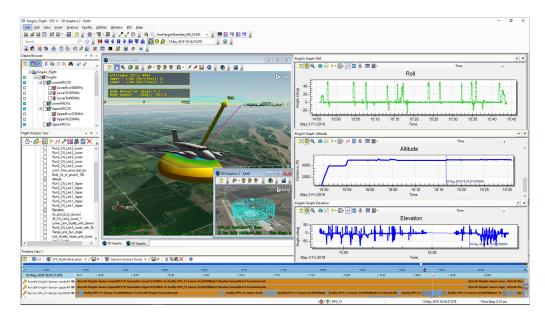




# TETK

Improve the efficiency and effectiveness of test and evaluation activities across the digital engineering product life cycle.

Test and Evaluation Tool Kit (TETK) supports test event planning, execution, and post-test data analysis for improved efficiency and effectiveness of test and evaluation activities. Build and validate detailed test plans, monitor test execution, and rapidly analyze post-test results to mitigate costs and reduce retest rates. Import your own unique system data to use alongside STK data and analysis artifacts. Monitor test execution in near real-time to make better decisions faster and replan on the fly.



## / Use Cases

#### Pre-test planning

- Predict quality of telemetry and command and control (C2) links.
- Predict compliance with geometric, parametric, and physicsbased constraints.
- Refine test point sequences and orientations to increase test point density.
- Define measures of effectiveness and measures of performance.
- Coordinate temporal and spatial relationships of test assets across multiple domains.

#### Test execution

- Assess test point attainment in near real-time and replan your missions on the fly.
- Visually monitor the performance of mission systems, range assets, GIS data, and more.

#### Post-test analysis

- Accelerate analysis of program-unique datasets by automating data ingestion and the generation of key analysis artifacts (e.g., graphs, reports, 3D visuals plus time).
- Accelerate anomaly forensics by visually interrogating relationships between complex datasets.

- Fuse data from onboard systems, payloads, data links, and range sensors for a complete understanding of test execution and system performance.
- Perform track-to-truth matching and track comparisons to validate sensor performance.
- Assess test results relative to specifications.

### Key Value Points

- Maximizes test point density and reduces retest rates by analyzing timing and spatial relationships in test plans.
- Processes data quickly to enable immediate mission insights.
- Accelerates test performance assessments through comprehensive quick-look playbacks.
- Fuses data from onboard systems, data links, and range sensors for a complete understanding of test execution and system performance.
- Assesses whether previous test points have been achieved while subsequent test points are being executed, potentially saving money by enabling the retesting of failed points before the test sequence ends.
- Provides stakeholders with immediate insight into technical details through 3D visuals plus time, reports, and graphs.





### / Core Capabilities

- Automated import of custom data sets. Custom and repeatable mappings of data fields from file formats such as CSV, text, and HDF5 to STK analysis parameters.
- Visualization techniques to make sense of complex data relationships. Four-dimensional globe visuals synchronized with interactive graphs and reports.
- Automated workflows to perform common test and evaluation analyses. Includes, for example, track-to-truth comparisons for sensor performance validation.
- Time tagging and data assignment mechanisms to help manage large datasets. Displays only the data relevant to a particular time window and analysis objective.

### / Technical Details

### / Workflows

- Track to truth comparison. A workflow to set up and calculate geometric verification measures.
- Track automation workflow. Automation of the multiple steps in the process to ingest and analyze sensor tracks.
- Track events workflow. Automation of the steps required to evaluate radar queueing in conjunction with weapons events.
- Sensor volumes workflow. Visualize behavior of data-driven sensor volume.
- EW track ID workflow. Filtering of sensor tracks based on electronic warfare characteristics.
- Track measurements filtering and analysis. A workflow to create track measurement objects that enable you to assess and filter through visualization and decision-aid graphics.

