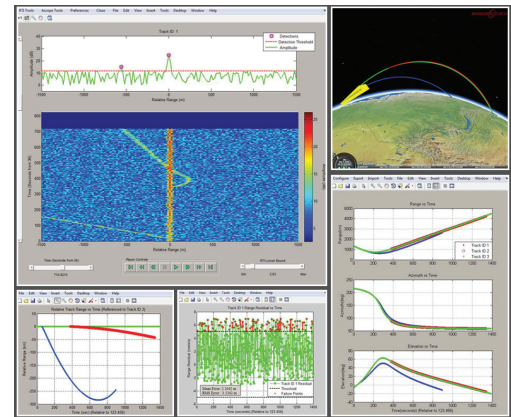# PHAROS

PERFORMANCE, HEALTH, AND ANALYSIS OF RADAR OPERATIONS SUITE

PHAROS is a custom, radar agnostic tool built by Riverside Research that can run interactively or as a background process to support all phases of post-mission data analysis. PHAROS will allow radar engineers, data analysts, and system maintainers the ability to conduct rapid, quantitative evaluation of sensor performance and mission success. Our engineers have successfully used PHAROS to review data artifacts and perform deep dive analysis of system performance and mission sequence to identify and investigate any anomalies and ultimately recommend solutions. In addition, PHAROS facilitates trend analysis of key performance parameters to identify and avert issues before they lead to degraded operation.

PHAROS Dashboard

FEATURES AND BENEFITS

Assess Radar Performance

- Evaluate calibration collections to analyze system performance (e.g., metric accuracy, RCS accuracy and sensitivity, range/Doppler resolution and sidelobes, antenna patterns)
- Track system calibration and performance metrics which allows for rapid identification of system degradation

Conduct System Assessment

- Evaluate effectiveness of system algorithms during mission collections

Integration

- Integrate numerous single-sensor tools into single tool suite eliminating redundancy

Object–oriented Programming

- Customizable to support multiple sensors
- Extensible to future sensors