

RF Space Domain Awareness Services

RF Monitoring Offers a More Complete Picture



A growing array of threats to space systems has increased urgency on advancing a more complete Space Domain Awareness (SDA) picture. As more satellites are launched and activated and adversaries develop new techniques to disrupt and disable U.S. and allies space operations, the threats continue to grow.

Kratos' has been offering Radio Frequency (RF) monitoring services to the U.S. government, partner governments and commercial customers for years. These services focus on helping resolve RF interference issues among the satellites. Collected through Kratos' unique, global network of sensors and ground facilities located around the world, that same RF data can now help the U.S. government, partner governments and commercial customers understand more about the health, location, performance and other factors about satellites. Now, Kratos offers SDA services including RF Satellite Surveillance, Correlative/Predictive Analytics, Bandwidth Utilization, Passive Ranging and RF Interference Mitigation. All services are offered by subscription or on demand.

Kratos' New RF SDA Services Are A Turnkey Operation

- L/S/C/X/Ku Band Coverage
- Basic recurring reporting
- Customized tasking, analysis and visualization
- Combination of profiling, geolocation and 3rd party data

Advanced technologies developed by and exclusive to Kratos have been integrated into all levels of this cutting-edge infrastructure, from custom algorithms employed in the sensor network, to industry-leading commercial applications used in the NOC (Network Operations Center) for data monitoring, correlation and geolocation, to specially developed analytics that provide the real meaning behind the raw data.

Introducing Enhanced RF SDA Services:

RF Satellite Surveillance

Effectively Detect:

- Interference patterns
- Long term performance trends
- System or behavior vulnerabilities
- Signal classification

Situational Awareness

- Single site maneuver detection
- Passive ranging TDOA/FDOA generation
- Orbit determination and maneuver detection

Bandwidth Utilization

- Monitor efficiency of transponder bandwidth
- Determine bandwidth effectiveness
- Detect and assess anomalies

RF Interference Detection

- Real-time monitoring
- Interference detection
- Geolocation
- Mitigation

Based on 24/7 Global Sensor Network

Kratos possesses the world's only global commercial RF network for delivering Spectral Services for SDA. This global network currently consists of worldwide RF monitoring sites and sensors with more than 80 antennas. The sensor infrastructure uses state-of-the-art technology for high-speed, accurate signal measurement and enables advanced analytics for EMI mitigation and SDA insight.

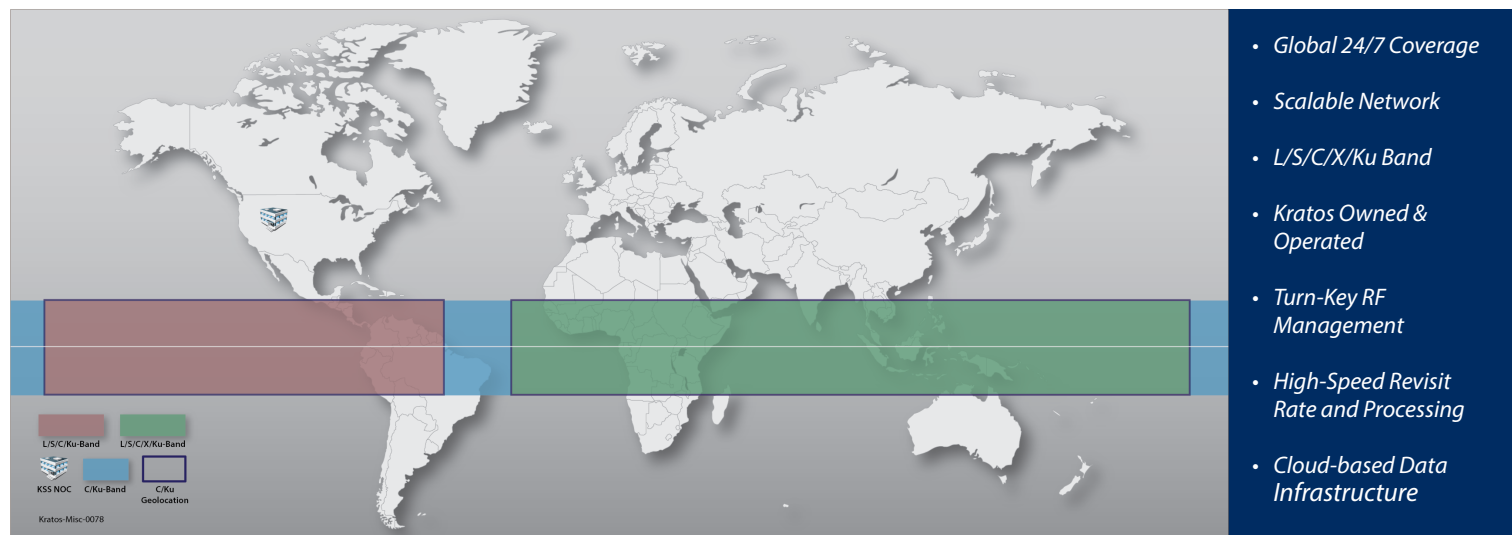
Advanced 24/7 Operations Center

The global network is supported by Kratos' 24/7 Network Operations Center (NOC) employing a dedicated workforce experienced in RF spectrum management, geolocation and data analysis. Supporting our government and commercial customers on a round-the-clock basis, the NOC is staffed with a highly skilled workforce that is trained to effectively access a wide range of databases, leverage business relationships and develop solution sets to address complex RF interference and SDA challenges.

Algorithm Development

Kratos' advanced data analytics process RF data for real-time SDA awareness, predictive insights, historical trending, and patterns of life. Supporting the ability to be fused and correlated with data from optical/radar terrestrial and space-based sensors, it provides more timely, accurate, and complete SDA.

Kratos RF Collection Infrastructure



Kratos' extensive global network consists of worldwide RF monitoring sites, hosting more than 80 sensors and antennas and is specially tuned for high-speed, accurate RF signal collection and measurement.

Other support is possible. Please contact us to discuss your needs.