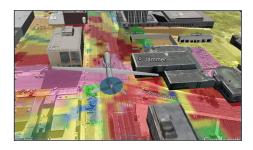


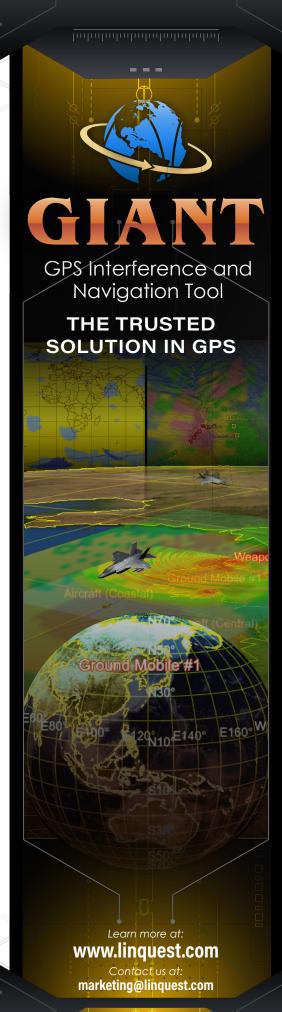
WHAT IS GIANT?

GIANT is a mission-level simulation that evaluates the impact of Position, Navigation, and Timing (PNT) system performance on operational effectiveness in a benign or electronic combat environment.

Created in 1996 to support the NAVWAR AoA, GIANT has been applied to hundreds of analyses by civilian and military user communities in support of research and development, acquisition programs, test and evaluation, training, concept of operations development, mission planning, and operations.

GIANT has been continually upgraded, adding fidelity and functionality, to reflect the evolution of the GPS enterprise architecture, GPS augmentations, other GNSS, and network- centric technologies. As the Air Force's standard model for GPS, GIANT has evolved from a constructive simulation and analysis tool to support live and virtual exercises and experiments, web-based applications, and air and space operations centers.





FEATURES

- Detailed databases for platforms, user equipment, satellites, signals, jammers, and interference sources
- Alternative/Complementary PNT including Doppler
- Live, virtual, and constructive applications
- Real-time data feeds and constellation status
- Application programming interface (API)
- Advanced anti-jam antenna models
- Tightly and loosely-coupled Kalman filter GPS/INS integration
- Tracking loop-based receiver
- Terrain effects
- GUI for setup and scenario visualization
- Integrated 3D modeling
- Import/export to multiple formats for post-processing and visualization

BENEFITS

- Comprehensive and pedigreed databases save significant time and resources
- Facilitates rapid architecture trade studies to refine solution space
- Verifiable and traceable PNT system requirements
- Accurate and cost-effective evaluation of GPS-aided systems
- Enables CONOPS and tactics, techniques, and procedures development
- Supports exercises, wargames, and operational test planning