



GIS DATA SOLUTIONS

High-Quality, Actionable Terrain Data for Critical Analyses

Precision Data. Mission-Ready Intelligence.

HII's geospatial data solutions deliver high-fidelity terrain and vector data to support RF analysis, modeling and mission-critical decision-making. Using a proprietary ingesting and processing approach, raw LiDAR data is converted into usable, high-quality formats with rigorous editing to correct erroneous data points. The result is reliable, accurate geospatial data ready for actionable analyses in defense, telecommunications and spectrum optimization environments.

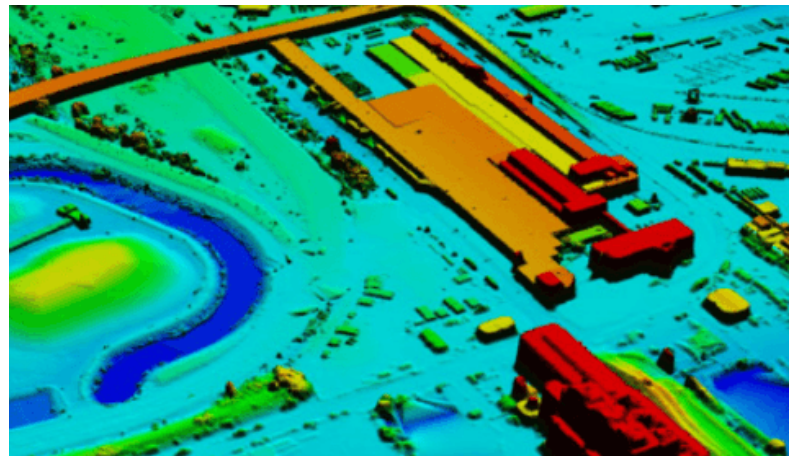
HII's geospatial experts gather the best available terrain and vector data from a myriad of sources by converting raw LiDAR data in combination with a robust quality assurance process by employing multiple LiDAR and geospatial editing software packages that enable teams to correct erroneous data points within the raw data files, providing the end user with high quality data that is ready for actionable analyses.

Mission Application

- Terrain-informed RF propagation modeling and analysis.
- Electromagnetic interference (EMI) prediction and mitigation.
- Spectrum optimization for congested or contested environments.
- Network performance evaluation and planning.
- High-resolution terrain modeling for defense and commercial operations.
- Rapid large-scale data sourcing to support time-sensitive missions.

Advantages

- **Accurate predictions:** Highly accurate predictions of RF signal loss over variable terrain and sea water help optimize communication systems for maximum performance.
- **Wide applicability:** Suitable for both ground-based and airborne transmitters and receivers make it a versatile tool for various applications.
- **Government-approved:** The de facto propagation tool of the United States Federal Government ensures its reliability and credibility in predicting RF signal loss.



100+ terabytes of geospatial data with coverage ranging from 10⁻¹ meters across the continental United States



About HII

HII is a global, all-domain defense provider. HII's mission is to deliver the world's most powerful ships and all-domain solutions in service of the nation, creating the advantage for our customers to protect peace and freedom around the world. As the nation's largest military shipbuilder, and with a more than 135-year history of advancing U.S. national security, HII delivers critical capabilities extending from ships to unmanned systems, cyber, ISR, AI/ML and synthetic training. Headquartered in Virginia, HII's workforce is 44,000 strong.



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Specifications

Data Processing	GIS data utilizing geospatial software packages including Python, GDAL, ArcGIS Desktop, ArcGIS Pro, QT Modeler, LP360, and QGIS and several custom tools and scripts utilizing Python and GDAL to aid in the data processing and conversion.
Data Formats	LAS, LAZ, TIF, PY, DT1, DT2, GeoJSON, SHP, XLS, CSV, PRJ, KML and ANSII.
Available Data Sets	10m coverage of the continental US and several territories. 5m data for Hawaii and the Majority of the continental US. 1m coverage of Maryland, Delaware, Virginia, Alabama, Florida, North Caroline, South Carolina, and New York with partial 1m coverage of Arizona, Colorado, West Virginia, Vermont, Hawaii, and Alaska. OCONUS coverage available by request.



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