INTERMAP

CAPABILITIES

A COMPANION GUIDE TO INTERMAP'S ORION PLATFORM™

INTERMAP'S ORION PLATFORM™ HAS **5 LAYERS**

1. **GEOSPATIAL SERVICES:** We offer a comprehensive suite of geospatial auditing, consulting, and data acquisition services to meet your needs.

2. **FOUNDATION DATA:** Consider the power of immediate access to the world's most comprehensive 3D elevation information and you'll understand why we call this our foundation data layer.

3. **FUSION SERVICES:** We are a leader in the aggregation of structured and unstructured information from multiple sources into a unified solution.

4. **3D BUSINESS INTELLIGENCE:** As a leading provider of location-based information solutions, Intermap has developed Web-based applications that transform the way governments and enterprises leverage geospatial data.

5. **DELIVERY SERVICES:** Intermap offers an array of delivery options for your solution.

Intermap is focused on solving the challenges of the rapidly expanding geospatial market.

We believe that your vision combined with our unique capabilities will create the perfect geospatial solution.

How do we know? Because, more than theory or bold speculation, our capabilities are field tested every day by hundreds of customers around the world.

The distinct portfolio that we offer is a direct result of listening to people like yourself and then delivering the right solution. On time and on budget.

At Intermap, customers have access to the world's most advanced location-based information capabilities. Partners become global players. And, our people become creators of the geospatial future.

WELCOME TO INTERMAP. SOLUTIONS ON DEMAND®.

5 LAYERS

DEFINE | DESIGN | DELIVER

GEOSPATIAL SERVICES

- Geospatial Audit
- Consulting Services
- Data Acquisition

3DBI® APPLICATIONS

- AdPro®
- LinkPro®
- InsitePro™
- New 3DBI

FUSION SERVICES

- Industry Intel
- Geo-Political Data
- Geospatial Information
- Customer Specific
- Data Fusion Service

FOUNDATION DATA LAYER

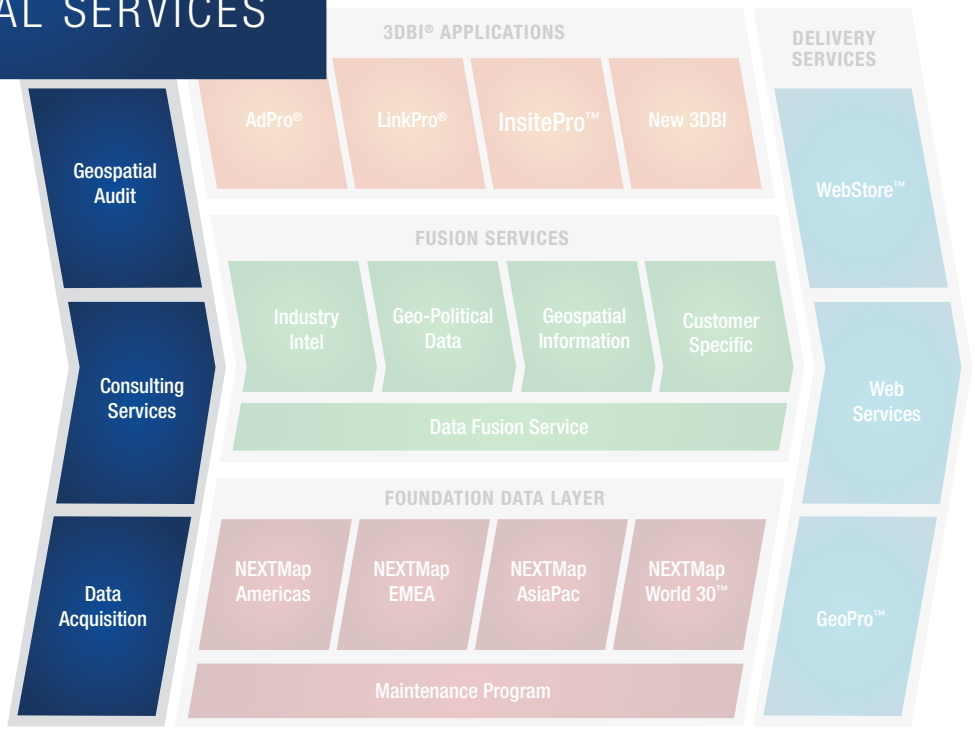
- NEXTMap Americas
- NEXTMap EMEA
- NEXTMap AsiaPac
- NEXTMap World 30™
- Maintenance Program

DELIVERY SERVICES

- WebStore™
- Web Services
- GeoPro™

LAYER 1

GEOSPATIAL SERVICES



Intermap's geospatial services represent the force behind defining all aspects of your geospatial needs. Intermap is committed to delivering 3D geospatial solutions that enable commercial enterprises and government agencies to make better terrain-based decisions. In defining your complete geospatial solution requirements, Intermap offers a comprehensive geospatial audit, detailed consulting services, and our premiere data acquisition services.

›› GEOSPATIAL AUDIT

Strategic geospatial planning is an important and often overlooked component of business operations. Without it, your programs may not be aligned to meet current requirements and may fall short in meeting future needs as well. Intermap's response to these industry challenges comes in the form of our geospatial audit service.

With over three decades of geospatial industry experience, Intermap Technologies® is equipped with the necessary tools and expertise to help you refine your strategies for all aspects of geospatial planning, design, development, implementation, execution, migration, and future forecasting. Our consultants are experienced in identifying where and how these key capabilities can be applied to your geospatial program to ensure your goals are realized for today and you are positioned for growth tomorrow.

We provide our customers with assistance in geospatial business process and requirements definition, industry policy and standards, database design/implementation/migration, application development, and overall geospatial enterprise integration. Leading with a geospatial audit, we listen to your project requirements, consult with you to understand your project challenges, determine the most cost-effective solution that will maximize your current resources, and make recommendations that will satisfy your requirements.

Our vast array of geospatial knowledge and experience allows us to offer solutions starting from custom airborne and spaceborne data collection services to 3D mapping products and solutions that help you create innovative geospatial solutions for numerous commercial, governmental, and defence applications.

Our comprehensive geospatial audit will:

- Assess your geospatial needs
- Design an end-to-end geospatial solution optimizing your resources
- Execute a strategic geospatial plan to solve your business needs

Many organizations struggle to manage multiple sources of the same and/or different data. They wrestle with multiple data formats and are often burdened with multiple costly and inefficient systems designed to manage and display the same data. We can establish a central authoritative database and single system to manage (store and display) all of your organization's GIS information using Web Services. The benefits include improved integrity, accuracy, and availability of GIS data while reducing the high expense of storing multiple copies of data and maintaining redundant systems.

Ideally Suited for Varied Applications

The multitude of geospatial benefactors of an Intermap geospatial audit include but are not limited to:

- Watershed analysis
- Base mapping at > 1:10,000 scale
- Line-of-sight analysis
- Mobility analysis
- Image orthorectification
- Surface analysis
- Infrastructure planning
- 3D visualization
- Asset management and planning
- Coastal resource management
- Internet mapping
- Precision farming and forestry
- Geological mapping and mineral exploration
- Oil and gas, wind energy, and pipeline routing

"We are very pleased to tell you that we have just released two new river flood hazard maps. The maps, for Austria and Switzerland, are based on Intermap Technologies' NEXTMap digital terrain data and are designed for use in the re/insurance sector."

LAYER 1

GEOSPATIAL SERVICES

›› GEOSPATIAL CONSULTING SERVICES

The geospatial industry is ever growing in importance as the world market becomes more acclimated and dependent on location intelligence. Designing, developing, and implementing geospatial solutions can quickly become the toughest challenge for our clients.

Intermap offers strategic, results-orientated geospatial consulting services from a trusted and experienced team of geospatial professionals. Our clients see challenges in defining requirements, improving operational performance, structuring solutions that leverage their technology investments, optimizing business process management, and executing strategic plans – all while reducing costs. Our geospatial consulting services are tailored to address these key needs and help our clients get from issue to solution quickly.

APPROACH

Our approach is really quite simple. We review your expected end needs and work backwards assessing workflow, tools, organization structure, infrastructure, resources, and current standard operating procedures. Our skilled team of GIS consultants, surveyors, and data management professionals apply proven technologies and methods to help you overcome organizational problems and develop a logical and realistic improvement plan.

BENEFITS

Intermap's worldwide geospatial consulting services provide many benefits, including improvements in:

- Needs assessment, definition, and development
- Implementation planning
- Enterprise workflow enhancement
- Organization structure alignment
- GIS implementation

›› DATA AQUISITION SERVICES

Intermap provides custom airborne and spaceborne data collection services and 3D mapping products to help you create innovative geospatial solutions for numerous commercial, governmental, and defense applications. We consult with you to customize and deliver the most cost-effective solution – regardless of map scale.

To meet your accuracy and geospatial requirements, we provide an integrated solution with one or more data sources, including our proprietary airborne interferometric synthetic aperture radar (IFSAR) technology or customer- or partner-supplied sources derived from LiDAR, and or spaceborne optical and IFSAR technologies.

Using Intermap's world-class enterprise 3D workflow allows us to integrate elevation datasets from a host of technologies and from locations around the world to provide best-of-class elevation models. With a range of accuracies starting at one meter LE90% (Linear Error 90%), our elevation models are aimed to meet your spatial data infrastructure requirements.

BENEFITS OF INTERMAP DATA ACQUISITION SERVICES

Intermap has been recognized as a leader in the aggregation of remotely sensed elevation data for over two decades. Our customers benefit from our advanced sensor systems, award-winning production facility, robust data fusion capabilities, and complete control over our entire workflow. We were the first private enterprise in the world to completely remap the United States, Western Europe, and large portions of Southeast Asia. Known as NEXTMap®, these national datasets have accuracies starting at one vertical meter LE90% in unobstructed terrain of low slopes and provide coverage of more than 18 million km^2. As a leader in data aggregation, Intermap has also created a World coverage digital surface model dataset called NEXTMap World 30™.

"Using Intermap's terrain data, we're able to delineate the inundation zone which results from a potential dam failure, identify structures that may be impacted, and plan emergency operations to evacuate residents."

LAYER 1

GEOSPATIAL SERVICES

›› DATA AQUISITION SERVICES CONTINUED

Our extensive history of successfully completing large mapping projects has been made possible through the expertise of our highly skilled people, the development of advanced technology, and continuous refinement of our data processing and editing procedures.

Here is how our extensive experience can help your custom project:

- **World-class project management:** Our team ensures transparency throughout the program lifecycle.
- **Worldwide data availability:** Start your mapping project off right with quick access to NEXTMap World 30.
- **Boundary-free, all-weather acquisition:** We map anywhere in the world day or night, regardless of weather conditions, cloud cover, or “no-fly” zones.
- **Wide-area data coverage:** A single stereo pair of spaceborne SAR or Optical images typically provide coverage of 1,500 km^2 (approximately the size of the Hawaiian island of Oahu).
- **Quality service:** Intermap’s ISO-certified production processes ensure consistent, quality products.
- **Production environment:** Our high-volume, scalable production facilities create and edit large quantities of mapping products.
- **Data fusion:** Our data aggregation and fusion processes are ideal for data derived from various sensing technologies, with different resolution and accuracy specifications, resulting in seamless, fully integrated mapping solutions.
- **Flexible delivery options:** We offer flexible delivery options designed to match your organization’s internal workflow and resources.

›› DATA AQUISITION SERVICES CONTINUED

3D DATA FUSION EXPERTISE

The wide-area coverage of Intermap's fused mapping products enables more accurate data in key areas, such as cities, utility corridors, and waterways. Our processes are designed to integrate and align multiple elevation data sources—supplied by you and/or Intermap. This allows you to optimize your project and budget by using the highest resolution elevation data only where it's needed. Moreover, we can integrate your elevation data from past or future projects to continually update your spatial data infrastructure, extending the value and life of your existing data.

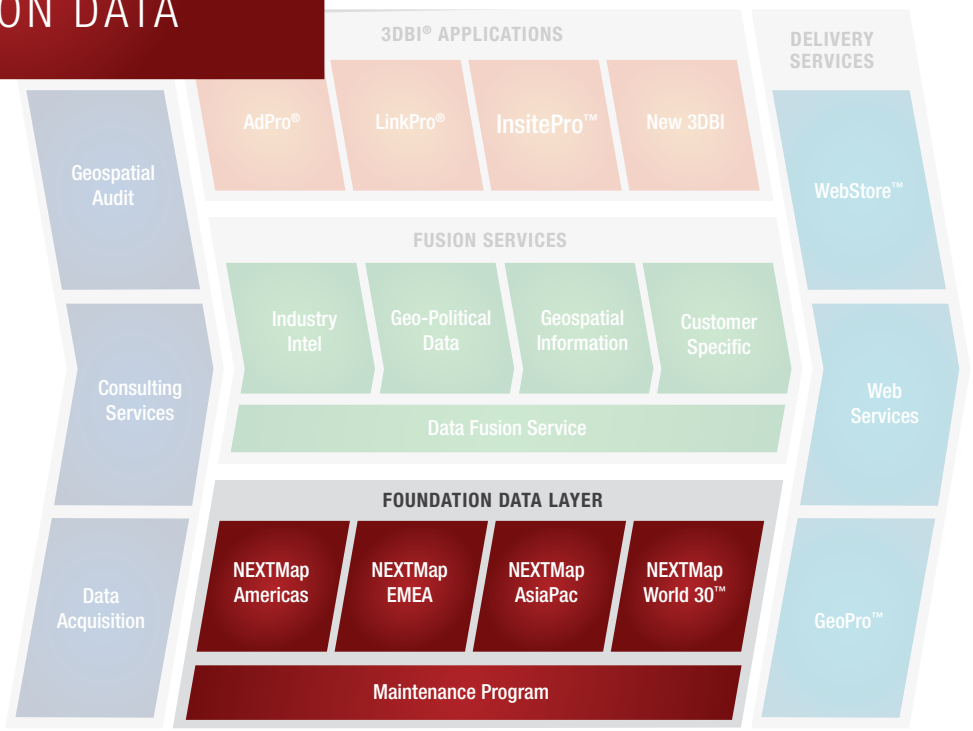
CUSTOM DATA COLLECTION

Intermap offers custom data collection using a variety of technologies designed to address a wide range of geospatial requirements across different mapping scales. We work with you to understand your requirements and recommend the data sources and appropriate technologies to create the most cost-effective solution for your project needs:

- **Satellite sources:** For mapping requirements of 1:25K scale or less, Intermap provides accurate digital elevation models (DEMs), 2.5m-resolution images and supplemental layers. These are ideal for less demanding applications in which data consistency and accuracy are still important, such as large-area coverage and national mapping programs.
- **Airborne IFSAR-generated data sources:** For mapping requirements of 1:10K to 1:50K scale, Intermap provides accurate DEMs, high-resolution .50m images, and supplementary thematic layers. These are ideal for regional and natural resource mapping.
- **LiDAR data sources:** These are useful for mapping that requires a 1:10K scale or greater, such as engineering projects, urban mapping, or detailed flood mapping.

LAYER 2

FOUNDATION DATA



Consider the benefits of immediate access to high quality 3D terrain data for the world. Intermap's NEXTMap database provides optimized, multi-sensor-derived digital elevation data and orthorectified radar images to enable accurate geospatial analyses in any area of interest.

Our NEXTMap products consist of seamless, wide-area, and current terrain information, including:

- **Digital surface model (DSM):** A first-reflective surface model that contains elevations of natural terrain features in addition to vegetation and cultural features such as buildings and roads.
- **Digital terrain model (DTM):** A bare-earth model that contains elevations of natural terrain features such as barren ridge tops and river valleys. Elevations of vegetation and cultural features, such as buildings and roads, are digitally removed.
- **Orthorectified radar image (ORI):** A gray-scale radar image of the earth's surface that has been corrected to remove geometric distortions caused by the terrain.

›› NEXTMAP ACCURACY SPECIFICATIONS

United States (including parts of Alaska), Western Europe, Malaysia, and parts of Australia

DATA TYPE	RESOLUTION	ACCURACY	COVERAGE AREA*
DSM, DTM	5m	< 1m LE90% (vertical)	40%
		1–3m LE90% (vertical)	40%
		> 3m LE90% (vertical)	20%
ORI	.625m	3m CE90% (horizontal)	4%
	1.25m	4m CE90% (horizontal)	94%
	2.50m	5m CE90% (horizontal)	2%

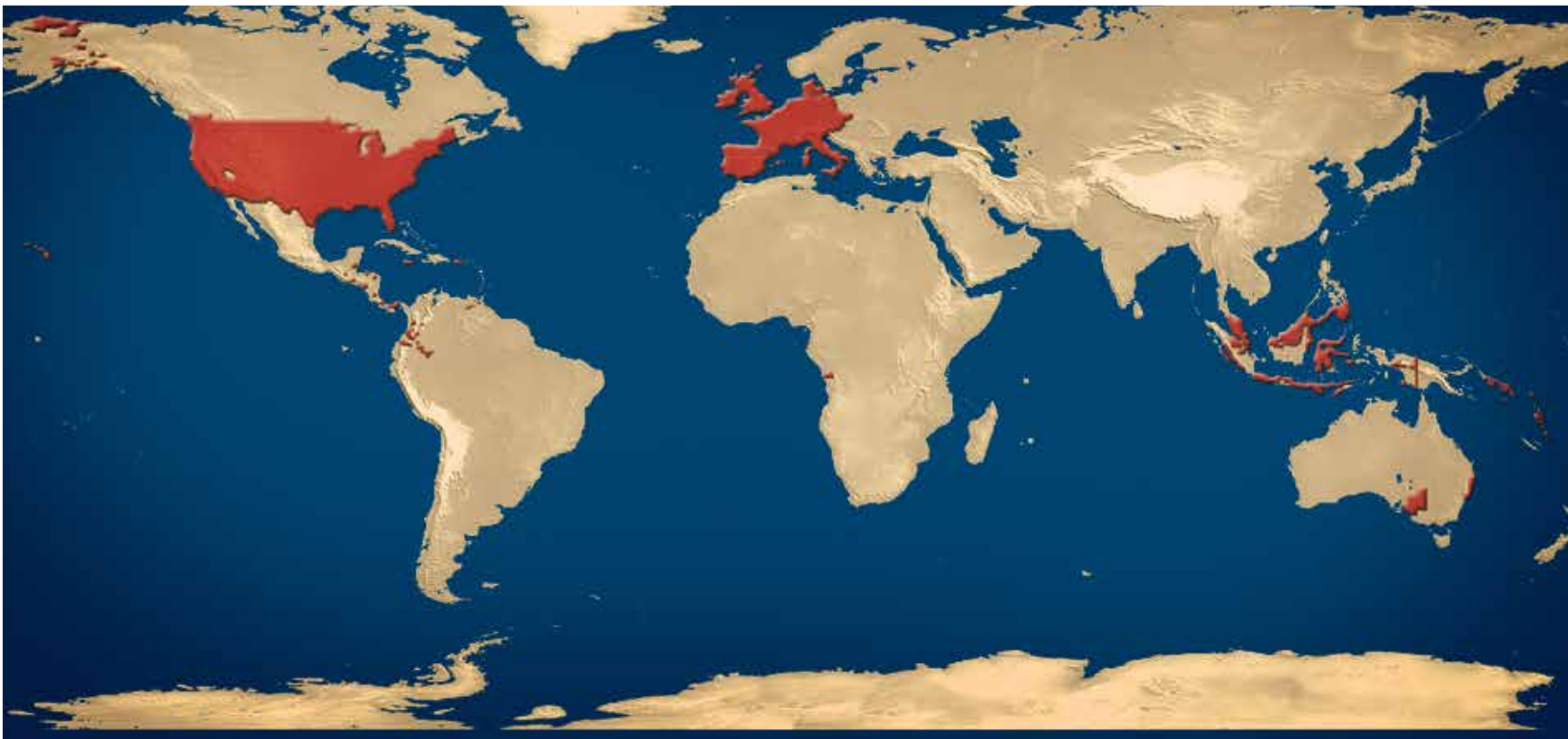
Indonesia, Puerto Rico, Jamaica, Solomon Islands, Vanuatu, and parts of Central/South America

DATA TYPE	RESOLUTION	ACCURACY	COVERAGE AREA*
DSM, DTM	5m	< 3m LE90% (vertical)	40%
		3–5m LE90% (vertical)	40%
		> 5m LE90% (vertical)	20%
ORI	1.25m	4m CE90% (horizontal)	90%
	2.50m	5m CE90% (horizontal)	10%

World

DATA TYPE	RESOLUTION	ACCURACY	COVERAGE AREA*
DSM	30m	16m LE90% (vertical)	United States
	90m	20m LE90% (vertical)	Rest of the World

*Coverage area refers to the percent of the NEXTMap dataset estimated to meet the listed accuracy specification.



LAYER 2

FOUNDATION DATA

ADVANCED DATA OPTIMIZATION

We ensure our data is seamless and consistent throughout the world. Our ISO-certified geospatial processing facility optimizes our NEXTMap products so they are:

- **Void-filled:** Missing data as a result of shadows, complex terrain, and/or look direction are filled via interpolation or with ancillary data to create a fully populated elevation dataset
- **Hydro-enforced:** Structures over water bodies (such as bridges) are removed, water surfaces are flat, and watercourses flow downstream to enable flood applications

Intermap's highly skilled people, development of advanced technology, and continuous refinement of our data processing and editing procedures enable us to provide accurate data that satisfies your geospatial needs. Seamless, wide-area, consistent, and current elevation data and images are critical for performing accurate geospatial analyses.

Our NEXTMap products enable:

- Base, topographic, and geological mapping
- Flood Modeling
- Watershed analysis
- Emergency response
- Land cover classification
- Forestry applications
- Natural resource conservation
- Environmental risk analysis
- Infrastructure planning
- Image orthorectification
- Contour generation

INSTANT ACCESS VIA WEB SERVICES

Our Web Services enable you to immediately access NEXTMap products for your area of interest. Since the data is hosted and stored in the cloud, costs and resources associated with storing and managing large datasets locally can be reduced. Our NEXTMap database is updated twice a year to integrate newly available, best-of-class elevation data—providing you with the most current data available. In addition, we offer NEXTMap-based online tools that allow users to perform simple analyses from any Web browser and make better terrain-based decisions without the need for any GIS software. Our NEXTMap products are available via our Web Services as a onetime purchase or a variety of subscription plans—helping you to save time and money. Intermap's Web Services enable you to easily subscribe to and access the data you need, when you need it.

›› NEXTMAP WORLD 30™ DSM

Intermap's NEXTMap World 30 digital surface model (DSM) provides seamless, best available surface elevation data with a 30-meter ground sampling distance (GSD) so you can perform more efficient geospatial analyses. NEXTMap World 30 DSM data for the entire globe is available. Our world-class enterprise workflow allows us to integrate elevation datasets from around the world to provide best-of-breed elevation models with a range of accuracies starting at five vertical meters.

NEXTMap World 30 DSM is a combination of 90-meter Shuttle Radar Topographic Mission (SRTM) v2.1 data, 30-meter ASTER Global DEM v2.0, and one-kilometer GTOPO which has been ground controlled using LiDAR data from NASA's Ice, Cloud and Land Elevation Satellite (ICESat) collection, resulting in a 25-centimeter root mean square error (RMSE) dataset for vertical control of the DSM. The resulting product is a 30-meter GSD DSM that covers the entire land mass of the planet.

›› NEXTMAP WORLD 30 DSM CONTINUED

PRODUCT HIGHLIGHTS

This 30-meter DSM provides the most accurate worldwide elevation product on the market to date. It has been aligned and adjusted using high-resolution worldwide LiDAR (25-centimeter vertical accuracy) producing a significant improvement from the original 30-meter ASTER Global DEM and SRTM 30- and 90-meter products available today. The aggregation and merging process of other elevation datasets has enabled Intermap to remove many of the artifact's "spikes and wells" characteristic of the latest release of ASTER and SRTM data. Additionally, NEXTMap World 30 is void-filled and adjusted for vertical and horizontal shifts that occur in ASTER and SRTM global DSM offerings.

A HOMOGENEOUS, SEAMLESS DATASET

The Intermap fusion process aggregates datasets from IFSAR, LiDAR, and optical photogrammetric methods using specialized data fusion tools to create a homogeneous, seamless, void-filled dataset with accuracies starting at five vertical meters. NEXTMap World 30 is produced with 30-meter (98-foot) postings or GSD, and is formatted as 24,000 one-degree by one-degree tiles. The World 30 DSM covers over 148 million square kilometers of land mass.

Each one-degree by one-degree tile is accompanied by a data characterization mask that provides an insight into the DEM source at every posting or GSD. Our quality process combines automatic tools, manual review, and additional editing, if needed, to remove anomalous features such as seam lines, spikes, and wells in the data.

NEXTMap World 30 DSM is a first-reflective surface model that contains elevations of natural terrain features in addition to elevations of vegetation and cultural features such as trees and buildings. The key benefit of the surface model is that it provides heights of features above the ground, enabling line-of-sight and viewshed analyses, feature extraction, and canopy heights for industries such as telecommunications, forestry, aviation, and geological and topographic mapping.

SUMMARY OF PRODUCT AND SERVICE BENEFITS

- Accuracies starting at five vertical meters
- Void-filled SRTM dataset merged with ASTER 30 meter using 25 centimeter vertical control from ICESat
- Utility of a seamless aggregated 30-meter GSD elevation fused dataset
- Flattened water body surfaces between North 60 degrees and South 56 degrees (flattening of water body surfaces North of 60° or South of 56° can be completed on request.)
- NEXTMap World 30 DSM's accurate topographic data is used for orthorectification, telecommunications, forest management, aviation, engineering, energy exploration, conserving natural resources, environmental management, public works design, fire fighting, recreation, geology, and city planning, to name just a few areas

DATA LICENSE AGREEMENT

Intermap supplies NEXTMap World 30 DSM data under a data license agreement for a specified period of mutual commitment. Under this arrangement, Intermap provides to the customer a database of NEXTMap World 30 DSM data, or data for the selected geographic area of interest, to the user. A maintenance plan is available and includes yearly updates of the database as additional data is collected and fused.

"We're pleased to be working with Intermap and incorporating its NEXTMap database to develop a new generation of flood models that will enable insurers to better underwrite and manage their risk."

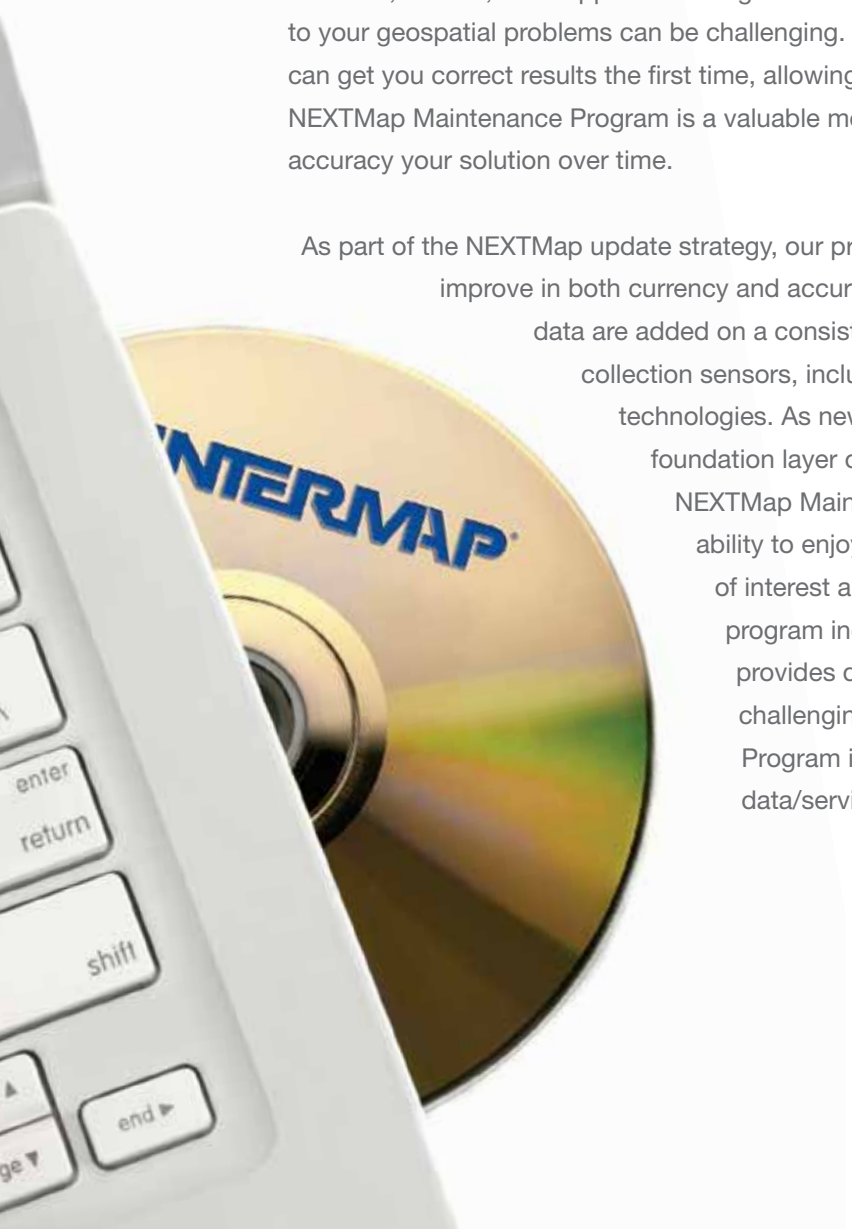
LAYER 2

FOUNDATION DATA

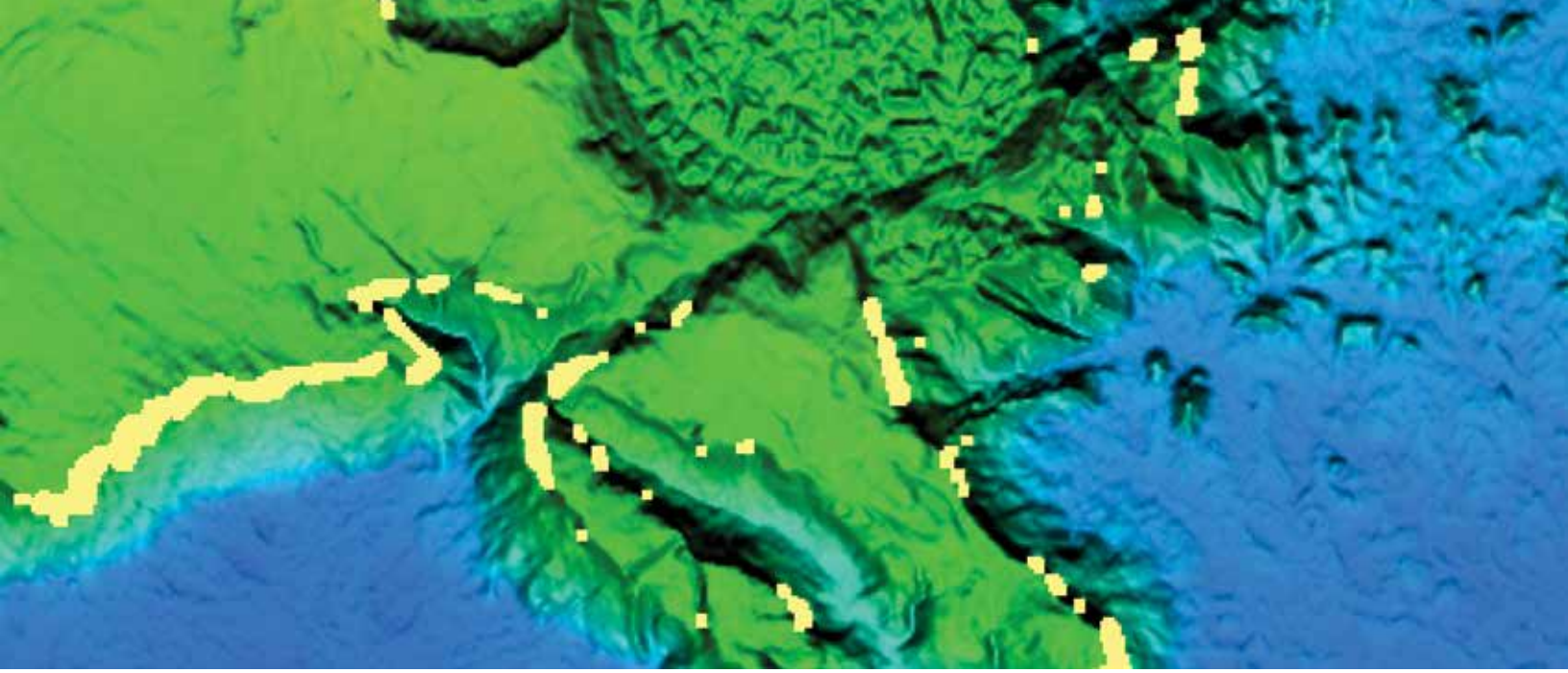
›› NEXTMAP MAINTENANCE

Intermap provides worldwide geospatial solutions, products, services, and applications, leveraging off our advanced technologies, award-winning 3D terrain production process, and highly skilled geospatial team. We help improve our client's business performance by providing leading-edge innovative solutions and advanced three dimensional geospatial products worldwide.

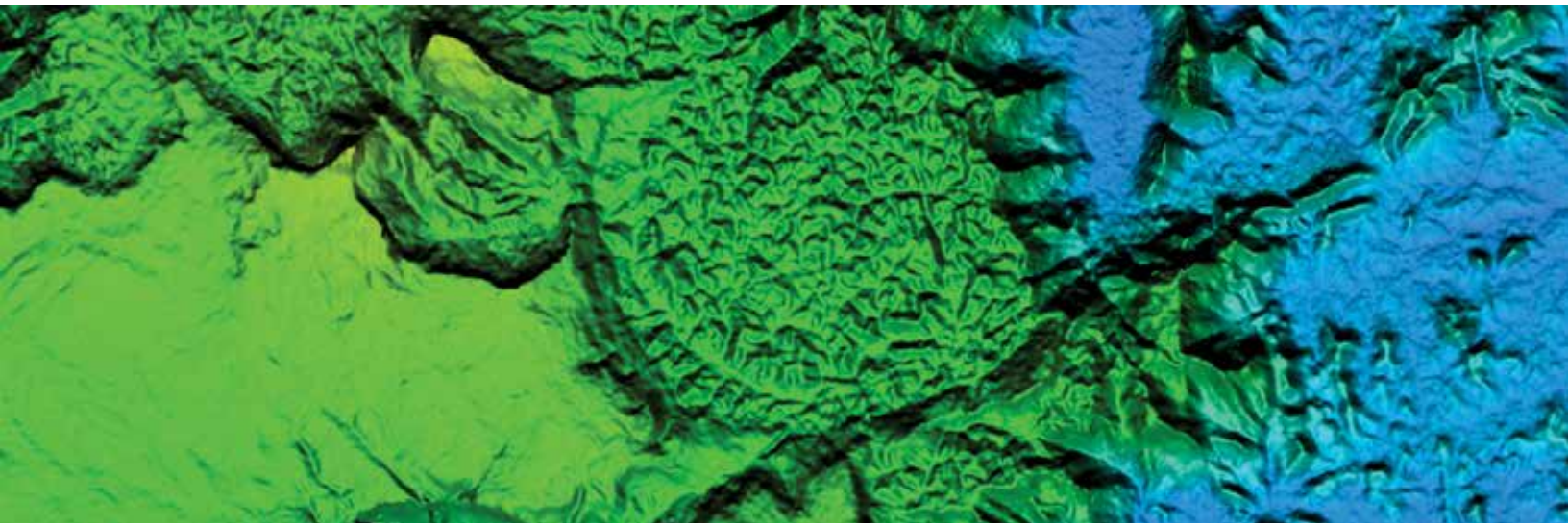
Consumers, governments, and businesses need to ensure their products and services are accurate, current, and supported throughout their lifecycle. Finding the correct solutions to your geospatial problems can be challenging. Having a source to turn to for answers can get you correct results the first time, allowing you to move on to your solution. The NEXTMap Maintenance Program is a valuable mechanism for affordably maintaining the accuracy your solution over time.



As part of the NEXTMap update strategy, our product suite continues to grow and improve in both currency and accuracy. New acquisitions of elevation data are added on a consistent basis and come from many collection sensors, including IFSAR, LiDAR, Satellite, and other technologies. As newer information becomes available, our foundation layer of NEXTMap product is enhanced. Our NEXTMap Maintenance Program offers our clients the ability to enjoy these enhancements for their area of interest automatically. Additional benefits of the program include premium customer support which provides quick answers when our clients encounter challenging issues. The NEXTMap Maintenance Program is an add-on to a customer's traditional data/service purchase and is paid annually.



Coarse resolution and voids can be seen in this SRTM 90-meter DSM.

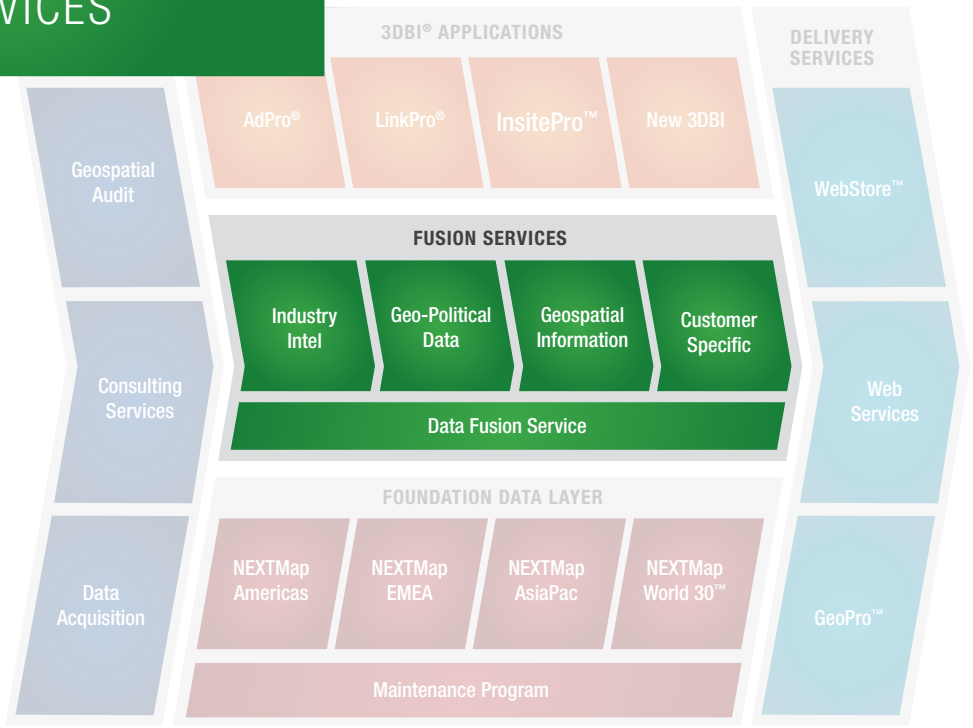


This image of the NEXTMap World 30 product depicts the same area as the SRTM but with a 30-meter GSD and no voids.

"The availability of Intermap's NEXTMap World 30 product will have a tremendous impact on plantation planning and management."

LAYER 3

FUSION SERVICES



We are a leader, innovator, and developer of smart, intuitive, 3D geospatial solutions that fuse structured and non-structured information, from multiple sources, both internal and external, to organizations that can be readily assimilated by decision makers. Through research and development programs, client projects, and fielding of proven systems, Intermap has worked with scientists, engineers, and subject-matter experts to develop data fusion solutions designed to reduce operator workload and enhance their understanding of the tactical operating environment.

Today, Intermap is at the forefront of data aggregation exploitation, with products and features designed to leverage data from a wide range of platforms and sensors creating affordable data fusion solutions.

›› INDUSTRY INTEL

Many industries possess a large inventory of field components and equipment that must be understood, monitored, assessed and showcased in a user-friendly format and online whereby multiple users can access, share, and make informed decisions. Utilities, AEC management, environmentalists, telecommunication coordinators, and oil and gas planners are just a few examples of customers possessing large amounts of field equipment, challenged in managing their inventory efficiently and effectively. Intermap's fusion services gives solutions to these industries and many more.

With geospatial products playing such an important role across industries, companies are utilizing NEXTMap products, solutions, and services because of their unique ability to provide highly accurate and detailed 3D geospatial information and solutions that increase the efficiency of their operations.

Key benefits to your industry include:

- Data standardization: Consistent quality across concessions and political boundaries.
- Availability: Off-the-shelf, easier single/multiple user access, quicker deployment rendering.
- Ease-of-use: Simplified workflow, accessed by most software tools
- Cost savings: Less expensive and an accurate alternative to field surveys.
- Time savings: Faster site location analysis from your desk with fewer trips to the field, reducing survey costs.
- Digital vs. analog: Replace paper and older engineering drawings with digital GPS-located source/receiver points.
- Hosting: Leverage Intermap's scalable global data hosting services to minimize internal IT infrastructure costs and improve 24/7 access.

Produced from Intermap's IFSAR sensors, this is an orthorectified radar image (ORI) of San Miguelito oil fields in southern California.

LAYER 3

FUSION SERVICES

›› GEO-POLITICAL

At the foundation in all levels of government planning, strategy development, and program implementation lies geospatial information. The ability to access this core information quickly, enabling users to visualize solutions, collaborate amongst stakeholders, and move forward with aligned answers is essential in efficiently and effectively managing government business and decision making.

Intermap offers strategic, results-orientated geo-political solutions from a trusted and experienced team of geospatial professionals. Our clients see challenges in defining requirements, improving operational performance, structuring solutions that leverage their technology investments, improving business process management, and executing strategic plans—all while reducing costs.

Intermap is equipped with the necessary tools and expertise to help you develop strategies for all aspects of geospatial planning, design, development, implementation, execution, migration, and future forecasting. Our experience is vast in identifying where and how these key capabilities can be applied to your geospatial program ensuring your goals are realized for today and that you are positioned for growth tomorrow. Employing our Orion Platform principles, Intermap helps you to integrate your geospatial and geo-political data and services in consideration of your existing workflow, budget, infrastructure, and solution requirements.

"This integration allows us to expand our service offering by giving users the ability to perform location-based analysis that will improve their organization's performance, effectiveness, and efficiency."

Our readily available NEXTMap product suite, custom mapping solutions, and three dimensional geospatial services provide government agencies with 3D mapping solutions that meet their diverse needs. Many federal, regional, and local governments throughout the world benefit from our 3D mapping solutions for applications such as:

- Defense and national security
- National and regional spatial data infrastructure programs
- Natural resource exploration, development, and management
- Flood modeling and watershed analysis
- Emergency response
- Natural resource conservation and environmental risk analysis
- Infrastructure planning
- General base mapping
- Image rectification

LAYER 3

FUSION SERVICES

›› GEOSPATIAL

Intermap has a rich history providing data services and solutions worldwide, supporting our client's in their complete geospatial needs. Our commitment to offering the very best quality, accuracy, and timely data collection products, services, and solutions is well known throughout the industry.

Whatever geospatial content is important to you, whatever aggregation of content is needed, Intermap is ready. Our patent-pending DEM fusion process and tools produce some of the most consistent, homogeneous, integrated, and accurate fused solutions allowing you to more effectively and efficiently assess, plan, and solve.

"This partnership has resulted in the design of a suitable product for wireless network operators who plan, build, and run networks in sprawling metropolitan areas where both man-made structures and vegetation play an important role in defining propagation characteristics."

LAYER 3

FUSION SERVICES

›› DATA FUSION

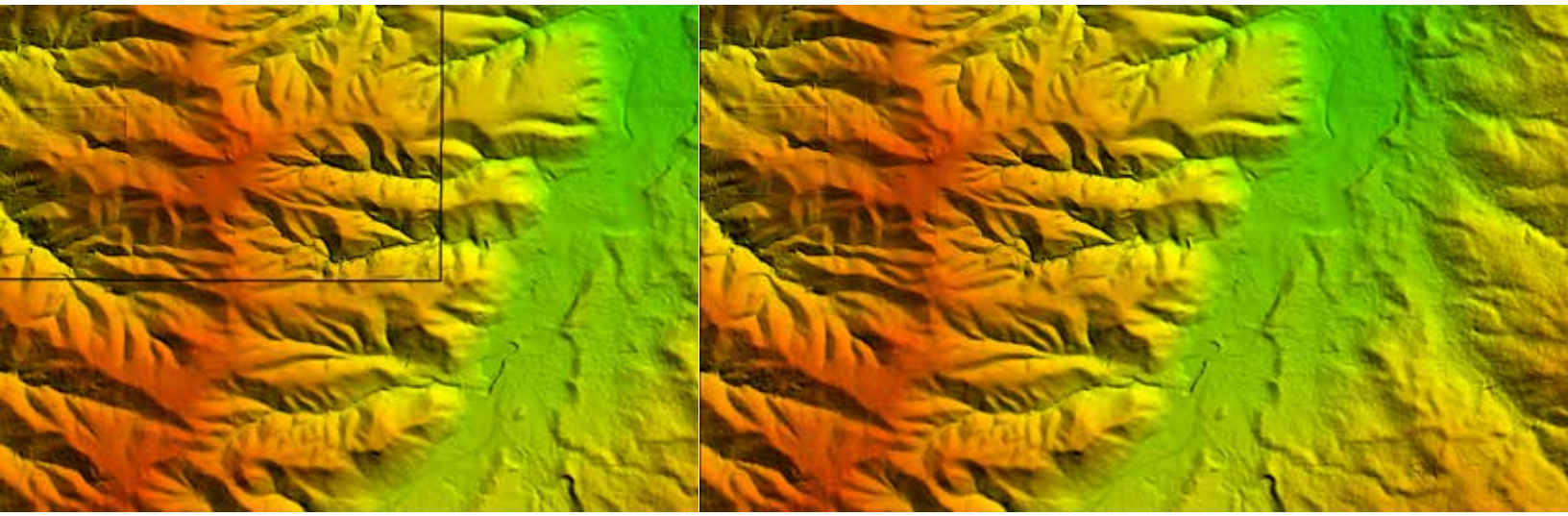
Many geospatial users end up with large numbers of separate terrain datasets that are next to impossible to use together. Intermap's affordable terrain data fusion solution brings multiple elevation datasets of differing resolutions and specifications together into one homogeneous data specification—as defined by the customer.

This fused terrain elevation dataset is often more accurate and useful (e.g. seamless, hydro-enforced) than the individual input elevation datasets are alone. We use a proprietary, patent-pending process to establish a more accurate dataset when validated against national survey data. This more accurate dataset is then used as the foundation to which all other elevation data are fused into one homogeneous, hydro-enforced product.

DATA FUSION PROCESS

Intermap has successfully developed elevation data fusion techniques that model systematic, low frequency errors in a high resolution dataset using a lower resolution dataset as reference. Using this technique, Intermap models and corrects systematic errors to produce improved higher resolution elevation data, such as that of LiDAR technologies. The high resolution data is also normalized to Intermap's consistent NEXTMap data removing any bias and planar tilts, where needed, further increasing the overall accuracy of the data. The combined improvements are applied to the full resolution LiDAR data, unlocking their full potential for government and large geospatial users.

The enhanced LiDAR data may also be combined through fusion with NEXTMap DEMs resulting in a consistent dataset through the incorporation of all available third-party data into the NEXTMap base layer. In a similar manner, building models will be fused into the NEXTMap DEM, further increasing value in large urban centers where radar is known to provide a less than optimal solution.



Benefits to the Intermap data fusion service include normalizing various LiDAR inventory to a common, seamless, hydro-enforced, and void-filled elevation dataset such as in the example above.

BENEFITS OF DATA FUSION SERVICE

Government and resource geospatial data managers have access to significant quantities of elevation data. Unfortunately, these data have been collected with many different technologies, project specifications, and quality control parameters. In simple terms, the data, when viewed in total, are inconsistent. As a result, it is difficult to implement key applications requiring seamless integration of multiple datasets, either due to the size of the region of interest, or analysis of temporal variation.

The seamless elevation dataset for your entire area of interest, resulting from our data fusion services, is ideal for:

- Maximizing your investment in LiDAR, photogrammetric-derived elevation models, or NEXTMap data
- Filling gaps in areas where your data is limited
- Merging terrain data derived from various LiDAR data providers and sensing technologies possessing different resolution and accuracy specifications
- Generating hydro-enforced terrain datasets so water flows downstream
- Producing seamless elevation datasets and fully integrated mapping solutions

"Intermap's GIS products helped us stay safe… when we entered remote areas, we always knew where we were and used Intermap's imagery to enhance our surveying efforts."

LAYER 3

FUSION SERVICES

›› DATA FUSION CONTINUED

RESULTS

Results include time saved searching through a variety of inventory, easier access, more consistent and quicker analysis across the entire area, and accessible elevation data for the entire area – not just where LiDAR may be available. The Intermap elevation data fusion techniques fully align multiple datasets, even those with complex, low frequency errors, providing a consistent, seamless, and fully integrated dataset with hydro enforcement.

APPLICATIONS

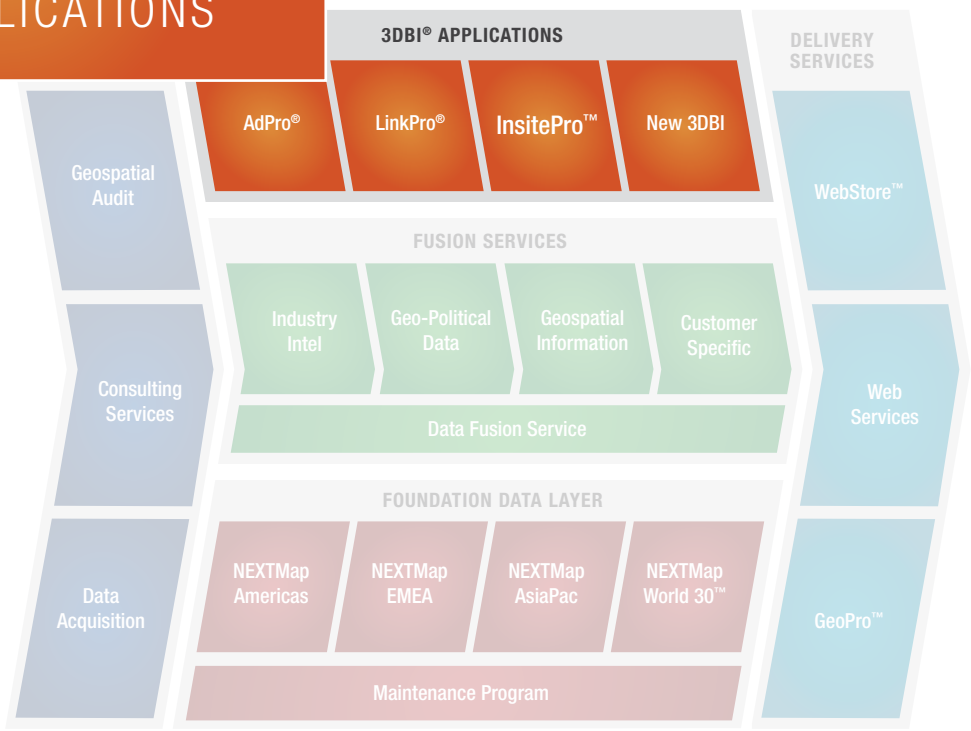
Optimal applications for the Intermap data fusion service include watershed modeling; floodplain management; engineering and infrastructure planning; risk management; telecommunications planning; natural resource exploration, development, and management; defense; national security; and emergency response. This list is by no means exhaustive; however, our government and commercial clients alike continue to find value in the application of Intermap's data fusion services.

BUILT ON THE FOUNDATION OF NEXTMAP

Our high-accuracy NEXTMap 3D terrain data for the world is the foundation of our data fusion services. NEXTMap includes digital elevation models and orthorectified radar images that are derived from multiple sensor technologies and optimized to ensure seamlessness and consistent results.

LAYER 4

3DBI APPLICATIONS



Intermap has developed all-in-one Web applications revolutionary in the fields of outdoor advertising, corridor planning, and risk management. The full suite of 3D Business Intelligence (3DBI®) Web-based geospatial applications are designed to help GIS professionals and non-GIS users perform simple analyses from a Web browser and make better terrain-based decisions without the need for any GIS software.

›› ADPRO®

These days, outdoor advertising is more important than ever to your clients. When used correctly, this compelling medium creates more impressions and more sales than any other advertising format. Period.

Are you and your agency getting your fair share of this large and growing outdoor advertising revenue stream?

"Intermap's outdoor advertising app called AdPro is amazing software that can tell you everything about any billboard location in the country—traffic speed, exposure time, height and read of sign, and much more."

›› ADPRO CONTINUED

So, is your agency getting its fair share? If not, ask yourself why. Is it because your margins are razor thin? Is it because there isn't reliable demographic data? Is it because the traffic information is too hard to verify? Is it because there isn't a unified database of all available outdoor properties? Is it because the process is just too manual and time-consuming?

MAKE YOUR OUTDOOR ADVERTISING MORE PROFITABLE

AdPro by Intermap will revolutionize the way you manage and grow your outdoor advertising business. AdPro combines best-of-class demographic, traffic, and mapping data into one easy-to-use Web interface. All subscribers to AdPro will benefit from:

- Access to AdPro's demographic ranking functionality, identifying where media locations best fit campaign targets
- AdPro's exposure calculation, identifying where a media location can be seen from and for how long that media location will remain in sight
- Traffic speed and congestion data that is aggregated and averaged constantly to provide historical speed and congestion patterns surrounding media locations
- Batch import functionality, 3D visualization, and street view imaging, and AdPro API integration
- NEXTMap 3D city models, unlimited media location reports, and private labeling
- Access to a designated support specialist

"We use AdPro to evaluate out of home media to ensure we are planning an effective campaign for our clients. AdPro demonstrates to clients that [we are] using every resource to ensure an effective campaign."

›› LINKPRO®

Smartphone usage is at an all time high with users demanding more and more data transfers along with faster speeds and consistent coverage. Carriers are responding by deploying microwave solutions to manage backhaul where fiber is nonexistent or too expensive. Every wireless carrier is facing this same problem and is in a race to build a solution faster and better than their competitors. LinkPro is a planning tool that will minimize desk plan iterations and cut down field verifications, not only saving money but also saving crucial time in the race to stabilize network infrastructures.

Until recently, the wireless telecommunications industry relied on obtaining information from several disparate sources. Understanding the best microwave links for strategic and tactical service planning has been a chore measured in weeks and at significant costs. Not anymore.

MAKE YOUR MICROWAVE LINK PLANNING MORE PROFITABLE

LinkPro by Intermap will revolutionize the way you manage and grow your microwave link planning business.

LinkPro combines Intermap's five-meter posted, one-meter vertical RMSE NEXTMap clutter height data along with user-defined tower locations and key planning tools into one convenient and easy-to-use Web service. Aimed at cell carriers, infrastructure planning companies, telecom service companies, MLP software providers, and cell tower owners, LinkPro provides customers with in-depth terrain and clutter analysis for any potential link in the continental US or Europe, including instant feedback and visual validation with the click of a mouse. This allows telecom planners to instantly analyze and view their network links, and filter a complex spider Web to a classified and rankable network that can help simplify the front end of their planning and development workflow of 4G WiMax and Long Term Evolution (LTE) wireless networks globally.

Using the LinkPro application, microwave link planners can quickly build an any-to-any network and immediately identify all valid links from links with obstructions penetrating the Fresnel Zone or blocking the line-of-sight between towers. Results can be viewed immediately online via clear map-based graphical representations of any given market that are color-coded based on clearance. Additionally, elevations at five-meter intervals compiled from Intermap's digital terrain model (terrain) and digital surface model (clutter) are exportable as a text file for each link.

LAYER 4

3DBI APPLICATIONS

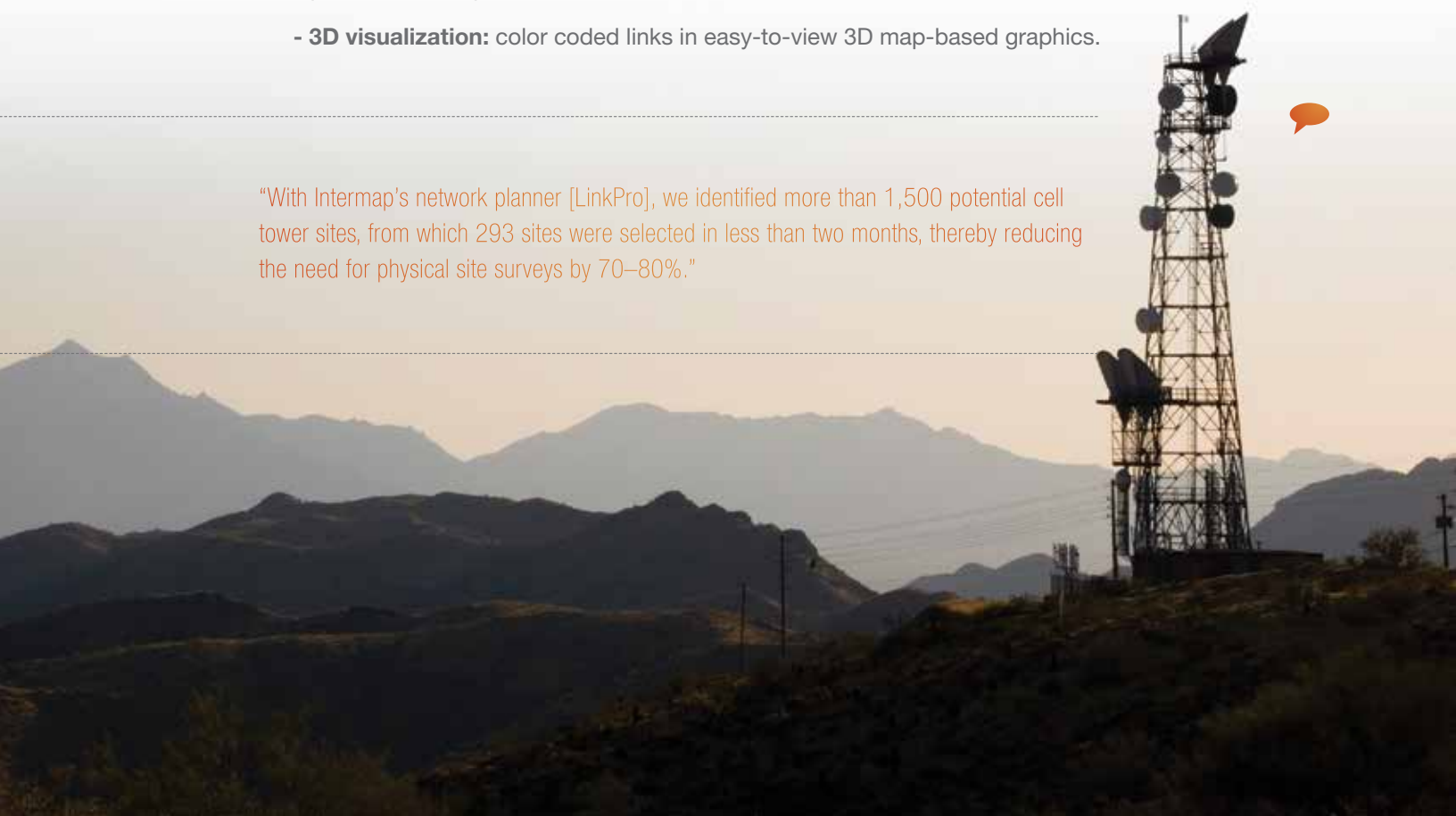
›› LINKPRO CONTINUED

These text files can be imported into other commercial microwave link planning software to create accurate 5-meter direct path profile models representing both the terrain and the clutter separately. This provides telecommunication companies the flexibility to fulfill their infrastructure planning needs without the requirement for any alterations to the existing workflow.

Key LinkPro features include:

- **Accurate clutter:** contains the industry's most accurate and comprehensive clutter database.
- **Inventory loading:** upload your tower database into LinkPro and manage it from anywhere. Or, let LinkPro manage it for you.
- **Planning tools:** Fresnel clearance analysis, tower height adjustment, link viability and more.
- **Private label:** label LinkPro with your company's brand or your logo to provide that personalized experience.
- **3D visualization:** color coded links in easy-to-view 3D map-based graphics.

"With Intermap's network planner [LinkPro], we identified more than 1,500 potential cell tower sites, from which 293 sites were selected in less than two months, thereby reducing the need for physical site surveys by 70–80%."



›› INSITEPRO™

Leveraging our rich history of providing risk mitigation solutions worldwide, Intermap's fast, location-based InsitePro software improves localized risk decision making for everyone. InsitePro's rich feature set provides a tool for users to assess risk for any location and make informed decisions about impending natural peril, risk impact to property, evacuation routes, safety locations, emergency storm shelter facilities, and more.

Combining climatological records, historical natural peril information, cutting-edge modeling, and best-of-class terrain data into an effective solution, InsitePro can be customized to support the specific needs of your organization with tailored hazard layers and analytics.

EASY-TO-USE APPLICATION

With our unmatched data assets, risk can be analyzed and quantified for areas of any scale, from national initiatives to a residential solution for a single homeowner. InsitePro brings together models and datasets including flood zones, wildfires, hurricane historical paths, airport locations, demographic data, fire responder locations, government buildings, hospitals, shelter locations, land use, roads and railroads, shipping ports, voting districts, and more. These models and datasets will be updated by data-streams of weather and other dynamic influences on risk to support tactical decision-making.

InsitePro can be used through the cloud, or as a stand-alone application supported locally on Intermap's secure GeoPro™ server when the security of data and networks prevents internet access. Additionally, the application includes a Google address search tool for users to obtain the geo-location of the property at risk, a map for visualization of the location overlaid on top of the flood zone information, and background maps. The background maps, consisting of city maps and aerial images, provide visual information during the risk assessment.

LAYER 4

3DBI APPLICATIONS

›› THE 360 REPORT™

The 360 Report, Intermap's latest 3DBI application aimed at property owners, is an invaluable tool that supplies essential information that can help you make better decisions when moving or relocating.

For any address in the United States (excluding Alaska), The 360 Report provides a risk projection based on FEMA flood zones, wildfire risk projection, and seven types of crime information. This comprehensive risk information can help you compare different properties, realize significant savings when negotiating purchase price, and help you, along with your family or business assets, find a safe place.

"The 360 Report was very helpful for the property I was looking at. It was easy to interpret and provided peace of mind that the property was not at risk for flooding or fires."

How are the reports created?

- **Flood Risk:** Once you choose your desired location(s), The 360 Report will collect and decode the most recently published FEMA flood maps and deliver a simple, user-friendly risk assessment report.
- **Wildfire Risk:** The wildfire risk is calculated using a technical model that has been validated against historical burn events; including the Waldo Canyon Fire (Colorado Springs, Colorado, 2012) and the Springs Fire (Ventura County, California, 2013). The model uses proprietary terrain data with more detail than any other wildfire risk model available, in addition to fuel and moisture indexes.
- **Crime Risk:** Utilizing continuously updated data from our partners, burglary, auto theft, larceny, assault, armed robbery, rape, and murder information is generated by a model that correlates historical and trending crime statistics with location and geographic features.

›› 3D BUSINESS INTELLIGENCE APPLICATION SERVICES

Building off our geospatial expertise in location-based intelligence, Intermap offers services to help move your data from individual pieces of information, to a world class 3DBI Web-based application. Data alone is a key component in helping to run your business, however, married to other key components of information and wrapped in a rich user interface, an Intermap 3DBI application helps in visualizing the answers you need to more effectively manage your business.

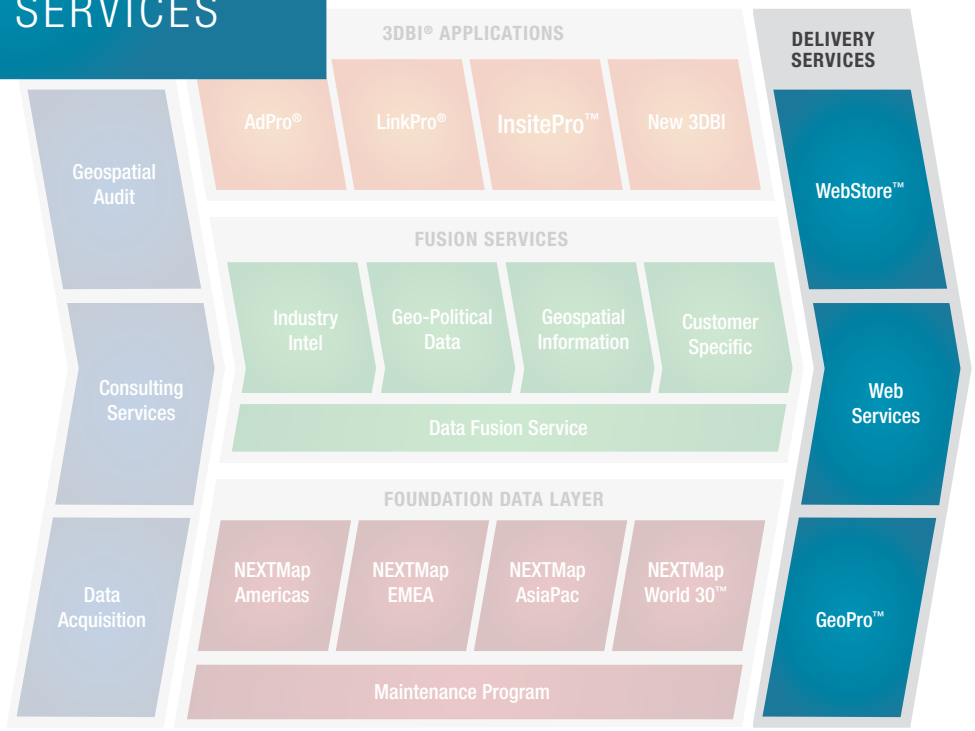
3DBI benefits which are focused on “enabling” geospatial content for use by a wider audience, particularly non-GIS users or more junior users who are not trained in complex, geospatial tools and workflows.

How can you benefit from Intermap’s 3DBI Application Services?

- Increase productivity by streamlining your geospatial workflows
- Increase ROI by enabling GIS and non-GIS users alike to benefit from NEXTMap content
- Save time and money by consolidating content in the cloud
- Simplify complex workflows, enabling you to more effectively manage your workforce (essentially allowing more senior people to do more complex work rather than those tasks that a more junior person could perform via the 3DBI app)
- Consolidate your data and information in one easy Web-based mapping interface
- Visualize and reference key location-based components of business intelligence together
- Manage your inventory of information key to your decision making
- Get to your solution more quickly and effectively

LAYER 5

DELIVERY SERVICES



Intermap offers an array of delivery methods to encompass varied customer needs. Whether you're looking to have your entire organization accessing NEXTMap products, solutions, and services via a secure firewalled appliance or the cloud, or simply need to access the Web for a quick answer to your problem, Intermap offers a suite of flexible options.

›› NEXTMAP WEBSTORE™

Since the first B2B online transaction back in 1981 and the subsequent first B2C online purchase in 1984, buying via the Internet has become the option of choice when considering product and service purchases. Intermap understands this convenience well and provides products and services via our NEXTMap WebStore that are second-to-none in the geospatial industry.

Offering an expanded suite of hosted tools, Intermap's WebStore gives even those unfamiliar with GIS the ability to quickly and easily download terrain data based on an area of interest, or access their county and state via an Open Geospatial Consortium (OGC) subscription service.

More specifically, the NEXTMap WebStore offers two convenient ways to access products and services. The Basic option offers downloads of small areas of interest for customers wanting to own data and manage within their workflow. The Premium/Enterprise option is perfect for clients in need of large amounts of data but prefer to access via a Web Service through Web browsers, desktop software (ArcGIS, Global Mapper), or via an application that leverages the Intermap Web Service software developers kit (SDK).
Our Web Services provide OCG-based services and include:

- **Web Map Service (WMS):** provides a map image that can be displayed in a browser application or OGC-compliant software.
- **Web Coverage Service (WCS):** Offers grid coverage or raster data that can be used as input data for 3D analysis and modeling.
- **Web Feature Service (WFS):** provides a vector layer that can support map objects such as .shp files and metadata.

›› WEB SERVICES

Web Services provide immediate access to our NEXTMap products, services, and online tools to help you save time, money, and resources. Since all of the data is hosted in the cloud and not on a local computer or server, there's no need to store, manage, or disseminate data yourself. By offering our NEXTMap products and services via Web Services, you get instant access in a standard format and at pricing that is unrivaled in the industry. Our standard pricing plan addresses most of our client needs by offering a single area purchase option and two subscription plans. In addition, we provide a custom plan that allows you to tailor the products and services thereby meeting your exact needs.

Intermap offers two classes within its Web Services API:

- **Data Services:** used to get access to Intermap's data products from within GIS software (ESRI, Global Mapper, ERDAS, MapInfo, Quantum GIS, Cadcorp, MapBrowser, etc.)
- **Terrain Analysis Services:** used to carry out analysis on Intermap's data products via the internet. Use within your application to employ tools such as Get_height, Get_profile, and Get_viewshed.

LAYER 5

DELIVERY SERVICES

›› GEOPRO™

Intermap understands your need to turn your data into actionable information, in response, we offer a solution in the form of GeoPro. GeoPro is a server software product, designed specifically to serve disparate spatial information and associated analytics to end users of Web and desktop applications. This powerful server can be fully integrated into your current infrastructure and is centrally accessible, allowing authorized users immediate access to the geospatial information they need in order to plan and solve problems quickly.

GeoPro differs from other GIS software on the market as it assembles the datasets in a centrally managed repository, and provides users with a network-visible and user-friendly toolset. Plug-and-play into your existing network, turn on using a simple user interface, and ready to go in minutes, GeoPro allows you to secure your databases, software, and hardware and is configured to work within your organizations existing security infrastructure.

BENEFITS

Your organization can benefit from GeoPro in many ways, including:

- Easy, secure user interface
- Data Integration: Enterprise Service Bus (ESB) capable of integrating over 400 different geospatial and non-geospatial data formats as well as support for hundreds of projections and datums.
- Information Sharing: Serve large amounts of spatial information to end users of Web and desktop applications.
- High-Volume Performance: Completely scalable to support as many users and as much data as desired.
- Data Visualization: Visualize all of your aggregated data on a map and create customized Web maps for others to use.

IDEALLY SUITED FOR SENSITIVE PROJECTS

GeoPro allows your organization to determine who shall have access to which projects, solutions, and databases, and for how long. The enhanced administrative tools allow you to manage your projects to ensure they are secure.

TAILORED FOR YOUR PROJECT REQUIREMENTS

Our trained geospatial experts will consult with you to determine the requirements of your project and customize GeoPro with our world-class foundation layers, SaaS software, and our 3DBI applications as required. In most cases our services allow you to build on your existing data via our patented data fusion services, providing best-of-class datasets via merged data sources such as IFSAR, LiDAR, and satellite-generated data.

"Overall, this partnership will enable our users from across the globe to perform location-based analysis using the most accurate terrain data available."

›› NOTES

›› NOTES

INTERMAP

CAPABILITIES

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