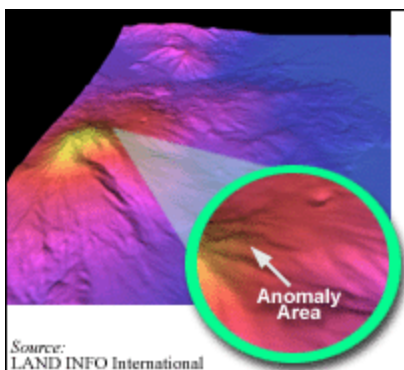


Client Solutions

UNCOVERING NOAH'S ARK ON MOUNT ARARAT

Fifty years of mystery and debate may be coming to an end very soon. Near the top of Turkey's Mt. Ararat, sits a 600-foot rectangular-shaped object which many believe is the remnants of Noah's Ark. The "Anomaly" was first discovered and photographed by U.S. Air Force pilots during a routine mission in 1949. Since then, numerous U.S. spy satellites have confirmed that the object does not naturally fit into the mountain's landscape. Further heating the argument, several CIA imagery analysts have speculated that the object appears to be nautical in structure. The subject remains a mystery because all but four of these photos have been declassified ([see 1949 photos](#)) for researchers and the international public. Now, with the evolving capabilities of commercial GIS technologies, the convincing proof may be just days away.

The biblical tale of Noah's Ark, the great flood, and the boat's landing somewhere in the "mountains of Ararat" are accepted by all three major religions, Christians, Jews, and Muslims. The controversy surrounds the fact that no one has ever produced conclusive, scientific proof that the Ark ever existed. Over the past 50 years, dozens of private expeditions have climbed the mountain seeking proof. The primary challenge is navigating Ararat's rough terrain to get to the Anomaly site. The closest any one has come is about a mile and a half from the site. The Anomaly is on the northwestern side of the mountain, at a lofty 15,500 foot elevation, approximately 2,000 feet below Ararat's summit.



Source:
 LAND INFO International
**LAND INFO produced a Mt. Ararat
 DEM to support search for Ark**

in his pursuit for the truth about the Mt. Ararat Anomaly.

In 2000, Space Imaging's Ikonos satellite captured several shots of the Anomaly over Mt. Ararat. However, the imagery did not conclusively end the mystery. Taylor is now working with DigitalGlobe, and its new 2-foot resolution satellite, to acquire new photos. Clear photos at this resolution would be a major stepping stone for the project.

Taylor's work also involves other support GIS datasets. He contacted LAND INFO International to support his analysis and presentational needs. LAND INFO produced a high-resolution digital elevation model (DEM) of Mt. Ararat. ([See 3D Model of Mt. Ararat](#))

"I am very excited to have LAND INFO on our team," commented Taylor. "They moved quickly to produce a [high-quality 3D model of the mountain](#) that will be a great help to our team." The DEM will be integrated with other datasets to aid

Services News

NEW SEAMLESS AERIAL PHOTO MOSAIC OF USA

LAND INFO has completed an agreement with Choctaw Geo Imaging (CGI) to offer **geoORTHO**, a seamless mosaic of USGS Digital Orthophoto Quarter Quad (DOQQ) aerial photography. The dataset, which complements LAND INFO's Quick DOQQ product, contains several enhancements, including radiometric balancing, mosaicking, database formatting, and black & white standardization. The geoORTHO data is packaged as a nationwide or state mosaic. County datasets will be available soon.

"We selected LAND INFO as our first resell partner, because of its impressive list of clientele, and sustained commitment to delivering quality products," commented **Brenda Burroughs**, CGI's Director of Sales. "Our geoORTHO data is an excellent complement to LAND INFO's suite of domestic data products."



The geoORTHO dataset is orthorectified to a pixel resolution of one meter. The data is enhanced through the following processes:

Radiometric Balancing

This technique corrects the photo for brightness or darkness, image vignetting, and bi-directional radiometric issues.



New GIS capabilities may help unravel mystery very soon

Weather conditions have also hampered search efforts. The Anomaly is submerged in a permanent glacier, and frequently covered in deep snow. This deep freeze may also be an advantage for preserving any remnants. Heavy cloud cover, snow, and glacial conditions dictate how much the satellites can photograph.

Successful imagery missions and on-site expeditions must be timed with minimal cloud cover and heavy glacial melting.

Since 1993, **Porcher Taylor, III**, has led the fight to unravel the mystery of the Ark. Taylor is a Senior Associate at the Center for Strategic & International Studies, a Washington D.C. think-tank. He is also an Assistant Professor at the University of Richmond in Virginia. Taylor was responsible for getting the government to declassify the four 1949 photos. However, these photos are just a handful of hundreds of classified photos of the Anomaly area. Taylor continues to seek declassification of all available photos. Simultaneously, Taylor has turned to commercial GIS technology

analysis of imagery and create simulations of the Anomaly area. For example, the DEM will help scientists compare the Anomaly's characteristics with the mountain's natural terrain.

The next step for Taylor is to acquire and publish conclusive images with expert analysis that proves the Anomaly is man-made. This would prompt further pressure for the American government to declassify the remaining Anomaly photos. Most significantly, this would also provide the trigger for Turkish officials to authorize a military mission to the Anomaly site. This type of mission would involve sending a helicopter team to view the site up close and potentially acquire samples for lab testing.

Lab tests, particularly modern DNA testing, could verify the substance of the Anomaly objects. According to the Bible, Noah was instructed by God to build the Ark from "gopher wood." The experts believe the year-round glacial conditions will help preserve any remnants on the mountain. Remember, the Ark was thought to be built over 5,000 years ago. Modern DNA testing will also be able to verify if animals came in contact with the objects.

Although the details of Noah's Ark was told thousands of years ago, the real story is just beginning. Modern remote-sensing and GIS technologies are shining new light on the mystery high on Ararat. [Click here to view 3D model of Mt. Ararat and the anomaly area.](#)

Black & White Standardization

Color and color infra-red photos have been converted to create a consistent black & white dataset across the country. This conversion utilizes all three bands of original image data which creates a richer and more dynamic visual image compared to the traditional one-band process.

Mosaicking

This process eliminates the overlap and redundancy between images. The production step involves running a predefined mosaic line through each image, which identifies unnecessary overlaps. Finally, a feathering technique removes break lines between images caused by radiometric differences in the original imagery.

The geoORTHO data is available in any common data format, compression routine, datum, and projection. The product is compatible with most GIS software applications.

CGI is a new enterprise of the Mississippi Band of Choctaw Indians (MBCI). MBCI has successfully launched a portfolio of manufacturing, tourism, and retail businesses throughout the United States and Mexico. Initially, MBCI created commercial ventures to generate jobs for its tribal members, and fund government services such as education, health care, police, and fire protection. The growth of the early businesses enabled the tribe to capitalize on emerging business trends, such as geo-technologies.

Services News

3D MODELS, TOPOGRAPHIC MAPS, CONTOURS, FEATURE LAYERS NOW AVAILABLE FOR MEXICO

LAND INFO offers nationwide data [coverage for Mexico](#). Digital topographic maps are available in both 1:50,000 and 1:250,000 scales. Digital Elevation Models (DEM) are available in 30-meter and 90-meter grid posting formats. Extracted road, contour, hydrology, and other map

topographic map. For example, oil & gas engineers may overlay satellite photos and proprietary pipeline data on top of the topographic map for analysis purposes.

LAND INFO also offers a variety of

features are also available. The digital datasets are fully geo-referenced to accommodate use with GPS, GIS, and engineering applications. Special pricing is offered for [Mexican State bundles](#).

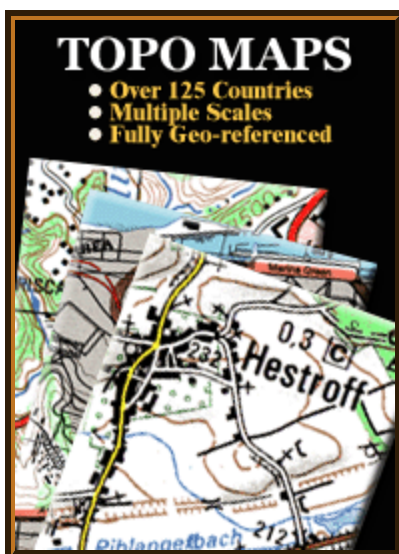
LAND INFO color scans paper topographic maps to produce a high resolution, digital image. Latitude and longitude coordinates are then



Mexico contours & DEMs are based on topographic maps

assigned to each map. This enables engineers, GIS project managers, and other end users, to overlay other geospatial data on top of the base

[derivative products](#) based on the Mexico topographic maps, including [digital elevation models \(DEM\)](#) and [extracted feature layers](#). The DEM dataset is created by extracting the contour elevation data from the source map. This contour data is then formatted to create a 3D interpretation of the land area. Extracted feature layers, such as [roads and waterways](#), are produced through a similar process.



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LAND INFO International, LLC

LAND INFO International offers GIS data and services for the United States and over 125 other countries. The company markets digital data, including topographic maps, 3D terrain models, contour elevation data, satellite imagery, aerial photos, transportation data, hydrography data, and custom datasets. LAND INFO provides geospatial solutions for civil engineers, government planners, project managers, and other international professionals. Please visit www.LANDINFO.com to learn more about these products and services. [Contact LAND INFO](#) today at 1-800-949-5080 (+1 303-369-6800) to discover how our data solutions can maximize the success of your team.

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