

Business

GeoEye-1 Imagery for Google

GeoEye has started delivering Google with high-resolution, colour satellite imagery from its newest satellite. The GeoEye-1 satellite images currently highlighted by Google were all taken within the last sixty days, and include images of the Pyramids of Giza, Mount Fuji, Sydney Australia, and many other recognisable locations. The images were all taken from 423 miles in space as GeoEye-1 moved around the Earth at 17,000 miles per hour. The 4,300-pound GeoEye-1 satellite was launched from Vandenberg Air Force Base (USA) on 6th September 2008.

<http://earth.google.com/geoeye/>

US Remapped in 3D

Intermap Technologies has completed data collection for its NEXTMap USA 3D mapping programme. This first company-funded initiative to map 3.1 million square miles (more than 8 million km²) of the entire contiguous US and Hawaii was completed in March 2009. The company plans to ultimately generate an elevation for the national dataset at unprecedented accuracy and detail that includes 3D digital terrain models, digital surface models, contours, 3D road center-line geometries, and other high-resolution geospatial products.

www.terrainondemand.com

OpenStreetMap 3D Prototype

Open geodata from OpenStreetMap (OSM) and elevation data from the Shuttle Radar Topography Mission (SRTM) have been used for the development of a 3D Geodata Infrastructure (GDI-3D) based on Open Geospatial Consortium (OGC) open web service standards. The work was done within the context of the research project 'Geodata Infrastructure 3D', and Germany was used for a first test-case. A Web 3D Service (OGC W3DS) is providing the client with the data as a 3D-scene graph. The first prototypical visualisation of the OpenStreetMap data in 3D takes place in a W3DS client (XNavigator). In contrast to server side rendered maps (as in typical Web Map Services like www.osm-wms.de), completely free client-side interaction and navigation is possible. As all data is passed to the client computer, a good internet connection and recent computer with its own graphic card are needed (cmp. system requirements), so that the method is also especially suitable for intranets. The project runs under the auspices of the Research Group Cartography (Prof. A. Zipf), Department of Geography, University of Bonn (Germany)

www.osm-3d.org, www.geographie.uni-bonn.de/karto/

Seventh GPS Satellite

A Lockheed Martin-built, modernised Global Positioning System Block IIR (GPS IIR-M) satellite, equipped with innovative payload that will provide an on-orbit demonstration of a third civil signal, was launched on 24th March 2009 from Cape Canaveral Air Force Station (FL, USA). Designated GPS IIR-20(M), the satellite is the seventh in a line of eight GPS IIR satellites that Lockheed Martin Navigation Systems has modernised for its customer, the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base (CA, USA). Modernised GPS IIR satellites include several features that enhance operations and navigation signal performance for military and civilian GPS users. The IIR-20(M) spacecraft also includes a new demonstration payload that will transmit a third civil signal on the L5 frequency (1176.45MHz), complying with international radio-frequency spectrum requirements. Follow-on generations of GPS spacecraft will include an operational L5 signal to improve system accuracy and performance.

www.lockheedmartin.com