### Lebanon



LAND INFO offers a variety of digital topographic map & nautical chart data and satellite imagery products of Lebanon including DEMs (Digital Elevation Models), bathymetry and vector layers such as contours, hydrology & transportation/roads. All data is delivered in industry standard file formats such as GeoTiff, NITF, ER Mapper .ecw, LizardTech MrSID .sid, JPG2000 .jp2, Idrisi .rst, ERDAS .img, ESRI .shp shapefile or .mdb GeoDatabase, AutoCAD .dxf or .dwg, MicroStation .dgn, MapInfo MIF/MID/TAB, USGS ASCII .dem, ARC ASCII GRID, DTED and .bil (other formats available upon request). All data includes customer choice of projection.

**Contact us** for educational and volume purchase discounts. Please note that due to copyright restrictions some map products are only available in their original printed format.

# Digital topographic maps available as DRGs (Digital Raster Graphics), vector layers and/or DEMs (Digital Elevation Models: 20m - 90m resolution):

Full coverage of Lebanon via 43 Russian military 1:50,000 topographic maps

Full coverage of Lebanon via 14 Russian military

1:100,000 topographic maps

Full coverage of Lebanon via 5 Russian military

1:200,000 topographic maps

Full coverage of Lebanon via 4 US NGA 1:250,000

JOG topographic maps

Full coverage of Lebanon via 1 US 1:1,000,000 ONC aeronautical topographic map



Lebanon	
Land area	
Water area	
Total area	10,400 sq km
Land boundaries	454 km
Coastline	
Lowest point	Mediterranean Sea 0
Highest point	Qornet es Saouda 3,088 m

# Large-scale (detailed) city mapping available as DRGs (Digital Raster Graphics), vector layers and/or DEMs (Digital Elevation Models: 5m - 10m resolution):

Beirut (Bayrut) – 2 Russian military 1:10,000 topographic City Plan maps Sidon (Sayda) – 1 Russian military 1:10,000 topographic City Plan map Tripoli (Tarabulus) – 1 Russian military 1:10,000 topographic City Plan map

#### Off-shelf global data of Lebanon-low-cost, rapid delivery:

Lebanon VMAP-0 – US NGA 1:1,000,000 vector mapping

Lebanon SRTM - Shuttle Radar Topography Mission Dem data available at 1 arc second (ca. 30m), 3 arc second (ca. 90m) or 30 arc second (ca. 1km)

Lebanon GeoCover 1990 30m resolution 7-4-2 Landsat 5 ortho imagery

Lebanon GeoCover 2000 15m resolution 7-4-2 Landsat 7 ortho imagery

#### **Satellite Imagery:**

High-resolution satellite imagery including Airbus Pléiades 50cm, DigitalGlobe IKONOS 80cm, QuickBird 60cm,

## Lebanon (continued)

GeoEye-1 40cm, WorldView-1 40cm, WorldView-2 40cm & WorldView-3 30cm of Lebanon Medium-resolution satellite imagery for cost-effective large-area coverage including Airbus SPOT Image 1.5m - 20m & SPOTMaps, ALOS 2.5m - 10m, RapidEye 5m, ASTER 15m, DEIMOS 22m and Landsat 15m - 30m of Lebanon

#### **Remote Sensing Services:**

Image processing services including orthorectification, tonal balancing, mosaic output, pan-sharpening, band manipulation, natural color simulation, 16- to 8-bit scaling/DRA (Dynamic Range Adjustment), cloud-patching, atmospheric correction, wavelet compression, GPS GCP (Ground Control Point) target location and accuracy assessment.

Classification & Object Based Image Analysis services including land-use/land cover, vegetation and impervious surface mapping.

2d vector feature extraction including roads/transportation, hydrology and building footprints.

3d terrain modeling via auto-correlation or photogrammetric methods using stereo satellite imagery including high-res (Pléiades, IKONOS, GeoEye-1, WorldView-1, WorldView-2 & WorldView-3 -- up to 1m post spacing), Airbus SPOT 5/6/7 (5m - 30m post spacing), ALOS (10m post spacing), ASTER (30m post spacing) or radar (Radarsat and Airbus WorldDEM TerraSAR-X/TanDEM-X); Intermap DEMs (5m post spacing) from airborne radar are also offered of select locations. 3d building models with customer choice of LOD (Level of Detail) are extracted from stereo or off-nadir imagery.

Contact us with your AOI (Area of Interest) for a scene search to determine if the imagery you need is already in archive or has to be custom-acquired.

#### LAND INFO Worldwide Mapping, LLC

Founded in 1993, LAND INFO Worldwide Mapping, LLC (Land Info) maintains one of the world's largest commercial archives of digital and paper topographic map and nautical chart data. Complemented by a variety of high-resolution and medium-resolution satellite imagery products, our total focus on data enables us to deliver high-quality solutions with rapid turn-around at competitive prices.

The markets we serve include mapping and geographic information systems (GIS), academia, national security and defense, visualization/simulation, aviation, wireless communications and other utilities, mining, oil & gas, conservation, hydrology, civil and environmental engineering, conservation, humanitarian assistance, land surveying, development, fleet management, mass media and motion pictures, among others.

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