



# Satellite Map of the NORTHERN LEVANT



**Technical Details**  
This image consists of a mosaic of sixteen LANDSAT 5 TM scenes. It is derived from the worldwide seamless LANDSAT 5 TM imagery GeoCover™ dataset produced by Earth Satellite Corporation (EarthSat, website: www.geocover.com) in Rockville, Maryland, USA. The false color scene is composed of TM spectral bands 4 (reflective infrared 0.76-0.90 μm), 7 (blue 2.08-2.35 μm), and 2 (green 0.52-0.60 μm). The pixel size is 28.5 m. The image has been georeferenced to the UTM projection (Grid Zone 37) on the WGS-84 datum. The scale is approximately 1:1,039,500 with a superimposed grid every 100 km.

**Geography**  
The image covers an area of some 433,715 km<sup>2</sup> and shows all or parts of Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Turkey. On the west lies the Mediterranean Sea. Paralleling the coast are the rugged mountains of Lebanon, and in the southwest across the Bekaa Valley, the Anti-Lebanon with Barjassus on its southeastern flank. The pink areas in the mountains are snow. In the extreme southwest lies the Sea of Galilee, the Golan Heights, and the dark green volcanic areas of Jebel Druze. In the north, within Turkey, are the southern flanks of the Taurus and Zagros mountain belts. The remainder of the image consists mainly of the western parts of Mesopotamia, and the northern parts of the vast Syrian Desert, crossed by the Euphrates River and its Khabur tributary.

Extending northeast, into the interior, from Damascus is Jabel al Ruwaaq (the Palmyrides). Vegetated areas are dark red, while the areas of pink in the deserts are sabkhras.

**Works of Man**  
Along the Mediterranean coast the major ports of Beirut (Beiruti), Tarabulus (Tripoli), Al Ladhidiyah (Latakia), and Iskenderun (Alexandretta) are clearly marked by gray urban patches define the cities of Damascus, Hama and Hama. Several large reservoirs have been produced by damming the major rivers: in Turkey, the new Ataturk reservoir on the upper Euphrates, and the prominent Bahayrat al Asad reservoir behind the Euphrates Dam.

**Tectonic Framework**  
Technically, the area is dominated by the effects of the northward collision of the Arabian Plate with Asia. In the west, the Dead Sea fault system can clearly be seen, working its way north from the Sea of Galilee, through two obliquely in the Anti-Lebanon, and then as an echelon strike into Turkey. Three sets of structures with the NW-SE Red Sea trend cross the area: the Zagros Fold Belt in the north, the Euphrates Fault Zone in the central regions, and of the image south of Jebel Druze, the Wad Sirhan Graben. Four other structures wrap (convex to the northwest) around the main thrusting direction of the collision: from north to south, the East

Anatolian Fault, the Bitlis Zone, the Palmyrides Zone, and the Unayzah-Rubah Uplift.

**Geological Formations**  
The geology consists primarily of sedimentary rocks with extensive regional outpourings of basalt. Quaternary to Recent basalts predominate in the southwestern corner of the area, in the Golan Heights, Jebel Druze, and northern Jordan. Here the coloring is dark green to black, with numerous conifer cones. Elsewhere, darker areas in the western half of the area, in the area between the Euphrates and Khabur Rivers, and in northeastern Syria reflect Neogene to Lower Quaternary basalts. A Mesozoic ophiolite series of argillites, diabases, spilites, and peridotites with a small Pre-Cambrian(?) exposure is located between Latakia and the Turkish border. The rest of the area consists of sedimentary rocks. The northeastern part surrounding the Euphrates and Khabur Rivers is primarily Neogene conglomerates, siltstones, sandstones, clays, and marls with some gypsum and rock salt. The lighter colored areas around the Palmyrides are primarily Cretaceous chalky and detrital limestones. In the remaining areas, primarily at right angles to the Palmyrides, are Paleogene limestones, sandstones, marls and clays, as well as nummulitic and chalky limestones.

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