

Use of Remote Sensing Data to Study the Environmental Problems In the Southern Part Of Syria

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Abstract

A complete geoenvironmental researches are carried out by using space images. With production of various geoenvironmental maps 1/100000 scale, to the Southern area of Syria ,10000 km².the work include a large number of Russian Space Images, have been used in this study. These images have a spatial resolution of 5-45 m.. within several spectral bands which range from 5-9 micrometer. Computer processing of the images has been performed using ERDAS software. This was followed by field check of important phenomena, and collecting of samples (rock, soil, vegetation, surface water, groundwater and bottom sediments). Chemical and bio- geochemical analyses on those samples, allowed determining normal geochemical base in ecosystems. And anomaly degree of artificial systems. This, in turn, allowed the assessment of human activity impact and properties. At the end, geo-environmental maps, and geo-environmental Situation assessment maps were compiled for the study areas, at the scale of 1/100000. Geo-environmental maps consisted of the following schemes:

- 1-Ecosystems map
- 2-Map of Geological Endogenous and Exogenous processes and phenomena.
- 3-Land use map which reflected 14 kinds of artificial systems, resulted from human activity
- 4- Geochemical maps which reflect the pollution degree of soil, vegetation, surface water and groundwater, especially in Barada River and rivers bottom sediments.

Maps of geo-environmental situation assessment, allowed the determination of the following ecological condition:

- *Areas of normal natural situation- . * Acceptable situation.
- *Dangerous situation.*Very Dangerous situation.

Those maps formed the basis for future environmental monitoring.