

## عنوان مقاله:

MONITORING AND CALCULATING THE SURFACE AREA OF LAKES IN NORTHERN IRAQ USING SATELLITE IMAGES

## محل انتشار:

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## خلاصه مقاله:

Water level and distribution is very essential in almost all life aspects and plays a great role in determining the population distribution and also in the economical state of Iraq. Natural and artificial lakes represent a large percentage of these water bodies in Iraq. In this research the changes in water levels are observed by calculating the areas of five different lakes in five different regions of the country, in a period of 40 years (1972 - 2012). In this study, archived remotely sensed images were used to determine surface areas around lakes and dams in Iraq for the chosen years (1972-2012). Level of the lakes corresponding to satellite determined surface areas were retrieved from remotely sensed data. These data were collected to give explanations on lake level and surface area fluctuations. Determination of lake surface area is important for water balance study and to manage risks around the lake, it is important to determine these areas at different water levels to know areas which are being flooded in addition to the total area inundated. Hydrological system of these lakes was appraised in the period 1972-2012, by using geographic information system (GIS) and remote sensing which found that the total area of the lakes surface had dimmed and the volume of the water reduced. The study further disclosed that the lake surfaces levels had lowered through those forty years.

## کلمات کلیدی:

Remote sensing, Satellite images, lakes in Iraq, geographic information system

## لینک ثابت مقاله در پایگاه سیویلیکا:

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