

Abstract

Low rainfall, dry areas such as Iran, the surface freshwater resources are limited and the other side of this water pollution risk faced by underground water supplies and maintenance needs of water is best. Also in some parts of Iran, climate and good conditions for Tectonic Structure formed by karstic table is provided. Karst are numerous definitions, but mainly to say that interact in calcareous rock comes into existence the phenomenon of dissolution or seam gaps and being able to cause stones in the rain holding his own until the opportunity Suitable to be exploited. Iran after the countries of America, China and Turkey has the highest percentage of karst and more than eleven percent of our surface karstic cover the constructor. The purpose of this study of the relationship between lineaments extracted from satellite imagery, tectonic elements, network topography, hydrography and agents with many water resources in the region Karstyk Maharloo using GIS and remote sensing are For this attempt to provide layers of information including lineaments, range curvature, elevation classes, slope, vegetation, springs, tectonic elements and hydrography network using field visits, topographic maps, geology, satellite imagery and digital models Was high. Findings with statistical tests such as linear regression, and Spearman and Pearson correlation analysis, principal component analysis was used. The results show that close ties between sex formation, topography (eg slope, elevation and range curvature), lineaments and hydrological factors, with many springs in the study area there. This relationship indicates significant role of environmental and structural factors and necessary Tvjhh the springs in the prevalence and transmission of groundwater is Karstyk areas.

Keywords: structural factors, lineaments, range curvature, springs, karst and Catchment Maharloo



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