



Surveying hydro geomorphic conditions of the SHIRKOOH Mountains in Yazd-central province of IRAN

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In this paper we study the circumstances of water, climate and morphology of Miankooh basin and its forming factors. This study is important because this basin is located in Shirkooh Mountains which is the highest and most massive mountains of the yazd province in the middle part of Iran. This basin is a sub-basin of Siah-Kooch desert. Miankooh is a basin with an area of 630 Km² and 27.59% slope that spreads from 4075 to 1520m of height. This basin is shaped like an elongated rectangle, the average rain rate is 228.8 mm and winter has the most amount of falls that are solid in the higher zones.

The average temperature of basin is 13.5 °C and environmental temperature decrease for this region is 0.9 °C per 100m of height.

February (bahman) is the coldest and July (tir) is the warmest month of the year. The basin's climate in heights is recognized as cold and semiarid. In this region, rivers are seasonal and the most important one is named Fakhrabad. Granite, lime, sand and stone are the main formation elements of this basin and are cracked in the tectonic processes and many faults are seen in them. Mentioned sediments have had enormous effects on the formation of landmarks. Various climate factors and the current of water has affected these sediments, and made a variety of different shapes. Temperature is one of the most important morphodynamic factors in this region and directly or indirectly influences the other type of erosion. The current of water has made two type of parallel and tree algorithm aqueduct networks. Valleys and rivers are in the young age.

Different behaviors of factors involved in configuration, has made several lands type and it is possible to recognize land units with particular properties, with a systemic vision.

This study consists of results that can be used for planning the development, management and optimization of natural resources.

Key word: Miankooh, Yazd, Equilibrium line of water and ice, Glacial, Land systems, Morphoclima

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