

## Morphoradiation calculation and analysis: Case study-Bazman mountain-South East of Iran

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**ABSTRACT:**

Morphoradiation model has been used in this study to the modelling of rough surfaces and interfering earth topography and its relation with distribution of radiation energy. Global, direct, diffuse and duration of direct radiation are calculated through special days (Equinox, summer and winter solstice) and also for a whole year. Radiational map for each state resulted and then statistically analysed. Correlation between radiation and topographical factors were studied and analysed. Results showed that high elevation and slope lead to high variance of radiation values in all radiation types. At winter, sun shine is less than the other season's radiation variation and is more than other time. During winter days, radiation deference between north and south faced lands are increased. Diffused radiation has nearly no connection to topographical factors and variable, on the other hand direct and global radiation have more connection to topographical and morphological variations.

**Keywords:**

Radiation, Bazman mountain, Digital elevation model, Modeling.