Monitoring Land Subsidence of Mashhad Valley of IRAN Using Leveling, GPS Survey and InSAR Techniques

Amrouni Hosseini M. and Bayat H.

ABSTRACT: In Northwest of Mashhad, one of the cities of Iran, land subsidence phenomenon is taking place highly due to the region being a large flat land. Therefore, it is very necessary to monitor this phenomenon accurately. In this study, a monitoring network was designed with image of the average speed of displacement to determine the horizontal displacement.

Keywords: Land Subsidence, Mashhad valley, Levelling, GPS Survey, InSAR Techniques.

Evaluating Human Consolation in Sadra Town Regarding Bioclimatic Indexes
ABSTRACT: As it is one of the most important vital tenets to choose a suitable place to live, it is better to evaluate the relation between the variations of the environment and human physical comfort. This study considers the effect of the variation of temperature and humidity on human comfort. The indexes of bioclimatic consolation, Terjang index and Beaker index are used to evaluate the human comfort to the environment. The results show that these indexes can be used in the design of improving the environment. From the evaluation of the indexes and the models according to human convenience or inconveniency in different times of the year.

Keywords: Bioclimatic Consolation, Sadra Town, Terjang Index, Beaker Index, Thermo-Hygrometric Index.
Introducing a New Approach for Modelling the Near Field Effects in Probabilistic Seismic Hazard Analysis
ABSTRACT: In definitions of seismic hazard analysis, if the site distance from the fault causing earthquake is short, that site distance should be considered as near field. In the other case, if the site distance from the fault causing earthquake is long, that site distance should be considered as far field. But when the distance is between near and far fields, it is to use the combination of both near and far field attenuation relations according to the proposed model in this study.

Keywords: Earthquake, Fault, Near Fault, Probabilistic Seismic Hazard Analysis, Attenuation Relations