الزلازل المتحرضة عن الخزانات المائية
دراسة حالة سد 16 تشرين, اللاذقية, سوريا

اطروحة اعدت كجزء من متطلبات الحصول على درجة الماجستير

في علم الزلازل

في المعهد العالي للبحوث والدراسات الزلزالية، جامعة دمشق

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Abstract:

Today more than 90 dam around the world proved conclusively the induction of earthquakes under the influence of filling, and emptying water reservoirs, the goal of this study to understand the effect of changing the size of the storage and loading cycle repeated water within. Lake Dam on the induction of tremors in the dam area by examining the case of stability October 16 actually 17 km northwest of the city of Latakia, which is the dam shelf biggest in the basin of the Syrian coast with a storage capacity of up to 225 million cubic meters, which is positioned within siesmotectonic active, using a series of seismic events between 1995-2011 with destiny (5> Mc> 0.2) registered at seismic stations in the network in addition to the Syrian national records in the General Authority for Remote Sensing. Using the program zmap been studying the evolution of seismic activity for October 16 dam area within 50 km and the quake likely Determine the maximum amount (MC =4.5-5).Through the MATLAB program was developed Histogram at represent the relationship between the change in the size of the storage dam and the number of tremors recorded during the period (1995- 2011) and using the statistical software (SPSS) was obtained on the coefficient of linear correlation (Pearson Correlation) where the largest value of 0.673 during the year 2011 it was in this research analysis of the stability of the dam under the influence of seismic loads using the program (GEOSTUDIO 2007) so as to know the dynamic behavior of the dam and by map code Syrian peak acceleration of ground movement horizontal (PGA) were used in the analysis of the response (0.3 g) where he found that the values of acceleration of ground movement at the top of the dam up to (0.5g) and less (0.3g) at the base of the dam and the coefficient for the stability of the dam found that the factor of safety in the dam, October 16 2.9 .