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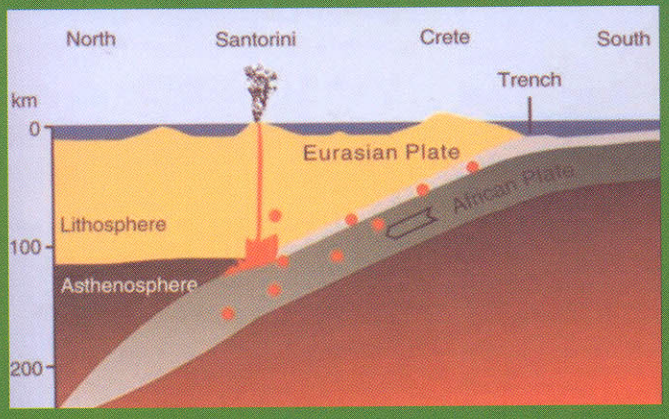

Creta Maris Conference Center

Hersonissos, Crete island, Greece

7 12 September, 2008

The Zipingpu dam is located 10km east of the earthquake epicenter and after the earthquake of 7.9R, the following failures were recorded:

- Subsidence of the crown in the central part of the dam, of the order of 50cm in relation to the side survey control points.
- Deformation of the lower face of the dam, an area of approximately 1000. m^2.
- Deviations and deformations of the construction elements throughout the face of the dam
- Widening of construction joints (approximately 15 cm on the upper face)
- Extended massive landslides throughout the reservoir
- Landslides on both left and right abutments of the dam causing further damages to secondary constructions.

After the evaluation of the dam damages, the discharge of the reservoir was ordered through the emergency spillway in order to minimize the risk of a potential disaster for the nearby towns and especially Dujiangyan. Finally, the causes of the failures are investigated based on the available data.

Earthquake ML=6,5R 08.06.2008 Northwestern Peloponnesus Cross- Correlation of Seismic Intensities, with Existing Seismotectonic,Geological and Geotechnical Conditions

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At the 8th of June 2008, 12:25:28.0 UTC, earthquake of ML=6,5R and D=15-21km stroke at the Northwestern Peloponnesus area (37.97N, 21.48E). According to the existing data, the earthquake was expressed by a fault trending N20°E, of dextral strike slip character, in 15-21km depth, while the aftershocks arrangement follows the same general trend. From the investigation that took place in the area, the expression of the seismic faults on the surface that pertain with the instrumental data were allocated, while the geological and geotechnical status of the area was determined as well. A detailed mapping and study of the damage distribution, as well geodynamic phenomena took place. Combining all the above mentioned, the intensities for every residential area came along according to EMS scale (1998) and so the intensity distribution in the misoseismal area. Based on the cross-correlation of all the existing data it is concluded that the seismotectonic, geological and geotechnical regime were determinant to the damage and intensities distribution.

The Relative Importance of Site Effects in Seismic Hazard Analysis

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Damage from strong earthquakes often exhibits local variation. Ground motion prediction equations have been developed that take account of such so-called site effects and they have been used in assessing seismic hazard. However, many authors have concluded that the ability to accurately reflect site effects in prediction equations is limited. This work describes a method for assessing the importance of site effects relative to that of magnitude, distance and residual uncertainty in predicting strong ground motion. The ideas are illustrated by carrying out some