χαλαρές αλλουβιακές ποτάμιες ή και λιμναίες αποθέσεις) την κακή ποιότητα των κατασκευών και τη συστηματική αγνόηση βασικών διατάξεων του αντισεισμικού κανονισμού προκάλεσαν τη μεγάλη έκταση της καταστροφής (μέγιστη ένταση 9ου βαθμού (MM) στο ERCINCAN).

CORRELATION OF NEOTECTONIC STRUCTURES WITH GEODYNAMIC ACTIVITY IN MILOS AFTER THE EARTHQUAKES OF MARCH 1992

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The seismic activity of March 1992 in Milos island resulted, except for the substantial destructions, in many macroseismic phenomena which are especially interesting due to the location of the island within the active volcanic arc and the possible relationship between the seismic movement of the active faults and the volcanic activity.

Extensive surveying showed that most of these phenomena, in both number and intensity, took place at the neotectonic block of the Milos Gulf-Fyriplaka Volcano, which is bounded by two large fault zones striking NW-SE. The earthquake epicenters were located along the southeast prolongation of this NW-SE graben.

In summary our observations are:

a. Seismic fractures. The fractures at the airport, Aghia Aekaterini and Provatas area were generally striking NW-SE and they actually coincided with the two aforementioned marginal fault zones of the Milos Gulf-Fyriplaka Volcano tectonic block. The fractures at the Aghia Kiriaki area and the Fyriplaka Volcano cone were striking E-W and actually coincided with the fault zone of the south coasts of Milos. Especially at Aghia Kiriaki the seismic fractures disrupted the zone of gas discharge.

b. Variations in intensity and temperature of the gases. The largest of them were observed at the borders of the Fyriplaka crater at the area of Kalamos and Aghia Kiriaki where some new wholes with gas discharge have been formed. Some reactivated fractures from the earthquakes were discharging much higher gas masses than the other wholes.

c. Landslides-Rockfalls. They took place intensively and especially where the local geological-morphological conditions were in favour of them. The most important ones were observed in the Milos Gulf-Fyriplaka Volcano tectonic block.

d. Liquefactions. They took place in the Chivadholimni area, within coastal fine

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deposits. Numerous fractures, 30 meters or more in lenght, with simultaneous extraction of finer material and water were observed, as a result of the liquefactions.

e. Variations in the aquifer level, which took place at the Airport area and were expressed with a rise of the aquifer level.

f. The destructions: (i) substancial destructions were observed within the wider area of the Milos Gulf-Fyriplaka Volcano tectonic block, (ii) smaller destructions were observed at the Plaka village, resulted by the existence of old constructions, over recent geological formations.

In conclusion: (i) the earthquakes were related to the reactivation of the two marginal fault zones of the Milos Gulf - Fyriplaka Volcano neotectonic block, (ii) the largest intensities were observed in the aforementioned tectonic block and (iii) there is with certainty an interelationship between these earthquakes, the activated fault zones and the volcanic activity.

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