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SEISMIC INTENSITIES AND SOCIO-ECONOMIC EFFECTS IN THE 1981 CORINTHOS, CENTRAL GREECE, EARTHQUAKE: A PILOT TEST BY QUESTIONNAIRES

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**INTRODUCTION:** An earthquake sequence of M=6.7 and 6.4 jolted Central Greece (Corinthos Prefecture) on 24;25 February 1981 (Fig.1). The city of Corinthos (popul.45000) and the most damaged village of Perahora (popul.2200) were investigated by direct interview 203 such interviews were obtained in time of 5 days, in July 1985. The first part of questionnaire sheet, with 29 items, is mostly based on MSK intensity scale and aims to evaluate the seismic intensity. The second part, with 47 items, asks about various aspects of earthquake damage as well as, restoration process, economical impact on household's income and some mental effects on people.

**INTENSITY CALCULATION:** Each of the intensity items contains several categories arranged according to the seismic intensity. For each of these categories one intensity coefficient was given in accordance to the MSK scale. As for items of structural damage, 3 structural type were considered. Thus one questionnaire sheet corresponds to one intensity calculated. The average intensities tentatively calculated were 6.3 for Corinthos and 7.3 for Perahora and histograms in Fig. 2 clearly show the intensity difference between the two sites. Further analysis is going to be done in order to measure intensity values more accurately.

**DEGREE OF DAMAGE BY STRUCTURAL TYPE:** In Corinthos 86% of the structures are R.C., of two distinct types. [1] R.C. framed struct. (71%) suffered various degrees of damage (from fine cracks to total collapse) and their performance is considered not satisfactory. [2] R.C. struct. with R.C. bearing walls (15%) behaved very well (only fine to small cracks). Contrarily in Perahora the main type was Stone Masonry (65%) and suffered heavy damages (most of them became uninhabitable).

**DIRECT AND INDIRECT DAMAGE:** The whole economic activities of the region were decreased and are not yet completely recovered. In Corinthos more than 25% of the families living in R.C. framed buildings, have changed dwelling place in seek of a safer residence though the damage to their buildings was not so heavy. In Perahora, where 70% of the houses became uninhabitable, extensive reconstruction took place and nowadays is in its final stage. But still many of the families live in shelter houses of very low standards because they cannot afford the reconstruction cost.



FIG.1 SURVEYED AREA AND EPICENTERS

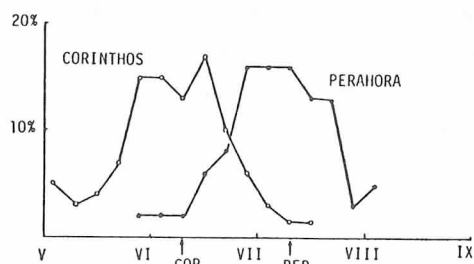


FIG.2 HISTOGRAMS OF CALCULATED INTENSITIES FOR TWO SITES