

European Seismological Commission, ESC XIX General Assembly, Moscow, USSR, October, 1984.

ESTIMATE OF MICROSEISMS ROLE IN THE STUDY OF SOURCE PHYSICS AND EARTHQUAKE PREDICTION

I. Kerimov, Academy of Sciences of Azerbaijan

Abstract

In the result of investigations from 1977 till today, conducted on the study of weak seismic fields by 10 autonomous seismological stations, embracing both source zones and the regions outside seismic areas (Azerbaijan, Belorussia and Tajikistan), it has been ascertained: seismic noise in every given point reflects total field, provoked not only local but also by regional factors and introduces the information about the focal processes proceeding at great distances; the study of more than 400 cases of the observed anomaly of microseisms at the distances to 10000 km and allows to use this precursor for short-term earthquake is not “instantaneous”, but a prolonged process during which the main shock occurs between the increasing and full attenuation of microseismic fields oscillations; the worked out methods and the programs of the analysis of polarisable and spectral parameters of seismic fields allow to localize the source of the coming earthquake for the definite period of time before the main shock.