

Investigation of the methods for prospective evaluation on earthquake activity

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Earthquake Research Committee for Headquarters for Earthquake Research Promotion is to analyze the results of gathering and organizing research on earthquakes, to evaluate the potential long-term subduction-zone earthquakes and earthquakes that occur on the active faults, earthquake probabilities have been published. The Earthquake Research Committee established the standard methods to evaluate the probability of aftershocks occurrence, the JMA timely announce after a large earthquake that it expects aftershock activity based on the method. Except for the probability of occurrence of aftershocks and evaluations of long-term earthquake occurrences in this time, the method to predict seismic activity has not been established. However, in recent years, and results of operations to process the integrated observation data, and the accumulation of advanced seismic data, the assessment of earthquake prediction by organizing activities to extract the features of past cases have been several cases can be seen. For example, 46 swarm activities occurred repeatedly off eastern Izu Peninsula since 1978. The activity period is about one month from the date of, the activity during a magnitude 5 earthquake has occurred in the class. These seismic activities are considered to be caused by magma intrusion, the 1989 submarine eruption occurred near Teishi- Knoll. During the swarm activity, or prior to the activity an crustal deformation was observed in the volume strain meter of Higashiizu-town set up by JMA. And to organize for this variation and seismic activity, while changes in the amount of strain, (1) the total number of earthquakes, (2) the maximum earthquake magnitude in the activity, (3) and the length of the period of seismic activity, we know that there is a correlation. By this, the amount of volume strain observed for the prospective evaluation of seismic activity has been on the possibility. The fact that these prospective evaluation is more important to organize for the past seismic activity, seismic activity in the past observation data of reading seismogram, etc. It becomes necessary to review the seismic activities. Centralized data for the previous seismic data, once again gather, organize, and should become the source and re-calculation process. In addition, early changes in the amount of volume strain observed seismic activity, and study of methods to estimate the total amount of magma intrusion that challenges remain. Studied these issues in order to study the seismic activity, including methods to evaluate the prospective content, and set up a subcommittee under the Earthquake Research Committee, and the feature of the activities of the past earthquakes in the swarm organize and promote the feature extraction from seismic activity, are expected to conduct a study of trends of evaluation method for seismic activity. The seismic activity was organized for assessment of prospective evaluation methods, content and outlook provided information, and it is necessary to promote the study of disaster response agency should take the information received

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