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Earthquake Information for Disaster mitigation, - Roles and operation schemes of Japan Meteorological Agency -

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1) Introduction

Japan Meteorological Agency (JMA) issues information to prevent and mitigate natural disasters, for safety of transportation, development and prosperity of industry, improvement of public welfare.

JMA provides earthquake information, which contains predictable information as follows.

- (1) Information on the anticipated Tokai Earthquake.
- (2) Earthquake information containing expectation of maximum intensity, maximum magnitude and duration of activity, for the swarm in the east part of Izu (preparing).
- (3) Earthquake Early Warnings.

The information is transmitted to related organizations by JMA. Moreover, the news organizations broadcast the information. It is insufficient only to establish the theory and the technique. We have the entire system including follows.

- (1)JMA can issue the alert and the science-based information anytime 24 hours a day.
- (2) JMA ensures transmission of the information.
- (3)The receiver can surely understand the information and can behave in an appropriate manner, after JMA makes efforts to conduct public relations activities.

2) JMAs obligation to the Tokai Earthquake prediction and the strategy

The Tokai Earthquake is expected to occur in the near future along the trench near Suruga Bay. The mechanism of Tokai Earthquake is well understood, and observation of a pre-seismic slip is expected just before the Tokai Earthquake itself. JMA has observation systems in place to detect the pre-seismic slip.

Director-General of JMA is responsible for reporting Earthquake Prediction Information concerning the anticipated Tokai Earthquake to Prime Minister of Japan.

If any anomalous phenomena are considered to be precursors of the Tokai Earthquake, JMA will convene the Earthquake Assessment Committee for Areas under Intensified Measures against Earthquake Disaster.

If the Committee concludes that the Tokai Earthquake is imminent, the Director-General of JMA will report the conclusion to the Prime Minister, who will hold a Cabinet meeting and issue a Warning Statement. Central government, individual local governments and relevant authorities take measures according to prevention plans. The disaster prevention correspondence and measures is provided by the law.

3) Forecast for the swarm in the east part of Izu

An earthquake prediction method has not been established now. However, the forecast of a few cases of the swarm activity seems to be possible.

JMA targeted the swarm activity in the east part of Izu. JMA is conferring on correspondence where the citizens should adopt the content, the method of the giving information, with a related organization, so as not to cause damage in the travel industry.

JMA plans to advance announcing to the correspondence that should be taken to the civilian after correspondence to information is decided.

This prediction method is the one based on the feature of past seismic activities, when the seismic activity is different from the past one, the forecast might not correspond to the reality. JMA advances well-known and announcing to the citizens about the limit of such cases.

Keywords: Prediction, Prevention, Disaster, Tokai, Izu