

A Social Experiments on Disaster Prevention by Using of the Advanced Weather Information

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The National Research Institute for Earth Science and Disaster Prevention has been carried out the research project on Tokyo Metropolitan Area Convection Sturdy for Extreme Weather Resilient Cities(TOMACS) in cooperation with 25 research agencies, researchers of more than 100 people and disaster management personnel of local governments. In this project we have been working on the following three research subjects.

- (1) Studies on extreme weather with dense meteorological observations
- (2) Development of the extreme weather early detection and prediction system
- (3) Social experiments on extreme weather resilient cities

The study fields by the social experiment are Rescue Services (Tokyo Fire Department), Risk management(Edogawa ward, Yokohama city, Fujisawa city, Minamiashigara city), Infrastructure(JR East, JR Central, Obayashi) and Education and life(Toyo univ., The Certified and Accredited Meteorologists of Japan). In the social experiments, the each participated institutions have studied on the effective use of advanced weather information into disaster prevention according to their purposes.

The objective of social experiments are to enable the continuous use of advanced weather information through the fixing of the monitoring and prediction system of extreme weather.

And also to discuss the problems and issues revealed in the course of social experiment, and to summarize as creating resilient city in extreme weather towards relevant government ministries and agencies, local government, the general population.

In this paper, overview of the social experiments is briefly explained and issues for continue use of advanced weather information are reported through the reference to the case of Edogawa-Ward where the X-band MP radar rainfall information is providing to residents. Finally this project is supported by the Japan Science and Technology Agency and Ministry of Education, Culture, Sports, Science and Technology.

Keywords: Extreme weather, Disaster prevention, Social experiment