RSMC Tokyo Activity Report for 2012

Executive Summary

During the year, RSMC Tokyo participated in a quarterly exercise conducted by the World Meteorological Organization (WMO) and the International Atomic Energy Agency (IAEA), and in an annual exercise conducted by WMO and the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO). The Centre also ran monthly internal training sessions.

In November, RSMC Tokyo examined facsimile and email communications with registered organizations in WMO Regional Association II (RA II) Members, and the test results were presented to RSMC Beijing, RSMC Obninsk and the WMO Secretariat.

RSMC Tokyo updated its operational system for the new super-computer at the Japan Meteorological Agency (JMA), enabling the provision of 50-day backtracking products for CTBTO.

Based on the arrangement discussed at the meeting of the Coordination Group on Emergency Response Activities (CG-NERA) (Vienna, Austria, 2011) (Action 18 of Annex III in the final report), RSMC Tokyo participated in joint RSMC tests with the ENSEMBLE project of the Joint Research Centre of the European Commission (JRC-EC).

1. Introduction

In July 1997, the Japan Meteorological Agency (JMA) was designated by the World Meteorological Organization (WMO) as a Regional Specialized Meteorological Centre (RSMC) supporting environmental emergency response (EER) activities. RSMC Tokyo is responsible for providing atmospheric transport model (ATM) products in response to requests from the International Atomic Energy Agency (IAEA) and Members of the WMO Regional Association II (RA-II). In such cases, RSMC Tokyo responds jointly with RSMC Beijing and RSMC Obninsk.

Based on the Manual on the Global Data-Processing and Forecasting System (WMO No. 485), RSMC Tokyo provides atmospheric backtracking products in response to requests for support from the Provisional Technical Secretariat (PTS) of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO).

2. Contact Information

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3. Exercises and Training

i. Quarterly Exercise with IAEA/IEC

RSMC Tokyo participated in a quarterly exercise for RA II conducted by WMO and IAEA on 15 November. In response to a request from IAEA's Incident and Emergency Centre (IEC), RSMC Tokyo distributed standard products and a joint statement in conjunction with RSMC Beijing and RSMC Obninsk.

ii. Annual Exercise (Atmospheric Backtracking) with CTBTO/IDC

RSMC Tokyo participated in an annual exercise in response to a request from CTBTO's International Data Centre (IDC). The request was received on 29 May, and the Center sent all products by the deadline (96 hours after the request was issued).

iii. Monthly Internal Training

RSMC Tokyo conducted monthly internal training to maintain its operational capability for the emergency response to nuclear accidents and for the atmospheric backtracking.

4. Operational Issues

JMA updated its super-computer system on 5 June, 2012. RSMC Tokyo also updated its operational ATM system for JMA's new computer system, enabling extension of the backtracking period to 50 days from the request date.

In November, RSMC Tokyo conducted a fax and email communication test in RA II in line with the technical memorandum issued by RA-II RSMCs. The test confirmed that 22 out of 27 registered organizations were accessible, and that 17 organizations were able to receive email appropriately. The test results were shared with RSMC Beijing, RSMC Obninsk and the WMO Secretariat.

5. Status of the Operational Atmospheric Transport Model

The status of the operational atmospheric transport model used at RSMC Tokyo is described in Annex 4 of WMO Technical Documentation No. 778 (WMO/TD-No. 778).

6. Other Activities Regarding ATM product development

RSMC Tokyo participated in the joint RSMC tests with the ENSEMBLE project of the Joint Research Centre of the European Commission (JRC-EC). A preliminary test session by ENSEMBLE was held on 26 January. A request to produce model ensemble products was sent on 18 April, and the Center successfully uploaded ATM products for three types of tracers from eight different initial times by the deadline (2 – 3 weeks after the request was received). Each test product contains five layers of concentration, time-integrated surface concentration, wet and dry depositions, and model precipitation.

7. Plans for 2013

RSMC Tokyo remains committed to fulfilling its responsibility as an RSMC providing the ATM products as necessary. The Centre will participate in international exercises planned for 2013 to maintain its capability for the nuclear environmental emergency activities in response to requests from IAEA/IEC, CTBTO/IDC and WMO RA II Members.