International Civil Aviation Organization

THE ELEVENTH MEETING OF ASIA/PACIFIC ROBEX WORKING GROUP (ROBEX WG/11)

Bangkok, Thailand, 11 – 13 March 2013

Agenda Item Conjoint C2 d): Advisory Information

PREPARATION FOR SIGMET ADVISORY AT JAPAN METEOROLOGICAL AGENCY

(Presented by Japan)

SUMMARY

This paper presents the current status of Japan with regard to the preparation for SIGMET advisory by using JMA numerical weather prediction model.

1. INTRODUCTION

1.1 The Meteorological Warnings Study Group (METWSG) has been discussing the feasibility of SIGMET advisory information. According to the summary of the discussion of METWSG/2, the aims of a feasibility study could be not only to improve the issuance of SIGMET but also to assess improvements and the level of added value.

1.2 At METWSG/4, SIGMET advisory information was recognized to be useful for the improvement of issuance of SIGMET based on the results of SIGMET advisory trial which was conducted in Asia and northern/southern Africa regions in 2011.

2. DISCUSSION

2.1 JMA considers that automatic significant weather detection technique is important in order to provide advisory information with timeliness and accuracy for a large region. Therefore, JMA has been developing such products.

2.2 At the OPMET/M TF/10 held in April 2012, the Japan Meteorological Agency (hereafter JMA) reported a plan to develop automatic detecting technique of thunderstorm (hereafter TS) by using the satellite observation and forecast by global numerical weather prediction (hereafter NWP) model to improve the content of SIGMET. JMA also introduced a sample of SIGMET advisory information based on the satellite observation at the meeting.

2.3 In addition to the graphical advisory information based on the satellite observation, JMA is also developing a technique to use NWP model. Figure 1 shows a sample of TS SIGMET advisory information derived from NWP model output in a graphical format. The colored cell means the top height of CB and the blue line indicates the TS region. The information in a graphical format could be used easily by forecasters in MWO, though the format was not directly connected with the text format of SIGMET.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information in this paper.

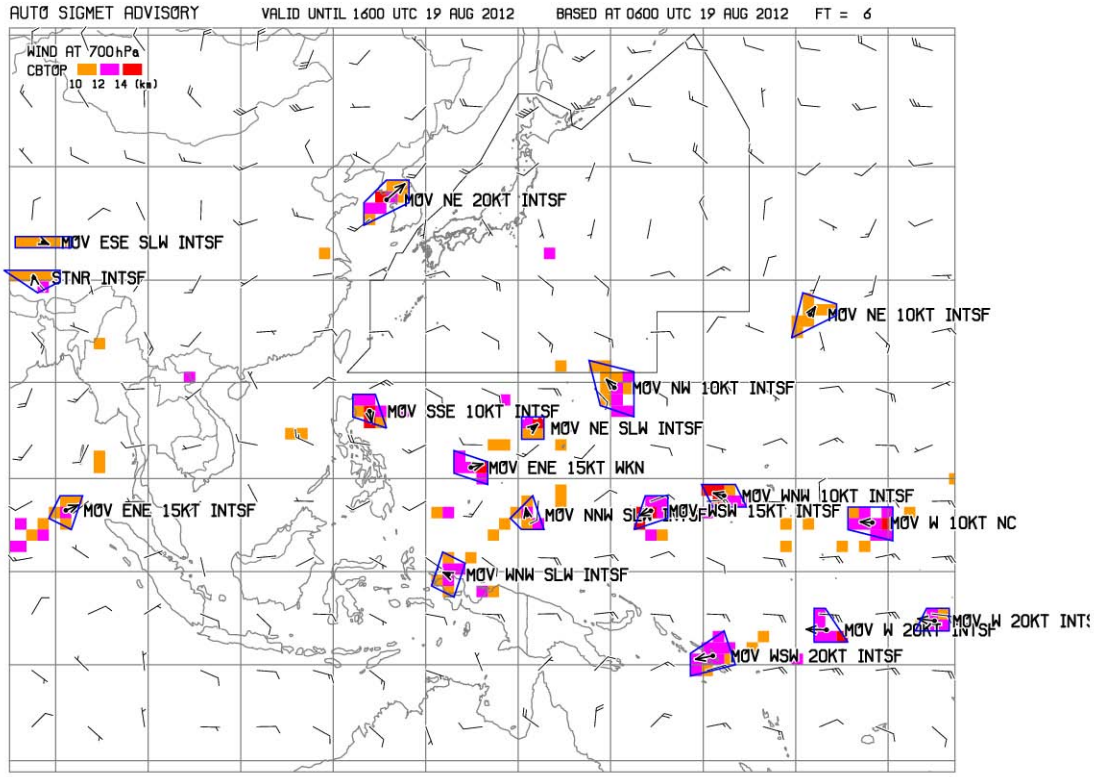

Figure 1. Sample of the TS SIGMET advisory information in graphical format

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