International Civil Aviation Organization

WORKING PAPER (WP/17)

ASIA AND PACIFIC (APAC) TWENTY-FOURTH MEETING OF THE METEOROLOGICAL INFORMATION EXCHANGE WORKING GROUP (MET/IE WG/24)

Nadi, Fiji, 21 to 24 April 2026

Agenda Item 6: Meteorological Information Exchange in IWXXM Form

IWXXM IMPLEMENTATION PROGRESS IN INDONESIA

(Presented by Indonesia)

SUMMARY

This paper outlines the development of IWXXM in Indonesia and its transmission through collaboration with HKO and MSS. It also highlights Indonesia's participation in SIGMET TEST 2025 using the IWXXM format. Furthermore, the paper proposes that Indonesia be excluded from the list of APAC States with potential deficiencies in IWXXM implementation.

1. INTRODUCTION

1.1 The International exchange of IWXXM formatted OPMET information (METAR/SPECI, TAF, AIRMET, SIGMET, Volcanic Ash Advisory, Tropical Cyclone Advisory and Space Weather Advisory) became a standard practice in the Annex 3 from 5 November 2020.

1.2 The MET Deficiency Report and Identification Guide states that the Annual ICAO SIGMET Test and the APAC RODB Annual OPMET Monitoring should include IWXXM-formatted data with successful validation and/or translation.

1.3 Referring to MET SG/29 – WP/07 and conclusion MET SG/29/06, the ad hoc group on MET deficiencies identified APAC States with potential deficiencies in IWXXM implementation for SIGMET issuance, based on the Annual SIGMET Tests conducted in 2023 and 2024. According to this monitoring, Indonesia was included in the list of States that had not participated in the SIGMET Test using the IWXXM format (LS, LY, and LV).

1.4 Considering that Indonesia was identified as having potential deficiencies in IWXXM implementation, Indonesia has developed an IWXXM translator to the latest version, as presented in MET SG/29 – WP/22.

2. DISCUSSION

Development of IWXXM

2.1 Indonesia has been developing an in-house IWXXM generator since 2019 (as reported in MET SG/24 – IP/25), initially producing IWXXM version 3.0. However, these products could not be disseminated to RODBs due to incompatibility with Indonesia's current AMHS.

2.2 In 2025, Indonesia developed this generator to the newest version which is IWXXM version 2025-2RC1 and 2025-2RC2. Although these versions were successfully developed, they were not yet official operational versions, and dissemination through Indonesia's AMHS remained unfeasible. During the ICAO monitoring period in November 2025, Indonesia collaborated with the Hong Kong Observatory (HKO), successfully routing the data submissions through the HKO's AMHS network.

2.3 However, technical challenge involved a version incompatibility, which resulted in the IWXXM data routed through the HKO's AMHS being flagged as invalid by the Bangkok RODB and London RODB. To address this issue, in January 2026, Indonesia refined the IWXXM to 2025-2 version, and the Bangkok RODB confirmed that the IWXXM data submitted by Indonesia was valid. In addition to validation by the Bangkok RODB, the IWXXM data was also validated using the HKO platform, and for now Indonesia still routinely sends IWXXM data via HKO.

2.4 Furthermore, Indonesia gratefully acknowledges the Hong Kong Observatory (HKO) for facilitating the submission of our IWXXM data to the RODBs and ROCs in accordance with the ROBEX Handbook. Also, Indonesia extends our sincere appreciation to Meteorological Service Singapore (MSS) for their invaluable support in converting TAF data across seven airports in Indonesia (FTID31).

2.5 Indonesia is currently in the process of installing a new AMHS and migrating data from the existing system. In parallel, the implementation of IWXXM dissemination through the new AMHS is planned for the last quarter of this year. AirNav Indonesia and BMKG are currently developing a method to integrate the IWXXM generator into the new AMHS network.

Indonesia Participation in SIGMET Test in IWXXM Format

2.6 During the SIGMET Test 2025, conducted on 12, 19, and 26 November 2025, Indonesia, through MWO Jakarta and Ujung Pandang, participated by issuing SIGMET test messages in IWXXM format. These messages were translated into IWXXM version 2023-1 and subsequently disseminated via the Hong Kong Observatory AMHS network.

2.7 Detailed evidence of the SIGMET Test issuance in IWXXM format is provided in Appendix A.

2.8 Considering that Indonesia has developed IWXXM version 2025-2, with successful validation and dissemination to RODBs and designated ROCs, and has participated in the SIGMET Test using the IWXXM format, it is proposed that the ad hoc group on MET deficiencies consider removing Indonesia from the list of States with potential deficiencies in IWXXM implementation.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;

b) consider the proposal in paragraph 2.8; and

c) discuss any relevant matters as appropriate.

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SIGMET TEST ISSUANCE IN IWXXM FORMAT

(MWO JAKARTA AND UJUNG PANDANG)

1. SIGMET TEST TROPICAL CYCLONE (12 NOVEMBER 2025)

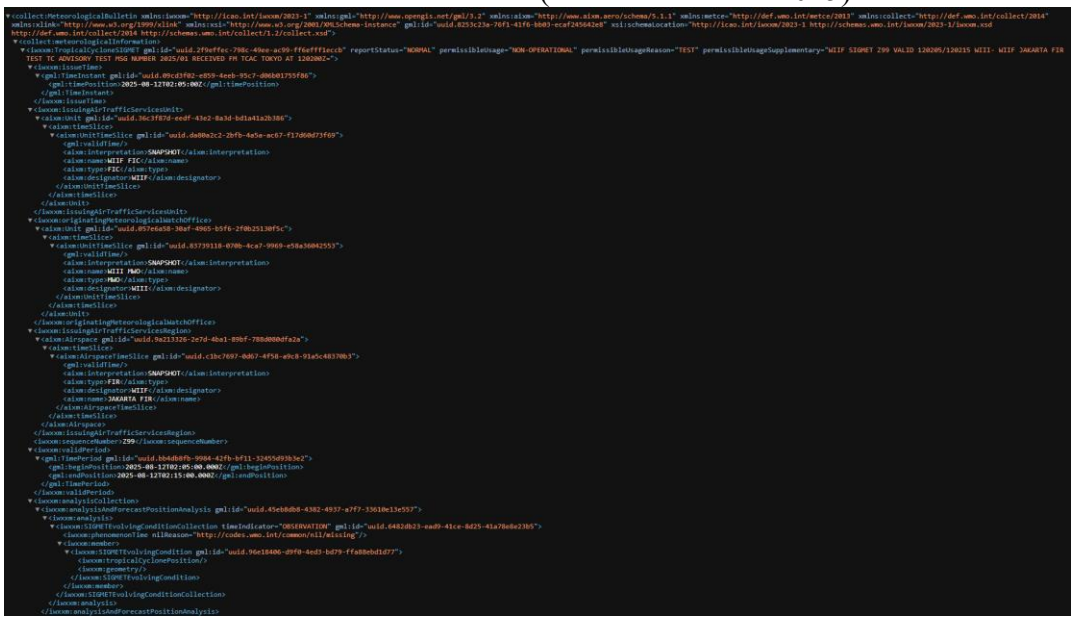


Figure 1. LY SIGMET WIII

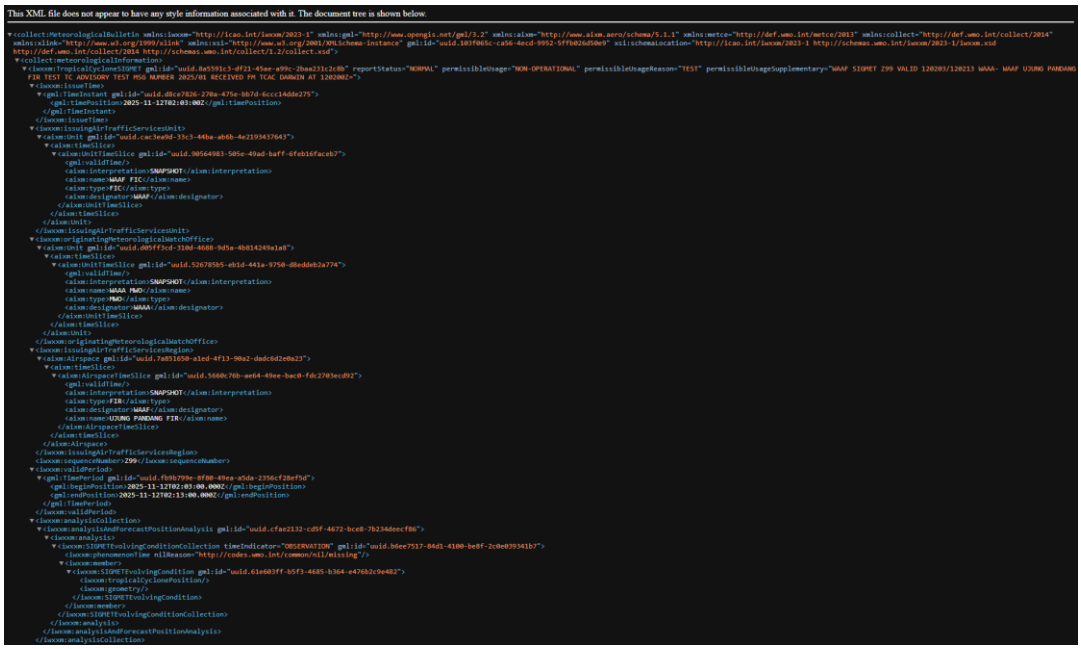
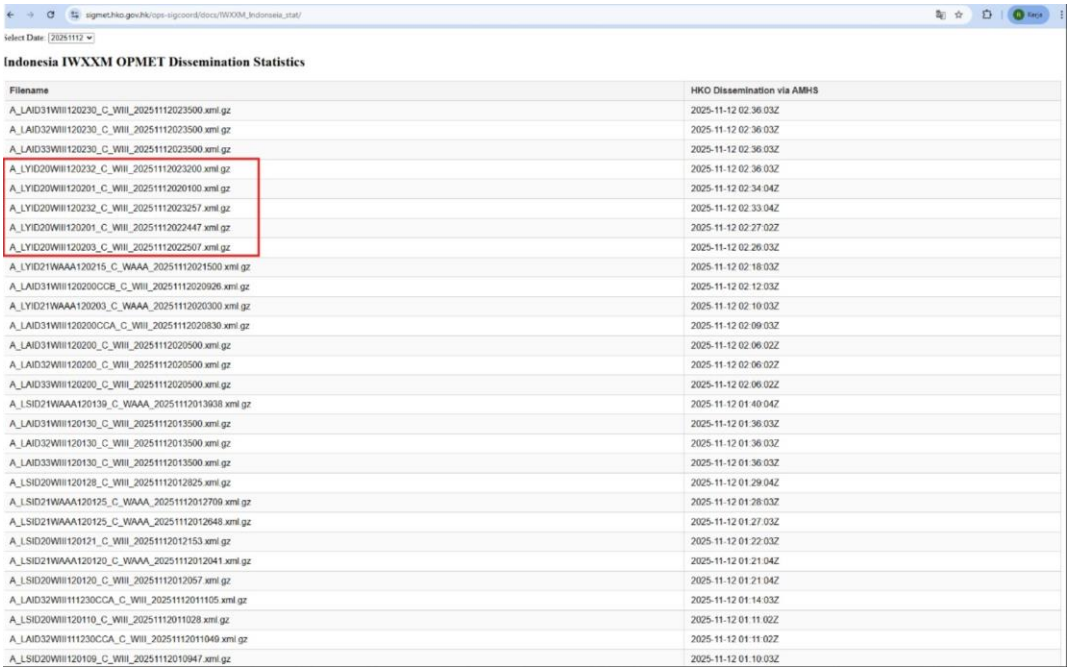


Figure 2. LY SIGMET WAAA



Select Date: 20251112

Indonesia IWXXM OPMET Dissemination Statistics

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A_LAID33WIII120200_C_WIII_20251112020500.xml.gz	2025-11-12 02:06:02Z
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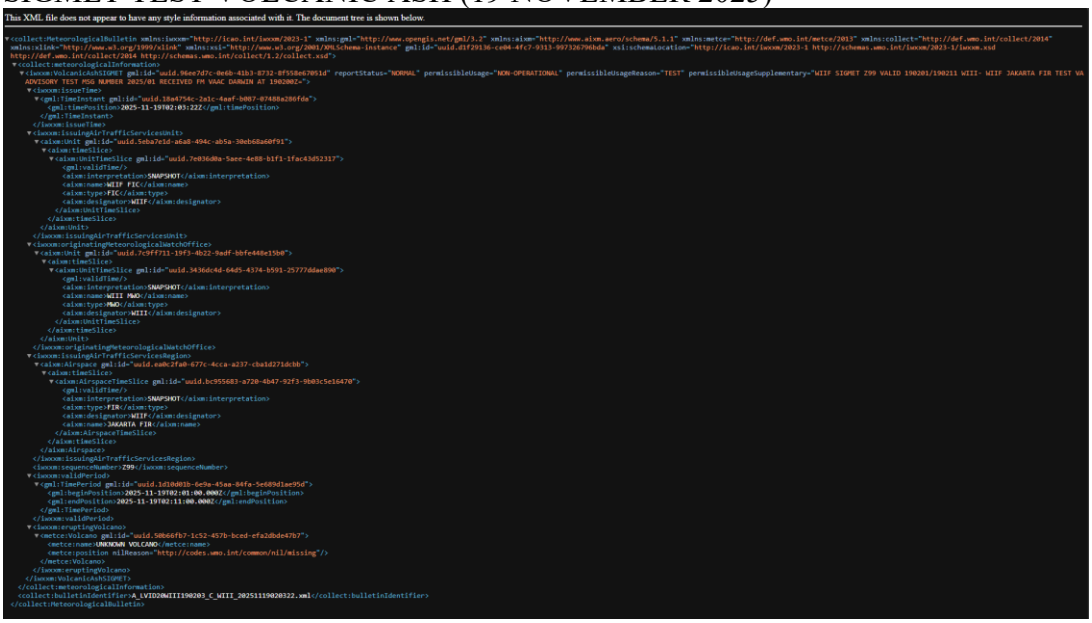
Figure 3. Dissemination Indonesia LY SIGMET TEST through HKO AMHS Network

2. SIGMET TEST VOLCANIC ASH (19 NOVEMBER 2025)



This XML file does not appear to have any style information associated with it. The document tree is shown below.

Figure 4. LV SIGMET WIII

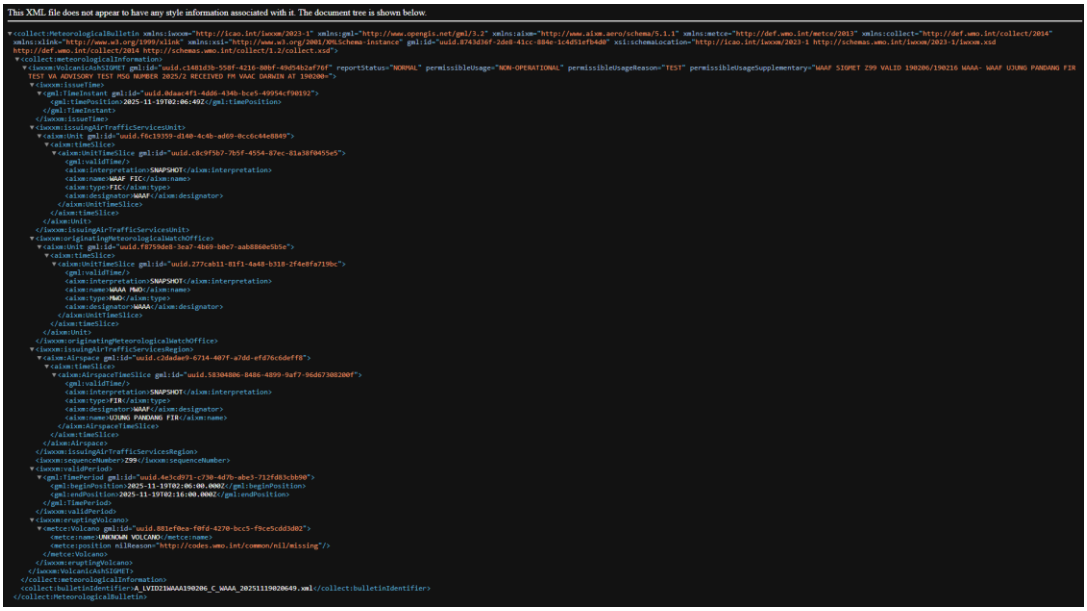


Figure 5. LV SIGMET WAAA

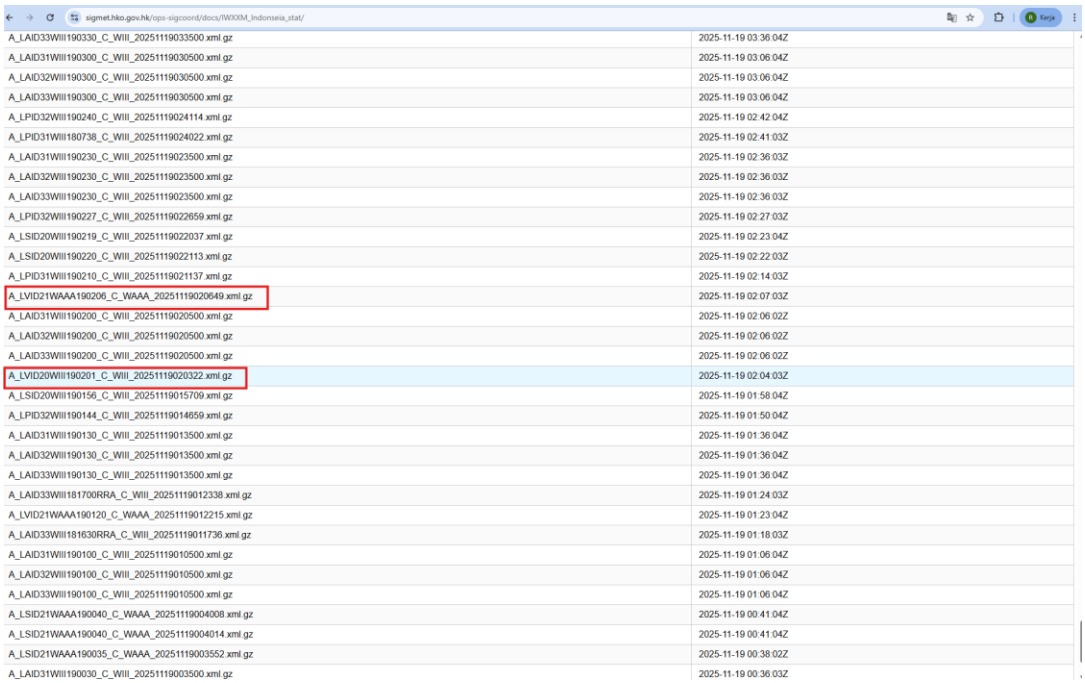


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Figure 6. Dissemination Indonesia LV SIGMET TEST through HKO AMHS Network

3. SIGMET TEST OTHER PHENOMENA (26 NOVEMBER 2025)

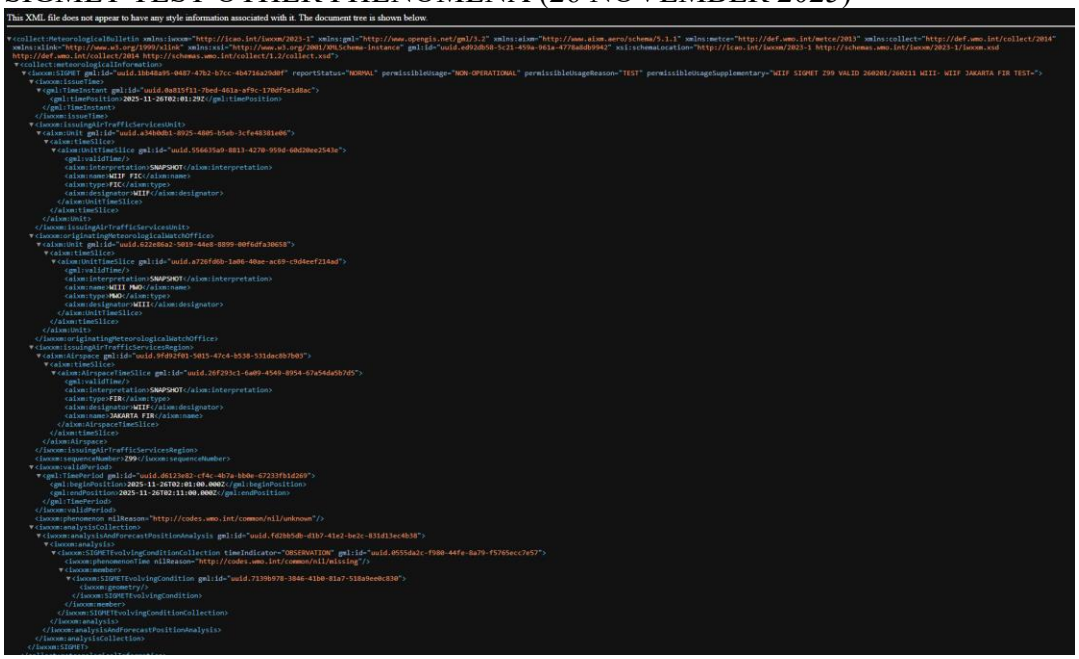

Figure 7. LS SIGMET WIII

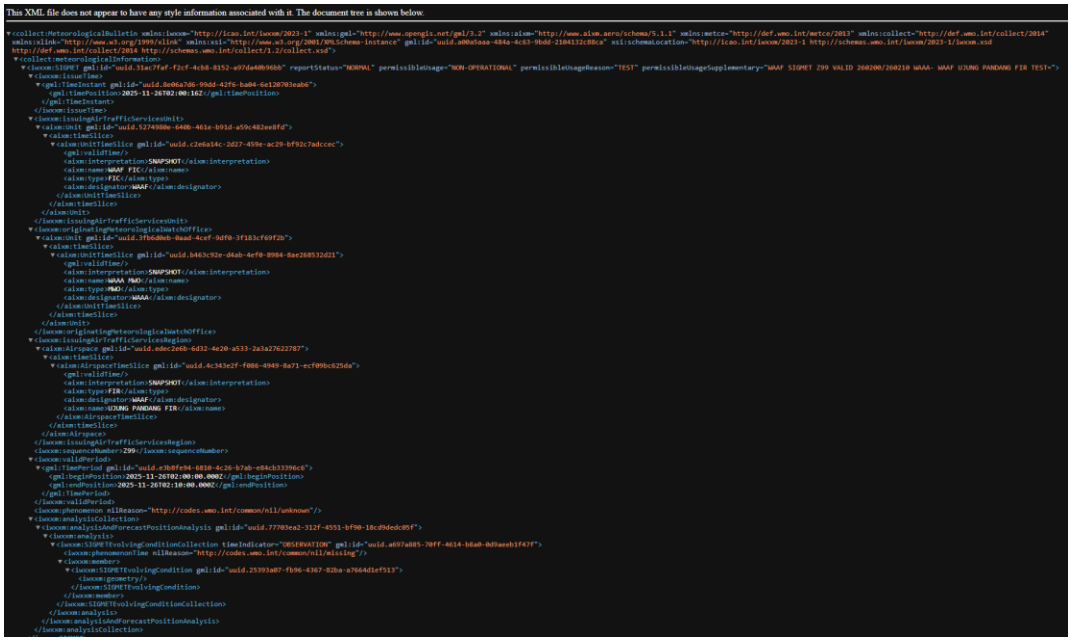

Figure 8. LS SIGMET WAAA

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Figure 9. Dissemination Indonesia LS SIGMET TEST through HKO AMHS Network