

**WMO OMM**

World Meteorological Organization  
Organisation météorologique mondiale  
Organización Meteorológica Mundial  
Всемирная метеорологическая организация  
المنظمة العالمية للأرصاد الجوية  
世界气象组织

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28 September 2022

Annexes: 4 (available in English only)

Subject: Preliminary 2023 edition of the *Guide to Instruments and Methods of Observation* (WMO-No. 8), Volumes I, II, III, and V, and of the *Guide to Operational Weather Radar Best Practices*, Volumes I, II, III, and VII

Action required: To review the documents from the subject and send your comments to the WMO Secretariat by **17 October 2022**

Dear Sir/Madam,

I wish to refer to the upcoming second session of the Commission for Observation, Infrastructure and Information Systems (INFCOM-2), to be held in Geneva, Switzerland, from 24 to 28 October 2022. On this occasion, the session will review a report on the status of the *Guide to Instruments and Methods of Observation* (WMO-No. 8) and plans for its update; and will be invited to approve the Provisional 2023 edition of its Volumes I, II, III, and V. The session will also review a report on the new publication titled as the *Guide to Operational Weather Radar Best Practices* and will be invited to approve the Provisional 2023 edition of its Volumes I, II, III, and VII.

Since its first publication in 1950, the *Guide* (WMO-No. 8) has been recognized as the main source of information used by Members to standardize instrument performances and ensure the quality of observations. Being a part of the standards under the WMO Integrated Global Observing System (WIGOS) framework, the *Guide* (WMO-No. 8) is being constantly reviewed and regularly updated, as requested by the World Meteorological Congress.

The *Guide to Operational Weather Radar Best Practices* has been developed by the INFCOM Joint Expert Team on Operational Weather Radars (JET-OWR) with the aim to become an important source of guidance material on various aspects of the operational weather radar. The Guide provides complementary and supportive guidance on the weather radar-related matters already available in WMO-No. 8 and in the *Guide to the WMO Integrated Global Observing System* (WMO-No. 1165).

Collaborative work of different expert teams and groups, together with the Editorial Board of the INFCOM/Standing Committee on Measurements, Instrumentation and Traceability resulted in the preliminary 2023 editions that are now available for the Members' review.

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers  
Presidents and Vice-presidents of Regional Associations  
President and Vice-president(s) of INFCOM  
Members of the INFCOM Management Group; and Chairs of SC-MINT Expert Teams  
Executive Secretary, Association of Hydro-Meteorological Equipment Industry  
Members of the INFCOM/SC-MINT Editorial Board

The preliminary edition of WMO-No. 8 includes updates of Chapters 12, 13 and 14 of Volume I, Chapter 2 of Volume II, Chapters 3, 5, 6, and 8 of Volume III, Chapter 5 of Volume V, and new Chapter 3 of Volume II. The preliminary edition is posted on WMO/IMOP website, under the heading "[Preliminary 2023 edition of WMO-No. 8](#)", for consideration by Members. An overview of the proposed updates is provided in Annex I to this letter.

The preliminary edition of the *Guide to Operational Weather Radar Best Practices* includes new Volumes I, II, III, and VII. It is also posted on WMO/IMOP website, under the heading "[Preliminary 2023 edition of the Guide to Operational Weather Radar Best Practices](#)", for consideration by Members. An overview of the already available and planned volumes is provided in Annex II of this letter.

I should be grateful if you could examine the text of the preliminary editions and send your detailed comments or suggestions to the WMO Secretariat, to the attention of Mr Krunoslav Premec ([kpremec@wmo.int](mailto:kpremec@wmo.int)) at your earliest convenience, but not later than **17 October 2022**, using the templates provided in Annex III and Annex IV, respectively. Your valuable feedback will be considered for the development of the Provisional 2023 Edition that will be submitted to the INFCOM-2 for approval. Should you have concerns with specific chapters, please nominate an appropriate contact person whom these concerns could be discussed with before the defined deadline.

Yours faithfully,



Dr Wenjian Zhang  
for the Secretary-General

## ANNEX I

**TABLE OF DRAFT CHANGES TO THE WMO-No. 8  
(2023 EDITION VS 2020 EDITION)**

CHAPTER	TITLE	SIZE OF THE UPDATE*
<b>VOLUME I</b>	<b>MEASUREMENT OF METEOROLOGICAL VARIABLES</b>	
12	Measurement of upper-air pressure, temperature and humidity	Partial
13	Measurement of upper wind	Partial
14	Observation of present and past weather; state of the ground	Minor
<b>VOLUME II</b>	<b>MEASUREMENT OF CRYOSPHERIC VARIABLES</b>	
2	Measurement of snow	Minor
3	Measurement of glaciers	New chapter
<b>VOLUME III</b>	<b>OBSERVING SYSTEMS</b>	
3	Aircraft-based observations	Minor
5	Special profiling techniques for the boundary layer and the troposphere	Partial
6	Electromagnetic methods of lightning detection	Major
8	Balloon techniques	Partial
<b>VOLUME V</b>	<b>QUALITY ASSURANCE AND MANAGEMENT OF OBSERVING SYSTEMS</b>	
5	Training of instrument specialist	Minor

\*Note: **Minor** indicates that only small changes were made to the chapter; **Partial** indicates that substantial changes were made to some sections of the chapter; **Major** indicates that substantial changes were made to the entire chapter.

**PROVISIONAL GUIDE TO OPERATIONAL WEATHER RADAR BEST PRACTICES**  
**(TABLE OF THE CONTENTS)**

<b>VOLUME</b>	<b>TITLE</b>	<b>COMMENT</b>
<b>I</b>	<b>Weather Radar Network Program Design</b>	Ready for INFCOM-2
<b>II</b>	<b>Weather Radar Technology</b>	Ready for INFCOM-2
<b>III</b>	<b>Weather Radar Procurement</b>	Ready for INFCOM-2
<b>IV</b>	<b>Weather Radar Siting, Configuration, and Scan Strategies</b>	To be available after INFCOM-2
<b>V</b>	<b>Weather Radar Calibration, Monitoring, and Maintenance</b>	To be available after INFCOM-2
<b>VI</b>	<b>Weather Radar Data Processing</b>	To be available after INFCOM-2
<b>VII</b>	<b>Weather Radar Data Representation and International Exchange</b>	Ready for INFCOM-2
<b>VIII</b>	<b>Operational Weather Radar Glossary of Terminology</b>	To be available after INFCOM-2



