



Our ref.: 08295/2025/I/WIGOS/NET

30 June 2025

Subject: New editions of the *Guide to Instruments and Methods of Observation* (WMO-No. 8) and the *Guide to Operational Weather Radar Best Practices* (WMO-No. 1257), are now available

Dear Sir/Madam,

The Standing Committee on Measurements, Instrumentation and Traceability (SC-MINT) of the Commission on Observation, Infrastructure and Information Systems (INFCOM) develops and maintains a range of guidance materials for WMO Members.

These materials aim to support Members in the standardization of measurements, the selection and operation of appropriate instruments including emerging technologies, the enhancement of data quality, and the maintenance and calibration of instruments to ensure measurement traceability.

Among these, two key guidance documents are regularly updated to provide comprehensive and continuous support and guidance to Members:

- (1) [Guide to Instruments and Methods of Observation](#) (WMO-No. 8);
- (2) [Guide to Operational Weather Radar Best Practices](#) (WMO-No. 1257).

I wish to announce that the 2024 editions of these essential guides have been published. Versions of the *Guide to Instruments and Methods of Observation* (in all official WMO languages will be made available shortly on the [WMO e-Library](#). Below are the latest editions of these guides with information on the updates:

- (1) *Guide to Instruments and Methods of Observation* (WMO-No. 8)
 - (a) [Volume I \(2024 edition\)](#) – Measurement of Meteorological Variables
 - Chapter 6 – Measurement of precipitation (major update)
 - Chapter 7 – Measurement of radiation (partial update)
 - (b) [Volume II \(2024 edition\)](#) – Measurement of Cryospheric Variables
 - Chapter 1 – General (minor update)
 - Chapter 4 – Measurement of permafrost (new chapter)
 - (c) [Volume III \(2024 edition\)](#) – Observing Systems
 - Chapter 5 – Special Profiling Techniques for the Boundary Layer and the Troposphere (minor update on Section 5.2.2 Wind profiler radars)

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers
Presidents of Technical Commissions and the Association of the HydroMeteorological and Environmental Industry (HMEI)

- (d) [Volume IV \(2021 edition\)](#) – Space-based Observations. No update for 2024 edition
- (e) [Volume V \(2023 edition\)](#) – Quality Assurance and Management of Observing Systems. No update for 2024 edition
- (2) Guide to Operational Weather Radar Best Practices (WMO-No. 1257)
 - (a) [Volume I \(2023 edition\)](#) – Weather Radar Network Programme Design. No update for 2024 edition
 - (b) [Volume II \(2023 edition\)](#) – Weather Radar Technology. No update for 2024 edition
 - (c) [Volume III \(2023 edition\)](#) – Weather Radar Procurement. No update for 2024 edition
 - (d) [Volume IV \(2024 edition\)](#) – Weather Radar Siting, Configuration and Scan Strategies. New volume
 - (e) [Volume V \(2024 edition\)](#) – Weather Radar Calibration, Monitoring and Maintenance. New volume
 - (f) [Volume VI \(2024 edition\)](#) – Weather Radar Data Processing. New volume
 - (g) [Volume VII \(2023 edition\)](#) – Weather Radar Data Representation and Exchange. No update for 2024 edition

These updated documents incorporate the latest advancements and best practices in meteorological instrumentation and observation. I strongly encourage all Members to apply the updated guidance in their applications as appropriate.

As these guides are subject to regular review and update by SC-MINT of INFCOM, any comments or suggestions from Members are welcome for consideration in future editions.

I would like to take this opportunity to express my sincere appreciation to all the experts who contributed to these updates and to you, for your continued support of WMO activities, through the work of your staff members.

Yours faithfully,



Ms Ko Barrett
for the Secretary-General