
WMO WRITING AND STYLE GUIDE



WEATHER CLIMATE WATER



WORLD
METEOROLOGICAL
ORGANIZATION



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Chair, Publications Board
World Meteorological Organization (WMO)
7 bis, avenue de la Paix
P.O. Box 2300
CH-1211 Geneva 2, Switzerland

Tel.: +41 (0) 22 730 84 03
Fax: +41 (0) 22 730 81 17
Email: publications@wmo.int

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INTRODUCTION

This guide covers issues that authors, scientific editors and linguists working at and for WMO may encounter during the preparation of material for publication. It is not exhaustive, focusing rather on common problems encountered and frequently asked questions asked by colleagues.

Largely based on the *United Nations Editorial Manual Online*, which remains the primary authority on style and spelling in the United Nations system, this guide focuses on the specific terminology, spelling and style that occur in WMO material.

Queries may be addressed to the in-house editors in the Language, Conference and Publishing Services Department. We remain open to any suggestions that would improve this guide for the benefit of users and readers.

Editorial team

Language, Conference and Publishing Services Department

STRUCTURE OF THE GUIDE

This guide is divided into three parts:

Part I

[Tips on writing](#) contains guidelines for drafting WMO material.

Part II

[Essential elements of style](#) highlights in-house editorial practices to be followed when preparing material for publication.

Part III

[Preparation of abridged final reports of constituent body sessions](#) contains guidelines on session reports and will be updated after the Eighteenth World Meteorological Congress.

PART I

TIPS ON WRITING

This part of the guide is intended to help authors draft and organize text so that the information presented can be easily understood and navigated by readers. The needs of readers of WMO material are an important concern: simplicity, clarity and consistency are essential for effective communication in a multilingual and multicultural environment.

Some useful tips are therefore provided, followed by guidelines for various types of WMO material. Further reading that may help in the writing process is then suggested.

Before writing

- Identify the intended audience
- Establish the purpose and key messages to be conveyed
- List the content to be included
- Consider the structure and prepare an outline using headings and subheadings
- Read the relevant parts of this guide

During writing

- Write clearly and unambiguously, avoiding jargon
- Use the active voice whenever possible
- Keep sentences simple, short and relevant, ensuring that they follow on from each other
- Present the main point of each paragraph at its beginning, then fill in the details in the rest of the paragraph
- Write one paragraph per topic, unless the topic is very long
- Use lists/subparagraphs to break up the text and present information at a glance
- Include figures, tables and boxes for illustration purposes

After writing

- Revise critically, from a multilingual reader's point of view
- Eliminate all unnecessary and superfluous words, and ensure that sentences make sense
- Ask colleagues to read and provide opinions
- Run any editorial tools, as appropriate
- Run a spell check, remembering that WMO spellings should be used

See also the United Nations [Online report-writing course](#).

PUBLICATIONS

The *Guidelines on the Preparation and Promulgation of the WMO Technical Regulations* (WMO-No. 1127) is essential reading, and must be taken into consideration before commencing writing Technical Regulations and related Manuals and Guides. It should be followed at all times.

For technical publications, observe the general [tips on writing](#) above, and include the following structural elements as appropriate:

- Title page
- Copyright information and disclaimer
- Contents page
- Foreword and/or preface
- Acknowledgements (if not part of the foreword or preface)
- Executive summary
- Introduction (if not part of the main text)
- Parts, chapters, sections and subsections
- Appendix (and subsequent appendices)
- Annex (and subsequent annexes)
- Glossary (add as an annex or a stand-alone chapter if there are no annexes)
- References (for voluminous publications, these can be added at the end of each part or even each chapter)
- Bibliography

Also include items such as:

- Figures, tables and boxes
- Reference citations

Be alert to plagiarism, and if material from other publications is to be used, seek permission from the copyright holder before inserting the material and acknowledge the source. (Permission is not needed for publications of the United Nations and its agencies; an exception is commissioned photographs, which do require permission.)

After completing a draft, revise and review it:

- Assess the organization and structure (hint: use the table of contents to check that headings follow a logical order)
- Check that chapter/section headings correctly convey the content
- Re-read the entire manuscript to ensure consistency of spelling, capitalization and terminology
- Choose a concise title that clearly and accurately reflects the content and distinguishes it from other publications
- In collaborative work with multiple authors, read the entire manuscript to ensure consistency and that there is no repetition among chapters/sections written by different authors

For detailed style guidelines on the technical preparation of material, see [Part II](#) below.

Examples of WMO publications can be found on the [WMO Library site](#).

General information publications

Writing for the public and non-specialists (for example, *Bulletin* or *MeteoWorld* articles, other bulletins such as the *WMO Greenhouse Gas Bulletin*, statements, web pages and press releases) is different from writing scientific publications or session reports:

- Remember the wider audience and that the intended purpose of the article is awareness raising
- Ensure that there is a topic/theme, which should also be reflected in the title
- Tell a story and illustrate the theme, but keep it as short and simple as possible
- Note that readers will probably scan the text, rather than read it thoroughly
- Use a compelling opening sentence that will attract attention
- Give the most important information
- Use short sentences and short paragraphs that follow a logical order
- Add concise headings and subheadings
- Use the active voice
- Add lists to break up the text and illustrate important points
- Include boxes or side bars for further information
- Create a visual impression
- Give real-world examples
- Ensure that figures and photographs are well described in captions (give credit to the source and obtain permission for reproduction)
- Keep the language simple, and avoid scientific terms and abbreviations that the public may not understand
- Revise, and remove any superfluous information that confuses or dilutes the theme

General information publications can be found on the [WMO Library site](#), and items for the media (including news and press releases) at <https://public.wmo.int/en/media>.

Guidelines for preparing articles for the *Bulletin* are given at <https://public.wmo.int/en/resources/bulletin/guidelines>.

DOCUMENTATION

Session documents of constituent bodies may include resolutions, decisions and recommendations adopted at the sessions.

Please note the following:

The WMOTools in Microsoft Word should be used for drafting new constituent body session documents.

- The correct, short form of official country names (see *Composition of the WMO* (WMO-No. 5)) should be used, *except in agenda item 1, where the formal name of the country may be used*.
- Acronyms and abbreviations should not be used in numbered headings or in titles of resolutions, decisions and recommendations, unless unavoidable.
- Footnotes must not appear in resolutions, decisions and recommendations. They should also be avoided in the general summary. If unavoidable, footnotes should be numbered consecutively, beginning from 1 in each new section (general summary, annexes to resolutions, decisions and recommendations).

Resolutions and recommendations

A resolution is a formal expression of the opinion or will of a constituent body, for example:

Resolution 5 (CIMO-17)

Vision for the future of environmental measurements

THE COMMISSION FOR INSTRUMENTS AND METHODS OF OBSERVATION,

Recalling Resolution 1 (CIMO-XV) – Vision statement of the Commission for Instruments and Methods of Observation,

Noting:

- (1) The need to be more agile, innovative and informative in response to new challenges that arise from the rapid development of new measuring techniques and technologies,
- (2) The fact that most WMO Members are expanding their meteorological observations from the traditional fields of weather, climate and water to other geophysical and environmental fields,
- (3) The necessity to motivate and engage younger experts, especially women, to participate in the activities of the Commission,
- (4) The ultimate need to ensure continuity of international standardization, traceability, compatibility and sustainability of measurements of meteorological, climatological, hydrological, marine and other related geophysical and environmental variables, regardless of the future WMO constituent body structure,

Noting with satisfaction that the CIMO Management Group took an agnostic approach to how the vision can be implemented structurally and has developed the vision with a view towards enhancing collaboration and cooperation and promoting the role of measurements, thus addressing the new challenges,

Recognizing that the vision is in agreement with the draft Vision for WIGOS in 2040 and the WMO Strategic Plan 2020–2023, which were recommended by the WMO Executive Council at its seventieth session through its Recommendation 6 (EC-70) – Vision for the WMO Integrated Global Observing System in 2040 and Recommendation 20 (EC-70) – WMO Strategic Plan, respectively,

Decides to adopt the vision statement as provided in the annex to the present resolution.

Note: This resolution replaces Resolution 1 (CIMO-XV), which is no longer in force.

Note: The style and format of recommendations are the same as those of resolutions.

When it is necessary to provide some background information in resolutions and recommendations of constituent bodies, it is preferable to present such information in the preambular part (defined by the use of participles) and the actual decision in the operative part (defined by the present indicative) of the document, as follows:

		<i>Verb tense</i>	<i>Punctuation</i>
[NAME OF CONSTITUENT BODY]			Insert a comma after the name of the organ
Preamble	Recalling Noting Noting also Noting further Noting with satisfaction Taking note Mindful	Present participle (or adjectives)	End each preambular paragraph with a comma
	Having examined Having considered Having been informed	Perfect participle	
	Convinced Satisfied	Past participle	
Operative part	Observes (record of views and observations expressed during the session) Decides Adopts Agrees Endorses Requests Also requests Further requests Urges Recommends Calls upon Invites Encourages	Present indicative	End each paragraph in the operative part with a semicolon, except the last one, which ends with a period/full stop

Ideally, the preambular paragraphs should be concise. For example, when recalling a resolution, there is no need to list all the provisions under that resolution, the title is often self-explanatory. If an explanation is needed, a brief summary of the main point(s) (no more than five lines) is sufficient in most cases.

Decisions

A decision is used to designate formal decisions, other than resolutions, dealing with non-substantive or routine matters such as elections, appointments, the time and place of meetings and the taking note of reports. For example:

Decision 34 (EC-70)

Designation of new Regional Instrument Centres

The Executive Council decides:

- (1) That CIMO is charged with assessing the capabilities of a candidate Regional Instrument Centre (RIC) and with CIMO lies the authority and the responsibility to make recommendations to a regional association on the capability of a candidate to perform the functions of a RIC;
- (2) That a regional association may formally designate a RIC, only upon positive assessment by CIMO of its capability to perform the functions of a RIC;
- (3) To request CIMO to document the process for assessing the capabilities of a candidate RIC.

Decision justification: Terms of Reference for RICs were developed by CIMO and approved by EC, while regional associations are responsible for the designation of RICs in their region. Assessing the capabilities of a candidate requires specific technical expertise lying in CIMO.

Background information needs to be provided in decisions of constituent bodies, and it should be added as a note containing information justifying the decision. If the note exceeds 100 words, it should be issued as a separate background information (INF) document.

For detailed guidelines on the preparation of session reports, see [Part III](#) below.

As WMO largely follows United Nations guidelines on the drafting of resolutions and decisions, see also the [United Nations Editorial Manual Online](#).

CORRESPONDENCE

For items of correspondence (letters, memorandums, notes, etc.), authors should:

- Use the official WMO formatting templates available in Microsoft Word under File>New>My templates>Official Templates as well as in ELIOS
- Keep the main body of the text clear, concise and accurate
- Ensure that all dates (in the format **10 July 2018**), instructions and information are current and correct
- If the name and/or sex of a correspondent is unknown, not assume that the person is male, and include both sexes in the salutation, or use a gender-neutral term: Dear Madam or Sir, Dear Director, Dear colleague.

An example of a circular letter is given below:

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

Secrétariat
7 bis, avenue de la Paix – Case postale 2300
CH 1211 Genève 2 – Suisse
Tel.: +41 (0) 22 730 81 11
Fax: +41 (0) 22 730 81 81
wmo@wmo.int – public.wmo.int

Our ref.: 19248/2018/SYMET-XIII/MISC 13 July 2018

Annex: 1 (available in English only)

Subject: Policy and Programme related publication on the outcome of the thirteenth WMO Education and Training Symposium and meeting of the WMO Regional Training Centre Directors

Action required: For information and dissemination

Dear Sir/Madam,

I am pleased to bring to your attention the attached publication entitled, *An International Agenda for Education and Training in Meteorology and Hydrology* (WMO-No. 1219, edition 2018), which has been prepared by WMO according to the recommendations of the thirteenth WMO Education and Training Symposium as well as the follow-on meeting of WMO Regional Training Centre Directors, both of which were held in Bridgetown, Barbados from 29 October to 2 November 2017.

As a synthesis of the outcomes, discussions and recommendations from the two meetings, the publication highlights the major challenges and opportunities for education and training and how stakeholders could contribute to the capabilities of the global work force involved in providing meteorological, hydrological and climatological services, particularly at the national level. It also analyses the issues relating to partnership development and resource mobilization, and private sector cooperation, among others.

It is my expectation that this publication will attract the interest of a wide range of audiences within and outside of the WMO community, particularly those who have the potential to contribute to, and benefit from, an increasingly knowledgeable and skilled global workforce in meteorology and hydrology. Hence I would be pleased if you could circulate it widely in your country.

Yours faithfully,

(W. Zhang)
for the Secretary-General

Emails

Emails are commonly used as a means of correspondence, and it is important that they be treated in the same way as any other correspondence with regard to clarity, conciseness, accuracy, grammar and spelling. In addition, there are other points worth noting:

- Be aware of the recipient(s) and ensure that the message is being sent to the correct person(s)
- Take care in the use of “cc” (for multiple recipients who may know each other) and “bcc” (for privacy of unknown multiple recipients)
- Only use “reply all” when it is necessary for all recipients to see your reply
- Do not overuse “reply”; if the email is on a new topic, start a new message
- Be careful about using “forward” without permission from the original sender
- Include a meaningful subject line that will attract attention
- Remember the greeting, as for any other type of correspondence
- Give the main point in the opening sentence
- Break the text down into paragraphs, and ensure that it is clear, easy to understand and not open to misinterpretation; check the tone, which can be difficult to convey in an email
- Tailor the language; for example, an internal email to colleagues that you know within WMO can be less formal than an external email to outside agencies
- Always ensure that emails are professional and correct
- If replying, respond promptly and answer all questions in the original message
- Remember to attach any files to be sent with the message
- End with a closing sentence or words, and include your name and signature with contact details
- Proofread carefully before clicking on “send”

SUGGESTED READING

General writing

Butterfield, J. (ed.), 2015: *Fowler's Dictionary of Modern English Usage*. Fourth edition. New York, Oxford University Press.

European Commission, 2016: *How to Write Clearly*. Luxembourg, Publications Office of the European Union.

Fiske, R.H., 2014: *To the Point: A Dictionary of Concise Writing*. New York, WW. Norton & Company.

Miller, C. and K. Swift, 2001: *The Handbook of Nonsexist Writing – For Writers, Editors and Speakers*. Second edition. Lincoln, NE, iUnivers.com, Inc.

New Hart's Rules: The Oxford Style Guide. Second edition, 2014. Oxford, Oxford University Press.

Strunk, W., Jr and E.B. White, 1999: *The Elements of Style*. Fourth edition. Longman (there is also an [online version](#) of this book, by William Strunk, Jr).

The Chicago Manual of Style: The Essential Guide for Writers, Editors and Publishers. Seventeenth edition, 2017. Chicago, The University of Chicago Press.

United Nations Editorial Manual Online, Online report-writing course, <http://dd.dgacm.org/editorialmanual/support%20for%20authors/Online%20course.htm>.

Scientific writing

Berger, R., 2014: *A Scientific Approach to Writing for Engineers and Scientists*. IEEE PCS Professional Engineering Communication Series. Hoboken, Wiley.

Boxman, R. and E. Boxman, 2017: *Communicating Science – A Practical Guide for Engineers and Physical Scientists*. Singapore, World Scientific Publishing.

PART II

ESSENTIAL ELEMENTS OF STYLE

This part of the guide provides WMO editorial practices (arranged alphabetically) to be followed in the technical preparation of manuscripts. It is much easier for readers to concentrate on content when a clear and consistent style is used.

ABBREVIATIONS AND ACRONYMS

Abbreviations and acronyms used in WMO documents can be found in [METEOTERM](#) on the Organization's website. For a list of abbreviations and acronyms used in United Nations documents, see the [United Nations Editorial Manual Online](#).

Please note that many acronyms and abbreviations used to simplify communication among experts in a specific field are puzzling to readers who are not specialized in the same area. Hence, abbreviations and acronyms should be used sparingly and avoided wherever possible. They should not be used when they occur only once or twice in a manuscript.

When unavoidable, insert the abbreviation or acronym in parentheses after the first mention of the (full) term, and then use the abbreviation or acronym consistently thereafter.

When the entity referred to is better known by the abbreviation or acronym, it may be preferable to include it in parentheses after the full name, even if it occurs only once.

Note: Abbreviations/acronyms can be used when they relate to the main subject of the publication, for example, **GOS** in the *Manual on the Global Observing System*, and **GDPFS** in the *Manual on the Global Data-processing and Forecasting System*.

Abbreviations and acronyms should be spelled out in full in titles and headings and should not be followed by the abbreviation in parentheses. As a general rule, they should be spelled out at the beginning of sentences, and redefined at first mention in each annex.

Some abbreviations/acronyms for technical terms – such as GDP, GPS, HIV, AIDS and DNA – and acronyms related to communication technology – such as CD, DVD, HTML, SMS, URL and XML – are now so widely used that spelling them out in full is unnecessary.

WMO should always be abbreviated. It does not need to be defined at its first mention, nor spelled out in headings or at the start of sentences.

Do not use the article before an abbreviation/acronym: “**WMO is the ...**” **not** “The WMO is the ...”

A list of abbreviations and/or acronyms is no longer included in WMO publications. In technical publications, when abbreviations/acronyms are used, refer the reader to [METEOTERM](#).

Chemical formulae (for example, **CO₂**, **CH₄**, **H₂O**, **O₂**, **N₂**) should be treated as abbreviations/acronyms, and spelled out at first mention in the text and at the beginning of sentences.

Abbreviations

Abbreviations may be used in figures, tables or boxes where space is limited, and a key should be provided for all abbreviations that are not previously defined in the text.

Avoid the use of e.g., i.e. and etc. whenever possible, except in lists and tables. They can be replaced as follows:

e.g.: **for example, for instance, such as**

i.e.: **that is**

etc.: **and the like, and so forth**, except in lists. Where used, “etc.” is preceded and followed by a comma when it is the final item of a series: **temperature, humidity, atmospheric pressure, etc., are important parameters.**

“Etc.” should not be used with “for example” (incorrect: for example, w, x, y, etc.). Never use “and etc.” Do not use a comma after “e.g.” and “i.e.”

“Mr” and “Ms” do not take a period/full stop.

Currencies

The currency abbreviation or symbol precedes the amount of money: **£ 50 000, € 1 200 000, US\$ 40 000**. The currency name written in full follows the figure: **₹ 2 000 or 2 000 rupees; Rub 5 000 or 5 000 rubles.**

Acronyms

Like abbreviations, acronyms may be used in figures, tables or boxes where space is limited, and a key should be provided for all acronyms that are not previously defined in the text.

Do not use periods/full stops with acronyms.

In general, write United Nations in full, even if used as an adjective: **the United Nations Sustainable Development Goals.**

CAPITALIZATION

Basic rules

Use initial capitals sparingly. They should be used for:

- The first word of a sentence
- The first word (and words normally capitalized) in titles, headings and subheadings, tables and figures
- The first word of a subparagraph or item on a list
- Proper nouns, adjectives and recognized geographical names
- All words in the titles of books, periodicals and publications, except articles, conjunctions and prepositions: ***The WMO Strategy for Service Delivery and its Implementation Plan***
- The first element of hyphenated words in titles:

Institutional Partnerships in Multi-hazard Early Warning Systems

Operational Procedures for Non-nuclear Emergency Response Activities

Capitalize the second element only if it is a proper noun or adjective, or a word normally capitalized:

Simultaneous interpretation will be provided for non-English speaking delegations

Non-Member Meteorological Service Agreements

Official titles of persons, councils, commissions, committees, Secretariat units, organizations, institutions, political parties and organized movements

- Titles of specific posts, WMO bodies, officials and their offices:

- Assistant Secretary-General

- Congress

- Deputy Secretary-General

- Executive Council

- External Auditor

- First, Second and Third Vice-Presidents of WMO

- Permanent Representative of Belgium (for example) with WMO

- President of WMO

- Regional Association I (II, III, IV, V and VI) **but** regional associations (in general)

- Secretariat

- Secretary-General

- WMO Bureau

- WMO Region

- WMO regulations. When referring to the WMO General, Technical, Financial and Staff Regulations in general, use initial capitals but do not use italics.

Note: When referring to the publication, use the full title in italics followed by the publication number in parenthesis and the volume number: *Technical Regulations (WMO-No. 49), Volume I*.

- Programme, when referring to a WMO Programme

- Chair (**not** chairperson), but chairs (in general); Vice-Chair; Co-Vice-Chair, for example: *The chairs assembled for a group photo*.

- Member, when referring to a country or territory Member of WMO

- State, when referring to a country or a specific state in a federation, such as the *State of New York*

- Tropical storms, hurricanes, cyclones, typhoons and their names (italicized):

- Hurricane Katrina*

- Typhoon Haiyan*

- Tropical Cyclone Evan*

- Earth (our planet) **but** earth (the soil); the Sun (planet), but a sun in general; our the Moon (planet), but a moon in general

- When referring to numbered figures, tables and boxes: *Figure 1, Table 2, Box 3*

Do not use capital letters for the following:

- Continent: *the Antarctic continent*

- Hemisphere: *northern, southern, eastern and western hemisphere*

- Names of clouds: *cumulonimbus*

- Seasons (see [Usage](#))

- The presidents and vice-presidents of regional associations and technical commissions

- WMO headquarters

Note: The terms “least developed countries” (LDCs) and “small island developing States” (SIDS) are not capitalized when written in full, except when they are part of an official name:

WMO Office for the Least Developed Countries and Regional Coordination

Programme of Action for the Sustainable Development of Small Island Developing States

Geographical designations and regions

North, South, East and West are capitalized when they are used as proper nouns or when they are part of the name of an area, a political division or concept:

The North, the South, the East, the West, the Near East, the Middle East, the Far East, South–South cooperation

North Africa (**hence** North African countries)

Central America (Central American countries)

South America (South American countries)

South-East Asia (**but** Association of Southeast Asian Nations)

West Africa (West African States)

the North Pole, the South Pole, the Third Pole (**but** poles in general)

Adjectives and nouns derived from the cardinal points are not capitalized, unless they are part of a proper name:

northern Europe, a northerner **but** Northern Ireland

western France, a westerner **but** Western Australia

Do not capitalize a generic term such as city, county, state or province when it precedes the proper noun or stands alone, unless it is used in a corporate sense:

A severe snowstorm hit the city of Atlanta late in January causing major power outages and traffic jams.

Tropical Cyclone *Dineo* hit the Inhambane province of Mozambique on 15 February 2017, with high winds, torrential rain and dangerous storm surge.

The 2017 wildfire season in the state of California was one of the worst in its history.

but

The report, commissioned by the City of London, sets out the issues that the local economy will face in meeting rising power demands.

The Ministry of the Environment and Climate Change of the Province of Ontario is responsible for the protection of Ontario's air, land and water to ensure healthy communities and economic prosperity for present and future generations.

Lawsuit filed against the State of New York over alleged inadequate funding of public schools.

Do not capitalize a generic term unless it is part of a geographical name:

The Tigris and Euphrates rivers, **but** River Plate, Lake Victoria, Gobi Desert, Rocky Mountains, Nile Valley

Please note the following variations based on context and usage:

Antarctica, the Antarctic Circle

The Arctic, the Arctic Circle, Arctic waters, a mass of Arctic air **but** arctic conditions (when referring to very cold weather)

The Equator, **but** the equatorial current, the equatorial climate

The Tropic of Cancer **but** the tropics (in general), tropical

Capitalize "greater" when used with a name of a city to denote a metropolitan area: Greater Chicago, Greater London.

Directions

Do not use capital letters for points of the compass if they indicate direction:

a north wind, south-westerly winds

to fly south, eastward

to turn east, westward

in the south-west of France

true north

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Chair, Publications Board

World Meteorological Organization (WMO)

7 bis, avenue de la Paix

P.O. Box 2300

CH-1211 Geneva 2, Switzerland

Tel.: +41 (0) 22 730 84 03

Fax: +41 (0) 22 730 81 17

Email: publications@wmo.int

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WMO-IOC/JCOMM-5/3

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COUNTRIES

Country names

The short forms of country names are used in WMO publications. Please see *Composition of the WMO* (WMO-No. 5). An up-to-date list of WMO Members is given [here](#). The formal name is generally used in legal texts. In historical texts, use the name of the country at the time, or use “the then (country name)”.

Please note the following:

- **Bolivarian Republic of Venezuela** (**not** Venezuela); in lists: **Venezuela (Bolivarian Republic of)**
- **Bosnia and Herzegovina** (**not** Bosnia-Herzegovina)
- **Brunei Darussalam** (**not** Brunei)
- **Cabo Verde** (**not** Cape Verde)
- **Côte d’Ivoire** (**not** Ivory Coast)
- **Curaçao and Sint Maarten** (**not** Netherlands Antilles and Aruba)
- **Czechia** (short form for the Czech Republic)
- **Democratic People’s Republic of Korea** (**not** North Korea or DPRK)
- **Democratic Republic of the Congo** (**not** Congo or DRC (when Kinshasa) **but** Congo (when Brazzaville))
- **Eswatini** (**not** Swaziland)
- **Falkland Islands (Malvinas)** (**not** just Falkland Islands)
- **Federated States of Micronesia** (**not** Micronesia); in lists: **Micronesia (Federated States of)**
- **Gambia** (short form for the Islamic Republic of the Gambia) (**not** The Gambia)
- **Hong Kong, China** (but in references before 1 July 1997: Hong Kong)
- **Islamic Republic of Iran** (**not** Iran); in lists: **Iran (Islamic Republic of)**
- **Lao People’s Democratic Republic** (**not** Laos or Lao PDR)
- **Libya** (**not** Libyan Arab Jamahiriya)
- **Macao, China** (**not** Macao (China) or Macao)
- **Myanmar** (**not** Burma)
- **Plurinational State of Bolivia** (**not** Bolivia); in lists: **Bolivia (Plurinational State of)**
- **Republic of Korea** (**not** South Korea or Korea)
- **Republic of Moldova** (**not** Moldova)
- **North Macedonia** (**not** former Yugoslav Republic of Macedonia)
- **Russian Federation** (**not** Russia or USSR)
- **State of Palestine** (**not** Palestine)
- Swaziland (see **Eswatini** above)
- **Syrian Arab Republic** (**not** Syria)
- **Taiwan Province of China** (**not** Taiwan, Province of China or Taiwan (Province of China) or Taiwan province of China)
- **Timor-Leste** (**not** East-Timor)
- **United Kingdom of Great Britain and Northern Ireland** (first mention; thereafter, **United Kingdom** or **UK** where space is limited)
- **United Republic of Tanzania** (**not** Tanzania)

- **United States of America** (first mention; thereafter, **United States** or **USA** where space is limited)
- **Viet Nam** (**not** Vietnam)

The country name is normally given after the name of a city, unless the city is the capital.

Note: Geneva and New York, although not the capitals of their respective countries, are not followed by the country name.

As Members of WMO include both countries and territories, avoid the expression “WMO Member States” as this would leave out the territories. Use instead **WMO Members** or **WMO Member States and Territories**.

Maps

All WMO maps must satisfy specific constraints linked to the Organization’s stature as a specialized agency of the United Nations. There are also other WMO-specific characteristics, such as the geographical limits of its regional associations, that maps issued by the Organization need to reflect. Therefore, the Secretary-General approved an official WMO basemap that must be used for the production of all maps for publication. The basemap is compatible with most standard Geographical Information System (GIS) tools such as Quantum GIS.

The WMO basemap contains geographic boundaries (borders) of WMO Member States and Territories, and other data (on non-Member States of WMO) in electronic format. The basemap is, therefore, subject to change; the Cabinet and External Relations (CER) Department will retain responsibility for accuracy, updating and maintaining of the basemap. Staff will be notified when a new WMO basemap version is made available and will be required to update their maps in all non-static publications upon receipt of the notification. The basemap version used to generate a map should be mentioned in the filename of the map so that all can easily identify whether a map has been updated.

The basemap can be found at G:\shared\DEPT\CER\Public\FOR USERS\WMOBaseMap\.

If staff notice any inconsistencies in the official basemaps (the reference is *Composition of the WMO* (WMO-No. 5)), these should be immediately reported for correction to Sarah Natalie Burke of CER.

FIGURES, TABLES AND BOXES

Authors are responsible for providing good-quality, high-resolution editable files of the illustrations used in their manuscript (preferably in .eps or .ai format).

Figures and tables must be simple and easy to understand at a glance, and should give useful information that supplements (but does not repeat) the text. Consideration should be given to their presentation (for example, several short tables may be easier to understand than one complicated table), and they should use terminology consistent with the text. Figures can be used to convey a message, tables can be used to convey data and boxes can be used for case studies or to provide additional information.

For all figures, tables and boxes that are taken from other sources covered by copyright, permission for reproduction must be obtained from the copyright holder prior to inclusion in the manuscript. In addition, all sources must be acknowledged.

In all publications, with the exception of public information material, figures, tables and boxes must be mentioned in the text before they appear (for example, *see Figure 1, Table 1 shows, Box 1 illustrates*). If there is only one figure, table or box, then it should not be numbered, but referred to in the text as *see the figure/table/box*. If the figure, table or box is split into parts, then these should be labelled (a), (b), (c), etc., and referred to as, for example, *see Figure 1(a)*. Figures, tables and boxes should be placed as close as possible to where they are first mentioned and must be numbered separately and consecutively.

Abbreviations: Do not use abbreviations unless they are unavoidable; when necessary, explain any that have not previously been defined in the text in a key.

Capitalization: Capitalize only the first word and proper nouns of information included in figures or tables.

Captions: Keep titles/captions of figures, tables and boxes as short and clear as possible, but they should accurately convey the information therein. A period/full stop should be placed after the number when it precedes the title: **Figure 1., Table 1., Box 1.** All captions should be in bold type and centred on the page.

Font size and type: The font size should be 1 pt smaller than that used in the main text. The font type should be the same as in the main text.

Footnotes: Use *a, b, c, ...* (**not** 1, 2, 3 or asterisks) and number footnotes separately in each figure or table, starting from a.

Punctuation: Only complete sentences should end with a period/full stop.

Spacing: Insert two lines between the text and the bottom or top of the figure or table; this should be applied consistently throughout.

Specific guidance on the free elements (figures, tables and boxes) is developed in the following sections.

Figures

Caption: Centre the bold caption below the figure. A period/full stop should be used only when the caption is a complete sentence.

Source: Place the source preferably below the caption in smaller font or at the end of the caption in parentheses. The word "Source" should be italicized. Align with the left margin.

In addition, ensure that:

- The Equator indicator is consistent: 0 or EQ
- Scales, horizontal and vertical axes are consistent in all graphs, even if the source differs
- Coordinates are always labelled

Examples:

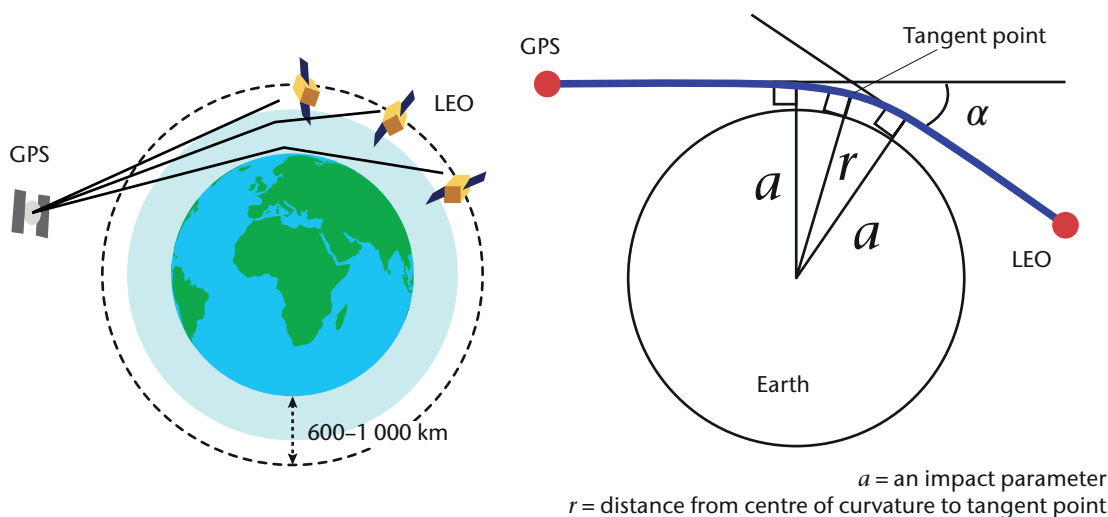


Figure 2.20. Principle of radio-occultation sounding. During the setting or rising of the GPS satellite over the horizon of the LEO satellite, the refraction induced by the crossed atmosphere changes the direction of propagation by a bending angle α .

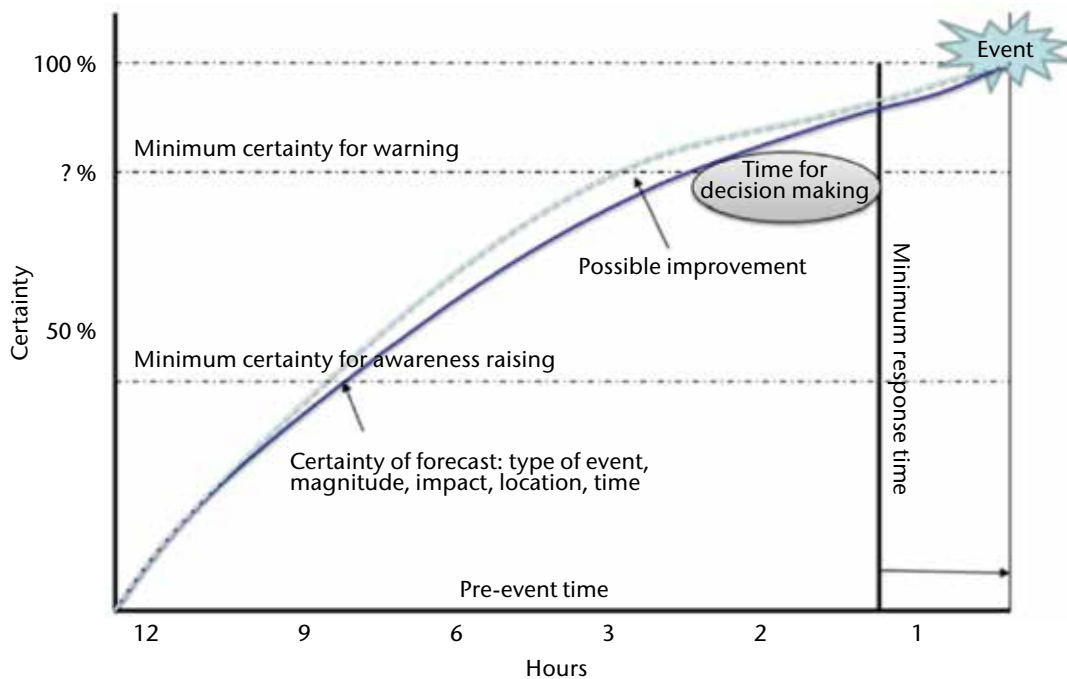


Figure 4.3. General illustration of the relation between the quality of forecasts, pre-warning time, response time and time for decision-making

Source: Mileti and Sorensen (1990)

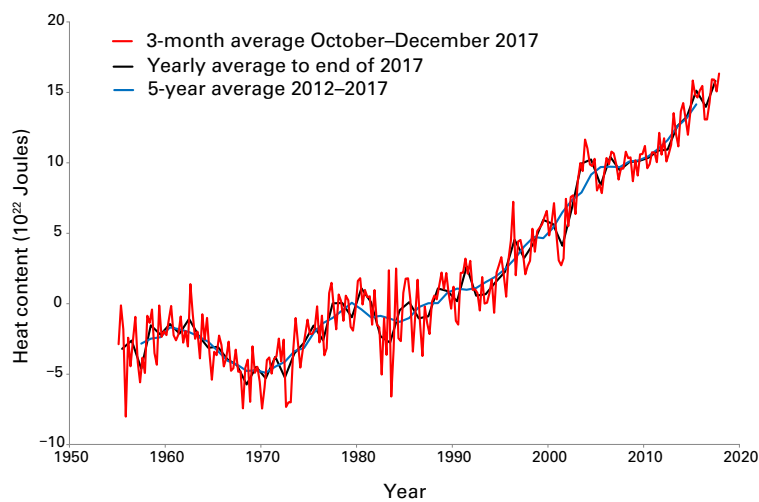


Figure 6. Global ocean heat content change (x 10²² J) for the 0–700 metre layer: three-monthly means (red), and annual (black) and 5-year (blue) running means, from the US National Oceanic and Atmospheric Administration (NOAA) dataset

Source: Prepared by WMO using data from NOAA National Centers for Environmental Information.

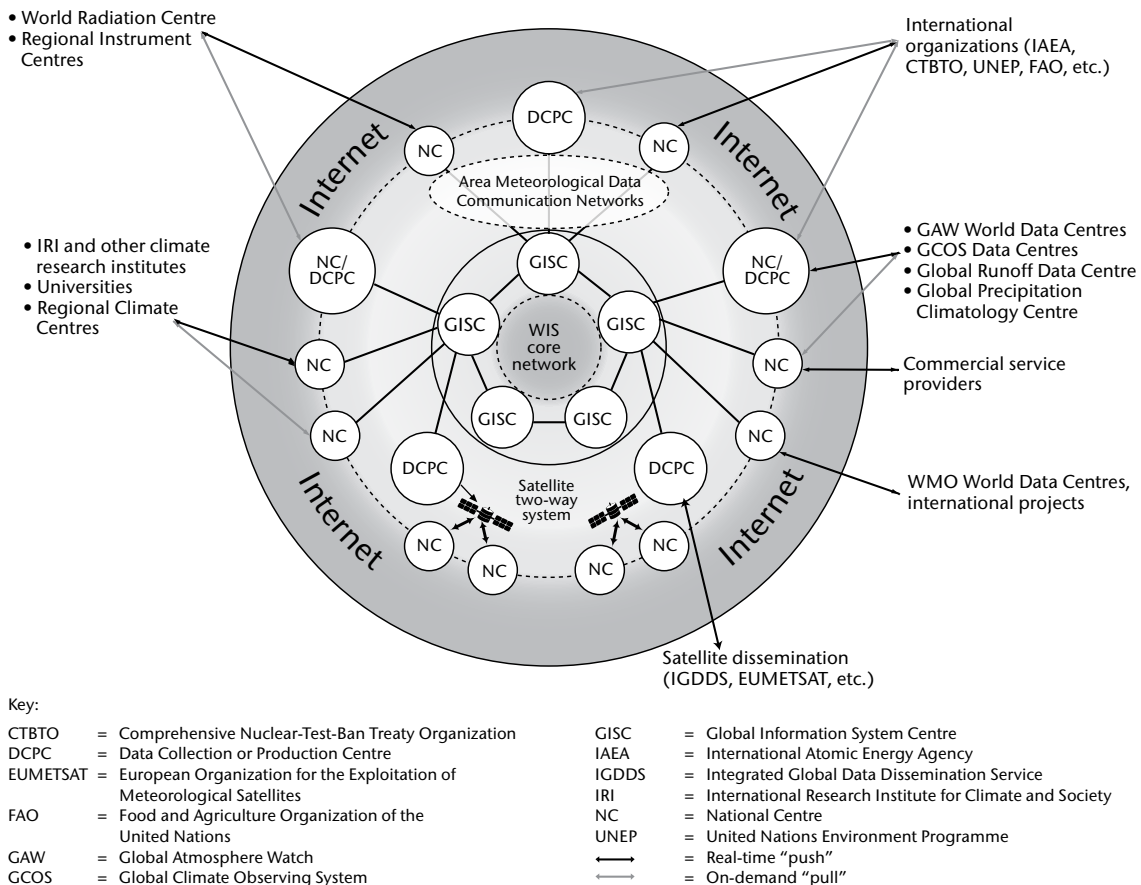


Figure 1. Types of WIS centres and typical interactions

Tables

Caption: Place the bold caption in the centre above the table. A period/full stop should be used only when the caption is a complete sentence.

Footnotes: Place footnotes below the table and before the source.

Headings: Place the centred headings in italics at the top of columns whenever possible. If units apply to all entries in a column or row, then place the units (in parentheses) in the column or row heading.

Lines: Insert horizontal lines before and after headings; draw one line at the bottom of the table. Use other horizontal lines and vertical lines only if the table is impossible to read without them.

Punctuation: Use open punctuation whenever possible, in particular for incomplete sentences. Only complete sentences should end with a period/full stop.

Source: Place the source below the table, after the footnotes. The word "Source" should be italicized.

Examples:

Table 1. Components of climate data rescue activities

<i>Components of data rescue</i>	<i>Activities</i>	<i>Keywords</i>
Archive paper and microfilm/ microfiche media (section 3)	Search and locate	NMHS, observation sites, universities, aviation and maritime agencies, agricultural organizations, international libraries and databases, national archives
	Preserve and store	Clean media; place in acid-free, labelled archive boxes, safe from dust, moisture, pests
	Create electronic paper/microfilm holdings inventory	Catalogue all paper media; estimate scope of imaging and digitizing effort
Image media (section 4)	Create master image inventory	
	Image and validate Update master image inventory Create image file inventories on each CD/DVD or in each computer directory	Update master image inventory after images are validated as readable, including metadata Cross-check CD/DVD file inventories with master image inventory
Digitize data values (section 5)	Create digital data inventory	
	Key entry, chart trace	Data input into CDMS
	Quality-control data	Update digital data inventory as data are digitized and pass through various QC tests
Archive digital media (section 6)	Cross-check printed media, images and digital data	Compare image and digital data inventories with original electronic paper/microfilm holdings inventory
	Back up electronic media	Daily
	Disperse multiple copies of images and digital data archives	To various locations
	Refresh media and migrate technologies	Every 5 to 10 years

Table 3.2. Recommended quintile boundaries

<i>Quintile boundary</i>	<i>Data content</i>
Lower bound of quintile 1	Lowest observation during the averaging period
Upper bound of quintile 1	$(1 + (n - 1) / 5)$ -th ranked observation during the averaging period (6.8 for a 30-year dataset)
Upper bound of quintile 2	$(1 + 2(n - 1) / 5)$ -th ranked observation during the averaging period (12.6 for a 30-year dataset)
Upper bound of quintile 3	$(1 + 3(n - 1) / 5)$ -th ranked observation during the averaging period (18.4 for a 30-year dataset)
Upper bound of quintile 4	$(1 + 4(n - 1) / 5)$ -th ranked observation during the averaging period (24.2 for a 30-year dataset)
Upper bound of quintile 5	Highest observation during the averaging period

Table 16.2. Chemical parameters required for analysis in the GAW Precipitation Chemistry Programme with recommended analytical methods

<i>Analyte</i>	<i>Status</i>	<i>Preferred methods^a</i>
pH	Required	Glass electrode
Conductivity	Required	Conductivity cell
Alkalinity	Optional	Titration
Cl ⁻ , NO ₃ ⁻ , SO ₄ ²⁻	Required	IC
NH ₄ ⁺	Required	IC, AC
Na ⁺ , K ⁺ , Ca ²⁺ , Mg ²⁺	Required	IC, ICP, AAS/AES
Organic acids ^b	Optional	IEC, IC
NO ₂ ⁻ , F ⁻	Optional	IC
PO ₄ ³⁻	Optional	IC, AC

Notes:

- a IC = ion chromatography; AC = automated colorimetry; ICP = inductively coupled plasma spectrometry; IEC = ion exclusion chromatography; AAS = atomic absorption spectrometry; AES = atomic emission spectrometry
- b For areas with high organic acid concentrations, formate and acetate analyses are recommended.

Boxes

Boxes generally contain information that supports the points given in the main text. They are inserted like figures or tables, and are hence treated in the same way. For general rules, see [Figures, tables and boxes](#) above.

The caption, footnotes and source are placed inside the box as follows:

Caption: Bold and centred at the top.

Footnotes: Below the text, before the source.

Source: Below the footnotes. The word “Source” should be italicized.

Box 2.5. Purpose of the external review process

The external review process is designed to:

- Assess the extent to which an RTC satisfies the current WMO criteria for the designation of an RTC;
- Reveal the strengths of the training programmes provided by the RTC and areas for development;
- Support the RTC in identifying ways of developing its training processes so as to enhance the quality, relevance and scope of what is on offer;
- Monitor the support given to WMO fellows;
- Help the RTC obtain potential leverage to acquire critically-needed resources.

Box 2.6. Ratings of Regional Training Centres that have undergone an external review

Fully meets the established criteria. There are no significant problems to be identified. Recommendations associated with this rating would be pointing out best practice for other RTCs, preventative measures or opportunities for incremental improvement to maintain or enhance quality.

Partially meets the established criteria. The RTC meets some of the criteria, but there is significant room for improvement. Recommendations associated with this rating would be of a corrective nature and could lead to a delay in the designation or reconfirmation of the institute as an RTC.

Does not meet the established criteria. This would lead to recommendations of a corrective nature that would have to be fully addressed for the institute to be designated or reconfirmed as an RTC.

FOOTNOTES AND ENDNOTES

Footnotes and endnotes are numbered consecutively throughout the main text. The numbering restarts at 1 for each appendix and/or annex. In voluminous publications, this can also be applied to parts or chapters. For footnotes in figures, tables and boxes, see [Figures, tables and boxes](#).

Within the body of a text, footnote numbers are inserted in superscript, outside punctuation. Footnotes appear at the foot of a page, regardless of where the text ends on the page. Endnotes appear at the end of a chapter or section, or at the very end of a publication.

Footnotes contained within quotations are omitted unless the meaning or purpose of the quotation would be obscured without the footnote. If the footnote must be retained, keep the original footnote number and place the footnote directly below the quotation. The final quotation marks should follow the footnote.

Abbreviations and acronyms used in footnotes and other references should follow the general rules given in [Abbreviations and acronyms](#).

FORMATTING AND LAYOUT

Bold and semibold

If bold must be used for emphasis, it should be confined to single words or phrases, not whole paragraphs.

In manuals, guides and technical publications, bold is used for chapter headings, first- and second-level headings, and bold and italics are used for third-level headings, as shown under [Headings and subheadings](#).

Semibold is used in the *Technical Regulations* (WMO-No. 49) and its annexes (Manuals) to highlight standard practices and procedures, which are distinguished by the use of the word “shall”.

Italics

Use italics for the following:

- Foreign words that do not appear in the latest edition of the *Concise Oxford English Dictionary*
- Latin names of animal and plant species
- Names of aircraft, ships and spacecraft
- Names of cyclones, hurricanes, tropical storms and typhoons
- Titles of books, publications, databases, periodicals, newspapers, titles of papers and articles, films, plays and radio and television programmes
- Titles of laws and decrees in a foreign language
- Variables in mathematical expressions (but not operables)

In manuals, guides and technical publications, italics are used in third- and fifth-level headings, as shown under [Headings and subheadings](#).

Do not use italics for the following:

- El Niño, La Niña
- Emphasis
- Non-English names of organizations, institutions, corporations and programmes

Headings and subheadings

Headings and subheadings enhance clarity by indicating the hierarchy and structure of ideas in the text.

In manuals, guides and other technical publications, there are five heading levels. Numbering begins at 1 if the chapters are not numbered (see first example below); otherwise, numbering follows from the chapter number (see second example below). The same style should be used in publications in which headings are not numbered.

CHAPTER HEADING **12 PT BOLD CAPS (14 pt leading)**

1.	FIRST-LEVEL HEADING	10 PT BOLD CAPS
1.1	Second-level heading	10 pt bold u/l
1.1.1	<i>Third-level heading</i>	<i>10 pt bold italics u/l</i>
1.1.1.1	Fourth-level heading	10 pt medium u/l
1.1.1.1.1	<i>Fifth-level heading</i>	<i>10 pt italics u/l</i>

or

CHAPTER 1 **12 PT BOLD CAPS (14 pt leading)**

1.1	FIRST-LEVEL HEADING	10 PT BOLD CAPS
1.1.1	Second-level heading	10 pt bold u/l
1.1.1.1	<i>Third-level heading</i>	<i>10 pt bold italics u/l</i>
1.1.1.1.1	Fourth-level heading	10 pt medium u/l
1.1.1.1.1.1	<i>Fifth-level heading</i>	<i>10 pt italics u/l</i>

When publications are divided into parts, use 13 pt bold caps for the part heading, with the part number in Roman numerals.

For headings and subheadings in brochures, see the [WMO Corporate Visual Identity Guidelines](#) (2016 update).

Running heads

In publications with no chapters, the title of the publication appears in the headers on both left-hand or recto pages (even numbers) and right-hand or verso pages (odd numbers).

In publications not divided into parts, the publication title appears as the running head on the verso pages, and the chapter title on the recto pages.

Verso:

2 **GUIDE TO AERONAUTICAL METEOROLOGICAL SERVICES COST RECOVERY**

Recto:

GENERAL PROCEDURES FOR ALLOCATING COSTS

35

In publications divided into parts and chapters, the part number and title appear on the verso, and the chapter number and title on the recto.

Verso:

2

Recto:

There are neither running heads nor page numbers on the first page of a part or chapter.

Paragraphs, subparagraphs and lists

Paragraph numbers should be avoided, unless absolutely essential for cross-referencing purposes. Do not number paragraphs in brochures, foldouts and many non-technical publications. In manuals, guides and other technical publications, paragraphs and subparagraphs can be clearly identified using numbers and letters as indicated below.

For paragraphs, use the following sequence:

1.

1.1

1.1.1

1.1.1.1

1.1.1.1.1

Try to avoid paragraph numbers longer than five figures. If there is only one paragraph in a section, do not number that paragraph.

Subparagraphs and lists should be numbered as follows:

First degree: (a), (b), (c), etc.

Second degree: (i), (ii), (iii), etc.

Third degree: a., b., c., etc.

Fourth degree: i., ii., iii., etc.

Example:

1. Quality control levels are outlined as follows:

(a) Basic quality control procedures to be carried out at a station:

(i) Automatic quality control of raw data:

a. Plausible value check: gross error check on measured values;

b. Check on a plausible rate of change: time consistency check;

(ii) Automatic quality control of processed data:

a. Plausible value check;

b. Time consistency check:

i. Check on a maximum allowed variability of an instantaneous value;

ii. Check on a minimum required variability of instantaneous values;

iii. Calculation of standard deviation;

c. Internal consistency check;

d. Technical monitoring of all crucial parts of a station;

(b) Basic quality control procedures to be carried out at a station: ...

Spacing

Insert one space (not two) after all punctuation marks, including at the end of a sentence.

In formulae, insert a space before and after operational symbols such as +, −, ±, ×, >, <, ≥, ≤, = and ≈, except in sub(super)scripts or when they indicate sign or magnitude. For example: +0.47 °C above; estimated error is ±6; $x + y = z$; $xa + yb = za + b$.

Signs for binary operations and binary relations are preceded and followed by spaces: $x + y = z$; $(a \times b) \times c = a \times (b \times c)$.

Note: Signs for binary operations are not followed by a space when they are used to modify a symbol rather than combine two mathematical symbols or expressions: −1, ×5.

Use a non-breaking space:

- To split whole numbers of more than three digits: 1 000, 200 000, 1 250 000
- Between every set of three digits counting from the right or left of the decimal point: 3 689.15, 0.234 56
- Between a unit of measurement and the preceding number: 3 kg, 30 m, 80 Hz, 220 V
- Between the currency abbreviation or symbol and the amount: £ 50 000, € 1 200 000, US\$ 40 000
- To separate a number from a unit: 20 times, 22 years, Part III, Chapter 5, section 2, Figure 1, Table 2, Box 3, Equation 4
- In temperature measurements: 60 °C, 212 °F
- In dates: 27 July 2018

Do not insert spaces:

- Between initials in names: T.H. Miller
- In geographical coordinates: 90°N, 45°S, 63°E, 13°W
- Before and after en dashes in date or number ranges: 3–7 July, 3 June–13 July, 2010–2018, 10–12 years

Parts of a publication

Front and back covers

Detailed information on the formatting of front and back cover layouts can be found in the *WMO Corporate Visual Identity Guidelines* (2016 update, section B5).

Title page

Use the same format as the front cover, in black and white.

Copyright page

This generally contains:

- Editorial note concerning METEOTERM and hyperlinks
- WMO publication number
- Copyright information
- ISBN
- Disclaimer (see [Copyright information and disclaimer](#))

Contents

In the table of contents, part, chapter and section headings should be included as they appear in the main text, with only first-, second- and third-level headings. The word Page should appear at the top right-hand corner of each page, just above the page numbers.

If the table of contents ends on a recto page, then a blank page must be inserted after it.

Foreword and/or preface

Both are introductory statements that appear in the front matter. The foreword precedes the preface.

Acknowledgements

If not part of the foreword or preface, the acknowledgements should be placed immediately after the foreword or preface, as applicable.

Executive summary

This should precede the introduction, or the first chapter when the introduction is part of the main text.

Introduction

If it is not part of the main text, the introduction should be placed immediately before the main text.

Main text

According to the length of a publication, the main text can be divided into parts and chapters. Parts start on a new page. Chapters usually start on a new page, but when they are short they run consecutively throughout the main text.

Appendices

Number appendices using Arabic numerals ([Appendix 1](#), [Appendix 2](#), etc.). If there is only one appendix, it should not be numbered but should be referred to in the text as [the appendix](#). As a general rule, an appendix should contain subsidiary material that cannot be submitted without the main text. For the *Technical Regulations* (WMO-No. 49) and its annexes (Manuals), appendices are used as well as attachments (see *Guidelines on the Preparation and Promulgation of the WMO Technical Regulations* (WMO-No. 1127)).

Attachments

Number attachments using Arabic numerals ([Attachment 1](#), [Attachment 2](#), etc.). If there is only one attachment, it should not be numbered but should be referred to in the text as [the attachment](#). An attachment usually has information that may be related to but is independent of the text to which it refers.

Annexes

Number annexes using Arabic numerals ([Annex 1](#), [Annex 2](#), etc.). If there is only one annex, it should not be numbered but should be referred to in the text as [the annex](#). All abbreviations and acronyms should be redefined at first mention in each annex, even if they have already been defined in the main text. As a general rule, an annex should contain subsidiary material that can be considered without the main text (it is a stand-alone document).

Glossary

A glossary is best presented in table format (without lines) as in the example below:

GLOSSARY

Accreditation	The process through which an external body evaluates an institution or programme against a specified standard. In essence, this is a form of quality assurance.
Blended learning	A combination, in any proportion or sequence, of distance-learning and classroom elements.
Certification	The process attesting that a person has satisfied a particular academic standard or professional qualification, or has the competencies required for a particular job or task.

References

This should contain the details of all references cited in the text; see [References](#) below.

Bibliography

This may contain references that are not cited in the text, but which are relevant to the subject matter and recommended for further reading; see [References](#) below.

GENDER-NEUTRAL LANGUAGE

Use non-sexist or gender-neutral language, which treats women and men equally.

Beware of sexist assumptions and hidden stereotypes such as: A climatologist provides invaluable services to his community.

If the name and/or sex of a correspondent is unknown, do not assume that the person is male. Include both sexes in the salutation, or use a gender-neutral term: Dear Madam or Sir, Dear Director, Dear colleague.

Neutral nouns

Ensure that words that are neutral in theory are actually used neutrally:

Our organization has revised its policy so that all new members of staff receive health insurance for their wives.

could become

Our organization has revised its policy so that all new members of staff receive health insurance for their spouses.

Specify sex only if necessary to the sense. A specific reference to sex can imply that women or men are oddities in certain situations or occupations: **woman director**, **woman engineer**, **male nurse**, **male cleaner**.

Personal pronouns

Masculine pronouns cannot be used to refer to both males and females. Use “he”, “his”, “him” or “himself” only when referring to a male person. Where “he” or “his” appears only once, “he or she” or “his or her” can be substituted: **Each author is responsible for checking his or her proofs.**

However, repeating “he or she” or “him or her” several times in a paragraph will make the text clumsy. In some cases, the sentence may be recast in the plural or reworded to eliminate the pronoun altogether:

Authors are responsible for checking their proofs.

Proofs are to be checked by the authors.

Avoid the unnecessary use of “man” and its compounds:

<i>avoid</i>	<i>replace by</i>
fisherman	fisher
man	people, human beings, etc.
mankind	the human race, humankind
man-hours	work-hours, staff-hours
man-made	manufactured, artificial, human-induced
manpower	staff, workforce, human resources
seaman	seafarer

NUMBERS

Arabic numerals

Use Arabic numerals for numbering:

- WMO constituent body sessions (after June 2012)
- Chapters
- Annexes
- Appendices
- Attachments
- Resolutions, decisions and recommendations, and their annexes
- Figures, tables and boxes

Cardinal numbers

Cardinal numbers expressed in figures

Numbers 10 and above are normally written in figures, except as noted in [Cardinal numbers expressed in words](#) below.

Whole numbers of more than three digits are split as follows: **2 632 597, 8 022** (using a non-breaking space).

Decimals are punctuated as follows: **3.4, US\$ 50.25, € 146.80**, with a decimal point (**not** a comma).

The following are always expressed in figures:

- WMO resolutions and recommendations: **Resolution 12 (EC-LXIII), Recommendation 3 (CBS-16)**
- Percentages: **Annual sample requirements have a 93% confidence interval with less than a 9% margin of error.**
- Compound fractions: **Staff are entitled to 2½ days' annual leave per month.**
- Decimal numbers and fractions: **The hurricane hit land 6.5 km from the border.**

Note: Insert a zero before the decimal point in decimal fractions expressing a number less than 1: **0.5 g**.
All decimal numbers in a table or series should have the same number of decimal places.

Do not use decimal points with whole numbers or when figures are preceded by “around” or “approximately”:

- Ratios: **The success–failure ratio of e-government in developing countries was 1 to 6.**
- Map scales: **A new map on the scale 1:250 000 was published in 2010.**
- Weights, units and measures: **A GPS satellite weighing 2 300 kg was installed some 20 000 km from Earth above the Indian Ocean.**
- Ages: **Average life expectancy in sub-Saharan Africa was 46 years in 2006.** (exception: **under-five mortality**)
- Temperatures: **15 °C, 92 °F**
- Sums of money: **US\$ 850 000, £ 456.50, € 850**
- Voting results: **The resolution was adopted by 33 votes to none, with 3 abstentions.**

Note: In votes, the word “none” is always used instead of the number “0”. The majority vote is always given first.

Cardinal numbers expressed in words

Numbers under 10 are generally expressed in words, except in ranges or when used with units:

six, not 6, but a 2–3 day workshop or 8 km

Numbers are always expressed in words:

- At the beginning of a sentence: **Twelve tornadoes were sighted above Wichita Falls.**
- In simple fractions: **Almost two thirds of the population were evacuated.**

Note: Fractions expressed in words are not hyphenated (for example, **one third of the total**) unless they are used as adjectives (for example, **one-third share**).

All numbers may be expressed in words in isolated references to approximate measures and periods of time: **The weather station, about ten kilometres from the Equator, has grown significantly over the past fifty years.**

Collective years

A single period covering two or more full years is written as follows:

2009–2018 (or from 2009 to 2018)

biennium 2016–2017

the 2001–2010 decade

A period of less than 24 months that overlaps two years is written as follows: **The 2016/2017 tropical cyclone season in the South Pacific was below average, with only four named tropical storms.**

Biannual, biennial and the like

Biannual means occurring twice a year.

Biennial means occurring every other year (every two years).

Bimonthly, biweekly and biyearly are ambiguous: they mean either occurring twice a month/week/year or occurring every other month/week/year.

It is best to avoid these words entirely, and write “twice a month/week/year” and “every other month/week/year” (or “every two months/weeks/years”) as appropriate.

Decades

Decades are always expressed as follows: **the 1990s (not the nineties, the 90s or the 1990’s).**

Chemical formulae

The numbers in chemical formulae should be subscript:

CO₂, CH₄, H₂O, O₂, N₂, NO_x

or, for ions: **SO₄²⁻**.

Dates

The day is followed by the month and year: **21 April 2018.** There is no comma between the month and the year: **July 2018.**

Months are normally written out in full but may be abbreviated (without punctuation) in tables if space is limited.

Dates are not to be written as 2/07/17 or 2.07.17. Where space is limited, for example in tables, the **2.7.17** form can be used.

Note: Exceptionally, Roman numerals are used to indicate the month in session templates (top right-hand corner) in order to avoid confusion with the American date format.

Non-specific references to “this year”, “next year” or “last year” are to be avoided. The specific year should be used, thus:

In the course of 2017, the Committee will pursue work on the following themes ...

The timetable for the 2015 global climate change agreement ...

The membership of WMO was 191 Member States and Territories in 2017.

References to meetings should be written out as follows: *Informal Planning Meeting of the Voluntary Cooperation Programme, Melbourne, Australia, 4–7 April 2017.*

Mathematical expressions

Use MathType or Microsoft Equation Editor for all equations. Displayed equations (equations on their own line) should be centred, and numbered sequentially in parentheses at the right-hand margin, for example:

$$x^a + y^b = z^{a+b} \tag{4}$$

Equations should be treated as part of a sentence, and should therefore have appropriate punctuation before and afterwards to aid comprehension. For example:

gives the following:

$$y = f(x),$$

where:

or

Equation 7 then reduces to:

$$c^2 = \frac{g}{k} = \frac{g\lambda}{2\pi}, \tag{10}$$

or when using $\lambda = cT$,

$$T = \sqrt{\frac{2\pi\lambda}{g}}, \tag{11}$$

$$\lambda = \frac{gT^2}{2\pi} \tag{12}$$

and

$$c = \frac{gT}{2\pi} = \frac{g}{2\pi f} = \frac{g}{\omega}. \tag{13}$$

If an equation extends over more than one line, break the equation before operators (=), continuing operators (+, −, ×, /) or signs.

Equations should be referred to in the text as, for example, *Equation 4.*

In all mathematical expressions, italic type should be used for variables, and bold italic type for vectors and matrices. Roman type should be used for “d” denoting a differential. For example:

$$\mathbf{v} = \frac{ds}{dt} \tag{13}$$

Millions, billions and trillions

In running text, numbers in the millions, billions and trillions are written as follows: **1 million, 3.4 million, 6 billion, 7.8 trillion.**

If there is more than one digit to the right of the decimal point, the number should normally be written out in full: **3 432 000 (not 3.432 million).**

The term “billion” (French: *milliard*; Spanish: *mil millón*) is used to mean a thousand million (10^9). The term “trillion” (French: *billion*; Spanish: *billón*) is used to mean a million million (10^{12}).

Numbers occurring together or in a series

When two numbers occur together, they should be expressed in different styles, according to the nature of the elements and the context: **Twenty 100-mm plastic raingauges; 15 five-year-old weather satellites.**

When two or more numbers to which different rules apply occur in a series, the rule applying to the higher or highest number applies to all:

Representatives from 12 African, 8 Asian and 5 Latin American countries attended the meeting.

The Eastern North Pacific basin had above-average hurricane activity in 2013, with a total of 20 storms, 9 of which intensified to hurricane status and 1 of which became a major hurricane.

Note: This rule does not necessarily apply if the series includes disparate items: **A total of 23 people were injured in four separate incidents.**

Ordinal numbers

Ordinal numbers expressed in figures

Ordinal numbers are written in figures to indicate:

- Meeting numbers: **2nd and 3rd meetings**
- Floors: **4th floor, 38th floor**
- Session numbers higher than 99: **100th session**

Ordinal numbers expressed in words

Ordinal numbers from first to ninety-ninth are expressed in words for most purposes:

WMO celebrated its fiftieth anniversary in 1999.

The Executive Council held its seventieth session at WMO headquarters from 20 to 29 June 2018.

For centuries, the word is written out: **twenty-first century** (**not** 21st century or XXI century).

Ranges of numbers

When two numbers are used to indicate a range, the two numbers should be homogeneous: **Between 3 430 500 and 4 000 000 housing units were built** (**not** between 3 430 500 and 4 million housing units).

To reduce the possibility of confusion, the numbers should be expressed in full, whether in words or figures: **Damages from the floods were estimated at between Can\$ 2 million and Can\$ 5 million** (**not** between Can\$ 2 and Can\$ 5 million).

When linking two numbers in a range, use the following forms:

- An en dash: **Production is expected to increase by an additional 2%–4%**.
Note: Do not use “from” with an en dash (**not** from 20%–30%).
- From ... to ...: **The Committee will meet from 12 to 23 April, and on 14 and 15 May 2018.**
Note: Do not use “from/to” for a two-day range (**not** from 14 to 15 May).
- Between ... and ...: **Literacy rates rose for girls between 10 and 15 years of age.**
Note: Do not use “between” with “to” (**not** between 15 to 20 satellites).

If the unit of the range is represented by a symbol, the symbol is always repeated:

The temperature rose from 15 °C to 30 °C.

Prices averaged \$A 20–\$A 25 per kilogram.

If the unit is written out or abbreviated, it is given only once, after the second number:

The Intergovernmental Panel on Climate Change warned that global sea levels could rise by between 26 and 82 cm by the end of the century if stronger efforts are not made to curb climate change.

A re-boost burn could increase the orbital height of an automated transfer vehicle by 30–50 km an hour.

Roman numerals

Roman numerals are normally used to identify:

- Parts and volumes of a publication
- Annexes to session reports
- WMO constituent body sessions (up to June 2012)

Telephone and fax numbers

Telephone and fax numbers should be written without parentheses or hyphens: **Tel.: 940 592 58 00, ext. 123; Fax: 212 555 77 77** (when abbreviated, telephone is written as “Tel.” and not “Tel”).

Where it is appropriate to include both a country and a city code, leave a space between the two codes and between the codes and the telephone or fax number. In the following example, the first block of numbers (41) is the country code for Switzerland and the second block (22) is the city code for Geneva: **Tel.: +41 (0) 22 730 83 14.**

Note: In some cases, as in the example above, the number contained within parentheses is considered part of the phone number only when dialling within the country.

Time of day

The 12-hour system is used for most purposes. The time of day is expressed as follows: **9 a.m. (not 9:00 a.m.), noon, 1.30 p.m., 9.05 p.m. (not 9.5 p.m.), midnight.**

The 24-hour system is used primarily in military, aviation and production schedules. The time is expressed in four figures and is written without punctuation: **0900 hours, 2100 hours.**

Note: In meteorology, time is expressed according to a single standard, the Universal Time Coordinated (UTC), formerly known as Greenwich Mean Time (GMT). Meteorologists also use the 24-hour clock (where 0000 = midnight UTC): Tuesday, 19 June 2018, at 1800 UTC.

Units of measurement

Units, quantities and symbols should be used in accordance with the *International System of Units* (SI), published by the Bureau International des Poids et Mesures (2006, updated 2014); *Quantities and Units, Part 1: General*, compiled by the International Organization for Standardization (ISO 80000-1:2009); and *Symbols, Units, Nomenclature and Fundamental Constants in Physics*, published by the International Union of Pure and Applied Physics (1987). Variables not defined as international symbols by the above-mentioned publications but commonly used in meteorology should be used as stated in the *International Meteorological Tables* (WMO-No. 188, TP. 94).

Note: The International Civil Aviation Organization uses some SI-derived units of measurement, which should not be changed (for example, m/s).

There should always be a non-breaking space between a number and a unit, except for percentages or with the degree symbol in geographical coordinates: **38%, 28°S, 15 °C, 92 °F.**

When used in conjunction with numbers, the abbreviated form of units should always be used: **22 m, not 22 metres.**

For units of time, the accepted abbreviations are:

seconds	s (not sec., sec or secs)
minutes	min (not min. or mins)
hours	h (not hr or hrs)
days	d

“years” should be written out in full, except in tables, where “y” may be used to save space.

Do not use the slash in units: **W m⁻² (not W/m2), W m⁻² s⁻¹ (not W/m2/s), m s⁻¹ (not m/s), mm h⁻¹ (not mm/h).**

PUNCTUATION

Apostrophe (’)

An apostrophe (’s or the plural form s’) is most commonly used to show possession:

- Earth’s climate**
- Members’ actions**

An apostrophe is not used with an abbreviation/acronym or the name of an organization:

WMO Commission for Agricultural Meteorology

United Nations Headquarters

Colon (:)

A colon introduces an element or a series of elements illustrating or amplifying what has preceded the colon: **Land stations shall measure or calculate the following parameters: vapour pressure, relative humidity and dewpoint temperature.**

A colon may be used instead of a period/full stop to introduce a series of related sentences: **The hurricane made landfall in the middle of the night: Should we wake the children? Find shelter in the basement? Or stay put?**

The first word following the colon is in lower case, unless it is a proper name, in the following cases:

- When a colon is used within a sentence: **Weather ships have been superseded by a new generation of technological tools: satellites, weather buoys and long-range aircraft.**
- When a colon is used in a heading or subheading: **Meteorological meteors: definition and general classification.**

Capitalize the first word after a colon in the following cases:

- To separate an independent clause from a quotation: **When talking about justice, the President would often quote Martin Luther King: "Human progress is neither automatic nor inevitable ... Every step towards the goal of justice requires sacrifice, suffering and struggle; the tireless exertions and passionate concern of dedicated individuals."**
- When a colon introduces two or more sentences: **The meeting was adjourned for three reasons: First, the delegates had fallen asleep. Second, the microphones did not work. Third, the gavel was nowhere to be found.**
- When the introductory phrase is very brief and the clause following the colon represents the gist of the message: **Reminder: Mammatus clouds, dark clouds shaped like sagging pouches, often appear after a tornado.**

A colon is generally used after expressions such as "as follows" and "the following"; but do not use more than once in any sentence. There should not be a space before a colon.

In general, do not use a colon after "namely", "for example" and similar expressions, or before a series introduced by a verb or preposition:

He stressed the positive effects of global warming, namely that overall productivity in Canada would rise.

Aid for science and technology supports enterprise-based innovation, for example, through international cooperation.

The manual deals with (a) the components of the Global Operating System, (b) ..., (c) ...

A résumé should include educational background, work experience, ...

Comma (,)

Do not use a serial comma to punctuate the last word of a series – there should be no final comma before "and" or "or": **Structural measures to reduce exposure to flooding include the construction of levees, floodwalls and bypass channels.** However, in some texts, the final comma may sometimes have to be included for the sake of clarity, for example, in an enumeration containing lengthy or complex elements:

Ministries of Foreign Affairs, Defence, and Health and Social Affairs

... capacity-building programmes, education and literacy programmes, and health and social support programmes

... including their chemical, biological and physical properties, and their interaction with the physical environment

Do not use a comma after e.g. and i.e., before parentheses or preceding/following en dashes.

En dash (–)

An en dash is used for the following purposes (intermediate length between a regular hyphen and an em dash) – Cntrl +“-” (numeric pad):

- To join coordinating or contrasting pairs:
 - height–depth ratio
 - coupled atmosphere–ocean patterns
 - climate–ocean–ecosystem interactions
- To connect numbers, where it means up to and including (or through):
 - see Chapters 23–30
 - You are invited to celebrate World Meteorological Day on Friday, 11.30 a.m.–3 p.m.
 - the WMO Strategic Plan 2016–2019
- To set off an amplifying or explanatory element in a similar manner to commas, parentheses or colons, where a space is inserted before and after the en dash:
 - The role of oceanic microbial processes in regulating the efficiency of the removal of carbon from the upper ocean and sequestering it on the ocean floor – thus regulating atmospheric carbon dioxide – will be explored.
 - Air pollution is a major concern as urban population is rising – from 50% of the world’s total population today, it is expected to reach 70% by 2050.
- To link a city name to the name of a university that has more than one campus:
 - the University of Wisconsin–Madison
 - the University of Wisconsin–Milwaukee
- In a list:
 - The variables listed below can be measured or derived from the basic measurements described in the previous sections:
 - Wind speed and direction
 - Constant pressure levels
 - Maximum wind
 - Wind shear
 - Observation clouds (optional)

Note: In manuals and guides, lists should always be set off by en dashes, not bullets.

Forward slash (/)

A forward slash is used for the following purposes:

- To indicate time periods that encompass parts of two consecutive calendar years: **Intersessional period 2016/2017**
- To link two alternative words: **and/or**
- Between the names of two organizations in the titles of joint meetings, programmes and projects:
 - Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology
 - WWRP/THORPEX African Science Plan

Hyphen (-)

There are no strict rules for the use of hyphens, but see also the [WMO spelling list](#).

Some compound words are hyphenated irrespective of their grammatical use:

Secretary-General
capacity-building

There are cases, however, where hyphenation is dictated by the grammatical function that some words have in a sentence:

in depth (adv.): This subject needs to be studied in depth

in-depth (adj.): An in-depth study of this subject

land use (noun): A report on land use in Europe

land-use (adj.): A report on land-use policies in Europe

sea ice (noun): One way to assess the state of the Arctic sea ice is to estimate the age of the ice, given that first-year ice is the thinnest and most susceptible to melting.

sea-ice (adj.): The 2001–2010 decade has experienced accelerated melting of the sea-ice cover and mass loss of the Greenland ice sheet.

When two or more compound modifiers have a common base, this base is sometimes omitted in all except the last modifier, but the hyphens are retained: short-, medium- and long-range climate prediction.

Do not hyphenate:

- Compounds formed by an adverb ending in -ly and a participle: internationally agreed environmental goals
- Compounds including the word “very”: very high-frequency radar
- Latin words, even when used as adjectives:
 - in situ measurements (**not** in-situ measurements)
 - ad hoc working group (**not** ad-hoc working group)

Do not:

- Use a hyphen to indicate a negative number, use a minus sign instead: –23 °C
- Use a hyphen in a number range, use an en dash instead: 326–389
- Use Word’s automatic hyphenation function

Prefixes

A hyphen is normally used after a prefix: to prevent a word being mistaken for another (*re-treat/retreat*, *re-cover/recover*); to avoid doubling a vowel or a consonant (*re-elect*, *re-employ*, *part-time*) or to link the prefix to a word beginning with a capital letter (*pre-Columbian*, *post-World War II*).

Parentheses

Use parentheses sparingly; they are often unnecessary and tend to clutter up a text.

Never use a comma before parentheses:

As noted in the glossary (see Appendix 3), a user is ...
... the *Manual on Codes* (WMO-No. 306), Volume I.2

Capitalization

If the parenthetical expression occurs inside a sentence, use lower case and no punctuation: ... research in various areas (see section 3.2).

If it occurs outside a sentence and is self-contained, use upper case and full punctuation: ... (See Chapter 2, Figure 4, for further details.).

Quotation marks

When necessary, use double quotation marks around a direct quotation. Use smart (or “curly”) quotes. Do not use French-style quotation marks, << >>. For more details, see [Quotations](#).

Semicolon

A semicolon is normally used at the end of a subparagraph/list item, as follows:

The statistics include:

- (a) Mean annual, monthly or seasonal values;
- (b) Maxima, minima and selected percentiles;
- (c) Measures of variability, such as the standard deviation;
- (d) Continuous records in the form, for example, of a river-flow hydrograph.

Do not insert “and” or “or” after the semicolon of the penultimate entry.

As a rule, do not use a semicolon with en dashes (or bullets); the preferred style is no punctuation or a period/full stop.

There is, however, an exception to this rule: in manuals and guides, a semicolon is used in lists set off by en dashes.

Square brackets

Use square brackets when inserting a word that is not in the original quotation (see [Quotations](#)).

Square brackets are used in reference lists to enclose English translations of non-English language references (see [References](#)).

They can also be used in complex mathematical expressions – where brackets should be used in the order $\{[(())]\}$ – or to denote intervals.

QUOTATIONS

The original quotation should never be changed, unless it contains obvious typos. Use double quotation marks (“ ”) around a direct quotation.

Use single quotation marks (‘ ’) for quotations within quotations:

The Secretary-General said, “I like to think of WMO strides in weather forecasting technology as ‘one small step for man, one giant leap for mankind’, with all due respect for both genders – and Neil Armstrong.”

To omit material from a quotation, use an ellipsis (...), a series of three periods/full stops. Ellipses are preceded and followed by one space.

Quoted material running up to three lines in a text should be enclosed in quotation marks within the relevant paragraph. Quotations of more than three lines should be rendered as a block quotation, that is, set apart from the text, indented both right and left, set in a font size two points smaller than the text, without quotation marks:

In anticipation of International Women’s Day on 8 March 2016, WMO Secretary-General Petteri Taalas stated:

For International Women’s Day, I and my team at the World Meteorological Organization are celebrating the outstanding work performed by female meteorologists, hydrologists, climatologists and scientists around the world by compiling an extensive Women in Action album with dozens of photos illustrating the remarkable work done by women at National Meteorological and Hydrological Services, often performed in remote areas and in challenging conditions.

When omitting one or more entire paragraphs, indicate the omission by placing an ellipsis in square brackets ([...]) on a separate line.

Place all punctuation marks, including periods and commas, outside quotation marks, unless they are part of the original quotation:

The Chair exclaimed, “Balderdash!”

Through their outstanding efforts “to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change,” Al Gore and the Intergovernmental Panel for Climate Change won over the Nobel Prize jury.

Use square brackets ([]) to indicate that a word or part of a word (for example, a verb tense or a change from capital to lower case or vice versa) in a quotation has been changed or added, normally in order to incorporate a quotation into a sentence or to fit the non-quoted surrounding text:

Original quotation: “These observations are exchanged internationally between aeronautical meteorological stations. Other types of reports are intended only for aeronautical operations.”

Modified quotation: It is now generally accepted that “[t]hese observations are exchanged internationally between aeronautical meteorological stations, while other types of reports are intended only for aeronautical operations.”

The source of a quotation should always be acknowledged.

For more details, see the [United Nations Editorial Manual Online](#).

REFERENCES

Authors are responsible for ensuring that all references and bibliographical items are accurate, complete and correct. **Editors** ensure that references follow WMO style but do not check their accuracy.

All references that are cited in the text must be given in the references section under the heading “References”, which should contain only those references that are mentioned in the text.

If required, a “Bibliography” may contain references that are relevant to the subject matter and recommended for further reading but which are not mentioned in the text.

The references and/or bibliography are normally placed at the end of a publication, after the glossary and before the index (if any). They should not be numbered, except when the introduction is numbered. The references should precede the bibliography (if present). All entries should follow the style and format given in [References and bibliography examples](#) below.

Personal communications should not be referred to in either the references or the bibliography chapters.

Citing references within the text

The citation style used in WMO publications is based on the Harvard referencing system. The author surname(s) and the date of publication are enclosed by parentheses in the body of the text, as follows:

- One author: (Stefanski, 2017)
- One author, different years: (Tawfik, 2015, 2016)
- One author, same year: (Sivakumar, 2014a, 2014b)
- Two authors, different years: (Shimazaki, 2010, 2012; Johnes, 2014, 2015)
- Two authors for the same work: (Foreman and Thomas, 2018)
- Three or more authors for the same work: (Baddour et al., 2016)
- Multiple references: (Baddour et al., 2013, 2016, 2018) (even when not in this order in the reference list)
- More than one work by different authors: (Chen, 2013; Environment Canada, 2014; IPCC, 2016; UNEP, 2017)

When author names are mentioned directly in the text, only the year is given in parentheses: A full description of the SPI computational procedure can be found in McKee et al. (1993, 1995) and Edwards and McKee (1997).

Citing WMO sources

The citation of a specific part of a source (part, chapter, section, paragraph, page, etc.) is included in the text reference starting with the title of the publication, as follows:

... as stated in the *Manual on the Global Observing System* (WMO-No. 544), Volume I, Part III, 3.3.5 (not: ... as stated in 3.3.5, Part III, Volume I, of the *Manual on the Global Observing System* (WMO-No. 544))

Do not use the word “paragraph” or “section” unless the text is incomprehensible without it:

See the *Guide to the Global Observing System* (WMO-No. 488), Part II, 3.2.1 (not: See the *Guide to the Global Observing System* (WMO-No. 488), Part II, paragraph 3.2.1.)

When, for example, 4 is followed by 4.1 in paragraph numbering, use the word “section” to refer to the entirety of 4 and “paragraph” to refer to a specific paragraph therein, such as paragraph 4.3, or simply 4.3. Do not refer to page numbers, unless unavoidable.

Formatting and layout of references and bibliography entries

Items should appear in alphabetical order by author and should have the following format: Surname and initials of author(s) or editor(s), year of publication: title of publication. Edition (only include if not the first edition). Place of publication, publisher (for books) or journal title, volume and pages (for articles). Italicize the titles of books, journals and videos but not the titles of individual papers or articles. Omit the number of pages for books, but always include them for journal articles.

The names of all the authors of a publication should be given (in parenthetical citations in the text and footnotes or endnotes, use “et al.” for references to publications with more than two authors).

For Internet references, authors should verify the URL for each source immediately before submitting their manuscripts for editing.

Editors should test the URL provided for a source to ensure that it is correct. If it is not, they should find the correct page and update the link (only for WMO sources). When WMO material cannot be found, editors should ask the author or consulting official for a new URL.

URLs should appear in blue and should never be underlined.

References and bibliography examples

Books (print and online)

Type	Example
No author (or editor) given	<p>Sources with no author or editor are alphabetized by the first word in the title of the work, excluding articles:</p> <p><i>Concise Oxford English Dictionary</i>. Twelfth edition, 2011. Oxford, Oxford University Press.</p>
One author	<p>Stern, N., 2007: <i>The Economics of Climate Change: The Stern Review</i>. Cambridge, Cambridge University Press.</p> <p>A single-author entry precedes a multi-author entry beginning with the same name:</p> <p>Kogan, H., 1974: <i>The First Century: The Chicago Bar Association, 1874–1974</i>. Chicago, Rand McNally.</p> <p>Kogan, H. and L. Wendt, 1958: <i>Chicago: A Pictorial History</i>. New York, Dutton.</p>
Two or more authors	<p>Kaimal, J.C. and J.J. Finnigan, 1994: <i>Atmospheric Boundary Layer Flows – Their Structure and Measurement</i>. Oxford, Oxford University Press.</p> <p>Chemin, J.Y., B. Desjardins, I. Gallagher and E. Grenier, 2006: <i>Mathematical Geophysics – An Introduction to Rotating Fluids and the Navier-Stokes Equations</i>. Oxford, Oxford University Press.</p> <p>When two authors have the same family name, the name is repeated:</p> <p>Friedman, M. and R. Friedman, 1998: <i>Two Lucky People: Memoirs</i>. Chicago, The University of Chicago Press.</p>
Same author	<p>Entries by the same author (individual, corporate, institutional or anonymous) are listed in ascending chronological order. A 3-em dash (PC: type ctrl + alt + numeric pad – three times; Mac OS: type alt + shift + – three times) followed by a comma is used after the first entry in place of the author’s name:</p> <p>Fleming, J.R., 1990: <i>Meteorology in America, 1800–1870</i>. Baltimore, Johns Hopkins University Press.</p> <p>———, 1998: <i>Historical Perspectives on Climate Change</i>. New York, Oxford University Press.</p> <p>———, 2007: <i>The Callendar Effect: The Life and Work of Guy Stewart Callendar (1898–1964)</i>. Boston, American Meteorological Society.</p> <p>When an author has written more than one work in the same year, use <i>a, b, c</i> (italicized) and so forth to differentiate: 2005<i>a</i>, 2005<i>b</i>, 2005<i>c</i>. Use the 3-em dash as shown in the previous example.</p>

Type	Example
Successive entries by two or more authors	<p>Successive entries by two or more authors in which the first author's name is the same are alphabetized according to the co-authors' last names:</p> <p>Brooks, D.R. and D.A. McLennan, 2002: <i>The Nature of Diversity. An Evolutionary Voyage of Discovery</i>. Chicago, The University of Chicago Press.</p> <p>Brooks, D.R. and E.O. Wiley, 1986: <i>Evolution as Entropy</i>. Second edition. Chicago, The University of Chicago Press.</p>
Corporate authors	<p>Economic Commission for Europe (UNECE), 2007: <i>Our Waters: Joining Hands Across Borders – First Assessment of Transboundary Rivers, Lakes and Groundwaters</i>. Geneva, United Nations.</p> <p>Food and Agriculture Organization of the United Nations (FAO), 2007: <i>The State of Food and Agriculture 2007 – Paying Farmers for Environmental Services</i>. Rome.</p> <p>United Nations Environment Programme (UNEP), 2003: <i>Evaluation of Environmental Impacts in Life Cycle Assessment</i>. Borghetto Lodigiano, La Fenice Grafica.</p>
Editions	<p>The edition (other than the first edition) is included after the main title:</p> <p>Mitsch, W.J. and J.G. Gosselink, 2000: <i>Wetlands</i>. Third edition. New York, Wiley.</p>
Edited books	<p>Brofenbrenner, U. (ed.), 2005: <i>Making Human Beings Human: Bioecological Perspectives on Human Development</i>. Thousand Oaks, California, Sage Publications.</p> <p>Intergovernmental Panel on Climate Change (IPCC), 2013: <i>Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change</i> (T.F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley, eds.). Cambridge and New York, Cambridge University Press.</p> <p>United Nations Statistics Division (comp.), 1995: <i>The World's Women 1995: Trends and Statistics</i>. New York, United Nations.</p> <p>The translated title in roman is placed in square brackets after the original title:</p> <p>Ozawa, Y. and M. Yoshino, 1992: <i>Shōkikō Chōsahō</i> [Methods in Local Climatology]. Tokyo, Asahi (in Japanese).</p>
Books with one author, translated and/or edited by another	<p>Freud, S., 2008: <i>The Interpretation of Dreams</i>. Translated by J. Crick and edited by R. Robertson. Oxford, Oxford University Press.</p> <p>Menchúm, R., 1999: <i>Crossing Borders</i>. Translated and edited by Ann Wright. New York, Verso.</p>

Type	Example
Chapters in edited books	Brumbaugh, F., 2000: Hurricanes and typhoons. In: <i>Marine Weather Forecasting</i> (F. Brumbaugh and J.P. O'Connor, eds.). Rockledge, Florida, Bristol Fashion Publications.
Conference papers and proceedings	<p>Sivakumar, M.V.K., U.S. De, K.C. Simharay and M. Rajeevan (eds.), 1998: <i>User Requirements for Agrometeorological Services</i>. Proceedings of an International Workshop held at Pune, India, 10–14 November 1997. Shivajinagar, India Meteorological Department.</p> <p>United Nations Office for Disaster Risk Reduction, 2015: <i>Proceedings – Third UN World Conference on Disaster Risk Reduction</i>, Sendai, Japan, 14–18 March 2015.</p> <p>Vuerich E., J.P. Morel, S. Mevel and J. Oliviéri, 2012: Updating and development of methods for worldwide accurate measurements of sunshine duration. Paper presented at the WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2012). Instruments and Observing Methods Report No. 109. Geneva.</p>
Online books	Rao, J.N.K., 2005: <i>Small Area Estimation</i> . E-book. Wiley Series in Survey Methodology. New York, Wiley & Sons.
Chapters in an online book	International Commission for the Protection of the Danube River, 2012: The Danube River Basin climate adaptation strategy. In: World Meteorological Organization, <i>Climate Exchange</i> , World Meteorological Organization, Tudor Rose, https://library.wmo.int/pmb_ged/climate_exchange.pdf .
Theses	Salonen, K., 2008: Towards the use of radar winds in numerical weather prediction. PhD Thesis, <i>Finnish Meteorological Institute Contributions</i> , No. 76.
Unpublished material	Gibbs, W.: <i>A Very Special Family: Memories of the Bureau of Meteorology 1946 to 1962</i> . Unpublished.
Material to be published	<i>Guide to Aircraft-based Observations</i> (in preparation).
Material accepted for publication, but still in press	Vincent, L.A., E.J. Milewska, X.L. Wang and M.M. Hartwell: Uncertainty in homogenized daily temperatures and derived indices of extremes illustrated using parallel observations in Canada. <i>International Journal of Climatology</i> (forthcoming).

Journal and newspaper articles

Type	Example
Journal articles, one author	Warbs, R.A., 2006: Methods of developing naturalised monthly flow at gauged and ungauged sites. <i>Journal of Hydrologic Engineering</i> , 11:55–64.
Journal articles, two or more authors	Ngan, K., P. Bartell and D.N. Straub, 2008: Dissipation of synoptic-scale flow by small-scale turbulence. <i>Journal of the Atmospheric Sciences</i> , 65(3):766–791.
Newspaper articles (print)	Simonian, H., 2007: Heavy snowfalls lift Alpine spirits. <i>Financial Times</i> , 23 November.
Newspaper articles (print), no author	<i>New York Times</i> , 2008: Study says global warming not worsening hurricanes, 21 May.
Online journal articles	Schmidt, D.A. and R. Bürgmann, 2003: Time-dependent land uplift and subsidence in the Santa Clara valley, California, from a large interferometric synthetic aperture radar data set. <i>Journal of Geophysical Research</i> , 108(B9): 2416, doi:10.1029/2002JB002267 and ftp://quake.geo.berkeley.edu/outgoing/burgmann/REPRINTS/Schmidt_JGR2003.pdf.
Online newspaper articles	Vidal, J., 2014: World begins 2014 with unusual number of extreme weather events. <i>The Guardian</i> , 25 February, http://www.theguardian.com/environment/2014/feb/25/world-2014-extreme-weather-events .

Standards

Type	Example
ISO standards	International Organization for Standardization, 2008: <i>Quality Management Systems – Requirements</i> , ISO 9001:2008. Geneva. International Organization for Standardization, 2009: <i>Quantities and Units – Part 1: General</i> , ISO 80000-1:2009. Geneva.

Web material

<i>Type</i>	<i>Example</i>
Web documents	World Meteorological Organization, 2013: A summary of current climate change findings and figures, information sheet, November, https://library.wmo.int/pmb_ged/2013_info-note_climate-change.pdf .
Web documents, no publication date	World Meteorological Organization, n.d.: Code of ethics, https://library.wmo.int/pmb_ged/2007_wmo-code-ethics_en.pdf .
Websites	ACTION COST-ES0601, 2014, http://www.homogenisation.org/v_02_15/ . World Meteorological Organization, World Weather Information Service, http://worldweather.wmo.int/en/home.html .
Interviews	Taalas, P., 2016: What extreme weather and global temperature rise mean for humanity – WMO chief, UN News interview, 15 November, https://news.un.org/en/story/2016/11/545432-interview-what-extreme-weather-and-global-temperature-rise-mean-humanity-wmo .
Videos	United Nations Environment Programme, 2013: The Arctic & the ozone layer: stabilizing our environment and climate. Video, https://www.youtube.com/watch?v=4Vl8AKGY-tY .
Webinars/webcasts	World Meteorological Organization, 2016: Integrating indigenous knowledge with scientific weather and climate information. Webinar, https://www.wmo.int/gfcs/node/881 . Food and Agriculture Organization of the United Nations, 2016: El Niño: impacts and priorities for action. Webcast, http://www.fao.org/webcast/home/en/item/4054/icode/ .

WMO publications

Type	Example
Books	World Meteorological Organization, 2003: <i>Climate into the 21st Century</i> (W. Burroughs, ed.). Cambridge, Cambridge University Press.
Guides and manuals	World Meteorological Organization, 2015: <i>Guide to the WMO Information System</i> (WMO-No. 1061). Geneva. World Meteorological Organization, 2015: <i>Manual on the Global Observing System</i> (WMO-No. 544), Volume I. Geneva.
Reports	World Meteorological Organization, 2018: <i>Commission for Climatology: Abridged Final Report of the Seventeenth Session</i> (WMO-No. 1216). Geneva. World Meteorological Organization, 2018: <i>Regional Association V (South-West Pacific): Abridged Final Report of the Seventeenth Session</i> (WMO-No. 1226). Geneva.
Technical publications	Kitchen, M., 1989: <i>Compatibility of Radiosonde Geopotential Measurements</i> . Instruments and Observing Methods Report No. 37 (WMO/TD-No. 344). World Meteorological Organization, Geneva. Brereton, A.J., S.A. Danielov and D. Scott, 1996: <i>Agrometeorology of Grass and Grasslands for Middle Latitudes</i> . Technical Note No. 197 (WMO-No. 839). World Meteorological Organization, Geneva. World Meteorological Organization, 2012: <i>Guidelines on Participation of National Meteorological and Hydrological Services in the WMO World Weather Information Service. PWS-25</i> (WMO-No. 1096). Geneva.
Joint publications	World Meteorological Organization/World Health Organization, 2015: <i>Heatwaves and Health: Guidance on Warning-System Development</i> (WMO-No. 1142). Geneva. World Meteorological Organization/United Nations Educational, Scientific and Cultural Organization, 2010: <i>International Glossary of Hydrology</i> (WMO-No. 385), http://hydrologie.org/glu/aglo.htm .
CD-ROMs	World Meteorological Organization, 2000: <i>Publications of the Commission for Agricultural Meteorology 1954–1999</i> . CD-ROM. Volume 1, Technical Notes 1–190; Volume 2, Technical Notes 191–199; CagM Reports 1–76; three brochures.

RELEVANT OTHER MATERIAL AND TOOLS

The [WMO website](#) contains up-to-date information on the Organization's structure and programmes. For the WMO Secretariat organization chart, see the [organigram](#).

Online dictionaries and thesauri

Oxford Dictionaries

Merriam-Webster

Roget's Thesaurus

Online encyclopedia

Britannica

Other online tools

[PeriodicTable](#) (Royal Society of Chemistry)

References

Concise Oxford English Dictionary. Twelfth edition, 2011. Oxford, Oxford University Press.

[International System of Units](#)

United Nations Editorial Manual Online

[United Nations Geospatial Information Section](#)

[United Nations Map Library](#)

[United Nations spelling list](#)

[UNTERM](#) (United Nations terminology database)

WMO Corporate Visual Identity Guidelines (2016 update)

[WMO Members](#)

[WMO METEOTERM](#)

[WMO spelling list](#)

Terminology and documentary databases of other international organizations and governmental sources

[FAOTERM](#) (Food and Agriculture Organization of the United Nations)

[IAEA INIS/ETDE Thesaurus IATE](#) (International Atomic Energy Agency)

[IPCC Glossary](#) (Intergovernmental Panel on Climate Change)

[ODS](#) (United Nations Documentary database)

[Termite 6L – Terminology of Telecommunications – V.7](#) (International Telecommunication Union)

[TERMIUM Plus](#) (Government of Canada)

UNESCOTERM (United Nations Educational, Scientific and Cultural Organization)

WTOTERM (World Trade Organization)

WMO documents

Basic Documents (WMO-No. 15), 2015 edition

International Glossary of Hydrology (WMO-No. 385), 2012

International Meteorological Vocabulary (WMO-No. 182), 1992

SPELLING

The general rule is to follow the [WMO spelling list](#). For words not included in this list, the [United Nations spelling list](#) and the latest edition of the *Concise Oxford English Dictionary* should be used. If more than one spelling is given in the dictionary, use the form listed first unless otherwise indicated in the WMO or United Nations lists.

Use “-ize” verb endings and related “-ization” noun endings:

organize, organization

realize, realization

nationalize, nationalization

utilize, utilization

emphasize, minimize and so forth

Exceptions: analyse, catalyse and paralyse

A spell check should be conducted on all manuscripts before submitting for editing.

USAGE

A few terms are specific to WMO, for example:

Titles: Either “Mr” or “Ms” (**not** Mr. or Ms.) should be indicated in brackets following the name when necessary; do not use Mrs. Military and scientific titles are tolerated (e.g. “Professor” (Prof.), “Doctor” (Dr) and General).

Prof. Tamarine Smith (Ms)

Dr Dominique Blanc (Mr)

General Thomas Brown (Mr)

Some terms differ in their hyphenation and capitalization among United Nations agencies. When referring to, for example, the Secretary-General of a certain organization, check the specific format used by that organization.

The following general issues should also be noted:

Data: Always use in the plural (**data are**).

Impact: Only use as a noun, never as a verb: for example, “**there was an impact on ...**” **not** “this impacts on the ...” (or use “this affects the ...” instead).

Names: Use “**family name**” or “**surname**,” **not** “last name” (in questionnaires or other forms, for example).

Percentages: The percentage symbol (%) is preferred, except at the beginning of a sentence where both the number and the symbol should be spelled out: **Fifty-one per cent or more of global greenhouse gas emissions are caused by animal agriculture, according to a report published by the Worldwatch Institute.**

Seasons: Designations of the seasons relate to different times of the year in the northern and southern hemispheres and should be used with care to avoid ambiguity. Seasons are **not** capitalized. If possible, use a precise date, month or quarter. Alternatively, use “austral” and “boreal” to describe the season in order to avoid confusion.

Sex: In questionnaires and other forms, do not use the word “gender,” but the word “sex.”

PART III

PREPARATION OF ABRIDGED FINAL REPORTS OF CONSTITUENT BODY SESSIONS

This part of the guide is for use in the preparation of session reports, in which the style differs from that of other WMO material.

GENERAL

Constituent body session reports are available [online](#) and are printed only upon request by Members.

All session reports are issued in the six official WMO languages, with the exception of regional association (RA) reports, which are issued in English and the following languages:

RA I: Arabic and French

RA II: Arabic, Chinese and Russian

RA III: Spanish

RA IV: Spanish

RA V: French

RA VI: Arabic, French and Russian

Session reports are generally issued once every four years, with the exception of the Executive Council report, which is issued every year, and the report of the Commission for Basic Systems, which is issued every two years.

GUIDELINES FOR EDITORS

In a constituent body session report, only resolutions and recommendations are edited, **not** their annexes. Decisions are not edited; there are no annexes to decisions.

The final report (available as Part I online) is prepared from the approved session documentation, that is, the approved Docs. The final layout is done in Word (covers in InDesign) or Typefi. A PDF file with bookmarks and links is the final product that is uploaded to the WMO website.

The progress/activity report (available as Part II online) is prepared by assembling information documents (INFs). This part of the constituent body session report is compiled by the desktop publishing (DTP) staff and is not edited.

For guidance on style, editors should consult the most recent report issued and not a copy of the previous session report, as the style can change between sessions.

Compiling the report

If available, a hard copy of the English manuscript (approved documents (Docs)) will be distributed containing handwritten corrections and/or track changes. Electronic files of the **approved** Docs can be found on the respective session site.

One Doc is issued for each agenda item, but for some items multiple Docs are issued. A Doc may comprise any of the following: resolutions and recommendations (and any annexes thereto) and decisions.

The report should be compiled in the order mentioned below (see [Parts of the report](#)). Annexes are placed immediately after the resolutions and recommendations to which they refer.

Once the report is compiled, check the text against the original English manuscript, that is, the approved Docs, to ensure that no text has been omitted. The quickest way is to check the first and last word of each heading or paragraph. Ensure that all changes marked in the manuscript have been included in the report.

Editing the report

General

The following rules apply to the whole publication. Individual parts of the report are presented in the next subsection.

- Ensure that the file name of the report contains only the WMO publication number followed by the abbreviation for the language version: **1218_en.docx**.
- All corrections should be inserted in Word using track changes. Once edited, a copy of the Word file should be put on the server for the other languages to follow.
- Check that the correct, short form of official country names (see *Composition of the WMO* (WMO-No. 5)) has been used throughout. Exception: Agenda item 1, where the formal name of the country may be used.
- Do not use acronyms and abbreviations in numbered headings, unless unavoidable.
- Footnotes must not appear in resolutions, decisions and recommendations. They should also be avoided in the general summary; if unavoidable, footnotes should be numbered consecutively, beginning from 1 in each new section (general summary and annexes to resolutions, decisions and recommendations).
- The page number does not appear on the title page, ISBN/disclaimer page or the first page of each section, which can begin on either a recto or verso page (except for the general summary, which must begin on a recto page).
- The inside front cover is always blank. A blank page must be inserted after the contents if one has not been generated automatically in the PDF file.
- A copy of the final English report (PDF) should be sent for approval to the relevant department. Any outstanding queries should be marked on the PDF file or included in an email.
- Ensure that colleagues working in other languages receive any additional changes made after the Word copy with track changes has been given to them.
- Run a spell check before converting to a PDF file.
- Create a folder in the server under “Final English pubs”, using the WMO-No. as the name of the folder. Place the Word file (or files) with track changes, the clean Word file (track changes accepted), the InDesign file of the cover and back cover, and the PDF file in this folder. Advise the other languages and the Administrative/Publishing Assistant (APA) when the final report is ready. Only the PDF file is placed on the website; the Word file is placed on the LSP database.

Note: If the report has been prepared in Typefi, create a folder under Typefi Publications in the server and place the Word, InDesign and PDF files and links in this folder.

Parts of the report

All session reports comprise the following:

- Front cover
- Title page
- Copyright and disclaimer page
- Contents

- General summary
- Resolutions
- Decisions
- Recommendations
- List of participants
- Back cover

Front cover

The following information should appear on the front cover:

- The name of the constituent body (in full), followed by: Abridged Final Report of the XXXX Session
- The place and date of the meeting: indicate only the city, not the country, where the meeting took place.

Note: The date on the cover should include any gaps in the meeting, regardless of the dates used on the meeting documents; for example, a meeting held on 10 and 13 April 2018 should appear as 10–13 April 2018 and not as 10 and 13 April 2018.

Ensure that the gold wind rose is used in the WMO logo. The WMO publication number must always appear on the cover of the publication below the logo.

The inside front cover is blank.

Title page

This page should contain the same information as the front cover.

Copyright information, disclaimer and ISBN page

Use the [copyright information](#) and [standard disclaimer](#) as they appear in Part II of this guide. The WMO number is in JobSys. The ISBN can be obtained from the APA. The WMO number, copyright year, which is the year when the session was held, and ISBN are the only changes that need to be made on this page.

For session reports, the disclaimer should also contain (in the last paragraph) the following phrase: “This report contains the text as adopted by Plenary and has been issued without formal editing.”

A reference to METEOTERM is added at the end of the disclaimer and should be phrased as follows:

Acronyms used in this report may be found in METEOTERM, the WMO terminology database, at <http://public.wmo.int/en/resources/meteoterm>.

Contents

Page numbering is in lower-case Roman numerals; the first page is iii, although the number does not actually appear on the first page of the table of contents.

Do not use acronyms or abbreviations in any heading that appears in the contents, unless unavoidable. In exceptional cases, acronyms are acceptable, as spelling them out would make the heading cumbersome:

WMO and UNESCO/IOC Strategic Planning and the JCOMM Strategy; monitoring and evaluation of JCOMM activities

The following appears at the end of the contents and is linked to Part II, which comprises all the INFs for the session:

BACKGROUND INFORMATION SUPPORTING THE WORK OF THE SESSION (PART II TO THE PRESENT REPORT)

General summary

The general summary is not edited, although editors should ensure that country names are correct. In addition, please bear in mind the following:

- Page numbering is in Arabic numerals; the first page is 1, which does not actually appear on the first page of the general summary.
- Check and renumber, where necessary
- Ensure that reference is made to the agenda given in Appendix 1.
- Ensure that reference is made to the list of participants given in the last appendix.
- Delete the word “draft” from the title of approved resolutions, decisions and recommendations.
- Highlight in blue and link all cross references to appendices.

Resolutions

For the structure of resolutions, see [Resolutions and recommendations](#).

Resolutions are edited, while annexes to resolutions are not. Please bear in mind that resolutions are adopted at the session; subsequent editing should, therefore, be kept to a minimum. Do, however, ensure that:

- All cross references to previous resolutions, decisions, recommendations, meetings, dates, names of working groups and the like are correct.
- Acronyms and abbreviations are written out in full (followed by the acronym or abbreviation in parentheses) the first time they occur in the text of a resolution or recommendation (see WMO [METEOTERM](#)), even if they were spelled out in a previous resolution or recommendation.
- Cross references to a resolution or recommendation include the session after the number:

Resolution 15 (EC-69) – International exchange of snow data

not

Resolution 15 – International exchange of snow data

Note: For session numbers, Arabic numerals were adopted in June 2012: [EC-69](#), [CHy-15](#), [CAS-16](#), [CCI-17](#) and so on. Roman numerals used before June 2012 should be kept, not changed to Arabic numerals: [EC-LXIV](#), [Cg-XV](#), [CHy-XIII](#) and so on.

- The phrase “**the present resolution**”, not “this resolution”, is used when referring to the text of the same resolution in order to avoid any ambiguity. This also applies to annexes to resolutions.
- All preambular clauses in resolutions or recommendations are followed by a comma; the verb introducing those clauses (**Noting ...** , **Considering ...**) should be in bold, for example:

Resolution 9 (Cg-17)

IDENTIFIERS FOR CATALOGUING EXTREME WEATHER, WATER AND CLIMATE EVENTS

THE WORLD METEOROLOGICAL CONGRESS,

Noting:

- (1) The increasing frequency and magnitude of extreme weather, water and climate events and their impacts on different socioeconomic sectors, lives and livelihoods,
- (2) The calls for reducing the losses associated with extreme events in the Sendai Framework for Disaster Risk Reduction 2015–2030, the United Nations Framework Convention on Climate Change Warsaw international mechanism for loss and damage associated with climate change impacts, and the United Nations draft sustainable development goals,

Noting further:

- (1) That developing identifiers for cataloguing weather, water and climate extreme events in cooperation with institutions having competences about possible impact of those weather events can provide an unambiguous reference for associated losses and damages and can promote consistency in the characterization of extreme events,
- (2) That more consistent event characterization in terms of type of event, location, duration, magnitude and timing would allow for better evaluation of the types of losses and damages associated with different types of events, and the most damaging events and thresholds, and trends,

Considering:

- (1) That many National Meteorological and Hydrological Services have developed and are maintaining historical catalogues of extreme events,

[...]

- All operative clauses in resolutions and recommendations are followed by a semicolon; the verb introducing those clauses (**Decides ...** , **Recommends ...** , **Requests ...**) should be in bold, for example:

THE WORLD METEOROLOGICAL CONGRESS,

[...]

Decides to standardize weather, water, climate, space weather and other related environmental hazard and risk information and develop identifiers for cataloguing weather, water and climate extreme events;

Requests the Executive Council to provide oversight on the standardization of hazard information for loss and damage assessment;

Requests the Commission for Basic Systems to develop, in collaboration with all technical commissions and regional associations, a proposal on standardized identifiers for cataloguing hazardous events for consideration by the Executive Council;

Requests the Secretary-General to take the necessary actions, within the available budgetary resources, to facilitate the work on this important issue.

- When two paragraphs begin with the same preambular/operative verb, “further” is added in the second paragraph; the additional word should be in bold:

THE EXECUTIVE COUNCIL,

[...]

Noting Resolution 1 (EC-LX) – Regular Meetings of Presidents of Regional Associations,

Noting further that there is a need for a stronger coordination of the work of the regional associations and a closer interregional cooperation,

[...]

- When three paragraphs begin with the same preambular/operative verb, “also” is added in the second paragraph and “further” in the third paragraph; the additional words should be in bold:

THE EXECUTIVE COUNCIL,

[...]

Noting that the new edition of the *International Cloud Atlas – Manual on the observation of clouds and other meteors* (WMO-No-407) was released in the form of a website (www.wmocloudatlas.org) on the occasion of the World Meteorological Day 2017 whose theme was “Understanding Clouds”;

Noting also with satisfaction the very large interest shown by Members and the media to this year’s World Meteorological Day and the International Cloud Atlas,

Noting further:

- (1) That several inquiries on the availability of the Atlas in other WMO languages were received,
- (2) That the update of the Atlas was carried out with a very limited budget,
- [...]

However, when the paragraphs contain a form of request or appeal, “also” and “further” should be added only if the request or appeal is addressed to the same entity:

THE EXECUTIVE COUNCIL,

[...]

Requests the Secretary-General provide support ...

Further requests the Secretary-General to provide an update ...

If the same entity is asked to carry out a certain number of actions, group these under the same operative verb as follows:

THE CONGRESS,

[...]

Requests the Secretary-General:

- (1) To reflect this amendment in the updated *Technical Regulations, Volume I*;
- (2) To facilitate training events for Members to assist them in the implementation of the PWS competencies in line with the WMO Strategy for Service Delivery and WMO Quality Management Systems, thus enhancing the satisfaction of their users through improvement of services and products of their National Meteorological and Hydrological Services.

- When the request or appeal is addressed to different entities, the verb is repeated:

Requests the Secretary-General, in collaboration with technical commissions ...

Requests the presidents of CBS and CAS to report to ...

Requests the CBS to facilitate capacity development ...

Requests technical commissions and regional associations ...

not

Requests:

- (1) The Secretary-General, in collaboration with technical commissions ...
- (2) The presidents of CBS and CAS to report to ...
- (3) The CBS to facilitate capacity development ...
- (4) Technical commissions and regional associations ...

Note: In preambular clauses, “also” and “further” appear **after** the verb, whereas in operative clauses “also” and “further” appear **before** the verb, for example, “Noting also” and “Further requests”.

- The numbering sequence is as follows: (1), (a), (i). When there is no second clause, delete number 1 in the first clause:

change

“Authorizes the president:

- (1) To take necessary decisions on behalf of the Association, after consultation with the Management Group, on important matters;”

to

“Authorizes the president to take necessary decisions on behalf of the Association, after consultation with the Management Group, on important matters;”

- Resolutions, decisions and recommendations are correctly referred to, and include the number, session number and title for the first mention, and only the number and session number for subsequent mentions.

THE EXECUTIVE COUNCIL,

Having considered Recommendation 4 (CBS-16) – Revised *Manual on the Global Observing System* (WMO-No. 544) and *Guide to the Global Observing System* (WMO-No. 488),

Decides:

(1) To amend the *Manual on the Global Observing System*, Volume 1 – Global Aspects, as detailed in Annex 1 to Recommendation 4 (CBS-16);

(2) To amend the *Guide to the Global Observing System* as detailed in Annex 2 to Recommendation 4 (CBS-16).

- It is the constituent body itself that adopts a resolution (or other) and not the session. Therefore, the following format, including month and year, should be used:

The Plan was adopted by the Executive Council at its seventieth session in June 2018.

not

The plan was adopted by the seventieth session of the Executive Council in June 2018.

- Reports are not spoken of as being submitted to a session of an organ but rather as being submitted to an organ at its session.

... requests the Executive Council Working Group on Capacity Development to report thereon to the Executive Council at its sixty-sixth session.

not

... to the sixty-sixth session of the Executive Council.

Resolutions in regional association reports

Ensure that:

- Following the heading of the resolution, the constituent body name is inserted in full (always in caps), followed by a comma:

change

“The Regional Association IV,”

to

“REGIONAL ASSOCIATION IV (NORTH AMERICA, CENTRAL AMERICA AND THE CARIBBEAN);”

- The lists of RBSN/RBCN stations are included in an annex to a resolution. The link to these lists should be provided in the Docs and is included in the report.

Regional association reports usually contain a list of resolutions to be kept in force. These must be linked to the reports in which they were published.

Annexes to resolutions

An annex to a resolution immediately follows the text of the resolution. It is headed by “Annex to Resolution xxx” followed by a title. If there are two or more annexes, they should be identified by Arabic numerals, so that the headings read “Annex 1 to Resolution xxx”, “Annex 2 to Resolution xxx” and so on.

Annexes to resolutions are **not** edited. In the text of the resolution, they should be referred to as follows:

THE EXECUTIVE COUNCIL,

[...]

Endorses the formal designation of centres hosted by Members that have completed the designation process by the time of the sixty-ninth session of the Executive Council, as given in the annex to the present resolution

or

Endorses the formal designation of centres hosted by Members that have completed the designation process by the time of the sixty-ninth session of the Executive Council, as given in Annex 3 to the present resolution (if there are two or more annexes).

Decisions

Decisions are **not** edited. They should comprise the decision number, title, the name of the constituent body, and the actual decision followed by a concise Decision justification, for example:

Decision 34 (EC-70)

Designation of new Regional Instrument Centres

The Executive Council decides:

- (1) That CIMO is charged with assessing the capabilities of a candidate Regional Instrument Centre (RIC) and with CIMO lies the authority and the responsibility to make recommendations to a regional association on the capability of a candidate to perform the functions of a RIC;
- (2) That a regional association may formally designate a RIC, only upon positive assessment by CIMO of its capability to perform the functions of a RIC;
- (3) To request CIMO to document the process for assessing the capabilities of a candidate RIC.

Decision justification: Terms of Reference for RICs were developed by CIMO and approved by EC, while regional associations are responsible for the designation of RICs in their region. Assessing the capabilities of a candidate requires specific technical expertise lying in CIMO.

Recommendations

Recommendations in all session reports are edited, but their annexes are not.

See [Resolutions](#) and [Annexes to resolutions](#) above for additional guidance on how to proceed with the editing of recommendations.

List of participants

This list is provided in English by the LCP Conference Services Unit. It is reproduced as provided with no editing except for country names and participants' names, when there is an obvious mistake, keeping the personal titles as they were provided by participants. The abbreviation "Ms" should appear in parentheses after female participants' names.

The list appears in English in all language editions.

Back cover

The following information should appear on the back cover:

- The address of the Communication and Public Affairs Office
- The job number (JN), which can be found in JobSys

Formatting and layout of the report

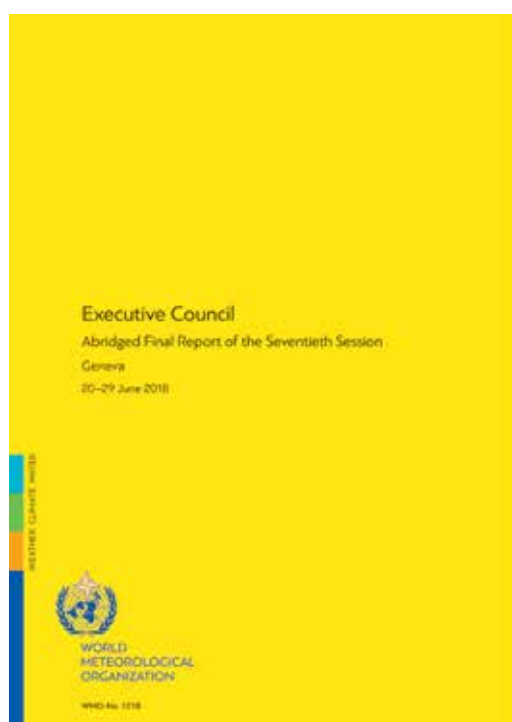
Front and back covers

The covers should be prepared in InDesign using the following Pantones:

- Congress, Executive Council Yellow (Pantone 108)
- Regional associations Pink (Pantone 196)
- Technical commissions Bright green (Pantone 368)

They should be laid out as follows:

Front cover



Back cover



Margins

Margins, except for the title page, should be set as follows:

- Top, left and right margins: 0.79" / 2 cm / 20 mm / 56.7 pt / 4.73 pi
- Bottom margin: 0.5" / 1.27 cm / 12.7 mm / 36 pt / 3 pi

Font type and size

All text is in Verdana 10 pt, except:

- Section headings: 12 pt
- Tables and figures: from 10 pt to 8 pt, as appropriate
- Footnotes: 9 pt

Spacing

Use only one space after punctuation marks throughout. Do a global search; replace double (or more) spaces with one space.

Use single-line spacing throughout the report. Two lines of space are used between resolutions, decisions and recommendations. Exceptions are tables and lists, where spacing can be less than one line.

Insert a single solid line between resolutions, recommendations and their annexes, a double solid line between two resolutions or recommendations, and a dotted line between parts of an annex.

PDF file

The Word file should be **printed** to PDF (not saved as PDF), in order to keep the file size small, which is important when downloading from the Internet.

Pagination

Page numbers at the top of a PDF file should correspond to the page numbers in the report itself, as this makes it easier to print the correct page. Pagination should be as follows:

- Front cover A
- Inside front cover (blank) B
- Title page i
- Copyright page ii
- Contents iii (iv, v, vi, ... as needed, plus blank if table of contents ends on a recto page)
- Report 1 to xxx
- Back cover C

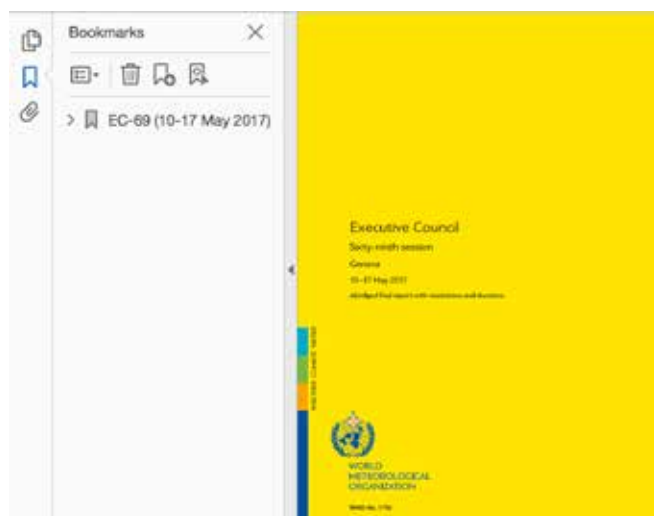
Properties

When preparing the PDF file, please use the following settings: In Acrobat, under “File” click on “Properties” → “Initial View”: Under “Navigation”, select “Bookmarks Panel and Page”; Under “Page layout”, select “Single Page”. Under “Magnification”, select “Fit page”. Under “Open to page”, select “A” (cover):



The file name should consist of the publication number and language version: 1218_en.

The PDF file should be set so that it opens on the cover page with only the first bookmark showing:



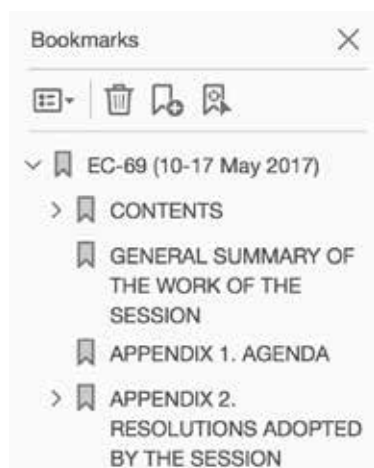
Note: When saving a pdf file, the last view of the bookmarks is saved. To ensure that the pdf file opens with only the first bookmark showing, the file must be saved with only the first bookmark open on screen. See the most recent report for an example.

Bookmarks

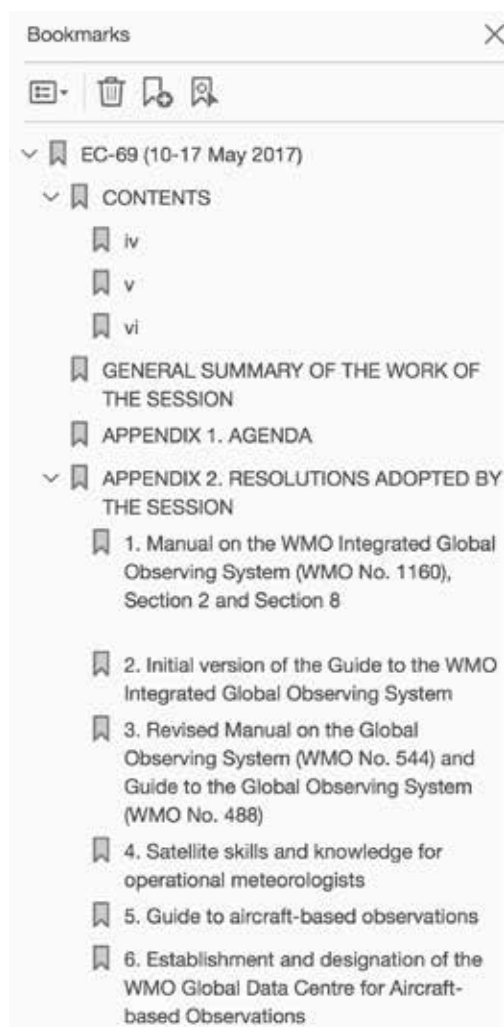
All bookmarks should be linked to the respective pages. The bookmarks bar should contain the following:

- First bookmark: abbreviation of the constituent body and session number, followed by the date of the meeting in parentheses: EC-70 (20-29 June 2018)
- Contents: each page of the contents should have a separate bookmark (Contents, iv, v, vi, ...)
- General summary
- Resolutions
- Decisions
- Recommendations (if applicable)
- List of participants
- Examples:

Principal bookmarks



Principal bookmarks, including some secondary bookmarks



Hyperlinks

When adding internal links, ensure that the page view on each linked page is set to “fit page”; otherwise the page size will differ when clicking on the links.

When cross references to resolutions, decisions and recommendations of other sessions are hyperlinked, as may be the case in some resolutions, do not remove the link, but do not add new ones either.

Text to be linked should be highlighted in blue in the Word file. The following links should be activated in the PDF file:

- In the general summary, cross references to all the appendices
- All URLs.

ANNEX. EDITOR CHECKLIST

At the layout stage:

- Check there are no page numbers or marks/bands on blank pages, the title page or the copyright page
- Check there are no headers or footers on the first page of parts or chapters of the main text
- Ensure that there is a centred line at the end of each chapter, annex and appendix; space permitting, there should be three lines of space between the last line of text and the centred line
- Ensure that there are no widows and orphans
- Check all information on the cover and title page (WMO number, logo, title, volume number, year of edition, year of update, etc.)
- Ensure that the WMO logo is placed first on joint publications when the ISBN contains a WMO number
- Check all information on the copyright page and ensure that the correct disclaimer has been used
- Ensure that the headings and page numbers in the Contents correspond to text headings and pages
- Ensure consistent use of fonts in different-level headings
- Check running heads
- Check spacing between paragraphs, sections, etc.
- Check indents between paragraph numbers and text, en dashes in lists, etc.
- Check superscripts and subscripts
- Ensure that URLs are in blue and active; when necessary, split URLs, using a soft return, after a punctuation mark
- Ensure that special characters, such as mathematical symbols, have not been affected by conversion
- Ensure that equation numbering is aligned right throughout
- Ensure that true fraction glyphs have been used
- Ensure that the rules for word division and hyphenation at the end of a line have been followed: two consecutive lines should not end with a hyphen
- Ensure that numbers are not separated from symbols, units of measurement and words that form a whole with the number, at the end of a line (for example, 100 m, 12 hurricanes)
- Do not allow a line break before a slash.

For more information, please contact:

World Meteorological Organization

7 bis, avenue de la Paix – P.O. Box 2300 – CH 1211 Geneva 2 – Switzerland

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