WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

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

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Annex.: 1 (available in English only)

Subject: Decadal Climate Report 2011-2020

Action required: To contribute to report, provide climatological information and nominate focal point, **no later than 29 April 2022**

Dear Sir/Madam,

As you may be aware, the World Meteorological Organization (WMO), in collaboration with Members and the Commission for Weather, Climate, Water and Related Environmental Services and Applications (SERCOM), has been active in providing authoritative information on the state of the global and regional climate on annual and multiyear time scales.

I am pleased to inform you that, following the successful publication of the first decadal climate report "The Global Climate 2001-2010: a decade of climate extremes – Summary Report" (WMO-No. 1119), which contained contributions from more than 120 Members, publication of the second such report covering 2011-2020 is scheduled for 2023, to coincide with the UNFCCC global stocktake. It will provide information on key climate indicators and climate impacts with implications for sustainable development. The concept and methodology for the second report is attached to this letter.

This is to invite you to contribute to this important report by requesting your institution to provide climatological information as described in the following digital survey (https://analytics-eu.clickdimensions.com/cn/accqt/decadal_survey) and to nominate a focal point with whom the Secretariat will interact. I would appreciate if the above online survey could be completed **no later than 29 April 2022.**

The WMO focal point for the report is Mr Omar Baddour (obaddour@wmo.int), with the assistance of Ms Claire Ransom. Should you have any questions or need assistance with filling in the survey, please contact Ms Ransom at cransom@wmo.int.

I would like to take this opportunity to thank you for your collaboration on climate activities. Your contribution to this initiative is highly appreciated.

Thank you for your continuous support to WMO and its activities.

Yours faithfully,

Prof. Petteri Taalas
Secretary-General

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers
President of SERCOM
President of INFCOM
Presidents of Regional Associations

WORLD METEOROLOGICAL ORGANIZATION

Decadal Report 2011-2020

CONCEPT & METHODOLOGY

Background

- **The first decadal report** was published in 2013. (WMO-No.1103). It covered 2001-2010 decade. It was published and launched at the occasion of the first Intergovernmental Board of Climate Services (IBCS), held at the Palais des Nations, Geneva in July 2013.
- **The decadal report for the period 2011-2020,** the second of its kind, is planned to be published in 2023, coinciding with the UNFCCC global stock-take, with focus on climate and Sustainable Development.
- **The SERCOM workplan includes the decadal report 2011-2020** as one of the deliverables of the Standing Committee on Climate Services (Annex to Resolution 3 (SERCOM-1), abridged final report, WMO-No.1259.

In 2010, WMO started to work on multi-year State of the Climate reports, including 10-year and 5-year timescales. The multiyear time scale allows enough time to gather enough data for retrospective analysis for long term signals assessed on climate indicators and extreme events. At this timescale, there is also enough data for attribution studies that can cover evenly various regions. The first decadal report was published in 2013 (WMO-No.1103), covering the 2001-2010 decade. It was published and launched at the occasion of the first Intergovernmental Board of Climate Services (IBCS), held at the Palais des Nations, Geneva in July 2013. In addition, two 5-year reports have been since published, including Global Climate in 2011-2015, which was submitted at Earth Info Day of UNFCCC-COP 22 and the Global climate 2015-2019, released on 22 April 2020 at the occasion of 50th anniversary of Earth Day.

2001-2010 report

The first WMO Decadal Climate Report (2001-2010) was published in 2013 and very positively received. The report was very featured prominently across UN organizations, research institutions and other educational platforms such as:

- **Swiss Academy of Science** (SCNAT.ch)
- **UNITAR** (UNCCLEARN.org)
- **UN-Social Development Network of Latin America and the Caribbean** (dds.cepal.org)
- With access through **UNEP** and **WCRP** websites

"The value of the WMO's work is the way it transcends ordinary timescales. It is easy for climate-change deniers to point to a very warm year like 1998 and argue that since subsequent years were cooler, climate change is a myth.

A decade-by-decade approach, and a view that covers the century or more since accurate temperature measurements started, give a much clearer picture of the emerging situation."

- *Paul Rogers, Emeritus Professor of Peace Studies at Bradford University, UK.*

WMO Decadal Report 2011-2020

HINDSIGHT & FORESIGHT FOR SUSTAINABLE DEVELOPMENT

The perspective of the past decade (2011-2020) provides an important window of time for retrospective analysis of the major climate indicators and their real and potential impacts on sustainable development. The 2011-2020 report will be the second of its kind, following the successful 2001-2010 report and will be a key deliverable for the UNFCCC Global Stock-take and the Standing Committee on Climate Services.

Proposed Structure

Foreword

Executive Summary

1. State of the Climate indicators
2. State of knowledge/conclusions on attribution of extreme events
3. Climate, socioeconomic impacts, and the SDGs
4. Featured article on reaching/exceeding 1.5°C

March 2022:

Call for contribution

June 2022:

Deadline for input

December 2022

First full draft

30 June 2023

Final draft

31 October 2023

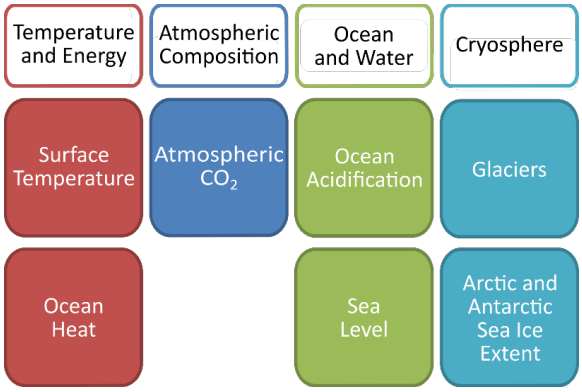
Published in 6 languages

To be launched at UNFCCC Global Stock-take 2023

State of the Climate Indicators- Data & Sources

Much like the annual State of the Climate reports, the Decadal Climate Report 2011-2020 will prominently feature the seven-peer reviewed State of the Climate Indicators. To ensure the most robust and accurate data across all indicators, input comes from a variety of sources, including but not limited to:

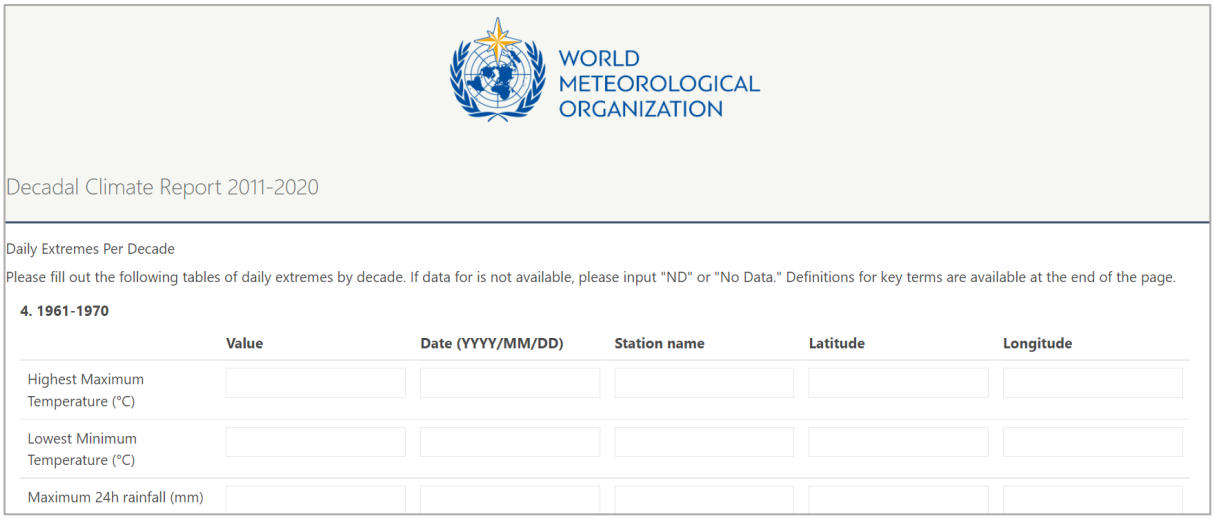
- International climate centers
- National hydrological and meteorological services
- Research institutions & universities
- Scientific agencies
- WMO & UN programs



Country data collection

To collect vital information on long-term temperature and precipitation trends, the WMO Secretariat will collect decadal data from countries through a digital survey associated with the Country Profile Database. The survey will follow a similar structure from the first Decadal Climate report, collecting key information on:

1. National temperature and precipitation record values
2. Decadal national temperature anomalies and rankings
3. National temperature ranking by decade



WORLD METEOROLOGICAL ORGANIZATION

Decadal Climate Report 2011-2020

Daily Extremes Per Decade

Please fill out the following tables of daily extremes by decade. If data for is not available, please input "ND" or "No Data." Definitions for key terms are available at the end of the page.

4. 1961-1970

	Value	Date (YYYY/MM/DD)	Station name	Latitude	Longitude
Highest Maximum Temperature (°C)					
Lowest Minimum Temperature (°C)					
Maximum 24h rainfall (mm)					

10. Decadal Temperature

	Mean Temperature (°C)	Anomaly with respect to 1981-2020 (°C)	Ranking Warmest (1) - Coldest (12)
1901-1910			
1911-1920			
1921-1930			

Climate, Impacts & SDGs – Data & Sources

In 2021, the WMO published the brochure *Climate Indicators and Sustainable Development: Demonstrating the Interconnections* connecting the 7 state of the climate indicators through to the potential and theoretical impacts identified in academic literature and connected them to the risks they posed to the related Sustainable Development Goals (SDGs). Following this improved understanding of the interconnections between climate change and sustainable development, the WMO Decadal Report 2011-2020 will focus on quantifying these impacts though a three-step methodology.

Step 1: Determining 10-15 high impact extreme events

The WMO Secretariat, together with the lead author, will select 10 to 15 high-impact events that occurred over the past decade as case studies. The events will:

- Represent all WMO regions
- Be selected from previous WMO publications
- Feature diverse event types & impacts

Step 2: Gathering key impact statistics

To quantify the impact of the determined events, the WMO Secretariat will create a survey to send out to the affected countries/regions. The survey will be sent to:

1. NHMSs for key climate information & statistics
2. Designated focal point at national statistical office for impact data and SDGs

Step 3: Multi-stakeholder data & analysis

Finally, to analyze and compliment the data received from the survey, the WMO Secretariat will liaise with partners potentially including:

- FAO
- CRED-EMDAT
- Munich-Re
- UNHCR / IOM
- IMF
- WHO
- RiskLayer GmbH