

Expert meeting on the State of the Climate reporting  
Geneva, Switzerland | November 8-10<sup>th</sup>, 2023



**Meeting Purpose:**

The State of the Climate reports are among WMO's flagship products, done on annual and multi-year timescales at global and regional levels. To ensure the quality and relevance of these reports, the Climate Monitoring and Policy (CMP) team is planning to host an international workshop on the State of the Climate Modernization in summer 2024. This expert meeting was held as a preparatory meeting ahead the workshop and to make recommendations on the structure and participation.

**Schedule:**

In DAY 1 the first plenary session included presentations for setting the stage, including from the IPCC, BAMS, GCOS and WMO on the United in Science, State of Climate Services and State of Water Resources reports. Preliminary discussions on high-level aspects of the State of the Climate Monitoring were discussed, as well as key challenges and prospects for its future.

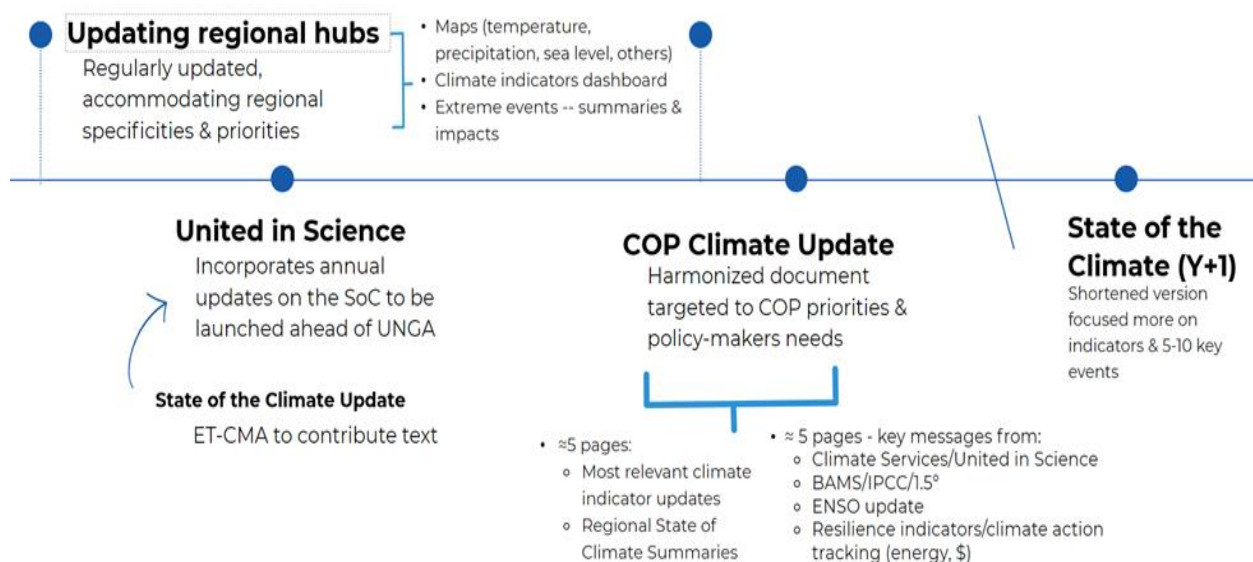
In DAY 2, the workplan included two thematic sessions on “Monitoring headline global climate indicators” and “Monitoring high impact events” respectively. The purpose of thematic sessions was to deliver documents for consideration by the subsequent international workshop.

In DAY 3 a concluding plenary session was held for reporting the working group deliverables and finalizing the documents.

### Outcomes:

The write shop produced four draft documents for consideration at the international workshop on the modernization of the State of the Climate reporting and an overall concept of the international workshop. These documents which will be finalized by the secretariat cover the following topics:

- 1) Fundamental questions to consider for modernizing the State of the Climate reporting
- 2) Potential candidates for new headline climate indicators and proposals for their monitoring across various timescales.
- 3) Opportunities for moving from annual summaries to near real time monitoring.
- 4) Potential future scenarios for the State of the Climate including:
  - Optimize the overlap/duplication with other annual WMO reports.
  - Regional State of the Climate to move from PDFs to Digital Hubs.
  - A single policy brief to be communicated at COP to replace provisional report.
  - WMO State of the Global Climate will continue to be produced annually.



- 5) Overall concept of the International Workshop.

Purpose: Bring together key players in the reporting on the State of the Climate to discuss scientific issues and questions that have been raised during the write-shop, such as promoting synergy, co-production, and linkages with other reports and to prospect the implementation of new methodologies, tools, data sources and production styles. It is

expected that the workshop will further consider resolving some of the fundamental questions, provide Recommendations to be submitted to WMO bodies (Executive Council, Regional Associations, Research Board, Policy Advisors) on Scenarios discussed at this write-shop and raise interest on the opportunities to publish papers on questions that need more in depth consideration, in peer-review journals.

It is expected that the workshop will take place in 9-11 July 2024 and hosted by DWD, Offenbach Germany. The size of the workshop would be within the range of 50 participants from the climate community, UN agencies and others.

An organizing committee will be established coordinated by the WMO Secretariat. The organizing committee will be established through consultation with key experts and is set to meet in the first quarter of 2024. The committee will use the outcome documents from the Write-Shop as guidance for planning the workshop.

**Participants:**

External	Internal
<ul style="list-style-type: none"> <li>• Blair Trewin, BOM, Australia</li> <li>• Markus Ziese, DWD, Germany</li> <li>• Atsushi Minami, Meteorological Agency, Japan</li> <li>• Robert Dunn, Met Office, UK</li> <li>• Awatif Ebrahim, Meteorological Authority, Egypt</li> <li>• John Kennedy, Consultant, WMO</li> <li>• Jessica Blunden, NOAA, USA</li> <li>• Anny Cazenave, LEGOS, France</li> <li>• Karina Von Shuckmann, Mercator Ocean International, France</li> <li>• Henry Reges, CoCoRaHS / CSU, USA</li> <li>• Mxosli Shongwe, IPCC</li> </ul>	<ul style="list-style-type: none"> <li>• Omar Baddour, WMO</li> <li>• Chris Hewitt, WMO</li> <li>• Claire Ransom, WMO</li> <li>• Alvaro Silva, Consultant, WMO</li> <li>• Atsushi Goto, WMO</li> <li>• Mark Majodina, WMO</li> <li>• Hindumathi Palanisamy, WCRP, WMO</li> <li>• Veronica Grasso, WMO</li> <li>• Lauren Stuart, WMO</li> <li>• Belén Martín Míguez, WMO</li> <li>• Sulagna Mishra, WMO</li> <li>• Nakiete Nsemo, WMO</li> </ul>

**Agenda:**

**DAY 1: 8 November**

**Plenary Session (PL1)** Stage setting, general background of the existing State of the Climate reports and other reports from global, regional, and national institutions.

Lead: [John Kennedy](#), assisted by [Omar Baddour](#)

AM Presentations:

9:00: Opening Remarks – Mark Majodina

9:10: Logistics & Agenda – Claire Ransom

9:15: State of the Climate Reports – John Kennedy and Blair Trewin

10:00: Coffee Break

10.15: Other Groups

10:15: IPCC Structure and Working Groups – Mxolisi Shongwe

10:30: BAMS State of the Climate – Jessica Blunden

10:45: GCOS Essential Climate Variables – Caterina Tassone

11:00 Break

11.15: WMO Reports

11:15: United in Science – Lauren Stuart

11:30: State of Climate Services – Veronica Grasso/Nakiete Nsemo

11:45: State of Water Resources – Sulagna Mishra

12:00 Lunch

13:30: Group discussion:

- Content/Relevance
- Contributors
- Audience and communication aspects
- Resources
- Review
- Day 2 logistics, working group guiding questions and deliverables

Deliverables:

- DEL-1: Paper raising fundamental questions such as on the benefit of continuing the current scheme of global and regional reports.
- DEL-2: Scenarios for future directions

**DAY-2: 9 November**

Participants will split into three groups to work in two Thematic Sessions TS1 on Monitoring Headline Global Climate Indicators and TS2 on Monitoring High Impact Events.

### **TS1: Monitoring Headline Global Climate Indicators**

**Moderator:** [Jessica Blunden](#), assisted by [Atsushi Goto](#)

- Are the current indicators sufficient and appropriate?
- WMO Climate Data Dashboard, other dashboards
- Consistency with IPCC (estimating warming, baselines, uncertainty estimates)
- Frequency for updating the indicators (weekly, monthly, quarterly etc.)

Deliverables:

- DEL-3: List of potential candidates for new headline climate indicators
- DEL-4: Proposals for their monitoring on various timescales, the role of WMO and other institutions, monitoring & review

### **TS2: Monitoring High Impact Events**

**Moderator:** [Blair Trewin](#), assisted by [José Alvaro](#)

- Tools for data collection and analysis
- New perspectives for using crowdsourced data, big data, satellite data, others.
- Criteria, thresholds, and categorization of events

Deliverables:

- DEL-5: White paper on the opportunities for moving from annual summaries to near real time monitoring
- DEL-6: Description of potential benefits and technical challenges

### **DAY-3: 10 November**

Plenary Session (PL2) - Concluding Session

**Lead:** [John Kennedy](#), assisted by [Omar Baddour](#)

Deliverables:

- DEL-7: Reports from WGs and finalization of the documents produced by the thematic sessions
- DEL-8: Recommendations for the structure of and participants at the International Workshop on State of the Climate Modernization (DEL-10)