Concept Note

Side-Event on Advancing the Climate Services Information System for Improved Climate Services

Date: 25 October 2023, 20:00 – 22:00 (Kigali time)

Venue: Kigali Convention Centre, Kigali, Rwanda

Background

Credible and actionable climate information, products and services are essential elements for effective climate risk management and to support climate change adaptation actions.

Many recipients of climate services benefit from operational provision of authentic, high-quality, and user-targeted climate information underpinned by well-formulated standards and protocols, implemented through a global system of multi-institutional and cascading mechanisms from global to local scales. Collaborative and agile approaches are required to translate research into operational services to inform decisions that can account for climate risks and opportunities.

With the increased awareness of the potential benefits of science-based climate information in climate risk management, there has been a significant move towards developing scientific capabilities to cater to decision-support needs in addition to addressing the basic research questions. In this context, there is a real need to strengthen the interaction between the research and operational communities to identify key research priorities with an explicit societal relevance that could be fed into operations to advance climate services.

The World Meteorological Organization (WMO) and other organizations worldwide are developing and strengthening systems that make climate services information operationally available to decision-makers, through a Climate Services Information System (CSIS) as one of the foundational pillars of the Global Framework for Climate Services (GFCS). The CSIS supports the production and delivery of authoritative climate products and services (including provision of data, monitoring and prediction information) in support of policy- and decision-making at global, regional, national as well as local scales, covering the entire spectrum of climate time scales spanning sub-seasonal, seasonal, annual to decadal and multi-decadal. Sustained interaction with the research community is crucial in this effort as the development of climate information for use and value in decision-making requires ongoing research into understanding the climate system, climate variability and climate change as well as climate applications including impacts on a range of socio-economic sectors and tailoring of climate information to suit decision contexts.

Side-Event objectives

The Side-Event will highlight the progress and plans for provision of climate service information through the CSIS with a focus on the regional and national scales, including its core functions, related activities and outputs. It will also showcase the contributions of the Expert Team on Climate Services Information System Operations (ET-CSISO) under the Standing Committee on Climate Services (SC-CLI) of the WMO Services Commission (SERCOM). An overarching objective of the Side-Event is to bring out the potential opportunities for establishing a sustained cooperation between the research and
operational communities that will enhance Research-to-Operations (R2O) and Operations-to-Research (O2R) exchange of knowledge and expertise. This could be achieved through a bidirectional approach, i.e., driven by operational needs on the one hand, and by innovative push of research advances on the other hand.

The Side-Event will start with opening remarks and overview presentations on the CSIS, its key components, functions, and activities, and the WMO efforts in supporting the cascading of climate information from global to regional to national scales informed by needs from subnational sectors. Furthermore, this event will offer an overview of the opportunities and challenges that science faces in meeting the evolving requirements of climate services. Presentations will be followed by a panel discussion, in which each panelist will have 2 minutes to share their experiences and thoughts based on the guiding questions posed by the moderator. The panelist interventions are followed by an open discussion allowing audience to share their perspectives on the key questions. The aim of the panel discussion is to explore actionable options and institutional innovations that can enhance the engagement of the science community in supporting regional and national climate research needs to improve CSIS operations.

The Side-Event will be moderated by Mr Wilfran Moufouma Okia, Head of the WMO Regional Climate Prediction Services Division.

**Programme**

**Presentations**

<table>
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<th>Time</th>
<th>Presentation</th>
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| 20:00 – 20:10 | Opening remarks  
*Wilfran Moufouma Okia (WMO)*  
*Roger Pulwarty (co-chair ET-CSISO, NOAA)* |
| 20:10 – 20:20 | Introduction to the CSIS, its role for improved climate services and the role of WCRP in the CSIS implementation  
*Roger Pulwarty (co-chair of ET-CSISO, NOAA)* |
| 20:20 – 20:30 | CSIS implementation status and the WMO strategy to strengthen the CSIS for improved generation and delivery of climate information at regional and national levels  
*Caio Coelho (ET-CSISO member)* |
| 20:30 – 20:40 | Harnessing science capability to meet climate services needs for societal gain: opportunities and challenges  
*Regina Rodrigues (WCRP My Climate Risk)* |
| 20:40 – 20:50 | Key research requirements of the operational community to advance the provision of actionable climate information  
*Francisco J. Doblas-Reyes (BSC-CNS)* |

**Panel Discussion**

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<th>Time</th>
<th>Activity</th>
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<tr>
<td>20:50 – 20:55</td>
<td>Introduction by <em>Wilfran Moufouma Okia (WMO)</em></td>
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<tr>
<td>20:55 – 21:15</td>
<td>Brief interventions by panelists (2 min each)</td>
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<tr>
<td>21:15 – 21:55</td>
<td>Open discussion</td>
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The questions that will guide the panel discussion:

1. What are the current research advances yet to be fully and effectively integrated into CSIS operations, what are the expected advances that could accelerate the development and use of climate services in the coming decade?

2. How can collaboration between the research and operational communities be strengthened and sustained in order to facilitate the seamless transition of research findings into operational practices that effectively meet the needs of users?

3. How can feedback and engagement be sustained between the research and operational communities and users, including through Regional Climate Forums (RCFs) and WCRP Climate Research Forums?

Panelists

- Roger Pulwarty (co-lead of ET-CSISO)
- Caio Coelho (co-lead of ET-OCPS and ET-CSISO)
- Andrew Robertson (ET-CSISO)
- Lisa Alexander (WCRP JSC and co-lead of ET-CID)
- Carlo Buontempo (Copernicus Climate Change Services)
- Regina Rodrigues (WCRP My Climate Risk)
- Francisco J. Doblas-Reyes (BSC-CNS)
- Wilfran Moufouma Okia (WMO)

Convenors

- Rupa Kumar Kolli (co-lead of ET-CSISO)
- Roger Pulwarty (co-lead of ET-CSISO)
- Andrew Robertson (ET-CSISO)
- Caio Coelho (co-lead of ET-OCPS and ET-CSISO)
- Lisa Alexander (WCRP JSC and co-lead of ET-CID)
- Christopher Hewitt (WMO)
- Wilfran Moufouma Okia (WMO)
- Anahit Hovsepyan (WMO)
- Sarah Diouf (WMO)
Side event on “Advancing the Climate Services Information System for Improved Climate Services”

Moderator
Wilfran Moufouma Okia
WMO

Speakers
Roger Pulwarty
ET-CSISO, NOAA

Caio Coelho
ET-OCPS and ET-CSISO, INPE

Andrew Robertson
ET-CSISO, IRI

Regina Rodrigues
WCRP My Climate Risk, UFSC

Carlo Buontempo
C3S

Lisa Alexander
WCRP JSC and ET-CID,
University of New South Wales

Francisco J. Doblas-Reyes
BSC-CNS