

# Planning for the Annual statement on the Global Climate in 2019

## 1/ Outlines of the WMO Statement on the State of the Global Climate in 2019

### Foreword

### Executive Summary

#### State of the Climate Indicators <sup>1</sup>

- Global temperatures
- Greenhouse gases
- The oceans<sup>2</sup>
- The cryosphere
- Major drivers of inter-annual climate variability
- Precipitation
- Extreme events

#### Climate risks and related impacts

- Agriculture and Food Security
- Health
- Population displacement
- Economic impacts<sup>3</sup>
- Environmental impacts<sup>4</sup>

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<sup>1</sup> In previous statements some environmental information was provided such as coral bleaching which was included in the ocean indicators. It is expected to address in 2018 new key environmental aspects that relate to the atmosphere, ocean, land and biosphere as relevant information will become available.

<sup>2</sup> This includes sea surface temperature and heat content, sea level and sea level budget and ocean acidification. For 2018 it is expected to add also information on deoxygenation and blue carbon (potentially as a side bar).

<sup>3</sup> Input from IMF will not change from previous year, but we need to update from other source if available.

<sup>4</sup> This was not in last year statement. It is planned to add critical environmental impact information due to climate change in recent years (2015,2016,2017) and prospect for 2018 such as impact induced on Pollution, forestry, marine life and fisheries, biodiversity, lakes, water levels in critical zones,...

## 2/ Schedule and tasks for the preparation of the WMO provisional Statement 2019

June 2019	30 September	14 -30 October	11-18 November	19 November	20-22 November	25-29 November	2-13 December 2019	
<p>Letters including Guidance on input and deadlines Send by WMO to:</p> <p>Countries and UN agencies</p>	<p>Deadline for countries' input</p>	Drafting the sections	<p>Drafting provisional Statement</p> <p>by</p> <p>Scientific Coordinator (<i>John Kennedy</i>)</p> <hr/> <p>Scientific coordinator communicates with co-authors for verification</p>	<p>Review meeting At WMO headquarter Participants:</p> <p>Co-authors + ECMWF, IPCC, WCRP, CMIP6 GCOS, OBS (WMO) WDS (WMO) CLPA (WMO) CPA (WMO) + Reps of UN agencies</p>	<p>finalisation of the Draft</p> <p>Scientific coordinator &amp; O.Baddour</p>	<p>Internal Review Produce approved version</p> <p>O.Baddour and Scientific coordinator</p>	<p><b>UNFCCC COP25, Santiago, Chile.</b></p>	
		Sections						Co-Authors
		Global T° / Ocean Heat Content						John Kennedy <sup>5</sup>
		Cryosphere						Vasily Smolyanitsky <sup>6</sup>
		Global Precipitation						Markus Ziese <sup>7</sup>
		GHG						Oksana Tarasova <sup>8</sup>
		Sea Level & Budget						Anny Cazenave <sup>9</sup>
		Extremes						Blair Trewin <sup>10</sup>
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\* Impact section is expected to be contributed by FAO, UNHCR, WFP, UN-Environment, WHO, IOM, IMF, UNESCO-IOC, UNDRR

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### 3/ Key Recommendations on improving WMO Statement (ref. [WCDMP-N0 84](#) )

**Data and Analysis:** Prospect adding reanalysis to be combined with the observational datasets ( ECMWF, JMA ). For the baselines and reference periods: 1981-2010 was proposed as the standard reference period for the annual statement. Not only is it the period recommended by WMO for routine climate monitoring, but it also allows for consistent reporting of information based on country information (the Expert Team on National Climate Monitoring Products has made a decision to adopt the use of the 1981-2010 period), global in situ data sets, satellite data sets and reanalyses. In addition, changes in key indicators (such as global temperature) relative to baseline periods which are important for other purposes, will be reported in a sidebar along with information supporting their inclusion and characterizing the use and value of these different baselines. These additional periods include: 1961-1990 for consistency with climate change reporting; 1985-2006 to harmonize with the IPCC; and a suitably defined “pre-industrial” period to inform in the context of UNFCCC and COP.

**Structure and contributions to the Statement:** The report will be divided into two strands, one focusing on the physical aspects of the weather and climate and another focusing on impacts associated with extreme events based on information provided by UN agencies. WMO will lead on the first and leadership of the other will be taken on by a UN agency in collaboration with others on a rotational basis. WMO will maintain overall ownership of the process, but the partnership with the other UN agencies will be clearly indicated.

**Open Science issues:** Add narratives on open science issues and use side bars when assessment has not reached the required scientific robustness .

**Collaboration with IPCC:** CCI experts involved in the WMO Statements should be involved in contributing to the IPCC reports, including the report on 1.5° and the 6<sup>th</sup> Assessment report. Experts need to be nominated –usually by country –to act as IPCC authors, but a nomination does not guarantee acceptance as an author, therefore the WMO needs to explore how representation can be ensured. As well as acting as chapter authors, CCI experts can also register as expert reviewers of the IPCC reports. On the other hand WMO Statements will benefit from the review by IPCC relevant WGs.

**Authorship:** A list of authors will be defined on annual basis, each author will be responsible for a section. The responsibility for the composition of the whole document will be given to a lead author assisted by WMO Secretariat and selected on voluntary basis from the pool of climate experts. A lead on the impact section from the designated UN agency will also need to be identified.

**Sources and citations:** Data and analysis should be supported by citing the sources and the references following WMO publication standards. In addition to the current practices for acknowledging contributions from international data and analysis centers and input from the countries, acknowledgment of the authors and the contribution of the UN organizations will be adopted as well.

**Planning:** A calendar should be provided via the WMO web pages to ensure that end-to-end publication process is described well in advance, including call for contribution, designation of authors, timelines for drafts, review and the release of the provisional and final publications. Guidance for authors –based on the experience of past coordinators –should also be provided. Guidance for reviewers should make it clear that the expectations for review are distinct from those for a typical peer-reviewed scientific paper as the methods and datasets will, for the most part, be updates of well-established products. WCRP will assist in providing narrative on open science issues to be included in the Statement.