



WCRP's 40th Anniversary Symposium

*Detlef Stammer
WCRP Science Week
AGU, December 2019*



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40 years ago

- The **World Climate Research Programme** was established 1980 after a major climate conference concluding that humans are able to affect the climate, but that **precise scientific knowledge was needed to understand the nature and consequences of this disturbance.**
- The conference recommended **international research to improve scientific knowledge of climate** and to use this knowledge to "**predict and prevent possible human-induced climate change** that could affect the well-being of humanity”.



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Since then ...

- WMO and ICSU (now ISC) formalized the creation of the World Climate Programme in 1980. 1993 the International Oceanographic Commission (IOC) of UNESCO became a third official co-sponsor.
- **WCRP became** a component of of the World Climate Programme, coordinates international climate research, and today as much as before provides a **reference framework for both individual researchers and national funding agencies.**



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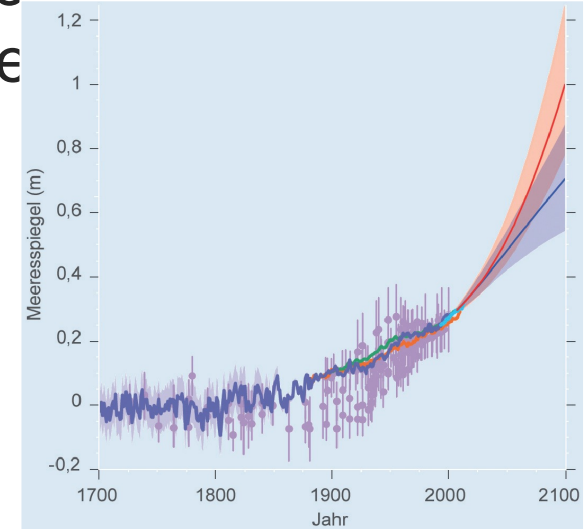


WCRP's Initial Mission

Until recently WCRP's mission was to facilitate the analysis and prediction of Earth system variability and change for use in an increasing range of practical applications of direct relevance, benefit and value to society

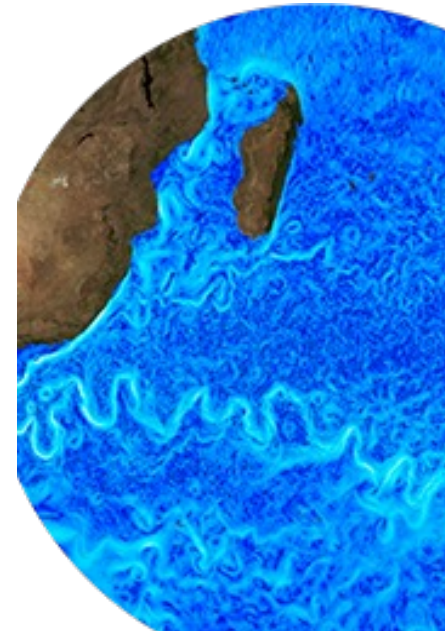
The two overarching objectives were:

- to determine the **predictability of climate**;
- and
- to determine the **effect of human activities** on climate



40 yrs of Major Achievements

- Build initially around existing initiatives WOCE, TOGA,
- WCRP fundamentally advances our **understanding of the climate system**,
- helped the **development of spatial and *in situ* observing systems**, climate data processing and assimilation methods
- improved computational facilities and **enabled extraordinary developments of numerical coupled climate models**, which established the the basis for ongoing climate politics.



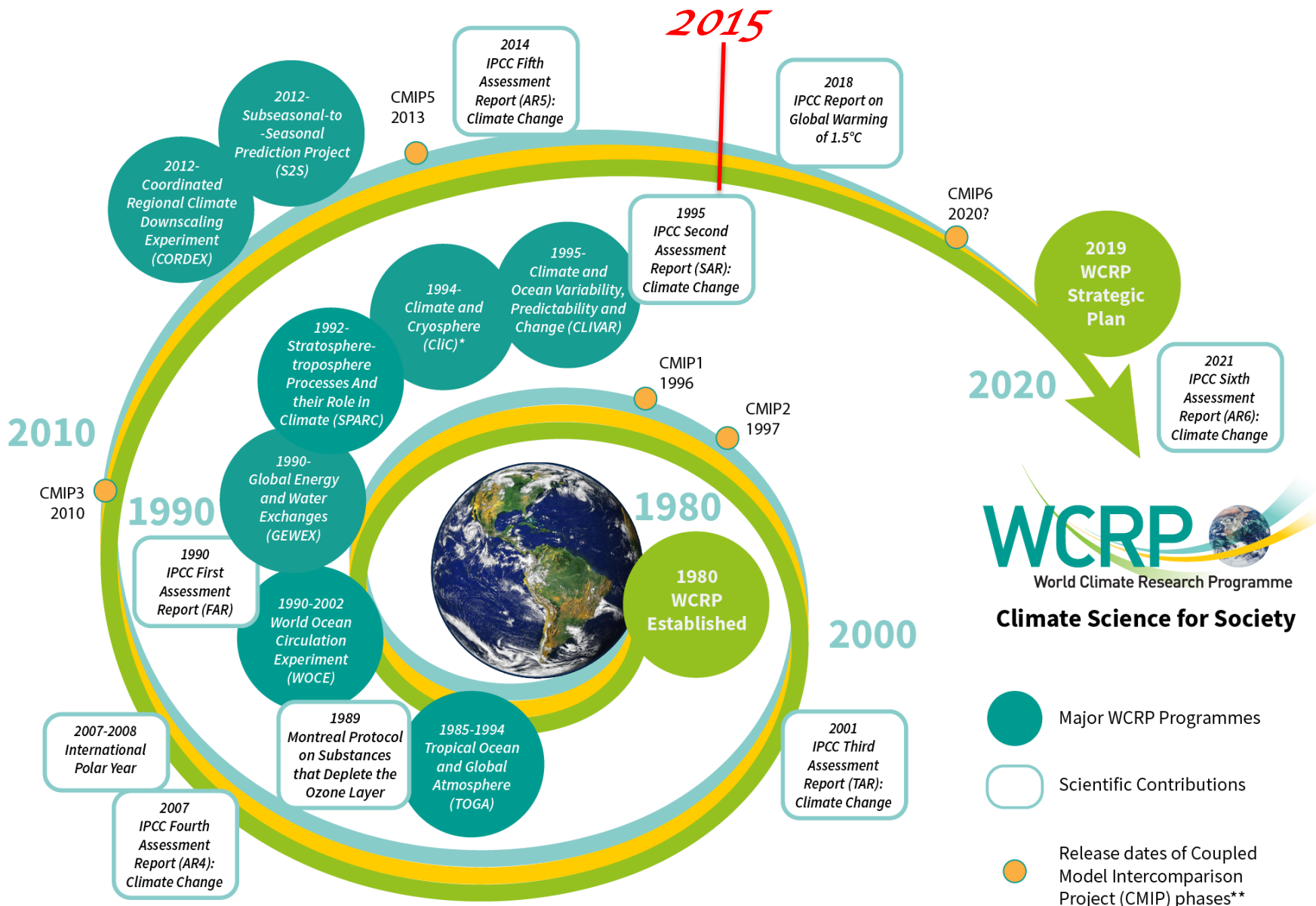
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40 yrs of Major Achievements



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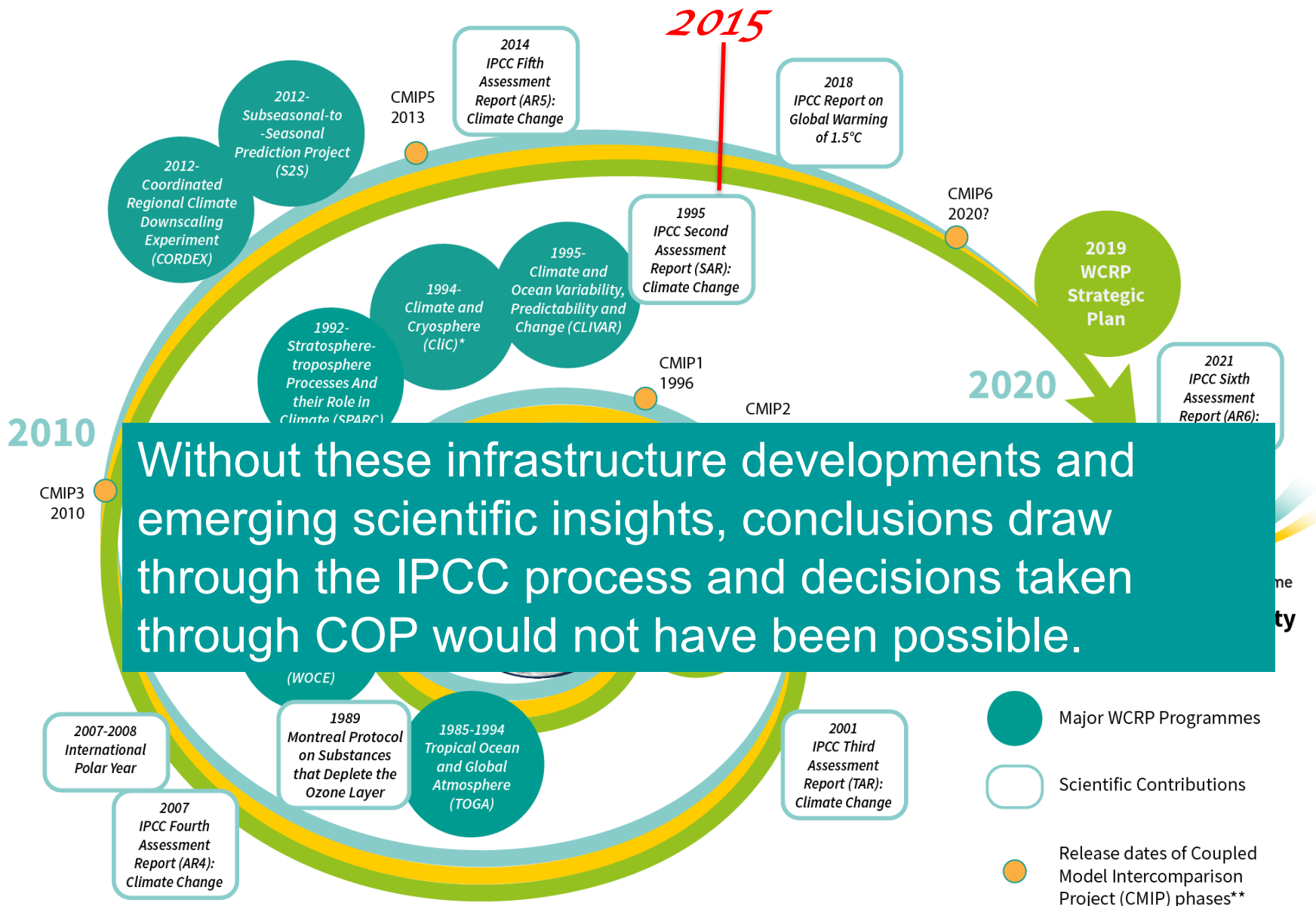




WCRP
 World Climate Research Programme
Climate Science for Society

* CLIC was formerly the Arctic Climate System Study (ACSYS)
 ** There was no CMIP4





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2015: A Landmark Year



- Over 190 countries signed up to reduce emissions, with the target to stay within a 2°C world.



- 15-year agreement for the substantial reduction of disaster risk and losses in lives, livelihoods and health.



- 2030 agenda with 17 goals to end poverty and hunger, improve health and education, making cities more sustainable, combating climate change, and protecting oceans and forests.



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Understanding and Quantifying Weather and Climate Risk are at the Core of these Actions



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Preparing for the Future



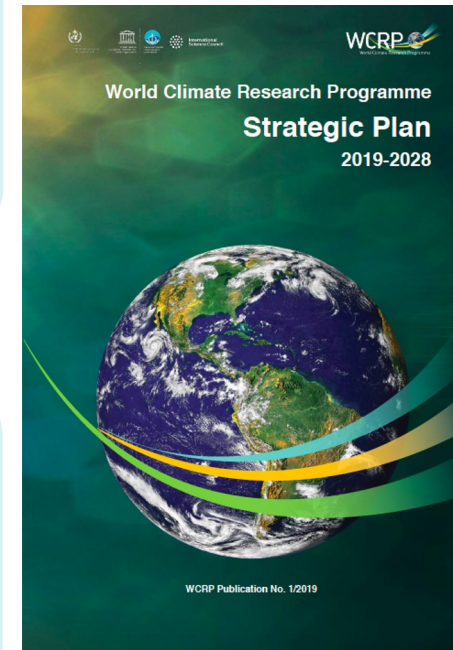
WCRP Strategy 2019-2028

New Vision

A world that uses sound, relevant, and timely climate science to ensure a more resilient present and sustainable future for humankind.

New Mission

The World Climate Research Programme (WCRP) coordinates and facilitates international climate research to develop, share, and apply the climate knowledge that contributes to societal well-being.



Goal of the Week

- **Celebrating 40 years of WCRP in Service to Society**

40th Anniversary Symposium



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Goal of the Week

- **Celebrating 40 years of WCRP in Service to Society**
- **Thank the community for its loyalty**
- **Entrain the next generation scientists**
- **The Launch of WCRP's Future**

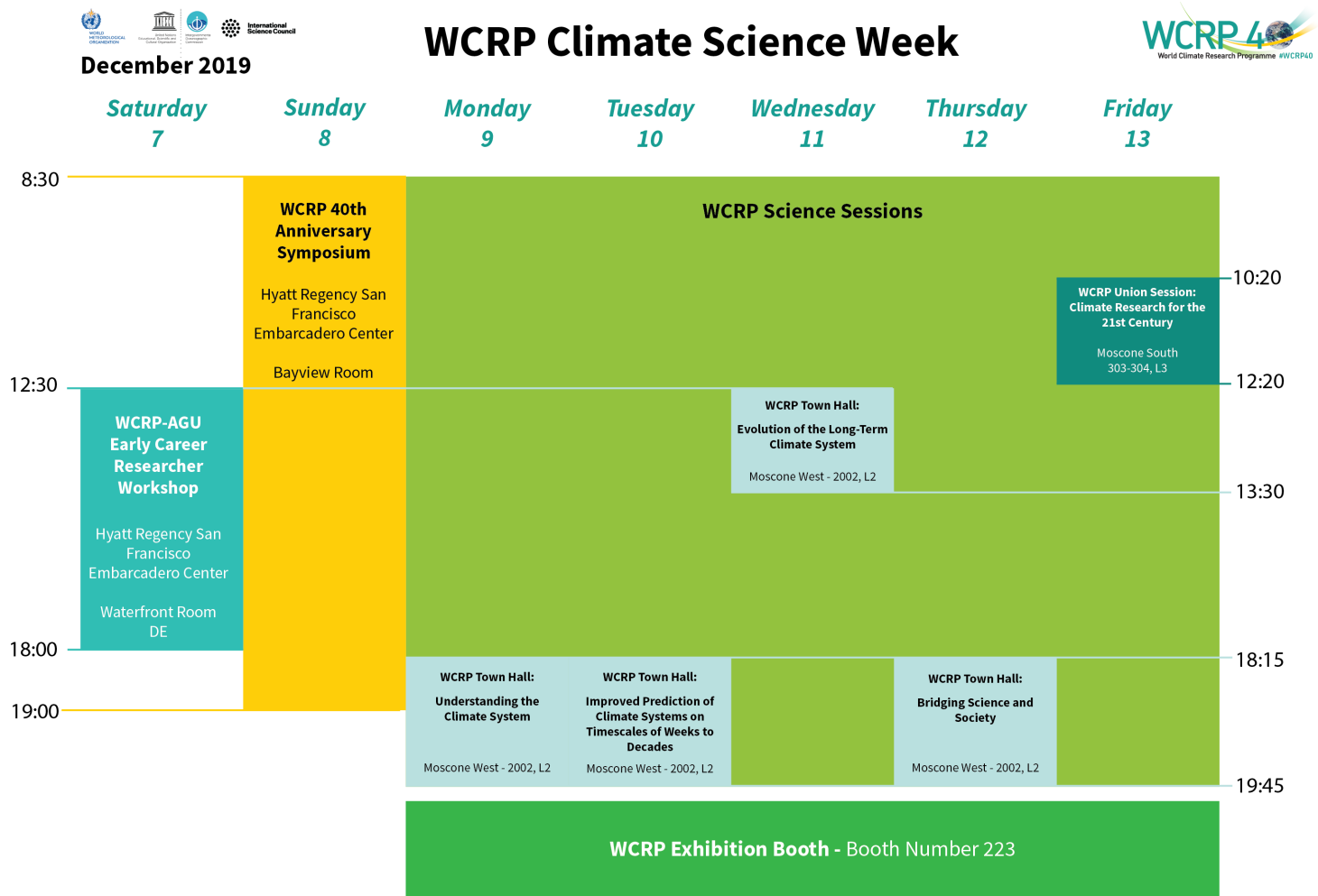


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Climate Science Week

Series of sessions and events



A big Thank You ...

- AGU
- Sponsors and agencies for their long-term support.
- Communities around the world for their continuous involvement and trust.
- Our sponsors for their confidence.
- WCRP leadership for their engagement.