

IPCC AR7 @ WCRP-JSC45

28 May 2024
4.00-4.45 am CEST

Input IPCC Co-Chairs

- ✓ AR7 Brief update on Workprogram
- ✓ Key scientific issues and knowledge gaps per WG
- ✓ Next steps

WG and TFI Co-Chairs for the 7th cycle



IPCC AR7 Work Program

Decided at IPCC-P60 (Istanbul, Feb 2024)

- 2 TFI MR reports (2027), 2 TFI EMs (2024)
- SR on Climate Change and Cities (2027)
- WGI, II and III 7th Assessment Reports
- Revision of Technical Guidelines for Adaptation (with WGII report)
- AR7 Synthesis Report (2029, tbc)

Other Expert Meetings expected, in discussion

Under way

- Call for AR7 scoping meeting experts
- Planning for AR7 scoping meeting, Dec 2024, Malaysia (tbc)
- Preparations for SR Cities (call for authors Aug 2024 tbc)

To be decided at IPCC-P61 (Sofia, Jul/Aug 2024)

- Timeline AR7 and SYR
- Approval of outlines for SR Cities and MR SLCF (TFI)
- ...

Expectations from the collaboration IPCC-WCRP

To touch base regularly with communities

- Following progresses in communities and in community structures
- Understanding emerging topics and prominent questions

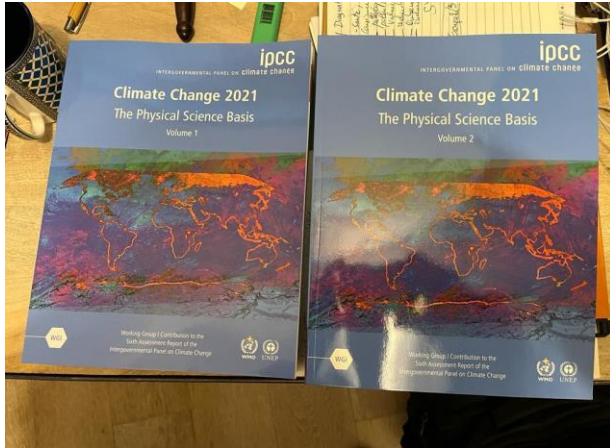
Proposition: regular topical meetings (eg every month or 2 months)

To facilitate work of authors of the AR7

- Review or concept papers will simplify the work of the authors
- Co-organize Expert Meetings

To increase inclusivity

- WCRP has a worldwide network
- WCRP can nominate experts and authors
- WCRP can help in finding contributing authors



Content of AR = crossing between what the community plans and what the governments need, and lessons learned

- More integration across WGs
- Question-driven and solutions-oriented report
- More packed and focused report
- Less workload for authors and TSUs
- More inclusivity

WCRP Links & collaboration potential

Almost all WGI drawing science from WCRP!

Many remaining challenges – examples (non exclusive)

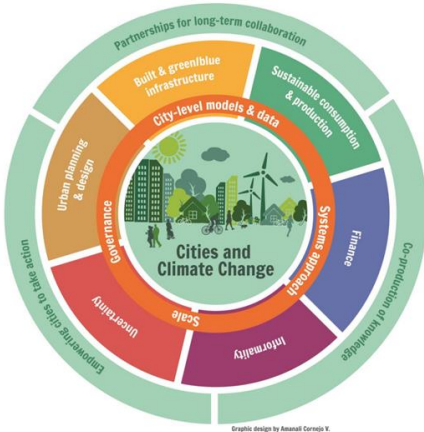
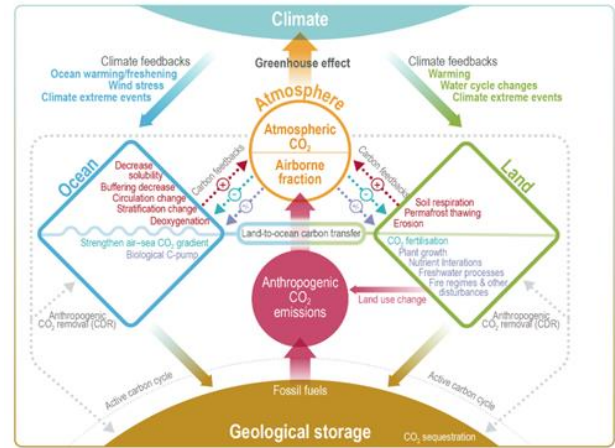


Figure 1. Pathways for climate adaptation and mitigation in cities

-Urban physical climate, observation and modeling, scenarios



-Consequences of a highly altered Earth system
 -Scenario “limits” and “feasibility” from the physical perspective

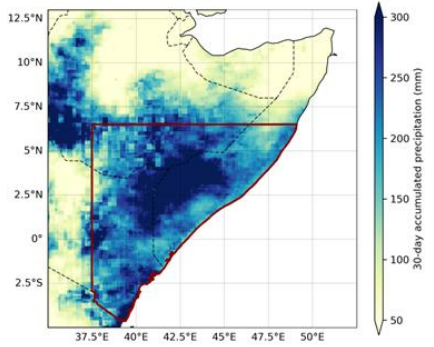
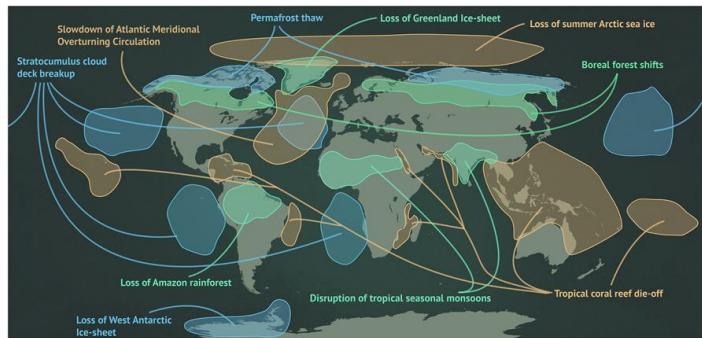


Figure 1. October–November 30-day rainfall accumulation over the Horn of Africa. Shows the maximum of 30-day cumulative rainfall on the 26th of November 2023 over the region that experienced highest flood-induced impacts. Source: MSWEP data.

-Recent trends and extremes, attribution
 -How models capture recent evolutions
 -Improvements in regional climate information



-Knowledge on high-impacts events and tipping points and regional consequences

WGII is tasked with assessing impacts and vulnerability arising from climate change, as well as adaptation to climate change.

Overarching goals for AR7

- x-WG integration (manifest through SR-Cities)
- Action oriented report focusing on policy-relevant solutions
- Inclusivity in scoping and developing reports and adaptation technical guideline update
 - Includes collaborations with other scientific groups on climate impacts and adaptation issues e.g. WCRP, WASP etc.

WCRP Links & collaboration potential

- Impacts and risks assessment that improves adaptation planning e.g. identifying key risks from climate-driven hazards
- Links between science of LL-HI events with vulnerability of selected regions and sectors e.g. coastal regions to SLR

Working Group III focuses on climate change mitigation, assessing methods for reducing greenhouse gas emissions, and removing greenhouse gases from the atmosphere.

Overarching goals

- More xWG integration
- More within WG integration
- More inclusivity

Links with WCRP

- In AR6, WGIII had limited direct contributions from WCRP.
- There are several potential topics of mutual interest, including: water, land use/land cover, SLCF, CDR, etc.

Next steps

Coordination moving forward

- specifically list of topics/meetings from June to AR7 scoping
- regular meetings?

Information needs

- key synthesis papers that would be welcome in the short term
- other assessment products

Expert workshops on relevant AR7 topics

- HHLI/tipping points?