

Working together: Future Earth and WCRP working together to jointly address major societal challenges

Given the highly complementary nature of our aspirations and purpose, and strengths and expertise, there is great benefit in Future Earth and WCRP harnessing our synergies to jointly investigate and answer the most pressing societal questions, associated with climate and environmental change, through co-design and co-delivery between our respective communities.

The purpose of this statement of intent is to explicitly describe these areas of synergy, and the ways in which we can leverage our historical collaboration to significantly strengthen the partnership between our two research programmes. Our goal is to achieve a step-change in the breadth and depth of our collaborative work so that we can collectively deliver more relevant, timely, integrated and robust programmes, products, and outcomes to benefit society. This goal is a decadal ambition, but the intent of both programmes is to develop a “roadmap” of shorter and longer-term actions that will ensure this stronger collaboration begins immediately and grows in breadth and depth over the decade ahead.

Both the World Climate Research Programme (WCRP) and Future Earth are committed to using sound, relevant and timely science as the evidence base for ensuring a resilient, sustainable and equitable world – now and into the future; a world where people can thrive. Future Earth’s mission is to accelerate transformations to global sustainability through research and innovation, while WCRP’s mission is to coordinate and facilitate international climate research to develop, share and apply climate knowledge so that it contributes to societal wellbeing in pursuit of this broader vision.

Future Earth’s Global Research Projects and Knowledge-Action Networks have had successful experiences collaborating with WCRP programs on a range of science-policy products. The Knowledge-Action networks on Emergent Risks and Extreme Events, Urban, and Oceans have all teamed up with, or received sponsorship from, WCRP. The Urban Knowledge-Action network and WCRP together with a list of other high-level partners working on cities have developed a milestone conference and report on the “Global Research and Action Agenda on Cities and Climate Change Science”. WCRP has supported the formation of the Knowledge-Action Network on Emergent Risks and Extreme Events and to date is an active member. There are also ongoing engagements and sponsorship by WCRP with the Knowledge-Action Network on Oceans. These engagements are expected to be solidified formally in the near future. WCRP is also a part of Future Earth’s 10 New Insights in Climate Science 2020 Editorial Board and a conversation is ongoing about WCRP becoming a formal partner to the publication.

On a more programmatic level, WCRP and Future Earth will continue and formalise their fruitful collaborations on various levels, especially those productive collaborations that WCRP have with the following Global Research Projects i) Analysis, Integration and Modeling of the Earth

System (AIMES), ii) Global Carbon Project (GCP), iii) Past Global Changes (PAGES), and iv) The international Surface Ocean – Lower Atmosphere Study (SOLAS). Specifically:

- AIMES and WCRP will leverage the opportunities provided by their joint Scientific Steering Committees and shared membership in various working groups to identify and develop key activities that will benefit from cooperation or closer collaboration.
- Future Earth will support deeper engagement between PAGES and WCRP, through their shared Scientific Partnership Agreement supporting joint communication and mutual research planning.
- Future Earth will work with both WCRP and GCP to deepen connections through the existing Scientific Partnership Agreement, which supports collaboration in communication and research planning, noting that WCRP is already a co-sponsor of GCP, and WCRP members are co-authors of many GCP products.
- Future Earth and WCRP will work to strengthen links that support SOLAS, which is also co-sponsored by WCRP, and through the collective participation in existing joint projects and working groups with IMBer and GCP. We note that SOLAS is also actively engaged and represented on the WCRP Data Advisory Council, and that WCRP is advising, and funding research actions of SOLAS and taking part in its SSC meetings.
- Future Earth and WCRP will also continue to support connections through existing collaborative work between IGAC and SPARC, two programmes that have been collaborating closely on various atmospheric chemistry projects.

Appendix 1 provides greater detail about these existing links between WCRP and Future Earth.

Going forward, we see the following “low hanging” opportunities for collaboration:

1. **Joint program review**, focusing on synergies, overlaps and gaps between WCRP and Future Earth topical and geographic programs. Greater cohesion within our collective global change programs will increase our combined impact around the world and allow both WCRP and Future Earth to offer stronger value to our individual and joint structures.
2. **Joint program-focused advancement activities**, focusing on the development of integrated programs and products that serve our common communities and stakeholders and engage researchers from both WCRP and Future Earth communities. Together, our programs have the depth and global spread to address the full spectrum of integrated sustainability needs that are emerging with greater and greater urgency, and the establishment of a set of core joint objectives and priorities for collaborative work would benefit both of our organizations.

3. **Joint activities to ensure support for our core programs.** WCRP supports many distinct climate and Earth System science communities as represented by our four Core projects (CLIVAR, GEWEX, SPARC and CliC) and two new “homes” in Earth System Modelling and Observations and Regional Information for Societies; while Future Earth supports 19 Global Research Projects, 9 Knowledge Action Networks, and more than 20 local, national, and regional structures. Working together, we can identify synergies within hosting countries, reduce fragmentation for our joint funders, and develop more productive structures for our shared communities.

4. **Joint Convening:** With the launch of the Sustainability Research and Innovation Congress with the Belmont Forum, ISC, UNESCO, IRD, and other partners, Future Earth is poised to support a strong convening platform through which WCRP and FE communities can come together regularly to develop joint agendas and joint programs. Developing an MOU to add WCRP as a core partner in SRI would help deepen connections between our core communities.

5. **Joint Products:** The United in Science Report represents an exceptional opportunity for a broader collaborative work across Future Earth and WCRP. Future Earth has engaged as a core partner in this work in the past, and there is significant value in extending this collaborative work in the future, building on the long-standing ties between WCRP and GCP.

6. **Engaging WCRP in the new Future Earth Governance Structure:** Future Earth is in the process of restructuring both secretariat and governance structures and will be developing a broad assembly structure to ensure that the direction and priorities of Future Earth come from the community. Within this process, we are explicitly working to recognize the core contribution of core global science convening organizations

Complementing these and aligned to 2. & 3. above, the WCRP are launching their Lighthouse activities. These five new initiatives represent major experiments, or high-visibility projects, or infrastructure building blocks that are critically important for addressing WCRP’s research priorities and scientific objectives. They will draw on the capabilities across all of the WCRP’s Core Projects and communities, are intended to be co-designed with relevant and allied research partners, including Future Earth, and are purposely directed at some of our most pressing scientific, technological and institutional challenges (see <https://www.wcrp-climate.org/wcrp-ip-la>).

Signed by



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