

The World Climate Research Programme (WCRP)

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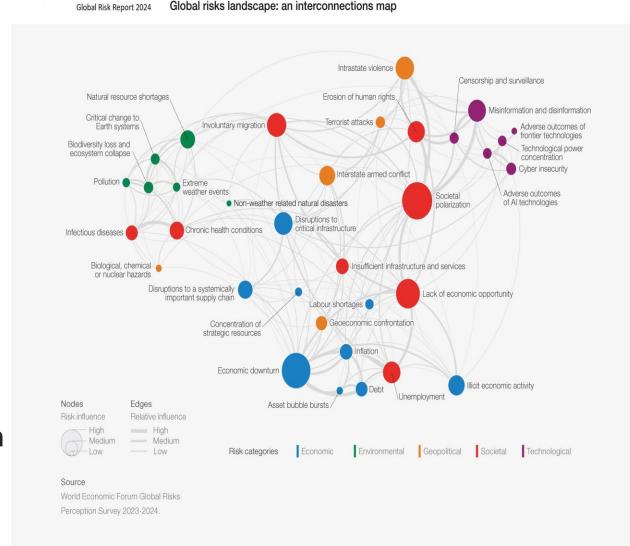






Climate Change and Risk

- Anthropogenic climate change even
 1.5 C warming brings significant challenges and risks that affect almost all aspects of life
- Droughts, heavy rain and flooding, heatwaves, extreme fire weather, loss of mountainous water storage, and coastal inundation.
- These are just some examples of what is already occurring and where amplified risks and impacts in the future will threaten millions of people around the world.





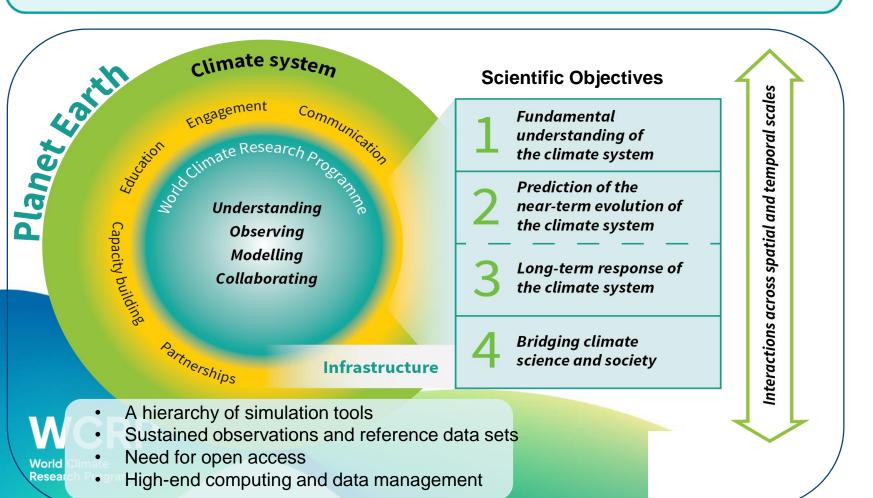


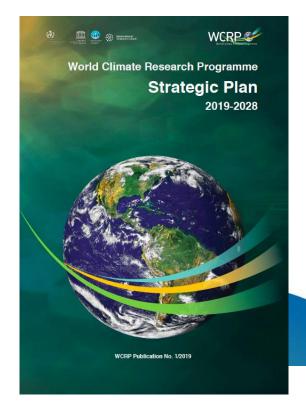




A new WCRP Strategic Plan for this decade

WCRP's Mission (Purpose) is to coordinate and facilitate international climate research to develop, share and apply the climate knowledge that contributes to societal well-being





www.wcrp-climate.org/wcrp-sp-overview



Joint Scientific Committee (JSC)

Lighthouse Activities

- Digital Earths
- Explaining and Predicting Earth System Change (EPESC)
- Global Precipitation Experiment (GPEX)
- My Climate Risk (MCR)
- Research on Climate Intervention
- Safe Landing Climates (SLC)

Ongoing Activities and Fora

- Fixed-term projects
- Rapid updates, syntheses, assessments, gap analysis
- Conferences and workshops
- Diversity and capacity building: ECRs, regions
- Communications and outreach

Core Projects

- Atmospheric Processes And their Role in Climate (APARC)
- Climate and Cryosphere (CliC)
- Climate and Ocean Variability, Predictability and Change (CLIVAR)
- Earth System Modelling and Observations (ESMO)
- ▶ including the Coupled Model Intercomparison Project (CMIP)
- Global Energy and Water Exchanges (GEWEX)
- Regional Information for Society (RIfS)
- ▶ including the Coordinated Regional Climate Downscaling Experiment (CORDEX)

Support Unit

International Offices

WCRP Academy

www.wcrp-climate.org

Basic Climate Knowledge

Climate Extremes and Risk Climate Information

Safe Landing Climates

Major WCRP Science

Predicting Earth System Change

Climate Intervention

Climate Observations and Modelling

Tipping Points

Cycles, Budgets and Stocktake







New frameworks for assessing and explaining climate risk so that climate information is meaningful locally.

Explaining and Predicting Earth System Change

An integrated capability for observing, explaining and providing early warnings of Earth System Change - multi-annual to decadal timescales.

My Climate Risk Digital, dynamic representation of the Earth system, blending models and observations.

Digital Earths

Safe Landing Climates

Routes to climate-safe landing 'spaces' for human and natural systems on multi-decadal to millennial timescales.

GPEX.

Years of precipitation.

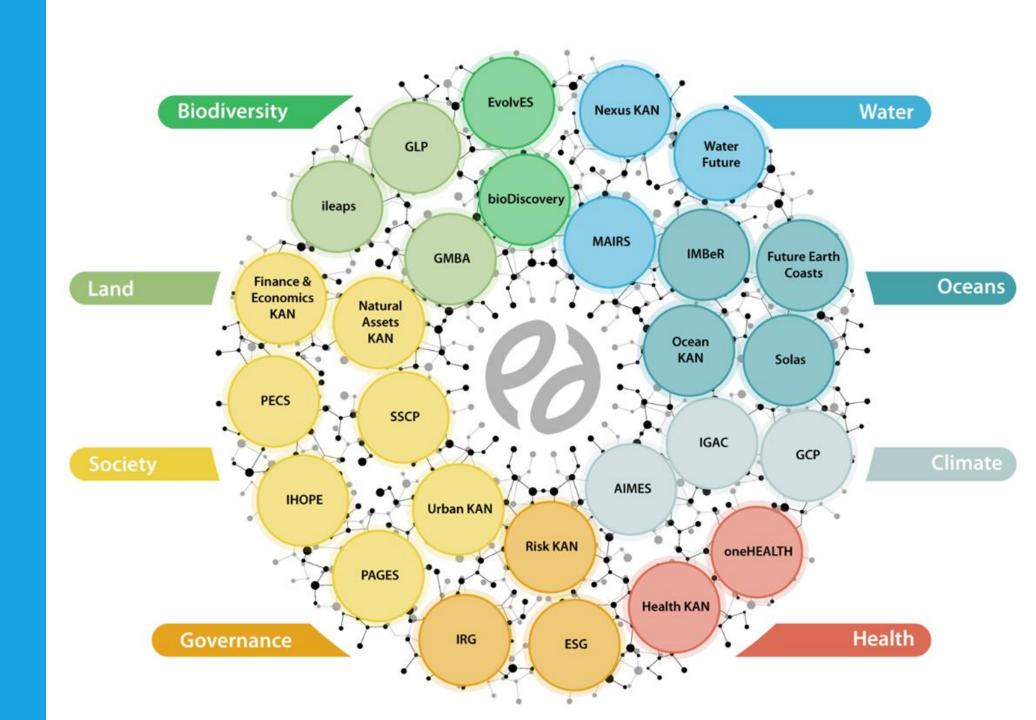
Climate Intervention.

Assessment of risk of climate intervention.

Climate Intervention

GPEX

Global Research Networks





Advancing Climate Science for a Sustainable Future

New
Fellowships
coming soon

WCRP Academy

Determine climate research education needs. Build enabling mechanisms by working with WCRP core activities and education providers, including universities. wcrp-academy.org

The WCRP OSC and the 'Kigali Declaration'....

- The world is in a state of 'polycrises' leading to cascading systemic risk and increasing inequality, with unabated climate change being one of the greatest threats to humanity.
- Probability is rising for complex and compound extremes, leading to cascading hazards, severe weather events, prolonged droughts, heatwaves, devastating floods and landslides, and wild/forest fires.
- Human-induced changes have led to profound and widespread changes; global surface temperatures soon surpassing 1.5°C.
- Any further delays to climate change mitigation and societal transformations (adaptation) will exacerbate the impacts and demand enhanced adaptation and mitigation responses.
- Requires urgent unprecedented societal and technological transformation on a global scale, for immediately attaining net zero carbon emissions.





Thank You



www.wcrp-climate.org





