



Workshop on
Pathway to regular and sustained delivery of climate forcing datasets

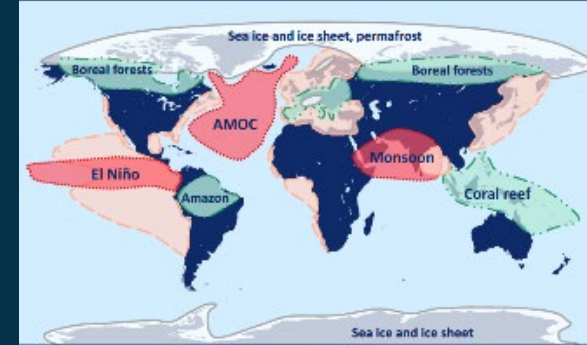
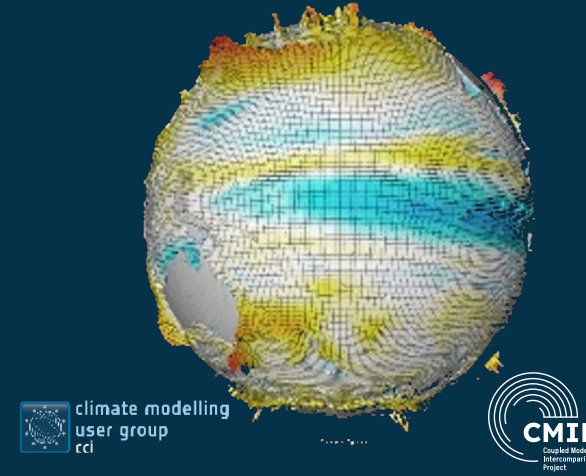
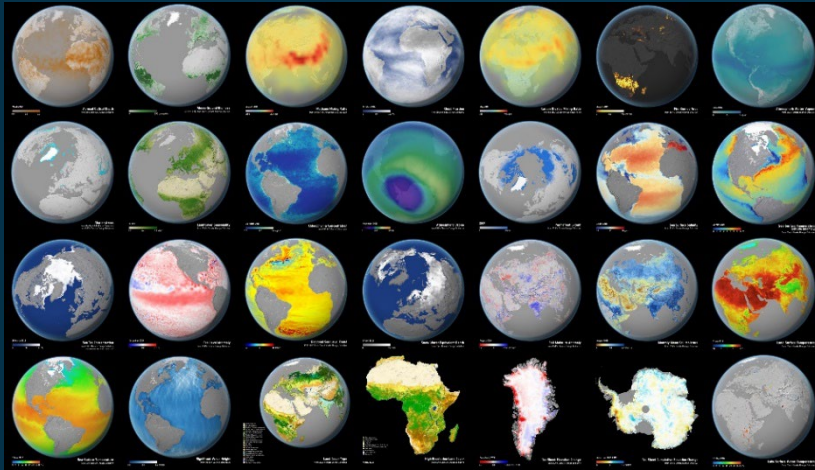
Funders panels

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EXPANDING ESA's CLIMATE CHANGE INITIATIVE



Duration: 2023-2029 | Funding: phase 1 ~90 Meuro ; phase 2 – TBD at CMIN 2025



- Providing physical evidence for a changing climate, R&D for operational climate services
- Earth observation data support and verify the UNFCCC Paris Agreement pledges
- Linking observations with modelling provides trustworthy climate predictions and projections (CMUG, CMIP)
- Cross-ECVs and Tipping Points

Policy drivers for CLIMATE-SPACE

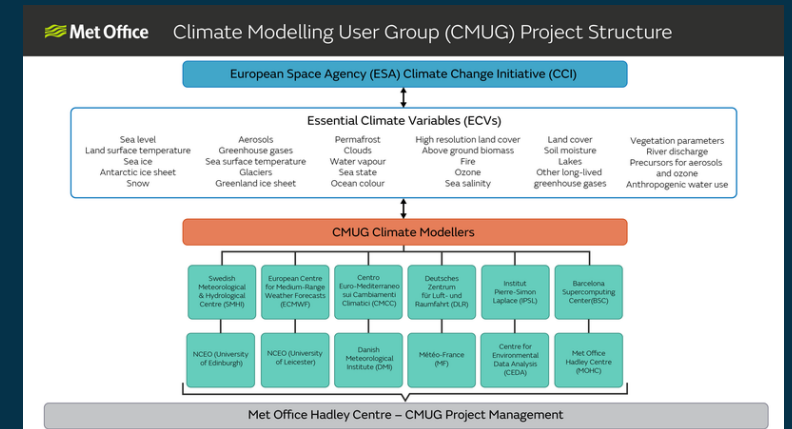
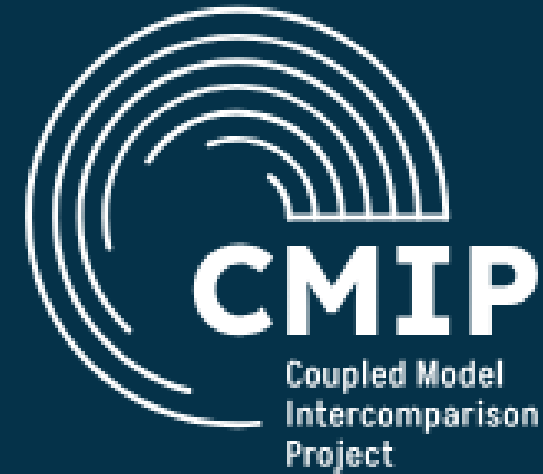
- GCOS & WCRP requirements
- UNFCCC Paris Agreement
- IPCC Assessment Reports
- New users: tipping points, biodiversity & ecosystems, health



OUR ROLE



- ESA hosts the WCRP CMIP international project office since 2022
- Funds R&D / pre-ops development of forcing data sets on
 - Greenhouse gas historical concentrations
 - Stratospheric volcanic SO2 emissions and aerosol optical properties
 - Ozone concentrations
- Links climate science and modelling communities through Climate Modelling User Group (CMUG)
- Continuously expands portfolio of activities
 - Interfacing the Climate observation and modelling communities
 - Additional Essential Climate Variables (ECVs) - New ECV Products
 - Details on <https://climate.esa.int/en/news-events/call-for-projects/> and ESA's tendering portal, ESA-STAR (<https://esastar-publication-ext.sso.esa.int>)
- Significant contribution to IPCC AR6 (



Working with operational services



CCI-C3S cooperation agreement

- Provision of CDRs
- Coordination of R&D activities
- Collaboration on pre-operational developments
- ~20 ECVs transferred to C3S

#LPS25 LPS25.ESA.INT



living planet symposium

VIENNA
23-27 June
2025

[LPS25 - Abstract submission \(open call\) \(esa.int\)](https://esa.int)
Deadline on 1st of December 2024

FROM OBSERVATION TO CLIMATE ACTION AND SUSTAINABILITY FOR EARTH



Earth Science Frontiers



Climate Action and
Sustainability Challenges



Earth Observation
Missions



Digital Innovation
and Green Solutions



Partnerships with Industry
for New Applications



Global Cooperation
and Policy Support