







'WCRP Ahead': Directions, Plans and Outcomes

For discussion at WCRP Joint Steering Committee, April 2016

Forward (Dave, Guy)

Introduction (Dave, Guy)

- Driving forces of WCRP (context, external factors, CoP21, IPCC, etc.)
- WCRP stakeholders (global research community, climate information users, etc.) Emphasizing WCRP's nature as community-driven effort motivated by the demand for improved understanding of climate
- Unique contribution of WCRP to society (climate assessment, etc.)

Enhancing Relevance of Climate Science to Society (Dave, Guy)

- Affirming long-term objectives / mission of WCRP
- Introducing key objectives for 2017-2022 implementation (Follow Brasseur & Carlson, introduce regional, urban)

Serving and Sustaining the Climate Community (need ONE JSC coordinator)

- Next Generation of Climate Experts: Building Capacity Regionally and Globally
- Climate Data Sets and Analyses (open access, progress in model outputs and in situ datasets)
- Efficiency and effectiveness in promoting WCRP science and service

Confronting Urgent Challenges (need TWO JSC coordinators)

Emerging Scientific Questions (focus on what these GC should have produced or accomplished by 2020. Note that WCRP is enabling and stimulating the process through creation & review of GCs.)

- Decadal Variability, Predictability and Prediction
- Regional Sea-Level Variability and Change
- Climate Extremes
- Clouds, Circulation and Climate Sensitivity
- Water Availability in Breadbasket Regions
- Melting Snow and Ice
- Biogeochemistry of CO₂

Framework for implementation (need FOUR JSC coordinators)

CMIP Impact and Process (use the Carlson and Eyring article, reference the GMD article)

The Building Blocks of Climate Science

- Atmosphere, Oceans and Climate
- Cryosphere and Climate
- Atmospheric Chemistry and Dynamics
- · Water, Energy and Climate
- Regional Downscaling

Advisory and working groups

Strategic Approach for WCRP Implementation (need TWO JSC coordinators)

Key Partnerships

- GCOS
- Research programmes in Earth system science (WWRP, GAW, etc.)
- Future Earth (and partner projects, highlighting WCRP as the coordinating body of fundamental climate science)
- Climate Services

Evaluation processes (JPS, need ONE JSC coordinator)

- Internal, project level
- Proposals
- Cross-cutting and overview

Structure and Funding (Dave)

Resources

Concluding Remarks

- Financial resources: 3-agency sponsorship, volunteer contribution of national institutions
- Structural resources: JPS, IPOs and volunteer engagement of national research programmes

Challenges and needs for sustainable support for climate research

Main (and planned) activities requiring resources during 2017-2018