Transition Plan and Objectives for Phase 2

Co-Chairs: Alex Ruane\textsuperscript{1,2} and Claas Teichmann\textsuperscript{3}

\textsuperscript{1}NASA Goddard Institute for Space Studies, New York City
\textsuperscript{2}Columbia University Center for Climate Systems Research
\textsuperscript{3}Climate Service Center, HZG, Hamburg
Building Bridges between Modeling and Applications Communities
The Vulnerability, Impacts, Adaptation and Climate Services (VIACS) Advisory Board for CMIP6

Phase I (2016-2018)
Establishing the VIACS Advisory Board and informing the design of CMIP6 simulations

Phase II (2019-2021)
Initial evaluation of CMIP6 models using DECK experiment outputs and the application of broader CMIP6 outputs

Key challenges for VIACS/ESM connection
- Improved VIACS models and analyses to make use of improved outputs
- Practical use of huge variety of models, ensemble members, and MIP experiments
- Incorporation of offline VIA results and VIA-oriented diagnostics for ESM development
- ESM expert guidance and technical facilitation for VIACS translation and application

Practical ideas to enhance communication:
- Create working groups on selected topics, (e.g., guidance on model output usage and model performance, FAQ, etc.)
- One VIACS/ESM contact person per participating modelling-group
- “Consumer reports” for ESMs listing known, VIACS-relevant biases
- Demonstration papers for CMIP6 MIPs: VIACS leader and MIP leader model application
- VIACS participation in major CMIP (and related) workshops and conferences
VIACS Advisory Board Phase 1 (2015 - 2018)

*This phase focused primarily on establishing the VIACS Advisory Board and informing the design of CMIP6 simulations.*

- Connections within VIACS communities and develop two-way engagement with CMIP6
- CMIP5 Variable evaluation and prioritization
- CMIP6 MIP Experiment interest from VIACS
- Provided VIACS perspectives at many meetings (modeling and applications)
- Ruane et al. (2016); contributions to Eyring et al., 2019
- Initiated a VIACS AB web presence

Transition to VIACS Advisory Board Phase 2
Convening the VIACS Advisory Board Phase 2

- We will release call for nominations in April
- Advertising widely in open process
- Seeking mix of new Advisory Board members and some members continuing with second term
- We will seek input from CMIP leadership on selection process
VIACS Advisory Board Phase 2: 2019 - 2022 (?)

Envisaged Objectives and Activities

Phase 2 will provide a VIACS-relevant perspective on the evaluation and application of CMIP6 outputs as new model and MIP outputs are posted and application efforts are designed and conducted (Specific objectives and activities will be determined by the entire VIACS Advisory Board upon its initial convening.)

- **Identify** key VIACS-relevant evaluation metrics for CMIP6 models in DECK and historical experiments.
- **Highlight** and **share** successful or **novel VIACS applications** using CMIP6 MIP outputs.
- **Recognize** common challenges in VIACS applications of CMIP6 outputs that may be addressed through closer interaction with CMIP6 modeling groups.
- **Inform** the creation of guidance documents on best practice use of CMIP6 outputs.
- **Foster** demonstrations of VIACS applications using MIP outputs that are particularly suited to particular applications sectors or climate services, e.g.:
  - HighResMIP and agricultural applications
  - LUMIP and ecosystem applications
  - ScenarioMIP and Climate Services.
- **Engage** VIACS representatives from Earth System Modeling groups participating in CMIP6.
- **Represent** the VIACS perspective at international workshops and conferences.
- **Develop** a stronger web presence for the VIACS Advisory Board.
Practical Ambition

Similar VIACS activities in many areas
- UNISDR/Sendai
- IPCC WGI/WGII Handshake
- UNFCCC NAP Process
- many more....