

The Vulnerability, Impacts, Adaptation, and Climate Services (VIACS) Advisory Board for CMIP6

Transition Plan and Objectives for Phase 2



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WCRP Working Group on Coupled Modeling (WGCM)
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Building Bridges between Modeling and Applications Communities

The Vulnerability, Impacts, Adaptation and Climate Services (VIACS) Advisory Board for CMIP6

Phase I (2016-2018)

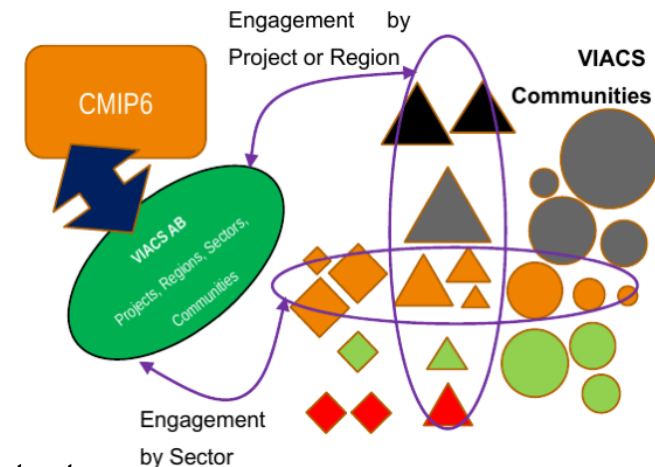
Establishing the VIACS Advisory Board and informing the design of CMIP6 simulations

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 AB
Mailinglist:



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

Call for Nominations for CMIP6 VIACS Advisory Board Phase 2

Alex Ruane¹ and Claas Teichmann², VIACS Advisory Board co-Chairs

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We request nominations for members of the VIACS Advisory Board for CMIP6 who will join efforts to foster sustained, two-way engagement between the climate modeling and climate applications communities.



Background

The Vulnerability, Impacts, Adaptation and Climate Services (VIACS) Advisory Board was launched in June, 2015 as a Diagnostic MIP seeking to enhance two-way engagement between the climate modelers in the Coupled Model Intercomparison Project Phase 6 (CMIP6) and the many VIACS communities that apply climate model outputs. This voluntary effort was formally endorsed by CMIP6 (Aug, 2015) and the Global Programme of Research on Climate Change Vulnerability, Impacts, and Adaptation (PROVIA) (Sep, 2015). Phase 1 of the VIACS Advisory Board (2015-2018) focused primarily on establishing connections within VIACS communities, communications between VIACS and CMIP leadership, and informing the design of CMIP6 simulations (Ruane et al., 2016; Eyring et al., 2019).

Role of Advisory Board members in Phase 2

The VIACS Advisory Board is designed as a conduit that collects, interprets, and translates questions and guidance between VIACS and CMIP6. The VIACS Advisory Board seeks members who can help raise attention and give advice to emerging challenges and opportunities in VIACS application of CMIP6 outputs, and likewise develop and disseminate

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....