Evaluation BoG

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Outline

- Cross-WPs: NA2, NA4, VA2, JRA2 (10 min)

- First topics we should discuss:
  ○ Survey (NA2) (30 min)
  ○ Standard interface for provenance (NA2) (20 min)
  ○ ESMValTool developments (JRA2, SA2) (20 min)

- Other topics: (10 min)
  ○ Sustainability of development of infrastructure (ESMValTool)
  ○ Climate4impacts portal

Goals

- Identify who is working on what
  - Define work groups
    - Survey
    - Standard interface
    - ESMValTool development
    - Other ?
  - Refine timeline

Cross-WP

- Cross-WPs: NA2, NA4, VA2, JRA2
    - How to organise interactions (virtual WP) ?
    - Generic evaluation mailing list (crossing WPs). Monthly telcos.

    - Define roadmap for model evaluation infrastructure in IS-ENES
        - 2 stages (M18 and M48 ?)
        - 18M to run and deliver the survey NA2.

Topics

- Survey (NA2)
  - "Community survey to review the needs and expectations of a variety of end users both existing and future"
  - Contact Assimila (done and interested). Ready to start.
  - How big is the community? Modelling groups, CMIP6 MIPs,
  - The scope of the survey is not the scientific needs.
  - Gathering technical requirements (ex: time to solution, performance metrics, where to run,

- Standard interface for provenance (NA2)
  - Share ENSO pilot work
  - Shared ideas on the interfaces and agreed to take this effort as a starting point.

- ESMValTool developments (JRA2, SA2)
  - Overview, organisation and interaction with IS-ENES3 partners
  - Examples on how is currently done in github.
  - The team has already started a discussion on how to share the developments plans.
  - A public roadmap is needed. Governance needs to evolve.

Model evaluation workflow

Climate information users

Climate experts

Software and data engineers

question interface

Science question interface

Science / IT interface

Define science question

Define metrics

Def. observations

Document metric = f(science question)

Build software to run metric

Choose metric(s) Choose model(s)

Program metric

Build software to view metric

Run and view metric

User interface(s)

Analyse results

Science governance

IT governance

Articulate different actors, different expertise and expectation

Structure of pilot ENSO package

Engage with an IT infrastructure (driver), here PMP

ENSO Metrics Package

User chooses metric collection and models

PMP Driver

ENSOCollectionsLib.py

Understand work
(vars, obs…)

ENSOComputeMetricsLib.py

Execute work

(loop on models)

ENSOMetricsLib.py

Define pre-processing

ENSO Support libs

dict{}

Collect results

Documentation of every step in calculation carried through with the results

https://github.com/eguil/ENSO_metrics
Collaboration with PMP/PCMDI
Explore how to use in ESMValTool

Science / IT interface

View results

User analyses results

- Sustainability of development of infrastructure (ESMValTool)
  - Increase of user support. Not in the core development tool but devoted to support.
  - Target new user willing to adopt the tool (including documentation, support, …).
  - Identify users outside our project contributing to the tool (already existing).

- Accessing results of the evaluation tool like http://cmip-eval.dkrz.de
  - Computing infrastructures
  - Covered by IS-ENES3 DoW (WP7)