

Version 29 May 2024

# Agenda ESMValTool Community Workshop 2024 (hybrid meeting)

(all times are given in CEST)

**27 May 2024 - Day 1 (Monday)**

**DLR, building 122, room “Einstein” (ground floor)**

9.30 am – 9.45 am **Introduction, welcome and workshop agenda** (Birgit)

9.45 am – 10.15 am **ESMValTool v2.11.0 release** (Emma, Chris, Ed)

10.15 am – 11.00 am **Getting ready for CMIP7** (Romain)

- On-the-fly CMORizer for ACCESS (Romain)
- CMIP7 development and submission including training of users and identification of gaps in our evaluation workflow (Romain)
- Development of a workflow at ACCESS NRI that uses ESMValTool (Romain)

11.00 am – 11.15 am **Coffee break**

11.15 am – 12.00 pm **Getting ready for CMIP7** (Alistair)

- Update on the ESMValTool application/activities within the Fresh Eyes community (Evgenia)
- ICONEval and model benchmarking (Manuel, Axel)
- General discussion (tbd)

12.00 pm – 01.00 pm **Lunch break**

01.00 pm – 01.30 pm **Introduction of possible coding sessions, e.g.** (Bouwe)

- Implementing supporting for different versions of obs datasets (Axel) (see [ESMValTool#3452](#))
- Improved ERA5 support (derived variables, grib) (Manuel, Bouwe)
- Starting on new configuration file (Manuel) (see [ESMValCore#2371](#), [ESMValCore#2369](#))
- Tutorial extension (Ranjini)
- Website updating (Axel)
- Support for station data (Birgit)
- Porting of selected obs datasets from tier3 to tier2 (Axel) (see [ESMValTool#3331](#))
- Cleaning up the repository (e.g. deleting old branches) (tbd)
- An introduction to using dask with some practice/demo (Bouwe)

01.30 pm – 03.30 pm **Coding session** (all)

03.30 pm – 03.45 pm **Coffee break**

03.45 pm – 04.45 pm **Coding session** (all)

04.45 pm – 05.00 pm **Summary and wrap up of first day** (Birgit)

## **28 May 2024 - Day 2 (Tuesday)**

### **DLR, building 135, room 0103 (ground floor)**

9.30 am – 9.40 am **Introduction day 2 and workshop agenda** (Birgit)

9.40 am – 10.15 am **Ocean diagnostics** (Alistair)

- Porting ocean diagnostics from the Consortium for Ocean and Sea-Ice Modeling in Australia (COSIMA) to ESMValTool (Romain)
- Recipe for ENSO evaluation (Romain)
- Challenges of dealing with ocean unstructured grids and tripolar grid in NEMO. How difficult will it be to work with ocean grids in ESMValTool? (User Engagement Team, tbd)
- Where does it make sense to use x-array? (Katja, User Engagement Team)

10.15 am – 11.00 am **Technical enhancements** (Manuel, Bouwe, V)

- Status on updating / maintenance of software dependencies including new Python version (V)
- Reading and processing data from intake catalogs, using the intake-esm library (Bouwe, Katja and Manuel about use case)
- Re-organizing our configuration files
- [New configuration file plan ESMValCore#2371](#), e.g. using different Dask configurations, different DRS for different rootpaths, etc.; new configuration file plan (Bouwe)

11.00 am – 11.15 am **Coffee break**

11.15 am – 12.00 am **Technical enhancements** (Manuel, Bouwe)

- Read and processing data in Zarr format; (what) do we need to read model data on HEALPix grids? (often intake and Zarr)? (Manuel, Katja)
- High-resolution model data: often the weights to interpolate grids can be reused, not only for different variables but even across different experiments, time periods, and simulations of the same model. Could ESMValTool support the reading and use of precalculated weights because their calculation is very time-consuming? (Katja)
- Presentation on how ECCO operationalizes ESMValTool for extreme event attribution, discussion on recipes generated by Python scripts (Liza)

12.00 pm – 01.00 pm **Lunch break**

01.00 pm – 01.10 pm **Preparation for coding sessions** (Alistair)

01.10 pm – 03.00 pm **Coding session** (all)

03.00 pm – 03.15 pm **Coffee break**

03.15 pm – 05.00 pm **Coding session** (all)

05.00 pm – 05.15 pm **Summary and wrap up of second day** (Birgit)

06.30 pm **Workshop dinner (self paid)**

## **29 May 2024 - Day 3 (Wednesday)**

### **DLR, building 135, room 0103 (ground floor)**

9.30 am – 9.40 am **Introduction day 3 and workshop agenda** (Birgit)

9.40 am – 10.00 am **Discussion: ESMValTool long-term strategy** (Alistair)

10.00 am – 10.30 am **Tutorial extension** (Bouwe)

- Developing teaching material (Felicity)
- Extending the Python API (tbd)
- Jupyter notebooks (Ranjini)
- Configuring Dask for use with ESMValTool (Bouwe)

10.30 am – 11.00 am **General discussions** (Axel)

- Guidelines for proposal contributions (Ranjini?)
- Cleaning up inactive users (Axel) (see [Community#151](#))

11.00 am – 11.15 am **Coffee break**

11.15 am – 12.00 pm **Observational data** (Bouwe)

- Observation data management, access to observational data is important to facilitate using ESMValTool: there have been difficulties in keeping observation data updated across platforms (Ranjini) (see [Google Docs](#))
- Support for station data, status and open issues (Alistair, Birgit)
- Porting selected obs datasets from tier3 to tier2 (Axel) (see [ESMValTool#3624](#))

12.00 pm – 01.00 pm **Lunch break**

01.00 pm – 01.10 pm **Preparation for coding sessions** (Birgit)

01.10 pm – 03.00 pm **Coding session** (all)

03.00 pm – 03.15 pm **Coffee break**

03.15 pm – 05.00 pm **Coding session** (all)

05.00 pm – 05.15 pm **Wrap up and future workshops** (Birgit)