

# ESM-Tools Developer Workshop

7 August 2018, 9:00-11:00  
Glaskasten, Building F

# Agenda

---

- News and announcements
- State of development
- Wish list for new features
- Documentation (esm-usermanual)
- Branching model and developer guideline
- AOB
- Next meetings

# News and announcements

- First release planned for: **4. September 2018**
  - Merge branch ‘develop’ into ‘release’
- Next code freeze: **17. August – 4. September 2018**
  - No merge requests accepted for develop and release branches
  - Updating the esm-usermanual, Wiki (GitLab)
  - Testing of ‘develop’ branch
  - Testing volunteers
    - AWI-CM 1.1 [ Nadine ], AWI-CM 2 [ Dima? ], AWI-CM 3 [ Jan Streffing ]
    - PISM, iterative coupling [ Paul, Sebastian ]
    - MPIESM [ Christian Stepanek ]
  - Which (wip) features go into next release? Merge requests for ‘develop’
- Share your new feature developments with the esm-tools community
- Develop new features on an up-to-date branch → avoid merge conflicts

# State of development

- PISM (wip)
- OIFS (wip)
- Updated example runscripts for AWI-CM
- Postprocessing (AWI-CM) (wip)
- Easier branching off (wip)
- fesom.clock restart file
- Automatic tests (wip)
- Copy esm-tools to scripts-folder
- Copy logs back
- Recom and Fesom-Recom support (wip)
- DKRZ Mistral: compute/compute2 Bugfix
- Jülich (JUWELS) support (wip)
- HLRN support (wip?)
- User-defined functions (wip)
- General bugfixes

# Wish list for new features

- Esm-runscripts
  - (awicm-CMIP6: esm removes fesom restart files after renaming experiment directory) → Very nice to have
  - Iterative coupling with standalone models
- Esm-master
  - Clarify state of AWICM test
  - PISM: getting and compiling
  - Get around esm-environment
- Esm-usermanual
  - Path to pool of restart files Ollie/Mistral (if available)

# Documentation

- esm-tools project on GitLab
  - <https://gitlab.dkrz.de/esm-tools/esm-usermanual>
- Pdf-File:
  - [https://gitlab.dkrz.de/esm-tools/esm-usermanual/blob/master/esm\\_usermanual.pdf](https://gitlab.dkrz.de/esm-tools/esm-usermanual/blob/master/esm_usermanual.pdf)
- Feedback for next release:
  - Missing chapters?
  - Missing examples?
  - Typos, misleading paragraphs, bugs in examples, ...?
- GitLab Wiki

# Branching model and developer guideline

- Branching model
  - 'release' → stable release (new release every three months)
  - 'develop' → testing
  - Feature branches → develop new feature
  - Bugfixes are done at any time
- Development workflow for new features and bugfixes
  - Create new issue on GitLab describing the new feature/bug
  - Create merge request (with WIP status)
  - Checkout feature branch and code new feature
  - Test your new feature
  - Commit and pull changes to remote branch (develop)
  - Describe your code changes in the merge request (on GitLab), so other developer can comment your solution before merging it
  - Remove WIP status of merge request (GitLab)
  - Automatic testing after accepting merge request (wip)

# AOB

- esm-master: Model licences
  - Note in the user-manual, source code (readme)
- GitLab usage? Any questions, problems, best practices?
- Internship for the development of a graphical user interface (Python Tkinter)?

# Next meeting

- **4. September 2018, 9:00-11:00**, Glaskasten, Building F
- ~~2. October 2018~~ (bridge day), → 9. October 2018
- 6. November 2018
- 4. December 2018 (→ Second release)
- ~~1. January 2019~~ (holiday) → 8. January 2019