

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-runscripsts
 - (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
- 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