



The Norwegian Climate Prediction Model (NorCPM) repository

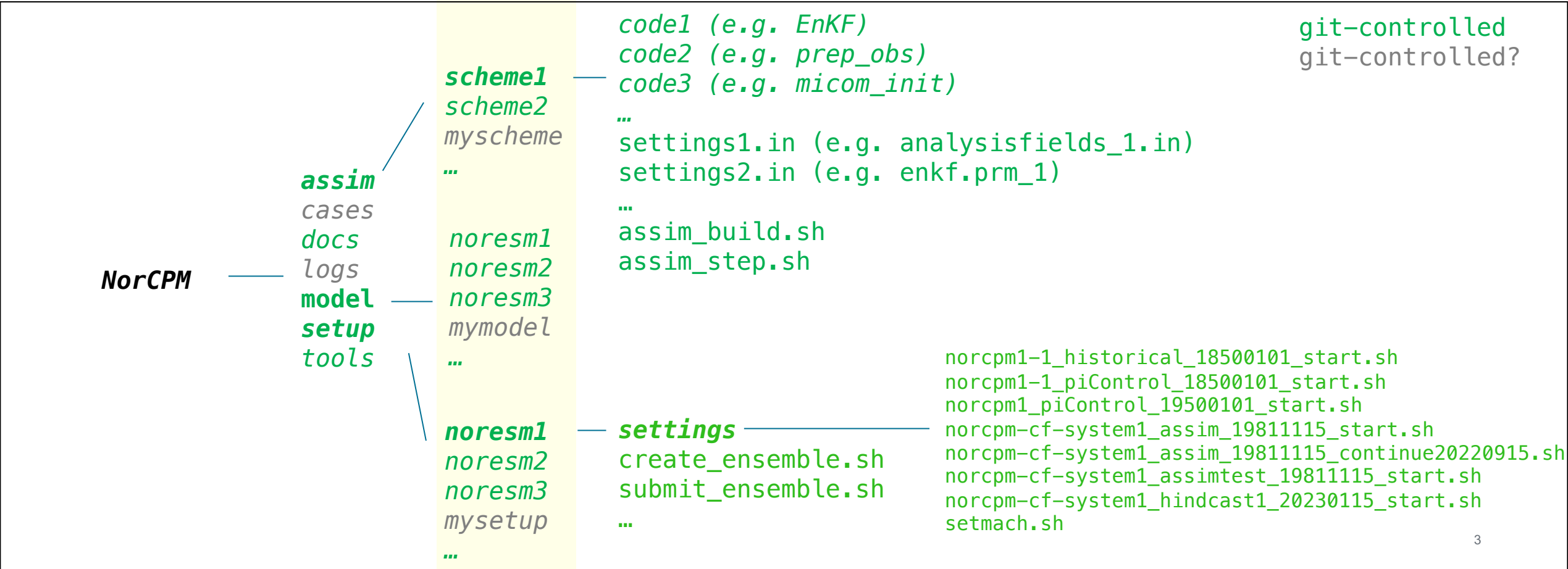
INGO.BETHKE@UIB.NO

Features of NorCPM structure

- NorCPM (NorESM+assimilation) code, scripts and settings in single git-repository
- NorCPM (NorESM+assimilation) input data in single location on Betzy
/cluster/shared/noresm/inputdata
- Automated experiment customization via setting files and command line options
- Compilation of assimilation and model code on-the-fly for each experiment
- Flexibility to add multiple models and assimilation schemes
- Improved logging of building and running
- Documentation: basic user-guide and examples for running NorCPM

NorCPM

- allows **multiple assimilation schemes and experiment setup environments** – multiple users can contribute to the same repository without interfering with each other's work
- flexible; structured and organized; fully version controlled
- suitable for use with NorESM1, NorESM2 and later versions



Tutorial for performing an assimilation experiment using NorESM1-ME

Install NorCPM in the nn9039k project space

```
mkdir -p /cluster/projects/nn9039k/people/$USER  
cd /cluster/projects/nn9039k/people/$USER  
git clone ssh://git@github.com/NorESMhub/NorCPM.git NorCPM
```

Set up a NorESM1-ME assimilation test experiment with 4 members

```
cd /cluster/projects/nn9039k/people/$USER/NorCPM/setup/noresm1  
./create_ensemble.sh settings/norcpm-cf-system1_assimtest_19811115.sh
```

Submit experiment

```
./submit_ensemble.sh settings/norcpm-cf-system1_assimtest_19811115.sh
```

Tutorial for performing an assimilation experiment using NorESM2-LM

Install NorCPM in the nn9039k project space

```
mkdir -p /cluster/projects/nn9039k/people/$USER  
cd /cluster/projects/nn9039k/people/$USER  
git clone ssh://git@github.com/NorESMhub/NorCPM.git NorCPM
```

Install NorESM2

```
cd /cluster/projects/nn9039k/people/$USER/NorCPM/setup/noresm2  
./install_noresm2.sh
```

Set up a NorESM2-LM assimilation test experiment with 10 members

```
./create_ensemble.sh settings/noresm2-lm_odaday_19960101.sh
```

Submit experiment

```
./submit_ensemble.sh settings/noresm2-lm_odaday_19960101.sh
```