## Main activities of ORCHIDEE-Project

- Several commit in the TRUNK (for CMIP6)
- Several BUG found/cleared over the summer
  - Water conservation with 11 layers
  - Restartability : 1 + 1 = 2
  - Bug with soil freezing + new snow + 11 layers (water conservation)
- New driver by Jan Polcher (open for tests)
- NEWS
  - https://forge.ipsl.jussieu.fr/orchidee/wiki/Documentation
- Various
  - Change parameter and variables names (hydrology)
  - Many changes: look (attached to the ppt at the end / added in the News)
  - Comment the line in libIGCM\_sys/libIGCM\_sys\_obelix.ksh"./usr/local/install/lf6481/bash\_laheyfort\_setup"

### ORCHIDHEE (CM6\_v1): New developments (vs CMIP5)

#### **Biophysic**

- 11 layers soil hydrology (done)
- Common soil vertical discretization between Hydrology and Thermics (done)
- New soil thermal properties (USDA soil texture classes) (done)
- Soil freezing following (I. Gouttevin's Phd) (done)
- New 3 layers snow module (Tao's work) (In progress)
- Adjusted albedos (in progress)

#### **Biogeochemistry**

- DGVM (done)
- Nitrogen cycle (to be included in Trunk)
- VOC (To be updated)
- FIRE (SPITFIRE) (To be included in Trunk)
- New Land Cover Classes using ESA ECVIcover product (In progress)
- CROPS GRASS (Possible improvement late 2015) ?
- PERMAFROST (Possible early 2016) ?

# ORCHIDEE next retreat

- 19 20 November (only half day the 20)
- Location : Jussieu
- Cleaning of the code (following coding guide lines)
- Specific work on model outputs (units, names,...)
- Oganizing team : Fabienne & Bertrand + Nicolas,
  Josefine, Philippe, Matthieu..
- Dinner for everyone the 19...

# Use LSCE cloud to support fair use policy..

- https://files.lsce.ipsl.fr/index.php/apps/files?dir=/Shared/ ORCHIDEE/FairUse\_%26\_ARTICLES
- ARTICLE\_IN\_PREP: directory with all articles...
- INTENDED\_STUDIES.doc
- MODEL\_FUNCTIONALITIES.doc
- → A Review will be done at the end of 2015 with a push to everyone to fill the tables (studies and articles in preparation)