## **ORCHIDEE: Some news...**

## • **PROJECT – LEVEL news:**

- Josefine is back ; shared "activities" with Xiaoni
- Next Training (Jan 22) : declare yourself if you want to attend
- Ongoing activity to redo some CMIP6 runs with ORC-V3 (N cycle)

## • Specific "Task forces":

- "Trunk forces" every Thursday morning (to improve the Trunk with forest dynamic, new RT scheme, hydraulic, etc)
- "Evaluation" : regular meeting on Monday (Patricia & Bertrand)
- "Spin up": to define emulators for spin up (Daniel G.)
- "Routing" : to define a new high res. routing scheme (Jan, Agnes)
- « New Driver » : to switch to have only new driver (Xiaoni)

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## • Sharing information

• Google document with important information (governance / list of people/ projects)

https://docs.google.com/document/d/

13R22r1fx0JoYKCojG1k3IM2C18RWuFNvxoYKdtacJEI/

edit#heading=h.xodt0i7kclgu

→ To be updated for the list of people (section 5)

• New ORCHIDEE articles:

Continue to share new article using ORCHIDEE with the sharebox place <u>https://sharebox.lsce.ipsl.fr/index.php/s/AhJk0Bk6rdySXKL</u>

 Check the "summary of the project meeting" (every Tuesday) at: <u>https://forge.ipsl.jussieu.fr/orchidee/wiki/GroupActivities/Meetings/Weekly</u> (ask orchidee-help if you don't have access)

### News about new driver

## General information (src\_driver/orchideedriver.f90)

- The new driver code is quite different from the older driver
- Better addresses the issues related with time-averaged variables in the forcing files
- Can work with forcing files of various cell methods in forcing files, more flexible than the old driver
- More flexible to handle certain meteorological parameter
- Potential to expand to other forcing grids

## Implementation in the trunk:

- Implemented and tested for the spinup analytic, transient simulation, and other simulations similar to fg2
- Works with the recent version of CRU JRA, WFDEI, CRU NCEP
- The default simulation configurations prepared and tested in spinupanalytic\_fg1nd, fg1transnd, fg2nd, fg8nd etc, with recommended parameter values included
- Consistent results from the first comparisons with the old driver

## Some useful information for the users of new driver:

- need the forcing files of previous, current, and next year: necessary data are available in IGCM
- In case of new forcing file, a script is available for usage in ORCHIDEE TOOLS
- Adjustable SPRED\_PREC\_SEC by users in PARAM/run.def
- Make sure of using correct calendar type for the forcing file, and appropriate number of MPI for simulation
- Does not need a restart file in the orchideedriver.card, while the old driver does have restart file in the orchidee\_ol.card.
- https://forge.ipsl.jussieu.fr/orchidee/wiki/Documentation/Drivers for detailed inforation about the new driver

#### Implementation in Tag 2.2: