Wikiprint Book

Title: 1. Training courses in IPSL modeling tools and environment (modipsl and libIGCM)

Subject: Igcmg_doc - Doc/Training

Version: 102

Date: 06/29/24 09:21:37

Table of Content

IPSL Training courses	3
1. Training courses in IPSL modeling tools and environment (modipsI and libIGCM)	3
1.1. Next training session	3
1.2. Older training sessions	3
2. Training courses on IPSL models	4
2.1. ORCHIDEE	4
2.2. LMDZ	4
2.3. NEMO	4
3. IPSL workflow for CMIP6	4
4. BOOTCAMP IPSL	4
4.1. Last training session 24 of March 2016	4

IPSL Training courses

1. Training courses in IPSL modeling tools and environment (modipsl and libIGCM)

The platform group at IPSL climate Center gives a two-day training course (in English) about how to use the IPSL models and the tools to configure and manage them. This training start with a general introduction to the model and environment on the first morning and move to practicals that participants could choose according to there level and interest. The courses are given at **__IDRIS** computing center, in a specific classroom equipped by computers. For hands-on session we have a special allocation on their super computer.

See below the description, presentation and exercises of the latest training courses. For the next session, the material will evolve to a more hands-on session.

Basic training course to learn how to use modipsI and libIGCM. This course is for beginners and for people who want to refresh their memory. Download the presentation here :

- basic session : training_course_day1_2018.pdf
- advanced session : <u>training_course_day2_2018.pdf</u>
- CliMAF part : CliMAF_C-ESM-EP_libIGCM_IDRIS_27Novembre2018.pdf

Hands on exercises : The exercises are done at temporary training account at ada IDRIS but most of the exercises can also be done at TGCC(curie) or LSCE(obelix). Download the hands on exercises here : training exercises nov2018.pdf

Registration in advance to the courses are needed. This is necessary to have entrance access at IDRIS where the courses are given.

How to come to IDRIS

See details here http://www.idris.fr/eng/info/contacts/alleridris-eng.html.

1.1. Next training session

The training course in running environment of IPSL models will be given 14th - 15th of January 2020 at IDRIS in Orsay (91).

This 2-days course is for beginners and advanced users. It will be mostly hands-on sessions that participant could select according to his or her level and interest. The program for these two days is: a general overview of the IPSL environment and tools such as modipsl/libIGCM, and then practicals work about how to launch a simulation, the post-processing step, how to best follow a simulation, repair errors, verify and redo post-treatment, ensemble of simulation, NEMO...

Additional information :

- The course will be held at IDRIS in Orsay. See here how to access: IDRIS http://www.idris.fr/eng/info/contacts/alleridris-eng.html.
- The course will be held in english
- The hands on sessions will be done on the IDRIS training computers (login/passwd will be provided during the training).
- Bring your ID card or passport all course days to enter in the IDRIS building. For security reasons, to be allowed to the enter the building you must have to be registered at the course.

1.2. Older training sessions

- 27th-28th of November 2018: Basic and advanced training sessions.
- 29'th of November 2017: Special training on CMIP6 official simulations (running them, controlling them, documenting them on ES-DOC, publishing them on ESGF, handling potential mistakes).
- 28'th of November 2017: basic
- 23'th and 24'th of November 2016 : basic and advanced
- 20'th and 21'th of October 2015 : basic and advanced
- 4'th and 5'th of November 2014 : basic and advanced
- 21'th and 22'nd of May 2014 : basic and advanced courses 1 and 2
- 5'th and 14'th of November 2013 : basic and advanced courses 1 and 2
- 17'th and 18'th of April 2013 : basic course 1
- October 2012 : basic course 1

2. Training courses on IPSL models

In addition to the global environment and tools training sessions, there are specific sessions for each component.

2.1. ORCHIDEE

There is one training session per year just after the IPSL tools and environment one. All informations about that could be found on the specific <u>Orchidee webpage</u>.

2.2. LMDZ

There is a one week session specifically about the IPSL Atmospheric model LMDZ at the beginning of December. All informations are available on the <u>LMDZ webpage</u>.

2.3. NEMO

There is no official training session for NEMO model but there are every 1 or 2 years the NEMO users meeting.

3. IPSL workflow for CMIP6

Overview of the IPSL workflow for CMIP6 from the model retrieval to the data publication on the IPSL ESGF node.

- Download the presentation here : training_course_CMIP6_2017.pdf.
- Download the exercises here : <u>TP_training_course_CMIP6_2017.pdf</u>

4. BOOTCAMP IPSL

Have you just started your PhD and do you easily get lost in front of a terminal? Would you like to learn core tools and become more productive in your research?

In a daily-based climate science work, there exists a wide range of tools used to simplify scientific work. They are well known by the community, but might be not at all for a beginning PhD student. At the same time, supervisors do not usually have time to introduce them to their students ...

The `IPSL Boot camp' pretends to amend this issue. The course will provide a first approach to a bunch of well known and useful tools such as: NetCDF tools (nco, cdo, ncdump...), Python, Ferret, Unix commands, Bash and Shell scripts, Vi and Emacs, Version control (Svn) ... to any one who has never known about them.

A small group of IPSL researchers and engineers will provide a first touch to anyone within the IPSL who might require it. Short tutorials, practical exercises and live coding are the main ingredients of this very first introductory sessions of core tools that can simplify your research work.

4.1. Last training session 24 of March 2016

- All the HandsOn (TP and netcdf files) are available on IDRIS (Ergon) and TGCC (Irene) : \${PATH_IGCM_repository}/TRAINING/BOOTCAMP_HandsOn_20160324
- You can download all presentations <u>20160324_bootcamp_pdf.2.tar</u>