Wikiprint Book

Title: 1. Foreword

Subject: Igcmg_doc - Doc/Intro

Version: 39

Date: 03/28/24 20:34:20

Table of Content

Introduction **3**
1. Foreword **3**
2. Reference configurations **3**
2.1. The _v5 configurations 3
2.2. Other forced configurations 3
3. Workshops **3**
3.1. Training courses 3
3.2. External courses 3
4. Mailing List **4**
5. How to use the IPSL Climate Modeling Center models and tools **4**
6. Glossary **4**

Introduction

1. Foreword

This users' manual describes the models and tools developed at the IPSL Climate Modeling Center.

For common hardware Homes (also called "machines"), this website provides information on how to:

- download reference configurations
- compile
  - the source codes of the different model components
  - the coupling interface (ocean-atmosphere) and the coupler
- perform a reference experiment (including input files)
- monitor its execution
- produce and store raw outputs
- produce, store and share ATLAS and standard analyses

2. Reference configurations

Several model configurations (coupled and forced) are available and described in this manual. Recommended configurations are:

2.1. The *_v5* configurations

- IPSLCM5_v5 : the reference IPSL coupled model for CMIP5-type simulations including atmosphere, land surface, ocean, sea ice and the carbon cycle
- LMDZOR_v5 : atmosphere-land only
- LMDZORINCA_v5 : atmosphere-land-tropospheric chemistry
- LMDZREPR_v5 : atmosphere-stratospheric chemistry
- IPSLCM5CHT_v5 : the reference coupled model with tropospheric chemistry
- IPSLCM5CHS_v5 : the reference coupled model with stratospheric chemistry

2.2. Other forced configurations

- NEMO : the ocean model including sea ice and marine biogeochemistry
- ORCHIDEE_SVN_AR5 : the land surface scheme used for the reference CMIP5 simulations
- ORCHIDEE_TAG : the latest reference version of the land surface model

3. Workshops

3.1. Training courses

The Home group at the IPSL Climate Modeling Center organizes training courses on how to use the IPSL models and tools. These courses aims to cover the content of this documentation.

More information, dates and inscription are available here : Train

3.2. External courses

Computing centers such as IDRIS organize workshops on supercomputing. Those workshops might be useful to all users of the models and tools presented here (Fortran, MPI/OMP). Some IPSL model development teams also offer workshops on how to use their particular model. More information can be found here:

- Technical workshops
  - Fortran, MPI/OpenMP, etc : ■http://cours.idris.fr
  - Workshops organized by the "maison de la simulation" : ■http://www.maisondelasimulation.fr

    - Workshops organized by the PRACE Advanced Training Centres (PATCs) ■http://www.training.prace-ri.eu/
- Workshops on IPSL models
    - LMDZ : ■http://lmdz.lmd.jussieu.fr
    - ORCHIDEE : ■http://forge.ipsl.jussieu.fr/orchidee/wiki/Contact
    - INCA : ■http://www-lsceinca.cea.fr/pp_contact.html
    - NEMO : ■http://www.nemo-ocean.eu/About-Us

4. Mailing List

There are two mailing lists:

- **Home-users** : the subscription to the list is open to everyone: ■http://courriel.ipsl.jussieu.fr/mailman/listinfo/platform-users . The purpose of this list is to organize and facilitate the communication between users of the IPSL models and tools (in particular libIGCM and modipsl). Discussions in French or in English are open to all users. Messages can be posted at platform-users_@….
- **esci** : this list provides the latest information on ongoing developments. Subscription is available on request (esci_@…) for users who want to take part in these developments.

5. How to use the IPSL Climate Modeling Center models and tools

- Check your computing resources (e.g. computing time, disk quota) available at your computing center
- Find the model configuration you need (several configurations might suit your project)
- Let the person in charge of this model configuration know that you are planning on using it
- Install the reference configuration and perform a first test simulation
- Check that this first simulation ran successfully and plot the outputs
- Change this configuration step by step to adapt it to your project needs
- A recommended starting point is ■the worksheet of the "Basic" workshop. This worksheet contains the necessary commands to install and run a reference simulation in the LMDZOR configuration.

The present manual should allow you to master these steps.

Please don't hesitate to ask questions to Home-users_@… to receive help from other users. Please also help other users if you know the answer to a question.

6. Glossary

A list of the acronyms used in this manual can be found at this page