Standardization of input/output files for SCM and LES simulations.

Initially planned as a practical session of the conference :



The proposed standard is an initiative of the :

- french DEPHY research network (Development and Evaluation of Physics)
- HighTune ANR (french research agency) project on calibration of SCM against LES

A version #0 of Dephy-SCM standard is already shared by IPSL and MeteoFrance will be made available for the workshop for tests.

Main objective : converge to a shared standard, even after the workshop. Rm : Evolution of the standard is less an issue once you have one (automatic filter)

The e-workshop was organized by

Frédéric Hourdin (LMDZ/IPSL Team) Catherine Rio (Dephy) Fleur Couvreux (HighTune/MesoNH) Romain Couvreux (Arpege-CNRM team) Marie-Pierre Lefebvre (CNRM) Yunyan Zhang (LLNL)

All the information about the organization available at https://www.lmd.jussieu.fr/~hourdin/Workshop1Dstd.html

SCM/LES representatives were identified

MUSC (Arpege/Arome) : Romain Roehrig LMDZ : Frédéric Hourdin MesoNH : Fleur Couvreux LLNL : Peter Andrew Bogenschutz DALES : Roel Neggers ICON : Martin Köhler CAM : Andrew Gettelman ECMWF IFS SCM : Richard Forbes MetOffice : Leif Denby GFDL : Zhihong Tan NASA/GMAO : Andrea M. Molod WRF (user) : Yi-Ling Hwong CCPP : Grant Firl Caltech/CliMA : , Ignacio Lopez-Gomez JPL : Mikael Witte

Information on groups avaiable on a google sheet : to be continued

<u>Monday, June 15:</u> A) Introduction and context (30 min)

- General introduction (Frédéric Hourdin, one more slide)
- Instructions for the smooth running of the sessions (Marie-Pierre Lefebvre)
- Motivation for multi-case SCM for climate model improvement (Catherine Rio)
- A standard for model calibration based on SCM/LES comparisons (Fleur Couvreux)
- B) Presentation of the dephy-scm standard format (20 min, Romain Roehrig)
- C) Round table (1h30) discussion about the experience of the other SCM groupsD) Discussion

Active chat (BlueJean) : with a moderator, where everyone can express himself.

Between June 15 and 19 and after :

- Try to implement the proposed format in your SCM starting with the simple ARM cumulus case or a few others already available.
- Try to provide new cases at the standard format.
- Try to produce standardize outputs and apply shared post processing Slack: to exchange technical, practical and general ideas about the standard Git: to report bugs and technical issues with the files and software e-mails to organizers :through representatives only to organize the next session

Friday, June 19 :

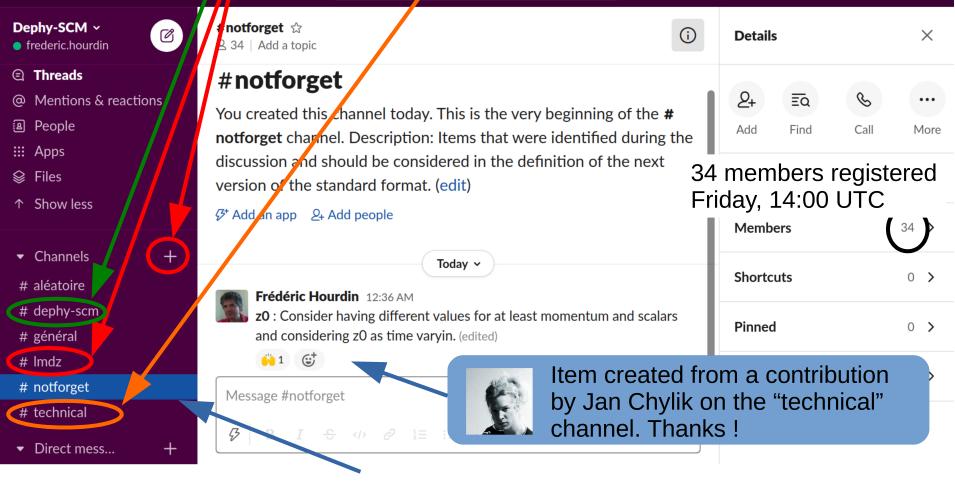
- Round table feedback from the various groups (~ 10min/group).
- Discussion on the definition of a standard suitable for everyone
- Discussion on how to continue this action. Should succeed !!!

Using the slack to organize our collaborative work

General discussion on the standardization

"+" : to create your own channel to exchange inside a team Like LMDZ here

Technical discussion on the format, help for implementation



"notforget" : to synthesize issues to be addressed for the future version