Vers CMIP7 avec les surfaces continentales

CMIP6	CMIP7
Hydro 12 couches , T et q même discretisation, prop. thermiques (texture, moisture)	idem
Gel du sol partiel (- chaleur latente)	Gel du sol + chaleur latente+ couche isolante
Classe texture :Zobler (3)	USDA (12)
Routage (simple)	routage (Native/externalisé)
Z0 : Dynamiques	z0m/z0h=10 , z0m (Su, fn LAI,u*)- En test
do_rsol = n (well watered forest evapore at higher rate than bare soil ?)	do_rsol = y (défaut) > biais chaud + impact bilrad. Réglages coef param. ?
Snow = intermediaire (3 couches)	Snow: 12 couches (idem ice).
Land_ice : LMDZ	land_ice : traité ORCHIDEE (mais pas-encore-traitement des glaciers continentaux) Groupe Neige (Orchidee-ice, C.Dumas, S. Charbit)
Stomate: hauteur arbres prescrite	Classes d'arbres, hauteur variable dépend de la biomasse disponible

Approche Evaluation

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Reference Simulations Page

Overview of the reference simulations

The ORCHIDEE project group has together planned a list of simulations to validate successive versions of the model. See here the protocol ValidationPlan_20150605.pdf. The simulations are done in offline mode at global and site level and coupled with LMDZ. Summary over the simulations in the validation protocol:

Coupled LMDZ-ORCHIEE simulations:

CL1	1981-1990	Grid: 96x95x39, Full ORCHIDEE (with sechiba and stomate and routing activated) and standard physics(old) of LMDZ	not longer included in reference simulations
CL2	1981-1990	As CL1 but with the physics NPv3.2 of LMDZ	not longer included in reference simulations
CL3	1981-1991	As CL2 with nudging of LMDZ	not longer included in reference simulations
CL4	1979-2008, no restart	Grid: 144x142x79, LMDZ physics: Using latest version in phase with IPSLCM6	
CL5	1985-2014, no restart	as CL5 with nudging of LMDZ	
CL6	1979-2008, no restart	Grid: 144x142x79, SST clim, LMDZ physics from QUEST	

Forced global ORCHIDEE simulations:

FG1	1901-1910	340years spinup with CRUJRA forcing	Without restart
FG1trans	1860-1900	Transient simulation. Land cover map is changing annually. Forcing is still cycling over 1901-1910	Restart from FG1
FG2	1901-2012	Historical simulation using CRUJRA (which resolution)	Restart from FG1trans
FG3	1979-2009	As FG2 but with WFDEI_GPCC climate forcing (execption for revision 3429 where Princeton 1° was used). Note also somes simulations with the GSWP3 forcing (F2.GSWP3.rev4783 at 1°, and FG4.rev4365 at 2°).	Without restart. The first 20 years are considered as spinup.

Forced site simulations with ORCHIDEE:

Orchidee wiki pag, reunions hebdo.

Multi-atlas LMDZ, mapper (vladislav)

+ Réunions Pirates, tuning