Status and overview of EUCLIPSE simulations for CNRM

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CFMIP-Aquaplanet simulations

- Contact at CNRM: <u>G. Bellon</u> and B. Oueslati (PhD)
- Current status: ready to start
- Schedule: end 2010

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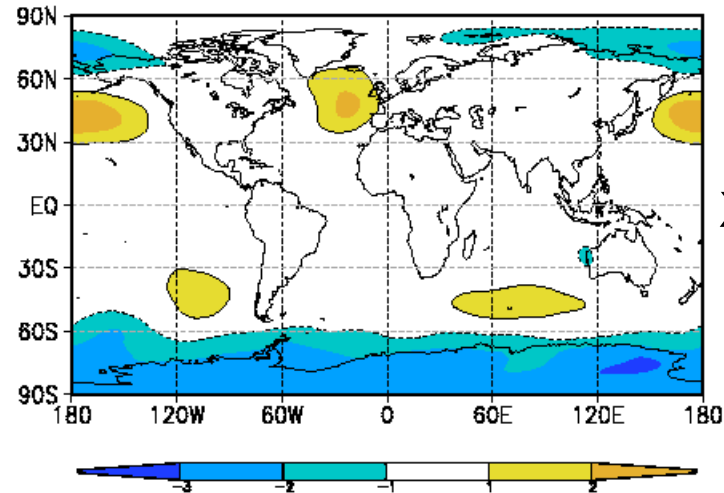# CFMIP-AMIP simulations

- Contact at CNRM: <u>H. Douville</u> and S. Tyteca
- Current status:
  - All simulations completed
  - NB: No on-line implementation of COSP
  - Off-line ISCCP + lidar simulations completed for expt 3.3 (1979-2008 SST)
- Schedule:
  - All COSP outputs (tables cfMon, cfDay, cfOff, cf3hr) for expts 3.3, 6.4, 6.6 and 6.8 completed before Feb. 2011
  - Most AGCM outputs (including table cfSite) completed before Feb. 2011

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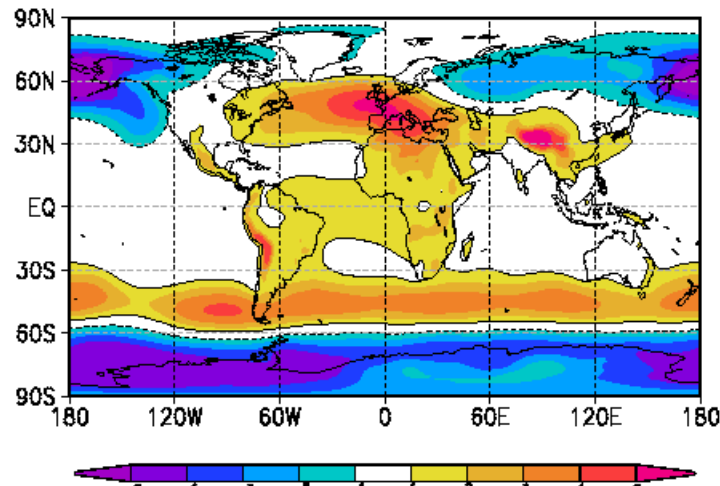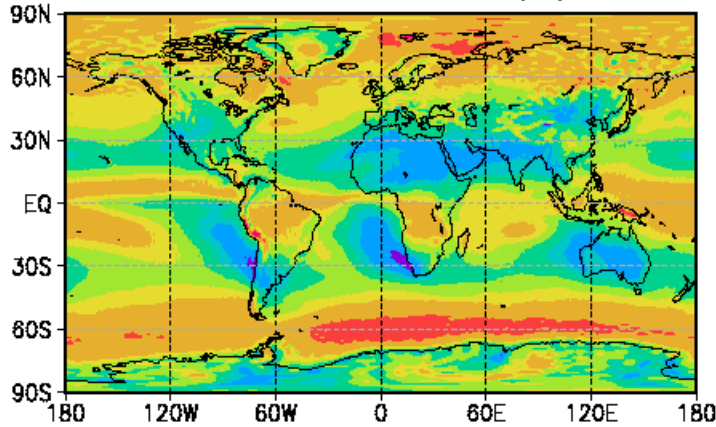Toujours un temps d'avance

CFMIP simulations: DJFM SLP

AMIP

x4CO2

+4K
UNIF
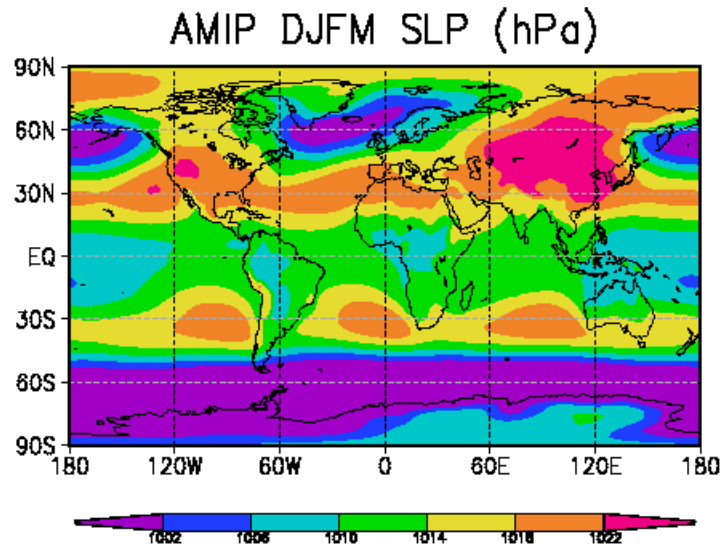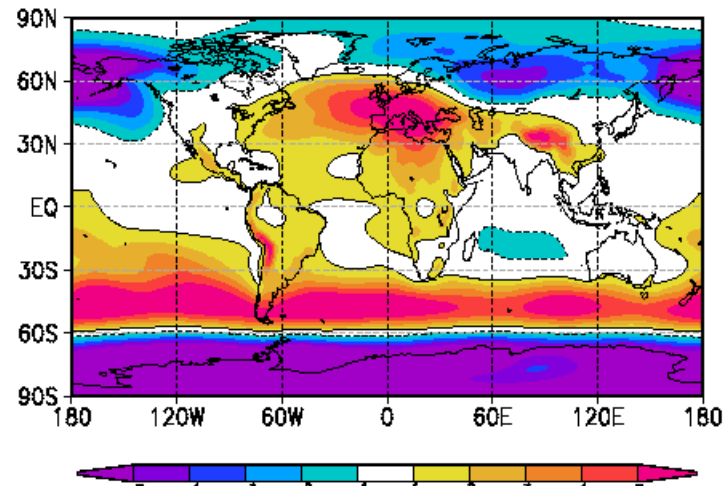
+4K
CMIP3

CFMIP simulations: DJFM cloud cover

AMIP

x4CO2

+4K UNIF

+4K CMIP3

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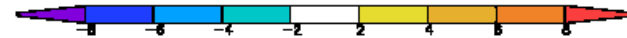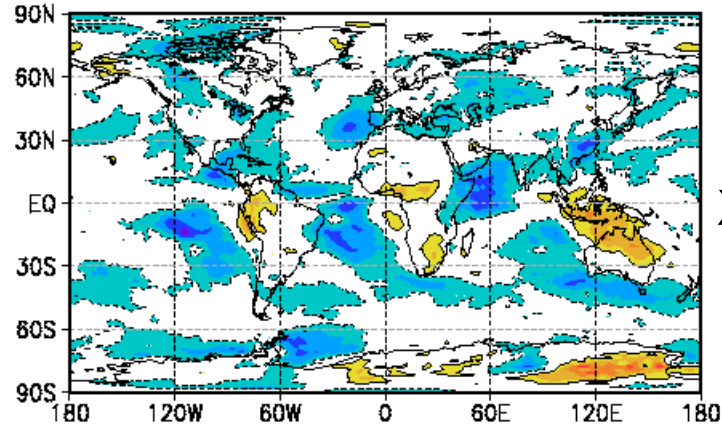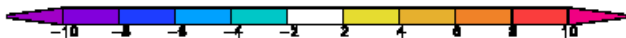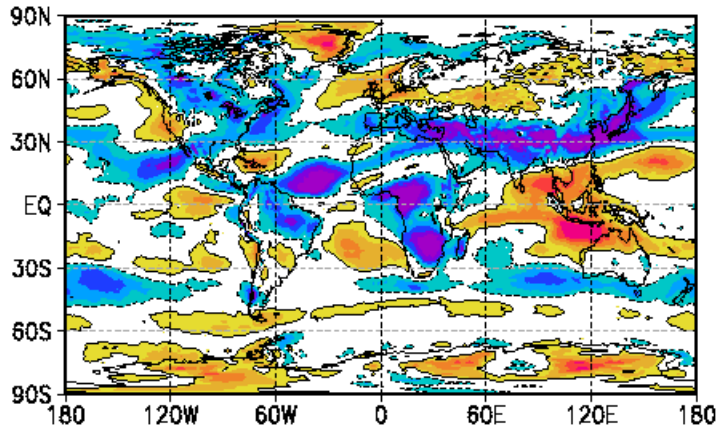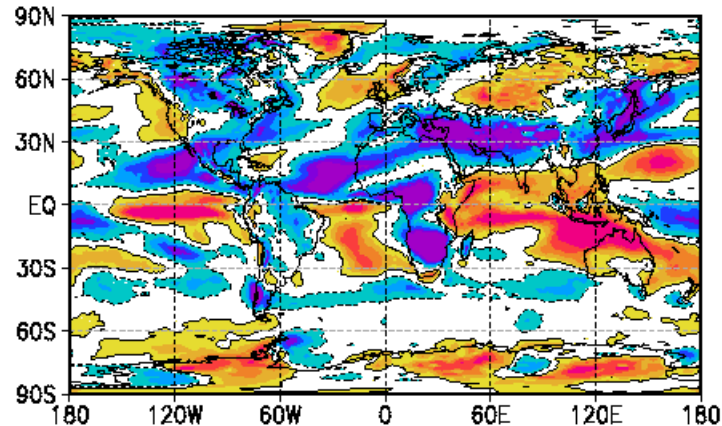
CMIP simulations

- Contact at CNRM: <u>D. Salas</u> and S. Sénési

- Current status: Just starting.

- Schedule: Core experiments completed before Feb. 2011, ensembles (5 to 10 members) before June 2011.

- NB: No COSP simulation.

- NB: No interactive carbon cycle.

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CNRM-CM5

External forcings
Aerosols
GHGs
Solar irradiance

Atmosphere
ARPEGE-Climat v5.2
T127 (1.5°), 31 levels

SURFEX Interface

Land surface
ISBA

**OASIS
v3**

24h

24h

24h

Sea Ice
GELATO v5

Ocean
NEMO v3.2 1°, 42 levels

River Routing
TRIP

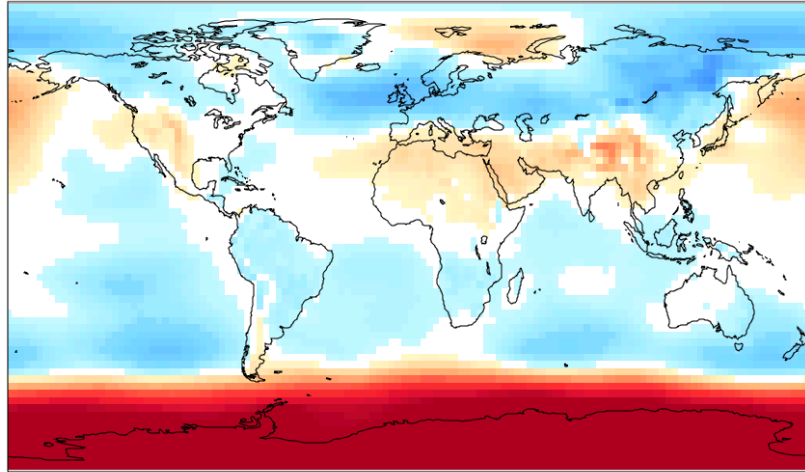24h

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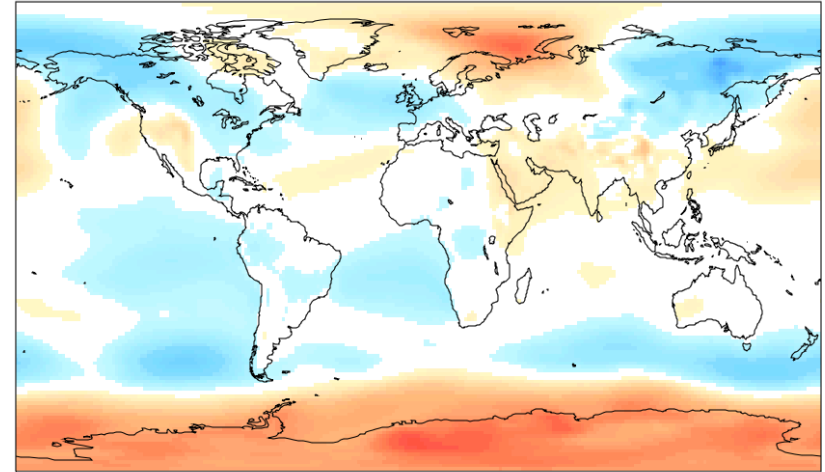# Mean sea level pressure biases vs ERA40
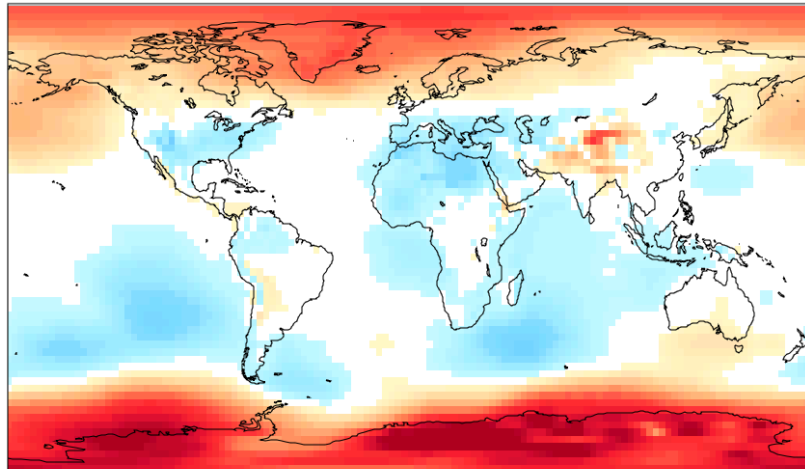

CNRM-CM3 MEAN = 0.84 RMS = 6.42

CNRM-CM5 MEAN = 0.03 RMS = 2.53
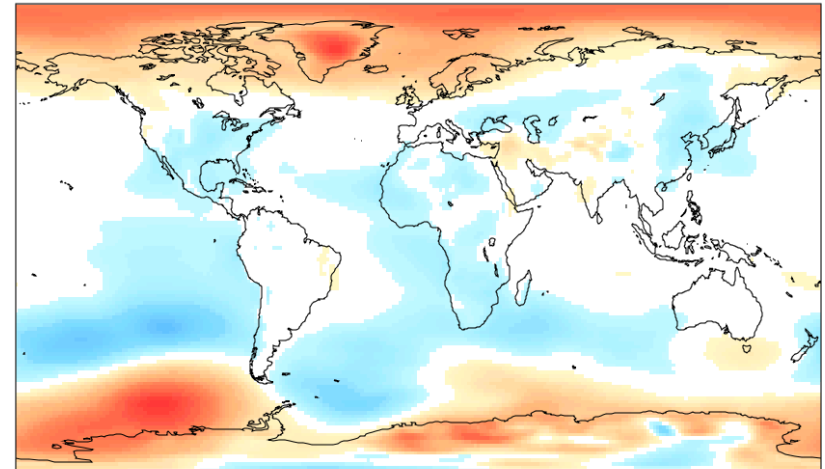
DJF

MEAN = 0.81 RMS = 4.37

MEAN = -0.09 RMS = 2.53

JJA

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Transpose-AMIP simulations

- Contact at CNRM: <u>M. Déqué</u> and F. Bouyssel
- Current status: model ready, initial situations to be built
- Schedule: before end 2011

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SCM simulations

- Contact at CNRM: <u>I. Beau</u>, E. Bazile and F. Bouyssel
- Current status: to be done
- Schedule: end 2010
  - ASTEX case
  - Composite case
  - ...

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Status of CNRM core experiments

Preindust.	Historical / Recent	CO2 forcing / adjustment	Climate feedbacks
3.1 ESM control	3.2 ESM historical	6.3 ESM Abrupt 4CO2	6.1 ESM + 1%CO2 per year
6.2a AMIP with control SST clim.	6.4 = 6.2a + aerosols in year 2000	6.2b = 6.2a + 4CO2	
CFMIP expts with COSP outputs (before Feb. 2011)	3.3 AMIP Control	6.4 AMIP + 4CO2	6.8 & 6.6 AMIP + 4K unif. & pattern
	6.7a AQUA Control	6.7b AQUA + 4CO2	6.7c AQUA + 4K unif.

Completed / To be completed before Feb. 2011

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