

Les simulations du LMDZ a trois  
resolutions differentes, pour le  
climat actuel et pour le futur

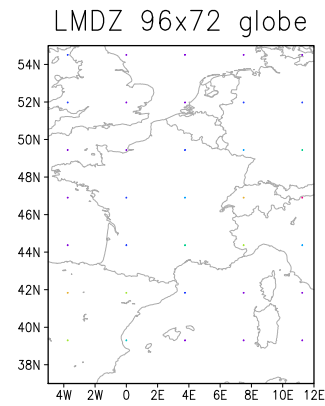
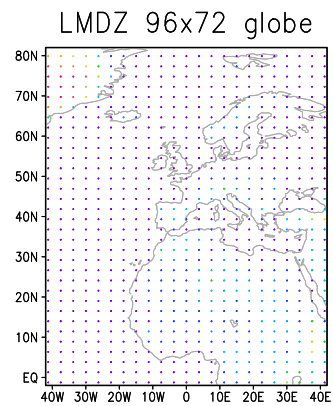
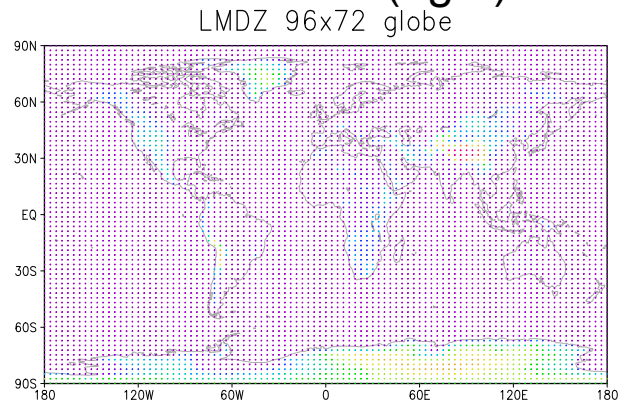
Compte-rendu de l'avancement au LMD

Laurent Li

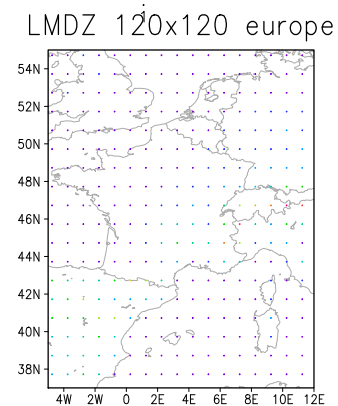
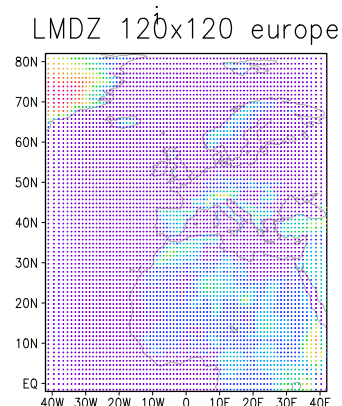
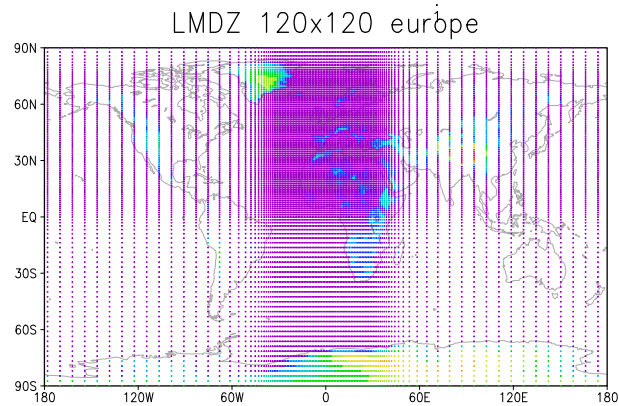
Le 15 janvier 2010

- Model used: LMDZ
- Three versions: Global / Europe / France
- Two-way nesting between Global/Europe
- One-way nesting from Europe to France

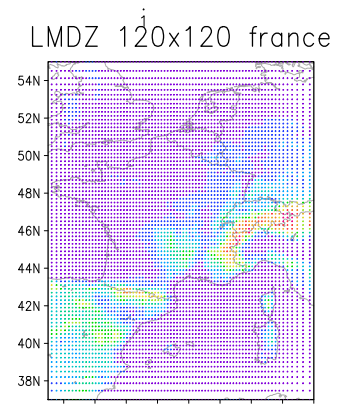
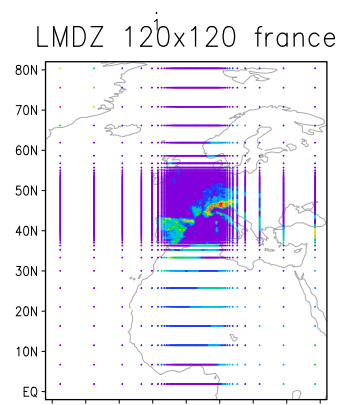
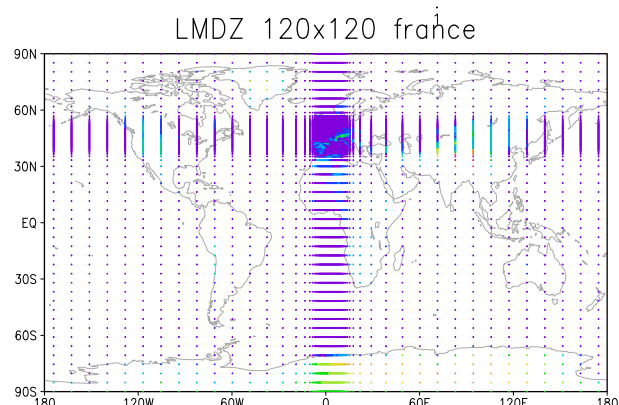
# LMDZ grid schemes for the whole earth (left), for Europe (middle) and for France (right) in three versions



**LMDZ Globe  
(300 km)**

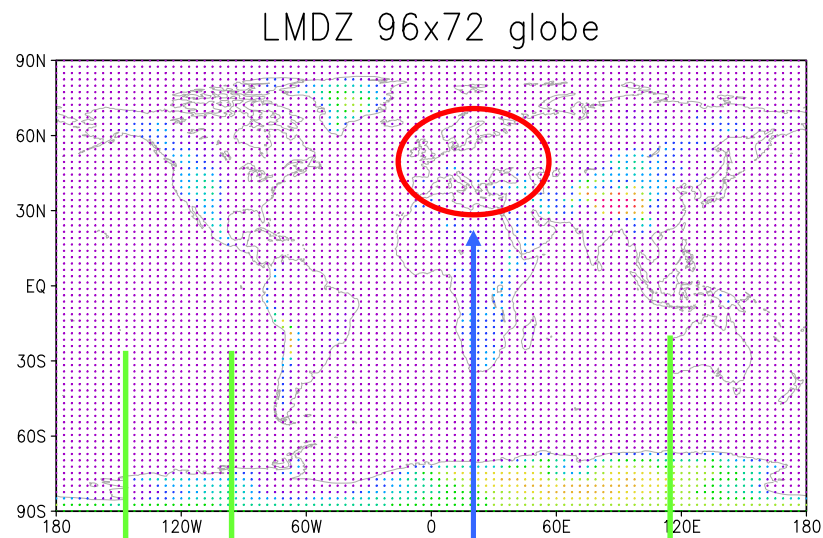


**LMDZ Europe  
(100 km)**

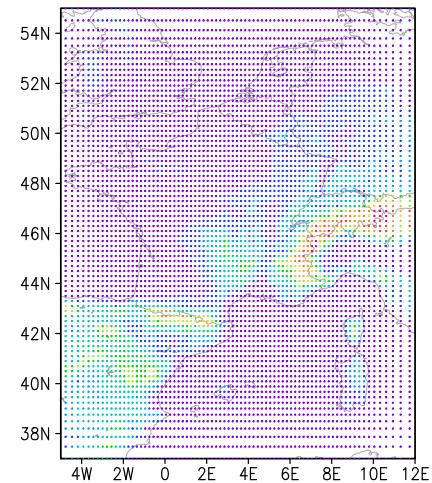


**LMDZ France  
(20 km)**

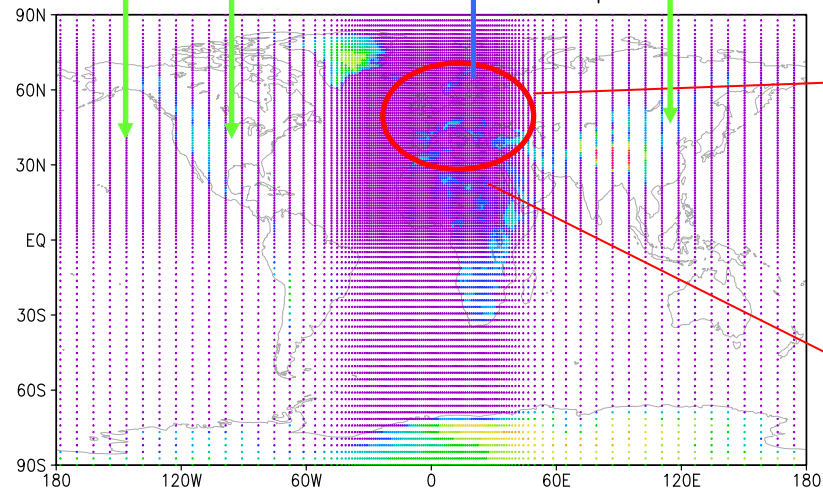
# Two-way nesting between LMDZ-regional and LMDZ-global



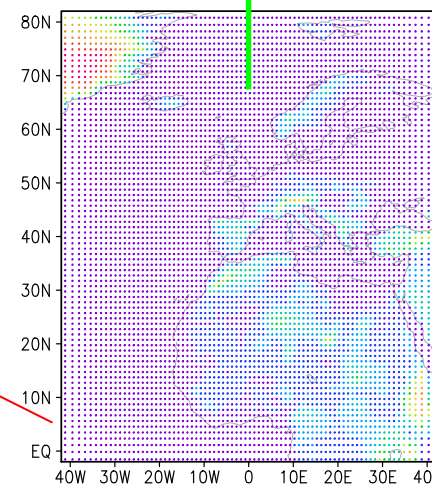
LMDZ 120x120 france



LMDZ 120x120 europe



LMDZ 120x120 europe

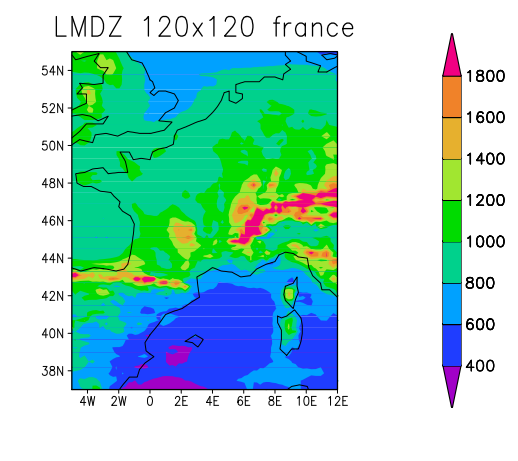
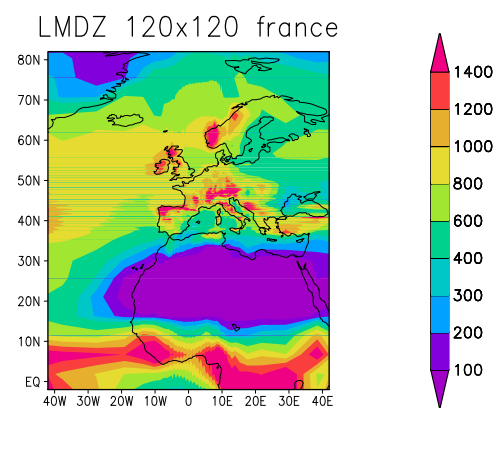
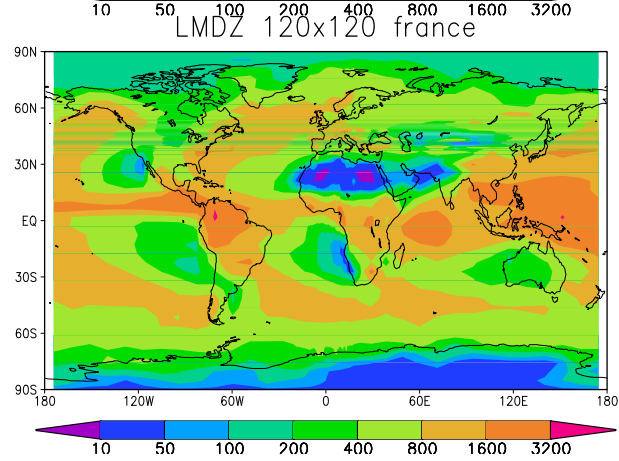
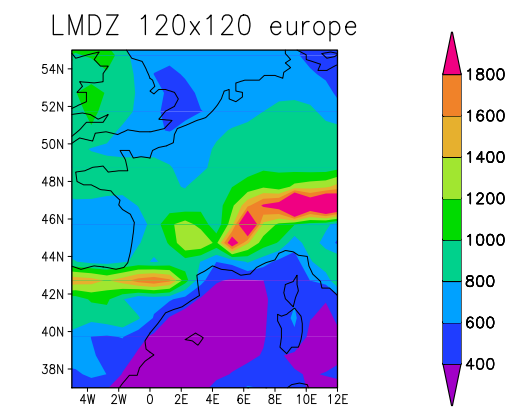
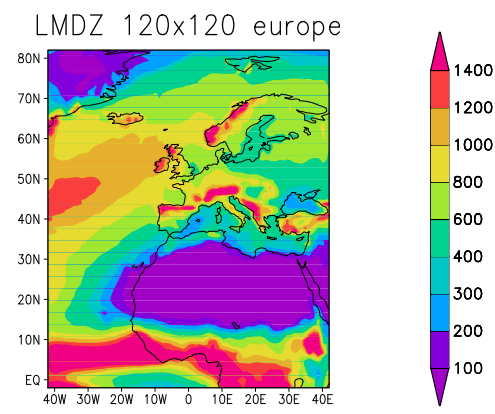
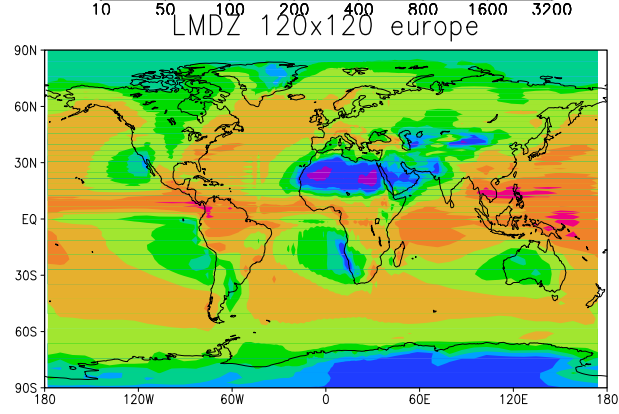
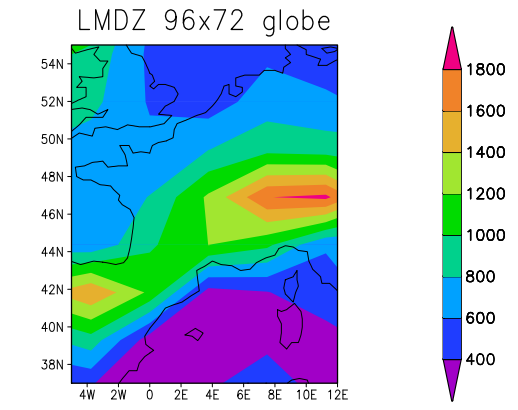
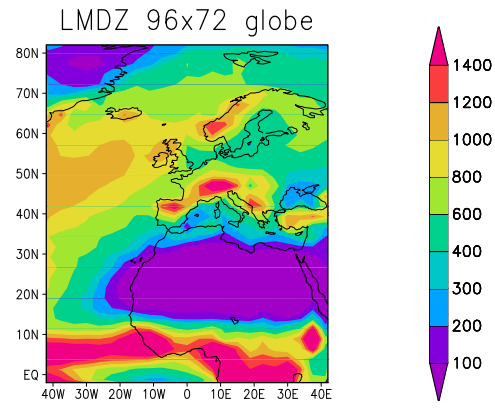
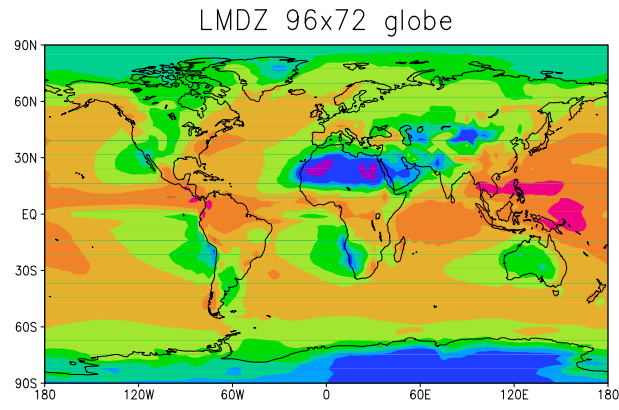


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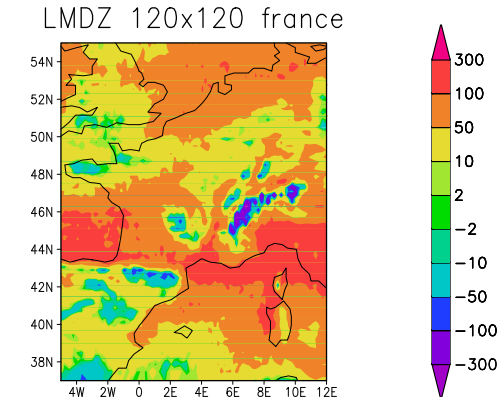
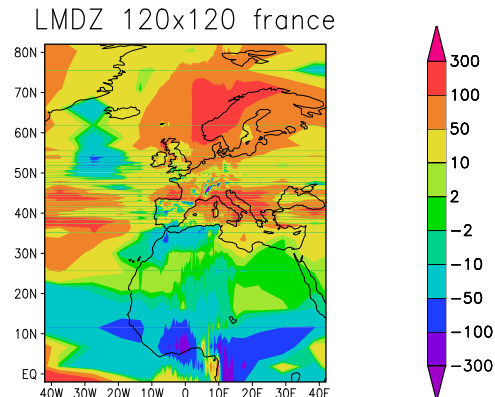
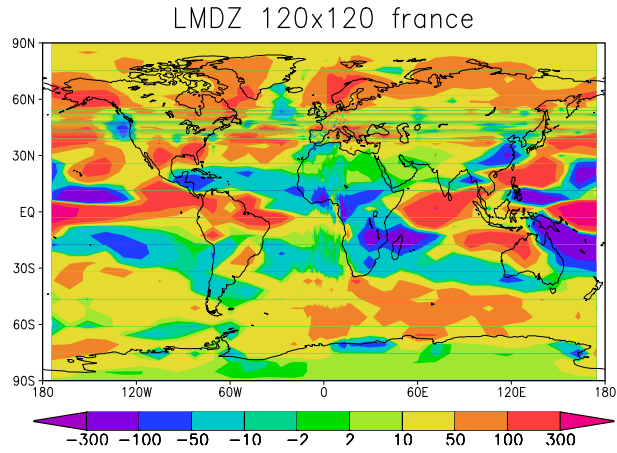
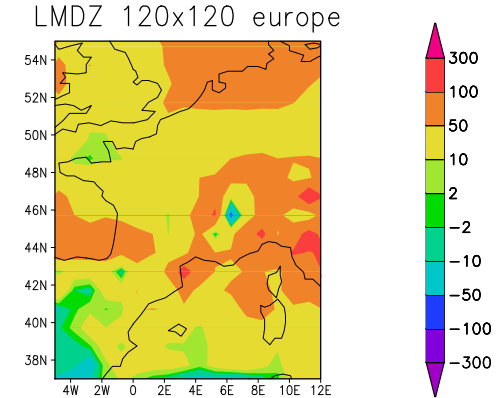
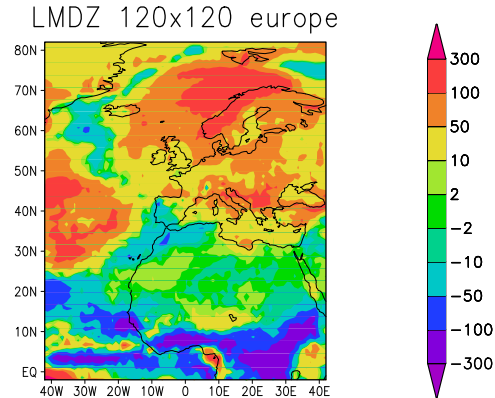
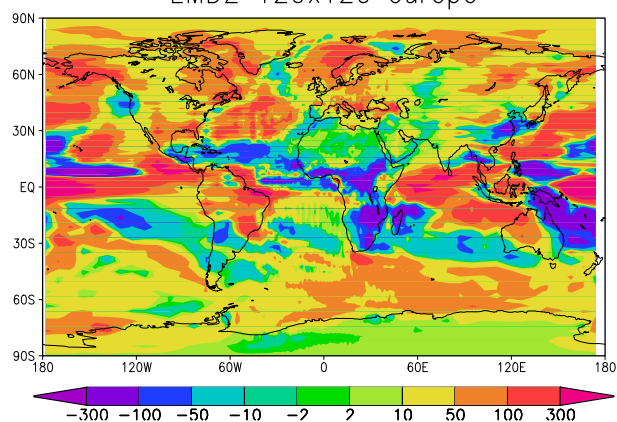
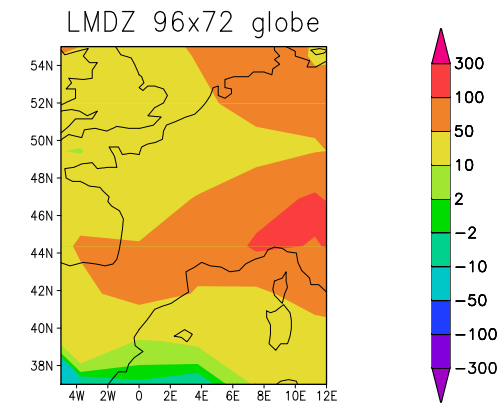
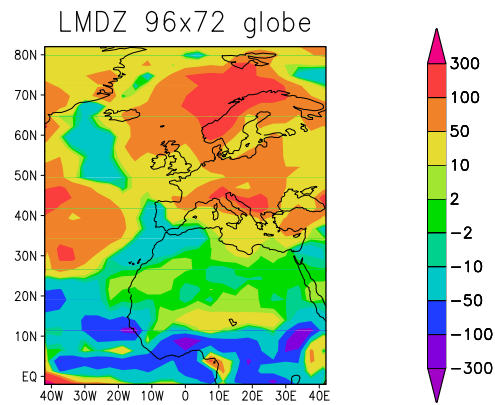
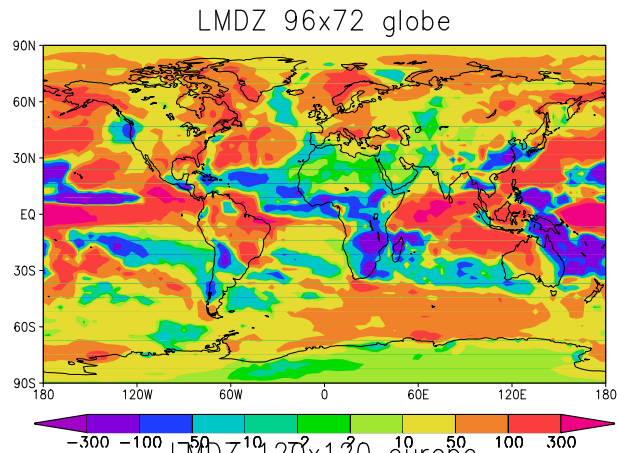
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- Present-day climat: observed SST, sea-ice and GHG for 1961/1990.
- Future projection: differential SST, sea-ice and GHG (2021/2050 – 1961/1990) from IPSL-CM4 under scenario A1B.
- Simulation length: 30 x 1 year (22 for France, to be extended to 30).
- Outputs: monthly, daily and 12xdaily

# Annual-mean precipitation (mm) in three LMDZ models: Globe (top), Europe (middle) and France (bottom)



# Annual-mean precipitation change (mm) in 3 LMDZ: Globe (top), Europe (middle) and France (bottom)



# Annual-mean T2m change (°C) in 3 LMDZ: Globe (top), Europe (middle) and France (bottom)

