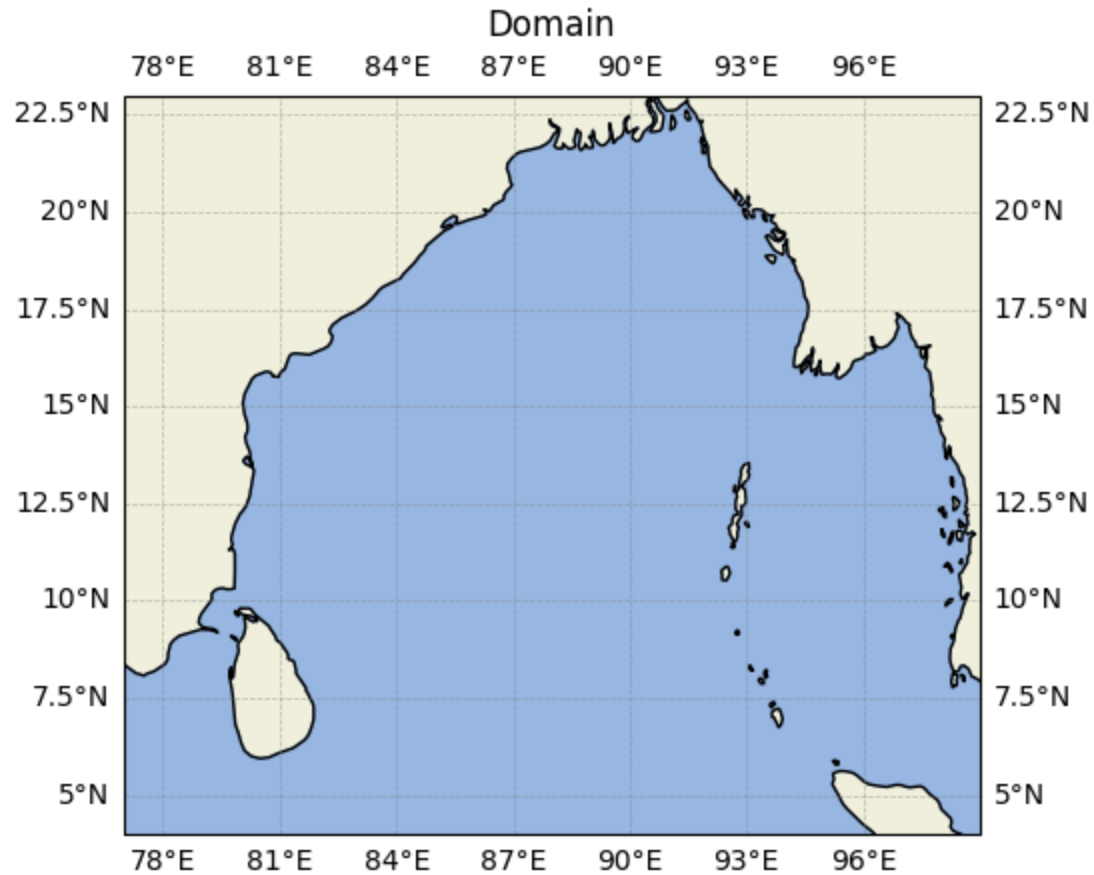


Model overview

- **Geophysical Fluid Dynamics Laboratory (GFDL) MOM6**
- publicly available in the NOAA-GFDL public domain. (GIT)
- Modular ocean model version 6 (MOM6) is a hydrostatic, primitive equation, free surface, Boussinesq ocean model with **ALE vertical grid remapping** to use any kind of vertical coordinates and generalized orthogonal horizontal coordinates.
- Equations governing ocean dynamics and thermodynamics are discretized on a fixed eulerian grid, with **Arkawa C grid** defining the horizontal arrangement of model variables



- 0.036 degrees resolution
- 4N , 25N and 77E to 99E
- 1-min ETOPO1
- 41 levels vertical resolution (HYCOM)
- max depth of 5000m

Model Build

Grid system

Vgrid Hgrid Topo

FRE_NC tools

Initial conditions

HYCOM model output
as initial conditions

**41 level HYCOM
single time 2012**

Forcing

ERA5 reanalysis JRA55

- 2m temp
- u10,v10
- precipitation
- runoff
- RH
- SLP

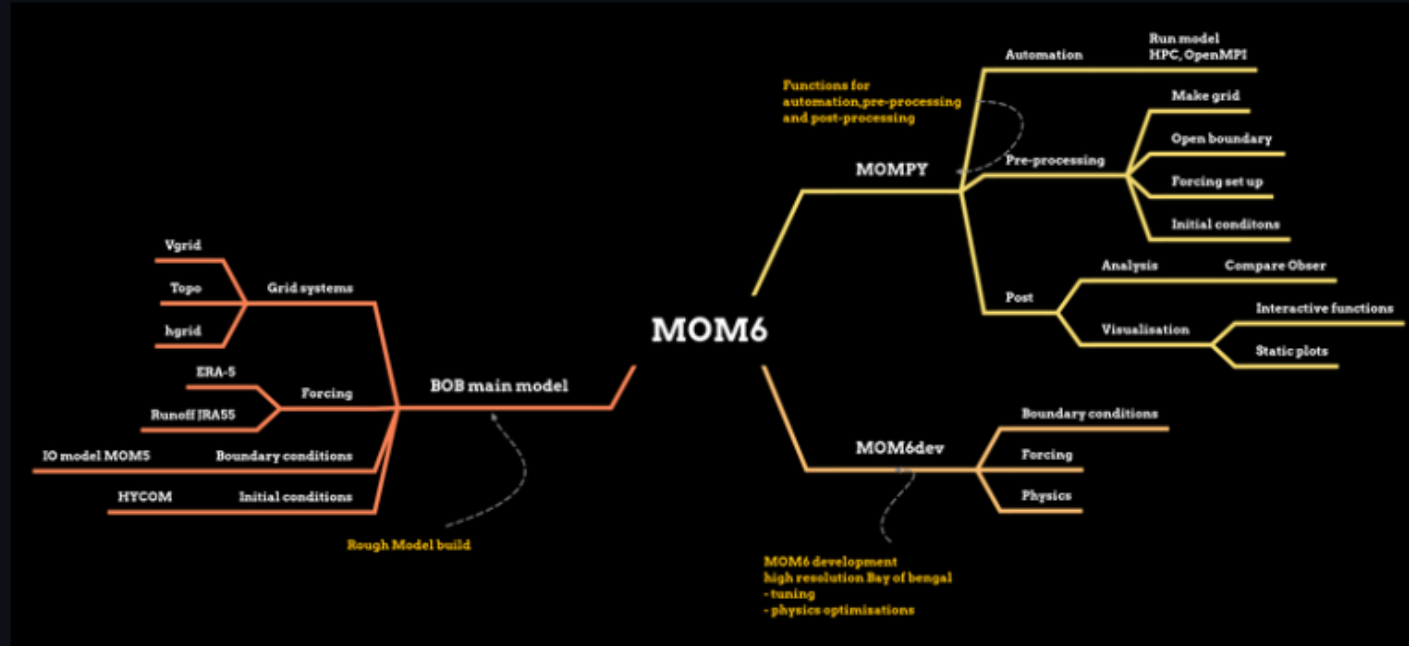
boundary conditions

Rigid boundary conditions Open boundary conditions

**Fake rigid boundary
- edited topography**

**open boundary conditions
- MOM5 Indian ocean model
output**


README.md




To do

- ☐ - High-res simulations (with 3 hourly forcing)
- ☒ - Create forcing datasets

Contributors 3

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Languages

● HTML 97.5% ● Jupyter Notebook 2.5%