

Run 2 - 2012-2013(2 year)

Domain setup

1. Closed boundaries. Fake rigid wall is setup in all open boundaries
2. All the mosaic files are made using FRE-NC tools

Initial conditions

1. HYCOM 41 level initial conditions are used
2. 2012-01-01-00:00:00

Run parameters

1. 2 year (2012 and 2013) and 1st year is considered as warm up period (720 days in total)
2. Simulation took approx 12 hours to complete

Boundary conditions

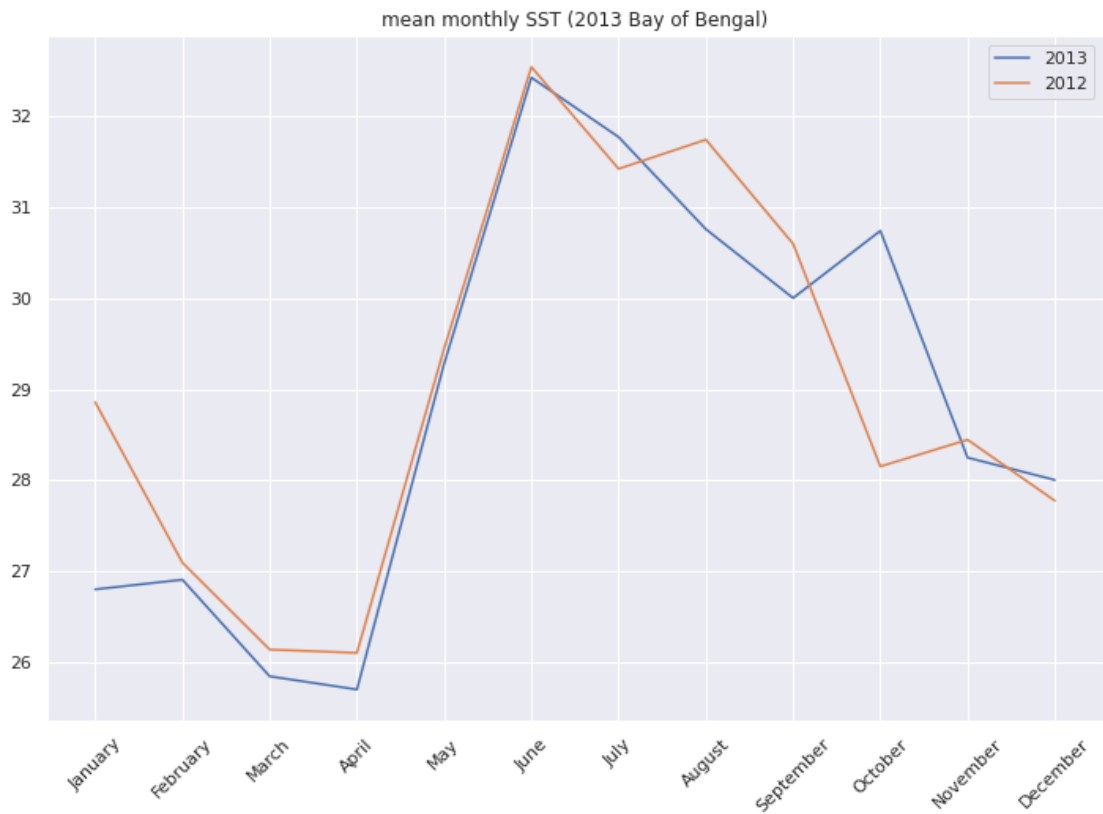
1. Since all 4 walls are closed , simulation will run in closed boundary condition
2. Datasets from ERA5-reanalysis
 1. wind ,U10 and V10
 2. temp , T at 2 meters
 3. specific humidity
 4. sea level pressure
 5. precipitation dataset prepared (but not included in this simulation)

All the units, and attributes in match with the MOM6 (MOM5, since MOM6 does not have any official guideline for creating forcing datasets) requirements

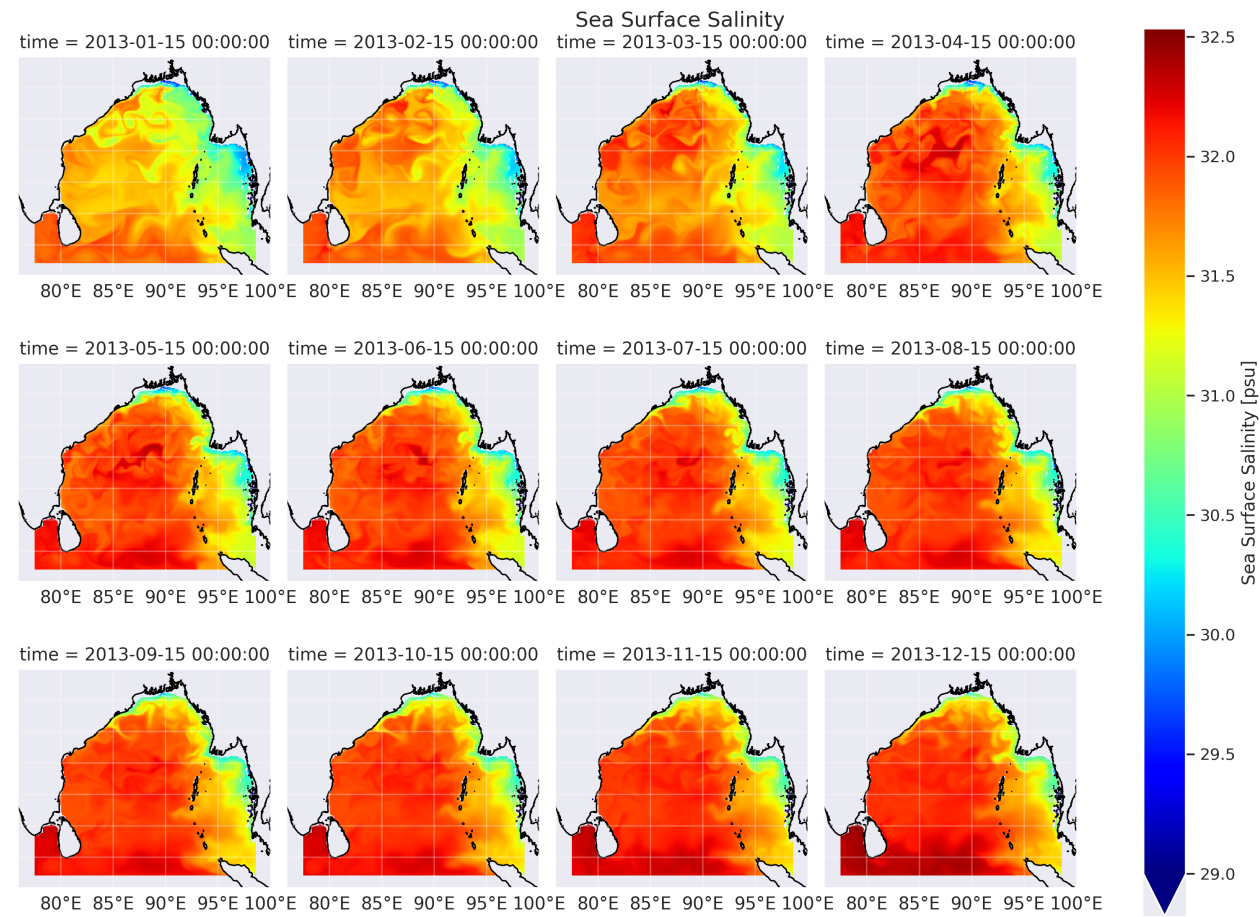
Simulation outputs

SST mean (area average)

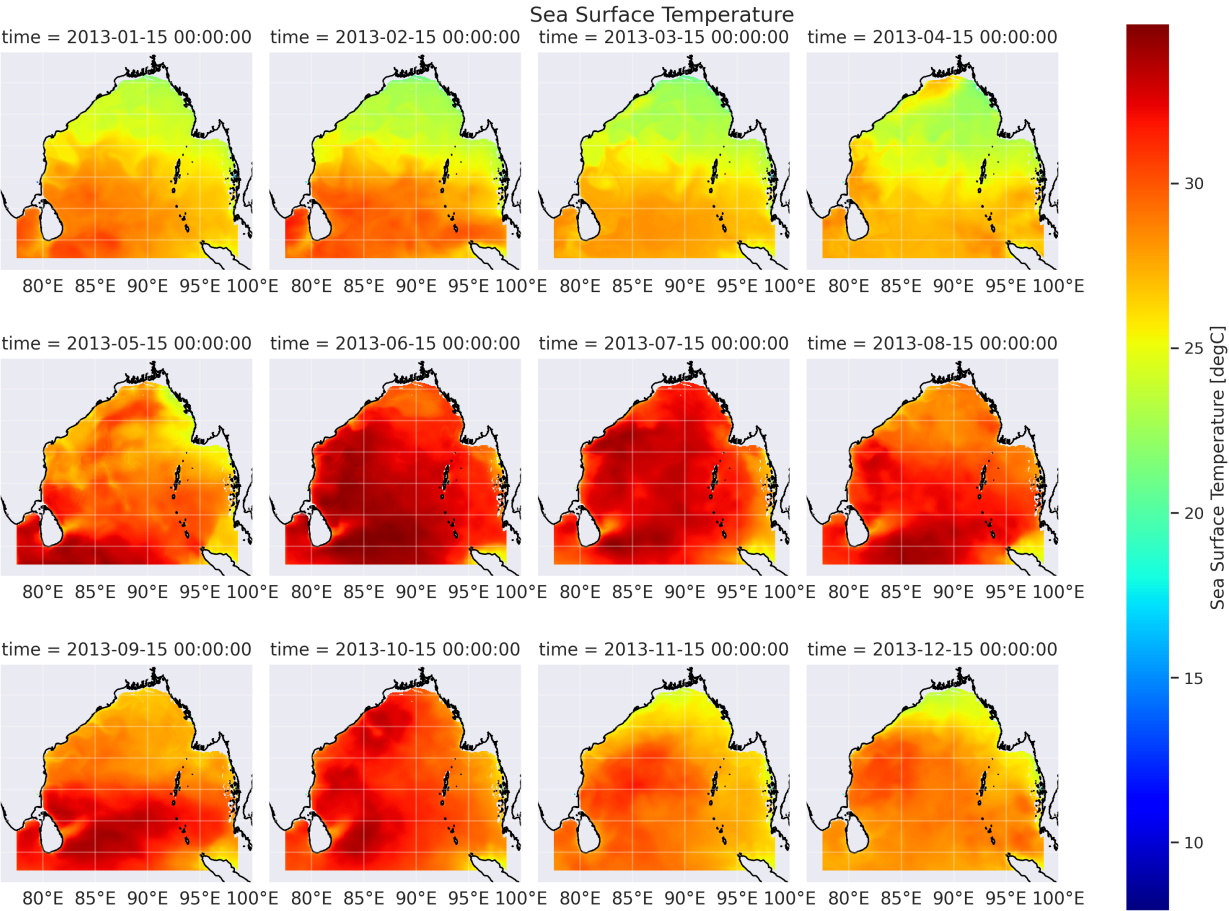
- Area average on 15th of every month (not monthly average)



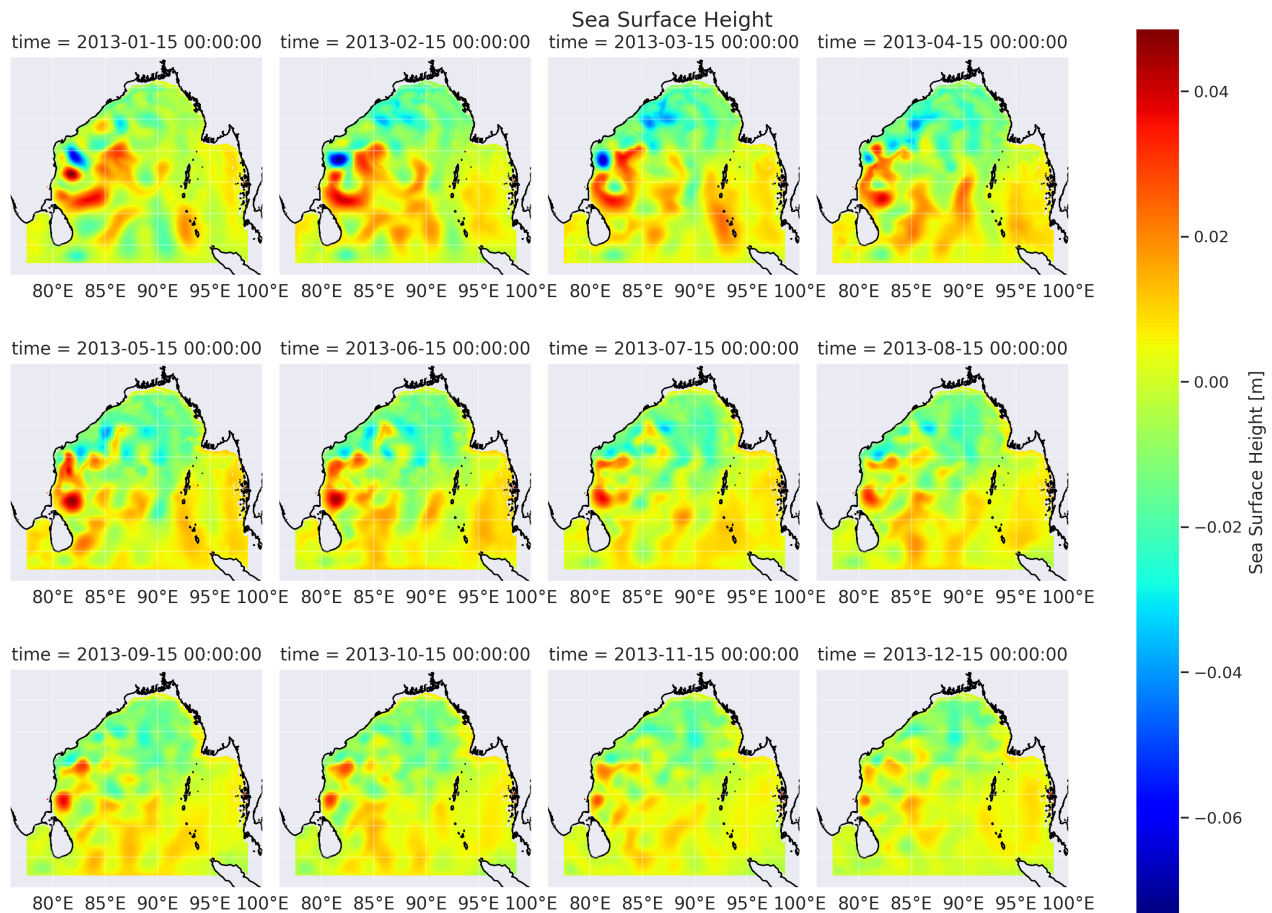
Salinity



Temperature



Sea surface height

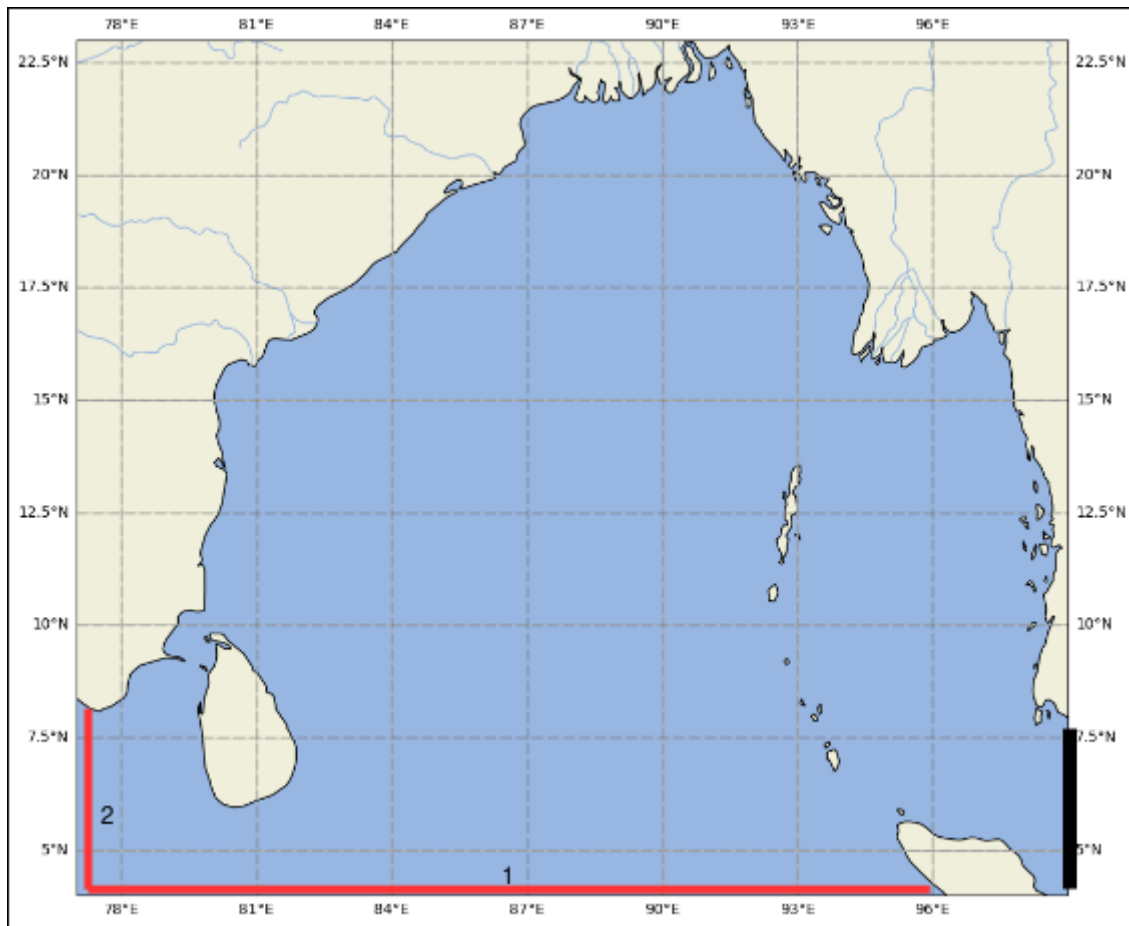


Times based interactive plots are also attached with this pdf

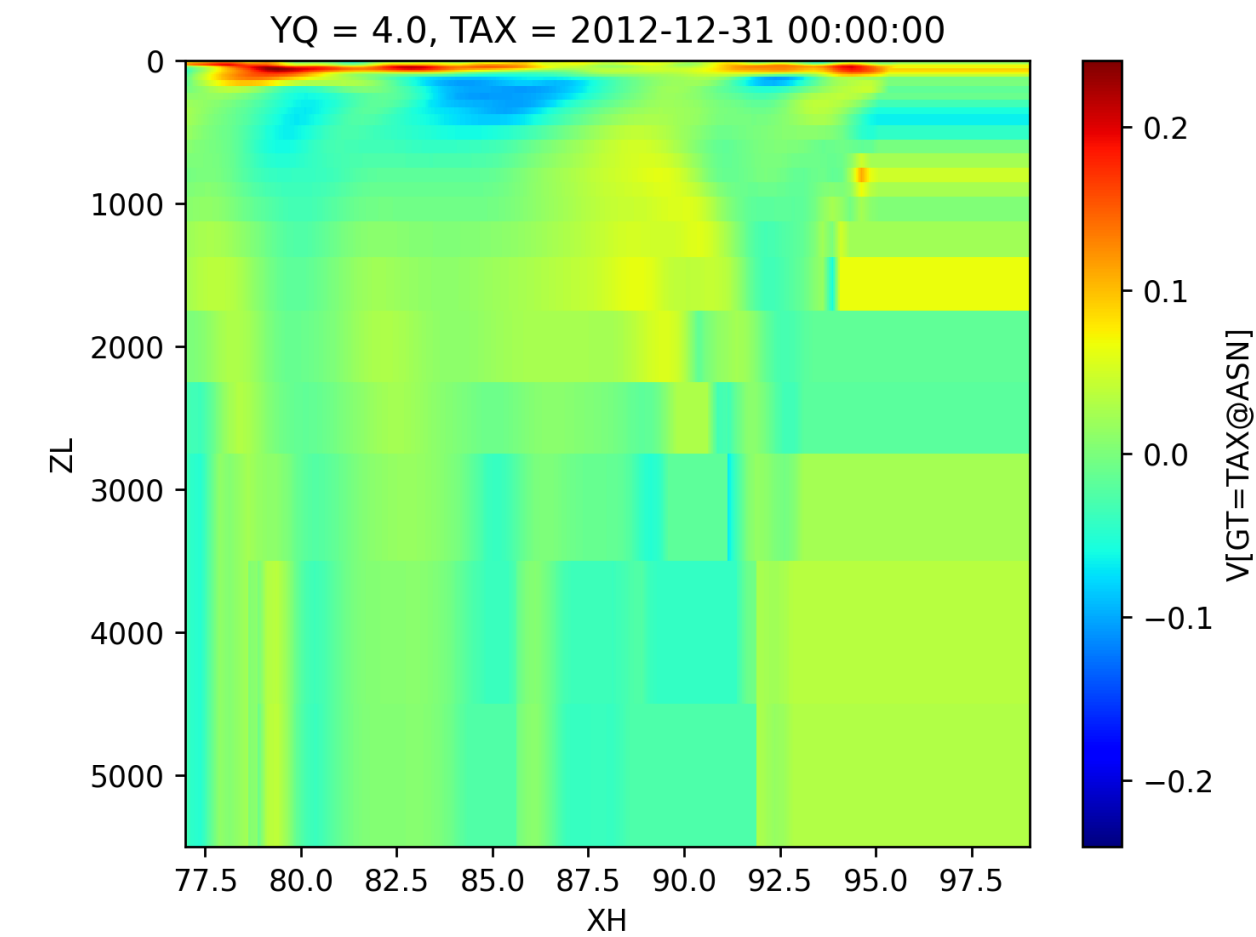
Open boundary condition Simulation

- The model is run on same duration
- The U , V and tracers from North Indian Ocean simulation (MOM5)
- Interploated to HYCOM 41 level
- Edges are regridded to our domain

Boundary Condition Setup



Southern boundary



Western boundary

