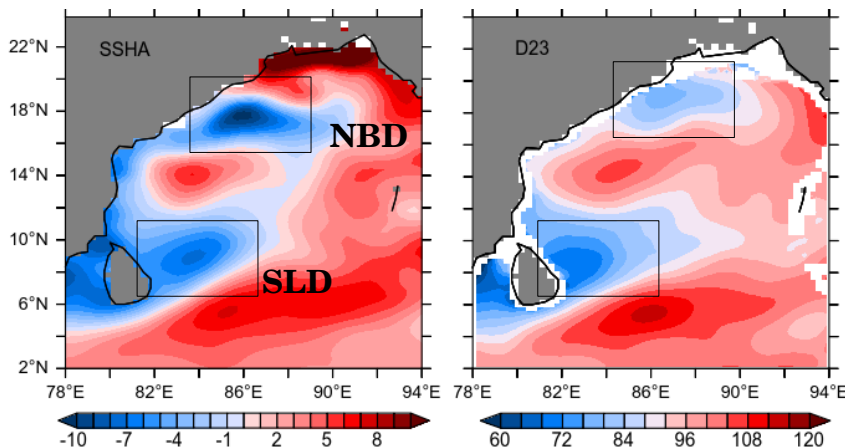
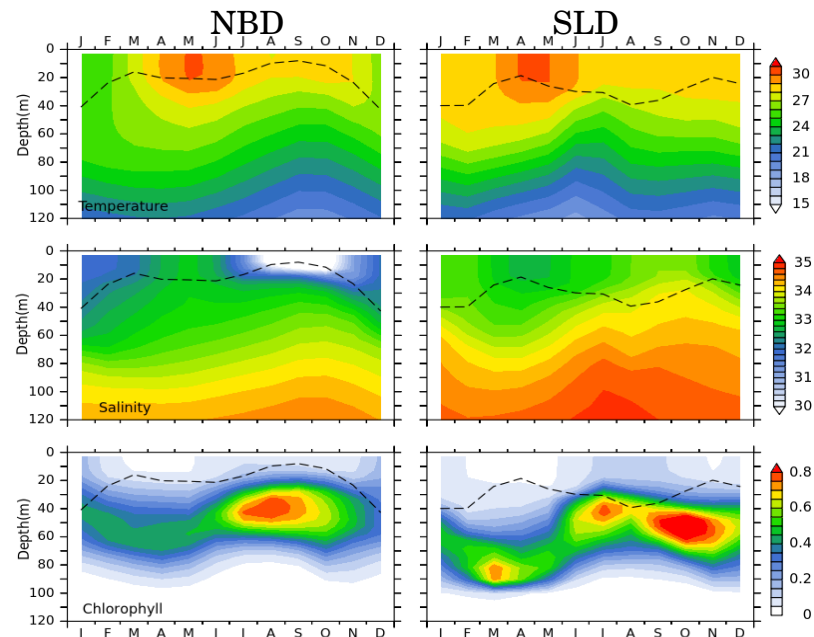




Map showing sea surface height anomaly and thermocline depth averaged for JJAS months

- Climatological observations shows two thermocline domes in the BoB.
- The first one is in the north and is referred as the Northern Bay of Bengal dome (NBD) which is studied for the first time and the second one is referred to as Sri Lankan dome (SLD).
- This study compares the two domes using the climatological observations and model simulations.

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Map showing the vertical distribution of temperature, salinity and chlorophyll averaged over two dome regions from model simulations.

- Shallow MLD and high stratification in NBD compared to SLD.
- Deepening of MLD is observed in the SLD region. Thus, nutrients entrain into the ML, thereby increasing the surface chla.
- Shallow MLD and high stratification in NBD region inhibit entrainment of nutrients into surface layers.