

Exercises series 1
Due 28 April 2016

1. Distribution of mass

- (a) Plot and discuss the distribution of surface pressure¹ as climatological summer-, winter- and annual means!
- (b) Do the same for the 200 hPa geopotential²!

2. Distribution of temperature

- (a) Do the same for the surface temperature³, and analyse the amplitude of the seasonal cycle!
- (b) Analyse the zonal mean climatological vertical distribution of temperature⁴!
- (c) Analyse the zonal mean vertical distribution of the meridional temperature gradients!

3. Ocean surface

Plot and discuss the mean distributions of sea salinity and height⁵!

4. Deep ocean

Plot and discuss the vertical-meridional distribution of the zonal temporal mean potential temperature and zonal temporal mean salinity!

1 File /home_local/quaas/data/ERA_ps_mean.nc

2 File /home_local/quaas/data/ERA_Z_mean.nc

3 File /home_local/quaas/data/ERA_Ts_mean.nc

4 File /home_local/quaas/data/ERA_T_zonmean_mean.nc

5 Use the files /home_local/quaas/data/gecco_temp.nc, gecco_salt.nc and gecco_zeta.nc!