



Figure S1: A comparison between the mean Atlantic overturning streamfunction in density space at OSNAP for ECCOv4 (orange) and OSNAP observations (blue). The overturning streamfunction in density space is also shown at 45°N (green) and the Greenland-Scotland Ridge (red). The convergence of the overturning between 45°N (green) and the Greenland-Scotland Ridge is shown in Figure 2a.