



Fig. S4 : Monthly evolution of (a) T_{CANT}° (magenta) as well as the diapycnal (blue), isopycnal (red), net (green) and total (black) transport of C_{ANT} (kmol s^{-1}), (b) the maximal intensity of MOC ($\text{MOC}\sigma$, Sv), and (c) the C_{ANT} concentration in its upper (triangles) and the lower (inverse triangles) branches ($\mu\text{mol kg}^{-1}$) at the Greenland-Portugal OVIDE section computed offline from monthly averaged model output (continuous line) and compared to estimations derived from the OVIDE data set (dotted line) over the period 2002-2010. Colored dots symbolize the month June. The grey dashed line of panel (a) represents C_{ANT} transport across the OVIDE section computed in online by the model (includes advective, diffusive and eddies contributions).