

**S1.** Scatter plots of dissolved cobalt concentrations (DCo) along the GEOTRACES-A02 section below 4 kdb (a; dark squares) and at three potential density anomaly:  $\sigma_0 = 27.65 \pm 0.1$   $\text{kg.m}^{-3}$  (b; blue diamonds),  $\sigma_0 = 27.85 \pm 0.02$   $\text{kg.m}^{-3}$  (b; red squares) and  $\sigma_0 = 27.88 \pm 0.015$   $\text{kg.m}^{-3}$  (b; green triangles).

