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Corrigendum to

"A new method for forming approximately neutral surfaces" published in Ocean Sci., 5, 155–172, 2009

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In the article, "A new method for forming approximately neutral surfaces" by Andreas Klocker, Trevor J. McDougall and D. R. Jackett, which appeared in June 2009 in Ocean Sci., 5, 155–172, 2009, several mistakes occurred during the publication process. The corrections are listed below.

– On page 157, immediately before Eq. (6) the words "in a steady state" are missing, the paragraph should read:

  The vertical velocity e^a through an approximately neutral surface, γ^a, can be written as (in a steady state)

  $$e^a = e + e^{hel}, \tag{6}$$

  where e is the diapycnal transport due to cabbeling, thermobaricity, double diffusion and small-scale turbulent mixing, and e^{hel} is the vertical velocity through the approximately neutral surface due to the helical shape of neutral trajectories (see Klocker and McDougall (2009) for an estimate of e^{hel}). The diapycnal velocity e^{hel} transports mass, salinity, conservative temperature and all other tracers. This diapycnal transport, e^{hel}, exists without requiring the dissipation of kinetic energy.

– The caption for Fig. 2 on page 157 should read:

  The blue surface shows the initial approximately neutral surface (γ^a-surface) on which the density pertubation field, Φ', is calculated. This density pertubation field is converted into a depth change, δz, which is then applied to the initial surface to get the new approximately neutral surface (the green surface).

– Equation (15) on page 159 should read:

  $$\Phi' = (A^T \cdot A)^{-1}(A^T \cdot \boldsymbol{\epsilon}^{\mathrm{init}}). \tag{15}$$

– The reference for McDougall (2003) should read:

  McDougall, T. J.: Potential Enthalpy: A Conservative Oceanic Variable for Evaluating Heat Content and Heat Fluxes, J. Phys. Oceanogr., 33, 945–963, 2003.

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