Correction to "A monitoring design for the Atlantic meridional overturning circulation"

J. J. Hirschi, J. Baehr, J. Marotzke, J. Stark, S. A. Cunningham, and J.-O. Beismann

[1] In the paper "A monitoring design for the Atlantic meridional overturning circulation" by J. Hirschi, J. Baehr, J. Marotzke, J. Stark, S. Cunningham and J.-O. Beismann the results shown in the panels c, f and g of Figure 2 for the FLAME model are incorrect. The offset seen between the meridional overturning circulation (MOC) and its reconstruction is mainly due to a missing constant in the calculation of the MOC. The corrected Figure 2 appears below.
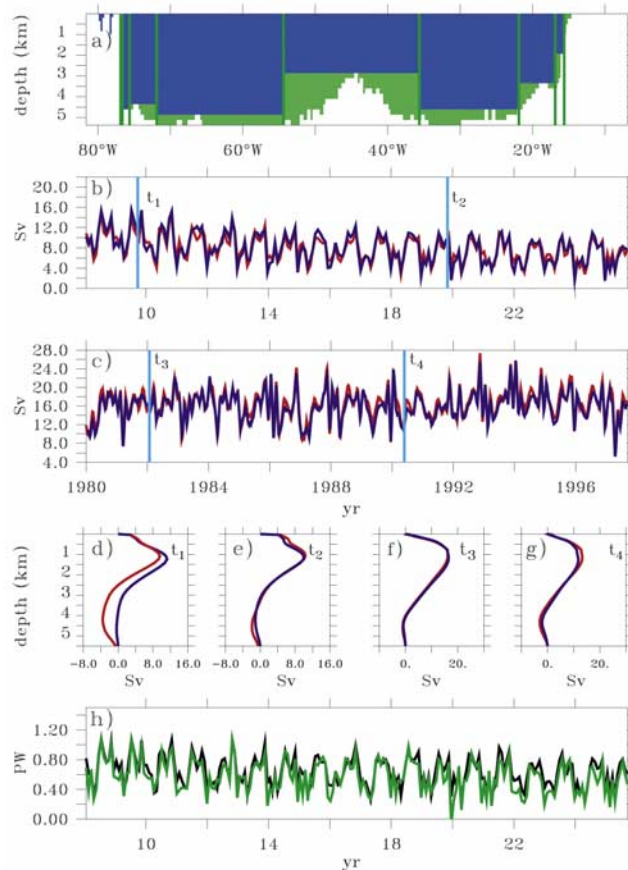
Figure 2. Transport reconstructions based on 9 vertical profiles of density and Ekman contributions. **a**, Distribution of vertical density profiles in OCCAM (vertical green lines). The blue shading indicates where the vertical profiles provide an estimate of the velocity shear. In the green areas (bottom triangles) the vertical shear cannot be estimated from adjacent profiles. **b** and **c**, Timeseries (18 years) for reconstructed maximum meridional overturning (blue) and maximum overturning using the full model velocities (red) at latitudes of 26.5°N (OCCAM, panel b) and 26°N (FLAME, panel c). **d**−**g**, Vertical flow patterns for the MOC (red) and its estimate (blue). Snapshots are shown at times t_1, t_2, t_3, and t_4 for OCCAM (panels d, e) and FLAME (panels f, g). **h**, Net meridional heat transport at 26.5°N in OCCAM (black) and heat transport calculated from estimated mass transport (green).