

Figure S1. Daily average FESOM realizations of the sections crossing the east Greenland shelfbreak for the year 2009. (a) Potential temperature and (b) velocity. Thin contours show potential density. The bold contour is the 27.8 kg m^{-3} isopycnal; above the 26, 27 and 27.6 kg m^{-3} isopycnals are shown, and below the density levels increase in 0.05 kg m^{-3} steps up to 28 kg m^{-3} . Please note that the y-axis changes scale at 500 m depth (dashed line) and the non-linear colourbars. The white contours in (a) show the 2° C and 0° C isotherms. The green contours in (b) show the 0 m s^{-1} isotach. Positive velocities are northward, negative velocities are southward. Section distance is 0 km at the east Greenland shelfbreak. Please open this pdf document with Adobe Reader to display the animation.

Figure S2. Daily average FESOM realizations of the section at 0° EW for the year 2009. (a) Potential temperature and (b) velocity. Thin contours show potential density. The bold contour is the 27.8 kg m^{-3} isopycnal; above the 26, 27 and 27.6 kg m^{-3} isopycnals are shown, and below the density levels increase in 0.05 kg m^{-3} steps up to 28 kg m^{-3} . Please note that the y-axis changes scale at 500 m depth (dashed line) and the non-linear colourbars. The white contours in (a) show the 2° C and 0° C isotherms. The green contours in (b) show the 0 m s^{-1} isotach. Positive velocities are eastward, negative velocities are westward. Please open this pdf document with Adobe Reader to display the animation.