

File Name: Supplementary Information

Description: Supplementary Figures, Supplementary Table, Supplementary Notes and Supplementary References

File Name: Supplementary Movie 1

Description: Deep water upwelling pathways from the Atlantic Ocean. Cumulative modeled (CM2.6) particle pathways for the first 50 years of the experiment from the Atlantic Ocean, with particles released in the depth range 1000-3500 m along 30°S. At each timestep, colored boxes mark 1° latitude x 1° longitude x 100 m depth grid boxes visited by more than 2.25 % of the total upwelling particle-transport from release at 30°S to the current timestep. Boxes are colored by depth.

File Name: Supplementary Movie 2

Description: Deep water upwelling pathways from the Indian Ocean. Cumulative modeled (CM2.6) particle pathways for the first 50 years of the experiment from the Indian Ocean, with particles released in the depth range 1000-3500 m along 30°S. At each timestep, colored boxes mark 1° latitude x 1° longitude x 100 m depth grid boxes visited by more than 2.25 % of the total upwelling particle-transport from release at 30°S to the current timestep. Boxes are colored by depth.

File Name: Supplementary Movie 3

Description: Deep water upwelling pathways from the Pacific Ocean. Cumulative modeled (CM2.6) particle pathways for the first 50 years of the experiment from the Pacific Ocean, with particles released in the depth range 1000-3500 m along 30°S. At each timestep, colored boxes mark 1° latitude x 1° longitude x 100 m depth grid boxes visited by more than 2.25 % of the total upwelling particle-transport from release at 30°S to the current timestep. Boxes are colored by depth.

File Name: Peer Review File

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