Citation:

Schmid, C., 2014: Mean vertical and horizontal structure of the subtropical circulation in the South Atlantic from three-dimensional observed velocity fields. *Deep Sea Research I*, 91 (9), 50-71, doi: 10.1016/j.dsr.2014.04.015.

Justification text:

The paper derives a monthly time series of the three-dimensional field of the horizontal velocity in the upper 2000 m of the South Atlantic and uses it to improve our understanding of the circulation. It is shown that, on average, the zonal currents in the subtropical gyre weaken from west to east, which can be explained by northward transports in the interior of the gyre. In addition, the latitude dependence of the eastern and western boundary currents are quantified. The results of this paper fit well into the NOAA mission, which is the systematic study of the structure and behavior of the ocean and includes integration of research and analysis. They help achieve the objective of improving scientific understanding of the changing climate system by using sustained ocean observations to study the circulation in the upper limb of the Atlantic Meridional Overturning Circulation.