Multidecadal variability of the subarctic gyre of the North Atlantic

Sydney Levitus
World Data Center for Oceanography, Silver Spring, NODC/NOAA, E/OC5, Silver Spring, United States
(sydney.levitus@noaa.gov, +1-301-713-3303)

We document multidecadal variability of the subarctic gyre of the North Atlantic Ocean using temperature, salinity, and oxygen data (WOD) for 1955-2009. We also examine density variability computed from individual coincident pairs of temperature and salinity profiles. The observed variability occurs through depths of at least 3000 m. Our work confirms and extends earlier work we have published. Our record is much too short to conclude that the observed variability is part of an oscillation. However oscillations with multidecadal time scales have been found to occur in AOGCM simulations.