



## **WOCE-Argo Global Hydrographic Climatology**

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A monthly full-depth one-fourth degree spatial resolution global ocean climatology (WAGHC) is presented. Quality controlled hydrographic data from the World Ocean Database 2013 as of January 2017 provide the data basis comprising 4,7 million temperature and salinity profiles. Two versions of the climatology are available: 1) the isobaric climatology with the optimal interpolation performed on depth levels and 2) the isopycnal climatology with the interpolation on the local density surfaces. Apart from the climatological temperature and salinity values the relative interpolation error, parameter standard deviations, data sparseness, mean year, and the depth of the upper mixed layer are available. The climatology is compared to the NOAA WOA13 climatology, to reveal and explain the overall and regional differences on depth levels and in temperature-salinity space. The quality-controlled temperature data along with the new climatology as the reference are used to produce the ocean heat content anomaly time series between 1925 and 2016 for 0-300 and 0-700 meter layers.