



The Permanent Service for Mean Sea Level (PSMSL) in its 80th Year

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The PSMSL was established as a “Permanent Service” of the International Council for Science in 1958, but in practice was a continuation of the Mean Sea Level Committee which had been set up at the Lisbon International Union of Geodesy and Geophysics (IUGG) conference in 1933. Now in its 80th year, the PSMSL continues to be the internationally recognised databank for long term sea level change information from tide gauge records. Here, we present a review of the past, present and planned future activities of the PSMSL.

The PSMSL dataset consists of over 2100 mean sea level records from across the globe, the longest of which date back to the start of the 19th century. Where possible, all data in a series are provided to a common benchmark-controlled datum, thus providing a record suitable for use in time series analysis. The PSMSL dataset is freely available for all to use, and is accessible through the PSMSL website (www.psmsl.org). We review the state of the PSMSL dataset, describing the historical evolution of the catalogue and highlighting some of the geographic regions where data coverage remains poor.

The PSMSL also provides technical and scientific outreach information to coastal stakeholders and the general public. It provides training and support to tide gauge operators across the globe. It plays an important role in the operation of the Intergovernmental Oceanographic Commission’s Global Sea Level Observing System (GLOSS) and has participated in each of the Intergovernmental Panel on Climate Change assessment reports.

We also describe recent changes made to the PSMSL website, and describe some products added to allow users to explore the dataset interactively. We highlight some of the efforts being made to increase the quality and quantity of metadata available, and describe ongoing attempts to link our dataset with sources of higher frequency sea level data and other related data.