

Quality control and management of the long-term time series data holdings at NIOZ Royal Netherlands Institute for Sea Research

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Data become more valuable over time. This is especially true for data being used in studies on climate change or the anthropogenic effects on the environment. However, data only become more valuable over time, if the data are managed carefully and professionally. This includes the completeness of the metadata, describing the methods used and circumstances of the measurements; the provenance of the data, describing what has happened with the data since they were collected and the quality control (QC) applied to the data.

NIOZ Royal Netherlands Institute for Sea Research, one of the oldest oceanographic research institutes in the world whose history dates back to 1876, operates all over the world, from the Wadden Sea along the Dutch coast to the remote polar oceans. Its data holdings therefore contain many different data types, ranging from some 6000 CTD-profiles from the deep sea to sediment data from over 3000 annually sampled sites in the Dutch Wadden Sea. Many of these data are part of long-term monitoring series, the crown jewel being a time-series of daily sampled coastal temperatures starting in 1861 (!) and continued to the present day.

A large part of these data are available via the SeaDataNet infrastructure, and thus contribute to several EMODnet projects. Other (biological) data types are accessible through the NIOZ IPT and GBIF.

This presentation provides an overview of the data holdings of NIOZ. Special emphasis is on the QC of extremely long-term time series or monitoring activities, where the duration of these time series may range from several years to over 40 years and, in one case, even to over 150 years!