



Implementation of quality control procedures by means of

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The quality assurance - quality control processes assure the quality of data. In particular quality control for ships of opportunity has been implemented in the Mediterranean during the Mediterranean Forecasting System - Pilot project. During the year a significant amount of data have been collected and the existing temperature data base in the Mediterranean is now capable to provide more information on temporal and spatial variability at monthly and mesoscale. During the last years the original Ships Of Opportunity Programme in the Mediterranean has been complemented with a so called 'Cruises Of Opportunity Programme', i.e. research vessels were used to collect data to be used in near real time. This has required the implementation of the original quality control procedures, since also CTD data have been transmitted in near real time. We started to modify all the procedures and constructed new temperature profiles to be used for comparison with new acquired data. Best estimates of monthly temperature profiles in 1x1 degree boxes have been calculated by using a maximum likelihood approach applied to data statistical distribution. The maps obtained from these estimates are compared with existing climatologies. Also the temporal variability of the temperature is calculated in different areas. This work is at the base of a further implementation of the quality control in the Mediterranean for both near real time and historical data. These are now also compared with the 'best estimates' and the consistency of the data will be assessed not only in the contest of each single campaign, but also on the base of the temporal variability in the areas. These information can be included in metafiles to be used for re-analysis and studies on climate variability. The improved procedures have a paramount importance for the management of data transmitted by observatories composed by different platforms.