Software for data quality control and homogenization of time series

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During the last decate, software package AnClim+ProClimDB+LoadData for process-
ing climatological data has been created. The reason was to fill a gap for missing meth-
ods/tools required in climatological practice. In the end, this software offers complex
solution in processing climatological time series, starting from loading data from a
central database (e.g. Oracle, software LoadData), through data duality control and
homogenization to time series analysis, extreme values evaluation and model outputs
verification (ProClimDB and AnClim software). The AnClim software is meant for
homogenization and time series analysis (correlation and regression analysis, analysis
of trends, cycles), ProClimDB is database software for processing whole climatolog-
ical datasets (containing tools for data quality control, creating reference series, ad-
justing series, filling missing data, extreme value analysis, model outputs verification,
calculation series for grid points). Regarding relative homogeneity tests, the test avail-
able are: Alexandersson's SNHT - various modifications, Bivariate test of Maronna
and Yohai, Easterling's and Peterson's test, Vincent's MLR, and others. The tools im-
plemented in the software enable to homogenize both monthly and daily data. For
more information see the web page http://www.climahom.eu/.