



Climate data quality control at MeteoSwiss – now and in future

G. Flury, D. van Geijtenbeek, C. Naguel, and Th. Konzelmann

Federal Office of Meteorology and Climatology MeteoSwiss, gaudenz.flury@meteoswiss.ch, Klimadienste, Krähbühlstrasse 58, Postfach 514, CH-8044 Zürich

National meteorological services are steadily automating their meteorological and climatological observation networks. This has also implications on the data quality control that is being automated in parallel. However, this is a challenge for data processing, management and quality assurance.

The current data quality control system at MeteoSwiss is based upon a temporal application by using limit tests, variability tests and inter-parameter consistency tests. These tests apply soft and hard limits that produce several different plausibility information flags. In addition MeteoSwiss is currently adopting spatial data quality tests on individual parameters such as precipitation. Since these spatial tests are not yet available on all granularities (e.g. 10 min) the quality flags do not apply on all granularities accordingly, whereas extra plausibility flags are needed. As a consequence, internal as external costumers are often overstrained by handling this complex quality flag information in order to apply the climatological data properly.

The challenge is now how to combine the traditional with the new approaches by simplifying the quality information for the end-users. The presentation will on the one hand demonstrate the different data quality systems used at MeteoSwiss and on the other hand introduce a simple data quality information system.