Modernization of Slovene Meteorological Database

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Modernization of meteorological database is usually not only technical task in terms of informational systems, there are also some user-related questions that have to be answered.

One of the problems that arise is data identification. Relational data base systems require unique relations between meta data tables and data tables through use of primary keys. In order to be able to identify data exactly with attributes described in meta data tables frequent changes of identifiers are required and consequently they become abstract. This system is in contrast with older, file-type organizations of meteorological archives where data along with meta data attributes was stored under one identifier that didn't change frequently.

Due to this fact a need for data blending system arises. Blended data is of primary importance for climatological applications where long homogene (usually that means homogenized) time series are required. European climate assessment dataset therefore uses blended data with fixed criteria for horizontal and vertical displacements allowed for measurement data to be blended into single time series. Our approach was to leave blending procedure for client application that was constructed for data retrieval from database. This approach leaves some flexibility in data retrieval, however there are also some disadvantages that will be discussed.