



The Vienna Temperature Series: Strengths and weaknesses for the use in climate change analyses

I. Auer, R. Böhm, C. Gruber, and A. Jurković

Central Institute for Meteorology and Geodynamics, Climatology, Vienna, Austria (ingeborg.auer@zamg.ac.at)

Strakosch-Grassmann (1932*) reports about the first instrumental measurements in Vienna in 1697 for a span of eight months only. Later, continuous measurements have been carried out at the observatory of the Jesuit College since 1734, at the k.k. Universitätssternwarte (astronomical observatory of the University of Vienna) since 1762. Unfortunately, most of the data before 1775 have gone lost. The HISTALP (<http://www.zamg.ac.at/histalp>) temperature series of Vienna is a composite of Wien-Universitätssternwarte, Wien-Favoritenstraund Wien-Hohe Warte. It allows studying climate variability for more than 235 years and it has been used very often in national and international studies. Although the Vienna series has been homogenized and quality checked with highest carefulness some remaining uncertainties are persisting. This especially concerns uncertainties of the very early measurements due to insufficient sheltering, and measurements of the last 60 years due to an increasing trend of the Viennese urban heat island.

*Strakosch-GraG, 1932. Neue Quellen zur Geschichte der Witterung in Europa vom 16. Bis zum 18. Jahrhundert. Met. Zeitschr. 1932, S 397.