



Causes for discrepancies between reanalyses and station observations in Germany

Andrea K. Kaiser-Weiss, Michael Borsche, and Frank Kaspar

DWD, National climate monitoring, Offenbach, Germany (andrea.kaiser-weiss@dwd.de)

The global reanalysis ERA-Interim and the regional reanalysis COSMO-REA6 are compared against station observations in Germany. We focus on wind and temperature observations performed close to the ground (10m and 2m above ground, respectively). There are discrepancies in the statistical properties on scales from the hourly scale to the decadal scale. Discrepancies could be caused by local influences on the station observations, or by a lack of the reanalyses to capture the processes observed at the stations, or by other reasons. Here we demonstrate our method and results in attempting to distinguish between these options and the implications for trend analysis over Germany.