



The FORBIO Climate data set for climate analyses

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The general objective of FORBIO climate is to scrutinize the adaptive capacity of trees to climate change and to make predictions about their future performance in Belgium under scenarios of climate change. To meet the objectives of FORBIO Climate and to test the hypotheses, the project has been structured in five scientific work packages, lead by the five consortium partners. In this contribution, we describe the past climate data set (daily minimum, maximum and mean temperatures as well as 24h precipitation quantities) developed to assess the effects of climate variation on tree performance. Indeed, only a subset of the climatological station network operated by the Royal Meteorological Institute (RMI) of Belgium is suitable for use in climate analyses. Several stations have too little data, and some have excessive missing data, poor site or observation quality, or are otherwise unsuitable. After the stations selection, data quality assessment procedures have been developed and applied to the selected stations records. Basically, the validity of a given datum is assessed with different approaches and several error types are considered before flagging the data.