

Climate Data

It has long been recognised that the geographic distribution of most poikilotherms (those plants and animals that have a body temperature that fluctuates with the temperature of the environment) are mostly determined by climate (Andrewartha and Birch, 1984; Woodward & Long 1988).

CLIMEX needs monthly long term average maximum and minimum temperatures, rainfall and relative humidity at 09:00 and 15:00 hours. The Metmanager allows the user to edit lists of stations into subsets (called selections), and to add new data for specific locations of interest. CLIMEX Version 3 is shipped with two meteorological databases: a point database with records from about 2400 meteorological stations worldwide, and a gridded database at 30' spatial resolution (Kriticos et al. 2006) derived from the Climatic Research Unit at the University of East Anglia (New et al. 2002).

Gridded climate data sets for CLIMEX

Hearne recommends the use of CliMond data products (<https://www.climond.org/>) for CLIMEX (Kriticos et al. 2012). This dataset contains cleaned, formatted data at 10' and 30' resolution. The CliMond 10' dataset is a hybrid between the CRU and Worldclim datasets, and includes several future climate scenarios. The CliMond 30' dataset was built using only CRU data.

References

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New M, Lister D, Hulme M and Makin I (2002) A high-resolution data set of surface climate over global land areas. *Climate Research* 21: 1-25

Woodward FI and Long SP (1988) Temperature and the distribution of plant species. *Plants and Temperature*, Symposium of the Society for Experimental Biology, Company of Biologists, Cambridge.