**ReadMe Biological data**

The following ReadMe gives a brief overview of the columns in “Climate station data.xlxs” and the future and historical climate data CSV files.

**“Climate station data.xlxs”:** Data about the climate stations used to obtain historical climate data.

* Population: Species name and geographical location (to distinguish between populations with

the same species name)

* Location: Geographic location, typically the country name followed by a name of the region

in which the population was collected

* Latitude: Latitude of the insect population
* Station\_Name: Name of the climate station
* Station\_Lat: Latitude of the climate station
* Station\_Lon: Longitude of the climate station
* Station\_Elev: Elevation of the climate station
* Station\_Code: Code for the climate station
* Station\_WMO: World Meteorological Organization code for the climate station
* Start\_yr: Year in which the climate data sequence starts
* Start\_mo: Month in which the climate data sequence starts
* Start\_day: Day in which the climate data sequence starts
* End\_yr: Year in which the climate data sequence ends
* End\_mo: Month in which the climate data sequence ends
* End\_day: Day in which the climate data sequence ends
* Year\_of\_data: Number of years of climate data

**Future climate data CVS files:** Future climate data assembled in “Read climate data.R” and used in “Habitat temperatures.R” to estimate the habitat temperature parameters (Eq. 5).

* day: Numerical day of the year (e.g., January 10 = day 10)
* time: Calendar date (DD.MM.YYYY)
* latitude: Latitude from which future climate data was downloaded
* longitude: Longitude from which future climate data was downloaded
* T: Mean daily temperature in Kelvin

**Historical climate data CVS files:** Historical climate data assembled in “Read climate data.R” and used in “Habitat temperatures.R” to estimate the habitat temperature parameters (Eq. 5).

* day: Numerical day of the year (e.g., January 10 = day 10)
* T: Mean daily temperature in Kelvin