Weather stations

Source: NCDC global surface summary of day data

Extraction of the climatic data

Maximum annual value of the daily maximum temperature

Maximum annual value of the daily maximum relative humidity

Application of the Gumbel frequency analysis

Maximum annual value of the daily maximum temperature for a return period of 2, 5 and 10 years

Maximum annual value of the daily relative humidity for a return period of 2, 5 and 10 years

Application of the Steadman formula

Maximum daily Heat Index (HI) for different return period

Application of the stepwise regression approach

Independent variables and regression model

Application of the regression model

Maximum daily heat index distribution maps for a return period of 2, 5 and 10 years

Reclassification

Spatial distribution of the intensity level of heat hazard for a return period of 2, 5 and 10 years

Legend
- Data
- Intermediate product
- Final product