

Number	EXP3
Indicator name	Difference in the number of tropical nights in the reference year from the long-term average
Area	E
Indicator definition	<p>The indicator assesses the difference between the number of tropical nights in the reference year and the long-term average. Tropical night occurs when the minimum night air temperature has not fallen below 20 °C. Measurements at the nearest weather station (professional or amateur) are considered. The long-term average of the number of tropical nights is set for the period 1981–2010 for the Czech Republic and is determined for each region. If the long-term value of the indicator is monitored on the basis of another time period, it shall be used.</p> <p>The long-term average value of tropical nights is often given in the interval (e.g.: 11 °C – 15°C), so we calculate the mean value of this interval (in this example, 13.5°C).</p>
Indicator unit	day (days)
Key words	Temperature, climate, tropical night
Reason for tracking and usability	<p>The number of tropical nights (the day when the minimum daily temperature does not fall below 25 °C) is a key indicator of the warming climate and allows the assessment of regional temperature differences, especially in summer. Higher temperatures can also affect the health of the population; therefore, it is necessary to monitor this indicator. A negative consequence of the temperature loads are the health problems that may affect those chronically ill, who are less tolerant of high temperatures.</p>

**Completeness, representativeness, validity**

The indicator responds to the negative impact of expected climate change on elevated temperature. The indicator is representative of the area. Nevertheless, in the case of a series of settlements, the indicator may not include the specifics of the city/city districts/municipalities, because in different parts and due to local factors (thermal urban island, flow, absence of greenery) the maximum temperature may be different. It is therefore appropriate to create a temperature map for a detailed evaluation of the city/ city district/municipality in terms of temperature interpretation. The data for the creation of the indicator are standardized and monitored through the official network of meteorological stations. They sufficiently represent the whole indicator.

The indicator results may not correspond to the temperature distribution within the city/city district/municipality, as the data is based on a station located in one location and may not cover the local specificities of the whole city/city district/municipality.

**Description of data processing**

The number of tropical nights recorded for the long-term average is subtracted from the number of tropical nights in the reference year.

**Data source**

The data source is data from long-term functioning meteorological stations of official institutions.

**Tracking frequency**

Yearly

**Urban influence**

The indicator is not influenced by the city/city district/municipality.

**Presentation method**

The results will be presented in a single Klimasken framework on a five-step scale according to specified intervals:

**Responsibility**

Klimasken processor, city/city district/municipality