

## TEMPERATURE

Due to the proximity of the sea and the predominant westerly winds, Wallonia is characterised by a "temperate" climate, i.e. relatively cool summers and generally mild winters. Certain weather conditions can lead to cold snaps or heatwaves.

### Elevation: a decisive factor

Over the period 1996-2015, the average annual temperature in Wallonia was 9.7°C. It varied from 7.5°C on the high plateau of Fagnes (Baraque Michel, Signal de Botrange) in the High Ardenne<sup>1</sup> and on certain summits of the Ardenne<sup>1</sup> to a little over 11°C in the west of Hainaut. The temperature variation observed in Walloon territory was therefore 3 to 4°C. The temperature is mainly determined by the elevation: it decreases by an average of 0.6°C per 100 m of elevation.

### Contrasting seasonal and monthly variability

Over the last 20 years, July has been the warmest month in Wallonia with an average temperature of 17.6°C, while January was the coldest with an average temperature of 2.2°C. In addition, the average daily temperatures varied most during January (average difference of 13°C between the highest and lowest temperature in the month) and least during September (average difference of 8.5°C). The monthly averages calculated over the period 1996-2015 consistently reached their lowest values on the high plateau of Fagnes (between -2.5°C and -2°C below the Walloon average) and their highest values in western Hainaut (between +1.2°C and +1.4°C above the Walloon average).

### Significant interannual variability

Between 1996 and 2015, the average annual temperature in Wallonia ranged from 8.4°C in 1996 to 11.2°C in 2014. The interannual variability of the average monthly temperature was greater, particularly for the months of November to February, when deviations of -7.5°C to +5.5°C from the monthly average were observed. For the rest of the year, these average monthly temperature differences varied from -4°C to +4°C.

### The most extreme temperatures: -30°C and +39°C

In the Ardenne, the lowest temperatures have been recorded in the valleys, with a record of -30.1°C at Rochefort in January 1940. With high frosts in the High Ardenne<sup>1</sup>, the minimum temperatures in the high plateaus can be higher than those recorded in the valleys. North of the Sambre-et-Meuse line<sup>2</sup> (elevation between 100 and 200 m), temperatures rarely drop to -20°C. The highest ever temperature was observed in Liège in July 2015, at 38.8°C. Values above 38°C can also be observed north of the Sambre-et-Meuse line<sup>2</sup>, as well as in the Ardenne valleys and the extreme south of the country<sup>3</sup>. The absolute maximum temperatures are lower on the ridge of the Ardenne.

[1] → Map 6 | [2] Bioclimatic zones of the Scaldian and Hesbaye-Brabant Lowlands and Valleys; → Map 6 | [3] Bioclimatic zones of High and Low Lorraine; → Map 6

Map 2 Temperature

