

RAINFALL

Wallonia is subject to dominant western winds throughout the year. These winds bring moisture-laden air masses from the ocean. The "temperate" regional climate is therefore characterised by weather that can be rainy in any season.

Rainfall that can vary up to double the amount in Walloon territory

Over the period 1996-2015, average annual rainfall in Wallonia varied locally by up to double the amount: whereas the bioclimatic zones of the Scaldisian and the Hesbaye-Brabant Lowlands and Valleys¹ were characterised by relatively uniform averages, of around 700 to 900 mm/year, the rest of Wallonia had more significant rainfall and a steeper gradient, varying from 900 to 1,400 mm/year. Rainfall is therefore positively influenced by the topography². Extreme values were measured in the High Ardenne³, around the Baraque Michel and the Signal de Botrange (high plateau of Fagnes) (1,375 mm/year) and, to a lesser extent, at the Baraque de Fraiture (1,200 mm/year); on the other hand, in the Low and Mid-Ardenne¹, in the area situated between Neufchâteau and Croix Scaille (1,350 mm/year). A transition zone (1,000 - 1,100 mm/year) has been established on the moderate relief of the bioclimatic zones Sambre-et-Meuse and Condroz, as well as Fagne, Famenne and Calestienne¹, except for the Meuse axis and the low Lesse valley, where average annual rainfall remained below 1,000 mm/year. The average annual number of rainy days (rainfall at least equal to 1 mm) varied from 130 days on the Hesbaye-Brabant lowlands¹ to 170 days on the high plateau of Fagnes.

A relatively uneven seasonal distribution

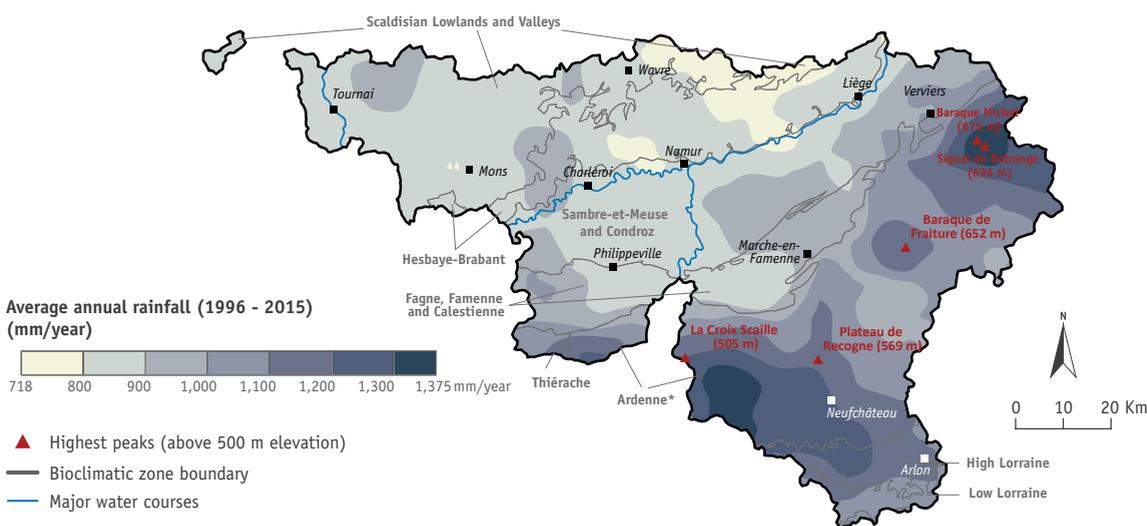
During the same period, the Walloon monthly averages showed a seasonal variability of moderate amplitude³, of around 30 mm. As such, rainfall was highest in winter and lowest in spring, with December and April representing the most extreme months (respectively 92 mm and 60 mm on average over Wallonia). From April to September, the average monthly rainfall was highest on the high plateau of Fagnes, while from October to March, the highest values were observed in the area between Neufchâteau and Croix Scaille.

Monthly rainfall with strong variation from year to year.

Between 1996 and 2015, monthly rainfall was highly variable from one year to the next, with dry and very rainy months characterised by rainfall of 10 and 250% of its monthly average. The average annual rainfall over Wallonia varied from one year to the next much more moderately ($\pm 20\%$ compared to the average of 930 mm/year), from 773 mm in 1996 to 1,140 mm in 2001.

[1] → Map 6 | [2] → Map 3 | [3] Difference between extreme values

Map 1 Rainfall



* Grouping together of the bioclimatic zones "Central Eastern Ardenne", "Low and Mid-Ardenne" and "High Ardenne" for the sake of legibility

SOERW 2017 – Sources: RMI; SPW – DGO3 – DEMNA & DNF