



5. Climate

Climate is very diverse in the Caucasus; it is possible to distinguish several climatic zones, from the humid, almost subtropical, to permanent snow and glaciers. The geographic latitude orientation of the Caucasus plays an important role – it divides the temperate climate to the north from the subtropical belt to the south and prevents the movement of cold air masses to the south. Climate is an important factor determining vegetation and its distribution.

The Caucasus is influenced by wet air masses from the Atlantic Ocean and Mediterranean Basin from the west and by dry continental air masses from Iran, central Asia and Siberia. The Black Sea increases the moisture of the western Atlantic winds. On the other hand, the Caspian Sea is not sufficiently large to fully moisturize dry air from Central Asia so it brings moisture only to the most easterly ridges such as Talysh in Azerbaijan, Zangezur and Karabakh in South Armenia /Azerbaijan and the eastern slopes of the Great Caucasus.

There is high pressure in winter and spring above the North Caucasus as an influence of the Siberian anticyclone. Simultaneously, the region of lower pressure above the Black Sea influences Transcaucasia. In winter, therefore, North Caucasus in winter is mostly frosty and dry. In spring the influence of the Siberian anticyclone slowly decreases in favour of the Azores cyclones. The latter bring wet weather. In summer, continental hot dry air from the steppe zone of Asia moves westwards and causes dry winds. Dry weather in the north-east Caucasus encourages steppe vegetation.

In Transcaucasia the principal climate factors are air masses from other regions. The most frequent air movement is from the west bringing moisture from the Atlantic Ocean and Mediterranean Sea.