

# **Climate variability and the trend along with the Drini River in Albania**

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This paper presents the analysis of climate variability and trends in the northern part of Albania located alongside of Drini River. Independently its small area, because of broken relief, a considerable variability of climatic elements inside this zone does exist. There are two main factors that create this variability: altitude over sea level and distance from the sea.

The study considers the long term series of temperature, precipitation, snow, wind for the period 1951 -2004. To provide the evidence of their variability, the trends of anomalies related to the normals values (1961-90) are analyzed.

Some conclusions are drawn related the climate variability and the trend:

- annual mean air temperature presents a considerable variation. It varies from 8.9°C in inner part of the zone up to 15.4°C in mouth of the Drini River Lezhe, while on the whole the mean of this zone is 11.7°C. It indicates a positive trend of about 1.0°C for the entire zone - annual distribution of mean, max, min temperature has similar cycles, the maximum value realized in summer (July-August) and the minimum in winter (January). precipitation total presents a decreasing trend. The ratio of the yearly amount of precipitation over the long term average decreased from 1.2 in the 1961 year to the 0.8 in the 2000 year. - mean speed of wind on the whole zone varies from 1.6 up to 3.7 m/sec. The high value of the wind speed came across in the hilly part as well as on the mouth of the Drini River, Lezhe. During the year the maximum values of mean speeds came across during the cold period where they reach up to 5.4m/sek during the January, Lezhe.