



## Climate Change Impact in the North-East Romania

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In this paper we have studied the temporal and spatial distribution of the precipitation and the temperature in a 55 years period, between 1956-2010, in the north-east of Romania, especially at 8 meteorological stations in Moldavia: Iași, Podu-Iloaie, Cotnari, Rauseni, Botoșani, Dorohoi, Avrameni and Darabani (from south to the north of Moldavia-Romania). We did case studies of regional hydrological behavior in climate sensitive and drought or flood regions in the north-east of Romania. We have studied our climate variability in the last 55 years (1956-2010) to better understanding the feedbacks between the interlinked terrestrial and atmospheric processes on different spatial and temporal scales for the north-east Romania. We did graphs with the observational data from the National Meteorological Agency of Romania about precipitation and air-temperature in our region climate. We have identified four dangerous levels of precipitation especially for flood and drought regions in the north-east Romania. We have studied the maximal and minimal level of the daily, monthly and annual precipitation in the north-east of Romania in correlation with the temperature variability graphs in the same regions.

The present document has the purpose to realize a very complex analysis on the frequency, repartition and variation in time. The study is firstly based on the raw material represented in facts measured and registered. These are synthesized in tables and the interpretation was sustained by graphics containing medium monthly values of this climatic element, resulted from interpreting some raw facts, medium and extreme, registered between 1956 - 2010 at the Temperature Measuring Station in Iași, Podu-Iloaie, Cotnari, Rauseni, Botoșani, Dorohoi, Avrameni and Darabani. We have studied the main characteristics of the precipitation and the temperature in the north-east Romania - Moldavia, both having a great temporal and territorial availability. We have represented the annual medium precipitation and the temperature variability in graphics registered between 1956 - 2010, in the area of Moldavia-Romania.