

Climate extremes and impacts

Lecturer: Borbála Gálos, Ph.D., associate professor

Institute: University of Sopron, Faculty of Forestry, Institute of Environmental and Earth Sciences

Course code: EG-E-CCCC

Credit points: 5

Time table: Lecture:2

Language: English or German

Course description

Topics

Climate variability. Climate extremes: definitions and classification. Ecological, economic and social impacts of extreme events. Quantification of extremes: temperature and precipitation indices. Drought indices and their application in forestry. Observed droughts and impacts. Extremes in a changing climate: probability, severity, potential risk. Modelling and projection of extremes. Expected ecological impacts of heatwaves and droughts in Europe, especially in the Carpathian Basin. Sensitive and vulnerable species and regions. Possibilities for adaptation. Recent international research projects related to climate extremes. Recent special reports of the IPCC.

References

1. IPCC 2013. Climate change 2013: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change <http://www.ipcc.ch>
2. IPCC 2012. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) <http://www.ipcc.ch/report/srex/>