

**Institut für Geographie**  
**Bremer Geographisches Kolloquium**

**Climate forcing versus human  
land use**

**A novel multiproxy approach for quantitative  
estimates of past landscape evolution**

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Soils are one of the most important resources of modern and historical societies and soil degradation can place an immense pressure on agricultural activities, food supply, and human civilizations. For instance, accelerated erosion in the catchment of Lake Dojran on the Balkan Peninsula between ~3,500 and 3,100 cal yr BP is potentially the first evidence of a negative feedback between civilization and environmental impact, as the erosion event is coeval with the onset of the Greek 'Dark Ages' (~3,200 cal yr BP). In the light of the growing human population and rapid anthropogenic climate change, the results from Lake Dojran underpin that preserving soils against degradation will become essential in the near future. However, our understanding of soil erosion in response to natural conditions and human activity in the past is still poor. To shed more light on the interplay between climate change, human land use and landscape evolution, innovative trace metal isotope analyses together with conventional proxy analyses have been applied on sediment records from Lakes Dojran and Ohrid on the Balkan Peninsula.

**Datum: Mittwoch, 2. Mai 2018**

**Uhrzeit: 16:15 Uhr**

**Ort: GW2 B1150**

**Alle Interessierten sind herzlich willkommen!**

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