Geophysical Research Abstracts, Vol. 10, EGU2008-A-03084, 2008 SRef-ID: 1607-7962/gra/EGU2008-A-03084 EGU General Assembly 2008 © Author(s) 2008



## Biogeochemistry of peat and environmental change in the "Erzgebirge" Mountains (Central Europe)

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Peat bogs are spread over the upper altitudes in the low mountain range "Erzgebirge". Beside the drainage especially climate change and change of depositions affect the peat quality. The microbial activity and the soluble organic matter are strongly influenced by the relationship of the content of carbon, nitrogen, phosphorus and sulfur in the upper peat layers. During the last years the environmental conditions caused lower sulfur content, closer relationship of the C/N and a higher degree of decomposition of the peat, and increased the activity of microbes and the solubility of natural organic matters. These interactions are exemplified by two sites of the western and eastern part of the range.