



## **Method development for detection of soil gas movements in geological subsurface structures in Lake Plön area, Schleswig-Holstein (Germany)**

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As part of the ANGUS II project  $^{222}\text{Rn}$  in soil gas activity was measured along several transects in Kleinneudorf, Lake Plön area (Schleswig-Holstein), which is directly located at the eastern boundary of the Northwest German Basin and thus strongly affected by tectonic faults and permian salt rises. Soil samples were taken to determine sediment physical properties such as water content, unit weight of dry and wet soil and density. Analysis of the physical parameters shows no significant correlation to increased  $^{222}\text{Rn}$  values. Therefore the sediment properties likely do not influence the radon flux. Radon maxima characterize closely confined areas with high gas flux above deep tectonic structures. At points of increased radon values hydrocarbon gases were measured. The existence of decane suspects a formation in the deep basin.