THE ²²²RN ACTIVITY CONCENTRATION IN BOREHOLE WATER AND ITS CORRELATION TO RAINFALL – A PRELIMINARY RESULTS

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ABSTRACT

The ²²²Rn activity concentration changes in borehole water from the three boreholes V-1 (10 m), V-2 (40 m) and V-3 (10 m) have been studied. In V-3 also the continual measurements of the ²²²Rn activity concentration in borehole air have been performed. The results since January to June 2006 are discussed. The changes of the radon concentration have been studied in relation to the water level changes in boreholes and to the precipitation amount. Also the water level changes in relation to precipitation were studied. The first results show that the radon concentration and the water level in V-1 and V-3 boreholes are significantly affected by precipitation, in V-2 borehole this phenomenon is not clearly observed.

Key words: radon activity concentration, borehole, water level, precipitation