

## Monitoring of crustal activity by gamma ray measurements on the ground(Part 2)

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Stress concentration due to deformation of the crust may produce highly compressed fluids within cracks in the rocks. Those fluids tend to migrate upwards through crack system in the crust. Radon gas is constantly discharged in some extent in the air from underground by the equilibrium of generation and decay. Its concentration in the air will be increased in response to the compression of fluids within the crust. The discharged radon gas in the air is one of important indicators of the crustal activity. By the use of the RE-100 scintillation counter, which enables to continuously record two bands in the gamma ray spectra, we have conducted measurements at the place close to the ground surface to monitor the underground radon emission into the air. During the recent five years, repeated continuous observations at a fixed station and on a moving automobile or train along a definite route have positively shown the validity of the principle of the measurement, and disclose burst-like emissions of radon, its temporal fluctuations and regional variations in the intensity of radon emission.