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MEASUREMENT OF SMALL AIR-IONS AT VARIOUS Rn²²² CONCENTRATIONS NEAR THE GROUND [P-14]

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In order to investigate the contribution of ionizing sources to the concentration of atmospheric ions and its variation, we are presenting the measurements of atmospheric small air-ions concentrations at various Rn exhalation rates near the ground. We designed the sensitive (Gerdien type) air-ion detector and utilized it for an absolute measuring of concentration of the ions (mobility $> 50 \cdot 10^{-6} \text{ m}^2 \text{ V}^{-1} \text{ s}^{-1}$) hydrated during their evolution. Since Rn exhalation from the soil is the main source of the air-ion generation, measurements of the air-ions near the ground were performed at various meteorological conditions and consequently different Rn concentrations. Also, the experiments with forced stopping of Rn exhalation from the ground were done.