Study on Transport Mechanism of $^{14}CO_2$ near the Ground Surface

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ABSTRACT

Concentration of $^{14}CO_2$ and flux of $^{14}CO_2$ from the ground surface were measured at Nagoya University in October 2001. This measurements are useful to provide transport mechanism of $^{14}CO_2$ near the ground surface. Distribution of $^{14}CO_2$ suggested that transport mechanism of $^{14}CO_2$ in soil is similar to that of CO_2. Distributions of specific activity of CO_2 in soil air is obviously not uniform, and have higher value than that of atmospheric CO_2. Time variation of $^{14}CO_2$ flux ranged from 0.3×10^{-6} to 2.3×10^{-6} Bq $m^{-2}s^{-1}$.