

Using environmental tracers to evaluate dynamics of nitrate sink in Japan Sea stratovolcano areas.

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Atmospheric deposition of nitrogen transported from the East Asia is modifying terrestrial ecosystem of Japan. Although increasing trends of nitrate concentration are reported in several rivers facing to the Sea of Japan, there are little long-term data on the relationship between atmospheric nitrogen deposition and nitrate concentration of stream water. To clarify the relationship, we have retrospectively evaluated the impact of atmospheric nitrogen deposition on three watersheds (Site A: Mt.Daisen, Site B: Mt.Haku, Site C: Mt.Chokai) by using nitrate triple oxygen isotope ($D^{17}O$) and sulfur hexafluoride (SF_6) in spring water and groundwater.

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