Japanese Peat records of Atmospheric deposition of artificial radionuclides (J-PEAT): Impacts of Fukushima accident and imlications for radiochronology

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The J-PEAT project couples environmental geochemistry, pollution impacts and radioecology, to investigate the spatial and temporal variability of the atmospheric deposition of artificial radionuclides from the Fukushima accident in Japanese low-impact areas using a multiproxy approach based on the analyses of peat cores. It will provide, for the first time, estimations of emission rates and total inventories of artificial radionuclide before and after the Fukushima accident. In this poster, we will present the first results of pre- and post-Fukushima radionuclide and chemical element deposition in two peat sections from Hokkaido Island. We will also detail the future objectives of J-PEAT. For instance, the influence of long-range atmospheric transport on the distribution of the radionuclides will be evaluated and new environmental chronometers using artificial radionuclides will be discussed.