

Publications applying MODERN

Meusburger, K., Porto, P., Kobler Waldis, J., and Alewell, C.: Validating plutonium-239+240 as a novel soil redistribution tracer – a comparison to measured sediment yield, SOIL, 9, 399–409, <https://doi.org/10.5194/soil-9-399-2023>, 2023

Meusburger, K., Porto, P., Kobler Waldis, J., and Alewell, C.: Validating plutonium-239+240 as a novel soil redistribution tracer – a comparison to measured sediment yield, SOIL, 9, 399–409, <https://doi.org/10.5194/soil-9-399-2023>, 2023

Baccolo, G., El Khair, D.A., Nastasi, M., Sisti, M., Ferrè, C., Alewell, C. et al. (2022) $^{210}\text{Pb}_{\text{xs}}$ is a viable alternative to ^{137}Cs for tracing soil redistribution in mountain pastures affected by heterogeneous Chernobyl fallout. *Earth Surface Processes and Landforms*, 1– 13. Available from: <https://doi.org/10.1002/esp.5512>

Khodadadi, M., Alewell, C., Mirzaei, M., Ehssan-Malahat, E., Asadzadeh, F., Strauss, P. and Meusburger, K., 2023. Understanding deforestation impacts on soil erosion rates using ^{137}Cs , $^{239+240}\text{Pu}$, and $^{210}\text{Pb}_{\text{ex}}$ and soil physicochemical properties in western Iran. *Journal of Environmental Radioactivity*, 257: 107078.

Meusburger, K; Porto, P; Mabit, L; La Spada, C; Arata, L; Alewell, C.; 2018: Excess Lead-210 and Plutonium-239+240: Two suitable radiogenic soil erosion tracers for mountain grassland sites, *ENVIRONMENTAL RESEARCH* 160: 195-202; DOI: [10.1016/j.envres.2017.09.020](https://doi.org/10.1016/j.envres.2017.09.020)

Meusburger, K., Mabit, L., E., K. M., Park, J. H., Sandor, T., Porto, P., and Alewell, C. 2016: A multi-radionuclide approach to evaluate the suitability of $^{239} + ^{240}\text{Pu}$ as soil erosion tracer, *Science of the Total Environment*, 566-567, 1489-1499. <https://doi.org/10.1016/j.scitotenv.2016.06.035>

Arata, L.; Alewell, C.; Frenkel, E.; A'Campo-Neuen, A.; Iurian, A.-R.; Ketterer, M. E.; Mabit, L.; Meusburger, K.: Modelling Deposition and Erosion rates with RadioNuclides (MODERN) – Part 2: A comparison of different models to convert $^{239+240}\text{Pu}$ inventories into soil redistribution rates at unploughed sites, *Journal of Environmental Radioactivity*, 162–163, 97-106, 2016. <https://doi.org/10.1016/j.jenvrad.2016.05.009>

Arata, L.; Meusburger, K.; Frenkel, E.; A'Campo-Neuen A.; Iurian, A.-R.; Ketterer, M. E.; Mabit, L.; Alewell, C.: Modelling Deposition and Erosion rates with RadioNuclides (MODERN) – Part 1: A new conversion model to derive soil redistribution rates from inventories of fallout radionuclides, *Journal of Environmental Radioactivity*, 162–163, 45-55, 2016. <https://doi.org/10.1016/j.jenvrad.2016.05.008>