



Supplementary Figure 2. Sediment residence times calculated using U isotopes as a function of the soil residence times estimated using catchment-averaged soil thickness (SoilGrids) and the ^{10}Be -derived denudation rate at each sampling location (Mariotti et al., 2019). In this case, when assigning S values to determine the sediment residence time, sediments from the Tinée and Vésubie catchments are treated separately on the one hand, and those from the Esteron and Var catchments on the other hand (see text for details). Note differences with Fig. 7A are minor.