



Mircrotomography of unconsolidated sediments: application to tsunami deposits

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While a lot of progress in the study of tsunamis and tsunami deposits has been made during the last two decades, identifying and characterizing tsunami deposits remains a challenging task. The available toolbox includes sedimentological, chemical, and biological proxies and covers a range of scales from hundreds of meters to around a centimeter. Yet, while it has been shown that they contain useful data, micromorphology and microstructures of deposits remain understudied to this day. X-Ray microtomography allows us to gain access to the smallest structures of the deposits down to the scale of the particles they are made of. This technique thus makes possible to study tsunami deposits in detail, down to a few micrometers, giving us access to sedimentological, structural and fabric data that complete the dataset available for tsunami scientists.