



Crime scene investigation involving a large turbidite – a 1h-teaching unit in Limnogeology/Sedimentology

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In 1996, a dead corpse (named „Brienzi“) was found at the banks of the picturesque Lake Brienz in the Bernese Alps/Switzerland. What is the origin of this corpse and which chain of events lead to this crime scene?

This is the starting position for a 1h exercise/game for undergraduate students in Earth Sciences/Geosciences. The students are provided with a wealth of evidences like statements from people potentially involved in the case, age data on the human corpse and monitoring data from the lake and its surroundings. The students are guided through the game step by step. After solving a task, the students get a feedback and can check if they were correct with their interpretation. Interestingly for earth science students, a lacustrine mass movement plays an important role in these investigations, but more should not be given at this point. In this exercise, we can also check if the taught content of the previous lessons have been acquired correctly by the students, as it deals with diverse limnogeological and sedimentological aspects.

The game is strongly based on a study of Girardclos et al. (2007) and uses their argumentation for the occurrence of a large mass movement in Lake Brienz in 1996. A copy of the game is available by the author upon request.

Reference:

Girardclos, S., Schmidt, O.T., Sturm, M., Ariztegui, D., Pugin, A. and Anselmetti, F.S., 2007, The 1996 AD delta collapse and large turbidite in Lake Brienz. *Marine Geology*, 241, pp.137-154. doi:10.1016/j.margeo.2007.03.011