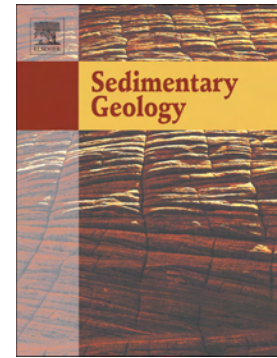


## Accepted Manuscript

Stratigraphy and deformation of Pleistocene talus in relation to a normal fault zone (central Apennines, Italy)

Diethard Sanders, Hugo Ortner, Hannah Pomella



PII: S0037-0738(18)30141-6  
DOI: doi:[10.1016/j.sedgeo.2018.05.013](https://doi.org/10.1016/j.sedgeo.2018.05.013)  
Reference: SEDGEO 5353  
To appear in: *Sedimentary Geology*  
Received date: 22 March 2018  
Revised date: 25 May 2018  
Accepted date: 25 May 2018

Please cite this article as: Diethard Sanders, Hugo Ortner, Hannah Pomella , Stratigraphy and deformation of Pleistocene talus in relation to a normal fault zone (central Apennines, Italy). *Sedgeo* (2018), doi:[10.1016/j.sedgeo.2018.05.013](https://doi.org/10.1016/j.sedgeo.2018.05.013)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Stratigraphy and deformation of Pleistocene talus in relation to a normal fault zone  
(central Apennines, Italy).**

Diethard Sanders<sup>a,\*</sup>, Hugo Ortner<sup>a</sup>, Hannah Pomella<sup>a</sup>

<sup>a</sup> Institute of Geology, Faculty of Geo- and Atmospheric Sciences, University of Innsbruck,  
6030 Innsbruck, Austria/EU.

\* corresponding author

*e-mail addresses:* Diethard.G.Sanders@uibk.ac.at (Diethard Sanders), Hugo.Ortner@uibk.ac.at  
(Hugo Ortner), Hannah.Pomella@uibk.ac.at (Hannah Pomella)

**ABSTRACT**

In studies of neotectonism, alluvial-fan and talus deposits commonly are used as deformation markers, but rarely are studied themselves and in relation to adjacent faults. Herein we report on the facies, diagenesis and deformation of a talus succession and fault cataclasites in the central Apennines of Italy. The study site is located near the western end of the Assergi normal fault zone that accommodates >2000 m of vertical throw, but was dormant since a longer interval of time.

The preserved talus succession is confined to the fault hangingwall. Deposition and deformation of the talus overlapped with the terminal phase of fault activity. The talus accumulated mainly from grain flows, cohesive debris flows and ephemeral fluid flows; it comprises (i) two superposed units of scree breccias, partly cemented before deformation, and intercalated with (ii) an interval of unlithified scree and soils. The exposed succession accumulated between  $\geq 33$ -30 cal ka BP to less than  $\sim 22$  cal ka BP. Talus breccias record complex diagenetic successions including eluviation/dissolution of primary matrix, growth of

Download English Version:

<https://daneshyari.com/en/article/8908468>

Download Persian Version:

<https://daneshyari.com/article/8908468>

[Daneshyari.com](https://daneshyari.com)