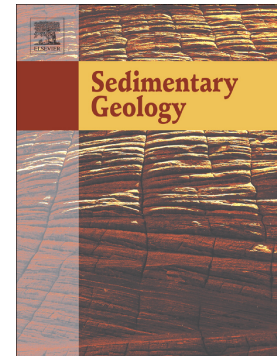


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Sedimentary and geochemical signature of the 2016 Kaikōura Tsunami at Little Pigeon Bay: a depositional benchmark for the Banks Peninsula region, New Zealand

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Abstract

The 14 November 2016 Kaikōura Tsunami inundated Little Pigeon Bay in Banks Peninsula, New Zealand, and left a distinct sedimentary deposit, on the ground and within the cottage near the shore. Sedimentary (grain size) and geochemical (electrical conductivity and X-Ray Fluorescence) analyses on samples collected over successive field campaigns are used to characterize the deposits. Sediment distribution observed in the cottage in combination with flow direction indicators suggests that sediment and debris laid down within the building were predominantly the result of a single wave that had been channeled up the stream bed rather than from offshore. Salinity data indicated

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