

Interactive comment on “Seismology of the Oso-Steelhead landslide” by C. Hibert et al.

Anonymous Referee #2

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General

The authors (Hibert et al) show how seismic recordings of signals generated by the catastrophic Oso-Steelhead landslide can help in reconstructing its volume and the dynamics. The topic is potentially of broad interest and the work is well organized. The manuscript can now be suitably revised taking also into account the newly available information included in the most recently published work on the same catastrophic landslide (Iverson et al. 2015) and the related, extremely detailed Short Comments posted by Kate Allstadt on 3 Feb, 2015. Although Iverson et al. (2015) also exploit seismic recordings, the focus of the NHESD manuscript and the seismological methods used by Hibert et al. are different. So I don't see much risk of overlap between the two works.

Some minor comments

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The work will attract also landslide specialists, who may have limited knowledge of seismology 101. Therefore, some terms like, for example, short- and long-period seismic waves (or seismic signal), should be clarified (associate T and frequency band).

Provide some basic background information regarding the local geology (in particular, lithologies involved) and landslide mechanism/type.

p. 7310 line 16 – ground observations – not entirely clear

p. 7312 line 19 – long-period surface waves ($T < 30$ s)?

p. 7313 Eq. 1 – explain symbols

p. 7314 line 12 (and Fig. 5) departure zone or departure area (p. 7318) – I suggest to use “source area”

p. 7316 line 15 – 45 s? perhaps 35 s

p. 7316 line 26 – Multiple time-overlapping breakaways – not entirely clear

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 7309, 2014.

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