

Interactive comment on “Brief communication: The curious case of the large wood-laden flow event in the Pocuro stream (Chile)” by Diego Ravazzolo et al.

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Reviewer 2

Reviewer quote 1: This short communication with a video tape presents an interesting example of massive movement of large wood in a straighten channel. I think it is worth publishing this paper with the video tape. I agree with the authors who interpreted this massive movement of large wood pieces as “debris flow”, and this may be the first paper and video tape which clearly showed us how large wood pieces interact each other in the front and rear parts, and how the phenomenon changes with the passage of debris flow. I wonder how this massive movement can be sustained with a low-

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velocity of the front part and a high-velocity of the rear part (Figure 2). I can image that the large wood pieces of rear part are gradually conveyed and supplied to the front part like caterpillar mode, which may contribute to maintaining and developing the large wood-laden debris flow. If the authors discuss more about the above processes, it is very interesting.

Answer quote 1: Thank you for this comment. It is difficult for us to provide a thorough interpretation of the phenomena based on the vide, but we added some more details on that in the text.

Reviewer quote 2: The weakness of the present MS is there are no information regarding supply processes of large woods. The authors said that “virtually all transported logs were recruited from upstream reaches or mass wasting processes at the basin scale.” I think it is not so difficult to identify the approximate sources of large woods using drone or air-photos, or satellite images. The authors discussed the magnitude of event, but it should be varied with supply processes. This basin is mainly covered by bushes and bare land with very little precipitation (250mm per year), and forests cover only 16 % of the basin. I am very curious how these massive large wood pieces are produced by what kinds of recruitment processes.

Answer quote 2: We thank the reviewer for this comment. Understanding the supply processes of logs at the basin scale during these types is definitely worth analyzing. However, the variety in spatial and temporal scale of recruitment processes is still a challenge to the quantitative prediction of LW transport during flood events. We tried to add deeper insights on that the manuscript, although this goes a bit out of the scope of this brief communication, mainly aimed at presenting the event itself.

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