Nat. Hazards Earth Syst. Sci. Discuss., 3, C567–C568, 2015 www.nat-hazards-earth-syst-sci-discuss.net/3/C567/2015/
© Author(s) 2015. This work is distributed under the Creative Commons Attribute 3.0 License.



## Interactive comment on "Dynamics of large wood during a flash flood in two mountain catchments" by A. Lucía et al.

## A. Iroumé

airoume@uach.cl

Received and published: 2 May 2015

I agree with the authors that large wood dynamics has been less studied, and dynamics during extreme or flash floods even lesser. The authors have prepared a manuscript that fits with the journal and represents an important contribution. I recommend it for publication after some minor revisions.

Some observations and suggestions are:

1.- Phrase between lines 11 and 16 in page 1644 should be rewritten. I suggest completing the idea in the first phrase about the channel widening but relate this process to floodplain erosions, and then continue with LW recruitment.

C567

- 2.- At the end of line 15 in page 1644, the authors mention "hillslopes processes". In other paragraphs of their document they also refer to colluvial processes (see line 8 on page 1645, line 15 on page 1646 and others); I suggest maintaining the reference to hillslopes processes along the text.
- 3.- Study area (pages 1647 and on) refers to the Gravegnola and Pogliaschina creeks as study streams. However, later on their manuscript the authors refer to the Radarena, Ginepro, Redovego and Sorttano creeks and others on page 1652 and Table 3. Please clarify.
- 4.- On lines 20 to 25, page 1651, the authors define how they calculated stream power and stream power index. But then from line 25 they write "Variables related to channel width, e.g., unit stream power or unit stream power index (Rigon et al., 2012), were not taken into account for the analysis". Please explain.
- 5.- My main observation reading the Results, Discussion and Conclusions chapters is that the authors have not fully convinced me that their observations about LW recruitment, dynamics and deposition are related to a normal peak flow or to a flash extreme flood. Which are the differences about LW dynamics between a normal peak flow and a flash extreme flood? What the authors are adding to the knowledge of LW dynamics during flash floods that was already known for normal peak flows???

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 1643, 2015.