Nat. Hazards Earth Syst. Sci. Discuss., 2, C3029–C3030, 2015 www.nat-hazards-earth-syst-sci-discuss.net/2/C3029/2015/

© Author(s) 2015. This work is distributed under the Creative Commons Attribute 3.0 License.



NHESSD

2, C3029-C3030, 2015

Interactive Comment

Interactive comment on "Pre-earthquake magnetic pulses" by J. Scoville et al.

F. Masci (Editor)

fabrizio.masci@ingv.it

Received and published: 14 January 2015

Dear Authors,

Thank you for your reply. I'm sorry, but I do not agree with you. Figure 4b of Dahlgren et al. (2014) shows that stress-stimulated currents appear simultaneously to the stress loading in dry samples of gabbro. This is not the case for fluid-saturated samples (Figure 5b of Dahlgren et al., 2014). Conversely, I agree with you that the experiment of Dahlgren et al. (2014) does not fully match the physic-chemical condition of the Earth's crust, but also a merely dry crust does not match reality. However, I think that what reported in your reply to my comments could be discussed in a new section of the manuscript so as to show that your model also fits for a crust in which are present the fluids in the source zone of the pulses, as well as between the source and the observer. I do not think this is evident in the current version of the manuscript.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



C3029

Sincerely,

Fabrizio Masci

References:

Dahlgren, P. R., M. J. S. Johnston, V. C. Vanderbilt, and R. N. Nakaba (2014), Comparison of the stress-stimulated current of dry and fluid saturated gabbro samples, Bulletin of the Seismological Society of America, 104, 2662-2672.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 7367, 2014.

NHESSD

2, C3029-C3030, 2015

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

