

Interactive comment on “Non-destructive evaluation of moisture content in wood by using Ground Penetrating Radar” by Hamza Reci et al.

H. Reci

reci.jack@gmail.com

Received and published: 14 September 2016

I have read in carefully, the comments of Referee #2 related to the manuscript "Non-destructive evaluation of moisture content in wood by using Ground Penetrating Radar" H. Reci, T. C. Mai, Z. M. Sbartaï, L. Pajewski, and E. Kiri We thank a lot the referee for the detailed suggestions about the manuscript and we agree that improvement should be done. Of course the manuscript needs corrections and we are working to improve it and make the necessary correction in the new version of the manuscript. I have those comments: We can include B scans from the measurements of course. We decided to exclude them in order to not put so many figures in the text. However attached you will see images from measurements and B scans for different levels of Humidity by mass water and polarization of E field (figure 1). Corrections regarding the axes, symbols and so on.. will be fixed as suggested by the referee. As related to the humidity

C1

[Printer-friendly version](#)

[Discussion paper](#)



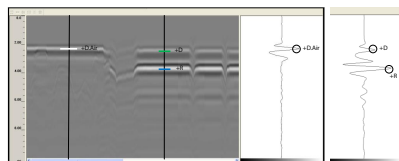
12%, and how did we determine that, we can say that we found at the end of the experiments putting the sample to the oven and finding the weight in anhydrous mode. Some corrections need to be done on mistyping and formulas, such as R2, which is the correlation coefficient of the measurements, or what each variable represent on the formulas. Of course there are other factors influencing biological degradation of wood caused by fungi and insects except moisture, like temperature, relative humidity and so on which is beyond the target of this work,, but the scope of the paper was to be focused on influence of the moisture content on the dielectric properties of wood and the difference between reflected and direct wave. The comments by the referee will be seen and corrected in the new version of the manuscript most of them are orthographic and some of them mistyped. As a conclusion i would like to say that another referee comment is needed after working on article and uploading the new version.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., doi:10.5194/gi-2016-24, 2016.

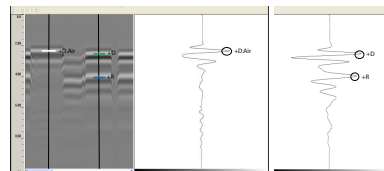
[Printer-friendly version](#)

[Discussion paper](#)

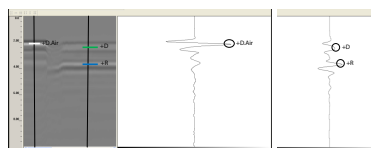




A) Direct air, direct wave and reflected wave, for 12% humidity. Electric field is polarized perpendicular to fibers



B) Direct air, direct sample and reflected wave for 22% humidity. Electric field is polarized perpendicular to the fibers.



C) Direct air, direct sample and reflected wave for 12% humidity. Electric field is polarized parallel to fibers

Fig. 1. B scans