Interactive comment on "Application of ground-penetrating radar technique to evaluate the waterfront location in hardened concrete" *by* Isabel Rodríguez-Abad et al.

Anonymous Referee #3

The authors should justify the ray model adopted in the proposed method; in fact , they are considering em fields in near zone.

In addition, the authors should discuss the phenomenon of the electromagnetic refraction at the wavefront (boundary between the dry and wet zones). In fact, by passing from a medium to another one, the Snell's law holds; this complicates the ray model adopted in the work.

By looking to the Table 3, the authors should justify because the error in the estimation of the waterfront depth (difference column in Table 3) has an oscillating behaviour.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., doi:10.5194/gi-2016-
21, 2016.