

## ***Interactive comment on “Electrical resistivity tomography for studying liquefaction induced by the May 2012 Emilia-Romagna earthquake ( $M_w = 6.1$ , North Italy)” by A. Giocoli et al.***

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Yes, the values of electrical resistivity show overlap between the 3 units FCU, MU and PAPU. In particular, at shallow depth, the resistivity values related to the diagonal and dotted patterns (T1) are common only to the MFGS and MU (Figs. 3, 4 and 5). The MFGS is the bottom part of the FCU. Thus, the diagonal and dotted pattern (T1) shows: - the uncertainty of the FCU-MU boundary location; - the sectors in the which it is possible to find the MFGS. In addition, the ERT results allowed us to obtain the first rapid and valuable geological information, such as: the lithostratigraphy setting, the depth at which it was possible to find the MFGS, etc. On the basis of ERT results, it was

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possible to design further investigations (e.g. complementary geophysical surveys, drill holes, etc.) for a better understanding of the liquefaction phenomenon. Thus, taking into account all the above inferences, we think that the ERT has proved to be effective as a reconnaissance technique to quickly detect valuable geological characteristics in areas affected by coseismic liquefaction.

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