Interactive comment on "A joint thermal and electromagnetic diagnostics approach for the inspection of thick walls" *by* Nicolas Le Touz et al.

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Geophysical observations in subsurface geophysics are notoriously complicated by numerous factors. The complexity of current geological problems and the ambiguity of the interpretation of geophysical observations call for an integration of different geophysical methods. The presented MS "A joint thermal and electromagnetic diagnostics approach for the inspection of thick walls" by Le Touz et al. shows a numerical inversion approach to delineation and localization of inclusions in thick walls under natural disturbances. Thick walls (or thick beds, according to terminology accepted in potential geophysical fields), are one of the most complex interpreting models. Therefore, any modifications and elaborations in this field are only welcome. The authors suggest an elegant mathematical solution for integration of GPR and infrared thermography. This MS is logically constructed a nicely graphically formed. Three most typical inclusions

in the thick beds: wood, steel and air are considered in detail on numerical examples.

One small inaccuracy in a first page: instead '(Beck J.V., 1985)' must be '(Beck and Blackwell, 1985)' could be easy corrected.

Without hesitation, it is a significant contribution to near-surface geophysics which may trigger a new series of investigations in this field.

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