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Commentary

Comment on "Review of self-potential methods in hydrogeophysics" by L. Jouniaux et al. [C. R. Geoscience 341 (2009) 928–936][☆]

Commentaire sur « Revue des méthodes de potentiel spontané en hydrogéophysique » par L. Jouniaux et al. [C. R. Geoscience 341 (2009) 928–936]

The C.R. Geoscience have published in 2009 a Special Issue on Hydrogeophysics. They received from Dr. André Revil a comment on one of its article, "Review of Selfpotential methods in Hydrogeophysics", by L. Jouniaux et al.

The Editors are very pleased to publish this comment, and the answer from the authors, as it confirms the current scientific interest in self-potential methods, of which Dr. Revil is a respected major contributor. They wish to emphasize that they had offered Dr. Revil the opportunity to contribute an article for this Special Issue, but unfortunately Dr. Revil declined the invitation. It seems to us that the current comment by Dr. Revil, which was reviewed and accepted for publication by the same reviewers who reviewed the Jouniaux et al. original paper, has two interesting parts:

- one on some issues concerning the theoretical developments of the Self Potential governing equations, on which the authors have replied;
- one on providing additional information and references on the recent work of Dr. Revil and co-workers, who have published in 2009 as many as 7 papers on this topic, plus 3 in 2008 (in total, there are 22 references from Dr. Revil's and co-workers' work in this comment, out of 27 references). We feel it is not appropriate to ask the authors of the original paper, which was submitted in August 2008, to discuss or take into account, in their review, papers that were not yet available when it was written; therefore we have asked the authors not to address these parts of the commentary; we rather

consider it as an interesting development that the readers may enjoy reading.

We wish, however, to say that Dr. Revil enthusiastically states in his comment that *there is an increasing number of publications in the field of self-potential*. This conclusion should perhaps be slightly moderated: it is clear that there is an increasing number of publications in the field of applied geophysics, but not only about self-potential; for instance, in the recently published special issue on Hydrogeophysics in *Near Surface Geophysics* (October–December 2009), which contains 27 papers, only 1 is about self-potential.

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