

Interactive comment on “The relationship between the open fractures and mineralized fractures in Oligocene sandstones of Leghorn coast (Tuscany, Italy) – the hydrogeological relapses” by A. Cerrina Feroni and P. Martinelli

Anonymous Referee #1

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The paper is not acceptable in the present form due to the extreme qualitative approach. A complete lack of structural and hydrogeological data exist.

Following HESS' evaluation criteria are commented.

1. DOES THE PAPER ADDRESS RELEVANT SCIENTIFIC QUESTIONS WITHIN THE SCOPE OF HESS?

The issue discussed in the paper is broadly pertinent with the HESS' scopes.

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2. DOES THE PAPER PRESENT NOVEL CONCEPTS, IDEAS, TOOLS, OR DATA?

The paper present a novel concept.

3. ARE SUBSTANTIAL CONCLUSIONS REACHED?

Conclusion are not consistent with the potential hydrogeological approach of the paper.

4. ARE THE SCIENTIFIC METHODS AND ASSUMPTIONS VALID AND CLEARLY OUTLINED?

Only observational and heuristic methods have been applied without any quantitative or semi-quantitative evaluations.

5. ARE THE RESULTS SUFFICIENT TO SUPPORT THE INTERPRETATIONS AND CONCLUSIONS?

Results are insufficient to support interpretations and conclusions.

6. IS THE DESCRIPTION OF EXPERIMENTS AND CALCULATIONS SUFFICIENTLY COMPLETE AND PRECISE TO ALLOW THEIR REPRODUCTION BY FELLOW SCIENTISTS (TRACEABILITY OF RESULTS)?

No.

7. DO THE AUTHORS GIVE PROPER CREDIT TO RELATED WORK AND CLEARLY INDICATE THEIR OWN NEW/ORIGINAL CONTRIBUTION?

Authors don't consider the bibliography regarding hydrology of turbidite formations. Among them it should be considered:

ALESSANDRO GARGINI (*), LEONARDO PICCININI (*), LUCA MARTELLI (**), SILVIA ROSSELLI (**), ALBERTO BENCINI (***), ANDREA MESSINA (*) & PAOLO CANUTI (***)
Idrogeologia delle unità torbiditiche: un modello concettuale derivato dal rilevamento geologico dell'Appennino Tosco-Emiliano e dal monitoraggio ambientale per il tunnel alta velocità ferroviaria Firenze-Bologna. Boll. Soc. Geol. It., 125 (2006),

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293-327

8. DOES THE TITLE CLEARLY REFLECT THE CONTENTS OF THE PAPER?

No.

9. DOES THE ABSTRACT PROVIDE A CONCISE AND COMPLETE SUMMARY?

Yes.

10. IS THE OVERALL PRESENTATION WELL STRUCTURED AND CLEAR?

The presentation is very weak if considering the general purpose of the paper.

11. IS THE LANGUAGE FLUENT AND PRECISE?

12. ARE MATHEMATICAL FORMULAE, SYMBOLS, ABBREVIATIONS, AND UNITS CORRECTLY DEFINED AND USED?

There are no mathematical formulas and no units of measures have been applied.

13. SHOULD ANY PARTS OF THE PAPER (TEXT, FORMULAE, FIGURES, TABLES) BE CLARIFIED, REDUCED, COMBINED, OR ELIMINATED?

The paper should be strongly improved.

14. ARE THE NUMBER AND QUALITY OF REFERENCES APPROPRIATE?

No (see n. 7).

15. IS THE AMOUNT AND QUALITY OF SUPPLEMENTARY MATERIAL APPROPRIATE?

No.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 2301, 2010.

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