Interactive comment on “Where microorganisms meet rocks in the Earth’s Critical Zone” by D. M. Akob and K. Küsel

Anonymous Referee #2

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The authors of this paper attempt to summarize our current knowledge about the role of microorganisms (bacteria, fungi, and protozoans) in the critical zone, and the non-biological factors that control where these microorganisms are found. This is an important topic, as interdisciplinary research in biogeochemistry has significantly expanded in recent years, contributing to our understanding of the interrelationships driving critical zone processes.

While the authors have provided a relatively thorough overview of biogeochemical processes in the critical zone, the primary issue that I see with this paper is that it is sometimes repetitious and confusing, such that the reader can lose track of the intended focus of a particular section. I recommend editing to streamline and reduce repetitive material.

Some minor errors were noted as well: Page 2540, line 25 – should this be cells ml groundwater-1, rather than groundwater-3? Page 2546, line 29 (last line) – should be “…rely on the addition of…” Page 2547, line 11-12 – should be “…reveal that a simple, previously unknown anaerobic respiration process could support…”

Interactive comment on Biogeosciences Discuss., 8, 2523, 2011.