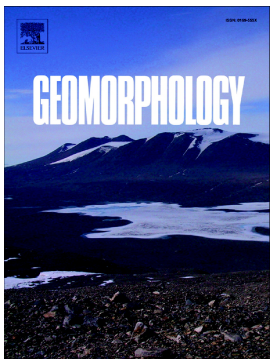

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Sulfur and oxygen isotopes in the gypsum deposits of the Provalata sulfuric acid cave (Macedonia)

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Highlights

- Use of both $\delta^{18}O$ and $\delta^{34}S$ in the study of gypsum deposits from a sulfuric acid cave
- Positive correlation between $\delta^{18}O$ and $\delta^{34}S$ due to both oxygen and sulfur isotopes being concurrently affected during H_2S oxidation
- Evolution of the sulfur stable isotopes in the H_2S of the sulfuric acid speleogenesis

Abstract

Sulfur stable isotopes from cave sulfates (mainly gypsum) have been used in a number of studies to trace the source of sulfur in caves formed by sulfuric acid, but only few studies apply combined use of sulfur and oxygen stable isotopes to further understand the processes operating in sulfuric acid speleogenesis (SAS). Here we present results of a detailed study of