

Supporting Information for ”Understanding the fate of H_2S injected in basalts by means of time-domain induced polarization geophysical logging”

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Supporting Information (Files uploaded separately)

1. Captions for Datasets S1 to S5
2. Captions for Figure sets S1 to S4

Introduction

Two types of supporting information are provided to the article: (i) data sets S1 to S5 corresponding to the geophysical monitoring and (ii) sets of figures S1 to S4 showing the Debye decompositions for all the decays (all depths, all dates, both 16- and 64-inch electrode spacing).

Data Set S1. Resistivity monitoring data for NN3, at all dates, with four different electrode spacings (including 16- and 64-inch, as well as 8- and 32-inch). Naming convention: ds01

Data Set S2. Resistivity monitoring data for NN4, at all dates, with four different electrode spacings (including 16- and 64-inch, as well as 8- and 32-inch). Naming convention: ds02

Data Set S3. Temperature and fluid conductivity measured in July 2022 in both NN3 and NN4 (+540 days monitoring round). Naming convention: ds03

Data Set S4. Full waveform time-domain induced polarization data in NN3, at all dates. Each spreadsheet corresponds to a given date (refer to Table 2 in the main manuscript for the correspondance between dates and time after injection start). The first two worksheets have the voltage waveforms for 16- and 64-inches. The third worksheet includes measurements of the injected electric current. Additional worksheet contains additional information on the acquisition settings. Naming convention: ds04

Data Set S5. Full waveform time-domain induced polarization data in NN4, at all dates. Each spreadsheet corresponds to a given date (refer to Table 2 in the main manuscript for the correspondance between dates and time after injection start). The first two worksheets have the voltage waveforms for 16- and 64-inches. The third worksheet includes measurements of the injected electric current. Additional worksheet contains additional information on the acquisition settings. Naming convention: ds05

Figure set S1.

Debye decomposition of 2m-averaged polarizability decays, after the step of stretched exponential fit, for data in NN3, with the 16-inch spacing, at all monitoring dates. Naming convention: fs01

Figure set S2.

Debye decomposition of 2m-averaged polarizability decays, after the step of stretched exponential fit, for data in NN3, with the 64-inch spacing, at all monitoring dates. Naming convention: fs02

Figure set S3.

Debye decomposition of 2m-averaged polarizability decays, after the step of stretched exponential fit, for data in NN4, with the 16-inch spacing, at all monitoring dates. Naming convention: fs03

Figure set S4.

Debye decomposition of 2m-averaged polarizability decays, after the step of stretched exponential fit, for data in NN4, with the 64-inch spacing, at all monitoring dates. Naming convention: fs04