Corrigendum to Solid Earth, 14, 271–291, 2023
https://doi.org/10.5194/se-14-271-2023-corrigendum

Solid Earth Open Access EGU

Corrigendum to
"Large grain-size-dependent rheology contrasts of halite at low differential stress: evidence from microstructural study of naturally deformed gneissic Zechstein 2 rock salt (Kristallbrockensalz) from the northern Netherlands" published in Solid Earth, 14, 271–291, 2023

Jessica Barabasch[1], **Joyce Schmatz**[2], **Jop Klaver**[2], **Alexander Schwedt**[3], **and Janos L. Urai**[1]

[1]Institute for Structural Geology, Tectonics and Geomechanics, RWTH Aachen University, Lochnerstrasse 4-20, 52056 Aachen, Germany
[2]MaP – Microstructure and Pores GmbH, Junkerstrasse 93, 52064 Aachen, Germany
[3]Central Facility for Electron Microscopy (GFE), RWTH Aachen University, Ahornstr. 55, 52074 Aachen, Germany

Correspondence: Jessica Barabasch (jessica.barabasch@emr.rwth-aachen.de)

Published: 15 May 2023

The captions of Figs. 9 and 10 were interchanged during the proofreading process and are therefore incorrect. The correct captions are as follows:

Published by Copernicus Publications on behalf of the European Geosciences Union.

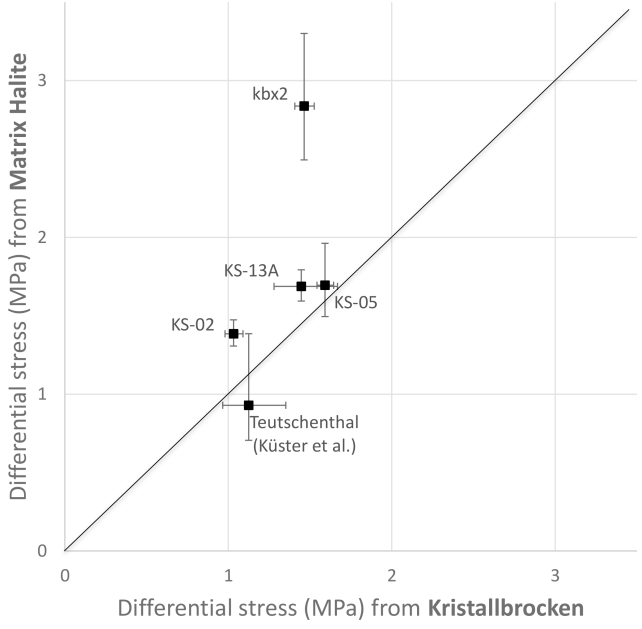

Figure 9. Comparison of differential stresses measured in Kristallbrocken and matrix halite for samples where both were available ($\sigma = 107 \cdot (D^{-0.87})$, D = subgrain size; Carter et al., 1993; Schléder and Urai, 2005) with 95 % confidence intervals based on all measured subgrains per sample. Measurements indicate comparable differential stresses for both halite types, but slightly lower values for differential stress in Kristallbrocken of this study. Differential stresses from Teutschenthal were measured based on micrographs presented in Küster et al. (2008) for matrix halite and Küster (2011) for Kristallbrocken and show comparable, slightly lower differential stresses.

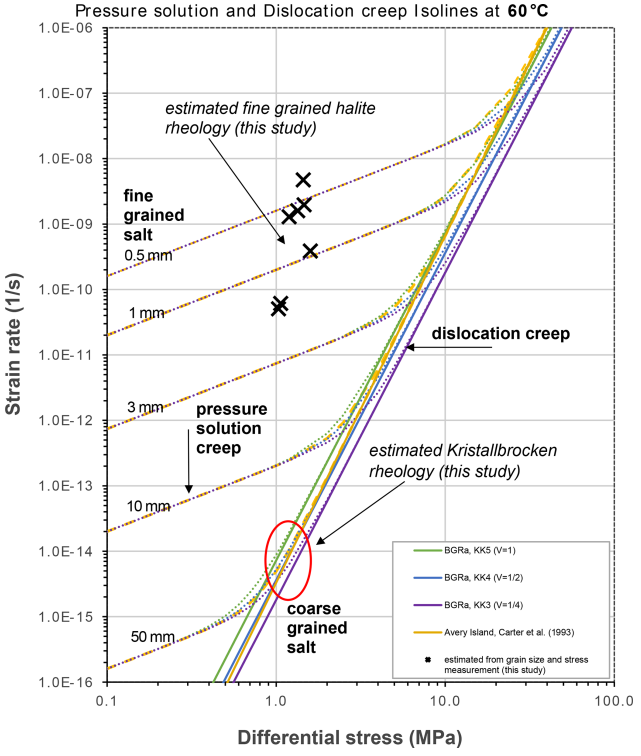

Figure 10. Differential stress vs. strain rate diagram plotting selected flow laws at 60 °C. For dislocation creep BGRa KK, Kriechklassen 5, 4, and 3 calculated with Eq. (1), $A = 2.083 \times 10^{-6}\,\mathrm{s}^{-1}$, $Q_{DC} = 54\,\mathrm{kJ\,mol}^{-1}$, and $n = 5$ (Liu et al., 2017) as well as Avery Island samples calculated with Eq. (1), $A = 1.6 \times 10^{-4}\,\mathrm{s}^{-1}$, $Q_{DC} = 68\,\mathrm{kJ\,mol}^{-1}$, and $n = 5.3$ from Carter et al. (1993) are included. Dotted lines show combined pressure solution and dislocation creep flow laws for different halite grain sizes calculated with Eq. (3); previous values for dislocation creep (Eq. 1); and $B = 4.7 \times 10^{-4}\,\mathrm{s}^{-1}$, $Q_{PS} = 24.53\,\mathrm{kJ\,mol}^{-1}$, and $m = 3$ (Eq. 2) (Spiers et al., 1990). Results from this study are plotted based on measured median fine-grained halite grain sizes (Fig. 7) and differential stresses from subgrain-size piezometry of Kristallbrocken for each sample (supplement 2 in Barabasch et al., 2022, Table 1).