



# Correction to: Study on SWCC and PSD evolution of compacted loess before and after drying-wetting cycles

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**Correction to: Bulletin of Engineering Geology and the Environment (2023) 82:180**  
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The original version of this article contains some errors. The corrections are given below:

The second paragraph in Introduction should be changed as follows:

The physical properties of soil are affected by its microstructure (Liu et al. 2013), and there is a growing interest in investigating the physical properties of loess from a microstructural perspective. Differences in soil structure can cause significant variations in the soil–water characteristic curve (SWCC) of natural, remodeled, and compacted loess (Muñoz-Castelblanco et al. 2012; Ng et al. 2016; Li et al. 2018; Mu et al. 2020), with even small structural changes leading to different SWCCs in loess samples. Land transformation projects have disturbed and modified the natural loess structure of the Chinese Loess Plateau (Zhang et al. 2019a), making it imperative to develop techniques for investigating the soil pore structure and mechanical properties (Jiang et al. 2014; Li et al. 2019a). Scanning electron microscopy (SEM) and Mercury Intrusion Porosimetry (MIP) constitute the primary methodologies employed for the characterization of the

microstructure of loess (Jiang et al. 2014; Li et al. 2019a). SEM facilitates the visualization of particle arrangement and contact interactions through imaging (Li and Li 2017). Conversely, MIP is predominantly employed for acquiring information regarding the distribution of pores within the material (Sasanian and Newson 2013; Wang et al. 2019). However, these methods have limitations. SEM images are susceptible to human interference (Shao et al. 2018; Tang et al. 2008), while MIP has difficulty entering micropores and can damage the soil structure. Besides, the soil is more fragile than rock, and its internal structure is more complicated due to rock weathering. NMR shows promising results in testing pore size distribution, particularly for fragile and complex soil structures.

The caption of Fig. 1 (b) should be changed as follows:

(b) Yan'an New District (Modified from Wang et al. (2021b))

## Reference

1. Wang Y, Li T, Zhao C et al (2021) A study on the effect of pore and particle distributions on the soil water characteristic curve of compacted loess soil. *Environ Earth Sci* 80:764. <https://doi.org/10.1007/s12665-021-09973-0>

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