



Newsletter of the Unesco Land Subsidence International Initiative

Vol.52, September 2024

Please, send your comments and suggestions to John.Lambert@deltares.nl

New Literature

PR China, Cangzhou

Bin Zhao et al.,

Spatio-Temporal Heterogeneous Ensemble Learning Method for Predicting Land Subsidence

<https://www.mdpi.com/2076-3417/14/18/8330>

PR China, Decheng District

Jinming Hu et al.,

Simulation and prediction of land subsidence in Decheng District under the constraint of InSAR deformation information

<https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2024.1458416/full>

PR China, Guangdong–Hong Kong–Macao Greater Bay

Chaoqi Lin, Kejie Chen, Cunren Liang, Hai Zhu, Wenfeng Cui, Haishan Chai, Mingjia Li, Changhu Xue, Zhiwen Zheng, Zhanhui Qing,

Subsidence Detection in Southwest Guangdong–Hong Kong–Macao Greater Bay Area Using InSAR with GNSS Corrected Tropospheric Delays,

<https://www.sciencedirect.com/science/article/abs/pii/S0273117724009359>

PR China, Qian'an County

Lianjing Zheng et al.,

Development and Comparison of InSAR-Based Land Subsidence Prediction Models

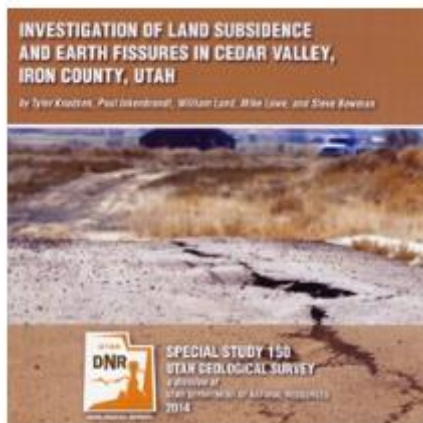
https://www.researchgate.net/publication/383888077_Development_and_Comparison_of_InSAR-Based_Land_Subsidence_Prediction_Models

PR China, Wuwei

Huang Jiale, Su Xiaoning, Shi Ruijuan, Bao Qinghua, Zhao Li, Xu Weixiang. 2024. Temporal and spatial characteristics of ground subsidence in Wuwei City based on PS-InSAR technology. Chinese Journal of Geology, 59(2): 575-587. doi: 10.12017/dzcx.2024.040

<http://en.dzcx.org/article/doi/10.12017/dzcx.2024.040>

USA, Utah



Investigation Of Land Subsidence
And Earth Fissures In Cedar Valley,
Iron County, Utah (SS-150)

\$19.95

<https://utahmapstore.com/collections/aquifer>

Mining

Iran, Isfahan

Vaezihir, A., Tabarmayeh, M., Taghipour, K. et al. Exploring the rate and potential risk of land subsidence induced by groundwater overexploitation in a multilayer aquifer. *Nat Hazards* (2024). <https://doi.org/10.1007/s11069-024-06820-w>

PR China

Fang, X., Guo, X. (2024). Comprehensive Treatment Mode of Mining Subsidence Area Based on Whole Life Cycle. In: Wang, S., Huang, R., Azzam, R., Marinos, V.P. (eds) *Engineering Geology for a Habitable Earth: IAEG XIV Congress 2023 Proceedings*, Chengdu, China. IAEG 2023. Environmental Science and Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-99-9073-3_20

PR China, Western China

Ju, J., Xu, J., Zhao, F. et al. Surface Subsidence Observations and Strata Breaking Activity Inversion from Underground Coal Mining: A Case Study in Western China. *Rock Mech Rock Eng* (2024). <https://doi.org/10.1007/s00603-024-04161-5>

PR China, Henan

Zhichao Chen et al.,

Soil Characteristics and Response Mechanism of the Microbial Community in a Coal–Grain Compound Area with High Groundwater Levels

<https://www.mdpi.com/2073-4395/14/9/1993>

Presentation

2.55 minutes:

The video player displays a presentation slide with the following elements:

- Title:** Land Subsidence Disaster in Urban Areas
- Subtitle:** Consequences
- Course:** LSD-01
- Speaker:** Dr. Abbas Kangi, Director of DRP Group
- Image:** A photograph of a building partially submerged in sand, with a dashed line indicating the 'Former land surface'.
- Source:** Southeast Arizona Dept. of Water Resources
- Session:** First Session
- Progress:** 0:00 / 2:55

<https://www.natural-hazards.com/land-subsidence>

From the Press

Iran, Isfahan

By Afshin Majlesi

17th-century Imam Mosque in Isfahan at serious risk

September 23, 2024 - 18:11

Tourism



TEHRAN - Isfahan's historical Masjed-e Jameh Abbasi, also known as the Imam Mosque, is facing a looming crisis, with its structural integrity severely threatened by deep cracks caused by land subsidence and prolonged drought.

<https://www.tehrantimes.com/news/504033/17th-century-Imam-Mosque-in-Isfahan-at-serious-risk>