

# Newsletter of the Unesco Land Subsidence International Initiative

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# Special Issue

A special issue of Remote Sensing (ISSN 2072-4292). This special issue belongs to the section "Urban Remote Sensing".

Deadline for manuscript submissions: 20 February 2024.

Remote Sensing Approaches to Groundwater Management and Mapping II

https://www.mdpi.com/journal/remotesensing/special issues/1UHIEU079B

# **New Literature**

## General, Experimental and Numerical analysis

Dayana Carolina Chalá et al.,

Land Subsidence Due to Groundwater Exploitation in Unconfined Aquifers: Experimental and Numerical Assessment with Computational Fluid Dynamics

https://www.mdpi.com/2073-

4441/16/3/467#:~:text=Land%20subsidence%20is%20a%20global,integrated%20modeling%20tools %20are%20essential.

#### General, Salt-water intrusion

Daniel Zamrsky et al.,

Global Impact of Sea Level Rise on Coastal Fresh Groundwater Resources

https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023EF003581

## **General, Smart Cities**

Nurul Fajar Januriyadi et al.,

Evaluation of Land Subsidence Prevention to Minimize the Flood Risk in a Port City

https://link.springer.com/chapter/10.1007/978-981-99-1111-0 13

#### India, Ludhiana

Shankar, Hari et al.,

Investigation of groundwater induced land subsidence in Ludhiana City using InSAR and Sentinel-1 data

https://ui.adsabs.harvard.edu/abs/2024QSAdv..1300151S/abstract

### Indonesia, Semarang

Ivan Muhammad Hanif et al.,

Green Waterfront City, Future Perspectives for Sustainable City in Tidal Flooding Prone Area at Northern Semarang

https://www.researchgate.net/publication/377120093 Green Waterfront City Future Perspective s for Sustainable City in Tidal Flooding Prone Area at Northern Semarang

#### Indonesia, Trumon Area

Dedy Alfian et al.,

Application of Spatial Model the Contribution of Land Subsidence Caused by Palm Oil Plantations Land Clearing to the Escalating Flood Risk in the Trumon Area, South Aceh Regency, Indonesia

https://www.researchgate.net/publication/377467509 Application of Spatial Model the Contribution of Land Subsidence Caused by Palm Oil Plantations Land Clearing to the Escalating Flood Risk in the Trumon Area South Aceh Regency Indonesia

#### Lybia, Derna

Prof.Dr. Mahmoud El-Mewafi et al.,

Differential synthetic aperture radar (SAR) interferometry for detection land subsidence in Derna City, Libya

DOI: 10.1515/jag-2023-0087

https://www.researchgate.net/publication/377175246 Differential synthetic aperture radar SAR interferometry for detection land subsidence in Derna City Libya

### Pakistan, Rawalpindi, Islamabad

Waqar A. Zafar et al.,

Time Series subsidence evaluation using NSBAS InSAR: A case study of Twin Megacities (Rawalpindi and Islamabad), Pakistan

https://www.frontiersin.org/articles/10.3389/feart.2024.1336530/abstract

### PR China, Beijing

Qingyi Cao, Yufei Zhang, Liu Yang, Jiameng Chen, Changhong Hou,

Unveiling the driving factors of urban land subsidence in Beijing, China,

https://www.sciencedirect.com/science/article/abs/pii/S0048969724002687

## PR China, Beijing Airport

Zheng, Y.; Peng, J.; Li, C.; Chen, X.; Peng, Y.; Ma, X.; Huang, M. Long-Term SAR Data Analysis for Subsidence Monitoring and Correlation Study at Beijing Capital Airport. Remote Sens. 2024, 16, 445. https://doi.org/10.3390/rs16030445

https://www.mdpi.com/2072-4292/16/3/445

# PR China, Guangzhou City

Simiao Wang et al.,

Integrated Assessment of Coastal Subsidence in Nansha District, Guangzhou City, China: Insights from SBAS-InSAR Monitoring and Risk Evaluation.

https://www.mdpi.com/2072-4292/16/2/248

# PR China, Hangjiahu Plain

Lv Zhou et al.,

InSAR time series analysis of natural and anthropogenic coastal plain subsidence: A case of Hangjiahu plain

https://www.sciencedirect.com/science/article/pii/S167498472400003X

### PR China, Shanghai

Muhammad Akmal Hakim bin Hishammnuddin et al.,

Underground Space-Subsidence and Economic Impact Planning Model in Shanghai: Cause-Effect and Spatiotemporal Regression Analyses for Year 1960-2020

https://www.researchgate.net/publication/377519783 Underground Space-Subsidence and Economic Impact Planning Model in Shanghai Cause-Effect and Spatiotemporal Regression Analyses for Year 1960-2020

# PR China, Yellow River Delta

Guoyang Wang, Peng Li, Zhenhong Li, Jie Liu, Yi Zhang, Houjie Wang,

InSAR and machine learning reveal new understanding of coastal subsidence risk in the Yellow River Delta, China,

https://www.sciencedirect.com/science/article/abs/pii/S0048969724003383

#### South-Korea,

Lee, M., Lee, JY. & Jang, J.

Numerical modeling of groundwater system with tunnel construction in an urban area of Korea: implications for land subsidence and mitigation measures. Environ Earth Sci 83, 80 (2024). https://doi.org/10.1007/s12665-023-11211-8

# From the Press

Global groundwater levels declining rapidly, but they can recover

https://www.ucl.ac.uk/news/2024/jan/global-groundwater-levels-declining-rapidly-they-can-recover

Iran, Isfahan

Subsidence Crisis Leads To Evacuation Of More Schools In Iran

https://www.iranintl.com/en/202401162632

Mexico, Mexico City

And:

USA, East Coast

https://www.sciencetimes.com/tags/subsidence