



Taiwan International Symposium on Land Subsidence

Ground Deformation in a Changing World:
Land Subsidence, Climate, and Resilience

Conference Agenda & Sessions

2026/04/14 ~ 2026/04/15

Preliminary Version

2026

4/13 MON → **4/17** FRI

4/13 workshop, 4/14-15 oral and poster, 4/16-17 field trip

Agenda

Day 1: April 14, 2026 (Tuesday)

9:00 - 9:30	Registration			
9:30 - 10:00	Opening Ceremony Chair: Distinguished guests: Prof. Shu-San Hsiau (President of National Central University) Distinguished guests: Prof. Pietro Teatini (Chair of UNESCO Land Subsidence International Initiative)		Room: 102	
	Distinguished guests:			
	Keynote Lecture (1) Speaker: Topic:			
	Group Photo			
10:40 - 11:10	Coffee Break			
11:10 - 11:40	Chair: Keynote Lecture (2) Speaker: Prof. Ramon Hanssen (Delft University of Technology) Topic: On the modeling concepts in geodesy and geophysics: the hand-over problem in relation to land subsidence		Room: 102	
	Keynote Lecture (3) Speaker: Prof. Ronaldo I. Borja (Stanford University) Topic: The role of computational poromechanics in predicting subsidence and 3D ground deformation			
	Conference Introduction & Student Competition Evaluation Guideline			
12:30 - 13:30	Lunch			
13:30 - 15:00	Session A			
	Session	A1-SPC	A2-MMS	
	Topic	Student Paper Competition	Mechanisms and Modeling of Subsidence (Invited talk)	
	Chair		Impacts, Risk Management, and Adaptation (Invited talk)	
	Room	101A	101B	
15:00 - 15:30	Coffee Break & Student Poster Evaluation (Room:101D)			
15:30 - 17:00	Session B			
	Session	B1-SPC	B3-MGD	
	Topic	Student Paper Competition	Mechanisms and Modeling of Subsidence	
	Chair		Monitoring and Measurement of Ground Deformation	
	Room	101A	101B	
17:00 - 18:00	Coffee Break & LaSII Meeting (Room: 101A)			
18:00 - 20:00	Conference Banquet			

Day 2: April 15, 2026 (Wednesday)

8:30 - 9:00	Registration			
	Session C			
	Session	C1-SPC	C2-MMS	C3-IRA
9:00 - 10:30	Topic	Student Paper Competition	Mechanisms and Modeling of Subsidence (Invited talk)	Impacts, Risk Management, and Adaptation (Invited talk)
	Chair			
	Room	101A	101B	101C
10:30 -11:00	Coffee Break & Student Poster Evaluation (Room:101D)			
	Session D			
	Session	D1-SPC	D2-ESD	D3-MGD
11:00 - 12:30	Topic	Student Paper Competition	Earth Surface Dynamics and Multi-Hazard Interactions	Monitoring and Measurement of Ground Deformation
	Chair			
	Room	101A	101B	101C
12:30 - 13:30	Lunch			
	Session E			
	Session	E1-SPC / E1-FET	E2-MMS	E3-PGP
13:30 - 15:00	Topic	Student Paper Competition / Frontiers and Emerging Topics	Mechanisms and Modeling of Subsidence (Invited talk)	Policy, Governance, and Public Engagement (Invited talk)
	Chair			
	Room	101A	101B	101C
15:00 - 15:30	Coffee Break			
	Session F			
	Session	F1-MOU	F2-SPT	F3-SPT
15:30 - 16:30	Topic	MOU Signature	Special Topics	Special Topics
	Chair			
	Room	101A	101B	101C
16:30 - 17:00	Closing Ceremony Conference Overview Student Paper Competition Award Ceremony			Room: 101C

Session A**2026-04-14****13:30~15:00****A1-SPC Student Paper Competition****Session Chair:
Seminar Room: 101A**

Paper No.	Title	Author
A1-SPC-1	Quantifying 3D Lagrangian Land Subsidence and Aquifer Compaction in Jakarta Using Combined InSAR and GNSS Extensometer Data	<u>Alexandru Mihai Lapadat</u> , Heri Andreas, Dhota Pradipta, Ramon Hanssen
A1-SPC-2	Evaluating of Jakarta's 2021 Groundwater Regulations on Land Subsidence: A Sentinel-1 InSAR Time-Series Analysis (2016-2025)	<u>Ulil Hidayat</u> , Tri Anggun Lestari, Tang-Huang Lin
A1-SPC-3	Exploring regional-scale land subsidence induced by agricultural groundwater pumping using various monitoring data in the Choushui River Alluvial Fan, Taiwan	<u>Cheng-Hsin Hung</u> , Chuen-Fa Ni, Ya-Ju Hsu
A1-SPC-4	Integrated Remote Sensing and Hydrogeological Monitoring for Quantifying Pumping-Induced Land Subsidence and Development of Mitigation Strategies in the Choushui River Fluvial Plain, Taiwan	<u>Thai-Vinh-Truong Nguyen</u> , Chuen-Fa Ni
A1-SPC-5	Displacement of Transportation Infrastructure Resulting from Land Subsidence	<u>Shao-Hung Lin</u> , Jyr-Ching Hu, Wei-Chia Hung
A1-SPC-6	Ground Subsidence and Hydrological Properties in Yangon, Myanmar	<u>Saw Myat Min</u> , Yu Wang, Yunung Nina Lin, Win Naing, Anuphao Aobpaet

A2-MMS Mechanisms and Modeling of Subsidence**Session Chair:
Seminar Room: 101B**

Paper No.	Title	Author
A2-MMS-1	Sensitivity analysis of controlling factors and surrogate models of groundwater pumping induced earth fissures	(Invited talk) <u>Shujun Ye</u> , Huolian Zhang
A2-MMS-2	X-ray micro-CT investigation of internal erosion of granular soils under triaxial shearing	<u>Zhangqi Xia</u> , <u>Jianfeng Wang</u> , Budi Zhao
A2-MMS-3	Unravelling shallow subsurface soil deformation processes in organic-rich coastal plains	<u>Sanneke van Asselen</u> , Gilles Erkens
A2-MMS-4	Integrating InSAR Data with In-Situ Well Measurements to Estimate Groundwater Storage Change in the Western United States	<u>Ryan Smith</u> , Susmita Pant, Abdullah Al Fatta, Soheil Nozari
A2-MMS-5	Estimating water abstraction using a coupled groundwater-subsidence model for Bandung, Indonesia	<u>Luke Bateson</u> , Ekbal Hussain, Michelle Rygus, Marco Bianchi, Alessandro Novellino, Claudia Meisina

A3-IRA Impacts, Risk Management, and Adaptation**Session Chair:
Seminar Room: 101C**

Paper No.	Title	Author
A3-IRA-1	From Flood Risk to Financial Losses: An Evaluation of Inland Subsidence Impacts in the Spring Creek Watershed, Southeast Texas, USA	(Invited talk) <u>Ashley Greuter</u> , Mohamed Bagha, Manoj Kc, Michael J. Turco, Chris Canonico, Alan Petrov
A3-IRA-2	Socioeconomic and environmental consequences of subsidence: case study in Can Tho city, Vietnam	<u>Le Anh Tuan</u>
A3-IRA-3	Socio-economic exposure to differential land subsidence in the Emilia-Romagna Region, Italy	<u>Roberta Bonì</u> , Andrea Taramelli, Serena Sapiro, Leila Goliraeisi, Francesca Cigna, Pietro Teatini, Roberta Paranunzio
A3-IRA-4	Identifying critical zones for early-warning system deployment in Himalayan valleys using InSAR based deformation and GLOF modeling	<u>Saurabh Vijay</u> , Greeffin Raju Fule, K Sai Tarun
A3-IRA-5	Studies on Pile Behaviours and Remedial work in Ground Subsidence Area	<u>Han-Wei Yang</u> , Pei-Ching Tsai

Session B**2026-04-14****15:30~17:00****B1-SPC Student Paper Competition****Session Chair:
Seminar Room: 101A**

Paper No.	Title	Author
B1-SPC-1	Hydrological uncertainty in stochastic heterogeneous soil slope	<u>Vu Phuong Thanh</u> , Chih-Yu Kuo, Chuen-Fa Ni, I-Hsien Lee, Yunung Lin, Tran Thi Kim Tu
B1-SPC-2	Assessing Extraction-Induced Subsidence Coupled with Variable-Density Groundwater Flow: A Case Study of the Vietnamese Mekong Delta	<u>Ahmed Sabbir</u> , Gualbert Oude Essink, Daniel Zamrsky, Artur Guzy, Pietro Teatini, Philip S.J. Minderhoud
B1-SPC-3	1D Poroelastic Consolidation Model as a Tool for Assessing Subsidence Mitigation and Aquifer Recharge in Urbanized Quaternary Systems	<u>Anuradha Karunakalage</u> , Michel Jaboyedoff, Ravi Sharma, Mohammed Taqi Daqiq, Zenan Huo
B1-SPC-4	A site specific land subsidence induced by groundwater pumping in the Chousui River Alluvial Fan, Taiwan	<u>G. U. Nugraha</u> , C.F. Ni, T. M. Tien
B1-SPC-5	Coupled 3D flow-geomechanical differential land subsidence modeling with InSAR-based data assimilation: Bologna, Italy	<u>Xi Tang</u> , Pietro Teatini, Claudia Zoccarato, Francesca Cigna, Roberta Paranunzio, Roberta Boni, Marco Marcaccio, Marianna Mazzei, Paolo Severi
B1-SPC-6	The Influence of Dependent-Parameters on Groundwater Pumping Induced Land Subsidence and Saltwater Intrusion	<u>Huu-Duc Truong</u> , Shih-Jung Wang

B2-MMS Mechanisms and Modeling of Subsidence**Session Chair:
Seminar Room: 101B**

Paper No.	Title	Author
B2-MMS-1	Mechanism of the Thermal Effect on Permeability of Clayey Aquitard by LF-NMR: Insights from Mobility of Water Molecules.	<u>Zhao Li</u> , Zujiang Luo
B2-MMS-2	Thermo-poro-mechanical modelling for fault stability and subsidence evaluation	<u>Silvia Monaco</u> , Stefano Mantica, Marco Brignoli

B2-MMS-3	An integrated model for long-term subsidence prediction above exhausted hydrocarbon fields	<u>Massimiliano Ferronato</u> , Caterina Millevoi, Claudia Zoccarato
B2-MMS-4	Diffusion-Based Inversion of Heterogeneous Aquifer Properties from Subsidence and Hydraulic Head Observations	<u>Yue-ting Li</u> , Shujun Ye
B2-MMS-5	Stochastic Gradient Null-space Monte Carlo Smoother for Uncertainty Visualization of Land Subsidence Model	<u>Masaatsu Aichi</u>
B2-MMS-6	Forecasting Production-Induced Subsidence Using the Impulse–Response Approach	<u>Stefano Mantica</u>

B3-MGD **Monitoring and Measurement of Ground Deformation**

Session Chair:
Seminar Room: 101C

Paper No.	Title	Author
B3-MGD-1	Mexico's largest subsidence footprint and fastest subsidence in Torreon and Mexico City metropolitan areas	<u>Enrique Cabral-Cano</u> , Daniel Hernández-Luna, Enrique Fernández-Torres, Luis Salazar-Tlaczani
B3-MGD-2	Measuring Land Subsidence and Sea Level Using Permanent Low-cost GNSS Instruments, Experimental Field Testing in the Subsiding North Manila Bay Area	<u>Rosalie Reyes</u> , Philip Minderhoud, Makan Karegar, John Dave Maclang, Alexi Mae Narca
B3-MGD-3	Large-scale ground motion monitoring with InSAR: the US East Coast case study	<u>Simone Fiaschi</u> , Sara Del Conte
B3-MGD-4	Integrated Time-Series InSAR and Groundwater Analysis for Subsidence Monitoring in the Lower Chao Phraya Basin, Thailand	<u>Anuphao Aobpaet</u> , Saruta Meyer, Anirut Ladawadee, Soravis Supavetch
B3-MGD-5	The hidden effect of irrigation: tracking land subsidence in the Pontina Plain, Central Italy	<u>Laura Pedretti</u> , Diana Terranova, Federico Filipponi, Cristina di Salvo, Christian Bignami, Francesco Zucca, Claudia Meisina
B3-MGD-6	Quantifying auto-compaction and land subsidence of the Lafourche bayhead delta in Louisiana (USA)	<u>Selena Baldan</u> , Philip S.J. Minderhoud, Claudia Zoccarato, Elizabeth Chamberlain, Sjanne Poell, Pietro Teatini

C1-SPC Student Paper Competition**Session Chair:
Seminar Room: 101A**

Paper No.	Title	Author
C1-SPC-1	Application of a new coupled hydro-mechanical soil deformation model to subsidence in the Groningen (Netherlands) reservoir region: From local model to regional scale.	<u>Yuta Hiruma</u> , Esther Stouthamer, Lina Hagenah, Ramon Hanssen, Femke Vossepoel, Tom de Gast, Rob Govers
C1-SPC-2	Evolution of the Aquifer Pressure and 3-D Land Displacement in Cangzhou, China: Coupled Hydro-geomechanical Simulation and Uncertainty Quantification	<u>Huilin Yu</u> , Lin Zhu, Claudia Zoccarato, Pietro Teatini
C1-SPC-3	A bounding surface plasticity model for the hydro-mechanical consequences of internal erosion	<u>Danial Haider</u> , Chao Zhou
C1-SPC-4	Sinking Italian coastal plains: stratigraphic architecture and subsidence patterns	<u>Naveed Ullah</u> , Daniela Ruberti, Carla Buffardi, Cristina Da Lio, Sandra Donnici, Luigi Tosi
C1-SPC-5	Saving sinking Asian deltaic megacities	<u>Can Lu</u> , Hanqing Xu, Laixiang Sun, Philip S.J. Minderhoud, Jeremy D. Bricker, Sebastiaan N. Jonkman, Jun Wang
C1-SPC-6	Meanings on the move: how science on soil subsidence is translated into policy	<u>Richard Ferdinand</u> <u>Pompoes</u> , Wieke D. Pot, Art R. P. J. Dewulf

C2-MMS Mechanisms and Modeling of Subsidence**Session Chair:
Seminar Room: 101B**

Paper No.	Title	Author
C2-MMS-1	Comparative Study of Deformation Processes in Lacustrine Soils from Mexico City and Volcanic Valleys of Central Mexico	(Invited talk) <u>Dora Carreon-Freyre</u> , Eugenio Carmona-Aboytes, Mariano Cerca, Sara Solís-Valdés, Beatriz Millán-Malo, Ricardo Carrizosa-Elizondo
C2-MMS-2	Heterogeneous Distribution of Consolidation and Swelling in Clayey Layers Induced by Groundwater	<u>Kazunori Tabe</u> , Masaatsu Aichi

	Level Fluctuations	
C2-MMS-3	A National-scale Modelling Framework for Predicting and Managing Land Subsidence in the Netherlands	<u>Deniz Kılıç</u> , Kim M. Cohen, Gilles Erkens, Esther Stouthamer
C2-MMS-4	Atmospheric and meteorologic changes influence coastal plain vertical land motions	<u>Kay Koster</u> , Laura Becerra Silva, Pietro Teatini, Thibault Candela
C2-MMS-5	Revisiting the Heterogenous of Hydrogeological Characteristics to Land Subsidence Using Multi-Layer Compaction Monitoring Wells: Insights from the Choushui River Alluvial Fan, Central Taiwan	Reyhan Azeriansyah, <u>Kuo-En Ching</u> , Cheng-Wei Lin, Kuo-Chin Hsu, Pei-Ching Tsai, Chao-Lung Yeh, Ruey-Juin Rau

C3-IRA Impacts, Risk Management, and Adaptation

Session Chair:
Seminar Room: 101C

Paper No.	Title	Author
C3-IRA-1	Land subsidence, flood-control infrastructures, and shallow-groundwater salinization in a subsiding coastal plain	(Invited talk) <u>Tomochika Tokunaga</u> , ChiSan Tsai, Yuka Ito, Jiaqi Liu, Katsuro Mogi
C3-IRA-2	The DPSIR Framework for Land Subsidence in Java's Northern Coastal Areas (Indonesia)	<u>Hasanuddin Z. Abidin</u> , Heri Andreas, Irwan Gumilar, Teguh P. Sidiq, Dhota Pradipta
C3-IRA-3	Water and land management scenarios and pathways to address land subsidence in the Dutch rural landscape	Muhannad Hammad, Deniz Kılıç, Gilles Erkens, Kim Cohen, <u>Esther Stouthamer</u>
C3-IRA-4	Groundwater Basin Management in Japan — Lessons from the History of Land Subsidence Mitigation	<u>Katsuhiro Fujisaki</u>
C3-IRA-5	Hydro-mechanical sensitivity and environmental risk of land subsidence at the Rincón de Parangueo maar, central Mexico	<u>Mariano Cerca</u> , Dora Carreón-Freyre, Eugenio Carmona Aboytes, Vania Ferrer

Session (D)**2026-04-15****11:00~12:30****D1-SPC Student Paper Competition****Session Chair:
Seminar Room: 101A**

Paper No.	Title	Author
D1-SPC-1	Investigation of Surface Horizontal Motion Mechanisms Induced by Land Subsidence in the Pingtung Area, Taiwan	<u>Pei-Ching Tsai</u> , Kuo-En Ching, Ruey-Juin Rau, Cheng-Wei Lin, Ray Y. Chuang, Han-Wei Yang, Chi-Yu Chiu
D1-SPC-2	Data-Driven Modeling and Prediction of Land Subsidence Using Machine Learning Techniques	<u>Chun-En Wang</u> , Chih-Yu Liu
D1-SPC-3	Prediction of land subsidence trends under extreme climate scenarios using machine learning	<u>Ting-Yuan Wu</u> , Cheng-Yu Ku, Chih-Yu Liu
D1-PSC-4	Three-Dimensional Modeling of Groundwater Level Dynamics and Land Subsidence	<u>Wei-Hao Chen</u> , Chih-Yu Liu
D1-SPC-5	Land subsidence mechanisms involved to concrete pile foundation insight from a Vietnam case study	<u>Hung-Thoi Do</u> , Chih-Chung Chung, Yong-Ming Tien, Duy-Khuong Tran, Hoang Le, Chau-Lan Nguyen
D1-SPC-6	Long- and Short-Term Vertical Deformation in the Chianan Region, Southwestern Taiwan	<u>Chih-Kuo Haung</u> , I-Chin Yen, Yu-Ting Kuo, Chia-Yu Chen

D2-ESD Earth Surface Dynamics and Multi-Hazard Interactions**Session Chair:
Seminar Room: 101B**

Paper No.	Title	Author
D2-ESD-1	The effect of roots on the compaction of shallow coastal soils	<u>Claudia Zoccarato</u> , Pietro Teatini, Luigi Tosi, Holly Michael, Christopher L. Meehan, Siamak Yoosefi
D2-ESD-2	InSAR-Based Assessment of Production-Induced Subsidence and Enhanced Flooding Hazards in the Coastal Oilfields of the Liaohe River Delta	<u>Wei Tang</u> , Yonghui Li, Yiming Lei
D2-ESD-3	Integrated vulnerability assessment across the land-sea continuum under land subsidence and relative sea-level rise in Venice, Italy	Marta Cosma, Cristina Da Lio, Sandra Donnici, Pablo Agustin Yaciuk, Selena Baldan, Massimiliano Ferronato, Annamaria Mazzia, Urooj Qayyum,

		Pietro Teatini, Cláudia Zoccarato, <u>Luigi Tosi</u>
D2-ESD-4	Understanding coastal vertical land motion in Europe on a continental scale	<u>Manon Verberne</u> , Joana Esteves Martins, Rémi Thieblemont, Holly Hourston, Luke Bateson, Ekbal Hussain, Bart Davids, Kay Koster, Aurélie Maspataud, Eleftheria Poyadji
D2-ESD-5	Getting Grip on Drowning Deltas: Advancing Modelling and Process-based Projections of Sinking Coastal-Deltaic Areas	<u>Philip S.J. Minderhoud</u> , Artur Guzy, Katharina Seeger, Selena Baldan, Ahmed Sabbir, Sebastian Walczak, Khai Quang Ha, Rosalie Reyes, Jak Sarmiento, Anuphao Aobpaet, Pham Huy Giao, Wojciech Witkowski, Magdalena Łucka, Claudia Zoccarato, Gualbert Oude Essink, Pietro Teatini
D2-ESD-6	Assessing land subsidENce and the impact of relative sea-level rise along the GULF of Guinea – Findings from the ENGULF project	<u>Katharina Seeger</u> , Pietro Teatini, Philip S.J. Minderhoud, Roberta Boni, Leonard Ohnenhen, Oluwaseyi Dasho, Selasi Yao Avornyo, Femi Emmanuel Ikuemonisan, Gergino Chounna Yemele, Elham Ashrafi, Wei-Chia Hung, Fatou Diop Ngom, Luigi Tosi, Cheikh Tidiane Wade, Cláudia Zoccarato, Kwasi Appeaning Addo, Manoochehr Shirzaei, Marine Canesi, Marie-Noëlle Woillez

D3-MGD Monitoring and Measurement of Ground Deformation

Session Chair:
Seminar Room: 101C

Paper No.	Title	Author
D3-MGD-1	Research on accuracy verification of synthetic aperture radar (SAR) observation results in wide-area land subsidence surveys	<u>Kenji Daito</u>
D3-MGD-2	Integrating Interpretable Machine Learning and InSAR Data for Land Subsidence Assessment in Southern Quebec, Canada	<u>Claudia Meisina</u> , Pouya Ghorbanvatan, Siamak Razzagh, Rahim Barzegar
D3-MGD-3	Comparative Analysis of LiDAR, InSAR, and In-Situ Monitoring of Subsidence-Induced Ground Deformation in a Heritage Building, Aguascalientes Valley, Central Mexico.	<u>Gil H. Ochoa-González</u> , Martín Hernández-Marín, Hugo Luna-Villavicencio, José M. Ramírez-León
D3-MGD-4	Patterns of subsidence across Great Britain's coastal lowlands	<u>Luke Bateson</u> , Ekbal Hussain, Holly Hourston
D3-MGD-5	Ground motions in northern Taiwan from Sentinel-1A, leveling and GNSS	<u>Cheinway Hwang</u> , Sihao Ge, Hong-Mao Huang, Shao-Hung Lin
D3-MGD-6	Advances in subsidence modelling in the Netherlands for resource extraction, groundwater management, and their interferences	<u>Manon Verberne</u> , Thibault Candela, Suresh Palanisamy Vadivel, Peter Fokker, Sander Osinga, Frans Aben, Maarten Pluymaekers, Kay Koster

Session (E)**2026-04-15****13:30~15:00**

E1-SPC **Student Paper Competition**
E1-FET **Frontiers and Emerging Topics**

Session Chair:
Seminar Room: 101A

Paper No.	Title	Author
E1-SPC-1	Spatiotemporal Evolution of Ground Deformation in the Chiayi Region, SW Taiwan: Insights from GNSS, Leveling, and InSAR (2006–2022)	<u>Pin-Jui Hsiang</u> , Horng-Yue Chen, Hsin Tung, I-Chin Yen, Yu-Ting Kuo, Chia-Yu Chen, Ching-Yu Lu, Chih-Heng Lu, Jiun-Yee Yen, Kai-Chien Cheng, Ray Y Chuang
E1-SPC-2	Three-dimensional investigation of land subsidence for a road embankment on soft soil improved by PVDs in Vietnam	<u>Hung-Thoi Do</u> , Chih-Chung Chung, Yong-Ming Tien, Hoang Le, Thi-Anh-Hong Le, Chau-Lan Nguyen, Nong Le
E1-FET-1	Integrating SAR Data with Hydrological–Urban Models to Assess Land Subsidence and Multi-Hazard Risks in the Vietnamese Mekong Delta	<u>Nguyen Vo Chau Ngan</u> , Huynh Vuong Thu Minh, Nguyen Dinh Giang Nam, Le Nhu Y
E1-FET-2	Interaction between groundwater dynamics and archaeological heritage in a subsiding urban context	Ilaria Bertolini, Michela Marchi, <u>Guido Gottardi</u>
E1-FET-3	Integrating automatic monitoring and qgis for water management in Tra Su Melaleuca forest - Vietnamese Mekong Delta	<u>Nguyen Dinh Giang Nam</u> , Nguyen Van Khang, Huynh Vuong Thu Minh, Lam Van Thinh, Nguyen Vo Chau Ngan
E1-FET-4	InSAR-Observed Land Subsidence and Seasonal Aquifer Deformation Driven by Groundwater Pumping and Recharge in an Arid Oasis Basin, Northwest China	<u>Wei Tang</u> , Xiangjun Zhao, Ying Liu

E2-MMS **Mechanisms and Modeling of Subsidence**

Session Chair:
Seminar Room: 101B

Paper No.	Title	Author
E2-MMS-1	Decoupling and Coupling of Subsidence and Carbon Emissions: Long-Term Observations from Dutch Peatlands	(Invited talk) <u>Gilles Erkens</u> , Sanneke van Asselen
E2-MMS-2	Linking Viscous Compression and Organic Matter Decomposition in Peat: Towards a Mechanistic	<u>Pepijn van Ederen</u> , Duygu Tolunay, Gilles Erkens,

	Understanding of Long-Term Subsidence	Esther Stouthamer
E2-MMS-3	A geological-geotechnical approach to analyze the causes of subsidence in the Volturno River plain (northern Campania, Italy)	<u>Daniela Ruberti</u> , Carla Buffardi, Naveed Ullah, Philip S.J. Minderhoud
E2-MMS-4	Land subsidence and groundwater storage change assessment using InSAR and GRACE in the arid environment of Saudi Arabia	<u>Esubalew Adem</u> , Roman Shults, Amro Elfeki
E2-MMS-5	The effectiveness of a high-resolution stratigraphic approach for site characterization of subsiding coastal areas and the role of late Quaternary paleovalley sedimentary fills	<u>Campo B.</u> , Di Martino A., Purri F., Amorosi A.

E3-PGP Policy, Governance, and Public Engagement

Session Chair:

Seminar Room: 101C

Paper No.	Title	Author
E3-PGP-1	Satellite-Based Assessment of Water Scarcity and Land Subsidence in Iran: A Multi-Decadal Earth Observation Perspective	(Invited talk) <u>Mahdi Motagh</u> , Mahmud Haghshenas Haghghi
E3-PGP-2	Balancing Future Water Demand and Land Stability: An Approach for Groundwater Planning and Policies to Prevent Subsidence in the Greater Houston Region, Texas, USA	Ashley Greuter, <u>Michael J. Turco</u> , Jason Afinowicz, John Ellis, Sunil Kommineni, Chris Canonico, Susan Baird, Alan Petrov
E3-PGP-3	A thirty-year experience of agreements between Eni and the Municipality of Ravenna: the subsidence issue. Eni perspective.	<u>Maria Carolina Dacome</u> , Davide Casini Ropa, Roberto Miandro, Michele Vettorel
E3-PGP-4	Integrated Assessment of Surface Deformation and Water Regime Alteration in Subsidence-Affected Areas	<u>Agnieszka A. Malinowska</u> , Szymon Łabojko, B. Stypiński, Ryszard Hejmanowski
E3-PGP-5	Growing the International Panel on Land Subsidence (IPLS) Combat relative sea-level rise at global scale	<u>Philip S.J. Minderhoud</u> , Manoochehr Shirzaei, Pietro Teatini, Artur Guzy, Makan Karegar, Kay Koster, Julius Oelsmann, Leonard Ohnenhen, Ahmed Sabbir, Katharina Seeger, Torbjörn E. Törnqvist, Luigi Tosi, Shujun Ye, Claudia Zoccarato

Session (F)**2026-04-15****15:30~16:30****F1-MOU MOU Signature****Session Chair:
Seminar Room: 101A**

Paper No.	Title	Author
F1-MOU	MOU Signature	

F2-SPT Special Topics**Session Chair:
Seminar Room: 101B**

Paper No.	Title	Author
F2-SPT-1	On the monitoring of subsidence in the Emilia-Romagna region (Italy) in the current century	<u>Gabriele Bitelli</u> , Eugenia Giorgini, Alessandro Lambertini, Marco Marcaccio, Marianna Mazzei, Luca Vittuari
F2-SPT-2	Assessing future landslide risk in Japan from large ensemble 5-km-grid regional climate model experiments	<u>Ying-Hsin Wu</u>
F2-SPT-3	A new approach to combine predicted subsurface ground displacement based on soil water content changes and A-DInSAR in clay-rich expansive soils	<u>Laura Pedretti</u> , Bente R. Lexmond, Esther Stouthamer, Claudia Meisina
F2-SPT-4	Towards the Optimal Monitoring of Land Subsidence in the Low-lying Bangkok and Neighbouring Areas Using Geodetic Measurements	<u>Pawan Piromthong</u> , Andrew Hooper, Milan Lazecky, Chalermchon Satirapod

F3-SPT Special Topics**Session Chair:
Seminar Room: 101C**

Paper No.	Title	Author
F3-SPT-1	InSAR-based Characterization of Urban Subsidence and Geological Controls in the Greater Manila Area	<u>Jolly Joyce S. Sulapas</u> , Alfredo Mahar Francisco A. Lagmay
F3-SPT-2	Groundwater Management and Land Subsidence Response in Ho Chi Minh City: Decadal Evidence of Aquifer Recovery and Urban Loading Effects	<u>Quang-Khai Ha</u> , Artur Guzy, Wojciech Witkowski, Pietro Teatini, Philip S.J. Minderhoud
F3-SPT-3	Monitoring and sustainable management of the Kanto groundwater basin in Japan	<u>Atsushi Kagawa</u> , Kunio Furuno

F3-SPT-4	<p>Groundwater Depletion and Water Quality Degradation in Coastal Aquifers of Soc Trang, Vietnam: Implications for Land Subsidence and Climate Resilience</p>	<p><u>Truong Thi Ngoc Chau</u>, Nguyen Dinh Giang Nam, Huynh Vuong Thu Minh, Nguyen Vo Chau Ngan</p>
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Poster Presentation (P)

P1-GPP General Poster Presentation

Seminar Room: 101D

Paper No.	Title	Author
P1-GGP-1	Integration and Analysis of Multi-Source Observation Data for Land Subsidence Monitoring in Yunlin, Taiwan	<u>Tsu-Yu Lee</u> , Ta-Kang Yeh, I-Hsien Lee
P1-GGP-2	Observation of Land Subsidence in the Southern Kanto Gas Field	<u>Koji Suzuki</u> , Daisuke Murai, Yuki Imanishi, Ryo Izumiya, Fuminori Waki, Nobuhiro Ono, Keita Sugawara, Hisaaki Tanabe
P1-GGP-3	Land subsidence extent and susceptibility mapping in Kalibo, Aklan using persistent scatterer interferometry (PS InSAR) and machine learning	<u>Michelle Joanne De Los Santos</u> , Czar Jakiri Sarmiento
P1-GGP-4	Correlation of Land Subsidence with Groundwater Extraction and Urbanization in Hagonoy and Calumpit, Bulacan from 2015 to 2021-Q1	John Dave C. Maclang, <u>Alexi Mae Y. Narca</u> , Rosalie B. Reyes, Luis Carlos S. Mabaquiao
P1-GGP-5	Sinkhole Monitoring and Early Warning Detection in the Karst Landscapes of Guimaras Island, Philippines Using Interferometric Synthetic Aperture Radar (InSAR) Satellite Data	<u>Laurelly Joyce A. Aporto</u> , Luis Carlo S. Mabaquiao, Leonardo Miguel Garcia1, Pia Francesca R. Maralit, Mario Jr. G. Ugalino, Kim Elijah M. Aguilan, Jarence David D. Casisirano, Albert Francis P. Florin, Karlo Mark C. Tablang, Fatima Joy O. Pamittan, Dominic Jr. C. Fargas, Czar Jakiri S. Sarmiento
P1-GGP-6	Assessing Three-Dimensional Land Subsidence and Infrastructure Resilience in the Semarang–Demak Coastal Plain, Indonesia	Reyhan Azeriansyah, <u>Kuo-En Ching</u>
P1-GGP-7	Development of a High-Resolution Fiber-Optic Monitoring System for Land Subsidence Using P1-BOTDR Technology in Taiwan	Chih-Chung Chung, Chun-Fa Ni, Ta-Kang Yeh, Chin-Yu Su, Tung-Wei Fu, Tzu-Yi Li, <u>Ting-Chun Tung</u>
P1-GGP-8	Modeling Pumping-Induced Earth Fissures in Faulted Basins: A Coupled Finite Element-Peridynamics	Andrea Franceschini, Miao Ye, Lin Zhu, <u>Andrea</u>

Paper No.	Title	Author
	Approach	<u>Franceschini</u> , <u>Huili Gong</u> , <u>Pietro Teatini</u>
P1-GGP-9	Influences of large-scale underground structures on pumping-induced land subsidence	<u>Yun Zhang</u>
P1-GGP-10	Numerical Analysis of Inertial Effects in Unsaturated Soil Consolidation under Cyclic Loading	<u>Nan-Chieh Chao</u> , <u>WeiCheng Lo</u> , <u>Ronaldo I. Borja</u>
P1-GGP-11	Mapping Spatial Variability of Aquitard Connectivity in a Layered Aquifer System, Southern Choushui River Alluvial Fan, Taiwan	<u>Zi-Yan Chou</u> , <u>Kou-Chin Hsu</u> , <u>Cheng-Wei Lin</u>
P1-GGP-12	Reactivation of Geological Faults in Western Germany due to Open-Pit Mining (1955–2025)	<u>Marzieh Baes</u> , <u>Mahdi Motagh</u> , <u>Pietro Teatini</u> , <u>Andrea Franceschini</u>
P1-GGP-13	When Subsidence Lingers: A Mechanistic Account of Post-Pumping Settlement via Hydraulic Lags and Elastic Plate Bending	<u>Ying-Fan Lin</u> , <u>Jun-Hong Lin</u>
P1-GGP-14	Reproduction and Parameter Evaluation of Triaxial Core Test Simulation Using the Elasto-Plastic “Duncan-Chang Model”	<u>IIJIMA Yoichiro</u> , <u>MATSUYAMA Ryusuke</u> , <u>ONO Nobuhiro</u> , <u>SASAKI Akihito</u> , <u>UZAWA Masaaki</u> , <u>MURAI Daisuke</u> , <u>HAYASHI Yuji</u>
P1-GGP-15	Hydromechanical Coupling Across the Mountain-to-Plain Transition: Implications for Groundwater Recharge and Displacement	<u>Duc-Huy Tran</u> , <u>Shih-Jung Wang</u> , <u>Chun-Rong Chen</u> , <u>Yung-Han Yang</u>
P1-GGP-16	Stochastic inversion of thermal-hydrological parameters in heterogeneous porous media	<u>Doan Thi Thanh Thuy</u> , <u>Chuen-Fa Ni</u> , <u>Nguyen Hoang Hiep</u>
P1-GGP-17	Characterization of long-term land subsidence in a multiple-layer aquifer system in Yunlin County: a workflow based on the data-driven approach	<u>I-Hsien Lee</u> , <u>Chuen-Fa Ni</u> , <u>Meng-Ping Feng</u> , <u>Yu-Wen Chen</u>
P1-GGP-18	Land subsidence simulation and prediction in Haimen District, Nantong City	<u>Zu-Jiang Luo</u>
P1-GGP-19	Comparison of Triaxial Test Results under Drained and Undrained Conditions for Mudstone of the Kazusa Group	<u>Matsuyama Ryusuke</u> , <u>IIJIMA Yoichiro</u> , <u>ONO Nobuhiro</u> , <u>SASAKI Akihito</u> , <u>UZAWA Masaaki</u> , <u>MURAI Daisuke</u> , <u>HAYASHI Yuji</u>

Paper No.	Title	Author
P1-GGP-20	Preliminary Assessment of Land Subsidence Susceptibility in Central Mexico through Machine Learning	<u>Hugo Luna-Villavicencio</u> , Claudia N Sánchez, Jesús Pacheco-Martínez, Isaí Gerardo Reyes-Cedeño
P1-GGP-21	Spatiotemporal Distribution of Hydromechanical Properties and Land Subsidence Susceptibility in the Choushui River Alluvial Fan, Taiwan	<u>Shih-Jung Wang</u> , Ngoc Thanh Vu Nguyen
P1-GGP-22	Mapping present-day differential land subsidence risk in Italy using a novel workflow based on satellite InSAR and urban settlement data	Francesca Cigna, Roberta Paranunzio, <u>Roberta Bonì</u> , Pietro Teatini
P1-GGP-23	A Comprehensive Analysis of the June 2018 Kahrud Landslide in Northern Iran: Insights from Remote Sensing Measurements and Field Surveys	<u>Jia-Nan Li</u> , Mahdi Motagh Haonan Jiang, Sigrid Roessner
P1-GGP-24	Navigating uncertainties – Improving assessments of relative sea-level rise impacts on data-sparse coastal lowlands	<u>Katharina Seeger</u> , Philip S.J. Minderhoud
P1-GGP-25	Natural land subsidence in the marshlands of the Venice Lagoon: monitoring by InSAR and modelling by NATSUB3D	<u>Urooj Qayyum</u> , Marta Cosma, Cristina Da Lio, Sandra Donnici, Annamaria Mazzia, Selena Baldan, Claudia Zoccarato, Massimiliano Ferronato, Luigi Tosi, Pietro Teatini
P1-GGP-26	Quantifying the Influence of Coastal Subsidence on Shoreline Change in the Mediterranean Region	<u>Mohammad Adil Aman</u> , Hone-Jay Chu
P1-GGP-27	Machine Learning-Based Groundwater Level Prediction and Pumping Regulation for Sustainable Irrigation Management	<u>Sheng-Wei Wang</u> , Yen-Yu Chen, Chih-Hui Chen, I-Hsien Lee, Chuen-Fa Ni
P1-GGP-28	Probabilistic Assessment of Seepage Through Layered Unsaturated Sediments: A Bayesian Framework with a Physics-Informed Neural Network Surrogate	<u>Jun-Ying Huang</u> , Tung-Ching Sun, Chun-Chun Lin
P1-GGP-29	Assessment of urban water supply and management strategies in Co Do District - Can Tho City	<u>Nguyen Dinh Giang Nam</u> , Alet Lou-Ann, Nguyen Van Khang, Nguyen Vo Chau Ngan
P1-GGP-30	Coupled Hydro-Mechanical and Parameter Sensitivity Analysis of Rainfall-Induced Instability in a Reinforced Freeway Slope	<u>Chwen-Huan Wang</u> , Sheng-Yuan Chen
P1-GGP-31	Quantifying Groundwater Storage Change using Relative Gravimetry along the Taiwan High-Speed	<u>Kuan-Hung Chen</u> , Cheinway Hwang

P1-GPP**General Poster Presentation****Seminar Room: 101D**

Paper No.	Title	Author
	Rail in Yunlin	
P1-GGP-32	Can InSAR be Used as A Reliable Satellite-Based Geodetic Technique for Operational Land Subsidence Assessment? Technical Challenges and Socio-Economic Consequences	<u>Mahdi Motagh</u>
P1-GGP-33	Detection and Disclosure Policies of Subsurface Cavities Using Ground-coupled GPR by Seoul Metropolitan Government's	<u>Joongho Lee</u> , Hwi-Jin Han
P1-GGP-34	AI-Enabled Automated Multi-Layer Compaction Monitoring System for Land Subsidence Observation in Yunlin, Taiwan	<u>Wei-Chia Hung</u> , Yi-An Chen, Shao-Hung Lin
P1-GGP-35	Characterizing Land Subsidence Mechanisms in the Chuoshui River Fluvial Plain from 2D Time-Series Surface Deformation Data	<u>Chih-Heng Lu</u> , Jiun-Yee Yen, Chun-Chin Wang, Hsuan Ren, Yue-Gau Chen, Ta-Kang Yeh, Chuen-Fa Ni, Chung-Pai Chang
P1-GGP-36	Assessing Artificial Recharge Efficiency and Aquifer Storage Dynamics Using Time-Lapse Gravity Surveys in Southern Taiwan	<u>Cheinway Hwang</u> , Ching-chung Cheng, Rahayu Lestari, Joseph Beneth Kankam, I-Chen Kuo

P2-SPC**Student Poster Competition****Seminar Room: 101D**

Paper No.	Title	Author
P2-SPC-1	Construction of a Land Subsidence Prediction Model Integrating GNSS and Hydrological Data	<u>Yi-Rou Jhan</u> , Ta-Kang Yeh, I-Hsien Lee
P2-SPC-2	Unveiling Land Subsidence Recovery Patterns in Jakarta: Decay Curves and Infrastructure Impacts	<u>Muhammad Yunus</u> , Ruey-Juin Rau, Sung-Ping Chang
P2-SPC-3	Decoupling basin scale land subsidence signals from shallow and deep aquifers based on InSAR and component decomposition methods	<u>Erik Rivas</u> , Mahmud Haghshenas Haghghi, Mahdi Motagh, Jyr-Ching Hu, Shao-Hung Li
P2-SPC-4	Integrating Shallow and Intermediate Compaction Processes: A Coupled Framework for Deltaic Land Subsidence	<u>Sebastian Walczak</u> , Selena Baldan, Artur Guzy, Pietro Teatini, Philip S.J. Minderhoud
P2-SPC-5	Investigation of the Compression Mechanism in the Aquifer Strata: A Case Study in Tuku, Central Taiwan	<u>Bo-Han Yu</u> , Duc-Huy Tran, Shih-Jung Wang
P2-SPC-6	Assessment of Ground Subsidence Impacts from the Construction of the New Samut Prakan Provincial Hall on Surrounding Structures Using Time-Series InSAR	<u>Nattapat Yotharak</u> , Anuphao Aobpaet

P2-SPC-7	Post-Landslide Road and Bridge Stability Analysis and Maintenance Prioritization Using InSAR Time-series and GIS: A Case Study of Na Noi District, Nan Province (2025)	<u>Supachai Soongying</u> , Anuphao Aobpaet
P2-SPC-8	Application of the Bangkok Basin SDOF Spectrum for Evaluating the Deformation of a Riverbank Protection Levee in Nakhon Pathom Province Using	<u>Tanakorn Srinuchard</u> , Anuphao Aobpaet
P2-SPC-9	Groundwater forecasting and pumping strategies for land subsidence mitigation: an example from the Taiwan High-Speed Rail corridor in Yunlin County, Taiwan	<u>Meng-Ping Feng</u> , Chuen-Fa Ni, I-Hsien Lee, Sheng-Wei Wang
P2-SPC-10	Forest Fire Risk Mapping Using Meteorological Factors in Muaro Jambi Regency	<u>Akhmad Haris Karsenaand</u> , Tang-Huang Lin
P2-SPC-11	Surface deformation monitoring in the Yunlin–Chiayi region, southwestern Taiwan, using PS-InSAR analysis of TerraSAR-X imagery	<u>Ying-Xuan Chen</u> , Yu-Ting Kuo, Chih-Heng Lu, Chia-Yu Chen, Jiun-Yee Yen
P2-SPC-12	Land Subsidence Prediction Using Machine Learning and Rainfall Forecasting	<u>Yu-Wen Jiang</u> , Cheng-Yu Ku, Chih-Yu Liu
P2-SPC-13	Principal Component Analysis of Variables Controlling Land Subsidence in the Jiaxing Area, Yunlin County, Taiwan	<u>Yi-Ting Huang</u> , Chih-Yu Liu
P2-SPC-14	Identification of Hydrological and Geological Factors on Land Subsidence in Yuanchang Township, Yunlin County, Taiwan	<u>Cheng-Yi Ko</u> , Chih-Yu Liu