

Oral Session Program

Room 802		
A: Soil and Water - Nutrient runoff -		
A1-1	Oct.27 11:00-11:15	Assessing impacts of Nutrient Runoff from corn field with Climate change Using APEX model An Yongbin•Hong Eun Mi•Choi Soon Kun•Ahn Jin-Hyuk•Bak HyeongJin
A1-2	Oct.27 11:15-11:30	Analysis of Nutrient Loss in Cropland Using the APEX Model: Effects of Environmental Characteristics and Climate Change Ahn Jin-Hyuk • Bak Hyeongjin • Jung Se yoon • Ahn Yongbin • Jun Sang-Min • Choi Soonkun•Hong Eunmi
A1-3	Oct.27 11:30-11:45	Evaluation of Nutrient Runoff Reduction Effects of Fertilizer Application BMPs in Paddy Fields Using the APEX-Paddy Model Bak Hyeongjin•Ahn Jin-Hyuk•An Yongbin•Jung Se yoon•Jun Sang-Min•Choi Soonkun•Hong Eunmi
A1-4	Oct.27 11:45-12:00	An Integrated Watershed-Reservoir Modeling Approach for Assessing Hydrodynamics, Sedimentation, and Nutrient Transport in Deji Reservoir, Taiwan Perodes Rozal Jemima•Yu Cheng-Wei•Monredondo Alayaay Mark Lloyd
A1-5	Oct.27 12:00-12:15	Refinement of a Total Nitrogen Dynamics Model by Introducing High Temporal Resolution in the Imbanuma Cyclic Irrigation Area Iwasaki Shunya•Iida Toshiaki
A1-6	Oct.27 12:15-12:30	Dynamics of water and nutrient flow in a cyclic irrigation scheme for paddy fields in Imbanuma Irrigation Area, Chiba Prefecture, Japan Adiyaksa Ilham Putra•Okura Fumi•Kato Tasuku
Room 810		
A: Soil and Water - Long term prediction, Drought -		
A2-1	Oct.27 11:00-11:15	Quantifying Soil Moisture Drydown Patterns Using Satellite Observations for Drought Early Warning Sasamoto Daichi•Tsujiimoto Kumiko•Ohta Tetsu
A2-2	Oct.27 11:15-11:30	Characterization of Flash Droughts on the Korean Peninsula Using Satellite-Derived Soil Moisture Lee Hee-Jin•Nam Won-Ho
A2-3	Oct.27 11:30-11:45	Meteorological Drought Thresholds in Cambodia Using the Standardized Precipitation Index Ol Kimsor•Junichiro Takeuchi•Chung Sarit•Masayuki Fujihara
A2-4	Oct.27 11:45-12:00	Application and Evaluation of Long-Term Ensemble Precipitation Forecasts for Reservoir Inflow Prediction Tai Yuan-Li•Cheng Ke-Sheng•Lin Yun-Ching•Lee Ching-Teng•Pan Chi
A2-5	Oct.27 12:00-12:15	Impact of Climate Change-Induced Rainfall Pattern Shifts on Marine Resources in Kafuri Bay Tabata Toshinori•Tanaka So•Harada Masayoshi•Ozaki Akinori
A2-6	Oct.27 12:15-12:30	Irrigation as an Adaptation Strategy for Tea Cultivation under Climate Change Matsushita Yoshihiro•Takeuchi Junichiro•Hama Takehide•Fujihara Masayuki
Room 811		
A: Soil and Water - Reclaimed water, Microorganisms -		
A3-1	Oct.27 11:00-11:15	Analysis of Biochar Effects on Sorghum Soil under Irrigation with Reclaimed Water from the Kinmen Distillery Liao Yi-Tai•Chiang Li-Chi•Liao Ci-Jyun•Chen Feng-Wen•Tan Yun-Wei
A3-2	Oct.27 11:15-11:30	Advancing sustainable rice farming through biochar integration with treated wastewater irrigation to combat greenhouse gas emissions Buates Jitrera•Phung Duc Luc•Watanabe Toru
A3-3	Oct.27 11:30-11:45	Microbial Responses to Metal Oxide Nanoparticles in Composted Sewage Sludge: Implications for Greenhouse Gas Emissions in Paddy Soils Phung Duc Luc•Nguyen Thi-Thanh Binh•Vu The Anh•Nishiyama Masateru•Watanabe Toru
A3-4	Oct.27 11:45-12:00	Enhancing Reclaimed Water Usage in Paddy Farming Huang Ben Hung-Pin•Huang Yin-Chen
A3-5	Oct.27 12:00-12:15	Phytoplankton Community Structure Changes and Occurrence Patterns Associated with Cyanobacterial Blooms in the Upstream Region of Lake Soyang Lee Seungyun•Kim Seonggyeoum•Yeom Hojeong•Choi Hyejeong•Hong Eunmi

A3-6	Oct.27 12:15-12:30	Changes in Phytoplankton Communities in Lake Uiam in Response to Climatic and Hydro-environmental Factors Kim Seonggyeoum • Lee Seungyun • Choi Hyejeong • Baek Kyongoh • Hong Eunmi
Room 804 A: Soil and Water - Soil -		
A4-1	Oct.27 11:00-11:15	Evaluating the Effect of Near-Surface Soil Moisture Profiles on Microwave Brightness Temperatures Using C-band Radiometry Tsujimoto Kumiko • Ohta Tetsu • Kaihotsu Ichirow
A4-2	Oct.27 11:15-11:30	Effect of Biomass-Derived Hydrogels as Soil Amendment on Heavy Metal Immobilization in Paddy and Upland Soils He Kung-Hui
A4-3	Oct.27 11:30-11:45	Cellulose nanofibers boost soil water availability and plant growth under deficit irrigation Mori Yasushi • Ngo Thuy An
A4-4	Oct.27 11:45-12:00	Evaluating Evapotranspiration and Irrigation Efficiency in Subtropical Rice Fields under AWD Management WU Dong-Hong • Wu Pei-Jhen • Tsai Hsuan-Ju • Lee Shin-Ruei
A4-5	Oct.27 12:00-12:15	Impacts of Soil Structure on Gas Diffusivity in Regenerative Agriculture Fields Yukari Yanagi • Sakai Masaru • Kiyoshi Nagasu
A4-6	Oct.27 12:15-12:30	Evaluation of the amount of water erosion by mineral composition Nishimura Taku • Yamasaki Takuhei • Gono Rin
Room 802 A: Soil and Water - Hydrological model -		
A5-1	Oct.27 13:30-13:45	A Systematic Review of Lumped and Conceptual Rainfall-Runoff Models: Performance, Hybridization, Uncertainty and Data Integration Rahmon Abiodun Salau • Qudus Adeyi • Adisa Hammed Akinsoji • Kyung Sook Choi
A5-2	Oct.27 13:45-14:00	On the Optimal Configuration of a Distributed Hydrological Model subject to Different Grid Sizes and Lateral Boundary Conditions Chen Chia-Jeng • Liu Jian-Jun
A5-3	Oct.27 14:00-14:15	Evaluation of Fecal Coliform Export from Agricultural Watersheds under Climate Change Scenarios Using the SWAT Model Jung Se yoon • Hong Eunmi • Ahn Jin Hyuk • Bak Hyeong Jin • Lee Seonah
A5-4	Oct.27 14:15-14:30	Evaluation of Climate Change and Agricultural Management Impacts on Hydrology and Water Quality Using SWAT+ Kim Min-Jin • Nam Won-Ho • Hong Eun-Mi • Jun Sang-Min • Choi Soon-Kun • Kim Seongjoon
A5-5	Oct.27 14:30-14:45	Assessing Crop Water Stress and Irrigation Benefits Using the SWAT Model: A Case Study of the Wu River Basin Cheng An-Rou • Chiang Li-Chi • Lin Guan-Zhou
A5-6	Oct.27 14:45-15:00	Coupled SWAT and CE-QUAL-W2 Modeling of Nutrient Transport from Watershed to Reservoir: A Case Study of the Feitsui Reservoir, Taiwan Wu Yu-Ting • Chiang Li-chi
A5-7	Oct.27 15:00-15:15	Groundwater Modeling and Adaptation Strategies under Climate Change in the Lanyan River Basin: Applications of SWAT+ and LSTM Hao-Hung Chiang • Li-Chi Chiang
Room 810 A: Soil and Water - Water use -		
A6-1	Oct.27 13:30-13:45	Assessment of the Agricultural Water Cycle and Resource Utilization Using the EPA-SWMM Model Shin Ji-Hyeon • Nam Won-Ho
A6-2	Oct.27 13:45-14:00	Evaluating the Impact of Input Data Structure on ANN-Based Runoff Modeling Maga Kim • Jin-yong Choi
A6-3	Oct.27 14:00-14:15	Growth responses of two green manure crops to treatments with non-sulfur photosynthesis bacteria and wastewater sludge Chun-Hank Ko • Bo-Xiang Lee • Ping-Yuan Yang • Chihhao Fan • Tang-Long Shen
A6-4	Oct.27 14:15-14:30	Optimizing Water Application Strategies for Climate-Resilient Amaranthus Production in Paddy Field: Insights from On-Farm Experiments in Northern Ghana Salifu Eliasu • Yamada Masakazu • Alhassan Mohammed Issah
A6-5	Oct.27 14:30-14:45	A Strategic Framework for Agricultural Water Allocation Using Modern Portfolio Theory HU Ming-Che • WANG Li-Kuan • WEN Tzai-Hung

A6-6	Oct.27 14:45-15:00	Optimizing Agricultural Water Distribution with Network Flow Model Chang-Ying Lee•Ming-Che Hu•Ching-Pin Tung
A6-7	Oct.27 15:00-15:15	Rapid Expansion of Irrigation through Participatory Irrigation Management in Madhya Pradesh, India: Key Features of Transformation Yokoyama Kenichi•Ishii Atsushi
Room 811 A: Soil and Water - Water quality -		
A7-1	Oct.27 13:30-13:45	Application of Time-Lapse Ion-Exchange Resin Capsules for Assessing Spatial Characteristics of Irrigation Water Pollution: A Case Study in the Dali Area, Taichung City, Central Taiwan Tan Yun Wei•Chen Feng Wen•Wang Man Zhing•Hsieh Ming Yang•Li Ting Yi
A7-2	Oct.27 13:45-14:00	Twenty Years of NPS Pollution Research in Korea: Insights from the Han River Basin Lee Seonah•Hong Eunmi
A7-3	Oct.27 14:00-14:15	Modeling the spatiotemporal dynamics of dissolved oxygen minima in a temperate reservoir using CE-QUAL-W2 Yeom Hojeong•Kim Yoonhee•Kim Bomchul•Hong Eunmi
A7-4	Oct.27 14:15-14:30	Raising Rice Productivity Through Oxygen-Enriched Irrigation Water Arif Chusnul • Purnomo Azzahra Putri Kayla • Wibowo Andrehan • Sutoyo Sutoyo • Purwanto Aris Yohannes • Taufik Muh
A7-5	Oct.27 14:30-14:45	Portable Minapadi Model and Its Performance for Urban Farming Julianto Tri Baskoro•Setiawan Indra Budi•Saptomo Krido Satyanto•Liyantono Liyantono
A7-6	Oct.27 14:45-15:00	Estimation of spring season fish assessment index (FAI) using PyCaret-based AutoML algorithm in South Korea Kim Yong Won•Lee Yonggwon•Chung Jeehun•Jun Wonjun•Kim Seongjoon
Room 804 A: Soil and Water - Groundwater -		
A8-1	Oct.27 13:30-13:45	Integrating Modified Sheet-Pipe Technology in Rice Field Subsurface Water Management Saptomo Krido Satyanto•Putra Heriansyah•Junaedi Ahmad•Iqbal Muhammad Raihan•Alghifari Faiq Muhammad•Hamzah Hadyanti Ayda
A8-2	Oct.27 13:45-14:00	The Impact of Alternate Wetting and Drying (AWD) on Methane Emissions and Groundwater Recharge in Organic Paddy Fields Hsu Shao-Yiu•Liao Ying-Chi• Tsai Yi-Zhih•Yang Zhi-Wei
A8-3	Oct.27 14:00-14:15	Assessment of Salinity and Soil Loss in Reclaimed Land Under Climate Change Using the APEX Model Lee Ye-Jun•Nam Won-Ho•Kwak Jin-Hyeob•Lee Kwang-Seung
A8-4	Oct.27 14:15-14:30	Time-dependent groundwater flows with similarity properties Togo Shuntaro•Unami Koichi•Fujihara Masayuki
A8-5	Oct.27 14:30-14:45	Spatio-temporal variability assessment of groundwater level in the drought-prone region in India. Dhivar Nanasaheb Yuvraj•Jha Kumar Madan•Fujihara Masayuki
A8-6	Oct.27 14:45-15:00	Water reuse and groundwater augmentation — Focus on New Valley, Egypt— Abdelhafez A Ahmed•Yoshida Shuichiro
Room 701 B: Agricultural Facilities - Concrete structure -		
B1-1	Oct.27 11:00-11:15	Multi-Domain Joint Learning for Crack Detection in-service Agricultural Infrastructure under Varying Illumination Conditions using UAV Imagery Tanaka Hiromu•Shibano Kazuma•Suzuki Tetsuya
B1-2	Oct.27 11:15-11:30	Quantitative Internal Damage Assessment of Irrigation and Drainage Concrete Structures by X-ray CT image-based DCNN IKEDA KOKI•Shibano Kazuma•Mukai Moeka•Suzuki Tetsuya
B1-3	Oct.27 11:30-11:45	Influence of Input Frequency on Ultrasonic Velocity in Concrete Cores with Large Aggregate Moeka Mukai•Kazuma Shibano•Tetsuya Suzuki
B1-4	Oct.27 11:45-12:00	A Study on Simplified Monitoring Methods for Water Leakage Evaluation in Aging Irrigation Reservoirs LI YIXUAN•Matsui Moe•Nakamura Naoki•Sato Mari
B1-5	Oct.27 12:00-12:15	Strain behavior and mechanical properties of admixture-added mortars during air and water curing Hirotsugu Suzuki•Kiyohito Yamamoto

Room 701		
B: Agricultural Facilities - Facilities -		
B2-1	Oct.27 13:30-13:45	Three-dimensional evaluation of in-service corroded steel sheet piles using laser scanning Hagiwara Taiki•Takahashi Yuto•Shibano Kazuma•Tanaka Hiromu•Ikeda Koki•Chiyoda Atsushi•Suematsu Kakutaro•Fujitani Yuta•Suzuki Tetsuya
B2-2	Oct.27 13:45-14:00	Non-Contact Detection of Water Pressure Transient Damping in Leakage Pipeline using DIC and TTBTs Techniques Takahashi Yuto•Hagiwara Taiki•Tsubota Toma•Suzuki Tetsuya
B2-3	Oct.27 14:00-14:15	Comparison of Future Drought Vulnerability Based on Water Resource Systems in North and South Korea Shin Hyeon-Wook•Nam Won-Ho
B2-4	Oct.27 14:15-14:30	Quantitative Assessment of Agricultural Reservoir Response to Extreme Events with Consideration of Storage Capacity Variations Yang Mi-Hye•Nam Won-Ho
B2-5	Oct.27 14:30-14:45	Predicting water distribution amount using deep learning in the Aichi Irrigation Project Taisei Hamaguchi•Keigo Noda•Masashi Kiguchi•Taichi Sano•Taikan Oki
B2-6	Oct.27 14:45-15:00	Evaluation of Open-Source Digital Elevation Models for Watershed Hydrology Simulation MISHRA KUMAR SURENDRA•PRASHANT PRASHANT•LOHANI KUMAR ANIL
Room 702		
C: Rural Planning and Ecosystem Services - Ecosystem services -		
C1-1	Oct.27 11:00-11:15	Estimating rice NDVI-peaks with use of variety-specific time-series curves Onishi Kyohei•Nagano Takanori•Yoshikawa Natsuki•Motonaga Yoshitaka
C1-2	Oct.27 11:15-11:30	Impact of Climate Change-induced Warming on Adult Morphology in <i>Sympetrum frequens</i> Shogo Sato•Hiroshi Jinguji
C1-3	Oct.27 11:30-11:45	Comparative Analysis of Fish Habitat Suitability Characteristics in Han River Basin, South Korea Lee Hyeokjin•Song Inhong
C1-4	Oct.27 11:45-12:00	Modeling the Ecosystem Conservation Function of Agricultural Ponds in Urbanizing Regions Jo Hamaguchi•Masayasu Maki•Koshi Yoshida•Tasuku Kato•Keigo Noda
C1-5	Oct.27 12:00-12:15	Estimation of Habitat Suitability Index Based on Water Quality Using Parametric Distributions in Korea Jang Seongju•Lee Hyeokjin•Song Inhong
C1-6	Oct.27 12:15-12:30	SPATIOTEMPORAL ANALYSIS OF HYDROLOGICAL CONNECTIVITY IN A FLOODPLAIN WETLAND USING GEOSTATISTICAL METHODS: A CASE STUDY OF BAKHIRA WILDLIFE SANCTUARY, INDIA Pandey Ashish•Rawat Manish•Yadav Basant•Gupta Kumar Praveen
Room 702		
C: Rural Planning and Ecosystem Services - Rural Planning -		
C2-1	Oct.27 13:30-13:45	Life cycle impact assessment of radioactive isotope release on the rice paddy fields environment Fong Chin•Fan Chihhao•Hsieh Cheng-I•Lin Wen-sheng
C2-2	Oct.27 13:45-14:00	Spatio-temporal characterization of compound heat and drought extremes in South Korea Qudus Adeyi•Deepak Chaulagain•Kyung Sook Choi
C2-3	Oct.27 14:00-14:15	Water Scarcity Risk for Paddy Field Development Project in Pre-Modern Japan: Case Study of the Kinu-Kokai River Basin. EKPELIKPEZE Russell Adonis•ASADA Yohei•ISHII Atsushi
C2-4	Oct.27 14:15-14:30	Optimizing Irrigation Water Allocation in Sonosari Irrigation Area, Malang Regency Using Deterministic Dynamic Programming to Enhance Utilization Efficiency and Agricultural Profitability Lufira Dara Rahmah•Limantara Montarcih Lily•Hamdany Ivan Muhammad
C2-5	Oct.27 14:30-14:45	A Preliminary Study on the Relationship between Tourism and Agriculture & Fishery NISHINO Takanori•WAKABAYASHI Takashi
C2-6	Oct.27 14:45-15:00	Factors Shaping Successful Participatory Irrigation Management in Vietnam: The Roles of Multi-Functional Cooperatives and the Public Sector TRAN HONG MINH•ISHII ATSUSHI•DOAN DOAN TUAN•SHIN MOONO•TRAN VIET DUNG•ASADA YOHEI•NGUYEN DUY TIEN
C2-7	Oct.27 15:00-15:15	Functions and structures of Water User Associations (WUAs) in Egypt: A Focus on New Valley Governorate El Gwely Samir•Iwasaki Erina•Sugiura Mikiko

Room 703		
D: Latest Smart Technologies - Smart facilities -		
D1-1	Oct.27 11:00-11:15	Development of a Drought Monitoring Method Using Multiple Vegetation Indices Derived from PlanetScope Imagery Choi Hyeok-Jae • Nam Won-Ho • Jeon Min-Gi • Moon Min-Kyu • Hong Eun-Mi • Park Jeong-Hwan
D1-2	Oct.27 11:15-11:30	Comparative Assessment of CHIRPS v2.0 and v3.0 for Satellite-Based Agricultural Drought Monitoring in South Korea Mun Young-Sik • Nam Won-Ho
D1-3	Oct.27 11:30-11:45	Parcel-Level Crop Classification from Structured SITS Features and Clustering Based Analysis Jaejun Gou • Seongju Jang • Jinseok Park • Hyeokjin Lee • Inhong Song
D1-4	Oct.27 11:45-12:00	Applying GeoAI to Paddy Area Estimation: A Case Study in Taibao, Taiwan Lee Zih-Ying • Liu Ting-Li • Shih Hsueh-Yen • Wijaya Candra
D1-5	Oct.27 12:00-12:15	Optimal IIS Deployment in Fragmented Paddy Fields via Geo-Clustering and Neighborhood Search Tian Runze • Noda Keigo • Takaki Kyoji
D1-6	Oct.27 12:15-12:30	Evaluating Smart Gate Control Effects on Water Allocation in Terminal Canals of Thai Paddy Irrigation Schemes Nakada Toru • Hitomi Tadayoshi • Nakaya Tetsuo • Diloksoapon Attapan • Ngootip Sarayut • Yamauchi Katsuhiko
Room 703		
D: Latest Smart Technologies - Infrastructure improvement -		
D2-1	Oct.27 13:30-13:45	Uncovering Stakeholders in Agricultural Irrigation Governance: A Corpus-Based Text Mining Approach YU JOU JOU • Yu Wei Cheng
D2-2	Oct.27 13:45-14:00	Implementation plan development and monitoring status for agricultural water resources in Korea under the Comprehensive Basin Water Management Plan yoon kwangsik
D2-3	Oct.27 14:00-14:15	Development of a Cascade Watershed Water Balance Model Integrating Agricultural Facilities Yoon Dong-Hyun • Nam Won-Ho
D2-4	Oct.27 14:15-14:30	Assessing the awareness of information and communications technology in construction among enterprises engaged in agricultural and rural development Yasushi Noguchi • Teruhito Miyamoto • Atsushi Ishii
D2-5	Oct.27 14:30-14:45	PHENOLOGY-BASED MAPPING OF DEEP-WATER FLOATING RICE IN MYANMAR USING GOOGLE EARTH ENGINE Rudiyanto Rudiyanto • Ginting Irawan Frisa • Fatchurrachman Fatchurrachman • Mohd Shah Ramisah • Che Soh Norhidayah
D2-6	Oct.27 14:45-15:00	Agricultural Street-View Survey System with Cabbage Field Object Detection Shih Hsueh-Yen • Liu Ting-Li • Ho Shin-Fu • Lee Zih-Ying • Wijaya Candra
D2-7	Oct.27 15:00-15:15	Experiments on Internet Environment Improvement in Mountainous Farmland Using Starlink and Mesh-net Wi-Fi Technology Masaru Mizoguchi • Yasuhiro Itakura