Table of contents

International Conference on Regional Climate ICRC-CORDEX 2023 | (smr 3878)

Tuesday 26 September 2023

notitle - Budinich Lecture Hall (LB), Giambiagi Lecture Hall (AGH), Kastler Lecture Hall (AGH), Lundqvist Lecture Hall (AGH), ex-SISSA Main Auditorium (SISSA), Informatics Laboratory (AGH) and Denardo Lecture Hall (AGH) (08:00-20:00)

time	title	presenter
08:00	Registration	
09:30	Welcome address	
10:30	Health break	
11:00	Session A1 - Earth System Modelling in the regional context	
	- Regional Earth System Models: Uncertain Definition, Clear Benefits, Open Challenges - Samuel SOMOT	
	- Regional coupled modeling to improve understanding of the Southeast Asian Climate Quentin - Frederic DESMET	
	- Himalayan glacial anomaly as simulated by a coupled regional glacier-climate model and its synoptic-scale drivers - Aaquib JAVED	
	- Coupled groundwater-to-atmosphere simulations with the regional climate system model TSMP as a contribution to the new European CORDEX-CMIP6 ensemble - Klaus GOERGEN	
	- The latest projected climate change signal over Southern Africa using the Conformal Cubic Atmospheric Model (CCAM) - Jessica STEINKOPF (NEE PICAS)	
	- Development of a regional earth system model using a variable resolution global grid - Marcus THATCHER	
12:30	Lunch	
13:30	Session A2 - Convection Permitting Modelling	
	- Advancing Convection-Permitting Climate Projections: Coordinated Ensemble Experiments and the Path Ahead - Erika COPPOLA	
	- Tropical cyclone changes in convection-permitting regional climate projections: a study over the Shanghai region - Erasmo BUONOMO	
	- The role of Tibetan Plateau Vortices in extreme precipitation events in the Tibetan Plateau region - Julia CURIO	
	- BARPA-C: Kilometre-scale climate modelling development based on ACCESS - Christian STASSEN	
	- Detection and sensitivity to global warming of disastrous-like storms in the complex alpine area - Emanuela PICHELLI	
	- Brand new Convection-Permitting simulations over South America: a look at the uncertainty sources at the sub-daily time scale - Francesca RAFFAELE	

	- A new method for dynamical downscaling of heatwaves by convection-permitting climate models: event-based downscaling - Fuxing WANG	
15:00	Health break	
15:30	Session A3 - Statistical Methods/Machine Learning techniques for regional climate modelling/downscaling	
	- A brief overview to warm up - José Manuel GUTIERREZ	
	- A storyline approach to select the CMIP6 model ensemble to be downscaled for the South America domain - Andressa ANDRADE CARDOSO	
	- Convolutional neural networks for local climate downscaling: precipitation extremes in the FPS in Southeastern South America - Maria Laura BETTOLLI	
	- RCM-emulators: A study of applicability to large GCM ensembles - Antoine DOURY	
	- Should we bias correct boundary conditions for regional climate models? - Jason EVANS	
	- Introducing eXplainable Artificial Intelligence to assess Deep Learning Models for Statistical Downscaling - Jose GONZÁLEZ-ABAD	
	- Can deep-learning models extrapolate to downscaling rainfall in future climates? - Neelesh RAMPAL	
	- Design of Experiments and Machine Learning (DoE & ML)-based approach to better capture uncertainty in future climate projections - Carla VIVACQUA	
17:15	Poster session A	
	- A1-P-01 Multilayer soil and interactive vegetation in regional climate models – A case study using REMO in Mainland Southeast Asia	ABEL DANIEL
	- A1-P-02 The response of atmospheric circulation to orographic forcing: application of a regional climate model	ALIZADEH OMID
	- A1-P-03 Evaluation of CMIP6 GCMs Over the CONUS for Downscaling Studies	ASHFAQ MOETASIM
	- A1-P-04 Impact of the Ocean-Atmosphere coupling on extratropical cyclones around the Mediterranean basin	CHERICONI MARCO
	- A1-P-05 Importance of Regional Climate Change ICRC-CORDEX to \mano River Union States	COLLINS EMMANUEL
	- A1-P-06 Regional Earth System Models for CMIP6 downscaling over the EURO-CORDEX domain	HAGEMANN HA
	- A1-P-07 Urban Environments and Regional Climate Change - CORDEX Flagship Pilot Study URB-RCC	HALENKA TOMAS
	- A1-P-08 The MED-CORDEX ensemble of climate projections for the Mediterranean Sea: impacts of the high resolution and ocean-atmosphere coupling	JORDA SANCHEZ GABRIEL
	- A1-P-09 Future Characteristics of Tropical Cyclones under the SSP scenarios over CORDEX-East Asia domain using Multi-RCMs	KIM EUNJI
	- A1-P-10 Investigation of aerosol effects on diurnal cycle of precipitation amount, frequency and intensity over Central Africa by a regional climate model	KOMKOUA MBIENDA ARMAND JOEL
	- A1-P-11 Investigating sea surface temperature impacts on Philippine climate in CORDEX-SEA simulations	MAGNAYE ANGELA MONINA

	- A1-P-12 Calibration of the new regional ocean-atmosphere model based on ICON and NEMO for the EURO-CORDEX domain	MAURER VERA
	- A1-P-13 Regional climate simulation of the record-breaking heavy rainfall over East Asia in 2020: model evaluation and impact of global warming	MUN TAEHO
	- A1-P-14 Evaluation of CORDEX-CORE Simulations in Revealing the Physical Mechanisms Behind the Rainfall Extremes over the Indo-Gangetic Plains	PANT MANAS
	- A1-P-15 The new modernized version of the regional model REMO	PIETIKA■INEN JONI-PEKKA SAMUEL
	- A1-P-16 Dynamical downscaling of CMIP6 models over Australia: Climate projections data submission to the Australasia CORDEX domain.	SYKTUS JOZEF
	- A1-P-17 Understanding the diversity of the West African monsoon system change projected by CORDEX■CORE regional climate models	TAMOFFO TCHIO ALAIN
	- A1-P-18 Evaluation and improvement of cloud microphysics in the Conformal Cubic Atmospheric Model	TRUONG CONG HOANG
	- A1-P-19 WRF-based hindcast simulations in the MENA region: modeling advances and contribution to CORDEX Phase II	ZITTIS GEORGIOS
	- A2-P-01 On convective enhancement of Vb-events in present and warmer climate	AHRENS BODO
	- A2-P-02 Analyzing simulated irrigation effects on convection-permitting scale – Does irrigation in northern Italy affect convective processes?	ASMUS CHRISTINA
	- A2-P-03 An ecological index for arthropod habitats in the Circum-Sicilian islands using Convection Permitting data	CIARLO JAMES
	- A2-P-04 An overview of the onset and cessation of the biannual rainy seasons in the Coastal areas of West Africa	COULIBALY AMADOU
	- A2-P-05 Evaluation of rainfall in high-resolution simulations over Mindanao	DADO JULIE MAE
	- A2-P-06 An African-based climate change event-attribution system using a regional climate model	ENGELBRECHT FRANCOIS ALWYN
	- A2-P-07 WRF ensemble dynamical downscaling of precipitation over China using different cumulus convective schemes	GAO SHIBO
	- A2-P-08 Effects of the regional-local circulation on precipitation development in the tropical Andes (Rio Santa Basin)	GARCIA ROSALES ALAN JESUS
	- A2-P-09 Analysis of the added value of increased spatial resolution in a region of complex orography: a comparison with CORDEX simulations	GARCI■A VALDECASAS OJEDA MATILDE MARIA DEL VALL
	- A2-P-10 A pan-European km-scale setup of the regional climate system model TSMP to study the impact of human interventions on the terrestrial water cycle	GOERGEN KLAUS
	- A2-P-11 Terrain-influences on the regionality of future increases in Japan's summertime extremely high temperatures and the projection uncertainty	ITO RUI
	- A2-P-12 Identifying future changes of extreme precipitation in Japan using 720-year 5-km-grid regional climate experiments	KAWASE HIROAKI
	- A2-P-13 CMIP6-Based Convection-Permitting Future Climate Simulation over the Black Sea Basin	KELEBEK MEHMET BARIS
	- A2-P-14 Testing of Non-hydrostatic Core and Microphysics over the Carpathians	KHALID BUSHRA
	- A2-P-15 Producing local climate information to help Western Australians adapt to our changing climate	LAM HO MAN SEAN

	- A2-P-16 County-scale Climate Projections over Minnesota for the 21st Century	LIESS STEFAN
	- A2-P-17 Performance of CMIP6 GCMs ensemble in the coupling zone for the RCM simulations in the PERUN project	MACHADO CRESPO NATA■LIA
	- A2-P-18 Numerical simulation of thunderstorm indices and lightning over Odisha, India, with WRF-ELEC	MAHAPATRA DEBASISH
	- A2-P-19 Influence of small-scale ocean structures on surface wind variability over the Western Mediterranean region.	MELO AGUILAR CAMILO ANDRES
	- A2-P-20 Why was the 2019-2021 drought event in La Plata Basin so persistent and extreme?	MILOVAC JOSIPA
	- A2-P-21 Impact of increasing model resolution on added values in regional climate simulation of heavy precipitation	PARK JUNSEO
	- A2-P-22 Flux exchange over heterogeneous land surfaces	POLL STEFAN
	- A2-P-23 Assessment of homogeneous groups climatology simulated by RegCM-CP over southeastern South America	PORFIRIO DA ROCHA ROSMERI
	- A2-P-24 Sensitivity of an unusual cyclone in southeast South America to convective parameterization schemes in the new ICTP RCM (RegCM5)	ROSSI PINHEIRO HENRI
	- A2-P-25 Dynamical downscaling experiments for a tropical region.	SALINAS PRIETO JOSE
	- A2-P-26 On the ability of convection permitting models for capturing the urban-rural contrasts over selected cities in South America	SOLMAN SILVINA
	- A2-P-27 BARPA: Advancing the Australian regional climate information for decision making	STASSEN CHRISTIAN
	- A2-P-28 An Open-Source Python Package for Computing the Effective Resolution of Regional Climate Models: Development, Validation, and Implications for the Climate Modeling Community	TARANU IOAN SABIN
	- A2-P-29 The design of the CORDEX.be II ensemble: selecting CMIP6 GCMs to downscale based on their spread of extreme weather at future warming levels.	VANDELANOTTE KOBE
	- A2-P-30 Soil moisture-atmosphere interactions during the 2020 European Heatwave using RegCM5.	VERMA SHRUTI
	- A2-P-31 Improvement of land-atmosphere exchange coefficient parameterization in regional numerical simulations	ZHANG XIA
	- A3-P-01 Preparation and downscaling of High-Resolution Climate Data for Bangladesh, Nepal and Pakistan	ALI SHAUKAT
	- A3-P-02 Investigating Interaction between Tropical Convection and Atmospheric Gravity Waves over West Africa	AMPADU SYLVIA
	- A3-P-03 Testing convolutional neural networks as a downscaling tool over southern South America in a climate change scenario: the case of daily extreme temperatures	BALMACEDA HUARTE ROCIO
	- A3-P-04 A deep learning framework to emulate the convection permitting dynamical models for extreme precipitation	BLASONE VALENTINA
	- A3-P-05 A Seamless Approach for Evaluating Climate Models Across Spatial Scale	CHANG ALEX
	- A3-P-06 Testing the stationary assumption of statistical downscaling using dynamical downscaling model output as pseudo observation	CHEN CHENG-TA
	- A3-P-07 Emulating a Complete GCM-RCM Euro-CORDEX Matrix	CHRISTENSEN OLE BOSSING

	- A3-P-08 Assessment of the interannual variability of precipitation and surface air temperature over Europe from a continental-scale high-resolution machine learning-based downscaled data	FUENTES FRANCO RAMóN
	- A3-P-09 Evaluating the multivariate structure of bias-corrected climate variables - Measuring joint extremity with vine copulas	FUNK HENRI
	- A3-P-10 Optimizing climate data analysis workflows: Strategies and lessons learned from two case studies	GOODMAN ALEXANDER DAVID
	- A3-P-11 High resolution statistical downscaling for the European continent using fully-convolutional neural networks	KRUS KRISTOFER ALEXANDER
	- A3-P-12 An interactive web interface to compare the LOcalized Constructed Analogs 2 (LOCA2) with its precursor and CMIP6	LEE HUGO
	- A3-P-13 Identification of the frequency of extreme precipitation events in southeastern South America	MARTINEZ DAIANA MICAELA
	- A3-P-14 Evaluation of rainfall bias-corrected in high resolution CORDEX-SEA over Java Island, Indonesia	MARUFAH UMMU
	- A3-P-15 Enhancing Spatial Consistency in downscaled Fire Weather Index (FWI) Projections for Improved Wildfire Risk Management: A multi-site multi-gaussian CNN approach	MIRONES ALONSO OSCAR
	- A3-P-16 Harnessing machine learning for calibration of regional climate models: preparing ALADIN for EURO-CORDEX	NABAT PIERRE JEAN ALAIN
	- A3-P-17 Intercomparison of statistical and dynamical downscaling in southeastern South America: future projections of extreme rainfall	OLMO MATIAS EZEQUIEL
	- A3-P-18 Use the data of the EURO-CORDEX ensemble of regional climate model simulations for probabilistic modeling of the maximum runoff of the spring flood on the rivers of the South of Ukraine	OVCHARUK VALERIYA
	- A3-P-19 The Comparison of 25-km and 5-km resolution of CORDEX-SEA Simulation for Precipitation Over Java Island, Indonesia	PERMANA DONALDI SUKMA
	- A3-P-20 The South American Monsoon lifecycle projected by an ensemble of CMIP6-GCM statistically downscaled	REBOITA MICHELLE SIMõES
	- A3-P-21 Relation between maximum temperatures and weather types as a method for the statistical-dynamical downscaling of uncertainties in CMIP6 models	SERRAS FIEN
	- A3-P-22 "Tuning" CORDEX data to reduce uncertainty in climate projections for the Carpathian Region	TORMA CSABA
	- A3-P-23- Circulation Types and precipitation patterns over Southern Central America in the CORDEX- CORE Experiment 1 RegCM4.7 Simulations	SAENZ SOTO, Fernan
18:00	Icebreaker reception	