Day	2	Tuesday, September 10, 2024, 11:20-13:05; Museo dell'arte classica
Session	1	Operational aspects

1		**OBJECT-BASED ENSEMBLE PREDICTION SYSTEM KONRAD3D-EPS** *1) Lukas Josipovic, 2) Gregor Pante, 3) Andreas Brechtel, 4) Nora-Linn Strotjohann, 5) Ulrich Blahak* 1) German Meteorological Service , 2) German Meteorological Service , 3) German Meteorological Service , 4) German Meteorological Service , 5) German Meteorological Service
2		**OPERATIONAL WIND TURBINE CLUTTER REMOVAL IN THE FINNISH WEATHER RADAR NETWORK: METHODOLOGY AND IMPACT ON DATA QUALITY** *1) Jenna Ritvanen, 2) Pauli Anttonen, 3) Harri Hohti, 4) Mikko Kurri, 5) Annakaisa von Lerber* 1) Finnish Meteorological Institute, Helsinki, Finland - Institute for Atmospheric and Earth System Research, Faculty of Science, University of Helsinki, Helsinki, Finland -, 2) Finnish Meteorological Institute, Helsinki, Finland , 3) Finnish Meteorological Institute, Helsinki, Finland , 4) Finnish Meteorological Institute, Helsinki, Finland , 5) Finnish Meteorological Institute, Helsinki, Finland
3		**AN INTER-RADAR INTERFERENCE SUPPRESSION METHOD FOR WEATHER RADAR DATA WITHOUT MODIFYING THE RADAR'S INTERNAL SIGNAL PROCESSING** *1) Shota Ochi, 2) Noritsugu Shiokawa, 3) Tomomi Aoki, 4) Masakazu Wada, 5) Satoshi Kida* 1) Toshiba Corporation , 2) Toshiba Corporation , 3) Toshiba Corporation , 4) Toshiba Digital Solutions Corporation , 5) Toshiba Digital Solutions Corporation
4		**RADAR OPERATIONAL NETWORK AND PRODUCTS IN FRANCE** *1) Ludovic Bouilloud, 2) Tom Nicolau, 3) Sylvain Chaumont, 4) Jean Millet, 5) Milka Radojevic, 6) Mathilde Moureaux* 1) Météo-France/Weather Radar Center , 2) Météo-France/Weather Radar Center , 3) Météo-France/Weather Radar Center , 4) Météo-France/Weather Radar Center , 5) Météo-France/Weather Radar Center , 6) Météo-France/Weather Radar Center
5		**A QUALITY INDEX FOR RE-SITING A WEATHER RADAR WITHIN A NETWORK** *1) Patri Altube, 2) Nicolau Pineda, 3) Ferran Fabró, 4) Oriol Rodríguez* 1) Servei Meteorològic de Catalunya , 2) Servei Meteorològic de Catalunya , 3) Servei Meteorològic de Catalunya , 4) Servei Meteorològic de Catalunya
6		**METHODS USED TO ESTIMATE DIFFERENTIAL PHASE DERIVED BASE DATA WITHIN THE BARON PROCESSOR SUITE** *1) Mrinal Balaji, 2) Darrin Cartwright, 3) James Romines* 1) Baron Weather Inc , 2) Baron Weather Inc , 3) Baron Weather Inc
7		**QZDRCAL: AN UPDATED FULL SEASON ZDR CALIBRATION ALGORITHM USING DRY AGGREGATED SNOW IN U.S. NEXRAD OPERATION** *1) Jiaxi Hu, 2) Alexander Ryzhkov, 3) John Krause* 1) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA -, 2) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA -, 3) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA -
8		**LEVERAGING FAIR PRINCIPLES FOR EFFICIENT MANAGEMENT OF METEOROLOGICAL RADAR DATA** *1) Alfonso Ladino, 2) Maxwell Grover, 3) Stephen Nesbitt, 4) Kai Mühlbauer* 1) University of Illinois at Urbana Champaign , 2) Argonne National Laboratory , 3) University of Illinois at Urbana Champaign , 4) University of Bonn Germany
9		**COMPARISON OF CONVENTIONAL AND NOVEL TECHNIQUES FOR REFLECTIVITY CALIBRATION MONITORING** *1) Alexander Myagkov, 2) Tatiana Nomokonova, 3) Michael Frech* 1) Radiometer Physics GmbH, Meckenheim, Germany , 2) Radiometer Physics GmbH, Meckenheim, Germany , 3) Meteorological Observatory Hohenpeissenberg, German Weather Service (DWD), Germany
10		**A UNIFIED FRAMEWORK FOR STUDYING WEATHER RADAR NETWORKS** *1) Shafi Sardar, 2) Marc Schleiss, 3) Apostolos Pappas, 4) Francesco Fioranelli* 1) Dept. of Geoscience and Remote Sensing, Faculty of Civil Engineering and Geoscience, Delft University of Technology , 2) Dept. of Geoscience and Remote Sensing, Faculty of Civil Engineering and Geoscience, Delft University of Technology , 3) Dept. of Microelectronics, Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology , 4) Dept. of Microelectronics, Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology
11		**DATA CENTER: TOWARD PREDICTIVE MAINTENANCE** *1) Hassan Al Sakka, 2) Nipesh Dulal*

		1) LEONARDO Germany GmbH , 2) LEONARDO Germany GmbH
12		**PROVISION OF HIGH-RESOLUTION X-BAND WEATHER RADAR DATA FOR AGRICULTURAL PRACTICE IN NORTHEAST GERMANY** *1) Alice Künzel, 2) Kai Mühlbauer, 3) Arash Madadi, 4) Johannes Knoch, 5) Sibylle Itzerott* 1) GFZ German Research Centre for Geosciences - - , 2) Institute of Geosciences, Meteorology Section, University of Bonn - - , 3) GFZ German Research Centre for Geosciences - - , 4) GFZ German Research Centre for Geosciences - - , 5) GFZ German Research Centre for Geosciences - -
13		**ADVANCEMENTS IN RADAR-DRIVEN CONVECTIVE CELL DETECTION AND NOWCASTING AT DEUTSCHER WETTERDIENST (DWD)** *1) Manuel Werner, 2) Robert Feger, 3) Lukas Josipovic, 4) Christian Berndt, 5) Cornelia Strube* 1) German Weather Service (DWD) , 2) German Weather Service (DWD) , 3) German Weather Service (DWD) , 4) German Weather Service (DWD) , 5) German Weather Service (DWD)
14		**MONITORING AND QUANTIFYING WIND TURBINE CLUTTER (WTC) IN DWD WEATHER RADAR DATA** *1) Michael Frech, 2) Annette Böhm, 3) Maximilian Schaper* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst
15		**WEATHER RADAR DATA EXCHANGE FORMATS AND CONVENTIONS FROM THE DATA PROVIDER POINT OF VIEW** *1) Sergey Panov, 2) Jason Selzler* 1) Vaisala Inc. , 2) Vaisala Inc.
16		**ARM RADAR DATA QUALITY AND CALIBRATIONS FOR THE SAIL AND EPCAPE FIELD CAMPAIGNS** *1) Alyssa Matthews, 2) Marqi Rocque, 3) Min Deng, 4) Ya-Chien Feng* 1) Pacific Northwest National Laboratory , 2) Pacific Northwest National Laboratory , 3) Brookhaven National Lab , 4) Pacific Northwest National Laboratory
17		**TROPICAL RAINFALL ESTIMATES FROM COMMERCIAL MICROWAVE LINKS IMPROVE BY RELATING RAINFALL RETRIEVAL ALGORITHM PARAMETERS TO LOCAL NETWORK AND ENVIRONMENTAL FEATURES** *1) Bas Walraven, 2) Aart Overeem, 3) Miriam Coenders, 4) Rolf Hut, 5) Luuk van der Valk, 6) Remko Uijlenhoet* 1) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands , 2) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute (KNMI), Utrechtseweg 297, 3731 GA De Bilt, The Netherlands - Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands -, 3) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands , 4) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands , 5) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands , 6) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands
18		**RADARHUB: INTEGRATING OPEN-SOURCE ALGORITHMS INTO REAL-TIME WORKFLOW** *1) Boonleng Cheong* 1) University of Oklahoma
19		**EXAMPLE OF USE OF THE ITALIAN DISDROMETER NETWORK FOR RADAR CALIBRATION CHECKS: THE ABRUZZO REGION CASE STUDY** *1) Mario Montopoli, 2) Alessandro Bracci, 3) Raffaele Lidori, 4) Elisa Adirosi, 5) Saverio Di Fabio, 6) Luca Baldini, 7) Adelaide Memmo, 8) Giancarlo Boscaino, 9) Clizia Annella, 10) Francesco Rossi, 11) Valentina Colaiuda, 12) Mauro Casinghini* 1) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy - Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy. -, 2) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Bologna, Italy. , 3) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy. , 4) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy , 5) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy. , 6) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy , 7) Ufficio Idrografico e Mareografico Via Catullo, 2 - 65127 Pescara , 8) Ufficio Idrografico e Mareografico Via Catullo, 2 - 65127 Pescara , 9) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy. - Department of Science and Technology, University of Naples "Parthenope", Naples, Italy -, 10) Agenzia regionale di Protezione Civile, Regione Abruzzo, Via Salaria Antica Est 27, 67100 L'Aquila. , 11) Agenzia regionale di Protezione Civile, Regione Abruzzo, Via Salaria Antica Est 27, 67100 L'Aquila. , 12) Agenzia regionale di Protezione Civile, Regione Abruzzo, Via Salaria Antica Est 27, 67100 L'Aquila.
20		**EUMETNET OPERA - IMPLEMENTATION OF NEW PRODUCTION LINES: PERFORMANCE AND DELIVERY OF OPERA RADAR PRODUCTS**

		1) Annakaisa von Lerber, 2) Ludovic Bouilloud, 3) Günther Haase, 4) Petteri Karsisto, 5) Stefan Klink, 6) Ben Lankamp, 7) Hidde Leijnse, 8) Vera Meyer, 9) Petr Novak, 10) Shinju Park, 11) Milka Radojevic, 12) Polly Schmederer , 13) Klaus Stephan, 14) Lukas Tüchler 1) Finnish Meteorological Institute - EUMETNET - OPERA -, 2) Météo France , 3) Swedish Meteorological and Hydrological Institute , 4) Finnish Meteorological Institute , 5) The Deutscher Wetterdienst , 6) The Royal Netherlands Meteorological Institute , 7) The Royal Netherlands Meteorological Institute , 8) GeoSphere Austria , 9) Czech Hydrometeorological Institute , 10) Center of Applied Research in Hydrometeorology - Universitat Politècnica de Catalunya (UPC) -, 11) Météo France , 12) GeoSphere Austria , 13) The Deutscher Wetterdienst , 14) Austro Control
21		**WIND TURBINES ACROSS THE CANADIAN WEATHER RADAR NETWORK** *1) Norman Donaldson, 2) Daniel Michelson, 3) Qian Li* 1) Environment and Climate Change Canada , 2) Environment and Climate Change Canada , 3) Environment and Climate Change Canada
22		**REAL-TIME TORNADO DETECTION SYSTEM USING DEEP LEARNING - TOWARDS MITIGATION OF LOCALIZED AND SUDDEN METEOROLOGICAL DISASTERS** *1) Kenichi Kusunoki, 2) Toru Adachi, 3) Osamu Suzuki, 4) Naoki Ishitsu, 5) Ken-ichiro Arai* 1) Meteorological Research Institute - Department of Typhoon and Severe Weather Research -, 2) Meteorological Research Institute - Department of Typhoon and Severe Weather Research -, 3) Meteorological Research Institute - Department of Typhoon and Severe Weather Research -, 4) Meteorological Research Institute - Department of Typhoon and Severe Weather Research - Alpha Denchi Co., Ltd., 5) Meteorological Research Institute - Department of Typhoon and Severe Weather Research - Alpha Denchi Co., Ltd.
23		**MULTI-FREQUENCY RADIO FLUX OBSERVED BY SIX DUAL-POLARIZATION WEATHER RADARS IN SWITZERLAND: A QUANTITATIVE COMPARISON WITH DRAO (CANADA) AND TWO RSTN SITES (ITALY AND AUSTRALIA)** *1) Marco Gabella, 2) Lisa Moser, 3) Philipp Schmid, 4) Maurizio Sartori, 5) Marco Boscacci, 6) Urs Germann* 1) MeteoSwiss , 2) MeteoSwiss , 3) Universität Bern , 4) MeteoSwiss , 5) MeteoSwiss , 6) MeteoSwiss
24		**ZDR BIAS MONITORING – ECCC'S NEW S-BAND RADARS** *1) Stephen Holden, 2) Daniel Michelson, 3) Sudesh Boodoo, 4) Norman Donaldson, 5) Peter Rodriguez, 6) Qian Li, 7) Peter Leibiuk* 1) Environment and Climate Change Canada , 2) Environment and Climate Change Canada , 3) Environment and Climate Change Canada , 4) Environment and Climate Change Canada , 5) Environment and Climate Change Canada , 6) Environment and Climate Change Canada , 7) Environment and Climate Change Canada
25		**SYSTEM DIFFERENTIAL PHASE – A HISTOGRAM APPROACH** *1) Kai Mühlbauer, 2) Velibor Pejcic, 3) Silke Trömel* 1) Institute of Geosciences, Meteorology Section, University Bonn , 2) Institute of Geosciences, Meteorology Section, University Bonn , 3) Institute of Geosciences, Meteorology Section, University Bonn
26		**AUTOMATIC RADAR QUALITY CONTROL FOR AUTO METAR IN SWISS CIVIL AIRPORTS** *1) Fabiana Chiriatti, 2) Loris Foresti, 3) Simone Balmelli, 4) Przemyslaw Juda, 5) Daniel Regenass, 6) Marco Boscacci, 7) Marco Gabella, 8) Maurizio Sartori, 9) Lorenzo Clementi, 10) Urs Germann* 1) Federal Office of Meteorology and Climatology MeteoSwiss , 2) Federal Office of Meteorology and Climatology MeteoSwiss , 3) Federal Office of Meteorology and Climatology MeteoSwiss , 4) Federal Office of Meteorology and Climatology MeteoSwiss , 5) Federal Office of Meteorology and Climatology MeteoSwiss , 6) Federal Office of Meteorology and Climatology MeteoSwiss , 7) Federal Office of Meteorology and Climatology MeteoSwiss , 8) Federal Office of Meteorology and Climatology MeteoSwiss , 9) Federal Office of Meteorology and Climatology MeteoSwiss , 10) Federal Office of Meteorology and Climatology MeteoSwiss
27		**INNOVATIONS IN OPERATIONAL RADAR PRODUCTS AND POST-CWRRP PRODUCTION STATUS** *1) Ahmed Mahidjiba, 2) Jonathan Belletete, 3) Rabah Hachelaf, 4) Ilyass Hajji, 5) Corinne Simard* 1) Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada, 2) Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada, 3) Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada, 4) Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada, 5) Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada - Environment and Climate Change Canada / Government of Canada
28		**WEATHER RADAR NETWORK QUALITY CONTROL AND OPERATIONS IN BRAZIL - CHALLENGES OF A MULTI-OPERATORS ENVIRONMENT** *1) Cesar Beneti, 2) Jeova Silva, 3) Vinicius Cebalhos, 4) Fernanda Verdelho*

		1) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil - - , 2) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil - - , 3) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil - - , 4) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil - -
29		**TOWARDS A SINGLE GLOBAL STANDARD FOR POLAR WEATHER RADAR DATA REPRESENTATION WITH FM301 – CFRADIAL2** *1) Mark Curtis, 2) Michael Dixon, 3) Daniel Michelson, 4) Peter Rodriguez* 1) Bureau of Meteorology, Australia , 2) National Center for Atmospheric Research , 3) Environment and Climate Change Canada , 4) Environment and Climate Change Canada
30		**USING NOISE DATA TO MONITOR DUAL-POLARIZATION RADAR RECEIVER GAINS AND CORRECT FOR DRIFT DURING OPERATIONS.** *1) Michael Dixon, 2) John Hubbert* 1) NSF National Center for Atmospheric Research , 2) NSF National Center for Atmospheric Research
31		**ATMOSPHERIC RADIATION MEASUREMENT (ARM) USER FACILITY: RADAR OPERATIONS AND DATA QUALITY CHARACTERIZATION** *1) Ya-Chien Feng, 2) Adam Theisen, 3) James Mather, 4) Iosif Lindenmaier, 5) Jennifer Comstock, 6) Alyssa Matthews, 7) Marqi Rocque, 8) Min Deng, 9) Timothy Wendler, 10) Vagner Castro, 11) Peter Argay, 12) Todd Ahouch, 13) Eddie Schuman, 14) Julia Flaherty* 1) Pacific Northwest National Laboratory , 2) Argonne National Laboratory , 3) Pacific Northwest National Laboratory , 4) Pacific Northwest National Laboratory , 5) Pacific Northwest National Laboratory , 6) Pacific Northwest National Laboratory , 7) Pacific Northwest National Laboratory , 8) Brookhaven National Laboratory , 9) Pacific Northwest National Laboratory , 10) Pacific Northwest National Laboratory , 11) Los Alamos National Laboratory , 12) Sandia National Laboratory , 13) Pacific Northwest National Laboratory , 14) Pacific Northwest National Laboratory
32		**SNOWFALLL CAMERA OPERATIONS FOR INSECT DETECTION TO CORROBORATE RADAR OBSERVATIONS** *1) Freya Addison, 2) Maximilian Maahn, 3) Roel Klink, 4) Heike Kalesse-los, 5) Moritz Lochmann* 1) Universität Leipzig , 2) Universität Leipzig , 3) German Centre for Integrative Biodiversity Research , 4) Universität Leipzig , 5) Universität Leipzig
33		**SHRIMP: SYNTHETIC HIMAWARI RADAR IMAGING PROJECT** *1) Valentin Louf, 2) Alain Protat, 3) Jordan Brook* 1) Australian Bureau Of Meteorology , 2) Australian Bureau Of Meteorology , 3) Australian Bureau Of Meteorology
34		**QUALITY ASSURANCE OF THE NEW DUAL-FREQUENCY DOPPLER CLOUD RADAR OPERATING IN THE SOUTHERN OF THE IBERIAN PENINSULA** *1) Juan Antonio Bravo-Aranda, 2) Matheus Tolentino, 3) Leoni von Terzi, 4) Stefan Kneifel, 5) Lucas Alados-Arboledas, 6) Juan Luis Guerrero-Rascado, 7) Francisco Navas-Guzmán, 8) María José Granados-Muñoz* 1) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -, 2) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -, 3) Ludwig-Maximilians Universität Munich , 4) Ludwig-Maximilians Universität Munich , 5) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -, 6) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -, 7) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -, 8) Andalusian Institute for Earth System Research - Department of Applied Physics, University of Granada -
35		**MITIGATION OF PERSISTENT CLUTTER IN SWEDISH WEATHER RADAR PRODUCTS** *1) Günther Haase, 2) Daniel Johnson, 3) Ulf Nordh, 4) Anders Henja* 1) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden , 2) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden , 3) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden , 4) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden - Henjab AB, Växjö, Sweden -
36		**CML APPLICATIONS WITHIN EMILIA ROMAGNA WEATHER SERVICE, ARPAE SIMC.** *1) Elia Covi, 2) Anna Fornasiero, 3) Pier Paolo Alberoni* 1) Hydro-Meteorological and Climate Service of Emilia-Romagna Region (Arpae-SIMC) , 2) Hydro-Meteorological and Climate Service of Emilia-Romagna Region (Arpae-SIMC) , 3) Hydro-Meteorological and Climate Service of Emilia-Romagna Region (Arpae-SIMC)
37		**MONITORING THE QUALITY OF OPERA RAINFALL COMPOSITES FOR REAL-TIME FLASH FLOOD FORECASTING IN THE EDERA PROJECT** *1) Shinju Park, 2) Emily Kemp, 3) Marc Berenguer, 4) Daniel Sempere-Torres* 1) Centre of Applied Research in Hydrometeorology, Universitat Politècnica de Catalunya , 2) Centre of Applied Research in Hydrometeorology, Universitat Politècnica de Catalunya , 3) Centre of Applied Research in Hydrometeorology, Universitat Politècnica de Catalunya , 4) Centre of Applied Research in Hydrometeorology, Universitat Politècnica de Catalunya
38		**IMPLEMENTATION OF OPEN-SOURCE SOFTWARE IN AN OPERATIONAL RADAR PROCESSING CHAIN USING RAINBOW** *1) Tiemo Mathijssen, 2) Aart Overeem, 3) Sebastian Knist, 4) Ronald Hannesen*

		1) Royal Netherlands Meteorological Institute, Utrechtseweg 297, 3731 GA, De Bilt, The Netherlands , 2) Royal Netherlands Meteorological Institute, Utrechtseweg 297, 3731 GA, De Bilt, The Netherlands , 3) Leonardo Germany GmbH, Raiffeisenstraße 10, 41470 Neuss, Germany , 4) Leonardo Germany GmbH, Raiffeisenstraße 10, 41470 Neuss, Germany
39		**CLEAR AIR AND WIND SHEAR MODES ON THE SOLID-STATE MOBILE RADAR** *1) Ondřej Pitaš, 2) Jan Horák, 3) Miloslav Staněk, 4) Filip Najman, 5) Jakub Bartel* 1) Meteopress , 2) Meteopress , 3) Meteopress - Charles University, Faculty of Science -, 4) Meteopress , 5) Meteopress
40		**PERFORMANCE OF THE THIES CLIMA 3D STEREO DISDROMETER: EVALUATION DURING RAIN AND SNOW EVENTS** *1) Sabina Angeloni, 2) Elisa Adirosi, 3) Mario Montopoli, 4) Luca Baldini, 5) Alessandro Bracci, 6) Giacomo Roversi* 1) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 2) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 3) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy - Center of Excellence for Telesensing of Environment and Model Prediction of Severe events (CETEMPS), University of L'Aquila, L'Aquila, Italy -, 4) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 5) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Bologna, Italy , 6) Department of Environmental Sciences, Informatics and Statistics, Ca' Foscari University, Venice, Italy - National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy -
41		**COMPUTING ECHO TOP PRODUCTS WITH FAST QUALITY-WEIGHTED SLIDING WINDOWS** *1) Markus Peura* 1) Finnish Meteorological Institute
42		**ASSESSMENT OF RADAR QUANTITATIVE PRECIPITATION ESTIMATION OBTAINED BY THE X-BAND NETWORKED RADARS OF ARPA LOMBARDIA** *1) Antioco Vargiu, 2) Giulio Camisani, 3) Gian Paolo Minardi, 4) Orietta Cazzuli, 5) Elisa Adirosi, 6) Luca Baldini, 7) Renzo Bechini, 8) Roberto Cremonini* 1) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 2) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 3) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 4) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 5) National Reserch Council, Institute of Atmospheric Sciences and Climate, Rome, Italy , 6) National Reserch Council, Institute of Atmospheric Sciences and Climate, Rome, Italy , 7) Regional Environmental Protection Agency of Piedmont (ARPA Piemonte), Turin, ItalySciences and Climate, Rome, Italy , 8) Regional Environmental Protection Agency of Piedmont (ARPA Piemonte), Turin, ItalySciences and Climate, Rome, Italy
43		**CALIBRATING THE AZIMUTH POINTING OF WEATHER RADAR USING GROUND CLUTTER CORRELATION** *1) Jiankai Huang , 2) Jiapeng Yin1 , 3) Jianbing Li* 1) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China; 2) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China; 3) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China
44		**CALIBRATION TECHNIQUE FOR POLARIMETRIC PHASED ARRAY WEATHER RADAR BASED ON THE METAL BALL CARRIED BY DOUBLE DRONES** *1) Jiapeng Yin, 2) Jiankai Huang, 3) Jianbing Li* 1) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China; 2) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China; 3) The State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System, National University of Defense Technology, China
	Operational aspects	
45		**PEAKO AND PEAKTREE: TOOLS FOR DETECTING AND INTERPRETING PEAKS IN CLOUD RADAR DOPPLER SPECTRA – CAPABILITIES AND LIMITATIONS** *1) Teresa Vogl, 2) Martin Radenz, 3) Fabiola Ramelli, 4) Rosa Gierens, 5) Heike Kalesse-Los* 1) Leipzig University, Leipzig, Germany , 2) Leibniz Institute for Tropospheric Research, Leipzig, Germany , 3) ETH Zürich, Zurich, Switzerland , 4) University of Cologne, Cologne, Germany , 5) Leipzig University, Leipzig, Germany
46		**A NEW C-BAND DWR ARCHITECTURE WITH DUAL TRANSMITTER, MAGNETRON AND SOLID-STATE POWER** *1) Matthias Toussaint, 2) Paul Malkomes, 3) Michael Knight, 4) Jim Helvin, 5) Michael Frech*

		1) GAMIC GmbH , 2) GAMIC GmbH , 3) Enterprise Electronics Corporation , 4) Enterprise Electronics Corporation , 5) Deutscher Wetterdienst
47		**WEATHER RADAR CALIBRATION BASED ON FAR-FIELD ANTENNA PATTERN MEASUREMENTS WITH THE UAS-BASED RADIO FREQUENCY SONDE (RFSONDE)** *1) Antonio Segales, 2) David Schvartzman, 3) Khuda Burdi, 4) Robert Palmer* 1) University of Oklahoma - Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) -, 2) University of Oklahoma - Advanced Radar Research Center and School of Meteorology -, 3) University of Oklahoma - Advanced Radar Research Center - School of Electrical and Computer Engineering, 4) University of Oklahoma - Advanced Radar Research Center and School of Meteorology -
48		**THE BENEFITS OF MULTI-DOPPLER RADARS WITH VARIOUS WAVELENGTHS IN WISSDOM SYNTHESIS** *1) Chia-Lun Tsai, 2) Yu-Chieng Liou, 3) GyuWon Lee* 1) Department of Atmospheric Sciences, Chinese Culture University, Taipei, Taiwan , 2) Department of Atmospheric Sciences, National Central University, Jhongli, Taiwan , 3) Department of Astronomy and Atmospheric Sciences, Center for Atmospheric REmote sensing (CARE), Kyungpook National University, Daegu, Sourth Korea
49		**GROUND CLUTTER RECOGNITION ALGORITHM BASED ON TIME-FREQUENCY CHARACTERISTICS OF PHASED** *1) Haojun Chen, 2) Qiyu Chen, 3) Chao Liu, 4) Chongxiang Zhang, 5) Jie Zheng, 6) Qian Wu, 7) Guorong Wang, 8) Wen* 1) Shanghai Meteorological Information and Technical Support Center - East China Phased Array Weather Radar Application Joint Laboratory -, 2) Zhejiang Eastone Washon Science and Technology Ltd. - East China Phased Array Weather Radar Application Joint Laboratory -, 3) Shanghai Meteorological Information and Technical Support Center , 4) Shanghai Meteorological Information and Technical Support Center , 5) Shanghai Meteorological Information and Technical Support
50		**PRELIMINARY STUDY ON THE APPLICATION OF NETWORK WIND PROFILE RADAR INVERSION PRODUCTS IN VERTICAL OBSERVATIONS IN SHANGHAI** *1) Yunong Guan, 2) Haojun Chen, 3) Chao Liu, 4) Chunguang Yin, 5) Chongxiang Zhang, 6) Jie Zheng* 1) Shanghai Meteorological Information and Technical Support Center , 2) Shanghai Meteorological Information and Technical Support Center , 3) Shanghai Meteorological Information and Technical Support Center , 4) Shanghai Meteorological Information and Technical Support Center , 5) Shanghai Meteorological Information and Technical Support Center , 6) Shanghai Meteorological Information and Technical Support Center
51		**NEW RANGE UNFOLDING ALGORITHM SUITABLE FOR PHASED ARRAY WEATHER RADAR** *1) Chao Liu, 2) Zhenhuan Wang, 3) Haojun Chen, 4) Wen Yang, 5) Guorong Wang* 1) Shanghai Meteorological Bureau , 2) Zhejiang Eastone Washon Science and Technology Ltd , 3) Shanghai Meteorological Bureau , 4) Zhejiang Eastone Washon Science and Technology Ltd - East China Phased Array Weather Radar Application Joint Laboratory -, 5) Zhejiang Eastone Washon Science and Technology Ltd - East China Phased Array Weather Radar Application Joint Laboratory -
52		**A STUDY ON MISSING DATA CORRECTION TECHNIQUE FOR WEATHER RADAR DATA USING MACHINE LEARNING** *1) Tomomi Aoki, 2) Noritsugu Shiokawa, 3) Shota Ochi, 4) Yasunori Nakagawa* 1) TOSHIBA corporation , 2) TOSHIBA corporation , 3) TOSHIBA corporation , 4) Toshiba Digital Solutions Corporation
53		**STAGGERED PRF PROCESSING WITHIN THE BARON PROCESSOR SUITE** *1) Mrinal Balaji, 2) Darrin Cartwright, 3) James Romines* 1) Baron Weather Inc , 2) Baron Weather Inc , 3) Baron Weather Inc
54		**VERIFYING THE CLUTTER SUPPRESSION CAPABILITY OF X- AND C-BAND WEATHER RADARS EQUIPPED WITH SOLID STATE POWER AMPLIFIER TRANSMITTERS** *1) Pekka Puhakka, 2) Jere Mäkinen, 3) Marjan Marbouti* 1) Vaisala , 2) Vaisala , 3) Vaisala
55		**COMPARING THE SENSITIVITY OF WEATHER RADARS WITH CONVENTIONAL MAGNETRON AND MODERN SOLID STATE POWER AMPLIFIER TRANSMITTER TECHNOLOGIES** *1) Pekka Puhakka, 2) Jere Mäkinen, 3) Marjan Marbouti* 1) Vaisala , 2) Vaisala , 3) Vaisala
56		**ENHANCED CALIBRATION AND COMPARISON METHODOLOGY FOR W-BAND CLOUD RADAR UTILIZING DISDROMETER RAIN DATA** *1) Felix Yanovsky, 2) Christine Unal, 3) Oleksandr Pitertsev, 4) Herman Russchenberg* 1) Delft University of Technology - Faculty CEG - Department of Electronics, Robotics, Monitoring and IoT Technology, National Aviation University, Kyiv, Ukraine -, 2) Delft University of Technology - Faculty CEG - Delft University of Technology - Climate Institute -, 3) Department of Electronics, Robotics, Monitoring and IoT Technology, National Aviation University, Kyiv, Ukraine , 4) Delft University of Technology - Faculty CEG - Delft University of Technology - Climate Institute -
57		**THE EFFECTS OF THE ANTENNA APPROXIMATION METHOD ON THE CALCULATION OF THE POLARIMETRIC BIASES** *1) Djordje Mirkovic, 2) David Schvartzman, 3) Dusan Zrnic*

		1) Cooperative Institute for Severe and High-impact Weather Research and Operations (CIWRO), The University of Oklahoma - National Severe Storms Laboratory, (OAR/NOAA) -, 2) School of Meteorology, The University of Oklahoma - 4. Advanced Radar Research Center, The University of Oklahoma -, 3) National Severe Storms Laboratory, (OAR/NOAA) - School of Meteorology, The University of Oklahoma -
58		**ASSESSMENT OF EDDY DISSIPATION RATE ESTIMATION METHODS USING DOPPLER WIND LIDAR** *1) Seungwon Baek, 2) Kwonil Kim, 3) Jung-Hoon Kim, 4) GyuWon Lee* 1) BK21 Weather Extremes Education & Research Team, Department of Atmospheric Sciences, Center for Atmospheric REmote sensing (CARE), Kyungpook National University, Republic of Korea , 2) Marine and Atmospheric Sciences, Stony Brook University, New York, USA , 3) School of Earth and Environmental Sciences, Seoul National University, Republic of Korea , 4) BK21 Weather Extremes Education & Research Team, Department of Atmospheric Sciences, Center for Atmospheric REmote sensing (CARE), Kyungpook National University, Republic of Korea
59		**LOOKING AT PULSED INTERFERENCE, FILTERS, AND PULSE COMPRESSION** *1) Christopher Curtis* 1) CIWRO - NSSL -
60		**UNLEASHING THE POWER: REVOLUTIONIZING WEATHER OBSERVATION WITH THE ADVANCED TECHNOLOGY** *1) Sebastián Torres* 1) CIWRO, The University of Oklahoma - NOAA/OAR National Severe Storms Laboratory -
61		**AN OVERVIEW OF THE PPAR ADVANCED TECHNOLOGY DEMONSTRATOR POLARIMETRIC CALIBRATION** *1) Igor Ivic* 1) The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) - NOAA National Severe Storms Laboratory (NSSL) -
62		**SINGLE FM PULSE NEAR RANGE SIGNAL RECOVERY WITH OFF-THE-SHELF DSPS** *1) Sergey Panov, 2) Jukka Hynninen, 3) Jordan Santillo, 4) Teemu Suitiala* 1) Vaisala Inc. , 2) Vaisala Oy , 3) Vaisala Oy , 4) Vaisala Oy
63		**DIRECT FILTERING VERSUS MULTI-STEP APPROACH IN THE WEATHER RADAR DSP** *1) Jordan Santillo, 2) Jim George, 3) Jukka Hynninen, 4) Sergey Panov, 5) Teemu Suitiala* 1) Vaisala Oy , 2) Colorado State University , 3) Vaisala Oy , 4) Vaisala Inc. , 5) Vaisala Oy
64		**IMPROVING WEATHER RADAR IMAGE QUALITY USING NEW DIRECT DECONVOLUTION ALGORITHM** *1) Anastasia Tyurina, 2) Fritz O'Hora, 3) Sergey I Panov* 1) Second Star Algonumerix LLC , 2) Vaisala Inc. , 3) Vaisala Inc.
65		**CHARACTERIZATION AND DETECTION OF DOWNBURSTS AND THEIR PRECURSORS WITH AN ALL-DIGITAL** *1) Tian-You Yu, 2) Nathan Kuhr, 3) David Bodine, 4) Sebastian Torres, 5) Charles Kuster* 1) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - School of Meterology, University of Oklahoma, 2) Advanced Radar Research Center, University of Oklahoma - School of Meterology, University of Oklahoma -, 3) Advanced Radar Research Center, University of Oklahoma - School of Meterology, University of Oklahoma -, 4) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - NOAA/OAR National Severe Storms Laboratory -, 5) NOAA/OAR National Severe Storms Laboratory
66		**INTERCOMPARISON OF COLLOCATED PARSIVEL DISTROMETERS** *1) Jan Handwerker* 1) Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research
67		**SOPHY: FIRST MOBILE X-BAND POLARIMETRIC WEATHER RADAR DEVELOPED IN PERU** *1) Juan C. Espinoza, 2) Danny E. Scipion, 3) Alexander O. Valdez, 4) Carlos M. Del Castillo* 1) Instituto Geofísico del Perú , 2) Instituto Geofísico del Perú , 3) Instituto Geofísico del Perú , 4) Instituto Geofísico del Perú
68		**UNDER THE HOOD - HOW SIGNAL PROCESSING IN THE WSR-88D PROVIDES THE BEST QUALITY DATA** *1) David Warde, 2) Richard Ice, 3) Sebastian Torres, 4) John Hubbert* 1) CIWRO, The University of Oklahoma - NOAA/OAR, NSSL -, 2) No affiliation , 3) CIWRO, The University of Oklahoma - NOAA/OAR, NSSL -, 4) National Center for Atmospheric Research
69		**CHARACTERIZATION OF WIND TURBINE CLUTTER (WTC) CONTAMINATION ON THE WSR-88D** *1) David Warde, 2) Feng Nai, 3) Sebastian Torres* 1) CIWRO, The University of Oklahoma - NOAA/OAR, NSSL -, 2) CIWRO, The University of Oklahoma - NOAA/OAR, NSSL -, 3) CIWRO, The University of Oklahoma - NOAA/OAR, NSSL -
70		**INTRODUCING THE VIDEO IN SITU SNOWFALL SENSOR FOR ADVANCING RADAR RETRIEVALS** *1) Maximilian Maahn, 2) Dmitri Moisseev, 3) Isabelle Steinke, 4) Nina Maherndl, 5) Matthew Shupe* 1) Leipzig University , 2) University of Helsinki , 3) TU Delft , 4) Leipzig University , 5) CU Boulder - NOAA -
71		**PERFORMANCE VERIFICATION OF DUAL-POLARIZED X-BAND PHASED ARRAY WEATHER RADAR AT OSAKA** *1) Yuuki Wada, 2) Hiroshi Hanado, 3) Shinsuke Satoh, 4) Daichi Kitahara, 5) Shuo Wang, 6) Rintaro Okumura, 7)*

		1) Osaka University , 2) NICT , 3) NICT , 4) Keio University , 5) Osaka University , 6) Osaka University , 7) NICT , 8) NICT , 9) Osaka University
72		**PY-ART 2.0: RADAR MEETS XRADAR** *1) Maxwell Grover, 2) Scott Collis, 3) Zachary Sherman, 4) Kai Mühlbauer, 5) Joseph O'Brien, 6) Robert Jackson* 1) Argonne National Laboratory , 2) Argonne National Laboratory - Northwestern University -, 3) Argonne National Laboratory , 4) University of Bonn , 5) Argonne National Laboratory , 6) Argonne National Laboratory - Northwestern University -
73		**OBSERVATIONS USING AN X-BAND PHASED-ARRAY BISTATIC RADAR NETWORK** *1) Steven Beninati, 2) Stephen Frasier, 3) Pavlos Kollias, 4) Edward Luke, 5) Jorge Salazar Cerreno* 1) University of Massachusetts , 2) University of Massachusetts , 3) Stony Brook University - Brookhaven National Laboratory -, 4) Brookhaven National Laboratory , 5) University of Oklahoma
74		**PODRADS: LOW-POWER, LOW-COST VERTICALLY POINTING RADARS TO OBSERVE VERTICAL VELOCITIES IN TORNADOES AND CONVECTIVE STORMS** *1) Jeffrey Snyder, 2) Patrick Servello, 3) Daniel Wasielewski* 1) NOAA/OAR National Severe Storms Laboratory , 2) NOAA/OAR National Severe Storms Laboratory - Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma -, 3) NOAA/OAR National Severe Storms Laboratory
75		**RMATOOLBOX: AN OPEN-SOURCE PYTHON LIBRARY FOR EXPLORATION OF DATA FROM THE ARGENTINIAN METEOROLOGICAL RADAR (V1.0)** *1) Federico Renolfi* 1) INVAP S.E.
76		**IMPROVING DATA ACCURACY OF CLOUD RADARS WITH MULTIPLE CALIBRATION METHODS INCLUDING AN ACTUATED NEAR-FIELD SPHERE** *1) Tim Wendler, 2) Andrei Lindenmaier, 3) Vagner Castro* 1) Pacific Northwest National Lab and Brookhaven National Lab, U.S.A., 2) Pacific Northwest National Lab and Brookhaven National Lab, U.S.A., 3) Pacific Northwest National Lab and Brookhaven National Lab, U.S.A.

Day	3	Tuesday, September 11, 2024, 11:20-13:05; Museo dell'arte classica
Session	2	Clouds and precipitation physics

1		**DEPENDENCE OF RADAR/LIDAR DERIVED CLOUD PROPERTIES ON ENVIRONMENTAL CONDITIONS OVER THE NORTH ATLANTIC AND SOUTHERN OCEAN** *1) Greg McFarquhar, 2) Zeqian Xia* 1) University of Oklahoma , 2) University of Oklahoma
2		**USING VISSS AND CLOUD RADAR OBSERVATIONS TO CHARACTERIZE SECONDARY ICE PRODUCTION EVENTS** *1) Haoran Li, 2) Maximilian Maahn* 1) Chinese Academy of Meteorological Sciences - Leipzig University -, 2) Leipzig University
3		**ZDR BACKWARDS ARC: RADAR EVIDENCE OF MULTI-DIRECTIONAL SIZE SORTING IN THE STORM PRODUCING 201.9 MM HOURLY RAINFALL ON 20 JULY 2021 IN ZHENGZHOU, CHINA** *1) Haoran Li, 2) Jinfang Yin, 3) Matt Kumjian* 1) Chinese Academy Of Meteorological Sciences , 2) Chinese Academy Of Meteorological Sciences , 3) PSU
4		**T-MATRIX SIMULATIONS OF SPECTRAL POLARIMETRIC VARIABLES FROM A CLOUD-RADAR** *1) Ioanna Tsikoudi, 2) Alessandro Battaglia, 3) Christine Unal, 4) Eleni Marinou, 5) Kalliopi Artemis Voudouri* 1) Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing, National Observatory of Athens - Department of Physics, Section of Environmental Physics-Meteorology, University of Athens, Athens, Greece -, 2) Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino, Torino, Italy , 3) Department of Geoscience and Remote Sensing, Delft University of Technology, Delft, the Netherlands , 4) Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing, National Observatory of Athens; 5) Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing, National Observatory of Athens, Athens, Greece, Department of Physics and Aristotle University of Thessaloniki, Thessaloniki, Greece
5		**EXPERIENCE WITH CLOUD ELECTRIFICATION ADDED TO THE ICON MODEL** *1) Zbyněk Sokol, 2) Jana Popová, 3) Lucie Pacovská* 1) Institute of Atmospheric Physics of the Czech Academy of Sciences , 2) Institute of Atmospheric Physics of the Czech Academy of Sciences - Faculty of Science, Charles University, Prague, Czech Republic -, 3) Faculty of Science, Charles University, Prague, Czech Republic
6		**ANALYSIS OF STRATIFORM PRECIPITATION SYSTEMS BY MP-PAWR** *1) Nobuhiro Takahashi, 2) Kei Kao* 1) Institute of Space-Earth Environmental Research, Nagoya University , 2) Institute of Space-Earth Environmental Research, Nagoya University
7		**IMPACT OF ASSIMILATING DIFFERENT TEMPERATURE VARIABLES ON MICROPHYSICAL PROCESSES IN CONVECTIVE AND STRATIFORM PRECIPITATION: A CASE STUDY OF FRONTAL SYSTEM IN TAHOPE IOP** *1) Chieh-Ying Ke, 2) Kao-Shen Chung* 1) Department of Atmospheric Sciences, National Central University , 2) Department of Atmospheric Sciences, National Central University
8		**ON THE USE OF POLARIMETRIC DOPPLER SPECTRA TO INVESTIGATE THE BOUNDARY LAYER OF TORNADOES** *1) Howard Bluestein, 2) David Schvartzman, 3) Ameya Naik, 4) David Bodine, 5) MIn-Duan Tzeng, 6) Leah Swinney, 7) Boon-Leng Cheong, 8) Tian-You Yu, 9) Trey Greenwood* 1) School of Meteorology, University of Oklahoma , 2) School of Meteorology, University of Oklahoma - Advanced Radar Research Center -, 3) School of Meteorology, University of Oklahoma , 4) School of Meteorology, University of Oklahoma - Advanced Radar Research Center -, 5) Advanced Radar Research Center , 6) School of Meteorology, University of Oklahoma , 7) Advanced Radar Research Center , 8) Advanced Radar Research Center , 9) Extreme Tornado Tours
9		**STORM CHARACTERISTICS BASED ON 5 YEARS OF MEASUREMENTS OF DOPPLER POLARIMETRIC VERTICAL CLOUD PROFILER** *1) Jana Popová, 2) Zbyněk Sokol, 3) Lucie Pacovská, 4) Stefano Federico, 5) Rosa Claudia Torcasio* 1) Institute of Atmospheric Physics, Czech Academy of Sciences - Faculty of Science, Charles University -, 2) Institute of Atmospheric Physics, Czech Academy of Sciences , 3) Faculty of Science, Charles University , 4) Institute of Atmospheric Sciences and Climate, National Research Council of Italy , 5) Institute of Atmospheric Sciences and Climate, National Research Council of Italy
10		**FIRST APPLICATIONS OF THE VIRGA-SNIFFER – A NEW TOOL TO IDENTIFY PRECIPITATION EVAPORATION USING GROUND-BASED REMOTE-SENSING OBSERVATIONS** *1) Heike Kalesse-Los, 2) Jonas Witthuhn, 3) Anton Kötsche, 4) Johannes Röttenbacher, 5) Andreas Foth, 6) Teresa Vogl* 1) Leipzig University , 2) Leipzig University - Leibniz Institute for Tropospheric Research -, 3) Leipzig University , 4) Leipzig University , 5) Leipzig University , 6) Leipzig University
11		**RADAR AND LIGHTNING CHARACTERISTICS OF TORNADIC STORMS IN CATALONIA**

		1) Oriol Rodríguez, 2) Helen San Segundo, 3) Patricia Altube 1) Servei Meteorològic de Catalunya , 2) Servei Meteorològic de Catalunya , 3) Servei Meteorològic de Catalunya
12		**MICROPHYSICAL STRUCTURES IN THE MELTING LAYER BASED ON IN-CLOUD AND GROUND-BASED PRECIPITATION PARTICLE IMAGING OBSERVATIONS** *1) Kenji Suzuki, 2) Yurika Hara, 3) Kazuya Takami* 1) Yamaguchi University, Japan , 2) Yamaguchi University, Japan , 3) Railway Technical Research Institute, Japan
13		**PROPOSAL FOR A NEW PRECIPITATION PARTICLE OBSERVATION METHOD USING THE RAINSCOPE AND THE UAV** *1) Shinya Mabuchi, 2) Kazuhiro Yoshimi* 1) Toyama Prefectural University , 2) Toyama Prefectural University
14		**MICROPHYSICAL RETRIEVALS IN MIXED-PHASE CLOUDS WITH LOW LWP USING CLOUD RADAR** *1) Peiyuan Wang, 2) Christine Unal* 1) Delft University of Technology , 2) Delft University of Technology
15		**PATTERNS IN POLARIMETRIC X-BAND RADAR DATA CHARACTERIZING SEVERE HAIL EVOLUTION** *1) Katerina Skripnikova, 2) Zbynek Sokol* 1) Institute of Atmospheric Physics of the Czech Academy of Sciences , 2) Institute of Atmospheric Physics of the Czech Academy of Sciences
16		**DISCRIMINATING BETWEEN "DRIZZLE OR RAIN" AND SEA SALT AEROSOLS IN CLOUDNET FOR MEASUREMENTS OVER THE BARBADOS CLOUD OBSERVATORY** *1) Johanna Roschke, 2) Jonas Witthuhn, 3) Marcus Klingebiel, 4) Moritz Haarig, 5) Andreas Foth, 6) Anton Kötsche, 7) Heike Kalesse-Los* 1) Leipzig University , 2) Leipzig University - Leibniz Institute for Tropospheric Research -, 3) Leipzig University , 4) Leibniz Institute for Tropospheric Research , 5) Leipzig University , 6) Leipzig University , 7) Leipzig University
17		**CHARACTERIZATION OF MICROPHYSICAL AND DYNAMICAL PROCESSES FOR MESOSCALE CONVECTIVE SYSTEMS FROM DUAL-POLARIMETRIC RADAR NETWORKS** *1) Jeong-Eun Lee, 2) GyuWon Lee* 1) BK21 Weather Extremes Education & Research Team, Department of Atmospheric Sciences, Center for Atmospheric REmote sensing (CARE), Kyungpook National University, Republic of Korea , 2) BK21 Weather Extremes Education & Research Team, Department of Atmospheric Sciences, Center for Atmospheric REmote sensing (CARE), Kyungpook National University, Republic of Korea
18		**NON-PARAMETRIC RETRIEVAL OF DROP-SIZE DISTRIBUTION PROFILES BASED ON CLOUD RADAR SPECTRAL POLARIMETRY** *1) Tatiana Nomokonova, 2) Alexander Myagkov, 3) Michael Frech* 1) RPG Radiometer Physics GmbH, Meckenheim, Germany , 2) RPG Radiometer Physics GmbH, Meckenheim, Germany , 3) Meteorological Observatory Hohenpeißenberg, German Weather Service (DWD), Germany
19		**OBSERVATIONAL STUDY OF TOPOGRAPHIC EFFECTS OF SNOW CLOUDS** *1) Kazuya Takami, 2) Kenji Suzuki* 1) Railway Technical Research Institute , 2) Yamaguchi University
20		**CLOUDSAT AND A-TRAIN WARM RAIN CHARACTERIZATION** *1) Susmitha Sasikumar, 2) Alessandro Battaglia, 3) Pavlos Kollias* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 3) Stony Brook University, Stony Brook NY, USA
21		**RETRIEVAL OF SNOW WATER EQUIVALENT FROM THIES LASER DISDROMETER IN THE SOUTHERN ITALY APENNINES** *1) Vincenzo Capozzi, 2) Lauro D'Esposito, 3) Clizia Annella, 4) Giannetta Fusco, 5) Giorgio Budillon* 1) Department of Science and Technology, University of Naples "Parthenope" , 2) Department of Science and Technology, University of Naples "Parthenope" , 3) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy - Department of Science and Technology, University of Naples "Parthenope" -, 4) Department of Science and Technology, University of Naples "Parthenope" , 5) Department of Science and Technology, University of Naples "Parthenope"
22		**RADAR TESTS FOR THE AWACA CAMPAIGN** *1) Heather Corden, 2) Jacopo Grazioli, 3) Michael Monnet, 4) Alexis Berne* 1) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland , 2) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland , 3) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland , 4) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland
23		**EVALUATION OF TWO MICROPHYSICS SCHEMES IN THE AROME MODEL USING AN OBJECT-BASED APPROACH APPLIED ON DUAL-POLARISATION RADAR DATA.**

		1) Cloé David, 2) Clotilde Augros, 3) Benoit Vie, 4) François Bouttier 1) National Centre for Meteorological Research (CNRM) - Météo-France - Université Toulouse III, 2) National Centre for Meteorological Research (CNRM) - Météo-France -, 3) National Centre for Meteorological Research (CNRM) - Météo-France -, 4) National Centre for Meteorological Research (CNRM) - Météo-France -
24		**UNRAVELLING THE MICROPHYSICAL CHARACTERISTICS OF EXTREME RAINFALL OVER TROPICAL STATIONS USING X-BAND DUAL-POLARIZATION RADAR OBSERVATION** *1) Kumar Abhijeet, 2) T. N. Rao, 3) Rama Rao Nidamanuri* 1) Indian Institute of Space Science and Technology, Thiruananthapuram, Kerala - National Atmospheric Research Laboratory, Gadanki - Indian Institute Tropical Meteorology, Pune, 2) National Atmospheric Research Laboratory, Gadanki , 3) Indian Institute of Space Science and Technology, Thiruananthapuram, Kerala
25		**PRECIPITATION INITIALIZATION IN THE WEATHER MODEL HARMONIE APPLYING A HYDROMETEOR CLASSIFICATION SCHEME** *1) Sibbo van der Veen, 2) Hidde Leijnse, 3) Aart Overeem, 4) Linda Bogerd, 5) Christine Unal* 1) Royal Netherlands Meteorological Institute (KNMI) , 2) Royal Netherlands Meteorological Institute (KNMI) , 3) Royal Netherlands Meteorological Institute (KNMI) , 4) Wageningen University and Research - Royal Netherlands Meteorological Institute (KNMI) -, 5) Delft University of Technology
26		**POLARIMETRIC RADAR OBSERVATIONS OF A TORNADIC SUPERCELL IN JERSEY, CHANNEL ISLANDS, ON 1 – 2 NOVEMBER 2023** *1) Matt Clark, 2) Steven Best* 1) Met Office , 2) Met Office
27		**HUMIDITY PROFILES AND ARCTIC MIXED-PHASE CLOUDS AS SEEN BY AIRBORNE G- AND W-BAND RADARS (HAMAG)** *1) Linnea Bühler, 2) Mario Mech, 3) Sabrina Schnitt, 4) Thomas Rose, 5) Jens Goliasch, 6) Nils Risse, 7) Pavel Krobot, 8) Susanne Crewell* 1) University of Cologne , 2) University of Cologne , 3) University of Cologne , 4) Radiometer Physics GmbH , 5) Radiometer Physics GmbH , 6) University of Cologne , 7) University of Cologne , 8) University of Cologne
28		**AN INVESTIGATION ON MICROPHYSICAL CHARACTERISTICS OF HEAVY RAINFALL EVENTS OVER TAIWAN** *1) Jayalakshmi Janapati , 2) Balaji Seela, 3) Pay-Liam Lin* 1) Department of Atmospheric Sciences, National Central University - Institute of Atmospheric Physics, National Central University -, 2) Department of Atmospheric Sciences, National Central University - Institute of Atmospheric Physics, National Central University - Academia Sinica, Taiwan, 3) Department of Atmospheric Sciences, National Central University - Earthquake-Disaster and Risk Evaluation and Management Center, National Central University - Research Center for Hazard Mitigation and Prevention, National Central University
29		**A STATISTICAL EVALUATION OF CONVECTIVE CLOUD SYSTEMS IN A NUMERICAL WEATHER PREDICTION MODEL WITH POLARIMETRIC RADAR OBSERVATIONS** *1) Gregor Köcher, 2) Tobias Zinner, 3) Christian Heske, 4) Florian Ewald* 1) Meteorologisches Institut, Ludwig-Maximilians-Universität, Munich, Germany , 2) Meteorologisches Institut, Ludwig-Maximilians-Universität, Munich, Germany , 3) Deutsches Zentrum für Luft- und Raumfahrt (DLR), Institut für Physik der Atmosphäre, Oberpfaffenhofen, Germany , 4) Deutsches Zentrum für Luft- und Raumfahrt (DLR), Institut für Physik der Atmosphäre, Oberpfaffenhofen, Germany
30		**LIGHTNING ACTIVITY OVER THE CZECHIA FROM THE PERSPECTIVE OF GROUND-BASED DETECTION NETWORKS** *1) Lucie Pacovská, 2) Jana Popová* 1) Faculty of Science, Charles University , 2) Faculty of Science, Charles University - Institute of Atmospheric Physics, Czech Academy of Sciences -
31		**DETERMINATION OF LOW-LEVEL TEMPERATURE PROFILES FROM MICROWAVE RADIOMETER OBSERVATIONS DURING RAIN** *1) Andreas Foth, 2) Moritz Lochmann, 3) Pablo Saavedra Garfias, 4) Heike Kalesse-Los* 1) Leipzig Institute for Meteorology, Leipzig University, Leipzig, 04103, Germany , 2) Leipzig Institute for Meteorology, Leipzig University, Leipzig, 04103, Germany , 3) Leipzig Institute for Meteorology, Leipzig University, Leipzig, 04103, Germany , 4) Leipzig Institute for Meteorology, Leipzig University, Leipzig, 04103, Germany
32		**A NEW HIGH-RESOLUTION STEREO IMAGER TO MEASURE THE SHAPE OF RAINDROPS AND OTHER HYDROMETEORS** *1) Veronica Escobar-Ruiz, 2) Chris Westbrook* 1) Department of Meteorology, University of Reading , 2) Department of Meteorology, University of Reading
33		**LIGHTNING FORECAST IMPROVEMENT THROUGH LIGHTNING DATA ASSIMILATION. RESULTS FOR A TWO-SEASONS PERIOD OVER ITALY USING THE WRF MODEL.** *1) Stefano Federico, 2) Rosa Claudia Torcasio, 3) Jana Popova, 4) Zbyněk Sokol, 5) Lukas Pop, 6) Lucie Pacovská, 7) Stefano Dietrich*

		1) National Research Council of Italy—Institute of Atmospheric Sciences and Climate (CNR-ISAC), via del Fosso del Cavaliere 100, 00133 Rome, Italy , 2) National Research Council of Italy—Institute of Atmospheric Sciences and Climate (CNR-ISAC), via del Fosso del Cavaliere 100, 00133 Rome, Italy , 3) Institute of Atmospheric Physics, Czech Academy of Sciences, Boční II 1401, 141 00 Prague, Czech Republic - Faculty of Science, Charles University, Albertov 6, 128 00 Prague, Czech Republic -, 4) Institute of Atmospheric Physics, Czech Academy of Sciences, Boční II 1401, 141 00 Prague, Czech Republic - Faculty of Science, Charles University, Albertov 6, 128 00 Prague, Czech Republic -, 5) Institute of Atmospheric Physics, Czech Academy of Sciences, Boční II 1401, 141 00 Prague, Czech Republic , 6) Faculty of Science, Charles University, Albertov 6, 128 00 Prague, Czech Republic , 7) National Research Council of Italy—Institute of Atmospheric Sciences and Climate (CNR-ISAC), via del Fosso del Cavaliere 100, 00133 Rome, Italy
34		**RETRIEVAL OF THE HAIL SIZE NUMBER DISTRIBUTION FROM POLARIMETRIC C-BAND WEATHER RADAR USING DOUBLE-MOMENT NORMALIZATION** *1) Matteo Guidicelli, 2) Alfonso Ferrone, 3) Gionata Ghiggi, 4) Marco Gabella, 5) Urs Germann, 6) Alexis Berne* 1) Environmental Remote Sensing Laboratory, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland - Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland -, 2) Hydro-Meteo-Climate Structure, Regional Agency for Prevention, Environment and Energy of Emilia-Romagna, Bologna, Italy , 3) Environmental Remote Sensing Laboratory, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland , 4) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland , 5) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland , 6) Environmental Remote Sensing Laboratory, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
35		**CONVERGING THE ICON 2-MOMENT MICROPHYSICS TO OBSERVATIONS: EVALUATION IN POLARIMETRIC RADAR OBSERVATION SPACE** *1) Jana Mendrok, 2) Alberto de Lozar, 3) Julian Steinheuer, 4) Velibor Pejcic, 5) Tobias Scharbach, 6) Silke Trömel, 7) Ulrich Blahak* 1) Deutscher Wetterdienst, Offenbach, Germany , 2) Deutscher Wetterdienst, Offenbach, Germany , 3) University of Bonn, Bonn, Germany , 4) University of Bonn, Bonn, Germany , 5) University of Bonn, Bonn, Germany , 6) University of Bonn, Bonn, Germany , 7) Deutscher Wetterdienst, Offenbach, Germany
36		**A CLIMATOLOGICAL STUDY ON THE MERGER-FORMATION BOW ECHOES IN CHINA** *1) Ang Zhou, 2) Kun Zhao, 3) Xin Xu* 1) Nanjing University , 2) Nanjing University , 3) Nanjing University
37		**AN OVERVIEW OF THE WESCON-WOEST FIELD CAMPAIGN IN SOUTHERN ENGLAND IN SUMMER 2023** *1) Lindsay J. Bennett, 2) Ryan R. Neely III, 3) Thorwald Stein, 4) Chris Walden* 1) National Centre for Atmospheric Science - University of Leeds -, 2) National Centre for Atmospheric Science - University of Leeds -, 3) University of Reading , 4) National Centre for Atmospheric Science - Science and Technology Facilities Council -
38		**THE FLEXIBLE ARRAY OF RADARS AND MESONETS (FARM)** *1) Joshua Wurman, 2) Karen Kosiba* 1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -
39		**PROPAGATION AND EVOLUTION OF ROTATION IN LINEAR SYSTEMS (PERILS) : ATTRICUTES OF TORNADIC AND NON-TORNADIC VORTICES** *1) Karen Kosiba, 2) Josh Wurman* 1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -
40		**WINDS AND STRUCTURES IN HURRICANE BOUNDARY LAYERS EXPERIMENT (WASHABLE)** *1) Joshua Wurman, 2) Karen Kosiba* 1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -
41		**THE COLORADO STATE UNIVERSITY SEA-GOING AND LAND DEPLOYABLE POLARIMETRIC (SEA-POL) RADAR** *1) Michael Bell, 2) V. Chandrasekar, 3) Steven Rutledge, 4) Brenda Dolan, 5) Jennifer DeHart, 6) Jim George, 7) Francesc Junyent* 1) Colorado State University , 2) Colorado State University , 3) Colorado State University , 4) Colorado State University , 5) Colorado State University , 6) Colorado State University , 7) Colorado State University
42		**OVERVIEW OF THE "ANALYSIS OF OROGRAPHIC IMPACTS ON PRECIPITATION MICROPHYSICS AND SATELLITE-DERIVED ESTIMATES" (ARTEMIS) FIELD CAMPAIGN IN THE EASTERN PYRENEES** *1) Joan Bech, 2) Mireia Udina, 3) Francesc Polls, 4) Eric Peinó, 5) Eulàlia Busquets, 6) Albert García-Benadí, 7) Patricia Altube, 8) Enric Casellas, 9) Jordi Mercader, 10) Alexandre Paci, 11) Sergi Gonzalez, 12) Laura Trapero*

		1) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain - Water Research Institute, Universitat de Barcelona, Barcelona, Spain -, 2) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain , 3) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain , 4) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain , 5) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain , 6) UTG Campus de Vilanova i la Geltrú, Universitat Politècnica de Catalunya, Spain , 7) Meteorological Service of Catalonia, Barcelona, Spain , 8) Meteorological Service of Catalonia, Barcelona, Spain , 9) Meteorological Service of Catalonia, Barcelona, Spain , 10) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France , 11) WSL-Institut für Schnee- und Lawinenforschung SLF, Davos, Switzerland , 12) Andorra Recerca + Innovació, Sant Julià de Lòria, Andorra
43		**VARIABILITY OF MESOSCALE CLOUD AND PRECIPITATION STRUCTURES DURING NEAR-FREEZING SURFACE CONDITIONS USING GROUND-BASED RADAR OBSERVATIONS FROM WINTRE-MIX** *1) Katja Friedrich, 2) Justin Minder , 3) Josh Wurman, 4) Karen Kosiba, 5) Jeff French, 6) David Kingsmill, 7) Andrew Winters , 8) Nicholas Bassill, 9) Julie Theriault, 10) John Gyakum* 1) University of Colorado Boulder , 2) University at Albany , 3) FARM - University of Illinois -, 4) FARM - University of Illinois -, 5) University of Wyoming , 6) University of Colorado Boulder , 7) University of Colorado Boulder , 8) University at Albany , 9) Université du Québec à Montréal , 10) McGill University
44		**COMPARATIVE ANALYSIS OF TWO ALGORITHMS FOR ESTIMATING LARGE HAIL OCCURRENCE USING RADAR DATA** *1) Valentina Campana, 2) Anna Fornasiero, 3) Roberto Cremonini, 4) Pier Paolo Alberoni, 5) Gianfranco Vulpiani* 1) ARPA Piemonte, Dipartimento rischi naturali e ambientali , 2) Arpae Emilia-Romagna, Struttura Idro-Meteo-Clima , 3) ARPA Piemonte, Dipartimento rischi naturali e ambientali , 4) Arpae Emilia-Romagna, Struttura Idro-Meteo-Clima , 5) Dipartimento di Protezione Civile Nazionale
45		**RAPID-SCAN POLARIMETRIC RADAR OBSERVATIONS OF A SEVERE DOWNSLOPE WIND STORM DURING CACTI** *1) Kelly Lombardo, 2) Matthew Kumjian, 3) Fan Wu* 1) Department of Meteorology & Atmospheric Science, The Pennsylvania State University , 2) Department of Meteorology & Atmospheric Science, The Pennsylvania State University , 3) Department of Meteorology & Atmospheric Science, The Pennsylvania State University
46		**CAN DUAL-POLARIZATION RADAR OBSERVATIONS INFORM US ABOUT HAIL PHYSICS?** *1) Matthew Kumjian, 2) Joshua Soderholm* 1) Department of Meteorology & Atmospheric Science, The Pennsylvania State University , 2) Bureau of Meteorology, Melbourne, Australia - Science and Innovation Group -
47		**COMBINING IN-SITU AND CLOUD RADAR OBSERVATIONS TO QUANTIFY RIMING** *1) Nils Pfeifer* 1) Leipzig Institute for Meteorology, Leipzig University, Leipzig, Germany
48		**DYNAMICS AND INTERNAL STRUCTURE OF THUNDERSTORMS IN SWITZERLAND FROM A DUAL-DOPPLER RADAR PERSPECTIVE** *1) Martin Lainer, 2) Daniel Wolfensberger, 3) Rebecca Gugerli, 4) Samuel Monhart, 5) Urs Germann* 1) Federal Office of Climatology and Meteorology MeteoSwiss , 2) Federal Office of Climatology and Meteorology MeteoSwiss , 3) Federal Office of Climatology and Meteorology MeteoSwiss , 4) Federal Office of Climatology and Meteorology MeteoSwiss , 5) Federal Office of Climatology and Meteorology MeteoSwiss
49		**INVESTIGATING THE RELATIONSHIPS BETWEEN ROTATION AND HEAVY RAINFALL ALONG THE MEI-YU FRONT DURING PRECIP 2022** *1) Jennifer DeHart, 2) Michael Bell, 3) Tyler Barbero* 1) Colorado State University , 2) Colorado State University , 3) Colorado State University
50		**FLUX OBSERVATIONS FOR PROCESS-INFORMED QUANTITATIVE PRECIPITATION ESTIMATES** *1) Aimee Matland-Dixon, 2) Pierre Kirstetter, 3) Robert Palmer, 4) Jacob Carlin, 5) Alexander Ryzhkov* 1) Advanced Radar Research Center at the University of Oklahoma - School of Meteorology at the University of Oklahoma -, 2) Advanced Radar Research Center at the University of Oklahoma - School of Meteorology at the University of Oklahoma - NOAA National Severe Storms Laboratory, 3) Advanced Radar Research Center at the University of Oklahoma , 4) The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) - NOAA National Severe Storms Laboratory -, 5) The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) - NOAA National Severe Storms Laboratory -
51		**CLASSIFICATION OF PRECIPITATING ICE PARTICLES BY COMBINING MRR AND DISDROMETER MEASUREMENTS DURING FIVE YEARS OF ANTARCTIC COASTAL PRECIPITATION** *1) Giacomo Roversi, 2) Alessandro Bracci, 3) Elisa Adirosi, 4) Sabina Angeloni, 5) Mario Montopoli, 6) Luca Baldini, 7) Federico Porcù*

		1) Department of Environmental Sciences, Informatics and Statistics, Ca' Foscari University, Venice, Italy - National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy -, 2) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Bologna, Italy , 3) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 4) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 5) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 6) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 7) Department of Physics and Astronomy "Augusto Righi", University of Bologna, Bologna, Italy
52		**A PRACTICAL MODEL TO DETERMINE THE RADAR CROSS SECTION OF RANDOMLY SHAPED RAIN DROPS BASED ON SELECTED SIZE PARAMETERS** *1) Franz Teschl, 2) Reinhard Teschl* 1) Graz University of Technology , 2) Graz University of Technology
53		**IMPACT OF OROGRAPHY AND WIND DYNAMICS ON PRECIPITATION DISTRIBUTION DURING CYCLONIC EVENT: A CASE STUDY OF CYCLONE BATSIRAI IN LA REUNION ISLAND** *1) Ambinintsoa Volatiana Ramanamahefa, 2) Thiruvengadam Padmanabhan, 3) Clement Soufflet, 4) Guillaume Lesage, 5) Joel Van Baelen* 1) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Meteo France, Université de La Réunion, 97400 Saint-Denis, France , 2) School of Meteorology, University of Oklahoma, Norman, Oklahoma, United State - Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Meteo France, Université de La Réunion, 97400 Saint-Denis, France -, 3) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Meteo France, Université de La Réunion, 97400 Saint-Denis, France , 4) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Meteo France, Université de La Réunion, 97400 Saint-Denis, France , 5) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Meteo France, Université de La Réunion, 97400 Saint-Denis, France
	Radar and society	
54		**WSR-88D OBSERVATION OF BIRDS LEAVING ROOSTS BECAUSE OF EARTHQUAKES** *1) Pengfei Zhang, 2) Dusan Zrnic* 1) CIWRO, University of Oklahoma, USA - NSSL, NOAA, USA -, 2) NSSL, NOAA, USA
55		**OUR STATIC, THEIR SIGNAL: CHALLENGES USING THE EUROPEAN RADAR NETWORK FOR AEROECOLOGY** *1) Hidde Leijnse, 2) Bart Hoekstra, 3) Bart Kranstauber, 4) Günther Haase, 5) Klaus Stephan, 6) Silke Bauer, 7) Peter Desmet, 8) Adriaan M Dokter, 9) Pieter Huybrechts, 10) Cecilia Nilsson, 11) Nadia Weisshaupt, 12) Judy Z Shamoun-Baranes* 1) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands , 2) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands , 3) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands , 4) Swedish Meteorological and Hydrological Institute, Sweden , 5) Deutscher Wetterdienst, Data Assimilation Unit, Offenbach, Germany , 6) Federal Research Institute for Forest, Snow and Landscape (WSL), Birmensdorf, Switzerland , 7) Research Institute for Nature and Forest (INBO), Brussels, Belgium , 8) Cornell Lab of Ornithology, Cornell University, Ithaca, NY , 9) Research Institute for Nature and Forest (INBO), Brussels, Belgium , 10) Lund University, Lund, Sweden , 11) Finnish Meteorological Institute, Helsinki, Finland , 12) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands
56		**OPPORTUNISTIC BIRD MIGRATION DETECTION USING OPERATIONAL WEATHER RADAR NETWORK** *1) Prateek GULATI, 2) Benoit Usunier, 3) Pascal LAPEBIE , 4) Laurent Barthes, 5) Nicolas Viltard, 6) Cecile Mallet* 1) LATMOS - CNRS -, 2) Federation Nationale des Chasseurs , 3) Federation Nationale des Chasseurs , 4) LATMOS - UVSQ -, 5) LATMOS - CNRS -, 6) LATMOS - UVSQ -
57		**RADAR-NEWS: A RADAR-BASED ALGORITHM ON SUPPORT OF THE NATIONAL EARLY WARNING SYSTEM** *1) Gianfranco Vulpiani, 2) Pietro Giordano, 3) Anna Fronasiero, 4) Virginia Poli, 5) Roberto Cremonini, 6) Luca Molini, 7) Emilio Guerriero* 1) Department of civil protection , 2) Department of civil protection , 3) ARPAE , 4) ARPAE - Agenzia ItaliaMeteo -, 5) ARPA Piemonte , 6) CIMA Research Foundation , 7) Leonardo S.p.a.
58		**DETECTING SMOKE FROM FOREST FIRES IN THE AMAZON WITH AMAZONIAN WEATHER RADAR NETWORK** *1) Luiz Alves dos Santos Neto, 2) Ivan Saraiva, 3) Marcio Nirlando Gomes Lopes* 1) CENSIPAM , 2) CENSIPAM , 3) CENSIPAM
	Space borne clouds and precipitation radar	
59		**RAINFALL RATE OBSERVATIONS FROM SPACE BORNE W-BAND RADARS - TECHNIQUES AND CHALLENGES** *1) Robert Thompson, 2) Anthony Illingworth* 1) University of Reading , 2) University of Reading
60		**THE STATUS AND TESTING RESULTS OF THE FENGYUN-3G PRECIPITATION MEASUREMENT RADAR IN COMMISSION PHASE**

		1) Honggang Yin, 2) Qiong Wu 1) National Satellite Meteorological Center (National Center for Space Weather), China Meteorological Administration - the Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites - Innovation Center for FengYun Meteorological Satellite, 2) National Satellite Meteorological Center (National Center for Space Weather), China Meteorological Administration - the Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites - Innovation Center for FengYun Meteorological Satellite
61		**A FREQUENCY CORRECTION ALGORITHM FOR SPACEBORNE PRECIPITATION MEASUREMENT RADAR AND GROUND-BASED WEATHER RADAR** *1) Qiong Wu, 2) Lin Chen, 3) Honggang Yin* 1) National Satellite Meteorological Center (National Center for Space Weather), China Meteorological Administration - the Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites - Innovation Center for FengYun Meteorological Satellite, 2) National Satellite Meteorological Center (National Center for Space Weather), China Meteorological Administration - the Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites - Innovation Center for FengYun Meteorological Satellite, 3) National Satellite Meteorological Center (National Center for Space Weather), China Meteorological Administration - the Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites - Innovation Center for FengYun Meteorological Satellite
62		**SEA SURFACE AND SNOWFLAKES AS NATURAL TARGETS CONNECTING FY-3G AND GPM-CO DUAL-FREQUENCY RADARS** *1) Bo Liu, 2) Haoran Li, 3) Liping Liu, 4) Jian Shang, 5) Honggang Yin, 6) Kwo-Sen Kuo* 1) School of Atmospheric Physics, Nanjing University of Information Science and Technology, Nanjing, China - State Key Laboratory of Severe Weather, Chinese Academy of Meteorological Sciences, Beijing, China -, 2) State Key Laboratory of Severe Weather, Chinese Academy of Meteorological Sciences, Beijing, China , 3) State Key Laboratory of Severe Weather, Chinese Academy of Meteorological Sciences, Beijing, China , 4) National Satellite Meteorological Center (National Centre for Space Weather), Beijing, China - Innovation Center for FengYun Meteorological Satellite (FYSIC), Beijing, China - Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites, Beijing, China, 5) National Satellite Meteorological Center (National Centre for Space Weather), Beijing, China - Innovation Center for FengYun Meteorological Satellite (FYSIC), Beijing, China - Key Laboratory of Radiometric Calibration and Validation for Environmental Satellites, Beijing, China, 6) Earth System Science Interdisciplinary Center, University of Maryland, College Park, MD, USA
63		**NON UNIFORM BEAM FILLING CORRECTION FOR SCANNING SPACE-BORNE DOPPLER RADARS** *1) Riccardo Rabino, 2) Frederic Tridon, 3) Alessandro Battaglia* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 3) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy
64		**CHARACTERIZATION OF SURFACE CLUTTER SIGNAL FOR A SPACEBORNE CONICALLY SCANNING W-BAND DOPPLER RADAR** *1) Francesco Manconi, 2) Alessandro Battaglia* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy
65		**I AND Q SIMULATIONS FOR A POLARIZATION DIVERSITY PULSE PAIR SPACEBORNE DOPPLER RADAR** *1) Ali Rizik, 2) Frederic Tridon, 3) Alessandro Battaglia, 4) Ishuwa Sikaneta* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 3) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy , 4) ESA-ESTEC, Noordwijk, Netherlands
66		**FY-3G/PMR ON-ORBIT CALIBRATION DESIGN AND CALIBRATION TEST** *1) Guangji Lai, 2) Runfeng Yang* 1) Beijing Research Institute Of Telemetry - Beijing Research Institute Of Telemetry - Beijing Research Institute Of Telemetry, 2) Beijing Research Institute Of Telemetry - Beijing Research Institute Of Telemetry - Beijing Research Institute Of Telemetry
67		**ENHANCING SPACE BORNE SNOWFALL ESTIMATES BY COMBINING ACTIVE AND PASSIVE MICROWAVE WIVERN OBSERVATIONS** *1) Nina Maherndl, 2) Maximilian Maahn, 3) Alessandro Battaglia* 1) Leipzig Institute of Meteorology (LIM), Leipzig University, Leipzig, Germany , 2) Leipzig Institute of Meteorology (LIM), Leipzig University, Leipzig, Germany , 3) Politecnico di Torino, Torino, Italy
68		**AN EVALUATION OF SATELLITE GPM-DPR PRECIPITATION ESTIMATES WITH GROUND-BASED DISDROMETERS IN A MEDITERRANEAN REGION** *1) Eric Peinó, 2) Joan Bech, 3) Francesc Polls, 4) Mireia Udina, 5) Sergi Gonzalez, 6) Brice Boudevillain, 7) Marco Petracca, 8) Elisa Adirosi*

		1) Universitat de Barcelona, Barcelona, Spain , 2) Universitat de Barcelona, Barcelona, Spain - Water Research Institute, Universitat de Barcelona, Barcelona, Spain -, 3) Universitat de Barcelona, Barcelona, Spain , 4) Universitat de Barcelona, Barcelona, Spain , 5) WSL-Institut für Schnee- und Lawinenforschung SLF, Davos, Switzerland , 6) Université Grenoble Alpes, CNRS, IRD, Grenoble-INP, Grenoble, France , 7) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 8) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy
69		**AN OPERATIONAL X-BAND RADAR FOR QPE AND SUPPORT TO WEATHER MONITORING IN THE COASTAL AREA OF THE STATE OF SAO PAULO** *1) Roberto Vicente Calheiros, 2) Gabriela Ramos Hurtado, 3) Demilson de Assis Quintão, 4) Jaqueline Murakami Kokitsu, 5) Giulia Lembo Caterina* 1) Meteorological Research Institute/Unesp, retired since 2011 , 2) Insitute of Science and Technology/ICT, Unesp - Institute of Advanced Studies on Ocean/IEAMar, Unesp -, 3) IPMet, Faculty of Science, Unesp , 4) Computing Department, Faculty of Science, Unesp , 5) IPMet, Faculty of Science, Unesp - Faculty of Agricultural Sciences, Unesp -
70		**DEVELOPMENT OF AN ENSEMBLE NOWCASTING SYSTEM BY USING THREE-DIMENSIONAL RADAR ECHO MOTION FIELDS** *1) kao-shen chung, 2) Yu-Chiao Hsu, 3) Yi-Hao Tsou, 4) Hsin-Hung Lin* 1) National Central University , 2) National Central University , 3) Central Weather Administration , 4) National Science and Technology Center for Disaster Reduction
71		**EARTHCARE - STATUS UPDATE ON PROCESSOR AND PRODUCTS** *1) Timon Hummel, 2) Dirk Bernaerts, 3) Jonas von Bismarck, 4) Christophe Caspar, 5) Patrick Deghaye, 6) Michael Eisinger, 7) Thorsten Fehr, 8) Bjoern Frommknecht, 9) Rob Koopman, 10) Fabien Marnas, 11) Stephanie Ruesli, 12) Vasileios Tziallas, 13) Kotska Wallace* 1) European Space Agency (ESA), ESRIN, Frascati, Italy , 2) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 3) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 4) European Space Agency (ESA), ESRIN, Frascati, Italy , 5) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 6) European Space Agency (ESA), ECSAT, Harwell, United Kingdom , 7) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 8) European Space Agency (ESA), ESRIN, Frascati, Italy , 9) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 10) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 11) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 12) European Space Agency (ESA), ESRIN, Frascati, Italy , 13) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands
72		**USING SYNTHETIC CLOUD PROFILING RADAR DATA TO DEVELOP VALIDATION METHODOLOGIES FOR GROUND-BASED CLOUD RADAR SITES** *1) Lukas Pfitzenmaier, 2) Pavlos Kollias, 3) Bernat Puigdomènech Treserras, 4) Ulrich Löhnert* 1) Universität zu Köln, Köln, Germany , 2) Stony Brook University, Stony Brook, NY, USA - Universität zu Köln, Köln, Germany -, 3) McGill University, Montreal QC Canada , 4) Universität zu Köln, Köln, Germany

Day	4	Tuesday, September 12, 2024, 11:20-13:05; Museo dell'arte classica
Poster Session	3	Radar hydrometeorological applications
	1	**CONVECTIVE GUST ALERTS GENERATED BY THE RADAR-BASED "SEVERE WEATHER INDEX" IN THE INCA-BE NOWCASTING SYSTEM** *1) Maarten Reyniers, 2) David Dehenauw, 3) Thomas Vanhamel* 1) Royal Meteorological Institute of Belgium , 2) Royal Meteorological Institute of Belgium , 3) Royal Meteorological Institute of Belgium
	2	**COMPARISON OF HOMOGENEOUS AND VARIABLE ELEVATION SCANS ON THE UNCERTAINTY OF THE QUANTITATIVE PRECIPITATION ESTIMATION** *1) Markus Jessen, 2) Bruno Castro, 3) Thomas Einfalt* 1) hydro & meteo GmbH , 2) hydro & meteo GmbH , 3) hydro & meteo GmbH
	3	**AUTOMATIC TRACKING OF TROPICAL CYCLONE CENTER USING OPTICAL FLOW TECHNIQUE COMBINED WITH THE KALMAN FILTER BASED ON WEATHER RADAR IMAGES** *1) Sun-Jin Mo, 2) Ji-Young Gu, 3) Bo-Young Ye, 4) Seungwoo Lee* 1) Weather Radar Center,Korea Meteorological Administration,South Korea , 2) Korea Meteorological Administration , 3) Weather Radar Center,Korea Meteorological Administration,South Korea , 4) Weather Radar Center,Korea Meteorological Administration,South Korea
	4	**DETECTION OF CIRCULATION CENTROID IN MID-LATITUDE CYCLONE USING HIGH-RESOLUTION THREE-DIMENSIONAL WIND FIELDS DERIVED FROM NATIONWIDE WEATHER RADAR NETWORK** *1) Soyeon Park, 2) Kwang-Ho Kim, 3) Sung-Hwa Jung* 1) Weather Radar Center, Korea Meteorological Administration, South Korea , 2) Weather Radar Center, Korea Meteorological Administration, South Korea , 3) Weather Radar Center, Korea Meteorological Administration, South Korea
	5	**ASSESSMENT OF VERTICAL PROFILE CORRECTION FOR QUANTITATIVE PRECIPITATION ESTIMATION USING OPERATIONAL S-BAND POLARIMETRIC RADAR OVER COMPLEX OROGRAPHY IN NORTHERN TAIWAN** *1) Jui Le Loh, 2) Wei Yu Chang, 3) Chien Yu Liu* 1) Department of Atmospheric Sciences, National Central University, Taiwan , 2) Department of Atmospheric Sciences, National Central University, Taiwan , 3) Department of Atmospheric Sciences, National Central University, Taiwan
	6	**A HYDROMETEOR CLASSIFICATION METHOD FOR DUAL POLARIZATION WEATHER RADAR BASED ON GAUSSIAN MIXTURE MODEL USING BAYESIAN INFERENCE** *1) Takahisa Wada, 2) Yuta Ozawa, 3) Satoshi Kida, 4) Masakazu Wada, 5) Yasunori Nakagawa, 6) Osamu Yamanaka* 1) Infrastructure Systems Research and Development Center,Toshiba Infrastructure Systems & Solutions Corporation , 2) Infrastructure Systems Research and Development Center,Toshiba Infrastructure Systems & Solutions Corporation , 3) Toshiba Corporation , 4) Toshiba Corporation , 5) Toshiba Digital Solutions Corporation , 6) Infrastructure Systems Research and Development Center,Toshiba Infrastructure Systems & Solutions Corporation
	7	**EXPLORING HEAVY RAINFALL EVENTS IN THE TROPICAL ANDES USING A SINGLE POLARIZATION X-BAND RADAR** *1) Diego Urdiales-Flores, 2) Nadav Peleg* 1) Institute of Earth Surface Dynamics, University of Lausanne, Lausanne, Switzerland , 2) Institute of Earth Surface Dynamics, University of Lausanne, Lausanne, Switzerland
	8	**INTEGRATING RADAR-INTERPRETED RAINFALL TO ESTONIAN OPERATIONAL FIRE WEATHER INDEX** *1) Tanel Voormansik, 2) Jorma Rahu, 3) Ahto Mets, 4) Aleksei Vaštšenko* 1) Estonian Environment Agency - University of Tartu -, 2) Estonian Environment Agency - University of Tartu -, 3) Estonian Environment Agency , 4) Estonian Environment Agency
	9	**RAINFALL RATE ESTIMATION IN NON-UNIFORM BLOCKAGE REGIONS: ADDRESSING CHALLENGES WITH THE SPECIFIC ATTENUATION METHOD** *1) Lin Tang, 2) Jian Zhang, 3) Yu-Shuang Tang* 1) Cooperative Institute for Severe and High-Impact Weather Research and Operation (CIWRO), University of Oklahoma, USA - NOAA/OAR/National Severe Storms Laboratory, USA -, 2) NOAA/OAR/National Severe Storms Laboratory, USA , 3) Central Weather Administration, Taiwan
	10	**QUANTITATIVE PRECIPITATION ESTIMATION IN THE FRAMEWORK OF THE PROWESS PROJECT** *1) Jordi Figueras i Ventura, 2) Albert Oude Nijhuis, 3) Tobias Otto, 4) Yann Dufournet* 1) Independent Radar Scientist , 2) SkyEcho B.V. , 3) SkyEcho B.V. , 4) SkyEcho B.V.
	11	**EVALUATION OF HOURLY PRECIPITATION SIMULATIONS FROM A NEW HIGH-RESOLUTION REGIONAL ATMOSPHERIC REANALYSIS ALADIN WITH GAUGE-ADJUSTED RADAR PRECIPITATION MEASUREMENTS**

		1) Vojtech Bliznak, 2) Petr Zacharov 1) Institute of Atmospheric Physics CAS , 2) Institute of Atmospheric Physics CAS
12		**PERFORMANCE OF A NEW RAIN RATE ESTIMATION METHOD IN AREAS OF WIND FARMS** *1) Pengfei Zhang, 2) Dusan Zrnic, 3) Alexander Ryzhkov* 1) CIWRO, University of Oklahoma - NSSL, NOAA -, 2) NSSL, NOAA , 3) CIWRO, University of Oklahoma - NSSL, NOAA -
13		**DEVELOPMENT OF A HYBRID RAINFALL DATASET USING WEATHER RADAR DATA AND GROUND RAIN GAUGES FROM THE THAILAND METEOROLOGICAL DEPARTMENT** *1) Kota Tsuzuki, 2) Taichi Tebakari* 1) Civil, Human and Environmental Science and Engineering Course, Graduate School of Science and Engineering, Chuo University, Japan , 2) Department of Civil and Environmental Engineering, Chuo University, Japan
14		**RAINCELL PROJECT: COMMERCIAL MICROWAVE LINKS TO ESTIMATE RAINFALL AT MÉTÉO-FRANCE** *1) Dominique Faure, 2) Marielle Gosset, 3) Pauline Mialhe, 4) Pierre Lepetit, 5) Laurent Brunier, 6) Olivier Laurantin, 7) Ludovic Bouilloud* 1) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE , 2) IRD/GET, OMP, 14 av Ed Belin, 31500 Toulouse, France , 3) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE , 4) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE , 5) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE , 6) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE , 7) Météo-France, 42 avenue Gaspard Coriolis, 31057 Toulouse, FRANCE
15		**EVALUATION OF OPERATIONAL USABILITY OF CURRENT RADAR PRODUCTS IN ESTIMATION OF PRECIPITATION TYPE** *1) Hana Kyznarova, 2) Petr Novak* 1) Czech Hydrometeorological Institute , 2) Czech Hydrometeorological Institute
16		**IMPROVEMENTS OF CZECH COMBINED RADAR-RAINGAUGE QPE AIMED AT MEETING HYDROLOGISTS NEEDS** *1) Petr Novak, 2) Hana Kyznarova* 1) Czech Hydrometeorological Institute , 2) Czech Hydrometeorological Institute
17		**USE OF POLARIMETRIC RADAR DATA FOR BETTER NOWCASTING OF CONVECTIVE STORM SEVERITY** *1) David Rýva* 1) Czech Hydrometeorological Institute, Radar Department
18		**EVALUATION AND IMPROVEMENTS OF A NATIONWIDE RADAR-BASED PRECIPITATION NOWCASTING** *1) Mathias Emond, 2) Silke Trömel, 3) Ricardo Reinoso-Rondinel* 1) Institute of Geosciences, department of Meteorology, University of Bonn, Bonn, Germany , 2) Institute of Geosciences, department of Meteorology, University of Bonn, Bonn, Germany , 3) Civil Engineering, Hydraulics & Geotechnics, KU Leuven, Leuven, Belgium - Royal Meteorological Institute of Belgium, Brussels, Belgium -
19		**PYRADMAN: A FLEXIBLE PYTHON FRAMEWORK FOR RADAR ADJUSTMENT USING CML AND RAIN GAUGE DATA** *1) Malte Wenzel, 2) Christian Vogel, 3) Maximilian Graf, 4) Christian Chwala, 5) Tanja Winterrath* 1) Deutscher Wetterdienst - Hydrometeorologie , 2) Deutscher Wetterdienst - Wettervorhersage , 3) University of Augsburg - Institute of Geography , 4) Karlsruhe Institute of Technology - Institute of Meteorology and Climate Research , 5) Deutscher Wetterdienst - Hydrometeorologie
20		**THE NEPTUNE EUROPEAN PROJECT FOR NOWCASTING AND IMPACT-BASED PREDICTIONS OF INUNDATIONS INMEDITERRANEAN CATCHMENTS: THE ALEX STORM CASE STUDY FOR THE TRANSBORDER CATCHMENT OF LA ROYA** *1) Lorenzo Alfieri, 2) Andrea Cavallo, 3) Pierre Javelle, 4) Erwan Le Bouar, 5) Rocco Masi, 6) Federica Martina, 7) Maria Laura Poletti, 8) Francesco Silvestro, 9) Emmanuel Moreau, 10) Julie Demargne* 1) CIMA , 2) ARPAL , 3) INRAE PACA , 4) NOVIMET , 5) CIMA , 6) ARPAL , 7) CIMA , 8) CIMA , 9) NOVIMET , 10) Hydris Hydrologie
21		**PREDICTING CONVECTIVE CELLS BY COMBINING NOWCASTING AND NUMERICAL WEATHER PREDICTION MODELS WITH KONRAD3D-SINFONY** *1) Nora Linn Strotjohann, 2) Andreas Brechtel, 3) Lukas Josipovic, 4) Gregor Pante, 5) Ulrich Blahak* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst , 4) Deutscher Wetterdienst , 5) Deutscher Wetterdienst
22		**THE EXCEPTIONAL METEOROLOGICAL EVENT ON THE GULF OF GENOA FROM 27-31 OCTOBER 2018: THE SATELLITE DATA PROCESSING FOR THE MARINE WIND FIELD EXTRAPOLATION** *1) Claudio Monteverde, 2) Cosimo Cagnazzo* 1) A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883 - A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883 - A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883, 2) A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883 - A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883 - A.P.S. Osservatorio Meteorologico, Agrario, Geologico Prof. Don Gian Carlo Raffaelli dal 1883

23		**INTEGRATING NEW KONRAD3D CELL ATTRIBUTES INTO THE NOWCASTING GUIDANCE SYSTEM NOWCASTMIX AT DWD** *1) Michael Debertshäuser, 2) Paul James, 3) Manuel Werner, 4) Gergely Bölöni* 1) German Weather Service , 2) German Weather Service , 3) German Weather Service , 4) German Weather Service
24		**ESTIMATION OF DESIGN PRECIPITATION USING WEATHER RADAR IN GERMANY: A COMPARISON OF STATISTICAL METHODS** *1) Katharina Lengfeld, 2) Thomas Junghänel, 3) Jennifer Ostermöller, 4) Angelika Palarz, 5) Francesco Marra* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst , 4) Deutscher Wetterdienst , 5) Department of Geosciences, University of Padova
25		**A STRAIGHTFORWARD ATMOSPHERIC-RADAR SIMULATOR FOR VERTICAL-AIR-MOTION ANALYSIS FROM FREQUENCY-MODULATED CONTINUOUS-WAVE-RADAR RAIN MEASUREMENTS** *1) Andreu Salcedo-Bosch, 2) Francesc Rocadenbosch, 3) Alicia Garcia Garcia, 4) Simone Lolli, 5) Robin Tanamachi, 6) Stephen Frasier* 1) Consiglio Nazionale delle Ricerche - Istituto di Metodologie per l'Analisi Ambientale, C. da S. Loja, Tito Scalo, Potenza, 85050, Italy , 2) CommSensLab-UPC, Department of Signal Theory and Communications, Universitat Politècnica de Catalunya (UPC), E-08034, Barcelona, Spain - Institute of Space Studies of Catalonia, IEEC, E-08034, Barcelona, Spain -, 3) CommSensLab-UPC, Department of Signal Theory and Communications, Universitat Politècnica de Catalunya (UPC), E-08034, Barcelona, Spain , 4) Consiglio Nazionale delle Ricerche, Istituto di Metodologie per l'Analisi Ambientale, C. da S. Loja, Tito Scalo, Potenza, 85050, Italy , 5) Department of Earth, Atmospheric and Planetary Sciences (EAPS), Purdue University, West Lafayette, Indiana , 6) Microwave Remote Sensing Laboratory (MIRSL), University of Massachusetts, 151 Holdsworth Way, Amherst, MA 01003-9284
26		**ASSESSMENT OF DETERMINISTIC AND ENSEMBLE HYDROMETEOROLOGICAL NOWCASTING METHODS: TWO CASES OF CONVECTIVE EVENTS IN ITALY** *1) Francesco Leonetti, 2) Luca Furnari, 3) Mario Montopoli, 4) Barbara Tomassetti, 5) Annalina Lombardi, 6) Giuseppe Mendicino, 7) Alfonso Senatore* 1) Department of Environmental Engineering (DIAm), University of Calabria, 87036 Rende (Cosenza), Italy , 2) Department of Environmental Engineering (DIAm), University of Calabria, 87036 Rende (Cosenza), Italy , 3) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), I-00133 Rome, Italy , 4) CETEMPS, Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events, University of L'Aquila, L'Aquila, Italy , 5) CETEMPS, Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events, University of L'Aquila, L'Aquila, Italy , 6) Department of Environmental Engineering (DIAm), University of Calabria, 87036 Rende (Cosenza), Italy , 7) Department of Environmental Engineering (DIAm), University of Calabria, 87036 Rende (Cosenza), Italy
27		**PRECIPITATION MEASUREMENTS IN MARIO ZUCCHELLI STATION, ANTARCTICA** *1) Claudio Scarchilli, 2) Paolo Grigioni, 3) Lorenzo Desilvestri, 4) Marco Proposito, 5) Antonio Iaccarino, 6) Giuseppe Camporeale, 7) Daniela Meloni, 8) Giandomenico Pace, 9) Virginia Ciardini* 1) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 2) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 3) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 4) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 5) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 6) Institute for Electromagnetic Sensing of the Enviroment (IREA), CNR, UOS Bari, Italy , 7) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 8) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy , 9) Laboratory for Observations and Measurements of the Environmental and Climate (SSPT-PROTER-OEM), ENEA, Rome, Italy
28		**RECENT IMPROVEMENTS OF THE DUTCH REAL-TIME RADAR PRECIPITATION PRODUCT** *1) Aart Overeem, 2) Hidde Leijnse, 3) Bastiaan Anker, 4) Xueli Wang, 5) Mats Veldhuizen, 6) Ely Deckers, 7) Jouke Jacobi, 8) Ben Lankamp, 9) Tim Vlemmix, 10) Tim den Dulk* 1) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 2) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 3) Information and Process Management, Royal Netherlands Meteorological Institute , 4) Information and Process Management, Royal Netherlands Meteorological Institute , 5) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 6) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 7) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 8) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 9) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute , 10) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute
29		**DETECTING LIGHTNING INITIATION SIGNALS USING A THREE-DIMENSIONAL DUAL-POLARIZATION RADAR DATA** *1) HAE LIM KIM, 2) MyoungJae SON, 3) Mi-Kyung Suk*

		1) KOREA METEOROLOGICAL ADMINISTRATION - Weather Radar Center - Radar Analysis Division, 2) KOREA METEOROLOGICAL ADMINISTRATION - Weather Radar Center - Radar Analysis Division, 3) KOREA METEOROLOGICAL ADMINISTRATION
30		**VERIFICATION OF SURFACE PRECIPITATION TYPES USING GROUND OBSERVATION DATA OVER THE COMPLEX TERRAIN IN KOREA** *1) Hee-Jeong Choi, 2) Soohyun Kwon, 3) Seungwoo Lee, 4) Sung-Hwa Jung* 1) Radar analysis division, Weather Radar Center, Korea Meteorological Administration (KMA) , 2) Radar analysis division, Weather Radar Center, Korea Meteorological Administration (KMA) , 3) Radar analysis division, Weather Radar Center, Korea Meteorological Administration (KMA) , 4) Radar analysis division, Weather Radar Center, Korea Meteorological Administration (KMA)
31		**THE MEAN DIAMETER UPDATE APPROACH FOR ENSEMBLE-BASED DUAL-POLARIMETRIC RADAR DATA ASSIMILATION** *1) Kao-Shen Chung, 2) Bing-Xue Zhuang, 3) Wei-Yu Chang, 4) Chih-Chien Tsai* 1) National Central University , 2) National Central University , 3) National Central University , 4) National Science and Technology Center for Disaster Reduction
32		**EVALUATION OF THE KIAPS LETKF-BASED RADAR REFLECTIVITY DA SYSTEM** *1) DAYOUNG CHOI, 2) Adam Clayton, 3) In-Hyuk Kwon* 1) Korea Institute of Atmospheric Prediction Systems , 2) Korea Institute of Atmospheric Prediction Systems , 3) Korea Institute of Atmospheric Prediction Systems
33		**TOWARDS PROBABILISTIC EXTREME RAINFALL WARNINGS FOR BELGIUM** *1) Felix Erdmann, 2) Dieter Roel Poelman, 3) Michiel Van Ginderachter, 4) Lesley De Cruz, 5) Ricardo Reinoso Rondinel* 1) Royal Meteorological Institute of Belgium, Brussels, Belgium , 2) Royal Meteorological Institute of Belgium, Brussels, Belgium , 3) Royal Meteorological Institute of Belgium, Brussels, Belgium , 4) Royal Meteorological Institute of Belgium, Brussels, Belgium - Department of Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium -, 5) Civil Engineering, Hydraulics & Geotechnics, KU Leuven, Leuven, Belgium - Royal Meteorological Institute of Belgium, Brussels, Belgium -
34		**RADAR POLARIMETRIC SIGNATURES OF SEVERE CONVECTIVE STORMS: TOWARDS AN EARLY WARNING SYSTEM FOR LAKE VICTORIA BASIN** *1) Anna del Moral Méndez, 2) Tammy Weckwerth, 3) James Wilson, 4) Rita Roberts* 1) NSF NCAR , 2) NSF NCAR , 3) NSF NCAR , 4) NSF NCAR
35		**CONSTRUCTION OF TWO-DIMENSIONAL PRECIPITATION FIELD USING C-BAND TDWR AND S-BAND OPERATIONAL RADAR NETWORK: QUALITY CONTROL, RAINFALL ESTIMATION, AND COMPOSITION** *1) Young-a Oh, 2) Hae Lim Kim* 1) WEATHER RADAR CENTER, KMA , 2) WEATHER RADAR CENTER, KMA
36		**VARIATION OF BRIGHT BAND STRUCTURES BASED ON WIND PROFILER RADAR NETWORK** *1) Kyung Hun Lee, 2) Byung Hyuk Kwon, 3) Hyeok Jin Bae, 4) Geon Myeong Lee, 5) Yu Jung Koo, 6) Zi Woo Seo , 7) Geun Mu Kim, 8) Sang Jin Kim* 1) Pukyong national university , 2) Pukyong national university , 3) Pukyong national university , 4) Pukyong national university , 5) Pukyong national university , 6) Pukyong national university , 7) Pukyong national university , 8) Pukyong national university
37		**LONG-TERM INTERCOMPARISON OF RADAR PRECIPITATION NOWCASTING TOOLS ACROSS ITALY** *1) Clizia Annella, 2) Vincenzo Capozzi, 3) Gianfranco Vulpiani, 4) Jungho Im, 5) Luca Baldini, 6) Elisa Adirosi, 7) Mario Montopoli* 1) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy. - Department of Science and Technology, University of Naples "Parthenope", Naples, Italy. -, 2) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy. , 3) Presidenza del consiglio dei ministri – Dipartimento di protezione civile, 00189 Roma, Italia. , 4) Department of Civil, Urban, Earth, and Environmental Engineering, Ulsan National Institute of Science and Technology, Ulsan, South Korea. , 5) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy. , 6) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy. , 7) National Research Council of Italy, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy.
38		**AUTOMATIC TRACKING AND PREDICTING TROPICAL CYCLONE CENTER BASED ON RADAR-REFLECTIVITY-FIELD FOR THE TYPHOON HINNAMNOR (2022).** *1) Sang Jin Kim, 2) Byung Hyuk Kwon, 3) Kyung Hun Lee, 4) Geon Myeong Lee, 5) Hyeok Jin Bae, 6) Zi Woo Seo, 7) Geun Mu Kim, 8) Yu Jung Koo, 9) Bernard Campistron* 1) Pukyong National University , 2) Pukyong National University , 3) Pukyong National University , 4) Pukyong National University , 5) Pukyong National University , 6) Pukyong National University , 7) Pukyong National University , 8) Pukyong National University , 9) Observatoire Midi Pyrénées, Laboratoire d'Aérologie UMR5560, University of Toulouse, France
39		**RAINFALL VARIABILITY MEASURED AT SUB-HOURLY TEMPORAL AND SUB-KILOMETER SPATIAL SCALE**

		1) Finn Burgemeister, 2) Marco Clemens, 3) Felix Ament 1) Meteorological Institute, Center for Earth System Research and Sustainability (CEN), Universität Hamburg, Germany - METEK Meteorologische Messtechnik GmbH, Germany -, 2) Meteorological Institute, Center for Earth System Research and Sustainability (CEN), Universität Hamburg, Germany , 3) Meteorological Institute, Center for Earth System Research and Sustainability (CEN), Universität Hamburg, Germany
40		**A STUDY ON THE ERROR OF INTERPOLATED PRECIPITATION BY GROUND PRECIPITATION GAUGE USING RADAR PRECIPITATION** *1) Narae Kang, 2) Jungsoo Yoon, 3) Seokhwan Hwang, 4) Seokhyeon Kim* 1) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 2) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 3) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 4) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY
41		**DEVELOPMENT OF AN OBSERVATION OPERATOR FOR DUAL-POLARIZATION RADAR DATA ASSIMILATION** *1) Ki-Hong Min, 2) Ji-Won Lee* 1) Department of Atmospheric Sciences, Kyungpook National University - BK21 Weather Extremes Education & Research Team - Center for Atmospheric Remote Sensing, 2) Department of Atmospheric Sciences, Kyungpook National University Center for Atmospheric Remote Sensing
42		**SEAMLESS PREDICTIONS AT THE ROYAL METEOROLOGICAL INSTITUTE OF BELGIUM** *1) Lesley De Cruz, 2) Michiel Van Ginderachter, 3) Maarten Reyniers, 4) Alex Deckmyn, 5) Simon De Kock, 6) Idir Dehmous, 7) Wout Dewettinck, 8) Felix Erdmann, 9) Ruben Imhoff, 10) Arthur Moraux, 11) Ricardo Reinoso Rondinel* 1) Royal Meteorological Institute, Brussels, Belgium - Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium -, 2) Royal Meteorological Institute, Brussels, Belgium , 3) Royal Meteorological Institute, Brussels, Belgium , 4) Royal Meteorological Institute, Brussels, Belgium , 5) Royal Meteorological Institute, Brussels, Belgium , 6) Royal Meteorological Institute, Brussels, Belgium , 7) Physics and Astronomy, Ghent University, Ghent, Belgium , 8) Royal Meteorological Institute, Brussels, Belgium , 9) Operational Water Management & Early Warning, Deltares, Delft, The Netherlands , 10) Royal Meteorological Institute, Brussels, Belgium - Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium -, 11) Royal Meteorological Institute, Brussels, Belgium - Civil Engineering, Hydraulics & Geotechnics, KU Leuven, Leuven, Belgium -
43		**TRANSBOUNDARY PRECIPITATION FOR DIGITAL SEWER SYSTEM** *1) Alexander Strehz, 2) Cornelius Faßhauer, 3) Thomas Einfalt* 1) hydro&meteo GmBH , 2) Techn. Betriebszentrum AöR der Stadt Flensburg , 3) hydro&meteo GmBH
44		**SUB-GRID VARIABILITY IN LOCALIZED INTENSE RAIN EVENTS USING HIGH-RESOLUTION OPERATIONAL RADAR DATA IN SWITZERLAND** *1) Adrien Liernur, 2) Marco Gabella, 3) Urs Germann, 4) Alexis Berne* 1) MeteoSwiss, Locarno-Monti, Switzerland - Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne, Switzerland -, 2) MeteoSwiss, Locarno-Monti, Switzerland , 3) MeteoSwiss, Locarno-Monti, Switzerland , 4) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne, Switzerland
45		**NATIONAL SCALE DATA-DRIVEN CLASSIFICATION OF POLARISED WEATHER RADAR OBSERVATIONS IN THE UK** *1) Maryna Lukach, 2) Mansi Mungee, 3) David Dufton, 4) Elizabeth J. Duncan, 5) Lindsay Bennett, 6) Freya I Addison, 7) William E. Kunin, 8) Christopher Hassall, 9) Ryan R. Neely III* 1) National Centre for Atmospheric Science - University of Leeds, UK -, 2) University of Leeds, UK , 3) University of Leeds , 4) University of Leeds , 5) University of Leeds , 6) University of Leeds , 7) University of Leeds , 8) University of Leeds, UK , 9) University of Leeds
46		**ANALYSIS OF POTENTIAL EVAPORATION EFFECTS ON C-BAND WEATHER RADAR RAINFALL OBSERVATIONS IN A SEMI-ARID AREA** *1) Francesc Polls, 2) Eric Peinó, 3) Mireia Udina , 4) Joan Bech* 1) Universitat de Barcelona , 2) Universitat de Barcelona , 3) Universitat de Barcelona , 4) Universitat de Barcelona - Water Research Institute, Universitat de Barcelona -
47		**RECENT UPDATES IN THE UNITED STATES MULTI-RADAR MULTI-SENSOR QPE SYSTEM** *1) Jian Zhang, 2) Lin Tang, 3) Stephen Cocks, 4) Andrew Osborne, 5) Ami Arthur, 6) Carrie Langston* 1) National Severe Storms Lab, Norman, OK, USA , 2) University of Oklahoma, Norman, OK, USA , 3) University of Oklahoma, Norman, OK, USA , 4) National Severe Storms Lab, Norman, OK, USA , 5) University of Oklahoma, Norman, OK, USA , 6) University of Oklahoma, Norman, OK, USA
48		**COMPARISON OF SIMULATED AND OBSERVED RADAR DATA IN A TROPICAL MARITIME CONVECTION EVENT DURING THE 2022 PRECIP FIELD CAMPAIGN** *1) Ting-Yu Cha, 2) Rosimar Rios-Berrios, 3) Wen-Chau Lee, 4) Christopher A. Davis* 1) National Center for Atmospheric Research, Boulder, CO, USA , 2) National Center for Atmospheric Research, Boulder, CO, USA , 3) National Center for Atmospheric Research, Boulder, CO, USA , 4) National Center for Atmospheric Research, Boulder, CO, USA

49		**ANALYSIS OF HAIL SIZE AND VERTICALLY INTEGRATED LIQUID DENSITY OVER LIGURIA REGION IN NORTHWESTERN ITALY** *1) Antonio Iengo, 2) Marco Tizzi, 3) Francesco Silvestro* 1) Agenzia Regionale per la Protezione dell'Ambiente Ligure (ARPAL) , 2) Agenzia Regionale per la Protezione dell'Ambiente Ligure (ARPAL) , 3) CIMA Research Foundation
50		**A DEEP LEARNING MODEL WITH EXPLICIT TEMPORAL ENCODING FOR ENHANCING RAINFALL NOWCASTING** *1) Ahmed Abdelhalim, 2) Miguel Rico-Ramirez, 3) weiru liu, 4) Dawei Han* 1) Department of Civil Engineering, University of Bristol, Bristol BS8 1TR, UK - Geology Department, Faculty of Science, Minia University, Minia 61519, Egypt -, 2) Department of Civil Engineering, University of Bristol, Bristol BS8 1TR, UK , 3) Department of Engineering Mathematics, University of Bristol, Bristol BS8 1TW, UK , 4) Department of Civil Engineering, University of Bristol, Bristol BS8 1TR, UK
51		**A MACHINE LEARNING APPROACH FOR QUANTITATIVE PRECIPITATION ESTIMATION IN THE OPERATIONAL CONTEXT OF SOUTHERN BRAZIL** *1) Cesar Beneti, 2) Fernanda Verdelho, 3) Rodrigo Lins, 4) Leonardo Calvetti* 1) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil , 2) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil , 3) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil , 4) UFPEL - Federal University of Pelotas, Pelotas, Brazil
52		**SPATIAL ERROR IN QUANTITATIVE PRECIPITATION ESTIMATION ACCORDING TO RADAR OBSERVATION CHARACTERISTICS** *1) Seokhwan Hwang, 2) Jungsoo Yoon, 3) Narae Kang, 4) Seokhyeon Kim* 1) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 2) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 3) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY , 4) KOREA INSTITUTE of CIVIL ENGINEERING and BUILDING TECHNOLOGY
53		**OPTIMAL EXPLOITATION OF POLARIMETRY AND OBSERVATION ERROR COVARIANCES FOR PRECIPITATION-INDUCED FLOOD FORECAST (POLARFLOOD)** *1) Sagar Pokale, 2) Silke Trömel, 3) Thomas Gastaldo, 4) Virginia Poli* 1) Meteorological Institute, University of Bonn, Bonn, Germany , 2) Meteorological Institute, University of Bonn, Bonn, Germany , 3) Arpae Emilia-Romagna, Hydro-Meteo-Climate Structure (Arpae-SIMC), Bologna, Italy , 4) Arpae Emilia-Romagna, Hydro-Meteo-Climate Structure (Arpae-SIMC), Bologna, Italy
54		**NOWCASTING OF RAINFALL IN THE TUSCANY TERRITORY** *1) Alessandro Mazza, 2) Andrea Antonini, 3) Alberto Ortolani, 4) Samantha Melani* 1) LaMMA Consortium - CNR IBE -, 2) LaMMA Consortium , 3) LaMMA Consortium - CNR IBE -, 4) LaMMA Consortium - CNR IBE -
55		**CATCHING THE FIRST STAGES OF SUPERCELL STORMS OCCURRED IN NORTHERN ITALY ON JULY 2023 WITH RADAR, LIGHTNING AND NWCSAF SATELLITE DATA FOR EARLY WARNING PURPOSES** *1) Miria Celano, 2) Valentina Campana, 3) Roberto Cremonini, 4) Pier Paolo Alberoni, 5) Silvia Puca* 1) Arpae Emilia-Romagna, Struttura Idro-Meteo-Clima, Bologna, Italy , 2) Arpa Piemonte, Dipartimento Rischi naturali e ambientali, Torino, Italy , 3) Arpa Piemonte, Dipartimento Rischi naturali e ambientali, Torino, Italy , 4) Arpae Emilia-Romagna, Struttura Idro-Meteo-Clima, Bologna, Italy , 5) Dipartimento di Protezione Civile Nazionale, Rome, Italy
56		**MERGING C-BAND AND X-BAND RADAR OBSERVATIONS IN THE ALPINE REGION** *1) Renzo Bechini, 2) Valentina Campana, 3) Antioco Vargiu, 4) Orietta Cazzuli* 1) Arpa Piemonte , 2) Arpa Piemonte , 3) Arpa Lombardia , 4) Arpa Lombardia
57		**SEAMLESS ENSEMBLE RAINFALL FORECASTS WITH REAL-TIME EXTREMITY ASSESSMENT FOR SMALL CATCHMENTS** *1) Christian Berndt, 2) Martin Rempel, 3) Markus Schultze, 4) Jan Bondy, 5) Ulrich Blahak* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst , 4) Deutscher Wetterdienst , 5) Deutscher Wetterdienst
58		**USE OF OPERATIONAL WEATHER RADARS IN THE QUALITY ASSESSMENT OF EUMETSAT H SAF PRECIPITATION PRODUCTS** *1) Marco Petracca, 2) Jan Kanak, 3) Bozena Lapeta, 4) Alexander Toniazzo, 5) Nicoletta Roberto, 6) Silvia Puca* 1) Institute of Atmospheric Sciences and Climate, National Research Council (CNR-ISAC), Rome , 2) Slovak Hydrometeorological Institute, Bratislava, Slovakia , 3) Satellite Remote Sensing Department, Institute of Meteorology and Water Management - National Research Institute, Krakow, Poland , 4) Civil Protection Department (DPC), Rome, Italy , 5) Civil Protection Department (DPC), Rome, Italy , 6) Civil Protection Department (DPC), Rome, Italy
59		**DISTRIBUTING HYDROLOGICAL RADAR DATA PROCESSING THROUGH CLOUD COMPUTING: A CASE STUDY OF THE VEVA PROJECT'S PROCESSING CHAIN.** *1) Rasmus Lauersen, 2) Niels Ejnar Jensen* 1) VeVa Denmark , 2) Furuno Denmark A/S
60		**IMPACT OF LATENT HEAT NUDGING ON ICON MODEL FORECASTS**

		1) Virginia Poli, 2) Thomas Gastaldo, 3) Chiara Marsigli, 4) Enrico Minguzzi, 5) Davide Cesari, 6) Pier Paolo Alberoni 1) Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy -, 2) Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy -, 3) Deutscher Wetterdienst, Germany - Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy, 4) Arpae Emilia-Romagna, Italy , 5) Arpae Emilia-Romagna, Italy , 6) Arpae Emilia-Romagna, Italy
61		**DEVELOPMENT OF AN OPERATIONAL SYSTEM FOR QUANTITATIVE PRECIPITATION ESTIMATION FROM C-BAND POLARIMETRIC RADARS IN THE FRAMEWORK OF THE PREVENIR PROJECT IN ARGENTINA** *1) Maite Cancelada, 2) Daichi Kitahara, 3) Paola Salio, 4) Luciano Vidal, 5) Martin Rugna, 6) Tomoo Ushio, 7) Takemasa Miyoshi, 8) Juan Ruiz, 9) Yanina García Skabar* 1) Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina - Centro de Investigaciones del Mar y la Atmósfera. Buenos Aires, Argentina. Instituto Franco-Argentino de Estudios sobre el Clima y sus Impactos – IRL 3351 – CNRS-CONICET-IRD-UBA. Buenos Aires, Argentina -, 2) Osaka University, Osaka, Japan , 3) Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina - Centro de Investigaciones del Mar y la Atmósfera. Buenos Aires, Argentina. Instituto Franco-Argentino de Estudios sobre el Clima y sus Impactos – IRL 3351 – CNRS-CONICET-IRD-UBA. Buenos Aires, Argentina -, 4) Servicio Meteorológico Nacional, Buenos Aires, Argentina , 5) Servicio Meteorológico Nacional, Buenos Aires, Argentina , 6) Osaka University, Osaka, Japan , 7) Riken, Kobe, Japan , 8) Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina - Centro de Investigaciones del Mar y la Atmósfera. Buenos Aires, Argentina. Instituto Franco-Argentino de Estudios sobre el Clima y sus Impactos – IRL 3351 – CNRS-CONICET-IRD-UBA. Buenos Aires, Argentina -, 9) Servicio Meteorológico Nacional, Buenos Aires, Argentina
62		**COMPARISON OF THE DIFFERENT RADAR-RAIN GAUGE ADJUSTED PRODUCTS OF GERMANY** *1) Matthias Gottschalk, 2) Katharina Lengfeld, 3) Elmar Weigl, 4) Malte Wenzel, 5) Tanja Winterrath* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst , 4) Deutscher Wetterdienst , 5) Deutscher Wetterdienst
63		**ANALYSIS OF TRAJECTORY AND INTENSITY OF EXTREME RAINFALL IN THE TROPICAL ANDES BY USING AN X-BAND RADAR** *1) Gabriela Urgilés, 2) Rolando Célleri, 3) Jörg Bendix, 4) Johanna Orellana-Alvear* 1) Departamento de Recursos Hídricos y Ciencias Ambientales, Universidad de Cuenca, Cuenca, Ecuador. - Facultad de Ingeniería, Universidad de Cuenca, Cuenca, Ecuador. -, 2) Departamento de Recursos Hídricos y Ciencias Ambientales, Universidad de Cuenca, Cuenca, Ecuador. - Facultad de Ingeniería, Universidad de Cuenca, Cuenca, Ecuador. -, 3) Laboratory for Climatology and Remote Sensing, Philipps-University Marburg, Marburg, Germany. , 4) Departamento de Recursos Hídricos y Ciencias Ambientales, Universidad de Cuenca, Cuenca, Ecuador. - Facultad de Ciencias Médicas, Universidad de Cuenca, Cuenca, Ecuador -
64		**SCALE-DEPENDENT EVALUATION OF DWD'S SEAMLESS SHORT-TERM FORECASTS OF CONVECTIVE PRECIPITATION** *1) Martin Rempel, 2) Markus Schultze, 3) Ulrich Blahak* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst
65		**RAIN, SNOW OR FREEZING RAIN? – RADAR-BASED SURFACE PRECIPITATION TYPE ANALYSIS AND VERIFICATION AT DWD** *1) Markus Schultze, 2) Jörg Steinert, 3) Tim Böhme* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst
66		**FIRST YEAR OF RADAR AND PRECIPITATION OBSERVATIONS AT THE ENEA STATION FOR CLIMATE OBSERVATION OF LAMPEDUSA** *1) Giandomenico Pace, 2) Lorenzo De Silvestri, 3) Tatiana Di Iorio, 4) Paolo Grigioni, 5) Virginia Ciardini, 6) Claudio Scarchilli, 7) Damiano Sferlazzo* 1) ENEA, Observations and Measurements for Environment and Climate Laboratory , 2) ENEA, Observations and Measurements for Environment and Climate Laboratory , 3) ENEA, Observations and Measurements for Environment and Climate Laboratory , 4) ENEA, Observations and Measurements for Environment and Climate Laboratory , 5) ENEA, Observations and Measurements for Environment and Climate Laboratory , 6) ENEA, Observations and Measurements for Environment and Climate Laboratory , 7) ENEA, Observations and Measurements for Environment and Climate Laboratory
67		**WIND FIELD RECONSTRUCTION BY DOPPLER X-BAND RADARS IN MILAN METROPOLITAN AREA.** *1) Antioco Vargiu, 2) Luca Baldini, 3) Elisa Adirosi, 4) Umberto Anselmi, 5) Giulio Camisani, 6) Gian Paolo Minardi, 7) Orietta Cazzuli*

		1) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 2) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 3) National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Rome, Italy , 4) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 5) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 6) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy , 7) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy
68		**EXAMINING MACHINE LEARNING BASED QUANTITATIVE PRECIPITATION ESTIMATION OVER COMPLEX TERRAIN** *1) EunYeol Kim, 2) V. Chandrasekar* 1) Colorado State University , 2) Colorado State University
	Weather radar and climate	
69		**AN EVALUATION OF DWD'S LONG RUNNING ADJUSTMENT METHOD FOR THE REAL-TIME AND CLIMATOLOGICAL RADAR-BASED PRECIPITATION PRODUCTS** *1) Tabea Wilke, 2) Katharina Lengfeld, 3) Thomas Junghänel, 4) Elmar Weigl* 1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst , 4) Deutscher Wetterdienst
70		**SETTING THE BASIS: EXPLORING Z-R RELATIONSHIPS IN X-BAND RADARS IN THE LOMBARDY REGION** *1) Nicolás Andrés Chaves González, 2) Alessandro Ceppi, 3) Giovanni Ravazzani, 4) Carlo De Michele* 1) Politecnico di Milano , 2) Politecnico di Milano , 3) Politecnico di Milano , 4) Politecnico di Milano
71		**CLASSIFICATION OF CONVECTIVE SYSTEMS YIELDING TORNADOES IN JAPAN** *1) Taisei Shibayama, 2) Koji Sassa* 1) Kochi University , 2) Kochi University
72		**QUALITY MAPS FOR HAIL MONITORING AND HAIL ANALYSES AND A LONG-TERM HAIL SIZE ARCHIVE FOR AUSTRIA** *1) Vera Katharina Meyer, 2) Lukas Tüchler* 1) GeoSphere Austria , 2) Austro Control GmbH
73		**RADAR CHARACTERISTICS OF WIND HAZARDS ASSOCIATED WITH DEEP MOIST CONVECTION** *1) Miloslav Staněk, 2) Filip Najman, 3) Jan Horák* 1) Meteopress - Charles University, Faculty of Science -, 2) Meteopress , 3) Meteopress
74		**A RADAR FOR WEATHER MONITORING IN AMAZON BASIN MINING CHAIN** *1) Ivan Saraiva, 2) Douglas Batista da Silva Ferreira, 3) Ana Paula Paes dos Santos, 4) Paulo Afonso Fischer Kuhn, 5) Cláudia Priscila Wanzeler da Costa, 6) Renata Gonçalves Tedeschi, 7) Eduardo Carvalho, 8) Fabricio Oliveira Silva, 9) Edmir dos Santos Jesus* 1) Operations and Management Center of the Amazon Protection System , 2) Vale Technological Institute , 3) Vale Technological Institute , 4) Federal University of Pará , 5) Vale Technological Institute , 6) Vale Technological Institute , 7) Vale Technological Institute , 8) Vale Technological Institute , 9) Vale Technological Institute