

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 <i>1) Greg McFarquhar, 2) Zeqian Xia</i> 1) University of Oklahoma , 2) University of Oklahoma	
2	USING VISSS AND CLOUD RADAR OBSERVATIONS TO CHARACTERIZE SECONDARY ICE PRODUCTION EVENTS <i>1) Haoran Li, 2) Maximilian Maahn</i> 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 <i>1) Haoran Li, 2) Jinfang Yin, 3) Matt Kumjian</i> 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 <i>1) Ioanna Tsikoudi, 2) Alessandro Battaglia, 3) Christine Unal, 4) Eleni Marinou, 5) Kalliopi Artemis Voudouri</i> 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 <i>1) Zbyněk Sokol, 2) Jana Popová, 3) Lucie Pacovská</i> 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 <i>1) Nobuhiro Takahashi, 2) Kei Kao</i> 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 <i>1) Chieh-Ying Ke, 2) Kao-Shen Chung</i> 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 TORNADES <i>1) Howard Bluestein, 2) David Schwartzman, 3) Ameya Naik, 4) David Bodine, 5) Min-Duan Tzeng, 6) Leah Swinney, 7) Boon-Leng Cheong, 8) Tian-You Yu, 9) Trey Greenwood</i> 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 <i>1) Jana Popová, 2) Zbyněk Sokol, 3) Lucie Pacovská, 4) Stefano Federico, 5) Rosa Claudia Torcasio</i> 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 <i>1) Heike Kalesse-Los, 2) Jonas Witthuhn, 3) Anton Kötsche, 4) Johannes Röttenbacher, 5) Andreas Foth, 6) Teresa Vogl</i> 1) Leipzig University , 2) Leipzig University - Leibniz Institute for Tropospheric Research -, 3) Leipzig University , 4) Leipzig University , 5) Leipzig University , 6) Leipzig University	

11	<p>RADAR AND LIGHTNING CHARACTERISTICS OF TORNADIC STORMS IN CATALONIA <i>1) Oriol Rodríguez, 2) Helen San Segundo, 3) Patricia Altube</i> 1) Servei Meteorològic de Catalunya , 2) Servei Meteorològic de Catalunya , 3) Servei Meteorològic de Catalunya</p>
12	<p>MICROPHYSICAL STRUCTURES IN THE MELTING LAYER BASED ON IN-CLOUD AND GROUND-BASED PRECIPITATION PARTICLE IMAGING OBSERVATIONS <i>1) Kenji Suzuki, 2) Yurika Hara, 3) Kazuya Takami</i> 1) Yamaguchi University, Japan , 2) Yamaguchi University, Japan , 3) Railway Technical Research Institute, Japan</p>
13	<p>PROPOSAL FOR A NEW PRECIPITATION PARTICLE OBSERVATION METHOD USING THE RAINSCOPE AND THE UAV <i>1) Shinya Mabuchi, 2) Kazuhiro Yoshimi</i> 1) Toyama Prefectural University , 2) Toyama Prefectural University</p>
14	<p>MICROPHYSICAL RETRIEVALS IN MIXED-PHASE CLOUDS WITH LOW LWP USING CLOUD RADAR <i>1) Peiyuan Wang, 2) Christine Unal</i> 1) Delft University of Technology , 2) Delft University of Technology</p>
15	<p>PATTERNS IN POLARIMETRIC X-BAND RADAR DATA CHARACTERIZING SEVERE HAIL EVOLUTION <i>1) Katerina Skripnikova, 2) Zbynek Sokol</i> 1) Institute of Atmospheric Physics of the Czech Academy of Sciences , 2) Institute of Atmospheric Physics of the Czech Academy of Sciences</p>
16	<p>DISCRIMINATING BETWEEN "DRIZZLE OR RAIN" AND SEA SALT AEROSOLS IN CLOUDNET FOR MEASUREMENTS OVER THE BARBADOS CLOUD OBSERVATORY <i>1) Johanna Roschke, 2) Jonas Witthuhn, 3) Marcus Klingebiel, 4) Moritz Haerig, 5) Andreas Foth, 6) Anton Kötsche, 7) Heike Kalesse-Los</i> 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</p>
17	<p>CHARACTERIZATION OF MICROPHYSICAL AND DYNAMICAL PROCESSES FOR MESOSCALE CONVECTIVE SYSTEMS FROM DUAL-POLARIMETRIC RADAR NETWORKS <i>1) Jeong-Eun Lee, 2) GyuWon Lee</i> 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</p>
18	<p>NON-PARAMETRIC RETRIEVAL OF DROP-SIZE DISTRIBUTION PROFILES BASED ON CLOUD RADAR SPECTRAL POLARIMETRY <i>1) Tatiana Nomokonova, 2) Alexander Myagkov, 3) Michael Frech</i> 1) RPG Radiometer Physics GmbH, Meckenheim, Germany , 2) RPG Radiometer Physics GmbH, Meckenheim, Germany , 3) Meteorological Observatory Hohenpeißenberg, German Weather Service (DWD), Germany</p>
19	<p>OBSERVATIONAL STUDY OF TOPOGRAPHIC EFFECTS OF SNOW CLOUDS <i>1) Kazuya Takami, 2) Kenji Suzuki</i> 1) Railway Technical Research Institute , 2) Yamaguchi University</p>
20	<p>CLOUDSAT AND A-TRAIN WARM RAIN CHARACTERIZATION <i>1) Susmitha Sasikumar, 2) Alessandro Battaglia, 3) Pavlos Kollias</i> 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</p>
21	<p>RETRIEVAL OF SNOW WATER EQUIVALENT FROM THIES LASER DISDROMETER IN THE SOUTHERN ITALY APENNINES <i>1) Vincenzo Capozzi, 2) Lauro D'Esposito, 3) Clizia Annella, 4) Giannetta Fusco, 5) Giorgio Budillon</i> 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"</p>
22	<p>RADAR TESTS FOR THE AWACA CAMPAIGN <i>1) Heather Corden, 2) Jacopo Grazioli, 3) Michael Monnet, 4) Alexis Berne</i> 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</p>

23	<p>EVALUATION OF TWO MICROPHYSICS SCHEMES IN THE AROME MODEL USING AN OBJECT-BASED APPROACH APPLIED ON DUAL-POLARISATION RADAR DATA.</p> <p>1) Cloé David, 2) Clotilde Augros, 3) Benoit Vie, 4) François Bouttier</p> <p>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 -</p>
24	<p>UNRAVELLING THE MICROPHYSICAL CHARACTERISTICS OF EXTREME RAINFALL OVER TROPICAL STATIONS USING X-BAND DUAL-POLARIZATION RADAR OBSERVATION</p> <p>1) Kumar Abhijeet, 2) T. N. Rao, 3) Rama Rao Nidamanuri</p> <p>1) Indian Institute of Space Science and Technology, Thiruvananthapuram, 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, Thiruvananthapuram, Kerala</p>
25	<p>PRECIPITATION INITIALIZATION IN THE WEATHER MODEL HARMONIE APPLYING A HYDROMETEOR CLASSIFICATION SCHEME</p> <p>1) Sibbo van der Veen, 2) Hidde Leijnse, 3) Aart Overeem, 4) Linda Bogerd, 5) Christine Unal</p> <p>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</p>
26	<p>POLARIMETRIC RADAR OBSERVATIONS OF A TORNADIC SUPERCELL IN JERSEY, CHANNEL ISLANDS, ON 1 – 2 NOVEMBER 2023</p> <p>1) Matt Clark, 2) Steven Best</p> <p>1) Met Office, 2) Met Office</p>
27	<p>HUMIDITY PROFILES AND ARCTIC MIXED-PHASE CLOUDS AS SEEN BY AIRBORNE G- AND W-BAND RADARS (HAMAG)</p> <p>1) Linnea Bühler, 2) Mario Mech, 3) Sabrina Schnitt, 4) Thomas Rose, 5) Jens Goliasch, 6) Nils Risse, 7) Pavel Krobot, 8) Susanne Crewell</p> <p>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</p>
28	<p>AN INVESTIGATION ON MICROPHYSICAL CHARACTERISTICS OF HEAVY RAINFALL EVENTS OVER TAIWAN</p> <p>1) Jayalakshmi Janapati, 2) Balaji Seela, 3) Pay-Liam Lin</p> <p>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</p>
29	<p>A STATISTICAL EVALUATION OF CONVECTIVE CLOUD SYSTEMS IN A NUMERICAL WEATHER PREDICTION MODEL WITH POLARIMETRIC RADAR OBSERVATIONS</p> <p>1) Gregor Köcher, 2) Tobias Zinner, 3) Christian Heske, 4) Florian Ewald</p> <p>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</p>
30	<p>LIGHTNING ACTIVITY OVER THE CZECHIA FROM THE PERSPECTIVE OF GROUND-BASED DETECTION NETWORKS</p> <p>1) Lucie Pacovská, 2) Jana Popová</p> <p>1) Faculty of Science, Charles University, 2) Faculty of Science, Charles University - Institute of Atmospheric Physics, Czech Academy of Sciences -</p>
31	<p>DETERMINATION OF LOW-LEVEL TEMPERATURE PROFILES FROM MICROWAVE RADIOMETER OBSERVATIONS DURING RAIN</p> <p>1) Andreas Foth, 2) Moritz Lochmann, 3) Pablo Saavedra Garfias, 4) Heike Kalesse-Los</p> <p>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</p>
32	<p>A NEW HIGH-RESOLUTION STEREO IMAGER TO MEASURE THE SHAPE OF RAINDROPS AND OTHER HYDROMETEORS</p> <p>1) Veronica Escobar-Ruiz, 2) Chris Westbrook</p> <p>1) Department of Meteorology, University of Reading, 2) Department of Meteorology, University of Reading</p>

33	<p>LIGHTNING FORECAST IMPROVEMENT THROUGH LIGHTNING DATA ASSIMILATION. RESULTS FOR A TWO-SEASONS PERIOD OVER ITALY USING THE WRF MODEL.</p> <p><i>1) Stefano Federico, 2) Rosa Claudia Torcasio, 3) Jana Popova, 4) Zbyněk Sokol, 5) Lukas Pop, 6) Lucie Pacovská, 7) Stefano Dietrich</i></p> <p>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 - Faculty of Science, Charles University, Albertov 6, 128 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</p>
34	<p>RETRIEVAL OF THE HAIL SIZE NUMBER DISTRIBUTION FROM POLARIMETRIC C-BAND WEATHER RADAR USING DOUBLE-MOMENT NORMALIZATION</p> <p><i>1) Matteo Guidicelli, 2) Alfonso Ferrone, 3) Gionata Ghiggi, 4) Marco Gabella, 5) Urs Germann, 6) Alexis Berne</i></p> <p>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</p>
35	<p>CONVERGING THE ICON 2-MOMENT MICROPHYSICS TO OBSERVATIONS: EVALUATION IN POLARIMETRIC RADAR OBSERVATION SPACE</p> <p><i>1) Jana Mendrok, 2) Alberto de Lozar, 3) Julian Steinheuer, 4) Velibor Pejčić, 5) Tobias Scharbach, 6) Silke Trömel, 7) Ulrich Blahak</i></p> <p>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</p>
36	<p>A CLIMATOLOGICAL STUDY ON THE MERGER-FORMATION BOW ECHOES IN CHINA</p> <p><i>1) Ang Zhou, 2) Kun Zhao, 3) Xin Xu</i></p> <p>1) Nanjing University , 2) Nanjing University , 3) Nanjing University</p>
37	<p>AN OVERVIEW OF THE WESCON-WOEST FIELD CAMPAIGN IN SOUTHERN ENGLAND IN SUMMER 2023</p> <p><i>1) Lindsay J. Bennett, 2) Ryan R. Neely III, 3) Thorwald Stein, 4) Chris Walden</i></p> <p>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 -</p>
38	<p>THE FLEXIBLE ARRAY OF RADARS AND MESONETS (FARM)</p> <p><i>1) Joshua Wurman, 2) Karen Kosiba</i></p> <p>1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -</p>
39	<p>PROPAGATION AND EVOLUTION OF ROTATION IN LINEAR SYSTEMS (PERILS) : ATTRIBUTES OF TORNADIC AND NON-TORNADIC VORTICES</p> <p><i>1) Karen Kosiba, 2) Josh Wurman</i></p> <p>1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -</p>
40	<p>WINDS AND STRUCTURES IN HURRICANE BOUNDARY LAYERS EXPERIMENT (WASHABLE)</p> <p><i>1) Joshua Wurman, 2) Karen Kosiba</i></p> <p>1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -, 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -</p>
41	<p>THE COLORADO STATE UNIVERSITY SEA-GOING AND LAND DEPLOYABLE POLARIMETRIC (SEA-POL) RADAR</p> <p><i>1) Michael Bell, 2) V. Chandrasekar, 3) Steven Rutledge, 4) Brenda Dolan, 5) Jennifer DeHart, 6) Jim George, 7) Francesc Junyent</i></p> <p>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</p>

42	<p>OVERVIEW OF THE “ANALYSIS OF OROGRAPHIC IMPACTS ON PRECIPITATION MICROPHYSICS AND SATELLITE-DERIVED ESTIMATES” (ARTEMIS) FIELD CAMPAIGN IN THE EASTERN PYRENEES</p> <p>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</p> <p>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</p>
43	<p>VARIABILITY OF MESOSCALE CLOUD AND PRECIPITATION STRUCTURES DURING NEAR-FREEZING SURFACE CONDITIONS USING GROUND-BASED RADAR OBSERVATIONS FROM WINTRE-MIX</p> <p>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</p> <p>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</p>
44	<p>COMPARATIVE ANALYSIS OF TWO ALGORITHMS FOR ESTIMATING LARGE HAIL OCCURRENCE USING RADAR DATA</p> <p>1) Valentina Campana, 2) Anna Fornasiero, 3) Roberto Cremonini, 4) Pier Paolo Alberoni, 5) Gianfranco Vulpiani</p> <p>1) ARPA Piemonte, Dipartimento rischi naturali e ambientali, 2) Arpa Emilia-Romagna, Struttura Idro-Meteo-Clima, 3) ARPA Piemonte, Dipartimento rischi naturali e ambientali, 4) Arpa Emilia-Romagna, Struttura Idro-Meteo-Clima, 5) Dipartimento di Protezione Civile Nazionale</p>
45	<p>RAPID-SCAN POLARIMETRIC RADAR OBSERVATIONS OF A SEVERE DOWNSLOPE WIND STORM DURING CACTI</p> <p>1) Kelly Lombardo, 2) Matthew Kumjian, 3) Fan Wu</p> <p>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</p>
46	<p>CAN DUAL-POLARIZATION RADAR OBSERVATIONS INFORM US ABOUT HAIL PHYSICS?</p> <p>1) Matthew Kumjian, 2) Joshua Soderholm</p> <p>1) Department of Meteorology & Atmospheric Science, The Pennsylvania State University, 2) Bureau of Meteorology, Melbourne, Australia - Science and Innovation Group -</p>
47	<p>COMBINING IN-SITU AND CLOUD RADAR OBSERVATIONS TO QUANTIFY RIMING</p> <p>1) Nils Pfeifer</p> <p>1) Leipzig Institute for Meteorology, Leipzig University, Leipzig, Germany</p>
48	<p>DYNAMICS AND INTERNAL STRUCTURE OF THUNDERSTORMS IN SWITZERLAND FROM A DUAL-DOPPLER RADAR PERSPECTIVE</p> <p>1) Martin Lainer, 2) Daniel Wolfensberger, 3) Rebecca Gugerli, 4) Samuel Monhart, 5) Urs Germann</p> <p>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</p>
49	<p>INVESTIGATING THE RELATIONSHIPS BETWEEN ROTATION AND HEAVY RAINFALL ALONG THE MEI-YU FRONT DURING PRECIP 2022</p> <p>1) Jennifer DeHart, 2) Michael Bell, 3) Tyler Barbero</p> <p>1) Colorado State University, 2) Colorado State University, 3) Colorado State University</p>
50	<p>FLUX OBSERVATIONS FOR PROCESS-INFORMED QUANTITATIVE PRECIPITATION ESTIMATES</p> <p>1) Aimee Matland-Dixon, 2) Pierre Kirstetter, 3) Robert Palmer, 4) Jacob Carlin, 5) Alexander Ryzhkov</p> <p>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 -</p>

51	<p>CLASSIFICATION OF PRECIPITATING ICE PARTICLES BY COMBINING MRR AND DISDROMETER MEASUREMENTS DURING FIVE YEARS OF ANTARCTIC COASTAL PRECIPITATION</p> <p>1) Giacomo Roversi, 2) Alessandro Bracci, 3) Elisa Adirosi, 4) Sabina Angeloni, 5) Mario Montopoli, 6) Luca Baldini, 7) Federico Porcù</p> <p>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</p>
52	<p>A PRACTICAL MODEL TO DETERMINE THE RADAR CROSS SECTION OF RANDOMLY SHAPED RAIN DROPS BASED ON SELECTED SIZE PARAMETERS</p> <p>1) Franz Teschl, 2) Reinhard Teschl</p> <p>1) Graz University of Technology , 2) Graz University of Technology</p>
53	<p>IMPACT OF OROGRAPHY AND WIND DYNAMICS ON PRECIPITATION DISTRIBUTION DURING CYCLONIC EVENT: A CASE STUDY OF CYCLONE BATSIRAI IN LA REUNION ISLAND</p> <p>1) Ambinintsoa Volatiana Ramanamahefa, 2) Thiruvengadam Padmanabhan, 3) Clement Soufflet, 4) Guillaume Lesage, 5) Joel Van Baelen</p> <p>1) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Météo 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, Météo France, Université de La Réunion, 97400 Saint-Denis, France -, 3) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Météo France, Université de La Réunion, 97400 Saint-Denis, France , 4) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Météo France, Université de La Réunion, 97400 Saint-Denis, France , 5) Laboratoire de l'Atmosphère et des Cyclones LACY, UMR 8105 CNRS, Météo France, Université de La Réunion, 97400 Saint-Denis, France</p>
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54	<p>WSR-88D OBSERVATION OF BIRDS LEAVING ROOSTS BECAUSE OF EARTHQUAKES</p> <p>1) Pengfei Zhang, 2) Dusan Zrnica</p> <p>1) CIWRO, University of Oklahoma, USA - NSSL, NOAA, USA -, 2) NSSL, NOAA, USA</p>
55	<p>OUR STATIC, THEIR SIGNAL: CHALLENGES USING THE EUROPEAN RADAR NETWORK FOR AEROECOLOGY</p> <p>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</p> <p>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</p>
56	<p>OPPORTUNISTIC BIRD MIGRATION DETECTION USING OPERATIONAL WEATHER RADAR NETWORK</p> <p>1) Prateek GULATI, 2) Benoit Usunier, 3) Pascal LAPEBIE, 4) Laurent Barthes, 5) Nicolas Viltard, 6) Cecile Mallet</p> <p>1) LATMOS - CNRS -, 2) Federation Nationale des Chasseurs , 3) Federation Nationale des Chasseurs , 4) LATMOS - UVSQ -, 5) LATMOS - CNRS -, 6) LATMOS - UVSQ -</p>
57	<p>RADAR-NEWS: A RADAR-BASED ALGORITHM ON SUPPORT OF THE NATIONAL EARLY WARNING SYSTEM</p> <p>1) Gianfranco Vulpiani, 2) Pietro Giordano, 3) Anna Fronasiero, 4) Virginia Poli, 5) Roberto Cremonini, 6) Luca Molini, 7) Emilio Guerriero</p> <p>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.</p>
58	<p>DETECTING SMOKE FROM FOREST FIRES IN THE AMAZON WITH AMAZONIAN WEATHER RADAR NETWORK</p> <p>1) Luiz Alves dos Santos Neto, 2) Ivan Saraiva, 3) Marcio Nirlando Gomes Lopes</p> <p>1) CENSIPAM , 2) CENSIPAM , 3) CENSIPAM</p>

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59	<p>RAINFALL RATE OBSERVATIONS FROM SPACE BORNE W-BAND RADARS - TECHNIQUES AND CHALLENGES <i>1) Robert Thompson, 2) Anthony Illingworth</i> 1) University of Reading , 2) University of Reading</p>
60	<p>THE STATUS AND TESTING RESULTS OF THE FENGYUN-3G PRECIPITATION MEASUREMENT RADAR IN COMMISSION PHASE <i>1) Honggang Yin, 2) Qiong Wu</i> 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</p>
61	<p>A FREQUENCY CORRECTION ALGORITHM FOR SPACEBORNE PRECIPITATION MEASUREMENT RADAR AND GROUND-BASED WEATHER RADAR <i>1) Qiong Wu, 2) Lin Chen, 3) Honggang Yin</i> 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</p>
62	<p>SEA SURFACE AND SNOWFLAKES AS NATURAL TARGETS CONNECTING FY-3G AND GPM-CO DUAL-FREQUENCY RADARS <i>1) Bo Liu, 2) Haoran Li, 3) Liping Liu, 4) Jian Shang, 5) Honggang Yin, 6) Kwo-Sen Kuo</i> 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</p>
63	<p>NON UNIFORM BEAM FILLING CORRECTION FOR SCANNING SPACE-BORNE DOPPLER RADARS <i>1) Riccardo Rabino, 2) Frederic Tridon, 3) Alessandro Battaglia</i> 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</p>
64	<p>CHARACTERIZATION OF SURFACE CLUTTER SIGNAL FOR A SPACEBORNE CONICALLY SCANNING W-BAND DOPPLER RADAR <i>1) Francesco Manconi, 2) Alessandro Battaglia</i> 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</p>
65	<p>I AND Q SIMULATIONS FOR A POLARIZATION DIVERSITY PULSE PAIR SPACEBORNE DOPPLER RADAR <i>1) Ali Rizik, 2) Frederic Tridon, 3) Alessandro Battaglia, 4) Ishuwa Sikaneta</i> 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</p>
66	<p>FY-3G/PMR ON-ORBIT CALIBRATION DESIGN AND CALIBRATION TEST <i>1) Guangji Lai, 2) Runfeng Yang</i> 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</p>

67	<p>ENHANCING SPACE BORNE SNOWFALL ESTIMATES BY COMBINING ACTIVE AND PASSIVE MICROWAVE WIVERN OBSERVATIONS</p> <p><i>1) Nina Mahernndl, 2) Maximilian Maahn, 3) Alessandro Battaglia</i></p> <p>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</p>
68	<p>AN EVALUATION OF SATELLITE GPM-DPR PRECIPITATION ESTIMATES WITH GROUND-BASED DISDRMETERS IN A MEDITERRANEAN REGION</p> <p><i>1) Eric Peinó, 2) Joan Bech, 3) Francesc Polls, 4) Mireia Udina, 5) Sergi Gonzalez, 6) Brice Boudevillain, 7) Marco Petracca, 8) Elisa Adirosi</i></p> <p>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</p>
69	<p>AN OPERATIONAL X-BAND RADAR FOR QPE AND SUPPORT TO WEATHER MONITORING IN THE COASTAL AREA OF THE STATE OF SAO PAULO</p> <p><i>1) Roberto Vicente Calheiros, 2) Gabriela Ramos Hurtado, 3) Demilson de Assis Quintão, 4) Jaqueline Murakami Kokitsu, 5) Giulia Lembo Caterina</i></p> <p>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 -</p>
70	<p>DEVELOPMENT OF AN ENSEMBLE NOWCASTING SYSTEM BY USING THREE-DIMENSIONAL RADAR ECHO MOTION FIELDS</p> <p><i>1) kao-shen chung, 2) Yu-Chiao Hsu, 3) Yi-Hao Tsou, 4) Hsin-Hung Lin</i></p> <p>1) National Central University , 2) National Central University , 3) Central Weather Administration , 4) National Science and Technology Center for Disaster Reduction</p>
71	<p>USING SYNTHETIC CLOUD PROFILING RADAR DATA TO DEVELOP VALIDATION METHODOLOGIES FOR GROUND-BASED CLOUD RADAR SITES</p> <p><i>1) Lukas Pfitzenmaier, 2) Pavlos Kollias, 3) Bernat Puigdomènech Treserras, 4) Ulrich Löhnert</i></p> <p>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</p>