

Day	2	Tuesday, September 10, 2024, 11:20-13:05; Museo dell'arte classica
Session	1	Operational aspects
1		<p><b>OBJECT-BASED ENSEMBLE PREDICTION SYSTEM KONRAD3D-EPS</b>  <i>1) Lukas Josipovic, 2) Gregor Pante, 3) Andreas Brechtel, 4) Nora-Linn Strotjohann, 5) Ulrich Blahak</i>            1) German Meteorological Service , 2) German Meteorological Service , 3) German Meteorological Service , 4) German Meteorological Service , 5) German Meteorological Service</p>
2		<p><b>OPERATIONAL WIND TURBINE CLUTTER REMOVAL IN THE FINNISH WEATHER RADAR NETWORK: METHODOLOGY AND IMPACT ON DATA QUALITY</b>  <i>1) Jenna Ritvanen, 2) Pauli Anttonen, 3) Harri Hohti, 4) Mikko Kurri, 5) Annakaisa von Lerber</i>            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</p>
3		<p><b>AN INTER-RADAR INTERFERENCE SUPPRESSION METHOD FOR WEATHER RADAR DATA WITHOUT MODIFYING THE RADAR'S INTERNAL SIGNAL PROCESSING</b>  <i>1) Shota Ochi, 2) Noritsugu Shiokawa, 3) Tomomi Aoki, 4) Masakazu Wada, 5) Satoshi Kida</i>            1) Toshiba Corporation , 2) Toshiba Corporation , 3) Toshiba Corporation , 4) Toshiba Digital Solutions Corporation , 5) Toshiba Digital Solutions Corporation</p>
4		<p><b>RADAR OPERATIONAL NETWORK AND PRODUCTS IN FRANCE</b>  <i>1) Ludovic Bouilloud, 2) Tom Nicolau, 3) Sylvain Chaumont, 4) Jean Millet, 5) Milka Radojevic, 6) Mathilde Moureaux</i>            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</p>
5		<p><b>A QUALITY INDEX FOR RE-SITING A WEATHER RADAR WITHIN A NETWORK</b>  <i>1) Patri Altube, 2) Nicolau Pineda, 3) Ferran Fabró, 4) Oriol Rodríguez</i>            1) Servei Meteorològic de Catalunya , 2) Servei Meteorològic de Catalunya , 3) Servei Meteorològic de Catalunya , 4) Servei Meteorològic de Catalunya</p>
6		<p><b>METHODS USED TO ESTIMATE DIFFERENTIAL PHASE DERIVED BASE DATA WITHIN THE BARON PROCESSOR SUITE</b>  <i>1) Mrinal Balaji, 2) Darrin Cartwright, 3) James Romines</i>            1) Baron Weather Inc , 2) Baron Weather Inc , 3) Baron Weather Inc</p>
7		<p><b>QZDRCAL: AN UPDATED FULL SEASON ZDR CALIBRATION ALGORITHM USING DRY AGGREGATED SNOW IN U.S. NEXRAD OPERATION</b>  <i>1) Jiaxi Hu, 2) Alexander Ryzhkov, 3) John Krause</i>            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 -</p>
8		<p><b>LEVERAGING FAIR PRINCIPLES FOR EFFICIENT MANAGEMENT OF METEOROLOGICAL RADAR DATA</b>  <i>1) Alfonso Ladino, 2) Maxwell Grover, 3) Stephen Nesbitt, 4) Kai Mühlbauer</i>            1) University of Illinois at Urbana Champaign , 2) Argonne National Laboratory , 3) University of Illinois at Urbana Champaign , 4) University of Bonn Germany</p>
9		<p><b>COMPARISON OF CONVENTIONAL AND NOVEL TECHNIQUES FOR REFLECTIVITY CALIBRATION MONITORING</b>  <i>1) Alexander Myagkov, 2) Tatiana Nomokonova, 3) Michael Frech</i>            1) Radiometer Physics GmbH, Meckenheim, Germany , 2) Radiometer Physics GmbH, Meckenheim, Germany , 3) Meteorological Observatory Hohenpeissenberg, German Weather Service (DWD), Germany</p>
10		<p><b>A UNIFIED FRAMEWORK FOR STUDYING WEATHER RADAR NETWORKS</b>  <i>1) Shafi Sardar, 2) Marc Schleiss, 3) Apostolos Pappas, 4) Francesco Fioranelli</i>            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</p>

11	<p><b>DATA CENTER: TOWARD PREDICTIVE MAINTENANCE</b>  <i>1) Hassan Al Sakka, 2) Nipesh Dulal</i>  1) LEONARDO Germany GmbH , 2) LEONARDO Germany GmbH</p>
12	<p><b>PROVISION OF HIGH-RESOLUTION X-BAND WEATHER RADAR DATA FOR AGRICULTURAL PRACTICE IN NORTHEAST GERMANY</b>  <i>1) Alice Künzel, 2) Kai Mühlbauer, 3) Arash Madadi, 4) Johannes Knoch, 5) Sibylle Itzerott</i>  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 -</p>
13	<p><b>ADVANCEMENTS IN RADAR-DRIVEN CONVECTIVE CELL DETECTION AND NOWCASTING AT DEUTSCHER WETTERDIENST (DWD)</b>  <i>1) Manuel Werner, 2) Robert Feger, 3) Lukas Josipovic, 4) Christian Berndt, 5) Cornelia Strube</i>  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)</p>
14	<p><b>MONITORING AND QUANTIFYING WIND TURBINE CLUTTER (WTC) IN DWD WEATHER RADAR DATA</b>  <i>1) Michael Frech, 2) Annette Böhm, 3) Maximilian Schaper</i>  1) Deutscher Wetterdienst , 2) Deutscher Wetterdienst , 3) Deutscher Wetterdienst</p>
15	<p><b>WEATHER RADAR DATA EXCHANGE FORMATS AND CONVENTIONS FROM THE DATA PROVIDER POINT OF VIEW</b>  <i>1) Sergey Panov, 2) Jason Selzler</i>  1) Vaisala Inc. , 2) Vaisala Inc.</p>
16	<p><b>ARM RADAR DATA QUALITY AND CALIBRATIONS FOR THE SAIL AND EPCAPE FIELD CAMPAIGNS</b>  <i>1) Alyssa Matthews, 2) Marqi Rocque, 3) Min Deng, 4) Ya-Chien Feng</i>  1) Pacific Northwest National Laboratory , 2) Pacific Northwest National Laboratory , 3) Brookhaven National Lab , 4) Pacific Northwest National Laboratory</p>
17	<p><b>TROPICAL RAINFALL ESTIMATES FROM COMMERCIAL MICROWAVE LINKS IMPROVE BY RELATING RAINFALL RETRIEVAL ALGORITHM PARAMETERS TO LOCAL NETWORK AND ENVIRONMENTAL FEATURES</b>  <i>1) Bas Walraven, 2) Aart Overeem, 3) Miriam Coenders, 4) Rolf Hut, 5) Luuk van der Valk, 6) Remko Uijlenhoet</i>  1) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands , 2) R&amp;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</p>
18	<p><b>RADARHUB: INTEGRATING OPEN-SOURCE ALGORITHMS INTO REAL-TIME WORKFLOW</b>  <i>1) Boonleng Cheong</i>  1) University of Oklahoma</p>
19	<p><b>EXAMPLE OF USE OF THE ITALIAN DISDROMETER NETWORK FOR RADAR CALIBRATION CHECKS: THE ABRUZZO REGION CASE STUDY</b>  <i>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</i>  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.</p>

20	<p><b>EUMETNET OPERA - IMPLEMENTATION OF NEW PRODUCTION LINES: PERFORMANCE AND DELIVERY OF OPERA RADAR PRODUCTS</b></p> <p>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</p> <p>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</p>
21	<p><b>WIND TURBINES ACROSS THE CANADIAN WEATHER RADAR NETWORK</b></p> <p>1) Norman Donaldson, 2) Daniel Michelson, 3) Qian Li</p> <p>1) Environment and Climate Change Canada , 2) Environment and Climate Change Canada , 3) Environment and Climate Change Canada</p>
22	<p><b>REAL-TIME TORNADO DETECTION SYSTEM USING DEEP LEARNING - TOWARDS MITIGATION OF LOCALIZED AND SUDDEN METEOROLOGICAL DISASTERS</b></p> <p>1) Kenichi Kusunoki, 2) Toru Adachi, 3) Osamu Suzuki, 4) Naoki Ishitsu, 5) Ken-ichiro Arai</p> <p>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.</p>
23	<p><b>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)</b></p> <p>1) Marco Gabella, 2) Lisa Moser, 3) Philipp Schmid, 4) Maurizio Sartori, 5) Marco Boscacci, 6) Urs Germann</p> <p>1) MeteoSwiss , 2) MeteoSwiss , 3) Universität Bern , 4) MeteoSwiss , 5) MeteoSwiss , 6) MeteoSwiss</p>
24	<p><b>ZDR BIAS MONITORING – ECCO’S NEW S-BAND RADARS</b></p> <p>1) Stephen Holden, 2) Daniel Michelson, 3) Sudesh Boodoo, 4) Norman Donaldson, 5) Peter Rodriguez, 6) Qian Li, 7) Peter Leibiuk</p> <p>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</p>
25	<p><b>SYSTEM DIFFERENTIAL PHASE – A HISTOGRAM APPROACH</b></p> <p>1) Kai Mühlbauer, 2) Velibor Pejčic, 3) Silke Trömel</p> <p>1) Institute of Geosciences, Meteorology Section, University Bonn , 2) Institute of Geosciences, Meteorology Section, University Bonn , 3) Institute of Geosciences, Meteorology Section, University Bonn</p>
26	<p><b>AUTOMATIC RADAR QUALITY CONTROL FOR AUTO METAR IN SWISS CIVIL AIRPORTS</b></p> <p>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</p> <p>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</p>
27	<p><b>INNOVATIONS IN OPERATIONAL RADAR PRODUCTS AND POST-CWRRP PRODUCTION STATUS</b></p> <p>1) Ahmed Mahidjiba, 2) Jonathan Belletete, 3) Rabah Hachelaf, 4) Ilyass Hajji, 5) Corinne Simard</p> <p>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 - 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 - 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 - 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</p>

28	<p><b>WEATHER RADAR NETWORK QUALITY CONTROL AND OPERATIONS IN BRAZIL - CHALLENGES OF A MULTI-OPERATORS ENVIRONMENT</b></p> <p>1) Cesar Beneti, 2) Jeova Silva, 3) Vinicius Cebalhos, 4) Fernanda Verdelho</p> <p>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 -</p>
29	<p><b>TOWARDS A SINGLE GLOBAL STANDARD FOR POLAR WEATHER RADAR DATA REPRESENTATION WITH FM301 – CFRADIAL2</b></p> <p>1) Mark Curtis, 2) Michael Dixon, 3) Daniel Michelson, 4) Peter Rodriguez</p> <p>1) Bureau of Meteorology, Australia , 2) National Center for Atmospheric Research , 3) Environment and Climate Change Canada , 4) Environment and Climate Change Canada</p>
30	<p><b>USING NOISE DATA TO MONITOR DUAL-POLARIZATION RADAR RECEIVER GAINS AND CORRECT FOR DRIFT DURING OPERATIONS.</b></p> <p>1) Michael Dixon, 2) John Hubbert</p> <p>1) NSF National Center for Atmospheric Research , 2) NSF National Center for Atmospheric Research</p>
31	<p><b>ATMOSPHERIC RADIATION MEASUREMENT (ARM) USER FACILITY: RADAR OPERATIONS AND DATA QUALITY CHARACTERIZATION</b></p> <p>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</p> <p>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</p>
32	<p><b>SNOWFALL CAMERA OPERATIONS FOR INSECT DETECTION TO CORROBORATE RADAR OBSERVATIONS</b></p> <p>1) Freya Addison, 2) Maximilian Maahn, 3) Roel Klink, 4) Heike Kalesse-Ios, 5) Moritz Lochmann</p> <p>1) Universität Leipzig , 2) Universität Leipzig , 3) German Centre for Integrative Biodiversity Research , 4) Universität Leipzig , 5) Universität Leipzig</p>
33	<p><b>SHRIMP: SYNTHETIC HIMAWARI RADAR IMAGING PROJECT</b></p> <p>1) Valentin Louf, 2) Alain Protat, 3) Jordan Brook</p> <p>1) Australian Bureau Of Meteorology , 2) Australian Bureau Of Meteorology , 3) Australian Bureau Of Meteorology</p>
34	<p><b>QUALITY ASSURANCE OF THE NEW DUAL-FREQUENCY DOPPLER CLOUD RADAR OPERATING IN THE SOUTHERN OF THE IBERIAN PENINSULA</b></p> <p>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</p> <p>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 -</p>
35	<p><b>MITIGATION OF PERSISTENT CLUTTER IN SWEDISH WEATHER RADAR PRODUCTS</b></p> <p>1) Günther Haase, 2) Daniel Johnson, 3) Ulf Nordh, 4) Anders Henja</p> <p>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 -</p>
36	<p><b>CML APPLICATIONS WITHIN EMILIA ROMAGNA WEATHER SERVICE, ARPAE SIMC.</b></p> <p>1) Elia Covi, 2) Anna Fornasiero, 3) Pier Paolo Alberoni</p> <p>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)</p>
37	<p><b>MONITORING THE QUALITY OF OPERA RAINFALL COMPOSITES FOR REAL-TIME FLASH FLOOD FORECASTING IN THE EDERA PROJECT</b></p> <p>1) Shinju Park, 2) Emily Kemp, 3) Marc Berenguer, 4) Daniel Sempere-Torres</p> <p>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</p>

38	<p><b>IMPLEMENTATION OF OPEN-SOURCE SOFTWARE IN AN OPERATIONAL RADAR PROCESSING CHAIN USING RAINBOW</b></p> <p><i>1) Tiemo Mathijssen, 2) Aart Overeem, 3) Sebastian Knist, 4) Ronald Hannesen</i></p> <p>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</p>
39	<p><b>CLEAR AIR AND WIND SHEAR MODES ON THE SOLID-STATE MOBILE RADAR</b></p> <p><i>1) Ondřej Pitaš, 2) Jan Horák, 3) Miloslav Staněk, 4) Filip Najman, 5) Jakub Bartel</i></p> <p>1) Meteopress , 2) Meteopress , 3) Meteopress - Charles University, Faculty of Science - , 4) Meteopress , 5) Meteopress</p>
40	<p><b>PERFORMANCE OF THE THIES CLIMA 3D STEREO DISDROMETER: EVALUATION DURING RAIN AND SNOW EVENTS</b></p> <p><i>1) Sabina Angeloni, 2) Elisa Adirosi, 3) Mario Montopoli, 4) Luca Baldini, 5) Alessandro Bracci, 6) Giacomo Roversi</i></p> <p>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 -</p>
41	<p><b>COMPUTING ECHO TOP PRODUCTS WITH FAST QUALITY-WEIGHTED SLIDING WINDOWS</b></p> <p><i>1) Markus Peura</i></p> <p>1) Finnish Meteorological Institute</p>
42	<p><b>ASSESSMENT OF RADAR QUANTITATIVE PRECIPITATION ESTIMATION OBTAINED BY THE X-BAND NETWORKED RADARS OF ARPA LOMBARDIA</b></p> <p><i>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</i></p> <p>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</p>
43	<p><b>CALIBRATING THE AZIMUTH POINTING OF WEATHER RADAR USING GROUND CLUTTER CORRELATION</b></p> <p><i>1) Jiankai Huang , 2) Jiapeng Yin1 , 3) Jianbing Li</i></p> <p>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</p>
44	<p><b>CALIBRATION TECHNIQUE FOR POLARIMETRIC PHASED ARRAY WEATHER RADAR BASED ON THE METAL BALL CARRIED BY DOUBLE DRONES</b></p> <p><i>1) Jiapeng Yin, 2) Jiankai Huang, 3) Jianbing Li</i></p> <p>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</p>

<b>Weather radar technologies</b>	
45	<p><b>PEAKO AND PEAKTREE: TOOLS FOR DETECTING AND INTERPRETING PEAKS IN CLOUD RADAR DOPPLER SPECTRA – CAPABILITIES AND LIMITATIONS</b></p> <p><i>1) Teresa Vogl, 2) Martin Radenz, 3) Fabiola Ramelli, 4) Rosa Gierens, 5) Heike Kalesse-Los</i></p> <p>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</p>
46	<p><b>A NEW C-BAND DWR ARCHITECTURE WITH DUAL TRANSMITTER, MAGNETRON AND SOLID-STATE POWER</b></p> <p><i>1) Matthias Toussaint, 2) Paul Malkomes, 3) Michael Knight, 4) Jim Helvin, 5) Michael Frech</i></p> <p>1) GAMIC GmbH , 2) GAMIC GmbH , 3) Enterprise Electronics Corporation , 4) Enterprise Electronics Corporation , 5) Deutscher Wetterdienst</p>
47	<p><b>WEATHER RADAR CALIBRATION BASED ON FAR-FIELD ANTENNA PATTERN MEASUREMENTS WITH THE UAS-BASED RADIO FREQUENCY SONDE (RFSONDE)</b></p> <p><i>1) Antonio Segales, 2) David Schwartzman, 3) Khuda Burdi, 4) Robert Palmer</i></p> <p>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 -</p>
48	<p><b>THE BENEFITS OF MULTI-DOPPLER RADARS WITH VARIOUS WAVELENGTHS IN WISSDOM SYNTHESIS</b></p> <p><i>1) Chia-Lun Tsai, 2) Yu-Chieng Liou, 3) GyuWon Lee</i></p> <p>1) Department of Atmospheric Sciences, Chinese Culture University, Taipei, Taiwan , 2) Department of Atmospheric Sciences, National Central University, Zhongli, Taiwan , 3) Department of Astronomy and Atmospheric Sciences, Center for Atmospheric Remote sensing (CARE), Kyungpook National University, Daegu, South Korea</p>
49	<p><b>GROUND CLUTTER RECOGNITION ALGORITHM BASED ON TIME-FREQUENCY CHARACTERISTICS OF PHASED</b></p> <p><i>1) Haojun Chen, 2) Qiyu Chen, 3) Chao Liu, 4) Chongxiang Zhang, 5) Jie Zheng, 6) Qian Wu, 7) Guorong Wang, 8) Wen</i></p> <p>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 Center</p>
50	<p><b>PRELIMINARY STUDY ON THE APPLICATION OF NETWORK WIND PROFILE RADAR INVERSION PRODUCTS IN VERTICAL OBSERVATIONS IN SHANGHAI</b></p> <p><i>1) Yunong Guan, 2) Haojun Chen, 3) Chao Liu, 4) Chunguang Yin, 5) Chongxiang Zhang, 6) Jie Zheng</i></p> <p>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</p>
51	<p><b>NEW RANGE UNFOLDING ALGORITHM SUITABLE FOR PHASED ARRAY WEATHER RADAR</b></p> <p><i>1) Chao Liu, 2) Zhenhuan Wang, 3) Haojun Chen, 4) Wen Yang, 5) Guorong Wang</i></p> <p>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 -</p>
52	<p><b>A STUDY ON MISSING DATA CORRECTION TECHNIQUE FOR WEATHER RADAR DATA USING MACHINE LEARNING</b></p> <p><i>1) Tomomi Aoki, 2) Noritsugu Shiokawa, 3) Shota Ochi, 4) Yasunori Nakagawa</i></p> <p>1) TOSHIBA corporation , 2) TOSHIBA corporation , 3) TOSHIBA corporation , 4) Toshiba Digital Solutions Corporation</p>
53	<p><b>STAGGERED PRF PROCESSING WITHIN THE BARON PROCESSOR SUITE</b></p> <p><i>1) Mrinal Balaji, 2) Darrin Cartwright, 3) James Romines</i></p> <p>1) Baron Weather Inc , 2) Baron Weather Inc , 3) Baron Weather Inc</p>
54	<p><b>VERIFYING THE CLUTTER SUPPRESSION CAPABILITY OF X- AND C-BAND WEATHER RADARS EQUIPPED WITH SOLID STATE POWER AMPLIFIER TRANSMITTERS</b></p> <p><i>1) Pekka Puhakka, 2) Jere Mäkinen, 3) Marjan Marbouti</i></p> <p>1) Vaisala , 2) Vaisala , 3) Vaisala</p>
55	<p><b>COMPARING THE SENSITIVITY OF WEATHER RADARS WITH CONVENTIONAL MAGNETRON AND MODERN SOLID STATE POWER AMPLIFIER TRANSMITTER TECHNOLOGIES</b></p> <p><i>1) Pekka Puhakka, 2) Jere Mäkinen, 3) Marjan Marbouti</i></p> <p>1) Vaisala , 2) Vaisala , 3) Vaisala</p>

56	<p><b>ENHANCED CALIBRATION AND COMPARISON METHODOLOGY FOR W-BAND CLOUD RADAR UTILIZING DISDROMETER RAIN DATA</b></p> <p><i>1) Felix Yanovsky, 2) Christine Unal, 3) Oleksandr Pitertsev, 4) Herman Russchenberg</i></p> <p>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 -</p>
57	<p><b>THE EFFECTS OF THE ANTENNA APPROXIMATION METHOD ON THE CALCULATION OF THE POLARIMETRIC BIASES</b></p> <p><i>1) Djordje Mirkovic, 2) David Schwartzman, 3) Dusan Zrnic</i></p> <p>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 -</p>
58	<p><b>ASSESSMENT OF EDDY DISSIPATION RATE ESTIMATION METHODS USING DOPPLER WIND LIDAR</b></p> <p><i>1) Seungwon Baek, 2) Kwonil Kim, 3) Jung-Hoon Kim, 4) GyuWon Lee</i></p> <p>1) BK21 Weather Extremes Education &amp; 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 &amp; Research Team, Department of Atmospheric Sciences, Center for Atmospheric Remote sensing (CARE), Kyungpook National University, Republic of Korea</p>
59	<p><b>LOOKING AT PULSED INTERFERENCE, FILTERS, AND PULSE COMPRESSION</b></p> <p><i>1) Christopher Curtis</i></p> <p>1) CIWRO - NSSL -</p>
60	<p><b>UNLEASHING THE POWER: REVOLUTIONIZING WEATHER OBSERVATION WITH THE ADVANCED TECHNOLOGY</b></p> <p><i>1) Sebastián Torres</i></p> <p>1) CIWRO, The University of Oklahoma - NOAA/OAR National Severe Storms Laboratory -</p>
61	<p><b>AN OVERVIEW OF THE PPAR ADVANCED TECHNOLOGY DEMONSTRATOR POLARIMETRIC CALIBRATION</b></p> <p><i>1) Igor Ivic</i></p> <p>1) The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) - NOAA National Severe Storms Laboratory (NSSL) -</p>
62	<p><b>SINGLE FM PULSE NEAR RANGE SIGNAL RECOVERY WITH OFF-THE-SHELF DSPS</b></p> <p><i>1) Sergey Panov, 2) Jukka Hynninen, 3) Jordan Santillo, 4) Teemu Sutila</i></p> <p>1) Vaisala Inc. , 2) Vaisala Oy , 3) Vaisala Oy , 4) Vaisala Oy</p>
63	<p><b>DIRECT FILTERING VERSUS MULTI-STEP APPROACH IN THE WEATHER RADAR DSP</b></p> <p><i>1) Jordan Santillo, 2) Jim George, 3) Jukka Hynninen, 4) Sergey Panov, 5) Teemu Sutila</i></p> <p>1) Vaisala Oy , 2) Colorado State University , 3) Vaisala Oy , 4) Vaisala Inc. , 5) Vaisala Oy</p>
64	<p><b>IMPROVING WEATHER RADAR IMAGE QUALITY USING NEW DIRECT DECONVOLUTION ALGORITHM</b></p> <p><i>1) Anastasia Tyurina, 2) Fritz O'Hora, 3) Sergey I Panov</i></p> <p>1) Second Star Algonumerix LLC , 2) Vaisala Inc. , 3) Vaisala Inc.</p>
65	<p><b>CHARACTERIZATION AND DETECTION OF DOWNBURSTS AND THEIR PRECURSORS WITH AN ALL-DIGITAL</b></p> <p><i>1) Tian-You Yu, 2) Nathan Kuhr, 3) David Bodine, 4) Sebastian Torres, 5) Charles Kuster</i></p> <p>1) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - School of Meteorology, University of Oklahoma, 2) Advanced Radar Research Center, University of Oklahoma - School of Meteorology, University of Oklahoma -, 3) Advanced Radar Research Center, University of Oklahoma - School of Meteorology, 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</p>
66	<p><b>INTERCOMPARISON OF COLLOCATED PARSIVEL DISTROMETERS</b></p> <p><i>1) Jan Handwerker</i></p> <p>1) Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research</p>
67	<p><b>SOPHY: FIRST MOBILE X-BAND POLARIMETRIC WEATHER RADAR DEVELOPED IN PERU</b></p> <p><i>1) Juan C. Espinoza, 2) Danny E. Scipion, 3) Alexander O. Valdez, 4) Carlos M. Del Castillo</i></p> <p>1) Instituto Geofísico del Perú , 2) Instituto Geofísico del Perú , 3) Instituto Geofísico del Perú , 4) Instituto Geofísico del Perú</p>
68	<p><b>UNDER THE HOOD - HOW SIGNAL PROCESSING IN THE WSR-88D PROVIDES THE BEST QUALITY DATA</b></p> <p><i>1) David Warde, 2) Richard Ice, 3) Sebastian Torres, 4) John Hubbert</i></p> <p>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</p>

69	<p><b>CHARACTERIZATION OF WIND TURBINE CLUTTER (WTC) CONTAMINATION ON THE WSR-88D</b></p> <p><i>1) David Warde, 2) Feng Nai, 3) Sebastian Torres</i></p> <p>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 -</p>
70	<p><b>INTRODUCING THE VIDEO IN SITU SNOWFALL SENSOR FOR ADVANCING RADAR RETRIEVALS</b></p> <p><i>1) Maximilian Maahn, 2) Dmitri Moisseev, 3) Isabelle Steinke, 4) Nina Maherndl, 5) Matthew Shupe</i></p> <p>1) Leipzig University , 2) University of Helsinki , 3) TU Delft , 4) Leipzig University , 5) CU Boulder - NOAA -</p>
71	<p><b>PERFORMANCE VERIFICATION OF DUAL-POLARIZED X-BAND PHASED ARRAY WEATHER RADAR AT OSAKA</b></p> <p><i>1) Yuuki Wada, 2) Hiroshi Hanado, 3) Shinsuke Satoh, 4) Daichi Kitahara, 5) Shuo Wang, 6) Rintaro Okumura, 7)</i></p> <p>1) Osaka University , 2) NICT , 3) NICT , 4) Keio University , 5) Osaka University , 6) Osaka University , 7) NICT , 8) NICT , 9) Osaka University</p>
72	<p><b>PY-ART 2.0: RADAR MEETS XRADAR</b></p> <p><i>1) Maxwell Grover, 2) Scott Collis, 3) Zachary Sherman, 4) Kai Mühlbauer, 5) Joseph O'Brien, 6) Robert Jackson</i></p> <p>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 -</p>
73	<p><b>OBSERVATIONS USING AN X-BAND PHASED-ARRAY BISTATIC RADAR NETWORK</b></p> <p><i>1) Steven Beninati, 2) Stephen Frasier, 3) Pavlos Kollias, 4) Edward Luke, 5) Jorge Salazar Cerreno</i></p> <p>1) University of Massachusetts , 2) University of Massachusetts , 3) Stony Brook University - Brookhaven National Laboratory -, 4) Brookhaven National Laboratory , 5) University of Oklahoma</p>
74	<p><b>PODRADS: LOW-POWER, LOW-COST VERTICALLY POINTING RADARS TO OBSERVE VERTICAL VELOCITIES IN TORNADOES AND CONVECTIVE STORMS</b></p> <p><i>1) Jeffrey Snyder, 2) Patrick Servello, 3) Daniel Wasielewski</i></p> <p>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</p>
75	<p><b>RMATOOBOX: AN OPEN-SOURCE PYTHON LIBRARY FOR EXPLORATION OF DATA FROM THE ARGENTINIAN METEOROLOGICAL RADAR (V1.0)</b></p> <p><i>1) Federico Renolfi</i></p> <p>1) INVAP S.E.</p>
76	<p><b>IMPROVING DATA ACCURACY OF CLOUD RADARS WITH MULTIPLE CALIBRATION METHODS INCLUDING AN ACTUATED NEAR-FIELD SPHERE</b></p> <p><i>1) Tim Wendler, 2) Andrei Lindenmaier, 3) Vagner Castro</i></p> <p>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.</p>