

CURRICULUM VITAE of DOMENICO CIMINI



GENERAL INFORMATION

First name: Domenico

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Date and place of birth: 02 October 1973, Teramo (TE), Italy

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CONTACTS

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EDUCATION

- 2006-2009, **Specialization in Medical Physics**, University of L'Aquila, Italia.
Tesi: Dosimetry and modelling on treatment planning system with electron beams in oncology radioterapy.
Relatori: Prof. Vincenzo Tombolini (University of L'Aquila and Regional Hospital "San Salvatore" L'Aquila)
- 1999-2002, **PhD in Physics**, University of L'Aquila, L'Aquila, Italy.
Thesis: Atmospheric and Oceanic Measurements by Infrared and Microwave radiometers: calibration techniques and retrieval accuracy.
Tutors: Dr. Ed R. Westwater (National Oceanic and Atmospheric Administration (NOAA), USA), Prof. Guido Visconti (University of L'Aquila).
- 2001, School for **Environmental Sensor Technology Expert**, L'Aquila, Italy.
Lecturers: Prof. Guido Visconti, Prof. Piero Ciotti, Prof. Frank Marzano, Dr. Rossella Ferretti, Dr. Vincenzo Rizi (Physics and Electrical Engineering Departments, University of L'Aquila). Selected as best student.
- 1991-1998, **Laurea (cum laude) in Physics**, University of L'Aquila, Italy.
Thesis: Ground-based remote sensing of atmospheric temperature and humidity profiles with a 5-channel microwave radiometer.
Tutors: Prof. Guido Visconti, Dr. Frank Marzano (Physics and Electrical Engineering Departments, University of L'Aquila).

PARTECIPATION TO SCHOOLS AND COURSES

- 2008, 22-26 September, **International Summer School on Atmospheric and Oceanic Sciences**, L'Aquila, Italia.
Lecturers: William Brune (Pennsylvania State University, USA), et al.
- 2007, 3-7 September, **International Summer School on Atmospheric and Oceanic Sciences**, L'Aquila, Italia.
Lecturers: Thomas Ackerman (University of Washington, USA), et al.
- 2004, Sept/Dec, **Writing in Physics**, University of Colorado at Boulder, USA.
Lecturer: Prof. Patricia Weis-Taylor (University of Colorado, USA)
- 2003, 23-31 May, **Remote Sensing Seminar**, Maratea, Italia.
Lecturers: Prof. Paul Menzel, Prof. Henk Revercomb, Paolo Antonelli (University of Wisconsin, USA)
- 2002, 25-30 August, **International Summer School on Atmospheric and Oceanic Sciences**, L'Aquila, Italy.
Lecturers: Micheal King (NASA, USA) et al.
- 2002, 25 February- 1 March, **Satellite Meteorology**, ARPA-SMR, Bologna, Italy.

PROFESSIONAL EXPERIENCES

- 2010-present, **Research Assistant**, Istituto di Metodologie per l'Analisi Ambientale (IMAA), Consiglio Nazionale delle Ricerche (CNR), Tito scalo, PZ, Italy
- 2007-2010: **Research Assistant**, Center of Excellence for the Integration of Remote Sensing and Numerical Weather Prediction Models (CETEMPS), University of L'Aquila, Italy.

- 2007 (Feb-Apr): **Assistant Professor**, Center for Environmental Technology (CET), Department of Electrical and Computer Engineering (DECE), University of Colorado, CO, USA.
- 2005-2006, **Research Assistant**, Istituto di Metodologie per l'Analisi Ambientale (IMAA), Consiglio Nazionale delle Ricerche (CNR), Tito scalo, PZ, Italy
- 2004-2005, **Research Associate** (Visiting Fellow), Cooperative Institute for Research in Environmental Sciences (CIRES), University of Colorado, CO, USA.
- 2002-2004: **Research Contractor**, CETEMPS, University of L'Aquila, Italy.

EDITORIAL EXPERIENCES

- 2013-present, **Associate Editor** for *Atmospheric Measurement Techniques (European Geosciences Union)*.
- 2012-2014, **Guest Editor** for *Atmospheric Measurement Techniques (European Geosciences Union) special issue on Tropospheric Profiling*.
- 2012-present, **Evaluator** of project funding proposals for *Swiss National Science Foundation (SNSF)*, *German Science Foundation (DFG)*, *Italian Ministry of Economic Development (MISE)*.
- 2001-present, **Reviewer** for international journals: *Journal of Geophysical Research*, *Radio Science (American Geophysical Union)*, *Atmospheric Sciences (Elsevier)*, *Transaction on Geoscience and Remote Sensing*, *Geoscience and Remote Sensing Letters (Institute of Electrical and Electronics Engineers)*, *Journal of Atmospheric and Oceanic Technology*, *Journal of Applied Meteorology and Climatology*, *AMS Meteorological Monograph (American Meteorological Society)*, *Annales Geophysicae*, *Atmospheric Measurement Techniques (European Geosciences Union)*.

INTERNATIONAL MEMBERSHIPS

- 2007-present: **Life Member** of **European Geophysical Union (EGU)**, Member 2007-2011; Complementary Member 2012-2014; Regular Member 2016; Life Member 2017-present)
- 2006 - present: Affiliate Member of the **Center for Environmental Technology (CET)**, Department of Electrical and Computer Engineering, University of Colorado, Boulder, CO, USA
- 1999 - 2005: Affiliate **National Oceanic and Atmospheric Administration (NOAA)** Environmental Technology Laboratory (ETL), Boulder, CO, USA

TEACHING EXPERIENCES

- 2016 - present, **Professor** of *Remote Sensing*, Department of Information Engineering and Mathematics Sciences, University of L'Aquila, Italy.
- 2013, November, **Lecturer** of *Techniques for Atmospheric Remote Sensing* within the course in *Expert of information technologies for the environmental monitoring*, Fondazione Archè, Potenza, Italy.
- 2013, 23-26 September, **Invited lecturer** at the 1st Summer school of the EU-funded network *Initial Training for atmospheric Remote Sensing (ITARS)* entitled "Aerosol Remote Sensing, Processes & Applications".
- 2011, 18-24 September, **Tutor** for the *Remote Sensing Seminar*, Brienza, Italy. *Lecturers*: Prof. Paul Menzel (University of Wisconsin, USA).
- 2011, October, **Lecturer** of *Techniques for Atmospheric Remote Sensing* within the course in *Expert of information technologies for the environmental monitoring*, Fondazione Archè, Potenza, Italy.
- 2008-2010, **Professor** of *Remote Sensing of the Atmosphere*, Physics and Environmental Science Department, University of L'Aquila, Italy.
- 2006, October, **Lecturer** of *Techniques for Atmospheric Remote Sensing* within the course in *ICT methods and tools for the Earth observation and the environmental monitoring*, Fondazione Archè, Potenza, Italy.
- 2006, June, **Tutor** for the *Remote Sensing Seminar*, Ostuni, Italy. *Lecturers*: Prof. Paul Menzel, Paolo Antonelli (University of Wisconsin, USA).
- 2004, **Lecturer** of *Introduction to the Satellite Remote Sensing* within the course in *Risk Prevention Engineering*, University of L'Aquila, Italy.
- 2004, **Lecturer** of *Techniques for Satellite Atmospheric Sounding* within the course in *Methods and Techniques for hydrometeorology and Earth observation*, Consorzio per lo Sviluppo dei Distretti Industriali per le Osservazioni della Terra (COSOT), Potenza, Italy.
- 2003, **Lecturer** of *Ground- and Satellite-based Passive Remote Sensing of the Atmosphere* within the course in *Natural Risk Management and Civil Protection*, Consorzio Didattico per gli Ecosistemi Montani e Marginali (CODEMM), L'Aquila, Italy.

- 2002, **Lecturer** of *Microwave Remote Sensing* within the course in *Ground-based remote sensing for the detection of aviation hazards*, Ente Nazionale per l'Assistenza al Volo (ENAV), L'Aquila, Italy.
- 2002-2005, **Assistant Professor** of *Remote Sensing of the Atmosphere*, Environmental Science Department, University of L'Aquila, Italy.

PARTECIPATION TO FUNDED PROJECTS

- Leader of Task 2.1.2 of the EU Horizon 2020 Project GAIA-CLIM (2015-2017)
- National delegate and Grant Holder for the COST action ES1303 *Towards operational ground based profiling with ceilometers, doppler lidars and microwave radiometers for improving weather forecasts* (TOPROF) (2013-2017).
- National delegate and Grant Holder for the COST action ES0702 *European Ground-Based Observations of Essential Variables for Climate and Operational Meteorology* (EG-CLIMET) (2008-2012).
- Co-Investigator of *Evolution of Radio Occultation Sounding of the Atmosphere (ROSA)*, phase-A study founded by the *Italian Space Agency (ASI)*.
- Co-Investigator of *Micro-satellite FLOWer Constellation of Milliwave RADiometers for Meteorology and Climate applications* (FLORAD), phase-A study founded by the *Italian Space Agency (ASI)*.
- Co-Investigator of *Mitigation of Electromagnetic Transmission errors induced by Atmospheric Water Vapour Effects* (METAWAVE), funded by *European Space Agency (ESA)*.
- Co-Principal Investigator of *Microwave and Millimeter-Wave Radiometric Studies of Temperature, Water Vapor, and Clouds*, funded by the United States Department of Energy Atmospheric Radiation Measurement (ARM) Program (PI: Dr. E. R. Westwater, NOAA/ETL).
- Investigator for national projects funded by the Italian Ministry of Education, University and Research (MIUR), and the National Research Center (CNR).

AWARDS

- 2008, *Fondazione Ugo Bordoni Award* in memory of Prof. Giovanni D'Auria for the Best Paper Concerning Atmospheric Topics at the 10th Specialist on Microwave Radiometry and Remote Sensing 2008.
- 2008, *Best Oral Award* (as co-Author), for "InSar, GPS data and high resolution simulations for studying the water vapor distribution in the urban area of Rome: A case study" by Pichelli E., R. Ferretti, D. Perissin, P. Basili, N. Pierdicca, D. Cimini, M. Montopoli and F.S. Marzano, at the 10th EGU-Plinius Conference on Mediterranean Storms, Cyprus, 22-24 Sept. 2008.
- 2004, Visiting Fellowship, Cooperative Institute for Research in Environmental Sciences (CIRES), University of Colorado, CO, USA
- 2001, Best student at the Professional School for *Environmental Sensor Technology Expert*.
- 1998, *Lauream Magna Cum Laude*.

RESEARCH INTERESTS

- Remote sensing of the Earth and the Atmosphere
- Infrared and Microwave Radiative Transfer Models
- Energy Budget and Climate
- Field Experiments

LANGUAGES

- Italian (native)
- English (fluent)
- Spanish (beginner)

CONFERENCE ORGANIZATION

- 2017, Co-convener Session OSA1.12 Ground-based profiling networks for improving weather forecasts, **European Meteorological Society General Assembly**, 3-7 Sept, Dublin, Ireland.
- 2017, Honorary Chair, **10th International Symposium on Tropospheric Profiling**, May 30-Jun 2, Fort Collins, USA
- 2016-present, Co-convener Session ASI.7/GI2.10 Atmospheric applications in microwave radiometry, **European Geophysical Union General Assembly**, Wien, Austria.
- 2012, 3-7 September, **9th International Symposium on Tropospheric Profiling**, L'Aquila, Italy
- 2008, 22-26 September, **International Summer School on Atmospheric and Oceanic Sciences**, L'Aquila, Italy

- 2007, 3-7 September, *International Summer School on Atmospheric and Oceanic Sciences*, L'Aquila, Italy
- 2007, 27 July, *Workshop on Climate changes and protected areas*, L'Aquila, Italy
- 2006, 4-10 October, *15th International TOVS Study Conference*, Maratea, Italy

SELECTED INTERNATIONAL ORAL PRESENTATIONS

- 2016, November, *Precipitation estimation from satellite*, AdriaRadNet Training School, Tirana, Albania, (**invited seminar**)
- 2014, September, *Microwave radiometry for cloud liquid water path retrieval*, ITARS Summer School, Jülich, Germany (**invited seminar**)
- 2013, September, *An introduction to atmospheric remote sensing with MicroWave radiometry*, ITARS Summer School, Bucharest, Romania (**invited seminar**)
- 2012, April, *Application of ground-based microwave radiometers to operational meteorology: from IDVAR to networking*, Institute of Applied Physics, University of Bern, CH (**invited seminar**).
- 2011, April, *Passive thermodynamic profiling by ground-based microwave radiometers*, Thermodynamic Profiling Technology Workshop, Boulder, CO, USA, (**invited overview**).
- 2010, November, *Introduction to Atmospheric Profiling with IDVAR*, Thermodynamic and Liquid Profiling Workshop, Beijing, China (**invited seminar**).
- 2006, March, *Ground-based millimeter- and submillimeter-wave observations of the Arctic atmosphere*, Specialist Meeting on Microwave Remote Sensing, San Juan, Puerto Rico (**invited paper**)
- 2004, April, *Recent developments in ground-based remote sensing of water vapor*, NASA Goddard Space Flight Center, Greenbelt, Maryland, USA (**invited seminar**)
- 2004, February, *Comparison of microwave absorption models for climatology in Payerne*, TUC Experiment expert meeting, Payerne, Switzerland (**invited talk**)

OTHER INTERESTS

- First and foremost: my two kids
- Ecology and sustainable development
- Travelling
- Reading books and artistic comics
- Playing volley, soccer, beach tennis

BIBLIOMETRY

ISI ResearchID: <http://www.researcherid.com/rid/M-8707-2013>

H-index=18; 77 documents; 900 total number of citations.

Scopus: <http://www.scopus.com/authid/detail.url?authorId=7003995144&origin=resultslist>

H-index=18; 99 documents; 1063 total number of citations.

Google Scholar: <http://scholar.google.it/citations?user=RhP7yXsAAAAJ>

H-index=23; 194 documents; 1692 total number of citations.

PUBLICATIONS ON INTERNATIONAL PEER-REVIEWED JOURNALS

- 1) De Angelis, F., **Cimini, D.**, Löhnert, U., Caumont, O., Haeefe, A., Pospichal, B., Martinet, P., Navas-Guzmán, F., Klein-Baltink, H., Dupont, J.-C., and Hocking, J.: Long-term observations minus background monitoring of ground-based brightness temperatures from a microwave radiometer network, *Atmos. Meas. Tech.*, 10, 3947-3961, <https://doi.org/10.5194/amt-10-3947-2017>, 2017. Online: <https://www.atmos-meas-tech.net/10/3947/2017/>
- 2) Martinet, P., **Cimini, D.**, De Angelis, F., Canut, G., Unger, V., Guillot, R., Tzanos, D., and Paci, A.: Combining ground-based microwave radiometer and the AROME convective scale model through 1DVAR retrievals in complex terrain: an Alpine valley case study, *Atmos. Meas. Tech.*, 10, 3385-3402, <https://doi.org/10.5194/amt-10-3385-2017>, 2017. Online: <https://www.atmos-meas-tech.net/10/3385/2017/>
- 3) Romano, F.; **Cimini, D.**; Nilo, S.T.; Di Paola, F.; Ricciardelli, E.; Ripepi, E.; Viggiano, M. The Role of Emissivity in the Detection of Arctic Night Clouds. *Remote Sens.* 9, 406, 2017.
- 4) De Angelis, F., **Cimini, D.**, Hocking, J., Martinet, P., and Kneifel, S.: RTTOV-gb – adapting the fast radiative transfer model RTTOV for the assimilation of ground-based microwave radiometer observations, *Geosci. Model Dev.*, 9, 2721-2739, doi:10.5194/gmd-9-2721-2016, Online: <http://www.geosci-model-dev.net/9/2721/2016/>, 2016.
- 5) Caumont O., **D. Cimini**, U. Löhnert, L. Alados-Arboledas, R. Bleisch, F. Buffa, M. E. Ferrario, A. Haeefe, T. Huet, F. Madonna, G. Pace, Assimilation of humidity and temperature observations retrieved from ground-based microwave radiometers into a convective-scale model, *Quart. Jour. Roy. Met. Soc.*, doi:10.1002/qj.2860, 2016.
- 6) Bodeker G.E., S. Bojinski, **D. Cimini**, R.J. Dirksen, M. Haeffelin, J.W. Hannigan, D. Hurst, F. Madonna, M. Maturilli, A.C. Mikalsen, R. Philipona, T. Reale, D.J. Seidel, D.G.H. Tan, P.W. Thorne, H. Vömel, J. Wang, Reference upper-air observations for climate: From concept to reality, *Bull. Amer. Meteor. Soc.*, doi: 10.1175/BAMS-D-14-00072.1, March, 2015.
- 7) Illingworth, A., **D. Cimini**, C. Gaffard, M. Haeffelin, V. Lehmann, U. Loehnert, E. O'Connor, D. Ruffieux, Exploiting Existing Ground-Based Remote Sensing Networks To Improve High Resolution Weather Forecasts, *Bull. Amer. Meteor. Soc.* doi: 10.1175/BAMS-D-13-00283.1, February, 2015.
- 8) **Cimini, D.**, Nelson, M., Güldner, J., and Ware, R.: Forecast indices from a ground-based microwave radiometer for operational meteorology, *Atmos. Meas. Tech.*, 8, 315-333, doi:10.5194/amt-8-315-2015, 2015.
- 9) Davolio S., R. Ferretti, L. Baldini, M. Casaioli, **D. Cimini**, M. Ferrario, S. Gentile, N. Loglisci, I. Maiello, A. Manzato, S. Mariani, C. Marsigli, F. S. Marzano, M. M. Miglietta, A. Montani, G. Panegrossi, F. Pasi, E. Pichelli, A. Pucillo, A. Zinzi, The role of the Italian scientific community in the first HyMeX SOP: an outstanding multidisciplinary experience, *Met. Zeit.*, DOI: 10.1127/metz/2014/0624, 2015.
- 10) Marzano F. S., L. Mereu, M. Montopoli, **D. Cimini**, and G. Martucci, Volcanic Ash Cloud Observation using Ground-based Ka-band Radar and Near-Infrared Lidar Ceilometer during the Eyjafjallajökull eruption, *ANNALS OF GEOPHYSICS*, doi: 10.4401/ag-6634, 2014.
- 11) Pichelli E., R. Ferretti, **D. Cimini**, G. Panegrossi, D. Perissin, N. Pierdicca, F. Rocca, and B. Rommen, InSAR Water Vapor Data Assimilation into Mesoscale Model MM5: Technique and Pilot Study, *IEEE J. Sel. Topics in Appl. Earth Obs. and Rem. Sens. (JSTARS)*, PP, 99, DOI: 10.1109/JSTARS.2014.2357685, 2014.
- 12) **Cimini, D.**, Rizi, V., Di Girolamo, P., Marzano, F. S., Macke, A., Pappalardo, G., and Richter, A.: Overview: Tropospheric profiling: state of the art and future challenges – introduction to the AMT special issue, *Atmos. Meas. Tech.*, 7, 2981-2986, doi:10.5194/amt-7-2981-2014, 2014.
- 13) Ori D., T. Maestri, R. Rizzi, **D. Cimini**, M. Montopoli, F.S. Marzano, Scattering properties of modeled complex snowflakes and mixed-phase particles at microwave and millimeter frequencies, *Journal of Geophysical Research - Atmospheres*, 119, 9931–9947, doi:10.1002/2014JD021616, 2014.

- 14) Ricciardelli E., **Cimini D.**, Di Paola F., Romano F., and Viggiano M.: A statistical approach for rain intensity differentiation using Meteosat Second Generation–Spinning Enhanced Visible and InfraRed Imager observations, *Hydrol. Earth Syst. Sci.*, 18, 2559-2576, doi:10.5194/hess-18-2559-2014, Online: <http://www.hydrol-earth-syst-sci.net/18/2559/2014/>, 2014.
- 15) Ferretti R., E. Pichelli, S. Gentile, I. Maiello, **D. Cimini**, S. Davolio, M. M. Miglietta, G. Panegrossi, L. Baldini, F. Pasi, F. S. Marzano, A. Zinzi, S. Mariani, M. Casaioli, G. Bartolini, N. Loglisci, A. Montani, C. Marsigli, A. Manzato, A. Pucillo, M. E. Ferrario, V. Colaiuda, and R. Rotunno, Overview of the first HyMeX Special Observation Period over Italy: observations and model results, *Hydrol. Earth Syst. Sci.*, 18, 1953-1977, doi:10.5194/hess-18-1953-2014, Online: www.hydrol-earth-syst-sci.net/18/1953/2014/, 2014.
- 16) Di Paola F., E. Ricciardelli, **D. Cimini**, F. Romano, M. Viggiano, V. Cuomo, Analysis of Catania flash flood case study by using combined Microwave and Infrared technique, *J. Hydrometeorology*, 15, 5, 1989-1998, 2014.
- 17) Montopoli, M., Vulpiani, G., **Cimini, D.**, Picciotti, E., and Marzano, F. S.: Interpretation of observed microwave signatures from ground dual polarization radar and space multi-frequency radiometer for the 2011 Grímsvötn volcanic eruption, *Atmos. Meas. Tech.*, 7, 537-552, doi:10.5194/amt-7-537-2014, 2014.
- 18) Ducrocq V., I. Braud, S. Davolio, R. Ferretti, C. Flamant, A. Jansa, N. Kalthoff, E. Richard, I. Taupier-Letage, P.-A. Ayrat, S. Belamari, A. Berne, M. Borgia, B. Boudevillain, O. Bock, J.-L. Boichard, M.-N. Bouin, O. Bousquet, C. Bouvier, J. Chiggiato, **D. Cimini**, U. Corsmeier, L. Coppola, P. Cocquerez, E. Defer, J. Delanoë, G. Delrieu, P. Di Girolamo, A. Doerenbecher, P. Drobinski, Y. Dufournet, N. Fourrié, J. Gourley, L. Labatut, D. Lambert, J. Le Coz, F. Marzano, A. Montani, M. Nuret, K. Ramage, B. Rison, O. Roussot, F. Said, A. Schwarzenboeck, P. Testor, J. Van Baelen, B. Vincendon, M. Aran, J. Tamayo, HyMeX-SOP1, the field campaign dedicated to heavy precipitation and flash-flooding in Northwestern Mediterranean, *Bull. Americ. Met. Soc.*, doi:10.1175/BAMS-D-12-00244.1, 2013.
- 19) **Cimini D.**, F. Romano, E. Ricciardelli, F. Di Paola, M. Viggiano, F. S. Marzano, V. Colaiuda, E. Picciotti, G. Vulpiani, and V. Cuomo, Validation of satellite OPEMW precipitation product with ground-based weather radar and rain gauge networks, *Atmos. Meas. Tech.*, 6, 3181-3196, doi:10.5194/amt-6-3181-2013, Online: <http://www.atmos-meas-tech.net/6/3181/2013/>, 2013.
- 20) **Cimini, D.**, De Angelis, F., Dupont, J.-C., Pal, S., and Haeffelin, M., Mixing layer height retrievals by multichannel microwave radiometer observations, *Atmos. Meas. Tech.*, 6, 2941-2951, doi: 10.5194/amt-6-2941-2013, Online: <http://www.atmos-meas-tech.net/6/2941/2013/>, 2013.
- 21) Ware R., **D. Cimini**, G. Giuliani, S. Albers, S. Koch, M. Nelson, and P. Joe, Thermodynamic and Liquid Profiling during the 2010 Winter Olympics, *Atmospheric Research*, 132-133, pp. 278-290, DOI: 10.1016/j.atmosres.2013.05.019, 2013.
- 22) Montopoli M., **D. Cimini**, M. Lamantea, M. Herzog, H. F. Graf, and F. S. Marzano, Microwave radiometric remote sensing of volcanic ash clouds from space: model and data analysis, *IEEE Transactions on Geoscience and Remote Sensing*, 51 (9), 4678-4691, doi:10.1109/TGRS.2013.2260343, 2013.
- 23) Romano F., Ricciardelli E., **Cimini D.**, Di Paola F. and Viggiano M., Dust Detection and Optical Depth Retrieval using MSG SEVIRI data, *Atmosphere*, 4(1), 35-47, doi:10.3390/atmos4010035, 2013.
- 24) Marzano F. S., M. Lamantea, M. Montopoli, M. Herzog, H. Graf, **D. Cimini**, Microwave remote sensing of the 2011 Plinian eruption of the Grímsvötn Icelandic volcano, *Remote Sensing of Environment*, 129, 168-184, DOI: 10.1016/j.rse.2012.11.005, 2013.
- 25) Bonafoni S., A. Mazzoni, **D. Cimini**, M. Montopoli, N. Pierdicca, P. Basili, P. Ciotti and G. Carlesimo, Assessment of water vapor retrievals from a GPS receiver network, *GPS Solutions*, Earth and Environmental Science, Springer, ISSN: 1080-5370, doi: 10.1007/s10291-012-0293-5, September 2012.
- 26) **Cimini D.**, N. Pierdicca, E. Pichelli, R. Ferretti, V. Mattioli, S. Bonafoni, M. Montopoli, and D. Perissin, On the accuracy of integrated water vapor observations and the potential for mitigating electromagnetic path delay error in InSAR, *Atmos. Meas. Tech.*, 5, 1015-1030, doi:10.5194/amt-5-1015-2012, Online: www.atmos-meas-tech.net/5/1015/2012/, 2012.
- 27) **Cimini D.**, E. Campos, R. Ware, S. Albers, G. Giuliani, J. Oreamuno, P. Joe, S. Koch, S. Cober, and E. Westwater, Thermodynamic Atmospheric Profiling during the 2010 Winter Olympics Using Ground-based Microwave Radiometry, *IEEE Transactions on Geoscience and Remote Sensing*, V. 49, 12, DOI 10.1109/TGRS.2011.2154337, Dec. 2011.
- 28) Sahoo S., S. C. Reising, S. Padmanabhan, J. Vivekanandan, F. Iturbide-Sanchez, N. Pierdicca, E. Pichelli, and **D. Cimini**, 3-D Humidity Retrieval using a Network of Compact Microwave Radiometers to Correct for Variations in Wet Tropospheric Path Delay in Spaceborne Interferometric SAR Imagery, *IEEE Transactions on Geoscience and Remote Sensing*, V. 49, 9, DOI: 10.1109/TGRS.2011.2119400, Sep. 2011.

- 29) Marzano, F. S. and **D. Cimini**, Flower elliptical-orbit constellation exploiting millimetre-wave radiometry and radio occultation for meteo-climatological applications, *Adv. Geosci.*, 8, 1–11, 2010
- 30) Marzano, F. S., **Cimini D.**, Montopoli, M., Investigating precipitation microphysics using ground-based microwave remote sensors and disdrometer data, *Atmospheric Research*, doi: 10.1016/j.atmosres.2010.03.019, Vol. 97, 583-600, 2010.
- 31) Marzano F., **Cimini D.**, A. Memmo, M. Montopoli, T. Rossi, M. De Sanctis, M. Lucente, D. Mortari, and S. Di Michele, Potential of Elliptical Flower Constellations for High-repetition Millimeter-wave Passive Remote Sensing of Precipitating Clouds, *Journal of Applied Meteorology and Climate*, Vol. 47, 7, 1454-1476, 2010.
- 32) Pichelli E., R. Ferretti, **D. Cimini**, D. Perissin, M. Montopoli, F.S. Marzano, N. Pierdicca, High resolution simulations and InSar data for studying the water vapor distribution in the urban area of Rome, *Natural Hazards and Earth System Science*, Vol. 10, 1, 121-132, 2010.
- 33) **Cimini D.**, E. R. Westwater, and A. J. Gasiewski, Temperature and humidity profiling in the Arctic using millimeter-wave radiometry and 1DVAR, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 48, 3, 1381-1388, 10.1109/TGRS.2009.2030500, 2010.
- 34) **Cimini D.**, F. Nasir, F. Consalvi, E. Westwater, Ground-based millimeter and submillimeter-wave radiometry for the observation of the Arctic atmosphere, *Italian Journal of Remote Sensing*, Vol. 41, 3, 63-71, 2009.
- 35) **Cimini D.**, F. Nasir, E.R. Westwater, V. H. Payne, D. D. Turner, E. J. Mlawer, M. L. Exner, and M. Cadeddu, Comparison of ground-based millimeter-wave observations in the Arctic winter, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 47, 9, 3098-3106, September 2009.
- 36) F. S. Marzano, **D. Cimini**, A. Memmo, M. Montopoli, T. Rossi, M. De Sanctis, M. Lucente, D. Mortari, and S. Di Michele, Flower Constellation of Millimeter-wave Radiometers for Tropospheric Monitoring at Pseudo-geostationary Scale, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 47, 9, 3107-3122, September 2009.
- 37) Knupp K. R., R. Ware, **D. Cimini**, F. Vandenberghe, J. Vivekanandan, E. Westwater, T. Coleman, and D Phillips, Ground-based Passive Microwave Profiling during Dynamic Weather Conditions, *Journal of Atmospheric and Oceanic Technology*, 26, 1057-1073, 2009.
- 38) Fiorucci I., G. Muscari, C. Bianchi, P. Di Girolamo, F. Esposito, D. Summa, G. Bianchini, L. Palchetti, M. Cacciani, T. Di Iorio, G. Pavese, **D. Cimini**, and R. L. de Zafra, Validation of precipitable water vapor measurements obtained by millimeter-wave spectroscopy, *Journal of Geophysical Research*, Vol. 113, D14314, doi:10.1029/2008JD009831, 2008.
- 39) Mattioli V., E. R. Westwater, **D. Cimini**, A.J.Gasiewski, M. Klein, V.Y. Leuski, Microwave and Millimeter-wave Radiometric and Radiosonde Observations in an Arctic Environment, *Journal of Atmospheric and Oceanic Technology*, Vol. 25, 10, 1768-1777, October, 2008.
- 40) Faccani C., **D. Cimini**, F. S. Marzano, and R. Ferretti, Three-dimensional variational assimilation of Special Sensor Microwave/Imager data into a mesoscale weather prediction model: a case study, *Quarterly Journal of Royal Meteorological Society*, 133, 1295-1307, 2007.
- 41) **Cimini, D.**, E. R. Westwater, A. J. Gasiewski, M. Klein, V. Leusky, and J. Liljegren, Ground-based millimeter- and submillimeter-wave observations of low vapor and liquid water contents, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 45, No. 7, pp. 2169-2180, July 2007.
- 42) **Cimini, D.**, E. R. Westwater, A. J. Gasiewski, M. Klein, V. Leusky, and S. Dowlatshahi, The Ground-based Scanning Radiometer: A Powerful Tool for Study of the Arctic Atmosphere, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 45, No. 9, pp. 2759-2777, September 2007.
- 43) Romano F., **D. Cimini**, R. Rizzi, V. Cuomo, Multilayered cloud parameters retrievals from combined infrared and microwave satellite observations, *Journal of Geophysical Research*, 112, D08210, doi:10.1029/2006JD007745, 2007.
- 44) Mattioli, V., E. R. Westwater, **D. Cimini**, J. S. Liljegren, B. M. Lesht, S. I. Gutman, and F. J. Schmidlin Analysis of Radiosonde and Ground-based Remotely Sensed PWV data from the 2004 North Slope of Alaska Arctic Winter Radiometric Experiment, *Journal of Atmospheric and Oceanic Technology*, Vol. 24, No. 3, 415–431, DOI: 10.1175/JTECH1982.12006, March, 2007.
- 45) **Cimini, D.**, T. J. Hewison, L. Martin, Comparison of brightness temperatures observed from ground-based microwave radiometers during TUC, *Meteorologische Zeitschrift*, Vol.15, No.1, 2006, pp.19-25, 2006.
- 46) Hewison T. J., **D. Cimini**, L. Martin, C. Gaffard and J. Nash, Validating clear air absorption model using ground-based microwave radiometers and vice-versa, *Meteorologische Zeitschrift*, Vol.15, No.1, 27-36, 2006.
- 47) **Cimini, D.**, T. J. Hewison, L. Martin, J. Güldner, C. Gaffard and F. S. Marzano, Temperature and humidity profile retrievals from ground-based microwave radiometers during TUC, *Meteorologische Zeitschrift*, Vol. 15, No. 1, 45-56, 2006.

- 48) Marzano, F.S., **D. Cimini**, E. Coppola, M. Verdecchia, V. Levizzani, F. Tapiador, and J.F. Turk, Satellite radiometric remote sensing of rainfall fields: multi-sensor retrieval techniques at geostationary scale, *Advances in Geosciences*, ISSN: 1680-7359, Vol. 2, pp. 267-272, doi:10.5194/adgeo-2-267-2005, 2005.
- 49) Marzano, F.S., **D. Cimini**, and R. Ware, Monitoring of rainfall by ground-based passive microwave systems: models, measurements, and applications, *Advances in Geosciences*, ISSN: 1680-7359, Vol. 2, pp. 259-265, doi:10.5194/adgeo-2-259-2005, 2005.
- 50) Faccani, C., **D. Cimini**, R. Ferretti, F. S. Marzano, and A. C. Taramasso, 3DVAR assimilation of SSM/I data for the IOP2b MAP case, *Advances in Geosciences*, ISSN: 1680-7359, Vol. 2, pp. 229-235, doi:10.5194/adgeo-2-229-2005, 2005.
- 51) Ferretti, R., C. Faccani, **D. Cimini**, F. S. Marzano, A. Memmo, L. Cucurull, and R. Pacione, Simulations of deep convection in the Mediterranean area using 3DVAR of conventional and non-conventional data, *Advances in Geosciences*, ISSN: 1680-7359, Vol. 2, pp. 65-71, doi:10.5194/adgeo-2-65-2005, 2005.
- 52) Bianco, L., **D. Cimini**, F. S. Marzano, and R. Ware, Combining Microwave Radiometer and Wind Profiler Radar Measurements for High-Resolution Atmospheric Humidity Profiling, *Journal of Atmospheric and Oceanic Technology*, Vol. 22, pp. 949-965, July 2005.
- 53) Marzano F. S., **D. Cimini**, P. Ciotti, and R. Ware: Modeling and Measurement of Rainfall by Ground-based Multispectral Microwave Radiometry, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 43, n. 5, pp. 1000-1011, May 2005.
- 54) Memmo, A., E. Fionda, T. Paolucci, **D. Cimini**, R. Ferretti, S. Bonafoni, and P. Ciotti: Comparison of MM5 Integrated Water Vapor with Microwave Radiometer, GPS, and Radiosonde Measurements, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 43, n. 5, pp. 1050-1058, May 2005.
- 55) Racette P., E. R. Westwater, Y. Han, A. Gasiewski, M. Klein, **D. Cimini**, W. Manning, E. Kim, J. Wang, and P. Kiedron: Measuring Low Amounts of Precipitable Water Vapor Using Millimeter-wave Radiometry, *Journal of Atmospheric and Oceanic Technology*, Vol. 22, 317-337, April 2005.
- 56) Marzano, F. S., M. Palmacci, **D. Cimini**, G. Giuliani and J. F. Turk: Multivariate Statistical Integration of Satellite Infrared and Microwave Radiometric Measurements for Rainfall Retrieval at the Geostationary Scale, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 42, n. 5, pp. 1018-1032, 2004.
- 57) **Cimini, D.**, E. R. Westwater, Y. Han, and S. J. Keihm: Accuracy of Ground-based Microwave Radiometer and Balloon-Borne Measurements During WVIOP2000 Field Experiment, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 41, n. 11, pp. 2605-2615, 2003.
- 58) **Cimini, D.**, J. A. Shaw, Y. Han, E. R. Westwater, V. Irisov, V. Leuski, and J. H. Churnside: Air temperature profile and air-sea temperature difference measurements by infrared and microwave scanning radiometers, *Radio Science*, Vol. 38, n. 3, 8045, 2003.
- 59) Westwater, E. R., B. B. Stankov, **D. Cimini**, Y. Han, J. A. Shaw, B. M. Lesht, and C. N. Long: Radiosonde Humidity Soundings and Microwave Radiometers during Nauru99, *Journal of Atmospheric and Oceanic Technology*, Vol. 20, n. 7, pp.953-971, 2003.
- 60) Shaw, J. A., **D. Cimini**, E. R. Westwater, Y. Han, H. Zorn, and J. H. Churnside, Scanning Infrared Radiometer for Measuring Air-Sea Temperature Difference, *Applied Optics*, ISSN: 0003-6935, Vol.40, n. 27, pp. 4807-4815, 2001.

PUBLICATIONS ON INTERNATIONAL REPORTS

- 1) Bodeker G., A. Mikalsen, X. Calbet, M. Kurylo, W. Lahoz, K. Rosenlof, T. August, B. Bell, S. Bojinski, B. Bojkov, A. Charlton-Perez, **D. Cimini**, B. Demoz, R. Dirksen, T. Hewison, D. Hurst, A. Illingworth, P. Keckhut, R. Kotamarthi, T. Leblanc, U. Löhnert, C. Long, F. Madonna, G. Pappalardo, T. Peter, T. Reale, C. Schreck, M. Schröder, D. Seidel, M. Sommer, D. Tan, A. Thompson, P. Thorne, H. Vömel, J. Wang, E. Weatherhead, D. Whiteman, GRUAN-RP-4: Outcomes of the GRUAN Network Expansion Workshop, GRUAN-RP-4. Online: <http://www.dwd.de/bvbw/generator/DWDWWW/Content/Projekte/Gruan/Downloads/documents/gruan-rp-4,templateId=raw,property=publicationFile.pdf/gruan-rp-4.pdf>, 2014.
- 2) Illingworth, A.J., Ruffieux, D., **Cimini, D.**, Löhnert, U., Haffelin, M., and Lehmann, V. (Eds.): COST Action ES0702 EG-CLIMET – Final Report, doi:10.12898/ES0702FR, 2013, Online: <http://doi.org/10.12898/ES0702FR>, 2013.
- 3) Mattioli, V., Fionda, E., Ciotti, P., Crewell, S., Löhnert, U., **Cimini, D.**, and Marzano, F.: Handbook of measurements, COST Action 0802 Final Report, Ref321994003, 2013.
- 4) Report on U.S./European Workshop on Climate Change Challenges and Observations, prepared by the Climate and Environmental Sciences Division within the U.S. Department of Energy Office of Science, Office of

Biological and Environmental Research, *DOE/SC-0154*, 33pp. Online:

http://science.energy.gov/~media/ber/pdf/CESD_EUworkshop_report.pdf, 2013.

- 5) Hoff, R.M., R.M. Hardesty, F. Carr, T. Weckwerth, S. Koch, A. Benedetti, S. Crewell, **D. Cimini**, D. Turner, W. Feltz, B. Demoz, V. Wulfmeyer, D. Sisterson, T. Ackerman, F. Fabry, and K. Knupp: Thermodynamic Profiling Technologies Workshop report to the National Science Foundation and the National Weather Service. *NCAR Technical Note NCAR/TN-488+STR*, 80 pp, DOI: 10.5065/D6SQ8XCF, 2012. Online at: <http://nldr.library.ucar.edu/repository/assets/technotes/TECH-NOTE-000-000-000-853.pdf>

PUBLICATIONS SUBMITTED TO INTERNATIONAL PEER-REVIEWED JOURNALS

- 1) Marzano F. S., L. Mereu, A. Kylling, M. Montopoli, D. Cimini, L. Merucci, S. Corradini, and D. Stelitano, Multisatellite Multisensor Observations of a SubPlinian Volcanic Eruption: the 2015 Calbuco explosive event in Chile, submitted to *TGRS*, 2017
- 2) De Angelis F., **D. Cimini**, J.-C. Dupont, S. Pal, M. Haeffelin, and M. Verdecchia, A neural network approach to mixing layer height retrievals by multichannel microwave radiometer, to be submitted to *AMTD*, 2017.

BOOKS

- 1) Integrated Ground-Based Observing Systems - Applications for Climate, Meteorology, and Civil Protection, **Cimini D.**, F. S. Marzano, and G. Visconti Eds., Earth and Environmental Science, DOI: 10.1007/978-3-642-12968-1, ISBN 978-3-642-12967-4 (Print) 978-3-642-12968-1 (Online), Springer, Berlin, September, 2010.

PUBLICATIONS ON BOOKS

- 1) **Cimini D.** and E. R. Westwater, Principles of radiometric remote sensing of the troposphere, *Integrated Ground-Based Observing Systems - Applications for Climate, Meteorology, and Civil Protection*, Cimini D., Marzano F. S., and G. Visconti Editors, Springer, 3-32, DOI: 10.1007/978-3-642-12968-1_1, 2010.
- 2) **Cimini D.**, Concepts for integration of measurements and methods, *Integrated Ground-Based Observing Systems - Applications for Climate, Meteorology, and Civil Protection*, Cimini D., Marzano F. S., and G. Visconti Editors, Springer, 129-143, DOI: 10.1007/978-3-642-12968-1_7, 2010.
- 3) Mätzler C., E. R. Westwater, **D. Cimini**, S. Crewell, T. Hewison, J. Güldner, and F. S. Marzano, Ground-Based Microwave Remote Sensing of the Troposphere, *COST Action 720 Final Report, Engelbart, Monna, Nash and Matzler Eds*, ISBN 978-92-898-0050-1, doi:10.2831/10752, pp. 20-60, 2008.
- 4) Bianco L., **D. Cimini**, F. Marzano, R. Ware, An Example of Integration of UHF Wind Profiler and Microwave Radiometer, *COST Action 720 Final Report, Engelbart, Monna, Nash and Matzler Eds*, ISBN 978-92-898-0050-1, doi:10.2831/10752, pp. 213-221, 2008.
- 5) Mätzler C., **D. Cimini**, J. Güldner, and T. Hewison, Integration of Microwave and Thermal-Infrared Radiometers, *COST Action 720 Final Report, Engelbart, Monna, Nash and Matzler Eds*, ISBN 978-92-898-0050-1, doi:10.2831/10752, pp. 222- 227, 2008.
- 6) Marzano, F. S., **D. Cimini**, and F. J. Turk, Multivariate Probability Matching for Microwave Infrared Combined Rainfall Algorithm (MICRA), *Measuring Precipitation from Space*, Levizzani V., P. Bauer, and F. J. Turk Editors, ISBN 978-1-4020-5835-6, Springer Netherlands, March, 2007.

PUBLICATIONS ON NATIONAL ITALIAN JOURNALS

- 1) **Cimini D.**, Le rinnovabili al Simposio di Fisica dell'Atmosfera, *Rinnovabili.it*, Online: <http://www.rinnovabili.it/categoria-eventi/le-rinnovabili-al-simposio-internazionale-di-fisica-dell%E2%80%99atmosfera603837/>, 25 September 2012
- 2) **Cimini D.**, AEROSOL E CAMBIAMENTI CLIMATICI, Un incontro internazionale per chiarire come minuscole particelle impattano il clima, *Regioni e Ambiente*, October 2008
- 3) **Cimini D.**, L'importanza delle Osservazioni da Terra per il Monitoraggio dei Fenomeni Atmosferici, *Regioni e Ambiente*, October 2007
- 4) **Cimini D.**, Campagne Polari per Migliorare i Modelli Climatici, *Regioni e Ambiente*, June 2007
- 5) Westwater E. R., S. Crewell, C. Mätzler, and **D. Cimini**, Principles of Surface-based Microwave and Millimeter wave Radiometric Remote Sensing of the Troposphere, *Quaderni della Società Italiana di Elettromagnetismo*, V. 1, no. 3, 2006.

PUBLICATIONS ON PROCEEDINGS OF CONFERENCES, MEETINGS, WORKSHOPS

- 1) Biscarini M., F. S. Marzano, L. Milani, M. Montopoli, K. De Sanctis, S. Di Fabio, **D. Cimini**, M. Montagna, M. Mercolino, M. Lanucara, Optimizing X and Ka band data volume return for BepiColombo mission using

- Cebreros and Malargüe data and weather-forecast based methodology, ESA International Workshop on Tracking, Telemetry and Command Systems for Space Applications (TTC), 13-16 September, Noordwijk, The Netherlands, 2016.
- 2) Marzano F. S., M. Montopoli, **D. Cimini**, A. Kylling, Spaceborne Microwave And Infrared Radiometric Observations During The Sub-Plinian Eruption Of Calbuco Volcano in 2015, *Proceedings of International Geoscience And Remote Sensing Symposium (IGARSS)*, 2016.
 - 3) **Cimini D.**, S. Di Fabio, E. Picciotti, L. Bernardini, G. Vulpiani, M. Montopoli, F. Romano, and F. S. Marzano: Synergy of ground-based weather radar and geostationary satellite observations for extending rain rate estimation beyond radar coverage, Proc. 8th European Conference on Radar in Meteorology and Hydrology (ERAD), Garmish-Partenkirchen, Germany, 1-5 September, 2014.
 - 4) **Cimini D.**, O. Caumont, U. Löhnert, L. Alados-Arboledas, R. Bleisch, T. Huet, M. E. Ferrario, F. Madonna, A. Haefele, F. Nasir, G. Pace, and R. Posada, A data assimilation experiment of temperature and humidity profiles from an international network of ground-based microwave radiometers, Proc. Microrad 2014, Pasadena, USA, 24-27 March, ISBN: 978-1-4799-4645-7, 978-1-4799-4644-0/14/\$31.00, 2014.
 - 5) Montopoli M., M. Herzog, G. Vulpiani, **D. Cimini**, F.S. Marzano, and H. Graf, Remote Sensing of Volcanic Ash: Synergistic Use of Ash Models and Microwave Observations of the Erupting Plumes, Proc. IGARSS 2013, pp.711-714, doi: 10.1109/IGARSS.2013.6721256, Melbourne, Australia, 21-26 July, 2013.
 - 6) **Cimini D.**, O. Caumont, U. Löhnert, L. Alados-Arboledas, R. Bleisch, J. Fernández-Gálvez, T. Huet, M. E. Ferrario, F. Madonna, O. Maier, F. Nasir, G. Pace, and R. Posada, An International Network of Ground-Based Microwave Radiometers for the Assimilation of Temperature and Humidity Profiles into NWP Models, Proceedings of 9th International Symposium on Tropospheric Profiling, ISBN 978-90-815839-4-7, L'Aquila, ITALY, 3-7 September 2012
 - 7) **Cimini D.**, J.-C. Dupont, M. Haeffelin, F. De Angelis, Retrieval of Mixing Height by Multichannel Microwave Radiometer Observations, Proc. of 9th International Symposium on Tropospheric Profiling, ISBN 978-90-815839-4-7, L'Aquila, ITALY, 3-7 September 2012
 - 8) Madonna F., **Cimini D.**, Demoz B., Güldner J., Gutman S., Kivi R., Pappalardo G., Quantifying the Value of Redundant Observations for GRUAN Operations, Proc. of 9th International Symposium on Tropospheric Profiling, ISBN 978-90-815839-4-7, L'Aquila, ITALY, 3-7 Sept. 2012
 - 9) Montopoli M., M. Herzog, F.S. Marzano, **D. Cimini**, G. Vulpiani, and H. Graf, Interpretation of microwave remote sensing observations of volcanic ash using the ATHAM simulations of the erupting plumes, Proc. of 9th International Symposium on Tropospheric Profiling, ISBN 978-90-815839-4-7, L'Aquila, ITALY, 3-7 Sept. 2012.
 - 10) Marzano F. S., M. Lamantea, M. Montopoli, **D. Cimini**, Radar remote sensing of ash cloud due to the Grímsvötn sub-glacial explosive eruption on 2011, Proc. of IGARSS2012, Munich, Germany, 23-27 July 2012.
 - 11) Montopoli M., F.S. Marzano, M. Lamantea, **D. Cimini**, S. Di Fabio, E. Picciotti, G. Vulpiani, L. Hoffman, M. Herzog, H. Graf, Microwave remote sensing of volcanic ash clouds for aviation hazard and civil protection applications: the 2011 Grímsvötn eruption case study, AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, 11-15 June 2012.
 - 12) Montopoli M., **D. Cimini**, E. Picciotti, S. Di Fabio, F.S. Marzano, Lightning detection and prediction evaluation by microwave ground based radar and infrared space-born integrated approach, Proc. Europ. Radar in Meteor. and Hydr. (ERAD2012), Toulouse, France, 25-29 June 2012.
 - 13) Marzano F.S., M. Lamantea, M. Montopoli, **D. Cimini**, S. Di Fabio, E. Picciotti, G. Vulpiani, M. Herzog, H. Graf, Microwave radar remote sensing of volcanic ash clouds for aviation hazard and civil protection applications: the 2011 Grímsvötn eruption case study, Proc. Europ. Radar in Meteor. and Hydr. (ERAD2012), Toulouse, France, 25-29 June 2012.
 - 14) Ori D., T. Maestri, R. Rizzi, M. Montopoli, **D. Cimini**, F.S. Marzano, A new microphysical characterization of complex snowflakes and mixed-phased particles scattering properties for improving microwave radar retrievals, Proc. Europ. Radar in Meteor. and Hydr. (ERAD2012), Toulouse, France, 25-29 June 2012.
 - 15) **Cimini D.**, J.-C. Dupont, M. Haeffelin, F. De Amicis, Mixing height retrievals by multichannel microwave observations: potential for instrument synergy, Proceedings of the 16th International Symposium for the Advancement of Boundary-Layer Remote Sensing (ISARS), Boulder, Colorado, 5-8 June 2012.
 - 16) Marzano F. S., M. Lamantea, M. Montopoli, **D. Cimini**, M. Herzog, H. Graf, Passive microwave remote sensing of Plinian eruption due to the Grímsvötn Icelandic volcano, Proc. 12th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment (MicroRad), Rome, Italy, March, 2012.

- 17) Mattioli V., Marzano F.S., Crewell S., Carrie G., Löhnert U., **Cimini D.**, Capsoni C., Fionda E., Martellucci A., Instruments, data and techniques for the assessment of the atmospheric noise emission in Satcom ground stations, Proc. 6th Europ. Conf. Anten. Prop. (EuCAP), Pages 76-80, Prague, CZ, 26-30 March, 2012
- 18) Crewell S., F. S. Marzano, V. Mattioli, N. Pierdicca, C. Capsoni, **D. Cimini**, E. Fionda, U. Löhnert, A. Martellucci, Use of Remote Sensing Techniques and Navigation Data for Tropospheric Channel Assessment, *Proceedings of European Conference on Antenna and Propagation (EUCAP)*, 2011
- 19) Pierdicca N., F. Rocca, B. Rommen, P. Basili, S. Bonafoni, **D. Cimini**, P. Ciotti, R. Ferretti, F.S. Marzano, V. Mattioli, M. Montopoli, R. Notarpietro, D. Perissin, E. Pichelli, G. Venuti, Synergic Use of EO, NWP and Ground Based Data for the Characterisation of Water Vapour Field, *Proceedings of European Conference on Antenna and Propagation (EUCAP)*, 2011
- 20) Pierdicca N., F. Rocca, P. Basili, S. Bonafoni, **D. Cimini**, P. Ciotti, R. Ferretti, F.S. Marzano, V. Mattioli, M. Montopoli, R. Notarpietro, D. Perissin, E. Pichelli, B. Rommen, G. Venuti, Synergic Use of EO, NWP and Ground Based Measurements for the Mitigation of Vapour Artefacts in SAR Interferometry, *Proceedings of International Geoscience And Remote Sensing Symposium (IGARSS)*, 2011.
- 21) Pierdicca N., F. Rocca, D. Perissin, R. Ferretti, E. Pichelli, B. Rommen, **D. Cimini**, Numerical weather prediction models and SAR interferometry: synergic use for meteorological and InSAR applications, *Proceedings of SPIE (Intern. Society for Optics and Photonics) Remote Sensing conference*, 2011
- 22) Ricciardelli E., F. Romano, **D. Cimini**, F. S. Marzano, and V. Cuomo, A statistical approach for rainfall confidence estimation using MSG-SEVIRI observations, *EUMETSAT Conference on Meteorological Satellite Applications*, 2010.
- 23) **Cimini D.**, R. Ware, G. Giuliani, J. Oreanuno, E. Campos, S. Albers, P. Joe, S. Koch, S. Cober, Boundary layer thermodynamic profiling using ground-based microwave radiometry and 1DVAR for Nowcasting, *International Symposium on Advancements in Boundary Layer Remote Sensing (ISARS)*, Paris, France, June, 2010.
- 24) **Cimini D.**, E. R. Westwater, and A. J. Gasiewski, Recent progress in temperature and humidity profiling in the Arctic using millimeter-wave radiometry, *Proc. of International Symposium on Tropospheric Profiling (ISTP)*, ISBN 978-90-6960-233-2, Delft, The Netherlands, November, 2009.
- 25) **Cimini D.**, N. Pierdicca and the METAWAVE team, Water vapor observations during the METAWAVE campaign for effect mitigation into satellite interferometric SAR imaging, *Proc. of International Symposium on Tropospheric Profiling (ISTP)*, ISBN 978-90-6960-233-2, Delft, The Netherlands, November, 2009.
- 26) Pierdicca, N., Rocca, F., Rommen, B., Basili, P., Bonafoni, S., **Cimini, D.**, Ciotti, P., Consalvi, F., Ferretti, R., Foster, W., Marzano, F.S., Mattioli, V., Mazzoni, A., Montopoli, M., Notarpietro, R., Padmanabhan, S., Perissin, D., Pichelli, E., Reising, S.C., Swaroop, S., Venuti, G., Atmospheric Water Vapor Effects on Spaceborne Interferometric SAR Imaging: Comparison with Ground-based Measurements and Meteorological Model Simulations at Different Scales. *Proceedings of International Geoscience And Remote Sensing Symposium (IGARSS)*, DOI: 10.1109/IGARSS.2009.5417668, 5, 320-323, Cape Town, 12-17 July 2009.
- 27) Pierdicca, N., F. Rocca, P. Basili, S. Bonafoni, **D. Cimini**, et al., Atmospheric water-vapour effects on spaceborne Interferometric SAR imaging: data synergy and comparison with ground-based measurements and meteorological model simulations at urban scale, *Proceedings of EuCAP*, Berlin, Germany, 23-27 March 2009.
- 28) Romano F., **D. Cimini**, E. Di Tomaso, E. Ricciardelli and E. Cuomo, Analysis of Arctic clouds by means of hyper-spectral satellite, *Proceedings of 16th International TOVS Study Conference*, pp.234-241, Angra dos Reis, Brazil, 7-13 May 2008.
- 29) Stallo C., E. Cianca, F. S. Marzano, M. Ruggieri, T. Rossi, M. De Sanctis, M. Lucente, **D. Cimini**, M. Montopoli, A. Memmo, R. Ferretti, D. Mortari, FLORAD MISSION: FLOWER CONSTELLATION OF MICRO-SATELLITES FOR MILLIMETER-WAVE ATMOSPHERIC REMOTE SENSING, 3rd IEEE GOLD REMOTE SENSING Conference, ESA-ESRIN Frascati (Roma), Italy, 22, 23 May 2008
- 30) Westwater E. R., **D. Cimini**, V. Mattioli, D. D. Turner, M. Klein, V. Leuski, A. J. Gasiewski, and M. Exner, Remote Sensing of Water Vapor, Cloud Liquid, and Temperature During RHUBC by Microwave and Millimeter Wave Radiometers, Proceedings of 18th Atmospheric Radiation Measurement (ARM) Science Team Meeting, March, 2008.
- 31) **Cimini D.**, F. Nasir, E. R. Westwater, V. H. Payne, Dave D. Turner, E. J. Mlawer, and M. L. Exner, Comparison of ground-based millimeter-wave observations in the Arctic winter, Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad), 11 - 14 Mar, Firenze, Italy, 2008.
- 32) **Cimini D.**, E. R. Westwater, A. J. Gasiewski, M. Klein, and V. Leuski, Temperature and humidity profiling in the Arctic using millimeter-wave radiometry, Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad), 11 - 14 Mar, Firenze, Italy, 2008.

- 33) Westwater E. R., **Cimini D.**, V. Mattioli, A. J. Gasiewski, M. Klein, V. Leuski, and D. D. Turner, Deployments of Microwave and Millimeterwave Radiometers in the Arctic, Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad), 11 - 14 Mar, Firenze, Italy, 2008.
- 34) Marzano F. S., **D. Cimini**, M. Montopoli, A. Memmo, R. Ferretti, T. Rossi, M. De Sanctis, M. Lucente, D. Mortari, D. Oricchio, S. Varchetta, P. Pavia, A. Nassisi, M. Balduccini, A. Scorzolini, L. Reboa, P. Tozzi, A. Bruno, F. Greco, G. Perrotta, G. Giuliani, R. Giusto and S. Di Michele, FLORAD: Micro-satellite Flower Constellation of Millimeter-wave Radiometers for Atmospheric Remote Sensing, Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad), 11 - 14 Mar, Firenze, Italy, 2008.
- 35) Westwater E. R., **D. Cimini**, M. Klein, V. Leuski, A. J. Gasiewski, and V. Mattioli, Results from the Ground-based Scanning Radiometer's Deployments at the NSA in 2004 and 2007 (RHUBC), Proceedings of 17th Atmospheric Radiation Measurement (ARM) Science Team Meeting, March, 2007.
- 36) **Cimini D.**, F. Romano, E. Ricciardelli, and V. Cuomo, On the role of surface emissivity in polar night-time cloud detection, *Proceedings of 15th International TOVS Study Conference*, pp.580-586, Maratea, Italy, October, 2006.
- 37) Romano F., **D. Cimini**, E. Ricciardelli, and V. Cuomo, Analysis of day- and night-time Arctic clouds by means of hyperspectral infrared and ground-based observations, *Proceedings of 15th International TOVS Study Conference*, pp.49-57, Maratea, Italy, October, 2006.
- 38) Palmer, J. M., **D. Cimini**, F. Romano, and V. Cuomo, Standard back-propagation artificial neural networks for cloud liquid water path retrieval from AMSU-B data, *Proceedings of 15th International TOVS Study Conference*, pp.648-662, Maratea, Italy, October, 2006.
- 39) Westwater, E. R., **D. Cimini**, V. Mattioli, A. J. Gasiewski, M. Klein, V. Leuski, Clear-Air Forward Microwave and Millimeterwave Radiative Transfer Models for Arctic Conditions, *Proceeding of 15th International TOVS Study Conference*, pp.26-34, Maratea, Italy, October, 2006.
- 40) **Cimini D.**, E. R. Westwater, A. J. Gasiewski, M. Klein, V. Leuski, and J. C. Liljegren, Millimeter- and submillimeter-wave Observations of Low Vapor and Liquid Water Amounts in the Arctic Winter, *Proceedings of 16th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March, 2006.
- 41) Westwater, E. R., **D. Cimini**, V. Mattioli, A. J. Gasiewski, M. Klein, V. Leuski, and J. C. Liljegren, The 2004 North Slope of Alaska Arctic Winter Radiometric Experiment: Overview and Recent Results, *Proceedings of 16th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March, 2006.
- 42) **Cimini, D.**, E. R. Westwater, A. J. Gasiewski, M. Klein, V. Leuski, V. Mattioli, S. Dowlatshahi, and J. Liljegren, Ground-Based Millimeter- and Submillimeter-Wave Observations of the Arctic Atmosphere, *Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad)*, 28 Feb - 03 Mar, San Juan, Puerto Rico, pp. 7-81, 2006.
- 43) Westwater, E. R., **D. Cimini**, V. Mattioli, A. J. Gasiewski, M. Klein, V. Leuski, and J. S. Liljegren, The 2004 North Slope Of Alaska Arctic Winter Radiometric Experiment: Overview and Highlights, *Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad)*, 28 Feb - 03 Mar, San Juan, Puerto Rico, 2006.
- 44) **Cimini D.**, E.R. Westwater, V. Mattioli, A.J. Gasiewski, M. Klein, F. Romano, and V. Cuomo, Analysis of radiosonde measurements by ground- and satellite-based simultaneous observations during the Water Vapor IOP 2004 experiment, *Proceeding of 14th International TOVS Study Conference*, May, 2005.
- 45) **Cimini D.**, V. Cuomo, S. Laviola, T. Maestri, P. Mazzetti, S. Nativi, J.M. Palmer, R. Rizzi, and F. Romano, Cloud Parameters from Infrared and Microwave Satellite Measurements, *Proceeding of 14th International TOVS Study Conference*, pp.124-129, May, 2005.
- 46) **Cimini D.**, A.J. Gasiewski, M. Klein, E.R. Westwater, V. Leuski, and S. Dowlatshahi, Ground-Based Scanning Radiometer Measurements During The Water Vapor IOP 2004: A Valuable New Data Set For The Study Of The Arctic Atmosphere, *Proceedings of 15th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March, 2005.
- 47) Mattioli, V., E. R. Westwater, **D. Cimini**, J. S. Liljegren, B. M. Lesht, S. Gutman, and F. Schmidlin, Analysis of Radiosonde and PWV data from the 2004 North Slope of Alaska Arctic Winter Radiometric Experiment, *Proceedings of 15th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March, 2005.
- 48) Westwater, E. R., **D. Cimini**, V. Mattioli, M. Klein, V. Leuski, A. J. Gasiewski, S. Dowlatshahi, J. S. Liljegren, B. M. Lesht, and J. A. Shaw, Microwave and Millimeter Wave Forward Modeling Results from the 2004 North Slope of Alaska Arctic Winter Radiometric Experiment, *Proceedings of 15th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March, 2005.
- 49) Dowlatshahi, S.G., A.J. Gasiewski, T. Uttal, M. Klein, E.R. Westwater, and **D. Cimini**, Detection of Arctic Cloud Ice Properties Using Submillimeter-wave Radiometers, Proc. of the 8th Conference on Polar Meteorology and Oceanography, 85th AMS Annual Meeting, January, 2005.

- 50) Levizzani and the EURAINSAT team, Precipitation estimation: from the RAO to EURAINSAT and beyond, *Proceeding of 2nd MSG-RAO Meeting*, ESA-SP-582, 113-118, Sept. 2004.
- 51) Ware, R., **D. Cimini**, P. Herzegh, F. Marzano, J. Vivekanandan, and E. Westwater, Ground-based Microwave Radiometer Measurements during Precipitation, *Proceedings of Specialist Meeting on Microwave Remote Sensing (Microrad)*, February, 2004.
- 52) Westwater E. R., M. Klein, V. Leuski, A. J. Gasiewski, T. Uttal, D. A. Hazen, **D. Cimini**, V. Mattioli, B. L. Weber, S. Dowlatshahi, J. A. Shaw, J. S. Liljegren, B. M. Lesht, and B. D. Zak, Initial Results from the 2004 North Slope of Alaska Arctic Winter Radiometric Experiment, *Proceedings of the International Geoscience and Remote Sensing Symposium 2004 (IGARSS04)*, Anchorage, AK, USA, 2004
- 53) **Cimini, D.**, E. R. Westwater, R. Ware, S.J. Keihm, Y. Han, F. S. Marzano, and P. Ciotti, Empirical evaluation of four microwave radiative forward models based on ground-based radiometer between 20 and 60 GHz, *Proceedings of 14th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, April, 2004.
- 54) Bianco, L., **D. Cimini**, R. Ware, and F. S. Marzano, Combining microwave radiometer and wind profiler radar measurements to improve accuracy and resolution of atmospheric humidity profiling, *Proceedings of 14th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, April, 2004.
- 55) Westwater E. R., M. Klein, V. Leuski, A. J. Gasiewski, T. Uttal, D. A. Hazen, **D. Cimini**, V. Mattioli, B. L. Weber, S. Dowlatshahi, J. A. Shaw, J. S. Liljegren, B. M. Lesht, and B. D. Zak, The 2004 North Slope of Alaska Arctic Winter Radiometric Experiment, *Proceedings of 14th Atmospheric Radiation Measurement (ARM) Science Team Meeting*, April, 2004
- 56) **Cimini D.**, F. S. Marzano, G. Vulpiani, G. Giuliani, P. P. Alberoni, V. Levizzani, and J. F. Turk, Rainfall mapping by satellite microwave-infrared radiometric data merging: applications to case studies over central Italy, *Proceedings of the 1st ACTIF workshop*, Bologna, Italy, Nov. 2003.
- 57) Marzano F. S., **D. Cimini**, R. Ware, E. Fionda, and Piero Ciotti, Modelling and measurement of rainfall by ground-based multispectral microwave radiometry, *Proceedings of the 1st ACTIF workshop*, Bologna, Italy, Nov. 2003.
- 58) Tomassetti B., E. Coppola, **D. Cimini**, M. Verdecchia, F.S. Marzano, and G. Visconti, Assimilating satellite rainfall estimation into hydrological model for flooding alert mapping, *Proceedings of the 1st ACTIF workshop*, Bologna, Italy, Nov. 2003.
- 59) Bianco, L., **D. Cimini**, R. Ware, and F. S. Marzano, Combining microwave radiometer and wind profiler radar measurements to improve accuracy and resolution of atmospheric humidity profiling, *Proceedings of the International Symposium on Tropospheric Profiling (ISTP2003)*, Leipzig, Germany, 2003.
- 60) **Cimini, D.**, E. R. Westwater, and Y. Han, Theoretical analysis of the frequency allocation of the hinge points around 22.235 GHz, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 61) **Cimini, D.**, E. R. Westwater, S.J. Keihm, Y. Han, F. S. Marzano, and P. Ciotti, Empirical evaluation of four microwave radiative forward models based on ground-based radiometer data near 20 and 30 GHz, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 62) **Cimini D.**, C. Fiorenza, E. Coppola, L. Bernardini, F. S. Marzano, and G. Visconti, Use of second order statistics of observed and synthetic outgoing long-wave radiation spectra datasets for testing Global Circulation Models., *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 63) Bianco, L., **D. Cimini**, R. Ware, and F. S. Marzano, Combining microwave radiometer and wind profiler radar measurements to improve accuracy and resolution of atmospheric humidity profiling, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 64) Marzano F. S., **D. Cimini**, R. Ware, E. Fionda, and P. Ciotti, Characterization of Rainfall Signature of Multispectral Microwave Radiometric Data from Ground, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 65) Westwater, E.R., P. Racette, **D. Cimini**, and Y. Han, Millimeter-wavelength forward-model radiative transfer comparisons based on ground-based observations taken during the 1999 North Slope of Alaska Radiometric Experiment, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 66) Ciotti, P., E. Di Giampaolo, P. Basili, S. Bonafoni, V. Mattioli, R. Biondi, E. Fionda, F. Consalvi, A. Memmo, **D. Cimini**, R. Pacione, and F. Vespe, Validation of Meris Water Vapour in the central Italy by concurrent measurements of Microwave Radiometers and GPS receivers, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.

- 67) Marzano, F. S., M. Palmacci, **D. Cimini**, G. Giuliani, F. Tapiador, and J. F. Turk, Multivariate Probability Matching of Satellite Infrared and Microwave Radiometric Measurements for Rainfall Retrieval at the Geostationary Scale, *Proceedings of the International Geoscience and Remote Sensing Symposium 2003 (IGARSS03)*, Toulouse, France, 2003.
- 68) **Cimini, D.**, E. R. Westwater, and Y. Han, Theoretical analysis of the frequency allocation of the hinge points around 22.235 GHz, *Proceedings of Thirteenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, Broomfield, CO, USA, April 1-4, 2003.
- 69) **Cimini, D.**, E. R. Westwater, S.J. Keihm, Y. Han, F. S. Marzano, and P. Ciotti, Empirical evaluation of four microwave radiative forward models based on ground-based radiometer data near 20 and 30 GHz, *Proceedings of Thirteenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, Broomfield, CO, USA, April 1-4, 2003.
- 70) Westwater, E.R., P. Racette, **D. Cimini**, and Y. Han, Millimeter-wavelength forward-model radiative transfer comparisons based on ground-based observations taken during the 1999 North Slope of Alaska Radiometric Experiment, *Proceedings of Thirteenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, Broomfield, CO, USA, April 1-4, 2003.
- 71) **Cimini D.**, E. R. Westwater, and B.M. Lesht, 2002: Evaluation of recent improvements in humidity sounding by balloon-borne sensors, *Proceedings of the COST720 Workshop*, L'Aquila, June 19-21, 2002.
- 72) **Cimini, D.**, E. R. Westwater, and V. Leusky, 2002: Measurements of atmospheric boundary layer temperature profiles by microwave scanning radiometer, *Proceedings of the COST720 Workshop*, L'Aquila, June 19-21, 2002.
- 73) Marzano, F. S., M. Palmacci, **D. Cimini** and J. F. Turk, 2002: Statistical integration of satellite passive microwave and infrared data for high-temporal sampling retrieval of rainfall, *Proceedings of the International Geoscience and Remote Sensing Symposium 2002 (IGARSS02)*, Toronto, Canada, June 24-28 2002.
- 74) **Cimini, D.**, E. R. Westwater, Y. Han, S. Keihm, 2002: Ground-based microwave radiometer measurements and radiosondes comparisons during the WVIOP2000 field experiment, *Proceedings of the International Geoscience and Remote Sensing Symposium 2002 (IGARSS'2002)*, Toronto, Canada, June 24-28 2002.
- 75) **Cimini, D.**, E. R. Westwater, Y. Han, S. Keihm, 2002: Ground-based microwave radiometer measurements and radiosondes comparisons during the WVIOP2000 field experiment, *Proceedings of Twelfth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, April 8-12, 2002.
- 76) **Cimini, D.**, J. A. Shaw, and E. R. Westwater, 2002, Recent Progress in Retrieving Air Temperature Profiles and Air-Sea Temperature Differences from Infrared and Microwave Scanning Radiometer Data, *Proceedings of Twelfth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, April 8-12, 2002.
- 77) Shaw, J.A., **D. Cimini**, Y. Han, and E. R. Westwater, Air-sea temperatures measured with scanning microwave and infrared radiometers in Nauru'99, *Proceedings of Eleventh Atmospheric Radiation (ARM) Measurement Science Team Meeting*, March 19-23, 2001.
- 78) Westwater, E. R., P. E. Racette, **D. Cimini**, The Arctic Winter Millimeter-Wave Radiometric Experiment: Summary, Conclusion and Recommendations. *Proceedings of Eleventh Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 19-23, 2001.
- 79) Westwater, E. R., Y. Han, **D. Cimini**, B. B. Stankov, J. A. Shaw, and B. M. Lesht, Nauru'99: Scaling of Radiosondes by Microwave Radiometers, *Proceedings of Eleventh Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 19-23, 2001.
- 80) Shaw, J. A., **D. Cimini**, E. R. Westwater, Y. Han, H. Zorn, and J. H. Churnside, Air-sea Temperature Differences Measured with Scanning Radiometers during Nauru99, *Proceedings of the International Geoscience and Remote Sensing Symposium (IGARSS) 2000*, July, 2000.
- 81) Shaw, J. A., J.H. Churnside, E. R. Westwater, Y. Han, V. Irisov, H. Zorn, **D. Cimini**, Microwave and Infrared Scanning Radiometer Measurements of Air-Sea Temperature Difference in the Tropical Western Pacific. *Proceedings of Tenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 14-18, 2000.

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- 1) Adachi, A., Kobayashi, T., Yamauchi, H., and Onogi, S.: Detection of potentially hazardous convective clouds with a dual-polarized C-band radar, *Atmos. Meas. Tech.*, 6, 2741-2760, doi:10.5194/amt-6-2741-2013, 2013. Online: <http://www.atmos-meas-tech.net/6/2741/2013/amt-6-2741-2013.pdf>
- 2) Montopoli M., N. Pierdicca and F. S. Marzano, Spectral downscaling of integrated water vapor fields from satellite infrared observations, *IEEE Trans. Geosci. and Rem. Sens.*, vol. 50, p. 415-428, ISSN: 0196-2892, doi: 10.1109/TGRS.2011.2161996, 2012.

- 3) Martucci G. and C. D. O'Dowd, Ground-based retrieval of continental and marine warm cloud microphysics, Atmos. Meas. Tech., 4, 2749–2765, 2011. Online: <http://www.atmos-meas-tech.net/4/2749/2011/amt-4-2749-2011.pdf>
- 4) Hewison T., Profiling Temperature and Humidity by Ground-based Microwave Radiometers, PhD Thesis, University of Reading, Dept. Meteorology, Sept. 2006

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