

HENRI DIÉMOZ

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PERSONAL INFORMATION

Place and date of birth: Aosta (Italy), 28 December 1979

Citizenship: Italian

Gender: male

Fiscal code: DMZHNR79T28A326P

EDUCATION AND QUALIFICATIONS

Ph.D., Remote sensing, Sapienza – University of Rome, Italy, 2011 – 2014

DISSERTATION: *Improvements to the nitrogen dioxide observations by means of the MKIV Brewer spectrophotometer*

B.Sc. Physics and M.Sc. Atmospheric Physics, Turin University, 1998 – 2003

DISSERTATION: *An experimental and theoretical study on the relation between the ultraviolet solar spectrum and the atmospheric columnar ozone*

110/110 with honours

Scientific High School, Aosta, 1994 – 1998

60/60 with honours

WORK EXPERIENCE

2004 – present. Research Scientist at the Environmental Protection Agency (ARPA) of the Aosta Valley. Head of the Solar and Atmospheric Monitoring unit.

RESEARCH INTERESTS

2015 – present. Lidar ceilometer measurements and aerosol profiles. Participation to the E-PROFILE (European) and Alice-net (Italian) networks.

2013 – present. Infrared radiation at ground and cloud radiative effects.

2012 – present. Aerosol optical properties and solar photometry. Participation to the European SkyRad network.

2011 – present. Nitrogen dioxide retrievals by means of MKIV Brewer spectrophotometers.

2007 – present. Brewer spectrophotometry and ground-based column ozone measurements.

2004 – present. Solar ultraviolet (UV) radiation and radiative transfer models.

Master Thesis / PhD assistant supervisor

- Marinelli, V., 2018
- Romagnolo, A., 2017
- Thomasset, S., 2009
- Gerbore, J., 2008
- Debernardi, I., 2007

Lectures and tutorials at training schools

- 2019.** Public seminar at MSc in Environmental Meteorology, Trento University.
- 2018.** Solar Radiation Based Established Techniques for aTmospheric Observations (SORBETTO) International Summer School, Rome (IT).
- 2017.** 16th WMO-GAW Brewer Operator Course – Asia/Pacific, Sydney (AU).
- 2016.** EUBREWNET COST Action training school, Edinburgh (UK).
- 2014.** EUBREWNET COST Action training school, Tenerife (ES).
- 2013.** Lecture at Scuola superiore di radioprotezione “Carlo Polvani” 49° corso, Ivrea (IT).
- 2011.** Public lecture at the Environmental Protection Agency of Puglia, Bari (IT).
- 2010.** Technical course at the Environmental Protection Agency of Tuscany, Florence (IT).
- 2009.** Public lecture at the National Council of Research, Pisa (IT).
- 2008.** Organisation and lectures at the first national tutorial on UV radiation measurements and modelling, Bologna (IT).
- 2008.** AGIRE POR exchange project on UV radiation, training of technicians from the Environmental Protection Agency of Basilicata, Potenza (IT).

COLLABORATION IN RESEARCH PROGRAMS

- 2017.** TransNational Access (TNA) ACTRIS-2 for the research project “Validation of Skynet Aerosol inversions in comparison to other ground based and airborne retrievals (VASAI)”, Finokalia station (Crete)
- 2016.** Short-term scientific mission at the National Oceanic and Atmospheric Administration (NOAA), Boulder (Colorado, U.S.A.): “Investigation of the optical and instrumental artifacts in the Brewer Umkehr ozone profile retrieval”
- 2015 – present.** Work Group 1 of the COST Action ES1303 “TOPROF – Towards operational ground based profiling with ceilometers, doppler lidars and microwave radiometers for improving weather forecasts”
- 2015.** Short-term scientific mission at Mauna Loa (Hawaii, U.S.A.) Observatory: “An updated zenith sky retrieval algorithm”
- 2014 – 2016.** Research associateship – National Research Council (CNR)
- 2014.** Short-term scientific mission at the Academy of Sciences of Athens: “Aerosol optical depth at 440 nm and nitrogen dioxide column retrievals in the visible by MKIV Brewers”
- 2013 – 2017.** Management Committee of the COST Action ES1207 “A EUropean BREWer NETwork – EUBREWNET”
- 2011 – 2014.** External partner of the European Project JRP ENV03 “Traceability for surface spectral solar ultraviolet radiation” (European Meterology Research Programme 2011 – 2014)
- 2008 – 2009.** Coordinator of the National Work Group for the implementation of an Italian ultraviolet network

- **Diémoz, H.**, Barnaba, F., Magri, T., Pession, G., Dionisi, D., Pittavino, S., Tombolato, I.K.F., Campanelli M., Della Ceca, L.S., Hervo, M., Di Liberto, L., Ferrero, L., and Gobbi, G.P.: *Transport of Po Valley aerosol pollution to the northwestern Alps – Part 1: Phenomenology*, Atmos. Chem. Phys., 19, 3065-3095, <https://doi.org/10.5194/acp-19-3065-2019>, 2019
- Dionisi, D., Barnaba, F., **Diémoz, H.**, Di Liberto, L., and Gobbi, G. P.: *A multi-wavelength numerical model in support to quantitative retrievals of aerosol properties from automated-lidar-ceilometers and test applications for AOT and PM10 estimation*, Atmos. Meas. Tech., 11, 6013-6042, <https://doi.org/10.5194/amt-11-6013-2018>, 2018
- Siani, A.M., Frasca, F., Scarlatti, F., Religi, A., **Diémoz, H.**, Casale, G.R., Pedone, M., Savastiouk, V.: *Examination on total ozone column retrievals by Brewer spectrophotometry using different processing software*, Atmos. Meas. Tech., <https://doi.org/10.5194/amt-11-5105-2018>
- Dionisi, D., Iannarelli, A.M., Scoccione, A., Liberti, G.L., Cacciani, M., Argentini, S., Baldini, L., Barnaba, F., Campanelli, M., Casasanta, G., **Diémoz, H.**, Di Liberto, L., Gobbi, G.P., Petenko, I., Siani, A.M., Von Bismarck, J., Casadio, S.: *Water vapor and aerosol lidar measurements within an atmospheric instrumental super site to study the aerosols and the tropospheric trace gases in Rome*, EPJ Web Conf., 176 (2018) 05050, <https://doi.org/10.1051/epjconf/201817605050>, 2018
- López-Solano, J., Redondas, A., Carlund, T., Rodriguez-Franco, J. J., **Diémoz, H.**, León-Luis, S. F., Hernández-Cruz, B., Guirado-Fuentes, C., Kouremeti, N., Gröbner, J., Kazadzis, S., Carreño, V., Berjón, A., Santana-Díaz, D., Rodríguez-Valido, M., De Bock, V., Moreta, J. R., Rimmer, J., Smedley, A. R. D., Boulkelia, L., Jepsen, N., Eriksen, P., Bais, A. F., Shiroto, V., Vilaplana, J. M., Wilson, K. M., and Karppinen, T.: *Aerosol optical depth in the European Brewer Network*, Atmos. Chem. Phys., 18, 3885-3902, <https://doi.org/10.5194/acp-18-3885-2018>, 2018
- Kazadzis, S., Kouremeti, N., **Diémoz, H.**, Gröbner, J., Forgan, B. W., Campanelli, M., Estellés, V., Lantz, K., Michalsky, J., Carlund, T., Cuevas, E., Toledano, C., Becker, R., Nyeki, S., Kosmopoulos, P. G., Tatsiankou, V., Vuilleumier, L., Denn, F. M., Ohkawara, N., Ijima, O., Goloub, P., Raptis, P. I., Milner, M., Behrens, K., Barreto, A., Martucci, G., Hall, E., Wendell, J., Fabbri, B. E., and Wehrli, C.: *Results from the Fourth WMO Filter Radiometer Comparison for aerosol optical depth measurements*, Atmos. Chem. Phys., 2018, doi: 10.5194/acp-18-3185-2018
- Campanelli, M., Mascitelli, A., Sanò, P., **Diémoz, H.**, Estellés, V., Federico, S., Iannarelli, A. M., Fratarcangeli, F., Mazzoni, A., Realini, E., Crespi, M., Bock, O., Martínez-Lozano, J. A., and Dietrich, S.: *Precipitable water vapor content from ESR/SKYNET Sun-sky radiometers: validation against GNSS/GPS and AERONET over three different sites in Europe*, Atmos. Meas. Tech., 2018, doi: 10.5194/amt-11-81-2018
- Schmalwieser, A.W., Grobner, J., Klotz, B., Blumthaler, M., De Backer, H., Bolsee, D., Werner, R., Tomsic, D., Metelka, L., Eriksen, P., Jepsen, N., Aun, M., Heikkila, A., Duprat, T., Sandmann, H., Weiss, T., Bais, A., Toth, Z., Siani, A.M., Vaccaro, L., **Diémoz, H.**, Lorenzetto, G., Grifoni, D., Zipoli, G., Petkov, B., di Sarra, A.G., Massen, F., Yousif, C., Aculinin, A., den Outer, P., Svendby, T., Dahlback, A., Johnsen, B.J. Byszczuk-Jakubowska, J., Krzyscin, J.W., Henriques, D., Chubarova, N., Kolarz, P., Mijatovic, Z., Pribullova, A., Groselj, D., Bilbao, J., Moreta Gonzalez, J.R., Vilaplana Guerrero, J.M., Serrano, A., Andersson, S., Vuilleumier, L., Webb, A., O' Hagan, J.B.: *UV Index Monitoring in Europe*, Photochem. Photobiol. Sci., 2017, doi: 10.1039/C7PP00178A

- Federico, S., Torcasio, R.C., Sanò, P., Casella, D., Campanelli, M., Meirink, J.F., Wang, P., Vergari, S., **Diémoz, H.**, and Dietrich, S.: *Comparison of hourly surface downwelling solar radiation estimated from MSG–SEVIRI and forecast by the RAMS model with pyranometers over Italy*, Atmos. Meas. Tech., 2017, doi: 10.5194/amt-10-2337-2017
- Zerefos, C. S., Eleftheratos, K., Kapsomenakis, J., Solomos, S., Inness, A., Balis, D., Redondas, A., Eskes, H., Amiridis, V., Repapis, C., Allaart, M., Engelmann, R., Dahlback, A., De Bock, V., **Diémoz, H.**, Eriksen, P., Gröbner, J., Heikkilä, A., Jaroslowski, J., Josefsson, W., Karppinen, T., Köhler, U., Meleti, C., Rimmer, J., Savinykh, V., Shiroto, V., Siani, A. M., Smedley, A. R. D., Stanek, M., and Stübi, R.: *Detecting volcanic sulfur dioxide plumes in the Northern Hemisphere using the Brewer spectrophotometer; other networks, and satellite observations*, Atmos. Chem. Phys., 2017, doi: 10.5194/acp-17-551-2017
- **Diémoz, H.**, Eleftheratos, K., Kazadzis, S., Amiridis, V., Zerefos, C.S.: *Retrieval of aerosol optical depth in the visible range with a Brewer spectrophotometer in Athens*, Atmos. Meas. Tech., 2016, doi:10.5194/amt-9-1871-2016
- Casale G.R., Siani A.M., **Diémoz H.**, Agnesod G., Parisi A.V., Colosimo A.: *Extreme UV index and solar exposures at Plateau Rosà (3500ma.s.l.) in Valle d'Aosta Region, Italy*, Sci Total Environ., 2015, doi: 10.1016/j.scitotenv.2015.01.049
- **Diémoz, H.**, Siani, A.M., Redondas, A., Savastiouk, V., McElroy, C.T., Navarro-Comas, M., Hase, F.: *Improved retrieval of nitrogen dioxide (NO₂) column densities by means of MKIV Brewer spectrophotometers*, Atmos. Meas. Tech., 7, 7367-7396 (2014), doi:10.5194/amt-7-4009-2014
- **Diémoz, H.**, Campanelli, M., Estelles, V.: *One Year of Measurements with a POM-02 Sky Radiometer at an Alpine EuroSkyRad Station*, Journal of the Meteorological Society of Japan, 2014, doi:10.2151/jmsj.2014-A01
- Petkov, B.H., Vitale, V., Tomasi, C., Siani, A.M., Seckmeyer, G., Webb, A., Smedley, A.R.D., Lanconelli, C., Mazzola, M., Lupi, A., Busetto, M., **Diémoz, H.**, Casale, G.R., Goutail, F., Köhler, U., Mendeva, B.T., Werner, R., Josefsson, W., Moore, D., Bartolomé, M.L., Moreta González, J.R., Mišaga, O., Dahlback, A., Toth, Z., Varghese, S., De Backer, H., Stübi, R., Vanicek, K.: *Response of the ozone column over West Europe to the 2011 Arctic springtime ozone depletion event according to ground-based observations*, Atmospheric Environment 85 (2014), doi: 10.1016/j.atmosenv.2013.12.005
- **Diémoz, H.**, Savastiouk, V., Siani, A. M.: *Capability and limitations in measuring atmospheric nitrogen dioxide column amounts by means of the MKIV Brewer spectrophotometers*, "Remote Sensing of Clouds and the Atmosphere XVIII; and Optics in Atmospheric Propagation and Adaptive Systems XVI" (2013), doi: 10.1117/12.2028704
- Siani, A.M., Modesti, S., Casale, G.R., **Diémoz, H.**, Colosimo, A.: *Biologically effective surface UV climatology at Rome and Aosta, Italy*, Radiation Processes in the Atmosphere and Ocean, 903-906 (2013); doi: 10.1063/1.4804917
- **Diémoz, H.**, Egli, L., Gröbner, J., Siani, A.M.: *Solar ultraviolet measurements in Aosta (Italy): an analysis of short- and middle-term spectral variability*, Radiation Processes in the Atmosphere and Ocean, 1531, 856-859 (2013); doi: 10.1063/1.4804905
- Casale, G. R., Siani, A. M., **Diémoz, H.**, Kimlin, M. G., Colosimo, A.: *Applicability of the Polysulphone Horizontal Calibration to Differently Inclined Dosimeters*, Photochem. Photobiol., 88: 207–214 (2012), doi: 10.1111/j.1751-1097.2011.01006.x
- **Diémoz, H.**, Siani, A. M., Casale, G. R., di Sarra, A., Serpillo, B., Petkov, B., Scaglione, S., Bonino, A., Facta, S., Fedele, F., Grifoni, D., Verdi, L., Zipoli, G.: *First national intercomparison of solar ultraviolet radiometers in Italy*, Atmos. Meas. Tech., 4, 1689-1703 (2011), doi:10.5194/amt-4-1689-2011
- Petkov, B.H., Tomasi, C., Vitale, V., di Sarra, A., Bonasoni, P., Lanconelli, C., Benedetti, E., Sferlazzo, D., **Diémoz, H.**, Agnesod, G., Santaguida, R.: *Ground-based observations of solar radiation at three Italian sites, during the eclipse of 29 March, 2006: Signs of the environment impact on incoming global irradiance*, Atmospheric Research 96, 1, 131–140

(2010), doi:10.1016/j.atmosres.2009.12.006

- Siani, A. M., Casale, G. R., **Diémoz, H.**, Agnesod, G., Kimlin, M. G., Lang, C. A., Colosimo A.: *Personal UV exposure on a ski-field at an Alpine site*, Atmos. Chem. Phys., 8, 3749-3760 (2008), doi:10.5194/acp-8-3749-2008

ORAL CONTRIBUTIONS

- **Diémoz, H.**, Campanelli, M., Estelles, V., Nakajima, T.: *Update of the European Skynet Radiometers network research studies*, International Skynet Workshop, 2019, New Delhi
- **Diémoz, H.**, Fountoulakis, I., Siani, A.M.: *12 years of solar UV monitoring in the Aosta Valley*, European Conference on Solar UV Monitoring, 2018, Wien. DOI: 10.13140/RG.2.2.27335.96164
- **Diémoz, H.**, Barnaba, F., Magri, T., Pession, G., Dionisi, D., Brunier, A., Lupato, G., Pignet, M., Pittavino, S., Proment, P., Tarricone, C., Tombolato, I., Vaccari, S., Gibellino, M.C., Zublena, M., Campanelli, M., Della Ceca, L., Hervo, M., Di Liberto, L., Ferrero, L., Gobbi, G.P.: *Air pollution transport from the Po Valley to the western Alps*, Air Quality 2018, Barcelona
- Hervo, M., Mattis, I., Borg, A.L., **Diémoz, H.**, Letertre-Danczak, J., Benedetti, A., and Haefele, A.: *First evaluation of ECMWF C-IFS model with E-PROFILE ALC network*, European Aerosol Conference, 2017, Zurich
- Dionisi, D., Barnaba, F., **Diémoz, H.**, Di Liberto, L., Gobbi, G.P.: *A model-assisted retrieval of aerosol properties from elastic backscatter lidar/ceilometer measurements*, EMS Annual Meeting, 2017, Dublin
- Campanelli, M., Barnaba, F., Estelles, V., **Diémoz, H.**, Iannarelli, A.M., Cacciani, M., Irie, H.: *Aerosol and trace gases measurements: contribution to EMeRGe from National and International networks and facilities over Italy and Europe*, EMeRGe Topical Workshop, 2017, Bremen
- **Diémoz, H.**, Siani, A. M., Casale, G. R., Campanelli, M.: *Tecniche di fotometria solare per la qualità dell'aria: recenti avanzamenti nello studio del contenuto colonnare di NO₂ e delle proprietà ottiche degli aerosol*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
- Casale, G. R., Siani, A. M., **Diémoz, H.**, Agnesod, G., Pedone, M., Colosimo, A.: *Modelli di previsione dell'indice ultravioletto*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
- **Diémoz, H.**, Gröbner, J., Carlund, T.: *Radiative transfer modelling during the 10th intercomparison RBCC-E campaign*, Brewer Ozone Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
- Carreño, V., **Diémoz, H.**, León-Luis, S.F., Redondas, A., López-Solano, J., Hernández-Cruz, B., Berjón, A., Santana, D.: *Brewer direct irradiance polarization effects*, Brewer Ozone Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
- Redondas, A., Karppinen, T., **Diémoz, H.**, Hernández-Cruz, B., López-Solano, J., León-Luis, S.F., Carreño, V., Berjón, A., Santana, D.: *EUBREWNET real time ozone processing, comparison of Brewer users processing software tools*, Brewer Ozone Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
- Egli, L., Gröbner, J., Köhler, U., Redondas, A., Carreño, V., **Diémoz, H.**, Blumthaler, M., El Gawhary, O., Kärhä, P., Kröger, I., Weber, M.: *A simulation tool to model ozone retrieval uncertainties of Brewer and Dobson instruments*, Brewer Ozone Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
- Siani, A. M., Casale, G. R., Pedone, M., Scarlatti, F., **Diémoz, H.**: *Total ozone measurements at Italian Brewer stations (Rome and Aosta)*, Brewer Ozone

- Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
- Zerefos, C., Eleftheratos, K., Kapsomenakis, I., Solomos, S., Inness, A., Balis, D., Redondas, A., Eskes, H., Amiridis, V., Repapis, C., Allaart, M., Ansmann, A., Dahlback, A., De Boeck, V., **Diémoz, H.**, Eriksen, P., Gröbner, J., Heikkilä, A., Jaroslowski, J., Josefsson, W., Karppinen, T., Köhler, U., Meleti, C., Rimmer, J., Savinykh, V., Shiroto, V., Siani, A. M., Smedley, A., Stanek, M., Stübi, R.: *Detecting volcanic sulfur dioxide plumes in the Northern Hemisphere using the Brewer spectrophotometer, other networks, and satellite observations*, Brewer Ozone Spectrophotometer/Metrology Open Workshop, 2016, Ponta Delgada
 - **Diémoz, H.**, Magri, T., Pession, G., Zublena, M., Gobbi, G.P., Barnaba, F., Dionisi, D., Di Liberto, L., Campanelli, M., Sprenger, M.: *Thermally-driven advections of aerosol-rich air masses to an Alpine valley: Theoretical considerations and experimental evidences*, EGU General Assembly, 2016, Wien
 - Hervo, M., Collaud Coen, M., Haefele, A., Bukowiecki, N., Gysel, M., Herrmann, E., Holla, R., Mattis, I., Wagner, F., Henne, S., Steinbacher, M., Gobbi, G., Diliberto, L., **Diémoz, H.**: *Dispersion of volcanic particles after Etna eruption in December 2015*, EGU General Assembly, 2016, Wien
 - **Diémoz, H.**, Campanelli, M., Becker, R., Kazadzis, S., Kouremeti, N., Estelles, V.: *Performances of two sun/sky POM-02 radiometers from EuroSkyRad at the Filter Radiometer Comparison, Davos 2015*, Skynet International Workshop, 2016, Rome
 - Campanelli, M., Federico, S., Wang, P., Sanò, P., Casella, D., Vergari, S., **Diémoz, H.**: *Comparison of hourly Surface Downwelling Solar Radiation estimated from MSG/SEVIRI and forecast by RAMS model with pyranometers over Italy*, Skynet International Workshop, 2016, Rome
 - **Diémoz, H.**, Agnesod, G.: *10 anni di monitoraggio della radiazione UV in Valle d'Aosta*, XXXVII Convegno Nazionale di Radioprotezione, ISBN 978-88-886484-0-8, 2014, Aosta
 - **Diémoz, H.**, Siani, A.M., Savastiouk, V., Redondas, A., Eleftheratos, K., Zerefos, C.S., Vrekoussis, M., Casale, G.R., Stanek, M., Burrows, J.P., Richter, A. and Hilboll, A.: *Improvements to the nitrogen dioxide observations by means of the MKIV Brewer spectrophotometer*, 14th WMO-GAW Brewer Users Group Meeting, 2014 Tenerife (ES)
 - **Diémoz, H.**, Campanelli, M.: *One year of measurements with a POM02 sun-sky radiometer at an Alpine Euroskyrad station*, International SKYNET Workshop 2013, Chiba (JP)
 - **Diémoz, H.**: *Misure di radiazione ultravioletta solare in continuo*, Convegno nazionale AIRM/AIRP "Radiazioni naturali: tra conoscenza e ricerca", 2013, Vulcano
 - **Diémoz, H.**: *Variazioni nell'irraggiamento solare e possibili impatti*, Convegno nazionale AIRM/AIRP "Radiazioni naturali: tra conoscenza e ricerca", 2013, Vulcano
 - **Diémoz, H.**, Siani, A. M., Campanelli, M.: *Due applicazioni della fotometria solare allo studio della qualità dell'aria: determinazione del diossido d'azoto e delle proprietà ottiche degli aerosol*, Convegno nazionale degli agenti fisici: Il controllo degli agenti fisici: ambiente, salute e qualità della vita, 2012, Novara
 - **Diémoz, H.**, Siani, A. M., Agnesod G.: *Il monitoraggio ambientale della radiazione ultravioletta*, Convegno nazionale di radioprotezione: Radiazioni naturali e artificiali nell'ambiente, 2011, Reggio Calabria, pp. 36-37, ISBN 978-88-88-648-29-3
 - **Diémoz, H.**: *Brewers and NO₂: algorithms and calibration issues*, 13th Biennial WMO-GAW Brewer Users Group Meeting, 2011, Beijing (China)
 - **Diémoz, H.**: *Characterization of MKIV Brewer #066 for NO₂ measurements*, 13th Biennial WMO-GAW Brewer Users Group Meeting, 2011, Beijing (China)
 - **Diémoz, H.**: *UV and Ozone Monitoring at ARPA Valle d'Aosta*, XII Biennial WMO Consultation on Brewer Ozone and UV Spectrophotometer Operation, Calibration and Data Reporting", 2009, Aosta
 - **Diémoz, H.**, Agnesod, G., Siani, A. M., Casale, G. R.: *Specifiche e scopi delle reti di monitoraggio della radiazione UV solare: proposte per una rete italiana*, IV Convegno

nazionale degli agenti fisici: "Controllo ambientale degli agenti fisici: nuove prospettive e problematiche emergenti", 2009, Vercelli

- **Diémoz, H.**, Tarricone, C., Agnesod, G., Debernardi, I.: *La radiazione solare UV in zone di montagna: sensori, modelli radiativi, territorio e meteorologia*, "Tecniche di meteorologia avanzata: metodi di osservazione, modelli previsionali e qualità dell'aria", 2007, Bari
- **Diémoz, H.**, Agnesod, G.: *Misura e previsione della radiazione UV solare in Valle d'Aosta*, Conferenza Nazionale degli Agenti Fisici, 2006, Biella

POSTERS

- Campanelli, M., Iannarelli, A.M., Kazadzis, S., Kouremeti, N., Vergari, S., Estelles, V., **Diémoz, H.**, di Sarra, A., Cede, A.: *The QUATRAM Campaign: QUALity and TRaceability of Atmospheric aerosol Measurements*, The 2018 WMO/CIMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (CIMO TECO-2018), Amsterdam
- López-Solano, J., Redondas, A., Carlund, T., Rodriguez-Franco, J.J., **Diémoz, H.**, León-Luis, S.F., Hernández-Cruz, B., Guirado-Fuentes, C., Kouremeti, N., Gröbner, J., Kazadzis, S., Carreño, V., Berjón, A., Santana-Díaz, D., Rodríguez-Valido, M., De Bock, V., Moreta, J.R., Rimmer, J., Smedley, A.R.D, Boulkelia, L., Jepsen, N., Eriksen, P., Bais, A.F., Shiroto, V., Vilaplana, J.M., Wilson, K.M., Karppinen, T.: *UV Aerosol Optical Depth in the European Brewer Network*, International Workshop on Sand/Duststorms and Associated Dustfall, 2018, Tenerife
- Campanelli, M., Mascitelli, A., Sanò, P., **Diémoz, H.**, Estellés, V., Federico, S., Iannarelli, A.M., Fratarcangeli, F., Mazzoni, A., Realini, E., Crespi, M., Bock, O., Martínez-Lozano, J.A., and Dietrich, S.: *Use of GNSS/GPS for calibrating ESR/SKYNET and AERONET Sun-sky radiometers: a multi-instruments approach to retrieve the precipitable water vapor content performing measurements comparability*, EGU General Assembly, 2018, Wien
- Marinelli, V., **Diémoz, H.**, Magri, T., Pession, G., Zublena, M., Campanelli, M., and Siani, A.M.: *Multi-year measurements of columnar aerosol properties at an Alpine EuroSkyRad Station*, EGU General Assembly, 2017, Wien
- Marinelli, V., Cremonese, E., **Diémoz, H.**, and Siani, A.M.: *Towards a first ground-based validation of aerosol optical depths from Sentinel-2 over the complex topography of the Alps*, EGU General Assembly, 2017, Wien
- **Diémoz, H.**, Magri, T., Pession, G., Tarricone, C., Zublena, M., Marinelli, V. and Siani, A.M.: *Non-conventional techniques to monitor the aerosol vertical properties in the atmosphere over an Alpine station*, TECH-AIR Conference, 2016, Lecce
- Campanelli, M., Estelles, V., **Diémoz, H.**, Kouremeti, N., Becker, R., Vergari, S.: *The SKYNET radiometer Network: Aerosol Optical Depth retrieval performance at the FRC-IV campaign and long-term comparison against GAW-PFR and AERONET standard instruments*, Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (CIMO TECO 2016), 2016, Madrid
- Petropavlovskikh, I., **Diémoz, H.**, Savastiouk, V., Disterhoft, P., and Rimmer, J.: *Investigation of the optical and instrumental artifacts in the Brewer Umkehr ozone profile retrieval*, Quadrennial Ozone Symposium, 2016, Edinburgh
- López-Solano, J., Carlund, T., Hernández-Cruz, B., León-Luis, S.F., Carreño, V., Berjón, A., Santana-Díaz, D., Bais, A.F., Moreta, J.R., Shiroto, V., Rimmer, J., Vilaplana, J.M., Wilson, K.M., Gröbner, J., Boulkelia, L., Eriksen, P., Karppinen, T., **Diémoz, H.**, Rodríguez Valido, M., and Redondas, A.: *Aerosol optical depth in the ultraviolet range: a new product in EUBREWNET*, Quadrennial Ozone Symposium, 2016, Edinburgh
- López-Solano, J., Hernández-Cruz, B., León-Luis, S.F., Carreño, V., Berjón, A., Santana-Díaz, D., Bais, A.F., Moreta, J.R., San Atanasio, J.M., Shiroto, V., Rimmer, J., Vilaplana,

- J.M., Wilson, K.M., Gröbner, J., Boulkelia, L., Eriksen, P., Karppinen, T., **Diémoz, H.**, Rodríguez Valido, M., and Redondas, A.: *Brewer-OMI ozone comparisons in EUBREWNET*, Quadrennial Ozone Symposium, 2016, Edinburgh
- Fountoulakis, I., Bais, A.F., Lakkala, K., Toth, Z., De Bock, V., **Diémoz, H.**, Doppler, L., Feister, U., Fragkos, K., Gröbner, J., Heikkilä, A., Karppinen, T., Koskela, T., San Atanasio, J.M., Siani, A.M., and Smedley, A.R.D.: *Temperature dependence of the Brewer spectral UV and total ozone column measurements*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - **Diémoz, H.**, Savastiouk, V., and Brohart, M.: *An alternative zenith-sky ozone retrieval algorithm for the Brewer spectrophotometer*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - Redondas, A., Vilaplana, J.M., Rimmer, J., Bais, A.F., Gröbner, J., Savastiouk, V., Serrano, A., Moreta, J.R., Eriksen, P., Willson, K., Karppinen, T., Shirov, V., Boulkelia, L., **Diémoz, H.**, McElroy, C.T., López-Solano, J., Stanek, M., Brohart, M.M. and the EUBREWNET Team: *EUBREWNET RBCC-E Huelva 2015 Ozone Brewer Intercomparison*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - Carreño, V., **Diémoz, H.**, León-Luis, S.F., López-Solano, J., Hernández-Cruz, B., Berjón, A., Santana-Díaz, D., Rodríguez Valido, M., and Redondas, A.: *Brewer direct irradiance measurements: polarization effects and model simulation*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - Hernández-Cruz, B., Redondas, A., Rodríguez Valido, M., López-Solano, J., León-Luis, S.F., Carreño, V., Berjón, A., Santana-Díaz, D., Rimmer, J., Gröbner, J., Fountoulakis, I., Karppinen, T., and **Diémoz, H.**: *A European Brewer Network: Web Tools for Ozone Data Process and Configuration Interface*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - Siani, A.M., Casale, G.R., Pedone, M., Scarlatti, F., and **Diémoz, H.**: *Total ozone measurements at Italian Brewer stations (Rome and Aosta)*, Quadrennial Ozone Symposium, 2016, Edinburgh
 - **Diémoz, H.**: *Monitoraggio della radiazione infrarossa naturale presso ARPA Valle d'Aosta*, VI Convegno degli Agenti Fisici, 2016, Alessandria (awarded as best poster), ISBN 978-88-7479-130-9
 - **Diémoz, H.**, Siani, A., M., Casale, G. R., Laschewski, G.: *Nuove tecniche per la valutazione dell'irradianza ultravioletta solare e del contenuto colonnare di ozono: è ancora necessaria la misura da terra?*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
 - **Diémoz, H.**, Siani, A., M., Casale, G. R.: *Analisi a lungo termine delle serie di misure di irradianza ultravioletta in Valle d'Aosta e a Roma*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
 - Siani, A.M., Campanelli, M., Di Sarra, G., Morelli, M., **Diémoz, H.**, Sozzi, R., Bolignano, A.: *Influenza delle caratteristiche ottiche dell'aerosol atmosferico sull'indice UV in ambiente urbano*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
 - Magri, T., **Diémoz, H.**, Pession, G., Zublena, M., Campanelli, M., Gobbi, G. P., Barnaba, F., Di Liberto, L., Dionisi, D.: *Avvezioni termiche di masse d'aria ricche di aerosol in una valle alpina: considerazioni teoriche ed evidenze sperimentali*, VI Convegno degli Agenti Fisici, 2016, Alessandria, ISBN 978-88-7479-130-9
 - Magri, T., **Diémoz, H.**, Tarricone, C.: *Riscontri sperimentali del trasporto di polveri sahariane in Valle d'Aosta ed impatti sulla qualità dell'aria*, PM2016, 2016, Rome
 - Gobbi, G.P., Di Liberto, L., **Diémoz, H.**, Guarnieri Calò Carducci, A., Ottonelli, S., Dionisi, D., Barnaba, F., Costabile, F., Ciampichetti, S., Ferrero, L., Sozzi, R., Bolignano, A., Morelli, M.: *ALICENet A cooperative network of Automated Lidar – Ceilometers*, PM2016, 2016, Rome
 - Iannarelli, A.M., Cacciani, M., Burini, A., Casadio, S., Campanelli, M., Siani, A.M., von Bismarck, J., Casasanta, G., **Diémoz, H.**, Bojkov, B.R.: *The BAQUNIN (Boundary layer Air*

- Quality-analysis Using Network of Instruments) Super-Site for atmospheric science and satellite data validation*, ESA Living Planet Symposium, 2016, Prague
- Sozzi, R., Bolignano, A., Morelli, M., Campanelli, M., Siani, A.M., **Diémoz, H.**, di Sarra, G.: *Impact of optical aerosol characteristics on UV index in a urban area*, Skynet International Workshop, 2016, Rome
 - Magri, T., **Diémoz, H.**, Gobbi, G.P., Di Liberto, L.: *Measurements with a CHM-15k ceilometer at the Alpine station of Aosta, Italy: first results and new insights on pollution dynamics*, DIAPASON Final Conference, 2015, Rome
 - **Diémoz, H.**, Redondas, A., Karppinen, T., Siani, A.M., Casale, G.R., Scarlatti, F., Eleftheratos, K., Stanek, M., San Atanasio, J.M.: *Statistics-based evaluation of the stray-light effect on ozone measurements in the framework of the European Brewer Network (EUBREWNET)*, NOG Meeting, 2015, Copenhagen
 - Casale, G.R., Siani, A.M., **Diémoz, H.**, Colosimo, A.: *La radiazione solare ultravioletta alle latitudini del Mediterraneo nel trattamento di acque microbiologicamente contaminate*, Atti dei Convegni Lincei n. 298, 81-90, ISBN 978-88-218-1124-1, 2014, Rome
 - Morelli, M., Masini, A., **Diémoz, H.**, Potenza M.A.C.: *Validazione di un sistema per il monitoraggio in quasi tempo reale e per la previsione a breve termine della radiazione UV a partire da immagini ottiche satellitari*, XXXVII Convegno Nazionale di Radioprotezione, ISBN 978-88-886484-0-8, 2014, Aosta
 - **Diémoz, H.**, Eleftheratos, K., Zerefos, C.S., Vrekoussis, M., Siani, A.M., Burrows, J.P., Richter A. and Hilboll, A.: *Reprocessing of nitrogen dioxide total column densities recorded with a Brewer spectrophotometer in Athens*, The Mediterranean City Conference, 2014, Athens (GR)
 - Religi, A., Siani, A.M., Casale, G.R., **Diémoz, H.**, Petkov, B.: *Trend and variability in total ozone content at three measurement stations in Italy*, 14th WMO-GAW Brewer Users Group Meeting, 2014 Tenerife (ES)
 - Casale, G.R., Siani, A.M., **Diémoz, H.**, Parisi, A.V., Colosimo, A.: *Extreme UV Index and solar exposures at Plateau Rosa (3500 m asl) in Valle d'Aosta region, Italy*, Davos Atmosphere and Cryosphere Assembly DACA-13, 2013, Davos (CH)
 - Casale, G.R., Siani, A.M., **Diémoz, H.**, Colosimo, A.: *Do solar UV daily doses allow water treatment at mediterranean latitudes?*, International Conference for Energy and Meteorology (ICEM 2013), 2013, Tolosa (FR)
 - **Diémoz, H.**, Gröbner J., Hülsen, G.: *Tracciabilità delle misure ultraviolette solari presso le stazioni di ARPA Valle d'Aosta*, Convegno nazionale degli agenti fisici: Il controllo degli agenti fisici: ambiente, salute e qualità della vita, 2012, Novara
 - **Diémoz, H.** et al.: *Primo interconfronto nazionale di radiometri ultravioletti solari*, V Convegno nazionale degli agenti fisici: Il controllo degli agenti fisici: ambiente, salute e qualità della vita, 2012, Novara
 - **Diémoz, H.**, Mayer, B.: *UV radiation in a mountaineous terrain: comparison of accurate 3D and fast 1D calculations in terms of UV index*, "One Century of UV Radiation Research", 2007, Davos (CH)
 - **Diémoz, H.**, Tarricone, C., Agnesod, G., Siani, A. M., Casale, G. R.: *Brewer #066: a new location in Italy*, "The tenth biennial WMO consultation on Brewer Ozone and UV spectrophotometer operation, calibration and data reporting", 2007, Northwich (UK)

OTHER PUBLICATIONS

- Egli, L., Gröbner, J., Köhler, U., Redondas, A., Carreño, V., **Diémoz, H.**, *A simulation-tool to model ozone retrieval uncertainties of Brewer and Dobsons instruments*, UVNews 11, 2016

- Egli, L., Gröbner, J., Shapiro, A., Blumthaler, M., **Diémoz, H.**: *Development of a new high resolution extraterrestrial spectrum*, PMOD/WRC Annual report 2012, printed 2013
- Casale, G.R., Siani, A.M., Modesti, S., **Diémoz, H.**, Agnesod, G., Colosimo, A.: *Misure mediante dosimetria a polisolfone per la quantificazione dell'esposizione individuale alla radiazione solare ultravioletta*, Italian Radiation Protection Association bulletin, 2013
- **Diémoz, H.**, Siani, A.M., Casale, G.R., di Sarra, A., Serpillo, B., Petkov, B., Scaglione, S., Bonino, A., Facta, S., Fedele, F., Grifoni, D., Verdi, L., Zipoli, G.: *Risultati della prima campagna di interconfronto italiana di strumentazione per la misura della radiazione ultravioletta solare*, Italian Radiation Protection Association bulletin, 2013
- **Diémoz, H.**: *Esposizione agli agenti fisici – Radiazione ultravioletta*, in: *Annuario Ispra dei dati ambientali 2010 – Tematiche in primo piano*, ISBN 978-88-448-0484-8
- **Diémoz, H.**, *Ultravioletti ad alta quota*, Sapere, 75, 5
- **Diémoz, H.**, *Esposizione agli agenti fisici – Radiazione ultravioletta*, in: *Annuario Ispra dei dati ambientali 2008 – Tematiche in primo piano*, ISBN 978-88-448-0360-5

REVIEWS

- Reviewer for Copernicus and MDPI Journals
 - Atmospheric Chemistry and Physics
 - Atmospheric Measurement Techniques
 - Geoscientific Instrumentation
 - Atmosphere
 - International Journal of Environmental Research and Public Health
- Reviewer of the UNEP EEAP Quadrennial Report on “Environmental Effects of Ozone Depletion and Interactions with Climate Change – 2018”

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