Bibliographie

Liste de publications scientifiques utilisant les données du site instrumenté CO-PDD (mise à jour 27/03/2024)

2024

1) Lacher, L., Adams, M. P., Barry, K., Bertozzi, B., Bingemer, H., Boffo, C., Bras, Y., Büttner, N., Castarede, D., Cziczo, D. J., DeMott, P. J., Fösig, R., Goodell, M., Höhler, K., Hill, T. C. J., Jentzsch, C., Ladino, L. A., Levin, E. J. T., Mertes, S., Möhler, O., Moore, K. A., Murray, B. J., Nadolny, J., Pfeuffer, T., Picard, D., Ramírez-Romero, C., Ribeiro, M., Richter, S., Schrod, J., Sellegri, K., Stratmann, F., Swanson, B. E., Thomson, E. S., Wex, H., Wolf, M. J., and Freney, E. , 2024, The Puy de Dôme ICe Nucleation Intercomparison Campaign (PICNIC): comparison between online and offline methods in ambient air, Atmos. Chem. Phys., 24, 2651–2678, https://doi.org/10.5194/acp-24-2651-2024

2) Rossi, F., C. Duchaine, R. Tignat-Perrier, M. Joly, C. Larose, A. Dommergue, N. Turgeon, M. Veillette, K. Sellegri, J.-L. Baray, P. Amato,Temporal variations of antimicrobial resistance genes in aerosols: A one-year monitoring at the puy de Dôme summit (Central France), Science of The Total Environment, 2024, 169567, https://doi.org/10.1016/j.scitotenv.2023.169567

3) Steiner, M., Peters, W., Luijkx, I., Henne, S., Chen, H., Hammer, S., and Brunner, D. , 2024, European CH4 inversions with ICON-ART coupled to the CarbonTracker Data Assimilation Shell, Atmos. Chem. Phys., 24, 2759–2782, https://doi.org/10.5194/acp-24-2759-2024

2023

1) Agustí-Panareda, A., Barré, J., Massart, S., Inness, A., Aben, I., Ades, M., Baier, B. C., Balsamo, G., Borsdorff, T., Bousserez, N., Boussetta, S., Buchwitz, M., Cantarello, L., Crevoisier, C., Engelen, R., Eskes, H., Flemming, J., Garrigues, S., Hasekamp, O., Huijnen, V., Jones, L., Kipling, Z., Langerock, B., McNorton, J., Meilhac, N., Noël, S., Parrington, M., Peuch, V.-H., Ramonet, M., Razinger, M., Reuter, M., Ribas, R., Suttie, M., Sweeney, C., Tarniewicz, J., and Wu, L. , 2023, Technical note: The CAMS greenhouse gas reanalysis from 2003 to 2020, Atmos. Chem. Phys., 23, 3829–3859, https://doi.org/10.5194/acp-23-3829-2023

2) Beenken, L., Stroheker, S., Dubach, V. et al. Microstrobilinia castrans, a new genus and species of the Sclerotiniaceae parasitizing pollen cones of Picea spp.. Mycol Progress 22, 14 (2023). https://doi.org/10.1007/s11557-023-01865-w

3) Dillon, K.P., Tignat-Perrier, R., Joly, M., Grogan, S.N.C.M., Larose, C., Amato, P., Mainelis, G. (2023). Comparison of Airborne Bacterial Populations Determined by Passive and Active Air Sampling at puy de Dôme, France. Aerosol Air Qual. Res. 23, 220403. https://doi.org/10.4209/aaqr.220403

4) Eswaran K., N. Montoux, A. Chauvigné, J.-L. Baray, G. Ancellet, K. Sellegri, E. Freney, C. Rose and J. Pelon, Lidar ratio calculations from in situ aerosol optical, microphysical and chemical measurements: observations at puy de Dôme, France and analysis with CALIOP, Atmospheric Research, 2023, 296, 107043, https://doi.org/10.1016/j.atmosres.2023.107043

5) Moreno, C. I., Krejci, R., Jaffrezo, J.-L., Uzu, G., Alastuey, A., Andrade, M. F., Mardóñez, V., Koenig, A. M., Aliaga, D., Mohr, C., Ticona, L., Velarde, F., Blacutt, L., Forno, R., Whiteman, D. N., Wiedensohler, A., Ginot, P., and Laj, P. , 2023, Tropical tropospheric aerosol sources and chemical composition observed at high-altitude in the Bolivian Andes, EGUsphere [preprint], https://doi.org/10.5194/egusphere-2023-1298

6) Muñoz, E., and C.A. Sierra, Deterministic and stochastic components of atmospheric CO2 inside forest canopies and consequences for predicting carbon and water exchange, Agricultural and Forest Meteorology, Volume 341, 2023, 109624, https://doi.org/10.1016/j.agrformet.2023.109624

7) Nie, Y., X. Li, Q. Paletta, M. Aragon, A. Scott, A. Brandt, Open-Source Ground-based Sky Image Datasets for Very Short-term Solar Forecasting, Cloud Analysis and Modeling: A Comprehensive Survey, Computer Science - Computer Vision and Pattern Recognition, https://doi.org/10.48550/arXiv.2211.14709

8) Noirmain, F., J.-L. Baray, L. Deguillaume, J. Van Baelen, and D. Latour, Exploring the size-dependent dynamics of photosynthetic cells in rainwater: The influence of atmospheric variables and rain characteristics, Science of The Total Environment, 2023, 167746, https://doi.org/10.1016/j.scitotenv.2023.167746

9) Pailler L., N. Wirgot, M. Joly , P. Renard, C. Mouchel-Vallon, A. Bianco, M. Leriche, M. Sancelme, A. Job, L. Patryl, P. Armand, A. -M. Delort, N. Chaumerliac and L. Deguillaume, Assessing the efficiency of water-soluble organic compound biodegradation in clouds under various environmental conditions Environ. Sci.: Atmos., 2023, 3, 731-748, https://doi.org/10.1039/D2EA00153E

10) Péguilhan, R., F. Rossi, O. Rué, M. Joly, P. Amato, Comparative analysis of bacterial diversity in clouds and aerosols, Atmospheric Environment, Volume 298, 2023, 119635, ISSN 1352-2310, https://doi.org/10.1016/j.atmosenv.2023.119635

11) Péguilhan, R., F. Rossi, O. Rué, M. Joly, P. Amato, Experimental and methodological framework for the assessment of nucleic acids in airborne microorganisms, 2023, bioRxiv, https://doi.org/10.1101/2023.10.10.561683

12) Peyrin, F.; Fréville, P.; Montoux, N.; Baray, J.-L. Original and Low-Cost ADS-B System to Fulfill Air Traffic Safety Obligations during High Power LIDAR Operation. Sensors 2023, 23, 2899. https://doi.org/10.3390/s23062899

13) Ramonet, M., Chatterjee, A., Ciais, P., Levin, I., Sha, M., Steinbacher, M., & Sweeney, C., 2023, CO2 in the Atmosphere: Growth and Trends Since 1850. Oxford Research Encyclopedia of Climate Science. https://doi.org/10.1093/acrefore/9780190228620.013.863

14) Rossi, F., R. Péguilhan, N. Turgeon, M. Veillette, J.-L. Baray, L. Deguillaume, P. Amato, C. Duchaine, Quantification of antibiotic resistance genes (ARGs) in clouds at a mountain site (puy de

Dôme, central France), Science of The Total Environment, Volume 865, 2023, https://doi.org/10.1016/j.scitotenv.2022.161264

16) Storm, I., Karstens, U., D'Onofrio, C., Vermeulen, A., and Peters, W.: A view of the European carbon flux landscape through the lens of the ICOS atmospheric observation network, 2023, Atmos. Chem. Phys., 23, 4993–5008, https://doi.org/10.5194/acp-23-4993-2023

17) Zheng, G., Hang Su, and Yafang Cheng, Role of Carbon Dioxide, Ammonia, and Organic Acids in Buffering Atmospheric Acidity: The Distinct Contribution in Clouds and Aerosols, Environmental Science & Technology 2023 57 (34), 12571-12582, https://doi.org/10.1021/acs.est.2c09851

2022

1) Amato P, Šantl-Temkiv T and Bianco A (2022) Editorial: The atmospheric microbiota II: Microbial biomarkers and imprint of biological activity in the atmosphere. Front. Microbiol. https://doi.org/10.3389/fmicb.2022.1055818

2) Chen, G., F. Canonaco, A. Tobler, W. AAS, A. Alastuey, J. Allan, S. Atabakhsh, M. Aurela et al., European Aerosol Phenomenology - 8: Harmonised Source Apportionment of Organic Aerosol using 22 Year-long ACSM/AMS Datasets, 2022, Environment International, https://doi.org/10.1016/j.envint.2022.107325

3) Choudhury, G.; Tesche, M. Assessment of CALIOP-Derived CCN Concentrations by In Situ Surface Measurements. Remote Sens. 2022, 14, 3342. https://doi.org/10.3390/rs14143342

4) George, P.B.L.; Rossi, F.; St-Germain, M.-W.; Amato, P.; Badard, T.; Bergeron, M.G.; Boissinot, M.; Charette, S.J.; Coleman, B.L.; Corbeil, J.; Culley, A.I.; Gaucher, M.-L.; Girard, M.; Godbout, S.; Kirychuk, S.P.; Marette, A.; McGeer, A.; O'Shaughnessy, P.T.; Parmley, E.J.; Simard, S.; Reid-Smith, R.J.; Topp, E.; Trudel, L.; Yao, M.; Brassard, P.; Delort, A.-M.; Larios, A.D.; Létourneau, V.; Paquet, V.E.; Pedneau, M.-H.; Pic, É.; Thompson, B.; Veillette, M.; Thaler, M.; Scapino, I.; Lebeuf, M.; Baghdadi, M.; Castillo Toro, A.; Cayouette, A.B.; Dubois, M.-J.; Durocher, A.F.; Girard, S.B.; Diaz, A.K.C.; Khalloufi, A.; Leclerc, S.; Lemieux, J.; Maldonado, M.P.; Pilon, G.; Murphy, C.P.; Notling, C.A.; Ofori-Darko, D.; Provencher, J.; Richer-Fortin, A.; Turgeon, N.; Duchaine, C. Antimicrobial Resistance in the Environment: Towards Elucidating the Roles of Bioaerosols in Transmission and Detection of Antibacterial Resistance Genes. Antibiotics 2022, 11, 974. https://doi.org/10.3390/antibiotics11070974

5) González, A.G., A. Bianco, J. Boutorh, M. Cheize, G. Mailhot, A. -M. Delort, H. Planquette, N. Chaumerliac, L. Deguillaume, G. Sarthou, Influence of strong iron-binding ligands on cloud water oxidant capacity, Science of the Total Environment (2022), https://doi.org/10.1016/j.scitotenv.2022.154642

6) Huang, X., X. Ge, D. Liu, L. Tong, D. Nie, F. Shen, M. Yang, Y. Wu, H. Xiao, H. Yu, Atmospheric particle number size distribution and size-dependent formation rate and growth rate of neutral and charged new particles at a coastal site of eastern China, Atmospheric Environment, Volume 270, 2022, 118899, https://doi.org/10.1016/j.atmosenv.2021.118899

7) Jarrige D., S. Haridas, C. Bleykasten-Grosshans, M. Joly, T. Nadalig, M. Sancelme, S. Vuilleumier, I. V Grigoriev, P. Amato, F. Bringel, High-quality genome of the basidiomycete yeast Dioszegia hungarica PDD-24b-2 isolated from cloud water, G3 Genes|Genomes|Genetics, jkac282, https://doi.org/10.1093/g3journal/jkac282

8) Jarrige D., T. Nadalig , M. Joly , M. Sancelme, S. Vuilleumier, P. Amato, F. Bringel, Complete Genome of Sphingomonas aerolata PDD-32b-11, Isolated from Cloud Water at the Summit of Puy de Dôme, France, Microbiol Resour Announc., 2022 Oct 20;11(10):e0068422. https://doi.org/10.1128/mra.00684-22

9) Myriokefalitakis, S., Bergas-Massó, E., Gonçalves-Ageitos, M., Pérez García-Pando, C., van Noije, T., Le Sager, P., Ito, A., Athanasopoulou, E., Nenes, A., Kanakidou, M., Krol, M. C., and Gerasopoulos, E.: Multiphase processes in the EC-Earth model and their relevance to the atmospheric oxalate, sulfate, and iron cycles, 2022, Geosci. Model Dev., 15, 3079–3120, https://doi.org/10.5194/gmd-15-3079-2022

10) Noirmain, F., Baray, J.-L., Tridon, F., Cacault, P., Billard, H., Voyard, G., Van Baelen, J., and Latour, D.: Interdisciplinary strategy to assess the impact of meteorological variables on the biochemical composition of the rain and the dynamics of a small eutrophic lake under rain forcing, 2022, Biogeosciences, 19, 5729–5749, https://doi.org/10.5194/bg-19-5729-2022

11) Pailler, L., P. Renard, E. Nicol, L. Deguillaume, A. Bianco: How well do we handle sample preparation, FT-ICR mass spectrometry analysis and data treatment of atmospheric waters?, Molecules, 27(22), 7796, 2022 https://doi.org/10.3390/molecules27227796

12) Renard, P., Brissy, M., Rossi, F., Leremboure, M., Jaber, S., Baray, J.-L., Bianco, A., Delort, A.-M., and Deguillaume, L.: Free amino acid quantification in cloud water at the Puy de Dôme station (France) , 2022, Atmos. Chem. Phys., 22, 2467–2486, https://doi.org/10.5194/acp-22-2467-2022

13) Renard, P., Bianco, A., Jänis, J., Kekäläinen, T., Bridoux, M., & Deguillaume, L. (2022). Puy de Dôme station (France): A stoichiometric approach to compound classification in clouds. Journal of Geophysical Research: Atmospheres, 127, https://doi.org/10.1029/2022JD036635

14) Roger, J.-C., Vermote, E., Skakun, S., Murphy, E., Dubovik, O., Kalecinski, N., Korgo, B., and Holben, B.: Aerosol models from the AERONET database: application to surface reflectance validation, 2022, Atmos. Meas. Tech., 15, 1123–1144, https://doi.org/10.5194/amt-15-1123-2022

2021

1) Doiteau, B.; Dournaux, M.; Montoux, N.; Baray, J.-L. Atmospheric Rivers and Associated Precipitation over France and Western Europe: 1980–2020 Climatology and Case Study. Atmosphere 2021, 12, 1075. https://doi.org/10.3390/atmos12081075

2) Evangeliou, N., Platt, S. M., Eckhardt, S., Lund Myhre, C., Laj, P., Alados-Arboledas, L., Backman, J., Brem, B. T., Fiebig, M., Flentje, H., Marinoni, A., Pandolfi, M., Yus-Dìez, J., Prats, N., Putaud, J. P., Sellegri, K., Sorribas, M., Eleftheriadis, K., Vratolis, S., Wiedensohler, A., and Stohl, A.: Changes in

black carbon emissions over Europe due to COVID-19 lockdowns, 2021, Atmos. Chem. Phys., 21, 2675–2692, https://doi.org/10.5194/acp-21-2675-2021

3) Farah, A. ; Freney, E. ; Canonaco, F. ; Prévôt, A. S. H. ; Pichon, J. -M. ; Abboud, M. ; Farah, W. ; Sellegri, K., Altitude Aerosol Measurements in Central France: Seasonality, Sources and Free Troposphere/Boundary Layer Segregation, Earth and Space Science, Volume 8, Issue 3, article id. e01018, March 2021, https://doi.org/10.1029/2019EA001018

4) Gliß, J., Mortier, A., Schulz, M., Andrews, E., Balkanski, Y., Bauer, S. E., Benedictow, A. M. K., Bian, H., Checa-Garcia, R., Chin, M., Ginoux, P., Griesfeller, J. J., Heckel, A., Kipling, Z., Kirkevåg, A., Kokkola, H., Laj, P., Le Sager, P., Lund, M. T., Lund Myhre, C., Matsui, H., Myhre, G., Neubauer, D., van Noije, T., North, P., Olivié, D. J. L., Rémy, S., Sogacheva, L., Takemura, T., Tsigaridis, K., and Tsyro, S. G.: AeroCom phase III multi-model evaluation of the aerosol life cycle and optical properties using ground- and space-based remote sensing as well as surface in situ observations, 2021, Atmos. Chem. Phys., 21, 87–128, https://doi.org/10.5194/acp-21-87-2021

5) Jaber, S., Joly, M., Brissy, M., Leremboure, M., Khaled, A., Ervens, B., and Delort, A.-M.: Biotic and abiotic transformation of amino acids in cloud water: experimental studies and atmospheric implications, 2021, Biogeosciences, 18, 1067–1080, https://doi.org/10.5194/bg-18-1067-202

6) Khaled, A., Zhang, M., Amato, P., Delort, A.-M., and Ervens, B.: Biodegradation by bacteria in clouds: an underestimated sink for some organics in the atmospheric multiphase system, 2021, Atmos. Chem. Phys., 21, 3123–3141, https://doi.org/10.5194/acp-21-3123-2021

7) Péguilhan R., L. Besaury, F. Rossi, F. Enault, J.-L. Baray, L. Deguillaume, and P. Amato, Rainfalls sprinkle cloud bacterial diversity while scavenging biomass, FEMS Microbiology Ecology, Volume 97, Issue 11, 2021 https://doi.org/10.1093/femsec/fiab144.

8) Resovsky, A., Ramonet, M., Rivier, L., Tarniewicz, J., Ciais, P., Steinbacher, M., Mammarella, I., Mölder, M., Heliasz, M., Kubistin, D., Lindauer, M., Müller-Williams, J., Conil, S., and Engelen, R.: An algorithm to detect non-background signals in greenhouse gas time series from European tall tower and mountain stations, 2021, Atmos. Meas. Tech., 14, 6119–6135, https://doi.org/10.5194/amt-14-6119-2021

9) Rose, C., Collaud Coen, M., Andrews, E., Lin, Y., Bossert, I., Lund Myhre, C., Tuch, T., Wiedensohler, A., Fiebig, M., Aalto, P., Alastuey, A., Alonso-Blanco, E., Andrade, M., Artíñano, B., Arsov, T., Baltensperger, U., Bastian, S., Bath, O., Beukes, J. P., Brem, B. T., Bukowiecki, N., Casquero-Vera, J. A., Conil, S., Eleftheriadis, K., Favez, O., Flentje, H., Gini, M. I., Gómez-Moreno, F. J., Gysel-Beer, M., Hallar, A. G., Kalapov, I., Kalivitis, N., Kasper-Giebl, A., Keywood, M., Kim, J. E., Kim, S.-W., Kristensson, A., Kulmala, M., Lihavainen, H., Lin, N.-H., Lyamani, H., Marinoni, A., Martins Dos Santos, S., Mayol-Bracero, O. L., Meinhardt, F., Merkel, M., Metzger, J.-M., Mihalopoulos, N., Ondracek, J., Pandolfi, M., Pérez, N., Petäjä, T., Petit, J.-E., Picard, D., Pichon, J.-M., Pont, V., Putaud, J.-P., Reisen, F., Sellegri, K., Sharma, S., Schauer, G., Sheridan, P., Sherman, J. P., Schwerin, A., Sohmer, R., Sorribas, M., Sun, J., Tulet, P., Vakkari, V., van Zyl, P. G., Velarde, F., Villani, P., Vratolis, S., Wagner, Z., Wang, S.-H., Weinhold, K., Weller, R., Yela, M., Zdimal, V., and Laj, P.: Seasonality of the particle number concentration and size distribution: a global analysis retrieved from the network of Global

Atmosphere Watch (GAW) near-surface observatories, Atmospheric Chemistry and Physics, (2021), Publié, https://doi.org/10.5194/acp-21-17185-2021

10) Vaquero-Martínez, J.; Antón, M. Review on the Role of GNSS Meteorology in Monitoring Water Vapor for Atmospheric Physics. Remote Sens. 2021, 13, 2287. https://doi.org/10.3390/rs13122287

11) Yver-Kwok, C., Philippon, C., Bergamaschi, P., Biermann, T., Calzolari, F., Chen, H., Conil, S., Cristofanelli, P., Delmotte, M., Hatakka, J., Heliasz, M., Hermansen, O., Komínková, K., Kubistin, D., Kumps, N., Laurent, O., Laurila, T., Lehner, I., Levula, J., Lindauer, M., Lopez, M., Mammarella, I., Manca, G., Marklund, P., Metzger, J.-M., Mölder, M., Platt, S. M., Ramonet, M., Rivier, L., Scheeren, B., Sha, M. K., Smith, P., Steinbacher, M., Vítková, G., and Wyss, S.: Evaluation and optimization of ICOS atmosphere station data as part of the labeling process, 2021, Atmos. Meas. Tech., 14, 89–116, https://doi.org/10.5194/amt-14-89-2021

2020

1) Baray, J.-L., Deguillaume, L., Colomb, A., Sellegri, K., Freney, E., Rose, C., Van Baelen, J., Pichon, J.-M., Picard, D., Fréville, P., Bouvier, L., Ribeiro, M., Amato, P., Banson, S., Bianco, A., Borbon, A., Bourcier, L., Bras, Y., Brigante, M., Cacault, P., Chauvigné, A., Charbouillot, T., Chaumerliac, N., Delort, A.-M., Delmotte, M., Dupuy, R., Farah, A., Febvre, G., Flossmann, A., Gourbeyre, C., Hervier, C., Hervo, M., Huret, N., Joly, M., Kazan, V., Lopez, M., Mailhot, G., Marinoni, A., Masson, O., Montoux, N., Parazols, M., Peyrin, F., Pointin, Y., Ramonet, M., Rocco, M., Sancelme, M., Sauvage, S., Schmidt, M., Tison, E., Vaïtilingom, M., Villani, P., Wang, M., Yver-Kwok, C., and Laj, P.: Cézeaux-Aulnat-Opme-Puy De Dôme: a multi-site for the long-term survey of the tropospheric composition and climate change, 2020, Atmos. Meas. Tech., 13, 3413–3445, https://doi.org/10.5194/amt-13-3413-2020

2) Collaud Coen, M., Andrews, E., Alastuey, A., Arsov, T. P., Backman, J., Brem, B. T., Bukowiecki, N., Couret, C., Eleftheriadis, K., Flentje, H., Fiebig, M., Gysel-Beer, M., Hand, J. L., Hoffer, A., Hooda, R., Hueglin, C., Joubert, W., Keywood, M., Kim, J. E., Kim, S.-W., Labuschagne, C., Lin, N.-H., Lin, Y., Lund Myhre, C., Luoma, K., Lyamani, H., Marinoni, A., Mayol-Bracero, O. L., Mihalopoulos, N., Pandolfi, M., Prats, N., Prenni, A. J., Putaud, J.-P., Ries, L., Reisen, F., Sellegri, K., Sharma, S., Sheridan, P., Sherman, J. P., Sun, J., Titos, G., Torres, E., Tuch, T., Weller, R., Wiedensohler, A., Zieger, P., and Laj, P.: Multidecadal trend analysis of in situ aerosol radiative properties around the world, 2020, Atmos. Chem. Phys., 20, 8867–8908, https://doi.org/10.5194/acp-20-8867-2020

3) Dillon, K. P., Correa, F., Judon, C., Sancelme, M., Fennell, D. E., Delort, A.-M., and Amato, P.: Cyanobacteria and algae in clouds and rain in the area of puy de Dôme, Central France, 2020, Appl. Environ. Microbiol., https://doi.org/10.1128/AEM.01850-20

4) Fomba, K. W., Deabji, N., Barcha, S. E. I., Ouchen, I., Elbaramoussi, E. M., El Moursli, R. C., Harnafi, M., El Hajjaji, S., Mellouki, A., and Herrmann, H.: Application of TXRF in monitoring trace metals in particulate matter and cloud water, 2020, Atmos. Meas. Tech., 13, 4773–4790, https://doi.org/10.5194/amt-13-4773-2020

5) Jaber, S., Lallement, A., Sancelme, M., Leremboure, M., Mailhot, G., Ervens, B., and Delort, A.-M.: Biodegradation of phenol and catechol in cloud water: comparison to chemical oxidation in the

atmospheric multiphase system, 2020, Atmos. Chem. Phys., 20, 4987–4997, https://doi.org/10.5194/acp-20-4987-2020

6) Laj, P., Bigi, A., Rose, C., Andrews, E., Lund Myhre, C., Collaud Coen, M., Lin, Y., Wiedensohler, A., Schulz, M., Ogren, J. A., Fiebig, M., Gliß, J., Mortier, A., Pandolfi, M., Petäja, T., Kim, S.-W., Aas, W., Putaud, J.-P., Mayol-Bracero, O., Keywood, M., Labrador, L., Aalto, P., Ahlberg, E., Alados Arboledas, L., Alastuey, A., Andrade, M., Artíñano, B., Ausmeel, S., Arsov, T., Asmi, E., Backman, J., Baltensperger, U., Bastian, S., Bath, O., Beukes, J. P., Brem, B. T., Bukowiecki, N., Conil, S., Couret, C., Day, D., Dayantolis, W., Degorska, A., Eleftheriadis, K., Fetfatzis, P., Favez, O., Flentje, H., Gini, M. I., Gregorič, A., Gysel-Beer, M., Hallar, A. G., Hand, J., Hoffer, A., Hueglin, C., Hooda, R. K., Hyvärinen, A., Kalapov, I., Kalivitis, N., Kasper-Giebl, A., Kim, J. E., Kouvarakis, G., Kranjc, I., Krejci, R., Kulmala, M., Labuschagne, C., Lee, H.-J., Lihavainen, H., Lin, N.-H., Löschau, G., Luoma, K., Marinoni, A., Martins Dos Santos, S., Meinhardt, F., Merkel, M., Metzger, J.-M., Mihalopoulos, N., Nguyen, N. A., Ondracek, J., Pérez, N., Perrone, M. R., Petit, J.-E., Picard, D., Pichon, J.-M., Pont, V., Prats, N., Prenni, A., Reisen, F., Romano, S., Sellegri, K., Sharma, S., Schauer, G., Sheridan, P., Sherman, J. P., Schütze, M., Schwerin, A., Sohmer, R., Sorribas, M., Steinbacher, M., Sun, J., Titos, G., Toczko, B., Tuch, T., Tulet, P., Tunved, P., Vakkari, V., Velarde, F., Velasquez, P., Villani, P., Vratolis, S., Wang, S.-H., Weinhold, K., Weller, R., Yela, M., Yus-Diez, J., Zdimal, V., Zieger, P., and Zikova, N.: A global analysis of climate-relevant aerosol properties retrieved from the network of Global Atmosphere Watch (GAW) near-surface observatories, 2020, Atmos. Meas. Tech., 13, 4353–4392, https://doi.org/10.5194/amt-13-4353-2020

7) Monteil, G., Broquet, G., Scholze, M., Lang, M., Karstens, U., Gerbig, C., Koch, F.-T., Smith, N. E., Thompson, R. L., Luijkx, I. T., White, E., Meesters, A., Ciais, P., Ganesan, A. L., Manning, A., Mischurow, M., Peters, W., Peylin, P., Tarniewicz, J., Rigby, M., Rödenbeck, C., Vermeulen, A., and Walton, E. M.: The regional European atmospheric transport inversion comparison, EUROCOM: first results on European-wide terrestrial carbon fluxes for the period 2006–2015, 2020, Atmos. Chem. Phys., 20, 12063–12091, https://doi.org/10.5194/acp-20-12063-2020

8) Mortier, A., Gliß, J., Schulz, M., Aas, W., Andrews, E., Bian, H., Chin, M., Ginoux, P., Hand, J., Holben, B., Zhang, H., Kipling, Z., Kirkevåg, A., Laj, P., Lurton, T., Myhre, G., Neubauer, D., Olivié, D., von Salzen, K., Skeie, R. B., Takemura, T., and Tilmes, S.: Evaluation of climate model aerosol trends with ground-based observations over the last 2 decades – an AeroCom and CMIP6 analysis, 2020, Atmos. Chem. Phys., 20, 13355–13378, https://doi.org/10.5194/acp-20-13355-2020

9) Papagiannopoulos, N., D'Amico, G., Gialitaki, A., Ajtai, N., Alados-Arboledas, L., Amodeo, A., Amiridis, V., Baars, H., Balis, D., Binietoglou, I., Comerón, A., Dionisi, D., Falconieri, A., Fréville, P., Kampouri, A., Mattis, I., Mijic, Z., Molero, F., Papayannis, A., Pappalardo, G., Rodríguez-Gómez, A., Solomos, S., and Mona, L.: An EARLINET early warning system for atmospheric aerosol aviation hazards, 2020, Atmos. Chem. Phys., 20, 10775–10789, https://doi.org/10.5194/acp-20-10775-2020

10) Ramonet, M., Ciais, P., Apadula, F., Bartyzel, J., Bastos, A., Bergamaschi, P., Blanc, P. E., Brunner, D., Caracciolo di Torchiarolo, L., Calzolari, F., Chen, H., Chmura, L., Colomb, A., Conil, S., Cristofanelli, P., Cuevas, E., Curcoll, R., Delmotte, M., di Sarra, A., Emmenegger, L., Forster, G., Frumau, A., Gerbig, C., Gheusi, F., Hammer, S., Haszpra, L., Hatakka, J., Hazan, L., Heliasz, M., Henne, S., Hensen, A., Hermansen, O., Keronen, P., Kivi, R., Komínková, K., Kubistin, D., Laurent, O., Laurila, T., Lavric, J. V., Lehner, I., Lehtinen, K. E. J., Leskinen, A., Leuenberger, M., Levin, I., Lindauer, M., Lopez, M., Myhre,

C. Lund , Mammarella, I., Manca, G., Manning, A., Marek, M. V., Marklund, P., Martin, D., Meinhardt, F., Mihalopoulos, N., Mölder, M., Morgui, J. A., Necki, J., O'Doherty, S., O'Dowd, C., Ottosson, M., Philippon, C., Piacentino, S., Pichon, J. M., Plass-Duelmer, C., Resovsky, A., Rivier, L., Rodó, X., Sha, M. K., Scheeren, H. A., Sferlazzo, D., Spain, T. G., Stanley, K. M., Steinbacher, M., Trisolino, P., Vermeulen, A., Vítková, G., Weyrauch, D., Xueref-Remy, I., Yala, K., Yver Kwok, C., The fingerprint of the summer 2018 drought in Europe on ground-based atmospheric CO2 measurements}, Philosophical Transactions of the Royal Society B: Biological Sciences, Vol. 375, No 1810,page 20190513, 2020, https://doi.org/10.1098/rstb.2019.0513

11) Renard, P.; Bianco, A.; Baray, J.-L.; Bridoux, M.; Delort, A.-M.; Deguillaume, L. Classification of Clouds Sampled at the Puy de Dôme Station (France) Based on Chemical Measurements and Air Mass History Matrices. Atmosphere 2020, 11, 732; https://doi.org/10.3390/atmos11070732

12) Saunois, M., Stavert, A. R., Poulter, B., Bousquet, P., Canadell, J. G., Jackson, R. B., Raymond, P. A., Dlugokencky, E. J., Houweling, S., Patra, P. K., Ciais, P., Arora, V. K., Bastviken, D., Bergamaschi, P., Blake, D. R., Brailsford, G., Bruhwiler, L., Carlson, K. M., Carrol, M., Castaldi, S., Chandra, N., Crevoisier, C., Crill, P. M., Covey, K., Curry, C. L., Etiope, G., Frankenberg, C., Gedney, N., Hegglin, M. I., Höglund-Isaksson, L., Hugelius, G., Ishizawa, M., Ito, A., Janssens-Maenhout, G., Jensen, K. M., Joos, F., Kleinen, T., Krummel, P. B., Langenfelds, R. L., Laruelle, G. G., Liu, L., Machida, T., Maksyutov, S., McDonald, K. C., McNorton, J., Miller, P. A., Melton, J. R., Morino, I., Müller, J., Murguia-Flores, F., Naik, V., Niwa, Y., Noce, S., O'Doherty, S., Parker, R. J., Peng, C., Peng, S., Peters, G. P., Prigent, C., Prinn, R., Ramonet, M., Regnier, P., Riley, W. J., Rosentreter, J. A., Segers, A., Simpson, I. J., Shi, H., Smith, S. J., Steele, L. P., Thornton, B. F., Tian, H., Tohjima, Y., Tubiello, F. N., Tsuruta, A., Viovy, N., Voulgarakis, A., Weber, T. S., van Weele, M., van der Werf, G. R., Weiss, R. F., Worthy, D., Wunch, D., Yin, Y., Yoshida, Y., Zhang, W., Zhang, Z., Zhao, Y., Zheng, B., Zhu, Q., Zhu, Q., and Zhuang, Q.: The Global Methane Budget 2000–2017, 2020, Earth Syst. Sci. Data, 12, 1561–1623, https://doi.org/10.5194/essd-12-1561-2020

13) Tignat-Perrier, R., Dommergue, A., Thollot, A., Magand, O., Amato, P., Joly, M., Sellegri, K., Vogel, T. M., and Larose, C.: Seasonal shift in airborne microbial communities, 2020, Science of The Total Environment, 716, 137129, https://doi.org/10.1016/j.scitotenv.2020.137129

14) Tignat-Perrier, R., Dommergue, A., Thollot, A., Magand, O., Vogel, T. M., and Larose, C.: Microbial functional signature in the atmospheric boundary layer, 2020, Biogeosciences, 17, 6081–6095, https://doi.org/10.5194/bg-17-6081-2020

15) Tignat-Perrier, R.; Dommergue, A.; Vogel, T.M.; Larose, C. Microbial Ecology of the Planetary Boundary Layer. Atmosphere 2020, 11, 1296. https://doi.org/10.3390/atmos11121296

16) Wang, M., H. Perroux, J. Fleuret, A. Bianco, L. Bouvier, A. Colomb, A. Borbon, L. Deguillaume, Anthropogenic and biogenic hydrophobic VOCs detected in clouds at the puy de Dôme station using Stir Bar Sorptive Extraction: Deviation from the Henry's law prediction, Atmospheric Research, 2020, 237, https://doi.org/10.1016/j.atmosres.2020.104844

17) Wolf, M.J., Zhang, Y., Zawadowicz, M.A. et al. A biogenic secondary organic aerosol source of cirrus ice nucleating particles. Nat Commun 11, 4834 (2020). https://doi.org/10.1038/s41467-020-18424-6

2019

1) Agustí-Panareda, A., Diamantakis, M., Massart, S., Chevallier, F., Muñoz-Sabater, J., Barré, J., Curcoll, R., Engelen, R., Langerock, B., Law, R. M., Loh, Z., Morguí, J. A., Parrington, M., Peuch, V.-H., Ramonet, M., Roehl, C., Vermeulen, A. T., Warneke, T., and Wunch, D.: Modelling CO2 weather – why horizontal resolution matters, 2019, Atmos. Chem. Phys., 19, 7347–7376, https://doi.org/10.5194/acp-19-7347-2019

2) Amato, P., Besaury, L., Joly, M., Penaud, B., Deguillaume, L., and Delort, A.-M.: Metatranscriptomic exploration of microbial functioning in clouds, 2019, Scientific Reports, 9, 4383, 10.1038/s41598-019-41032-4

3) Baars, H., Ansmann, A., Ohneiser, K., Haarig, M., Engelmann, R., Althausen, D., Hanssen, I., Gausa, M., Pietruczuk, A., Szkop, A., Stachlewska, I. S., Wang, D., Reichardt, J., Skupin, A., Mattis, I., Trickl, T., Vogelmann, H., Navas-Guzmán, F., Haefele, A., Acheson, K., Ruth, A. A., Tatarov, B., Müller, D., Hu, Q., Podvin, T., Goloub, P., Veselovskii, I., Pietras, C., Haeffelin, M., Fréville, P., Sicard, M., Comerón, A., Fernández García, A. J., Molero Menéndez, F., Córdoba-Jabonero, C., Guerrero-Rascado, J. L., Alados-Arboledas, L., Bortoli, D., Costa, M. J., Dionisi, D., Liberti, G. L., Wang, X., Sannino, A., Papagiannopoulos, N., Boselli, A., Mona, L., D'Amico, G., Romano, S., Perrone, M. R., Belegante, L., Nicolae, D., Grigorov, I., Gialitaki, A., Amiridis, V., Soupiona, O., Papayannis, A., Mamouri, R.-E., Nisantzi, A., Heese, B., Hofer, J., Schechner, Y. Y., Wandinger, U., and Pappalardo, G.: The unprecedented 2017–2018 stratospheric smoke event: decay phase and aerosol properties observed with the EARLINET, 2019, Atmos. Chem. Phys., 19, 15183–15198, https://doi.org/10.5194/acp-19-15183-2019

4) Baray, J.-L.; Bah, A.; Cacault, P.; Sellegri, K.; Pichon, J.-M.; Deguillaume, L.; Montoux, N.; Noel, V.; Seze, G.; Gabarrot, F.; Payen, G.; Duflot, V. Cloud Occurrence Frequency at Puy de Dôme (France) Deduced from an Automatic Camera Image Analysis: Method, Validation, and Comparisons with Larger Scale Parameters. Atmosphere 2019, 10, 808. https://doi.org/10.3390/atmos10120808

5) Bianco A., Riva M., Baray J.-L., Ribeiro M., Chaumerliac N., George C., Bridoux M. C., Deguillaume L.. Chemical characterization of cloud water collected at puy de Dôme by FT-ICR MS reveals the presence of SOA components, ACS Earth and Space Chemistry, 2019, 3, 10, 2076-2087, https://doi.org/10.1021/acsearthspacechem.9b00153

6) Bianco A. , L. Deguillaume, N. Chaumerliac, M. Vaïtilingom, M. Wang, A.-M. Delort, M.C. Bridoux, Effect of endogenous microbiota on the molecular composition of cloud water: a study by Fourier-transform ion cyclotron resonance mass spectrometry (FT-ICR MS), [Scientific Reports], (2019) https://doi.org/10.1038/s41598-019-44149-8

7) Blaszczak B., K. Widziewicz-Rzonca, N. Ziola, K. Klejnowski and K. Juda-Rezler, 2019, Chemical Characteristics of Fine Particulate Matter in Poland in Relation with Data from Selected Rural and Urban Background Stations in Europe, Appl. Sciences, 9, 98, https://doi.org/10.3390/app9010098

8) Dommergue A., Amato P., Tignat-Perrier R., Magand O., Thollot A., Joly M., Bouvier L., Sellegri K., Vogel T., Sonke J.E., Jaffrezo J.-L., Andrade M., Moreno I., Labuschagne C., Martin L., Zhang Q.,

LaRose C., 2019, Methods to Investigate the Global Atmospheric Microbiome, Frontiers in Microbiology, 10, 243, https://doi.org/10.3389/fmicb.2019.00243

9) Fanourgakis, G. S., Kanakidou, M., Nenes, A., Bauer, S. E., Bergman, T., Carslaw, K. S., Grini, A., Hamilton, D. S., Johnson, J. S., Karydis, V. A., Kirkevåg, A., Kodros, J. K., Lohmann, U., Luo, G., Makkonen, R., Matsui, H., Neubauer, D., Pierce, J. R., Schmale, J., Stier, P., Tsigaridis, K., van Noije, T., Wang, H., Watson-Parris, D., Westervelt, D. M., Yang, Y., Yoshioka, M., Daskalakis, N., Decesari, S., Gysel-Beer, M., Kalivitis, N., Liu, X., Mahowald, N. M., Myriokefalitakis, S., Schrödner, R., Sfakianaki, M., Tsimpidi, A. P., Wu, M., and Yu, F.: Evaluation of global simulations of aerosol particle and cloud condensation nuclei number, with implications for cloud droplet formation, 2019, Atmos. Chem. Phys., 19, 8591–8617, https://doi.org/10.5194/acp-19-8591-2019

10) Lee, S.-H., Gordon, H., Yu, H., Lehtipalo, K., Haley, R., Li, Y., & Zhang, R. (2019). New particle formation in the atmosphere: From molecular clusters to global climate. Journal of Geophysical Research: Atmospheres, 124, 7098–7146. https://doi.org/10.1029/2018JD029356

11) Lothon, M., Barnéoud, P., Gabella, O., Lohou, F., Derrien, S., Rondi, S., Chiriaco, M., Bastin, S., Dupont, J.-C., Haeffelin, M., Badosa, J., Pascal, N., and Montoux, N.: ELIFAN, an algorithm for the estimation of cloud cover from sky imagers, 2019, Atmos. Meas. Tech., 12, 5519–5534, https://doi.org/10.5194/amt-12-5519-2019

12) Picard, D., Attoui, M., and Sellegri, K.: B3010: a boosted TSI 3010 condensation particle counter for airborne studies, 2019, Atmos. Meas. Tech., 12, 2531–2543, https://doi.org/10.5194/amt-12-2531-2019

13) Ramonet, M., Ciais, P., Apadula, F., Bartyzel, J., Bastos, A., Bergamaschi, P., Blanc, P. E., Brunner, D., di Torchiarolo, L. C., Calzolari, F., Chen, H., Chmura, L., Colomb, A., Conil, S., Cristofanelli, P., Cuevas, E., Curcoll, R., Delmotte, M., di Sarra, A., ... Kwok, C. Y. (2020). The fingerprint of the summer 2018 drought in Europe on ground-based atmospheric CO2 measurements. Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences, 375(1810), [20190513]. https://doi.org/10.1098/rstb.2019.0513

14) Sellegri, K.; Rose, C.; Marinoni, A.; Lupi, A.; Wiedensohler, A.; Andrade, M.; Bonasoni, P.; Laj, P. New Particle Formation: A Review of Ground-Based Observations at Mountain Research Stations. Atmosphere 2019, 10, 493. https://doi.org/10.3390/atmos10090493

15) Smith, H. R., Ulanowski, Z., Kaye, P. H., Hirst, E., Stanley, W., Kaye, R., Wieser, A., Stopford, C., Kezoudi, M., Girdwood, J., Greenaway, R., and Mackenzie, R.: The Universal Cloud and Aerosol Sounding System (UCASS): a low-cost miniature optical particle counter for use in dropsonde or balloon-borne sounding systems, 2019, Atmos. Meas. Tech., 12, 6579–6599, https://doi.org/10.5194/amt-12-6579-2019

16) Tegen, I., Neubauer, D., Ferrachat, S., Siegenthaler-Le Drian, C., Bey, I., Schutgens, N., Stier, P., Watson-Parris, D., Stanelle, T., Schmidt, H., Rast, S., Kokkola, H., Schultz, M., Schroeder, S., Daskalakis, N., Barthel, S., Heinold, B., and Lohmann, U.: The global aerosol–climate model ECHAM6.3–HAM2.3 – Part 1: Aerosol evaluation, 2019, Geosci. Model Dev., 12, 1643–1677, https://doi.org/10.5194/gmd-12-1643-2019

17) Yang, Y.; Fu, Y.; Lin, Q.; Jiang, F.; Lian, X.; Li, L.; Wang, Z.; Zhang, G.; Bi, X.; Wang, X.; Sheng, G. Recent Advances in Quantifying Wet Scavenging Efficiency of Black Carbon Aerosol. Atmosphere 2019, 10, 175, https://doi.org/10.3390/atmos10040175

18) Zellweger, C., Steinbrecher, R., Laurent, O., Lee, H., Kim, S., Emmenegger, L., Steinbacher, M., and Buchmann, B.: Recent advances in measurement techniques for atmospheric carbon monoxide and nitrous oxide observations, 2019, Atmos. Meas. Tech., 12, 5863–5878, https://doi.org/10.5194/amt-12-5863-2019

2018

1) Bergamaschi, P., Karstens, U., Manning, A. J., Saunois, M., Tsuruta, A., Berchet, A., Vermeulen, A. T., Arnold, T., Janssens-Maenhout, G., Hammer, S., Levin, I., Schmidt, M., Ramonet, M., Lopez, M., Lavric, J., Aalto, T., Chen, H., Feist, D. G., Gerbig, C., Haszpra, L., Hermansen, O., Manca, G., Moncrieff, J., Meinhardt, F., Necki, J., Galkowski, M., O'Doherty, S., Paramonova, N., Scheeren, H. A., Steinbacher, M., and Dlugokencky, E.: Inverse modelling of European CH4 emissions during 2006–2012 using different inverse models and reassessed atmospheric observations, 2018, Atmos. Chem. Phys., 18, 901-920, https://doi.org/10.5194/acp-18-901-2018

2) Bianco A., L. Deguillaume, M. Vaïtilingom, E. Nicol, J.-L. Baray, N. Chaumerliac, and M. Bridoux, Molecular Characterization of Cloud Water Samples Collected at the Puy de Dôme (France) by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry, Environmental Science & Technology 2018 52 (18), 10275-10285, https://doi.org/10.1021/acs.est.8b01964

3) Collaud Coen, M., Andrews, E., Aliaga, D., Andrade, M., Angelov, H., Bukowiecki, N., Ealo, M., Fialho, P., Flentje, H., Hallar, A. G., Hooda, R., Kalapov, I., Krejci, R., Lin, N.-H., Marinoni, A., Ming, J., Nguyen, N. A., Pandolfi, M., Pont, V., Ries, L., Rodríguez, S., Schauer, G., Sellegri, K., Sharma, S., Sun, J., Tunved, P., Velasquez, P., and Ruffieux, D.: Identification of topographic features influencing aerosol observations at high altitude stations, 2018, Atmos. Chem. Phys., 18, 12289-12313, https://doi.org/10.5194/acp-18-12289-2018

4) Dall'Osto, M., D.C.S., Beddows, A., Asmi, L. Poulain, L. Hao, E. Freney, J. D. Allan, M. Canagaratna, M. Crippa, F. Bianchi, G. de Leeuw, A. Eriksson, E. Swietlicki, H. C. Hansson, J. S. Henzing, C. Granier, K. Zemankova, P. Laj, T. Onasch, A. Prevot, J. P. Putaud, K. Sellegri, M. Vidal, A. Virtanen, R. Simo, D. Worsnop, C. O'Dowd, M. Kulmala & Roy M. Harrison, Novel insights on new particle formation derived from a pan-european observing system. Sci Rep 8, 1482 (2018). https://doi.org/10.1038/s41598-017-17343-9

5) Farah A., E. Freney, A. Chauvigné, J.-L. Baray, C. Rose, D. Picard, A. Colomb, D. Hadad, M. Abboud, W. Farah, and K. Sellegri, Seasonal variation of aerosol size distribution data at the Puy de Dôme station with emphasis on the boundary layer/free troposphere segregation, Atmosphere 2018, 9(7), 244; https://doi.org/10.3390/atmos9070244

6) Hadad D., J.-L. Baray, N. Montoux, J. Van Baelen, P. Fréville, J.-M. Pichon, P. Bosser, M. Ramonet, C. Yver Kwok, N. Bègue and V. Duflot, Surface and tropospheric water vapor variability and decadal

trends at two supersites of CO-PDD (Cézeaux and Puy de Dôme) in Central France, Atmosphere 2018, 9(8), 302; https://doi.org/10.3390/atmos9080302

7) Hu, W., H. Niu, K. M., Z. Wu, M. Hu, T. Kojima, D. Zhang, Bacteria in atmospheric waters: Detection, characteristics and implications, Atmospheric Environment, 179, 2018, 201-221, https://doi.org/10.1016/j.atmosenv.2018.02.026

8) Kountouris, P., Gerbig, C., Rödenbeck, C., Karstens, U., Koch, T. F., and Heimann, M.: Atmospheric CO2 inversions on the mesoscale using data-driven prior uncertainties: quantification of the European terrestrial CO2 fluxes, 2018, Atmos. Chem. Phys., 18, 3047-3064, https://doi.org/10.5194/acp-18-3047-2018

9) Jimenez-Sanchez C., Hanlon R., Aho Ken A., Powers C., Morris Cindy E., Schmale D. G., Diversity and Ice Nucleation Activity of Microorganisms Collected With a Small Unmanned Aircraft System (sUAS) in France and the United States, Frontiers in Microbiology, Vol. 9, 2018, https://doi.org/10.3389/fmicb.2018.01667

10) Jousse, C., Dalle, C., Canet, I., Lagrée M., Traïkia M., Lyan M., Mendes C., Sancelme M., Amato P., Delort A.M., Metabolomic study of the response to cold shock in a strain of Pseudomonas syringae isolated from cloud water, Metabolomics (2018) 14: 11. https://doi.org/10.1007/s11306-017-1295-7

11) Lac, C., Chaboureau, J.-P., Masson, V., Pinty, J.-P., Tulet, P., Escobar, J., Leriche, M., Barthe, C., Aouizerats, B., Augros, C., Aumond, P., Auguste, F., Bechtold, P., Berthet, S., Bielli, S., Bosseur, F., Caumont, O., Cohard, J.-M., Colin, J., Couvreux, F., Cuxart, J., Delautier, G., Dauhut, T., Ducrocq, V., Filippi, J.-B., Gazen, D., Geoffroy, O., Gheusi, F., Honnert, R., Lafore, J.-P., Lebeaupin Brossier, C., Libois, Q., Lunet, T., Mari, C., Maric, T., Mascart, P., Mogé, M., Molinié, G., Nuissier, O., Pantillon, F., Peyrillé, P., Pergaud, J., Perraud, E., Pianezze, J., Redelsperger, J.-L., Ricard, D., Richard, E., Riette, S., Rodier, Q., Schoetter, R., Seyfried, L., Stein, J., Suhre, K., Taufour, M., Thouron, O., Turner, S., Verrelle, A., Vié, B., Visentin, F., Vionnet, V., and Wautelet, P.: Overview of the Meso-NH model version 5.4 and its applications, 2018, Geosci. Model Dev., 11, 1929-1969, https://doi.org/10.5194/gmd-11-1929-2018

12) Lallement, A., Besaury, L., Tixier, E., Sancelme, M., Amato, P., Vinatier, V., Canet, I., Polyakova, O. V., Artaev, V. B., Lebedev, A. T., Deguillaume, L., Mailhot, G., and Delort, A.-M.: Potential for phenol biodegradation in cloud waters, 2018, Biogeosciences, 15, 5733-5744, https://doi.org/10.5194/bg-15-5733-2018

13) Lallement A., V. Vinatier, M. Brigante, L. Deguillaume, A.M. Delort, G. Mailhot, First evaluation of the effect of microorganisms on steady state hydroxyl radical concentrations in atmospheric waters, Chemosphere, 212, 2018, 715-722, ISSN 0045-6535, https://doi.org/10.1016/j.chemosphere.2018.08.128

14) Lebedev A.T., O.V. Polyakova, D.M. Mazur, V.B. Artaev, I. Canet, A. Lallement, M. Vaïtilingom, L. Deguillaume, A.-M. Delort, Detection of semi-volatile compounds in cloud waters by GC×GC-TOF-MS. Evidence of phenols and phthalates as priority pollutants, 2018, Environmental Pollution, 241, 616-625, https://doi.org/10.1016/j.envpol.2018.05.089

15) Marion, A., M. Brigante, G. Mailhot, A new source of ammonia and carboxylic acids in cloud water: The first evidence of photochemical process involving an iron-amino acid complex, Atmospheric Environment, Vol.195, 2018, Pages 179-186, https://doi.org/10.1016/j.atmosenv.2018.09.060

16) Nieminen, T., Kerminen, V.-M., Petäjä, T., Aalto, P. P., Arshinov, M., Asmi, E., Baltensperger, U., Beddows, D. C. S., Beukes, J. P., Collins, D., Ding, A., Harrison, R. M., Henzing, B., Hooda, R., Hu, M., Hõrrak, U., Kivekäs, N., Komsaare, K., Krejci, R., Kristensson, A., Laakso, L., Laaksonen, A., Leaitch, W. R., Lihavainen, H., Mihalopoulos, N., Németh, Z., Nie, W., O'Dowd, C., Salma, I., Sellegri, K., Svenningsson, B., Swietlicki, E., Tunved, P., Ulevicius, V., Vakkari, V., Vana, M., Wiedensohler, A., Wu, Z., Virtanen, A., and Kulmala, M.: Global analysis of continental boundary layer new particle formation based on long-term measurements, 2018, Atmos. Chem. Phys., 18, 14737-14756, https://doi.org/10.5194/acp-18-14737-2018

17) Pandolfi, M., Alados-Arboledas, L., Alastuey, A., Andrade, M., Angelov, C., Artiñano, B., Backman, J., Baltensperger, U., Bonasoni, P., Bukowiecki, N., Collaud Coen, M., Conil, S., Coz, E., Crenn, V., Dudoitis, V., Ealo, M., Eleftheriadis, K., Favez, O., Fetfatzis, P., Fiebig, M., Flentje, H., Ginot, P., Gysel, M., Henzing, B., Hoffer, A., Holubova Smejkalova, A., Kalapov, I., Kalivitis, N., Kouvarakis, G., Kristensson, A., Kulmala, M., Lihavainen, H., Lunder, C., Luoma, K., Lyamani, H., Marinoni, A., Mihalopoulos, N., Moerman, M., Nicolas, J., O'Dowd, C., Petäjä, T., Petit, J.-E., Pichon, J. M., Prokopciuk, N., Putaud, J.-P., Rodríguez, S., Sciare, J., Sellegri, K., Swietlicki, E., Titos, G., Tuch, T., Tunved, P., Ulevicius, V., Vaishya, A., Vana, M., Virkkula, A., Vratolis, S., Weingartner, E., Wiedensohler, A., and Laj, P.: A European aerosol phenomenology – 6: scattering properties of atmospheric aerosol particles from 28 ACTRIS sites, 2018, Atmos. Chem. Phys., 18, 7877-7911, https://doi.org/10.5194/acp-18-7877-2018

18) Pison, I., Berchet, A., Saunois, M., Bousquet, P., Broquet, G., Conil, S., Delmotte, M., Ganesan, A., Laurent, O., Martin, D., O'Doherty, S., Ramonet, M., Spain, T. G., Vermeulen, A., and Yver Kwok, C.: How a European network may help with estimating methane emissions on the French national scale, 2018, Atmos. Chem. Phys., 18, 3779-3798, https://doi.org/10.5194/acp-18-3779-2018

19) Rose, C., Chaumerliac, N., Deguillaume, L., Perroux, H., Mouchel-Vallon, C., Leriche, M., Patryl, L., and Armand, P.: Modeling the partitioning of organic chemical species in cloud phases with CLEPS (1.1) , 2018, Atmos. Chem. Phys., 18, 2225-2242, https://doi.org/10.5194/acp-18-2225-2018

20) Schmale J., S. Henning, B. Henzing, H. Keskinen, K. Sellegri, J. Ovadnevaite, A. Bougiatioti, N. Kalivitis, I. Stavroulas, A. Jefferson, M. Park, P. Schlag, A. Kristensson, Y. Iwamoto, K. Pringle, C. Reddington, P. Aalto, M. Äijälä, U. Baltensperger, J. Bialek, W. Birmili, N. Bukowiecki, M. Ehn, A. M. Fjæraa, M. Fiebig, G. Frank, R. Fröhlich, A. Frumau, M. Furuya, E. Hammer, L. Heikkinen, E. Herrmann, R. Holzinger, H. Hyono, M. Kanakidou, A. Kiendler-Scharr, K. Kinouchi, G. Kos, M. Kulmala, N. Mihalopoulos, G. Motos, A. Nenes, C. O'Dowd, M. Paramonov, T. Petäjä, D. Picard, L. Poulain, A. Stephan H. Prévôt, J. Slowik, A. Sonntag, E. Swietlicki, B. Svenningsson, H. Tsurumaru, A. Wiedensohler, C. Wittbom, J. A. Ogren, A. Matsuki, S. Soo Yum, C. Lund Myhre, K. Carslaw, F. Stratmann & M. Gysel, Collocated observations of cloud condensation nuclei, particle size distributions, and chemical composition, SCIENTIFIC DATA, vol 4, 170003, 2018 DOI: https://doi.org/10.1038/sdata.2017.3

21) Schmale, J., Henning, S., Decesari, S., Henzing, B., Keskinen, H., Sellegri, K., Ovadnevaite, J., Pöhlker, M. L., Brito, J., Bougiatioti, A., Kristensson, A., Kalivitis, N., Stavroulas, I., Carbone, S., Jefferson, A., Park, M., Schlag, P., Iwamoto, Y., Aalto, P., Äijälä, M., Bukowiecki, N., Ehn, M., Frank, G., Fröhlich, R., Frumau, A., Herrmann, E., Herrmann, H., Holzinger, R., Kos, G., Kulmala, M., Mihalopoulos, N., Nenes, A., O'Dowd, C., Petäjä, T., Picard, D., Pöhlker, C., Pöschl, U., Poulain, L., Prévôt, A. S. H., Swietlicki, E., Andreae, M. O., Artaxo, P., Wiedensohler, A., Ogren, J., Matsuki, A., Yum, S. S., Stratmann, F., Baltensperger, U., and Gysel, M.: Long-term cloud condensation nuclei number concentration, particle number size distribution and chemical composition measurements at regionally representative observatories, 2018, Atmos. Chem. Phys., 18, 2853-2881, https://doi.org/10.5194/acp-18-2853-2018

22) Seck, I.; Van Baelen, J. Geostatistical Merging of a Single-Polarized X-Band Weather Radar and a Sparse Rain Gauge Network over an Urban Catchment. Atmosphere 2018, 9, 496. https://doi.org/10.3390/atmos9120496

23) Vicente, E.D., C.A. Alves, An overview of particulate emissions from residential biomass combustion, Atmospheric Research, Vol. 199, 2018, Pages 159-185, https://doi.org/10.1016/j.atmosres.2017.08.027

2017

1) Amato P, Joly M, Besaury L, Oudart A, Taib N, Moné AI, Deguillaume, L., Delort, A.-M., Debroas D. (2017) Active microorganisms thrive among extremely diverse communities in cloud water. PLoS ONE 12(8): e0182869. https://doi.org/10.1371/journal.pone.0182869

2) Baray J.-L. , Y. Pointin, J. Van Baelen, M. Lothon, B. Campistron, J.-P. Cammas, O. Masson, A. Colomb, C. Hervier, Y. Bezombes, S. Banson, C. Duroure, D. Hadad, and F. Tridon, Case study and climatological analysis of upper tropospheric jet stream and stratosphere-troposphere exchanges using VHF profilers and radionuclide measurements in France, Journal of Applied Meteorology and Climatology, 2017, 56:11, 3081-3097, https://doi.org/10.1175/JAMC-D-16-0353.1.

3) Bianco, A.; Vaïtilingom, M.; Bridoux, M.; Chaumerliac, N.; Pichon, J.-M.; Piro, J.-L.; Deguillaume, L. Trace Metals in Cloud Water Sampled at the Puy De Dôme Station. Atmosphere 2017, 8, 225 https://doi.org/10.3390/atmos8110225.

4) Ciarelli, G., Aksoyoglu, S., El Haddad, I., Bruns, E. A., Crippa, M., Poulain, L., Äijälä, M., Carbone, S., Freney, E., O'Dowd, C., Baltensperger, U., and Prévôt, A. S. H.: Modelling winter organic aerosol at the European scale with CAMx: evaluation and source apportionment with a VBS parameterization based on novel wood burning smog chamber experiments, 2017, Atmos. Chem. Phys., 17, 7653-7669, https://doi.org/10.5194/acp-17-7653-2017

5) Delort, A.-M., Deguillaume, L., Renard, P., Vinatier, V., Canet, I., Vaïtilingom, M., Chaumerliac, N., 2017. Impacts on Cloud Chemistry, in: Delort, A.-M., Amato, P. (Eds.), Microbiology of Aerosols. John Wiley & Sons, Inc., pp. 221–248. https://doi.org/10.1002/9781119132318.ch3b

6) Delort, A.M., Vaïtilingom, M., Joly, M., Amato, P., Wirgot, N., Lallement, A., Sancelme, M., Matulova, M., Deguillaume, L., 2017. Clouds: A Transient and Stressing Habitat for Microorganisms,

in: Microbial Ecology of Extreme Environments. Springer, Cham, pp. 215–245. https://doi.org/10.1007/978-3-319-51686-8_10

7) Dione, C. F. Lohou, M. Chiriaco, M. Lothon, S. Bastin, J.-L. Baray, P. Yiou, and A. Colomb, 2017, The Influence of Synoptic Circulations and Local Processes on Temperature Anomalies at Three French Observatories, J. Appl. Meteor. Climatol., 56, 141–158, https://doi.org/10.1175/JAMC-D-16-0113.1

8) Kontkanen, J., Lehtipalo, K., Ahonen, L., Kangasluoma, J., Manninen, H. E., Hakala, J., Rose, C., Sellegri, K., Xiao, S., Wang, L., Qi, X., Nie, W., Ding, A., Yu, H., Lee, S., Kerminen, V.-M., Petäjä, T., and Kulmala, M.: Measurements of sub-3?nm particles using a particle size magnifier in different environments: from clean mountain top to polluted megacities, 2017, Atmos. Chem. Phys., 17, 2163-2187, https://doi.org/10.5194/acp-17-2163-2017

9) Lallement, A., L. Besaury, B. Eyheraguibel, P. Amato, M. Sancelme, G. Mailhot, A. M. Delort, 2017, Draft Genome Sequence of Rhodococcus enclensis 23b-28, a Model Strain Isolated from Cloud Water, Genome Announc. Oct 2017, 5 (43) e01199-17; https://doi.org/10.1128/genomea.01199-17

10) Pouzet G., E. Péghaire, M. Aguès, J.-L. Baray, F. Conen, P. Amato, Atmospheric processing and variability of biological ice nucleating particles in precipitation at Opme, France, Atmosphere 2017, 8(11), 229-246; https://doi.org/10.3390/atmos8110229

11) Qi, L., Li, Q., He, C., Wang, X., and Huang, J.: Effects of the Wegener–Bergeron–Findeisen process on global black carbon distribution, 2017, Atmos. Chem. Phys., 17, 7459-7479, https://doi.org/10.5194/acp-17-7459-2017

12) Santl-Temkiv T., P. Amato, U. Gosewinkel, R. Thyrhaug, A. Charton, B. Chicot, Kai Finster, G. Bratbak, and J. Löndahl, 2017, High-Flow-Rate Impinger for the Study of Concentration, Viability, Metabolic Activity, and Ice-Nucleation Activity of Airborne Bacteria, Environmental Science & Technology 51 (19), 11224-11234 https://doi.org/10.1021/acs.est.7b01480

13) Schultz, M.G., Schröder, S., Lyapina, O., Cooper, O., Galbally, I., Petropavlovskikh, I., von Schneidemesser, E., Tanimoto, H., Elshorbany, Y., Naja, M., Seguel, R., Dauert, U., Eckhardt, P., Feigenspahn, S., Fiebig, M., Hjellbrekke, A.-G., Hong, Y.-D., Christian Kjeld, P., Koide, H., Lear, G., Tarasick, D., Ueno, M., Wallasch, M., Baumgardner, D., Chuang, M.-T., Gillett, R., Lee, M., Molloy, S., Moolla, R., Wang, T., Sharps, K., Adame, J.A., Ancellet, G., Apadula, F., Artaxo, P., Barlasina, M., Bogucka, M., Bonasoni, P., Chang, L., Colomb, A., Cuevas, E., Cupeiro, M., Degorska, A., Ding, A., Fröhlich, M., Frolova, M., Gadhavi, H., Gheusi, F., Gilge, S., Gonzalez, M.Y., Gros, V., Hamad, S.H., Helmig, D., Henriques, D., Hermansen, O., Holla, R., Huber, J., Im, U., Jaffe, D.A., Komala, N., Kubistin, D., Lam, K.-S., Laurila, T., Lee, H., Levy, I., Mazzoleni, C., Mazzoleni, L., McClure-Begley, A., Mohamad, M., Murovic, M., Navarro-Comas, M., Nicodim, F., Parrish, D., Read, K.A., Reid, N., Ries, L., Saxena, P., Schwab, J.J., Scorgie, Y., Senik, I., Simmonds, P., Sinha, V., Skorokhod, A., Spain, G., Spangl, W., Spoor, R., Springston, S.R., Steer, K., Steinbacher, M., Suharguniyawan, E., Torre, P., Trickl, T., Weili, L., Weller, R., Xu, X., Xue, L. and Zhiqiang, M., 2017. Tropospheric Ozone Assessment Report: Database and Metrics Data of Global Surface Ozone Observations. Elem Sci Anth, 5, p.58. DOI: http://doi.org/10.1525/elementa.244

14) Wirgot, N., Vinatier, V., Deguillaume, L., Sancelme, M., and Delort, A.-M.: H2O2 modulates the energetic metabolism of the cloud microbiome, 2017, Atmos. Chem. Phys., 17, 14841-14851, https://doi.org/10.5194/acp-17-14841-2017

2016

1) Alastuey, A., Querol, X., Aas, W., Lucarelli, F., Pérez, N., Moreno, T., Cavalli, F., Areskoug, H., Balan, V., Catrambone, M., Ceburnis, D., Cerro, J.C., Conil, S., Gevorgyan, L., Hueglin, C., Imre, K., Jaffrezo, J.-L., Leeson, S.R., Mihalopoulos, N., Mitosinkova, M., O'Dowd, C.D., Pey, J., Putaud, J.-P., Riffault, V., Ripoll, A., Sciare, J., Sellegri, K., Spindler, G., Yttri, K.E., 2016. Geochemistry of PM10 over Europe during the EMEP intensive measurement periods in summer 2012 and winter 2013. Atmos Chem Phys 16, 6107–6129. https://doi.org/10.5194/acp-16-6107-2016

2) Barbet, C., Deguillaume, L., Chaumerliac, N, Leriche, M, Freney, E, Colomb A., Sellegri, K., Patryl L., Armand P 2016, Evaluation of Aerosol Chemical Composition Simulations by the WRF-Chem Model at the Puy de Dôme Station (France), Aerosol and Air Quality Research, 16, 3, 909-917 https://doi.org/10.4209/aaqr.2015.05.0342

3) Berger, A., C. Barbet , M. Leriche, L. Deguillaume, C. Mari, N. Chaumerliac, N. Bègue, P. Tulet, D. Gazen, J. Escobar 2016, Evaluation of Meso-NH and WRF/CHEM simulated gas and aerosol chemistry over Europe based on hourly observations, Atmospheric Research, 176-177, 43-63, https://doi.org/10.1016/j.atmosres.2016.02.006

4) Bianco, A.; Voyard, G.; Deguillaume, L.; Mailhot, G.; Brigante, M. 2016, Improving the characterization of dissolved organic carbon in cloud water: Amino acids and their impact on the oxidant capacity, Scientific Reports, 6, 37420, 2016 https://doi.org/10.1038/srep37420

5) Bianco, A. M. Passananti, L. Deguillaume, G. Mailhot, M. Brigante 2016, Tryptophan and tryptophan-like substances in cloud water: Occurrence and photochemical fate, Atmospheric Environment, 137, 53-61, https://doi.org/10.1016/j.atmosenv.2016.04.034

6) Cavalli, F., Alastuey, A., Areskoug, H., Ceburnis, D., Cech, J., Genberg, J., Harrison, R.M., Jaffrezo, J.L., Kiss, G., Laj, P., Mihalopoulos, N., Perez, N., Quincey, P., Schwarz, J., Sellegri, K., Spindler, G., Swietlicki, E., Theodosi, C., Yttri, K.E., Aas, W., Putaud, J.P., 2016. A European aerosol phenomenology -4: Harmonized concentrations of carbonaceous aerosol at 10 regional background sites across Europe. Atmos. Environ. 144, 133–145. https://doi.org/10.1016/j.atmosenv.2016.07.050

7) Chauvigné, A., Sellegri, K., Hervo, M., Montoux, N., Freville, P., and Goloub, P., 2016, Comparison of the aerosol optical properties and size distribution retrieved by sun photometer with in situ measurements at midlatitude, Atmospheric Measurement Technique, 9, 4569-4585, https://doi.org/10.5194/amt-9-4569-2016

8) Ciarelli, G., Aksoyoglu, S., Crippa, M., Jimenez, J.-L., Nemitz, E., Sellegri, K., Äijälä, M., Carbone, S., Mohr, C., O'Dowd, C., Poulain, L., Baltensperger, U., Prévôt, A.S.H., 2016. Evaluation of European air quality modelled by CAMx including the volatility basis set scheme. Atmos Chem Phys 16, 10313–10332. https://doi.org/10.5194/acp-16-10313-2016

9) Denjean, C. F. Cassola, A. Mazzino, S. Triquet, S. Chevaillier, N. Grand, T. Bourrianne, G. Momboisse, K. Sellegri, A. Schwarzenbock, E.Freney, M. Mallet, and P. Formenti, 2016, Size distribution and optical properties of mineral dust aerosols transported in the western Mediterranean, AtmosphericChemistry and Physics, 16, 1081-1104, https://doi.org/10.5194/acp-16-1081-2016

10) Freney E., K. Sellegri, E. Asmi, C. Rose, A. Chauvigne, J.-L. Baray, A. Colomb, M. Hervo, N. Montoux, L. Bouvier, D. Picard, 2016, Experimental evidence of the feeding of the free troposphere with aerosol particles from the mixing layer, Aerosol and Air Quality Research, 16, 702-716 https://doi.org/10.4209/aaqr.2015.03.0164 .

11) Hallar, A.G., Andrews, E., Bukowiecki, N., Jaffe, D.A. and Lin, N.H. (2016). Overview of the Special Issue "Selected Papers from the 2nd Atmospheric Chemistry and Physics at Mountain Sites Symposium". Aerosol Air Qual. Res. 16: 471-477. https://doi.org/10.4209/aaqr.2016.02.0077

12) Jia, H.-y.; Wang, L.; Li, P.-h.; Wang, Y.; Guo, L.-q.; Li, T.; Sun, L.; Shou, Y.-p.; Mao, T.-y.; Yi, X.-l. Characterization, Long-Range Transport and Source Identification of Carbonaceous Aerosols during Spring and Autumn Periods at a High Mountain Site in South China. Atmosphere 2016, 7, 122. https://doi.org/10.3390/atmos7100122

13) Kiendler-Scharr, A., Mensah, A.A., Friese, E., Topping, D., Nemitz, E., Prevot, A.S.H., Äijälä, M., Allan, J., Canonaco, F., Canagaratna, M., Carbone, S., Crippa, M., Dall Osto, M., Day, D.A., De Carlo, P., Di Marco, C.F., Elbern, H., Eriksson, A., Freney, E., Hao, L., Herrmann, H., Hildebrandt, L., Hillamo, R., Jimenez, J.L., Laaksonen, A., McFiggans, G., Mohr, C., O'Dowd, C., Otjes, R., Ovadnevaite, J., Pandis, S.N., Poulain, L., Schlag, P., Sellegri, K., Swietlicki, E., Tiitta, P., Vermeulen, A., Wahner, A., Worsnop, D., Wu, H.-C., 2016. Ubiquity of organic nitrates from nighttime chemistry in the European submicron aerosol. Geophys. Res. Lett. 43, 2016GL069239. https://doi.org/10.1002/2016GL069239

14) Masson O., J. Bieringer, E. Brattich, A. Dalheimer, S. Estier, I. Penev, W. Ringer, C. Schlosser, T. Steinkopff, P. Steinmann, L.Tositti, P. Van Beek, A. de Vismes-Ott, 2016, Variation in airborne 134Cs, 137Cs, particulate 131I and 7Be maximum activities at high-altitude European locations after the arrival of Fukushima-labeled air masses, Journal of Environmental Radioactivity, 162–163,14-22, ISSN 0265-931X, https://doi.org/10.1016/j.jenvrad.2016.05.004

15) Passananti M., V.Vinatier, A.-M. Delort, G. Mailhot, and M. Brigante, 2016, Siderophores in Cloud Waters and Potential Impact on Atmospheric Chemistry: Photoreactivity of Iron Complexes under Sun-Simulated Conditions Environmental Science & Technology 50 (17), 9324-9332, https://doi.org/10.1021/acs.est.6b02338

16) Renard, P., Canet, I., Sancelme, M., Wirgot, N., Deguillaume, L., and Delort, A.-M.: Screening of cloud microorganisms isolated at the Puy de Dôme (France) station for the production of biosurfactants, 2016, Atmos. Chem. Phys., 16, 12347–12358, https://doi.org/10.5194/acp-16-12347-2016

17) Saïd, F., Campistron, B., Delbarre, H., Canut, G., Doerenbecher, A., Durand, P., Fourrié, N., Lambert, D. and Legain, D. (2016), Offshore winds obtained from a network of wind-profiler radars during HyMeX. Q.J.R. Meteorol. Soc., 142: 23–42. https://doi.org/10.1002/qj.2749

18) Vinatier, V.; Wirgot, N.; Joly, M.; Sancelme,M.; Abrantes, M.; Deguillaume, L.; Delort, A.-M. 2016, Siderophores in cloud waters and potential impact in atmospheric chemistry. Part I: Production by microorganisms isolated at the puy de Dôme station, Environmental Science and Technology, 50-17, 9315-9323, https://doi.org/10.1021/acs.est.6b02335

2015

1) Amato, P., Joly, M., Schaupp, C., Attard, E., Möhler, O., Morris, C. E., Brunet, Y., and Delort, A.-M.: Survival and ice nucleation activity of bacteria as aerosols in a cloud simulation chamber, 2015, Atmos. Chem. Phys., 15, 6455-6465, https://doi.org/10.5194/acp-15-6455-2015

2) Bègue, N., Tulet, P., Pelon, J., Aouizerats, B., Berger, A., and Schwarzenboeck, A.: Aerosol processing and CCN formation of an intense Saharan dust plume during the EUCAARI 2008 campaign, 2015, Atmos. Chem. Phys., 15, 3497–3516, https://doi.org/10.5194/acp-15-3497-2015

3) Bianco, A., Passananti, M., Perroux, H., Voyard, G., Mouchel-Vallon, C., Chaumerliac, N., Mailhot, G., Deguillaume, L., and Brigante, M.: A better understanding of hydroxyl radical photochemical sources in cloud waters collected at the puy de Dôme station – experimental versus modelled formation rates, 2015, Atmos. Chem. Phys., 15, 9191–9202, https://doi.org/10.5194/acp-15-9191-2015

4) Conen, F., S. Rodríguez, C. Hülin, S. Henne, E. Herrmann, N. Bukowiecki and C. Alewell (2015) Atmospheric ice nuclei at the high-altitude observatory Jungfraujoch, Switzerland, Tellus B: Chemical and Physical Meteorology, 67:1,25014, https://doi.org/10.3402/tellusb.v67.25014

5) Fréville P., N. Montoux, J.-L. Baray, A. Chauvigné, F. Réveret, M. Hervo, D. Dionisi, G. Payen, K. Sellegri, Lidar developments at Clermont-Ferrand – France for atmospheric observation Sensors 2015, 15(2), 3041-3069; https://doi.org/10.3390/s150203041

6) Guyot, G., Gourbeyre, C., Febvre, G., Shcherbakov, V., Burnet, F., Dupont, J.-C., Sellegri, K., and Jourdan, O.: Quantitative evaluation of seven optical sensors for cloud microphysical measurements at the Puy-de-Dôme Observatory, France, 2015, Atmos. Meas. Tech., 8, 4347–4367, https://doi.org/10.5194/amt-8-4347-2015

7) Hoerger, C. C., Claude, A., Plass-Duelmer, C., Reimann, S., Eckart, E., Steinbrecher, R., Aalto, J., Arduini, J., Bonnaire, N., Cape, J. N., Colomb, A., Connolly, R., Diskova, J., Dumitrean, P., Ehlers, C., Gros, V., Hakola, H., Hill, M., Hopkins, J. R., Jäger, J., Junek, R., Kajos, M. K., Klemp, D., Leuchner, M., Lewis, A. C., Locoge, N., Maione, M., Martin, D., Michl, K., Nemitz, E., O'Doherty, S., Pérez Ballesta, P., Ruuskanen, T. M., Sauvage, S., Schmidbauer, N., Spain, T. G., Straube, E., Vana, M., Vollmer, M. K., Wegener, R., and Wenger, A.: ACTRIS non-methane hydrocarbon intercomparison experiment in Europe to support WMO GAW and EMEP observation networks, 2015, Atmos. Meas. Tech., 8, 2715–2736, https://doi.org/10.5194/amt-8-2715-2015

8) Joly, M ; Amato, P.; Sancelme, M.; Vinatier V.; Abrantes, M.; Deguillaume, L. ; Delort, A.-M. ; 2015, Survival of microbial isolates from clouds towards simulated atmospheric stress factors, Atmospheric Environment, 117, 92-98, https://doi.org/10.1016/j.atmosenv.2015.07.009

9) Labbouz, L., Van Baelen, J. S. , and C. Duroure 2015, Investigation of the links between water vapor field evolution and rain rate based on 5 years of measurements at a midlatitude site, Geophysical Research Letters, 42 https://doi.org/10.1002/2015GL066048

10) Lopez, M., Schmidt, M., Ramonet, M., Bonne, J.-L., Colomb, A., Kazan, V., Laj, P., and Pichon, J.-M.: Three years of semicontinuous greenhouse gas measurements at the Puy de Dôme station (central France) , 2015, Atmos. Meas. Tech., 8, 3941–3958, https://doi.org/10.5194/amt-8-3941-2015

11) Masson O., de Vismes Ott A., Bourcier L., Paulat P., Ribeiro M., Pichon J.-M., Sellegri K., Gurriaran R., 2015, Change of radioactive cesium (137Cs and 134Cs) content in cloud water at an elevated site in France, before and after the Fukushima nuclear accident: Comparison with radioactivity in rainwater and in aerosol particles, Atmospheric Research, 151, 45–51 https://doi.org/10.1016/j.atmosres.2014.03.031.

12) Rose, C., Sellegri, K., Asmi, E., Hervo, M., Freney, E., Colomb, A., Junninen, H., Duplissy, J., Sipilä, M., Kontkanen, J., Lehtipalo, K., and Kulmala, M.: Major contribution of neutral clusters to new particle formation at the interface between the boundary layer and the free troposphere, 2015, Atmos. Chem. Phys., 15, 3413-3428, https://doi.org/10.5194/acp-15-3413-2015

13) Vlastelic, I., K. Suchorski, K. Sellegri, A. Colomb, F. Nauret, L. Bouvier, J.-L. Piro,, The high field strength element budget of atmospheric aerosols (puy de Dome, France), Geochimica et Cosmochimica acta, 167, 253-268, 2015 https://doi.org/10.1016/j.gca.2015.07.006

2014

1) Bourcier L., O. Masson, P. Laj, P. Paulat, J.-M. Pichon, P. Chausse, R. Gurriaran,K. Sellegri 2014,Be-7, Pb-210 and Cs-137 concentrations in cloud water, J. Environm. Radioactivity, 128, 15-19, https://doi.org/10.1016/j.jenvrad.2013.10.020

2) Crippa, M., Canonaco, F., Lanz, V. A., Äijälä, M., Allan, J. D., Carbone, S., Capes, G., Ceburnis, D., Dall'Osto, M., Day, D. A., DeCarlo, P. F., Ehn, M., Eriksson, A., Freney, E., Hildebrandt Ruiz, L., Hillamo, R., Jimenez, J. L., Junninen, H., Kiendler-Scharr, A., Kortelainen, A.-M., Kulmala, M., Laaksonen, A., Mensah, A. A., Mohr, C., Nemitz, E., O'Dowd, C., Ovadnevaite, J., Pandis, S. N., Petäjä, T., Poulain, L., Saarikoski, S., Sellegri, K., Swietlicki, E., Tiitta, P., Worsnop, D. R., Baltensperger, U., and Prévôt, A. S. H.: Organic aerosol components derived from 25 AMS data sets across Europe using a consistent ME-2 based source apportionment approach, 2014, Atmos. Chem. Phys., 14, 6159–6176, https://doi.org/10.5194/acp-14-6159-2014

3) Deguillaume, L., Charbouillot, T., Joly, M., Vaïtilingom, M., Parazols, M., Marinoni, A., Amato, P., Delort, A.-M., Vinatier, V., Flossmann, A., Chaumerliac, N., Pichon, J. M., Houdier, S., Laj, P., Sellegri, K., Colomb, A., Brigante, M., and Mailhot, G.: Classification of clouds sampled at the puy de Dôme (France) based on 10 yr of monitoring of their physicochemical properties, 2014, Atmos. Chem. Phys., 14, 1485–1506, https://doi.org/10.5194/acp-14-1485-2014

4) García, M. I., Rodríguez, S., González, Y., and García, R. D.: Climatology of new particle formation at Izaña mountain GAW observatory in the subtropical North Atlantic, 2014, Atmos. Chem. Phys., 14, 3865-3881, https://doi.org/10.5194/acp-14-3865-2014

5) Holmgren, H., Sellegri, K., Hervo, M., Rose, C., Freney, E., Villani, P., and Laj, P.: Hygroscopic properties and mixing state of aerosol measured at the high-altitude site Puy de Dôme (1465 m a.s.l.), France, 2014, Atmos. Chem. Phys., 14, 9537–9554, https://doi.org/10.5194/acp-14-9537-2014

6) Joly, M., Amato, P., Deguillaume, L., Monier, M., Hoose, C., and Delort, A.-M.: Quantification of ice nuclei active at near 0 °C temperatures in low-altitude clouds at the Puy de Dôme atmospheric station, 2014, Atmos. Chem. Phys., 14, 8185–8195, https://doi.org/10.5194/acp-14-8185-2014

7) Langmann, B., Sellegri, K., and Freney, E.: Secondary organic aerosol formation during June 2010 in Central Europe: measurements and modelling studies with a mixed thermodynamic-kinetic approach, 2014, Atmos. Chem. Phys., 14, 3831–3842, https://doi.org/10.5194/acp-14-3831-2014

8) Makkonen, R., Seland, Ø., Kirkevåg, A., Iversen, T., and Kristjánsson, J. E.: Evaluation of aerosol number concentrations in NorESM with improved nucleation parameterization, 2014, Atmos. Chem. Phys., 14, 5127–5152, https://doi.org/10.5194/acp-14-5127-2014

9) Megaritis, A. G., Fountoukis, C., Charalampidis, P. E., Denier van der Gon, H. A. C., Pilinis, C., and Pandis, S. N.: Linking climate and air quality over Europe: effects of meteorology on PM2.5 concentrations, 2014, Atmos. Chem. Phys., 14, 10283-10298, https://doi.org/10.5194/acp-14-10283-2014

10) Pietikäinen, J.-P., Mikkonen, S., Hamed, A., Hienola, A. I., Birmili, W., Kulmala, M., and Laaksonen, A.: Analysis of nucleation events in the European boundary layer using the regional aerosol–climate model REMO-HAM with a solar radiation-driven OH-proxy, 2014, Atmos. Chem. Phys., 14, 11711–11729, https://doi.org/10.5194/acp-14-11711-2014

11) Ripoll, A., Pey, J., Minguillón, M. C., Pérez, N., Pandolfi, M., Querol, X., and Alastuey, A.: Three years of aerosol mass, black carbon and particle number concentrations at Montsec (southern Pyrenees, 1570 m a.s.l.) , 2014, Atmos. Chem. Phys., 14, 4279–4295, https://doi.org/10.5194/acp-14-4279-2014

12) Rose, C., Sellegri, K., Asmi, E., Hervo, M., Freney, E., Colomb, A., Junninen, H., Duplissy, J., Sipilä, M., Kontkanen, J., Lehtipalo, K., and Kulmala, M.: Major contribution of neutral clusters to new particle formation at the interface between the boundary layer and the free troposphere, 2015, Atmos. Chem. Phys., 15, 3413–3428, https://doi.org/10.5194/acp-15-3413-2015

13) Vlastelic, I., Suchorski, K., Sellegri, K., Colomb, A., Nauret, F., Bouvier, L., Piro J.-L. 2014, The trace metal signature of atmospheric aerosols sampled at a European regional background site (puy de Dôme, France), Journal of Atmospheric Chemistry, 71, 3, 195-212, https://doi.org/10.1007/s10874-014-9290-0

2013

1) Berchet, A., Pison, I., Chevallier, F., Bousquet, P., Conil, S., Geever, M., Laurila, T., Lavrič, J., Lopez, M., Moncrieff, J., Necki, J., Ramonet, M., Schmidt, M., Steinbacher, M., and Tarniewicz, J.: Towards better error statistics for atmospheric inversions of methane surface fluxes, 2013, Atmos. Chem. Phys., 13, 7115–7132, https://doi.org/10.5194/acp-13-7115-2013

2) Broquet, G., Chevallier, F., Bréon, F.-M., Kadygrov, N., Alemanno, M., Apadula, F., Hammer, S., Haszpra, L., Meinhardt, F., Morguí, J. A., Necki, J., Piacentino, S., Ramonet, M., Schmidt, M., Thompson, R. L., Vermeulen, A. T., Yver, C., and Ciais, P.: Regional inversion of CO_2 ecosystem fluxes from atmospheric measurements: reliability of the uncertainty estimates, 2013, Atmos. Chem. Phys., 13, 9039–9056, https://doi.org/10.5194/acp-13-9039-2013

3) Gabey, A. M., Vaitilingom, M., Freney, E., Boulon, J., Sellegri, K., Gallagher, M. W., Crawford, I. P., Robinson, N. H., Stanley, W. R., and Kaye, P. H.: Observations of fluorescent and biological aerosol at a high-altitude site in central France, 2013, Atmos. Chem. Phys., 13, 7415–7428, https://doi.org/10.5194/acp-13-7415-2013

4) Guilhermet, J., S. Preunkert, D. Voisin, C. Baduel, and M. Legrand (2013), Major twentieth century changes of water-soluble humic-like substances (HULISWS) aerosol over Europe inferred from Alpine ice cores, J. Geophys. Res. Atmos., 118, 3869–3878, https://doi.org/10.1002/jgrd.50201

5) Joly, M.; Attard, E.; Sancelme, M.; Deguillaume, L.; Guilbaud, C.; Morris, C.E.; Amato, P.; Delort, A.-M. 2013, Ice nucleation activity of bacteria isolated from cloud water, Atmospheric Environment, 70, 1, 392-400, https://doi.org/10.1016/j.atmosenv.2013.01.027

6) Legrand, M., S. Preunkert, B. May, J. Guilhermet, H. Hoffman, and D. Wagenbach (2013), Major 20th century changes of the content and chemical speciation of organic carbon archived in Alpine ice cores: Implications for the long-term change of organic aerosol over Europe, J. Geophys. Res. Atmos., 118, 3879–3890, https://doi.org/10.1002/jgrd.50202

7) Long, Y., Charbouillot, T., Brigante, M., Mailhot, G., Delort, A.-M., Chaumerliac, N., Deguillaume, L., 2013, Evaluation of modeled cloud chemistry mechanism against laboratory irradiation experiments: The HxOy/iron/carboxylic acid chemical system, Atmospheric Environment, 77, 686–695, https://doi.org/10.1016/j.atmosenv.2013.05.037

8) Rose, C., Boulon, J., Hervo, M., Holmgren, H., Asmi, E., Ramonet, M., Laj, P., and Sellegri, K.: Long-term observations of cluster ion concentration, sources and sinks in clear sky conditions at the high-altitude site of the Puy de Dôme, France, 2013, Atmos. Chem. Phys., 13, 11573–11594, https://doi.org/10.5194/acp-13-11573-2013

9) Vaïtilingom, M.; Deguillaume, L.; Vinatier, V.; Sancelme, M.; Amato, P.; Chaumerliac, N.; Delort, A.-M. 2013, Potential impact of microbial activity on the oxidant capacity and organic carbon budget in clouds, Proceedings of the National Academy of Sciences of the United States of America, 110, 2, 559-564, https://doi.org/10.1073/pnas.1205743110

10) Villani, P.; Sellegri, K.; Monier, M.; Laj, P. 2013, Influence of semi-volatile species on particle hygroscopic growth, Atmospheric Environment, 79, 1, 129-137, https://doi.org/10.1016/j.atmosenv.2013.05.069

11) Zhang, Y., Sartelet, K., Zhu, S., Wang, W., Wu, S.-Y., Zhang, X., Wang, K., Tran, P., Seigneur, C., and Wang, Z.-F.: Application of WRF/Chem-MADRID and WRF/Polyphemus in Europe – Part 2: Evaluation of chemical concentrations and sensitivity simulations, 2013, Atmos. Chem. Phys., 13, 6845–6875, https://doi.org/10.5194/acp-13-6845-2013

2012

1) Asmi, E., Freney, E., Hervo, M., Picard, D., Rose, C., Colomb, A., and Sellegri, K.: Aerosol cloud activation in summer and winter at puy-de-Dôme high altitude site in France, 2012, Atmos. Chem. Phys., 12, 11589–11607, https://doi.org/10.5194/acp-12-11589-2012

2) Attard, E., Yang, H., Delort, A.-M., Amato, P., Pöschl, U., Glaux, C., Koop, T., and Morris, C. E.: Effects of atmospheric conditions on ice nucleation activity of Pseudomonas, 2012, Atmos. Chem. Phys., 12, 10667–10677, https://doi.org/10.5194/acp-12-10667-2012

3) Bergström, R., Denier van der Gon, H. A. C., Prévôt, A. S. H., Yttri, K. E., and Simpson, D.: Modelling of organic aerosols over Europe (2002–2007) using a volatility basis set (VBS) framework: application of different assumptions regarding the formation of secondary organic aerosol, 2012, Atmos. Chem. Phys., 12, 8499–8527, https://doi.org/10.5194/acp-12-8499-2012

4) Bourcier, L., K. Sellegri, P. Chausse, J. M. Pichon, and P. Laj 2012, Seasonal variation of water-soluble inorganic components in aerosol size-segregated at the puy de Dôme station (1,465 m a.s.l.), France, Journal of Atmospheric Chemistry, 69(1), 47-66, https://doi.org/10.1007/s10874-012-9229-2

5) Bourcier, L., O. Masson, P. Laj, P. Chausse, J.M. Pichon, P. Paulat, G. Bertrand, K. Sellegri 2012, A new method for assessing the aerosol to rain chemical composition relationships, Atmospheric Research, 118, 295–303, https://doi.org/10.1016/j.atmosres.2012.07.020

6) Charbouillot, T. ; Gorini, S. ; Voyard, G. ; Parazols, M. ; Brigante, M. ; Deguillaume, L. 2012, Delort, A.-M. ; Mailhot, G. 2012, Mechanism of carboxylic acid photooxidation in atmospheric aqueous phase: Formation, fate and reactivity, Atmospheric Environment, 56, 1, 1-8, https://doi.org/10.1016/j.atmosenv.2012.03.079

7) Hamburger, T., McMeeking, G., Minikin, A., Petzold, A., Coe, H., and Krejci, R.: Airborne observations of aerosol microphysical properties and particle ageing processes in the troposphere above Europe, 2012, Atmos. Chem. Phys., 12, 11533-11554, https://doi.org/10.5194/acp-12-11533-2012

8) Hervo, M., Quennehen, B., Kristiansen, N. I., Boulon, J., Stohl, A., Fréville, P., Pichon, J.-M., Picard, D., Labazuy, P., Gouhier, M., Roger, J.-C., Colomb, A., Schwarzenboeck, A., and Sellegri, K.: Physical and optical properties of 2010 Eyjafjallajökull volcanic eruption aerosol: ground-based, Lidar and airborne measurements in France, 2012, Atmos. Chem. Phys., 12, 1721–1736, https://doi.org/10.5194/acp-12-1721-2012

9) Kaminski, T., Rayner, P. J., Voßbeck, M., Scholze, M., and Koffi, E.: Observing the continental-scale carbon balance: assessment of sampling complementarity and redundancy in a terrestrial

assimilation system by means of quantitative network design, 2012, Atmos. Chem. Phys., 12, 7867–7879, https://doi.org/10.5194/acp-12-7867-2012

10) Kretschmer, R., Gerbig, C., Karstens, U., and Koch, F.-T.: Error characterization of CO_2 vertical mixing in the atmospheric transport model WRF-VPRM, 2012, Atmos. Chem. Phys., 12, 2441–2458, https://doi.org/10.5194/acp-12-2441-2012

11) Lopez, M., M. Schmidt, C. Yver, C. Messager, D. Worthy, V. Kazan, M. Ramonet, P. Bousquet, and P. Ciais 2012, Seasonal variation of N2O emissions in France inferred from atmospheric N2O and 222Rn measurements, Journal of Geophysical Research, 117, D14103, https://doi.org/10.1029/2012JD017703

12) Vaitilingom, M., E. Attard, N. Gaiani, M. Sancelme, L. Deguillaume, A. I. Flossmann, P. Amato, and A. M. Delort 2012, Long-term features of cloud microbiology at the puy de Dome (France), Atmospheric Environment, 56, 88-100, https://doi.org/10.1016/j.atmosenv.2012.03.072

13) Wiedensohler, A., Birmili, W., Nowak, A., Sonntag, A., Weinhold, K., Merkel, M., Wehner, B., Tuch, T., Pfeifer, S., Fiebig, M., Fjäraa, A. M., Asmi, E., Sellegri, K., Depuy, R., Venzac, H., Villani, P., Laj, P., Aalto, P., Ogren, J. A., Swietlicki, E., Williams, P., Roldin, P., Quincey, P., Hüglin, C., Fierz-Schmidhauser, R., Gysel, M., Weingartner, E., Riccobono, F., Santos, S., Grüning, C., Faloon, K., Beddows, D., Harrison, R., Monahan, C., Jennings, S. G., O'Dowd, C. D., Marinoni, A., Horn, H.-G., Keck, L., Jiang, J., Scheckman, J., McMurry, P. H., Deng, Z., Zhao, C. S., Moerman, M., Henzing, B., de Leeuw, G., Löschau, G., and Bastian, S.: Mobility particle size spectrometers: harmonization of technical standards and data structure to facilitate high quality long-term observations of atmospheric particle number size distributions, 2012, Atmos. Meas. Tech., 5, 657–685, https://doi.org/10.5194/amt-5-657-2012

14) Wilson, R. C., Fleming, Z. L., Monks, P. S., Clain, G., Henne, S., Konovalov, I. B., Szopa, S., and Menut, L.: Have primary emission reduction measures reduced ozone across Europe? An analysis of European rural background ozone trends 1996–2005, 2012, Atmos. Chem. Phys., 12, 437–454, https://doi.org/10.5194/acp-12-437-2012

2011

1) Asmi, A., Wiedensohler, A., Laj, P., Fjaeraa, A.-M., Sellegri, K., Birmili, W., Weingartner, E., Baltensperger, U., Zdimal, V., Zikova, N., Putaud, J.-P., Marinoni, A., Tunved, P., Hansson, H.-C., Fiebig, M., Kivekäs, N., Lihavainen, H., Asmi, E., Ulevicius, V., Aalto, P. P., Swietlicki, E., Kristensson, A., Mihalopoulos, N., Kalivitis, N., Kalapov, I., Kiss, G., de Leeuw, G., Henzing, B., Harrison, R. M., Beddows, D., O'Dowd, C., Jennings, S. G., Flentje, H., Weinhold, K., Meinhardt, F., Ries, L., and Kulmala, M.: Number size distributions and seasonality of submicron particles in Europe 2008–2009, 2011, Atmos. Chem. Phys., 11, 5505–5538, https://doi.org/10.5194/acp-11-5505-2011

2) Boulon, J., Sellegri, K., Hervo, M., Picard, D., Pichon, J.-M., Fréville, P., and Laj, P.: Investigation of nucleation events vertical extent: a long term study at two different altitude sites, 2011, Atmos. Chem. Phys., 11, 5625–5639, https://doi.org/10.5194/acp-11-5625-2011

3) Boulon, J., K. Sellegri, M. Hervo, and P. Laj 2011, Observations of nucleation of new particles in a volcanic plume, Proceedings of the National Academy of Sciences of the United States of America, 108(30), 12223-12226, https://doi.org/10.1073/pnas.110492310

4) Bourcier, L., O. Masson, P. Laj, J. M. Pichon, P. Paulat, E. Freney, and K. Sellegri 2011, Comparative trends and seasonal variation of Be-7, Pb-210 and Cs-137 at two altitude sites in the central part of France, Journal of Environmental Radioactivity, 102(3), 294-301, https://doi.org/10.1016/j.jenvrad.2010.12.005

5) Broquet, G., F. Chevallier, P. Rayner, C. Aulagnier, I. Pison, M. Ramonet, M. Schmidt, A. T. Vermeulen, and P. Ciais (2011), A European summertime CO2 biogenic flux inversion at mesoscale from continuous in situ mixing ratio measurements, J. Geophys. Res., 116, D23303, https://doi.org/10.1029/2011JD016202

6) Freney, E. J., Sellegri, K., Canonaco, F., Boulon, J., Hervo, M., Weigel, R., Pichon, J. M., Colomb, A., Prévôt, A. S. H., and Laj, P.: Seasonal variations in aerosol particle composition at the puy-de-Dôme research station in France, 2011, Atmos. Chem. Phys., 11, 13047–13059, https://doi.org/10.5194/acp-11-13047-2011

7) Hirsikko, A., Nieminen, T., Gagné, S., Lehtipalo, K., Manninen, H. E., Ehn, M., Hõrrak, U., Kerminen, V.-M., Laakso, L., McMurry, P. H., Mirme, A., Mirme, S., Petäjä, T., Tammet, H., Vakkari, V., Vana, M., and Kulmala, M.: Atmospheric ions and nucleation: a review of observations, 2011, Atmos. Chem. Phys., 11, 767–798, https://doi.org/10.5194/acp-11-767-2011

8) Houdier, S. ; Barret, M. ; Dominé, F. ; Charbouillot, T. ; Deguillaume, L. ; Voisin, D. 2011, Sensitive determination of glyoxal, methylglyoxal and hydroxyacetaldehyde in environmental water samples by using dansylacetamidooxyamine derivatization and liquid chromatography/fluorescence, Analytica Chimica Acta, 704, 1-2, p. 162-173 https://doi.org/10.1016/j.aca.2011.08.002

9) Husarova, S., M. Vaitilingom, L. Deguillaume, M. Traikia, V. Vinatier, M. Sancelme, P. Amato, M. Matulova, and A. M. Delort 2011, Biotransformation of methanol and formaldehyde by bacteria isolated from clouds. Comparison with radical chemistry, Atmospheric Environment, 45(33), 6093-6102, https://doi.org/10.1016/j.atmosenv.2011.06.035

10) Kulmala, M., Asmi, A., Lappalainen, H. K., Baltensperger, U., Brenguier, J.-L., Facchini, M. C., Hansson, H.-C., Hov, Ø., O'Dowd, C. D., Pöschl, U., Wiedensohler, A., Boers, R., Boucher, O., de Leeuw, G., Denier van der Gon, H. A. C., Feichter, J., Krejci, R., Laj, P., Lihavainen, H., Lohmann, U., McFiggans, G., Mentel, T., Pilinis, C., Riipinen, I., Schulz, M., Stohl, A., Swietlicki, E., Vignati, E., Alves, C., Amann, M., Ammann, M., Arabas, S., Artaxo, P., Baars, H., Beddows, D. C. S., Bergström, R., Beukes, J. P., Bilde, M., Burkhart, J. F., Canonaco, F., Clegg, S. L., Coe, H., Crumeyrolle, S., D'Anna, B., Decesari, S., Gilardoni, S., Fischer, M., Fjaeraa, A. M., Fountoukis, C., George, C., Gomes, L., Halloran, P., Hamburger, T., Harrison, R. M., Herrmann, H., Hoffmann, T., Hoose, C., Hu, M., Hyvärinen, A., Hõrrak, U., Iinuma, Y., Iversen, T., Josipovic, M., Kanakidou, M., Kiendler-Scharr, A., Kirkevåg, A., Kiss, G., Klimont, Z., Kolmonen, P., Komppula, M., Kristjánsson, J.-E., Laakso, L., Laaksonen, A., Labonnote, L., Lanz, V. A., Lehtinen, K. E. J., Rizzo, L. V., Makkonen, R., Manninen, H. E., McMeeking, G., Merikanto, J., Minikin, A., Mirme, S., Morgan, W. T., Nemitz, E., O'Donnell, D., Panwar, T. S., Pawlowska, H., Petzold, A., Pienaar, J. J., Pio, C., Plass-Duelmer, C., Prévôt, A. S. H., Pryor, S.,

Reddington, C. L., Roberts, G., Rosenfeld, D., Schwarz, J., Seland, Ø., Sellegri, K., Shen, X. J., Shiraiwa, M., Siebert, H., Sierau, B., Simpson, D., Sun, J. Y., Topping, D., Tunved, P., Vaattovaara, P., Vakkari, V., Veefkind, J. P., Visschedijk, A., Vuollekoski, H., Vuolo, R., Wehner, B., Wildt, J., Woodward, S., Worsnop, D. R., van Zadelhoff, G.-J., Zardini, A. A., Zhang, K., van Zyl, P. G., Kerminen, V.-M., S Carslaw, K., and Pandis, S. N.: General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) – integrating aerosol research from nano to global scales, 2011, Atmos. Chem. Phys., 11, 13061–13143, https://doi.org/10.5194/acp-11-13061-2011

11) Marinoni, A. ; Parazols, M. ; Brigante, M. ; Deguillaume, L. ; Amato, P. ; Delort, A.-M. ; Laj, P. 2011, Mailhot, G. 2011, Hydrogen peroxide in natural cloud water: Sources and photoreactivity, Atmospheric Research, 101, 1-2, 256-263, https://doi.org/10.1016/j.atmosres.2011.02.013

12) Myriokefalitakis, S., Tsigaridis, K., Mihalopoulos, N., Sciare, J., Nenes, A., Kawamura, K., Segers, A., and Kanakidou, M.: In-cloud oxalate formation in the global troposphere: a 3-D modeling study, 2011, Atmos. Chem. Phys., 11, 5761–5782, https://doi.org/10.5194/acp-11-5761-2011

13) Nieminen, T., Paasonen, P., Manninen, H. E., Sellegri, K., Kerminen, V.-M., and Kulmala, M.: Parameterization of ion-induced nucleation rates based on ambient observations, 2011, Atmos. Chem. Phys., 11, 3393–3402, https://doi.org/10.5194/acp-11-3393-2011

14) Reddington, C. L., Carslaw, K. S., Spracklen, D. V., Frontoso, M. G., Collins, L., Merikanto, J., Minikin, A., Hamburger, T., Coe, H., Kulmala, M., Aalto, P., Flentje, H., Plass-Dülmer, C., Birmili, W., Wiedensohler, A., Wehner, B., Tuch, T., Sonntag, A., O'Dowd, C. D., Jennings, S. G., Dupuy, R., Baltensperger, U., Weingartner, E., Hansson, H.-C., Tunved, P., Laj, P., Sellegri, K., Boulon, J., Putaud, J.-P., Gruening, C., Swietlicki, E., Roldin, P., Henzing, J. S., Moerman, M., Mihalopoulos, N., Kouvarakis, G., Ždímal, V., Zíková, N., Marinoni, A., Bonasoni, P., and Duchi, R.: Primary versus secondary contributions to particle number concentrations in the European boundary layer, 2011, Atmos. Chem. Phys., 11, 12007–12036, https://doi.org/10.5194/acp-11-12007-2011

15) Tridon, F., J. Van Baelen, and Y. Pointin 2011, Aliasing in Micro Rain Radar data due to strong vertical winds, Geophysical Research Letters, 38, L02804, https://doi.org/10.1029/2010GL046018

16) Vaïtilingom, M., Charbouillot, T., Deguillaume, L., Maisonobe, R., Parazols, M., Amato, P., Sancelme, M., and Delort, A.-M.: Atmospheric chemistry of carboxylic acids: microbial implication versus photochemistry, 2011, Atmos. Chem. Phys., 11, 8721–8733, https://doi.org/10.5194/acp-11-8721-2011

17) Xueref-Remy, I., Messager, C., Filippi, D., Pastel, M., Nedelec, P., Ramonet, M., Paris, J. D., and Ciais, P.: Variability and budget of CO_2 in Europe: analysis of the CAATER airborne campaigns – Part 1: Observed variability, 2011, Atmos. Chem. Phys., 11, 5655–5672, https://doi.org/10.5194/acp-11-5655-2011

18) Yver, C. E., Pison, I. C., Fortems-Cheiney, A., Schmidt, M., Chevallier, F., Ramonet, M., Jordan, A., Søvde, O. A., Engel, A., Fisher, R. E., Lowry, D., Nisbet, E. G., Levin, I., Hammer, S., Necki, J., Bartyzel, J., Reimann, S., Vollmer, M. K., Steinbacher, M., Aalto, T., Maione, M., Arduini, J., O'Doherty, S., Grant, A., Sturges, W. T., Forster, G. L., Lunder, C. R., Privalov, V., Paramonova, N., Werner, A., and Bousquet, P.: A new estimation of the recent tropospheric molecular hydrogen budget using

atmospheric observations and variational inversion, 2011, Atmos. Chem. Phys., 11, 3375–3392, https://doi.org/10.5194/acp-11-3375-2011

2010

1) Astitha, M., Kallos, G., Spyrou, C., O'Hirok, W., Lelieveld, J., and Denier van der Gon, H. A. C.: Modelling the chemically aged and mixed aerosols over the eastern central Atlantic Ocean – potential impacts, 2010, Atmos. Chem. Phys., 10, 5797–5822, https://doi.org/10.5194/acp-10-5797-2010

2) Bergamaschi, P., M. Krol J. F. Meirink F. Dentener A. Segers J. van Aardenne S. Monni A. T. Vermeulen M. Schmidt M. Ramonet C. Yver F. Meinhardt E. G. Nisbet R. E. Fisher S. O'Doherty E. J. Dlugokencky (2010), Inverse modeling of European CH4 emissions 2001–2006, J. Geophys. Res., 115, D22309, https://doi.org/10.1029/2010JD014180

3) Boulon, J., Sellegri, K., Venzac, H., Picard, D., Weingartner, E., Wehrle, G., Collaud Coen, M., Bütikofer, R., Flückiger, E., Baltensperger, U., and Laj, P.: New particle formation and ultrafine charged aerosol climatology at a high altitude site in the Alps (Jungfraujoch, 3580 m a.s.l., Switzerland) , 2010, Atmos. Chem. Phys., 10, 9333–9349, https://doi.org/10.5194/acp-10-9333-2010

4) Bourcier, L., K. Sellegri, O. Masson, R. Zangrando, C. Barbante, A. Gambaro, J. M. Pichon, J. Boulon, and P. Laj (2010), Experimental evidence of biomass burning as a source of atmospheric Cs-137, puy de Dome (1465 m a.s.l.), France, Atmospheric Environment, 44(19), 2280-2286, https://doi.org/10.1016/j.atmosenv.2010.04.017

5) Carouge, C., Bousquet, P., Peylin, P., Rayner, P. J., and Ciais, P.: What can we learn from European continuous atmospheric CO_2 measurements to quantify regional fluxes – Part 1: Potential of the 2001 network, 2010, Atmos. Chem. Phys., 10, 3107–3117, https://doi.org/10.5194/acp-10-3107-2010

6) Chevallier, F., P. Ciais T. J. Conway T. Aalto B. E. Anderson P. Bousquet E. G. Brunke L. Ciattaglia Y. Esaki M. Fröhlich A. Gomez A. J. Gomez-Pelaez L. Haszpra P. B. Krummel R. L. Langenfelds M. Leuenberger T. Machida F. Maignan H. Matsueda J. A. Morguí H. Mukai T. Nakazawa P. Peylin M. Ramonet L. Rivier Y. Sawa M. Schmidt L. P. Steele S. A. Vay A. T. Vermeulen S. Wofsy D. Worthy (2010), CO2 surface fluxes at grid point scale estimated from a global 21 year reanalysis of atmospheric measurements, J. Geophys. Res., 115, D21307, https://doi.org/10.1029/2010JD013887

7) Delort, A. M., M. Vaitilingom, P. Amato, M. Sancelme, M. Parazols, G. Mailhot, P. Laj, and L. Deguillaume 2010, A short overview of the microbial population in clouds: Potential roles in atmospheric chemistry and nucleation processes, Atmospheric Research, 98(2-4), 249-260, https://doi.org/10.1016/j.atmosres.2010.07.004

8) Kerminen, V.-M., Petäjä, T., Manninen, H. E., Paasonen, P., Nieminen, T., Sipilä, M., Junninen, H., Ehn, M., Gagné, S., Laakso, L., Riipinen, I., Vehkamäki, H., Kurten, T., Ortega, I. K., Dal Maso, M., Brus, D., Hyvärinen, A., Lihavainen, H., Leppä, J., Lehtinen, K. E. J., Mirme, A., Mirme, S., Hõrrak, U., Berndt, T., Stratmann, F., Birmili, W., Wiedensohler, A., Metzger, A., Dommen, J., Baltensperger, U., Kiendler-Scharr, A., Mentel, T. F., Wildt, J., Winkler, P. M., Wagner, P. E., Petzold, A., Minikin, A., Plass-Dülmer, C., Pöschl, U., Laaksonen, A., and Kulmala, M.: Atmospheric nucleation: highlights of the EUCAARI

project and future directions, 2010, Atmos. Chem. Phys., 10, 10829–10848, https://doi.org/10.5194/acp-10-10829-2010

9) Manninen, H. E., Nieminen, T., Asmi, E., Gagné, S., Häkkinen, S., Lehtipalo, K., Aalto, P., Vana, M., Mirme, A., Mirme, S., Hõrrak, U., Plass-Dülmer, C., Stange, G., Kiss, G., Hoffer, A., Törő, N., Moerman, M., Henzing, B., de Leeuw, G., Brinkenberg, M., Kouvarakis, G. N., Bougiatioti, A., Mihalopoulos, N., O'Dowd, C., Ceburnis, D., Arneth, A., Svenningsson, B., Swietlicki, E., Tarozzi, L., Decesari, S., Facchini, M. C., Birmili, W., Sonntag, A., Wiedensohler, A., Boulon, J., Sellegri, K., Laj, P., Gysel, M., Bukowiecki, N., Weingartner, E., Wehrle, G., Laaksonen, A., Hamed, A., Joutsensaari, J., Petäjä, T., Kerminen, V.-M., and Kulmala, M.: EUCAARI ion spectrometer measurements at 12 European sites – analysis of new particle formation events, 2010, Atmos. Chem. Phys., 10, 7907–7927, https://doi.org/10.5194/acp-10-7907-2010

10) Spracklen, D. V., Carslaw, K. S., Merikanto, J., Mann, G. W., Reddington, C. L., Pickering, S., Ogren, J. A., Andrews, E., Baltensperger, U., Weingartner, E., Boy, M., Kulmala, M., Laakso, L., Lihavainen, H., Kivekäs, N., Komppula, M., Mihalopoulos, N., Kouvarakis, G., Jennings, S. G., O'Dowd, C., Birmili, W., Wiedensohler, A., Weller, R., Gras, J., Laj, P., Sellegri, K., Bonn, B., Krejci, R., Laaksonen, A., Hamed, A., Minikin, A., Harrison, R. M., Talbot, R., and Sun, J.: Explaining global surface aerosol number concentrations in terms of primary emissions and particle formation, 2010, Atmos. Chem. Phys., 10, 4775–4793, https://doi.org/10.5194/acp-10-4775-2010

11) Trusilova, K., Rödenbeck, C., Gerbig, C., and Heimann, M.: Technical Note: A new coupled system for global-to-regional downscaling of CO_2 concentration estimation, 2010, Atmos. Chem. Phys., 10, 3205–3213, https://doi.org/10.5194/acp-10-3205-2010

12) Vaitilingom, M., P. Amato, M. Sancelme, P. Laj, M. Leriche, and A. M. Delort 2010, Contribution of Microbial Activity to Carbon Chemistry in Clouds, Applied and Environmental Microbiology, 76(1), 23-29, https://doi.org/10.1128/AEM.01127-09

13) Villani, M. G., Bergamaschi, P., Krol, M., Meirink, J. F., and Dentener, F. 2010, Inverse modeling of European CH4 emissions: sensitivity to the observational network, Atmospheric Chemistry and Physics, 10, 1249-1267, https://doi.org/10.1128/AEM.01127-09

2009

1) Duplissy, J., Gysel, M., Sjogren, S., Meyer, N., Good, N., Kammermann, L., Michaud, V., Weigel, R., Martins dos Santos, S., Gruening, C., Villani, P., Laj, P., Sellegri, K., Metzger, A., McFiggans, G. B., Wehrle, G., Richter, R., Dommen, J., Ristovski, Z., Baltensperger, U., and Weingartner, E.: Intercomparison study of six HTDMAs: results and recommendations, 2009, Atmos. Meas. Tech., 2, 363–378, https://doi.org/10.5194/amt-2-363-2009

2) Fadnavis, S., D. Siingh, and R. P. Singh (2009), Mesospheric inversion layer and sprites, J. Geophys. Res., 114, D23307, https://doi.org/10.1029/2009JD011913

3) Laj, P. ; Klausen, J. ; Bilde, M. ; Plaß-Duelmer, C. ; Pappalardo, G. ; Clerbaux, C. ; Baltensperger, U. ; Hjorth, J. ; Simpson, D. ; Reimann, S. ; Coheur, P.-F. ; Richter, A. ; De Mazière, M. ; Rudich, Y. ; McFiggans, G. ; Torseth, K. ; Wiedensohler, A. ; Morin, S. ; Schulz, M. ; Allan, J.D. ; Attié, J.-L. ; Barnes,

I. ; Birmili, W. ; Cammas, J.P. ; Dommen, J. ; Dorn, H.-P. ; Fowler, D. ; Fuzzi, S. ; Glasius, M. ; Granier, C. ; Hermann, M. ; Isaksen, I.S.A. ; Kinne, S. ; Koren, I. ; Madonna, F. ; Maione, M. ; Massling, A. ; Moehler, O. ; Mona, L. ; Monks, .S. ; Müller, D. ; Müller, T. ; Orphal, J. ; Peuch, V.-H. ; Stratmann, F. ; Tanré, D. ; Tyndall, G. ; Riziq, A.A. ; Van Roozendael, M. ; Villani, P. ; Wehner, B. ; Wex, H. ; Zardini, A.A. 2009, Measuring atmospheric composition change, Atmospheric Environment, 43, 33, 5351-5414, https://doi.org/10.1016/j.atmosenv.2009.08.020

4) Van Baelen, J. S. ; Penide, G. 2009, Study of water vapor vertical variability and possible cloud formation with a small network of GPS stations, Geophysical Research Letters, 36, 2, L02804, https://doi.org/10.1029/2008GL036148

5) Van Baelen, J., Pointin, Y., Wobrock, W., Flossmann, A., Peters, G., Tridon, F., and Planche, C.: Precipitation and microphysical studies with a low cost high resolution X-band radar: an innovative project prospective, 2009, Adv. Geosci., 20, 25–32, https://doi.org/10.5194/adgeo-20-25-2009

6) Van Baelen, J. S. ; Tridon, F. ; Pointin, Y. B. 2009, Simultaneous X-band and K-band study of precipitation to derive specific Z-R relationships, AtmosphericResearch, 94, 4, 596-605 https://doi.org/10.1016/j.atmosres.2009.04.003

7) Venzac, H., Sellegri, K., Villani, P., Picard, D., and Laj, P.: Seasonal variation of aerosol size distributions in the free troposphere and residual layer at the puy de Dôme station, France, 2009, Atmos. Chem. Phys., 9, 1465–1478, https://doi.org/10.5194/acp-9-1465-2009

8) Verhaege, C. ; Shcherbakov, V. N. ; Personne, P. 2009, Retrieval of complex refractive index and size distribution of spherical particles from Dual-Polarization Polar Nephelometer data, J. Quant. Spectrosc. Radiat. Transfer, 110, 14-16, 1690-1697, https://doi.org/10.1016/j.jqsrt.2009.01.004

2008

1) Bertrand, G.; Celle-Jeanton, H. ; Laj, P. ; Rangognio, J. ; Chazot, G. 2008, Rainfall chemistry: long range transport versus below cloud scavenging. A two-year study at an inland station (Opme, France), Journal of Atmospheric Chemistry, 60, 3, 253-271, https://doi.org/10.1007/s10874-009-9120-y

2) Deguillaume, L., Leriche, M., Amato, P., Ariya, P. A., Delort, A.-M., Pöschl, U., Chaumerliac, N., Bauer, H., Flossmann, A. I., and Morris, C. E.: Microbiology and atmospheric processes: chemical interactions of primary biological aerosols, 2008, Biogeosciences, 5, 1073–1084, https://doi.org/10.5194/bg-5-1073-2008

3) Guillaume, B.; C. Liousse, C. Galy-Lacaux, R. Rosset, E. Gardrat, H. Cachier, B. Bessagnet, N. Poisson, Modeling exceptional high concentrations of carbonaceous aerosols observed at Pic du Midi in spring-summer 2003: Comparison with Sonnblick and Puy de Dome, atmos. Envionm., 42, 20, 5140-5149, 2008, https://doi.org/10.1016/j.atmosenv.2008.02.024

4) Le Roux G., L. Pourcelot, O. Masson, C. Duffa, F. Vray, P. Renaud, Aerosol deposition and origin in French mountains estimated with soil inventories of 210Pb and artificial radionuclides, Atmospheric Environment, 42, 7, March 2008, 1517-1524 https://doi.org/10.1016/j.atmosenv.2007.10.083

5) Valentino, F. L.; M. Leuenberger, C. Uglietti, P. Sturm, Measurements and trend analysis of O-2, CO2 and delta C-13 of CO2 from the high altitude research station Junfgraujoch, Switzerland - A comparison with the observations from the remote site Puy de Dome, France, Science op the total environment, 391, 2-3, 203-210, 2008, https://doi.org/10.1016/j.scitotenv.2007.10.009

6) Villani, P. ; Picard, D. ; Michaud, V. ; Laj, P. ; Wiedensohler, A. 2008, Design and Validation of a Volatility Hygroscopic Tandem Differential Mobility Analyzer (VH-TDMA) to Characterize the Relationships Between the Thermal and Hygroscopic Properties of Atmospheric Aerosol Particles, Aerosol Sci. Technol., 42, 9, 729-741 https://doi.org/10.1080/02786820802255668

2007

1) Amato, P., Demeer, F., Melaouhi, A., Fontanella, S., Martin-Biesse, A.-S., Sancelme, M., Laj, P., and Delort, A.-M.: A fate for organic acids, formaldehyde and methanol in cloud water: their biotransformation by micro-organisms, 2007, Atmos. Chem. Phys., 7, 4159-4169, https://doi.org/10.5194/acp-7-4159-2007

2) Amato, P. ; Parazols, M. ; Sancelme, M. ; Laj, P. ; Mailhot, G. ; Delort, A.-M. 2007, Microorganisms isolated from the water phase of tropospheric clouds at the Puy de Dôme: major groups and growth abilities at low temperatures FEMS Microbiology Ecology Vol. 59 , No. 2 , p. 242-254 https://doi.org/10.1111/j.1574-6941.2006.00199.x

3) Amato, P. ; Parazols, M. ; Sancelme, M. ; Mailhot, G. ; Laj, P. ; Delort, A.-M. 2007, An important oceanic source of micro-organisms for cloud water at the Puy de Dôme (France) Atmos. Environ. Vol. 41 , No. 37 , p. 8253-8263 https://doi.org/10.1016/j.atmosenv.2007.06.022

4) Feczko, T., H. Puxbaum, A. Kasper-Giebl, M. Handler, A. Limbeck, A. Gelencsér, C. Pio, S. Preunkert, and M. Legrand (2007), Determination of water and alkaline extractable atmospheric humic-like substances with the TU Vienna HULIS analyzer in samples from six background sites in Europe, J. Geophys. Res., 112, D23S10, https://doi.org/10.1029/2006JD008331

5) Gelencsér, A., B. May, D. Simpson, A. Sánchez-Ochoa, A. Kasper-Giebl, H. Puxbaum, A. Caseiro, C. Pio, and M. Legrand (2007), Source apportionment of PM2.5 organic aerosol over Europe: Primary/secondary, natural/anthropogenic, and fossil/biogenic origin, J. Geophys. Res., 112, D23S04, https://doi.org/10.1029/2006JD008094

6) Hammer, S., D. Wagenbach, S. Preunkert, C. Pio, C. Schlosser, and F. Meinhardt (2007), Lead-210 observations within CARBOSOL: A diagnostic tool for assessing the spatiotemporal variability of related chemical aerosol species? J. Geophys. Res., 112, D23S03, https://doi.org/10.1029/2006JD008065

7) Legrand, M. ; Preunkert, S. ; Oliveira, T. ; Pio, C.A. ; Hammer, S. ; Gelencsér, A. ; Kasper-Giebl, A. ; Laj, P. 2007 Origin of C2-C5 dicarboxylic acids in the European atmosphere inferred from year-round aerosol study conducted at a west-east transect J. Geophys. Res. Vol. 112 , No. D16 , D23S07, https://doi.org/10.1029/2006JD008019

8) Legrand, M., and H. Puxbaum (2007), Summary of the CARBOSOL project: Present and retrospective state of organic versus inorganic aerosol over Europe, J. Geophys. Res., 112, D23S01, https://doi.org/10.1029/2006JD008271

9) Leriche, M. ; Curier, R.L. ; Deguillaume, L. ; Caro, D. ; Sellegri, K. ; Chaumerliac, N. 2007 Numerical quantification of sources and phase partitioning of chemical species in cloud: application to wintertime anthropogenic air masses at the Puy de Dôme station J. Atmos. Chem. Vol. 57 , No. 3 , p. 281-297 https://doi.org/10.1007/s10874-007-9073-y

10) Lukács, H., A. Gelencsér, S. Hammer, H. Puxbaum, C. Pio, M. Legrand, A. Kasper-Giebl, M. Handler, A. Limbeck, D. Simpson, S. Preunkert (2007), Seasonal trends and possible sources of brown carbon based on 2-year aerosol measurements at six sites in Europe, J. Geophys. Res., 112, D23S18, https://doi.org/10.1029/2006JD008151

11) Oliveira, T. S., C. A. Pio, C. A. Alves, A. J. D. Silvestre, M. Evtyugina, J. V. Afonso, P. Fialho, M. Legrand, H. Puxbaum, and A. Gelencsér (2007), Seasonal variation of particulate lipophilic organic compounds at nonurban sites in Europe, J. Geophys. Res., 112, D23S09, https://doi.org/10.1029/2007JD008504

12) Parazols, M. ; Marinoni, A. ; Amato, P. ; Abida, O. ; Laj, P. ; Mailhot, G. ; Delort, A.-M. ; Sergio, Z. 2007 Erratum "Speciation and role of iron in cloud droplets at the puy de Dôme station" J. Atmos. Chem., 54(3) 267-281 DOI 10.1007/s10874-006-9026-x J. Atmos. Chem. Vol. 57 , No. 3 , p. 299-300 http://dx.doi.org/10.1007/s10874-006-9026-x

13) Pio, C. A., M. Legrand T. Oliveira J. Afonso C. Santos A. Caseiro P. Fialho F. Barata H. Puxbaum A. Sanchez-Ochoa A. Kasper-Giebl A. Gelencsér S. Preunkert M. Schock (2007), Climatology of aerosol composition (organic versus inorganic) at nonurban sites on a west-east transect across Europe, J. Geophys. Res., 112, D23S02, https://doi.org/10.1029/2006JD008038

14) Puxbaum, H., A. Caseiro, A. Sánchez-Ochoa, A. Kasper-Giebl, M. Claeys, A. Gelencsér, M. Legrand, S. Preunkert, and C. Pio (2007), Levoglucosan levels at background sites in Europe for assessing the impact of biomass combustion on the European aerosol background, J. Geophys. Res., 112, D23S05, https://doi.org/10.1029/2006JD008114

15) Sánchez-Ochoa, A., A. Kasper-Giebl, H. Puxbaum, A. Gelencser, M. Legrand, and C. Pio (2007), Concentration of atmospheric cellulose: A proxy for plant debris across a west-east transect over Europe, J. Geophys. Res., 112, D23S08, https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2006JD008180

16) Simpson, D., K. E. Yttri, Z. Klimont, K. Kupiainen, A. Caseiro, A. Gelencsér, C. Pio, H. Puxbaum, and M. Legrand (2007), Modeling carbonaceous aerosol over Europe: Analysis of the CARBOSOL and EMEP EC/OC campaigns, J. Geophys. Res., 112, D23S14, https://doi.org/10.1029/2006JD008158

17) Venzac, H. ; Sellegri, K. ; Laj, P. 2007 Nucleation events detected at the high altitude site of the Puy de Dôme Research Station, France Boreal Env. Res. Vol. 12 , No. 3 , p. 345-359.

18) Villani, P. ; Picard, D. ; Marchand, N. ; Laj, P. 2007, Design and Validation of a 6-Volatility Tandem Differential Mobility Analyzer (VTDMA), Aerosol Sci. Technol. Vol. 41 , No. 10 , p. 898-906 https://doi.org/10.1080/02786820701534593

2006

1) Parazols, M. ; Marinoni, A. ; Amato, P. ; Abida, O. ; Laj, P. ; Mailhot, G. 2006, Speciation and role of iron in cloud droplets at the puy de Dôme station, J. Atmos. Chem. Vol. 54 , No. 3 , p. 267-281 https://doi.org/10.1007/s10874-006-9026-x

2005

1) Amato, P. ; Ménager, M. ; Sancelme, M. ; Laj, P. ; Mailhot, G. ; Delort, A.-M. 2005 Microbial population in cloud water at the Puy de Dôme: Implications for the chemistry of clouds Atmos. Environ. Vol. 39 , No. 22 , p. 4143-4153 https://doi.org/10.1016/j.atmosenv.2005.04.002

2) Deguillaume, L. ; Leriche, M. ; Desboeufs, K. ; Mailhot, G. ; George, C. ; Chaumerliac, N. 2005 Transition Metals in Atmospheric Liquid Phases: Sources, Reactivity, and Sensitive Parameters Chemical Reviews Vol. 105 , No. 9 , p. 3388-3431 https://doi.org/10.1021/cr040649c

3) Renard, J.-B. ; Daugeron, D. ; Personne, P. ; Legros, G. ; Baillargeat, J. ; Hadamcik, É. ; Worms, J.-C. 2005 Optical properties of randomly distributed soot: improved polarimetric and intensity scattering functions Appl. Opt. Vol. 44 , No. 4 , p. 591-596 https://doi.org/10.1364/AO.44.000591

4) Sturm, P; Leuenberger, M; Schmidt, M, Atmospheric O-2, CO2 and delta C-13 observations from the remote sites Jungfraujoch, Switzerland, and Puy de Dome, France, Geophys. Res. Lett., 32, 17, L17811, 2005, https://doi.org/10.1016/j.scitotenv.2007.10.009

5) Zhou Y., S. Soula, V. Pont, X. Qie, NOx ground concentration at a station at high altitude in relation to cloud-to-ground lightning flashes, Atmospheric Research, 75, 1–2, April 2005, 47-69, https://doi.org/10.1016/j.atmosres.2004.11.001

2004

1) Marinoni, A., Laj, P., Sellegri, K., and Mailhot, G.: Cloud chemistry at the Puy de Dôme: variability and relationships with environmental factors, 2004, Atmos. Chem. Phys., 4, 715–728, https://doi.org/10.5194/acp-4-715-2004

2) Putaud, J.-P. ; Raes, F. ; Van Dingenen, R. ; Brüggemann, E. ; Facchini, M.-C. ; Decesari, S. ; Fuzzi, S. ; Gehrig, R. ; Hüglin, C. ; Laj, P. ; Lorbeer, G. ; Maenhaut, W. ; Mihalopoulos, N. ; Müller, K. ; Querol, X. ; Rodriguez, S. ; Schneider, J. ; Spindler, G. ; ten Brink, H. ; Tørseth, K. ; Wiedensohler, A. 2004, A European aerosol phenomenology--2: chemical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe, Atmos. Environ. Vol. 38 , No. 16 , p. 2579-2595 https://doi.org/10.1016/j.atmosenv.2004.01.041

3) Van Dingenen, R. ; Raes, F. ; Putaud, J.-P. ; Baltensperger, U. ; Charron, A. ; Facchini, M.-C. ; Decesari, S. ; Fuzzi, S. ; Gehrig, R. ; Hansson, H.-C. ; Harrison, R.M. ; Hüglin, C. ; Jones, A.M. ; Laj, P. ; Lorbeer, G. ; Maenhaut, W. ; Palmgren, F. ; Querol, X. ; Rodriguez, S. ; Schneider, J. ; ten Brink, H. ; Tunved, P. ; Tørseth, K. ; Wehner, B. ; Weingartner, E. ; Wiedensohler, A. ; Wåhlin, P. 2004, A European aerosol phenomenology--1: physical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe, Atmos. Environ. Vol. 38 , No. 16 , p. 2561-2577 https://doi.org/10.1016/j.atmosenv.2004.01.040

2003

1) Gauchard, P.-A. ; Dommergue, A. ; Ferrari, C.P. ; Laj, P. ; Boutron, C.F. 2003 Mercury speciation into tropospheric clouds J. Phys. IV France Vol. 107 , , p. 525-528 https://doi.org/10.1051/jp4:20030356

2) Laj, P. ; Sellegri, K. ; Pichon, J.-M. ; Gourbeyre, C. ; Preunkert, S. ; Cachier, H. ; Ghermandi, G. 2003 Variability of aerosol properties at Puy de Dôme (France) J. Aerosol Sci. Vol. 34 , No. Supp. 1 , p. 179-180

3) Leriche, M. ; Deguillaume, L. ; Chaumerliac, N. 2003 Modeling study of strong acids formation and partitioning in a polluted cloud during wintertime J. Geophys. Res. Vol. 108 , No. D14 , 4433, https://doi.org/10.1029/2002JD002950

4) Marinoni, A. ; Laj, P. ; Abida, O. ; Mailhot, G. 2003 Iron photochemistry in cloud droplets at the Puy de Dôme J. Phys. IV France Vol. 107 , , p. 823-826 https://doi.org/10.1051/jp4:20030425

5) Sellegri, K. ; Laj, P. ; Dupuy, R. ; Legrand, M. ; Preunkert, S. ; Putaud, J.-P. 2003 Size-dependent scavenging efficiencies of multicomponent atmospheric aerosols in clouds J. Geophys. Res. Vol. 108 , No. D11 , 4334, https://doi.org/10.1029/2002JD002749

6) Sellegri, K., Laj, P., Marinoni, A., Dupuy, R., Legrand, M., and Preunkert, S.: Contribution of gaseous and particulate species to droplet solute composition at the Puy de Dôme, France, 2003, Atmos. Chem. Phys., 3, 1509–1522, https://doi.org/10.5194/acp-3-1509-2003

7) Sellegri, K. ; Laj, P. ; Peron, F. ; Dupuy, R. ; Legrand, M. ; Preunkert, S. ; Putaud, J.-P. ; Cachier, H. ; Ghermandi, G. 2003 Mass balance of free tropospheric aerosol at the Puy de Dôme (France) in winter, J. Geophys. Res. Vol. 108 , No. D11 , 4333, https://doi.org/10.1029/2002JD002747

2002

2001

1) Caccia, J.-L. ; Aubagnac, J.-P. ; Béthenod, G. ; Bourdier, C. ; Bruzzese, E. ; Campistron, B. ; Candusso, J.-P. ; Chérel, G. ; Claeyman, J.-P. ; Conrad, J.-L. ; Cordesses, R. ; Currier, P. ; Derrien, S. ; Despaux, G. ; Dole, J. ; Durbe, R. ; Fournet-Fayard, J. ; Frappier, A. ; Ghio, F. ; Girard-Ardhuin, F. ; Jacoby-Koaly, S. ; Klaus, V. ; Ney, R. ; Pagès, J.-P. ; Petitdidier, M. ; Pointin, Y. B. ; Richard, É. ; Seloyan, I. ; Smaïni, L. ;

Wilson, R. 2001 The French ST-radar network during MAP: Observational and scientific aspects Meteor. Zeit. Vol. 10 , No. 6 , p. 469-478 https://doi.org/10.1127/0941-2948/2001/0010-0469

2) Campistron, B., Despaux, G., Lothon, M., Klaus, V., Pointin, Y., and Mauprivez, M.: A partial 45 MHz sky temperature map obtained from the observations of five ST radars, 2001, Ann. Geophys., 19, 863–871, https://doi.org/10.5194/angeo-19-863-2001

3) Chaumerliac, N. ; Flossmann, A. I. 2001 Preface Issue CIME Atmos. Res. Vol. 58 , No. 4 , p. 229-230 https://doi.org/10.1016/S0169-8095(01)00093-X

4) Laj, P. ; Flossmann, A. I. ; Wobrock, W. ; Fuzzi, S. ; Orsi, G. ; Ricci, L. ; Mertes, S. ; Schwarzenböck, A. ; Heintzenberg, J. ; Brink, H.T. 2001 Behaviour of H2O2, NH3, and black carbon in mixed-phase clouds during CIME Atmos. Res. Vol. 58 , No. 4 , p. 315- https://doi.org/10.1016/S0169-8095(01)00097-7

5) Leriche, M. ; Chaumerliac, N. ; Monod, A. 2001 Coupling quasi-spectral microphysics with multiphase chemistry: a case study of a polluted air mass at the top of the Puy de Dôme mountain (France) Atmos. Environ. Vol. 35 , No. 32 , p. 5411-5423 https://doi.org/10.1016/S1352-2310(01)00300-4

6) Mertes, S. ; Schwarzenböck, A. ; Laj, P. ; Wobrock, W. ; Pichon, J.-M. ; Orsi, G. ; Heintzenberg, J. 2001 Changes of cloud microphysical properties during the transition from supercooled to mixed-phase conditions during CIME Atmos. Res. Vol. 58 , No. 4 , p. 267-294 https://doi.org/10.1016/S0169-8095(01)00095-3

7) Schwarzenböck, A., S Mertes, J Heintzenberg, W Wobrock, P Laj, Impact of the Bergeron–Findeisen process on the release of aerosol particles during the evolution of cloud ice, Atmospheric Research, Volume 58, Issue 4, 2001, Pages 295-313, https://doi.org/10.1016/S0169-8095(01)00096-5

8) Wobrock, W. ; Flossmann, A. I. ; Monier, M. ; Pichon, J.-M. ; Cortez, L. ; Fournol, J.-F. ; Schwarzenböck, A. ; Mertes, S. ; Heintzenberg, J. ; Laj, P. ; Orsi, G. ; Ricci, L. ; Fuzzi, S. ; Brink, H.T. ; Jongejan, P. ; Otjes, R. 2001 The Cloud Ice Mountain Experiment (CIME) 1998: experiment overview and modelling of the microphysical processes during the seeding by isentropic gas expansion Atmos. Res. Vol. 58 , No. 4 , p. 231-265 https://doi.org/10.1016/S0169-8095(01)00094-1

2000

1) Caccia, J.-L. ; Bertin, F. ; Campistron, B. ; Klaus, V. ; Pointin, Y. B. ; Van Baelen, J. S. ; Wilson, R. 2000 Cut-off low monitoring by the French VHF-ST-radar network during the ESTIME campaign, J. Atmos. Solar-Terr. Phys. Vol. 62 , No. 8 , p. 639-651 https://doi.org/10.1016/S1364-6826(00)00045-6

2) Gérémy, G. ; Wobrock, W. ; Flossmann, A. I. ; Schwarzenböck, A. ; Mertes, S. 2000 A modelling study on the activation of small Aitken-mode aerosol particles during CIME 97 Tellus B Vol. 52 , No. 3 , p. 959-979 https://doi.org/10.3402/tellusb.v52i3.17078

3) Leriche, M. ; Voisin, D. ; Chaumerliac, N. ; Monod, A. ; Aumont, B. 2000 A model for tropospheric multiphase chemistry: application to one cloudy event during the CIME experiment, Atmos. Environ. Vol. 34 , No. 29-30 , p. 5015-5036 https://doi.org/10.1016/S1352-2310(00)00329-0

4) Voisin, D. ; Legrand, M. ; Chaumerliac, N. 2000 Scavenging of acidic gases (HCOOH, CH3COOH, HNO3, HCl, and SO2) and ammonia in mixed liquid-solid water clouds at the Puy de Dôme mountain (France) J. Geophys. Res. Vol. 105 , No. D5 , p. 6817-6836 https://doi.org/10.1029/1999JD900983

1999

1) Campistron, B. ; Pointin, Y. B. ; Lohou, F. ; Pagès, J.-P. 1999 Aspect sensitivity of VHF radar echoes observed in the middle and upper troposphere during the passage of a cutoff low Radio Sci. Vol. 34 , No. 3 , p. 667-670 https://doi.org/10.1029/1998RS900032

1998

1) Larsen, H. , J.-F. Gayet, G. Febvre, H. Chepfer and G. Brogniez, Measurement errors in cirrus cloud microphysical properties, Ann. Geophysicae 16, 266-276 (1998) https://doi.org/10.1007/s00585-998-0266-8

1997

1) Crépel, O., Gayet, J.-F., Fournol, J.-F., and Oshchepkov, S.: A new airborne Polar Nephelometer for the measurement of optical and microphysical cloud properties. Part II: Preliminary tests, 1997, Ann. Geophys., 15, 460–470, https://doi.org/10.1007/s00585-997-0460-0

2) Gayet, J. F., Crépel, O., Fournol, J. F., and Oshchepkov, S.: A new airborne polar Nephelometer for the measurements of optical and microphysical cloud properties. Part I: Theoretical design, 1997, Ann. Geophys., 15, 451–459, https://doi.org/10.1007/s00585-997-0451-1