

Conference presentations (selected)

Helmert, J., B. Heinold, I. Tegen, O. Hellmuth, and R. Wolke (2005), Modelling of Saharan dust events within SAMUM: Investigations on regional radiative forcing using LM-MUSCAT, paper presented at General Assembly of the European Geosciences Union (EGU), European Geosciences Union, Vienna, Austria, 24-29 April.

Heinold, B., J. Helmert, I. Tegen, O. Hellmuth, and R. Wolke (2006), Regional modelling of Saharan dust as part of the SAMUM project: Description of dust events using the model LM-MUSCAT, paper presented at EGU General Assembly 2006, European Geosciences Union, Vienna, Austria, 2-7 April.

Heinold, B., J. Helmert, I. Tegen, O. Hellmuth, and R. Wolke (2006), Modeling of Saharan dust events within SAMUM: On the description of the Saharan dust cycle using LM-MUSCAT, paper presented at 28th NATO/CCMS International Technical Meeting on Air Pollution Modelling and its Application, Leipzig, Germany, 15-19 May.

Helmert, J., B. Heinold, I. Tegen, O. Hellmuth, and R. Wolke (2006), Modeling of Saharan dust events within SAMUM: Implications for regional radiation balance and mesoscale circulation, paper presented at 28th NATO/CCMS International Technical Meeting on Air Pollution Modelling and its Application, Leipzig, Germany, 15-19 May.

Tegen, I., B. Heinold, and J. Helmert (2006), Regional Modeling of Saharan Dust Aerosol: Emissions, Transport and Radiative Impact, paper presented at the Sixth International Conference on Aeolian Research (ICAR 6), Guelph, Canada, 24-26 July.

Müller, D., A. Ansmann, M. Tesche, V. Freudenthaler, D. Althausen, M. Heese, M. Wiegner, I. Mattis, A. Petzold, M. Wendisch, L. Schuetz, K. Kandler, W. von Hoyningen-Huene, I. Tegen, T. Trautmann, T. Rother, O. Dubovik, P. Knippertz, and J. Heintzenberg (2006), Saharan Mineral Dust Experiment (SAMUM 2006): First results, paper presented at AGU 2006 Fall Meeting, San Francisco, CA, USA, 11-15 December.

Petzold, A., B. Weinzierl, M. Esselborn, M. Fiebig, A. Fix, C. Kiemle, K. Rasp, M. Wirth, D. Müller, M. Wendisch, L. Schütz, K. Kandler, R. Kahn, F. Wagner, S. Pereira, and A. Virkkula (2006), Saharan Mineral Dust Experiment SAMUM 2006: Airborne observations of dust particle properties and vertical dust profiles, paper presented at AGU 2006 Fall Meeting, San Francisco, CA, USA, 11-15 December.

Kandler, K., N. Benker, U. Bundke, E. Cuevas, M. Ebert, P. Knippertz, S. Rodríguez, L. Schütz, and S. Weinbruch (2007), Chemical composition and complex refractive index of Saharan Mineral Dust at Izaña, Tenerife (Spain) derived by electron microscopy, EGU General Assembly 2007, European Geosciences Union, Vienna, Austria, 15-20 April

K. Kandler, C. Deutscher, M. Ebert, H. Hofmann, S. Jäckel, P. Knippertz, A. Maßling, A. Schladitz, L. Schütz, S. Weinbruch (2007), Size distribution, mineralogical and chemical composition of Saharan mineral dust at Tinfou, Morocco, EGU General Assembly 2007, European Geosciences Union, Vienna, Austria, 15-20 April

P. Knippertz, C. Deutscher, K. Kandler, T. Müller, O. Schulz and L. Schütz (2007). Dust Mobilization due to Density Currents in the Atlas Region: Observations from the

SAMUM Field Campaign EGU General Assembly 2007, European Geosciences Union, Vienna, Austria, 15-20 April

Heinold, B., I. Tegen, K. Schepanski, and B. Laurent (2007), Regional modelling of Saharan dust as part of the SAMUM project: Characterisation of dust events in May 2006 using the model LM-MUSCAT, paper presented at XXIV. IUGG, International Union of Geodesy and Geophysics, Perugia, Italy, 2-13 July.

Müller, D., M. Tesche, A. Ansmann, V. Freudenthaler, D. Althausen, B. Heese, M. Wiegner, M. Esselborn, A. Petzold, M. Garhammer, I. Mattis, G. Pisani, and O. Dubovik (2007), Saharan Mineral Dust Experiment (SAMUM) 2006: Characterization of mineral dust from lidar and sun photometer observations in Morocco, paper presented at IAMAS (IUGG), The International Association of Meteorology and Atmospheric Sciences, Perugia, Italy, 2-13 July.

Otto, S., T. Trautmann, E. Bierwirth, M. Wendisch (2007) Radiative transfer simulations within Saharan dust atmospheres compared to measurements from the SAMUM experiment, IUGG, International Union of Geodesy and Geophysics, Perugia, Italy, 2-13 July.

Kaaden, N., A. Massling, T. Müller, A. Schladitz, K. Kandler, L. Schütz, and A. Wiedensohler State of mixing of the Saharan dust sub- and supermicrometer aerosol, European Aerosol Conference (EAC), Salzburg, Austria, 9-14 September.

Kandler, K., C. Deutscher, M. Ebert, H. Hofmann, S. Jäckel, A. Petzold, L. Schütz, S. Weinbruch, B. Weinzierl, S. Zorn (2007), Chemical and mineralogical composition of Saharan dust over southeast Morocco, European Aerosol Conference (EAC), Salzburg, Austria, 9-14 September.

Schladitz, A., T. Müller, A. Massling, N. Kaaden, and A. Wiedensohler (2007), Measurements of optical properties of dust particles during the Saharan mineral dust experiment SAMUM 2006, paper presented at European Aerosol Conference (EAC), Salzburg, Austria, 9-14 September.

L. Schütz, K. Kandler, C. Deutscher, R. Jaenicke, P. Knippertz, S. Zorn, M. Ebert, S. Weinbruch, A. Maßling, A. Schladitz, and A. Wiedensohler (2007) Desert Aerosol Size Distributions and Mass Concentrations – Results from the Saharan Mineral Dust Experiment SAMUM 2006, European Aerosol Conference (EAC), Salzburg, Austria, 9-14 September.

Schütz, L., K. Kandler, C. Deutscher, R. Jaenicke, P. Knippertz, S. Zorn, M. Ebert, S. Weinbruch, A. Massling, A. Schladitz, and A. Wiedensohler (2007), Desert aerosol size distributions and mass concentrations - Results from the Saharan mineral dust experiment SAMUM 2006, paper presented at European Aerosol Conference (EAC), Salzburg, Austria, 9-14 September.

Tegen, I., B. Heinold, K. Schepanski, and B. Laurent (2008), Regional modeling of Saharan dust aerosol in the framework of the German SAMUM project, paper presented at EGU General Assembly 2008, European Geosciences Union, Vienna, Austria, 13-18 April.

Massling, A., N. Kaaden, A. Schladitz, T. Müller, K. Kandler, L. Schütz, and A. Wiedensohler (2008), Particle number, size, and shape of Saharan dust particles calculated based on hygroscopic growth parameters during SAMUM 2006, paper presented at European Aerosol Conference (EAC), Thessaloniki, Greece, 24-29 August.

Müller, D., M. Tesche, D. Althausen, R. Engelmann, V. Freudenthaler, S. Gross, M. Esselborn, B. Weinzierl, A. Petzold, C. Toledano, J. Fruntke, P. Seifert, and A. Ansmann (2008), Saharan Mineral Dust Experiment (SAMUM): Raman lidar and sun photometer observations of Saharan dust over Morocco and over the Cape Verde Islands, paper presented at European Aerosol Conference (EAC), Thessaloniki, Greece, 24-29 August.

Schladitz, A., T. Müller, A. Nowak, A. Massling, N. Kaaden, and A. Wiedensohler (2008), First results of in-situ measurements of optical and microphysical aerosol properties during the SAMUM - 2 field campaign in 2008, paper presented at European Aerosol Conference (EAC), Thessaloniki, Greece, 24-29 August.

Schütz, L., K. Kandler, C. Deutscher, P. Knippertz, M. Ebert, K. Lieke, D. Müller-Ebert, S. Weinbruch, A. Nowak, and A. Schladitz (2008), Mixed mineral, biomass burning and marine aerosols of the Cape Verde Islands region - Size distributions and mass concentrations during SAMUM-II, paper presented at European Aerosol Conference (EAC), Thessaloniki, Greece, 24-29 August.

Laurent, B., I. Tegen, B. Heinold, and K. Schepanski (2008), Simulation of the Saharan dust cycle with the regional LM-MUSCAT-DES model during SAMUM 2006, paper presented at IGAC 10th International Conference "Bridging the Scales in Atmospheric Chemistry: Local to Global" Annecy, France, 7-12 September.

Müller, D. (2008), Capabilities and limitations of ground-based remote sensing of dust: Lessons learned from SAMUM, paper presented at 3rd International Workshop on Mineral Dust, Leipzig, Germany, 15-17 September.