

## Publications:

### **2014**

- N. Bobrowski, R. von Glasow, G. B. Giuffrida, D. Tedesco, A. Aiuppa, M. Yalire, S. Arellano, M. Johansson and B. Galle, Gas emission strength and evolution of the molar ratio of BrO/SO<sub>2</sub> in the plume of Mt. Nyiragongo in comparison to Mt. Etna, *JGR*, DOI: 10.1002/2013JD021069, 2014.
- J. Gliss, N. Bobrowski, Vogel, L., and Platt, U., OClO and BrO observations in the volcanic plume of Mt. Etna - Implications on the chemistry of chlorine and bromine species in volcanic plumes, *ACPD* 14, 25213–25280, 2014.
- L. Surl, D. Donohoue, A. Aiuppa, N. Bobrowski, and R. von Glasow, Quantification of the depletion of ozone in the plume of Mount Etna, *ACPD*, 14, 23639-23680, 2014.
- C. Voigt, P. Jessberger, T. Jurkat, S. Kaufmann, R. Baumann, H. Schlager, N. Bobrowski, G. Salerno and G. Giuffrida, Reply to Comment from Liotta and Rizzo on "Evolution of CO<sub>2</sub>, SO<sub>2</sub>, HCl and HNO<sub>3</sub> in the volcanic plumes from Etna" by Voigt et al. [*Geophys. Res. Lett.*; 41, doi:10.1002/2013GL058974], accepted *Bull. of Volcanology*, 2014.
- S. Calabrese, S. Scaglione, S. Milazzo, W. D'Alessandro, N. Bobrowski, G. B. Giuffrida, D. Tedesco, F. Parello, M. Yalire, Passive degassing at Nyiragongo (D.R. Congo and Etna (Italy) volcanoes, submitted to *Annals of Geophysics*.
- S. General, D. Pöhler, H. Sihler, N. Bobrowski, U. Frieß, J. Zielcke, P. Shepson, B. Stirm, W. Simpson, K. Weber, C. Fischer and U. Platt, The Heidelberg Airborne Imaging DOAS Instrument (HAIDI) A Novel Imaging DOAS Device for 2-D and 3-D Imaging of Trace Gases, *AMT* 7, 3459-3485, 2014.
- S. General, N. Bobrowski, D. Pöhler, K. Weber, C. Fischer and U. Platt, Airborne I-DOAS measurements at Mt. Etna BrO and OClO evolution in the plume, *JVGR*, 10.1016/j.jvolgeores.2014.05.012, 2014.
- J. Kuhn, N. Bobrowski, P. Lübcke, L. Vogel, and U. Platt, A Fabry-Perot Interferometer based Camera for two-dimensional mapping of SO<sub>2</sub> Distributions, *Atmos. Meas. Tech. Discuss.*, 7, 5117-5145, 2014.
- E. Frins, N. Bobrowski, M. Osorio, N. Casaballe, G. Belsterli, T. Wagner, and U. Platt, Scanning and Mobile multi-axis DOAS measurements of SO<sub>2</sub> and NO<sub>2</sub> emissions from an electric power plant in Montevideo, Uruguay, *Atmospheric Environment* 98, 1-10, DOI: 10.1016/j.atmosenv.2014.03.069, 2014.
- C. Kern, P. Lübcke, N. Bobrowski, R. Campion, T. Mori, J-F. Smekens, K. Stebel, G. Tamburello, M. Burton, U. Platt and F. Prata, Intercomparison of SO<sub>2</sub> camera systems for 1 imaging volcanic gas plumes, accepted to *JVGR*.
- U. Platt, P. Lübcke, J. Kuhn, N. Bobrowski, M. Burton, F. Prata, C. Kern, Quantitative Imaging of Volcanic Plumes – Results, Future Needs, and Future Trends, accepted to *JVGR*.

- U. Platt and N. Bobrowski, Quantification of volcanic reactive halogen emissions, chapter in "Volcanism and Global Change" accepted 2014.
- J. Wittmer, N. Bobrowski, M. Liotta, G. Giuffrida, S. Calabrese, U. Platt, Active alkaline traps to determine acidic-gas ratios in volcanic plumes: sampling technique and analytical Methods, *G3*, 15, 2797–2820, DOI 10.1002/2013GC005133, 2014.
- C. Voigt, P. Jessberger, T. Jurkat, S. Kaufmann, R. Baumann, H. Schlager, N. Bobrowski, G. Salerno and G. Giuffrida, Evolution of CO<sub>2</sub>, SO<sub>2</sub>, HCl and HNO<sub>3</sub> in the volcanic plumes from Etna, *GRL* 2014, 2196-2203, DOI: 10.1002/2013GL058974.

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- P. Lübcke, N. Bobrowski, H. Delgado Granados, S. Illing, C. Kern, J. M. Alvarez Nieves, L. Vogel, J. Zielcke, U. Platt, Studies on the absolute calibration of SO<sub>2</sub> Cameras, *AMT*, 5, 6183-6240, 2012.
- C. Hörmann, H. Sihler, N. Bobrowski, S. Beirle, M. Penning de Vries, U. Platt, T. Wagner, Systematic investigation of bromine monoxide in volcanic plumes from space by using the GOME-2 instrument, *ACP*, doi:10.5194/acpd-12-29325-2012.
- C. Kern, Werner C., Elias T., Sutton A.J., and Lübcke P., Applying UV cameras for SO<sub>2</sub> detection to distant for optically thick plumes, *J. Volcanology and Geothermal Res.* 262, 80-89, 2013
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- P. Lübcke, N. Bobrowski, S. Arellano, Bo Galle, G. Garzón, Leif Vogel, U. Platt, BrO/SO<sub>2</sub> molar ratios from scanning DOAS measurements in the NOVAC network, *SED* 2013.

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N. Bobrowski, R. von Glasow, A. Aiuppa, S. Inguaggiato, I. Louban, O. W. Ibrahim, and U. Platt. (2007) Reactive halogen chemistry in volcanic plumes. *J. Geophys. Res.*, 112 , D06 311, doi:10.1029/2006JD007 206.

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N. Bobrowski, G. Hönninger, B. Galle, and U. Platt, (2003), Detection of bromine monoxide in a volcanic plume, *Nature*, 423, doi: 10.1038/nature01625

## **Bachelor/Master/Diploma, PhD Thesis**

N. Bobrowski, *Volcanic Gas Studies by Multi Axis Differential Optical Absorption Spectroscopy* Diploma thesis, Institut für Umweltphysik, Universität Heidelberg, (2002).

L. Kritten, *Messung von Vulkangasen mit Multio-AxisDOAS am Kilauea*, Diploma thesis, Institut für Umweltphysik, Universität Heidelberg, (2004).

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- P. Lübcke, Development of a new SO<sub>2</sub> camera for volcanic gas flux Measurements, Diploma thesis, Institut für Umweltphysik, Universität Heidelberg, (2010)
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- M. Huwe, Remote sensing of SO<sub>2</sub> Fluxes: further development and upgrading of the SO<sub>2</sub> Camera, Diploma thesis Institut für Umweltphysik, Universität Heidelberg, (2012).
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