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ANNOUNCEMENT: ATTO TALKS

guest lectures by ATTO members at INPA



In the spirit of partnership we are creating a new talk series at INPA. ATTO Talks was brought to life and will be organized by Flavia Durgante with support from Bruno Takeshi, Roberta de Souza and Cybelli Barbosa.

Starting this September, every project scientist visiting Manaus should present a talk at INPA. They have the opportunity

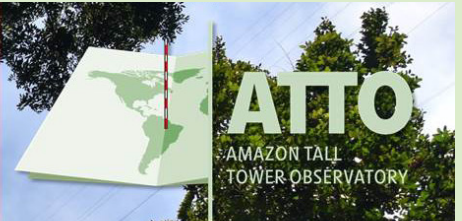
to speak about their work at ATTO or other related research. Presenters can pick the dates that suits them best before or after their stay at the site. When you are planning a trip to ATTO, please get in touch with Flavia by emailing to attoresearch@gmail.com to schedule a date for your talk and discuss further logistics. The talks will be

advertised at INPA, via the ATTO social media channels and will be listed in the ATTO calendar. In addition, we plan on setting up a video conference system on a voluntary basis to allow other consortium members to hear the talks.

We hope you are as excited about this opportunity as we are and are looking forward seeing your presentations!

ATTO Talks at INPA

International ATTO scientists present their work within ATTO and other projects



lectures will be always at 5 pm in the INPA auditorium

dates of each talk will be announced the week before

ATTO MEETING 2019

Workshop for the ATTO consortium in Manaus in September



This year, we will meet for the annual ATTO workshop in Manaus, Brazil. INPA will be hosting the meeting from September 16 - 18. It is open to all members of the ATTO consortium.

The focus of the meeting will be to inform the consortium about the scientific progress that has been made, to discuss data and findings, and to strengthen the collaboration between the different working groups. Therefore, we hope that all of you will be able to make it, including students and Early Career Scientists, to present your research.

Registration is open until August 31 and required for all participants.

REGISTER NOW! 



MEET THE TEAM

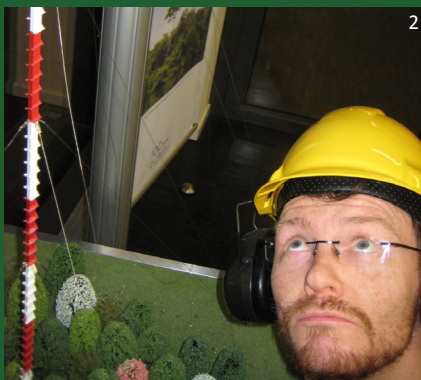
Introducing new and long-time members of the ATTO consortium



David Walter, PostDoc at MPI-BGC

David is working in the ATTO project since 2014 and analyzes the greenhouse gas data of the Picarro analyzers (CO , CO_2 , CH_4), which are measuring vertical profiles at the Walkup-tower and the Tall Tower. He works both in the Aerosol group of Christopher Pöhlker at the MPI-C Mainz and the Tall Tower Atmospheric Gas Measurements of Jost Lavric at the MPI-BGC Jena. He is currently employed in Jena but his desk is still in Mainz.

David is involved in the organization of the ATTO data, so that they can be uploaded to the data portal.



Rodrigo Alves, Post Master at INPA

Rodrigo has recently joined the ATTO project, after graduating from the Federal University of Pampa, where he worked on plant communities in Antarctica. He's now member of the Group of Bettina Weber at the MPI-C in Mainz but is stationed in Brazil. As a biologist, he works with cryptogamic communities and their role in bioaerosol and trace gas cycling in the tropical rainforest. He travels to the ATTO site every month, where he samples and analyzes cryptogamic organisms and gets to learn about the Amazon Rainforest.



Flavia Durgante, PostDoc at KIT

Flavia is a Postdoc in the Wetland Ecology Group of Florian Wittmann at the Karlsruhe Institute of Technology (KIT), but mostly stationed at INPA. With a graduate degree in Forest Engineering from UFSM she monitors the hydraulic potential of trees and collects water samples at ATTO that are analyzed for water isotopes. She wants to recognize climatic signals as oxygen isotopes in the tree rings to understand the vulnerability of this ecosystem in future climate and understand the variability of past climate. At INPA, she will organize the „ATTO Talks“ series.





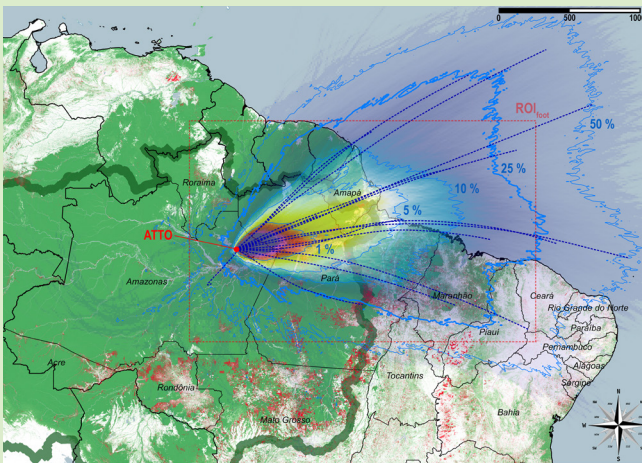
NEW PUBLICATIONS

Articles published in peer-reviewed journals between March and July 2019

Pöhlker et al.

Land cover and its transformation in the backward trajectory footprint region of the Amazon Tall Tower Observatory, Atmos. Chem. Phys., 19. ↗

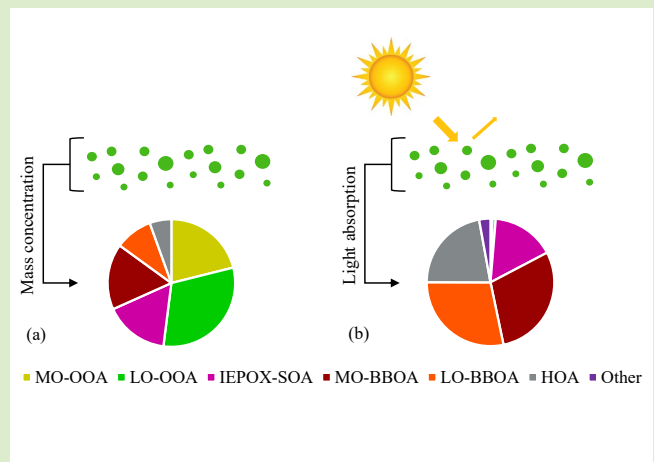
Backward trajectories are used to define the ATTO footprint region, helping to embed the ATTO observations into the larger context of human-caused transformations of Amazonia. Winds travel along a NE path during the wet season, with the air moving largely over pristine rainforest. During the dry season, the air takes a more SE path within the influence of agricultural areas. The resulting ATTO footprint area was then characterized in terms of climatic conditions, land cover and land use, fire regimes and present-day and future deforestation scenarios.



de Sá et al.

Contributions of biomass-burning, urban, and biogenic emissions to the concentrations and light-absorbing properties of particulate matter in central Amazonia during the dry season, Atmos. Chem. Phys., 19. ↗

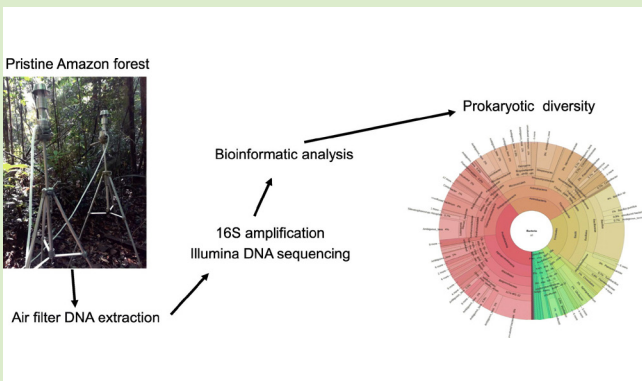
In the Amazon, particles from biomass burning and urban pollution account for ca. 30 % of all particulate matter, while the rest comes from biogenic sources. Overall concentration of particulate matter are much higher during the dry season. But even though the anthropogenic fraction of particulate matter is relatively low, these particles absorb much more light than biogenic particles do. Therefore, they have a comparably higher contribution to the greenhouse effect.



Souza et al.

Uncovering prokaryotic biodiversity within aerosols of the pristine Amazon forest, Science of the Total Environment, 688. ↗

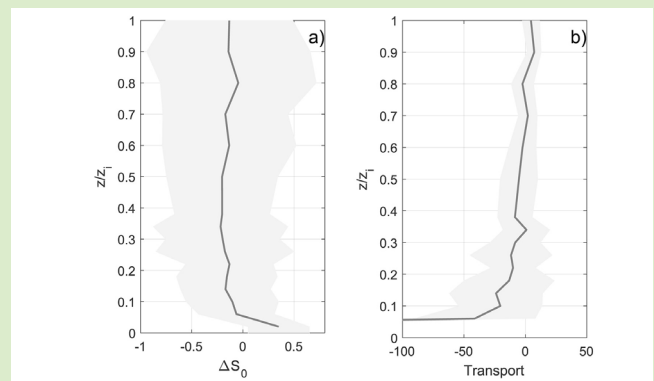
Bioaerosols collected at ATTO were extracted and analyzed for their DNA to determine the communities present. This is the first study which described the community of microorganisms within aerosols in the Amazon. A great variety of types of bacteria and fungi are present, including many that are specific to certain environments such as soil or water. This suggests that the atmosphere may act as an important gateway for bacteria to be exchanged between plants, soil, and water.



Dias-Júnior et al.

Is There a Classical Inertial Sublayer Over the Amazon Forest? Geophysical Research Letters, 46. ↗

Measurements of a number of atmospheric parameters that typically change between layers at different heights, provide no evidence that an inertial sublayer exists in the Amazon, where trees grow relatively high. Instead the roughness sublayer directly merges with the convective mixed layer above. This means that new methods and theories will be needed to address the absence of the inertial sublayer to improve the estimates of fluxes over the Amazon rainforest.





NEWS FROM THE DATA PORTAL

Introduction to the information resources on the data portal



The ATTO data portal keeps expanding - thank you to all of you, who have been uploading data!

Beyond data we want to point out some additional resources available on the data portal. In the „INFORMATION“ tab[↗], you can find useful documents regarding logistics and science, such as the project fact sheet[↗] (please fill out asap, if you haven't yet!), presentations from past meetings and conference (e.g. the ATTO meeting 2018 and EGU 2019). There is also an exportation guide for shipping equipment and instruments to ATTO and more. We will continuously expand this section in the coming months. For example, a guide on Open Access publication and packing tips for your first ATTO trip are currently in the works.

If you have documents you think might be useful for the entire consortium, please contact us at attodbm@bgc-jena.mpg.de, and we can add it to the data portal, if it is suitable. Also, please contact us with questions and comments!

Science

Overview of the ATTO sub-projects, workgroups and PIs including contact details.

ATTO project fact sheet

The ATTO project fact sheet form must be FILL OUT by each PI for every ATTO (sub-)project. Please send the filled form back to attodbm@bgc-jena.mpg.de

[Fact sheet](#)

Contacts

List with contacts of all registered consortium members.

[Contact List](#)

PI mailing list

Principal Investigators of ATTO projects should subscribe to the ATTO Principal Investigators mailing list, which distributes important information for project members that is not suitable for the public ATTO mailing list. Subscription will be approved by the list owners. Subscribe here: https://mail.bgc-jena.mpg.de/mailman/listinfo/atto_pis

[List link](#)

ATTO Site Reports and conference contributions

All Site Reports and presentations of ATTO members at conferences are shared as PDF via Keeper.

[Keeper links](#)

UPCOMING EVENTS



Goldschmidt[↗]

Barcelona, Spain on 18 - 23 August 2019

ATTO-related presentations:

- » David Guinoiseau (MPI-C): African dust sources contributing to fertilization in the Amazon Basin[↗]
- » Paulo Artaxo (USP): Long term observations of Sahara dust in Central Amazonia at the ATTO and ZF2 towers[↗]

European Aerosol Conference (EAC)[↗]

Gothenburg, Sweden on 25 - 30 August 2019

ATTO-related presentations:

- » Maria Praß (MPI-C): Quantification of Bioaerosol Classes in the Amazon Rain Forest
- » Leslie Krempner (MPI-C): Chemical Characterization of Ultrafine Aerosol Particles from the Amazon by Surface-Enhanced Raman Spectroscopy
- » Oliver Lauer (MPI-C): Detection of Secondary Droplet Activation and Differentiation of Microphysical Zones in Deep Convective Cumulus Clouds over the Amazon Rainforest using Satellite Imaging

Chapman Conference – Understanding Carbon Climate Feedbacks[↗]

San Diego, USA on 26 - 29 August 2019

Registration now open.

ATTO Meeting 2019[↗]

Manaus, Brazil on 16 - 18 September 2019

Registration now open.

International Symposium on Environmental Biogeochemistry (ISEB)[↗]

Potsdam, Germany on 22 - 27 September 2019

Registration now open.

IUFRO World Congress[↗]

Curitiba, Brazil on 29 September - 5 October 2019

Late registration still open.

American Association for Aerosol Research Conference[↗]

Portland OR, USA on 14 - 18 October 2019

Registration now open.

AGU Fall Meeting[↗]

San Francisco CA, USA on 9 – 13 December 2019

Registration now open.

American Meteorological Society (AMS) Annual Meeting[↗]

Boston MA, USA on 12 - 16 January 2020

Registration now open.



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ATTOproject.org



Social Media

