

## WORKSHOP

### Tropical Atlantic basin hydroclimate change: learning from long instrumental records

<https://www.oeschger.unibe.ch/atlanticbasin2023>

**Location:** University of Bern, Mittelstrasse 43, room 220, and online

**Organizers:** Andrew Friedman and Stefan Brönnimann (University of Bern)

**Support:**

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UNIVERSITÄT  
BERN  
  
OESCHGER CENTRE  
CLIMATE CHANGE RESEARCH



**Swiss National  
Science Foundation**



### Tuesday 16 May 2023: 1PM-5PM (Central European Summer Time, UTC+2)

13:10 Andrew Friedman (University of Bern) *Welcome and introduction*

#### Early records, data rescue, and dataset development

13:30 Stefan Brönnimann (University of Bern) *Overview of early instrumental meteorological records from the tropical Atlantic*

14:00 Sharon Nicholson (Florida State University) *Pre-1900 precipitation data in the Tropical Atlantic regions, with emphasis on the Caribbean*

14:30 Stefan Grab (University of the Witwatersrand, Johannesburg, South Africa) *Historical rainfall characteristics for Cape Town, southwesternmost Africa: insights and unsolved questions*

15:00-15:30 COFFEE BREAK

*Moderator – Stefan Brönnimann*

15:30 Koen Hufkens (University of Bern) *Data rescue of Congo historical vegetation and hydroclimate, 1937-1958*

16:00 Andrés Antico (CONICET-National University of the Littoral, Santa Fe, Argentina) *Paraná River streamflow variability since 1875: Insights from long hydrometric records*

16:30 DISCUSSION

19:00 DINNER

### Wednesday 17 May 2023: 9AM-5PM (Central European Summer Time, UTC+2)

#### Regional hydroclimate variability and impacts

*Moderator – Sharon Nicholson*

- 9:00           Ansoumana Bodian (Université Gaston Berger du Saint-Louis, Senegal) *Recent evolution of hydroclimatic conditions in the Senegal River Basin*
- 9:30           Alessandra Giannini (Ecole Normale Supérieure, Paris) *The influence of the oceans on Sahel climate*
- 10:00          Guy Moukandi N’kaya (Marien Ngouabi University, Brazzaville, Congo Republic) *Spatiotemporal variations and trends of flows and sediment transfer processes in the large intertropical peri-Atlantic hydrologic system (Congo River Basin)*
- 10:30-11:00   COFFEE BREAK

*Moderator – Marta Martin-Rey*

- 11:00          Jonathan Barichivich (Laboratoire des sciences du climat et de l’environnement, Paris) *Intensification of the hydrological cycle in the Amazon Basin*
- 11:30          Felicia Akinyemi (University of Bern) *Vegetation trends for major land uses and agro-ecological zones in Nigeria, West Africa*
- 12:00          Teresa Losada (Universidad Complutense de Madrid) *Impact of SSTs in West African climate and Atlantic marine ecosystems*
- 12:30-14:00   LUNCH

*Marine hydroclimate and sea surface salinity*

- 14:00          Gilles Reverdin (Sorbonne Université – LOCEAN, Paris) *Tropical Atlantic surface salinity reconstruction and its variability*
- 14:30          Natan Silva Pereira (State University of Bahia, Brazil) *Coral archives as a tool for environmental and climate reconstructions at the western tropical South Atlantic*
- 15:00-15:30   COFFEE BREAK

*Basin-scale variability and mechanisms*

- 15:30          Aiguo Dai (University at Albany, State University of New York) *Externally-forced AMO-like precipitation variations across the tropical Atlantic Basin*
- 16:00          Marta Martín-Rey (Universidad Complutense de Madrid) *Low frequency modulation of interannual Atlantic Variability*
- 16:30          FINAL DISCUSSION