

CURRICULUM VITAE

Mamadou Thiam

Postdoctoral researcher, Laboratory of Atmospheric and Oceanic Sciences – Materials, Energy, and Devices (LSAO-MED), Gaston Berger University, Route de Ngalléle, BP 234, Saint-Louis, Senegal.

Associate researcher, Laboratory Atmospheres and Spatial Observations (LATMOS-IPSL), Sorbonne University, 4 Place Jussieu, 75252 Paris Cedex 05, France.

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Personal

Date of birth	December 03, 1992
Citizenship	Senegal
Marital status	married

Education

Doctor of Philosophy (PhD) in Atmosphere, Ocean and Climate Sciences March 2024
Sorbonne University (Paris, France) & Gaston Berger University (Saint-Louis, Senegal)
Advisor: Gaëlle De Coetlogon, Bouya Diop and Abdou Karim Farota
Thesis: « Ocean-atmosphere coupling in the Northeast Tropical Atlantic and its impact on precipitation in Senegal »

Master of Science (MS) in Physical, Atmosphere Oceanography and Climate February 2021
Gaston Berger University (Saint-Louis, Senegal)

Master of Science (MS) in Physical Oceanography and Applications October 2020
Paul Sabatier University (Toulouse, France) & Abomey Calavi University (Cotonou, Benin)

Bachelor's degree in Physics and Chemistry July 2016
Cheikh Anta Diop University, Dakar, Senegal

Professional Experience

Reviewer member	02/2024 - present
Laboratory of Atmospheric and Oceanic Sciences – Materials, Energy, and Devices (LSAO-MED)	
Visiting researcher	01/04/2025 - 30/06/2025
Institute of Meteorology and Climate Research (IMKTRO), Karlsruhe Institute of Technology, Wolfgang-Gaede-Str. 1, Germany.	
Postdoctoral researcher	31/08/2024 – 31/12/2024

Laboratory Atmospheres and Spatial Observations (LATMOS-IPSL), Sorbonne University, 4 Place Jussieu, Paris, France.

Graduate Student Researcher

01/04/2020 - 31/08/2020

Laboratory of Oceanography and Climate: Experiments and Numerical Approaches (LOCEAN), Sorbonne University, Paris, France.

Teaching and supervision Experience

Teaching Assistant

March 2025

Green Africa Institute, Dakar, Senegal

Teaching Assistant

February 2024

Gaston Berger University, Saint-Louis, Senegal

Supervision students

March 2024 -present

Gaston Berger University, Saint-Louis, Senegal, Physical atmosphere, ocean and climate master program

Supervision students

March 2024 -present

Abomey Calavi University, Physical oceanography and applications master program

Research Interests

- Air-sea interaction in the Northeastern Tropical Atlantic and their impact on the African monsoon, from the diurnal cycle to interannual variability
- Regional coupled ocean-atmosphere and atmospheric forced modeling
- Interannual and decadal West africa upwelling variability

Awards

- MOPGA 2025 - Visiting Fellowship Program for Early Career Researchers, September 2025 - september 2026
- TWAS-DFG Cooperation Visits Programme fellowship for postdoctoral researchers from sub-Saharan Africa, April - june 2025
- Thesis grant from the International Doctoral Program—Modeling Complex Systems, 2020–2024 (joint supervision Senegal–France)
- French Embassy in Senegal fellowship (August- December 2024)
- The "ODD Friendly" prize of the 4th ODD Summer School was awarded to Team 4 "Fruits 4 sustainability" organized by IRD (Institute of Research for Development, Aix-Marseille University, AFD (French Development Agency) and CRI (Interdisciplinary Research Center), July, 2021.
- ERASMUS+ Mobility Grant, Benin-France, April, 2020.

Voluntary Activities

- External relations officer of the Senegalese Association of Friends Nature, Gaston Berger University section (2023-2024).
- President of the External Relations Committee of the Gaston Berger University Doctoral Collective (2022-202).
- General Secretary of Climate and Water Student Unit, CECE , Saint-Louis/Senegal (2017-2018).

Publications in peer-reviewed Journals

Thiam, M., de Coetlogon, G., Sarr, M., Wade, M., and Diop, B., 2025: Air-sea feedback in the northeastern tropical Atlantic in boreal summer at intraseasonal time scales. Quarterly Journal of the Royal Meteorological Society, e4982, doi.org/10.1002/qj.4982.

Thiam, M., Oruba, L., de Coetlogon, G., Wade, M., Diop, B., and Farota, A. K., 2024: Impact of sea surface temperature in the north-eastern tropical Atlantic on precipitation over Senegal. Journal of Geophysical Research: Atmospheres, 129(3), e2023JD040513, doi.org/10.1029/2023JD040513.

Wade, M., **Thiam, M.**, Diba, I., Diop, B., 2021: Phenology and mechanisms of the early upwelling formation in the southern coast of Senegal. African Journal of Environmental Science and Technology 15, no. 12 (2021): 529-539, doi.org/10.5897/AJEST2021.3071.

Others Publications

Thiam, Mamadou, 2024: Couplage océan-atmosphère en Atlantique Tropical Nord-Est et impact sur les précipitations au Sénégal (Doctoral dissertation, Sorbonne University and Gaston Berger University). <https://theses.hal.science/tel-04705666v1>

Thiam, M., Lazar A., Gnamah, M., 2020: Evaluation of Large-Scale Vertical Velocities in the Tropical Atlantic: Analysis of Linear Vorticity Balance.
[https://ostst.aviso.altimetry.fr/programs/abstracts-details.html?
tx_ausyclsseminar_pi2%5BobjAbstracte%5D=3121&cHash=68e4ab1b4d610415c98485eb2905d646](https://ostst.aviso.altimetry.fr/programs/abstracts-details.html?tx_ausyclsseminar_pi2%5BobjAbstracte%5D=3121&cHash=68e4ab1b4d610415c98485eb2905d646)

Invited Presentations

Thiam, M., Air-sea interaction in the Northeastern Tropical Atlantic durant the Summer West African Monsoon, GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany, 2025/06/03

Thiam, M., Ocean-atmosphere coupling in the Northeast Tropical Atlantic and its impact on precipitation in Senegal, *Takkussane LOSEC, Ziguinchor*, Senegal, 2024/01/20

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., Farota, A., K., Sea surface temperature and atmospheric circulation anomalies associated with seasonal rainfall in Senegal/West Africa, Doctoral Day LATMOS, Guyancourt, France, 2023/05/02

Conference Presentations

Thiam, M., «Sea surface temperature and atmospheric circulation anomalies associated with seasonal rainfall in Senegal/West Africa», Online seminar for students of the ISH (Daoula) and ENSTMO (Kibri) in Cameroun, March 29, 2025

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., Farota, A., K., «Impact of the Sea Surface Temperature in the North-Eastern Tropical Atlantic on Precipitation Over Senegal», LPAOSF seminar, Dakar, Senega, June 27, 2024

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., Farota, A., K., «Global SST and Atmospheric Circulation Signal Associated Seasonal Rainfall in Senegal», Open Science Conference, WCRP, Kigali, Rwanda, October 23-27, 2023

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., Farota, A., K., «Global SST and atmospheric circulation signals associated with seasonal precipitation in Senegal», 1st symposium of the Senegalese Physics Society, Alioune Diop University of Bambey, May 24-25, 2022

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., «Oceanic and Atmospheric Precursors of Seasonal Rainfall in Senegal», Doctoral Day Assane Seck University of Ziguinchor, November 10-12, 2022

Thiam, M., «Ocean Sciences, a solution to bring the ocean back to life», World Ocean Day, USAN, UGB section, Saint-Louis, Senegal, June, 08, 2022

Thiam, M., De Coetlogon, G., Wade, Wade., Bouya Diop., «Global SST and atmospheric circulation signals associated with seasonal precipitation in Senegal», Doctoral Day Assane Seck University of Ziguinchor, June 22, 2022

Thiam, M., «Oceanic Signals Predicting Seasonal Rainfall in Senegal», Complex Systems Modeling Conference, Paris, France, October 18, November 05, 2021

Thiam, M., Lazar, A., Magnim, M., « An Assessment of Oceanic Large Scale Vertical Velocities in the Tropical Atlantic: an analysis of the vorticity balance», The Ocean Surface Topography Meeting, Online Meeting, October 19-23, 2020

Thiam, M., « An Assessment of Oceanic Large Scale Vertical Velocities in the Tropical Atlantic », Tropical Atlantic Climate and COastal VARIability (TACCOVAR), September 23-27, 2019

Computer Skills

- Programming with Matlab, Python, Ferret, GrAds, CDO, NCO
- UNIX scripting with bash, slurm
- Data visualization with, Matlab, Python, Ferret, GrAds
- Parallel programming under MPI and Open MPI
- Statistical analysis with Matlab, Python, R

Languages

Wolof (native), French (fluent), English (understanding and conversational, intermediate level)

Supervision of internship students

- **Ndiaye Moussa**
“Phenology and Low-Frequency Variability of the Angola-Benguela Upwelling System”
Master 2, joint program — Abomey-Calavi University (Benin) & Paul Sabatier University (France)
April – September 2024
- **Sene Abdoulaye**
“Influence of Oceanic and Atmospheric Dynamics on Extreme and Moderate Rainfall Indices in the Western Sahel”
Master 2 internship — Gaston Berger University (Senegal)
September 2024 – July 2025

- **Niang Boubou Thierno Boro**

“Study of the Interannual Variability of the West African Coastal Upwelling: The Case of Mauritania”

Master 2 internship — Gaston Berger University (Senegal)

September 2024 – July 2025

- **Lyne Joelle KAMGA TETSOPGUIM**

“Air–Sea Coupling in the Eastern Tropical Atlantic Using Statistical Analyses of Observations and Reanalyses (2000–2023)”

Master 2, joint program — Abomey-Calavi University (Benin) & Paul Sabatier University (France)

April 2025 – in progress

Reference

- **De Coetlogon Gaelle**

Lecturer, Laboratoire Atmosphères et Observations Spatiales (LATMOS)

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- **Diop Bouya**

Professor, Laboratoire des Sciences de l'Atmosphère et des Océans - Matériaux,

Energies, Dispositifs (LSAO-MED), Gaston Berger University, BP-234, Saint-Louis, Sénégal.

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- **Lazar Alban**

Lecturer, Laboratoire d'Océanographie et du Climat (LOCEAN)

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