

Riddhima Puri

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EDUCATION

Courant Institute of Mathematical Sciences, New York University, USA | 2023–2024

Doctoral Fellow at NYU Center for Atmosphere Ocean Science (CAOS)

Department of Geosciences, École Normale Supérieure (ENS) Paris, France | 2019–2023

Masters Sciences of the Earth, Planets, Environment (*Atmosphere-Ocean Science Specialisation*)

Diploma of École Normale Supérieure (DENS) (*Interdisciplinary Research Based*)

Department of Physics, Miranda House, University of Delhi, India | 2016–2019

Bachelor of Science (Honours) Physics Major, Mathematics Minor, 8.554 Cumulative Grade Point Average (CGPA)

Mater Dei School, New Delhi, India | 2016

All India Senior School Certificate Examination, 95% - *Physics, Chemistry, Mathematics, Computer Science, English*

RESEARCH INTERESTS

Climate variability and predictability, land-atmosphere interactions, clouds, radiation, model evaluation, climate change impacts, history of meteorology.

SKILLS

- Python, C++, Matlab, SQL
 - Familiar with HPC, deep learning tools Keras/TensorFlow
 - Numerical Methods
 - General Circulation Models (GCMs)
 - Geophysical Data Analysis (observations and simulations)
 - Languages (CEFR level): English (C2), Hindi (C1), French (B1+), Portuguese (A1)
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RESEARCH EXPERIENCE

Climate Service Centre Germany (GERICS), Helmholtz-Zentrum Hereon | 09/2024–Present

Researcher in the SUNRISE project.

Laboratoire de Météorologie Dynamique (LMD) ENS, France | 02/2023–06/2023

Research Intern supervised by Alessandra Giannini.

Worked on attribution of long-term changes in Indian Monsoon to aerosols and land-use/land-cover changes using GCM simulations under Coupled Model Intercomparison Project Phase 6 (CMIP6).

Institute of Science and Technology Austria (ISTA) | 05/2022–07/2022

Scientific Intern supervised by Caroline Muller, Bidyut Bikas Goswami.

Studied the relationship between intense precipitation and convective clouds in GCMs using CMIP6 simulations and ERA5 reanalysis data.

Max Planck Institute for the History of Science (MPIWG) Berlin, Germany | 09/2021–03/2022

Research Assistant to Christoph Rosol and Giulia Rispoli.

Anthropogenic Markers Project:

- Organised the Anthropogenic Markers International Workshop (September 2021, collaboration of Anthropocene Working Group (AWG), Haus der Kulturen der Welt (HKW), and MPIWG).
- Edited the publication Anthropogenic Markers: Stratigraphy and Context: <https://www.anthropocene-curriculum.org/>

Instituto de Astrofísica e Ciências do Espaço (IA), Portugal | 03/2021–07/2021

Research Intern supervised by Gabriella Gilli.

Characterised composition of exoplanetary atmospheres by performing transmission spectra simulations and using high resolution ESPRESSO/Very Large Telescope observations.

Laboratoire de Météorologie Dynamique (LMD) ENS, France | 06/2020

Research Intern supervised by Sabrina Speich, Agostino N Meroni (CIMAS, Italy) and others from EUREC⁴A-ATOMIC team.

Characterised the upper ocean diurnal cycle in the Northwest Tropical Atlantic using EUREC⁴A field campaign data.

Sampled indoor air pollution data and performed gravimetric analysis for PM characterisation to examine severely polluted indoor areas and associated health effects.

PUBLICATIONS AND ACADEMIC HONOURS

- Riddhima Puri, "The Breathable Materiality of Combustion," in *Anthropogenic Markers: Stratigraphy and Context*, eds Christoph Rosol and Giulia Rispoli (2022): <https://www.anthropocene-curriculum.org/anthropogenic-markers/combustion/contribution/the-breathable-materiality-of-combustion>, 10.58049/7w3g-c613
 - Winner of *International Selection 2019* entrance and scholarship competition, École Normale Supérieure (ENS) Paris, France.
 - Academic Excellence and Ms Mammen Memorial Award for the highest scorer in Mathematics, 12th grade (high school), Central Board of Secondary Education (CBSE), Mater Dei School, New Delhi, India.
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ACTIVITIES

- Senior Diploma, Hindustani Classical Music, Prayag Sangeet Samiti, India.
- Trained in Harmonium, Tanpura (Indian Classical Instruments).
- Powerlifting Coach, The Gym.
- Volunteer: (Hunger Hero) Feeding India, 2017; JOSH Talks, 2016.

OTHER INTERESTS

Yoga, Power Lifting, Cooking, Contemporary Art, Photography, Singing, Pottery, Reading.
