## Ali Hasan Siddiqui

https://asiddi24.github.io/

 $ali\_siddiqui@brown.edu$ 

RESEARCH INTERESTS Climate variability in the north Atlantic and Arctic ocean. AMOC-Arctic interactions and influence of Arctic freshwater on the global overturning circulation. History of climate science.

EDUCATION

Johns Hopkins University, Baltimore, Maryland USA

Ph. D. in Earth and Planetary Sciences

Jan 2025

 ${\bf Dissertation\ Topic:\ ``Salinity\ variability\ in\ the\ subpolar\ north\ Atlantic."}$ 

Advisor: Thomas W.N. Haine

Indian Institute of Science, Bengaluru, Karnataka India

M.Tech. in Climate Sciences

May 2018

 $The sis: \ ``Climate\ Variability\ in\ the\ Antarctic."$ 

Advisor: J. Srinivisan

National Institute of Technology, Bhopal, Madhya Pradesh India

B.Tech. in Civil Engineering

May 2015

Professional Appointments  ${\bf Brown\ University},$  Providence, Rhode Island USA

Postdoctoral Research Associate

Feb 2025-present

Publications

Ali H. Siddiqui, Thomas W. N. Haine, An T. Nguyen, Martha Buckley (2024). "Controls on upper ocean salinity variability in the eastern subpolar North Atlantic during 1992–2017". *JGR Oceans*, [paper].

Thomas W. N. Haine, **Ali H. Siddiqui**, and Wenrui Jiang (2023). "Arctic freshwater impact on the Atlantic Meridional Overturning Circulation: Status and prospects". *Philosophical Transactions of the Royal Society A*, 381(2262), 20220185, [paper].

Wilbert Weijer, Thomas WN Haine, **Ali H Siddiqui**, Wei Cheng, Milena Veneziani, Prajvala Kurtakoti (2022). "Interactions between the Arctic Mediterranean and the Atlantic Meridional Overturning Circulation: A Review". *Oceanography*, 35(3/4), 118–127, [paper].

Thomas Haine, Renske Gelderloos, Miguel Jimenez-Urias, **Ali Siddiqui**, Gerard Lemson, Dmitry Medvedev, Alex Szalay, Ryan Abernathey, Mattia Almansi, Christopher Hill (2021). "Computational Oceanography is Coming of Age". *Bulletin of the American Meteorological Society*, [paper].

Almansi, M., R. Gelderloos, T. W. N. Haine, A. Saberi, and **A. H. Siddiqui** (2019). "OceanSpy: A Python package to facilitate ocean model data analysis and visualization" *Journal of Open Source Software*, 4(39), 1506, [paper].

Papers in Preparation **Ali H. Siddiqui**, Thomas W. N. Haine, Anand Gnanadesikan, Who M. Kim, Gokhan Danabasoglu, Dan Amrhein. "Natural Variability of Upper Ocean salinity in the Subpolar North Atlantic" (*In prep for Journal of Climate*).

**Ali H. Siddiqui**, Thomas W.N. Haine. "Emerging signals of anthropogenic change in the subpolar north Atlantic" (*In prep for GRL*).

## Honors and Awards

JHU Dean's Teaching Fellowship, Fall 2023

NCAR Advanced Study Program's Graduate Student (GVP) Fellowship, Summer 2023 Graduate Fellow (Declined) JHU Center for Medical Humanities and Social Medicine, 2023 Science Communication Fellow, JHU Professional Development and Career Office, 2022

Department Fellowship, Earth and Planetary Sciences, JHU, 2018–2019

Grantham Fellowship, Divecha Center for Climate Change, IISC Bangalore, 2017–2018 Outstanding student award, Outgoing class of Civil Engineering, NIT Bhopal, 2015

## Presentations

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SASIP annual meeting, Providence, RI, Poster	June $2025$
ASOF, Barcelona, Spain, Oral talk	May 2025
AGU, Washington DC, Oral talk	December 2024
Ocean Sciences, New Orleans, Poster	February 2024
Summer Student Research Poster Symposium, NCAR, Boulder CO, Poster	August 2023
Arctic Processes in CMIP6 Bootcamp, Poster	October 2022
US AMOC Science Meeting, Woods Hole, MA, Poster	April 2022
Earth System Observation and Modeling Graduate Student Symposium, George Mason University, Oral talk	March 2022
Ocean Sciences, virtual, Poster	Feb 2022
Ocean Sciences, virtual, Town Hall tutorial	Feb 2022
UMD Oceans brown bag seminar (Invited Talk)	Dec 2021
27th IUGG General Assembly, Montreal, Poster	July 2019
Center for Atmospheric and Oceanic Sciences, IISc Bangalore, Talk	September 2017
Summer School on Antarctic Climate Variability and Ice Dynamics National Centre for Polar and Ocean Research (NCAOR), Goa, Poster	May 2017

## TEACHING EXPERIENCE

Instructor Fall 2023

Proposed, designed and taught an undergraduate seminar course as part of the Dean's Teaching Fellowship at Johns Hopkins on the *History of Climate Science*. The course charts the evolution of the field of climate science over the last

 $[Syllabus][Course\ Feedback]$ 

Teaching Assistant

Fall 2024

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Remote Sensing of the Environment Undergraduate course, Johns Hopkins University.

Teaching Assistant

Spring 2022, 2023

Guided tour of the planets

Undergraduate course, Johns Hopkins University. [TA feedback]

Teaching Assistant

Introduction to Global Environmental Change Undergraduate course, Johns Hopkins University

Teaching Assistant Spring 2020

Oceans and Atmospheres

Undergraduate course, Johns Hopkins University. [TA feedback]

Additional Training CESM Tutorial

July 2025

Fall 2020

Boulder, Colorado [web.]

ECCO Summer School May 2025

A two-week course on ocean state estimation and NASA's

Estimating the Circulation and Climate of the Ocean (ECCO) project.

Pacific Grove, California [web.]

Teaching Academy, Certificate of Completion

2024

Center for Teaching Excellence and Innovation, JHU

Arctic Processes in CMIP6 Bootcamp

October 2022

CLIVAR/CliC Northern Oceans Region Panel, Søminestationen, Denmark [web.]

Summer School on Bouyancy Driven Flows

June 2017

2023

International Center for Theoretical Sciences (ICTS), Bangalore

FIELD EXPERIENCE US GO-SHIP A22 transect  $[\mbox{\it cruise blog}]$  LADCP & CTD deployment and Operations

Chief Scientist: Dr. Viviane Menezes

RV Thomas G. Thompson April 18 - May 17, 2021

ACADEMIC SERVICE Reviewer for Geophysical Research Letters, Journal of Geophysical Research - Atmospheres

Expert Reviewer for IPCC report, AR6 Working Group I

UNIVERSITY SERVICE Reviewer for Advanced Undergraduate Research Fellowship, Brown University

Co-Chair, Graduate Representative Organization, JHU

2023

Graduate Rep, Johns Hopkins Cross-Institutional Student Advisory Committee, 2023

Pod member, Unlearning Racism in Geoscience (URGE), EPS, JHU

 $\label{eq:organizer} \textbf{Organizer}, \ \text{Teachers and Researchers United - UE, Graduate worker union, JHU} \qquad \qquad 2022-2024$ 

Coordinator. Atmospheres and Oceans seminars, Earth and Planetary Sciences, JHU 2020–2022

Volunteer, Project Bridge, JHU 2019