Meghan Brehon

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ACADEMIC CREDENTIALS

Master of Science – Atmospheric Physics

September 2022 - present

University of Saskatchewan, Saskatoon, SK

- Thesis: Possible mechanisms for observed trends in tropospheric carbon monoxide in the Indian Ocean region
- Expected date of completion: September 2024

Bachelor of Science – Engineering Physics

2022

University of Saskatchewan, Saskatoon, SK

Research Interests

- Dynamics and pollution in the troposphere
- Dynamics of the stratosphere, in particular with regard to the quasi-biennial oscillation (QBO)

EXPERIENCE

Laboratory teaching assistant

2023

University of Saskatchewan, Saskatoon, SK

- Facilitated a 200 level engineering physics laboratory
- Provided lab introductions
- Assisted students with questions
- Graded laboratory reports

Teaching assistant

2022

University of Saskatchewan, Saskatoon, SK

- Acted as a teaching assistant for a 400 level engineering physics optics course
 - Graded course assignments

Student research assistant

May 2021 - August 2022

University of Saskatchewan, Saskatoon, SK

- Analyzed meteorological data using MATLAB for multiple projects, including an analysis of long-term changes to the amplitude of the QBO, as well as an investigation of the trends in tropospheric CO above the Indian Ocean
- Produced plots to display results of analysis
- Wrote multiple reports, summarizing findings of analysis

Conference Presentations

"Tropospheric CO in the Indian Ocean region: An analysis of seasonal and long-term variability" May 2023 Canadian Meteorological and Oceanographic Society Congress, St. Johns, NL

PEER REVIEWED PUBLICATIONS

Jia, Y., Hahn, J., Quack, B., Jones, E., **Brehon, M.**, Tegtmeier, S. (2023). Anthropogenic bromoform at the extratropical tropopause. *Geophysical Research Letters*, 50(9), e2023GL102894. doi:10.1029/2023GL102894

HONOURS AND GRANTS

Canadian Student Participation in Space Conferences Canadian Space Agency	2023
and Training Events Grant	
Morrel Bachynski Memorial Award in Engineering Physics University of Saskatchewan	2020 - 2022
Dean's Honour Roll, College of Engineering University of Saskatchewan	2018 - 2022
Marvin and Dagmar Romanow Scholarship University of Saskatchewan	2018