



**DEPARTMENT OF GEOSCIENCES**  
**JUNIOR PAPERS (Class of '25)**  
**FALL 2023-2024**

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Feasibility of Uranium Series Dating on Elephant  
Bird Eggshells

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**Isabelle Checa Ramia**

Joint Variability of Air-Sea Carbon and Oxygen  
Fluxes in the High-Latitude Southern Ocean

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**Clara Grace Conatser**

Skill of the Model AM2.5C360 at Reproducing  
Interannual Variability in Tropical Cyclone

Frequency

In the South Indian Ocean

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**William Haarlow**

Development of High Throughput Methods for the  
Isolation of Lithium Isotopes in Ancient Carbonates

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Methodology: Quantification of Zooxanthellae Cells  
In Coral Tissue Homogenates

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Effects of Diagenesis on Metal/Calcium Ratios in the  
Viki Core During the Late Ordovician, Hirnantian  
Glaciation

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Recent Temperature Anomaly Trends and Extreme  
Heat Events in the American Southwest

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Tracing Ancient Climate Signals: A Multifaceted  
Analysis of Ice Core and Foraminifera Data Over  
Millions of Years

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**Zane Vincent Smith**  
Trends

The Deviation of Full from Subsampled Model

Of Ocean Oxygen Concentration

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**Jaeda Woodruff**

Sea Surface Temperature Distributions and the 2023  
El Nino Event

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