#### ANTHONY WILSON

Scripps Institution of Oceanography University of California San Diego <u>a4wilson@ucsd.edu</u>

# **RESEARCH INTERESTS**

My focus is on basic issues in dynamical oceanography to a variety of different topics in climate dynamics, climate extremes, climate impacts, coupled ocean – atmosphere interactions, regional impacts of global climate change, climate energy and machine learning. To do this research, I am diagnosing variables that constrain Earth's warmest temperatures. To better understand warm and moist columns of air within Earth's atmosphere which help reduce uncertainties within climate models.

#### **EDUCATION**

2021 – Present	Scripps Institution of Oceanography (SIO), UC San Diego Ph.D. in Climate Science
	Advisors: Arthur Miller, Nicholas Lutsko, Duncan Watson-Parris
2016 - 2020	Central Michigan University BSc. in Geography Advisor: Matthew Liesch
APPOINTMENTS	

#### 2021 – Present Graduate Research Assistant, SIO, Supervisor: Arthur Miller

## **RESEARCH EXPERIENCE**

2023	Research Fellow – Science Based Targets - Carbon Disclosure Project (CDP) Measuring Company Guidelines on Emission Changes		
	<ul> <li>Utilize data created in R to analyze emission changes in acquisition, divestment, change in boundary, merger, or change in methodology</li> <li>Develop Python scripts from R coding language to create tools to read excel files and output data on different companies regarding emissions changes</li> </ul>		
2022	Climate Risk and Resilience Student – Electric Power Research Institute Measuring Impact of Persistent Low/ High Temperature on Load		
	<ul> <li>Train Machine Learning Algorithm to Predict Load Time using Temperature from Climate Models</li> <li>Develop Algorithm with Temperature and Time Dependencies by Global Climate Models</li> </ul>		

2019 - 2020	Significant Opportunity of Atmospheric Research – National Center for Atmospheric Research,	
	- Defining Heatwave Definition and Creating Heatwave Statistics: Occurrence, Duration, Frequency	
	- Compare Heatwave Statistics Using Different Climate Model Resolutions	
2018 – 2020	McNair Scholar – Central Michigan University, Tornadic Environment Climatology, Supervisor: Dr. John Allen	
	<ul> <li>Analyzing Tornado Climatology Definitions and Creating Tornadic Environments Climatology</li> </ul>	
	- Compared Tornado Climatology Data Over Southeast to Analysis Difference in Tornadic Environments across Country	

## HONORS AND AWARDS

2023	California Legislative LGBTQ Scholarship
2023	San Diego PFLAG Raytheon Scholarship
2022	Eastern Pacific Ocean Conference – Best Student Poster
2022	Bill Anderson Fund Fellow
2021	San Diego Fellowship – UC San Diego
2019-2020	Central Michigan University Deans List

## **CONFERENCE PRESENTATIONS**

- Miller A., and **Wilson A.,** Barbeau K., Ohman M., Stukel M., (2022). North Pacific Marine Heat Waves Affecting the California Current Ecosystem (CCE). All Scientists Meeting, Monterey, CA, 19-23 Sept.
- Wilson A., Lutsko N., and Miller A., (2022). Radiative Constraints on Earth's Warmest Surface Temperatures. Eastern Pacific Ocean Conference, Mount Hood, OR, 14-17 Sept.
- Wilson A., Lutsko N., and Miller A., (2022). Radiative Constraints on Earth's Warmest Surface Temperatures. CalGFD, Pasadena, CA, 18-19 Aug.

# **SERVICE ACTIVITIES**

2020 – 2021 American Meteorological Society Culture and Inclusion Cabinet

# **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

American Meteorological Society (AMS) American Geophysical Union (AGU)

# **COMPUTER/TECHNICAL SKILLS**

Programming and Remote Sensing - MatLab

- Visual Basic -
- Unix Terminal Systems -
- Python
- ArcGIS Pro
- ArcPy -
- Machine Learning