

Work History

Present	Research Intern	Institute of Complex Additive Systems Analysis	
05 Sep 2017	The position involved tasks regarding a variety of different projects around the theme		
	of complex systems analysis. As a part of a team, I have worked on projects regarding		
	data preprocessing for language detection models, analysis of RF and Bluetooth models,		
	and Internet-Of-Things research and development.		
16 Aug 2017	High School Work Stud	ly National Security Agency	
06 Sep 2016	The position required a thorough background check, federal investigation including a		
	polygraph, as part of the application in order to obtain Top Secret security clearance.		
	Most of the tasks that were assigned revolved around clerical work, specifically inventory		
	and data transfer requests added with Inspector General inspection preparations.		

Education

May 2022	B.Sc. Physics	New Mexico Institute of Mining and Technology
A 0017	Astrophysics and Atmospheric Physics Option	
Aug 2017	Minor in Mathematics	
	GPA: 3.26	

Publications

Under Review Atmospheric Precipitable Water Vapor and its Correlation with Clear Sky Infrared Temperature Observations

Vicki Kelsey, Spencer Riley, Kenneth Minschwaner Atmospheric Measurement Techniques 10.5194/amt-2021-130

Presentations

Jan 2020 Atmospheric Precipitable Water and its Correlation with Clear Sky

Boston, MA Infrared Temperature Readings

Vicki Kelsey, Spencer Riley

American Meteorological Society Annual Meeting 100

Nov 2019 Atmospheric Precipitable Water and its Correlation with Clear Sky

Providence, RI Infrared Temperature Readings: Data Analysis

Spencer Riley, Vicki Kelsey Physics Congress 2019

Research Projects

Present The Precipitable Water Project

Jan 2019

This research is based on developing a computational model of the relationship between daily precipitable water measurements and the atmospheric temperature. The goal of this research is to develop and utilize the relationship using low cost instrumentation to deduce the amount of precipitable water from the effective temperature.

Collaborators: Vicki Kelsey, Dr. Kenneth Minschwaner

Documentation Page: docs.pmat.app

Development Projects

AtmosAccess: A Python package to retrieving atmospheric data.

pacviz: A R package for informal data visualizations.

Precipitable-Water Model Analysis Tool: An open source software suite for the analysis of precipitable water.