








Spencer Riley


 (505) 205-9115

 <https://pharaohcola13.github.io>

 spencer.riley@student.nmt.edu

 <https://github.com/PharaohCola13>

 0000-0001-7949-9163

 https://www.researchgate.net/profile/Spencer_Riley2

Skills

Programming Languages

R

Python

Bash

Laboratory Proficiency

Oscilloscope

Development Projects

pacviz:

R

visualization

Precipitable-Water Model Analysis Tool:

R

modeling

regression analysis

machine learning

Work History

Sep 05 2017

Research Intern

Institute of Complex Additive Systems Analysis

Present

TBA

Sep 06 2016

High School Work Study

National Security Agency

Aug 16 2017

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

Aug 2017

B.Sc. Physics

New Mexico Institute of Mining and Technology

May 2022

Concentration in Astrophysics and Atmospheric Physics

Minor in Mathematics

GPA: 3.26

Publications

Under Review

Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Readings

Vicki Kelsey, Spencer Riley, Kenneth Minschwaner

Atmospheric Measurement Techniques

Presentations

Jan 2020

Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Readings

Vicki Kelsey, Spencer Riley

American Meteorological Society Annual Meeting 100

Nov 2019

Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Readings: Data Analysis

Spencer Riley, Vicki Kelsey

Physics Congress 2019

Research Projects

Jan 2019

Precipitable Water Modeling

Present

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: <https://precipitable-water.tech/>