

# SolarQuake Project

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Add new chunk by clicking the *Insert Chunk* button on the toolbar or by pressing *Cmd+Option+I*.

When you save the notebook, an HTML file containing the code and output will be saved alongside it (click the *Preview* button or press *Cmd+Shift+K* to preview the HTML file).

The preview shows you a rendered HTML copy of the contents of the editor. Consequently, unlike *Knit*, *Preview* does not run any R code chunks. Instead, the output of the chunk when it was last run in the editor is displayed.

Try executing this chunk by clicking the *Run* button within the chunk or by placing your cursor inside it and pressing *Cmd+Shift+Enter*.

## Objective

The purpose of this project was to explore the relationship, if any, between solar flare activity in the sun and earthquake activity on the earth.

## Introduction

Solar flares and activity

Seismic activity, earthquakes, predictions and forecasting

## Methods and Analysis

### PROJECT STRATEGY

Data import, download links

Data cleaning and alignment by timestamp wrangled to day

Modeling: predictions from flare frequency to quake frequency and magnitude

Report - Accuracy and RMSE

**DATA EXPLORATION** Solar flares - shape and content of data set

Multiple per day, varying energy release (keV)

Flare counts per day follow solar cycle pattern

Isolate frequency for modeling

## Results

## Conclusion