SunDash

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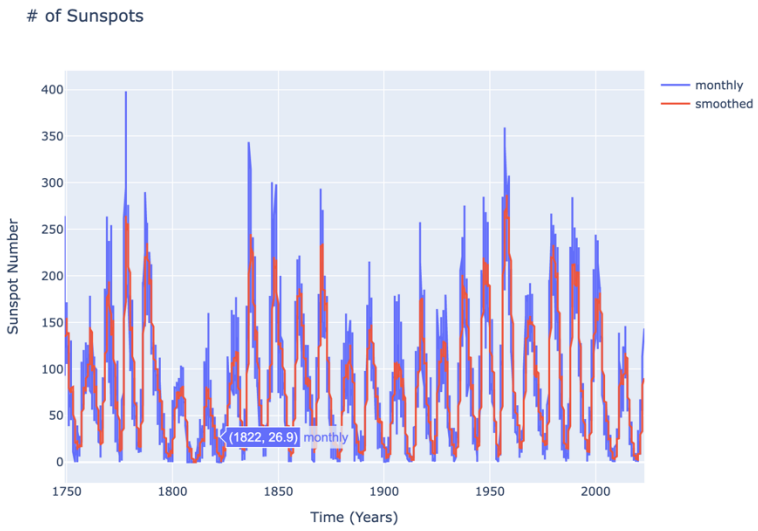
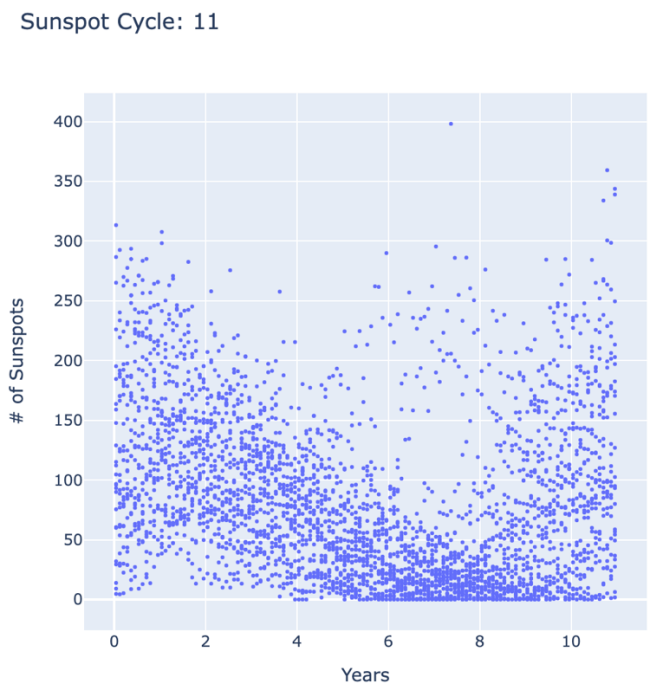
Extended Abstract

My ‘SunDash’ dashboard features two main visualizations, three sliders, and five real-time images of the sun. The data, which is grabbed from the monthly average data on the Solar Influences Data Analysis Center (SIDC) website, has data from every month of every year from 1749 to 2023.

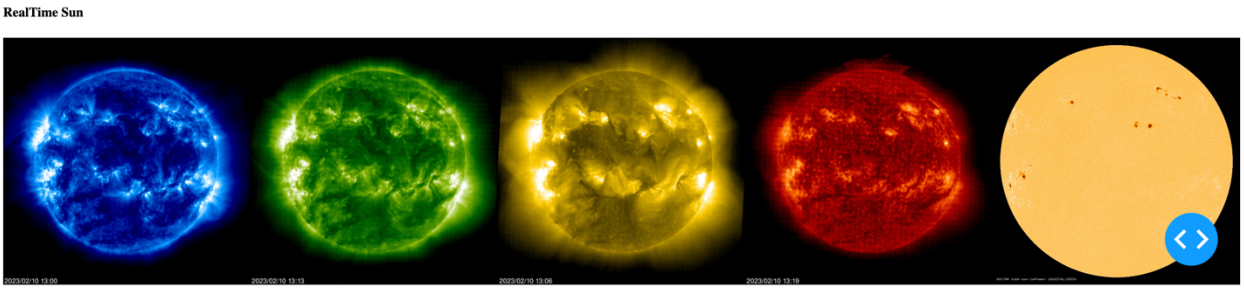
The first graph focuses on the number of sunspots over a user-inputted number of years. It’s an interactive visualization that also features a “smoothed” line made up of the averaged mean total number of sunspots per month of every year. The user is also allowed to change the number of months they want to “smooth” the data by



The second graph highlights an overlay-type visualization of the number of sunspots over a user-inputted number of cycles. It comes with one slider, that allows the user to change the number of cycles anywhere from a range of 5 to 15 cycles, but it starts the user at 11 cycles, as that seems to most match the ebb and flow of the number of sunspots.



The last thing my dashboard has is multiple real-time images of the sun. The Extreme Ultraviolet Imaging Telescope (EIT) pictures are pictures taken of the sun at several different wavelengths, hence the different hues and colors seen. Ordered in degree of temperature, the higher the temperature, the higher in the atmosphere the telescope is looking.



Overall, one of the main issues I had with this project was my difficulty moving my graphs and sliders around. As you can see on the dashboard, the ‘year’ and ‘cycles’ sliders are next to each other, as are their corresponding graphs, but the sliders aren’t in line with where the graphs are on the page. If I were to adapt this dashboard, I would probably try to make it more visually appealing and make sure the placements of the graphs and sliders all line up correctly.