REU: Week Five

David Stauffer

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This week was mostly preparation for the SPD week. I had to make a poster detailing what I'd done so far. On tuesday, about half the REU students had a short presentation. I felt like I wasn't super clear and could definitely use some practice/notes before my final presentation. It was difficult to clearly explain what I'd done with such little time. I now have pictures (created in python) that show our tracking of the shark tooth coronal hole and the restulting flux. The data shows the daily-updated hmi charts clearly give better results than the monthly hmi charts. They are much less noisy and are closer to the expected trends than the monthly data.

The monthly hmi data actually tracks along with the daily hmi fairly well for unsigned flux. However, I suspect that this is a false correlation. Since we're using unsigned flux and the flux of a hole isn't particularly strong, just more biased to one sign, the agreement between daily- and monthly-based flux data is just a funciton of area. The fluxes are totally different with signed flux so the monthly hmi-based flux is just over a random spot on the sun that is quiet (i.e. has the right magnitude flux) but isn't biased positive like daily hmi data.

Finally, I finished the poster friday for the SPD conference next week. See pdf link, it gives a good overview of what I've worked on so far and our current results.