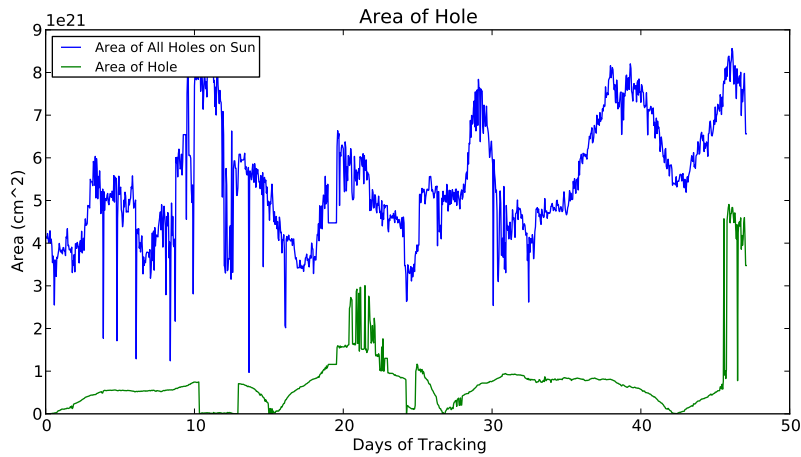


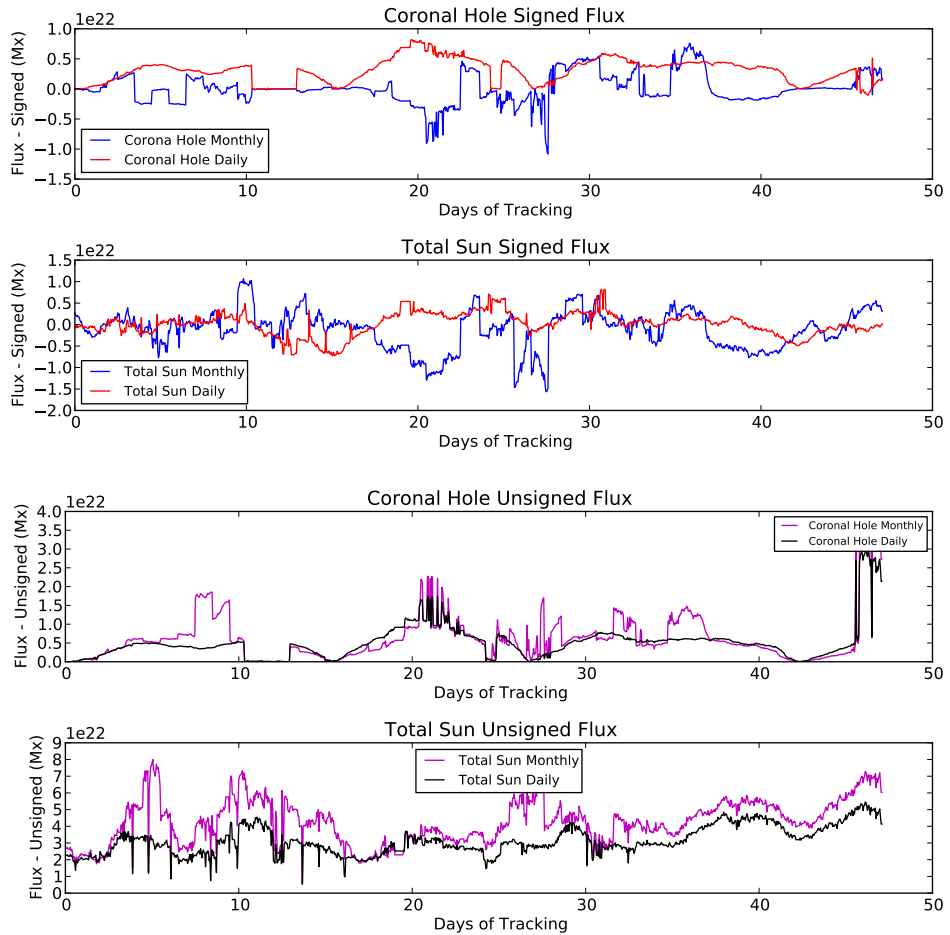
REU: Week Seven

David Stauffer

July 16 , 2013

I rewrote the coronal hole detecting program, `ch_track_surf`, to use daily synoptic charts instead of the monthly charts. I reran the coronal hole tracking routine in the hope that using daily charts would help track the holes better but they still appear to blink in and out quite frequently on the tracking video. I also reran the flux measuring routines and got these results (fairly similar to the old ones, the coronal hole we're tracking disappears for a bit with the daily HMI charts):





Next, I downloaded data for a new hole to examine over the dates 2011/6/17 - 2011/8/23. The data download program has some serious problems running over such a long time; it slows by a factor of at least 10 and eventually ends up freezing. So downloading such a lengthy data series took quite a while. I added some more filtering to the hmi magnetic data (cutting off very small and very large measurements) and added the ability to track positive and negative flux in the hole individually. The resulting flux measurements for our new hole look like this:

