

# REU: Week Three

David Stauffer

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Over the weekend I downloaded aia, sta and stb data at a one hour cadence for 2013/05/09 - 2013/06/10 and then ran `ch_track_surf` on it. We made it into another movie and with the high frame rate it looks smoother than previous videos. I wrote a program `ch_baddates` that may be able to replace bad frames from aia with new from from nearby times. `Ch_baddates` takes the `baddates` file created by `ch_track_surf`, increments the timestamp of the bad frames by a minute and uses `ch_data_grab` to get a new frame in the slightly offset time.

Thursday, Friday and this weekend I've worked on writing two pieces of code. One, `ch_track`, tracks a specified coronal hole across different frames of aia sun images. It uses a recursive structure and was fun to write. The second program, `ch_sync`, takes "monthly" synoptic hmi charts, daily synoptic hmi charts and aia/sta/stb images and syncs them up because they have different cadences in data recording. Both are now written but will most likely need exactly a LOT of time to debug. My IDL abilities are improving a lot with matrix manipulation.