

Week 2 Update

Zoe Schlossnagle with Dr. Chunming Zhu

Background

Objectives:

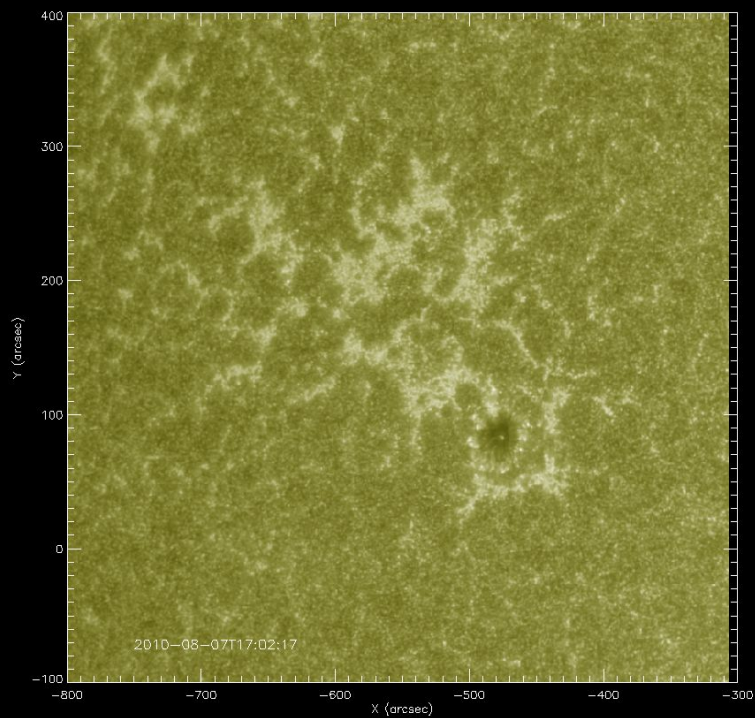
- Studying solar flare precursor events
- Looking at SDO data to characterize early signs of solar flare events.
- Understanding triggers of solar eruptions

This week

- Understanding IDL and Python and how to work in the server
- Reading up on solar flares and CMEs
- Data and map generation for SDO data cutouts in IDL
- Creating images and animations from map data

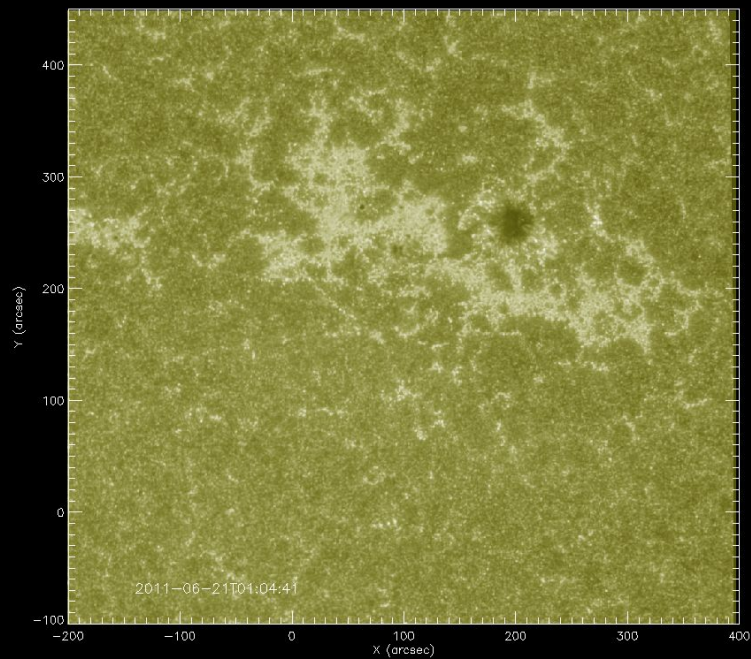
2010/08/07

AIA 1600 Å



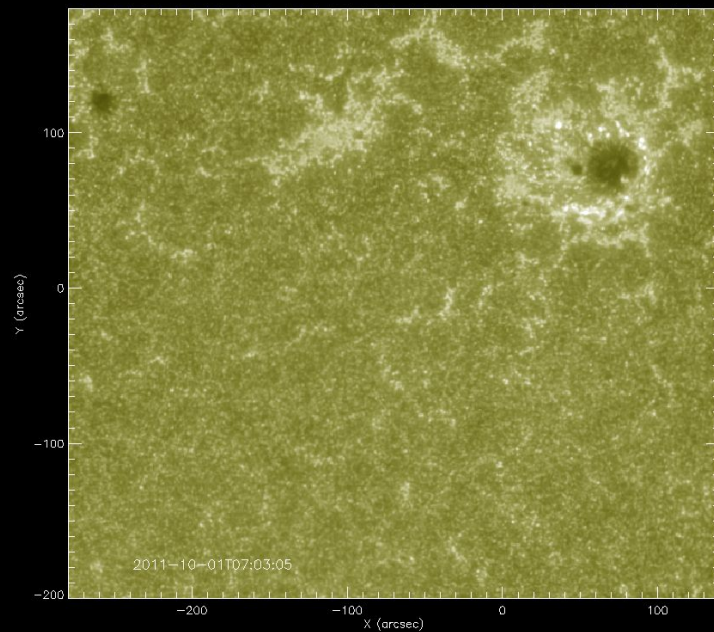
2011/06/21

AIA 1600 Å



2011/10/01

AIA 1600 Å



Animation Example

Next Steps

- Using Prof. Qiu's method for identifying flaring pixels

References

Chunming Zhu *et al* 2020 *ApJ* 893 141

Zhu, et al. (2022). Early Bursts during Flare Precursor and the Relationship to Onset of Solar Eruption [Poster presentation]. American Geophysical Union, Chicago.

Code from Dr. Zhu