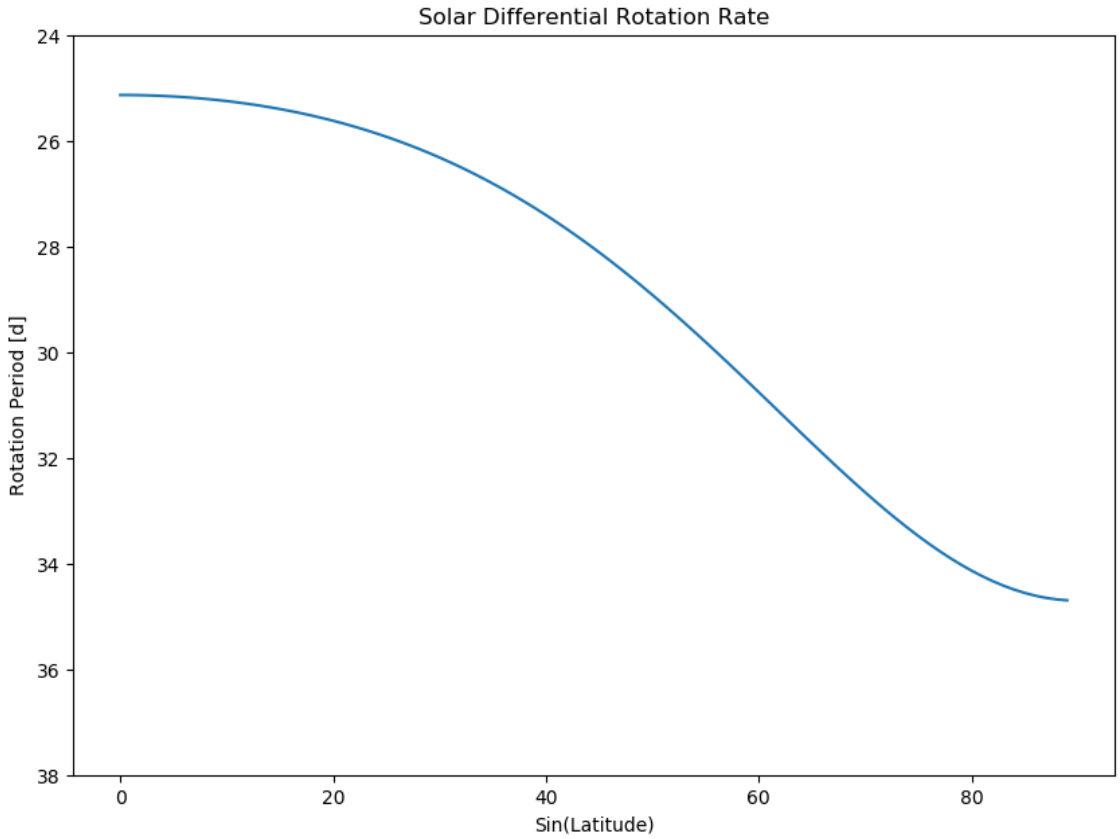
Forecast generated: 2018-08-02 at 11:58 MDT

FOXSI3 is schedule to fly on Aug 06, 2018 at 12:00pm [Launch Drill]

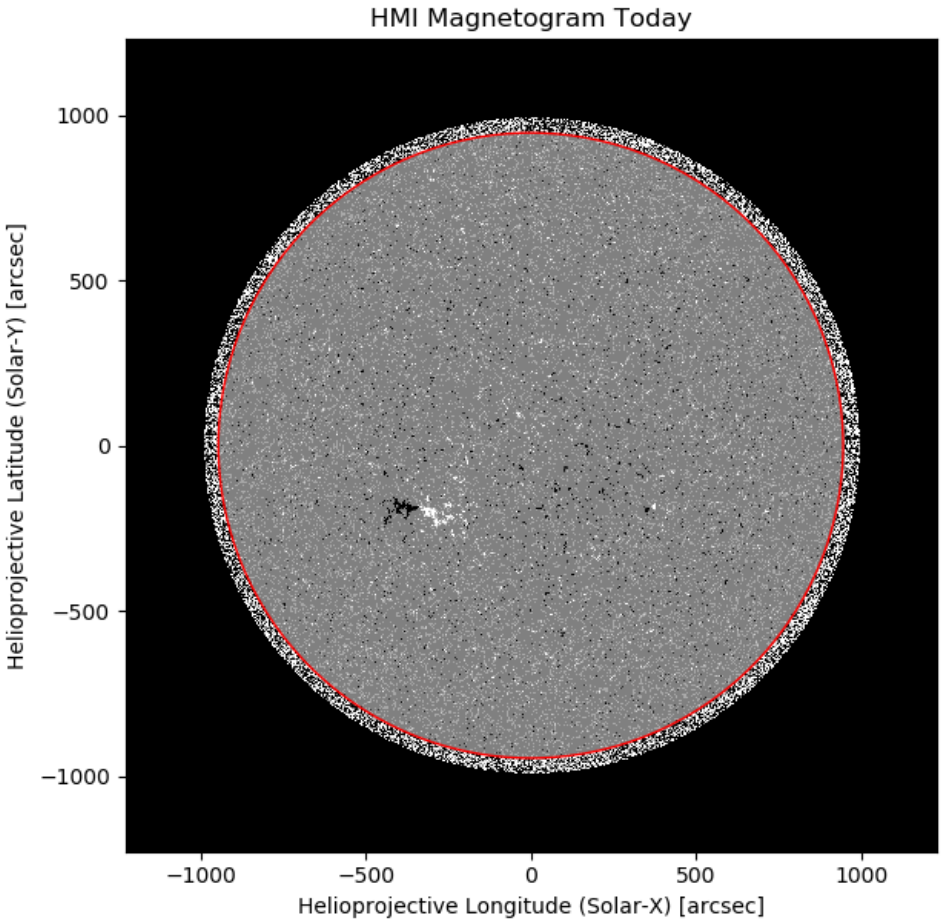
Milo Buitrago-Casas
Space Sciences Laboratory
UC Berkeley

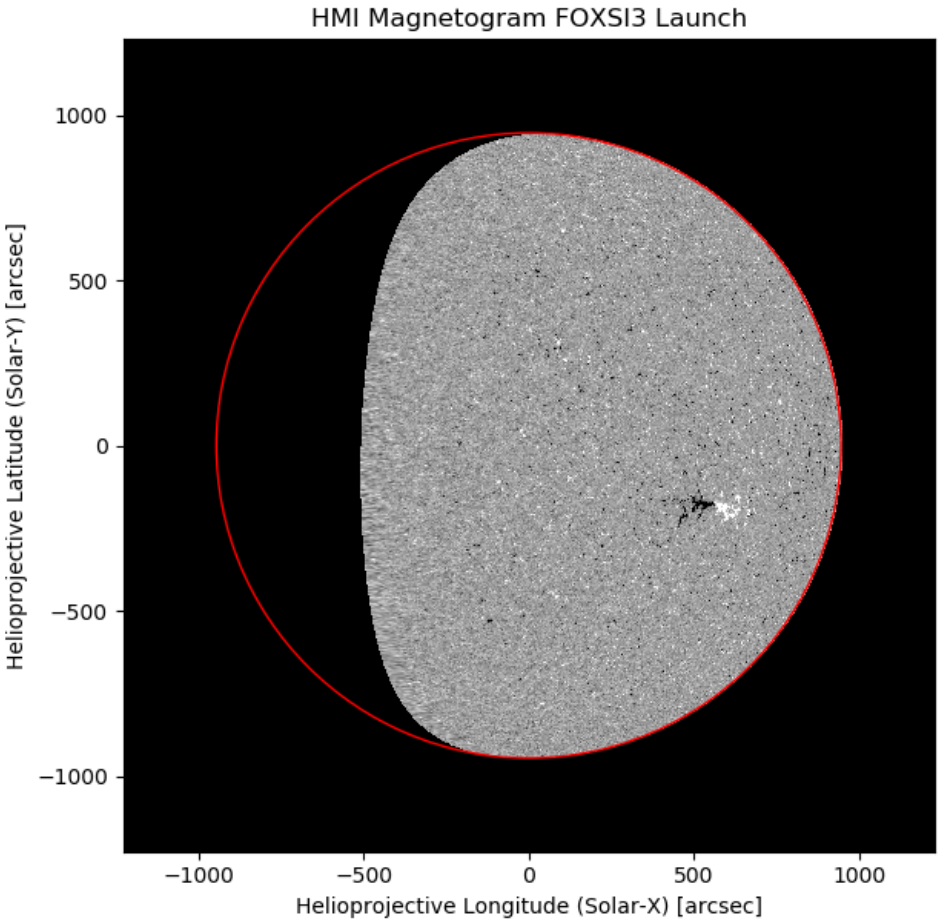
Differential rotation curve



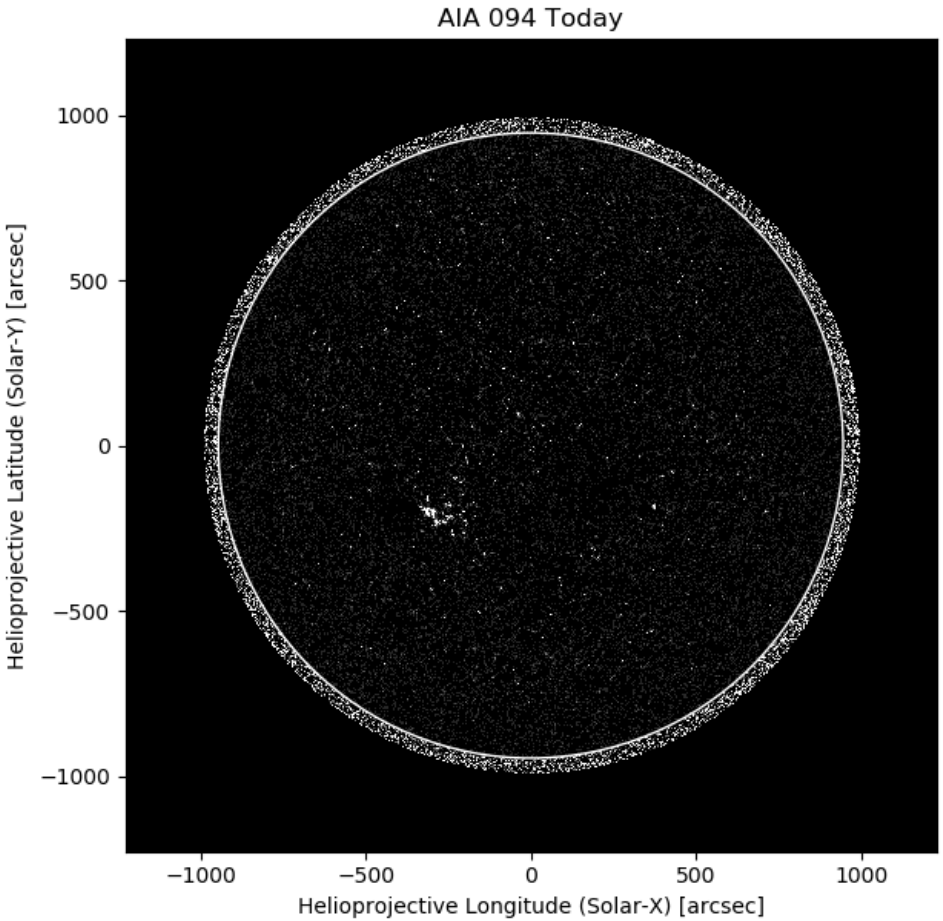
"A COMPARISON OF DIFFERENTIAL ROTATION MEASUREMENTS", Beck 1999 Solar Physics 191, 47–70.
https://link.springer.com/content/pdf/10.1023%2FA%3A1005226402796.pdf

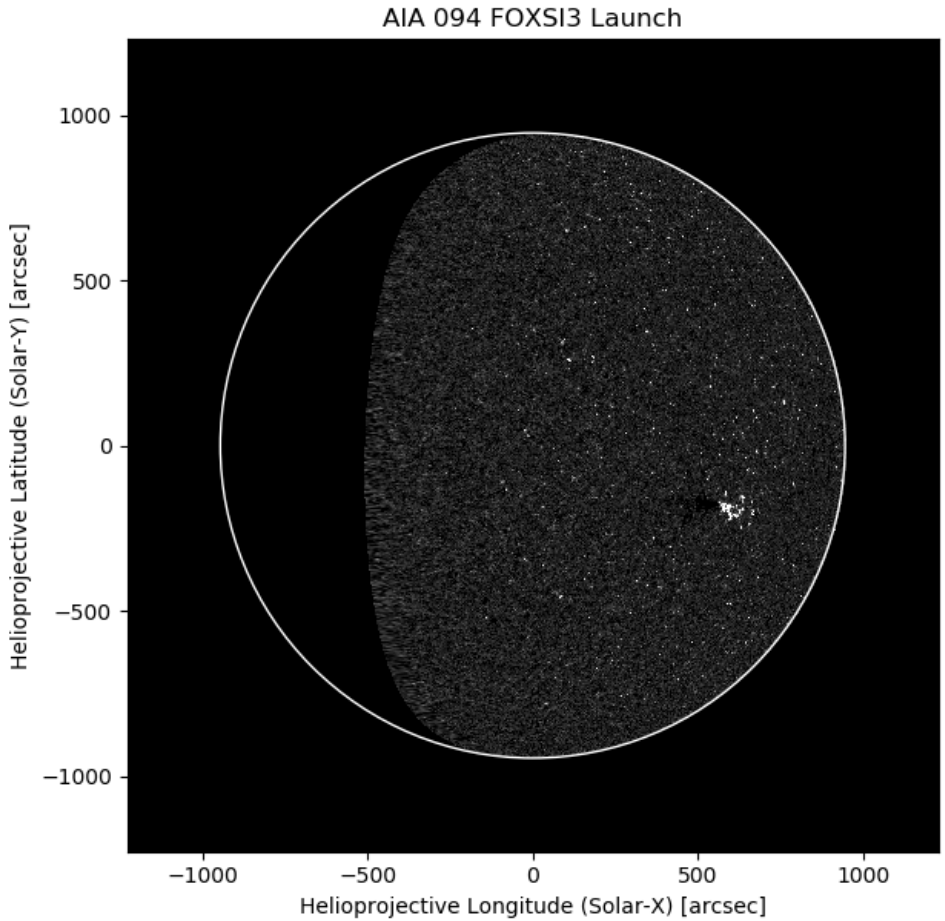
HMI/SDO Magnetogram



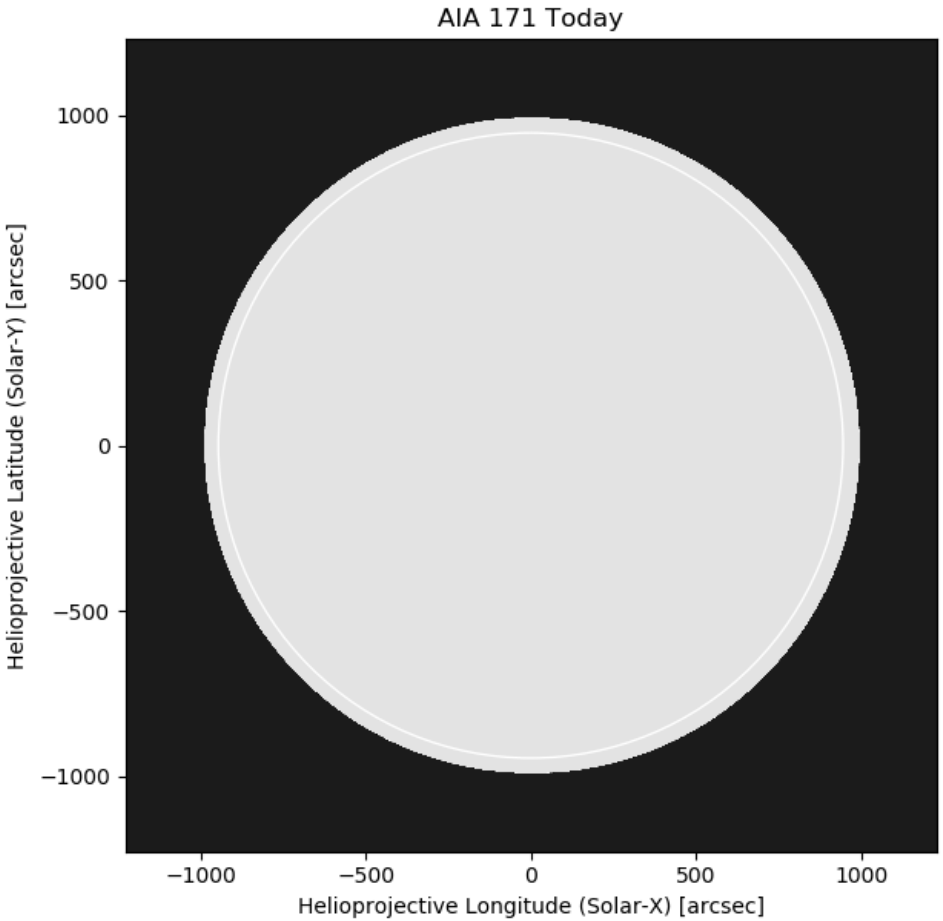


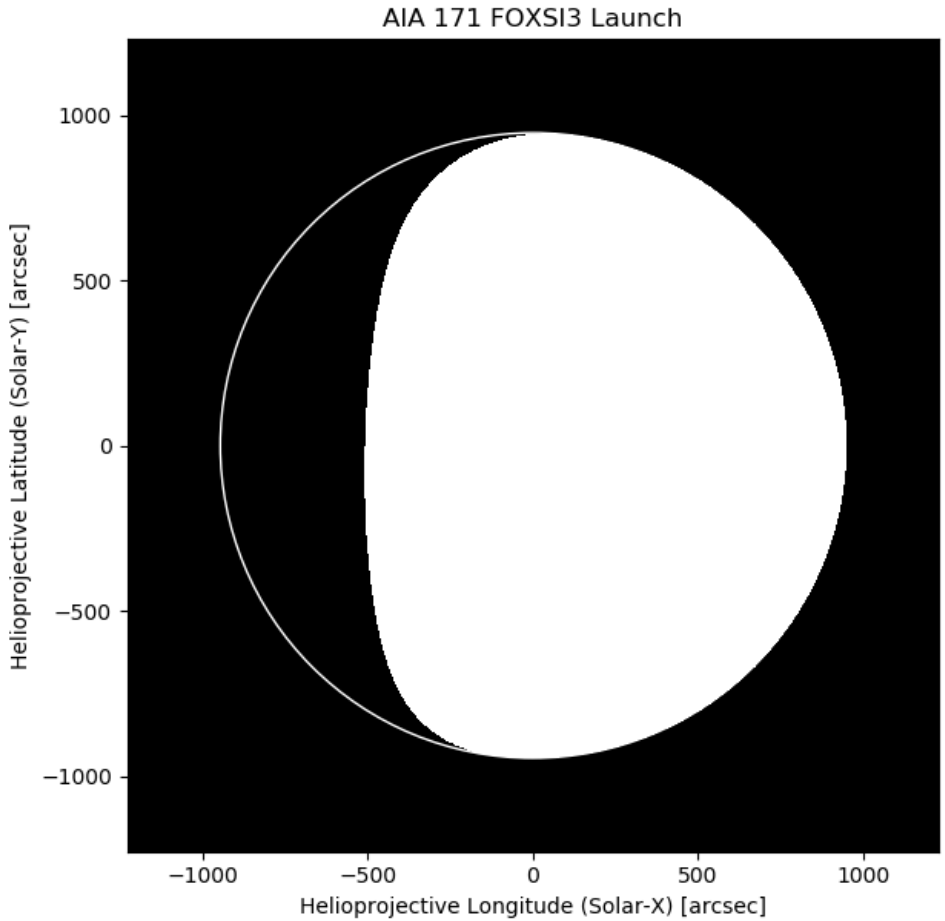
AIA/SDO 094


AIA 094 Today
1000
500
0
−500
−1000
Helioprojective Latitude (Solar-Y) [arcsec]
−1000
−500
0
500
1000
Helioprojective Longitude (Solar-X) [arcsec]


AIA 094 FOXSI3 Launch
1000
500
0
−500
−1000
Helioprojective Latitude (Solar-Y) [arcsec]
−1000
−500
0
500
1000
Helioprojective Longitude (Solar-X) [arcsec]

AIA/SDO 171

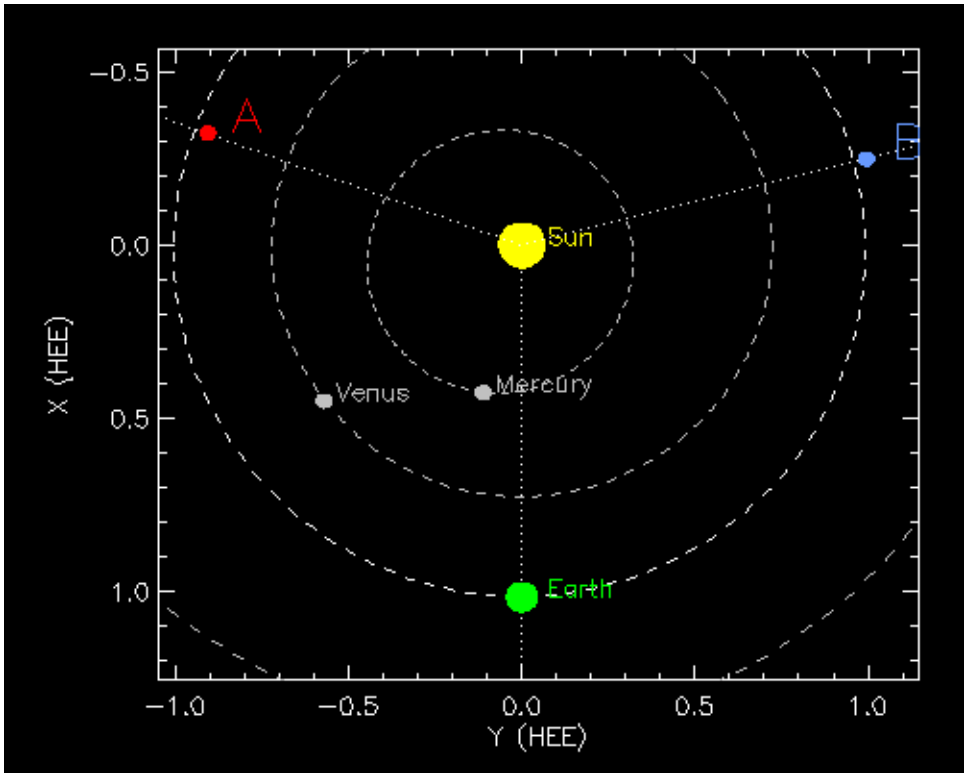

AIA 171 Today
1000
500
0
−500
−1000
Helioprojective Latitude (Solar-Y) [arcsec]
−1000
−500
0
500
1000
Helioprojective Longitude (Solar-X) [arcsec]


AIA 171 FOXSI3 Launch
1000
500
0
−500
−1000
Helioprojective Latitude (Solar-Y) [arcsec]
−1000
−500
0
500
1000
Helioprojective Longitude (Solar-X) [arcsec]

Where is STEREO-A right now?

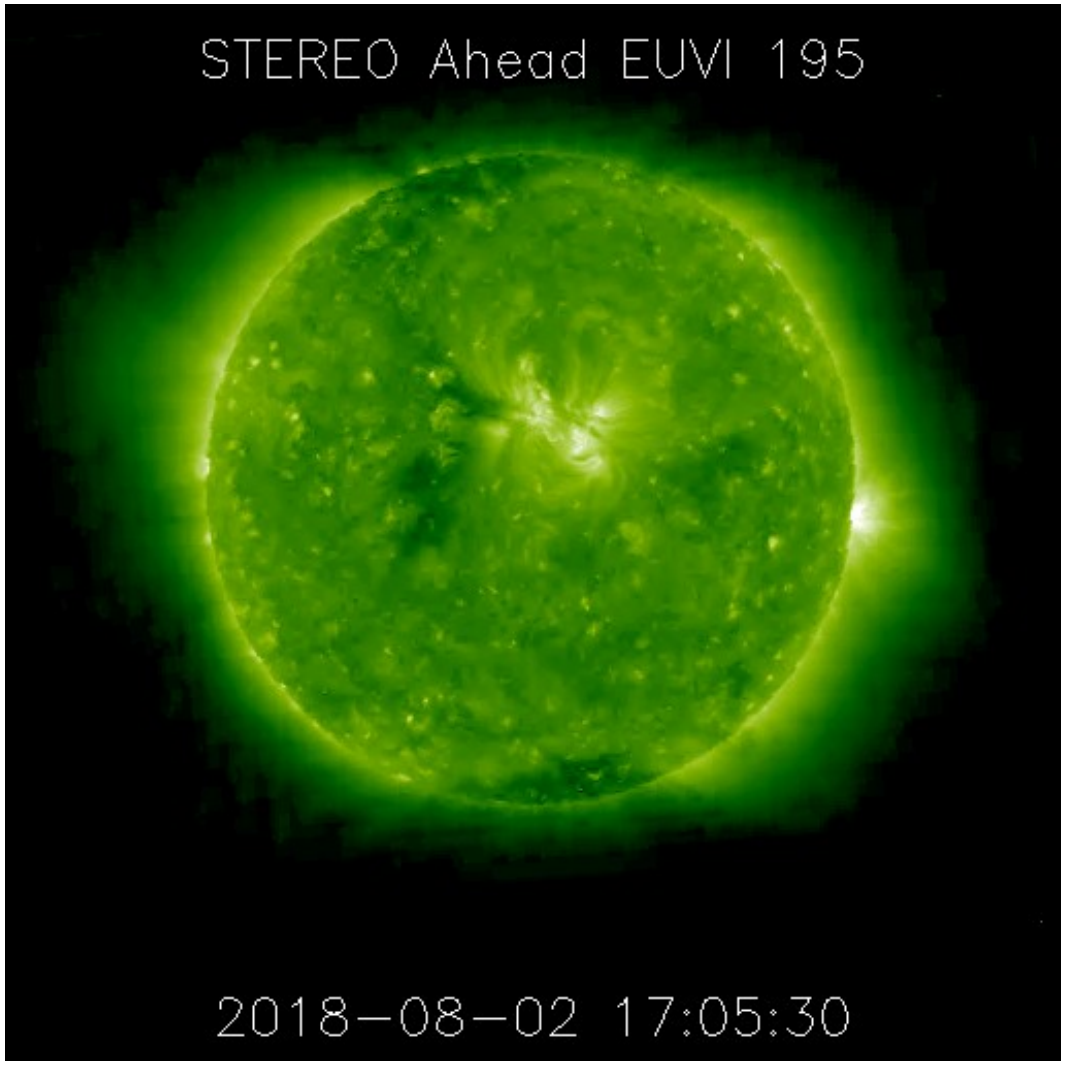
STEREO has two separate telemetrystreams coming down from each spacecraft, the space weather beacon telemetry,and the science recorder playback telemetry. The beacon telemetry contains the most recent data and images, and is transmitted 24 hours per day. A volunteernetwork of antenna stations around the world collect as much as possible of this real-time data stream, and send it to the STEREO Science Center for processing. However, because the beacon telemetry rate is very low, the images need to be compressed by large factors, and are thus of much lower quality than the actual science data.

The science data collected by the STEREO spacecraft are written to the on-board recorder, which is then read out and transmitted to the ground during daily telemetry tracks using the NASA Deep Space Network. These data are of much higher quality than the beacon data, but take several days to reach the STEREO Science Center website. Thus, the most recent images on the STEREO Science Center browse tool will always be beacon images. These temporary beacon images are replaced with the full-quality versions as they become available, generally about 2-3 days later.

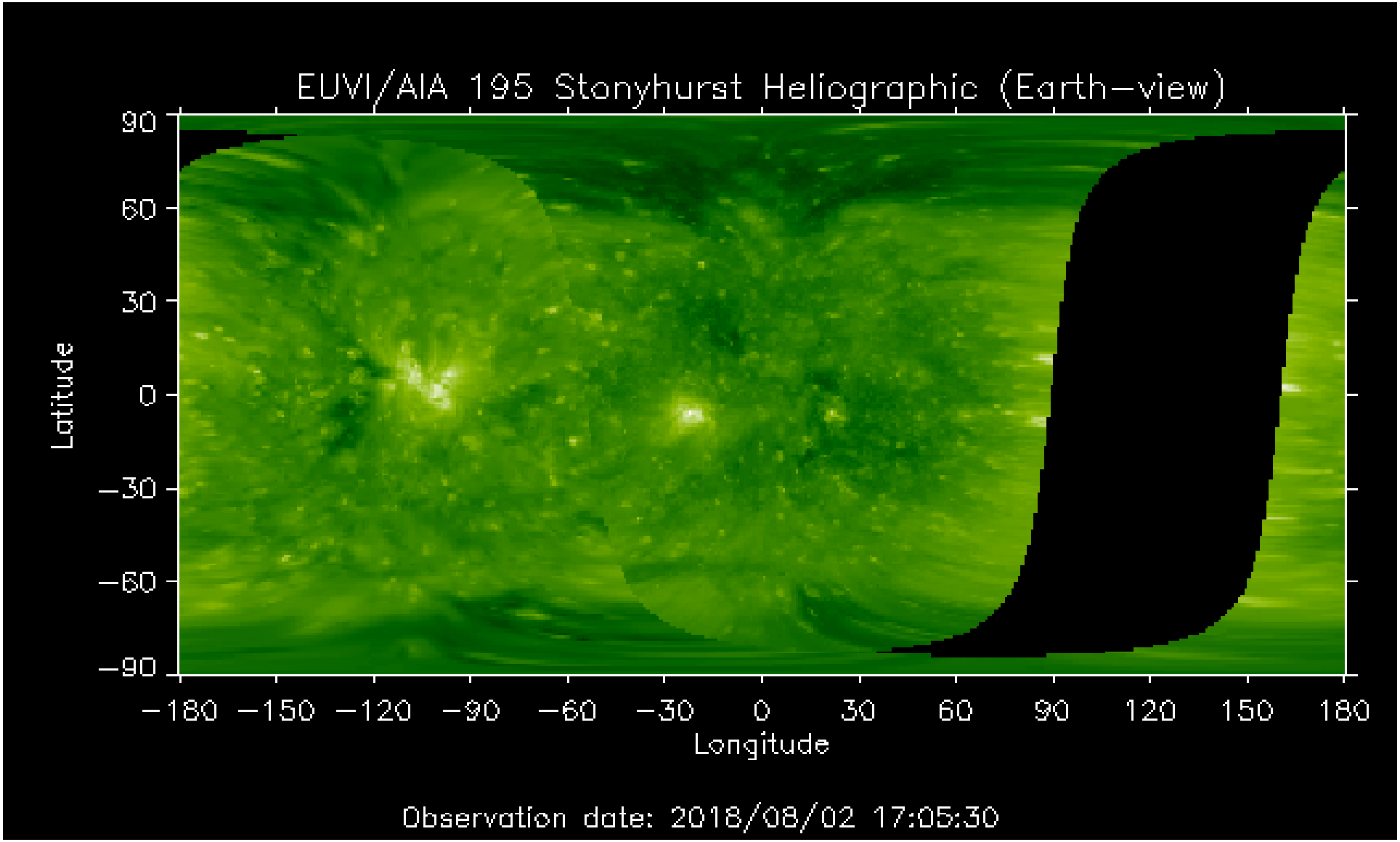


Latest EUVI 195 Beacon

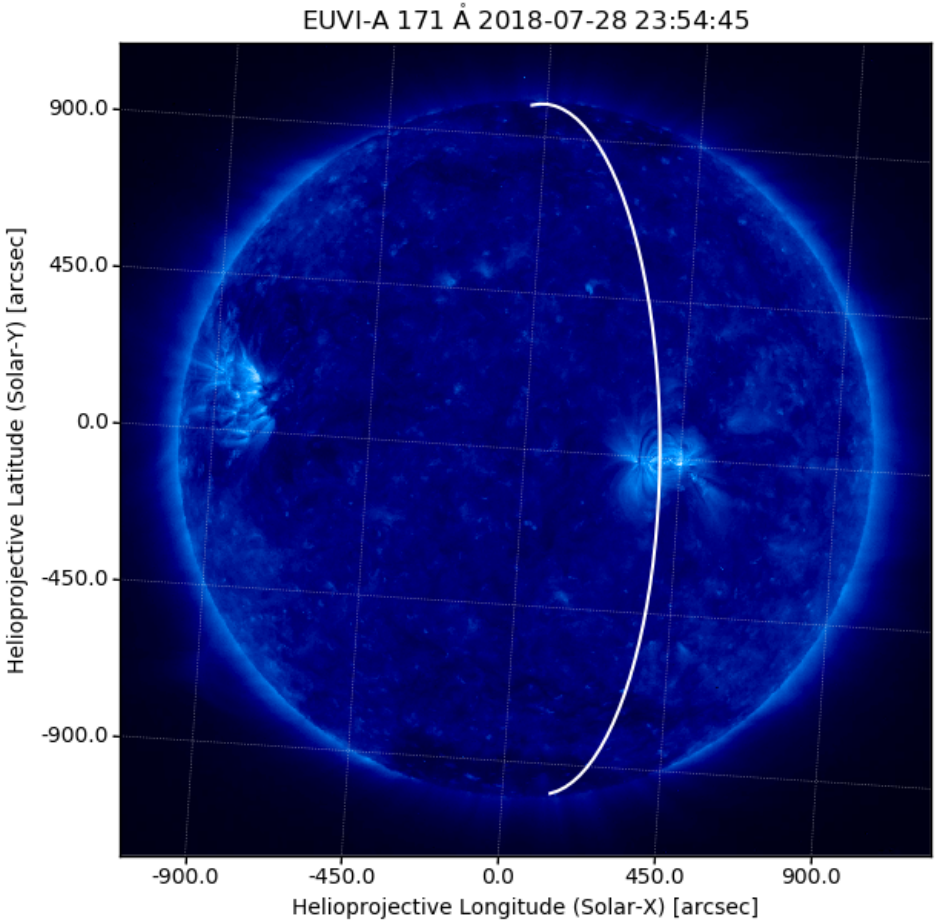
Shown here is the latest SECCHI beacon image. The STEREO space weather beacon telemetry mode is a very low rate, highly compressed data stream broadcast by the spacecraft 24 hours per day. These data are used for space weather forecasting. Because of the large compression factors used, these beacon images are of much lower quality than the actual science data.

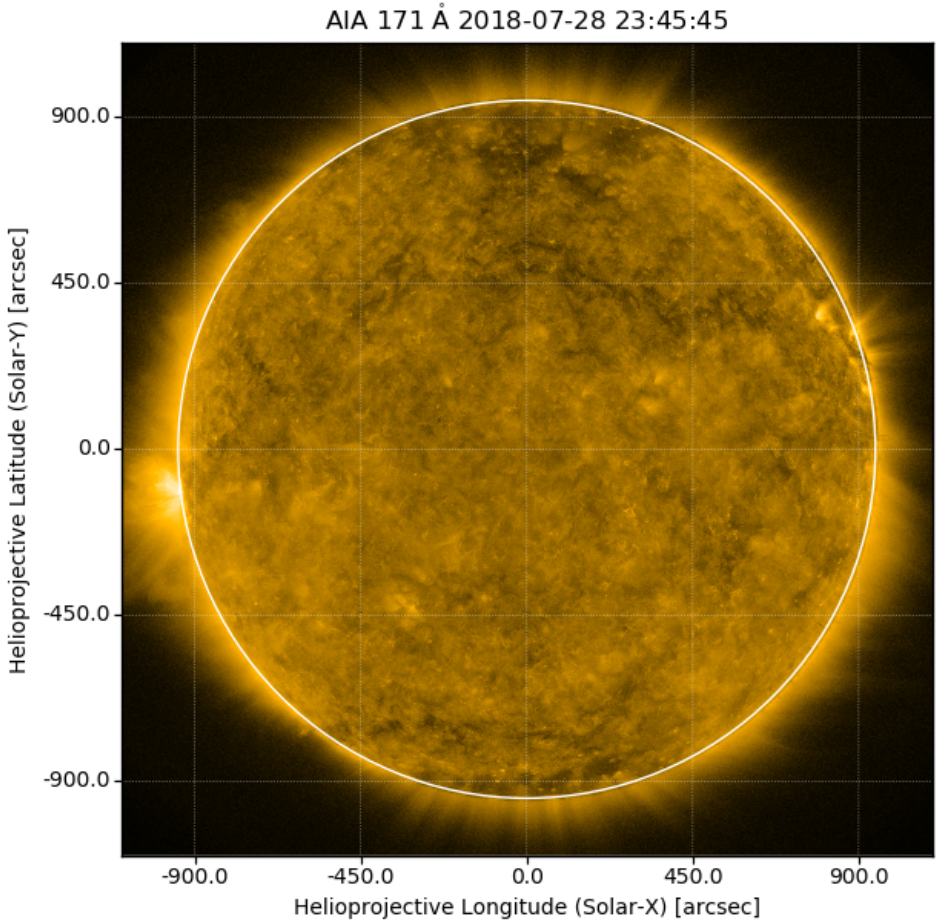


Beacon EUVI-195 & AIA/SDO-195

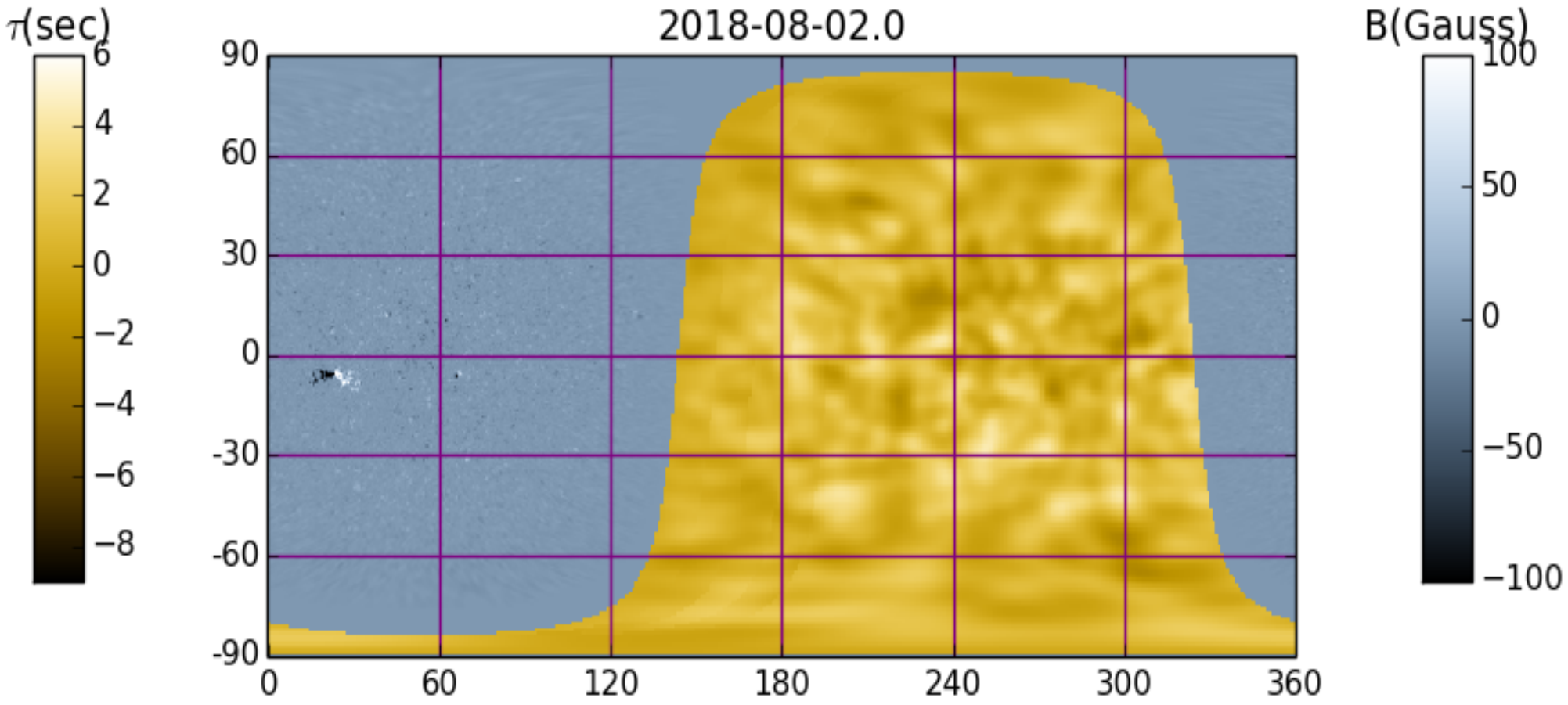


Latest EUVI-171 & AIA/SDO-171

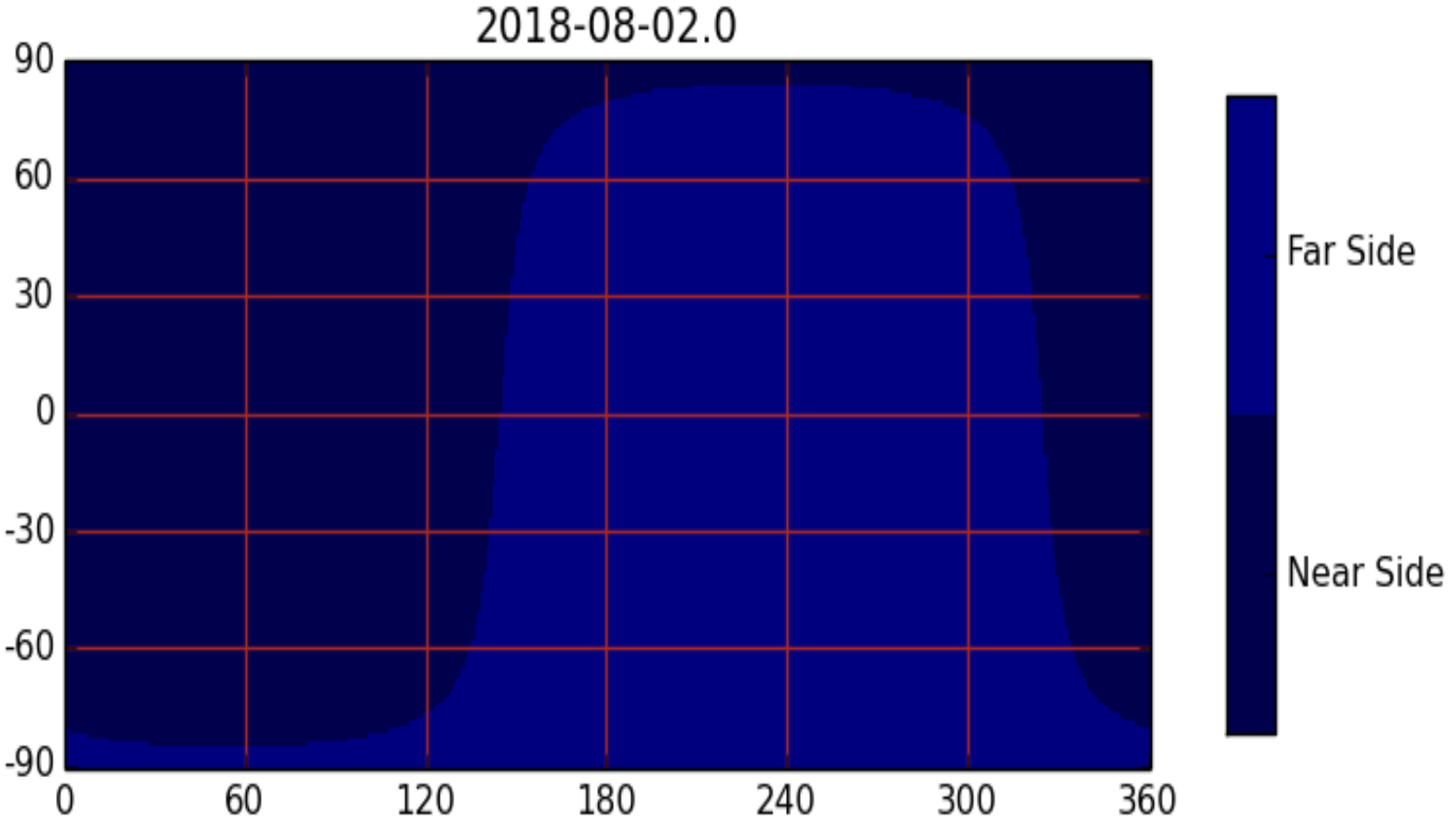




Composite Map - Charlie Lindsey



Active Regions Map - Charlie Lindsey



Beacon and GONG/HMI Farside