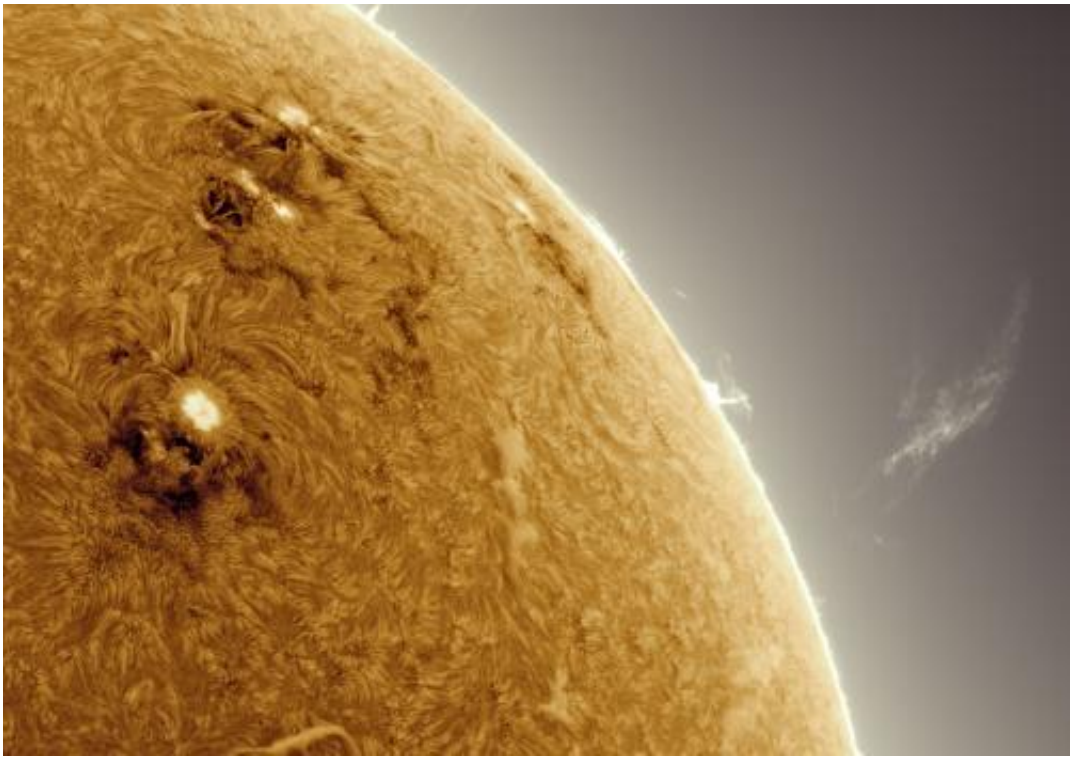
A stunning image of our home star

July 15 2014, by Jason Major



Sunspots and a detached prominence photographed on July 11, 2014. Credit: Alan Friedman

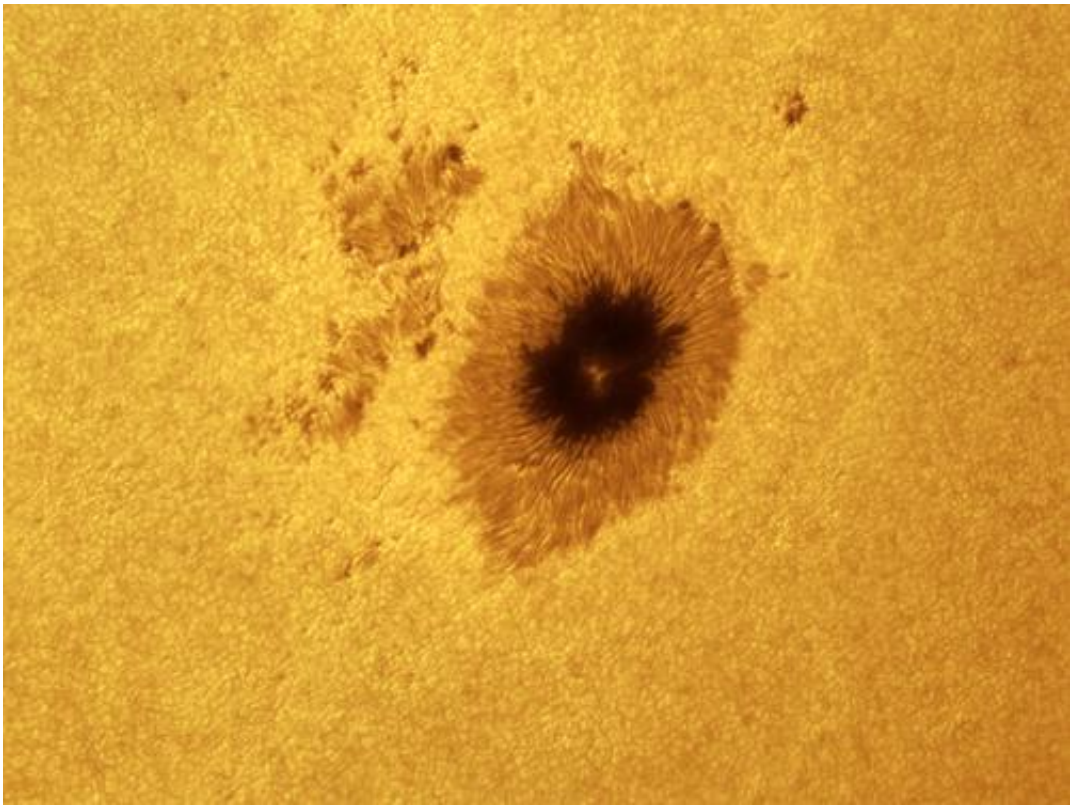
Active regions 2108 and 2109 are now passing around the limb of the Sun, but not before solar photography specialist Alan Friedman grabbed a few pictures of them on Friday! The image above, captured by Alan from his location in Buffalo, NY, shows the two large sunspots nestled in a forest of solar spicules while a large detached prominence hovers several Earth-diameters inside the corona. A beautiful snapshot

of our home star!

Captured in hydrogen-alpha wavelengths, the image above has been colored by Alan, rotated 90 degrees counterclockwise, and inverted from the original. The sunspots and standing prominence are cooler in Ha than the surrounding chromosphere and corona, and so actually photograph darker.

Sunspots are the result of magnetic fields rising up from deep within the Sun, preventing convection from occurring in large areas on the Sun's surface and thereby creating relatively cooler regions we see as dark spots. They can often be many times the size of Earth and can be sources of powerful solar flares.

See these and more images by Alan on his blog here.



AR2109 photographed by Alan Friedman on July 11, 2014.

Source: Universe Today