It looks like something is eating the Sun in recent pictures from the Solar Dynamics Observatory - and in recent SDO videos, the Sun suddenly disappears! What is going on? Could it be aliens, Planet X, or the Great Galactic Ghoul?

Nope, just orbital mechanics and syzygy (an alignment of three celestial objects). At this time of year the Sun, Earth, and the SDO spacecraft in geosynchronous orbit line up, creating syzygically spectacular Sun-Earth eclipses. The folks from SDO explain it this way:

“Twice a year, SDO enters an eclipse season where the spacecraft slips behind Earth for up to 72 minutes a day. Unlike the crisp shadow one sees on the sun during a lunar eclipse, Earth's shadow has a variegated edge due to its atmosphere, which blocks the sun light to different degrees depending on its density. Also, light from brighter spots on the sun may make it through, which is why some solar features extend low into Earth's shadow.”