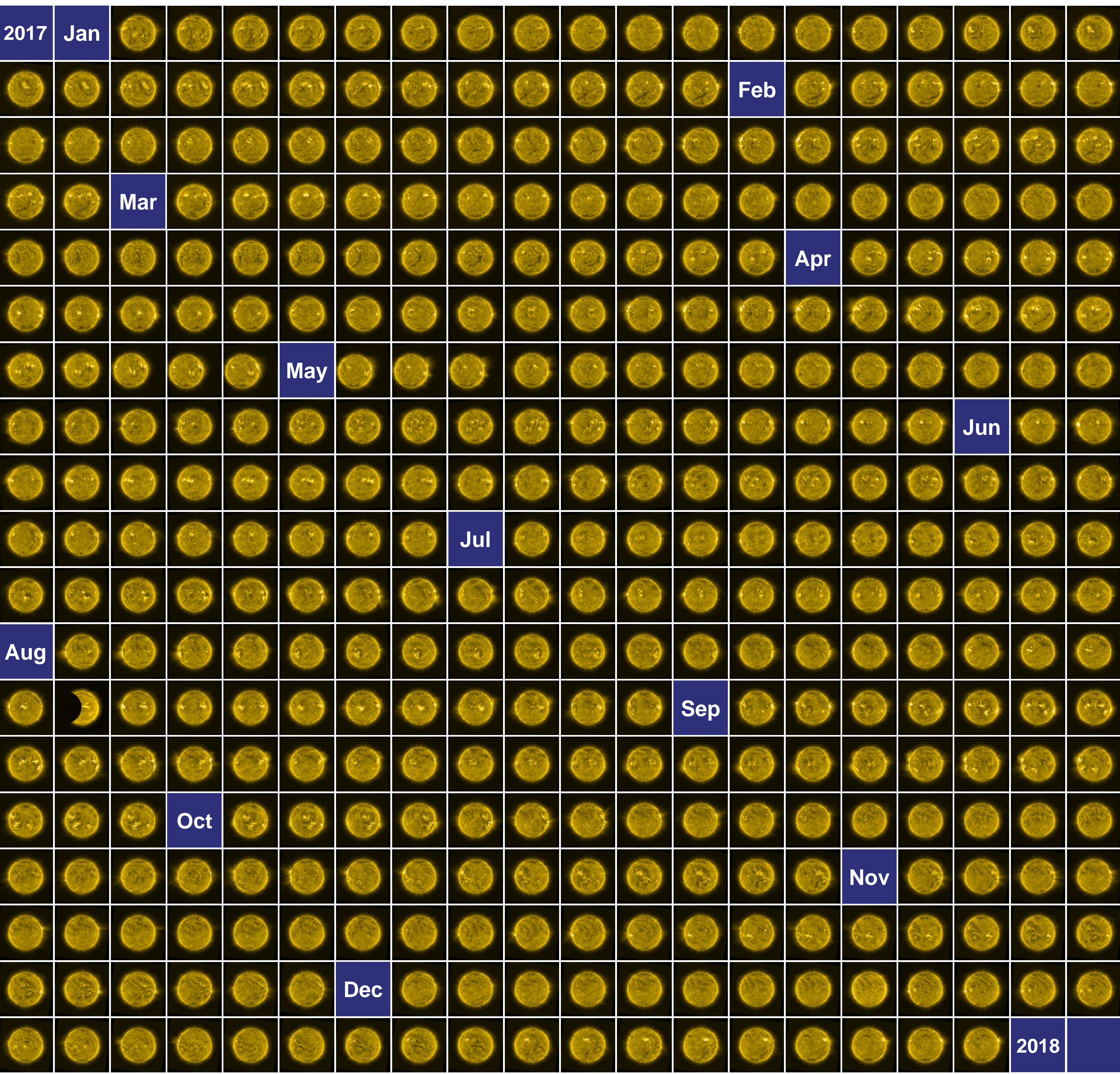


THE EVOLVING SUN THROUGHOUT 2017



Throughout 2017 the Sun's 11-year activity cycle approached its minimum, a period when the number of active regions (seen as bright regions in the images above) diminish, and coronal holes (seen as darker regions) are larger and more prominent. The changing activity of the Sun was continuously monitored by SWAP—the extreme-ultraviolet imager aboard ESA's PROBA2 satellite—which is represented in the series of images above, where one image was selected to represent each day of the mission during 2017.

If you look carefully at the images of the Sun above you'll notice that the Sun's shape and position varies a couple of times. Firstly between April 28th and May 3rd when the satellite performed a sustained off-point campaign. When making such observations the Sun is no longer centred in the field-of-view, but appears to one side of the image, allowing observations of the extended solar atmosphere on the other side. Secondly, on August 21st PROBA2 observed an important celestial event, a solar eclipse. PROBA2 orbits the Earth at a height of approximately 700 km above the surface, and due to its sun-synchronous orbit it passed through the moon's shadow several times during the eclipse resulting in PROBA2 observing as many as 3 partial eclipses. An image of the eclipse was chosen to represent August 21st.

