

Image: Sunset over South America

May 9 2011



Image Credit: NASA

(PhysOrg.com) -- The Expedition 27 crew photographed this sunset over western South America from aboard the International Space Station.

The station crew sees, on average, sixteen sunrises and sunsets during a 24-hour orbital period. Each changeover between day and night on the ground is marked by the terminator, or line separating the sunlit side of

Earth from the side in [darkness](#). While the terminator is conceptualized as a hard boundary--and is frequently presented as such in graphics and visualizations--in reality the boundary between light and dark is diffuse due to scattering of light by Earth's atmosphere.

This zone of diffuse lighting is experienced as dusk or twilight on the ground--while the sun is no longer visible, some illumination is still present due to light scattering over the local horizon. The terminator is visible in this photograph trending across the image from lower left to upper right. This panoramic view across central South America, looking towards the northeast, was acquired at approximately 7:37 p.m. local time. Layers of [Earth's](#) atmosphere, colored bright white to deep blue, are visible extending across the horizon. The highest cloud tops have a reddish glow from the direct light of the setting sun while lower clouds are in twilight. The Salar de Coipasa, a large salt lake in Bolivia, is dimly visible on the night side of the terminator. The salar provides a geographic reference point that allows the location and viewing orientation of the image to be determined.

Provided by JPL/NASA

Citation: Image: Sunset over South America (2011, May 9) retrieved 27 April 2024 from <https://phys.org/news/2011-05-image-sunset-south-america.html>

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