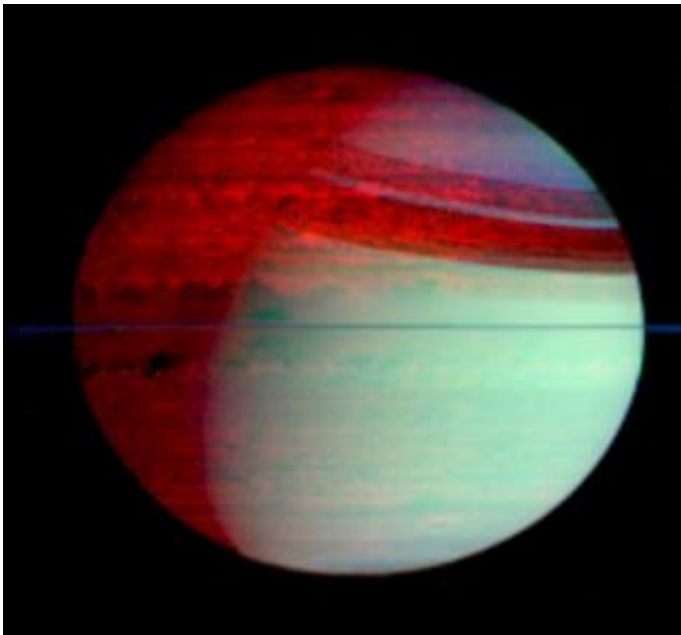


'Chinese Lantern' Technique Helps Track Clouds at Saturn

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This false-color mosaic of Saturn shows deep-level clouds silhouetted against Saturn's glowing interior. Image credit: NASA/JPL/University of Arizona

A new image of Saturn demonstrates a technique that creates a 'Chinese lantern' effect, showing Saturn's deep clouds silhouetted against the planet's warm, glowing interior. Seen this way, Saturn's interior shows surprising activity underneath the overlying haze, with a great variety of cloud shapes and sizes.

Because upper-level hazes and clouds obscure the view of these deep

clouds in visible light, imaging clouds in the depths of Saturn is not practical using visible-light cameras. Several recent images obtained by Cassini's visual and infrared mapping spectrometer were combined in a way that highlights the deep clouds in silhouette against the background radiation of heat generated by Saturn's interior. This literally lights the planet from the inside, like a lantern.

Clouds and hazes in Saturn's northern hemisphere are noticeably thinner than those in its southern hemisphere. This is thought to be a seasonal effect; this idea will be tested as Saturn's northern hemisphere enters springtime in the next few years.

Bright red colors indicate areas relatively free of deep-level clouds and particles, while darker red colors are cloudy regions. Images like these show Saturn's deep clouds under both daytime and nighttime conditions.

Source: NASA

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