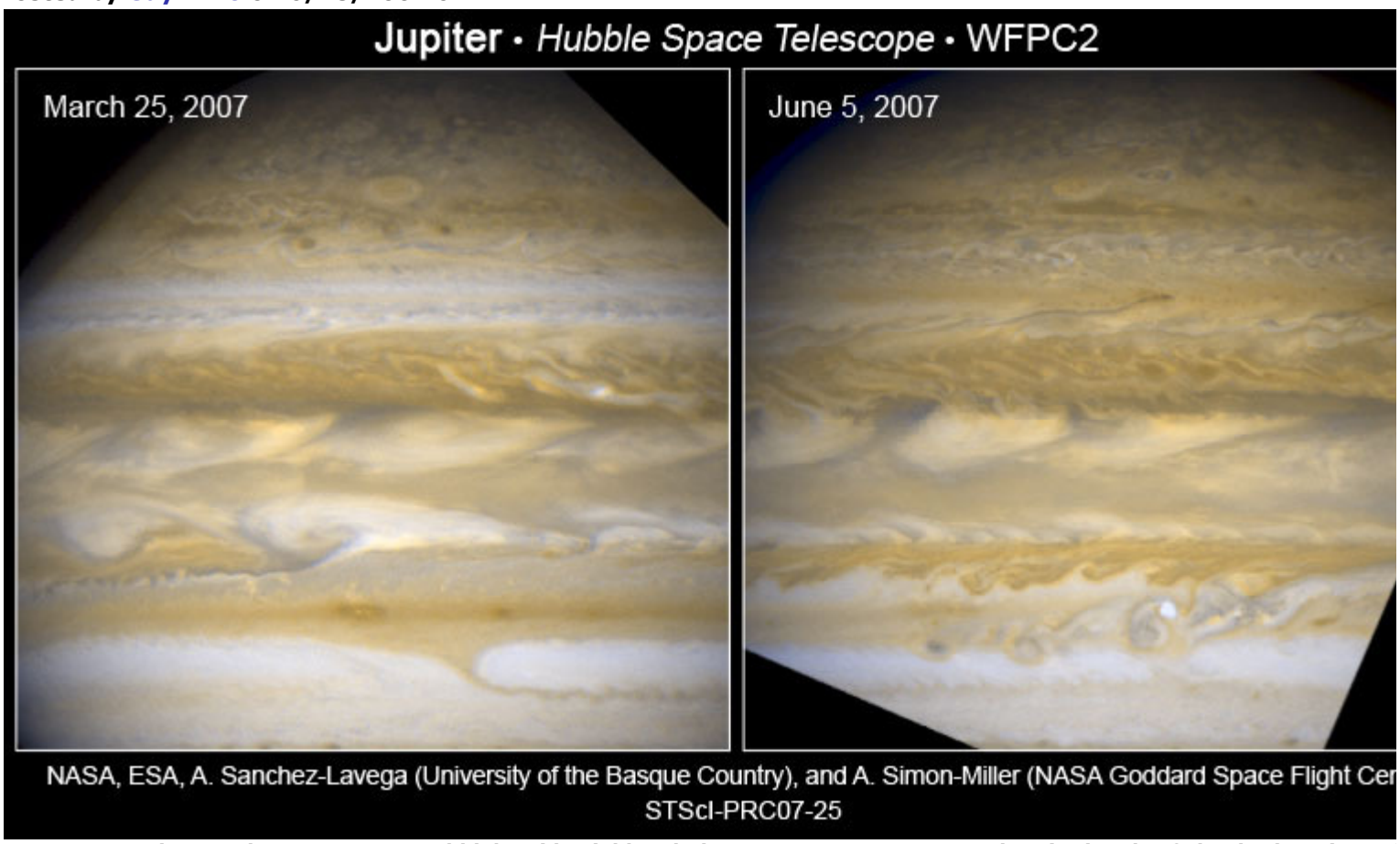
Jupiter is Changing its Stripes Right in Front of Our Eyes

Posted by Guy Pirro on 6/28/2007 6:11 PM



Between March 25 and June 5, 2007, Hubble's Wide Field and Planetary Camera 2 captured entire bands of clouds changing co Zones have darkened into belts and belts have lightened and transformed into zones. Cloud features have rapidly altered in sha and size. The image at left shows a thin band of white clouds above Jupiter's equator. The white color indicates clouds at highe altitudes in Jupiter's atmosphere. In this image, the band's white hue has turned brown, showing clouds deep within the plane atmosphere. The whole band appears to have merged with the one below it. (Image Credit: NASA; ESA; A. Simon-Miller - NASA Goddard Space Flight Center, Greenbelt), A. Sánchez-Lavega - University of the Basque Country, Spain)

interact, storms and turbulence appear.

Between March 25 and June 5, 2007, Hubble's Wide Field and Planetary Camera 2 captured entire bands of clouds changing co darkened into belts and belts have lightened and transformed into zones. Cloud features have rapidly altered in shape and size

Recent "before and after" images show the dramatic changes. The image on the left shows a thin band of white clouds above . The white color indicates clouds at higher altitudes in Jupiter's atmosphere. The image on the right shows that the band's whit brown, showing clouds deep within the planet's atmosphere. The whole band appears to have merged with the one below it.

In the same cloud band above the equator, the small swirls in the image on the left have morphed into larger wave-like featur photo. Dominating the band is a dark streak that resembles a snake. This serpent-shaped structure is actually a small tear in which gives astronomers a view deep within the atmosphere.

Below the equatorial region, the brownish upside-down shark fin in the left-hand image disappears in the photo at right. Appe brownish tongue-shaped clouds with a stream of white swirls below them.

These global upheavals have been seen before, but not with Hubble's sharp resolution. Astronomers using ground-based teles drastic atmospheric transformation in the 1980s. Another major disturbance was seen in the early 1990s, after Hubble was lau The telescope, however, did not have the resolution to view the upheaval in fine detail. These higher-quality Hubble images m astronomers understand how such global upheavals develop on Jupiter.

For more information:

http://hubblesite.org/newscenter/archive/releases/2007/25/

http://www.newswise.com/articles/view/531164/

http://www.astromart.com/news/news.asp?news_id=384

http://www.astromart.com/news/news.asp?news_id=545