back scatter

Atlantis in transit

On 12 May, 24 hours after its launch, the space shuttle *Atlantis* was halfway to its rendezvous with the *Hubble Space Telescope* when French photographer Thierry Legault captured this image of the shuttle passing in front of the Sun. *Atlantis* was 260 km above Earth's surface, and the solar transit lasted only 0.3 second. The thinness of the silhouette confirms that the shuttle's cargo-bay doors were open at the time.

The Sun's apparent texture is due to solar granulation in the photosphere. Each granule is a convection cell (Bénard cell) about the size of Texas. Hot gas rises in the center of the cells, and cooler gas descends in the darker spaces between the granules. With lifetimes on the order of 10 minutes, the granules form a constantly shifting pattern; the pattern is partly obscured here due to atmospheric turbulence. (Photo courtesy of Thierry Legault/NASA; more transit photos are available at http://www.astrophoto.fr.)

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