Tuesday Telescope: A time-lapse from orbit reveals treasures below

Welcome to the Tuesday Telescope. There is a little too much darkness in this world and not enough light—a little too much pseudoscience and not enough science. We'll let other publications offer you a daily horoscope. At Ars Technica, we'll take a different route, finding inspiration from very real images of a universe that is filled with stars and wonder.

I did not expect to feature NASA astronaut Nichole Ayers in the Tuesday Telescope so soon, but a recent photo she shared is just sublime. (In case you missed it, we wrote about her photo of lightning from space about a month ago.)

This week Ayers has a time-lapse sequence she captured from the Cupola as the International Space Station soared near Central and South America.

"Soooooo much going on in this picture," Ayers wrote on the social media site X. "You can see Nicaragua, Costa Rica, and Panama, with South America off in the distance."

The most distinct feature is a lightning strike near Panama City. This illuminates the clouds below. Above the strike is a reddish phenomenon known as a sprite, which sometimes occurs in the atmosphere between 50 and 90 km above a lightning strike near the surface of the planet. This appears to be a "jellyfish" sprite. It is rendered beautifully.

But wait, there's more! The lightning strike is so bright that

its reflection can be seen in the space station’s structure, at the top of the image. Additionally the atmosphere’s airglow can be clearly seen in the orange line just above the atmosphere.

All in all, it’s a wonderful photo, and I can’t wait to see what other treasures Ayers sends down from on high.

Source: Nichole Ayers/NASA

Do you want to submit a photo for the Daily Telescope? Reach out and say hello.

https://arstechnica.com/space/2025/06/tuesday-telescope-lighting-sprites-and-airglow-over-central-america/