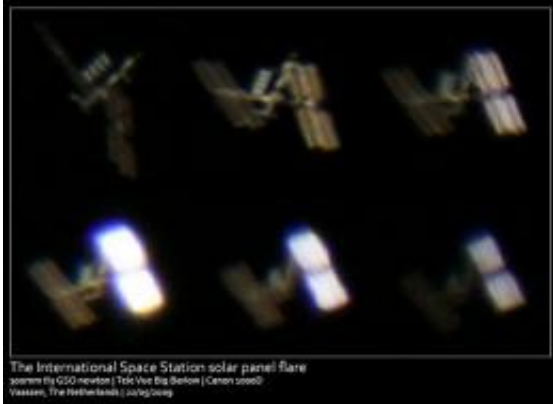


Space Station Marathon

July 6 2009



Sunlight glints from the space station's solar arrays on May 22, 2009. Photo credit: Quintus Oostendorp of Vaassen, the Netherlands.

The International Space Station (ISS) is about to make a remarkable series of flybys over the United States. Beginning this 4th of July weekend, the station will appear once, twice, and sometimes three times a day for many days in a row. No matter where you live, you should have at least a few opportunities to see the biggest spaceship ever built.

Check [NASA's ISS Tracker](#) for [flyby](#) times.

The ISS has been under construction for nearly 11 years, and it has grown very large and very bright. The station is now more than 350 ft wide (wider than a football field), has 12,600 cubic feet of labs and living quarters, and on Earth would weigh about 670,000 lb. Sunlight illuminating the massive outpost makes it shine fifteen times brighter

than Sirius, the brightest star in the sky.

Sometimes it is even brighter than that. Sunlight glinting from the station's flat surfaces (mainly solar arrays) produce dazzling flares as much as six hundred times brighter than Sirius. For astronomers: On the scale of visual magnitudes, space station flares register -8.

"The station flared spectacularly on May 22nd when it passed over my backyard observatory in the Netherlands," reports amateur astronomer Quintus Oostendorp. "I knew the ISS was coming, so I had my telescope ready and I was able see exactly what happened."

At present, the flares are unpredictable. No one knows when they will happen or exactly how bright they will be. Any given flyby could be interrupted by one—and that's what makes the watch so much fun.

The marathon of space station flybys won't stop until mid-to-late July (depending on your location). That gives [space shuttle Endeavour](#), currently scheduled to launch on July 11th, time to reach the space station and join the show. As the shuttle approaches station for docking, many observers will witness a memorable double flyby—Endeavour and the ISS sailing side by side across the starry night sky.

Endeavour is on yet another space station construction mission. This time it will deliver a "space porch" to be added to Japan's Kibo science laboratory module. The porch is not a place where astronauts can sit, relax and watch the stars drift by (although that is not a bad idea); it is a science platform. When an experiment needs to be exposed to the hard vacuum or energetic radiation of space, it can placed outside on the porch to take advantage of the space station's unique research environment. The official name of the porch is the Kibo Japanese Experiment Module Exposed Facility and it will add its own small contribution to the station's reflected luminosity in the night sky.

What now? Check for flyby times, ready your telescope (optional), and let the sightings begin.

Source: by Dr. Tony Phillips, Science@NASA

Citation: Space Station Marathon (2009, July 6) retrieved 26 April 2024 from <https://phys.org/news/2009-07-space-station-marathon.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.