

Can astronauts see stars from the space station?

August 18 2017, by Nancy Atkinson



Stars and the limb of Earth seen in the background of the International Space Station on July 29, 2017. Credit: NASA/Jack Fischer.

I've often been asked the question, "Can the astronauts on the Space Station see the stars?" Astronaut Jack Fischer provides an unequivocal answer of "yes!" with a recent post on Twitter of a timelapse he took from the ISS. Fischer captured the arc of the Milky Way in all its glory,

saying it "paints the heavens in a thick coat of awesome-sauce!"

Can you see [stars](#) from up here? Oh yeah baby! Check out the Milky Way as it spins & paints the heavens in a thick coat of awesome-sauce! pic.twitter.com/MsXeNHPxLF

— Jack Fischer (@Astro2fish) [August 16, 2017](#)

But, you might be saying, "how can this be? I thought the [astronauts](#) on the Moon couldn't see any stars, so how can anyone see stars in space?"

It is a common misconception that the Apollo astronauts didn't see any stars. While stars don't show up in the pictures from the Apollo missions, that's because the camera exposures were set to allow for good images of the bright sunlit lunar surface, which included astronauts in bright white space suits and shiny spacecraft. Apollo astronauts reported they could see the brighter stars if they stood in the shadow of the Lunar Module, and also they saw stars while orbiting the far side of the Moon. Al Worden from Apollo 15 has said the sky was "awash with stars" in the view from the far side of the Moon that was not in daylight.

Just like stargazers on Earth need dark skies to see stars, so too when you're in space.



John W. Young on the Moon during Apollo 16 mission. Charles M. Duke Jr. took this picture. The LM Orion is on the left. April 21, 1972. Credit: NASA

The cool thing about being in the ISS is that astronauts experience nighttime 16 times a day (in 45 minute intervals) as they orbit the Earth every 90 minutes, and can have extremely dark skies when they are on the "dark" side of Earth.

Twinkle, twinkle, little star...
Up above the world so high
Like a diamond in the sky... pic.twitter.com/8H7CshyP0p

— Jack Fischer (@Astro2fish) [August 13, 2017](#)

For stars to show up in any image, its all about the exposure settings. For example, if you are outside (on Earth) on a dark night and can see thousands of stars, if you just take your camera or phone camera and snap a quick picture, you'll just get a darkness. Earth-bound astrophotographers need long-exposure shots to capture the Milky Way. Same is true with ISS astronauts: if they take long-exposure shots, they can get stunning images.



This long exposure image of the night sky over Earth was taken on August 9, 2015 by a member of the Expedition 44 crew on board the International Space Station. Credit: NASA

Source: [Universe Today](#)

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