

35 years ago: Our first family portrait of the Earth and Moon

September 19 2012, by Jason Major



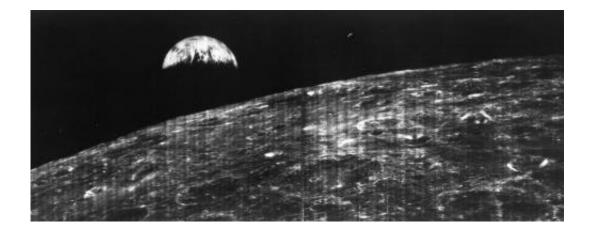
A crescent Earth and Moon as seen by Voyager 1 on September 18, 1977. Credit: NASA



Thirty-five years ago today, September 18, 1977, NASA's Voyager 1 spacecraft turned its camera homeward just about two weeks after its launch, capturing the image above from a distance of 7.25 million miles (11.66 million km). It was the first time an image of its kind had ever been taken, showing the entire Earth and Moon together in a single frame, crescent-lit partners in space.

The view of <u>Earth</u> shows eastern Asia, the western Pacific Ocean and part of the Arctic. Voyager 1 was actually positioned directly above Mt. Everest when the images were taken (the final <u>color image</u> was made from three separate images taken through color filters.)

The Moon was brightened in the original NASA images by a factor of three, simply because Earth is so much brighter that it would have been overexposed in the images were they set to expose for the Moon. (Also I extended the sides of the image a bit above to fit better within a square format.)



First View of Earth From Moon. On Aug. 23, 1966, the world received its first view of Earth taken by a spacecraft from the vicinity of the Moon. The photo was transmitted to Earth by the Lunar Orbiter I and received at the NASA tracking station at Robledo De Chavela near Madrid, Spain. The image was taken during the spacecraft's 16th orbit. Credit: NASA



Previous images may have shown the Earth and Moon together, but they were taken from orbit around one or the other and as a result didn't have both worlds fully—and in color!—within a single frame like this one does. In fact, it was only 11 years earlier that the very first image of Earth from the Moon was taken, acquired by NASA's Lunar Orbiter I spacecraft on August 23, 1966.

It's amazing to think what was happening in the world when Voyager took that image:

- <u>World population</u> was 4.23 billion (currently estimated to be 7.04 billion)
- The Space Shuttle Enterprise made its first test flight from a 747
- Star Wars, Close Encounters of the Third Kind and Saturday Night Fever were out in U.S. theaters
- Charlie Chaplin and Elvis Presley died
- U.S. federal debt was "only" \$706 billion (now over \$16 trillion!)
- And, of course, both <u>Voyagers</u> launched on their Grand Tour of the Solar System, ultimately becoming the most distant manmade objects in existence

See more world stats and events here.

Source: <u>Universe Today</u>

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