



EXPLORE EARTH APOLLO 8 • DECEMBER 24, 1968



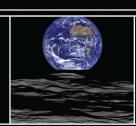














EXPL)REEARTH

DECEMBER 24,



1968: Earthrise: Few people have seen our planet from space firsthand. The human exploration of the Apollo missions during the 1960s and '70s brought us new and stunning imagery, along with the emotion and sense of awe conveyed by the crew as witness to the beauty and fragility of Earth. The simple moment of "Earthrise," as captured in this iconic photo by the crew of Apollo 8 on December 24,1968, for a moment slowed the chaos of a tumultuous year. It reminded us that we are residents of one planet that needs our care as it sustains us.

Now, as we venture back to the Moon-and beyond-the next generation of explorers will bring us new images of Earth from space that will provide new ways to understand the interconnected systems of our home planet, as well as to appreciate its natural splendor.



1960: First "television" picture of Earth

from space: The Television InfraRed Observational Satellite (TIROS-1) was the Nation's first weather satellite. It enabled accurate weather forecasting based on data about Earth's cloud cover and weather patterns collected from space.

Image credit: NASA



1966: First view of Earth from the Moon:

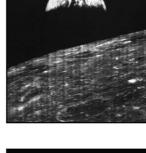
The public's first view of Earth from the Moon was taken by the Lunar Orbiter 1, which surveyed smooth areas of the Moon for landing sites.

Image credit: NASA/LOIRP



1972: The "Blue Marble": This iconic view of Earth was taken by the crew of Apollo 17, the last Apollo mission. It was the first time an Apollo trajectory made it possible to photograph the South polar ice cap.

Image credit: NASA



1992: "Family portrait" of Earth and Moon:

From about 3.9 million miles away (about 6.3 million km), the Galileo spacecraft captured this image of the Moon orbiting Earth.

Image credit: NASA/JPL

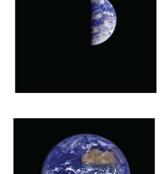
Moon's surface.



2013: Earth seen through Saturn's

rings: From 898 million miles away (a little over 1,445 km), Earth appears as a tiny blue dot in this photograph from the Cassini spacecraft. The Cassini-Huygens mission, terminated in 2017, was a cooperative project of NASA, the European Space Agency, and the Italian Space Agency.

Image credit: NASA/JPL-Caltech/Space Science Institute



2015: Earthrise 2.0: This view of Earth was taken by the Lunar Reconnaissance Orbiter (LRO). Launched in 2009, LRO captures some 12 Earthrises daily, but is generally busy looking at the

Image credit: NASA/Goddard/ Arizona State University



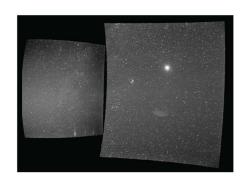
2015: Moon crosses Earth: From 1 million miles away (about 1.6 million km), NASA's Earth Polychromatic Imaging Camera (EPIC) aboard the Deep Space Climate Observatory (DSCOVR) satellite captured the Moon crossing in front of Earth. DSCOVR is a partnership between NASA, NOAA and the U.S. Air force.

Image credit: NASA/NOAA



2016: The Black Marble: The human footprint is illuminated in composite images created by data from the Visible Infrared Imaging Radiometer Suite (VIIRS) on the Suomi National Polar-orbiting Partnership (Suomi NPP), a NASA, National Oceanic and Atmospheric Administration, and Department of Defense mission.

Image credit: NASA



2018: Parker Solar Probe looks back. On its way to study the Sun, NASA's Parker Solar Probe captured this image of Earth from about 27 million miles (about 43 million km) away. The image was taken as Parker engaged in a gravity assist around Venus, a series of maneuvers that will help the probe get closer to the Sun's surface than any other spacecraft.

Image Credit: NASA/Naval Research Laboratory/Parker Solar Probe

