



# EARTHRISE APOLLO 8 · DECEMBER 24, 1968

# EARTH, RISING.

"WE CAME ALL THIS WAY TO EXPLORE THE MOON, AND THE MOST IMPORTANT THING IS THAT WE DISCOVERED EARTH."

APOLLO 8 LUNAR MODULE PILOT WILLIAM ANDERS

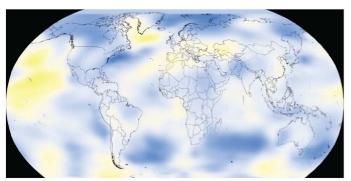


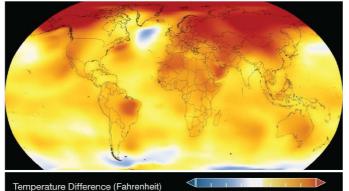
### **Rising Earth**

NASA's Iconic Photo, December 24,1968

The simple moment of "Earthrise," as captured in this iconic photo by the crew of Apollo 8 in December 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. Scholars and casual observers alike have cited the influence of the Earthrise image in creating the modern environmental awareness movement, including the first Earth Day in 1970.

For decades, NASA Earth observations have shown us the progression of natural and human-induced changes to our planet. In this knowledge is the power to do all we can to correct imbalances, slow dangerous shifts, encourage positive change and protect our planet, our home base as we return to the Moon and explore the space beyond.





**Rising Temperatures** 

Global Temperature Change 1968–2017

The map on the left shows average 1968 global temperatures, with dark blue areas colder than average. In the 2017 map on the right, warmer than average areas are red.

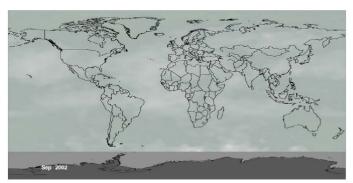


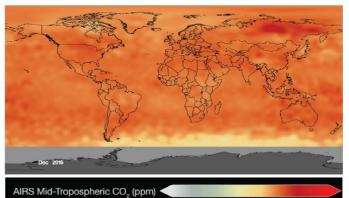


## **Rising Population**

Urban Growth, Las Vegas, Nev., 1972-2018

By 2017, the population of Las Vegas was 2.2 million, more than eight times what it was in 1972. In these satellite images from 1972 (left) and 2017 (right) urban growth is seen in purple and green.

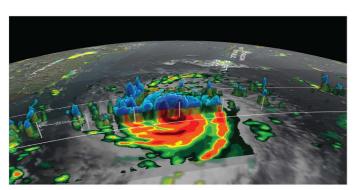




# Rising CO,

Global changes in carbon dioxide concentration, 2002–2016

The pale yellow regions in the 2002 map (left) show lower concentrations of carbon dioxide. By comparison, the 2016 map at left shows greater concentrations in red.





### **Rising Resilience**

Earth science benefits humanity

NASA Earth-observing satellites provide critical data during crises, such as natural disasters and severe weather. More often, though, the data are used to inform the decisions that improve life on our home planet.



