Just beyond Earth’s atmosphere, space is full of orbiting objects observing our planet. NASA’s Earth Observing System (EOS) is a coordinated series of orbiting satellites. Scientists can learn about changing coastlines, ocean currents, air pollution, and much more from the images the EOS satellites send back to Earth.

**NASA’s Jason-3 spacecraft orbits Earth and monitors sea level rise.** The satellite measures ocean height, wind speeds, and wave heights. Together, these data create a detailed record of the ocean that can be tracked over time, allowing scientists to understand and predict weather systems and changes to sea level caused by climate change. The rising ocean will have a major impact on Americans. By the end of this century, the sea level is projected to rise a full meter (about a yard). That’s enough to submerge land in coastal states such as California, Florida, and New York.