Comet Shoemaker-Levy 9 (SL9) collided with Jupiter on May 17, 1994. This high resolution infrared image which was taken on July 21, 1994 shows several hot spots created by the impact of the collisions. The brightest object in the upper left is Io, Jupiter’s closest moon.

www.ifa.hawaii.edu/88inch
Saturn

Distance from the Sun: 1,428,000,000 km
(888,000,000 miles, 0.00015 light year)

This is a series of submillimeter images of Saturn: the rings are changing from maximum tilt in 2003 to nearly edge-on in 2008. CSO’s submillimeter camera has modest resolution much better than the human eye, but not as good as optical telescopes.

www.submm.caltech.edu/cso
This mosaic image of Saturn was taken with the Keck I Telescope in the infrared light to study temperatures of its upper troposphere. This 2004 view was the first to identify a strange “hot spot” at Saturn’s South Pole. The black square in the lower right represents missing data.
Uranus

Keck © Marcos Van Dam / W. M. Keck Observatory

Distance from the Sun: 2,873,000,000 km
(1,785,000,000 miles, 0.00030 light year)

This image of Uranus is comprised of two different types of infrared light and shown in artificial colors. The body of Uranus and the rings have different “colors” (wavelengths) because Uranus itself and its rings are bright in different “colors”.

www.keckobservatory.org
This is an infrared image of Uranus and its moons. The rings and the moons, which are mostly made of rocks, are bright in the same “color” (wavelength). The “color” of Uranus itself, which is made of gas, is different.