

Before SN 1997ap discovery

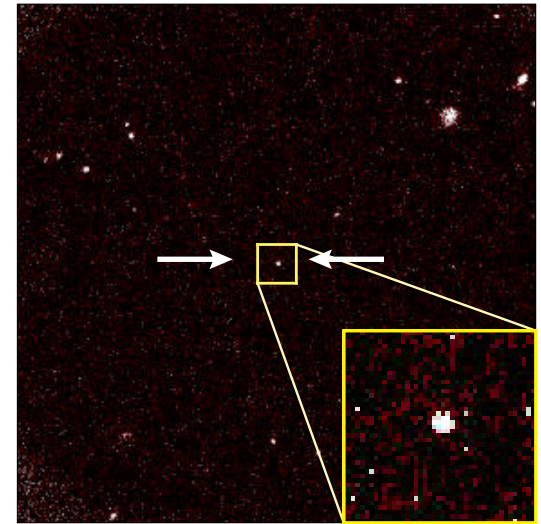
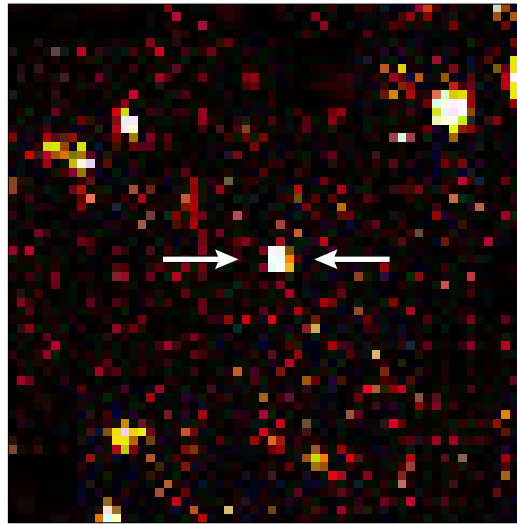
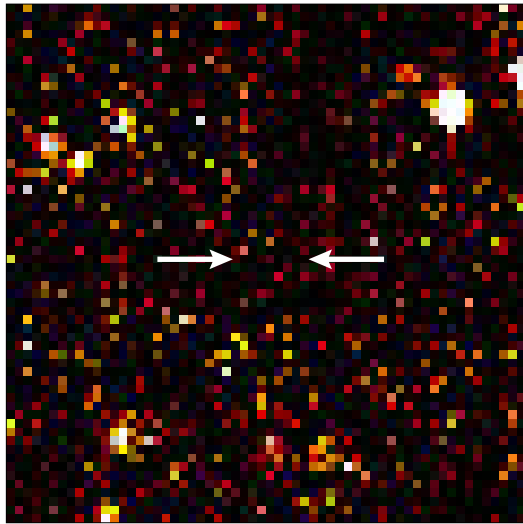
SN 1997ap discovery

SN 1997ap follow-up

Cerro Tololo  
Interamerican Observatory  
4-meter Telescope  
February 1997

Cerro Tololo  
Interamerican Observatory  
4-meter Telescope  
March 1997

Hubble Space Telescope  
April/May 1997



False-color images from observations by the Supernova Cosmology Project of one of the two most distant spectroscopically confirmed supernova. From the left: the first two images, from the Cerro Tololo Interamerican Observatory 4-meter telescope, show a small region of sky just before and just after the the appearance of a type-Ia supernova that exploded when the universe was about half its present age. The third image shows the same supernova as observed with the Hubble Space Telescope. This much sharper picture allows a much better measurement of the apparent brightness and hence the distance of this supernova. Because their intrinsic brightness is predictable, such supernovae help to determine the deceleration, and so the eventual fate, of the universe.

Credit: Perlmutter *et al.*, The Supernova Cosmology Project