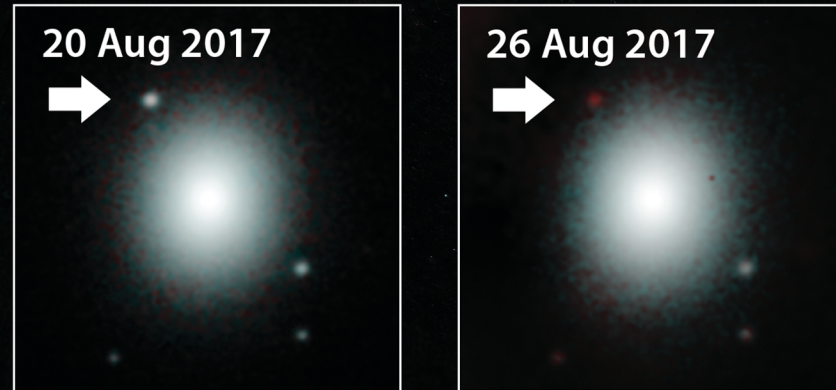


Astronomers Feast on First Light From Gravitational Wave Event

Infrared images from the FLAMINGOS-2 data (insets, below) with a Hubble Space Telescope image of the host galaxy NGC 4993 (background). Note that the image on August 26th appears redder than the comparison image on the 20th.



Credit: Robert Hurt (Caltech/IPAC), Ryan Lau (Caltech), Leo Singer (NASA), Mansi Kasliwal (Caltech) and the GROWTH collaboration/ Background HST

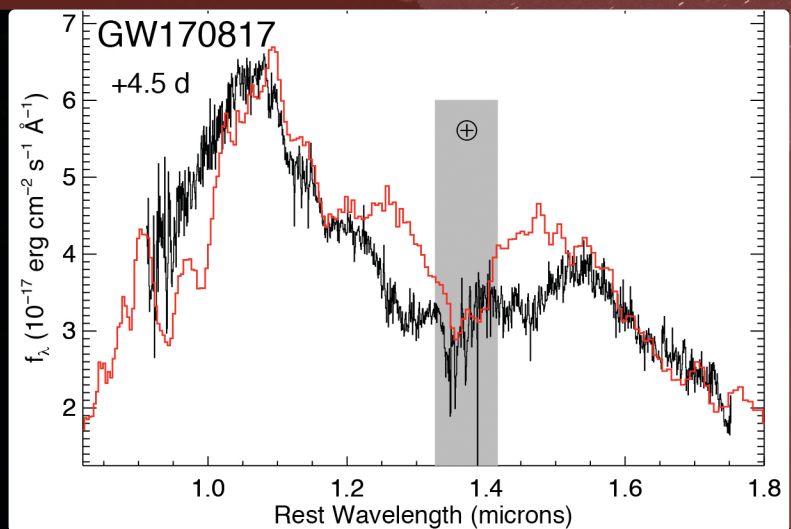


The image sequence above shows infrared imaging from the FLAMINGOS-2 imager and spectrograph for a period of over two weeks. The top row features images in the h-band, a shorter (bluer) wavelength of infrared light. The bottom row focuses mostly on k-band images, which are longer (redder) wavelengths of light. This sequence reveals how the object became redder as it faded from view.

Credit: Gemini Observatory/NSF/AURA/Leo Singer (NASA), Mansi Kasliwal (Caltech), Ryan Lau (Caltech) and the GROWTH collaboration, Edo Berger (Harvard), Peter Blanchard (Harvard), Ryan Chornock (Ohio University), Travis Rector (University of Alaska-Anchorage), Jennifer Miller (Gemini Observatory)

Infrared spectrum obtained with FLAMINGOS-2 at Gemini South dissects light taken 4.5 days after the gravitational wave event. The spectrum is shown in black, with the red line comparing a theoretical model's prediction (Kasen et al. 2017).

Credit: Edo Berger (Harvard), Ryan Chornock (Ohio University)



Gemini South telescope infrared imaging and spectroscopy provided astronomers with key data used by multiple research teams to understand the source of the gravitational wave event GW170817.

For more details see: www.gemini.edu/gw-first-light