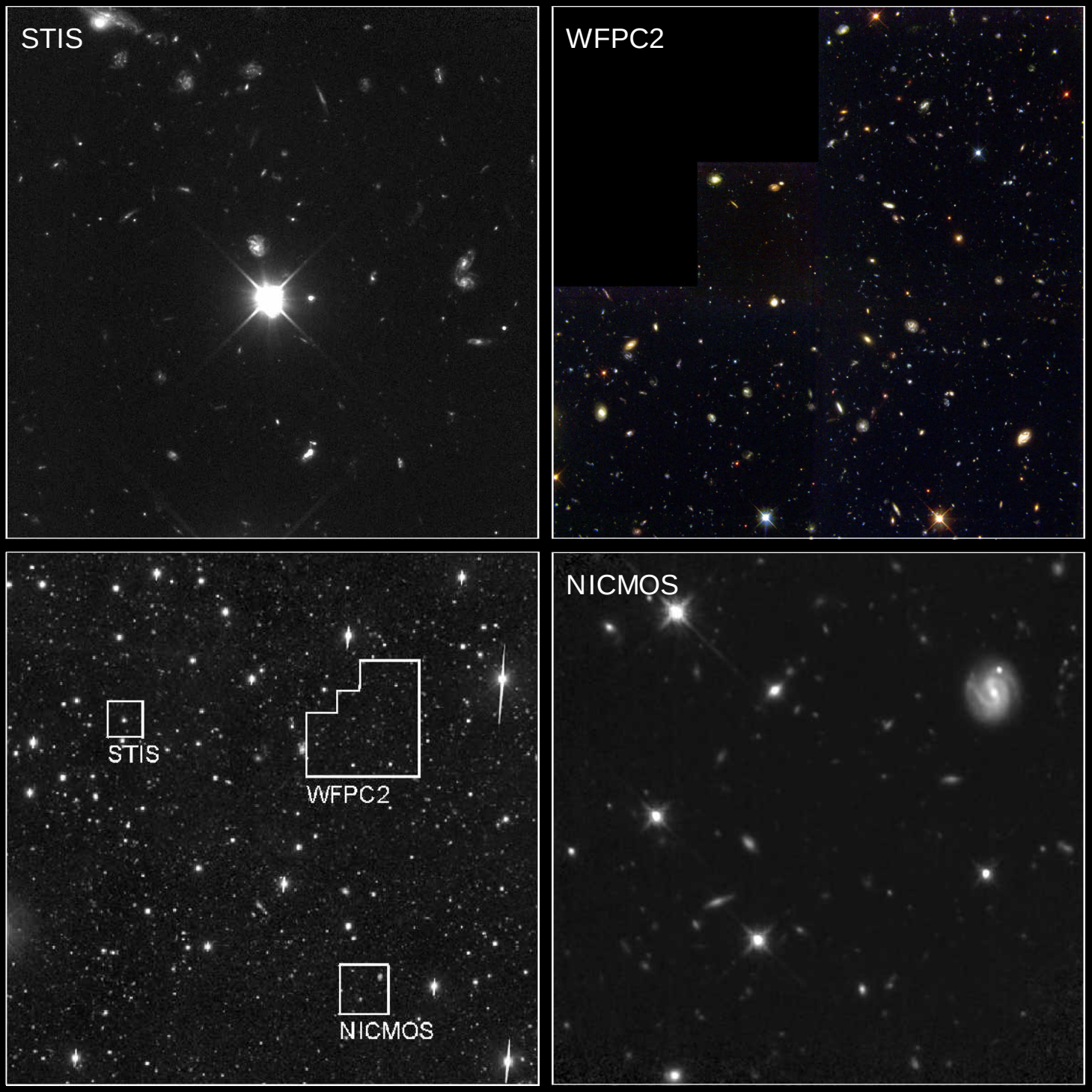

HDF Southern Fields

Hubble Space Telescope • WFPC2 • STIS • NICMOS

PRC98-41b • November 23, 1998 • STScI OPO • The HDF-S Team and NASA

Hubble Space Telescope NEWS

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HUBBLE DEEP FIELD SOUTH -- MULTIPLE WINDOWS ON THE UNIVERSE

Peering at a small patch of sky near the south celestial pole, NASA's Hubble Space Telescope used its full array of instruments to look nearly all the way across the universe. Called the Hubble Deep Field South (HDF-S) This new far-look complements the original Hubble "deep field" taken in late 1995, when Hubble was aimed at a small patch of space in the opposite direction on the sky, near the north celestial pole.

[lower left]
The carefully selected HDF-S target field in the constellation Tucana, as imaged by the 4-meter Victor M. Blanco telescope at the Cerro Tololo Interamerican Observatory in Chile. The respective fields of Hubble's three instruments are outlined.

[upper left]
The deepest visible/ultraviolet light image of the universe ever taken, revealing galaxies down to 30th magnitude. Glaring fiercely across 12 billion light-years of space is the brilliant beacon of a distant quasar (z=2.2). Most of the galaxies in this view lie between us and the quasar. The image was taken with the camera on the Space Telescope Imaging Spectrograph (STIS). The STIS recorded how numerous invisible intervening clouds of hydrogen gas affected the quasar's light. Some of the galaxies in the image may be linked to these clouds.

[upper right]
Several thousand never-before-seen spiral, elliptical and colliding galaxies snap into view in Hubble Wide Field Planetary Camera 2 (WFPC2). The image has a striking similarity to the WFPC2's picture of the northern deep field. This picture confirms that the universe look essentially the same in all directions. The full color picture can be used to estimate galaxy distance and ages.

[lower right]
Hubble's Near Infrared and Multi-Object Spectrometer (NICMOS) captures the "invisible light" coming from stars hidden in dusty galaxies, and galaxies that are so far away their light has been stretched beyond the red end of the visible spectrum.

Credit: R. Williams (STScI) the HDF-S Team, and NASA

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