

# Astronomy Picture of the Day

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2004 March 6



## N49's Cosmic Blast

**Credit:** Hubble Heritage Team ([STScI](#) / [AURA](#)), Y. Chu ([UIUC](#)) et al., [NASA](#)

**Explanation:** Scattered debris from a cosmic supernova explosion [lights up the sky](#) in this gorgeous [composited image](#) based on data from the Hubble Space Telescope. Cataloged as N49, these glowing filaments of shocked gas [span about](#) 30 light-years in our neighboring galaxy, the [Large Magellanic Cloud](#). Light from the original exploding star reached Earth thousands of years ago, but N49 also marks the location of another energetic outburst -- an extremely intense blast of [gamma-rays](#) detected by satellites only twenty-five years ago on [March 5, 1979](#). That date was the beginning of an [exciting journey](#) in astrophysics which led researchers to the understanding of an exotic new class of stars. The source of the [March 5th Event](#) is now attributed to [a magnetar](#) - a highly magnetized, spinning neutron star also born in the ancient stellar explosion which created supernova remnant N49. The [magnetar](#) hurtles through the supernova [debris](#) cloud at over 1,200 kilometers per second.

**Tomorrow's picture:** [SETI Sunday](#)

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