

# Astronomy

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Spiral Galaxies NGC 4298 and NGC 4302



Supernova 1987A



Stellar Nursery Sharpless 2-29



Star Cluster Pismis 24



Globular Star Cluster 47 Tucanae



The Eagle and Omega Nebulae (M16 and M17)



Apollo 11 Astronauts on the Moon



Star Cluster Westerlund 2



Spiral Galaxy NGC 1964



Cat's Paw and Lobster Nebulae (NGC 6334 and NGC 6357)



The Cocoon Galaxy (NGC 4490)

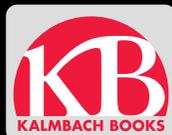


Reflection Nebula M78 in Infrared Light

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## Star Cluster Westerlund 2

NASA/ESA/The Hubble Heritage Team (STScI/AURA)/A. Nota (ESA/STScI)/The Westerlund 2 Science Team

Mercury is visible in morning twilight, early and midmonth. Venus is not visible this month. Mars is not visible this month. Jupiter sets at 1 a.m. Saturn crosses meridian at 10 p.m., sets at 3 a.m. (All times are local daylight time for an observer at 40° north latitude at midmonth.)

# August

Astronomy  
www.astronomy.com

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

What you see is not always what you get. This strikingly sharp view of the star cluster Westerlund 2 comes courtesy of the Hubble Space Telescope, which used its ability to capture light at near-infrared wavelengths to penetrate the dusty shroud that partially obscures the cluster in visible light. The cluster holds approximately 3,000 stars in a volume that spans roughly 10 light-years. But Hubble also sees visible light, which reveals the massive star-forming region known as Gum 29 that surrounds Westerlund 2. The cluster's biggest stars, some of which rank among the most massive in our Galaxy, spew out energetic ultraviolet light that excites nearby gas. These same stars also drive strong winds of charged particles that sculpt the nebula. Notice how the dark pillars in Gum 29 all point back toward Westerlund 2. The winds and radiation are eroding these denser pockets, which serve as nurseries for a new generation of stars. The diffuse reddish light in Gum 29 comes from hydrogen atoms excited by the cluster's stars. The red dots scattered across the image are small, still-developing stars that have yet to ignite hydrogen in their cores. The blues tell a different story. The bluish haze arises from excited oxygen atoms, while most of the bright blue stars are foreground objects. The entire Gum 29 and Westerlund 2 complex resides some 20,000 light-years from Earth in the southern constellation Carina.