

05

Auriga, The Charioteer

NAME: Auriga (uh-RYE-guh; ore-RYE-guh)

SEASON: Late autumn

CULMINATION: midnight, 9 December

ABBREVIATION: Aur

GENITIVE: Aurigae (uh-RYE-GUY; ore-RYE-GUY)

NEIGHBORS: Cam, Gem, Lyn, Per, Tau

BINOCULAR OBJECTS: NGC 1893, NGC 1907, NGC 1912 (M 38), NGC 1960 (M 36), NGC 2099 (M 37), NGC 2281

URBAN OBJECTS: NGC 1912 (M 38), NGC 1960 (M 36), NGC 2099 (M 37), NGC 2281, 37-theta

Auriga is a prominent, large constellation, ranking 21st in size among the 88 constellations. It covers 657 square degrees of the celestial sphere, or about 1.6%. Auriga is an ancient constellation, well-known to the Greeks and Romans of antiquity, although they did not associate Auriga with a chariot or charioteer. The chariot association arose much earlier, at least as early as the Babylonians, and perhaps as early as the Sumerians. The Greeks and Romans instead saw Auriga as a shepherd, leading or carrying a she-goat and her kids, represented by the stars 8-zeta (ζ) Aurigae and 10-eta (η) Aurigae. The brightest star in Auriga was known to

the Greeks as Amaltheia, the name of the she-goat that suckled the infant Zeus. The current proper name of that star, Capella, is of Roman origin, and means “she-goat” in Latin.

The most prominent stars in Auriga, including 0th-magnitude Capella, form an unmistakable pentagon that lies embedded in a rich area of the winter Milky Way. Opposite Capella at the far southern corner of the pentagon lies the bright 2nd-magnitude star Alnath, which for historical reasons has the distinction of belonging to two constellations. In addition to being designated gamma (γ) Aurigae, Alnath is also known as 112-beta (β) Tauri.

TABLE 05-1.

Featured star clusters, nebulae, and galaxies in Auriga

Object	Type	Mv	Size	RA	Dec	M	B	U	D	R	Notes
NGC 2099	OC	5.6	23.0	05 52.3	+32 33	●	●	●			M 37; Cr 75; Class II 1 r or I 2 r
NGC 1960	OC	6.0	12.0	05 36.3	+34 08	●	●	●			M 36; Cr 71; Class I 3 r
NGC 1931	OC/RN/EN	10.1	6.0	05 31.4	+34 15					●	Cr 68; Stock 9; Class I 3 p n
NGC 1912	OC	6.4	21.0	05 28.7	+35 51	●	●	●			M 38; Cr 67; Class II 2 r
NGC 1907	OC	8.2	6.0	05 28.1	+35 20					●	Cr 66; Mel 35; Class I 1 m n
NGC 1893	OC	7.5	11.0	05 22.8	+33 25					●	Cr 63; Mel 33; Class II 3 r n
NGC 2281	OC	5.4	14.0	06 48.3	+41 05			●	●		Cr 116; Mel 51; Class I 3 m

TABLE 05-2.

Featured multiple stars in Auriga

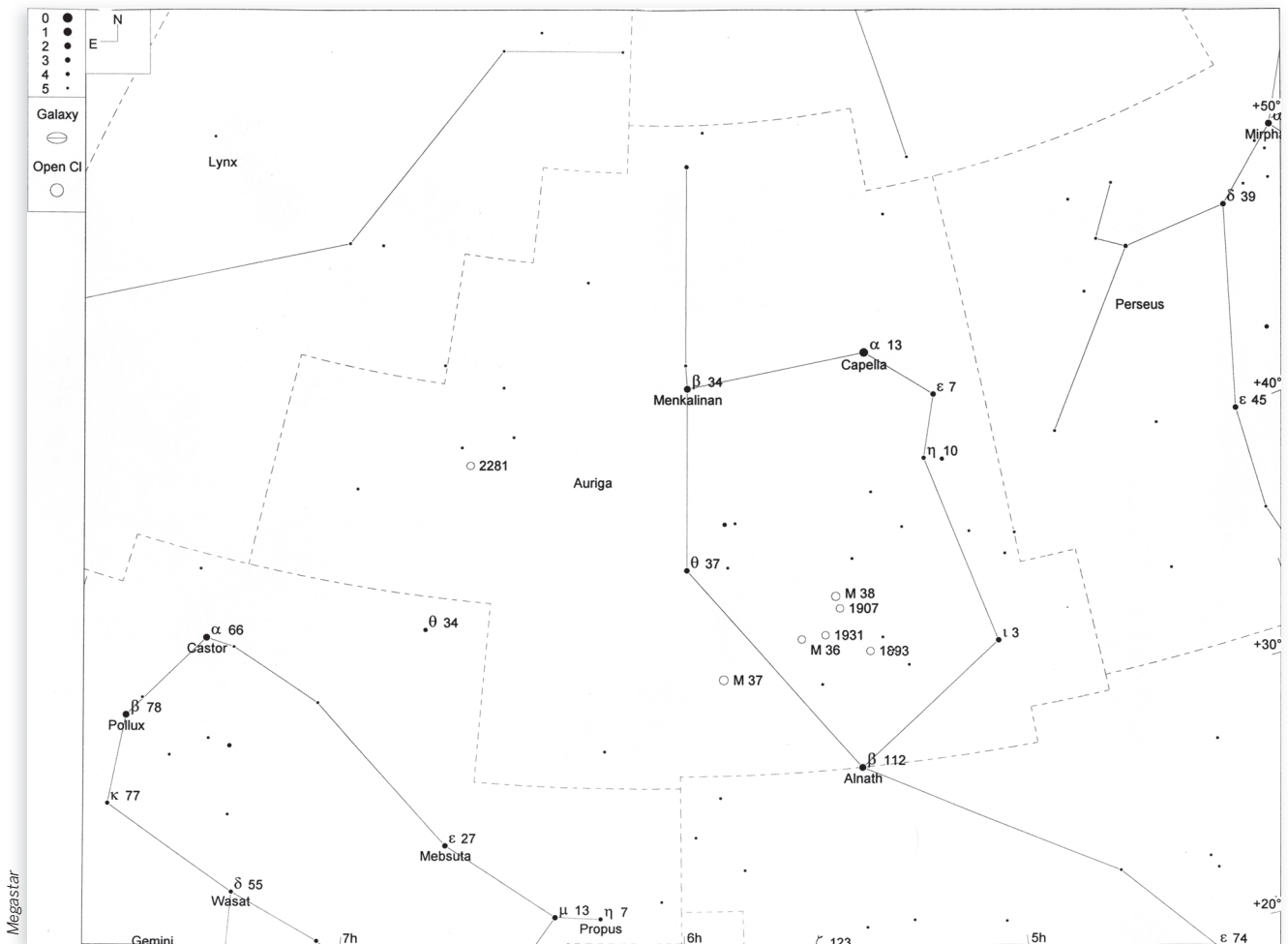
Object	Pair	M1	M2	Sep	PA	Year	RA	Dec	UO	DS	Notes
37-theta	STF 545	2.7	9.2	130.7	350	1924	05 59.7	+37 13	●		

Auriga contains many relatively bright stars, well distributed, which serve as guideposts for locating the DSOs in Auriga. Due in no small part to its location in the winter Milky Way, Auriga is home to many magnificent open clusters, including the superb Messier open clusters M 36, M 37, and M 38. Auriga is at the anti-center of the Milky Way, which means it lies in the plane of our galaxy, but is more distant from the galactic center than we are. When we look at Auriga, we are looking out toward the edge of our galaxy, so the Milky Way banding that is so prominent in constellations like Cygnus and Sagittarius—which lie between us and the galactic center—is much less prominent.

The bright pentagon of Auriga is easy to find, anchored as it is by the 0th-magnitude star Capella and lying just north of and halfway along a line between the bright pair Castor and Pollux in Gemini and the Pleiades (M 45) in Taurus. For observers at mid-northern latitudes, Auriga is well placed for evening observing between mid-autumn, when it rises soon after dusk, to mid-spring, when it sets a couple hours after dark.

CHART 05-1.

The constellation Auriga (field width 50°)



Clusters, Nebulae, and Galaxies

We begin with a sextet of open clusters that we personally call the Heart of Auriga, shown in Chart 05-2. Other than the belt and sword region of Orion, which is without equal, we consider the Heart of Auriga the most impressive single region in the winter sky. This region includes the magnificent Messier clusters M 36, M 37, and M 38, all of which are prominent in a 50mm finder scope. In fact, if your binocular or finder scope has a 6° or wider field of view, it's possible to view all three Messier clusters at the same time.

Two of the three smaller, dimmer open clusters in this region—NGC 1893 and NGC 1907—are also relatively easy binocular objects. Only NGC 1931 is beyond the reach of a standard binocular. But merely because five of these objects can be viewed with a binocular doesn't mean that's the only way you should view them. All six of these objects reveal a wealth of detail in even small telescopes.

CHART 05-2.

The Heart of Auriga (15° field width, 5.0° finder fields, 1.0° eyepiece field, LM 9.0)

