Conventions and Catalogs

Constellation Summary Sheet

Each featured constellation sheet includes the name of the constellation, the constellation abbreviation, the number of objects featured in the constellation, links to online information, and a summary table.

Example Constellation Summary Table

Object (Type)	Links	Gear	Aliases	Stats
NGC-5053 (GC)	1	T	Collinder 267, Cr 267, GCl 23, C 1313+179	| M=10.0 | Size=10.5' | SB=23.7 | MC=XI |
Messier 53 (GC)	1	T	NGC-5024, GCl 22, C 1310+184	| M=7.6 | Size=13.0' | SB=21.2 | MC= V |
ACO-1656	1	B	Abell 1656, Coma Cluster	| Number of Galaxies = 1,000+ | Size= 1.3° |
NGC-4884 (G)	1	T	NGC-4889, Caldwell 35, C-35, UGC 8110, PGC 44715, MCG 5-31-77, CGCG 160-241	| M=12.9 | Size=2.9' x 1.9' | SB=23.4 | MC=E3 |
NGC-4725 (G)	1	T	UGC 7989, PGC 43451, MCG 4-30-22, CGCG 129-27	| M=10.1 | Size=9.8' x 6.8' | SB=23.3 | MC=SBab/P |
Messier 64 (G)	1	T	NGC-4826, UGC 8062, PGC 44182, MCG 4-31-1, CGCG 130-1, Black Eye Galaxy, Sleeping Beauty Galaxy, Evil Eye Galaxy	| M=9.4 | Size=10.7' x 5.1' | SB=22.4 | MC=(R)SA(rs)ab |
35 Com (MS-3)	1, 2	B, T	SAO-082551, HIP 62886, HD 112033, HR 4894, STF 1687, ADS 8695, WDS12533+2115	AB | M=5.1, 7.1 | Sep=1.2" | PA=205° | MC= | G5 III | AC | M=5.1, 9.8 | Sep=28.6" PA=127° | MC= F |

The summary table contains the following columns:

- **Object (Type)**: Name of the object along with the type of object. Object types include:

Abr	Object	Abr		Abr	
AS	Asterism	**DS**	Double Star system	**EN**	Emission Nebula
OC	Open Cluster	**MS**	Multiple Star System	**PN**	Planetary Nebula
GC	Globular Cluster	**CS**	Carbon Star	**RN**	Reflection Nebula
G	Galaxy	**DN**	Dark Nebula	**SNR**	Supernova Remnant
GX	Galaxy Cluster				

- **Links**: The link(s) provided in this column depend on the target. For multiple star systems the first link is to the Stelle Doppie website for the star. This website has extensive details on double and multiple star systems. The second link (if provided) is to the Wikipedia website where more information on the target is provided. For all other objects the first (and usually only) link is to the Wikipedia website.
- **Gear**: This is a quick and dirty listing of what gear may be best for observing the target.
  - **B**: Binoculars – For multiple star systems a separation of at least 15" (arcseconds) and deep space objects larger than 15' (arcminutes) are considered appropriate targets.
  - **T**: Telescope – Objects smaller than 30' (arcminutes) are generally considered good telescope targets.
- **Aliases**: Alternate identification(s) for the featured object.
- **Stats**: Further details on the object. Information is separated by the pipe (|) symbol. Stats include:
  - **M**: Magnitude of object. For multiple star systems, a magnitude is supplied for each component in the system.
  - **Size**: For non-stellar objects the size of the object measured, in arcminutes (') or degrees (°).
  - **SB**: Surface Brightness is provided for most of the non-stellar objects to help indicate how easily the object is to distinguish from the background.

- **Sep**: Separation is provided for multiple star systems; these distances are provided in units of arcseconds (”).
- **Color**: For stars reported color of components. Note: this is a highly subjective value.
- **Spec**: Spectral classification of stars
- **MC**: Morphological Classification. Different classification schemes have been developed for many deep sky objects including galaxies, open clusters, globular clusters, stars, dark nebula and planetary nebula. See the Morphological Classification section of this guide for more details.
- **Color Index**: For Carbon Stars, this is a simple numerical expression that indicates the color of an object. The lower the color index, the bluer the object is, while higher values indicate redder color.

Stellar Naming Conventions

Stars may be identified on a map or in documentation in a number of ways. The most common methods, listed in order of preference are: proper names, Bayer designations, and Flamsteed designations.

- Proper Names: These are the traditional names assigned to bright stars through history, most have Arabic origins.
- Named After Individuals: A few select stars are named after people.
- Catalogue Designations: There are a number of catalogs used to identify stars. Two common catalogs and their methods include:
  - Bayer designation: Brighter stars in a constellation are assigned Greek letters beginning with the brightest, alpha (α), and decreasing in brightness to the final Greek letter, omega (ω).
  - Flamsteed designation: Lists stars by constellation, but by number rather than letter, ordering them by increasing right ascension rather than by decreasing brightness.