

September Observing List

Prepared by Bill Breeden

Double Stars (Astronomical League)

- _____ 87. 31 Cyg SAO 49337 Const. CYG Type DS RA 20 13.6 Decl. +46° 44' Mag. 3.8 6.7 4.8
- _____ 88. Alpha Cap SAO 163422 Al Giedi Const. CAP Type DS RA 20 18.1 Decl. -12° 33' Mag. 3.6 4.2
- _____ 89. Beta Cap SAO 163481 Dabih Const. CAP Type DS RA 20 21.0 Decl. -14° 47' Mag. 3.4 6.2
- _____ 90. Gamma Del SAO 106475 Const. DEL Type DS RA 20 46.7 Decl. +16° 07' Mag. 4.5 5.5
- _____ 91. 61 Cyg SAO 70919 Const. CYG Type DS RA 21 06.9 Decl. +38° 45' Mag. 5.2 6.0
- _____ 92. Beta Cep SAO 10057 Alfirk Const. CEP Type DS RA 21 28.7 Decl. +70° 34' Mag. 3.2 7.9
- _____ 93. Struve 2816 SAO 33626 Const. CEP Type DS RA 21 39.0 Decl. +57° 29' Mag. 5.6 7.7 7.8
- _____ 94. Epsilon Peg SAO 127029 Enif Const. PEG Type DS RA 21 44.2 Decl. +09° 52' Mag. 2.4 8.4

Carbon Stars (Astronomical League)

- _____ 80. V1469 Aql SAO 125356 RA 20 01 03 Decl. +09 30 51 Mag. 8.4 – 8.7 Per. 98 Class C4 (N0v)
- _____ 81. BF Sge GSC 1629:945 RA 20 02 23 Decl. +21 05 24 Mag. 8.5 – 10.0 Per. 177 Class C4 (N3)
- _____ 82. X Sge HD 190606 RA 20 05 05 Decl. +20 38 51 Mag. 7.0 – 9.7 Per. 196 Class C6 (N3)
- _____ 83. SV Cyg GSC 3563:462 RA 20 09 30 Decl. +47 52 17 Mag. 8.5-8.7 Per. ? Class C5-C7462 (N3)
- _____ 84. RY Cyg GSC 2683:3082 RA 20 10 23 Decl. +35 56 50 Mag. 8.5 – 10.3 Per. Irr. Class C4-C6 (N)
- _____ 85. RS Cyg SAO 69636 RA 20 13 23 Decl. +38 43 44 Mag. 6.5 – 9.5 Per. 417 Class C8 (N0pe)
- _____ 86. RT Cap GSC 6340:1015 RA 20 17 06 Decl. -21 19 04 Mag. 7.0 – 8.1 Per. 393 Class C6 (N3)
- _____ 87. U Cyg SAO 49477 RA 20 19 36 Decl. +47 53 39 Mag. 5.9 – 12.1 Per. 463 Class C7 – C9 (Npe)
- _____ 88. V Cyg SAO 49940 RA 20 41 18 Decl. +48 08 28 Mag. 7.7 – 13.9 Per. 421 Class C5 – C7 (Npe)
- _____ 89. CY Cyg SAO 50053 RA 20 46 50 Decl. +46 03 06 Mag. 7.9 – 8.4 Per. ? Class CS (M2p)
- _____ 90. SAO 106516 (Del) GSC 1651:1359 RA 20 48 36 Decl. +17 50 23 Mag. 7.9-8.1 Class C1 (R0)
- _____ 91. NSV 13571 (Vul) SAO 89499 RA 21 09 59 Decl. +26 36 54 Mag. 8.1-8.2 Per. ? Class C1 (Kp)
- _____ 92. S Cep SAO 10100 RA 21 35 12 Decl. +78 37 28 Mag. 7.4 – 12.9 Per. 487 Class C7 (N8e)
- _____ 93. V460 Cyg SAO 71613 RA 21 42 01 Decl. +35 30 36 Mag. 5.6 – 7.0 Per. 180 Class C6 (N1)
- _____ 94. RV Cyg SAO 71642 RA 21 43 16 Decl. +38 01 02 Mag. 7.1 – 9.3 Per. 263 Class C6 (N5)
- _____ 95. RX Pegasi HD 208526 RA 21 56 22 Decl. +22 51 39 Mag. 7.7 – 9.5 Per. 629 Class C4 (N3)

Messier Objects

- _____ M2 NGC7089 Const. AQR Type GC RA 21 33.5 Decl. -00 49 Mag. 6.3
- _____ M15 NGC7078 Const. PEG Type GC RA 21 30.0 Decl. +12 10 Mag. 6
- _____ M29 NGC6913 Const. CYG Type OC RA 20 23.9 Decl. +38 32 Mag. 7.1
- _____ M30 NGC7099 Const. CAP Type GC RA 21 40.4 Decl. -23 11 Mag. 8.4
- _____ M39 NGC7092 Const. CYG Type OC RA 21 32.2 Decl. +48 26 Mag. 5.2
- _____ M72 NGC6981 Const. AQR Type GC RA 20 53.5 Decl. -12 32 Mag. 9.8
- _____ M73 NGC6994 Const. AQR Type A RA 20 58.9 Decl. -12 38 Mag. 9
- _____ M75 NGC6864 Const. SGR Type GC RA 20 06.1 Decl. -21 55 Mag. 8

Caldwell Objects

- _____ C4 NGC7023 Const. CEP Type BN RA 21 01 48.00 Decl. +68 12 00.0 Mag. 6.8
- _____ C12 NGC6946 Const. CEP Type SG RA 20 34 48.00 Decl. +60 09 00.0 Mag. 9.7
- _____ C19 IC5146 Cocoon Nebula Const. CYG Type BN RA 21 53 30.00 Decl. +47 16 00.0 Mag. 10
- _____ C20 NGC7000 North Amer Neb Const. CYG Type BN RA 20 58 48.00 Decl. +44 20 00.0 Mag. 6
- _____ C27 NGC6888 Crescent Nebula Const. CYG Type BN RA 20 12 00.00 Decl. +38 21 00.0 Mag. 7.5
- _____ C3 NGC6992/5 East Veil Nebula Const. CYG Type SN RA 20 56 24.00 Decl. +31 43 00.0 Mag.

- _____ C34 NGC6960 West Veil Nebula Const. CYG Type SN RA 20 45 42.00 Decl. +30 43 00.0 Mag.
- _____ C37 NGC6885 Const. VUL Type OC RA 20 12 00.00 Decl. +26 29 00.0 Mag. 5.7
- _____ C42 NGC7006 Const. DEL Type GC RA 21 01 30.00 Decl. +16 11 00.0 Mag. 10.6
- _____ C47 NGC6934 Const. DEL Type GC RA 20 34 12.00 Decl. +07 24 00.0 Mag. 8.9
- _____ C55 NGC7009 Saturn Nebula Const. AQR Type PN RA 21 04 12.00 Decl. -11 22 00.0 Mag. 8.3

Royal Astronomical Society of Canada Objects

- _____ 1. NGC7009 Saturn Nebula Const. AQR Type PN RA 21 04.2 Decl. -11 02 Mag. 8.3
- _____ 98. NGC6888 Const. CYG Type SNR? RA 20 12.0 Decl. +38 21 Mag.
- _____ 99a. NGC6960 West Veil Nebula Const. CYG Type SNR RA 20 45.7 Decl. +30 43 Mag.
- _____ 99b. NGC6992/5 East Veil Nebula Const. CYG Type SNR RA 20 56.4 Decl. +31 43 Mag.
- _____ 100. NGC7000 North America Nebula Const. CYG Type EN RA 20 58.8 Decl. +44 20 Mag. 6
- _____ 101. NGC7027 Const. CYG Type PN? RA 21 07.1 Decl. +42 14 Mag. 10.4
- _____ 106. NGC6940 Const. VUL Type OC RA 20 34.6 Decl. +28 18 Mag. 6.3
- _____ 107. NGC6939 Const. CEP Type OC RA 20 31.4 Decl. +60 38 Mag. 7.8
- _____ 108. NGC6946 Const. CEP Type G-Sc RA 20 34.8 Decl. +60 09 Mag. 8.9
- _____ 109. NGC7129 Const. CEP Type RN RA 21 44.4 Decl. +66 10 Mag.

Hidden Treasures (Stephen O'Meara)

- _____ 100. NGC6866 Const. CYG Type OC RA 20h03m42s Decl. +44°00'00" Mag. 7.6
- _____ 101. NGC6940 Const. VUL Type OC RA 20h34m27s Decl. +28°16'58" Mag. 6.3
- _____ 102. Northern Coalsack Const. CYG Type NbDRK RA 20h40m00s Decl. +41°00'00" Mag. ---
- _____ 103. NGC7008 Const. CYG Type PN RA 21h00m33s Decl. +54°32'35" Mag. 10.7
- _____ 104. NGC7027 Const. CYG Type PN RA 21h07m02s Decl. +42°14'10" Mag. 8.8
- _____ 105. IC 1396 Const. CEP Type NbOC RA 21h39m06s Decl. +57°30'00" Mag. 3.5
- _____ A19. NGC6905 Const. DEL Type PN RA 20h22m23s Decl. +20°06'17" Mag. 11.1
- _____ A20. NGC6939 Const. CEP Type OC RA 20h31m24s Decl. +60°38'00" Mag. 7.8

Secret Deep (Stephen O'Meara)

- _____ 94. OME 3 Const. CYG Type Asterism RA 20h05.3m Decl. +47°32' Mag. -- Size 12'
- _____ 95. NGC6891 Const. DEL Type PN RA 20h15.2m Decl. +12°42' Mag. 10.5 Size"18""
- _____ 96. NGC6894 Const. CYG Type PN RA 20h16.4m Decl. +30°34' Mag. 12.3 Size"42""
- _____ 97. IC1318a Const. CYG Type BN RA 20h16.6m Decl. +41°49' Mag. -- Size 45'x20'
- _____ 98. NGC6905 Const. DEL Type PN RA 20h22.4m Decl. +20°06' Mag. 11.1 Size 42"x35"
- _____ 99. NGC6910 Const. CYG Type OC RA 20h23.2m Decl. +40°47' Mag. 6.6 Size 10'
- _____ 100. NGC6939 Const. CEP Type OC RA 20h31.5m Decl. +60°40' Mag. 7.8 Size 10'
- _____ 101. NGC7026 Const. CYG Type PN RA 21h06.3m Decl. +47°51' Mag. 10.9 Size"21""
- _____ 102. NGC7048 Const. CYG Type PN RA 21h14.2m Decl. +46°17' Mag. 12.1 Size 1'
- _____ 103. NGC7129 Const. CEP Type BN RA 21h42.8m Decl. +66°06' Mag. -- Size 7'x7'
- _____ 104. NGC7160 Const. CEP Type OC RA 21h53.7m Decl. +62°36' Mag. 6.1 Size 5'

Notes: This list contains deep sky objects with Right Ascension (RA) of 20 and 21 hours. These lines of RA cross the meridian (the highest point they can reach) near 10:00 pm during September. This list can also be used at 8:00 pm in October, and at midnight in August. Declination can be used to determine if an object is visible from your latitude. Observing all objects in each monthly list will allow you to observe all objects in the catalogs represented here over the course of one year.

Key: M=Messier Catalog. C=Caldwell Catalog. NGC=New General Catalogue. IC=Index Catalog. SAO=Smithsonian Astrophysical Observatory Star Catalog. Const.=Constellation. DS=Double Star. GSC=Guide Star Catalog. GC=Globular Cluster. OC=Open Cluster. GAL=Galaxy. SG=Spiral Galaxy. PN=Planetary Nebula. EN=Emission Nebula. RN=Reflection Nebula. BN=Bright Nebula. AST=Asterism. RA=Right Ascension. Decl.=Declination. Mag.=Magnitude. Size=Apparent Size.

Updated 5/19/2023.