

<u>Meeting Date</u>	Nov 13, 2022		
<u>Night Begins</u>	6:51 PM EST	<i>Note: Astronomical Twilight Ends</i>	
<u>Solar Noon / Midnight</u>	12:18 EST	<i>Note: on Meeting Date</i>	
<u>Moon Quarters</u>	First 11/01, Full 11/08, Last 11/16, New 11/23, First 11/30		
<u>Darkest Evenings</u>	10/15 - 10/30	11/14 - 11/29	<i>Note: 2 days before Last Quarter thru 2 days before First Quarter</i>

Viewing Resources	Evening Sky Maps	http://skymaps.com/
	Astronomy Forecast	https://www.cleardarksky.com/
	Satellite Tracking	https://www.heavens-above.com/
	Melotte Catalogue	https://en.wikipedia.org/wiki/Melotte_catalogue

Deep Sky**Focus: 01 Hours RA Thru 02 Hours RA***Note: West to East***Featured Targets***Note: Quality 1 = very easy, 5 = very hard, A = spectacular, D = detectable but featureless*

M / NGC / IC	Constellation	Type	vMag	Quality	Common Name
Engagement Ring UMi		Ast	8.0	1A	Polaris
Stars form a circle with Polaris as the diamond. Size 2 degrees					
Iota	Cas	DS	4.6	2A	Struve 262, SAO 12298
Triple Mag 4.6, 6.9, 8.4 Sep 2.6", 7.3" Stunning colors, A3 white, F5 yellow-white, & G7 golden					
NGC 869 & 884	Per	OC	3.8	1A	Double Cluster C15
The large cluster easily seen through binoculars, A telescope reveals about 5000 stars.					
None					
No Bright Globular Clusters North of -35 Declination in these RA					
IC 1613	Cet	GAL	9.21	4C	C 51
Large Irregular Galaxy in our local group, requires dark site or EAA					
NGC 650/651	Per	PLN	10.1	2B	Little Dumbbell, M76
Resembles M 27, Only Bright Planetary Nebula North of -35 Declination in these RA					
NGC 896	Cas	C/N	10	4c	Heart, Fish Head
Faint nebula near Double Cluster, dark site required, OIII filter will help.					

Constellations*Note: Sorted by Average RA, Rank by Size 1 - 88*

Name	Common Name	Rank	Alpha Star
Cassiopeia	the Seated Queen	25	Shedar (18)
Cetus	the Sea Monster	4	Menkar (92)
Triangulum	the Triangle	78	Mothallah (2)
Cepheus	the King	27	Alderamin (5)
Aries	the Ram	39	Hamal (13)
Fornax	the Furnace	41	Dalim (12 Eridani)

Messier Objects*Note: Sorted by RA*

Name	Constellation	Type	vMag	Quality	NGC	Common Name
M 103	Cas	OCL	7.4	2B	581	Mel 8
M 33	Tri	GAL	5.7	3A	598	Triangulum
M 74	Psc	GAL	9.4	4D	628	Phantom
M 76	Per	PLN	10.1	2B	650	Little Dumbbell
M 34	Per	OCL	5.2	2B	1039	Spiral Cluster
M 77	Cet	GAL	8.9	2C	1068	Cetus A