

Observation Plan for the month of October 2020

Moon

New	1st Quarter	Full Moon	Last Quarter
16/10/20	23/10/20	31/10/20	10/10/20

Planets

Planet	Magnitude	Comments
Mercury	n/a	Lost in the Sun's glare this month.
Venus	-4.0	Rising at about 03:30
Mars	-2.6	At opposition on 13/10/20. Visible all night.
Jupiter	-2.3	Setting at about 22:30
Saturn	+0.5	Setting at about 23:00
Uranus	+5.7	Visible all night.
Neptune	+7.8	Setting at about 04:00

Comets

Name:141P Machholz 2-D	Magnitude	RA	Dec
5th of the month	+7.4	15h 48'	+10° 51'
15th of the month	+6.3	14h 56'	+11°24'
25th of the month	+5.9	13h 36'	+8° 42'

Meteor Showers

Name	Nominal start date	Nominal end date	Peak ZHR	Originating comet	Moon illumination at peak and comments
Orionid	16 October	30 October	25	1P/Halley	30%
Taurid	20 October	30 November	10	2P/Encke	10%

Deep Sky

Object	RA	Dec	Mag	Type	Dates seen
M110	00h 40'	+41° 23'	+8.9	Galaxy	
M31	00h 43'	+41° 16'	+4.3	Galaxy	
M32	00h 43'	+40° 52'	+8.8	Galaxy	
NGC752	01h 58'	+37° 42'	+6.6	Open Cluster	
NGC691	02h 22'	+42° 20'	+10.8	Galaxy	
NGC891	02h 223'	+42° 21'	+10.8	Galaxy	
NGC7662	23h 26'	+42° 33'	+9.8	Planetary Nebula	
M2	21h 33'	+00° 49'	+6.6	Globular Cluster	
NGC6709	18h 51'	+10° 20'	+7.4	Open Cluster	
NGC6751	19h 06'	-05° 59'	+11.9	Planetary Nebula	
NGC6778	19h 18'	-01° 36'	+11.9	Planetary Nebula	
NGC6781	19h 19'	+06° 32'	+11.4	Planetary Nebula	
NGC6804	19h 32'	+09° 13'	+12.2	Planetary Nebula	
IC342	03h 47'	+68° 06'	+9.1	Galaxy	
NGC1502	04h 08'	+62° 21'	+4.1	Open Cluster	
NGC2403	07h 37'	+65° 35'	+8.9	Galaxy	

M30	21h 40'	-23° 11'	+6.9	Globular Cluster	
NGC129	00h 30'	+60° 13'	+9.8	Open Cluster	
NGC281	00h 53'	+56° 38'	+7.4	Diffuse Nebula	
NGC457	01h 19'	+58° 19'	+5.1	Open Cluster	
M103	01h 33'	+60° 42'	+6.9	Open Cluster	
M52	23h 24'	+61° 35'	+8.2	Open Cluster	
NGC40	00h 13'	+72° 33'	+10.7	Planetary Nebula	
NGC188	00h 44'	+85° 22'	+9.3	Open Cluster	
NGC7023	21h 02'	+68° 10'	+6.8	Reflection Nebula	
NGC7354	22h 40'	+61° 17'	+12.2	Planetary Nebula	
NGC246	00h 47'	-11° 52'	+8	Planetary Nebula	
NGC936	02h 28'	-01° 09'	+10.2	Galaxy	
M77	02h 43'	-00° 01'	+9.5	Galaxy	
NGC6826	19h 44'	+50° 32'	+9.8	Planetary Nebula	
NGC6894	20h 16'	+30° 34'	+12.3	Planetary Nebula	
NGC6910	20h 23'	+40° 46'	+7.3	Open Cluster	
M29	20h 24'	+38° 32'	+7.5	Open Cluster	
NGC6946	20h 34'	+60° 10'	+9.7	Galaxy	
NGC6960	20h 45'	+30° 43'	+7.0	Supernova remnant	
NGC6992	20h 56'	+31° 43'	+7.0	Supernova remnant	
NGC6995	20h 57'	+31° 13'	+7.0	Supernova remnant	
NGC7000	21h 01'	+44° 12'	+4.0	Diffuse Nebula	
NGC7008	21h 01'	+54° 37'	+13.00	Planetary Nebula	
NGC7026	21h 06'	+47° 51'	+10.9	Planetary Nebula	
NGC7048	21h 14'	+46° 17'	+12.1	Planetary Nebula	
M39	21h 32'	+48° 26'	+5.3	Open Cluster	
NGC7538	23h 14'	+61° 28'		Emission Nebula	

NGC7635	23h 21'	+61° 18'	+10.00	Emission Nebula	
NGC6891	20h 15'	+12° 42'	+11.7	Planetary Nebula	
NGC6905	20h 22'	+20° 06'	+11.1	Planetary Nebula	
NGC6934	20h 34'	+07° 25'	+8.9	Globular Cluster	
NGC7006	21h 01'	+16° 12'	+10.6	Globular Cluster	
NGC5907	15h 15'	+56° 19'	+11.1	Galaxy	
NGC6543	17h 58'	+66° 37'	+8.8	Planetary Nebula	
IC4593	16h 12'	+12° 04'	+10.7	Planetary Nebula	
M13	16h 42'	+36° 28'	+5.9	Globular Cluster	
NGC6207	16h 43'	+36° 50'	+11.6	Galaxy	
NGC6229	16h 46'	+47° 31'	+9.4	Globular Cluster	
M92	17h 17'	+43° 08'	+6.5	Globular Cluster	
NGC7209	22h 05'	+46° 29'	+7.8	Open Cluster	
M57	18h 54'	+33° 02'	+9.7	Planetary Nebula	
M56	19h 17'	+30° 11'	+8.2	Globular Cluster	
NGC6791	19h 20'	+37° 51'	+9.5	Open Cluster	
M15	21h 30'	+12° 10'	+6.4	Globular Cluster	
NGC7094	21h 37'	+12° 47'	+13.4	Planetary Nebula	
M76	01h 42'	+51° 34'	+12.2	Planetary Nebula	
NGC869	02h 19'	+57° 08'	+4.3	Open Cluster	
NGC884	02h 22'	+57° 06'	+4.3	Open Cluster	
NGC1023	02h 40'	+39° 04'	+10.35	Galaxy	
M34	02h 42'	+42° 47'	+5.8	Open Cluster	
NGC1499	04h 03'	+36° 23'	+5.0	Diffuse Nebula	
NGC1491	04h 03'	+51° 19'		Emission Nebula	
NGC1579	04h 30'	+35° 16'		Emission Nebula	
NGC507	01h 23'	+33° 15'	+11.2	Galaxy	

M74	01h 37'	+15° 47'	+10.0	Galaxy	
M71	19h 54'	+18° 47'	+8.3	Globular Cluster	
M81	09h 56'	+69° 04'	+7.8	Galaxy	
M82	09h 56'	+69° 41'	+9.2	Galaxy	
NGC3079	10h 02'	+55° 41'	+10.9	Galaxy	
NGC3077	10h 03'	+68° 44'	+9.8	Galaxy	
NGC3198	10h 20'	+45° 33'	+10.3	Galaxy	
M108	11h 11'	+55° 40'	+10.9	Galaxy	
M97	11h 15'	+55° 01'	+12.0	Planetary Nebula	
NGC3675	11h 26'	+43° 35'	+11.0	Galaxy	
NGC3726	11h 33'	+47° 01'	+10.9	Galaxy	
NGC3877	11h 46'	+47° 29'	+11.8	Galaxy	
NGC3893	11h 49'	+48° 43'	+10.5	Galaxy	
NGC3953	11h 54'	+52° 20'	+10.1	Galaxy	
M109	11h 58'	+53° 23'	+10.8	Galaxy	
NGC4026	11h 59'	+50° 57'	+11.7	Galaxy	
NGC4036	12h 01'	+61° 54'	+10.7	Galaxy	
NGC4051	12h 03'	+44° 32'	+10.2	Galaxy	
M40	12h 22'	+58° 50'	+8.0	Double Star	
M101	14h 03'	+54° 21'	+7.7	Galaxy	
Collinder 399	19h 25'	+20° 11'	+4.8	Open Cluster	
M27	19h 59'	+22° 43'	+7.6	Planetary Nebula	
NGC6940	20h 34'	+28° 18'	+7.2	Open Cluster	