

TMSP 2016 OBSERVERS CHALLENGE

Welcome to the TMSP 2016 Observers Challenge.

This year we are exploring a small area of the sky, an area just a little larger than 100 square degrees, an interesting and exciting exploration of our Milky-way. The highlights are the dark nebula, made famous by E. E. Barnard, intertwined with both globular and open clusters, several found within the dark nebula. We recommend you use binoculars for much of your search and a scope for the fine details and objects found within. The search for dark nebula will require you to change your thinking about what to look for, there are many blank areas between stars, dark nebula will actually have visible boundaries. Some of these boundaries are sharp edged and others simply fade, yet are darker than their surroundings. You will find these objects in Uranometria, pages 250, 251, 295 and 296. In the Sky Pocket Atlas on pages 64, 65, 66, 67.

After you have completed the list or while working on this list, you can have a lot more fun exploring the area; check out more below;

B-112 Just South of many list objects.

B-114 – 116 – 117 and 118 Several small dark Nebula.

Also, note the following Quasars ll located along a 1 deg wide by 5 deg long area along the Galactic Equator;

3C 392

3C 391

3C 389

3C 390.2

HAVE FUN!!!!!!!!!!

Kreig and Tom

TMSPA
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List #9

	OBJECT	TYPE	RA, DEC	CONST	Mag -V	Mag - 2	SIZE	SEP	COMMENTS
1	NGC 6790	Planetary Nebula	19h 22m 57" +1deg 30' 46.4"	AQUILA	10.5 - 11.4		5"		An almost star-like Planetary, you need a large scope to see any disk. This PN should show a bluish/green color cast.
2	23 Aquila	Double Star	19h 18m 33" +01deg 05' 06"	AQUILA	5.1	8.76		3.25"	A triple star system with two components visible, have fun with this!
3	B138	Dark Nebula	19h 16m 00" +00deg 13'	AQUILA					Great curved, semi-vacant lane over 3 degrees in length, enjoy this excellent DN.
	B139	Dark Nebula	19h 18m' -01deg 28'	AQUILA					Narrow black spot; 10 mag star on SE edge
5	NGC 6760	GC	19h 11m 12" +01deg 01' 50"	AQUILA	8.9		9.6'		Globular cluster of very low dimension and unresolved.
6	NGC 6749	GC	19H 05' 15" +01deg 54' 05"	AQUILA	12		6'		An extremely faint, round patch, on the threshold of visibility in 10". Completely unresolved. NGC 6749 has a reputation as the most difficult NGC globular in the sky.
7	NGC 6741	Planetary Nebula	19h 00m 02" -00deg 31' 23"	AQUILA	11		6"		Phantom Streak Planetary Nebula, "No central star...small bright oval...indistinct ring structure.
8	LDN 617	Dark Nebula	18h 57m 30 +1° 04' 00"	AQUILA			3 deg		A large multi-armed blob of dark sky sweeping between the stars in the field.
9	LDN 564 (B316)	Dark Nebula	18h 37m 36" -01deg 12' 00"	SERPENS			45' x 15'		Medium small triangular area that juts into the brighter Milky Way. Located just 1.2 deg NE of LDN 557.
10	LDN 557	Dark Nebula	18h 38m 36" -01deg 46' 59"	SERPENS			1° x 10'		Conspicuous dark nebula bound on the W side by numerous MY stars. Large diffuse dark area next to triangular and smaller LDN 564 (B316).
11	B136 + B135	Dark Nebula	19h 08m 49" -04deg 00' 00"	AQUILA			8', 13'		B136=Dusky spot; diam. 8'; 10 mag. star near middle. B135=Dusky spot; diam. 13'; BD -4 4698 (magnitude 9.2) on N border; BD -4 4702 (magnitude 9.2) on SE edge
12	Aquila 15	Double Star	19H 05' -04deg 05'	AQUILA	5.5	7	38.4"		Very nice wide double
13	LDN 567 (B 132)	Dark Nebula	19h 04' 27" -04deg 25' 00"	AQUILA			16'		Dark; fairly well-defined. Tadpole-shaped, 16' long E and W.
14	B130 +B127 + B139	Dark Nebula	19H 02m -5deg	AQUILA			7', 4.5', narrow		B130=dusky; not well defined; length 7' B127=Irregular; diam. 4.5' B139=Narrow black spot; 10 mag star on SE edge.
15	NGC 6751	Planetary Nebula	19h 05' 9" -06deg 00'		11.9				Located in a rich field of 10-13 mag stars. Use 200X for observing the disk. The central star should be visible 12" scopes.
16	B134	Dark Nebula	19H 06' -06deg 14'	AQUILA			6'		Opacity 6. Circular in shape. NGC 6751 is close by, 20' NW and B133 is close by. Check in binos and then a scope for more details with edge stars.
17	B133	Dark Nebula	19h 06.1' -06deg 50'	AQUILA					Opacity of 6. Compare this with B134 easily seen in a 1.2 deg FOV.
18	B111	Dark Nebula	18h 50.1' -04deg 48'	SCUTUM			2 deg		Opacity of 2. Observations show sizes from 15'x5' up to 2 degrees, depending on how you define the structure.
19	B119a	Dark Nebula	18h 55' -05deg 10'	SCUTUM			30'		Irregular dark region; diam. .5 degree; liberally sprinkled with stars in its NW half; several dark lanes in SE part

by Kreig McBride and Tom Masterson

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20	NGC6704	Open Cluster	18h 50' 54" -05deg 11' 59"	SCUTUM	9.7		6'		Faint and small, only 6' diameter and brightest star is 12.2 mag. Located 1 deg N of M-11 Located in B-111
21	HV150 + Sigma2391	Double Star	18h 49.7' -05 11' 59"	SCUTUM	AB 6.1	12.2		23.3"	Two nice doubles located between BAS 1 and M-11.
21	Sigma2391	Double Star	18h 48' 38" -05deg 50' 32"		AC 6,1	8.6		113.7"	Yellow-White + Blue
22	BAS 1	Open Cluster	18h 48' 38" -05 50" 32"	SCUTUM	8.9		9'		Look for six faint stars in a ring shape.
23	J107 inside M-11	Double Star	18h 51' 8' -06deg 20'	SCUTUM	8	12.4		5.8"	Have some fun with this fainter DBL with a close connection.
24	B108	Dark Nebula	18h 49, 30' -06deg 30'	SCUTUM			3'		Very small; diam. 3'; not black; two narrow diverging lanes extending to the N; some small stars within.
25	Trumpler 35 + Do32	Open Cluster	18h 42' 59' -04deg 13' 06' Ra 18:40:24 Dec -04:06:00	SCUTUM	9.2		9.0', 12.0'		Both Trumpler 35 and Dolidze 32 are open clusters in Scutum.
26	NGC 6683 + B103	+ Dark Nebula	18h 42' 13.9" -06deg 12'44" 18h 39' 25" -06deg 40' 00"	SCUTUM	9.4, Opacity = 6		3.0', 4.0'		NGC is an open cluster. B103 is a dark cloud with Opacity = 6
27	Do29 + Do30 + Do31	Open Clusters	18h 3' 24" -06deg 38' 00" 18h32'54" -06deg 02' 18h34' 54' -06deg 51'	SCUTUM			18', 18', 18'		All three Dolidze are open clusters, have fun!!
28	NGC 6664	Open Cluster	19H 02m -5deg	SCUTUM	7.8		16'		
29	NGC 6712	GC	18h 53' 04' -08deg 42' 22"	SCUTUM	8.1		7.2'		Tight, small open cluster.
30	B318	Dark Nebula	18H 51' -06 deg 25'	SCUTUM			1.5 deg x 2' wide		Long, straight, dark line. This dusky line, just S of M-11, extends E and W for about 1 1/2 degrees. It is uniformly about 2' wide. A very very difficult object, spend a lot of time to study this one!





