

# ★ April 15th Observing Plan ★

(Green=early evening/all night, Blue=late evening, Red=not at all)



Star indicates Supernova

0=Have Seen, Not Worth Revisiting

1=Haven't Seen, High Priority

2=Haven't Seen, Moderate Priority

3=Haven't Seen, Low Priority

98=Have Seen, Need Better B&W Image

99=Have Good Image, Worth Revisiting

100=Have Good B&W Image, Need Color

Resources: [skymaps.com](http://skymaps.com), [Google and Google.com/sky/](http://Google.com/sky/), [Stellarium](http://Stellarium),

<http://www.rochesterastronomy.org/supernova.html>

<http://www.saguaroastro.org/content/BEST-OBJECTS-IN-THE-NEW-GENERAL-CATALOG.htm>

Telescope FoV 11x15 arcminutes (11'x15')

OBJECT	Mag	FoV	Nearby Object	LOCATION	TIME FRAME	Rank
Polaris	2.0	Point	N/A	0 N +42	All night	
Altair	.75	Point	N/A	226SW, +47	All night	
★ M82 2014J	12.9	11'	Dubhe	21NE, +29	6-	100
★ 2014ak	16.6	-	capella	312NW, +60	8-12	
★ 2014ai	15.6	3.18	procyon	129.5 SE, +80	All night	
M1	8.4	6'	Alnath	221SW, +65	8-12	100
M51, Whirlpool	9.6	5' 24"	Alkaid	46NE, 22	8-All Night	99
M64	8.5	9'	Vindemiatrix	90N, +33	10:00	99
M43	9	20'	Rigel	134SE, +33	7pm-	1
M45	N/A	30'	Betelgeuse	124NE, +66	6-2	1
M77	8.8	6'	Cet	171NW, +49	6-11	1
M78	8	8'	Alnitak	117SE, +28	6-2	1

M82 2014J	12.9	11'	Dubhe	21NE, +29	6-	100
M97, Owl Nebula	11.2	3'	Merak	25NE, +13	6-	1 with color
NGC772 (By moon-ish)	10.3	7'	Sheratan	196E, +68	6-12	1
NGC2403	8.4	17'	Polaris	32NE, +40	6-	1
NGC925	10	9'	Mothallah	181NE, +83	6-1	1
NGC1234	15	N/A	N/A	167SE, +41	6-11	1
NGC1931	11.3	3'	Capella	84E, +53	6-4	1
NGC2024	N/A	30'	Alnitak	121SE, +29	6-2	1
NGC891	10	13'	Almaak	318W, +86	6-2	1
NGC6960	N/A	1.1	Gieah	293W, +21	6-7	1
NGC6946	8.9	11'	Alderamin	323NW, +33	6-	1
NGC7129	12	8'	Alderamin	328NW, +42	6-	1
NGC1	13	1deg	Alpheratz	260SW, +56	6-10	2
Messier Objects Start Here:						
M1	8.4	6'	Alnath	221SW, +65	8-12	100
M2	6.5	12'	Kitalpha	+244NW, +38	6pm-7pm	2
M3	6.4	16'	Muphrid	+333NW, -16	2:10am -	0
M4	5.9	26'	Al Niyat	260SW, -32	N/A	3
M5	5.8	17'	5 Ser	297NW, -25	N/A	0
M6	4.2	15'	d Oph	245SW, -21	N/A	2
M7	3.3	1°20'	Shaula	241SW, -20	N/A	2
M8	5.8	1°30'	Kaus Borealis	248SW, -12	N/A	2
M9	7.9	9'	Sabik	259SW, -16	N/A	2
M10	6.6	15'	30 Oph	274NW, -12	N/A	3

M11	5.8	8.1	B SCT	254SW/+7	n/a	0
M12	6.6	8.1	Marfik	278SW/+7	n/a	3
M13	5.9	16'	Vega	307NW/+13	-509PM	0
M14	N/A	11'	-	269SW/-3	N/A	3
M15	6.4	12'	Altair	235SW/+48	1050A M-830P M	2
M16	N/A	35'	-	254SW/-2	N/A	100
M17	6.0	46'	Altair	253SW/-5	N/A	1
M18	6.9	09'	Antares	251SW/-5	N/A	3
M19	7.2	13'	Antares	256SW/-25	N/A	3
M20	6.3	29'	Antares	251SW/-13	N/A	100
M21	5.90	13'	Kaus Borealis	251SW, -12	N/A	3
M22	5.10	24'	Kaus Borealis	247SW, -10	N/A	3
M23	5.50	27'	Kaus Borealis	256SW, -14	N/A	3
M24	11	5'	Kaus Borealis	254SW, -9	N/A	3
M25	4.6	32'	Kaus Borealis	251SW, -8	N/A	3
M26	8.00	15'	Nunki	256SW, +5	N/A	3
M27	8.1	15'	kornephoro s	271SW, +35	6-9	3
M28	6.9	11'	Kaus Borealis	248SW, -12	N/A	3
M29	6.6	7'	sadr	286SW, +47	6-10	3
M30	7.5	11'	Nashira	215SW, +18	6-7	2
M31	3.5	2°58'	Mirach	78NE, +79	6-1:30	2
M32	8.2	7'	Mirach	80NE, +79	6-1:30	2

M33, Triangulum Galaxy	5.7	1°2'	Mothallah	104SE, +66	6-1:45	2
M34	5.2	35'	Algol	70NE, +57	6-	2
M35	5.1	28'	Propus	67NE, +11	7-	3
M36	6	12'	Alnath	63NE, +22	6-	3
M37	5.6	24'	Alnath	63NE, +19	6:10-	2
M38	6.4	21'	LY Aur	63NE, +25	6-	3
M39	4.6	32'	Azelfafage	300NW, +64	6-10:45	2
M40	8.4	point	Megrez	5N, +8	1-	2
M41	4.5	38'00"	Sirius	143SE, 19	10:30+	3
M42, Orion Nebula	4	1 Deg. 6'	Rigel	116SE, 20	8pm-	100
M43	9	20'	Rigel	115SE, 20	8pm-	1
M44	3.1	1deg. 35'	Pollux	80NE, 20	9pm-	3
M45	N/A	30'	Betelgeuse	88NE, 38	all night	1
M46	6.1	27'	Sirius	131SE, 20	10:50+	3
M47	4.4	30'	Sirius	132SE, 21	10:50+	3
M48	5.8	54'	Procyon	116SE, 20	10:36+	3
M49	8.4	8' 54"	Vindemiatrix	97SE, 20	2am-	2
M51, Whirlpool	9.6	5' 24"	Alkaid	46NE, 22	8-All Night	1
M52	6.9	13'	Caph	326NW, 59	All Night	2
M53	7.7	12' 36"	Vindemiatrix	82NE, 20	2:10am -	2
M54	7.7	9' 06"	Ascella	252SW, .28	N/A	2
M55	7	19'	Ascella	2466SW, -20	N/A	3
M56	8.3	7' 6"	Vega	298NW, 13	Early	3

M57, Ring Nebula	9	2' 30''	Vega	303NW, 11	Early	99
M58	9.8	5' 24''	Vindemiatrix	91SE, 20	1:55am -	2
M59	9.8	5' 06''	Vindemiatrix	90E , 19	1:55am -	2
M60	8.8	7' 12''	Vindemiatrix	91SE, 20	2am-	1
M61	9.70	6'	Zaniah	+107SE, +24	2:30-	1
M63	8.6	12'	Cor Caroli	53NeE, 22	1:00	3
M64	8.5	9'	Vindemiatrix	90N, +33	10:00	1
M65	9.3	10'	Chertan	94SE, 24	1:00	3
M66	9.0	8'	Denebola	95SE, 25	1:00	3
M67	6.9	30'	Acuben	95SE, 24	10:30	
M68	8.2	12'	Gienah	N/A	N/A	3
M69	7.7	7'	N/A	N/A	N/A	3
M70	8.1	7'	N/A	N/A	N/A	3
M71	8.3	7'	sham	263SW, 35	6-7:30	3
M75	8.6	6'	N/A	N/A	N/A	2
M76	12	4'	Per	49NE, 67	6-2	99
M77	8.8	6'	Cet	125NW, 35	6-2	1
M78	8	8'	Alnitak	111SE, 22	8-	1
M79	8	8'	VX lep	113NW, -9	10-2	2
M80	7.2	8'	N/A	N/A	N/A	2
M81, Bode's Galaxy	6.9	25'	dUMA	11NE, 21	6-2	0
M82	8.4	11'	Dubhe	10NE, 23	6-	100
M83	7.6	11'	N/A	N/A	N/A	1
M84	9.3	5'	12 Vir	94NE, 25	12-2	2
M85	9.2	7'	11COM	351SE, -31	12-	2
M86	9.2	7'	Denebola	94SE, 23	2-	2
M87	8.6	7'	20Vir	39SE, -37	12-	2

M88	9.5	6'	25 Com	103NW	12-	1
M89	9.8	4'	Vir	348SE, -36	1-	2
M90	9.5	9'	Vindemiatrix	344NW/ -35	1:50-	2
M91	10.2	5'	Vindemiatrix	345NW/ -34	1:45-	1
M92	6.5	11'	Rastaban	308NW/ +21	6-6:10	0
M93	6.2	22'	Sirius	159SE, 21"	12:30-	3
M94	8.2	11'	Cor Caroli	53NE, 21	12:30-	0
M95	9.7	7'	Chertan	91SE19	12:30-	2
M96	9.2	7'	Chertan	96SE24	12:30-	2
M97, Owl Nebula	11.2	3'	Merak	7NE, 5	6-	1 with color
M98	10.1	9'	Denebola	375SE, -35	N/A	2
M99	9.8	5'	Denebola	355SE, -35	12-	1
M100	9.40	6' 54"	Denebola	86NE, 20	1:30am -	1
M101	7.70	26'54"	Mizar	39NE, 25	1:30am -	99
M102	10	5' 12"	Edasich	25NE, 42	12am-	0
M103	7.4	6'	Shedir	326NW, 29	-12am	2
M105	9.3	4'30"	Regulus	119SE, 47	All Night	2
M106	8.3	18' 12"	Phad	59NE, 47	All Night	98
M107	8.1	10'	Sabik	271NW, -22	N/A	3
M108	10.1	8'18"	Merak	45NE, 41	All Night	98
M109	9.8	7' 36"	Phad	45NE, 33	All Night	1\98
M110	8	17' 24"	Mirach	308NW, 20	8-10pm	3
NGC STARTS HERE						
NGC 1999	NA	16'	Rigel	109SE, +11	4am-	1

NGC 7662, Blue Snowball	9	2'12"	Alpheratz	58NE, +31	all night	1
NGC 6543, Cat's Eye Nebula	9	5'48"	Altais	359N, +63	all night	1
NGC 3242, Ghost of Jupiter	9	25"	Alphard	269W, -18	not visible	99
NGC 1532	11	5'36"	Phact	153SE, 11	5am	1
NGC 6826, Caldwell 15	10	2'18"	Vega	55NE, +60	all night	1
NGC 2264, Cone Nebula	3.90	1d (zoom on cone)	Procyon/Bet elgeuse	97E, +23	5am-	1
NGC1234	15.00	180degrees		157SE, +37	All Night	1
Extra Objects List						
						0
B Lyrae	3.50	point	Vega	98SE,63	All Night	
Y Delphini	5.10	point	Juno	96NE, 32	All Night	
epsilon bootis	2.5	.01555	HIP 72244	235SW,+65	All Night	
Albireo	3.35	point	Vega	96SE,51	All Night	
61 Cygni	6.00	point	Deneb	69NE, 40	All Night	
On the Web						
Lynn: M95+SN2012aw, M13, M16, M27c, M42, M51, M57c, M64, M66, M68, M82, M91~, M96, M104c, (13 Messier) NGC3242, NGC7009						
IMAGES: NGC5669-SN2013ab, M1, M5, M11, M20, M76, M81, M92, NGC6826c, Epsilon Lyrae, M94,						

M101, M102, M104, M108, (12 Messier) Mizar, Comet,						
IMAGES2: M75, M97, M106, M109						
<b>MISSING from Web</b>						
2013_08_07: M3, M20c,						
2013_08_20: NGC6543c,						