Observation session from 2019-01-03 20:57 to 2019-01-04 03:31. Ordered by set time, then transit time. Galaxy in Triangulum Galaxy in Pisces mag **5.7** 2019-01-03 13:37 2019-01-03 14:20 9.4 Triangulum M 74 M 74, NGC 628, CGCG Galaxy 2019-01-03 23:27 01h36m42s 2019-01-04 00:15 01h33m52s 460-14, IRAS M 33, NGC 598, CGCG 01340+1532, MCG 3-5-+15d47m00s 502-110, MCG 5-4-69, +30d39m29s 21° 34° 11, PGC 5974, UGC PGC 5818, UGC 1117 midnight alt midnight alt 1149 66.0 x 41.6 -8° 10.5 x 9.5 0° 2019-01-03 18:53 1 to 10 1 to 10 2019-01-03 18:56 42° -41° -47° Galaxy in Cetus Bright nebula in Taurus 8.9 2019-01-03 14:03 1.2 2019-01-03 16:11 M 77 **Pleiades** M 77, NGC 1068, 3C 71, M 45, Mel 22 02h42m41s 03h47m00s 2019-01-04 02:01 2019-01-04 02:01 Arp 37, CGCG 388-98. start alt start alt IRAS 02401-0013, KUG -0d00m46s +24d07m00s 34° 0240-002, MCG 0-7midnight alt midnight alt 83, PGC 10266, UGC 102.0 x 102.0 7.1 x 6.0 18° 2188 chart chart 1 to 10 2019-01-03 20:02 11 to 20 2019-01-03 21:06 58° 34° end alt end alt -19° -17° Galaxy in Eridanus Open cluster in Auriga mag 11.9 2019-01-03 14:28 6.4 2019-01-03 18:34 M 38 NGC 1337 M 38, NGC 1912, OCL NGC 1337, MCG -2-9-05h28m43s 2019-01-04 03:01 03h28m06s 2019-01-04 03:07 42, PGC 12916 433 start alt start al +35d51m18s -8d23m18s midnight alt midnight alt 5.7 x 1.5 15.0 x 15.0 19° 36° 11 to 20 11 to 20 2019-01-03 20:47 2019-01-03 22:48 66° 22° end alt end alt -4° -5° Open cluster in Auriga Galaxy in Eridanus 6.0 2019-01-03 18:35 9.9 2019-01-03 13:37 M 36 NGC 1232 M 36, NGC 1960, OCL NGC 1232, ESO 547-14, 05h36m18s 03h09m45s 2019-01-04 03:21 2019-01-04 03:16 445 Arp 41, MCG -4-8-32, start all start al PGC 11819 +34d08m27s 18° -20d34m45s midnight alt midnight alt size 7.4 x 6.5 10.0 x 10.0 chart chart transit 11 to 20 2019-01-03 22:55 11 to 20 2019-01-03 20:29 24° 789 end alt end alt -2° -1° Galaxy in Fornax Galaxy in Eridanus mag 11.5 mag 10.4 2019-01-03 12:44 2019-01-03 13:50 NGC 1079 NGC 1300 NGC 1079, ESO 416-13, NGC 1300. ESO 547-31. 02h43m44s 2019-01-04 03:21 03h19m41s 2019-01-04 03:28 IRAS 03174-1935, MCG IRAS 02415-2913, MCG start al -3-9-18, PGC 12412, -5-7-17, PGC 10330 -29d00m10s -19d24m41s 77° UGCA 66 midnight alt midnight alt 5.5 x 3.1 36° 6.2 x 4.1 40° chart chart 11 to 20 1 to 10 2019-01-03 20:03 2019-01-03 20:39 87° 77° end alt end alt -1°

Galaxy in Fornax NGC 1097	mag 9.5	rise 2019-01-03 12:43	Open cluster in Auriga M 37	mag 5.6	rise 2019-01-03 18:45
NGC 1097, ESO 416-20, AM 0244-302, Arp 77, C 67, IRAS 02441- 3029, MCG -5-7-24, PGC 10488, UGCA 41	02h46m19s	2019-01-04 03:28	M 37, NGC 2099, OCL 451	05h52m18s	^{set} 2019-01-04 03:38
	-30d16m32s	start alt 78°		+32d33m11s	start alt 18°
PGC 10488, UGCA 41	9.4 x 6.6	midnight alt		ra 05h52m18s dec +32d33m11s size 15.0 x 15.0 chart 11 to 20 mag 9.6 ra 03h38m30s	midnight alt 24°
	chart 1 to 10	transit 2019-01-03 20:06 88°			transit 2019-01-03 23:11 25°
		end alt O°			end alt 1°
Planetary nebula in Taurus Crab Nebula	mag 8.4	rise 2019-01-03 17:52	Galaxy in Eridanus NGC 1395		rise 2019-01-03 13:58
M 1, NGC 1952, Sh 2- 244	^{ra} 05h34m30s	set 2019-01-04 03:55	NGC 1395, ESO 482-19, AM 0336-231, MCG -4-	^{ra} 03h38m30s	set 2019-01-04 03:57
	+22d01m00s	start alt 29°	9-39, PGC 13419		start alt 81°
	8.0 x 4.0	midnight alt 32°			midnight alt 45°
	chart 11 to 20	transit 2019-01-03 22:53 36°			transit 2019-01-03 20:57 81°
		end alt 4°			end alt 4°
Galaxy in Fornax NGC 1367	mag 10.7	rise 2019-01-03 13:49	Planetary nebula in Fornax		rise 2019-01-03 13:44
NGC 1367, NGC 1371, ESO 482-10, AM 0332- 250, IRAS 03327-2505,	ra 03h35m01s	set 2019-01-04 03:59	NGC 1360, ESO 482- PN7, AM 0331-260, PK 220-53.1	ra 03h33m15s	set 2019-01-04 04:00
	dec -24d56m00s	start alt			start alt
MCG -4-9-29, PGC 13255, UGCA 79	size 5.6 x 3.9	midnight alt			midnight alt 45°
	chart 11 to 20	transit 2019-01-03 20:54 83°			transit 2019-01-03 20:52 84°
		end alt 5°			end alt 5°
Galaxy in Fornax NGC 1398	mag 9.7	rise 2019-01-03 13:48	Open cluster in Gemini M 35		rise 2019-01-03 18:33
NGC 1398, ESO 482-	ra 03h38m52s	set 2019-01-04 04:07	M 35, NGC 2168, OCL		set 2019-01-04 04:22
22, AM 0336-263, IRAS 03367-2629, MCG -4-	dec -26d20m14s	start alt 84°	466		start alt
9-40, PGC 13434	size 7.2 x 5.2	midnight alt 46°		size 25.0 x 25.0	midnight alt 32°
	chart 11 to 20	transit 2019-01-03 20:58 84°		chart 21 to 30	transit 2019-01-03 23:28 34°
		end alt 6°			end alt 9°
Galaxy in Fornax NGC 1425	mag 10.6	rise 2019-01-03 13:39	Galaxy in Fornax NGC 1350	mag 10.3	rise 2019-01-03 13:15
NGC 1425, ESO 419-4, IRAS 03401-3002, MCG	ra 03h42m11s	set 2019-01-04 04:23	NGC 1350, ESO 358-13, AM 0329-334, FCC 88,	^{ra} 03h31m08s	set 2019-01-04 04:25
-5-9-23, PGC 13602, UGCA 84	-29d53m39s	start alt 88°	IRAS 03291-3347, MCG -6-8-23, PGC 13059	dec -33d37m38s	start alt 87°
	size 5.8 x 2.5	midnight alt 48°	2 2 25, 1 2 2 1 3 3 3 3	size 5.9 x 3.1	midnight alt 47°
	chart 11 to 20	transit 2019-01-03 21:01 88°		chart 11 to 20	transit 2019-01-03 20:50 88°
		end alt 9°			end alt 9°

Galaxy in Fornax NGC 1316	mag 8.5	rise 2019-01-03 12:52	Bright nebula in Orion NGC 1788	mag 0.0	rise 2019-01-03 16:19
NGC 1316, ESO 357-22, AM 0320-372, Arp 154, FCC 21, IRAS 03208- 3723, MCG -6-8-8,	^{ra} 03h22m41s	set 2019-01-04 04:32	NGC 1788, LBN 916	^{ra} 05h06m54s	set 2019-01-04 04:33
	dec -37d12m28s	start alt 83°		dec -3d20m00s	start alt 54°
PGC 12651	size 11.0 x 7.2	midnight alt 46°		0.0 ra 05h06m54s dec -3d20m00s size 5.0 x 3.0 chart 11 to 20 mag 6.8 ra 06h09m36s dec +20d29m00s size 18.0 x 18.0 chart 21 to 30 mag 9.6 3- FCC PGC 35d26m59s size 6.9 x 6.5 chart 11 to 20	midnight alt 51°
	chart 11 to 20	transit 2019-01-03 20:42 84°			transit 2019-01-03 22:26 61°
		end alt 9°			end alt 13°
Diffuse nebula in Orion	mag 0.0	rise 2019-01-03 18:23	Bright nebula in Orion		rise 2019-01-03 18:23
NGC 2174, Sh 2-252,	^{ra} 06h09m24s	set 2019-01-04 04:34	NGC 2175,		set 2019-01-04 04:34
Ced 67A	dec +20d40m00s	start alt 26°		dec +20d29m00s	start alt 26°
	size 40.0 x 30.0	midnight alt 36°			midnight alt 36°
	chart 21 to 30	transit 2019-01-03 23:28 37°			transit 2019-01-03 23:28 37°
		end alt 11°			end alt 11°
Galaxy in Fornax Great Barred Spiral Galaxy NGC 1365, ESO 358-17, FCC 121, IRAS 03317-	mag 9.6	rise 2019-01-03 13:07	Galaxy in Fornax NGC 1399		rise 2019-01-03 13:15
	ra 03h33m37s	set 2019-01-04 04:38	NGC 1399 NGC 1399, ESO 358- 45, AM 0336-353, FCC 213, MCG -6-9-12, PGC 13418	ra 03h38m29s	set 2019-01-04 04:40
	dec -36d08m27s	start alt 85°		_{dec} -35d26m59s	start alt 86°
3618, MCG -6-8-26, PGC 13179, V V 825	size 11.0 x 6.2	midnight alt 48°			midnight alt 49°
	chart 11 to 20	transit 2019-01-03 20:53 85°			transit 2019-01-03 20:57 86°
		end alt 10°			end alt 11°
Galaxy in Eridanus NGC 1269	mag 8.5	rise 2019-01-03 12:28	Bright nebula in Orion		rise 2019-01-03 16:53
NGC 1269, NGC 1291,	ra 03h17m18s	set 2019-01-04 04:45	NGC 1990, LBN 940		set 2019-01-04 04:57
ESO 301-2, AM 0315- 411, IRAS 03154-4117,	dec -41d06m26s	start alt 79°			start alt 48°
MCG -7-7-8, PGC 12209	size 11.0 x 9.5	midnight alt		size	midnight alt
	chart 11 to 20	transit 2019-01-03 20:36 80°			transit 2019-01-03 22:55 59°
		end alt 10°			end alt 18°
Galaxy in Eridanus NGC 1532	mag 9.9	rise 2019-01-03 13:58	Bright nebula in Orion		rise 2019-01-03 17:06
NGC 1532, ESO 359-	^{ra} 04h12m04s	set 2019-01-04 05:03	NGC 2067,		set 2019-01-04 05:04
27, AM 0410-325, AM 0410-330, IRAS 04102- 3259, MCG -5-11-2,	dec -32d52m23s	start alt			start alt 46°
9259, MCG -5-11-2, PGC 14638	size 11.6 x 3.4	midnight alt		size 8.0 x 3.0	midnight alt
	chart 11 to 20	transit 2019-01-03 21:31 88°	100000000000000000000000000000000000000	chart 11 to 20	transit 2019-01-03 23:05 58°
		end alt			end alt 19°

Diffuse nebula in Orion Flame Nebula	mag 0.0	rise 2019-01-03 16:57	Bright nebula in Orion	mag 0.0	rise 2019-01-03 17:06
NGC 2024, Sh 2-277,	^{ra} 05h41m42s	set 2019-01-04 05:04	NGC 2064, LBN 1627	^{ra} 05h46m18s	set 2019-01-04 05:04
Ced 55P	dec -1d51m00s	start alt 48°		dec +0d00m00s	start alt 46°
	size 30.0 x 30.0	midnight alt		size 10.0 x 10.0	midnight alt 54°
	chart 11 to 20	transit 2019-01-03 23:00 60°		chart 11 to 20	transit 2019-01-03 23:05 58°
		end alt 19°			end alt 19°
Bright nebula in Orion	mag 8.0	rise 2019-01-03 17:08	Bright nebula in Orion	mag 8.0	rise 2019-01-03 17:07
NGC 2071, LBN 938	^{ra} 05h47m06s	set 2019-01-04 05:04	M 78, NGC 2068	^{ra} 05h46m48s	set 2019-01-04 05:04
	dec +0d18m00s	start alt 45°		dec +0d05m00s	start alt 46°
	size 7.0 x 5.0	midnight alt 54°		size 8.0 x 6.0	midnight alt 54°
	chart 11 to 20	transit 2019-01-03 23:06 58°		chart 11 to 20	transit 2019-01-03 23:06 58°
		end alt 19°			end alt 19°
Bright nebula in Orion	mag 7.0	rise 2019-01-03 16:43	Bright nebula in Orion NGC 1975 NGC 1975, Ced 55C	mag 7.0	rise 2019-01-03 16:44
NGC 1973, Ced 55B	^{ra} 05h35m06s	set 2019-01-04 05:05		ra 05h35m18s	set 2019-01-04 05:05
	dec -4d44m00s	start alt		dec -4d41m00s	start alt 51°
	size 5.0 x 5.0	midnight alt		size 10.0 x 5.0	midnight alt
	chart 11 to 20	transit 2019-01-03 22:54 63°		chart 11 to 20	transit 2019-01-03 22:54 63°
		end alt 19°			end alt 19°
Bright nebula in Orion	mag 0.0	rise 2019-01-03 16:56	Bright nebula in Orion Running Man	mag 7.0	rise 2019-01-03 16:43
NGC 2023, LBN 953	ra 05h41m36s	set 2019-01-04 05:05	NGC 1977,	ra 05h35m18s	set 2019-01-04 05:05
	dec -2d16m00s	start alt 48°		dec -4d51m00s	start alt 51°
	size 10.0 x 8.0	midnight alt		size 20.0 x 10.0	midnight alt
	chart 11 to 20	transit 2019-01-03 23:00 60°		chart 11 to 20	transit 2019-01-03 22:54 63°
		end alt 19°	10000		end alt 19°
Bright nebula in Orion De Mairan's	mag 7.0	rise 2019-01-03 16:42	Diffuse nebula in Orion Orion Nebula	mag 4.0	rise 2019-01-03 16:42
Nebula	^{ra} 05h35m30s	set 2019-01-04 05:06	M 42, NGC 1976, Sh 2-	ra 05h35m18s	set 2019-01-04 05:06
M 43, NGC 1982	_{dec} -5d16m00s	start alt 51°	281, LBN 974	_{dec} -5d23m00s	start alt 52°
	size 20.0 x 15.0	midnight alt		size 90.0 x 60.0	midnight alt
	chart 11 to 20	transit 2019-01-03 22:54 63°		chart 11 to 20	transit 2019-01-03 22:54 63°
		end alt 20°			end alt 20°

Bright nebula in Orion NGC 1980	mag 2.5	rise 2019-01-03 16:41	Galaxy in Lepus NGC 1744	mag 11.1	rise 2019-01-03 15:10
NGC 1980,	^{ra} 05h35m24s	set 2019-01-04 05:08	NGC 1744, ESO 486-5, IRAS 04579-2605,	^{ra} 04h59m58s	set 2019-01-04 05:27
	-5d55m00s	start alt 52°	MCG -4-12-29, PGC 16517	-26d01m22s	start alt 71°
	size 14.0 x 14.0	midnight alt 58°		^{size} 7.4 x 3.5	midnight alt 64°
	chart 11 to 20	transit 2019-01-03 22:54 64°		chart 11 to 20	transit 2019-01-03 22:19 84°
		end alt 20°			end alt 22°
Galaxy in Horologium NGC 1448	mag 10.7	rise 2019-01-03 12:35	Diffuse nebula in Monoceros Cone Nebula	mag 3.9	rise 2019-01-03 18:25
NGC 1448, NGC 1457, ESO 249-16, AM 0342-	^{ra} 03h44m31s	set 2019-01-04 05:32	NGC 2264, Sh 2-273	^{ra} 06h41m00s	set 2019-01-04 05:34
444, MCG -7-8-5, PGC 13727	^{dec} -44d38m45s	start alt 76°		^{dec} +9d54m00s	start alt 29°
	size 7.6 x 1.7	midnight alt 50°		size 20.0 x 20.0	midnight alt 48°
	chart 11 to 20	transit 2019-01-03 21:03 77°		chart 21 to 30	transit 2019-01-04 00:00 48°
		end alt 16°			end alt 24°
Bright nebula in Monoceros NGC 2239 NGC 2239,	mag 4. 8	rise 2019-01-03 18:04	NGC 1512 NGC 1512, ESO 250-4, AM 0402-433, IRAS 04022-4329, MCG -7- 9-7, PGC 14391	mag 10.3	rise 2019-01-03 13:02
	^{ra} 06h31m54s	set 2019-01-04 05:37		^{ra} 04h03m54s	set 2019-01-04 05:43
	dec +4d57m00s	start alt 34°		dec -43d20m56s	start alt 77°
	size 24.0 x 24.0	midnight alt 52°		size 8.9 x 5.6	midnight alt 54°
	chart 21 to 30	transit 2019-01-03 23:51 53°		chart 11 to 20	transit 2019-01-03 21:23 78°
		end alt 25°			end alt 19°
Galaxy in Horologium	mag 9.9	rise 2019-01-03 12:16	Globular cluster in Lepus M 79	mag 7.7	rise 2019-01-03 15:39
NGC 1433, ESO 249- 14, AM 0340-472, IRAS	^{ra} 03h42m01s	set 2019-01-04 05:46	M 79, NGC 1904, ESO 487-SC7, GCL 10	^{ra} 05h24m11s	set 2019-01-04 05:47
14, AM 0340-472, IRAS 03404-4722, PGC 13586	^{dec} -47d13m19s	start alt 74°	487-307, GCL 10	dec -24d31m25s	start alt 65°
73300	size 6.5 x 5.9	midnight alt 50°		9.6 x 9.6	midnight alt
	chart 11 to 20	transit 2019-01-03 21:01 74°		chart 11 to 20	transit 2019-01-03 22:43 82°
		end alt 17°			end alt 26°
Galaxy in Lepus NGC 1964	mag 10.8	rise 2019-01-03 15:56	Galaxy in Columba NGC 1792	mag 10.2	rise 2019-01-03 14:30
NGC 1964, ESO 554- 10, IRAS 05312-2158,	^{ra} 05h33m22s	set 2019-01-04 05:48	NGC 1792, ESO 305-6, AM 0503-380, IRAS	^{ra} 05h05m14s	set 2019-01-04 06:17
10, 1RAS 05312-2158, MCG -4-14-3, PGC 17436	dec -21d56m43s	start alt 62°	05035-380, IRAS 05035-3802, MCG -6- 12-4, PGC 16709	dec -37d58m47s	start alt 71°
	size 5.6 x 1.8	midnight alt 69°	.,. 00 10, 00	size 5.2 x 2.6	midnight alt 66°
	chart 11 to 20	transit 2019-01-03 22:52 80°		chart 11 to 20	transit 2019-01-03 22:24 83°
		end alt 27°			end alt 28°

Galaxy in Columba NGC 1808	mag 9.9	rise 2019-01-03 14:35	Globular cluster in Columba	mag 7.1	rise 2019-01-03 14:29
NGC 1808, ESO 305-8, AM 0505-373, IRAS 05059-3734, MCG -6- 12-5, PGC 16779	^{ra} 05h07m43s	set 2019-01-04 06:18	NGC 1851, ESO 305- SC16, C 73, GCL 9	^{ra} 05h14m06s	set 2019-01-04 06:36
	dec -37d30m48s	start alt 70°	3010, 073, 002 9	dec -40d02m48s	start alt 68°
12 0,1 00 10,70	size 6.5 x 3.9	midnight alt 67°		size 12.0 x 12.0	midnight alt 67°
	chart 11 to 20	transit 2019-01-03 22:26 84°		chart 11 to 20	transit 2019-01-03 22:33 81°
		end alt 28°			end alt 30°
Globular cluster in Horologium	mag 8.3	rise 2019-01-03 10:24		mag 5.9	rise 2019-01-03 18:01
NGC 1261 NGC 1261, ESO 155-	^{ra} 03h12m15s	set 2019-01-04 06:38	M 50, NGC 2323, OCL 559	^{ra} 07h02m48s	set 2019-01-04 06:41
SC11, C 87, GCL 5	dec -55d12m59s	start alt 66°	330	dec -8d22m33s	start alt 37°
	size 6.8 x 6.8	midnight alt 44°		size 15.0 x 15.0	midnight alt 66°
	chart 11 to 20	transit 2019-01-03 20:31 66°		chart 21 to 30	transit 2019-01-04 00:21 66°
		end alt 17°			end alt 40°
Bright nebula in Canis Major NGC 2327 NGC 2327, Ced 89B	mag 0.0	rise 2019-01-03 17:55	Open cluster in Canis Major M 41	mag 4. 5	rise 2019-01-03 17:11
	^{ra} 07h04m06s	set 2019-01-04 06:50	M 41, NGC 2287, ESO 557-SC14, OCL 597	^{ra} 06h46m00s	set 2019-01-04 06:57
	dec -11d19m00s	start alt 38°		dec -20d45m24s	start alt 46°
	size 20.0 x 20.0	midnight alt		size 39.0 x 39.0	midnight alt
	chart 21 to 30	transit 2019-01-04 00:23 69°		chart 21 to 30	transit 2019-01-04 00:04 79°
		end alt 42°			end alt 42°
Open cluster in Cancer Beehive Cluster	mag 3.1	rise 2019-01-03 20:50	Diffuse nebula in Canis Major Thor's Helmet	mag 0.0	rise 2019-01-03 18:05
M 44, NGC 2632, OCL 507	^{ra} 08h40m24s	set 2019-01-04 07:07	NGC 2359, Sh 2-298, LBN 1041	^{ra} 07h18m30s	set 2019-01-04 07:09
<i>307</i>	^{dec} +19d40m12s	start alt 1°	EBIV 1041	-13d14m00s	start alt 36°
	size 72.0 x 72.0	midnight alt 32°		size 10.0 x 5.0	midnight alt 70°
	chart 21 to 30	transit 2019-01-04 01:59 38°		chart 21 to 30	transit 2019-01-04 00:37 71°
		end alt 34°			end alt 46°
Galaxy in Dorado	mag 11.2	rise 2019-01-03 11:31	Galaxy in Canis Major NGC 2280	mag 10.3	rise 2019-01-03 16:49
NGC 1515, ESO 156-36, AM 0402-541, IRAS	^{ra} 04h04m02s	set 2019-01-04 07:14	NGC 2280, ESO 427-2, AM 0642-273, IRAS	^{ra} 06h44m49s	set 2019-01-04 07:17
04028-5414, PGC 14397	dec -54d06m00s	start alt 67°	06428-2735, MCG -5- 16-20, PGC 19531,	dec -27d38m20s	start alt 49°
	5.4 x 1.3	midnight alt 52°	UGCA 131	6.3 x 3.0	midnight alt 85°
	chart 11 to 20	transit 2019-01-03 21:23 67°		chart 21 to 30	transit 2019-01-04 00:03 86°
		end alt 23°			end alt 44°

Open cluster in Puppis M 47	mag 4.4	rise 2019-01-03 18:19	Open cluster in Puppis M 46	mag 6.1	rise 2019-01-03 18:24
M 47, NGC 2422	^{ra} 07h36m36s	set 2019-01-04 07:31	M 46, NGC 2437, OCL	^{ra} 07h41m47s	set 2019-01-04 07:37
	-14d29m00s	start alt	601	-14d48m36s	start alt 32°
	size 30.0 x 30.0	midnight alt 70°		size 20.0 x 20.0	midnight alt 70°
	chart 21 to 30	transit 2019-01-04 00:55 72°		chart 21 to 30	transit 2019-01-04 01:00 73°
		end alt 50°			end alt 51°
Open cluster in Cancer M 67	6.9 2019-01-03 20:40 NGC 1566	mag 9.7	rise 2019-01-03 11:35		
M 67, NGC 2682, OCL 549	^{ra} 08h51m18s	set 2019-01-04 07:39	NGC 1566, ESO 157-20, IRAS 04189-5503, PGC	04h20m01s	set 2019-01-04 07:42
0.10	^{dec} +11d49m00s	start alt 3°	14897	dec -54d56m14s	start alt 65°
	size 25.0 x 25.0	midnight alt 38°		size 8.2 x 6.5	midnight alt 54°
	chart 21 to 30	transit 2019-01-04 02:10 46°		chart 11 to 20	transit 2019-01-03 21:38 66°
		end alt 42°			end alt 26°
Open cluster in Hydra M 48	mag 5.8	rise 2019-01-03 19:19	Globular cluster in Puppis	mag 9.3	rise 2019-01-03 16:22
M 48, NGC 2548, OCL 584	na 08h13m43s	set 2019-01-04 07:45	NGC 2298, ESO 366- SC22, GCL 11	na 06h48m59s	set 2019-01-04 07:53
	dec -5d45m02s	start alt 20°		dec -36d00m17s	start alt
	size 30.0 x 30.0	midnight alt		size 5.0 x 5.0	midnight alt
	chart 21 to 30	transit 2019-01-04 01:32 64°		chart 21 to 30	transit 2019-01-04 00:07 85°
		end alt 51°			end alt 47°
Open cluster in Puppis M 93	mag 6.2	rise 2019-01-03 18:01	Bright nebula in Puppis	mag 7.1	rise 2019-01-03 18:00
M 93, NGC 2447, ESO 493-SC7, OCL 649	^{ra} 07h44m30s	set 2019-01-04 08:05	NGC 2467,	^{ra} 07h52m30s	set 2019-01-04 08:21
493-SC/, UCL 649	-23d51m24s	start alt 35°		dec -26d26m00s	start alt 34°
	size 10.0 x 10.0	midnight alt 76°		size 15.0 x 15.0	midnight alt 76°
	chart 21 to 30	transit 2019-01-04 01:03 82°		chart 21 to 30	transit 2019-01-04 01:11 84°
		end alt 56°			end alt 58°
Galaxy in Pyxis NGC 2613	mag 10.3	rise 2019-01-03 18:52	Bright nebula in Puppis	mag 7.5	rise 2019-01-03 17:53
NGC 2613, ESO 495- 18, AM 0831-224,	^{ra} 08h33m23s	set 2019-01-04 08:51	NGC 2579,	^{ra} 08h20m54s	set 2019-01-04 09:25
CGMW 2-3822, IRAS 08311-2248, MCG -4-	dec -22d58m22s	start alt 25°		dec -36d13m00s	start alt 32°
00311-2240, MCO -4- 21-3, PGC 23997, UGCA 141	size 6.5 x 1.4	midnight alt 66°		size 10.0 x 10.0	midnight alt
	chart 21 to 30	transit 2019-01-04 01:52 81°		chart 21 to 30	transit 2019-01-04 01:39 85°
		end alt 66°			end alt

Galaxy in Leo M 95	mag 9.7	rise 2019-01-03 22:32	Galaxy in Leo M 105	mag 9.3	rise 2019-01-03 22:38
M 95, NGC 3351, CGCG 66-4, IRAS 10413+1158, MCG 2-28-1, PGC 32007, UGC 5850 Galaxy in Hydra NGC 2784 NGC 2784, ESO 497- 23, AM 0910-235, MCG -4-22-5, PGC 25950,	^{ra} 10h43m58s	set 2019-01-04 09:32	M 105, NGC 3379, CGCG 66-18, MCG 2-	^{ra} 10h47m49s	set 2019-01-04 09:34
	dec +11d42m12s	start alt -20°	28-11, PGC 32256, UGC 5902	dec +12d34m52s	start alt -21°
	^{size} 7.4 x 5.0	midnight alt 20°		size 5.3 x 4.8	midnight alt 19°
	chart 31 to 40	transit 2019-01-03 04:06 46°		chart 31 to 40	transit 2019-01-03 04:10 45°
		end alt 46°			end alt 45°
Galaxy in Hydra NGC 2784	mag 10.2	rise 2019-01-03 19:27		mag 10.5	rise 2019-01-03 19:38
NGC 2784, ESO 497- 23. AM 0910-235. MCG	09h12m19s	set 2019-01-04 09:34	NGC 2835, ESO 564- 35, AM 0915-220, IRAS	^{ra} 09h17m53s	2019-01-04 09:34
-4-22-5, PGC 25950, UGCA 152	-24d10m21s	start alt 17°	09156-2208, MCG -4- 22-8, PGC 26259,	-22d21m19s	start alt 15°
	5.5 x 2.2	midnight alt 59°	UGCA 157	6.6 x 4.4	midnight alt 57°
	chart 31 to 40	transit 2019-01-04 02:30 82°		chart 31 to 40	transit 2019-01-04 02:36 80°
		end alt 74°			end alt 74°
Galaxy in Leo M 96 M 96, NGC 3368, CGCG 66-13, IRAS 10441+1205, MCG 2- 28-6, PGC 32192, UGC 5882	mag 9.3	rise 2019-01-03 22:35	NGC 3115 NGC 3115, C 53, MCG -1-26-18, PGC 29265, UGCA 199	mag 8.9	rise 2019-01-03 21:05
	ra 10h46m46s	set 2019-01-04 09:34		ra 10h05m14s	set 2019-01-04 09:42
	dec +11d49m12s	start alt -20°		dec -7d43m05s	start alt
	size 7.8 x 5.2	midnight alt		size 7.2 x 2.4	midnight alt
	chart 31 to 40	transit 2019-01-03 04:09 46°		chart 31 to 40	transit 2019-01-04 03:21 66°
		end alt 45°			end alt 66°
Bright nebula in Vela	mag 0.0	rise 2019-01-03 17:47	Galaxy in Leo M 65	mag 9.3	rise 2019-01-03 23:10
NGC 2626, ESO 313-	^{ra} 08h35m30s	set 2019-01-04 10:00	M 65, NGC 3623, Arp	^{ra} 11h18m56s	set 2019-01-04 10:03
N*4	dec -40d40m00s	start alt 31°	317, CGCG 67-54, IRAS 11163+1322, MCG 2- 29-18, PGC 34612,	dec +13d05m27s	start alt -28°
	size 5.0 x 5.0	midnight alt 68°	UGC 6328, V V 308	size 9.8 x 2.9	midnight alt
	chart 21 to 30	transit 2019-01-04 01:54 80°		chart 31 to 40	transit 2019-01-03 04:41 45°
		end alt 68°		9.3 ra 10h47m49s dec +12d34m52s size 5.3 x 4.8 chart 31 to 40 mag 10.5 ra 09h17m53s dec -22d21m19s size 6.6 x 4.4 chart 31 to 40 mag 8.9 ra 10h05m14s dec -7d43m05s size 7.2 x 2.4 chart 31 to 40 mag 9.3 ra 11h18m56s dec +13d05m27s size 9.8 x 2.9 chart	end alt 42°
Galaxy in Leo M 66	mag 8.9	rise 2019-01-03 23:11	Galaxy in Antlia NGC 2997		rise 2019-01-03 19:37
M 66, NGC 3627, ARAK 288, Arp 16, Arp 317,	11h20m15s	set 2019-01-04 10:05	NGC 2997, ESO 434- 35, AM 0943-305,	^{ra} 09h45m39s	^{set} 2019-01-04 10:30
CGCG 67-57, MCG 2- 29-19, PGC 34695,	dec +12d59m24s	start alt -28°	MCG -5-23-12, PGC 27978, UGCA 181		start alt 14°
UGC 6346, V V 308	size 9.1 x 4.1	midnight alt 12°	,		midnight alt 53°
	chart 31 to 40	transit 2019-01-03 04:42 45°			transit 2019-01-04 03:03 89°
		end alt			end alt

Galaxy in Hydra NGC 3109	mag 9.9	rise 2019-01-03 20:11	Galaxy in Antlia NGC 3137	mag 11.5	rise 2019-01-03 20:08
NGC 3109, ESO 499- 36, AM 1000-255, DDO	^{ra} 10h03m07s	set 2019-01-04 10:31	NGC 3137, ESO 435-47, AM 1006-284, IRAS	^{ra} 10h09m07s	set 2019-01-04 10:46
236, MCG -4-24-13, PGC 29128, UGCA 194	dec -26d09m30s	start alt	10068-2849, MCG -5- 24-24, PGC 29530,	dec -29d03m49s	start alt 8°
PGC 29120, UGCA 194	size 19.1 x 3.7	midnight alt 48°	UGCA 203	size 6.2 x 2.2	midnight alt 48°
	31 to 40	transit 2019-01-04 03:19 84°		chart 31 to 40	transit 2019-01-04 03:25 87°
		end alt 84°			end alt 87°
Galaxy in Antlia	mag 11.2	rise 2019-01-03 20:14	Galaxy in Coma Berenices M 98	mag 10.1	rise 2019-01-04 00:10
NGC 3175, ESO 436-3,	^{ra} 10h14m42s	set 2019-01-04 10:51	M 98, NGC 4192, CGCG	^{ra} 12h13m48s	set 2019-01-04 10:53
AM 1012-283, IRAS 10124-2837, MCG -5-	dec -28d52m16s	start alt 7°	98-108, IRAS 12112+1510, MCG 3-31-	dec +14d53m58s	start alt -40°
24-28, PGC 29892, UGCA 207, V V 796	size 5.1 x 1.3	midnight alt	79, PGC 39028, UGC 7231, VCC 92	size 9.8 x 2.8	midnight alt
	chart 31 to 40	transit 2019-01-03 03:39 87°		chart 41 to 50	transit 2019-01-03 05:35 43°
		end alt 87°			end alt 35°
Bright nebula in Vela The Pencil Nebula NGC 2736, RCW 37	mag 0.0	rise 2019-01-03 17:41	M 85, NGC 4382, CGCG 99-45, KCPG 334A, MCG 3-32-29, PGC 40515, UGC 7508, VCC 798	mag 9.1	rise 2019-01-04 00:30
	ra 09h00m24s	set 2019-01-04 10:55		ra 12h25m24s	set 2019-01-04 10:56
	dec -45d54m00s	start alt		dec +18d11m27s	start alt -44°
	size 30.0 x 7.0	midnight alt		size 7.1 x 5.5	midnight alt -3°
	chart 31 to 40	transit 2019-01-04 02:18 75°		chart 41 to 50	transit 2019-01-03 05:47 40°
		end alt 69°			end alt 31°
Galaxy in Coma Berenices M 99	mag 9.9	rise 2019-01-04 00:14	Galaxy in Coma Berenices M 100	mag 9.4	rise 2019-01-04 00:21
M 99, NGC 4254,	ra 12h18m49s	set 2019-01-04 10:59	M 100, NGC 4321,	ra 12h22m55s	set 2019-01-04 11:00
CGCG 98-144, CGCG 99-11, IRAS	dec +14d25m03s	start alt -41°	CGCG 99-30, IRAS 12204+1605, KUG 1220+160, MCG 3-32-	dec +15d49m22s	start alt -43°
12162+1441, MCG 3- 31-99, PGC 39578, UGC 7345, VCC 307	size 5.3 x 4.6	midnight alt	1220+160, MCG 3-32- 15, PGC 40153, UGC 7450, VCC 596	size 7.5 x 6.1	midnight alt -1°
	chart 41 to 50	transit 2019-01-03 05:40 44°		chart 41 to 50	transit 2019-01-03 05:44 42°
		end alt 35°			end alt 33°
Galaxy in Virgo M 84	mag 9.1	rise 2019-01-04 00:16	Galaxy in Virgo M 86	mag 8.9	rise 2019-01-04 00:17
M 84, NGC 4374, 3C	^{ra} 12h25m04s	set 2019-01-04 11:10	M 86, NGC 4406,	^{ra} 12h26m12s	set 2019-01-04 11:11
272.1, CGCG 70-58, IRAS 12224+1309, MCG	dec +12d53m13s	start alt -42°	CGCG 70-72, MCG 2- 32-46, PGC 40653,	dec +12d56m47s	start alt -42°
2-32-34, PGC 40455, UGC 7494, VCC 763	size 6.5 x 5.6	midnight alt	UGC 7532, VCC 881	size 8.9 x 5.8	midnight alt
	chart 41 to 50	transit 2019-01-03 05:47 45°		chart 41 to 50	transit 2019-01-03 05:48 45°
		end alt 35°			end alt 35°

Galaxy in Coma Berenices M 88	mag 9.6	rise 2019-01-04 00:27	Galaxy in Coma Berenices M 91	mag 10.2	rise 2019-01-04 00:30
M 88, NGC 4501, CGCG 99-76, MCG 3-32-59, PGC 41517, UGC 7675, VCC 1401	ra 12h31m59s	set 2019-01-04 11:13	M 91, NGC 4548, CGCG 99-96, IRAS	ra 12h35m26s	set 2019-01-04 11:16
	^{dec} +14d25m11s	start alt -44°	12328+1446, MCG 3- 32-75, PGC 41934,	^{dec} +14d29m47s	start alt -44°
	6.8 x 3.7	midnight alt -2°	UGC 7753, VCC 1615 s	5.2 x 4.2	midnight alt -3°
	chart 41 to 50	transit 2019-01-03 05:54 44°		chart 41 to 50	transit 2019-01-03 05:57 43°
		end alt 33°			end alt 32°
Galaxy in Virgo Virgo A	mag 8.6	rise 2019-01-04 00:20	Galaxy in Coma Berenices Black Eye Galaxy	mag 8.5	rise 2019-01-04 01:12
M 87, NGC 4486, 3C 274, Arp 152, CGCG	^{ra} 12h30m49s	set 2019-01-04 11:17	M 64, NGC 4826, CGCG 130-1, IRAS	^{ra} 12h56m44s	set 2019-01-04 11:17
70-139, IRAS 12282+1240, MCG 2-	dec +12d23m26s	start alt -42°	12542+2157, KARA 559. MCG 4-31-1. PGC	dec +21d40m59s	start alt -52°
32-105, PGC 41361, UGC 7654, VCC 1316	size 8.3 x 6.6	midnight alt -1°	44182, UGC 8062	size 10.0 x 5.4	midnight alt -11°
,	chart 41 to 50	transit 2019-01-03 05:52 46°		chart 41 to 50	transit 2019-01-03 06:18 36°
		end alt 35°			end alt 23°
Galaxy in Virgo M 90 M 90, NGC 4569, Arp 76, CGCG 70-192, IRAS 12343+1326, MCG 2- 32-155, PGC 42089, UGC 7786, VCC 1690	mag 9.5	rise 2019-01-04 00:28	M 89 M 89, NGC 4552, CGCG 70-184, MCG 2- 32-149, PGC 41968, UGC 7760, VCC 1632	mag 9.8	rise 2019-01-04 00:25
	12h36m50s	set 2019-01-04 11:21		12h35m40s	set 2019-01-04 11:21
	dec +13d09m50s	start alt -44°		dec +12d33m22s	start alt -44°
	size 9.5 x 4.4	midnight alt -2°		size 3.5 x 3.5	midnight alt
	chart 41 to 50	transit 2019-01-03 05:58 45°		chart 41 to 50	transit 2019-01-03 05:57 45°
		end alt 33°			end alt 34°
Galaxy in Crater NGC 3511	mag 11.0	rise 2019-01-03 21:21	Galaxy in Virgo M 58	mag 9.7	rise 2019-01-04 00:26
NGC 3511, ESO 502-13,	^{ra} 11h03m24s	set 2019-01-04 11:21	M 58, NGC 4579, CGCG	^{ra} 12h37m44s	set 2019-01-04 11:25
IRAS 11009-2248, MCG -4-26-20, PGC 33385, UGCA 223	dec -23d05m11s	start alt	70-197, IRAS 12351+1205, MCG 2- 32-160, PGC 42168,	dec +11d49m06s	start alt -44°
333/1220	size 6.0 x 2.1	midnight alt 35°	UGC 7796, VCC 1727	size 6.0 x 4.8	midnight alt -2°
	chart 31 to 40	transit 2019-01-03 04:25 81°		chart 41 to 50	transit 2019-01-03 05:59 46°
		end alt 76°			end alt 34°
Galaxy in Virgo M 49	mag 8.4	rise 2019-01-04 00:08	Galaxy in Virgo M 61	mag 9.7	rise 2019-01-03 23:51
M 49, NGC 4472, Arp 134, CGCG 42-134,	^{ra} 12h29m47s	set 2019-01-04 11:27	M 61, NGC 4303, CGCG 42-45, IRAS	ra 12h21m55s	set 2019-01-04 11:28
MCG 1-32-83, PGC 41220, UGC 7629, VCC	dec +8d00m00s	start alt -40°	12194+0444, MCG 1- 32-22, PGC 40001,	dec +4d28m22s	start alt -36°
1226	size 10.2 x 8.3	midnight alt 1°	UGC 7420, VCC 508	size 6.5 x 5.9	midnight alt 4°
	chart 41 to 50	transit 2019-01-03 05:51 50°		chart 41 to 50	transit 2019-01-03 05:43 53°
		end alt			end alt

Galaxy in Virgo M 59	mag 9.6	rise 2019-01-04 00:29	Galaxy in Virgo M 60	mag 8.8	rise 2019-01-04 00:31
M 59, NGC 4621, CGCG 70-223, MCG 2-32-	^{ra} 12h42m02s	set 2019-01-04 11:30	M 60, NGC 4649, Arp 116, CGCG 71-16, KCPG	^{ra} 12h43m40s	set 2019-01-04 11:32
183, PGC 42628, UGC 7858, VCC 1903	dec +11d38m50s	start alt -44°	353B, MCG 2-33-2, PGC 42831, UGC 7898,	dec +11d33m11s	start alt -45°
, 600, 100 1000	size 5.4 x 3.7	midnight alt	V V 206, VCC 1978	size 7.6 x 6.2	midnight alt -3°
	chart 41 to 50	transit 2019-01-03 06:04 46°		chart 41 to 50	transit 2019-01-03 06:05 46°
		end alt 34°			end alt 33°
Globular cluster in Coma Berenices	mag 7.7	rise 2019-01-04 01:18		mag 9.7	rise 2019-01-03 21:03
M 53 M 53, NGC 5024, GCL	13h12m55s	set 2019-01-04 11:43	NGC 3621, ESO 377-37, AM 1115-323, IRAS	^{ra} 11h18m16s	set 2019-01-04 12:09
22	^{dec} +18d10m11s	start alt -54°	11159-3235, MCG -5- 27-8, PGC 34554,	-32d48m40s	start alt -1°
	size 13.0 x 13.0	midnight alt -12°	UGCA 232	size 12.3 x 6.8	midnight alt 35°
	chart 41 to 50	transit 2019-01-03 06:34 40°		chart 31 to 40	transit 2019-01-03 04:40 88°
		end alt 24°			end alt 76°
Galaxy in Hydra NGC 3717 NGC 3717, ESO 439-15, AM 1129-300, IRAS 11290-3001, MCG -5-	mag 11.2	rise 2019-01-03 21:26	NGC 3263 NGC 3263, ESO 263- 43, AM 1027-435, IRAS 10270-4351, MCG -7- 22-18, PGC 30887	mag 11.9	rise 2019-01-03 19:21
	ra 11h31m32s	set 2019-01-04 12:13		10h29m13s	set 2019-01-04 12:13
	dec -30d18m30s	start alt		dec -44d07m22s	start alt 13°
27-15, PGC 35539, UGCA 238	size 6.2 x 1.0	midnight alt 31°		size 5.1 x 1.4	midnight alt
	chart 31 to 40	transit 2019-01-03 04:53 88°		chart 31 to 40	transit 2019-01-03 03:51 77°
		end alt 73°			end alt 77°
Globular cluster in Vela	mag 6.9	rise 2019-01-03 18:55	Galaxy in Virgo Sombrero Galaxy	mag 8.0	rise 2019-01-03 23:29
NGC 3201, ESO 263-	^{ra} 10h17m37s	set 2019-01-04 12:16	M 104, NGC 4594, IRAS	^{ra} 12h39m59s	set 2019-01-04 12:26
SC26, C 79, GCL 15	dec -46d24m38s	start alt 16°	12373-1120, MCG -2- 32-20, PGC 42407, UGCA 293	dec -11d37m21s	start alt -29°
	size 20.0 x 20.0	midnight alt 48°	00CA 293	size 8.6 x 4.2	midnight alt
	chart 31 to 40	transit 2019-01-03 03:42 75°		chart 41 to 50	transit 2019-01-03 06:02 70°
		end alt 75°			end alt 50°
Globular cluster in Hydra M 68	mag 7.3	rise 2019-01-03 22:46	Galaxy in Hydra Southern	mag 7.5	rise 2019-01-03 23:33
M 68, NGC 4590, ESO 506-SC30, GCL 20	^{ra} 12h39m28s	set 2019-01-04 13:09	Pinwheel Galaxy	^{ra} 13h37m00s	set 2019-01-04 14:17
	dec -26d44m32s	start alt -17°	M 83, NGC 5236, ESO 444-81, IRAS 13342-	dec -29d52m02s	start alt -22°
	size 11.0 x 11.0	midnight alt 16°	2933, MCG -5-32-50, PGC 48082, UGCA 366	size 12.9 x 11.5	midnight alt 7°
	chart 41 to 50	transit 2019-01-03 06:01 85°		chart 41 to 50	transit 2019-01-03 06:58 88°
		end alt			end alt 46°

Bright nebula in Carina	mag 0.0	rise 2019-01-03 16:15	Bright nebula in Carina Gabriela Mistral	mag 6.7	rise
NGC 3199, ESO 127-	^{ra} 10h17m24s	set 2019-01-04 14:56	Nebula	^{ra} 10h37m18s	set
EN14	dec -57d55m00s	start alt 21°	NGC 3324, IC 2599	dec -58d40m00s	start alt 19°
	size 22.0 x 22.0	midnight alt 47°		size 16.0 x 16.0	midnight alt
	chart 31 to 40	transit 2019-01-03 03:41 63°		chart 31 to 40	transit 2019-01-03 03:59 62°
		end alt 63°			end alt 62°
Globular cluster in Musca	mag 7.2	rise	Globular cluster in Musca	mag 8.4	rise
NGC 4372, ESO 64- SC6, C 108, GCL 19	^{ra} 12h25m45s	set	NGC 4833, ESO 65- SC4, C 105, GCL 21, Lac	^{ra} 12h59m35s	set
306, 0 106, GCL 19	_{dec} -72d39m31s	start alt 19°	1-4	dec -70d52m27s	start alt 16°
	size 5.0 x 5.0	midnight alt 32°		size 14.0 x 14.0	midnight alt
	chart 41 to 50	transit 2019-01-03 05:47 48°		chart 41 to 50	transit 2019-01-03 06:21 50°
		end alt 45°			end alt 44°
Globular cluster in Apus	mag 9.2	rise	Globular cluster in Tucana 47 Tucanae	mag 4.0	rise
NGC 6101, ESO 69- SC4, C 107, GCL 40	^{ra} 16h25m49s	set	NGC 104, ESO 50-SC9, C 106, GCL 1	^{ra} 00h24m05s	set
3C4, C 107, GCL 40	dec -72d12m04s	start alt 14°		dec -72d04m49s	start alt 42°
	size 5.0 x 5.0	midnight alt 17°		size 50.0 x 50.0	midnight alt 27°
	chart 51 to 60	transit 2019-01-03 09:48 49°		chart 1 to 10	transit 2019-01-03 17:44 49°
		end alt 28°			end alt 16°
Globular cluster in Tucana	mag 12.0	rise	Bright nebula in Tucana	mag 10.3	rise
NGC 152, ESO 28-SC24	^{ra} 00h32m54s	set	NGC 346, ESO 51-SC10	^{ra} 00h59m06s	set
	dec -73d07m00s	start alt 42°		dec -72d11m00s	start alt 44°
	size 30.0 x 30.0	midnight alt 28°		size 5.2 x 5.2	midnight alt
	chart 1 to 10	transit 2019-01-03 17:52 48°		chart 1 to 10	transit 2019-01-03 18:18 49°
		end alt 17°			end alt 17°
Globular cluster in Tucana	mag 6.8	rise	Bright nebula in Tucana	mag 13.8	rise
NGC 362, ESO 51- SC13, C 104, GCL 3	^{ra} 01h03m14s	set	NGC 371, ESO 51-SC14	^{ra} 01h03m30s	set
3013, C 104, GCL 3	dec -70d50m52s	start alt 45°		dec -72d03m00s	start alt 44°
	size 14.0 x 14.0	midnight alt 30°		size 7.5 x 7.5	midnight alt 30°
	chart 1 to 10	transit 2019-01-03 18:22 50°		chart 1 to 10	transit 2019-01-03 18:23 49°
		end alt			end alt

Globular cluster in Tucana	mag 11.8	rise	Bright nebula in Tucana	mag 0.0	rise
NGC 376, ESO 29-	^{ra} 01h03m54s	set	NGC 395, ESO 51-SC16	^{ra} 01h05m06s	set
SC29	dec -72d49m00s	start alt 44°		dec -72d00m00s	start alt 44°
	size 7.9 x 7.9	midnight alt 30°		size 17.0 x 17.0	midnight alt 30°
	chart 1 to 10	transit 2019-01-03 18:23 48°		chart 1 to 10	transit 2019-01-03 18:24 49°
		end alt 18°			end alt 17°
Bright nebula in Tucana	mag 0.0	rise	Galaxy in Reticulum NGC 1313	mag 8.7	rise
NGC 456, ESO 29-	^{ra} 01h13m42s	set	NGC 1313, ESO 82-11,	na 03h18m16s	set
SC38	dec -73d18m00s	start alt 44°	AM 0317-664, IRAS 03176-6640, PGC 12286, V V 436	dec -66d29m43s	start alt 55°
	size 15.0 x 15.0	midnight alt 31°	72200, V 400	9.2 x 7.2	midnight alt 42°
	chart 1 to 10	transit 2019-01-03 18:33 48°		chart 11 to 20	transit 2019-01-03 20:37 55°
		end alt 19°			end alt 23°
Galaxy in Dorado NGC 1672	mag 9.7	rise	NGC 1731 NGC 1731, ESO 85- SC12	mag 9.9	rise
NGC 1672, ESO 118-43,	^{ra} 04h45m43s	set		na 04h53m30s	set
AM 0444-592, IRAS 04449-5920, PGC 15941, V V 826	dec -59d14m52s	start alt		dec -66d56m00s	start alt 53°
10041, V V 020	size 6.7 x 5.6	midnight alt 54°		size 8.0 x 8.0	midnight alt 50°
	chart 11 to 20	transit 2019-01-03 22:04 62°		chart 11 to 20	transit 2019-01-03 22:11 54°
		end alt 30°			end alt 32°
Bright nebula in Dorado NGC 1747	mag 9.4	rise	Bright nebula in Dorado	mag 0.0	rise
NGC 1747, ESO 85-	^{ra} 04h55m12s	set	NGC 1763, IC 2115	^{ra} 04h56m48s	set
SC16	dec -67d10m00s	start alt 52°		dec -66d25m00s	start alt 53°
	size 12.0 x 10.0	midnight alt 50°		size 25.0 x 20.0	midnight alt 50°
	chart 11 to 20	transit 2019-01-03 22:13 54°		chart 11 to 20	transit 2019-01-03 22:15 55°
		end alt 32°			end alt 32°
Bright nebula in Dorado	mag 9.0	rise	Bright nebula in Dorado	mag 0.0	rise
NGC 1816, ESO 85-	^{ra} 05h03m48s	set	NGC 1929, ESO 56-	^{ra} 05h21m36s	set
SC37	dec -67d16m00s	start alt 52°	EN107	_{dec} -67d55m00s	start alt 50°
	size 16.0 x 16.0	midnight alt 50°		size 20.0 x 15.0	midnight alt 51°
	chart 11 to 20	transit 2019-01-03 22:22 54°		chart 11 to 20	transit 2019-01-03 22:39 53°
		end alt			end alt 35°

Bright nebula in Dorado	mag 8.5	rise	Bright nebula in Dorado	mag 8.5	rise
NGC 1962, ESO 56- SC122	^{ra} 05h26m18s	set	NGC 1966, ESO 56- SC125	^{ra} 05h26m48s	set
	dec -68d50m00s	start alt 49°		dec -68d49m00s	start alt 49°
	size 13.0 x 12.0	midnight alt 50°		13.0 x 13.0	midnight alt 50°
	chart 11 to 20	transit 2019-01-03 22:44 52°		chart 11 to 20	transit 2019-01-03 22:45 52°
		end alt 35°			end alt 35°
Bright nebula in Dorado	mag 9.0	rise	Bright nebula in Dorado	mag 9.0	rise
NGC 1968, ESO 56- SC130	^{ra} 05h27m24s	set	NGC 1974, NGC 1991	^{ra} 05h28m00s	set
C130	^{dec} -67d28m00s	start alt 50°		^{dec} -67d25m00s	start alt 50°
	size 20.0 x 20.0	midnight alt		9.0 x 9.0	midnight alt 51°
	chart 11 to 20	transit 2019-01-03 22:45 54°		chart 11 to 20	transit 2019-01-03 22:46 54°
		end alt 35°			end alt 36°
Globular cluster in Dorado	mag 9.9	rise	Supernova remnant in Mensa NGC 2018 NGC 2018, ESO 56- SC141	mag 10.9	rise
NGC 1978, ESO 85- SC90	^{ra} 05h28m48s	set		^{ra} 05h30m48s	set
	^{dec} -66d14m00s	start alt 51°		^{dec} -71d04m00s	start alt 47°
	size 42.0 x 19.0	midnight alt 52°		^{size} 25.0 x 18.0	midnight alt 48°
	chart 11 to 20	transit 2019-01-03 22:47 55°		chart 11 to 20	transit 2019-01-03 22:48 50°
		end alt 36°			end alt 35°
Bright nebula in Dorado Tarantula Nebula	mag 8.3	rise	Bright nebula in Dorado	0.0	rise
NGC 2070, ESO 57- EN6, C 103	^{ra} 05h38m36s	set	NGC 2077, ESO 57-EN9	^{ra} 05h39m36s	set
	^{dec} -69d06m00s	start alt 48°		dec -69d39m00s	start alt 48°
	size 20.0 x 20.0	midnight alt		size 15.0 x 15.0	midnight alt 50°
	chart 11 to 20	transit 2019-01-03 22:56 52°		chart 11 to 20	transit 2019-01-03 22:57 51°
		end alt 36°			end alt 36°
Globular cluster in Dorado	mag 13.5	rise	Galaxy in Volans NGC 2442 NGC 2442, NGC 2443, ESO 59-8, AM 0736- 692, IRAS 07367-6924, PGC 21373	mag 10.4	rise
NGC 2257, ESO 87- SC24	^{ra} 06h30m12s	set		^{ra} 07h36m24s	set
	dec -64d19m00s	start alt 47°		dec -69d31m51s	start alt 40°
	size 55.0 x 55.0	midnight alt 57°		size 6.0 x 5.0	midnight alt 51°
	chart 21 to 30	transit 2019-01-03 23:48 57°		chart 21 to 30	transit 2019-01-04 00:54 52°
		end alt 42°			end alt 46°

Globular cluster in Carina NGC 2808	mag 6.2	rise
NGC 2808, ESO 91- SC1, GCL 13	^{ra} 09h12m03s	set
3C1, GCL 13	dec -64d51m45s	start alt 31°
	size 14.0 x 14.0	midnight alt 50°
	chart 31 to 40	transit 2019-01-04 02:30
		end alt 55°