



**Aspect of the sky from 50 45' N : 2 00' W at 21:00 UTC**

Chart from [www.fourmilab.ch](http://www.fourmilab.ch)

**Lunar Phases:** Last Qtr: May 1 at 11:27 and May 30 at 17:12; New: May 8 at 03:22; First Qtr: May 15 at 11:49; Full: May 23 at 13:53.

**Apsides:** Perigee (closest) May 5 at 22:03, 363163 Km, (32' 37"); Apogee (furthest) May 17 at 18:56, 404639 (29' 50")

**Mercury (☿):** is just past Inferior Conjunction last month it is now a morning star. By month's end it will be only 13° east of the Sun on a shallow ecliptic mag -0.7. but will be difficult to observe being very low down on the SE horizon by dawn.

**Venus (♀):** is moving toward superior conjunction on the 1<sup>st</sup> of June so will not be observed, and will rise at the same time as the Sun.

**Mars (♂):** is well into the morning sky, 40° from the Sun, mag.1.1, similar to nearby Saturn, and at month's start, is very close to Neptune, mag. 7.9. Moon close on the 5<sup>th</sup>

**Jupiter (♃):** is at Solar conjunction on the 18<sup>th</sup>, thence becoming a morning object. Its not practical to consider Red spot timings this month.

**Saturn (♄):** is improving in the morning sky, by mid-month is 66° from the Sun, rising at 02:25, i.e. 2 hours before the Sun, mag. 1.2. Moon is nearby on the 4<sup>th</sup>.

**Uranus (♅):** is at solar conjunction on the 13<sup>th</sup> and won't be visible this month.

**Neptune (♆):** is very close to Mars on the 1<sup>st</sup> and by month's end will be 70° from the Sun at mag 7.9 in a dark morning sky, 10 east of Saturn. Moon close on the 5<sup>th</sup> but nearer to Mars on this date!

**Meteors:** The Eta Aquarids meteor 'shower' is this month's offering, peaking on the 5<sup>th</sup>, the Moon is near new on that date, so there's reasonable chance to see some meteors, though they are low down.

**Sunrise set times:** All times in UTC

Date	Rise	Transit	Set	Date	Rise	Transit	Set
01 May 2024	04:41:26	12:05:02	19:29:40	16 May 2024	04:17:13	12:04:23	19:52:28
06 May 2024	04:32:40	12:04:35	19:37:30	21 May 2024	04:10:44	12:04:38	19:59:23
11 May 2024	04:24:34	12:04:22	19:45:09	26 May 2024	04:05:12	12:05:06	20:05:44
31 May 2024	04:00:43	12:05:46	20:11:26				

**Moonrise set time** All times in UTC

Date	Rise	Transit	Set	Date	Rise	Transit	Set
01 May 2024	02:19:20	06:18:52	10:28:14	16 May 2024	12:11:19	19:21:42	02:03:12
06 May 2024	03:42:27	10:33:42	17:45:51	21 May 2024	18:03:41	22:44:25	02:59:01
11 May 2024	06:12:16	15:18:48	--:--:--	26 May 2024	23:46:50	02:18:25	05:40:27
31 May 2024	01:21:36	06:49:39	12:33:31				

**B Persei, (Algol)** (Mag 2.1 to 3.4) – no visible minima this month, the star is below or close to the northern horizon all night; it is effectively in Solar conjunction.

**RZ Cassiopeiae** (Mag. 6.2 to 7.7) – 7 opportunities during the month:

2<sup>nd</sup> at 23:16; 8<sup>th</sup> at 22:40; 14<sup>th</sup> at 22:05; 20<sup>th</sup> at 21:20; 22<sup>nd</sup> at 02:10; 26<sup>th</sup> at 21:00; 28<sup>th</sup> at 01:40 and 31<sup>st</sup> at 21:50.

**Note:** During the Summer month's Cassiopeiae is north of Polaris, i.e. toward the northern horizon so a good northern aspect is required if you want to make observations.

**Lambda Tauri** (Mag 3.4 to 3.9) – none are visible this month, star is below the horizon.

Don't forget the star **T Corona Borealis** which is expected to reach possibly mag 2 or so, before year's end. Keep watching – it's at the position of the black dot to the left of Corona Borealis in the above chart.

For observation of the **ISS** during the month, log-in to <http://www.heavens-above.com>. Passes begin in the morning from month's start. Evening passes start on the 10<sup>th</sup>.

The next scheduled Durlston event is on August 12<sup>th</sup> at 7.30 pm, when the Perseid meteor shower peaks, also observing Saturn and the Summer Constellations.

**Solar news**

There was a considerable period of activity on the night of the 23<sup>rd</sup>/24<sup>th</sup> last month, when the Kp index reached 8 (storm) (maximum is 9), which gave rise to auroras over most of the states and Europe. It is thought that the next solar max (25) will now be earlier than expected, may peak later this year or in 2025.

Timings for Jupiter's **Great Red Spot (GRS):**

Jupiter is too close to the Sun to make any timings practical this month (conjunction mid-month) so the timings of when the Red Spot is on the Jovian meridian, don't make it easily visible due to the relative proximity to the Sun, in the morning sky, and time of dawn. Timings will resume later.

Good observing                      Robert Hatch    01/05/2024

**Passes of the ISS for May**

Date	Brightness (mag)	Start			Highest point			End			Pass type
		Time	Alt.	Az.	Time	Alt.	Az	Time	Alt.	Az.	
01 May	-0.9	02:04:10	11°	E	02:04:10	11°	E	02:04:17	10°	E	visible
01 May	-3.9	03:37:00	41°	WSW	03:38:00	75°	SSE	03:41:20	10°	ENE	visible
02 May	-3.2	02:49:27	47°	ESE	02:49:27	47°	ESE	02:52:10	10°	ENE	visible
02 May	-3.6	04:22:17	10°	W	04:25:34	74°	N	04:28:54	10°	E	visible
03 May	-1.5	02:01:52	18°	E	02:01:52	18°	E	02:02:55	10°	E	visible
03 May	-3.8	03:34:41	27°	W	03:36:20	80°	N	03:39:41	10°	E	visible
04 May	-3.9	02:47:02	86°	SW	02:47:05	87°	SSE	02:50:26	10°	ENE	visible
04 May	-3.7	04:20:31	10°	W	04:23:51	77°	N	04:27:12	10°	E	visible
05 May	-2.3	01:59:19	29°	E	01:59:19	29°	E	02:01:08	10°	ENE	visible
05 May	-3.6	03:32:09	18°	W	03:34:33	73°	N	03:37:53	10°	E	visible
06 May	-1.0	01:11:36	11°	E	01:11:36	11°	E	01:11:48	10°	E	visible
06 May	-3.7	02:44:24	48°	WNW	02:45:11	75°	N	02:48:32	10°	E	visible
07 May	-3.0	01:56:38	47°	ENE	01:56:38	47°	ENE	01:59:08	10°	E	visible
07 May	-3.8	03:29:26	11°	WNW	03:32:34	84°	N	03:35:55	10°	E	visible
08 May	-1.5	01:08:50	17°	ENE	01:08:50	17°	ENE	01:09:44	10°	ENE	visible
08 May	-3.7	02:41:39	30°	WNW	02:43:08	76°	N	02:46:29	10°	E	visible
08 May	-3.6	04:16:31	10°	W	04:19:47	50°	SSW	04:23:01	10°	SE	visible
09 May	-3.6	01:53:52	69°	NE	01:53:52	69°	NE	01:57:00	10°	E	visible
09 May	-3.9	03:27:03	10°	WNW	03:30:22	68°	SSW	03:33:41	10°	ESE	visible
10 May	-1.8	01:06:12	21°	ENE	01:06:12	21°	ENE	01:07:29	10°	E	visible
10 May	-3.9	02:39:03	24°	WNW	02:40:53	86°	SSW	02:44:14	10°	ESE	visible
10 May	-2.8	04:14:26	10°	W	04:17:19	27°	SSW	04:20:11	10°	SSE	visible
10 May	-3.1	22:35:04	10°	SW	22:38:06	33°	SSE	22:39:16	25°	ESE	visible
11 May	-1.8	00:11:14	10°	W	00:19:10	3°	E	00:12:26	20°	W	visible
11 May	-3.3	01:52:06	51°	E	01:52:06	51°	E	01:54:41	10°	E	visible
11 May	-3.4	03:25:02	12°	W	03:27:54	39°	SSW	03:31:02	10°	SE	visible
11 May	-2.6	21:46:00	10°	SSW	21:48:40	23°	SE	21:51:22	10°	E	visible
11 May	-4.0	23:21:41	10°	WSW	23:25:01	78°	SSE	23:27:46	14°	ENE	visible
12 May	-2.8	00:58:24	10°	W	01:00:41	40°	WNW	01:00:41	40°	WNW	visible
12 May	-1.5	02:41:06	14°	SE	02:41:06	14°	SE	02:41:40	10°	SE	visible
12 May	-2.0	04:14:16	14°	SW	04:14:32	14°	SW	04:16:22	10°	S	visible
12 May	-3.8	22:32:09	10°	WSW	22:35:26	59°	SSE	22:38:43	10°	ENE	visible
13 May	-3.7	00:08:45	10°	W	00:12:06	74°	N	00:13:23	34°	ENE	visible
13 May	-1.5	01:45:29	10°	WNW	01:46:13	16°	WNW	01:46:13	16°	WNW	visible
13 May	-3.4	21:42:40	10°	SW	21:45:51	42°	SSE	21:49:02	10°	E	visible
13 May	-3.7	23:19:04	10°	W	23:22:25	79°	N	23:25:32	12°	E	visible
14 May	-3.2	00:55:49	10°	WNW	00:58:21	48°	WNW	00:58:21	48°	WNW	visible
14 May	-3.8	22:29:22	10°	WSW	22:32:42	89°	SSE	22:36:03	10°	ENE	visible
15 May	-3.7	00:06:06	10°	W	00:09:28	78°	N	00:10:19	46°	E	visible
15 May	-1.2	01:42:49	10°	W	01:43:07	12°	W	01:43:07	12°	W	visible
15 May	-3.8	21:39:39	10°	WSW	21:42:59	72°	SSE	21:46:18	10°	ENE	visible
15 May	-3.6	23:16:21	10°	W	23:19:41	73°	N	23:22:13	16°	E	visible
16 May	-2.5	00:53:03	10°	WNW	00:55:01	31°	W	00:55:01	31°	W	visible
16 May	-3.6	22:26:32	10°	W	22:29:52	75°	N	22:33:13	10°	E	visible
17 May	-4.0	00:03:15	10°	WNW	00:06:36	80°	SSW	00:06:51	73°	SE	visible
17 May	-3.7	21:36:41	10°	W	21:40:02	82°	N	21:43:23	10°	E	visible
17 May	-3.8	23:13:26	10°	WNW	23:16:46	85°	N	23:18:39	24°	E	visible
18 May	-1.8	00:50:11	10°	W	00:51:26	19°	W	00:51:26	19°	W	visible
18 May	-3.6	22:23:33	10°	W	22:26:54	76°	N	22:30:14	10°	E	visible
19 May	-3.4	00:00:15	10°	W	00:03:12	47°	SW	00:03:12	47°	SW	visible
19 May	-3.5	21:33:38	10°	W	21:36:57	73°	N	21:40:18	10°	E	visible
19 May	-3.8	23:10:19	10°	WNW	23:13:38	68°	SSW	23:14:56	33°	SE	visible
20 May	-1.1	00:47:28	10°	W	00:47:43	11°	W	00:47:43	11°	W	visible
20 May	-3.8	22:20:22	10°	WNW	22:23:42	86°	SSW	22:26:40	13°	ESE	visible
20 May	-2.4	23:57:12	10°	W	23:59:27	25°	SW	23:59:27	25°	SW	visible
21 May	-3.2	23:07:06	10°	W	23:10:14	39°	SSW	23:11:09	31°	SSE	visible
22 May	-3.6	22:17:00	10°	WNW	22:20:17	56°	SSW	22:22:50	15°	SE	visible
22 May	-1.4	23:54:32	10°	WSW	23:55:37	13°	WSW	23:55:37	13°	WSW	visible
23 May	-2.2	23:03:56	10°	W	23:06:31	21°	SW	23:07:17	20°	SSW	visible
24 May	-2.7	22:13:35	10°	W	22:16:34	31°	SSW	22:18:58	14°	SSE	visible
25 May	-1.3	23:01:43	10°	WSW	23:02:30	11°	SW	23:03:17	10°	SSW	visible
26 May	-1.7	22:10:22	10°	W	22:12:33	17°	SW	22:14:45	10°	S	visible

**End of passes for May**