



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

Map from www.fourmilab.ch

- Earth** is at Aphelion on the 6th at 12:00 UTC when it will be 152 million km (95 million miles) from the sun.
- Lunar Phases** : Last Qtr: Jul. 4th at 14:35; New: Jul. 11th at 19:40; 1st Qtr, 18th at 10:10 and Full: Jul. 26th at 01:40.
- Apsides**: Apogee (furthest) Jul 1st 10:13, 405035 km (29' 30"); Perigee (closest) Jul 13th 11:22, 361114 km (33' 05"); and Apogee (furthest) 28th at 23:51, 405955 km (29' 26').
- Mercury** was in Superior Conjunction on the 28th ult. but will be low in the evening twilight during July. Look carefully.
- Venus** increases its elongation, at mag -4.0 during the month, but drops lower during the month. Moon is near on the 14th.
- Mars** is still visible but at mag 1.4 will not command attention. Moon is near on the 15th.
- Jupiter** rises at 00:40, with mag -2.2, low in the morning sky, and begins to retrograde on the 24th. Moon is near on the 4th & 31st.
- Saturn** is visible in the western sky after sunset and will be close to Mars (2°) on the 30th. Moon is near on the 16th.
- Uranus** rises at 22:45 mid month at mag 5.9. Moon near on the 3rd & 31st.
- Neptune**: rises at 21:45 mid-month, 5° east of mag 2.81 Delta Cap, as on the above chart. Moon is near on the 1st.
- Meteors**. Paul Money lists the Southern Delta Aquarids as this month's offering, peaking at 20mph on 28th (or 31st!).

Sunrise - set times (All times UTC.)

Jul. 01	Rise 03:53:30	Set: 20:29:27	Jul. 16	Rise: 04:08:04	Set: 20:18:55	July 31:	Rise: 04:28:48
Jul. 06	Rise 03:57:25	Set: 20:27:10	Jul. 21	Rise: 04:14:29	Set: 20:13:06		Set: 19:58:35
Jul. 11	Rise: 04:02:20	Set: 20:23:38	Jul. 26	Rise: 04:21:26	Set: 20:06:17		

Moonrise - set times

Jul. 01	Rise: 22:27:40	Set: 09:16:00	Jul. 16	Rise: 10:34:48	Set: 22:02:53	July 31:	Rise: 21:18:00
Jul. 06	Rise: 23:54:00	Set: 15:04:47	Jul. 21	Rise: 17:01:57	Set: --:--:--		Set: 10:26:42
Jul. 11	Rise: 03:21:58	Set: 20:11:15	Jul. 26	Rise: 20:03:34	Set: 04:45:25		

There is one minimum of **B Persei**, (**Algol**), (mag 2.1 to 3.4), on the 12th at 22:57. The Duration of this event is 9.6 hours and the period is 2.866 days.

RZ Cassiopeiae (mag 6.2 to 7.7) - the 4 minima visible from Britain are 12th at 00:01; 17th at 23:26; 23rd at 22:52 and 29th at 22:17. Duration of minima events is 4.8 hours and the period is 1.19525 days..

For observations of the **ISS** during the month, log-in to <http://www.heavens-above.com> The outpost began another series of passes late last month and selected (!) remaining passes are shown below:

Date	Mag	Starts			Max. altitude.			Ends		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
29 Jun	-3.6	22:43:37	10	W	22:46:33	83	NNW	22:49:30	10	ENE
30 Jun	-3.6	00:19:02	10	WNW	00:22:00	80	NNE	00:24:41	12	E
30 Jun	-3.4	23:10:16	10	W	23:13:12	70	N	23:16:08	10	E
1 Jul	-3.7	00:45:39	10	WNW	00:48:34	65	SSW	00:49:11	47	SE
1 Jul	-3.5	22:01:29	10	W	22:04:24	81	N	22:07:20	10	ENE
1 Jul	-3.6	23:36:53	10	WNW	23:39:49	83	N	23:42:22	13	E
2 Jul	-3.3	22:28:05	10	W	22:31:00	71	N	22:33:56	10	E
3 Jul	-3.6	00:03:27	10	W	00:06:21	60	SSW	00:07:13	38	SE
3 Jul	-3.6	22:54:39	10	WNW	22:57:35	86	NNE	23:00:31	10	E
4 Jul	-3.3	21:45:49	10	W	21:48:43	71	N	21:51:39	10	E
4 Jul	-3.5	23:21:11	10	W	23:24:03	55	SSW	23:25:32	25	SE
5 Jul	-3.6	22:12:19	10	WNW	22:15:15	89	WNW	22:18:11	10	ESE
5 Jul	-2.4	23:47:50	10	W	23:50:22	26	SSW	23:50:31	26	SSW
6 Jul	-3.3	22:38:49	10	W	22:41:41	51	SSW	22:43:58	14	SE
7 Jul	-3.6	21:29:55	10	WNW	21:32:51	86	S	21:35:47	10	ESE
7 Jul	-2.2	23:05:29	10	W	23:07:56	24	SSW	23:09:00	19	S
8 Jul	-3.1	21:56:23	10	W	21:59:13	47	SSW	22:02:02	10	SE
8 Jul	-1.0	23:33:19	10	SW	23:33:59	11	SW	23:34:04	11	SW

On 24th June, at 22:08 I watched as the ISS sailed 'over' the moon's disk from near my home location. I could not get to my telescope as I was not *at home* at the time, so could not actually observe the ISS in silhouette. I had gone to <http://www.calsky.com> which is a surprising resource. This site will calculate any astronomical observation you wish to make, including passes of satellites in front of the Sun and Moon. It will give the ground location for an observable pass if the phenomenon can't be seen from your home. Go and try it, log on with your home location as accurately as possible and then look at all the possibilities and options. It's amazing!

This month constellations and asterisms of Summer continue their watch with Leo, Bootes and Corona Borealis being dominant amongst others, with the 'Plough' moving round toward west of overhead at this time of year. Draco is the 'overhead' constellation this month. Look for mag 4.9 Nu Draconis in the head of Draco, (near Y on the above chart), a nice easily split double. The 'Cat's Eye' nebula NGC 6543 is also in attendance. It is a mag 8.8 planetary. The Durlston Astronomy Group meets again on **August 12th** for the Perseid Meteors, Milky Way and Summer constellations.

Solar news:

Go to <http://wattsupwiththat.com/2008/01/04/solar-cycle-24-has-officially-started/>. for info on Cycle 24. A number of folk have booked the PST Coronado H- α telescope, and hopefully are making some interesting observations. If you are using it, try making sketches of what you see or try a photo (can be tricky with the PST's focal ratio, I've found!) Get in quick to avoid disappointment. Check <http://www.spaceweather.com> for details of the latest solar activity.

And finally other delights for July:

On the 1st there will be a nice configuration of Venus, Regulus, Mars and Saturn. Venus will pass Regulus at just over 2 degrees on the 9th, and on the 13th to 16th there will be Mercury (low down), Regulus, Venus, Mars and Saturn, with the moon sidling past the line up over these 4 days. Note; Mercury may be lost in a bright dusk sky. Mars and Saturn are closest on the 31st, just east of Venus. -- Moonlight may interfere with the meteors this month - the peek date is unsure - 28th or 31st.

Good observing. Robert Hatch. - 2010 July 01.