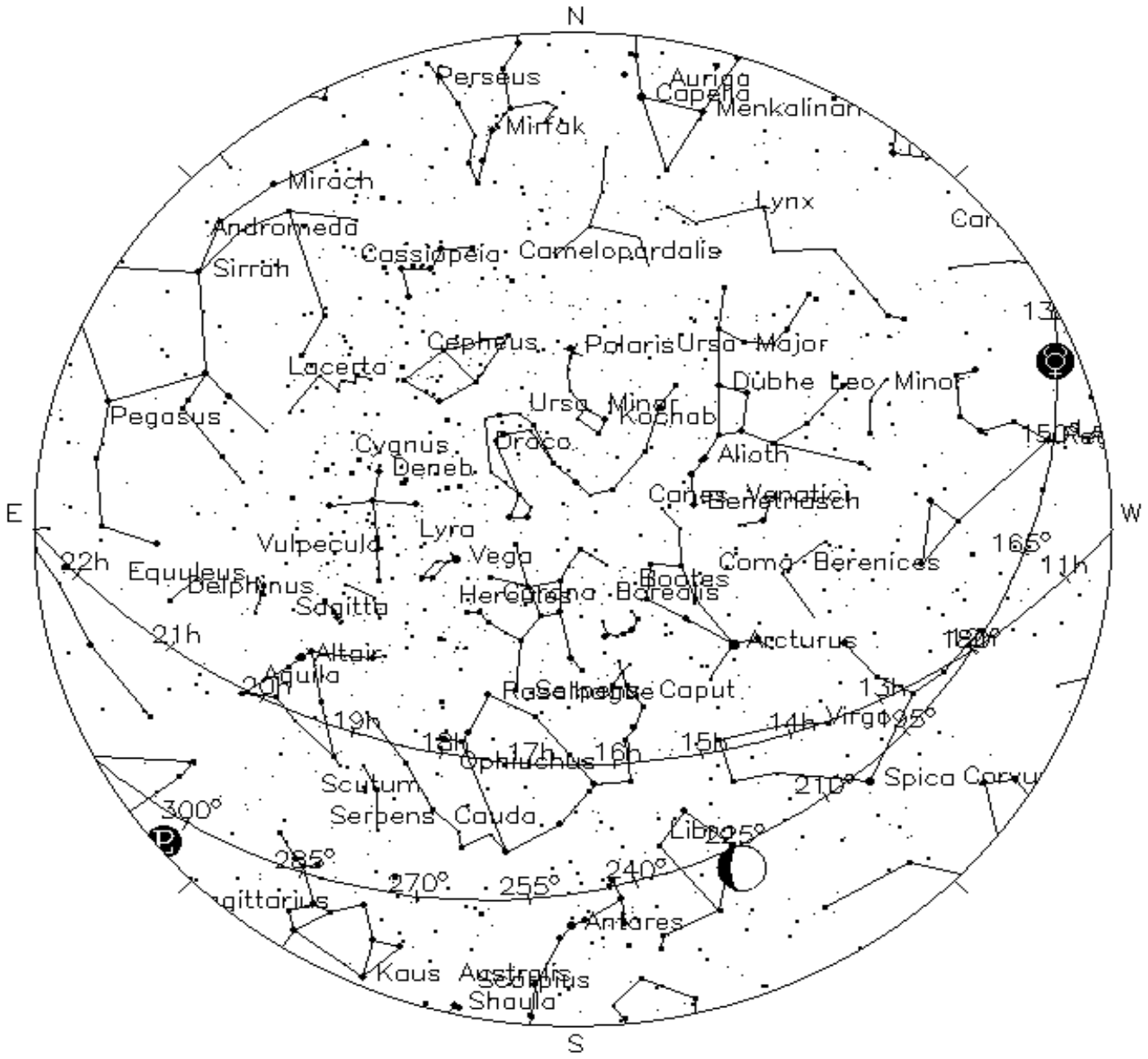
Wessex Sky Notes - 2024 July 15 at 21:00 Vol 18 No. 7



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

Chart from www.fourmilab.ch

Earth is at Aphelion, furthest from the Sun on the 5 th, at 151.2 million Km, 94.5 million miles. Poll

Lunar Phases:; New: July 5th at 22:57; First Qtr: July 13th at 22:48; Full: July 21st at 10:17 and Last Qtr July 28th at 02:51.

Apsides: Perigee (closest) July 24 at 05:40, 364917 Km, (32’ 55”); Apogee (furthest) July 12th at 08:10, 404362 Km (29’ 22”)

Mercury (☿): reaches maximum eastern elongation 26.9° on the 21st mag.0.4, but only 0.5° above the WNW horizon dusk, so not visible during this apparition.

Venus °(♀): is slowly pulling away from the Sun in the evening sky reaching eastern elongation of 15.8° by month’s end, not easily visible, but at mag.-3.9. Moon near on the 6th, academic as on this date Venus will be too close to the Sun - 9° - to be sensibly visible.

Mars (♂): moves eastward about .5 degree a day, elongation increasing from 54° to 62°, magnitude increasing from 1.0 to 0.9,.during the month. It will be 23° above the SE horizon at end of dusk on the 1st.and 40° at month’s end. The moon will be close on the 1st and 2nd .

Jupiter (♃): will reach 34°above the SE horizon by month’s end at mag.-2.1, and at elongation of 54° Moon close on the 3rd. See later for GRS timings.

Saturn (♄): is at an elongation of 123° mid-month, at mag 0.9, and is 47° above the SE horizon at month’s star, at onset of dawn. Moon is in the vicinity on the 5th.

Uranus (♅): is 10° west of Jupiter throughout the month and is exactly midway between Jupiter and Mars at month’s end, mag 5.8. Moon close on the 1st, (it makes a triangle between Mars, and Uranus).

Neptune (♆): is 8° east of Saturn throughout the month, At mag. 7.9 it will need a good binocular,, however.

Meteors: The Southern Delta Aquarids and the Alpha-Capricornid meteor ‘showers’ are this month’s offering, peaking on the 30th. and is favourable in the morning skies, moon just past last quarter, but both are minor showers, 5- 8 meteors per hour between then, if we’re lucky.

Sunrise set times: All times in UTC (note a slight adjustment to the format)

Date	Rise	Transit	Set	Date	Rise	Transit	Set
01 Jul 2024	03:59:26	12:11:59	20:24:11	21 Jul 2024	04:19:57	12:14:28	20:08:10
06 Jul 2024	04:03:21	12:12:53	20:21:55	26 Jul 2024	04:26:38	12:14:33	20:01:33
11 Jul 2024	04:08:10	12:13:37	20:18:27	31 Jul 2024	04:33:43	12:14:23	19:54:04
16 Jul 2024	04:13:44	12:14:09	20:13:50				

Moonrise set time All times in UTC (note a slight adjustment to the format)

Date	Rise	Transit	Set	Date	Rise	Transit	Set
01 Jul 2024	00:25:13	08:02:10	16:00:14	21 Jul 2024	20:52:02	--:--:--	03:35:51
06 Jul 2024	03:50:42	12:46:01	21:27:19	26 Jul 2024	22:16:07	04:20:24	10:56:55
11 Jul 2024	10:00:13	16:32:32	22:49:33	31 Jul 2024	--:--:--	08:43:51	17:48:15
16 Jul 2024	15:57:41	20:03:19	--:--:--				

B Persei, (Algol) (Mag 2.1 to 3.4) – The 2 minima are:
17th at 03:45 and 20th at 00:34;

RZ Cassiopeiae (Mag. 6.2 to 7.7) – the star is at minimum during daylight hours all month.
4th at 01:35; 10th at 01:20; 16th at 00:45; 22nd at 00:12 and 27th at 23:35.

Lambda Tauri (Mag 3.4 to 3.9) – only 1 opportunity with the star very low down in the west.
31st at 02:00 (start looking half an hour before this time)

For observation of the ISS during the month, log-in to http://www.heavens-above.com. Evening passes start on July 6th in the morning and run on through the month, with some earlier passes also shown.

The next scheduled Durlston event is planned for August. More details in August's issue. Keep a look out on the Wessex website.

Solar news

There has been 2 instances when the Kp was at 4 or higher, Kp=6 on June 7th mid-evening and Kp= 6, 7.6, 5, and 5, midday on the 27th but I did not hear of any significant effects being seen, in either case. Auroras would have been seen at some one's dark sky! 24 F

Timings for Jupiter's ***Great Red Spot (GRS):*** try for these timings between Jupiter rise and onset of dawn, a very narrow window of observation. You'll need a clear SSE horizon.

5th at 02:50; 10th at 02:00; 17th at 02:49; 22nd at 01:58; 27th at 01:08 and 29th at 02:46

Good observing Robert Hatch 01 July 2024

Passes of the ISS for July.

Edited for when passes before midnight are observed. Some earlier ones are included!

Date	Brightness	--------Start---------			---- Highest point--			----------End----------			Pass type
	(mag)	Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.	
06 Jul	-2.1	23:37:04	18°	ESE	23:37:04	18°	ESE	23:38:27	10°	E	visible
07 Jul	-4.0	01:09:50	18°	WSW	01:12:10	78°	SSE	01:15:30	10°	ENE	visible
07 Jul	-3.6	02:45:39	10°	W	02:48:59	74°	N	02:52:18	10°	E	**visible**
07 Jul	-2.1	22:47:30	15°	SE	22:47:30	15°	SE	22:49:29	10°	ESE	visible
08 Jul	-3.9	00:20:24	10°	WSW	00:23:39	60°	SSE	00:26:57	10°	ENE	visible
08 Jul	-3.6	01:57:05	10°	W	02:00:24	74°	N	02:03:44	10°	E	visible
08 Jul	-3.9	03:33:52	10°	WNW	03:37:11	73°	SSW	03:40:31	10°	ESE	visible
08 Jul	-3.5	23:32:00	10°	SW	23:35:09	43°	SSE	23:38:20	10°	E	visible
09 Jul	-3.7	01:08:28	10°	W	01:11:48	78°	N	01:15:08	10°	E	visible
09 Jul	-3.9	02:45:17	10°	WNW	02:48:37	90°	SSW	02:51:58	10°	ESE	visible
09 Jul	-2.9	04:22:11	10°	W	04:25:08	29°	SSW	04:28:05	10°	SSE	visible
09 Jul	-3.0	22:43:42	10°	SSW	22:46:40	30°	SSE	22:49:37	10°	E	visible
10 Jul	-3.9	00:19:51	10°	WSW	00:23:10	89°	NW	00:26:31	10°	ENE	visible
10 Jul	-3.7	01:56:40	10°	W	02:00:00	79°	N	02:03:20	10°	E	visible
10 Jul	-3.4	03:33:28	10°	W	03:36:38	42°	SSW	03:39:47	10°	SE	visible
10 Jul	-3.9	23:31:15	10°	WSW	23:34:32	75°	SSE	23:37:52	10°	ENE	visible
11 Jul	-3.6	01:08:01	10°	W	01:11:20	74°	N	01:14:39	10°	E	visible
11 Jul	-3.8	02:44:46	10°	WNW	02:48:03	58°	SSW	02:51:20	10°	ESE	visible
11 Jul	-2.1	04:22:17	10°	WSW	04:24:16	15°	SW	04:26:15	10°	S	visible
11 Jul	-3.8	22:42:39	10°	WSW	22:45:55	57°	SSE	22:49:10	10°	ENE	visible
12 Jul	-3.6	00:19:18	10°	W	00:22:37	74°	N	00:25:57	10°	E	visible
12 Jul	-4.0	01:56:05	10°	WNW	01:59:25	76°	SSW	02:02:44	10°	ESE	visible
12 Jul	-2.6	03:33:09	10°	W	03:35:47	22°	SW	03:38:25	10°	SSE	visible
12 Jul	-3.7	23:30:34	10°	W	23:33:53	80°	N	23:37:13	10°	E	visible
13 Jul	-3.9	01:07:22	10°	WNW	01:10:42	88°	N	01:14:02	10°	ESE	visible
13 Jul	-3.0	02:44:14	10°	W	02:46:50	30°	SW	02:46:50	30°	SW	visible
13 Jul	-3.8	22:41:49	10°	WSW	22:45:07	89°	S	22:48:28	10°	ENE	visible
14 Jul	-3.7	00:18:37	10°	W	00:21:57	78°	N	00:25:10	11°	E	visible
14 Jul	-3.2	01:55:24	10°	W	01:57:57	38°	WSW	01:57:57	38°	WSW	visible
14 Jul	-3.8	21:53:04	10°	WSW	21:56:22	72°	SSE	21:59:41	10°	ENE	visible
14 Jul	-3.6	23:29:49	10°	W	23:33:08	73°	N	23:36:28	10°	E	visible
15 Jul	-3.9	01:06:35	10°	WNW	01:09:52	61°	SSW	01:09:57	61°	SSW	visible
15 Jul	-3.6	22:40:59	10°	W	22:44:18	75°	N	22:47:37	10°	E	visible
16 Jul	-3.9	00:17:46	10°	WNW	00:21:05	79°	SSW	00:22:15	37°	ESE	visible
16 Jul	-1.3	01:54:46	10°	W	01:55:04	12°	W	01:55:04	12°	W	visible
16 Jul	-3.7	21:52:07	10°	W	21:55:26	81°	N	21:58:45	10°	E	visible
16 Jul	-3.8	23:28:55	10°	WNW	23:32:15	86°	N	23:34:40	17°	E	visible
17 Jul	-2.2	01:05:44	10°	W	01:07:29	24°	WSW	01:07:29	24°	WSW	visible
17 Jul	-3.7	22:40:01	10°	W	22:43:21	76°	N	22:46:40	10°	E	visible
18 Jul	-3.5	00:16:47	10°	W	00:19:58	47°	SSW	00:19:58	47°	SSW	visible
18 Jul	-3.6	21:51:06	10°	W	21:54:25	73°	N	21:57:43	10°	E	visible
18 Jul	-3.8	23:27:51	10°	WNW	23:31:09	65°	SSW	23:32:29	32°	SE	visible
19 Jul	-1.1	01:05:08	10°	W	01:05:19	11°	W	01:05:19	11°	W	visible
19 Jul	-3.9	22:38:54	10°	WNW	22:42:13	83°	SSW	22:45:00	14°	ESE	visible
20 Jul	-2.2	00:15:51	10°	W	00:17:50	23°	WSW	00:17:50	23°	WSW	visible
20 Jul	-3.7	21:49:55	10°	W	21:53:14	83°	N	21:56:34	10°	E	visible

Continued overleaf.

20 Jul	-3.1	23:26:43	10°	W	23:29:47	36°	SSW	23:30:23	33°	S	visible
21 Jul	-3.5	22:37:38	10°	W	22:40:52	51°	SSW	22:42:56	19°	SE	visible
22 Jul	-1.2	00:15:29	10°	WSW	00:15:47	11°	WSW	00:15:47	11°	WSW	visible
22 Jul	-3.7	21:48:34	10°	WNW	21:51:52	69°	SSW	21:55:10	10°	ESE	visible
22 Jul	-2.0	23:25:45	10°	W	23:28:10	19°	SW	23:28:20	19°	SSW	visible
23 Jul	-2.5	22:36:23	10°	W	22:39:15	27°	SSW	22:40:55	18°	SSE	visible
24 Jul	-3.0	21:47:09	10°	W	21:50:16	39°	SSW	21:53:23	10°	SE	visible
25 Jul	-1.4	22:35:34	10°	WSW	22:37:21	14°	SW	22:38:57	11°	SSW	visible
26 Jul	-1.9	21:45:50	10°	W	21:48:22	21°	SW	21:50:56	10°	SSE	visible