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What's happening

Work has started in the auditorium with the removal of the chairs and panelling around the outer walls. The last show with the Zeiss star projector on 25 June did not go as smooth as planned. The star projector fought back by blowing the main northern star bulb as the show started, Ray fixed it during the show. We finished the show just in time when load shedding kicked in. Thank you for all the support. We will update you on the renovations as things happen.



Moon Phases

First Quarter:	5 Aug
Full Moon:	12 Aug
Last Quarter:	19 Aug
New Moon:	27 Aug

Sunrise/set and Moonrise/set for Johannesburg – August 2022

Date	Day	Sunrise	Sunset	Moonrise	Moonset
		h m	h m	h m	h m
1	Mon	06:47	17:42	09:12	21:04
2	Tue	06:47	17:42	09:43	21:59
3	Wed	06:46	17:43	10:14	22:55
4	Thu	06:45	17:43	10:46	23:53
5	Fri	06:45	17:44	11:22	--:--
6	Sat	06:44	17:44	12:02	00:55
7	Sun	06:43	17:45	12:50	02:00
8	Mon	06:42	17:45	13:45	03:08
9	Tue	06:42	17:45	14:49	04:16
10	Wed	06:41	17:46	15:59	05:20
11	Thu	06:40	17:46	17:11	06:17
12	Fri	06:39	17:47	18:20	07:06
13	Sat	06:39	17:47	19:27	07:49
14	Sun	06:38	17:48	20:29	08:26
15	Mon	06:37	17:48	21:29	09:01
16	Tue	06:36	17:49	22:27	09:34
17	Wed	06:35	17:49	23:24	10:07
18	Thu	06:34	17:50	--:--	10:41
19	Fri	06:33	17:50	00:20	11:18
20	Sat	06:32	17:50	01:17	11:58
21	Sun	06:32	17:51	02:12	12:42
22	Mon	06:31	17:51	03:06	13:31
23	Tue	06:30	17:52	03:57	14:23
24	Wed	06:29	17:52	04:44	15:17
25	Thu	06:28	17:53	05:27	16:13
26	Fri	06:27	17:53	06:06	17:09
27	Sat	06:26	17:53	06:41	18:04
28	Sun	06:25	17:54	07:14	18:59
29	Mon	06:24	17:54	07:45	19:54
30	Tue	06:23	17:55	08:16	20:50
31	Wed	06:22	17:55	08:48	21:48

Data calculated using MICA, US Naval Observatory

Astronomical Events – August 2022

Date	Time	Astronomical Event
3	23:26	Spica 4.6°S of Moon
4	06:58	Mercury 0.6°N of Regulus
5	13:06	FIRST QUARTER MOON
	22:30	Moon at Descending Node
7	10:29	Antares 2.8°S of Moon
10	19:14	Moon at Perigee: 359,830 km
12	03:36	FULL MOON
	05:55	Saturn 3.9°N of Moon
13	03	Perseid Meteor Shower (Northern Hemisphere)
14	19	Saturn at Opposition (opposite the Sun as seen from Earth)
15	11:37	Jupiter 1.9°N of Moon
18	12:59	Moon at Ascending Node
19	06:36	LAST QUARTER MOON
	12:32	Pleiades 3.1°N of Moon
	14:16	Mars 2.7°S of Moon
22	23:53	Moon at Apogee: 405,419 km
23	23	Mercury at Aphelion (furthest from the Sun)
24	02:17	Pollux 2.1°N of Moon
25	22:58	Venus 4.3°S of Moon
27	10:17	NEW MOON
	18	Mercury at Greatest Elong: 27.3°E
31	04:59	Spica 4.4°S of Moon

Planetary Ephemeris Data Courtesy of Fred Espenak, www.Astropixels.com

Naked Eye Planets Rise and Set Times for Johannesburg

Date	Mercury			Venus			Mars		
	Rise	Transit	Set	Rise	Transit	Set	Rise	Transit	Set
	h m	h m	h m	h m	h m	h m	h m	h m	h m
01-Aug	07:45	13:19	18:54	05:27	10:43	16:00	01:03	06:34	12:04
08-Aug	07:52	13:35	19:20	05:33	10:52	16:11	00:56	06:24	11:52
15-Aug	07:52	13:45	19:38	05:38	11:00	16:23	00:48	06:14	11:39
22-Aug	07:47	13:48	19:51	05:41	11:08	16:35	00:40	06:03	11:27
29-Aug	07:36	13:45	19:55	05:43	11:15	16:47	00:30	05:52	11:13

Date	Jupiter			Saturn		
	Rise	Transit	Set	Rise	Transit	Set
	h m	h m	h m	h m	h m	h m
01-Aug	22:02	04:03	10:01	18:36	01:12	07:44
08-Aug	21:34	03:35	09:33	18:06	00:43	07:15
15-Aug	21:05	03:07	09:05	17:36	00:13	06:46
22-Aug	20:35	02:38	08:36	17:06	23:40	06:17
29-Aug	20:05	02:08	08:07	16:37	23:10	05:48

Data calculated using MICA, US Naval Observatory

Transit = "passage of a celestial body across an observer's meridian above the celestial pole"

Movement of Mars during August seen at 4:30 a.m.

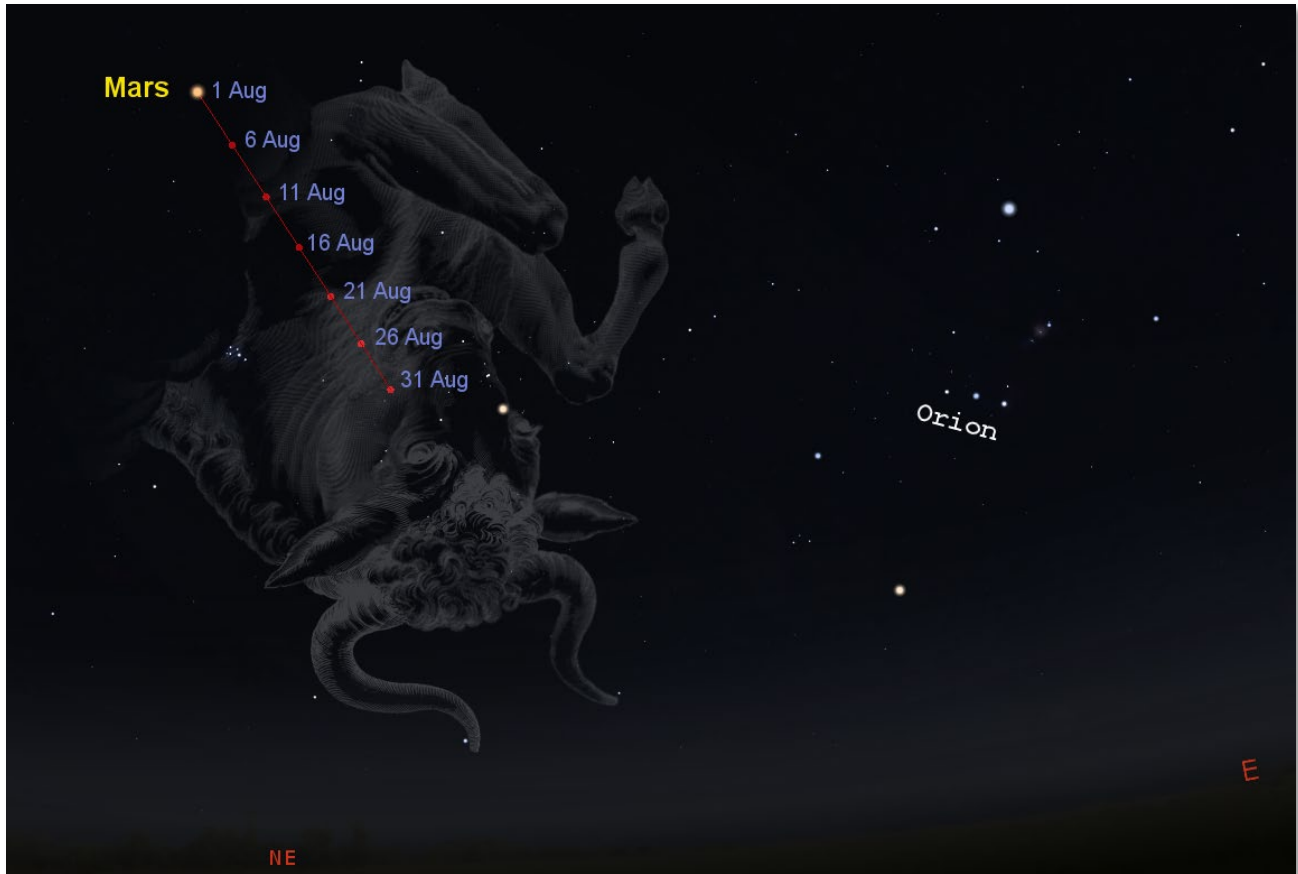


Image: Stellarium

Enjoy

Clear skies
Constant