

In this newsletter:

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What's happening (Planetarium Upgrade)

The star projector has been removed and is currently in storage. Building work commence this month.



Moon Phases

Full Moon:	5 Feb
Last Quarter:	13 Feb
New Moon:	20 Feb
First Quarter:	27 Feb

Sunrise/set and Moonrise/set for Johannesburg – February 2023

Date	Day	Sunrise		Sunset		Moonrise		Moonset	
		h	m	h	m	h	m	h	m
1	Wed	05:42	19:00	16:07	01:42				
2	Thu	05:43	18:59	16:59	02:30				
3	Fri	05:44	18:59	17:47	03:22				
4	Sat	05:45	18:58	18:30	04:16				
5	Sun	05:45	18:58	19:09	05:12				
6	Mon	05:46	18:57	19:44	06:06				
7	Tue	05:47	18:57	20:15	07:00				
8	Wed	05:48	18:56	20:45	07:53				
9	Thu	05:48	18:55	21:14	08:46				
10	Fri	05:49	18:55	21:44	09:39				
11	Sat	05:50	18:54	22:15	10:33				
12	Sun	05:50	18:53	22:50	11:30				
13	Mon	05:51	18:53	23:30	12:30				
14	Tue	05:52	18:52	--:--	13:33				
15	Wed	05:53	18:51	00:16	14:39				
16	Thu	05:53	18:50	01:12	15:45				
17	Fri	05:54	18:49	02:15	16:48				
18	Sat	05:55	18:49	03:25	17:44				
19	Sun	05:55	18:48	04:38	18:33				
20	Mon	05:56	18:47	05:49	19:15				
21	Tue	05:56	18:46	06:58	19:53				
22	Wed	05:57	18:45	08:03	20:29				
23	Thu	05:58	18:44	09:05	21:03				
24	Fri	05:58	18:43	10:06	21:38				
25	Sat	05:59	18:43	11:06	22:14				
26	Sun	06:00	18:42	12:06	22:54				
27	Mon	06:00	18:41	13:04	23:37				
28	Tue	06:01	18:40	14:01	--:--				

Data calculated using MICA, US Naval Observatory

Astronomical Events – February 2023

Date	Time	Astronomical Event
3	21:47	Pollux 1.9°N of Moon
4	10:55	Moon at Apogee: 406,476 km
5	20:29	FULL MOON
6	19:44	Regulus 4.5°S of Moon
11	06:23	Spica 3.6°S of Moon
12	09:31	Moon at Descending Node
13	18:01	LAST QUARTER MOON
14	20:09	Antares 1.9°S of Moon
15	22	Mercury at Aphelion
16	18	Saturn in Conjunction with Sun
18	22:53	Mercury 3.6°N of Moon
19	11:06	Moon at Perigee: 358,267 km
20	09:06	NEW MOON
22	09:57	Venus 2.1°N of Moon
	23:58	Jupiter 1.2°N of Moon: Occn.
24	20:56	Moon at Ascending Node
26	16:42	Pleiades 2.1°N of Moon
27	10:06	FIRST QUARTER MOON
28	06:32	Mars 1.1°S of Moon: Occn.

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-Feb	03:49	10:38	17:26	07:34	13:58	20:21	14:45	19:55	01:08
06-Feb	03:55	10:43	17:31	07:43	14:02	20:20	14:31	19:40	00:53
11-Feb	04:05	10:52	17:39	07:51	14:05	20:18	14:17	19:27	00:39
16-Feb	04:18	11:02	17:46	07:59	14:07	20:16	14:05	19:14	00:26
21-Feb	04:33	11:14	17:54	08:07	14:10	20:13	13:53	19:02	00:13
26-Feb	04:50	11:26	18:01	08:14	14:13	20:11	13:42	18:51	00:01

Date	Jupiter			Saturn		
	Rise	Transit	Set	Rise	Transit	Set
	h m	h m	h m	h m	h m	h m
01-Feb	09:47	15:46	21:45	06:47	13:17	19:47
06-Feb	09:32	15:30	21:28	06:30	12:59	19:29
11-Feb	09:17	15:14	21:12	06:13	12:42	19:11
16-Feb	09:02	14:58	20:55	05:56	12:25	18:53
21-Feb	08:47	14:43	20:38	05:39	12:07	18:36
26-Feb	08:32	14:27	20:22	05:22	11:50	18:18

Data calculated using MICA, US Naval Observatory

Comet C/2022 E3 (ZTF)

Date	RA (J2000)	Dec (J2000)	Rise	Transit	Set
04/02/2023	5h19m46.0s	+53°25'58.4"	17:18:08	20:30:33	23:54:01
05/02/2023	5h10m27.0s	+47°53'23.1"	16:30:55	20:17:20	00:12:21
06/02/2023	5h03m38.0s	+42°47'03.8"	15:56:23	20:06:35	00:23:38
07/02/2023	4h58m28.4s	+38°09'08.4"	15:29:34	19:57:28	00:30:57
08/02/2023	4h54m27.9s	+33°59'26.5"	15:07:51	19:49:30	00:35:47
09/02/2023	4h51m17.5s	+30°16'23.8"	14:49:43	19:42:22	00:38:56
10/02/2023	4h48m44.3s	+26°57'42.9"	14:34:11	19:35:51	00:40:52
11/02/2023	4h46m39.7s	+24°00'50.7"	14:20:38	19:29:49	00:41:54
12/02/2023	4h44m57.5s	+21°23'15.1"	14:08:36	19:24:10	00:42:15
13/02/2023	4h43m33.3s	+19°02'33.7"	13:57:46	19:18:48	00:42:04
14/02/2023	4h42m23.6s	+16°56'38.1"	13:47:54	19:13:42	00:41:27
15/02/2023	4h41m26.0s	+15°03'34.9"	13:38:49	19:08:47	00:40:30
16/02/2023	4h40m38.5s	+13°21'45.5"	13:30:24	19:04:03	00:39:16
17/02/2023	4h39m59.4s	+11°49'44.4"	13:22:32	18:59:27	00:37:47
18/02/2023	4h39m27.7s	+10°26'18.4"	13:15:08	18:54:59	00:36:07
19/02/2023	4h39m02.3s	+9°10'24.3"	13:08:07	18:50:37	00:34:16
20/02/2023	4h38m42.4s	+8°01'07.9"	13:01:27	18:46:20	00:32:17
21/02/2023	4h38m27.3s	+6°57'42.7"	12:55:05	18:42:08	00:30:11
22/02/2023	4h38m16.5s	+5°59'28.4"	12:48:59	18:38:01	00:27:58
23/02/2023	4h38m09.5s	+5°05'50.3"	12:43:06	18:33:58	00:25:39
24/02/2023	4h38m05.8s	+4°16'18.4"	12:37:25	18:29:57	00:23:16
25/02/2023	4h38m05.3s	+3°30'26.5"	12:31:55	18:26:00	00:20:49
26/02/2023	4h38m07.5s	+2°47'51.9"	12:26:35	18:22:06	00:18:18
27/02/2023	4h38m12.2s	+2°08'14.8"	12:21:23	18:18:15	00:15:43
28/02/2023	4h38m19.2s	+1°31'17.7"	12:16:19	18:14:25	00:13:06

Data from Stellarium

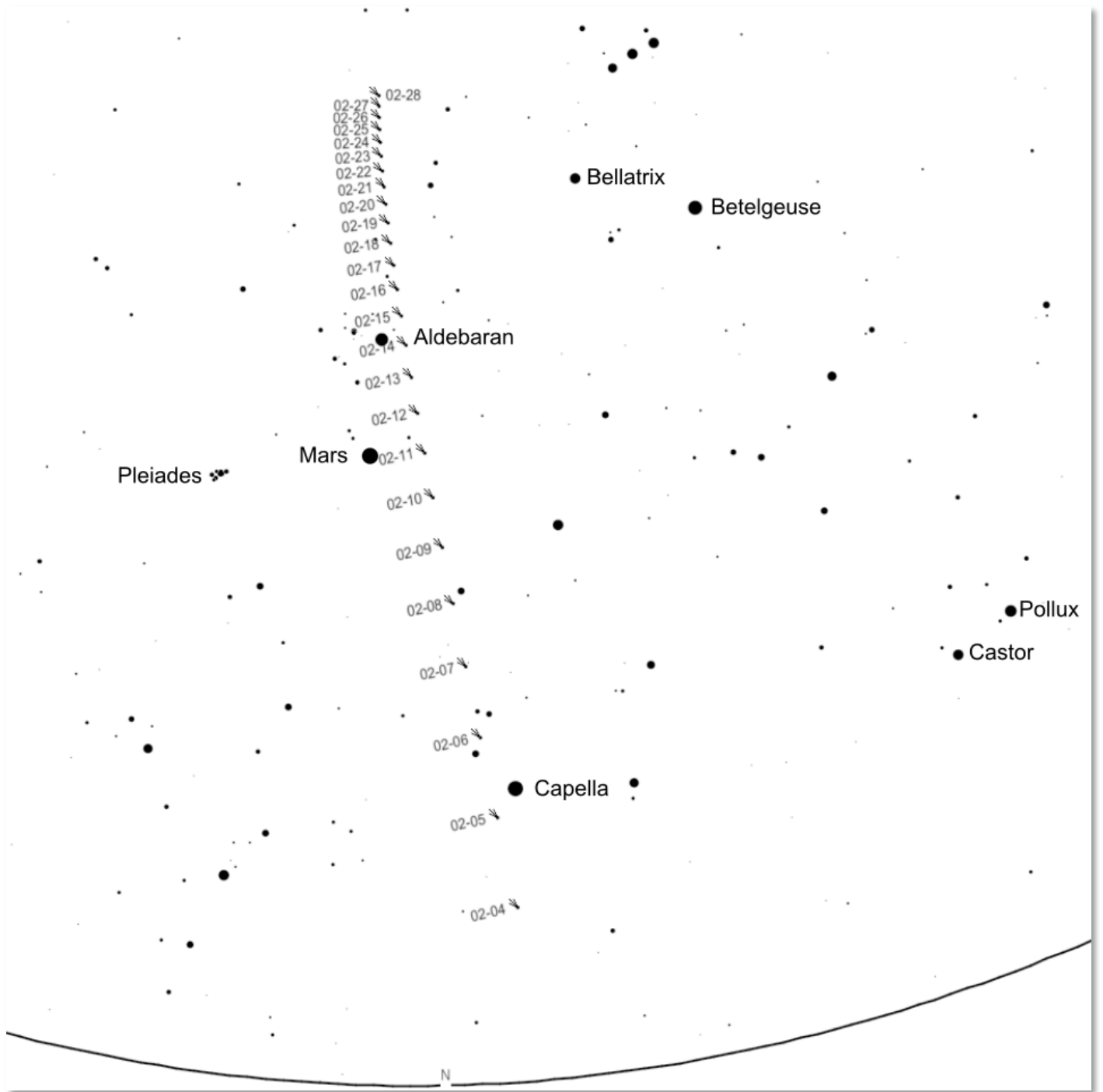


Image: Cartes du Ciel

Enjoy

Clear skies
Constant