



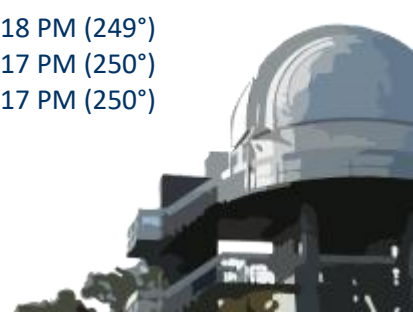
Sun Rise/Set for Perth, Australia for 2023

(latitude -31:57:08.3, longitude 115:51:31.4)

For rise and set times, the numbers in brackets are the azimuth (compass bearing) of the Sun at rise or set. Transit time is the instant at which the Sun crosses the zenith and reaches its highest angle above the horizon. The number in brackets is the direction (n or s) and angle above the horizon at the transit time.

Calculated by timeanddate.com and endorsed by Perth Observatory

Date	Rise (Azm)	Transit (Alt)	Set (Azm)
01/01/2023	5:13 AM (118°)	12:19 PM (N 81.1°)	7:25 PM (242°)
02/01/2023	5:14 AM (118°)	12:20 PM (N 81.0°)	7:26 PM (242°)
03/01/2023	5:15 AM (118°)	12:20 PM (N 80.9°)	7:26 PM (242°)
04/01/2023	5:15 AM (118°)	12:21 PM (N 80.8°)	7:26 PM (242°)
05/01/2023	5:16 AM (118°)	12:21 PM (N 80.7°)	7:26 PM (242°)
06/01/2023	5:17 AM (117°)	12:22 PM (N 80.6°)	7:26 PM (243°)
07/01/2023	5:18 AM (117°)	12:22 PM (N 80.5°)	7:26 PM (243°)
08/01/2023	5:19 AM (117°)	12:22 PM (N 80.3°)	7:26 PM (243°)
09/01/2023	5:19 AM (117°)	12:23 PM (N 80.2°)	7:26 PM (243°)
10/01/2023	5:20 AM (117°)	12:23 PM (N 80.0°)	7:26 PM (243°)
11/01/2023	5:21 AM (117°)	12:24 PM (N 79.9°)	7:26 PM (243°)
12/01/2023	5:22 AM (116°)	12:24 PM (N 79.7°)	7:26 PM (244°)
13/01/2023	5:23 AM (116°)	12:24 PM (N 79.6°)	7:26 PM (244°)
14/01/2023	5:24 AM (116°)	12:25 PM (N 79.4°)	7:26 PM (244°)
15/01/2023	5:25 AM (116°)	12:25 PM (N 79.2°)	7:25 PM (244°)
16/01/2023	5:26 AM (116°)	12:26 PM (N 79.0°)	7:25 PM (245°)
17/01/2023	5:26 AM (115°)	12:26 PM (N 78.8°)	7:25 PM (245°)
18/01/2023	5:27 AM (115°)	12:26 PM (N 78.7°)	7:25 PM (245°)
19/01/2023	5:28 AM (115°)	12:27 PM (N 78.4°)	7:24 PM (245°)
20/01/2023	5:29 AM (115°)	12:27 PM (N 78.2°)	7:24 PM (246°)
21/01/2023	5:30 AM (114°)	12:27 PM (N 78.0°)	7:24 PM (246°)
22/01/2023	5:31 AM (114°)	12:27 PM (N 77.8°)	7:23 PM (246°)
23/01/2023	5:32 AM (114°)	12:28 PM (N 77.6°)	7:23 PM (246°)
24/01/2023	5:33 AM (114°)	12:28 PM (N 77.3°)	7:23 PM (247°)
25/01/2023	5:34 AM (113°)	12:28 PM (N 77.1°)	7:22 PM (247°)
26/01/2023	5:35 AM (113°)	12:28 PM (N 76.8°)	7:22 PM (247°)
27/01/2023	5:36 AM (113°)	12:29 PM (N 76.6°)	7:21 PM (248°)
28/01/2023	5:37 AM (112°)	12:29 PM (N 76.3°)	7:20 PM (248°)
29/01/2023	5:38 AM (112°)	12:29 PM (N 76.1°)	7:20 PM (248°)
30/01/2023	5:39 AM (112°)	12:29 PM (N 75.8°)	7:19 PM (248°)
31/01/2023	5:40 AM (111°)	12:29 PM (N 75.5°)	7:19 PM (249°)
01/02/2023	5:41 AM (111°)	12:30 PM (N 75.2°)	7:18 PM (249°)
02/02/2023	5:42 AM (111°)	12:30 PM (N 74.9°)	7:17 PM (250°)
03/02/2023	5:42 AM (110°)	12:30 PM (N 74.7°)	7:17 PM (250°)





04/02/2023	5:43 AM (110°)	12:30 PM (N 74.4°)	7:16 PM (250°)
05/02/2023	5:44 AM (110°)	12:30 PM (N 74.1°)	7:15 PM (251°)
06/02/2023	5:45 AM (109°)	12:30 PM (N 73.8°)	7:14 PM (251°)
07/02/2023	5:46 AM (109°)	12:30 PM (N 73.4°)	7:14 PM (251°)
08/02/2023	5:47 AM (109°)	12:30 PM (N 73.1°)	7:13 PM (252°)
09/02/2023	5:48 AM (108°)	12:30 PM (N 72.8°)	7:12 PM (252°)
10/02/2023	5:49 AM (108°)	12:30 PM (N 72.5°)	7:11 PM (252°)
11/02/2023	5:50 AM (107°)	12:30 PM (N 72.2°)	7:10 PM (253°)
12/02/2023	5:51 AM (107°)	12:30 PM (N 71.8°)	7:09 PM (253°)
13/02/2023	5:52 AM (107°)	12:30 PM (N 71.5°)	7:08 PM (254°)
14/02/2023	5:52 AM (106°)	12:30 PM (N 71.2°)	7:07 PM (254°)
15/02/2023	5:53 AM (106°)	12:30 PM (N 70.8°)	7:07 PM (254°)
16/02/2023	5:54 AM (105°)	12:30 PM (N 70.5°)	7:06 PM (255°)
17/02/2023	5:55 AM (105°)	12:30 PM (N 70.1°)	7:05 PM (255°)
18/02/2023	5:56 AM (105°)	12:30 PM (N 69.8°)	7:04 PM (256°)
19/02/2023	5:57 AM (104°)	12:30 PM (N 69.4°)	7:03 PM (256°)
20/02/2023	5:58 AM (104°)	12:30 PM (N 69.1°)	7:01 PM (257°)
21/02/2023	5:58 AM (103°)	12:30 PM (N 68.7°)	7:00 PM (257°)
22/02/2023	5:59 AM (103°)	12:30 PM (N 68.4°)	6:59 PM (257°)
23/02/2023	6:00 AM (102°)	12:29 PM (N 68.0°)	6:58 PM (258°)
24/02/2023	6:01 AM (102°)	12:29 PM (N 67.6°)	6:57 PM (258°)
25/02/2023	6:02 AM (102°)	12:29 PM (N 67.3°)	6:56 PM (259°)
26/02/2023	6:03 AM (101°)	12:29 PM (N 66.9°)	6:55 PM (259°)
27/02/2023	6:03 AM (101°)	12:29 PM (N 66.5°)	6:54 PM (260°)
28/02/2023	6:04 AM (100°)	12:29 PM (N 66.1°)	6:53 PM (260°)
01/03/2023	6:05 AM (100°)	12:28 PM (N 65.8°)	6:51 PM (261°)
02/03/2023	6:06 AM (99°)	12:28 PM (N 65.4°)	6:50 PM (261°)
03/03/2023	6:06 AM (99°)	12:28 PM (N 65.0°)	6:49 PM (261°)
04/03/2023	6:07 AM (98°)	12:28 PM (N 64.6°)	6:48 PM (262°)
05/03/2023	6:08 AM (98°)	12:28 PM (N 64.2°)	6:47 PM (262°)
06/03/2023	6:09 AM (97°)	12:27 PM (N 63.8°)	6:46 PM (263°)
07/03/2023	6:10 AM (97°)	12:27 PM (N 63.4°)	6:44 PM (263°)
08/03/2023	6:10 AM (97°)	12:27 PM (N 63.1°)	6:43 PM (264°)
09/03/2023	6:11 AM (96°)	12:27 PM (N 62.7°)	6:42 PM (264°)
10/03/2023	6:12 AM (96°)	12:26 PM (N 62.3°)	6:41 PM (265°)
11/03/2023	6:12 AM (95°)	12:26 PM (N 61.9°)	6:39 PM (265°)
12/03/2023	6:13 AM (95°)	12:26 PM (N 61.5°)	6:38 PM (266°)
13/03/2023	6:14 AM (94°)	12:26 PM (N 61.1°)	6:37 PM (266°)
14/03/2023	6:15 AM (94°)	12:25 PM (N 60.7°)	6:36 PM (266°)
15/03/2023	6:15 AM (93°)	12:25 PM (N 60.3°)	6:34 PM (267°)
16/03/2023	6:16 AM (93°)	12:25 PM (N 59.9°)	6:33 PM (267°)
17/03/2023	6:17 AM (92°)	12:25 PM (N 59.5°)	6:32 PM (268°)
18/03/2023	6:17 AM (92°)	12:24 PM (N 59.1°)	6:31 PM (268°)
19/03/2023	6:18 AM (91°)	12:24 PM (N 58.7°)	6:29 PM (269°)
20/03/2023	6:19 AM (91°)	12:24 PM (N 58.3°)	6:28 PM (269°)
21/03/2023	6:20 AM (91°)	12:23 PM (N 57.9°)	6:27 PM (270°)
22/03/2023	6:20 AM (90°)	12:23 PM (N 57.5°)	6:25 PM (270°)





23/03/2023	6:21 AM (90°)	12:23 PM (N 57.1°)	6:24 PM (271°)
24/03/2023	6:22 AM (89°)	12:22 PM (N 56.8°)	6:23 PM (271°)
25/03/2023	6:22 AM (89°)	12:22 PM (N 56.4°)	6:22 PM (272°)
26/03/2023	6:23 AM (88°)	12:22 PM (N 56.0°)	6:20 PM (272°)
27/03/2023	6:24 AM (88°)	12:22 PM (N 55.6°)	6:19 PM (273°)
28/03/2023	6:24 AM (87°)	12:21 PM (N 55.2°)	6:18 PM (273°)
29/03/2023	6:25 AM (87°)	12:21 PM (N 54.8°)	6:16 PM (273°)
30/03/2023	6:26 AM (86°)	12:21 PM (N 54.4°)	6:15 PM (274°)
31/03/2023	6:26 AM (86°)	12:20 PM (N 54.0°)	6:14 PM (274°)

01/04/2023	6:27 AM (85°)	12:20 PM (N 53.6°)	6:13 PM (275°)
02/04/2023	6:28 AM (85°)	12:20 PM (N 53.2°)	6:11 PM (275°)
03/04/2023	6:28 AM (85°)	12:19 PM (N 52.9°)	6:10 PM (276°)
04/04/2023	6:29 AM (84°)	12:19 PM (N 52.5°)	6:09 PM (276°)
05/04/2023	6:30 AM (84°)	12:19 PM (N 52.1°)	6:08 PM (277°)
06/04/2023	6:30 AM (83°)	12:19 PM (N 51.7°)	6:06 PM (277°)
07/04/2023	6:31 AM (83°)	12:18 PM (N 51.3°)	6:05 PM (278°)
08/04/2023	6:32 AM (82°)	12:18 PM (N 51.0°)	6:04 PM (278°)
09/04/2023	6:32 AM (82°)	12:18 PM (N 50.6°)	6:03 PM (278°)
10/04/2023	6:33 AM (81°)	12:18 PM (N 50.2°)	6:01 PM (279°)
11/04/2023	6:34 AM (81°)	12:17 PM (N 49.9°)	6:00 PM (279°)
12/04/2023	6:34 AM (81°)	12:17 PM (N 49.5°)	5:59 PM (280°)
13/04/2023	6:35 AM (80°)	12:17 PM (N 49.1°)	5:58 PM (280°)
14/04/2023	6:36 AM (80°)	12:16 PM (N 48.8°)	5:57 PM (281°)
15/04/2023	6:36 AM (79°)	12:16 PM (N 48.4°)	5:56 PM (281°)
16/04/2023	6:37 AM (79°)	12:16 PM (N 48.0°)	5:54 PM (281°)
17/04/2023	6:38 AM (78°)	12:16 PM (N 47.7°)	5:53 PM (282°)
18/04/2023	6:39 AM (78°)	12:16 PM (N 47.3°)	5:52 PM (282°)
19/04/2023	6:39 AM (78°)	12:15 PM (N 47.0°)	5:51 PM (283°)
20/04/2023	6:40 AM (77°)	12:15 PM (N 46.6°)	5:50 PM (283°)
21/04/2023	6:41 AM (77°)	12:15 PM (N 46.3°)	5:49 PM (283°)
22/04/2023	6:41 AM (76°)	12:15 PM (N 46.0°)	5:48 PM (284°)
23/04/2023	6:42 AM (76°)	12:14 PM (N 45.6°)	5:47 PM (284°)
24/04/2023	6:43 AM (76°)	12:14 PM (N 45.3°)	5:46 PM (285°)
25/04/2023	6:43 AM (75°)	12:14 PM (N 45.0°)	5:45 PM (285°)
26/04/2023	6:44 AM (75°)	12:14 PM (N 44.6°)	5:44 PM (285°)
27/04/2023	6:45 AM (74°)	12:14 PM (N 44.3°)	5:43 PM (286°)
28/04/2023	6:45 AM (74°)	12:14 PM (N 44.0°)	5:42 PM (286°)
29/04/2023	6:46 AM (74°)	12:14 PM (N 43.7°)	5:41 PM (287°)
30/04/2023	6:47 AM (73°)	12:13 PM (N 43.4°)	5:40 PM (287°)

01/05/2023	6:47 AM (73°)	12:13 PM (N 43.1°)	5:39 PM (287°)
02/05/2023	6:48 AM (73°)	12:13 PM (N 42.8°)	5:38 PM (288°)
03/05/2023	6:49 AM (72°)	12:13 PM (N 42.5°)	5:37 PM (288°)
04/05/2023	6:50 AM (72°)	12:13 PM (N 42.2°)	5:36 PM (288°)
05/05/2023	6:50 AM (71°)	12:13 PM (N 41.9°)	5:35 PM (289°)
06/05/2023	6:51 AM (71°)	12:13 PM (N 41.6°)	5:34 PM (289°)
07/05/2023	6:52 AM (71°)	12:13 PM (N 41.3°)	5:33 PM (289°)





08/05/2023	6:52 AM (70°)	12:13 PM (N 41.1°)	5:33 PM (290°)
09/05/2023	6:53 AM (70°)	12:13 PM (N 40.8°)	5:32 PM (290°)
10/05/2023	6:54 AM (70°)	12:12 PM (N 40.5°)	5:31 PM (290°)
11/05/2023	6:54 AM (69°)	12:12 PM (N 40.3°)	5:30 PM (291°)
12/05/2023	6:55 AM (69°)	12:12 PM (N 40.0°)	5:30 PM (291°)
13/05/2023	6:56 AM (69°)	12:12 PM (N 39.8°)	5:29 PM (291°)
14/05/2023	6:56 AM (69°)	12:12 PM (N 39.5°)	5:28 PM (292°)
15/05/2023	6:57 AM (68°)	12:12 PM (N 39.3°)	5:27 PM (292°)
16/05/2023	6:58 AM (68°)	12:12 PM (N 39.0°)	5:27 PM (292°)
17/05/2023	6:58 AM (68°)	12:12 PM (N 38.8°)	5:26 PM (292°)
18/05/2023	6:59 AM (67°)	12:12 PM (N 38.6°)	5:26 PM (293°)
19/05/2023	7:00 AM (67°)	12:13 PM (N 38.4°)	5:25 PM (293°)
20/05/2023	7:00 AM (67°)	12:13 PM (N 38.1°)	5:24 PM (293°)
21/05/2023	7:01 AM (67°)	12:13 PM (N 37.9°)	5:24 PM (293°)
22/05/2023	7:02 AM (66°)	12:13 PM (N 37.7°)	5:23 PM (294°)
23/05/2023	7:02 AM (66°)	12:13 PM (N 37.5°)	5:23 PM (294°)
24/05/2023	7:03 AM (66°)	12:13 PM (N 37.4°)	5:22 PM (294°)
25/05/2023	7:04 AM (66°)	12:13 PM (N 37.2°)	5:22 PM (294°)
26/05/2023	7:04 AM (66°)	12:13 PM (N 37.0°)	5:22 PM (295°)
27/05/2023	7:05 AM (65°)	12:13 PM (N 36.8°)	5:21 PM (295°)
28/05/2023	7:06 AM (65°)	12:13 PM (N 36.7°)	5:21 PM (295°)
29/05/2023	7:06 AM (65°)	12:13 PM (N 36.5°)	5:21 PM (295°)
30/05/2023	7:07 AM (65°)	12:14 PM (N 36.3°)	5:20 PM (295°)
31/05/2023	7:07 AM (65°)	12:14 PM (N 36.2°)	5:20 PM (296°)
01/06/2023	7:08 AM (64°)	12:14 PM (N 36.1°)	5:20 PM (296°)
02/06/2023	7:08 AM (64°)	12:14 PM (N 35.9°)	5:19 PM (296°)
03/06/2023	7:09 AM (64°)	12:14 PM (N 35.8°)	5:19 PM (296°)
04/06/2023	7:09 AM (64°)	12:14 PM (N 35.7°)	5:19 PM (296°)
05/06/2023	7:10 AM (64°)	12:14 PM (N 35.6°)	5:19 PM (296°)
06/06/2023	7:10 AM (64°)	12:15 PM (N 35.4°)	5:19 PM (296°)
07/06/2023	7:11 AM (64°)	12:15 PM (N 35.3°)	5:19 PM (297°)
08/06/2023	7:11 AM (63°)	12:15 PM (N 35.2°)	5:19 PM (297°)
09/06/2023	7:12 AM (63°)	12:15 PM (N 35.2°)	5:18 PM (297°)
10/06/2023	7:12 AM (63°)	12:15 PM (N 35.1°)	5:18 PM (297°)
11/06/2023	7:13 AM (63°)	12:16 PM (N 35.0°)	5:18 PM (297°)
12/06/2023	7:13 AM (63°)	12:16 PM (N 34.9°)	5:18 PM (297°)
13/06/2023	7:14 AM (63°)	12:16 PM (N 34.9°)	5:18 PM (297°)
14/06/2023	7:14 AM (63°)	12:16 PM (N 34.8°)	5:18 PM (297°)
15/06/2023	7:14 AM (63°)	12:16 PM (N 34.8°)	5:19 PM (297°)
16/06/2023	7:15 AM (63°)	12:17 PM (N 34.7°)	5:19 PM (297°)
17/06/2023	7:15 AM (63°)	12:17 PM (N 34.7°)	5:19 PM (297°)
18/06/2023	7:15 AM (63°)	12:17 PM (N 34.7°)	5:19 PM (297°)
19/06/2023	7:16 AM (63°)	12:17 PM (N 34.6°)	5:19 PM (297°)
20/06/2023	7:16 AM (63°)	12:18 PM (N 34.6°)	5:19 PM (297°)
21/06/2023	7:16 AM (63°)	12:18 PM (N 34.6°)	5:19 PM (297°)
22/06/2023	7:16 AM (63°)	12:18 PM (N 34.6°)	5:20 PM (297°)
23/06/2023	7:17 AM (63°)	12:18 PM (N 34.6°)	5:20 PM (297°)





24/06/2023	7:17 AM (63°)	12:18 PM (N 34.7°)	5:20 PM (297°)
25/06/2023	7:17 AM (63°)	12:19 PM (N 34.7°)	5:20 PM (297°)
26/06/2023	7:17 AM (63°)	12:19 PM (N 34.7°)	5:21 PM (297°)
27/06/2023	7:17 AM (63°)	12:19 PM (N 34.7°)	5:21 PM (297°)
28/06/2023	7:17 AM (63°)	12:19 PM (N 34.8°)	5:21 PM (297°)
29/06/2023	7:17 AM (63°)	12:19 PM (N 34.8°)	5:22 PM (297°)
30/06/2023	7:17 AM (63°)	12:20 PM (N 34.9°)	5:22 PM (297°)
01/07/2023	7:17 AM (63°)	12:20 PM (N 34.9°)	5:23 PM (297°)
02/07/2023	7:17 AM (63°)	12:20 PM (N 35.0°)	5:23 PM (297°)
03/07/2023	7:17 AM (63°)	12:20 PM (N 35.1°)	5:23 PM (297°)
04/07/2023	7:17 AM (63°)	12:20 PM (N 35.2°)	5:24 PM (297°)
05/07/2023	7:17 AM (63°)	12:21 PM (N 35.3°)	5:24 PM (297°)
06/07/2023	7:17 AM (63°)	12:21 PM (N 35.4°)	5:25 PM (296°)
07/07/2023	7:17 AM (64°)	12:21 PM (N 35.5°)	5:25 PM (296°)
08/07/2023	7:17 AM (64°)	12:21 PM (N 35.6°)	5:26 PM (296°)
09/07/2023	7:17 AM (64°)	12:21 PM (N 35.7°)	5:26 PM (296°)
10/07/2023	7:16 AM (64°)	12:21 PM (N 35.8°)	5:27 PM (296°)
11/07/2023	7:16 AM (64°)	12:22 PM (N 35.9°)	5:27 PM (296°)
12/07/2023	7:16 AM (64°)	12:22 PM (N 36.1°)	5:28 PM (296°)
13/07/2023	7:16 AM (64°)	12:22 PM (N 36.2°)	5:28 PM (295°)
14/07/2023	7:15 AM (65°)	12:22 PM (N 36.3°)	5:29 PM (295°)
15/07/2023	7:15 AM (65°)	12:22 PM (N 36.5°)	5:29 PM (295°)
16/07/2023	7:15 AM (65°)	12:22 PM (N 36.7°)	5:30 PM (295°)
17/07/2023	7:14 AM (65°)	12:22 PM (N 36.8°)	5:31 PM (295°)
18/07/2023	7:14 AM (65°)	12:22 PM (N 37.0°)	5:31 PM (294°)
19/07/2023	7:13 AM (66°)	12:22 PM (N 37.2°)	5:32 PM (294°)
20/07/2023	7:13 AM (66°)	12:22 PM (N 37.4°)	5:32 PM (294°)
21/07/2023	7:12 AM (66°)	12:23 PM (N 37.5°)	5:33 PM (294°)
22/07/2023	7:12 AM (66°)	12:23 PM (N 37.7°)	5:34 PM (294°)
23/07/2023	7:11 AM (67°)	12:23 PM (N 37.9°)	5:34 PM (293°)
24/07/2023	7:11 AM (67°)	12:23 PM (N 38.1°)	5:35 PM (293°)
25/07/2023	7:10 AM (67°)	12:23 PM (N 38.4°)	5:35 PM (293°)
26/07/2023	7:10 AM (67°)	12:23 PM (N 38.6°)	5:36 PM (293°)
27/07/2023	7:09 AM (68°)	12:23 PM (N 38.8°)	5:37 PM (292°)
28/07/2023	7:08 AM (68°)	12:23 PM (N 39.0°)	5:37 PM (292°)
29/07/2023	7:08 AM (68°)	12:23 PM (N 39.3°)	5:38 PM (292°)
30/07/2023	7:07 AM (68°)	12:23 PM (N 39.5°)	5:39 PM (291°)
31/07/2023	7:06 AM (69°)	12:23 PM (N 39.7°)	5:39 PM (291°)
01/08/2023	7:05 AM (69°)	12:22 PM (N 40.0°)	5:40 PM (291°)
02/08/2023	7:05 AM (69°)	12:22 PM (N 40.2°)	5:40 PM (291°)
03/08/2023	7:04 AM (70°)	12:22 PM (N 40.5°)	5:41 PM (290°)
04/08/2023	7:03 AM (70°)	12:22 PM (N 40.7°)	5:42 PM (290°)
05/08/2023	7:02 AM (70°)	12:22 PM (N 41.0°)	5:42 PM (290°)
06/08/2023	7:01 AM (71°)	12:22 PM (N 41.3°)	5:43 PM (289°)
07/08/2023	7:01 AM (71°)	12:22 PM (N 41.6°)	5:44 PM (289°)
08/08/2023	7:00 AM (71°)	12:22 PM (N 41.8°)	5:44 PM (289°)





09/08/2023	6:59 AM (72°)	12:22 PM (N 42.1°)	5:45 PM (288°)
10/08/2023	6:58 AM (72°)	12:22 PM (N 42.4°)	5:46 PM (288°)
11/08/2023	6:57 AM (72°)	12:21 PM (N 42.7°)	5:46 PM (288°)
12/08/2023	6:56 AM (73°)	12:21 PM (N 43.0°)	5:47 PM (287°)
13/08/2023	6:55 AM (73°)	12:21 PM (N 43.3°)	5:47 PM (287°)
14/08/2023	6:54 AM (73°)	12:21 PM (N 43.6°)	5:48 PM (286°)
15/08/2023	6:53 AM (74°)	12:21 PM (N 43.9°)	5:49 PM (286°)
16/08/2023	6:52 AM (74°)	12:20 PM (N 44.2°)	5:49 PM (286°)
17/08/2023	6:51 AM (74°)	12:20 PM (N 44.6°)	5:50 PM (285°)
18/08/2023	6:50 AM (75°)	12:20 PM (N 44.9°)	5:51 PM (285°)
19/08/2023	6:49 AM (75°)	12:20 PM (N 45.2°)	5:51 PM (285°)
20/08/2023	6:48 AM (76°)	12:20 PM (N 45.5°)	5:52 PM (284°)
21/08/2023	6:47 AM (76°)	12:19 PM (N 45.9°)	5:53 PM (284°)
22/08/2023	6:46 AM (76°)	12:19 PM (N 46.2°)	5:53 PM (283°)
23/08/2023	6:44 AM (77°)	12:19 PM (N 46.5°)	5:54 PM (283°)
24/08/2023	6:43 AM (77°)	12:19 PM (N 46.9°)	5:54 PM (283°)
25/08/2023	6:42 AM (78°)	12:18 PM (N 47.2°)	5:55 PM (282°)
26/08/2023	6:41 AM (78°)	12:18 PM (N 47.5°)	5:56 PM (282°)
27/08/2023	6:40 AM (78°)	12:18 PM (N 47.9°)	5:56 PM (281°)
28/08/2023	6:39 AM (79°)	12:17 PM (N 48.2°)	5:57 PM (281°)
29/08/2023	6:37 AM (79°)	12:17 PM (N 48.6°)	5:57 PM (281°)
30/08/2023	6:36 AM (80°)	12:17 PM (N 49.0°)	5:58 PM (280°)
31/08/2023	6:35 AM (80°)	12:17 PM (N 49.3°)	5:59 PM (280°)
01/09/2023	6:34 AM (81°)	12:16 PM (N 49.7°)	5:59 PM (279°)
02/09/2023	6:32 AM (81°)	12:16 PM (N 50.0°)	6:00 PM (279°)
03/09/2023	6:31 AM (81°)	12:16 PM (N 50.4°)	6:00 PM (278°)
04/09/2023	6:30 AM (82°)	12:15 PM (N 50.8°)	6:01 PM (278°)
05/09/2023	6:29 AM (82°)	12:15 PM (N 51.1°)	6:02 PM (278°)
06/09/2023	6:27 AM (83°)	12:15 PM (N 51.5°)	6:02 PM (277°)
07/09/2023	6:26 AM (83°)	12:14 PM (N 51.9°)	6:03 PM (277°)
08/09/2023	6:25 AM (84°)	12:14 PM (N 52.3°)	6:03 PM (276°)
09/09/2023	6:24 AM (84°)	12:14 PM (N 52.6°)	6:04 PM (276°)
10/09/2023	6:22 AM (84°)	12:13 PM (N 53.0°)	6:05 PM (275°)
11/09/2023	6:21 AM (85°)	12:13 PM (N 53.4°)	6:05 PM (275°)
12/09/2023	6:20 AM (85°)	12:13 PM (N 53.8°)	6:06 PM (274°)
13/09/2023	6:18 AM (86°)	12:12 PM (N 54.1°)	6:06 PM (274°)
14/09/2023	6:17 AM (86°)	12:12 PM (N 54.5°)	6:07 PM (274°)
15/09/2023	6:16 AM (87°)	12:11 PM (N 54.9°)	6:08 PM (273°)
16/09/2023	6:14 AM (87°)	12:11 PM (N 55.3°)	6:08 PM (273°)
17/09/2023	6:13 AM (88°)	12:11 PM (N 55.7°)	6:09 PM (272°)
18/09/2023	6:12 AM (88°)	12:10 PM (N 56.1°)	6:10 PM (272°)
19/09/2023	6:10 AM (89°)	12:10 PM (N 56.5°)	6:10 PM (271°)
20/09/2023	6:09 AM (89°)	12:10 PM (N 56.8°)	6:11 PM (271°)
21/09/2023	6:08 AM (89°)	12:09 PM (N 57.2°)	6:11 PM (270°)
22/09/2023	6:07 AM (90°)	12:09 PM (N 57.6°)	6:12 PM (270°)
23/09/2023	6:05 AM (90°)	12:09 PM (N 58.0°)	6:13 PM (269°)
24/09/2023	6:04 AM (91°)	12:08 PM (N 58.4°)	6:13 PM (269°)





25/09/2023	6:03 AM (91°)	12:08 PM (N 58.8°)	6:14 PM (268°)
26/09/2023	6:01 AM (92°)	12:08 PM (N 59.2°)	6:14 PM (268°)
27/09/2023	6:00 AM (92°)	12:07 PM (N 59.6°)	6:15 PM (268°)
28/09/2023	5:59 AM (93°)	12:07 PM (N 60.0°)	6:16 PM (267°)
29/09/2023	5:57 AM (93°)	12:07 PM (N 60.3°)	6:16 PM (267°)
30/09/2023	5:56 AM (94°)	12:06 PM (N 60.7°)	6:17 PM (266°)
01/10/2023	5:55 AM (94°)	12:06 PM (N 61.1°)	6:18 PM (266°)
02/10/2023	5:53 AM (94°)	12:06 PM (N 61.5°)	6:18 PM (265°)
03/10/2023	5:52 AM (95°)	12:05 PM (N 61.9°)	6:19 PM (265°)
04/10/2023	5:51 AM (95°)	12:05 PM (N 62.3°)	6:20 PM (264°)
05/10/2023	5:50 AM (96°)	12:05 PM (N 62.7°)	6:20 PM (264°)
06/10/2023	5:48 AM (96°)	12:04 PM (N 63.0°)	6:21 PM (263°)
07/10/2023	5:47 AM (97°)	12:04 PM (N 63.4°)	6:22 PM (263°)
08/10/2023	5:46 AM (97°)	12:04 PM (N 63.8°)	6:22 PM (263°)
09/10/2023	5:44 AM (98°)	12:03 PM (N 64.2°)	6:23 PM (262°)
10/10/2023	5:43 AM (98°)	12:03 PM (N 64.6°)	6:24 PM (262°)
11/10/2023	5:42 AM (99°)	12:03 PM (N 65.0°)	6:24 PM (261°)
12/10/2023	5:41 AM (99°)	12:03 PM (N 65.3°)	6:25 PM (261°)
13/10/2023	5:40 AM (99°)	12:02 PM (N 65.7°)	6:26 PM (260°)
14/10/2023	5:38 AM (100°)	12:02 PM (N 66.1°)	6:27 PM (260°)
15/10/2023	5:37 AM (100°)	12:02 PM (N 66.5°)	6:27 PM (259°)
16/10/2023	5:36 AM (101°)	12:02 PM (N 66.8°)	6:28 PM (259°)
17/10/2023	5:35 AM (101°)	12:02 PM (N 67.2°)	6:29 PM (259°)
18/10/2023	5:34 AM (102°)	12:01 PM (N 67.6°)	6:30 PM (258°)
19/10/2023	5:33 AM (102°)	12:01 PM (N 67.9°)	6:30 PM (258°)
20/10/2023	5:31 AM (102°)	12:01 PM (N 68.3°)	6:31 PM (257°)
21/10/2023	5:30 AM (103°)	12:01 PM (N 68.6°)	6:32 PM (257°)
22/10/2023	5:29 AM (103°)	12:01 PM (N 69.0°)	6:33 PM (256°)
23/10/2023	5:28 AM (104°)	12:00 PM (N 69.3°)	6:33 PM (256°)
24/10/2023	5:27 AM (104°)	12:00 PM (N 69.7°)	6:34 PM (256°)
25/10/2023	5:26 AM (105°)	12:00 PM (N 70.0°)	6:35 PM (255°)
26/10/2023	5:25 AM (105°)	12:00 PM (N 70.4°)	6:36 PM (255°)
27/10/2023	5:24 AM (105°)	12:00 PM (N 70.7°)	6:37 PM (254°)
28/10/2023	5:23 AM (106°)	12:00 PM (N 71.1°)	6:37 PM (254°)
29/10/2023	5:22 AM (106°)	12:00 PM (N 71.4°)	6:38 PM (254°)
30/10/2023	5:21 AM (107°)	12:00 PM (N 71.7°)	6:39 PM (253°)
31/10/2023	5:20 AM (107°)	12:00 PM (N 72.1°)	6:40 PM (253°)
01/11/2023	5:19 AM (107°)	12:00 PM (N 72.4°)	6:41 PM (252°)
02/11/2023	5:18 AM (108°)	12:00 PM (N 72.7°)	6:42 PM (252°)
03/11/2023	5:17 AM (108°)	12:00 PM (N 73.0°)	6:42 PM (252°)
04/11/2023	5:16 AM (109°)	12:00 PM (N 73.3°)	6:43 PM (251°)
05/11/2023	5:16 AM (109°)	12:00 PM (N 73.6°)	6:44 PM (251°)
06/11/2023	5:15 AM (109°)	12:00 PM (N 73.9°)	6:45 PM (251°)
07/11/2023	5:14 AM (110°)	12:00 PM (N 74.2°)	6:46 PM (250°)
08/11/2023	5:13 AM (110°)	12:00 PM (N 74.5°)	6:47 PM (250°)
09/11/2023	5:13 AM (110°)	12:00 PM (N 74.8°)	6:48 PM (249°)





10/11/2023	5:12 AM (111°)	12:00 PM (N 75.1°)	6:48 PM (249°)
11/11/2023	5:11 AM (111°)	12:00 PM (N 75.4°)	6:49 PM (249°)
12/11/2023	5:10 AM (111°)	12:00 PM (N 75.7°)	6:50 PM (248°)
13/11/2023	5:10 AM (112°)	12:00 PM (N 75.9°)	6:51 PM (248°)
14/11/2023	5:09 AM (112°)	12:00 PM (N 76.2°)	6:52 PM (248°)
15/11/2023	5:09 AM (112°)	12:01 PM (N 76.4°)	6:53 PM (248°)
16/11/2023	5:08 AM (113°)	12:01 PM (N 76.7°)	6:54 PM (247°)
17/11/2023	5:07 AM (113°)	12:01 PM (N 77.0°)	6:55 PM (247°)
18/11/2023	5:07 AM (113°)	12:01 PM (N 77.2°)	6:56 PM (247°)
19/11/2023	5:06 AM (114°)	12:01 PM (N 77.4°)	6:57 PM (246°)
20/11/2023	5:06 AM (114°)	12:02 PM (N 77.7°)	6:57 PM (246°)
21/11/2023	5:06 AM (114°)	12:02 PM (N 77.9°)	6:58 PM (246°)
22/11/2023	5:05 AM (114°)	12:02 PM (N 78.1°)	6:59 PM (246°)
23/11/2023	5:05 AM (115°)	12:02 PM (N 78.3°)	7:00 PM (245°)
24/11/2023	5:04 AM (115°)	12:03 PM (N 78.5°)	7:01 PM (245°)
25/11/2023	5:04 AM (115°)	12:03 PM (N 78.7°)	7:02 PM (245°)
26/11/2023	5:04 AM (115°)	12:03 PM (N 78.9°)	7:03 PM (245°)
27/11/2023	5:04 AM (116°)	12:03 PM (N 79.1°)	7:04 PM (244°)
28/11/2023	5:03 AM (116°)	12:04 PM (N 79.3°)	7:05 PM (244°)
29/11/2023	5:03 AM (116°)	12:04 PM (N 79.5°)	7:05 PM (244°)
30/11/2023	5:03 AM (116°)	12:04 PM (N 79.6°)	7:06 PM (244°)
01/12/2023	5:03 AM (116°)	12:05 PM (N 79.8°)	7:07 PM (243°)
02/12/2023	5:03 AM (117°)	12:05 PM (N 80.0°)	7:08 PM (243°)
03/12/2023	5:03 AM (117°)	12:06 PM (N 80.1°)	7:09 PM (243°)
04/12/2023	5:03 AM (117°)	12:06 PM (N 80.2°)	7:10 PM (243°)
05/12/2023	5:03 AM (117°)	12:06 PM (N 80.4°)	7:10 PM (243°)
06/12/2023	5:03 AM (117°)	12:07 PM (N 80.5°)	7:11 PM (243°)
07/12/2023	5:03 AM (117°)	12:07 PM (N 80.6°)	7:12 PM (242°)
08/12/2023	5:03 AM (118°)	12:08 PM (N 80.7°)	7:13 PM (242°)
09/12/2023	5:03 AM (118°)	12:08 PM (N 80.8°)	7:14 PM (242°)
10/12/2023	5:03 AM (118°)	12:09 PM (N 80.9°)	7:14 PM (242°)
11/12/2023	5:03 AM (118°)	12:09 PM (N 81.0°)	7:15 PM (242°)
12/12/2023	5:03 AM (118°)	12:09 PM (N 81.1°)	7:16 PM (242°)
13/12/2023	5:04 AM (118°)	12:10 PM (N 81.2°)	7:16 PM (242°)
14/12/2023	5:04 AM (118°)	12:10 PM (N 81.2°)	7:17 PM (242°)
15/12/2023	5:04 AM (118°)	12:11 PM (N 81.3°)	7:18 PM (242°)
16/12/2023	5:04 AM (118°)	12:11 PM (N 81.3°)	7:18 PM (242°)
17/12/2023	5:05 AM (118°)	12:12 PM (N 81.4°)	7:19 PM (242°)
18/12/2023	5:05 AM (118°)	12:12 PM (N 81.4°)	7:20 PM (242°)
19/12/2023	5:06 AM (118°)	12:13 PM (N 81.5°)	7:20 PM (241°)
20/12/2023	5:06 AM (119°)	12:13 PM (N 81.5°)	7:21 PM (241°)
21/12/2023	5:06 AM (119°)	12:14 PM (N 81.5°)	7:21 PM (241°)
22/12/2023	5:07 AM (119°)	12:14 PM (N 81.5°)	7:22 PM (241°)
23/12/2023	5:07 AM (119°)	12:15 PM (N 81.5°)	7:22 PM (241°)
24/12/2023	5:08 AM (119°)	12:15 PM (N 81.5°)	7:23 PM (241°)
25/12/2023	5:09 AM (119°)	12:16 PM (N 81.4°)	7:23 PM (242°)
26/12/2023	5:09 AM (118°)	12:16 PM (N 81.4°)	7:23 PM (242°)





27/12/2023	5:10 AM (118°)	12:17 PM (N 81.4°)	7:24 PM (242°)
28/12/2023	5:10 AM (118°)	12:17 PM (N 81.3°)	7:24 PM (242°)
29/12/2023	5:11 AM (118°)	12:18 PM (N 81.3°)	7:25 PM (242°)
30/12/2023	5:12 AM (118°)	12:18 PM (N 81.2°)	7:25 PM (242°)
31/12/2023	5:12 AM (118°)	12:19 PM (N 81.2°)	7:25 PM (242°)

