



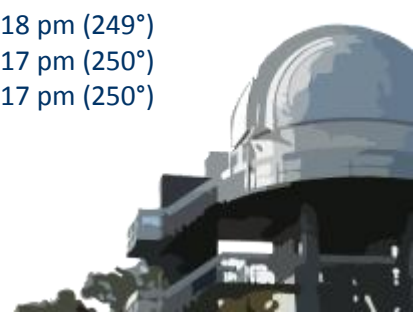
Sun Rise/Set for Perth, Australia for 2027

(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)
01/01/2027	5:13 am (118°)	12:19 pm (81.1°)	7:25 pm (242°)
02/01/2027	5:14 am (118°)	12:20 pm (81.0°)	7:26 pm (242°)
03/01/2027	5:15 am (118°)	12:20 pm (80.9°)	7:26 pm (242°)
04/01/2027	5:15 am (118°)	12:21 pm (80.8°)	7:26 pm (242°)
05/01/2027	5:16 am (118°)	12:21 pm (80.7°)	7:26 pm (242°)
06/01/2027	5:17 am (117°)	12:22 pm (80.6°)	7:26 pm (243°)
07/01/2027	5:18 am (117°)	12:22 pm (80.5°)	7:26 pm (243°)
08/01/2027	5:19 am (117°)	12:23 pm (80.3°)	7:26 pm (243°)
09/01/2027	5:20 am (117°)	12:23 pm (80.2°)	7:26 pm (243°)
10/01/2027	5:20 am (117°)	12:23 pm (80.0°)	7:26 pm (243°)
11/01/2027	5:21 am (117°)	12:24 pm (79.9°)	7:26 pm (243°)
12/01/2027	5:22 am (116°)	12:24 pm (79.7°)	7:26 pm (244°)
13/01/2027	5:23 am (116°)	12:25 pm (79.6°)	7:26 pm (244°)
14/01/2027	5:24 am (116°)	12:25 pm (79.4°)	7:26 pm (244°)
15/01/2027	5:25 am (116°)	12:25 pm (79.2°)	7:26 pm (244°)
16/01/2027	5:26 am (116°)	12:26 pm (79.0°)	7:25 pm (245°)
17/01/2027	5:27 am (115°)	12:26 pm (78.8°)	7:25 pm (245°)
18/01/2027	5:27 am (115°)	12:26 pm (78.6°)	7:25 pm (245°)
19/01/2027	5:28 am (115°)	12:27 pm (78.4°)	7:24 pm (245°)
20/01/2027	5:29 am (115°)	12:27 pm (78.2°)	7:24 pm (246°)
21/01/2027	5:30 am (114°)	12:27 pm (78.0°)	7:24 pm (246°)
22/01/2027	5:31 am (114°)	12:27 pm (77.8°)	7:23 pm (246°)
23/01/2027	5:32 am (114°)	12:28 pm (77.6°)	7:23 pm (246°)
24/01/2027	5:33 am (114°)	12:28 pm (77.3°)	7:23 pm (247°)
25/01/2027	5:34 am (113°)	12:28 pm (77.1°)	7:22 pm (247°)
26/01/2027	5:35 am (113°)	12:28 pm (76.8°)	7:22 pm (247°)
27/01/2027	5:36 am (113°)	12:29 pm (76.6°)	7:21 pm (248°)
28/01/2027	5:37 am (112°)	12:29 pm (76.3°)	7:20 pm (248°)
29/01/2027	5:38 am (112°)	12:29 pm (76.0°)	7:20 pm (248°)
30/01/2027	5:39 am (112°)	12:29 pm (75.8°)	7:19 pm (248°)
31/01/2027	5:40 am (111°)	12:29 pm (75.5°)	7:19 pm (249°)
01/02/2027	5:41 am (111°)	12:30 pm (75.2°)	7:18 pm (249°)
02/02/2027	5:42 am (111°)	12:30 pm (74.9°)	7:17 pm (250°)
03/02/2027	5:42 am (110°)	12:30 pm (74.6°)	7:17 pm (250°)





04/02/2027	5:43 am (110°)	12:30 pm (74.4°)	7:16 pm (250°)
05/02/2027	5:44 am (110°)	12:30 pm (74.0°)	7:15 pm (251°)
06/02/2027	5:45 am (109°)	12:30 pm (73.7°)	7:14 pm (251°)
07/02/2027	5:46 am (109°)	12:30 pm (73.4°)	7:14 pm (251°)
08/02/2027	5:47 am (109°)	12:30 pm (73.1°)	7:13 pm (252°)
09/02/2027	5:48 am (108°)	12:30 pm (72.8°)	7:12 pm (252°)
10/02/2027	5:49 am (108°)	12:30 pm (72.5°)	7:11 pm (252°)
11/02/2027	5:50 am (107°)	12:30 pm (72.2°)	7:10 pm (253°)
12/02/2027	5:51 am (107°)	12:30 pm (71.8°)	7:09 pm (253°)
13/02/2027	5:52 am (107°)	12:30 pm (71.5°)	7:08 pm (254°)
14/02/2027	5:53 am (106°)	12:30 pm (71.2°)	7:07 pm (254°)
15/02/2027	5:53 am (106°)	12:30 pm (70.8°)	7:07 pm (254°)
16/02/2027	5:54 am (105°)	12:30 pm (70.5°)	7:06 pm (255°)
17/02/2027	5:55 am (105°)	12:30 pm (70.1°)	7:05 pm (255°)
18/02/2027	5:56 am (105°)	12:30 pm (69.8°)	7:04 pm (256°)
19/02/2027	5:57 am (104°)	12:30 pm (69.4°)	7:03 pm (256°)
20/02/2027	5:58 am (104°)	12:30 pm (69.1°)	7:01 pm (257°)
21/02/2027	5:59 am (103°)	12:30 pm (68.7°)	7:00 pm (257°)
22/02/2027	5:59 am (103°)	12:30 pm (68.3°)	6:59 pm (257°)
23/02/2027	6:00 am (102°)	12:29 pm (68.0°)	6:58 pm (258°)
24/02/2027	6:01 am (102°)	12:29 pm (67.6°)	6:57 pm (258°)
25/02/2027	6:02 am (101°)	12:29 pm (67.2°)	6:56 pm (259°)
26/02/2027	6:03 am (101°)	12:29 pm (66.9°)	6:55 pm (259°)
27/02/2027	6:03 am (101°)	12:29 pm (66.5°)	6:54 pm (260°)
28/02/2027	6:04 am (100°)	12:29 pm (66.1°)	6:53 pm (260°)
01/03/2027	6:05 am (100°)	12:28 pm (65.7°)	6:51 pm (261°)
02/03/2027	6:06 am (99°)	12:28 pm (65.4°)	6:50 pm (261°)
03/03/2027	6:07 am (99°)	12:28 pm (65.0°)	6:49 pm (261°)
04/03/2027	6:07 am (98°)	12:28 pm (64.6°)	6:48 pm (262°)
05/03/2027	6:08 am (98°)	12:28 pm (64.2°)	6:47 pm (262°)
06/03/2027	6:09 am (97°)	12:27 pm (63.8°)	6:46 pm (263°)
07/03/2027	6:10 am (97°)	12:27 pm (63.4°)	6:44 pm (263°)
08/03/2027	6:10 am (97°)	12:27 pm (63.0°)	6:43 pm (264°)
09/03/2027	6:11 am (96°)	12:27 pm (62.7°)	6:42 pm (264°)
10/03/2027	6:12 am (96°)	12:26 pm (62.3°)	6:41 pm (265°)
11/03/2027	6:13 am (95°)	12:26 pm (61.9°)	6:39 pm (265°)
12/03/2027	6:13 am (95°)	12:26 pm (61.5°)	6:38 pm (266°)
13/03/2027	6:14 am (94°)	12:26 pm (61.1°)	6:37 pm (266°)
14/03/2027	6:15 am (94°)	12:25 pm (60.7°)	6:36 pm (266°)
15/03/2027	6:15 am (93°)	12:25 pm (60.3°)	6:34 pm (267°)
16/03/2027	6:16 am (93°)	12:25 pm (59.9°)	6:33 pm (267°)
17/03/2027	6:17 am (92°)	12:25 pm (59.5°)	6:32 pm (268°)
18/03/2027	6:18 am (92°)	12:24 pm (59.1°)	6:31 pm (268°)
19/03/2027	6:18 am (91°)	12:24 pm (58.7°)	6:29 pm (269°)
20/03/2027	6:19 am (91°)	12:24 pm (58.3°)	6:28 pm (269°)
21/03/2027	6:20 am (90°)	12:23 pm (57.9°)	6:27 pm (270°)
22/03/2027	6:20 am (90°)	12:23 pm (57.5°)	6:25 pm (270°)





23/03/2027	6:21 am (90°)	12:23 pm (57.1°)	6:24 pm (271°)
24/03/2027	6:22 am (89°)	12:23 pm (56.7°)	6:23 pm (271°)
25/03/2027	6:22 am (89°)	12:22 pm (56.3°)	6:22 pm (272°)
26/03/2027	6:23 am (88°)	12:22 pm (56.0°)	6:20 pm (272°)
27/03/2027	6:24 am (88°)	12:22 pm (55.6°)	6:19 pm (273°)
28/03/2027	6:24 am (87°)	12:21 pm (55.2°)	6:18 pm (273°)
29/03/2027	6:25 am (87°)	12:21 pm (54.8°)	6:16 pm (273°)
30/03/2027	6:26 am (86°)	12:21 pm (54.4°)	6:15 pm (274°)
31/03/2027	6:26 am (86°)	12:20 pm (54.0°)	6:14 pm (274°)
01/04/2027	6:27 am (85°)	12:20 pm (53.6°)	6:13 pm (275°)
02/04/2027	6:28 am (85°)	12:20 pm (53.2°)	6:11 pm (275°)
03/04/2027	6:28 am (84°)	12:20 pm (52.8°)	6:10 pm (276°)
04/04/2027	6:29 am (84°)	12:19 pm (52.5°)	6:09 pm (276°)
05/04/2027	6:30 am (84°)	12:19 pm (52.1°)	6:08 pm (277°)
06/04/2027	6:30 am (83°)	12:19 pm (51.7°)	6:06 pm (277°)
07/04/2027	6:31 am (83°)	12:18 pm (51.3°)	6:05 pm (278°)
08/04/2027	6:32 am (82°)	12:18 pm (51.0°)	6:04 pm (278°)
09/04/2027	6:32 am (82°)	12:18 pm (50.6°)	6:03 pm (278°)
10/04/2027	6:33 am (81°)	12:18 pm (50.2°)	6:01 pm (279°)
11/04/2027	6:34 am (81°)	12:17 pm (49.8°)	6:00 pm (279°)
12/04/2027	6:34 am (80°)	12:17 pm (49.5°)	5:59 pm (280°)
13/04/2027	6:35 am (80°)	12:17 pm (49.1°)	5:58 pm (280°)
14/04/2027	6:36 am (80°)	12:17 pm (48.7°)	5:57 pm (281°)
15/04/2027	6:37 am (79°)	12:16 pm (48.4°)	5:56 pm (281°)
16/04/2027	6:37 am (79°)	12:16 pm (48.0°)	5:54 pm (281°)
17/04/2027	6:38 am (78°)	12:16 pm (47.7°)	5:53 pm (282°)
18/04/2027	6:39 am (78°)	12:16 pm (47.3°)	5:52 pm (282°)
19/04/2027	6:39 am (78°)	12:15 pm (47.0°)	5:51 pm (283°)
20/04/2027	6:40 am (77°)	12:15 pm (46.6°)	5:50 pm (283°)
21/04/2027	6:41 am (77°)	12:15 pm (46.3°)	5:49 pm (283°)
22/04/2027	6:41 am (76°)	12:15 pm (46.0°)	5:48 pm (284°)
23/04/2027	6:42 am (76°)	12:15 pm (45.6°)	5:47 pm (284°)
24/04/2027	6:43 am (76°)	12:14 pm (45.3°)	5:46 pm (285°)
25/04/2027	6:43 am (75°)	12:14 pm (45.0°)	5:45 pm (285°)
26/04/2027	6:44 am (75°)	12:14 pm (44.6°)	5:44 pm (285°)
27/04/2027	6:45 am (74°)	12:14 pm (44.3°)	5:43 pm (286°)
28/04/2027	6:45 am (74°)	12:14 pm (44.0°)	5:42 pm (286°)
29/04/2027	6:46 am (74°)	12:14 pm (43.7°)	5:41 pm (287°)
30/04/2027	6:47 am (73°)	12:13 pm (43.4°)	5:40 pm (287°)
01/05/2027	6:47 am (73°)	12:13 pm (43.1°)	5:39 pm (287°)
02/05/2027	6:48 am (73°)	12:13 pm (42.8°)	5:38 pm (288°)
03/05/2027	6:49 am (72°)	12:13 pm (42.5°)	5:37 pm (288°)
04/05/2027	6:50 am (72°)	12:13 pm (42.2°)	5:36 pm (288°)
05/05/2027	6:50 am (71°)	12:13 pm (41.9°)	5:35 pm (289°)
06/05/2027	6:51 am (71°)	12:13 pm (41.6°)	5:34 pm (289°)
07/05/2027	6:52 am (71°)	12:13 pm (41.3°)	5:33 pm (289°)





08/05/2027	6:52 am (70°)	12:13 pm (41.0°)	5:33 pm (290°)
09/05/2027	6:53 am (70°)	12:13 pm (40.8°)	5:32 pm (290°)
10/05/2027	6:54 am (70°)	12:13 pm (40.5°)	5:31 pm (290°)
11/05/2027	6:54 am (69°)	12:12 pm (40.2°)	5:30 pm (291°)
12/05/2027	6:55 am (69°)	12:12 pm (40.0°)	5:30 pm (291°)
13/05/2027	6:56 am (69°)	12:12 pm (39.7°)	5:29 pm (291°)
14/05/2027	6:56 am (69°)	12:12 pm (39.5°)	5:28 pm (292°)
15/05/2027	6:57 am (68°)	12:12 pm (39.3°)	5:27 pm (292°)
16/05/2027	6:58 am (68°)	12:12 pm (39.0°)	5:27 pm (292°)
17/05/2027	6:58 am (68°)	12:12 pm (38.8°)	5:26 pm (292°)
18/05/2027	6:59 am (67°)	12:13 pm (38.6°)	5:26 pm (293°)
19/05/2027	7:00 am (67°)	12:13 pm (38.4°)	5:25 pm (293°)
20/05/2027	7:00 am (67°)	12:13 pm (38.1°)	5:24 pm (293°)
21/05/2027	7:01 am (67°)	12:13 pm (37.9°)	5:24 pm (293°)
22/05/2027	7:02 am (66°)	12:13 pm (37.7°)	5:23 pm (294°)
23/05/2027	7:02 am (66°)	12:13 pm (37.5°)	5:23 pm (294°)
24/05/2027	7:03 am (66°)	12:13 pm (37.3°)	5:22 pm (294°)
25/05/2027	7:04 am (66°)	12:13 pm (37.2°)	5:22 pm (294°)
26/05/2027	7:04 am (66°)	12:13 pm (37.0°)	5:22 pm (295°)
27/05/2027	7:05 am (65°)	12:13 pm (36.8°)	5:21 pm (295°)
28/05/2027	7:06 am (65°)	12:13 pm (36.6°)	5:21 pm (295°)
29/05/2027	7:06 am (65°)	12:13 pm (36.5°)	5:21 pm (295°)
30/05/2027	7:07 am (65°)	12:14 pm (36.3°)	5:20 pm (295°)
31/05/2027	7:07 am (65°)	12:14 pm (36.2°)	5:20 pm (296°)
01/06/2027	7:08 am (64°)	12:14 pm (36.0°)	5:20 pm (296°)
02/06/2027	7:08 am (64°)	12:14 pm (35.9°)	5:19 pm (296°)
03/06/2027	7:09 am (64°)	12:14 pm (35.8°)	5:19 pm (296°)
04/06/2027	7:09 am (64°)	12:14 pm (35.7°)	5:19 pm (296°)
05/06/2027	7:10 am (64°)	12:15 pm (35.6°)	5:19 pm (296°)
06/06/2027	7:10 am (64°)	12:15 pm (35.4°)	5:19 pm (296°)
07/06/2027	7:11 am (64°)	12:15 pm (35.3°)	5:19 pm (297°)
08/06/2027	7:11 am (63°)	12:15 pm (35.2°)	5:19 pm (297°)
09/06/2027	7:12 am (63°)	12:15 pm (35.2°)	5:18 pm (297°)
10/06/2027	7:12 am (63°)	12:15 pm (35.1°)	5:18 pm (297°)
11/06/2027	7:13 am (63°)	12:16 pm (35.0°)	5:18 pm (297°)
12/06/2027	7:13 am (63°)	12:16 pm (34.9°)	5:18 pm (297°)
13/06/2027	7:14 am (63°)	12:16 pm (34.9°)	5:18 pm (297°)
14/06/2027	7:14 am (63°)	12:16 pm (34.8°)	5:18 pm (297°)
15/06/2027	7:14 am (63°)	12:16 pm (34.8°)	5:19 pm (297°)
16/06/2027	7:15 am (63°)	12:17 pm (34.7°)	5:19 pm (297°)
17/06/2027	7:15 am (63°)	12:17 pm (34.7°)	5:19 pm (297°)
18/06/2027	7:15 am (63°)	12:17 pm (34.7°)	5:19 pm (297°)
19/06/2027	7:16 am (63°)	12:17 pm (34.6°)	5:19 pm (297°)
20/06/2027	7:16 am (63°)	12:18 pm (34.6°)	5:19 pm (297°)
21/06/2027	7:16 am (63°)	12:18 pm (34.6°)	5:19 pm (297°)
22/06/2027	7:16 am (63°)	12:18 pm (34.6°)	5:20 pm (297°)
23/06/2027	7:16 am (63°)	12:18 pm (34.6°)	5:20 pm (297°)



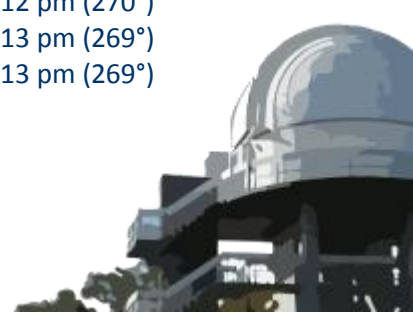


24/06/2027	7:17 am (63°)	12:18 pm (34.7°)	5:20 pm (297°)
25/06/2027	7:17 am (63°)	12:19 pm (34.7°)	5:20 pm (297°)
26/06/2027	7:17 am (63°)	12:19 pm (34.7°)	5:21 pm (297°)
27/06/2027	7:17 am (63°)	12:19 pm (34.7°)	5:21 pm (297°)
28/06/2027	7:17 am (63°)	12:19 pm (34.8°)	5:21 pm (297°)
29/06/2027	7:17 am (63°)	12:19 pm (34.8°)	5:22 pm (297°)
30/06/2027	7:17 am (63°)	12:20 pm (34.9°)	5:22 pm (297°)
01/07/2027	7:17 am (63°)	12:20 pm (34.9°)	5:23 pm (297°)
02/07/2027	7:17 am (63°)	12:20 pm (35.0°)	5:23 pm (297°)
03/07/2027	7:17 am (63°)	12:20 pm (35.1°)	5:23 pm (297°)
04/07/2027	7:17 am (63°)	12:20 pm (35.2°)	5:24 pm (297°)
05/07/2027	7:17 am (63°)	12:21 pm (35.3°)	5:24 pm (297°)
06/07/2027	7:17 am (63°)	12:21 pm (35.4°)	5:25 pm (296°)
07/07/2027	7:17 am (64°)	12:21 pm (35.5°)	5:25 pm (296°)
08/07/2027	7:17 am (64°)	12:21 pm (35.6°)	5:26 pm (296°)
09/07/2027	7:17 am (64°)	12:21 pm (35.7°)	5:26 pm (296°)
10/07/2027	7:16 am (64°)	12:21 pm (35.8°)	5:27 pm (296°)
11/07/2027	7:16 am (64°)	12:22 pm (35.9°)	5:27 pm (296°)
12/07/2027	7:16 am (64°)	12:22 pm (36.1°)	5:28 pm (296°)
13/07/2027	7:16 am (65°)	12:22 pm (36.2°)	5:28 pm (295°)
14/07/2027	7:15 am (65°)	12:22 pm (36.4°)	5:29 pm (295°)
15/07/2027	7:15 am (65°)	12:22 pm (36.5°)	5:29 pm (295°)
16/07/2027	7:15 am (65°)	12:22 pm (36.7°)	5:30 pm (295°)
17/07/2027	7:14 am (65°)	12:22 pm (36.8°)	5:31 pm (295°)
18/07/2027	7:14 am (65°)	12:22 pm (37.0°)	5:31 pm (294°)
19/07/2027	7:13 am (66°)	12:22 pm (37.2°)	5:32 pm (294°)
20/07/2027	7:13 am (66°)	12:22 pm (37.4°)	5:32 pm (294°)
21/07/2027	7:12 am (66°)	12:23 pm (37.5°)	5:33 pm (294°)
22/07/2027	7:12 am (66°)	12:23 pm (37.7°)	5:34 pm (294°)
23/07/2027	7:11 am (67°)	12:23 pm (37.9°)	5:34 pm (293°)
24/07/2027	7:11 am (67°)	12:23 pm (38.1°)	5:35 pm (293°)
25/07/2027	7:10 am (67°)	12:23 pm (38.4°)	5:35 pm (293°)
26/07/2027	7:10 am (67°)	12:23 pm (38.6°)	5:36 pm (293°)
27/07/2027	7:09 am (68°)	12:23 pm (38.8°)	5:37 pm (292°)
28/07/2027	7:08 am (68°)	12:23 pm (39.0°)	5:37 pm (292°)
29/07/2027	7:08 am (68°)	12:23 pm (39.3°)	5:38 pm (292°)
30/07/2027	7:07 am (68°)	12:23 pm (39.5°)	5:39 pm (291°)
31/07/2027	7:06 am (69°)	12:23 pm (39.7°)	5:39 pm (291°)
01/08/2027	7:05 am (69°)	12:22 pm (40.0°)	5:40 pm (291°)
02/08/2027	7:05 am (69°)	12:22 pm (40.2°)	5:40 pm (291°)
03/08/2027	7:04 am (70°)	12:22 pm (40.5°)	5:41 pm (290°)
04/08/2027	7:03 am (70°)	12:22 pm (40.8°)	5:42 pm (290°)
05/08/2027	7:02 am (70°)	12:22 pm (41.0°)	5:42 pm (290°)
06/08/2027	7:01 am (71°)	12:22 pm (41.3°)	5:43 pm (289°)
07/08/2027	7:01 am (71°)	12:22 pm (41.6°)	5:44 pm (289°)
08/08/2027	7:00 am (71°)	12:22 pm (41.9°)	5:44 pm (289°)



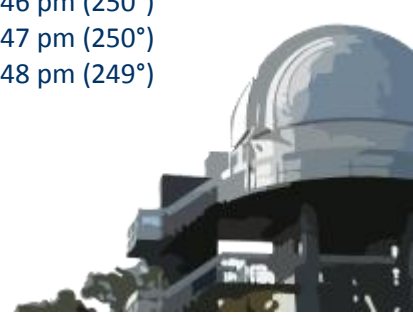


09/08/2027	6:59 am (72°)	12:22 pm (42.1°)	5:45 pm (288°)
10/08/2027	6:58 am (72°)	12:22 pm (42.4°)	5:46 pm (288°)
11/08/2027	6:57 am (72°)	12:21 pm (42.7°)	5:46 pm (288°)
12/08/2027	6:56 am (73°)	12:21 pm (43.0°)	5:47 pm (287°)
13/08/2027	6:55 am (73°)	12:21 pm (43.3°)	5:48 pm (287°)
14/08/2027	6:54 am (73°)	12:21 pm (43.6°)	5:48 pm (286°)
15/08/2027	6:53 am (74°)	12:21 pm (43.9°)	5:49 pm (286°)
16/08/2027	6:52 am (74°)	12:21 pm (44.2°)	5:49 pm (286°)
17/08/2027	6:51 am (74°)	12:20 pm (44.6°)	5:50 pm (285°)
18/08/2027	6:50 am (75°)	12:20 pm (44.9°)	5:51 pm (285°)
19/08/2027	6:49 am (75°)	12:20 pm (45.2°)	5:51 pm (285°)
20/08/2027	6:48 am (76°)	12:20 pm (45.5°)	5:52 pm (284°)
21/08/2027	6:47 am (76°)	12:19 pm (45.9°)	5:53 pm (284°)
22/08/2027	6:45 am (76°)	12:19 pm (46.2°)	5:53 pm (283°)
23/08/2027	6:44 am (77°)	12:19 pm (46.5°)	5:54 pm (283°)
24/08/2027	6:43 am (77°)	12:19 pm (46.9°)	5:54 pm (283°)
25/08/2027	6:42 am (78°)	12:18 pm (47.2°)	5:55 pm (282°)
26/08/2027	6:41 am (78°)	12:18 pm (47.6°)	5:56 pm (282°)
27/08/2027	6:40 am (78°)	12:18 pm (47.9°)	5:56 pm (281°)
28/08/2027	6:39 am (79°)	12:17 pm (48.3°)	5:57 pm (281°)
29/08/2027	6:37 am (79°)	12:17 pm (48.6°)	5:57 pm (281°)
30/08/2027	6:36 am (80°)	12:17 pm (49.0°)	5:58 pm (280°)
31/08/2027	6:35 am (80°)	12:17 pm (49.3°)	5:59 pm (280°)
01/09/2027	6:34 am (81°)	12:16 pm (49.7°)	5:59 pm (279°)
02/09/2027	6:32 am (81°)	12:16 pm (50.0°)	6:00 pm (279°)
03/09/2027	6:31 am (81°)	12:16 pm (50.4°)	6:01 pm (278°)
04/09/2027	6:30 am (82°)	12:15 pm (50.8°)	6:01 pm (278°)
05/09/2027	6:29 am (82°)	12:15 pm (51.2°)	6:02 pm (278°)
06/09/2027	6:27 am (83°)	12:15 pm (51.5°)	6:02 pm (277°)
07/09/2027	6:26 am (83°)	12:14 pm (51.9°)	6:03 pm (277°)
08/09/2027	6:25 am (84°)	12:14 pm (52.3°)	6:04 pm (276°)
09/09/2027	6:24 am (84°)	12:14 pm (52.6°)	6:04 pm (276°)
10/09/2027	6:22 am (84°)	12:13 pm (53.0°)	6:05 pm (275°)
11/09/2027	6:21 am (85°)	12:13 pm (53.4°)	6:05 pm (275°)
12/09/2027	6:20 am (85°)	12:13 pm (53.8°)	6:06 pm (274°)
13/09/2027	6:18 am (86°)	12:12 pm (54.2°)	6:07 pm (274°)
14/09/2027	6:17 am (86°)	12:12 pm (54.5°)	6:07 pm (274°)
15/09/2027	6:16 am (87°)	12:11 pm (54.9°)	6:08 pm (273°)
16/09/2027	6:14 am (87°)	12:11 pm (55.3°)	6:08 pm (273°)
17/09/2027	6:13 am (88°)	12:11 pm (55.7°)	6:09 pm (272°)
18/09/2027	6:12 am (88°)	12:10 pm (56.1°)	6:10 pm (272°)
19/09/2027	6:10 am (89°)	12:10 pm (56.5°)	6:10 pm (271°)
20/09/2027	6:09 am (89°)	12:10 pm (56.9°)	6:11 pm (271°)
21/09/2027	6:08 am (89°)	12:09 pm (57.2°)	6:11 pm (270°)
22/09/2027	6:06 am (90°)	12:09 pm (57.6°)	6:12 pm (270°)
23/09/2027	6:05 am (90°)	12:09 pm (58.0°)	6:13 pm (269°)
24/09/2027	6:04 am (91°)	12:08 pm (58.4°)	6:13 pm (269°)



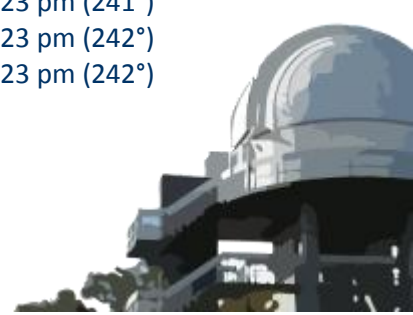


25/09/2027	6:02 am (91°)	12:08 pm (58.8°)	6:14 pm (268°)
26/09/2027	6:01 am (92°)	12:08 pm (59.2°)	6:14 pm (268°)
27/09/2027	6:00 am (92°)	12:07 pm (59.6°)	6:15 pm (268°)
28/09/2027	5:59 am (93°)	12:07 pm (60.0°)	6:16 pm (267°)
29/09/2027	5:57 am (93°)	12:07 pm (60.4°)	6:16 pm (267°)
30/09/2027	5:56 am (94°)	12:06 pm (60.7°)	6:17 pm (266°)
01/10/2027	5:55 am (94°)	12:06 pm (61.1°)	6:18 pm (266°)
02/10/2027	5:53 am (94°)	12:06 pm (61.5°)	6:18 pm (265°)
03/10/2027	5:52 am (95°)	12:05 pm (61.9°)	6:19 pm (265°)
04/10/2027	5:51 am (95°)	12:05 pm (62.3°)	6:20 pm (264°)
05/10/2027	5:49 am (96°)	12:05 pm (62.7°)	6:20 pm (264°)
06/10/2027	5:48 am (96°)	12:04 pm (63.1°)	6:21 pm (263°)
07/10/2027	5:47 am (97°)	12:04 pm (63.4°)	6:22 pm (263°)
08/10/2027	5:46 am (97°)	12:04 pm (63.8°)	6:22 pm (263°)
09/10/2027	5:44 am (98°)	12:04 pm (64.2°)	6:23 pm (262°)
10/10/2027	5:43 am (98°)	12:03 pm (64.6°)	6:24 pm (262°)
11/10/2027	5:42 am (99°)	12:03 pm (65.0°)	6:24 pm (261°)
12/10/2027	5:41 am (99°)	12:03 pm (65.3°)	6:25 pm (261°)
13/10/2027	5:40 am (99°)	12:02 pm (65.7°)	6:26 pm (260°)
14/10/2027	5:38 am (100°)	12:02 pm (66.1°)	6:27 pm (260°)
15/10/2027	5:37 am (100°)	12:02 pm (66.5°)	6:27 pm (259°)
16/10/2027	5:36 am (101°)	12:02 pm (66.8°)	6:28 pm (259°)
17/10/2027	5:35 am (101°)	12:02 pm (67.2°)	6:29 pm (259°)
18/10/2027	5:34 am (102°)	12:01 pm (67.6°)	6:30 pm (258°)
19/10/2027	5:32 am (102°)	12:01 pm (67.9°)	6:30 pm (258°)
20/10/2027	5:31 am (103°)	12:01 pm (68.3°)	6:31 pm (257°)
21/10/2027	5:30 am (103°)	12:01 pm (68.6°)	6:32 pm (257°)
22/10/2027	5:29 am (103°)	12:01 pm (69.0°)	6:33 pm (256°)
23/10/2027	5:28 am (104°)	12:00 pm (69.4°)	6:33 pm (256°)
24/10/2027	5:27 am (104°)	12:00 pm (69.7°)	6:34 pm (256°)
25/10/2027	5:26 am (105°)	12:00 pm (70.0°)	6:35 pm (255°)
26/10/2027	5:25 am (105°)	12:00 pm (70.4°)	6:36 pm (255°)
27/10/2027	5:24 am (105°)	12:00 pm (70.7°)	6:37 pm (254°)
28/10/2027	5:23 am (106°)	12:00 pm (71.1°)	6:37 pm (254°)
29/10/2027	5:22 am (106°)	12:00 pm (71.4°)	6:38 pm (254°)
30/10/2027	5:21 am (107°)	12:00 pm (71.7°)	6:39 pm (253°)
31/10/2027	5:20 am (107°)	12:00 pm (72.1°)	6:40 pm (253°)
01/11/2027	5:19 am (107°)	12:00 pm (72.4°)	6:41 pm (252°)
02/11/2027	5:18 am (108°)	12:00 pm (72.7°)	6:42 pm (252°)
03/11/2027	5:17 am (108°)	12:00 pm (73.0°)	6:42 pm (252°)
04/11/2027	5:16 am (109°)	12:00 pm (73.3°)	6:43 pm (251°)
05/11/2027	5:16 am (109°)	12:00 pm (73.6°)	6:44 pm (251°)
06/11/2027	5:15 am (109°)	12:00 pm (73.9°)	6:45 pm (251°)
07/11/2027	5:14 am (110°)	12:00 pm (74.2°)	6:46 pm (250°)
08/11/2027	5:13 am (110°)	12:00 pm (74.5°)	6:47 pm (250°)
09/11/2027	5:13 am (110°)	12:00 pm (74.8°)	6:48 pm (249°)





10/11/2027	5:12 am (111°)	12:00 pm (75.1°)	6:49 pm (249°)
11/11/2027	5:11 am (111°)	12:00 pm (75.4°)	6:49 pm (249°)
12/11/2027	5:10 am (111°)	12:00 pm (75.7°)	6:50 pm (248°)
13/11/2027	5:10 am (112°)	12:00 pm (75.9°)	6:51 pm (248°)
14/11/2027	5:09 am (112°)	12:00 pm (76.2°)	6:52 pm (248°)
15/11/2027	5:09 am (112°)	12:01 pm (76.5°)	6:53 pm (247°)
16/11/2027	5:08 am (113°)	12:01 pm (76.7°)	6:54 pm (247°)
17/11/2027	5:07 am (113°)	12:01 pm (77.0°)	6:55 pm (247°)
18/11/2027	5:07 am (113°)	12:01 pm (77.2°)	6:56 pm (247°)
19/11/2027	5:06 am (114°)	12:01 pm (77.4°)	6:57 pm (246°)
20/11/2027	5:06 am (114°)	12:02 pm (77.7°)	6:57 pm (246°)
21/11/2027	5:06 am (114°)	12:02 pm (77.9°)	6:58 pm (246°)
22/11/2027	5:05 am (114°)	12:02 pm (78.1°)	6:59 pm (245°)
23/11/2027	5:05 am (115°)	12:02 pm (78.3°)	7:00 pm (245°)
24/11/2027	5:04 am (115°)	12:03 pm (78.5°)	7:01 pm (245°)
25/11/2027	5:04 am (115°)	12:03 pm (78.7°)	7:02 pm (245°)
26/11/2027	5:04 am (115°)	12:03 pm (78.9°)	7:03 pm (245°)
27/11/2027	5:04 am (116°)	12:04 pm (79.1°)	7:04 pm (244°)
28/11/2027	5:03 am (116°)	12:04 pm (79.3°)	7:05 pm (244°)
29/11/2027	5:03 am (116°)	12:04 pm (79.5°)	7:05 pm (244°)
30/11/2027	5:03 am (116°)	12:05 pm (79.6°)	7:06 pm (244°)
01/12/2027	5:03 am (116°)	12:05 pm (79.8°)	7:07 pm (243°)
02/12/2027	5:03 am (117°)	12:05 pm (80.0°)	7:08 pm (243°)
03/12/2027	5:03 am (117°)	12:06 pm (80.1°)	7:09 pm (243°)
04/12/2027	5:03 am (117°)	12:06 pm (80.2°)	7:10 pm (243°)
05/12/2027	5:03 am (117°)	12:06 pm (80.4°)	7:10 pm (243°)
06/12/2027	5:03 am (117°)	12:07 pm (80.5°)	7:11 pm (243°)
07/12/2027	5:03 am (117°)	12:07 pm (80.6°)	7:12 pm (242°)
08/12/2027	5:03 am (118°)	12:08 pm (80.7°)	7:13 pm (242°)
09/12/2027	5:03 am (118°)	12:08 pm (80.8°)	7:14 pm (242°)
10/12/2027	5:03 am (118°)	12:09 pm (80.9°)	7:14 pm (242°)
11/12/2027	5:03 am (118°)	12:09 pm (81.0°)	7:15 pm (242°)
12/12/2027	5:03 am (118°)	12:10 pm (81.1°)	7:16 pm (242°)
13/12/2027	5:04 am (118°)	12:10 pm (81.2°)	7:16 pm (242°)
14/12/2027	5:04 am (118°)	12:10 pm (81.2°)	7:17 pm (242°)
15/12/2027	5:04 am (118°)	12:11 pm (81.3°)	7:18 pm (242°)
16/12/2027	5:05 am (118°)	12:11 pm (81.3°)	7:18 pm (242°)
17/12/2027	5:05 am (118°)	12:12 pm (81.4°)	7:19 pm (242°)
18/12/2027	5:05 am (118°)	12:12 pm (81.4°)	7:20 pm (242°)
19/12/2027	5:06 am (118°)	12:13 pm (81.5°)	7:20 pm (241°)
20/12/2027	5:06 am (119°)	12:13 pm (81.5°)	7:21 pm (241°)
21/12/2027	5:06 am (119°)	12:14 pm (81.5°)	7:21 pm (241°)
22/12/2027	5:07 am (119°)	12:14 pm (81.5°)	7:22 pm (241°)
23/12/2027	5:07 am (119°)	12:15 pm (81.5°)	7:22 pm (241°)
24/12/2027	5:08 am (119°)	12:15 pm (81.5°)	7:23 pm (241°)
25/12/2027	5:09 am (119°)	12:16 pm (81.4°)	7:23 pm (242°)
26/12/2027	5:09 am (118°)	12:16 pm (81.4°)	7:23 pm (242°)





27/12/2027	5:10 am (118°)	12:17 pm (81.4°)	7:24 pm (242°)
28/12/2027	5:10 am (118°)	12:17 pm (81.3°)	7:24 pm (242°)
29/12/2027	5:11 am (118°)	12:18 pm (81.3°)	7:25 pm (242°)
30/12/2027	5:12 am (118°)	12:18 pm (81.2°)	7:25 pm (242°)
31/12/2027	5:12 am (118°)	12:19 pm (81.2°)	7:25 pm (242°)

