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# APPENDIX E

NOAA SUNRISE/SUNSET TABLES FOR 2021

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# NOAA Global Monitoring Laboratory

Global Radiation Group

<https://gml.noaa.gov/grad/solcalc>

## Sunrise Table for 2021

**Location: Latitude 36.55600 Longitude -121.91091**

**Time Zone Offset: America/Los\_Angeles -7.0**

All times are in local time. Cells with light green color indicate when daylight savings time is in effect.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	07:20	07:09	06:38	06:53	06:14	05:51	05:53	06:14	06:39	07:03	07:31	07:01
2	07:20	07:08	06:36	06:52	06:13	05:50	05:54	06:15	06:40	07:04	07:32	07:02
3	07:20	07:07	06:35	06:50	06:11	05:50	05:54	06:16	06:41	07:05	07:33	07:03
4	07:20	07:06	06:34	06:49	06:10	05:50	05:55	06:17	06:42	07:06	07:34	07:04
5	07:20	07:05	06:32	06:47	06:09	05:50	05:55	06:17	06:42	07:07	07:35	07:05
6	07:20	07:05	06:31	06:46	06:08	05:49	05:56	06:18	06:43	07:07	07:36	07:06
7	07:20	07:04	06:29	06:44	06:07	05:49	05:56	06:19	06:44	07:08	06:37	07:07
8	07:20	07:03	06:28	06:43	06:06	05:49	05:57	06:20	06:45	07:09	06:38	07:08
9	07:20	07:02	06:27	06:42	06:05	05:49	05:57	06:21	06:46	07:10	06:39	07:08
10	07:20	07:01	06:25	06:40	06:05	05:49	05:58	06:21	06:46	07:11	06:41	07:09
11	07:20	07:00	06:24	06:39	06:04	05:49	05:59	06:22	06:47	07:12	06:42	07:10
12	07:19	06:58	06:22	06:37	06:03	05:49	05:59	06:23	06:48	07:13	06:43	07:11
13	07:19	06:57	06:21	06:36	06:02	05:49	06:00	06:24	06:49	07:13	06:44	07:11
14	07:19	06:56	07:19	06:35	06:01	05:49	06:01	06:25	06:49	07:14	06:45	07:12
15	07:19	06:55	07:18	06:33	06:00	05:49	06:01	06:26	06:50	07:15	06:46	07:13
16	07:18	06:54	07:16	06:32	06:00	05:49	06:02	06:26	06:51	07:16	06:47	07:13
17	07:18	06:53	07:15	06:31	05:59	05:49	06:03	06:27	06:52	07:17	06:48	07:14
18	07:18	06:52	07:14	06:29	05:58	05:49	06:03	06:28	06:53	07:18	06:49	07:15
19	07:17	06:50	07:12	06:28	05:57	05:49	06:04	06:29	06:53	07:19	06:50	07:15
20	07:17	06:49	07:11	06:27	05:57	05:49	06:05	06:30	06:54	07:20	06:51	07:16
21	07:16	06:48	07:09	06:26	05:56	05:50	06:06	06:30	06:55	07:21	06:52	07:16
22	07:16	06:47	07:08	06:24	05:55	05:50	06:06	06:31	06:56	07:22	06:53	07:17
23	07:15	06:46	07:06	06:23	05:55	05:50	06:07	06:32	06:57	07:23	06:54	07:17
24	07:15	06:44	07:05	06:22	05:54	05:50	06:08	06:33	06:57	07:24	06:55	07:17
25	07:14	06:43	07:03	06:21	05:54	05:51	06:09	06:34	06:58	07:25	06:56	07:18
26	07:13	06:42	07:02	06:19	05:53	05:51	06:09	06:34	06:59	07:26	06:57	07:18
27	07:13	06:40	07:00	06:18	05:53	05:52	06:10	06:35	07:00	07:26	06:58	07:19
28	07:12	06:39	06:59	06:17	05:52	05:52	06:11	06:36	07:01	07:27	06:59	07:19
29	07:11		06:57	06:16	05:52	05:52	06:12	06:37	07:02	07:28	07:00	07:19
30	07:11		06:56	06:15	05:51	05:53	06:13	06:38	07:02	07:29	07:01	07:19
31	07:10		06:54		05:51		06:13	06:38		07:30		07:20

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## Sunset Table for 2021

**Location: Latitude 36.55600 Longitude -121.91091**

**Time Zone Offset: America/Los\_Angeles -7.0**

All times are in local time. Cells with light green color indicate when daylight savings time is in effect.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	17:03	17:34	18:03	19:30	19:56	20:21	20:30	20:13	19:35	18:50	18:10	16:52
2	17:04	17:35	18:04	19:31	19:57	20:21	20:30	20:12	19:34	18:49	18:09	16:52
3	17:05	17:36	18:04	19:32	19:58	20:22	20:30	20:11	19:32	18:48	18:08	16:52
4	17:06	17:37	18:05	19:33	19:59	20:23	20:29	20:10	19:31	18:46	18:07	16:52
5	17:07	17:38	18:06	19:34	20:00	20:23	20:29	20:09	19:29	18:45	18:07	16:52
6	17:07	17:39	18:07	19:34	20:01	20:24	20:29	20:08	19:28	18:43	18:06	16:52
7	17:08	17:40	18:08	19:35	20:01	20:24	20:29	20:07	19:26	18:42	17:05	16:52
8	17:09	17:41	18:09	19:36	20:02	20:25	20:29	20:06	19:25	18:40	17:04	16:52
9	17:10	17:43	18:10	19:37	20:03	20:25	20:28	20:05	19:23	18:39	17:03	16:52
10	17:11	17:44	18:11	19:38	20:04	20:26	20:28	20:04	19:22	18:38	17:02	16:52
11	17:12	17:45	18:12	19:39	20:05	20:26	20:28	20:03	19:20	18:36	17:01	16:52
12	17:13	17:46	18:13	19:40	20:06	20:27	20:27	20:02	19:19	18:35	17:01	16:53
13	17:14	17:47	18:14	19:41	20:07	20:27	20:27	20:00	19:17	18:33	17:00	16:53
14	17:15	17:48	19:14	19:41	20:07	20:27	20:26	19:59	19:16	18:32	16:59	16:53
15	17:16	17:49	19:15	19:42	20:08	20:28	20:26	19:58	19:14	18:31	16:59	16:53
16	17:17	17:50	19:16	19:43	20:09	20:28	20:25	19:57	19:13	18:29	16:58	16:54
17	17:18	17:51	19:17	19:44	20:10	20:28	20:25	19:55	19:11	18:28	16:57	16:54
18	17:19	17:52	19:18	19:45	20:11	20:29	20:24	19:54	19:10	18:27	16:57	16:54
19	17:20	17:53	19:19	19:46	20:11	20:29	20:23	19:53	19:08	18:26	16:56	16:55
20	17:21	17:54	19:20	19:47	20:12	20:29	20:23	19:52	19:07	18:24	16:56	16:55
21	17:22	17:55	19:21	19:47	20:13	20:29	20:22	19:50	19:05	18:23	16:55	16:56
22	17:23	17:56	19:22	19:48	20:14	20:30	20:22	19:49	19:04	18:22	16:55	16:56
23	17:24	17:57	19:22	19:49	20:15	20:30	20:21	19:48	19:02	18:21	16:54	16:57
24	17:25	17:58	19:23	19:50	20:15	20:30	20:20	19:46	19:01	18:19	16:54	16:57
25	17:27	17:59	19:24	19:51	20:16	20:30	20:19	19:45	18:59	18:18	16:54	16:58
26	17:28	18:00	19:25	19:52	20:17	20:30	20:18	19:44	18:58	18:17	16:53	16:59
27	17:29	18:01	19:26	19:53	20:17	20:30	20:18	19:42	18:56	18:16	16:53	16:59
28	17:30	18:02	19:27	19:54	20:18	20:30	20:17	19:41	18:55	18:15	16:53	17:00
29	17:31		19:28	19:54	20:19	20:30	20:16	19:39	18:53	18:14	16:52	17:01
30	17:32		19:28	19:55	20:20	20:30	20:15	19:38	18:52	18:13	16:52	17:02
31	17:33		19:29		20:20		20:14	19:37		18:11		17:02

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Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12:11:29	12:21:18	12:19:51	13:11:19	13:04:41	13:05:35	13:11:38	13:13:57	13:07:29	12:57:08	12:51:10	11:56:53
2	12:11:57	12:21:25	12:19:39	13:11:01	13:04:34	13:05:45	13:11:50	13:13:53	13:07:10	12:56:49	12:51:09	11:57:16
3	12:12:24	12:21:32	12:19:26	13:10:44	13:04:28	13:05:55	13:12:01	13:13:48	13:06:50	12:56:30	12:51:10	11:57:40
4	12:12:51	12:21:37	12:19:13	13:10:27	13:04:23	13:06:05	13:12:11	13:13:42	13:06:30	12:56:12	12:51:11	11:58:05
5	12:13:18	12:21:42	12:18:59	13:10:10	13:04:18	13:06:16	13:12:22	13:13:36	13:06:10	12:55:54	12:51:12	11:58:30
6	12:13:44	12:21:45	12:18:45	13:09:53	13:04:14	13:06:27	13:12:32	13:13:29	13:05:50	12:55:36	12:51:15	11:58:55
7	12:14:10	12:21:48	12:18:30	13:09:36	13:04:10	13:06:38	13:12:41	13:13:22	13:05:29	12:55:19	11:51:19	11:59:21
8	12:14:35	12:21:51	12:18:15	13:09:19	13:04:07	13:06:50	13:12:50	13:13:14	13:05:09	12:55:02	11:51:23	11:59:48
9	12:15:00	12:21:52	12:18:00	13:09:03	13:04:04	13:07:02	13:12:59	13:13:05	13:04:48	12:54:45	11:51:28	12:00:14
10	12:15:24	12:21:53	12:17:44	13:08:47	13:04:02	13:07:14	13:13:07	13:12:56	13:04:27	12:54:29	11:51:34	12:00:42
11	12:15:47	12:21:53	12:17:29	13:08:32	13:04:01	13:07:26	13:13:15	13:12:46	13:04:06	12:54:14	11:51:41	12:01:09
12	12:16:10	12:21:52	12:17:12	13:08:16	13:04:00	13:07:38	13:13:23	13:12:36	13:03:45	12:53:59	11:51:49	12:01:37
13	12:16:33	12:21:50	12:16:56	13:08:01	13:04:00	13:07:51	13:13:30	13:12:25	13:03:23	12:53:44	11:51:58	12:02:06
14	12:16:54	12:21:47	13:16:39	13:07:46	13:04:00	13:08:04	13:13:36	13:12:13	13:03:02	12:53:30	11:52:08	12:02:34
15	12:17:15	12:21:44	13:16:22	13:07:32	13:04:01	13:08:16	13:13:42	13:12:01	13:02:41	12:53:17	11:52:18	12:03:03
16	12:17:36	12:21:40	13:16:05	13:07:18	13:04:02	13:08:29	13:13:48	13:11:49	13:02:19	12:53:04	11:52:29	12:03:32
17	12:17:55	12:21:36	13:15:48	13:07:05	13:04:04	13:08:42	13:13:52	13:11:36	13:01:58	12:52:52	11:52:41	12:04:02
18	12:18:14	12:21:31	13:15:30	13:06:51	13:04:07	13:08:55	13:13:57	13:11:23	13:01:36	12:52:40	11:52:54	12:04:31
19	12:18:32	12:21:25	13:15:13	13:06:38	13:04:10	13:09:08	13:14:01	13:11:09	13:01:15	12:52:29	11:53:08	12:05:01
20	12:18:50	12:21:18	13:14:55	13:06:26	13:04:13	13:09:22	13:14:04	13:10:54	13:00:54	12:52:19	11:53:23	12:05:31
21	12:19:07	12:21:11	13:14:37	13:06:14	13:04:18	13:09:35	13:14:07	13:10:39	13:00:32	12:52:09	11:53:38	12:06:00
22	12:19:23	12:21:03	13:14:19	13:06:03	13:04:22	13:09:48	13:14:09	13:10:24	13:00:11	12:52:00	11:53:54	12:06:30
23	12:19:38	12:20:54	13:14:01	13:05:52	13:04:27	13:10:00	13:14:10	13:10:08	12:59:50	12:51:52	11:54:11	12:07:00
24	12:19:52	12:20:45	13:13:43	13:05:41	13:04:33	13:10:13	13:14:11	13:09:52	12:59:29	12:51:44	11:54:29	12:07:30
25	12:20:06	12:20:35	13:13:25	13:05:31	13:04:39	13:10:26	13:14:12	13:09:35	12:59:09	12:51:37	11:54:47	12:07:59
26	12:20:19	12:20:25	13:13:07	13:05:21	13:04:46	13:10:39	13:14:11	13:09:18	12:58:48	12:51:31	11:55:07	12:08:29
27	12:20:31	12:20:14	13:12:49	13:05:12	13:04:53	13:10:51	13:14:11	13:09:01	12:58:28	12:51:25	11:55:27	12:08:58
28	12:20:42	12:20:03	13:12:31	13:05:03	13:05:01	13:11:03	13:14:09	13:08:43	12:58:07	12:51:21	11:55:47	12:09:27
29	12:20:52		13:12:13	13:04:55	13:05:09	13:11:15	13:14:07	13:08:25	12:57:47	12:51:17	11:56:09	12:09:56
30	12:21:02		13:11:55	13:04:48	13:05:17	13:11:27	13:14:05	13:08:07	12:57:28	12:51:14	11:56:31	12:10:25
31	12:21:10		13:11:37		13:05:26		13:14:01	13:07:48		12:51:12		12:10:54