

Nights of August 1st, 2021 to August 31st, 2021

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
1	2021 08 01	13:41	Transit of the Sun at the meridian (center of the Sun 67,3° above the horizon)
2	2021 08 01	15:06	Moonset
3	2021 08 01	20:49	SUNSET
4	2021 08 01	20:57	Setting of Mercury
5	2021 08 01	21:20	End of civil twilight
6	2021 08 01	21:41	Rising of Jupiter
7	2021 08 01	21:53	Setting of Mars
8	2021 08 01	21:58	End of nautical twilight
9	2021 08 01	22:21	Setting of Venus
10	2021 08 01	22:39	End of astronomical twilight
11	2021 08 02	01:22	Moonrise
12	2021 08 02	01:41	Middle of the night (center of the Sun 31,6° below the horizon)
13	2021 08 02	01:43	Transit of Saturn at the meridian
14	2021 08 02	02:59	Transit of Jupiter at the meridian
15	2021 08 02	04:43	Beginning of astronomical dawn
16	2021 08 02	05:24	Beginning of nautical dawn
17	2021 08 02	06:02	Beginning of civil dawn
18	2021 08 02	06:33	SUNRISE
19	2021 08 02	08:40	Transit of the Moon at the meridian (center of the Moon 68,3° above the horizon)
20	2021 08 02	13:41	Transit of the Sun at the meridian (center of the Sun 67,0° above the horizon)
21	2021 08 02	16:07	Moonset
22	2021 08 02	20:48	SUNSET
23	2021 08 02	20:59	Setting of Mercury
24	2021 08 02	21:19	End of civil twilight
25	2021 08 02	21:37	Rising of Jupiter
26	2021 08 02	21:51	Setting of Mars
27	2021 08 02	21:56	End of nautical twilight
28	2021 08 02	22:20	Setting of Venus
29	2021 08 02	22:38	End of astronomical twilight
30	2021 08 03	01:38	Transit of Saturn at the meridian
31	2021 08 03	01:41	Middle of the night (center of the Sun 31,9° below the horizon)
32	2021 08 03	01:53	Moonrise
33	2021 08 03	02:55	Transit of Jupiter at the meridian
34	2021 08 03	03:16	The Red Spot crosses the central meridian of Jupiter
35	2021 08 03	04:43	Beginning of occultation of HD 28676 (magn. = 7,08)
36	2021 08 03	04:44	Beginning of astronomical dawn
37	2021 08 03	05:14	End of occultation of HD 28676 (magn. = 7,08)
38	2021 08 03	05:25	Beginning of nautical dawn
39	2021 08 03	05:39	Beginning of eclipse of satellite Europa in Jupiter's shadow
40	2021 08 03	06:03	Beginning of civil dawn
41	2021 08 03	06:33	SUNRISE
42	2021 08 03	09:26	Transit of the Moon at the meridian (center of the Moon 71,5° above the horizon)
43	2021 08 03	13:41	Transit of the Sun at the meridian (center of the Sun 66,7° above the horizon)
44	2021 08 03	17:07	Moonset
45	2021 08 03	20:47	SUNSET
46	2021 08 03	21:02	Setting of Mercury
47	2021 08 03	21:18	End of civil twilight
48	2021 08 03	21:33	Rising of Jupiter
49	2021 08 03	21:49	Setting of Mars
50	2021 08 03	21:55	End of nautical twilight
51	2021 08 03	22:19	Setting of Venus
52	2021 08 03	22:36	End of astronomical twilight
53	2021 08 03	23:07	The Red Spot crosses the central meridian of Jupiter
54	2021 08 04	01:34	Transit of Saturn at the meridian
55	2021 08 04	01:41	Middle of the night (center of the Sun 32,2° below the horizon)
56	2021 08 04	02:30	Moonrise
57	2021 08 04	02:50	Transit of Jupiter at the meridian
58	2021 08 04	04:32	Beginning of shadow's transit of satellite Io on Jupiter's disk
59	2021 08 04	04:46	Beginning of astronomical dawn
60	2021 08 04	04:56	Beginning of transit of satellite Io in front of Jupiter's disk

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
61	2021 08 04	05:27	Beginning of nautical dawn
62	2021 08 04	06:04	Beginning of civil dawn
63	2021 08 04	06:30	Setting of Saturn
64	2021 08 04	06:34	SUNRISE
65	2021 08 04	10:15	Transit of the Moon at the meridian (center of the Moon 73,8° above the horizon)
66	2021 08 04	13:41	Transit of the Sun at the meridian (center of the Sun 66,5° above the horizon)
67	2021 08 04	18:05	Moonset
68	2021 08 04	20:46	SUNSET
69	2021 08 04	21:04	Setting of Mercury
70	2021 08 04	21:16	End of civil twilight
71	2021 08 04	21:29	Rising of Jupiter
72	2021 08 04	21:46	Setting of Mars
73	2021 08 04	21:54	End of nautical twilight
74	2021 08 04	22:17	Setting of Venus
75	2021 08 04	22:34	End of astronomical twilight
76	2021 08 05	00:25	Beginning of shadow's transit of satellite Europa on Jupiter's disk
77	2021 08 05	01:11	Beginning of transit of satellite Europa in front of Jupiter's disk
78	2021 08 05	01:30	Transit of Saturn at the meridian
79	2021 08 05	01:41	Middle of the night (center of the Sun 32,4° below the horizon)
80	2021 08 05	01:48	Beginning of eclipse of satellite Io in Jupiter's shadow
81	2021 08 05	02:46	Transit of Jupiter at the meridian
82	2021 08 05	02:50	End of occultation of satellite Ganymede by Jupiter
83	2021 08 05	03:14	Moonrise
84	2021 08 05	03:16	End of shadow's transit of satellite Europa on Jupiter's disk
85	2021 08 05	03:59	End of transit of satellite Europa in front of Jupiter's disk
86	2021 08 05	04:28	End of occultation of satellite Io by Jupiter
87	2021 08 05	04:47	Beginning of astronomical dawn
88	2021 08 05	04:54	The Red Spot crosses the central meridian of Jupiter
89	2021 08 05	05:28	Beginning of nautical dawn
90	2021 08 05	05:56	Beginning of occultation of TYC 1882-1686-1 (magn. = 7,44)
91	2021 08 05	06:05	Beginning of civil dawn
92	2021 08 05	06:26	Setting of Saturn
93	2021 08 05	06:35	SUNRISE
94	2021 08 05	11:07	Transit of the Moon at the meridian (center of the Moon 74,8° above the horizon)
95	2021 08 05	13:41	Transit of the Sun at the meridian (center of the Sun 66,2° above the horizon)
96	2021 08 05	19:00	Moonset
97	2021 08 05	20:45	SUNSET
98	2021 08 05	21:05	Setting of Mercury
99	2021 08 05	21:15	End of civil twilight
100	2021 08 05	21:25	Rising of Jupiter
101	2021 08 05	21:44	Setting of Mars
102	2021 08 05	21:52	End of nautical twilight
103	2021 08 05	22:16	Setting of Venus
104	2021 08 05	22:33	End of astronomical twilight
105	2021 08 05	22:59	Beginning of shadow's transit of satellite Io on Jupiter's disk
106	2021 08 05	23:22	Beginning of transit of satellite Io in front of Jupiter's disk
107	2021 08 06	00:45	The Red Spot crosses the central meridian of Jupiter
108	2021 08 06	01:19	End of shadow's transit of satellite Io on Jupiter's disk
109	2021 08 06	01:26	Transit of Saturn at the meridian
110	2021 08 06	01:40	End of transit of satellite Io in front of Jupiter's disk
111	2021 08 06	01:40	Middle of the night (center of the Sun 32,7° below the horizon)
112	2021 08 06	02:41	Transit of Jupiter at the meridian
113	2021 08 06	04:06	Moonrise
114	2021 08 06	04:49	Beginning of astronomical dawn
115	2021 08 06	05:29	Beginning of nautical dawn
116	2021 08 06	05:40	Beginning of occultation of HD 55458 (magn. = 8,40)
117	2021 08 06	06:06	Beginning of civil dawn
118	2021 08 06	06:21	Setting of Saturn
119	2021 08 06	06:36	SUNRISE
120	2021 08 06	11:59	Transit of the Moon at the meridian (center of the Moon 74,5° above the horizon)

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
121	2021 08 06	13:40	Transit of the Sun at the meridian (center of the Sun 65,9° above the horizon)
122	2021 08 06	19:49	Moonset
123	2021 08 06	20:44	SUNSET
124	2021 08 06	21:07	Setting of Mercury
125	2021 08 06	21:14	End of civil twilight
126	2021 08 06	21:20	Rising of Jupiter
127	2021 08 06	21:41	Setting of Mars
128	2021 08 06	21:51	End of nautical twilight
129	2021 08 06	22:15	Setting of Venus
130	2021 08 06	22:31	End of astronomical twilight
131	2021 08 06	22:31	End of occultation of satellite Europa by Jupiter
132	2021 08 06	22:53	End of occultation of satellite Io by Jupiter
133	2021 08 07	01:22	Transit of Saturn at the meridian
134	2021 08 07	01:40	Middle of the night (center of the Sun 33,0° below the horizon)
135	2021 08 07	02:37	Transit of Jupiter at the meridian
136	2021 08 07	03:19	Beginning of eclipse of satellite Callisto in Jupiter's shadow
137	2021 08 07	04:50	Beginning of astronomical dawn
138	2021 08 07	05:05	Moonrise
139	2021 08 07	05:30	Beginning of nautical dawn
140	2021 08 07	06:07	Beginning of civil dawn
141	2021 08 07	06:17	Setting of Saturn
142	2021 08 07	06:32	The Red Spot crosses the central meridian of Jupiter
143	2021 08 07	06:37	SUNRISE
144	2021 08 07	12:52	Transit of the Moon at the meridian (center of the Moon 72,7° above the horizon)
145	2021 08 07	13:40	Transit of the Sun at the meridian (center of the Sun 65,6° above the horizon)
146	2021 08 07	20:32	Moonset
147	2021 08 07	20:43	SUNSET
148	2021 08 07	21:08	Setting of Mercury
149	2021 08 07	21:13	End of civil twilight
150	2021 08 07	21:16	Rising of Jupiter
151	2021 08 07	21:39	Setting of Mars
152	2021 08 07	21:49	End of nautical twilight
153	2021 08 07	22:13	Setting of Venus
154	2021 08 07	22:29	End of astronomical twilight
155	2021 08 08	01:17	Transit of Saturn at the meridian
156	2021 08 08	01:40	Middle of the night (center of the Sun 33,3° below the horizon)
157	2021 08 08	02:23	The Red Spot crosses the central meridian of Jupiter
158	2021 08 08	02:33	Transit of Jupiter at the meridian
159	2021 08 08	04:52	Beginning of astronomical dawn
160	2021 08 08	05:32	Beginning of nautical dawn
161	2021 08 08	06:08	Beginning of civil dawn
162	2021 08 08	06:09	Moonrise
163	2021 08 08	06:13	Setting of Saturn
164	2021 08 08	06:38	SUNRISE
165	2021 08 08	13:40	Transit of the Sun at the meridian (center of the Sun 65,4° above the horizon)
166	2021 08 08	13:44	Transit of the Moon at the meridian (center of the Moon 69,6° above the horizon)
167	2021 08 08	14:50	NEW MOON
168	2021 08 08	20:41	SUNSET
169	2021 08 08	21:09	Moonset
170	2021 08 08	21:09	Setting of Mercury
171	2021 08 08	21:11	End of civil twilight
172	2021 08 08	21:12	Rising of Jupiter
173	2021 08 08	21:36	Setting of Mars
174	2021 08 08	21:48	End of nautical twilight
175	2021 08 08	22:12	Setting of Venus
176	2021 08 08	22:14	The Red Spot crosses the central meridian of Jupiter
177	2021 08 08	22:27	End of astronomical twilight
178	2021 08 09	01:13	Transit of Saturn at the meridian
179	2021 08 09	01:40	Middle of the night (center of the Sun 33,5° below the horizon)
180	2021 08 09	02:28	Transit of Jupiter at the meridian

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	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
181	2021 08 09	04:53	Beginning of astronomical dawn
182	2021 08 09	05:33	Beginning of nautical dawn
183	2021 08 09	06:08	Setting of Saturn
184	2021 08 09	06:09	Beginning of civil dawn
185	2021 08 09	06:39	SUNRISE
186	2021 08 09	07:17	Moonrise
187	2021 08 09	13:40	Transit of the Sun at the meridian (center of the Sun 65,1° above the horizon)
188	2021 08 09	14:34	Transit of the Moon at the meridian (center of the Moon 65,4° above the horizon)
189	2021 08 09	20:40	SUNSET
190	2021 08 09	21:08	Rising of Jupiter
191	2021 08 09	21:10	End of civil twilight
192	2021 08 09	21:10	Setting of Mercury
193	2021 08 09	21:34	Setting of Mars
194	2021 08 09	21:41	Moonset
195	2021 08 09	21:46	End of nautical twilight
196	2021 08 09	22:11	Setting of Venus
197	2021 08 09	22:26	End of astronomical twilight
198	2021 08 10	01:09	Transit of Saturn at the meridian
199	2021 08 10	01:40	Middle of the night (center of the Sun 33,8° below the horizon)
200	2021 08 10	02:24	Transit of Jupiter at the meridian
201	2021 08 10	04:01	The Red Spot crosses the central meridian of Jupiter
202	2021 08 10	04:55	Beginning of astronomical dawn
203	2021 08 10	05:34	Beginning of nautical dawn
204	2021 08 10	06:04	Setting of Saturn
205	2021 08 10	06:11	Beginning of civil dawn
206	2021 08 10	06:40	SUNRISE
207	2021 08 10	08:25	Moonrise
208	2021 08 10	13:40	Transit of the Sun at the meridian (center of the Sun 64,8° above the horizon)
209	2021 08 10	15:23	Transit of the Moon at the meridian (center of the Moon 60,2° above the horizon)
210	2021 08 10	20:39	SUNSET
211	2021 08 10	21:03	Rising of Jupiter
212	2021 08 10	21:08	End of civil twilight
213	2021 08 10	21:11	Setting of Mercury
214	2021 08 10	21:32	Setting of Mars
215	2021 08 10	21:45	End of nautical twilight
216	2021 08 10	22:09	Moonset
217	2021 08 10	22:09	Setting of Venus
218	2021 08 10	22:24	End of astronomical twilight
219	2021 08 10	23:52	The Red Spot crosses the central meridian of Jupiter
220	2021 08 11	01:05	Transit of Saturn at the meridian
221	2021 08 11	01:40	Middle of the night (center of the Sun 34,1° below the horizon)
222	2021 08 11	02:20	Transit of Jupiter at the meridian
223	2021 08 11	04:56	Beginning of astronomical dawn
224	2021 08 11	05:35	Beginning of nautical dawn
225	2021 08 11	05:59	Setting of Saturn
226	2021 08 11	06:12	Beginning of civil dawn
227	2021 08 11	06:26	Beginning of shadow's transit of satellite Io on Jupiter's disk
228	2021 08 11	06:41	SUNRISE
229	2021 08 11	09:34	Moonrise
230	2021 08 11	13:40	Transit of the Sun at the meridian (center of the Sun 64,5° above the horizon)
231	2021 08 11	16:11	Transit of the Moon at the meridian (center of the Moon 54,3° above the horizon)
232	2021 08 11	20:38	SUNSET
233	2021 08 11	20:59	Rising of Jupiter
234	2021 08 11	21:07	End of civil twilight
235	2021 08 11	21:11	Setting of Mercury
236	2021 08 11	21:19	Beginning of occultation of HD 104884 (magn. = 7,14)
237	2021 08 11	21:29	Setting of Mars
238	2021 08 11	21:43	End of nautical twilight
239	2021 08 11	21:45	Beginning of occultation of TYC 283-722-1 (magn. = 8,37)
240	2021 08 11	22:08	Setting of Venus

Nights of August 1st, 2021 to August 31st, 2021 (following)

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	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
241	2021 08 11	22:15	End of occultation of HD 104884 (magn. = 7,14)
242	2021 08 11	22:22	End of astronomical twilight
243	2021 08 11	22:26	End of occultation of TYC 283-722-1 (magn. = 8,37)
244	2021 08 11	22:35	Moonset
245	2021 08 12	01:00	Transit of Saturn at the meridian
246	2021 08 12	01:40	Middle of the night (center of the Sun 34,4° below the horizon)
247	2021 08 12	01:41	Beginning of eclipse of satellite Ganymede in Jupiter's shadow
248	2021 08 12	02:15	Transit of Jupiter at the meridian
249	2021 08 12	02:59	Beginning of shadow's transit of satellite Europa on Jupiter's disk
250	2021 08 12	03:24	Beginning of transit of satellite Europa in front of Jupiter's disk
251	2021 08 12	03:41	Beginning of eclipse of satellite Io in Jupiter's shadow
252	2021 08 12	04:58	Beginning of astronomical dawn
253	2021 08 12	05:37	Beginning of nautical dawn
254	2021 08 12	05:39	The Red Spot crosses the central meridian of Jupiter
255	2021 08 12	05:50	End of shadow's transit of satellite Europa on Jupiter's disk
256	2021 08 12	05:55	Setting of Saturn
257	2021 08 12	06:06	End of occultation of satellite Ganymede by Jupiter
258	2021 08 12	06:11	End of occultation of satellite Io by Jupiter
259	2021 08 12	06:13	Beginning of civil dawn
260	2021 08 12	06:13	End of transit of satellite Europa in front of Jupiter's disk
261	2021 08 12	06:42	SUNRISE
262	2021 08 12	10:43	Moonrise
263	2021 08 12	13:40	Transit of the Sun at the meridian (center of the Sun 64,2° above the horizon)
264	2021 08 12	16:58	Transit of the Moon at the meridian (center of the Moon 48,1° above the horizon)
265	2021 08 12	20:30	Meteor shower : Perseids (100 meteors/hour at zenith; duration = 38,0 days)
266	2021 08 12	20:36	SUNSET
267	2021 08 12	20:55	Rising of Jupiter
268	2021 08 12	21:06	End of civil twilight
269	2021 08 12	21:12	Setting of Mercury
270	2021 08 12	21:27	Setting of Mars
271	2021 08 12	21:42	End of nautical twilight
272	2021 08 12	22:06	Setting of Venus
273	2021 08 12	22:20	End of astronomical twilight
274	2021 08 12	23:01	Moonset
275	2021 08 13	00:55	Beginning of shadow's transit of satellite Io on Jupiter's disk
276	2021 08 13	00:56	Transit of Saturn at the meridian
277	2021 08 13	01:06	Beginning of transit of satellite Io in front of Jupiter's disk
278	2021 08 13	01:30	The Red Spot crosses the central meridian of Jupiter
279	2021 08 13	01:39	Middle of the night (center of the Sun 34,7° below the horizon)
280	2021 08 13	02:11	Transit of Jupiter at the meridian
281	2021 08 13	03:13	End of shadow's transit of satellite Io on Jupiter's disk
282	2021 08 13	03:24	End of transit of satellite Io in front of Jupiter's disk
283	2021 08 13	04:59	Beginning of astronomical dawn
284	2021 08 13	05:38	Beginning of nautical dawn
285	2021 08 13	05:51	Setting of Saturn
286	2021 08 13	06:14	Beginning of civil dawn
287	2021 08 13	06:43	SUNRISE
288	2021 08 13	11:54	Moonrise
289	2021 08 13	13:39	Transit of the Sun at the meridian (center of the Sun 63,9° above the horizon)
290	2021 08 13	17:46	Transit of the Moon at the meridian (center of the Moon 41,8° above the horizon)
291	2021 08 13	20:35	SUNSET
292	2021 08 13	20:51	Rising of Jupiter
293	2021 08 13	21:04	End of civil twilight
294	2021 08 13	21:12	Setting of Mercury
295	2021 08 13	21:21	The Red Spot crosses the central meridian of Jupiter
296	2021 08 13	21:24	Setting of Mars
297	2021 08 13	21:35	Beginning of eclipse of satellite Europa in Jupiter's shadow
298	2021 08 13	21:40	End of nautical twilight
299	2021 08 13	22:05	Setting of Venus
300	2021 08 13	22:10	Beginning of eclipse of satellite Io in Jupiter's shadow

Nights of August 1st, 2021 to August 31st, 2021 (following)

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	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
301	2021 08 13	22:18	End of astronomical twilight
302	2021 08 13	23:28	Moonset
303	2021 08 14	00:36	End of occultation of satellite Io by Jupiter
304	2021 08 14	00:47	End of occultation of satellite Europa by Jupiter
305	2021 08 14	00:52	Transit of Saturn at the meridian
306	2021 08 14	01:39	Middle of the night (center of the Sun 35,0° below the horizon)
307	2021 08 14	02:06	Transit of Jupiter at the meridian
308	2021 08 14	05:01	Beginning of astronomical dawn
309	2021 08 14	05:39	Beginning of nautical dawn
310	2021 08 14	05:47	Setting of Saturn
311	2021 08 14	06:15	Beginning of civil dawn
312	2021 08 14	06:44	SUNRISE
313	2021 08 14	13:05	Moonrise
314	2021 08 14	13:39	Transit of the Sun at the meridian (center of the Sun 63,6° above the horizon)
315	2021 08 14	18:35	Transit of the Moon at the meridian (center of the Moon 35,9° above the horizon)
316	2021 08 14	20:34	SUNSET
317	2021 08 14	20:46	Rising of Jupiter
318	2021 08 14	21:03	End of civil twilight
319	2021 08 14	21:12	Setting of Mercury
320	2021 08 14	21:22	Setting of Mars
321	2021 08 14	21:38	End of nautical twilight
322	2021 08 14	21:42	End of shadow's transit of satellite Io on Jupiter's disk
323	2021 08 14	21:50	End of transit of satellite Io in front of Jupiter's disk
324	2021 08 14	22:04	Setting of Venus
325	2021 08 14	22:17	End of astronomical twilight
326	2021 08 14	22:40	Beginning of occultation of HD 128986 (magn. = 6,97)
327	2021 08 14	23:12	End of occultation of HD 128986 (magn. = 6,97)
328	2021 08 14	23:57	Moonset
329	2021 08 15	00:48	Transit of Saturn at the meridian
330	2021 08 15	01:39	Middle of the night (center of the Sun 35,3° below the horizon)
331	2021 08 15	02:02	Transit of Jupiter at the meridian
332	2021 08 15	03:08	The Red Spot crosses the central meridian of Jupiter
333	2021 08 15	05:02	Beginning of astronomical dawn
334	2021 08 15	05:40	Beginning of nautical dawn
335	2021 08 15	05:43	Setting of Saturn
336	2021 08 15	06:16	Beginning of civil dawn
337	2021 08 15	06:45	SUNRISE
338	2021 08 15	13:39	Transit of the Sun at the meridian (center of the Sun 63,3° above the horizon)
339	2021 08 15	14:18	Moonrise
340	2021 08 15	16:20	FIRST QUARTER OF THE MOON
341	2021 08 15	19:28	Transit of the Moon at the meridian (center of the Moon 30,6° above the horizon)
342	2021 08 15	20:32	SUNSET
343	2021 08 15	20:42	Rising of Jupiter
344	2021 08 15	21:01	End of civil twilight
345	2021 08 15	21:12	Setting of Mercury
346	2021 08 15	21:19	Setting of Mars
347	2021 08 15	21:37	End of nautical twilight
348	2021 08 15	22:02	Setting of Venus
349	2021 08 15	22:15	End of astronomical twilight
350	2021 08 15	22:59	The Red Spot crosses the central meridian of Jupiter
351	2021 08 16	00:02	Beginning of occultation of 41 Lib (magn. = 5,36)
352	2021 08 16	00:30	Moonset
353	2021 08 16	00:43	Transit of Saturn at the meridian
354	2021 08 16	01:39	Middle of the night (center of the Sun 35,7° below the horizon)
355	2021 08 16	01:57	Transit of Jupiter at the meridian
356	2021 08 16	05:03	Beginning of astronomical dawn
357	2021 08 16	05:38	Setting of Saturn
358	2021 08 16	05:41	Beginning of nautical dawn
359	2021 08 16	06:17	Beginning of civil dawn
360	2021 08 16	06:46	SUNRISE

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
361	2021 08 16	13:39	Transit of the Sun at the meridian (center of the Sun 62,9° above the horizon)
362	2021 08 16	15:32	Moonrise
363	2021 08 16	20:24	Transit of the Moon at the meridian (center of the Moon 26,4° above the horizon)
364	2021 08 16	20:31	SUNSET
365	2021 08 16	20:38	Rising of Jupiter
366	2021 08 16	20:59	End of civil twilight
367	2021 08 16	21:12	Setting of Mercury
368	2021 08 16	21:17	Setting of Mars
369	2021 08 16	21:35	End of nautical twilight
370	2021 08 16	22:01	Setting of Venus
371	2021 08 16	22:13	End of astronomical twilight
372	2021 08 17	00:00	Meteor shower : Kappa Cygnids (3 meteors/hour at zenith; duration = 22,0 days)
373	2021 08 17	00:39	Transit of Saturn at the meridian
374	2021 08 17	01:10	Moonset
375	2021 08 17	01:39	Middle of the night (center of the Sun 36,0° below the horizon)
376	2021 08 17	01:53	Transit of Jupiter at the meridian
377	2021 08 17	04:46	The Red Spot crosses the central meridian of Jupiter
378	2021 08 17	05:05	Beginning of astronomical dawn
379	2021 08 17	05:34	Setting of Saturn
380	2021 08 17	05:43	Beginning of nautical dawn
381	2021 08 17	06:18	Beginning of civil dawn
382	2021 08 17	06:47	SUNRISE
383	2021 08 17	13:38	Transit of the Sun at the meridian (center of the Sun 62,6° above the horizon)
384	2021 08 17	16:45	Moonrise
385	2021 08 17	20:29	SUNSET
386	2021 08 17	20:34	Rising of Jupiter
387	2021 08 17	20:58	End of civil twilight
388	2021 08 17	21:12	Setting of Mercury
389	2021 08 17	21:15	Setting of Mars
390	2021 08 17	21:24	Transit of the Moon at the meridian (center of the Moon 23,7° above the horizon)
391	2021 08 17	21:34	End of nautical twilight
392	2021 08 17	21:59	Setting of Venus
393	2021 08 17	22:11	End of astronomical twilight
394	2021 08 18	00:35	Transit of Saturn at the meridian
395	2021 08 18	00:37	The Red Spot crosses the central meridian of Jupiter
396	2021 08 18	01:38	Middle of the night (center of the Sun 36,3° below the horizon)
397	2021 08 18	01:48	Transit of Jupiter at the meridian
398	2021 08 18	01:59	Moonset
399	2021 08 18	05:06	Beginning of astronomical dawn
400	2021 08 18	05:30	Setting of Saturn
401	2021 08 18	05:44	Beginning of nautical dawn
402	2021 08 18	06:19	Beginning of civil dawn
403	2021 08 18	06:48	SUNRISE
404	2021 08 18	13:38	Transit of the Sun at the meridian (center of the Sun 62,3° above the horizon)
405	2021 08 18	17:53	Moonrise
406	2021 08 18	20:28	SUNSET
407	2021 08 18	20:29	Rising of Jupiter
408	2021 08 18	20:57	End of civil twilight
409	2021 08 18	21:11	Setting of Mercury
410	2021 08 18	21:12	Setting of Mars
411	2021 08 18	21:32	End of nautical twilight
412	2021 08 18	21:58	Setting of Venus
413	2021 08 18	22:09	End of astronomical twilight
414	2021 08 18	22:25	Transit of the Moon at the meridian (center of the Moon 22,7° above the horizon)
415	2021 08 18	22:47	Beginning of occultation of HD 172407 (magn. = 8,40)
416	2021 08 18	23:37	Beginning of occultation of HD 172684 (magn. = 8,42)
417	2021 08 19	00:05	End of occultation of HD 172407 (magn. = 8,40)
418	2021 08 19	00:31	Transit of Saturn at the meridian
419	2021 08 19	00:53	End of occultation of HD 172684 (magn. = 8,42)
420	2021 08 19	01:38	Middle of the night (center of the Sun 36,6° below the horizon)

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
421	2021 08 19	01:44	Transit of Jupiter at the meridian
422	2021 08 19	02:58	Moonset
423	2021 08 19	05:08	Beginning of astronomical dawn
424	2021 08 19	05:25	Setting of Saturn
425	2021 08 19	05:35	Beginning of shadow's transit of satellite Europa on Jupiter's disk
426	2021 08 19	05:36	Beginning of eclipse of satellite Io in Jupiter's shadow
427	2021 08 19	05:37	Beginning of transit of satellite Europa in front of Jupiter's disk
428	2021 08 19	05:42	Beginning of eclipse of satellite Ganymede in Jupiter's shadow
429	2021 08 19	05:45	Beginning of nautical dawn
430	2021 08 19	06:20	Beginning of civil dawn
431	2021 08 19	06:24	The Red Spot crosses the central meridian of Jupiter
432	2021 08 19	06:49	SUNRISE
433	2021 08 19	13:38	Transit of the Sun at the meridian (center of the Sun 62,0° above the horizon)
434	2021 08 19	18:52	Moonrise
435	2021 08 19	20:26	SUNSET
436	2021 08 19	20:55	End of civil twilight
437	2021 08 19	21:10	Setting of Mars
438	2021 08 19	21:11	Setting of Mercury
439	2021 08 19	21:30	End of nautical twilight
440	2021 08 19	21:56	Setting of Venus
441	2021 08 19	22:07	End of astronomical twilight
442	2021 08 19	23:26	Transit of the Moon at the meridian (center of the Moon 23,6° above the horizon)
443	2021 08 20	00:27	Transit of Saturn at the meridian
444	2021 08 20	00:36	Beginning of occultation of HD 186806 (magn. = 7,81)
445	2021 08 20	01:38	Middle of the night (center of the Sun 37,0° below the horizon)
446	2021 08 20	01:40	Transit of Jupiter at the meridian
447	2021 08 20	01:49	End of occultation of HD 186806 (magn. = 7,81)
448	2021 08 20	02:15	The Red Spot crosses the central meridian of Jupiter
449	2021 08 20	02:30	Beginning of occultation of HD 187383 (magn. = 8,00)
450	2021 08 20	02:50	Beginning of transit of satellite Io in front of Jupiter's disk
451	2021 08 20	03:14	End of occultation of HD 187383 (magn. = 8,00)
452	2021 08 20	03:23	Beginning of occultation of HD 187858 (magn. = 7,91)
453	2021 08 20	04:04	Moonset
454	2021 08 20	05:08	End of transit of satellite Io in front of Jupiter's disk
455	2021 08 20	05:09	Beginning of astronomical dawn
456	2021 08 20	05:09	End of shadow's transit of satellite Io on Jupiter's disk
457	2021 08 20	05:21	Setting of Saturn
458	2021 08 20	05:46	Beginning of nautical dawn
459	2021 08 20	06:21	Beginning of civil dawn
460	2021 08 20	06:50	SUNRISE
461	2021 08 20	13:38	Transit of the Sun at the meridian (center of the Sun 61,6° above the horizon)
462	2021 08 20	19:41	Moonrise
463	2021 08 20	20:25	SUNSET
464	2021 08 20	20:54	End of civil twilight
465	2021 08 20	21:07	Setting of Mars
466	2021 08 20	21:10	Setting of Mercury
467	2021 08 20	21:29	End of nautical twilight
468	2021 08 20	21:34	Beginning of occultation of HD 197320 (magn. = 7,99)
469	2021 08 20	21:55	Setting of Venus
470	2021 08 20	22:06	End of astronomical twilight
471	2021 08 20	22:06	The Red Spot crosses the central meridian of Jupiter
472	2021 08 20	22:46	End of occultation of HD 197320 (magn. = 7,99)
473	2021 08 20	23:55	Beginning of occultation of HD 197969 (magn. = 7,85)
474	2021 08 21	00:03	Beginning of occultation of satellite Io by Jupiter
475	2021 08 21	00:11	Beginning of occultation of satellite Europa by Jupiter
476	2021 08 21	00:22	Transit of Saturn at the meridian
477	2021 08 21	00:25	Transit of the Moon at the meridian (center of the Moon 26,1° above the horizon)
478	2021 08 21	00:59	End of occultation of HD 197969 (magn. = 7,85)
479	2021 08 21	01:35	Transit of Jupiter at the meridian
480	2021 08 21	01:38	Middle of the night (center of the Sun 37,3° below the horizon)

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
481	2021 08 21	02:22	End of eclipse of satellite Io in Jupiter's shadow
482	2021 08 21	03:06	End of eclipse of satellite Europa in Jupiter's shadow
483	2021 08 21	05:10	Beginning of astronomical dawn
484	2021 08 21	05:16	Moonset
485	2021 08 21	05:17	Setting of Saturn
486	2021 08 21	05:47	Beginning of nautical dawn
487	2021 08 21	06:22	Beginning of civil dawn
488	2021 08 21	06:49	Setting of Jupiter
489	2021 08 21	06:51	SUNRISE
490	2021 08 21	13:38	Transit of the Sun at the meridian (center of the Sun 61,3° above the horizon)
491	2021 08 21	20:20	Moonrise
492	2021 08 21	20:23	SUNSET
493	2021 08 21	20:52	End of civil twilight
494	2021 08 21	21:05	Setting of Mars
495	2021 08 21	21:09	Setting of Mercury
496	2021 08 21	21:16	Beginning of transit of satellite Io in front of Jupiter's disk
497	2021 08 21	21:19	Beginning of shadow's transit of satellite Io on Jupiter's disk
498	2021 08 21	21:27	End of nautical twilight
499	2021 08 21	21:43	Beginning of occultation of HD 206317 (magn. = 7,02)
500	2021 08 21	21:53	Setting of Venus
501	2021 08 21	22:04	End of astronomical twilight
502	2021 08 21	22:40	Beginning of occultation of HD 206546 (magn. = 6,23)
503	2021 08 21	22:55	End of occultation of HD 206317 (magn. = 7,02)
504	2021 08 21	23:14	Beginning of occultation of HD 206647 (magn. = 8,10)
505	2021 08 21	23:34	End of transit of satellite Io in front of Jupiter's disk
506	2021 08 21	23:37	End of shadow's transit of satellite Io on Jupiter's disk
507	2021 08 21	23:50	End of occultation of HD 206546 (magn. = 6,23)
508	2021 08 22	00:18	Transit of Saturn at the meridian
509	2021 08 22	00:20	End of occultation of HD 206647 (magn. = 8,10)
510	2021 08 22	01:20	Transit of the Moon at the meridian (center of the Moon 30,1° above the horizon)
511	2021 08 22	01:31	Transit of Jupiter at the meridian
512	2021 08 22	01:37	Middle of the night (center of the Sun 37,6° below the horizon)
513	2021 08 22	03:53	The Red Spot crosses the central meridian of Jupiter
514	2021 08 22	04:08	Beginning of occultation of HD 207760 (magn. = 6,19)
515	2021 08 22	05:10	End of occultation of HD 207760 (magn. = 6,19)
516	2021 08 22	05:12	Beginning of astronomical dawn
517	2021 08 22	05:12	Setting of Saturn
518	2021 08 22	05:49	Beginning of nautical dawn
519	2021 08 22	06:23	Beginning of civil dawn
520	2021 08 22	06:27	Moonset
521	2021 08 22	06:45	Setting of Jupiter
522	2021 08 22	06:52	SUNRISE
523	2021 08 22	13:02	FULL MOON
524	2021 08 22	13:37	Transit of the Sun at the meridian (center of the Sun 61,0° above the horizon)
525	2021 08 22	20:22	SUNSET
526	2021 08 22	20:50	End of eclipse of satellite Io in Jupiter's shadow
527	2021 08 22	20:51	End of civil twilight
528	2021 08 22	20:53	Moonrise
529	2021 08 22	21:02	Setting of Mars
530	2021 08 22	21:09	Setting of Mercury
531	2021 08 22	21:25	End of nautical twilight
532	2021 08 22	21:32	End of transit of satellite Europa in front of Jupiter's disk
533	2021 08 22	21:42	End of shadow's transit of satellite Europa on Jupiter's disk
534	2021 08 22	21:52	Setting of Venus
535	2021 08 22	22:02	End of astronomical twilight
536	2021 08 22	23:01	End of transit of satellite Ganymede in front of Jupiter's disk
537	2021 08 22	23:21	End of shadow's transit of satellite Ganymede on Jupiter's disk
538	2021 08 22	23:44	The Red Spot crosses the central meridian of Jupiter
539	2021 08 23	00:14	Transit of Saturn at the meridian
540	2021 08 23	00:38	Beginning of occultation of HD 214654 (magn. = 7,80)

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
541	2021 08 23	00:43	Beginning of occultation of HD 214723 (magn. = 8,11)
542	2021 08 23	01:26	Transit of Jupiter at the meridian
543	2021 08 23	01:37	Middle of the night (center of the Sun 38,0° below the horizon)
544	2021 08 23	01:48	End of occultation of HD 214654 (magn. = 7,80)
545	2021 08 23	02:03	End of occultation of HD 214723 (magn. = 8,11)
546	2021 08 23	02:11	Transit of the Moon at the meridian (center of the Moon 35,0° above the horizon)
547	2021 08 23	04:41	Beginning of occultation of HD 215541 (magn. = 8,42)
548	2021 08 23	05:08	Setting of Saturn
549	2021 08 23	05:13	Beginning of astronomical dawn
550	2021 08 23	05:46	End of occultation of HD 215541 (magn. = 8,42)
551	2021 08 23	05:50	Beginning of nautical dawn
552	2021 08 23	06:24	Beginning of civil dawn
553	2021 08 23	06:40	Setting of Jupiter
554	2021 08 23	06:53	SUNRISE
555	2021 08 23	07:37	Moonset
556	2021 08 23	13:37	Transit of the Sun at the meridian (center of the Sun 60,6° above the horizon)
557	2021 08 23	20:21	SUNSET
558	2021 08 23	20:40	Beginning of occultation of satellite Callisto by Jupiter
559	2021 08 23	20:49	End of civil twilight
560	2021 08 23	20:59	Setting of Mars
561	2021 08 23	21:08	Setting of Mercury
562	2021 08 23	21:21	Moonrise
563	2021 08 23	21:23	End of nautical twilight
564	2021 08 23	21:50	Setting of Venus
565	2021 08 23	21:59	End of astronomical twilight
566	2021 08 24	00:10	Transit of Saturn at the meridian
567	2021 08 24	00:28	Beginning of occultation of HD 221081 (magn. = 6,20)
568	2021 08 24	00:32	End of occultation of HD 221081 (magn. = 6,20)
569	2021 08 24	01:22	Transit of Jupiter at the meridian
570	2021 08 24	01:37	Middle of the night (center of the Sun 38,3° below the horizon)
571	2021 08 24	02:06	End of eclipse of satellite Callisto in Jupiter's shadow
572	2021 08 24	02:17	Beginning of occultation of HD 221519 (magn. = 7,97)
573	2021 08 24	02:58	Transit of the Moon at the meridian (center of the Moon 40,5° above the horizon)
574	2021 08 24	03:12	End of occultation of HD 221519 (magn. = 7,97)
575	2021 08 24	05:04	Setting of Saturn
576	2021 08 24	05:15	Beginning of astronomical dawn
577	2021 08 24	05:31	The Red Spot crosses the central meridian of Jupiter
578	2021 08 24	05:51	Beginning of nautical dawn
579	2021 08 24	06:25	Beginning of civil dawn
580	2021 08 24	06:36	Setting of Jupiter
581	2021 08 24	06:54	SUNRISE
582	2021 08 24	08:45	Moonset
583	2021 08 24	13:37	Transit of the Sun at the meridian (center of the Sun 60,3° above the horizon)
584	2021 08 24	20:19	SUNSET
585	2021 08 24	20:47	End of civil twilight
586	2021 08 24	20:57	Setting of Mars
587	2021 08 24	21:07	Setting of Mercury
588	2021 08 24	21:22	End of nautical twilight
589	2021 08 24	21:46	Moonrise
590	2021 08 24	21:49	Setting of Venus
591	2021 08 24	21:58	End of astronomical twilight
592	2021 08 25	00:06	Transit of Saturn at the meridian
593	2021 08 25	01:17	Transit of Jupiter at the meridian
594	2021 08 25	01:22	The Red Spot crosses the central meridian of Jupiter
595	2021 08 25	01:37	Middle of the night (center of the Sun 38,6° below the horizon)
596	2021 08 25	02:53	Beginning of occultation of HD 1689 (magn. = 7,36)
597	2021 08 25	03:42	Transit of the Moon at the meridian (center of the Moon 46,3° above the horizon)
598	2021 08 25	03:52	Beginning of occultation of HD 1679 (magn. = 6,92)
599	2021 08 25	04:09	End of occultation of HD 1689 (magn. = 7,36)
600	2021 08 25	04:18	End of occultation of HD 1679 (magn. = 6,92)

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
601	2021 08 25	04:59	Setting of Saturn
602	2021 08 25	05:16	Beginning of astronomical dawn
603	2021 08 25	05:52	Beginning of nautical dawn
604	2021 08 25	06:26	Beginning of civil dawn
605	2021 08 25	06:31	Setting of Jupiter
606	2021 08 25	06:55	SUNRISE
607	2021 08 25	09:49	Moonset
608	2021 08 25	13:36	Transit of the Sun at the meridian (center of the Sun 60,0° above the horizon)
609	2021 08 25	20:17	SUNSET
610	2021 08 25	20:46	End of civil twilight
611	2021 08 25	20:55	Setting of Mars
612	2021 08 25	21:06	Setting of Mercury
613	2021 08 25	21:14	The Red Spot crosses the central meridian of Jupiter
614	2021 08 25	21:20	End of nautical twilight
615	2021 08 25	21:48	Setting of Venus
616	2021 08 25	21:56	End of astronomical twilight
617	2021 08 25	22:09	Moonrise
618	2021 08 26	01:13	Transit of Jupiter at the meridian
619	2021 08 26	01:36	Middle of the night (center of the Sun 39,0° below the horizon)
620	2021 08 26	04:25	Transit of the Moon at the meridian (center of the Moon 52,0° above the horizon)
621	2021 08 26	05:17	Beginning of astronomical dawn
622	2021 08 26	05:53	Beginning of nautical dawn
623	2021 08 26	06:26	Setting of Jupiter
624	2021 08 26	06:28	Beginning of civil dawn
625	2021 08 26	06:56	SUNRISE
626	2021 08 26	10:52	Moonset
627	2021 08 26	13:36	Transit of the Sun at the meridian (center of the Sun 59,6° above the horizon)
628	2021 08 26	20:16	SUNSET
629	2021 08 26	20:44	End of civil twilight
630	2021 08 26	20:52	Setting of Mars
631	2021 08 26	21:05	Setting of Mercury
632	2021 08 26	21:18	End of nautical twilight
633	2021 08 26	21:46	Setting of Venus
634	2021 08 26	21:54	End of astronomical twilight
635	2021 08 26	22:32	Moonrise
636	2021 08 26	23:57	Transit of Saturn at the meridian
637	2021 08 27	01:05	Beginning of occultation of HD 11170 (magn. = 7,43)
638	2021 08 27	01:09	Transit of Jupiter at the meridian
639	2021 08 27	01:36	Middle of the night (center of the Sun 39,3° below the horizon)
640	2021 08 27	02:17	End of occultation of HD 11170 (magn. = 7,43)
641	2021 08 27	02:26	Beginning of occultation of HD 11350 (magn. = 8,16)
642	2021 08 27	03:00	The Red Spot crosses the central meridian of Jupiter
643	2021 08 27	03:46	End of occultation of HD 11350 (magn. = 8,16)
644	2021 08 27	03:52	Beginning of occultation of HD 11558 (magn. = 7,44)
645	2021 08 27	04:30	End of occultation of HD 11558 (magn. = 7,44)
646	2021 08 27	04:34	Beginning of transit of satellite Io in front of Jupiter's disk
647	2021 08 27	04:46	Beginning of shadow's transit of satellite Io on Jupiter's disk
648	2021 08 27	04:51	Setting of Saturn
649	2021 08 27	05:07	Transit of the Moon at the meridian (center of the Moon 57,5° above the horizon)
650	2021 08 27	05:19	Beginning of astronomical dawn
651	2021 08 27	05:54	Beginning of nautical dawn
652	2021 08 27	06:22	Setting of Jupiter
653	2021 08 27	06:29	Beginning of civil dawn
654	2021 08 27	06:57	SUNRISE
655	2021 08 27	11:53	Moonset
656	2021 08 27	13:36	Transit of the Sun at the meridian (center of the Sun 59,3° above the horizon)
657	2021 08 27	20:14	SUNSET
658	2021 08 27	20:43	End of civil twilight
659	2021 08 27	20:50	Setting of Mars
660	2021 08 27	21:04	Setting of Mercury

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
661	2021 08 27	21:17	End of nautical twilight
662	2021 08 27	21:44	Setting of Venus
663	2021 08 27	21:52	End of astronomical twilight
664	2021 08 27	22:51	The Red Spot crosses the central meridian of Jupiter
665	2021 08 27	22:55	Moonrise
666	2021 08 27	23:53	Transit of Saturn at the meridian
667	2021 08 28	00:42	Beginning of occultation of HD 15942 (magn. = 7,49)
668	2021 08 28	01:04	Transit of Jupiter at the meridian
669	2021 08 28	01:32	End of occultation of HD 15942 (magn. = 7,49)
670	2021 08 28	01:36	Middle of the night (center of the Sun 39,7° below the horizon)
671	2021 08 28	01:47	Beginning of occultation of satellite Io by Jupiter
672	2021 08 28	02:06	Beginning of occultation of 31 Ari (magn. = 5,64)
673	2021 08 28	02:26	Beginning of occultation of satellite Europa by Jupiter
674	2021 08 28	02:48	Beginning of occultation of HD 16353 (magn. = 7,58)
675	2021 08 28	03:11	End of occultation of HD 16353 (magn. = 7,58)
676	2021 08 28	03:18	End of occultation of 31 Ari (magn. = 5,64)
677	2021 08 28	04:16	End of eclipse of satellite Io in Jupiter's shadow
678	2021 08 28	04:47	Setting of Saturn
679	2021 08 28	05:20	Beginning of astronomical dawn
680	2021 08 28	05:44	End of eclipse of satellite Europa in Jupiter's shadow
681	2021 08 28	05:50	Transit of the Moon at the meridian (center of the Moon 62,5° above the horizon)
682	2021 08 28	05:56	Beginning of nautical dawn
683	2021 08 28	06:17	Setting of Jupiter
684	2021 08 28	06:30	Beginning of civil dawn
685	2021 08 28	06:58	SUNRISE
686	2021 08 28	12:54	Moonset
687	2021 08 28	13:36	Transit of the Sun at the meridian (center of the Sun 58,9° above the horizon)
688	2021 08 28	20:13	SUNSET
689	2021 08 28	20:41	End of civil twilight
690	2021 08 28	20:47	Setting of Mars
691	2021 08 28	21:02	Setting of Mercury
692	2021 08 28	21:15	End of nautical twilight
693	2021 08 28	21:43	Setting of Venus
694	2021 08 28	21:50	End of astronomical twilight
695	2021 08 28	22:59	Beginning of transit of satellite Io in front of Jupiter's disk
696	2021 08 28	23:14	Beginning of shadow's transit of satellite Io on Jupiter's disk
697	2021 08 28	23:21	Moonrise
698	2021 08 28	23:49	Transit of Saturn at the meridian
699	2021 08 29	00:59	Transit of Jupiter at the meridian
700	2021 08 29	01:18	End of transit of satellite Io in front of Jupiter's disk
701	2021 08 29	01:33	End of shadow's transit of satellite Io on Jupiter's disk
702	2021 08 29	01:35	Middle of the night (center of the Sun 40,0° below the horizon)
703	2021 08 29	01:56	Beginning of occultation of TYC 1233-635-1 (magn. = 8,27)
704	2021 08 29	02:04	Beginning of occultation of HD 20955 (magn. = 7,86)
705	2021 08 29	02:25	Beginning of occultation of HD 20996 (magn. = 8,49)
706	2021 08 29	02:54	End of occultation of TYC 1233-635-1 (magn. = 8,27)
707	2021 08 29	02:56	End of occultation of HD 20955 (magn. = 7,86)
708	2021 08 29	03:31	End of occultation of HD 20996 (magn. = 8,49)
709	2021 08 29	04:38	The Red Spot crosses the central meridian of Jupiter
710	2021 08 29	04:43	Setting of Saturn
711	2021 08 29	05:21	Beginning of astronomical dawn
712	2021 08 29	05:38	Beginning of occultation of HD 21457 (magn. = 8,33)
713	2021 08 29	05:57	Beginning of nautical dawn
714	2021 08 29	06:08	End of occultation of HD 21457 (magn. = 8,33)
715	2021 08 29	06:13	Setting of Jupiter
716	2021 08 29	06:31	Beginning of civil dawn
717	2021 08 29	06:34	Transit of the Moon at the meridian (center of the Moon 66,9° above the horizon)
718	2021 08 29	06:59	SUNRISE
719	2021 08 29	13:35	Transit of the Sun at the meridian (center of the Sun 58,5° above the horizon)
720	2021 08 29	13:55	Moonset

Nights of August 1st, 2021 to August 31st, 2021 (following)

Times are given in daylight time for Aveiro, PT (8° 38' 0" W, 40° 37' 0" N, zone Z).

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
721	2021 08 29	20:11	SUNSET
722	2021 08 29	20:39	End of civil twilight
723	2021 08 29	20:45	Setting of Mars
724	2021 08 29	20:57	Beginning of transit of satellite Europa in front of Jupiter's disk
725	2021 08 29	21:01	Setting of Mercury
726	2021 08 29	21:13	End of nautical twilight
727	2021 08 29	21:26	Beginning of shadow's transit of satellite Europa on Jupiter's disk
728	2021 08 29	21:42	Setting of Venus
729	2021 08 29	21:48	End of astronomical twilight
730	2021 08 29	22:42	Beginning of transit of satellite Ganymede in front of Jupiter's disk
731	2021 08 29	22:45	End of eclipse of satellite Io in Jupiter's shadow
732	2021 08 29	23:44	Beginning of shadow's transit of satellite Ganymede on Jupiter's disk
733	2021 08 29	23:45	Transit of Saturn at the meridian
734	2021 08 29	23:46	End of transit of satellite Europa in front of Jupiter's disk
735	2021 08 29	23:51	Moonrise
736	2021 08 30	00:16	End of occultation of HD 25720 (magn. = 8,29)
737	2021 08 30	00:17	End of shadow's transit of satellite Europa on Jupiter's disk
738	2021 08 30	00:30	The Red Spot crosses the central meridian of Jupiter
739	2021 08 30	00:55	Transit of Jupiter at the meridian
740	2021 08 30	01:35	Middle of the night (center of the Sun 40,4° below the horizon)
741	2021 08 30	02:17	End of transit of satellite Ganymede in front of Jupiter's disk
742	2021 08 30	03:22	End of shadow's transit of satellite Ganymede on Jupiter's disk
743	2021 08 30	04:38	Setting of Saturn
744	2021 08 30	04:45	Beginning of occultation of HD 26874 (magn. = 7,83)
745	2021 08 30	05:23	Beginning of astronomical dawn
746	2021 08 30	05:58	Beginning of nautical dawn
747	2021 08 30	06:08	Setting of Jupiter
748	2021 08 30	06:08	End of occultation of HD 26874 (magn. = 7,83)
749	2021 08 30	06:32	Beginning of civil dawn
750	2021 08 30	06:59	SUNRISE
751	2021 08 30	07:19	Transit of the Moon at the meridian (center of the Moon 70,6° above the horizon)
752	2021 08 30	08:13	LAST QUARTER OF THE MOON
753	2021 08 30	13:35	Transit of the Sun at the meridian (center of the Sun 58,2° above the horizon)
754	2021 08 30	14:56	Moonset
755	2021 08 30	20:10	SUNSET
756	2021 08 30	20:21	The Red Spot crosses the central meridian of Jupiter
757	2021 08 30	20:38	End of civil twilight
758	2021 08 30	20:42	Setting of Mars
759	2021 08 30	20:59	Setting of Mercury
760	2021 08 30	21:11	End of nautical twilight
761	2021 08 30	21:40	Setting of Venus
762	2021 08 30	21:46	End of astronomical twilight
763	2021 08 30	23:41	Transit of Saturn at the meridian
764	2021 08 31	00:25	Moonrise
765	2021 08 31	00:51	Transit of Jupiter at the meridian
766	2021 08 31	01:35	Middle of the night (center of the Sun 40,8° below the horizon)
767	2021 08 31	03:59	Beginning of occultation of TYC 1845-2377-1 (magn. = 7,58)
768	2021 08 31	04:34	Setting of Saturn
769	2021 08 31	04:50	End of occultation of TYC 1845-2377-1 (magn. = 7,58)
770	2021 08 31	05:24	Beginning of astronomical dawn
771	2021 08 31	05:59	Beginning of nautical dawn
772	2021 08 31	06:03	Setting of Jupiter
773	2021 08 31	06:33	Beginning of civil dawn
774	2021 08 31	07:01	SUNRISE
775	2021 08 31	08:07	Transit of the Moon at the meridian (center of the Moon 73,2° above the horizon)