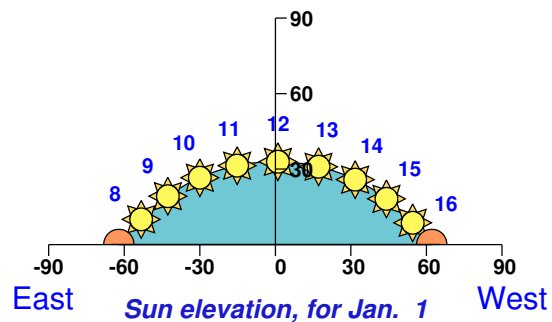
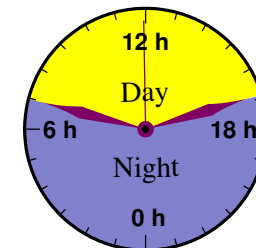


Sun Diary **2018**

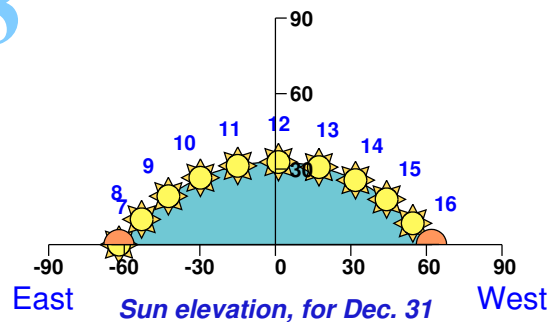
Week **1****Dec. - Jan. 2019****Pasadena**

-118.14°E, 34.14°N

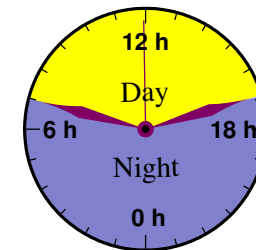
*Duration of the day, for Dec. 31***Monday 1****Tuesday 2****Wednesday 3****Thursday 4****Friday 4****Saturday 5****Sunday 6***Sunrise and Sunset at Pasadena (TL ± 1 mn)*

1 - 364 06:59 - 16:54				4 - 361 06:59 - 16:56			4 - 361 06:59 - 16:56			5 - 360 06:59 - 16:57			6 - 359 06:59 - 16:57		
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
9:55	+0 m.	33°		9:55	+1 m.	33°		9:56	+0 m.	33°		9:56	+1 m.	33°	

Duration of the day - Variation - Sun maximal elevation (°)

Week **53****January 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Jan. 1***Monday 31****Tuesday 1****Wednesday 2****Thursday 3****Friday 5****Saturday 6****Sunday 7***Sunrise and Sunset at Pasadena (TL ± 1 mn)***365 - 0**

06:58 - 16:53

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:54 +0 m. 33°

1 - 364

06:59 - 16:53

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:54 +0 m. 33°

2 - 363

06:59 - 16:54

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:55 +1 m. 33°

3 - 362

06:59 - 16:55

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:56 +0 m. 33°

5 - 360

06:59 - 16:57

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:57 +1 m. 33°

6 - 359

06:59 - 16:58

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:58 +1 m. 33°

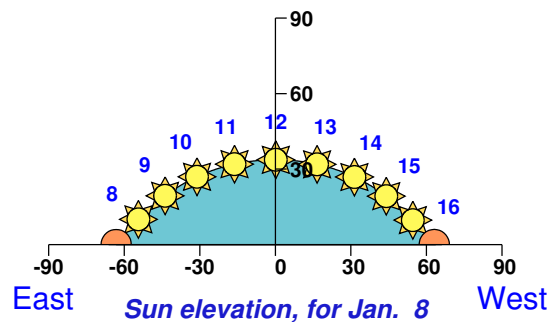
7 - 358

06:59 - 16:58

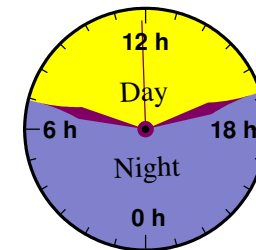
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:59 +1 m. 34°

Duration of the day - Variation - Sun maximal elevation (°)

Week **2****December 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Dec. 24***Monday 8****Tuesday 9****Wednesday 10****Thursday 11****Friday 28****Saturday 29****Sunday 30***Sunrise and Sunset at Pasadena (TL ± 1 mn)*

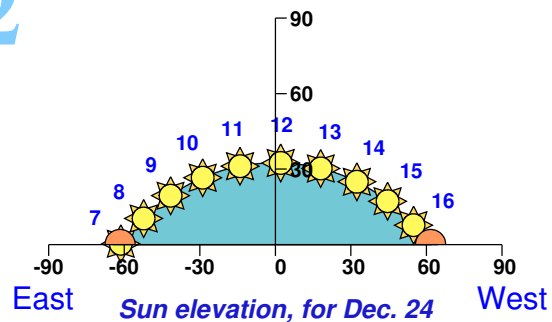
8 - 357 06:59 - 16:59				362 - 3 06:58 - 16:51		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:00	+1 m.	34°		9:53	+0 m.	33°

9 - 356 06:59 - 17:00				363 - 2 06:58 - 16:51		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:01	+1 m.	34°		9:53	+0 m.	33°

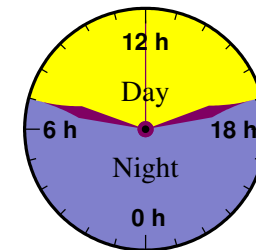
10 - 355 06:59 - 17:01				364 - 1 06:58 - 16:52		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:02	+1 m.	34°		9:54	+0 m.	33°

11 - 354 06:59 - 17:02						
8 9 10 11 12 13 14 15 16 17 18 19 20						
10:03	+1 m.	34°				

Duration of the day - Variation - Sun maximal elevation (°)

Week **52****January 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Jan. 8*
Monday 24 **Tuesday 25** **Wednesday 26** **Thursday 27**
Friday 12 **Saturday 13** **Sunday 14**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

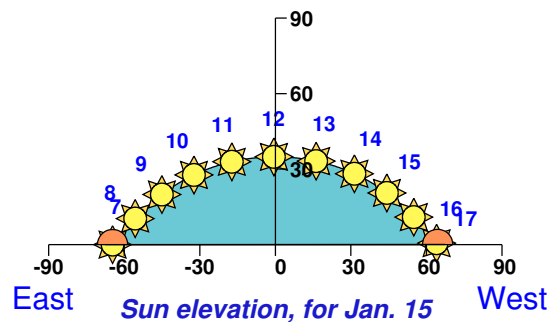
358 - 7 06:56 - 16:48				12 - 353 06:59 - 17:03		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
9:52	+0 m.	32°		10:04	+1 m.	34°

359 - 6 06:56 - 16:49				13 - 352 06:59 - 17:04		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
9:52	+0 m.	33°		10:05	+1 m.	35°

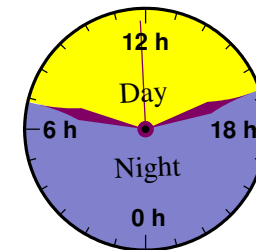
360 - 5 06:57 - 16:49				14 - 351 06:58 - 17:05		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
9:52	+0 m.	33°		10:06	+1 m.	35°

361 - 4 06:57 - 16:50						
8 9 10 11 12 13 14 15 16 17 18 19 20						
9:52	+0 m.	33°				

Duration of the day - Variation - Sun maximal elevation (°)

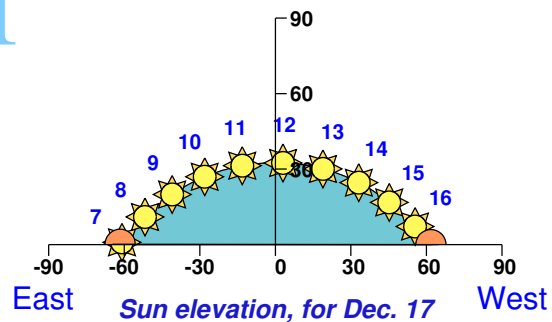
Week **3****December 2018****Pasadena**

-118.14°E, 34.14°N

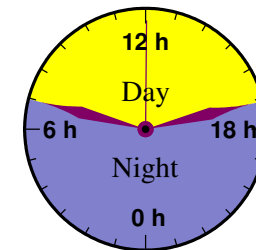
*Duration of the day, for Dec. 17*
Monday 15 **Tuesday 16** **Wednesday 17** **Thursday 18**
Friday 21 **Saturday 22** **Sunday 23**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

15 - 350 06:58 - 17:06				355 - 10 06:55 - 16:47		
16 - 349 06:58 - 17:07				356 - 9 06:55 - 16:47		
17 - 348 06:58 - 17:07				357 - 8 06:56 - 16:48		
18 - 347 06:57 - 17:08						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:07	+1 m.	35°		9:52	+0 m.	32°

Duration of the day - Variation - Sun maximal elevation (°)

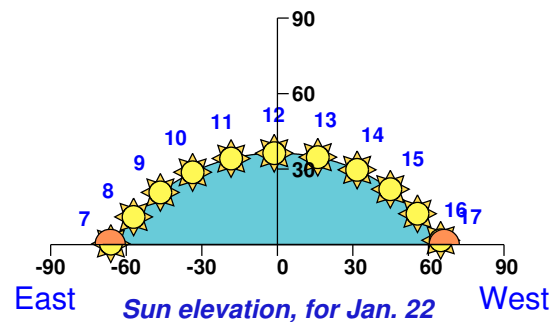
Week **51****January 2018****Pasadena**

-118.14°E, 34.14°N

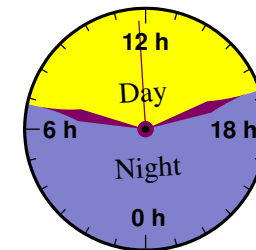
*Duration of the day, for Jan. 15*
Monday 17 **Tuesday 18** **Wednesday 19** **Thursday 20**
Friday 19 **Saturday 20** **Sunday 21**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

351 - 14 06:52 - 16:45				19 - 346 06:57 - 17:09		
352 - 13 06:53 - 16:45				20 - 345 06:57 - 17:10		
353 - 12 06:54 - 16:46				21 - 344 06:56 - 17:11		
354 - 11 06:54 - 16:46						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
9:52 +0 m. 33°	9:52 +0 m. 32°	9:52 +0 m. 32°	9:52 +0 m. 32°	10:12 +1 m. 36°	10:14 +2 m. 36°	10:15 +1 m. 36°

Duration of the day - Variation - Sun maximal elevation (°)

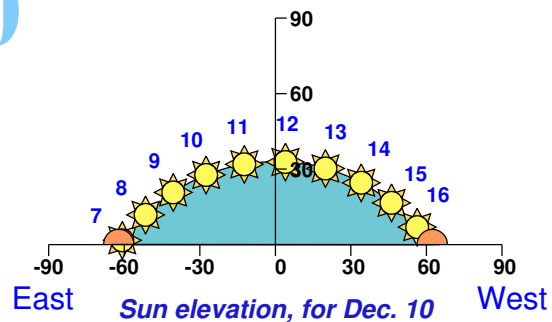
Week **4****December 2018****Pasadena**

-118.14°E, 34.14°N

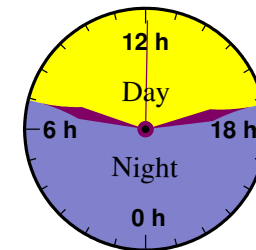
*Duration of the day, for Dec. 10*
Monday 22 **Tuesday 23** **Wednesday 24** **Thursday 25**
Friday 14 **Saturday 15** **Sunday 16**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

22 - 343 06:56 - 17:12				348 - 17 06:51 - 16:44		
23 - 342 06:55 - 17:13				349 - 16 06:51 - 16:44		
24 - 341 06:55 - 17:14				350 - 15 06:52 - 16:45		
25 - 340 06:54 - 17:15						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:17 <i>+1 m.</i> 36°	10:18 <i>+1 m.</i> 37°	10:20 <i>+1 m.</i> 37°	10:21 <i>+1 m.</i> 37°	9:53 <i>+0 m.</i> 33°	9:53 <i>+0 m.</i> 33°	9:53 <i>+0 m.</i> 33°

Duration of the day - Variation - Sun maximal elevation (°)

Week **50****January 2018****Pasadena**

-118.14°E, 34.14°N



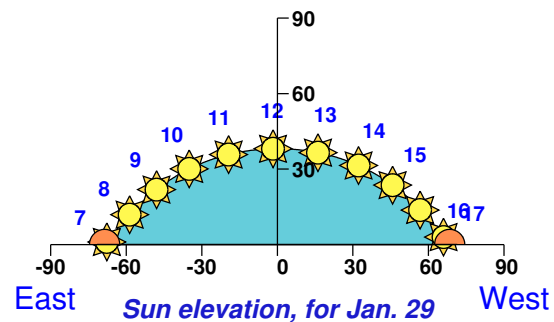
Duration of the day, for Jan. 22

Monday 10 **Tuesday 11** **Wednesday 12** **Thursday 13**
Friday 26 **Saturday 27** **Sunday 28**

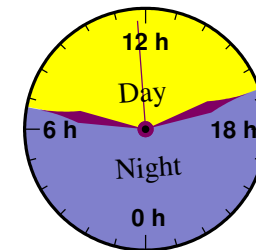
Sunrise and Sunset at Pasadena (TL ± 1 mn)

344 - 21 06:48 - 16:43				26 - 339 06:54 - 17:16		
345 - 20 06:48 - 16:43				27 - 338 06:53 - 17:17		
346 - 19 06:49 - 16:44				28 - 337 06:53 - 17:18		
347 - 18 06:50 - 16:44						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
9:55 +0 m. 33°	9:55 +0 m. 33°	9:54 +0 m. 33°	9:54 +0 m. 33°	10:23 +1 m. 37°	10:24 +1 m. 38°	10:26 +2 m. 38°

Duration of the day - Variation - Sun maximal elevation (°)

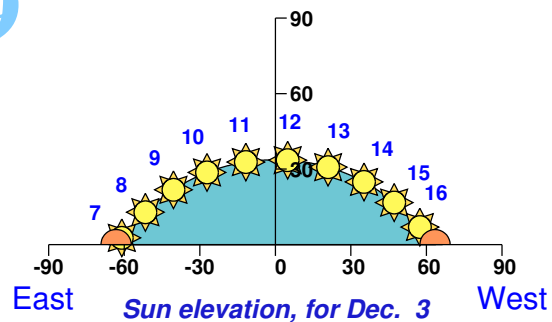
Week **5****December 2018****Pasadena**

-118.14°E, 34.14°N

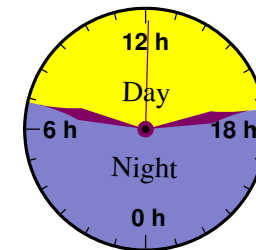
*Duration of the day, for Dec. 3*
Monday 29 **Tuesday 30** **Wednesday 31** **Thursday 1**
Friday 7 **Saturday 8** **Sunday 9**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

29 - 336 06:52 - 17:19				341 - 24 06:45 - 16:43		
30 - 335 06:51 - 17:20				342 - 23 06:46 - 16:43		
31 - 334 06:51 - 17:21				343 - 22 06:47 - 16:43		
32 - 333 06:50 - 17:22						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:27 +2 m. 38°	10:29 +2 m. 38°	10:31 +2 m. 39°	10:32 +1 m. 39°	9:57 +0 m. 33°	9:56 +0 m. 33°	9:56 +0 m. 33°

Duration of the day - Variation - Sun maximal elevation (°)

Week **49****Jan. - Feb. 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Jan. 29***Monday 3****Tuesday 4****Wednesday 5****Thursday 6****Friday 2****Saturday 3****Sunday 4***Sunrise and Sunset at Pasadena (TL ± 1 mn)***337 - 28**

06:42 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:01 +0 m. 34°

338 - 27

06:43 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:00 +0 m. 34°

339 - 26

06:44 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:59 +0 m. 33°

340 - 25

06:45 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

9:58 +0 m. 33°

33 - 332

06:49 - 17:23

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:34 +2 m. 39°

34 - 331

06:48 - 17:24

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:36 +2 m. 40°

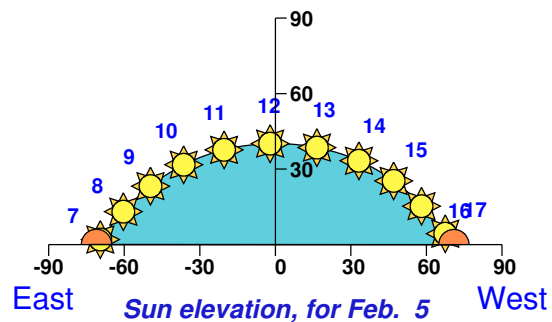
35 - 330

06:48 - 17:25

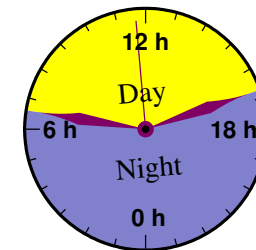
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:38 +1 m. 40°

Duration of the day - Variation - Sun maximal elevation (°)

Week **6****Nov. - Dec. 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Nov. 26***Monday 5****Tuesday 6****Wednesday 7****Thursday 8****Friday 30****Saturday 1****Sunday 2***Sunrise and Sunset at Pasadena (TL ± 1 mn)***36 - 329**

06:47 - 17:26

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:39 +2 m. 40°

37 - 328

06:46 - 17:27

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:41 +2 m. 40°

38 - 327

06:45 - 17:28

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:43 +2 m. 41°

39 - 326

06:44 - 17:29

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:45 +2 m. 41°

334 - 31

06:40 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:04 +0 m. 34°

335 - 30

06:40 - 16:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:03 +0 m. 34°

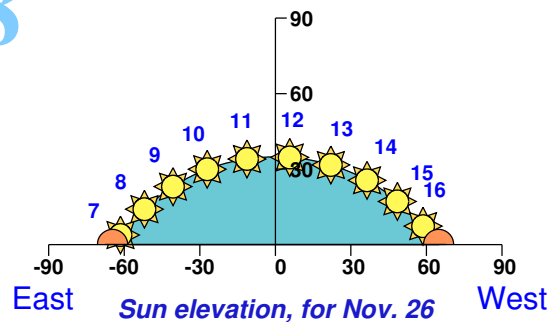
336 - 29

06:41 - 16:43

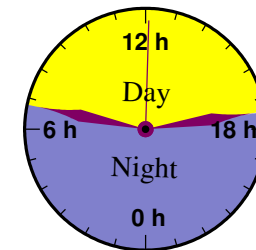
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

10:02 +0 m. 34°

Duration of the day - Variation - Sun maximal elevation (°)

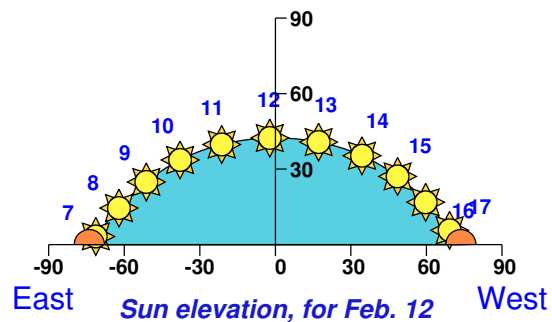
Week **48****February 2018****Pasadena**

-118.14°E, 34.14°N

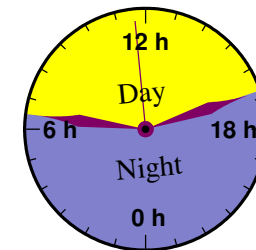
*Duration of the day, for Feb. 5*
Monday 26 **Tuesday 27** **Wednesday 28** **Thursday 29**
Friday 9 **Saturday 10** **Sunday 11**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

330 - 35 06:36 - 16:44				40 - 325 06:43 - 17:30		
331 - 34 06:37 - 16:44				41 - 324 06:42 - 17:31		
332 - 33 06:38 - 16:44				42 - 323 06:41 - 17:32		
333 - 32 06:39 - 16:44						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:08 +0 m. 35°	10:07 +0 m. 35°	10:06 +0 m. 34°	10:05 +0 m. 34°	10:47 +2 m. 41°	10:49 +1 m. 42°	10:51 +1 m. 42°

Duration of the day - Variation - Sun maximal elevation (°)

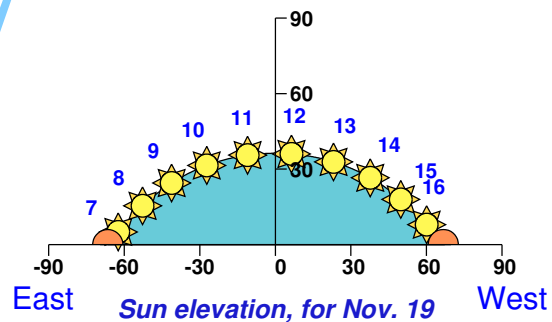
Week **7****November 2018****Pasadena**

-118.14°E, 34.14°N

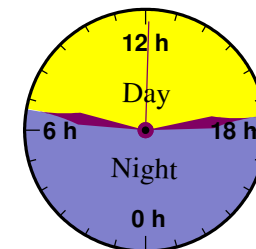
*Duration of the day, for Nov. 19*
Monday 12 **Tuesday 13** **Wednesday 14** **Thursday 15**
Friday 23 **Saturday 24** **Sunday 25**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

43 - 322 06:40 - 17:33				327 - 38 06:33 - 16:45		
44 - 321 06:39 - 17:34				328 - 37 06:34 - 16:45		
45 - 320 06:38 - 17:35				329 - 36 06:35 - 16:45		
46 - 319 06:37 - 17:36						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:53 <i>+2 m.</i> 42°	10:55 <i>+1 m.</i> 43°	10:56 <i>+1 m.</i> 43°	10:58 <i>+2 m.</i> 43°	10:12 <i>-1 m.</i> 35°	10:11 <i>+0 m.</i> 35°	10:10 <i>-1 m.</i> 35°

Duration of the day - Variation - Sun maximal elevation (°)

Week **47****February 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Feb. 12***Monday 19 Tuesday 20 Wednesday 21 Thursday 22****Friday 16 Saturday 17 Sunday 18***Sunrise and Sunset at Pasadena (TL ± 1 mn)*

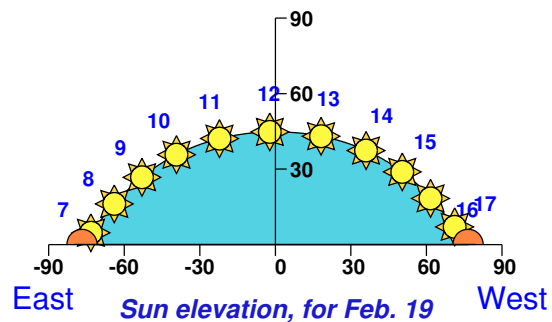
323 - 42 06:29 - 16:47				47 - 318 06:36 - 17:37		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:18	-1 m.	36°		11:00	+2 m.	44°

324 - 41 06:30 - 16:47				48 - 317 06:35 - 17:38		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:16	-1 m.	36°		11:02	+2 m.	44°

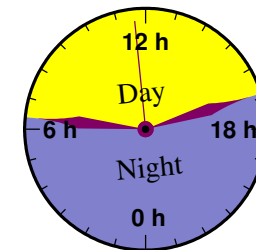
325 - 40 06:31 - 16:46				49 - 316 06:34 - 17:39		
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:15	+0 m.	36°		11:04	+2 m.	44°

326 - 39 06:32 - 16:46						
8 9 10 11 12 13 14 15 16 17 18 19 20				8 9 10 11 12 13 14 15 16 17 18 19 20		
10:14	-1 m.	36°				

Duration of the day - Variation - Sun maximal elevation (°)

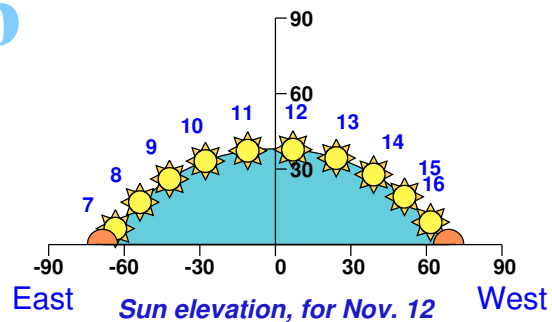
Week **8****November 2018****Pasadena**

-118.14°E, 34.14°N

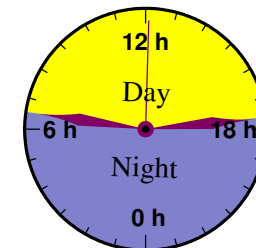
*Duration of the day, for Nov. 12*
Monday 19 **Tuesday 20** **Wednesday 21** **Thursday 22**
Friday 16 **Saturday 17** **Sunday 18**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

50 - 315 06:33 - 17:39				320 - 45 06:27 - 16:49		
51 - 314 06:32 - 17:40				321 - 44 06:28 - 16:48		
52 - 313 06:31 - 17:41				322 - 43 06:28 - 16:48		
53 - 312 06:30 - 17:42						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
11:06 +2 m. 45°	11:08 +2 m. 45°	11:10 +2 m. 46°	11:12 +2 m. 46°	10:22 -1 m. 37°	10:21 +0 m. 37°	10:19 -1 m. 37°

Duration of the day - Variation - Sun maximal elevation (°)

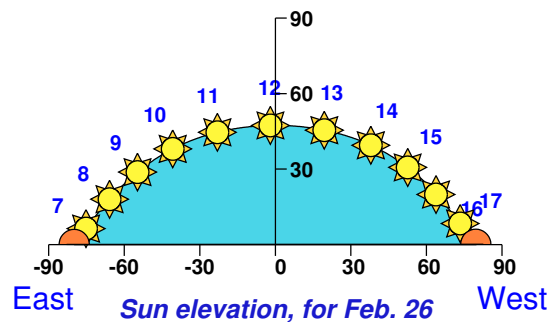
Week **46****February 2018****Pasadena**

-118.14°E, 34.14°N

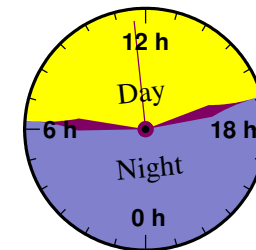
*Duration of the day, for Feb. 19***Monday 12 Tuesday 13 Wednesday 14 Thursday 15****Friday 23 Saturday 24 Sunday 25***Sunrise and Sunset at Pasadena (TL ± 1 mn)*

316 - 49 06:23 - 16:51				54 - 311 06:29 - 17:43		
317 - 48 06:24 - 16:51				55 - 310 06:27 - 17:44		
318 - 47 06:25 - 16:50				56 - 309 06:26 - 17:45		
319 - 46 06:26 - 16:49						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:29	-1 m.	38°		11:15	+2 m.	46°
10:27	-1 m.	38°		11:17	+1 m.	47°
10:25	-1 m.	38°		11:19	+1 m.	47°
10:24	+0 m.	37°				

Duration of the day - Variation - Sun maximal elevation (°)

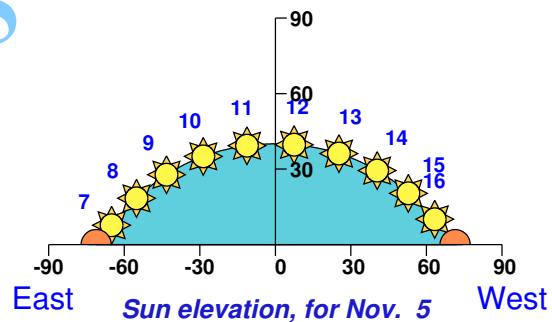
Week **9****November 2018****Pasadena**

-118.14°E, 34.14°N

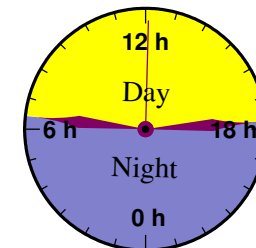
*Duration of the day, for Nov. 5*
Monday 26 **Tuesday 27** **Wednesday 28** **Thursday 1**
Friday 9 **Saturday 10** **Sunday 11**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

57 - 308 06:25 - 17:46				313 - 52 06:20 - 16:54		
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
11:21 +2 m. 47°	11:23 +2 m. 48°	11:25 +2 m. 48°	11:27 +2 m. 49°	10:34 +0 m. 39°	10:32 -1 m. 39°	10:30 -1 m. 38°

Duration of the day - Variation - Sun maximal elevation (°)

Week **45****Feb. - March 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Feb. 26***Monday 5****Tuesday 6****Wednesday 7****Thursday 8****Friday 2****Saturday 3****Sunday 4***Sunrise and Sunset at Pasadena (TL ± 1 mn)***309 - 56**

06:16 - 16:57

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

10:41 -1 m. 40°

310 - 55

06:17 - 16:56

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

10:39 -1 m. 40°

311 - 54

06:18 - 16:55

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

10:37 -1 m. 39°

312 - 53

06:19 - 16:54

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

10:35 -1 m. 39°

61 - 304

06:20 - 17:49

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

11:29 +2 m. 49°

62 - 303

06:19 - 17:50

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

11:31 +2 m. 49°

63 - 302

06:18 - 17:51

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

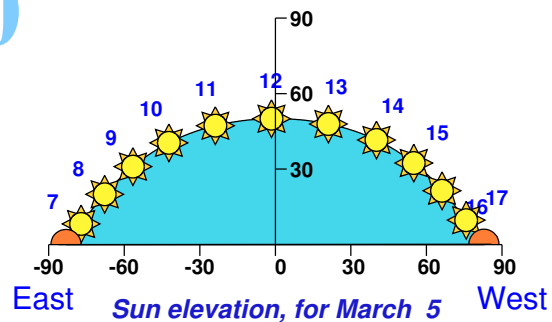
18 —

19 —

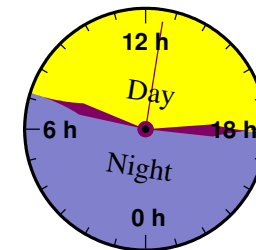
20 —

11:33 +2 m. 50°

Duration of the day - Variation - Sun maximal elevation (°)

Week **10****Oct. - Nov. 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Oct. 29***Monday 5****Tuesday 6****Wednesday 7****Thursday 8****Friday 2****Saturday 3****Sunday 4***Sunrise and Sunset at Pasadena (TL ± 1 mn)***64 - 301**

06:16 - 17:52

65 - 300

06:15 - 17:53

66 - 299

06:14 - 17:53

67 - 298

06:12 - 17:54

306 - 59

07:13 - 18:00

307 - 58

07:14 - 17:59

308 - 57

06:15 - 16:58

Time change November 4

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

11:36 +2 m. 50°

11:38 +2 m. 50°

11:40 +2 m. 51°

11:42 +2 m. 51°

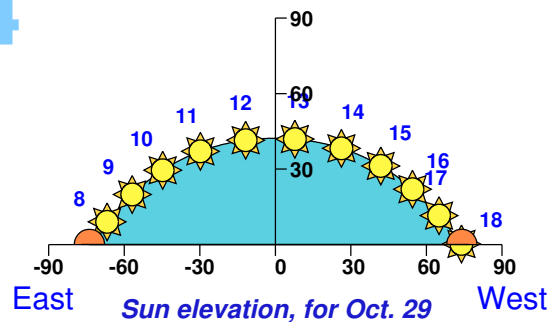
10:46 -1 m. 41°

10:44 -1 m. 41°

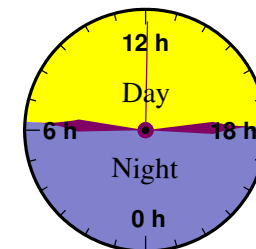
10:43 -1 m. 40°

40°

Duration of the day - Variation - Sun maximal elevation (°)

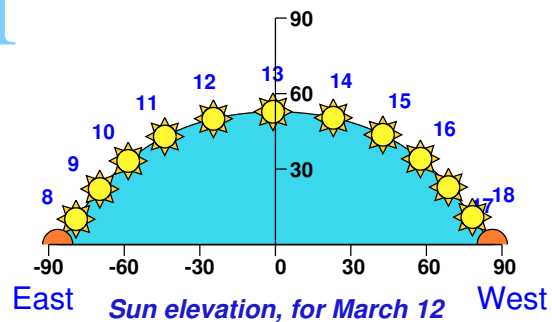
Week **44****March 2018****Pasadena**

-118.14°E, 34.14°N

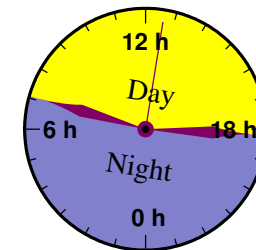
*Duration of the day, for March 5*
Monday 29 **Tuesday 30** **Wednesday 31** **Thursday 1**
Friday 9 **Saturday 10** **Sunday 11**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

302 - 63 07:10 - 18:04	303 - 62 07:11 - 18:03	304 - 61 07:12 - 18:02	305 - 60 07:13 - 18:01	68 - 297 06:11 - 17:55	69 - 296 06:10 - 17:56	70 - 295 07:08 - 18:57
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
10:54 -1 m. 42°	10:52 -1 m. 42°	10:50 -1 m. 42°	10:48 -1 m. 41°	11:44 +2 m. 52°	11:46 +2 m. 52°	11:48 +2 m. 52°

Duration of the day - Variation - Sun maximal elevation (°)

Week **11****October 2018****Pasadena**

-118.14°E, 34.14°N



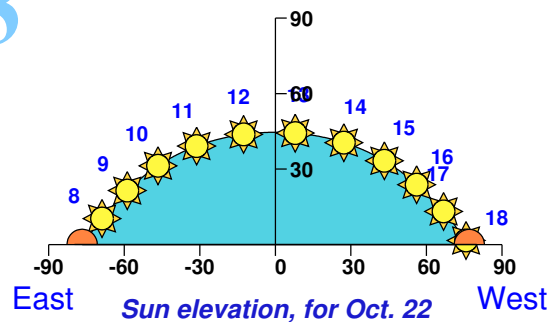
Duration of the day, for Oct. 22

Monday 12 **Tuesday 13** **Wednesday 14** **Thursday 15**
Friday 26 **Saturday 27** **Sunday 28**

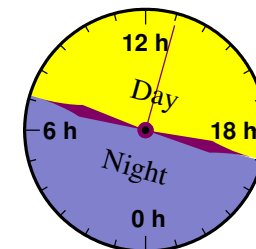
Sunrise and Sunset at Pasadena (TL ± 1 mn)

71 - 294 07:07 - 18:57				299 - 66 07:07 - 18:07		
72 - 293 07:06 - 18:58				300 - 65 07:08 - 18:06		
73 - 292 07:04 - 18:59				301 - 64 07:09 - 18:05		
74 - 291 07:03 - 19:00						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
11:50 +2 m. 53°	11:53 +2 m. 53°	11:55 +2 m. 54°	11:57 +2 m. 54°	11:00 -1 m. 43°	10:58 -2 m. 43°	10:56 -1 m. 43°

Duration of the day - Variation - Sun maximal elevation (°)

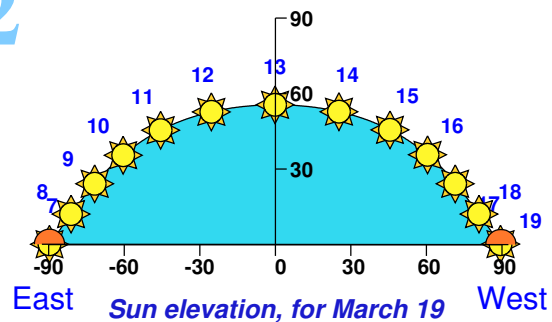
Week **43****March 2018****Pasadena**

-118.14°E, 34.14°N

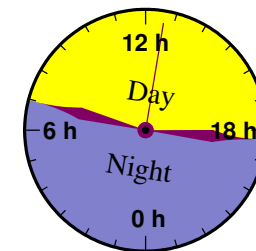
*Duration of the day, for March 12*
Monday 22 **Tuesday 23** **Wednesday 24** **Thursday 25**
Friday 16 **Saturday 17** **Sunday 18**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

295 - 70 07:04 - 18:11	296 - 69 07:05 - 18:10	297 - 68 07:06 - 18:09	298 - 67 07:06 - 18:08	75 - 290 07:02 - 19:01	76 - 289 07:00 - 19:01	77 - 288 06:59 - 19:02
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
11:08 -1 m. 45°	11:06 -2 m. 44°	11:03 -2 m. 44°	11:01 -1 m. 44°	11:59 +2 m. 54°	12:01 +2 m. 55°	12:03 +2 m. 55°

Duration of the day - Variation - Sun maximal elevation (°)

Week **12****October 2018****Pasadena**

-118.14°E, 34.14°N



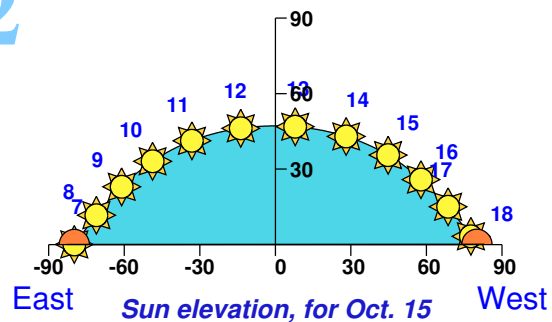
Duration of the day, for Oct. 15

Monday 19 **Tuesday 20** **Wednesday 21** **Thursday 22**
Friday 19 **Saturday 20** **Sunday 21**

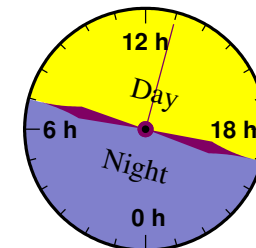
Sunrise and Sunset at Pasadena (TL ± 1 mn)

78 - 287 06:58 - 19:03				292 - 73 07:01 - 18:15		
79 - 286 06:56 - 19:04				293 - 72 07:02 - 18:14		
80 - 285 06:55 - 19:05				294 - 71 07:03 - 18:12		
81 - 284 06:54 - 19:05						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:05 +2 m. 56°	12:08 +2 m. 56°	12:10 +2 m. 56°	12:12 +2 m. 57°	11:14 -2 m. 46°	11:12 -2 m. 45°	11:10 -2 m. 45°

Duration of the day - Variation - Sun maximal elevation (°)

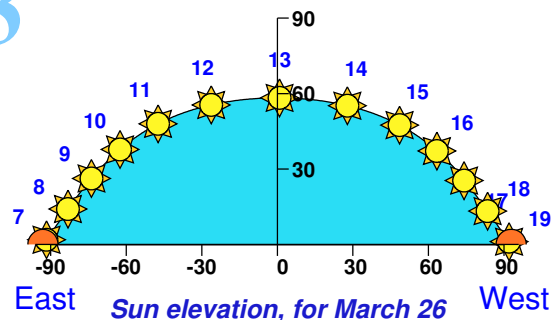
Week **42****March 2018****Pasadena**

-118.14°E, 34.14°N

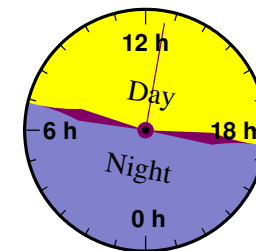
*Duration of the day, for March 19*
Monday 15 **Tuesday 16** **Wednesday 17** **Thursday 18**
Friday 23 **Saturday 24** **Sunday 25**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

288 - 77 06:58 - 18:20	289 - 76 06:59 - 18:18	290 - 75 07:00 - 18:17	291 - 74 07:00 - 18:16	82 - 283 06:52 - 19:06	83 - 282 06:51 - 19:07	84 - 281 06:49 - 19:08
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
11:22 -1 m. 47°	11:20 -2 m. 47°	11:18 -2 m. 46°	11:16 -2 m. 46°	12:14 +2 m. 57°	12:16 +2 m. 58°	12:18 +2 m. 58°

Duration of the day - Variation - Sun maximal elevation (°)

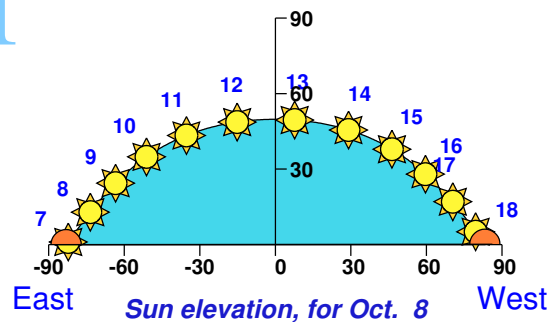
Week **13****October 2018****Pasadena**

-118.14°E, 34.14°N

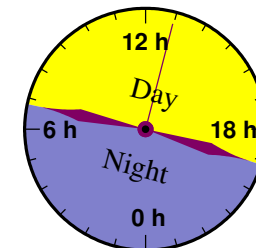
*Duration of the day, for Oct. 8*
Monday 26 **Tuesday 27** **Wednesday 28** **Thursday 29**
Friday 12 **Saturday 13** **Sunday 14**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

85 - 280 06:48 - 19:08				285 - 80 06:56 - 18:23		
86 - 279 06:47 - 19:09				286 - 79 06:56 - 18:22		
87 - 278 06:45 - 19:10				287 - 78 06:57 - 18:21		
88 - 277 06:44 - 19:11						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:20 <i>+2 m.</i> 58°	12:22 <i>+2 m.</i> 59°	12:25 <i>+3 m.</i> 59°	12:27 <i>+2 m.</i> 59°	11:28 <i>-1 m.</i> 48°	11:26 <i>-1 m.</i> 48°	11:24 <i>-1 m.</i> 48°

Duration of the day - Variation - Sun maximal elevation (°)

Week **41****March - April 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for March 26***Monday 8****Tuesday 9****Wednesday 10****Thursday 11****Friday 30****Saturday 31****Sunday 1***Sunrise and Sunset at Pasadena (TL ± 1 mn)***281 - 84**

06:53 - 18:29

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:36 -1 m. 50°

282 - 83

06:53 - 18:27

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:34 -1 m. 49°

283 - 82

06:54 - 18:26

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:32 -1 m. 49°

284 - 81

06:55 - 18:25

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:30 -1 m. 49°

89 - 276

06:43 - 19:11

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:29 +2 m. 60°

90 - 275

06:41 - 19:12

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:31 +2 m. 60°

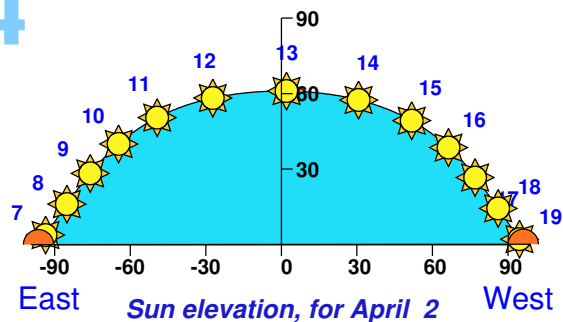
91 - 274

06:40 - 19:13

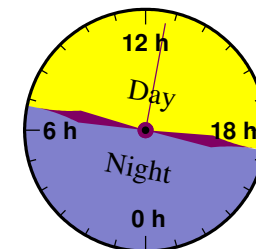
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:33 +2 m. 61°

Duration of the day - Variation - Sun maximal elevation (°)

Week **14****October 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Oct. 1***Monday 2****Tuesday 3****Wednesday 4****Thursday 5****Friday 5****Saturday 6****Sunday 7***Sunrise and Sunset at Pasadena (TL ± 1 mn)***92 - 273**

06:39 - 19:14

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

12:35 +2 m. 61°

93 - 272

06:37 - 19:14

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

12:37 +2 m. 61°

94 - 271

06:36 - 19:15

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

12:40 +2 m. 62°

95 - 270

06:34 - 19:16

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

12:42 +1 m. 62°

278 - 87

06:50 - 18:33

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

11:43 -2 m. 51°

279 - 86

06:51 - 18:31

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

18 —

19 —

20 —

11:40 -2 m. 51°

280 - 85

06:52 - 18:30

8 —

9 —

10 —

11 —

12 —

13 —

14 —

15 —

16 —

17 —

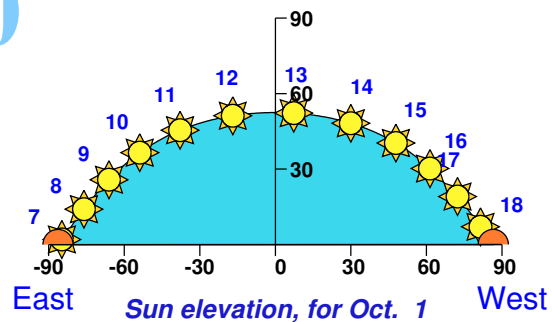
18 —

19 —

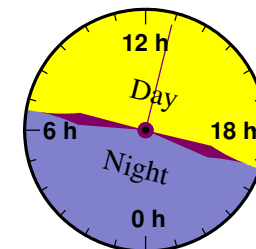
20 —

11:38 -1 m. 50°

Duration of the day - Variation - Sun maximal elevation (°)

Week **40****April 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for April 2***Monday 1****Tuesday 2****Wednesday 3****Thursday 4****Friday 6****Saturday 7****Sunday 8***Sunrise and Sunset at Pasadena (TL ± 1 mn)***274 - 91**

06:47 - 18:38

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:51 -1 m. 52°

275 - 90

06:48 - 18:37

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:49 -1 m. 52°

276 - 89

06:49 - 18:35

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:47 -1 m. 52°

277 - 88

06:50 - 18:34

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

11:45 -2 m. 51°

96 - 269

06:33 - 19:17

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:44 +2 m. 63°

97 - 268

06:32 - 19:18

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:46 +2 m. 63°

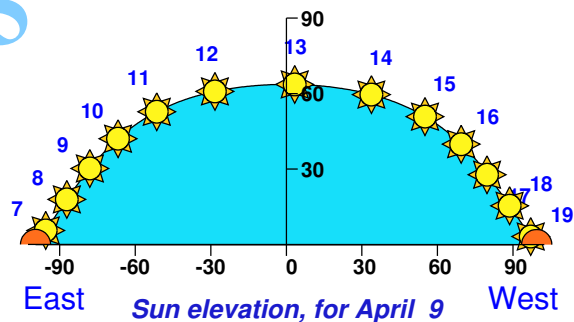
98 - 267

06:31 - 19:18

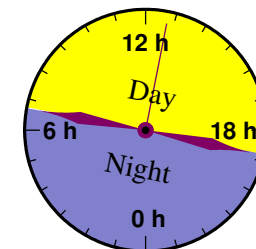
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:48 +2 m. 63°

Duration of the day - Variation - Sun maximal elevation (°)

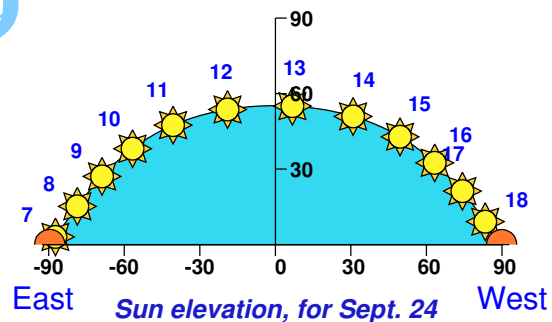
Week **15****September 2018****Pasadena**

-118.14°E, 34.14°N

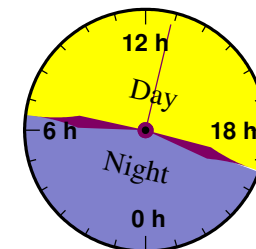
*Duration of the day, for Sept. 24*
Monday 9 **Tuesday 10** **Wednesday 11** **Thursday 12**
Friday 28 **Saturday 29** **Sunday 30**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

99 - 266 06:29 - 19:19				271 - 94 06:45 - 18:42		
100 - 265 06:28 - 19:20				272 - 93 06:46 - 18:41		
101 - 264 06:27 - 19:21				273 - 92 06:47 - 18:40		
102 - 263 06:25 - 19:21						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:50 <i>+2 m.</i> 64°	12:52 <i>+2 m.</i> 64°	12:54 <i>+2 m.</i> 64°	12:56 <i>+2 m.</i> 65°	11:57 <i>-1 m.</i> 54°	11:55 <i>-1 m.</i> 53°	11:53 <i>-1 m.</i> 53°

Duration of the day - Variation - Sun maximal elevation (°)

Week **39****April 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for April 9*
Monday 24 **Tuesday 25** **Wednesday 26** **Thursday 27**
Friday 13 **Saturday 14** **Sunday 15**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

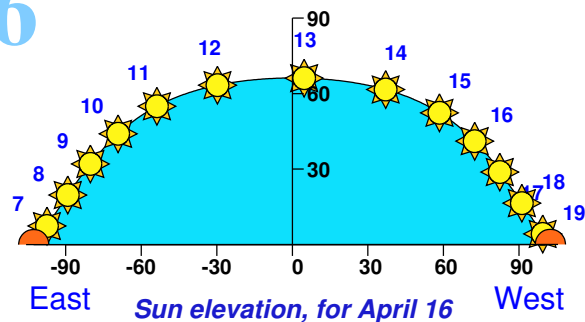
267 - 98 06:42 - 18:48				103 - 262 06:24 - 19:22		
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:06	-1 m.	55°		12:58	+2 m.	65°

268 - 97 06:43 - 18:46				104 - 261 06:23 - 19:23		
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:04	-2 m.	55°		13:00	+2 m.	65°

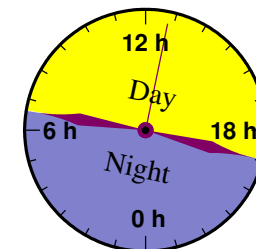
269 - 96 06:44 - 18:45				105 - 260 06:22 - 19:24		
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:01	-2 m.	54°		13:02	+2 m.	66°

270 - 95 06:44 - 18:44						
8	8	8	8			
9	9	9	9			
10	10	10	10			
11	11	11	11			
12	12	12	12			
13	13	13	13			
14	14	14	14			
15	15	15	15			
16	16	16	16			
17	17	17	17			
18	18	18	18			
19	19	19	19			
20	20	20	20			
11:59	-1 m.	54°				

Duration of the day - Variation - Sun maximal elevation (°)

Week **16****September 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Sept. 17***Monday 16** **Tuesday 17** **Wednesday 18** **Thursday 19****Friday 21** **Saturday 22** **Sunday 23***Sunrise and Sunset at Pasadena (TL ± 1 mn)***106 - 259**

06:20 - 19:24

107 - 258

06:19 - 19:25

108 - 257

06:18 - 19:26

109 - 256

06:17 - 19:27

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

13:04 +2 m. 66°

13:06 +2 m. 67°

13:08 +2 m. 67°

13:10 +2 m. 67°

264 - 101

06:40 - 18:52

265 - 100

06:41 - 18:51

266 - 99

06:42 - 18:49

8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

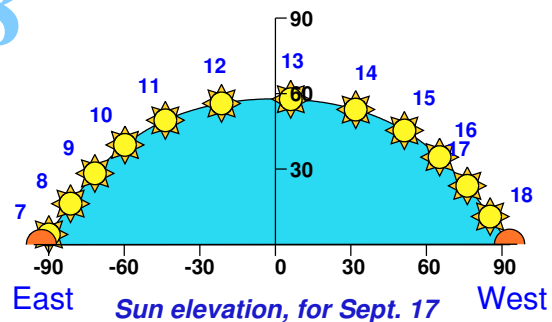
12:12 -1 m. 56°

12:10 -1 m. 56°

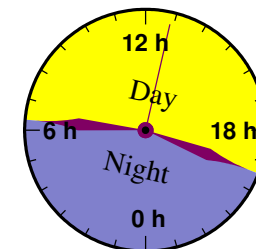
12:08 -1 m. 56°

12:08 -1 m. 56°

Duration of the day - Variation - Sun maximal elevation (°)

Week **38****April 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for April 16***Monday 17 Tuesday 18 Wednesday 19 Thursday 20****Friday 20 Saturday 21 Sunday 22***Sunrise and Sunset at Pasadena (TL ± 1 mn)***260 - 105**

06:37 - 18:58

8
9
10
11
12
13
14
15
16
17
18
19
20

12:20 -1 m. 58°

261 - 104

06:38 - 18:56

8
9
10
11
12
13
14
15
16
17
18
19
20

12:18 -1 m. 58°

262 - 103

06:39 - 18:55

8
9
10
11
12
13
14
15
16
17
18
19
20

12:16 -1 m. 57°

263 - 102

06:39 - 18:54

8
9
10
11
12
13
14
15
16
17
18
19
20

12:14 -1 m. 57°

110 - 255

06:15 - 19:27

8
9
10
11
12
13
14
15
16
17
18
19
20

13:12 +2 m. 68°

111 - 254

06:14 - 19:28

8
9
10
11
12
13
14
15
16
17
18
19
20

13:14 +2 m. 68°

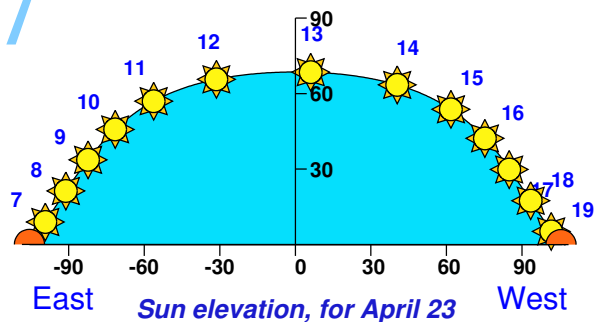
112 - 253

06:13 - 19:29

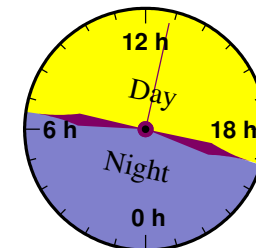
8
9
10
11
12
13
14
15
16
17
18
19
20

13:16 +2 m. 68°

Duration of the day - Variation - Sun maximal elevation (°)

Week **17****September 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Sept. 10***Monday 23 Tuesday 24 Wednesday 25 Thursday 26****Friday 14 Saturday 15 Sunday 16***Sunrise and Sunset at Pasadena (TL ± 1 mn)***113 - 252**

06:12 - 19:30

114 - 251

06:11 - 19:31

115 - 250

06:10 - 19:31

116 - 249

06:09 - 19:32

257 - 108

06:35 - 19:02

258 - 107

06:36 - 19:01

259 - 106

06:37 - 18:59

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

13:18 +2 m. 69°

13:20 +2 m. 69°

13:22 +2 m. 69°

13:24 +2 m. 70°

8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

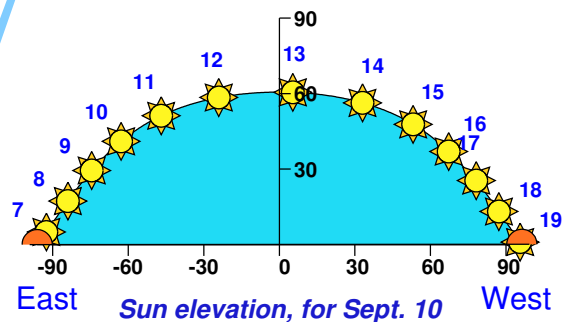
12:27 -1 m. 59°

12:25 -1 m. 59°

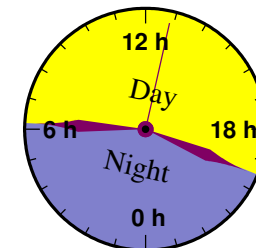
12:22 -2 m. 58°

12:22 -2 m. 58°

Duration of the day - Variation - Sun maximal elevation (°)

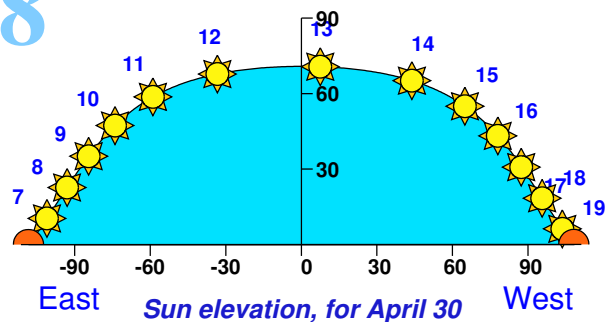
Week **37****April 2018****Pasadena**

-118.14°E, 34.14°N

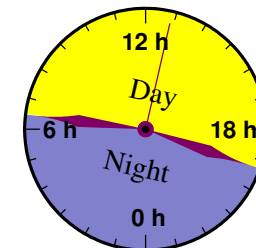
*Duration of the day, for April 23*
Monday 10 **Tuesday 11** **Wednesday 12** **Thursday 13**
Friday 27 **Saturday 28** **Sunday 29**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

253 - 112 06:33 - 19:08				117 - 248 06:07 - 19:33		
254 - 111 06:33 - 19:06				118 - 247 06:06 - 19:34		
255 - 110 06:34 - 19:05				119 - 246 06:05 - 19:35		
256 - 109 06:35 - 19:03						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
12:35 -1 m. 61°	12:33 -1 m. 60°	12:31 -1 m. 60°	12:29 -1 m. 59°	13:26 +1 m. 70°	13:27 +1 m. 70°	13:29 +2 m. 71°

Duration of the day - Variation - Sun maximal elevation (°)

Week **18****September 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Sept. 3***Monday 30****Tuesday 1****Wednesday 2****Thursday 3****Friday 7****Saturday 8****Sunday 9***Sunrise and Sunset at Pasadena (TL ± 1 mn)***120 - 245**

06:04 - 19:35

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:31 +2 m. 71°

121 - 244

06:03 - 19:36

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:33 +2 m. 71°

122 - 243

06:02 - 19:37

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:35 +2 m. 71°

123 - 242

06:01 - 19:38

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:36 +1 m. 72°

250 - 115

06:30 - 19:12

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:41 -1 m. 62°

251 - 114

06:31 - 19:10

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:39 -1 m. 61°

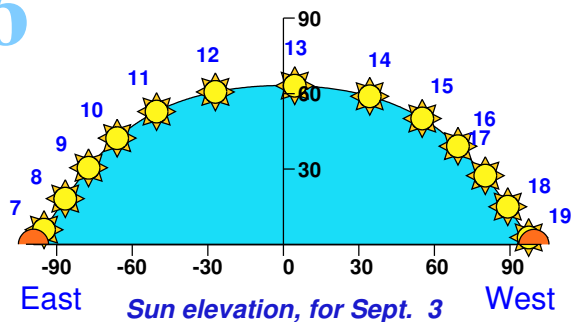
252 - 113

06:32 - 19:09

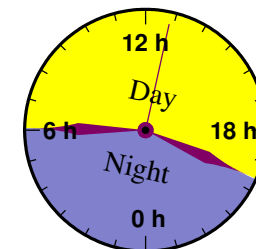
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:37 -1 m. 61°

Duration of the day - Variation - Sun maximal elevation (°)

Week **36****April - May 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for April 30***Monday 3****Tuesday 4****Wednesday 5****Thursday 6****Friday 4****Saturday 5****Sunday 6***Sunrise and Sunset at Pasadena (TL ± 1 mn)***246 - 119**

06:28 - 19:17

8
9
10
11
12
13
14
15
16
17
18
19
20

12:49 -1 m. 63°

247 - 118

06:28 - 19:16

8
9
10
11
12
13
14
15
16
17
18
19
20

12:47 -1 m. 63°

248 - 117

06:29 - 19:14

8
9
10
11
12
13
14
15
16
17
18
19
20

12:45 -1 m. 62°

249 - 116

06:30 - 19:13

8
9
10
11
12
13
14
15
16
17
18
19
20

12:43 -1 m. 62°

124 - 241

06:00 - 19:38

8
9
10
11
12
13
14
15
16
17
18
19
20

13:38 +2 m. 72°

125 - 240

05:59 - 19:39

8
9
10
11
12
13
14
15
16
17
18
19
20

13:40 +2 m. 72°

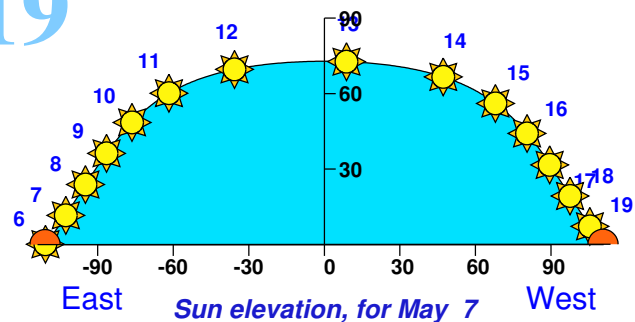
126 - 239

05:58 - 19:40

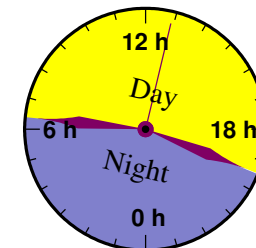
8
9
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11
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13
14
15
16
17
18
19
20

13:42 +2 m. 73°

Duration of the day - Variation - Sun maximal elevation (°)

Week **19****Aug. - Sept. 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Aug. 27***Monday 7****Tuesday 8****Wednesday 9****Thursday 10****Friday 31****Saturday 1****Sunday 2***Sunrise and Sunset at Pasadena (TL ± 1 mn)***127 - 238**

05:57 - 19:41

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:43 +2 m. 73°

128 - 237

05:57 - 19:42

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:45 +2 m. 73°

129 - 236

05:56 - 19:42

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:47 +2 m. 73°

130 - 235

05:55 - 19:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:48 +1 m. 74°

243 - 122

06:26 - 19:21

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:56 -2 m. 64°

244 - 121

06:26 - 19:20

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:54 -2 m. 64°

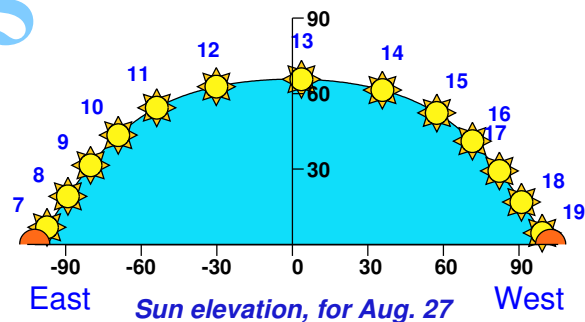
245 - 120

06:27 - 19:18

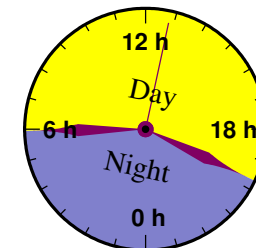
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

12:52 -2 m. 64°

Duration of the day - Variation - Sun maximal elevation (°)

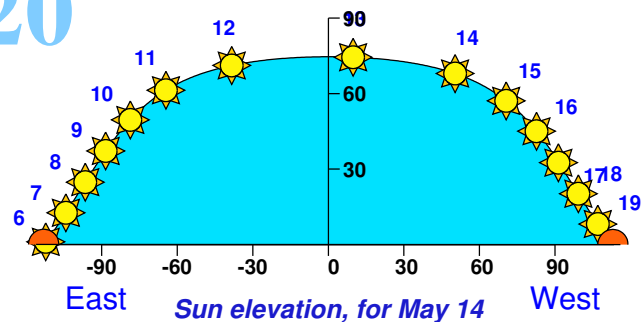
Week **35****May 2018****Pasadena**

-118.14°E, 34.14°N

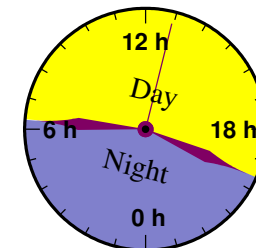
*Duration of the day, for May 7*
Monday 27 **Tuesday 28** **Wednesday 29** **Thursday 30**
Friday 11 **Saturday 12** **Sunday 13**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

239 - 126 06:23 - 19:26				131 - 234 05:54 - 19:44		
240 - 125 06:23 - 19:25				132 - 233 05:53 - 19:45		
241 - 124 06:24 - 19:24				133 - 232 05:52 - 19:45		
242 - 123 06:25 - 19:22						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
13:04 -1 m. 66°	13:02 -1 m. 65°	13:00 -2 m. 65°	12:58 -2 m. 65°	13:50 +2 m. 74°	13:51 +1 m. 74°	13:53 +2 m. 74°

Duration of the day - Variation - Sun maximal elevation (°)

Week **20****August 2018****Pasadena**

-118.14°E, 34.14°N



Duration of the day, for Aug. 20

Monday 14 **Tuesday 15** **Wednesday 16** **Thursday 17**
Friday 24 **Saturday 25** **Sunday 26**

Sunrise and Sunset at Pasadena (TL ± 1 mn)

134 - 231

05:52 - 19:46

8
9
10
11
12
13
14
15
16
17
18
19
20

13:55 +2 m. 75°

135 - 230

05:51 - 19:47

8
9
10
11
12
13
14
15
16
17
18
19
20

13:56 +1 m. 75°

136 - 229

05:50 - 19:48

8
9
10
11
12
13
14
15
16
17
18
19
20

13:58 +1 m. 75°

137 - 228

05:49 - 19:48

8
9
10
11
12
13
14
15
16
17
18
19
20

13:59 +1 m. 75°

236 - 129

06:21 - 19:30

8
9
10
11
12
13
14
15
16
17
18
19
20

13:10 -1 m. 67°

237 - 128

06:21 - 19:29

8
9
10
11
12
13
14
15
16
17
18
19
20

13:08 -2 m. 66°

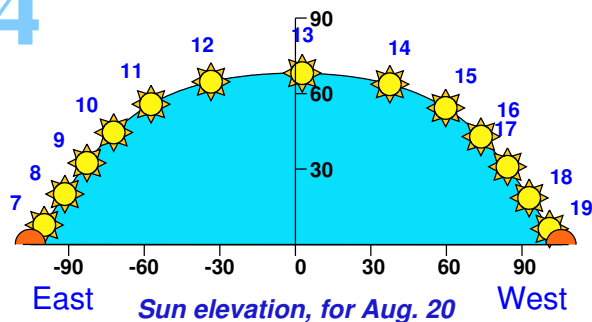
238 - 127

06:22 - 19:28

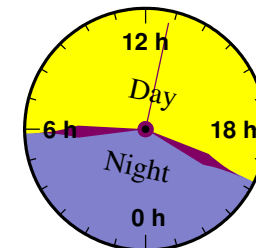
8
9
10
11
12
13
14
15
16
17
18
19
20

13:06 -2 m. 66°

Duration of the day - Variation - Sun maximal elevation (°)

Week **34****May 2018****Pasadena**

-118.14°E, 34.14°N



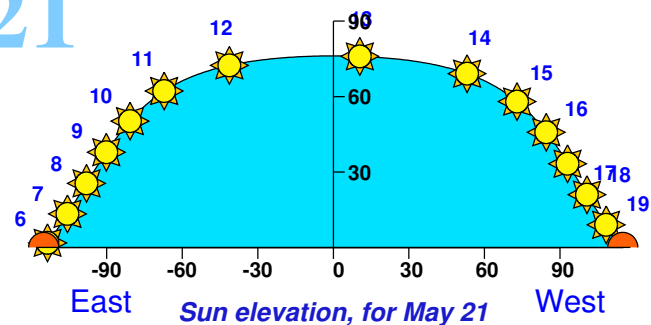
Duration of the day, for May 14

Monday 20 **Tuesday 21** **Wednesday 22** **Thursday 23**
Friday 18 **Saturday 19** **Sunday 20**

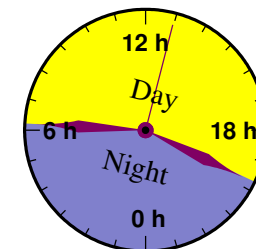
Sunrise and Sunset at Pasadena (TL ± 1 mn)

232 - 133 06:18 - 19:35				138 - 227 05:49 - 19:49		
233 - 132 06:19 - 19:34				139 - 226 05:48 - 19:50		
234 - 131 06:19 - 19:33				140 - 225 05:48 - 19:51		
235 - 130 06:20 - 19:31						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
13:17 -1 m. 68°	13:15 -1 m. 68°	13:13 -1 m. 67°	13:11 -1 m. 67°	14:01 +1 m. 76°	14:02 +1 m. 76°	14:03 +1 m. 76°

Duration of the day - Variation - Sun maximal elevation (°)

Week **21****August 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Aug. 13*
Monday 21 **Tuesday 22** **Wednesday 23** **Thursday 24**
Friday 17 **Saturday 18** **Sunday 19**
*Sunrise and Sunset at Pasadena (TL ± 1 mn)**141 - 224*

05:47 - 19:51

142 - 223

05:46 - 19:52

143 - 222

05:46 - 19:53

144 - 221

05:45 - 19:54

229 - 136

06:16 - 19:38

230 - 135

06:16 - 19:37

231 - 134

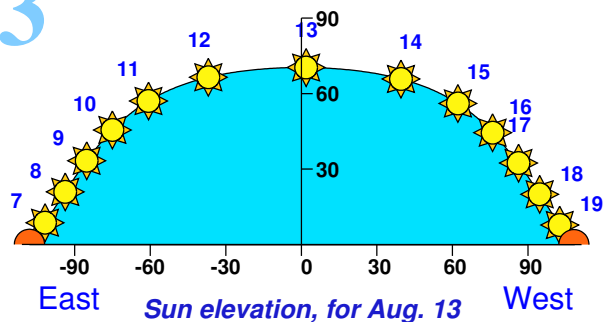
06:17 - 19:36

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

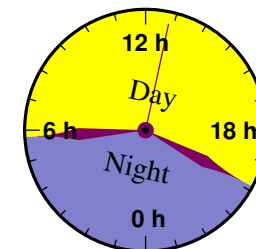
14:05 *+1 m.* 76°14:06 *+1 m.* 76°14:07 *+1 m.* 77°14:08 *+1 m.* 77°

8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

13:23 *-1 m.* 69°13:21 *-1 m.* 69°13:19 *-1 m.* 68°13:19 *-1 m.* 68°*Duration of the day - Variation - Sun maximal elevation (°)*

Week **33****May 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for May 21***Monday 13 Tuesday 14 Wednesday 15 Thursday 16****Friday 25 Saturday 26 Sunday 27***Sunrise and Sunset at Pasadena (TL ± 1 mn)***225 - 140**

06:13 - 19:43

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:30 -1 m. 70°

226 - 139

06:13 - 19:42

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:29 -1 m. 70°

227 - 138

06:14 - 19:41

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:27 -2 m. 70°

228 - 137

06:15 - 19:40

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

13:25 -1 m. 69°

145 - 220

05:45 - 19:54

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

14:09 +1 m. 77°

146 - 219

05:44 - 19:55

8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

14:11 +1 m. 77°

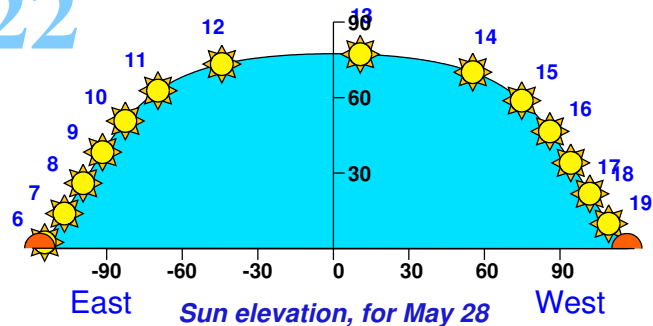
147 - 218

05:44 - 19:56

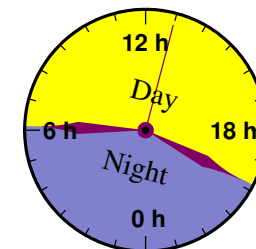
8 —
9 —
10 —
11 —
12 —
13 —
14 —
15 —
16 —
17 —
18 —
19 —
20 —

14:12 +1 m. 77°

Duration of the day - Variation - Sun maximal elevation (°)

Week **22****August 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for Aug. 6*
Monday 28 **Tuesday 29** **Wednesday 30** **Thursday 31**
Friday 10 **Saturday 11** **Sunday 12**
*Sunrise and Sunset at Pasadena (TL ± 1 mn)**148 - 217*

05:44 - 19:56

149 - 216

05:43 - 19:57

150 - 215

05:43 - 19:58

151 - 214

05:42 - 19:58

222 - 143

06:11 - 19:46

223 - 142

06:11 - 19:45

224 - 141

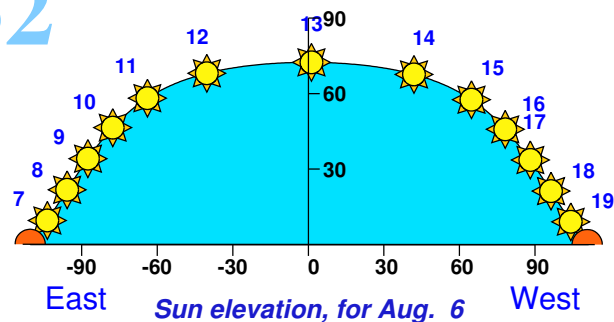
06:12 - 19:44

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

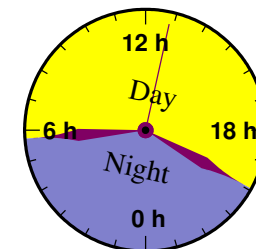
14:13 *+1 m.* 77°14:14 *+1 m.* 78°14:15 *+1 m.* 78°14:16 *+1 m.* 78°

8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

13:36 *-1 m.* 71°13:34 *-1 m.* 71°13:32 *-1 m.* 71°*Duration of the day - Variation - Sun maximal elevation (°)*

Week **32****May - June 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for May 28***Monday 6****Tuesday 7****Wednesday 8****Thursday 9****Friday 1****Saturday 2****Sunday 3***Sunrise and Sunset at Pasadena (TL ± 1 mn)***218 - 147**

06:08 - 19:50

219 - 146

06:08 - 19:49

220 - 145

06:09 - 19:48

221 - 144

06:10 - 19:47

152 - 213

05:42 - 19:59

153 - 212

05:42 - 19:59

154 - 211

05:42 - 20:00

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

13:43 -1 m. 72°

13:41 -1 m. 72°

13:39 -1 m. 72°

13:37 -1 m. 72°

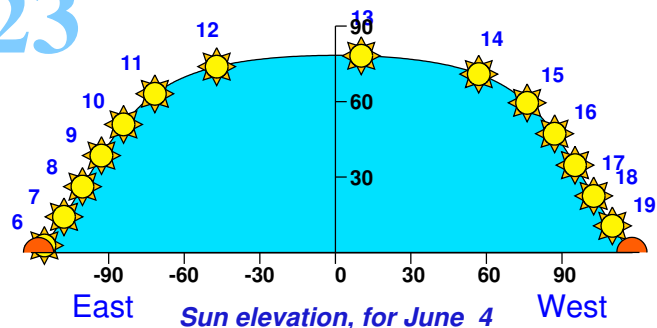
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

14:17 +1 m. 78°

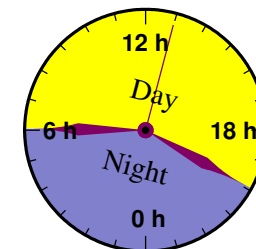
14:18 +0 m. 78°

14:18 +0 m. 78°

Duration of the day - Variation - Sun maximal elevation (°)

Week **23****July - Aug. 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for July 30***Monday 4****Tuesday 5****Wednesday 6****Thursday 7****Friday 3****Saturday 4****Sunday 5***Sunrise and Sunset at Pasadena (TL ± 1 mn)***155 - 210**

05:41 - 20:01

8
9
10
11
12
13
14
15
16
17
18
19
20

14:19 +1 m. 78°

156 - 209

05:41 - 20:01

8
9
10
11
12
13
14
15
16
17
18
19
20

14:20 +1 m. 78°

157 - 208

05:41 - 20:02

8
9
10
11
12
13
14
15
16
17
18
19
20

14:21 +0 m. 79°

158 - 207

05:41 - 20:02

8
9
10
11
12
13
14
15
16
17
18
19
20

14:21 +0 m. 79°

215 - 150

06:05 - 19:53

8
9
10
11
12
13
14
15
16
17
18
19
20

13:47 -1 m. 73°

216 - 149

06:06 - 19:52

8
9
10
11
12
13
14
15
16
17
18
19
20

13:46 +0 m. 73°

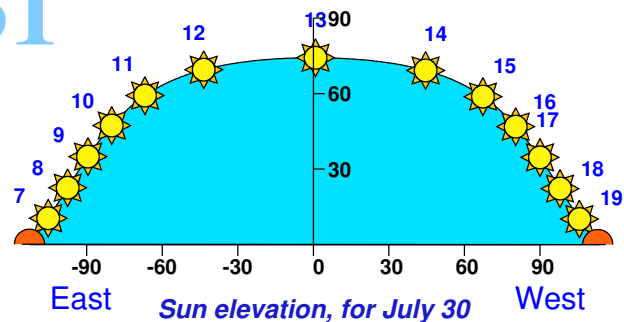
217 - 148

06:07 - 19:51

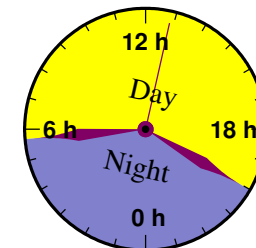
8
9
10
11
12
13
14
15
16
17
18
19
20

13:44 -1 m. 73°

Duration of the day - Variation - Sun maximal elevation (°)

Week **31****June 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for June 4***Monday 30****Tuesday 31****Wednesday 1****Thursday 2****Friday 8****Saturday 9****Sunday 10***Sunrise and Sunset at Pasadena (TL ± 1 mn)***211 - 154**

06:03 - 19:56

212 - 153

06:03 - 19:55

213 - 152

06:04 - 19:55

214 - 151

06:05 - 19:54

159 - 206

05:41 - 20:03

160 - 205

05:41 - 20:03

161 - 204

05:41 - 20:04

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

13:54 -1 m. 74°

13:52 -1 m. 74°

13:51 +0 m. 74°

13:49 -1 m. 73°

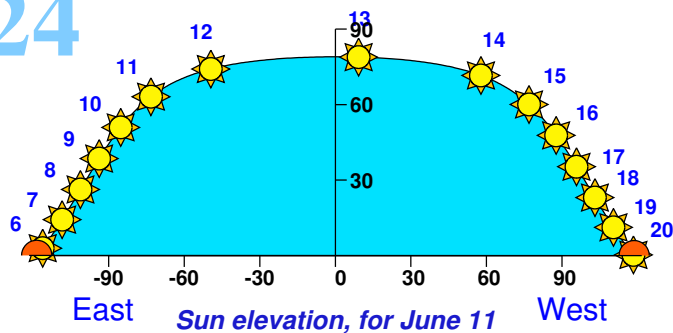
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

14:22 +1 m. 79°

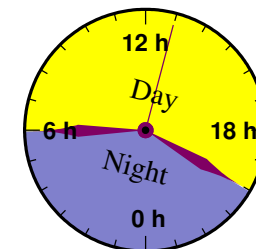
14:23 +0 m. 79°

14:23 +0 m. 79°

Duration of the day - Variation - Sun maximal elevation (°)

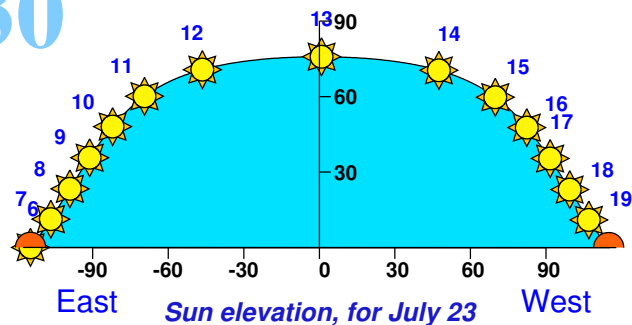
Week **24****July 2018****Pasadena**

-118.14°E, 34.14°N

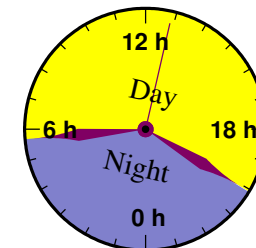
*Duration of the day, for July 23*
Monday 11 **Tuesday 12** **Wednesday 13** **Thursday 14**
Friday 27 **Saturday 28** **Sunday 29**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

162 - 203 05:41 - 20:04				208 - 157 06:00 - 19:58		
163 - 202 05:41 - 20:04				209 - 156 06:01 - 19:58		
164 - 201 05:41 - 20:05				210 - 155 06:02 - 19:57		
165 - 200 05:41 - 20:05						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
14:24 <i>+0 m.</i> 79°	14:24 <i>+0 m.</i> 79°	14:24 <i>+0 m.</i> 79°	14:25 <i>+1 m.</i> 79°	13:58 <i>+0 m.</i> 75°	13:57 <i>+0 m.</i> 75°	13:55 <i>-1 m.</i> 74°

Duration of the day - Variation - Sun maximal elevation (°)

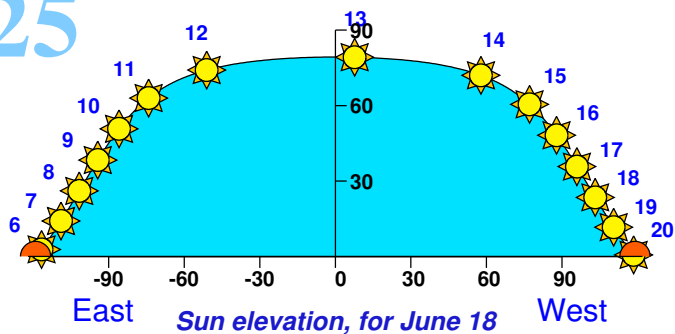
Week **30****June 2018****Pasadena**

-118.14°E, 34.14°N

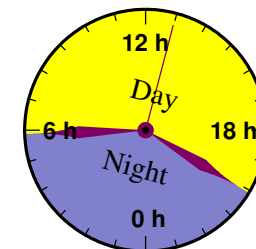
*Duration of the day, for June 11*
Monday 23 **Tuesday 24** **Wednesday 25** **Thursday 26**
Friday 15 **Saturday 16** **Sunday 17**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

204 - 161 05:58 - 20:01				166 - 199 05:41 - 20:06		
205 - 160 05:58 - 20:00				167 - 198 05:41 - 20:06		
206 - 159 05:59 - 20:00				168 - 197 05:41 - 20:06		
207 - 158 06:00 - 19:59						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
14:04 +0 m. 76°	14:02 -1 m. 76°	14:01 +0 m. 75°	13:59 -1 m. 75°	14:25 +0 m. 79°	14:25 +0 m. 79°	14:26 +0 m. 79°

Duration of the day - Variation - Sun maximal elevation (°)

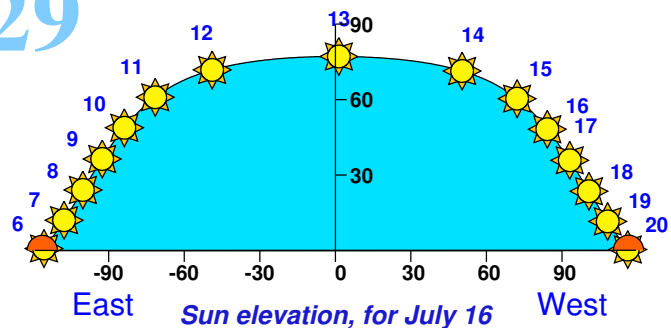
Week **25****July 2018****Pasadena**

-118.14°E, 34.14°N

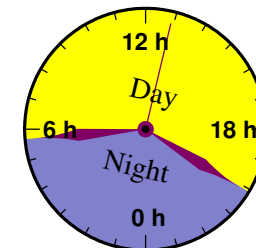
*Duration of the day, for July 16*
Monday 18 **Tuesday 19** **Wednesday 20** **Thursday 21**
Friday 20 **Saturday 21** **Sunday 22**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

169 - 196 05:41 - 20:07				201 - 164 05:56 - 20:03		
170 - 195 05:41 - 20:07				202 - 163 05:56 - 20:02		
171 - 194 05:41 - 20:07				203 - 162 05:57 - 20:02		
172 - 193 05:42 - 20:07						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
14:26 <i>+0 m.</i> 79°	14:26 <i>+0 m.</i> 79°	14:26 <i>+0 m.</i> 79°	14:26 <i>+0 m.</i> 79°	14:07 <i>-1 m.</i> 76°	14:06 <i>+0 m.</i> 76°	14:05 <i>+0 m.</i> 76°

Duration of the day - Variation - Sun maximal elevation (°)

Week **29****June 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for June 18***Monday 16 Tuesday 17 Wednesday 18 Thursday 19****Friday 22 Saturday 23 Sunday 24***Sunrise and Sunset at Pasadena (TL ± 1 mn)***197 - 168**

05:53 - 20:05

8
9
10
11
12
13
14
15
16
17
18
19
20

14:12 +0 m. 77°

198 - 167

05:54 - 20:04

8
9
10
11
12
13
14
15
16
17
18
19
20

14:11 +0 m. 77°

199 - 166

05:54 - 20:04

8
9
10
11
12
13
14
15
16
17
18
19
20

14:10 +0 m. 77°

200 - 165

05:55 - 20:03

8
9
10
11
12
13
14
15
16
17
18
19
20

14:09 -1 m. 77°

173 - 192

05:42 - 20:08

8
9
10
11
12
13
14
15
16
17
18
19
20

14:26 +0 m. 79°

174 - 191

05:42 - 20:08

8
9
10
11
12
13
14
15
16
17
18
19
20

14:26 +0 m. 79°

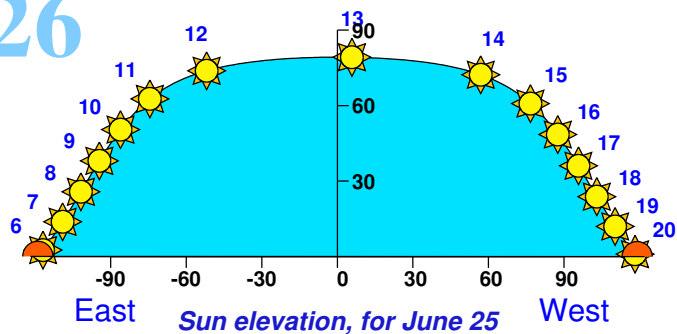
175 - 190

05:42 - 20:08

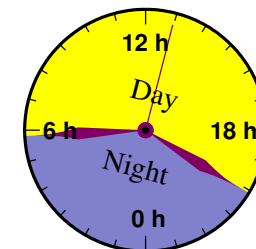
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19
20

14:26 +0 m. 79°

Duration of the day - Variation - Sun maximal elevation (°)

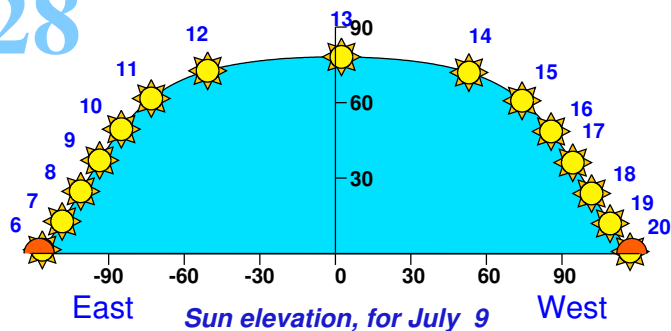
Week **26****July 2018****Pasadena**

-118.14°E, 34.14°N

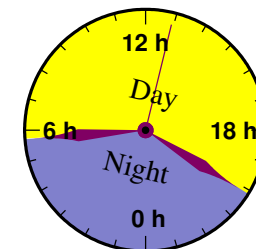
*Duration of the day, for July 9*
Monday 25 **Tuesday 26** **Wednesday 27** **Thursday 28**
Friday 13 **Saturday 14** **Sunday 15**
Sunrise and Sunset at Pasadena (TL ± 1 mn)

176 - 189 05:43 - 20:08				194 - 171 05:51 - 20:06		
177 - 188 05:43 - 20:08				195 - 170 05:52 - 20:06		
178 - 187 05:43 - 20:08				196 - 169 05:52 - 20:05		
179 - 186 05:44 - 20:08						
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
14:26 +0 m. 79°	14:25 +0 m. 79°	14:25 +0 m. 79°	14:25 +0 m. 79°	14:15 +0 m. 78°	14:14 +0 m. 77°	14:13 +0 m. 77°

Duration of the day - Variation - Sun maximal elevation (°)

Week **28****June - July 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for June 25***Monday 9 Tuesday 10 Wednesday 11 Thursday 12****Friday 29 Saturday 30 Sunday 1***Sunrise and Sunset at Pasadena (TL ± 1 mn)***190 - 175**

05:49 - 20:07

8
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17
18
19
20

14:19 +0 m. 78°

191 - 174

05:49 - 20:07

8
9
10
11
12
13
14
15
16
17
18
19
20

14:18 +0 m. 78°

192 - 173

05:50 - 20:07

8
9
10
11
12
13
14
15
16
17
18
19
20

14:17 +0 m. 78°

193 - 172

05:51 - 20:06

8
9
10
11
12
13
14
15
16
17
18
19
20

14:16 +0 m. 78°

180 - 185

05:44 - 20:08

8
9
10
11
12
13
14
15
16
17
18
19
20

14:24 +0 m. 79°

181 - 184

05:44 - 20:08

8
9
10
11
12
13
14
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16
17
18
19
20

14:24 +0 m. 79°

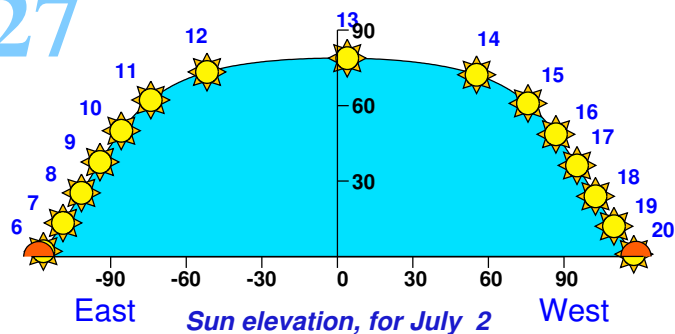
182 - 183

05:45 - 20:08

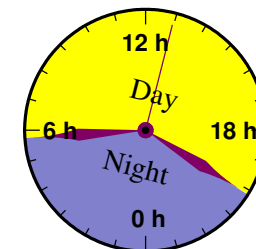
8
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19
20

14:24 +0 m. 79°

Duration of the day - Variation - Sun maximal elevation (°)

Week **27****July 2018****Pasadena**

-118.14°E, 34.14°N

*Duration of the day, for July 2***Monday 2****Tuesday 3****Wednesday 4****Thursday 5****Friday 6****Saturday 7****Sunday 8***Sunrise and Sunset at Pasadena (TL ± 1 mn)***183 - 182**

05:45 - 20:08

184 - 181

05:46 - 20:08

185 - 180

05:46 - 20:08

186 - 179

05:47 - 20:08

187 - 178

05:47 - 20:08

188 - 177

05:48 - 20:08

189 - 176

05:48 - 20:08

8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20

14:23 +0 m. 79°

14:23 +0 m. 79°

14:22 +0 m. 79°

14:21 +0 m. 79°

8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

14:21 +0 m. 78°

14:20 +0 m. 78°

14:19 +0 m.

78°

Duration of the day - Variation - Sun maximal elevation (°)