

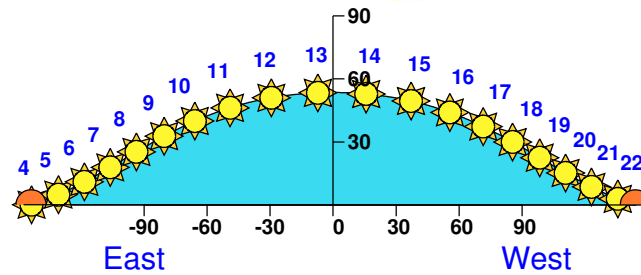
Sun Calendar 2018

Produced by *ScientiDev*
www.scientidev.fr

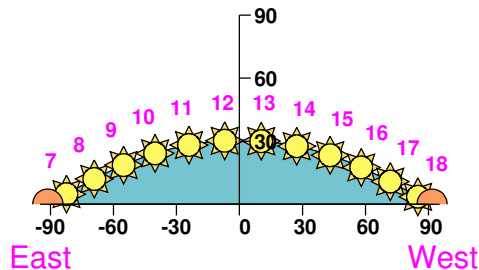
Oslo

10.75°E, 59.916°N

Summer

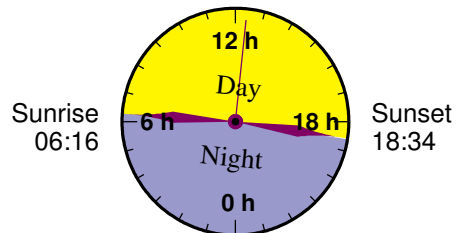


Spring



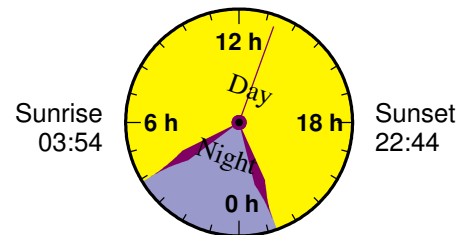
March 21

Day duration 12:18



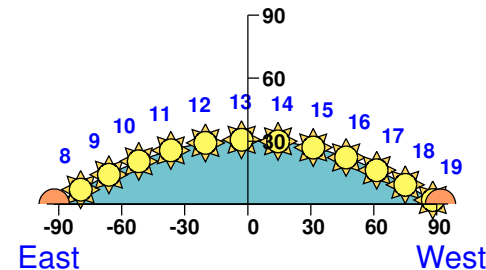
Spring Equinox

Day duration 18:50



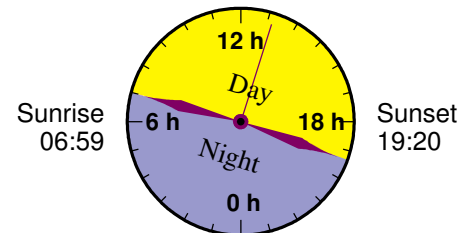
Summer Solstice

Autumn



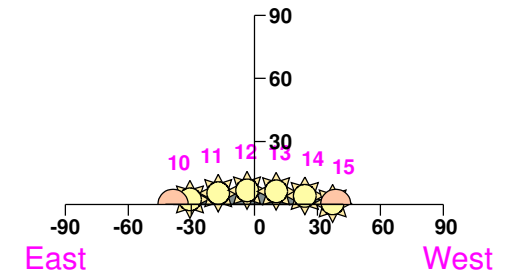
Sept. 21

Day duration 12:22



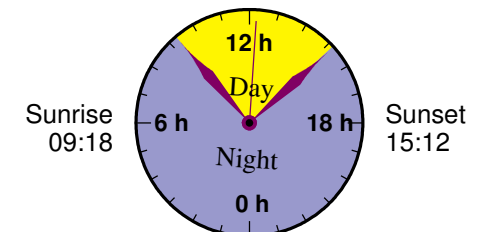
Autumn Equinox

Winter



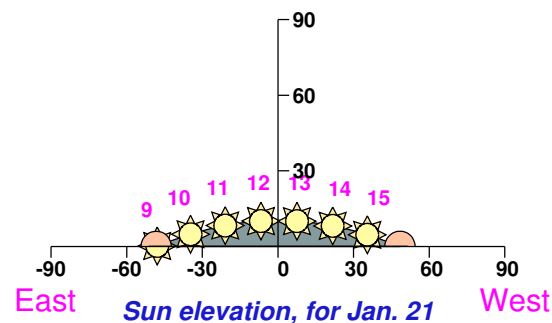
Dec. 21

Day duration 5:53

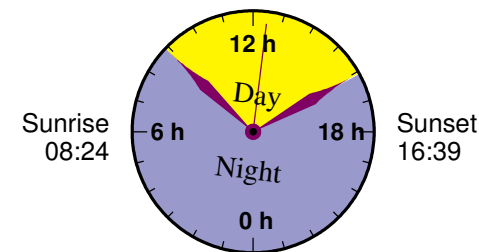


Winter Solstice

January 2018



Oslo
10.75°E, 59.916°N

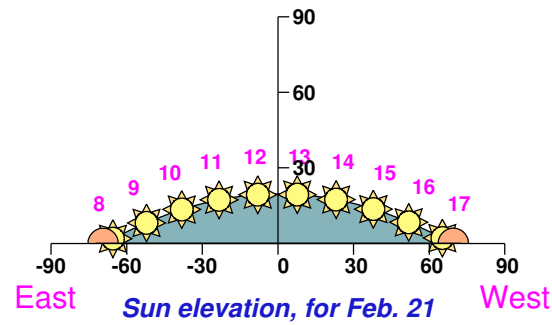


Duration of the day, for January 21

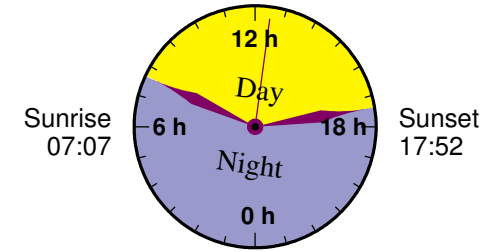
Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	1 1 - 364 09:19 - 15:23 7° 	2 2 - 363 09:18 - 15:24 7° 	3 3 - 362 09:18 - 15:26 7° 	4 4 - 361 09:17 - 15:28 8° 	5 5 - 360 09:16 - 15:29 8° 	6 6 - 359 09:15 - 15:31 8° 	7 7 - 358 09:14 - 15:33 8°
2	8 8 - 357 09:13 - 15:35 8° 	9 9 - 356 09:12 - 15:37 8° 	10 10 - 355 09:11 - 15:39 8° 	11 11 - 354 09:10 - 15:41 8° 	12 12 - 353 09:09 - 15:43 9° 	13 13 - 352 09:07 - 15:45 9° 	14 14 - 351 09:06 - 15:47 9°
3	15 15 - 350 09:04 - 15:49 9° 	16 16 - 349 09:03 - 15:52 9° 	17 17 - 348 09:01 - 15:54 9° 	18 18 - 347 08:59 - 15:56 10° 	19 19 - 346 08:58 - 15:59 10° 	20 20 - 345 08:56 - 16:01 10° 	21 21 - 344 08:54 - 16:04 10°
4	22 22 - 343 08:52 - 16:06 11° 	23 23 - 342 08:50 - 16:08 11° 	24 24 - 341 08:48 - 16:11 11° 	25 25 - 340 08:46 - 16:13 11° 	26 26 - 339 08:44 - 16:16 12° 	27 27 - 338 08:42 - 16:19 12° 	28 28 - 337 08:40 - 16:21 12°
5	29 29 - 336 08:38 - 16:24 12° 	30 30 - 335 08:35 - 16:26 13° 	31 31 - 334 08:33 - 16:29 13° 				

February 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for February 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

5

1 32 - 333
08:31 - 16:32 13°

2 33 - 332
08:28 - 16:34 13°

3 34 - 331
08:26 - 16:37 14°

4 35 - 330
08:24 - 16:39 14°

6

5 36 - 329
08:21 - 16:42 14°

6 37 - 328
08:19 - 16:45 15°

7 38 - 327
08:16 - 16:47 15°

8 39 - 326
08:14 - 16:50 15°

9 40 - 325
08:11 - 16:53 16°

10 41 - 324
08:09 - 16:55 16°

11 42 - 323
08:06 - 16:58 16°

7

12 43 - 322
08:03 - 17:00 17°

13 44 - 321
08:01 - 17:03 17°

14 45 - 320
07:58 - 17:06 17°

15 46 - 319
07:55 - 17:08 18°

16 47 - 318
07:53 - 17:11 18°

17 48 - 317
07:50 - 17:14 18°

18 49 - 316
07:47 - 17:16 19°

8

19 50 - 315
07:44 - 17:19 19°

20 51 - 314
07:42 - 17:21 19°

21 52 - 313
07:39 - 17:24 20°

22 53 - 312
07:36 - 17:26 20°

23 54 - 311
07:33 - 17:29 20°

24 55 - 310
07:30 - 17:32 21°

25 56 - 309
07:27 - 17:34 21°

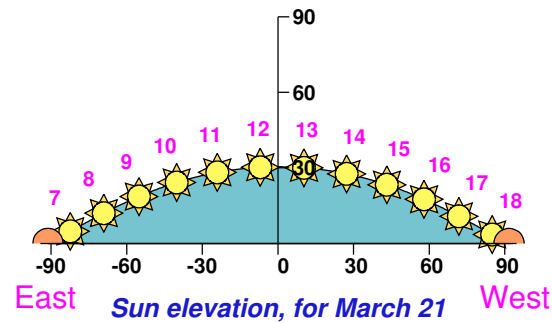
9

26 57 - 308
07:25 - 17:37 21°

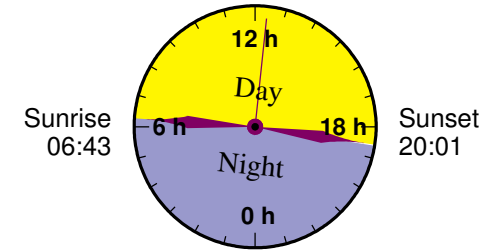
27 58 - 307
07:22 - 17:39 22°

28 59 - 306
07:19 - 17:42 22°

March 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for March 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Time change March 25

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

9

1 60 - 305 07:16 - 17:44 23° 	2 61 - 304 07:13 - 17:47 23° 	3 62 - 303 07:10 - 17:49 23° 	4 63 - 302 07:07 - 17:52 24°
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10

5 64 - 301 07:04 - 17:54 24° 	6 65 - 300 07:01 - 17:57 25° 	7 66 - 299 06:58 - 17:59 25° 	8 67 - 298 06:55 - 18:02 25° 	9 68 - 297 06:52 - 18:04 26° 	10 69 - 296 06:49 - 18:07 26° 	11 70 - 295 06:46 - 18:09 26°
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11

12 71 - 294 06:43 - 18:12 27° 	13 72 - 293 06:40 - 18:14 27° 	14 73 - 292 06:37 - 18:17 28° 	15 74 - 291 06:34 - 18:19 28° 	16 75 - 290 06:31 - 18:22 28° 	17 76 - 289 06:28 - 18:24 29° 	18 77 - 288 06:25 - 18:27 29°
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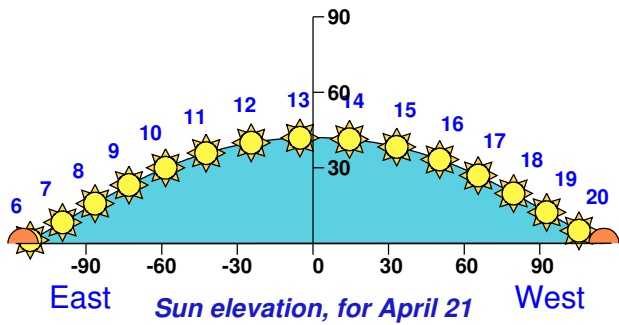
12

19 78 - 287 06:22 - 18:29 30° 	20 79 - 286 06:19 - 18:31 30° 	21 80 - 285 06:16 - 18:34 30° 	22 81 - 284 06:13 - 18:36 31° 	23 82 - 283 06:10 - 18:39 31° 	24 83 - 282 06:07 - 18:41 32° 	25 84 - 281 07:04 - 19:44 32°
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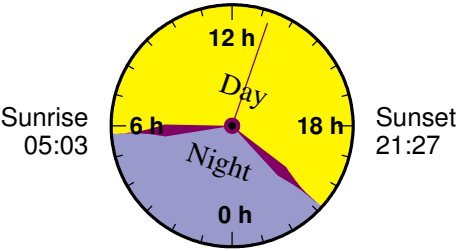
13

26 85 - 280 07:01 - 19:46 32° 	27 86 - 279 06:58 - 19:48 33° 	28 87 - 278 06:55 - 19:51 33° 	29 88 - 277 06:52 - 19:53 34° 	30 89 - 276 06:49 - 19:56 34° 	31 90 - 275 06:46 - 19:58 34°
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April 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for April 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

13

14

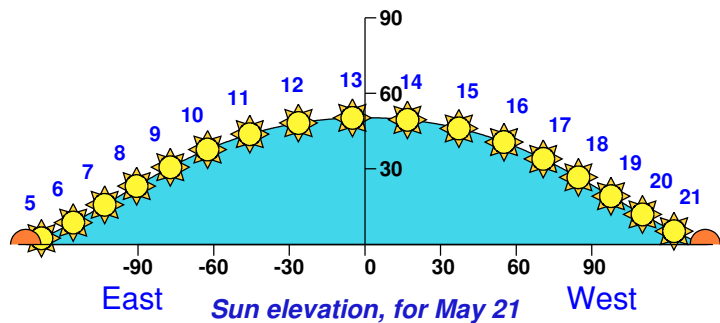
15

16

17

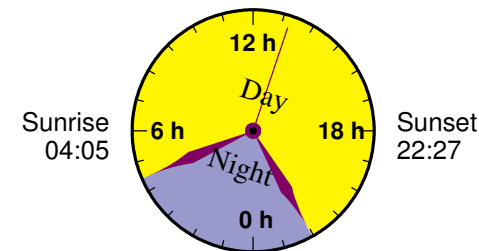
18

						191 - 274 06:43 - 20:01 35°
292 - 273 06:40 - 20:03 35° 	393 - 272 06:37 - 20:05 35° 	494 - 271 06:34 - 20:08 36° 	595 - 270 06:31 - 20:10 36° 	696 - 269 06:28 - 20:13 37° 	797 - 268 06:25 - 20:15 37° 	898 - 267 06:22 - 20:18 37°
999 - 266 06:19 - 20:20 38° 	10100 - 265 06:16 - 20:22 38° 	11101 - 264 06:13 - 20:25 38° 	12102 - 263 06:10 - 20:27 39° 	13103 - 262 06:07 - 20:30 39° 	14104 - 261 06:04 - 20:32 40° 	15105 - 260 06:01 - 20:35 40°
16106 - 259 05:58 - 20:37 40° 	17107 - 258 05:55 - 20:40 41° 	18108 - 257 05:53 - 20:42 41° 	19109 - 256 05:50 - 20:45 41° 	20110 - 255 05:47 - 20:47 42° 	21111 - 254 05:44 - 20:50 42° 	22112 - 253 05:41 - 20:52 42°
23113 - 252 05:38 - 20:55 43° 	24114 - 251 05:35 - 20:57 43° 	25115 - 250 05:33 - 20:59 43° 	26116 - 249 05:30 - 21:02 44° 	27117 - 248 05:27 - 21:04 44° 	28118 - 247 05:24 - 21:07 44° 	29119 - 246 05:21 - 21:09 45°
30120 - 245 05:19 - 21:12 45° 						



May 2018

Oslo
10.75°E, 59.916°N



Duration of the day, for May 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

18

1 121 - 244
05:16 - 21:14 45°

2 122 - 243
05:13 - 21:17 46°

3 123 - 242
05:11 - 21:19 46°

4 124 - 241
05:08 - 21:22 46°

5 125 - 240
05:05 - 21:24 46°

6 126 - 239
05:03 - 21:27 47°

19

7 127 - 238
05:00 - 21:29 47°

8 128 - 237
04:58 - 21:32 47°

9 129 - 236
04:55 - 21:34 48°

10 130 - 235
04:53 - 21:36 48°

11 131 - 234
04:50 - 21:39 48°

12 132 - 233
04:48 - 21:41 48°

13 133 - 232
04:45 - 21:44 49°

20

14 134 - 231
04:43 - 21:46 49°

15 135 - 230
04:40 - 21:48 49°

16 136 - 229
04:38 - 21:51 49°

17 137 - 228
04:36 - 21:53 49°

18 138 - 227
04:34 - 21:55 50°

19 139 - 226
04:31 - 21:57 50°

20 140 - 225
04:29 - 22:00 50°

21

21 141 - 224
04:27 - 22:02 50°

22 142 - 223
04:25 - 22:04 51°

23 143 - 222
04:23 - 22:06 51°

24 144 - 221
04:21 - 22:08 51°

25 145 - 220
04:19 - 22:10 51°

26 146 - 219
04:17 - 22:12 51°

27 147 - 218
04:16 - 22:14 51°

22

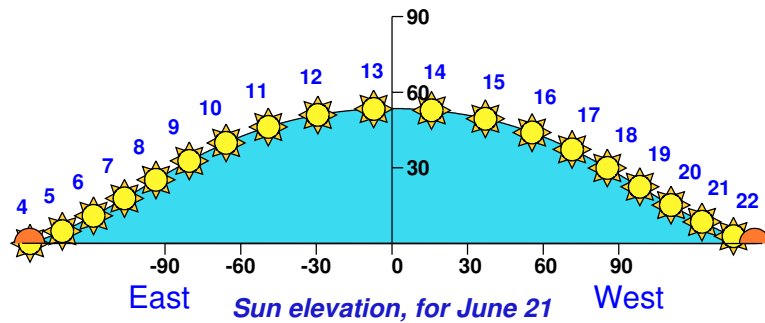
28 148 - 217
04:14 - 22:16 52°

29 149 - 216
04:12 - 22:18 52°

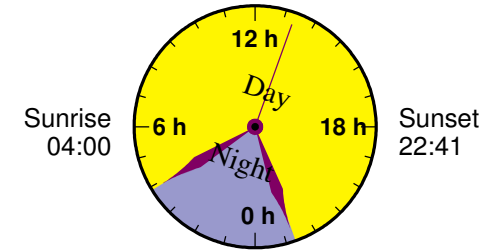
30 150 - 215
04:11 - 22:20 52°

31 151 - 214
04:09 - 22:22 52°

June 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for June 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

22

1 152 - 213 04:07 - 22:24 52° 	2 153 - 212 04:06 - 22:25 52° 	3 154 - 211 04:05 - 22:27 52°
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23

4 155 - 210 04:03 - 22:29 53° 	5 156 - 209 04:02 - 22:30 53° 	6 157 - 208 04:01 - 22:32 53° 	7 158 - 207 04:00 - 22:33 53° 	8 159 - 206 03:59 - 22:34 53° 	9 160 - 205 03:58 - 22:36 53° 	10 161 - 204 03:57 - 22:37 53°
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24

11 162 - 203 03:56 - 22:38 53° 	12 163 - 202 03:56 - 22:39 53° 	13 164 - 201 03:55 - 22:40 53° 	14 165 - 200 03:55 - 22:41 53° 	15 166 - 199 03:54 - 22:41 53° 	16 167 - 198 03:54 - 22:42 53° 	17 168 - 197 03:54 - 22:43 53°
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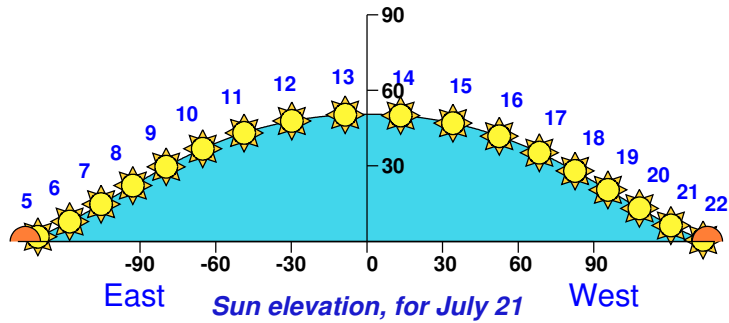
25

18 169 - 196 03:54 - 22:43 54° 	19 170 - 195 03:54 - 22:44 54° 	20 171 - 194 03:54 - 22:44 54° 	21 172 - 193 03:54 - 22:44 54° 	22 173 - 192 03:54 - 22:44 54° 	23 174 - 191 03:54 - 22:44 54° 	24 175 - 190 03:55 - 22:44 54°
--	--	--	--	--	--	--

26

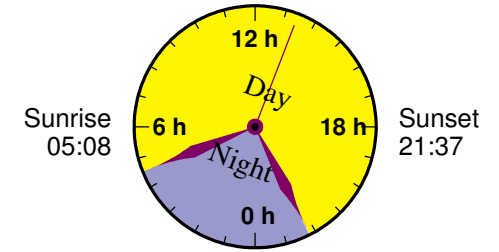
25 176 - 189 03:55 - 22:44 53° 	26 177 - 188 03:56 - 22:44 53° 	27 178 - 187 03:57 - 22:43 53° 	28 179 - 186 03:57 - 22:43 53° 	29 180 - 185 03:58 - 22:43 53° 	30 181 - 184 03:59 - 22:42 53°
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July 2018



Oslo
10.75°E, 59.916°N

Sunrise and Sunset at Oslo (TL ± 1 mn) and sun maximal elevation (°)



Duration of the day, for July 21

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

26

27

28

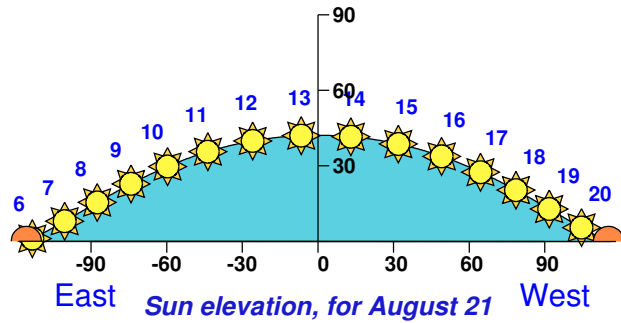
29

30

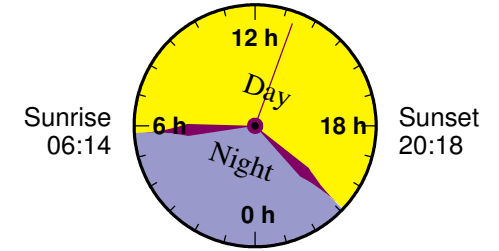
31

						1 182 - 183 04:00 - 22:41 53°
2 183 - 182 04:01 - 22:41 53° 	3 184 - 181 04:02 - 22:40 53° 	4 185 - 180 04:04 - 22:39 53° 	5 186 - 179 04:05 - 22:38 53° 	6 187 - 178 04:06 - 22:37 53° 	7 188 - 177 04:08 - 22:35 53° 	8 189 - 176 04:09 - 22:34 53°
9 190 - 175 04:11 - 22:33 52° 	10 191 - 174 04:12 - 22:32 52° 	11 192 - 173 04:14 - 22:30 52° 	12 193 - 172 04:16 - 22:29 52° 	13 194 - 171 04:18 - 22:27 52° 	14 195 - 170 04:19 - 22:25 52° 	15 196 - 169 04:21 - 22:24 52°
16 197 - 168 04:23 - 22:22 51° 	17 198 - 167 04:25 - 22:20 51° 	18 199 - 166 Polar Night 	19 200 - 165 04:29 - 22:16 51° 	20 201 - 164 04:31 - 22:14 51° 	21 202 - 163 04:33 - 22:12 51° 	22 203 - 162 04:36 - 22:10 50°
23 204 - 161 04:38 - 22:08 50° 	24 205 - 160 04:40 - 22:06 50° 	25 206 - 159 04:42 - 22:04 50° 	26 207 - 158 04:44 - 22:02 49° 	27 208 - 157 04:47 - 21:59 49° 	28 209 - 156 04:49 - 21:57 49° 	29 210 - 155 04:51 - 21:55 49°
30 211 - 154 04:53 - 21:52 49° 	31 212 - 153 04:56 - 21:50 48° 					

August 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for August 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

31

32

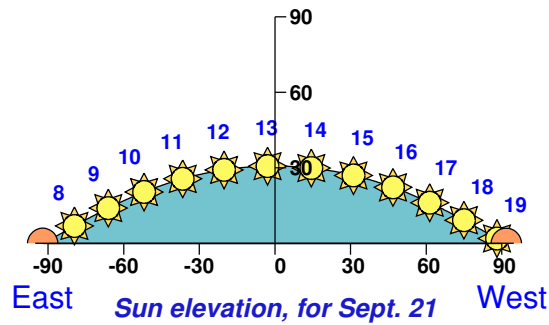
33

34

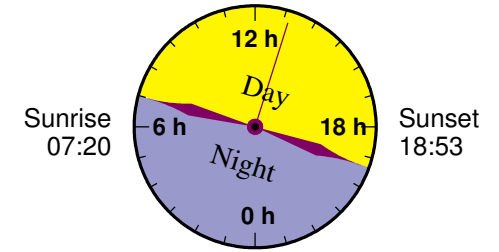
35

		1 213 - 152 04:58 - 21:47 48° 	2 214 - 151 05:00 - 21:45 48° 	3 215 - 150 05:03 - 21:42 48° 	4 216 - 149 05:05 - 21:40 47° 	5 217 - 148 05:08 - 21:37 47°
6 218 - 147 05:10 - 21:35 47° 	7 219 - 146 05:12 - 21:32 46° 	8 220 - 145 05:15 - 21:29 46° 	9 221 - 144 05:17 - 21:27 46° 	10 222 - 143 05:19 - 21:24 46° 	11 223 - 142 05:22 - 21:21 45° 	12 224 - 141 05:24 - 21:19 45°
13 225 - 140 05:27 - 21:16 45° 	14 226 - 139 05:29 - 21:13 44° 	15 227 - 138 05:31 - 21:10 44° 	16 228 - 137 05:34 - 21:07 44° 	17 229 - 136 05:36 - 21:05 43° 	18 230 - 135 05:39 - 21:02 43° 	19 231 - 134 05:41 - 20:59 43°
20 232 - 133 05:43 - 20:56 42° 	21 233 - 132 05:46 - 20:53 42° 	22 234 - 131 05:48 - 20:50 42° 	23 235 - 130 05:51 - 20:47 41° 	24 236 - 129 05:53 - 20:45 41° 	25 237 - 128 05:55 - 20:42 41° 	26 238 - 127 05:58 - 20:39 40°
27 239 - 126 06:00 - 20:36 40° 	28 240 - 125 06:02 - 20:33 40° 	29 241 - 124 06:05 - 20:30 39° 	30 242 - 123 06:07 - 20:27 39° 	31 243 - 122 06:10 - 20:24 39° 		

September 2018



Oslo
10.75°E, 59.916°N



Duration of the day, for September 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

35

36

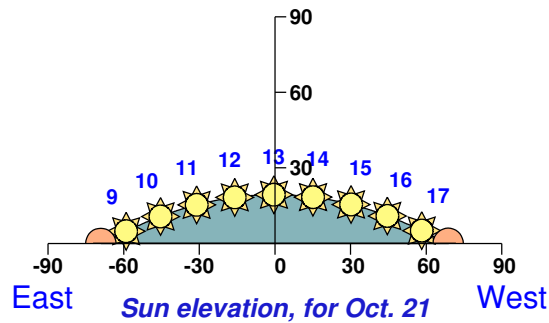
37

38

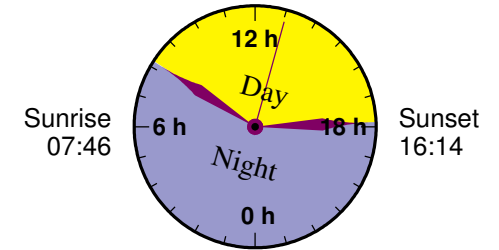
39

1 244 - 121 06:12 - 20:21 38° 	2 245 - 120 06:14 - 20:18 38°
3 246 - 119 06:17 - 20:15 38° 	4 247 - 118 06:19 - 20:12 37°
5 248 - 117 06:21 - 20:09 37° 	6 249 - 116 06:24 - 20:06 36°
7 250 - 115 06:26 - 20:03 36° 	8 251 - 114 06:28 - 20:00 36°
9 252 - 113 06:31 - 19:57 35° 	10 253 - 112 06:33 - 19:54 35°
11 254 - 111 06:35 - 19:51 35° 	12 255 - 110 06:38 - 19:48 34°
13 256 - 109 06:40 - 19:45 34° 	14 257 - 108 06:42 - 19:42 33°
15 258 - 107 06:45 - 19:39 33° 	16 259 - 106 06:47 - 19:36 33°
17 260 - 105 06:49 - 19:33 32° 	18 261 - 104 06:52 - 19:30 32°
19 262 - 103 06:54 - 19:27 32° 	20 263 - 102 06:56 - 19:23 31°
21 264 - 101 06:59 - 19:20 31° 	22 265 - 100 07:01 - 19:17 30°
23 266 - 99 07:03 - 19:14 30° 	24 267 - 98 07:06 - 19:11 30°
25 268 - 97 07:08 - 19:08 29° 	26 269 - 96 07:10 - 19:05 29°
27 270 - 95 07:13 - 19:02 28° 	28 271 - 94 07:15 - 18:59 28°
29 272 - 93 07:17 - 18:56 28° 	30 273 - 92 07:20 - 18:53 27°

October 2018



Oslo
10.75°E, 59.916°N

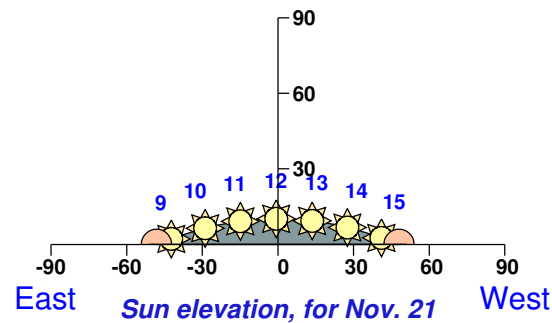


Duration of the day, for October 21

Sunrise and Sunset at Oslo (TL $\pm$ 1 mn) and sun maximal elevation (°)

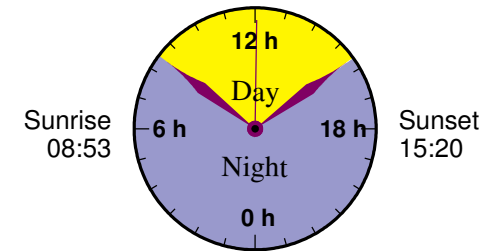
Time change October 28

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
40	1 274 - 91 07:22 - 18:50 27° 	2 275 - 90 07:25 - 18:47 26° 	3 276 - 89 07:27 - 18:44 26° 	4 277 - 88 07:29 - 18:41 26° 	5 278 - 87 07:32 - 18:38 25° 	6 279 - 86 07:34 - 18:35 25° 	7 280 - 85 07:37 - 18:32 25°
41	8 281 - 84 07:39 - 18:29 24° 	9 282 - 83 07:41 - 18:26 24° 	10 283 - 82 07:44 - 18:23 23° 	11 284 - 81 07:46 - 18:21 23° 	12 285 - 80 07:49 - 18:18 23° 	13 286 - 79 07:51 - 18:15 22° 	14 287 - 78 07:53 - 18:12 22°
42	15 288 - 77 07:56 - 18:09 22° 	16 289 - 76 07:58 - 18:06 21° 	17 290 - 75 08:01 - 18:03 21° 	18 291 - 74 08:03 - 18:00 20° 	19 292 - 73 08:06 - 17:57 20° 	20 293 - 72 08:08 - 17:55 20° 	21 294 - 71 08:11 - 17:52 19°
43	22 295 - 70 08:13 - 17:49 19° 	23 296 - 69 08:16 - 17:46 19° 	24 297 - 68 08:18 - 17:43 18° 	25 298 - 67 08:21 - 17:41 18° 	26 299 - 66 08:23 - 17:38 18° 	27 300 - 65 08:26 - 17:35 17° 	28 301 - 64 07:28 - 16:33 17°
44	29 302 - 63 07:31 - 16:30 17° 	30 303 - 62 07:34 - 16:27 16° 	31 304 - 61 07:36 - 16:25 16° 				



November 2018

Oslo
10.75°E, 59.916°N



Duration of the day, for November 21

Sunrise and Sunset at Oslo (TL ± 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

44

1 305 - 60 07:39 - 16:22 16°	2 306 - 59 07:41 - 16:19 15°	3 307 - 58 07:44 - 16:17 15°	4 308 - 57 07:46 - 16:14 15°

45

5 309 - 56 07:49 - 16:12 14°	6 310 - 55 07:51 - 16:09 14°	7 311 - 54 07:54 - 16:07 14°	8 312 - 53 07:57 - 16:04 14°	9 313 - 52 07:59 - 16:02 13°	10 314 - 51 08:02 - 16:00 13°	11 315 - 50 08:04 - 15:57 13°

46

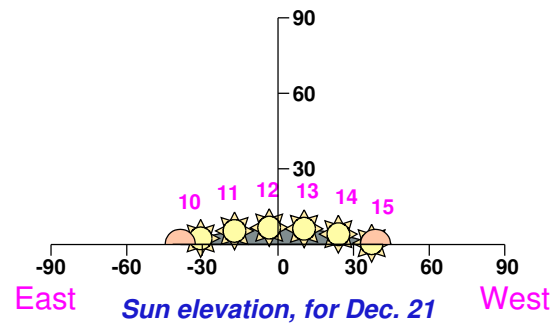
12 316 - 49 08:07 - 15:55 12°	13 317 - 48 08:09 - 15:53 12°	14 318 - 47 08:12 - 15:51 12°	15 319 - 46 08:14 - 15:49 12°	16 320 - 45 08:17 - 15:46 11°	17 321 - 44 08:19 - 15:44 11°	18 322 - 43 08:22 - 15:42 11°

47

19 323 - 42 08:24 - 15:40 11°	20 324 - 41 08:27 - 15:38 10°	21 325 - 40 08:29 - 15:36 10°	22 326 - 39 08:31 - 15:35 10°	23 327 - 38 08:34 - 15:33 10°	24 328 - 37 08:36 - 15:31 10°	25 329 - 36 08:38 - 15:29 9°

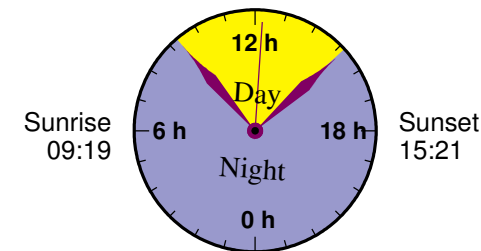
48

26 330 - 35 08:40 - 15:28 9°	27 331 - 34 08:43 - 15:26 9°	28 332 - 33 08:45 - 15:25 9°	29 333 - 32 08:47 - 15:23 9°	30 334 - 31 08:49 - 15:22 9°



December 2018

Oslo
10.75°E, 59.916°N



Duration of the day, for December 21

Sunrise and Sunset at Oslo (TL ± 1 mn) and sun maximal elevation (°)

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

48

49

50

51

52

53

1 335 - 30 08:51 - 15:21 8° 	2 336 - 29 08:53 - 15:20 8°
3 337 - 28 08:55 - 15:18 8° 	4 338 - 27 08:57 - 15:17 8°
5 339 - 26 08:59 - 15:16 8° 	6 340 - 25 09:01 - 15:15 8°
7 341 - 24 09:02 - 15:15 8° 	8 342 - 23 09:04 - 15:14 7°
9 343 - 22 09:05 - 15:13 7° 	10 344 - 21 09:07 - 15:13 7°
11 345 - 20 09:08 - 15:12 7° 	12 346 - 19 09:10 - 15:12 7°
13 347 - 18 09:11 - 15:11 7° 	14 348 - 17 09:12 - 15:11 7°
15 349 - 16 09:13 - 15:11 7° 	16 350 - 15 09:14 - 15:11 7°
17 351 - 14 09:15 - 15:11 7° 	18 352 - 13 09:16 - 15:11 7°
19 353 - 12 09:17 - 15:11 7° 	20 354 - 11 09:18 - 15:12 7°
21 355 - 10 09:18 - 15:12 7° 	22 356 - 9 09:19 - 15:13 7°
23 357 - 8 09:19 - 15:13 7° 	24 358 - 7 09:19 - 15:14 7°
25 359 - 6 09:20 - 15:15 7° 	26 360 - 5 09:20 - 15:16 7°
27 361 - 4 09:20 - 15:17 7° 	28 362 - 3 09:20 - 15:18 7°
29 363 - 2 09:20 - 15:19 7° 	30 364 - 1 09:19 - 15:20 7°

31 365 - 0 09:19 - 15:21 7°
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