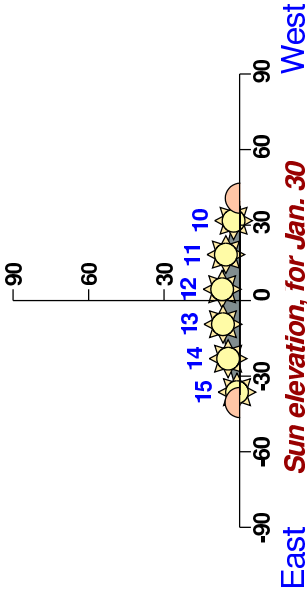


Sun Diary 2014

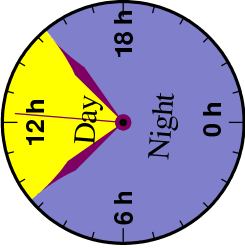
© Patrick ROBERT, PatCie, Déc. 2012

Week 1

Dec. - Jan. 2015



Oslo
10.75°E, 59.916°N



Duration of the day, for Dec. 29

Monday 30

Tuesday 31

Wednesday 1

Thursday 2

Friday 2

Saturday 3

Sunday 4

Sunrise and Sunset at Oslo (TL ± 1 mn)

363 - 2

09:19 - 15:20

363 - 2

09:19 - 15:22

363 - 2

09:19 - 15:23

363 - 2

09:18 - 15:24

362 - 3

09:18 - 15:24

362 - 3

09:18 - 15:26

362 - 3

09:17 - 15:27

6:00

+1 m.

7°

6:02

+3 m.

7°

6:04

+5 m.

7°

6:06

+7 m.

7°

6:05

+8 m.

7°

6:07

+10 m.

7°

6:10

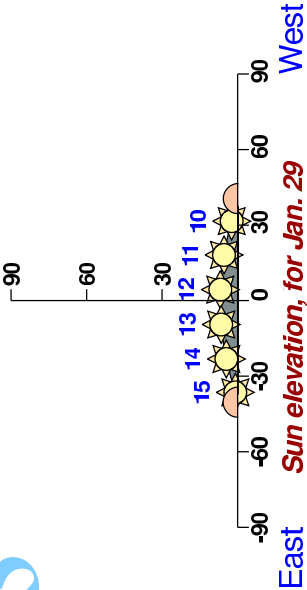
+13 m.

7°

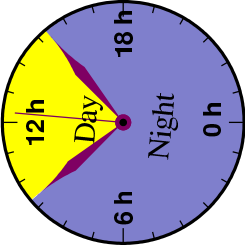
Duration of the day - Variation - Sun maximal elevation (°)

Week 53

Dec. - Jan. 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Dec. 30

Monday 29

Tuesday 30

Wednesday 31

Thursday 1

Friday 3

Saturday 4

Sunday 5

Sunrise and Sunset at Oslo (TL ± 1 mn)

362 - 3

09:20 - 15:19

362 - 3

09:20 - 15:20

362 - 3

09:19 - 15:21

362 - 3

09:19 - 15:23

363 - 2

09:18 - 15:26

363 - 2

09:17 - 15:28

363 - 2

09:16 - 15:29

5:59

+2 m.

7°

6:00

+3 m.

7°

6:02

+5 m.

7°

6:03

+6 m.

7°

6:08

+9 m.

7°

6:10

+11 m.

8°

6:13

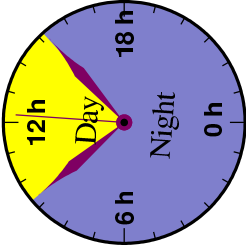
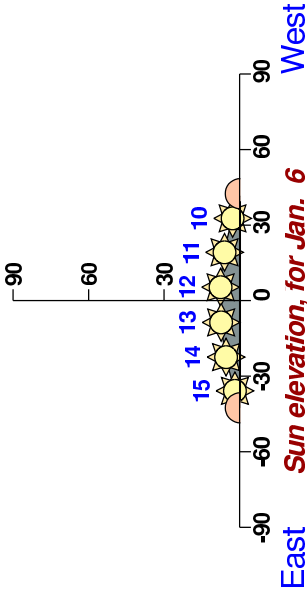
+14 m.

8°

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

Week 2

December 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Dec. 22

Monday 6

Tuesday 7

Wednesday 8

Thursday 9

Friday 26

Saturday 27

Sunday 28

Sunrise and Sunset at Oslo (TL ± 1 mn)

5 - 360
09:15 - 15:31

5 - 360
09:14 - 15:33

5 - 360
09:13 - 15:35

5 - 360
09:12 - 15:37

355 - 10
09:20 - 15:16

355 - 10
09:20 - 15:17

355 - 10
09:20 - 15:18

6:15

+2 m.

8°

6:18

+5 m.

8°

6:21

+8 m.

8°

6:24

+11 m.

8°

5:55

+2 m.

7°

5:56

+3 m.

7°

5:57

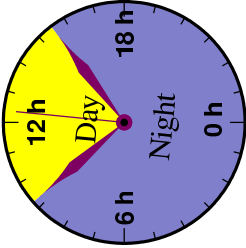
+4 m.

7°

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

Week 52

January 2014



Oslo
10.75°E, 59.916°N

East Sun elevation, for Dec. 22 West

Duration of the day, for Jan. 6

Monday 22

Tuesday 23

Wednesday 24

Thursday 25

Friday 10

Saturday 11

Sunday 12

Sunrise and Sunset at Oslo (TL ± 1 mn)

355 - 10
09:19 - 15:13

355 - 10
09:19 - 15:13

355 - 10
09:20 - 15:14

355 - 10
09:20 - 15:15

5 - 360
09:11 - 15:39

5 - 360
09:10 - 15:41

5 - 360
09:09 - 15:43

5:53 +0 m.

5:54 +1 m.

5:54 +1 m.

5:55 +2 m.

6:27

6:30

+17 m. 8°

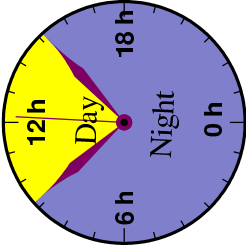
+21 m.

9°

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

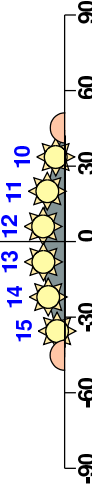
Week **3**

December 2014



Oslo
10.75°E, 59.916°N

East **Sun elevation, for Jan. 13** West



Duration of the day, for Dec. 13

Monday **13**

Tuesday **14**

Wednesday **15**

Thursday **16**

Friday **19**

Saturday **20**

Sunday **21**

Sunrise and Sunset at Oslo (TL ± 1 mn)

12 - 353

09:07 - 15:45

12 - 353

09:06 - 15:47

12 - 353

09:04 - 15:49

12 - 353

09:03 - 15:52

348 - 17

09:17 - 15:11

348 - 17

09:18 - 15:12

348 - 17

09:18 - 15:12

6:37

+3 m.

9°

6:41

+7 m.

9°

6:45

+11 m.

9°

6:48

+14 m.

9°

5:54

-4 m.

7°

5:54

-4 m.

7°

5:53

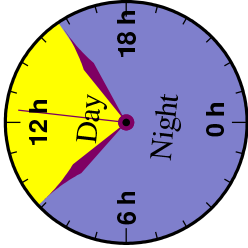
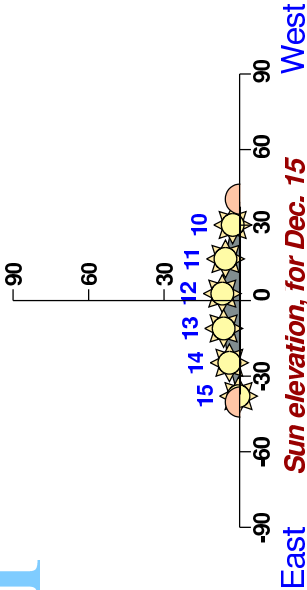
-5 m.

7°

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

Week 51

January 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Jan. 13

Monday 15

Tuesday 16

Wednesday 17

Thursday 18

Friday 17

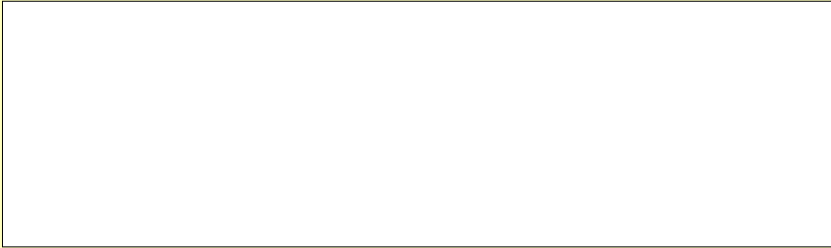
Saturday 18

Sunday 19

Sunrise and Sunset at Oslo (TL ± 1 mn)

348 - 17

09:13 - 15:11



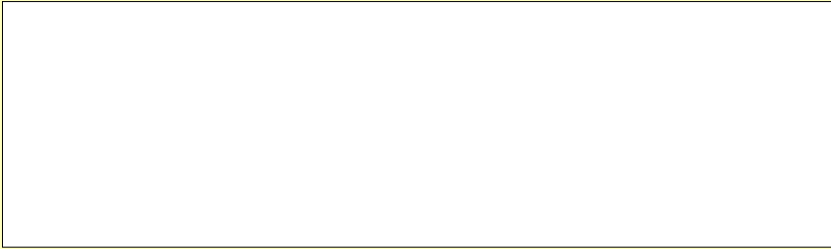
-1 m.

5:57

7°

348 - 17

09:14 - 15:11



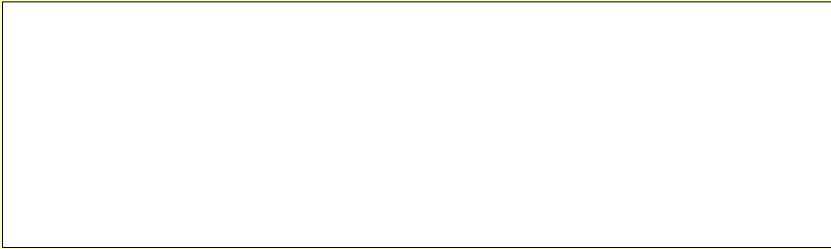
-2 m.

5:56

7°

348 - 17

09:15 - 15:11



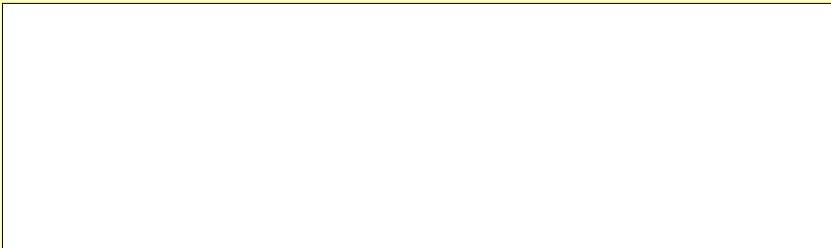
-3 m.

5:55

7°

348 - 17

09:16 - 15:11



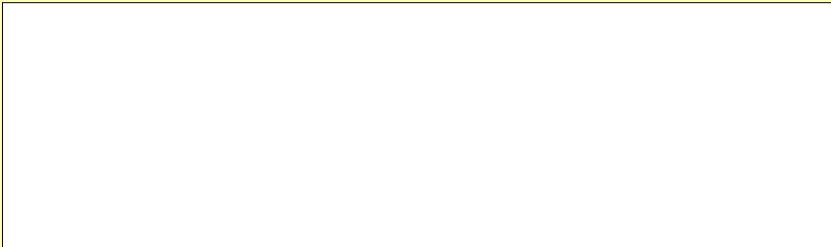
-4 m.

5:54

7°

12 - 353

09:01 - 15:54



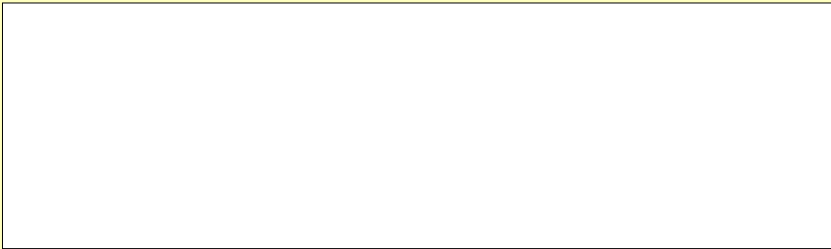
+18 m.

6:52

9°

12 - 353

08:59 - 15:56



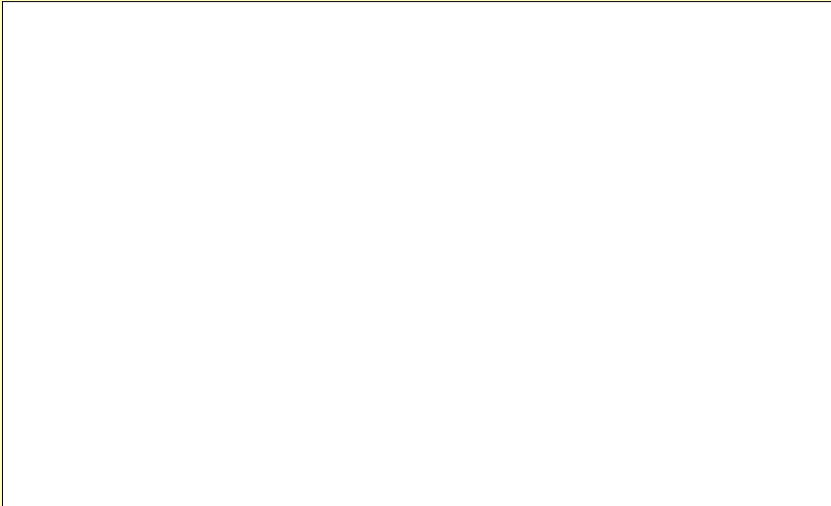
+22 m.

6:56

10°

12 - 353

08:58 - 15:59



+26 m.

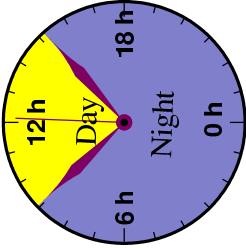
7:00

10°

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

Week 4

December 2014



Oslo
10.75°E, 59.916°N

East **Sun elevation, for Jan. 20** West

Duration of the day, for Dec. 8

Monday 20

Tuesday 21

Wednesday 22

Thursday 23

Friday 12

Saturday 13

Sunday 14

Sunrise and Sunset at Oslo (TL ± 1 mn)

19 - 346
08:56 - 16:01

19 - 346
08:54 - 16:03

19 - 346
08:52 - 16:06

19 - 346
08:50 - 16:08

341 - 24
09:10 - 15:12

341 - 24
09:11 - 15:11

341 - 24
09:12 - 15:11

7:05

+5 m.

10°

7:09

+9 m.

10°

7:13

+13 m.

11°

7:18

+18 m.

11°

6:02

-10 m.

7°

6:00

-12 m.

7°

5:58

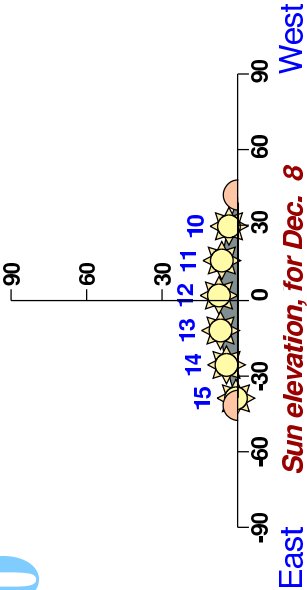
-14 m.

7°

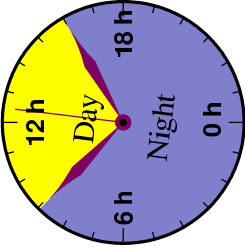
Duration of the day - Variation - Sun maximal elevation (°)

Week 50

January 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Jan. 20

Monday 8

Tuesday 9

Wednesday 10

Thursday 11

Friday 24

Saturday 25

Sunday 26

Sunrise and Sunset at Oslo (TL ± 1 mn)

341 - 24
09:04 - 15:14

341 - 24
09:05 - 15:13

341 - 24
09:07 - 15:13

341 - 24
09:08 - 15:12

19 - 346
08:48 - 16:11

19 - 346
08:46 - 16:13

19 - 346
08:44 - 16:16

6:10 -2 m.

7°

6:07

-5 m.

7°

6:05

-7 m.

7°

6:03

-9 m.

7°

7:22

+22 m.

11°

7:27

+27 m.

11°

7:31

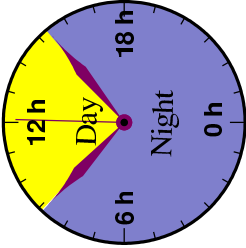
+31 m.

11°

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

Week **5**

December 2014



Oslo
10.75°E, 59.916°N

East **Sun elevation, for Feb. 27** West

Duration of the day, for Dec. 1

Monday **27**

Tuesday **28**

Wednesday **29**

Thursday **30**

Friday **5**

Saturday **6**

Sunday **7**

Sunrise and Sunset at Oslo (TL ± 1 mn)

26 - 339
08:42 - 16:18

26 - 339
08:40 - 16:21

26 - 339
08:38 - 16:24

26 - 339
08:35 - 16:26

334 - 31
08:59 - 15:16

334 - 31
09:01 - 15:15

334 - 31
09:02 - 15:15

7:36

+5 m.

12°

7:41

+10 m.

12°

7:45

+14 m.

12°

7:50

+19 m.

13°

6:17

-16 m.

8°

6:14

-19 m.

8°

6:12

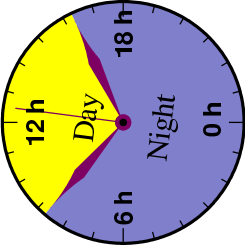
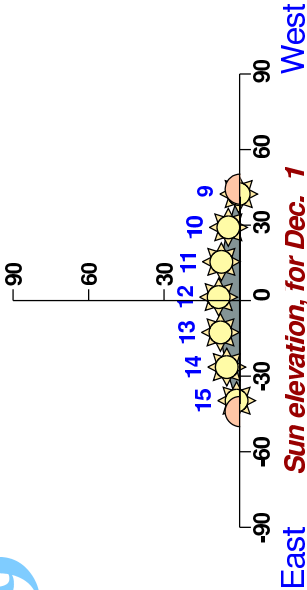
-21 m.

8°

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

Week 49

Jan. - Feb. 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Jan. 27

Monday 1

Tuesday 2

Wednesday 3

Thursday 4

Friday 31

Saturday 1

Sunday 2

Sunrise and Sunset at Oslo (TL ± 1 mn)

334 - 31

08:51 - 15:21

334 - 31

08:53 - 15:20

334 - 31

08:55 - 15:18

334 - 31

08:57 - 15:17

26 - 339

08:33 - 16:29

26 - 339

08:31 - 16:31

26 - 339

08:28 - 16:34

6:29

-4 m.

8°

6:26

-7 m.

8°

6:23

-10 m.

8°

6:20

-13 m.

8°

7:55

+24 m.

13°

8:00

+29 m.

13°

8:05

+34 m.

13°

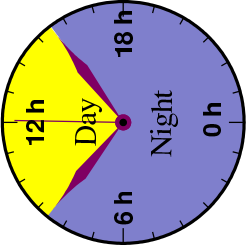
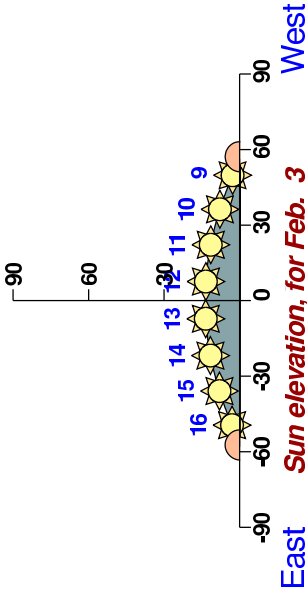
Duration of the day - Variation - Sun maximal elevation (°)

Week 6

November 2014

Oslo

10.75°E, 59.916°N



Duration of the day, for Nov. 24

Monday 3

Tuesday 4

Wednesday 5

Thursday 6

Friday 28

Saturday 29

Sunday 30

Sunrise and Sunset at Oslo (TL ± 1 mn)

33 - 332
08:26 - 16:37

33 - 332
08:24 - 16:39

33 - 332
08:21 - 16:42

33 - 332
08:19 - 16:45

327 - 38
08:45 - 15:25

327 - 38
08:47 - 15:23

327 - 38
08:49 - 15:22

8:10

+5 m.

14°

8:15

+10 m.

14°

8:20

+15 m.

14°

8:25

+20 m.

15°

6:40

-19 m.

9°

6:36

-23 m.

9°

6:33

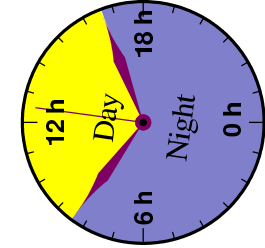
-26 m.

9°

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

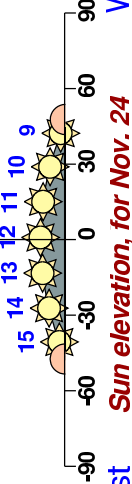
Week
48

February 2014



Oslo
10.75°E, 59.916°N

East **Sun elevation, for Nov. 24** West



Duration of the day, for Feb. 3

Monday
24

Tuesday
25

Wednesday
26

Thursday
27

Friday
7

Saturday
8

Sunday
9

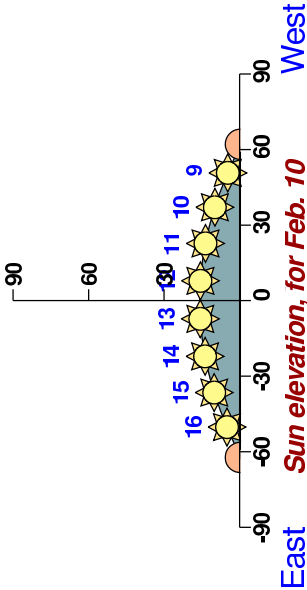
Sunrise and Sunset at Oslo (TL ± 1 mn)

327 - 38 08:36 - 15:31	327 - 38 08:38 - 15:30	327 - 38 08:40 - 15:28	327 - 38 08:43 - 15:26	33 - 332 08:16 - 16:47	33 - 332 08:14 - 16:50	33 - 332 08:11 - 16:52
6:55	6:51	6:47	6:43	8:31	8:36	8:41
-4 m.	-8 m.	-12 m.	-16 m.	+26 m.	+31 m.	+36 m.
10°	9°	9°	9°	15°	15°	16°

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

Week 7

November 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Nov. 17

Monday 10

Tuesday 11

Wednesday 12

Thursday 13

Friday 21

Saturday 22

Sunday 23

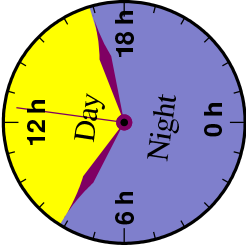
Sunrise and Sunset at Oslo (TL ± 1 mn)

40 - 325 08:09 - 16:55	40 - 325 08:06 - 16:58	40 - 325 08:03 - 17:00	40 - 325 08:01 - 17:03	320 - 45 08:29 - 15:37	320 - 45 08:31 - 15:35	320 - 45 08:34 - 15:33
8:46 +5 m. 16°	8:51 +10 m. 16°	8:57 +16 m. 17°	9:02 +21 m. 17°	7:07 -22 m. 10°	7:03 -26 m. 10°	6:59 -30 m. 10°

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

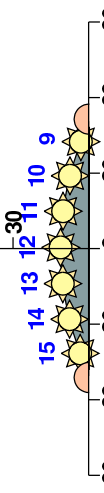
Week 47

February 2014



Oslo
10.75°E, 59.916°N

East **Sun elevation, for Nov. 17** West



Duration of the day, for Feb. 10

Monday 17

Tuesday 18

Wednesday 19

Thursday 20

Friday 14

Saturday 15

Sunday 16

Sunrise and Sunset at Oslo (TL ± 1 mn)

320 - 45
08:19 - 15:44

320 - 45
08:22 - 15:42

320 - 45
08:24 - 15:40

320 - 45
08:26 - 15:38

40 - 325
07:58 - 17:06

40 - 325
07:55 - 17:08

40 - 325
07:53 - 17:11

7:25

-4 m.

11 °

7:20

-9 m.

11 °

7:16

-13 m.

11 °

7:12

-17 m.

10 °

9:07

+28 m.

17 °

9:12

+31 m.

18 °

9:18

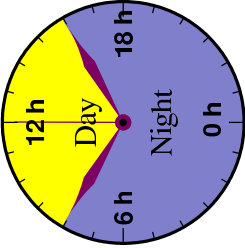
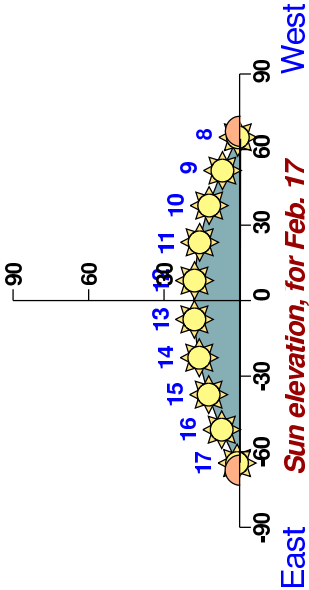
+37 m.

18 °

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

Week 8

November 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Nov. 10

Monday 17

Tuesday 18

Wednesday 19

Thursday 20

Friday 14

Saturday 15

Sunday 16

Sunrise and Sunset at Oslo (TL ± 1 mn)

47 - 318

07:50 - 17:13

47 - 318

07:47 - 17:16

47 - 318

07:44 - 17:19

47 - 318

07:42 - 17:21

313 - 52

08:12 - 15:51

313 - 52

08:14 - 15:49

313 - 52

08:17 - 15:46

9:23

+5 m.

18°

9:29

+11 m.

19°

9:34

+16 m.

19°

9:39

+21 m.

19°

7:39

-24 m.

12°

7:34

-29 m.

12°

7:29

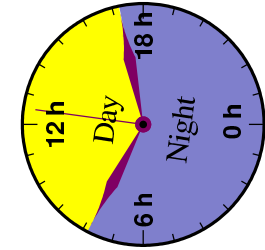
-34 m.

11°

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

Week 46

February 2014



East Sun elevation, for Nov. 10 West

Oslo
10.75°E, 59.916°N

Duration of the day, for Feb. 17

Monday 10

Tuesday 11

Wednesday 12

Thursday 13

Friday 21

Saturday 22

Sunday 23

Sunrise and Sunset at Oslo (TL ± 1 mn)

313 - 52
08:02 - 16:00

313 - 52
08:04 - 15:57

313 - 52
08:07 - 15:55

313 - 52
08:09 - 15:53

47 - 318
07:39 - 17:24

47 - 318
07:36 - 17:26

47 - 318
07:33 - 17:29

7:58

-5 m.

13°

7:53

-10 m.

13°

7:48

-15 m.

12°

7:43

-20 m.

12°

9:45

+27 m.

20°

9:50

+32 m.

20°

9:55

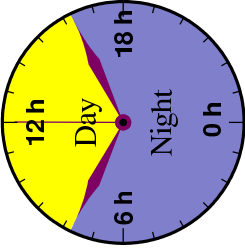
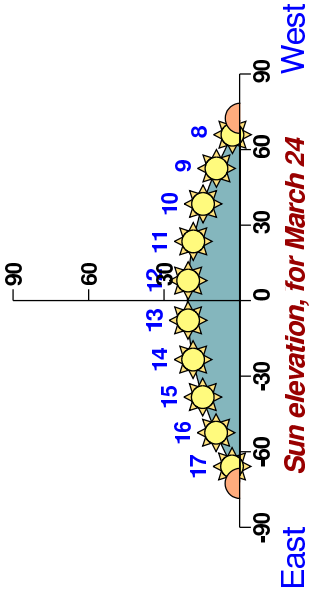
+37 m.

20°

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

Week 9

November 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Nov. 3

Monday 24

Tuesday 25

Wednesday 26

Thursday 27

Friday 7

Saturday 8

Sunday 9

Sunrise and Sunset at Oslo (TL ± 1 mn)

54 - 311
07:30 - 17:32

54 - 311
07:27 - 17:34

54 - 311
07:25 - 17:37

54 - 311
07:22 - 17:39

306 - 59
07:54 - 16:07

306 - 59
07:56 - 16:05

306 - 59
07:59 - 16:02

10:01

+6 m. 21°

+12 m. 21°

+17 m. 21°

+23 m. 22°

-25 m. 14°

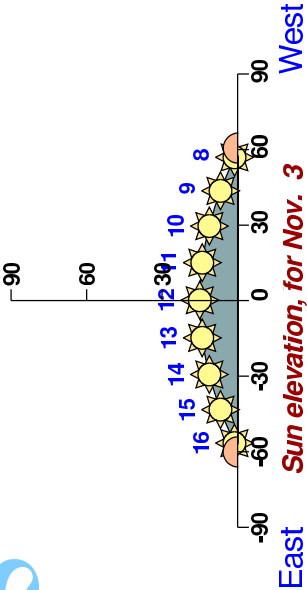
-30 m. 14°

-35 m. 13°

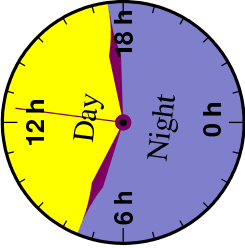
Duration of the day - Variation - Sun maximal elevation (°)

Week 45

Feb. - March 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Feb. 24

Monday 3

Tuesday 4

Wednesday 5

Thursday 6

Friday 28

Saturday 1

Sunday 2

Sunrise and Sunset at Oslo (TL ± 1 mn)

306 - 59
07:44 - 16:17

306 - 59
07:46 - 16:14

306 - 59
07:49 - 16:12

306 - 59
07:51 - 16:09

54 - 311
07:19 - 17:42

54 - 311
07:16 - 17:44

54 - 311
07:13 - 17:47

8:33

-5 m.

15°

8:28

-10 m.

15°

8:23

-15 m.

14°

8:18

-20 m.

14°

10:23

+28 m.

22°

10:28

+33 m.

23°

10:34

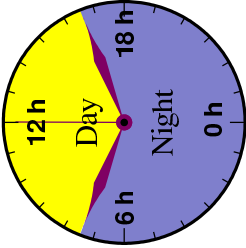
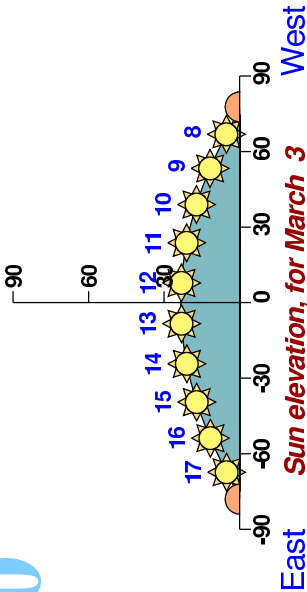
+39 m.

23°

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

Week 10

Oct. - Nov. 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Oct. 27

Monday 3

Tuesday 4

Wednesday 5

Thursday 6

Friday 31

Saturday 1

Sunday 2

Sunrise and Sunset at Oslo (TL ± 1 mn)

61 - 304
07:10 - 17:49

61 - 304
07:07 - 17:52

61 - 304
07:04 - 17:54

61 - 304
07:01 - 17:57

299 - 66
07:36 - 16:25

299 - 66
07:39 - 16:22

299 - 66
07:41 - 16:19

10:39 +5 m. 23°

10:45 +11 m. 24°

10:50 +16 m. 24°

10:56 +22 m. 25°

8:48

-26 m. 16°

8:43

-31 m. 16°

8:38

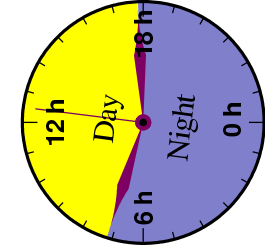
-36 m.

15°

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

Week 44

March 2014



Oslo
10.75°E, 59.916°N

East Sun elevation, for Nov. 27 West

Duration of the day, for March 3

Monday 27

Tuesday 28

Wednesday 29

Thursday 30

Friday 7

Saturday 8

Sunday 9

Sunrise and Sunset at Oslo (TL ± 1 mn)

299 - 66
07:26 - 16:35

299 - 66
07:28 - 16:33

299 - 66
07:31 - 16:30

299 - 66
07:33 - 16:27

61 - 304
06:58 - 17:59

61 - 304
06:55 - 18:02

61 - 304
06:52 - 18:04

9:09

-5 m.

17°

9:04

-10 m.

17°

8:59

-15 m.

17°

8:53

-21 m.

16°

11:01

+27 m.

25°

11:06

+32 m.

25°

11:12

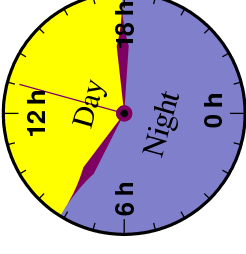
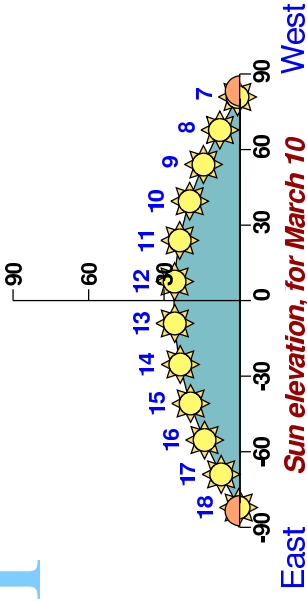
+38 m.

26°

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

Week 11

October 2014



Oslo
10.75°E, 59.916°N

10.75°E, 59.916°N

East **Sun elevation, for March 10** West

Duration of the day, for Oct. 20

Monday 10

11 Tuesday

12 Wednesday 13 Thursday

Thursday 13 Friday

Friday

25 Saturday

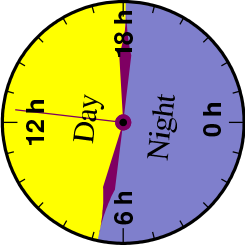
Sunday
26

Sunrise and Sunset at Oslo ($TL \pm 1\text{ mn}$)

[illegible]

Week 43

March 2014



Oslo
10.75°E, 59.916°N

East Sun elevation, for Oct. 20 West

Duration of the day, for March 10

Monday 20

Tuesday 21

Wednesday 22

Thursday 23

Friday 14

Saturday 15

Sunday 16

Sunrise and Sunset at Oslo (TL ± 1 mn)

292 - 73

08:08 - 17:55

292 - 73

08:11 - 17:52

292 - 73

08:13 - 17:49

292 - 73

08:16 - 17:46

68 - 297

06:37 - 18:17

68 - 297

06:34 - 18:19

68 - 297

06:31 - 18:22

9:46

-5 m.

20°

9:41

-10 m.

19°

9:35

-16 m.

19°

9:30

-21 m.

19°

11:39

+27 m.

28°

11:45

+33 m.

28°

11:50

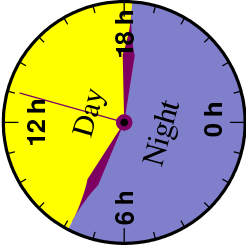
+38 m.

28°

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

Week 12

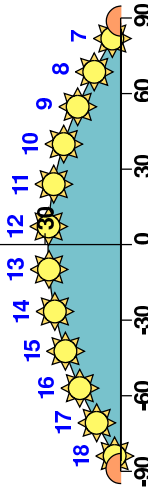
October 2014



Oslo

10.75°E, 59.916°N

East Sun elevation, for March 17 West



Duration of the day, for Oct. 13

Monday 17

Tuesday 18

Wednesday 19

Thursday 20

Friday 17

Saturday 18

Sunday 19

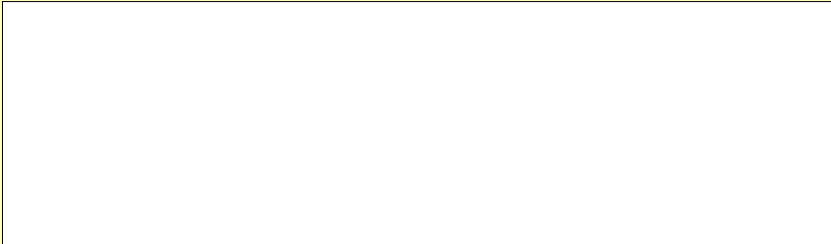
Sunrise and Sunset at Oslo (TL ± 1 mn)

75 - 290
06:28 - 18:24



11:56 +6 m. 29°

75 - 290
06:25 - 18:26



12:01 +11 m. 29°

75 - 290
06:22 - 18:29



12:07 +17 m. 30°

75 - 290
06:19 - 18:31



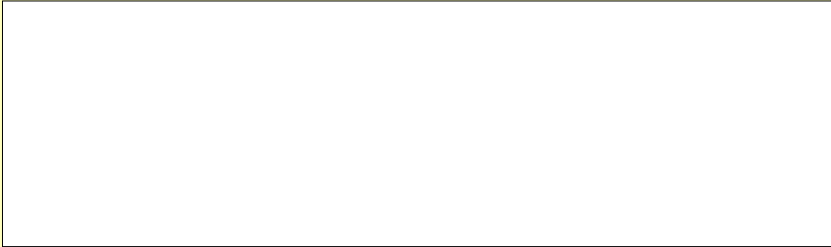
12:12 +22 m. 30°

285 - 80
08:01 - 18:03



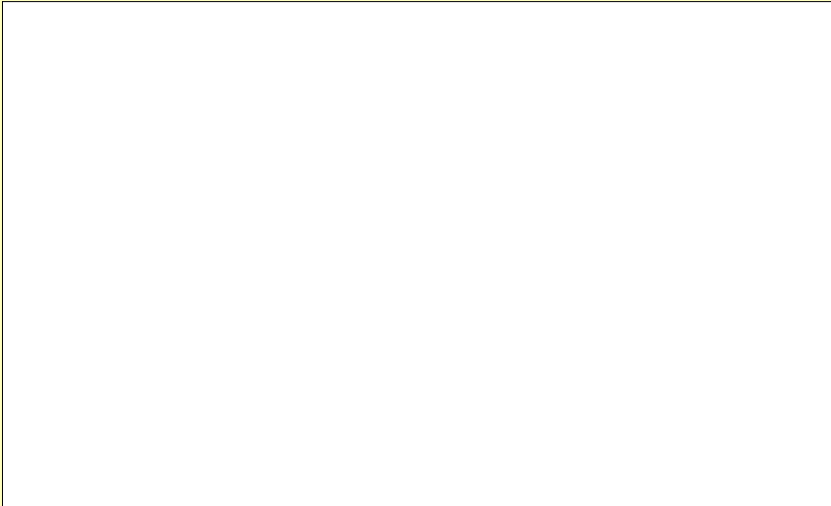
10:03 -26 m. 21°

285 - 80
08:03 - 18:00



9:57 -32 m. 20°

285 - 80
08:06 - 17:57

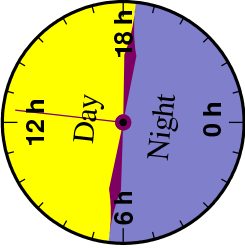
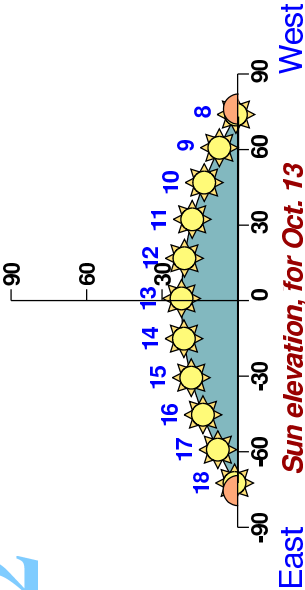


9:51 -38 m. 20°

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

Week 42

March 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for March 17

Monday 13

Tuesday 14

Wednesday 15

Thursday 16

Friday 21

Saturday 22

Sunday 23

Sunrise and Sunset at Oslo (TL ± 1 mn)

285 - 80
07:51 - 18:15

285 - 80
07:53 - 18:12

285 - 80
07:56 - 18:09

285 - 80
07:58 - 18:06

75 - 290
06:16 - 18:34

75 - 290
06:13 - 18:36

75 - 290
06:10 - 18:39

10:24

-5 m.

22°

10:19

-10 m.

22°

10:13

-16 m.

22°

10:08

-21 m.

21°

12:17

+27 m.

30°

12:23

+33 m.

31°

12:28

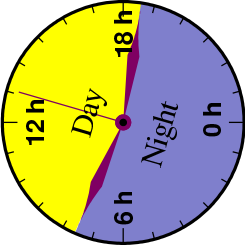
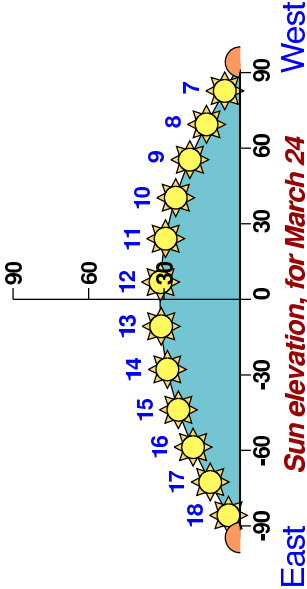
+38 m.

31°

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

Week 13

October 2014



Duration of the day, for Oct. 6

Oslo
10.75°E, 59.916°N

Monday 24

Tuesday 25

Wednesday 26

Thursday 27

Friday 10

Saturday 11

Sunday 12

Sunrise and Sunset at Oslo (TL ± 1 mn)

82 - 283
06:07 - 18:41

82 - 283
06:04 - 18:43

82 - 283
06:01 - 18:46

82 - 283
05:58 - 18:48

278 - 87
07:44 - 18:24

278 - 87
07:46 - 18:21

278 - 87
07:49 - 18:18

12:34

+6 m.

32°

12:39

+11 m.

32°

12:45

+17 m.

32°

12:50

+22 m.

33°

10:40

-27 m.

23°

10:35

-32 m.

23°

10:29

-38 m.

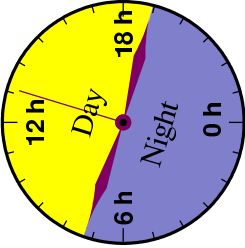
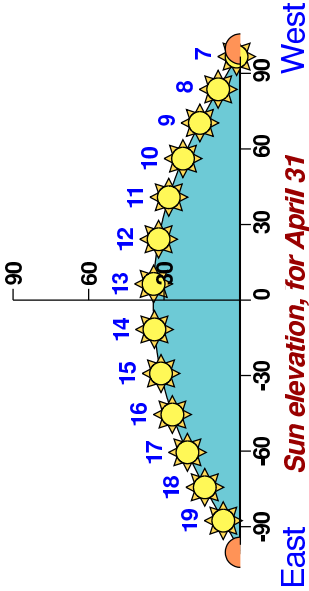
23°

23°

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

Week 14

Sept. - Oct. 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Sept. 29

Monday 31

Tuesday 1

Wednesday 2

Thursday 3

Friday 3

Saturday 4

Sunday 5

Sunrise and Sunset at Oslo (TL ± 1 mn)

89 - 276
06:46 - 19:58

89 - 276
06:43 - 20:00

89 - 276
06:40 - 20:03

89 - 276
06:37 - 20:05

271 - 94
07:27 - 18:44

271 - 94
07:29 - 18:41

271 - 94
07:32 - 18:38

13:12

+6 m.

34°

13:17

+11 m.

35°

13:23

+17 m.

35°

13:28

+22 m.

35°

11:17

-27 m.

26°

11:12

-32 m.

26°

11:07

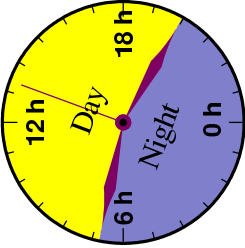
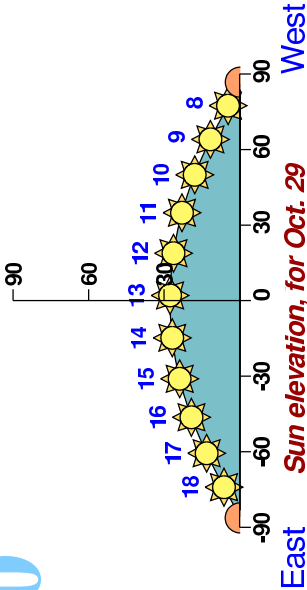
-37 m.

25°

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

Week 40

March - April 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for March 31

Monday 29

Tuesday 30

Wednesday 1

Thursday 2

Friday 4

Saturday 5

Sunday 6

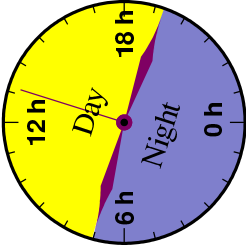
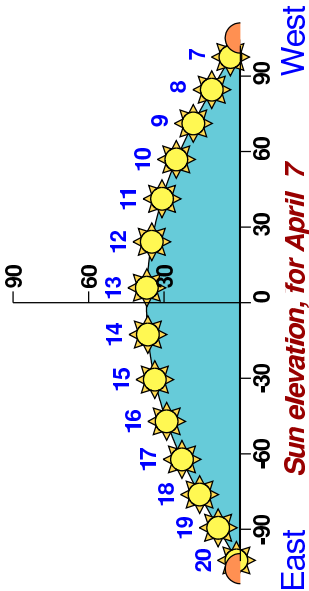
Sunrise and Sunset at Oslo (TL ± 1 mn)

271 - 94 07:17 - 18:56	271 - 94 07:20 - 18:53	271 - 94 07:22 - 18:50	271 - 94 07:24 - 18:47	89 - 276 06:34 - 20:08	89 - 276 06:31 - 20:10	89 - 276 06:28 - 20:13
11:39 -5 m. 28°	11:34 -10 m. 27°	11:28 -16 m. 27°	11:23 -21 m. 26°	13:34 +28 m. 36°	13:39 +33 m. 36°	13:45 +39 m. 37°

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

Week 15

September 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Sept. 22

Monday 7

Tuesday 8

Wednesday 9

Thursday 10

Friday 26

Saturday 27

Sunday 28

Sunrise and Sunset at Oslo (TL ± 1 mn)

96 - 269

06:25 - 20:15

96 - 269

06:22 - 20:18

96 - 269

06:19 - 20:20

96 - 269

06:16 - 20:22

13:50

+5 m.

37°

13:56

+11 m.

37°

14:01

+16 m.

38°

14:06

+21 m.

38°

11:55

-27 m.

29°

11:50

-32 m.

28°

11:44

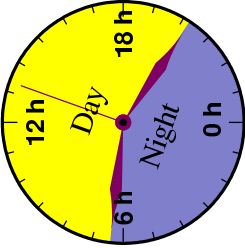
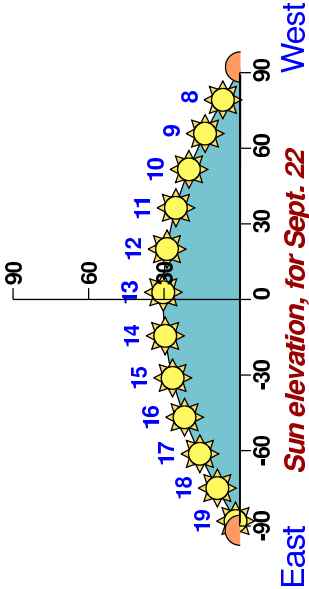
-38 m.

28°

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

Week 39

April 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for April 7

Monday 22

Tuesday 23

Wednesday 24

Thursday 25

Friday 11

Saturday 12

Sunday 13

Sunrise and Sunset at Oslo (TL ± 1 mn)

264 - 101
07:01 - 19:18

264 - 101
07:03 - 19:14

264 - 101
07:06 - 19:11

264 - 101
07:08 - 19:08

96 - 269
06:13 - 20:25

96 - 269
06:10 - 20:27

96 - 269
06:07 - 20:30

12:17

-5 m.

30°

12:11

-11 m.

30°

12:06

-16 m.

30°

12:01

-21 m.

29°

14:12

+27 m.

38°

14:17

+32 m.

39°

14:23

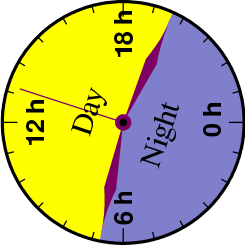
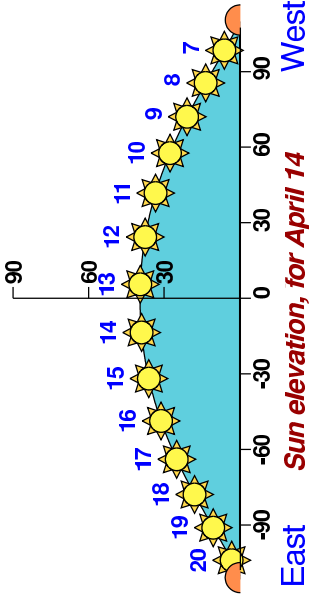
+38 m.

39°

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

Week 16

September 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for Sept. 15

Monday 14

Tuesday 15

Wednesday 16

Thursday 17

Friday 19

Saturday 20

Sunday 21

Sunrise and Sunset at Oslo (TL ± 1 mn)

103 - 262
06:04 - 20:32

103 - 262
06:01 - 20:35

103 - 262
05:58 - 20:37

103 - 262
05:56 - 20:40

257 - 108
06:54 - 19:27

257 - 108
06:56 - 19:24

257 - 108
06:59 - 19:21

14:28

+5 m.

40°

14:33

+10 m.

40°

14:39

+16 m.

40°

14:44

+21 m.

41°

12:33

-27 m.

32°

12:27

-33 m.

31°

12:22

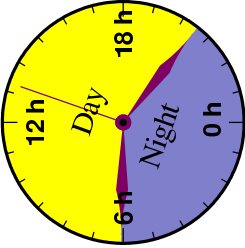
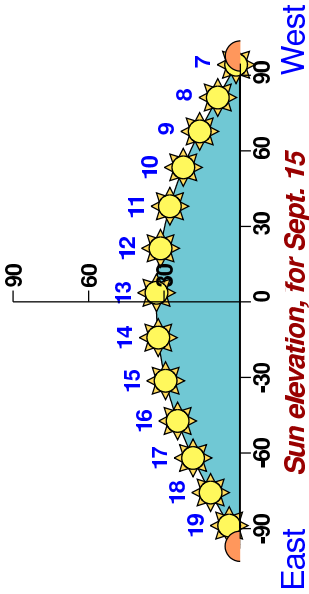
-38 m.

31°

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

Week 38

April 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for April 14

Monday 15

Tuesday 16

Wednesday 17

Thursday 18

Friday 18

Saturday 19

Sunday 20

Sunrise and Sunset at Oslo (TL ± 1 mn)

257 - 108
06:45 - 19:39

257 - 108
06:47 - 19:36

257 - 108
06:49 - 19:33

257 - 108
06:52 - 19:30

103 - 262
05:53 - 20:42

103 - 262
05:50 - 20:45

103 - 262
05:47 - 20:47

12:54

-6 m.

33°

12:49

-11 m.

33°

12:44

-16 m.

32°

12:38

-22 m.

32°

14:50

+27 m.

41°

14:55

+32 m.

41°

15:00

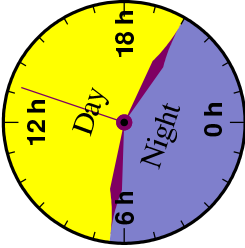
+37 m.

42°

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

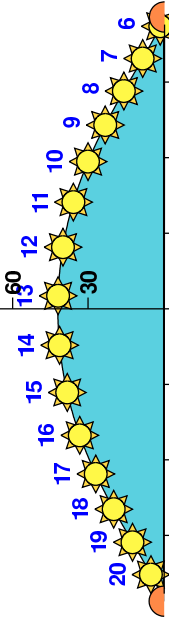
Week 17

September 2014



Oslo
10.75°E, 59.916°N

East Sun elevation, for April 21 West



Duration of the day, for Sept. 8

Monday 21

Tuesday 22

Wednesday 23

Thursday 24

Friday 12

Saturday 13

Sunday 14

Sunrise and Sunset at Oslo (TL ± 1 mn)

110 - 255
05:44 - 20:49

110 - 255
05:41 - 20:52

110 - 255
05:38 - 20:54

110 - 255
05:35 - 20:57

250 - 115
06:38 - 19:48

250 - 115
06:40 - 19:45

250 - 115
06:42 - 19:42

15:06

+6 m.

42°

15:11

+11 m.

42°

15:16

+16 m.

43°

15:22

+22 m.

43°

13:10

-27 m.

34°

13:05

-32 m.

34°

13:00

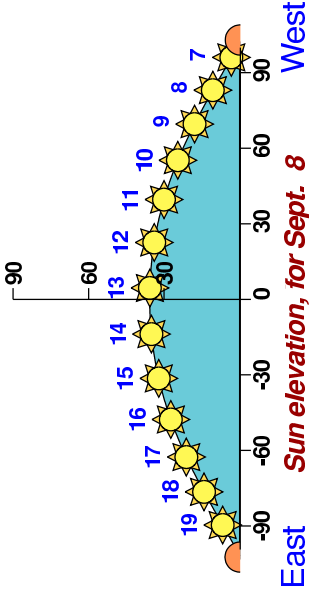
-37 m.

33°

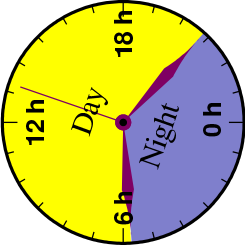
Duration of the day - Variation - Sun maximal elevation (°)

Week 37

April 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for April 21

Monday 8

Tuesday 9

Wednesday 10

Thursday 11

Friday 25

Saturday 26

Sunday 27

Sunrise and Sunset at Oslo (TL ± 1 mn)

250 - 115
06:28 - 20:00

250 - 115
06:31 - 19:57

250 - 115
06:33 - 19:54

250 - 115
06:35 - 19:51

110 - 255
05:33 - 20:59

110 - 255
05:30 - 21:02

110 - 255
05:27 - 21:04

13:32

-5 m.

36°

13:26

-11 m.

35°

13:21

-16 m.

35°

13:16

-21 m.

35°

15:27

+27 m.

43°

15:32

+32 m.

44°

15:37

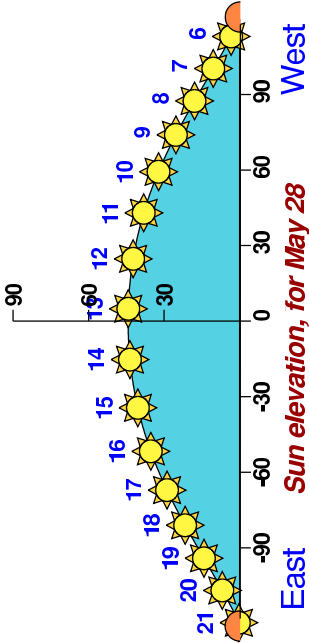
+37 m.

44°

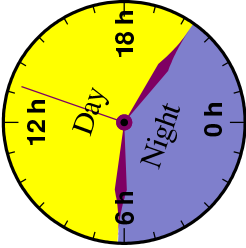
Duration of the day - Variation - Sun maximal elevation (°)

Week 18

September 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Sept. 1

Monday 28

Tuesday 29

Wednesday 30

Thursday 1

Friday 5

Saturday 6

Sunday 7

Sunrise and Sunset at Oslo (TL ± 1 mn)

117 - 248
05:24 - 21:07

117 - 248
05:21 - 21:09

117 - 248
05:19 - 21:12

117 - 248
05:16 - 21:14

243 - 122
06:21 - 20:09

243 - 122
06:24 - 20:06

243 - 122
06:26 - 20:03

15:43

+6 m.

44°

15:48

+11 m.

45°

15:53

+16 m.

45°

15:58

+21 m.

45°

13:48

-27 m.

37°

13:43

-32 m.

36°

13:37

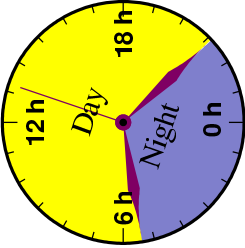
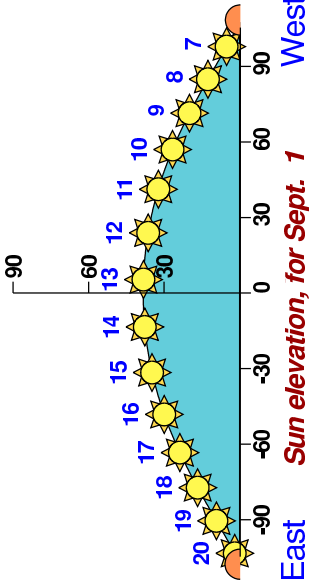
-38 m.

36°

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

Week 36

April - May 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for April 28

Monday 1

Tuesday 2

Wednesday 3

Thursday 4

Friday 2

Saturday 3

Sunday 4

Sunrise and Sunset at Oslo (TL ± 1 mn)

243 - 122
06:12 - 20:21

243 - 122
06:14 - 20:18

243 - 122
06:17 - 20:15

243 - 122
06:19 - 20:12

117 - 248
05:13 - 21:17

117 - 248
05:11 - 21:19

117 - 248
05:08 - 21:22

14:09

-6 m.

38°

14:04

-11 m.

38°

13:59

-16 m.

38°

13:53

-22 m.

37°

16:04

+27 m.

46°

16:09

+32 m.

46°

16:14

+37 m.

46°

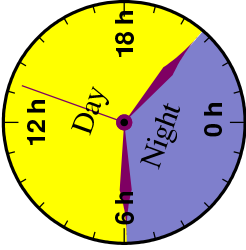
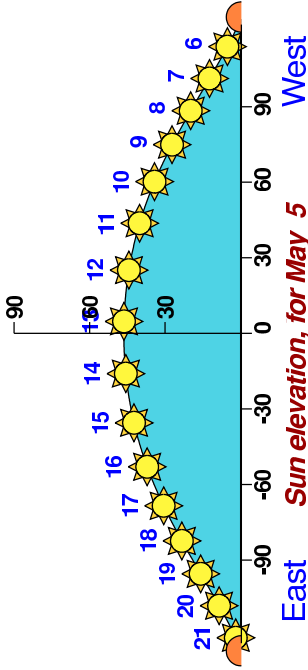
Duration of the day - Variation - Sun maximal elevation (°)

Week 19

August 2014

Oslo

10.75°E, 59.916°N



Duration of the day, for Aug. 25

Monday 5

Tuesday 6

Wednesday 7

Thursday 8

Friday 29

Saturday 30

Sunday 31

Sunrise and Sunset at Oslo (TL ± 1 mn)

124 - 241

05:05 - 21:24

124 - 241

05:03 - 21:27

124 - 241

05:00 - 21:29

124 - 241

04:58 - 21:31

236 - 129

06:05 - 20:30

236 - 129

06:07 - 20:27

236 - 129

06:09 - 20:24

16:19

+5 m.

46°

16:24

+10 m.

47°

16:29

+15 m.

47°

16:34

+20 m.

47°

14:25

-27 m.

39°

14:20

-32 m.

39°

14:15

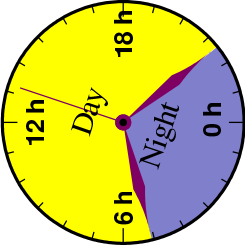
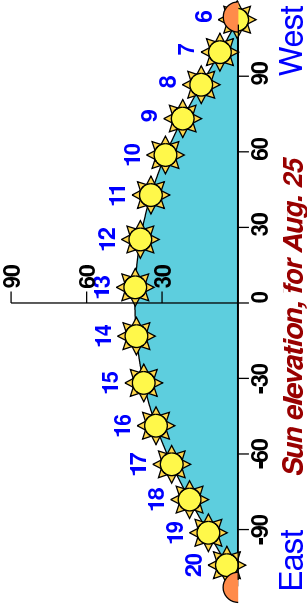
-37 m.

39°

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

Week 35

May 2014



Oslo

10.75°E, 59.916°N

Duration of the day, for May 5

Monday 25

Tuesday 26

Wednesday 27

Thursday 28

Friday 9

Saturday 10

Sunday 11

Sunrise and Sunset at Oslo (TL ± 1 mn)

236 - 129
05:55 - 20:42

236 - 129
05:58 - 20:39

236 - 129
06:00 - 20:36

236 - 129
06:02 - 20:33

124 - 241
04:55 - 21:34

124 - 241
04:53 - 21:36

124 - 241
04:50 - 21:39

14:47

-5 m.

41°

14:41

-11 m.

40°

14:36

-16 m.

40°

14:31

-21 m.

40°

16:39

+25 m.

48°

16:44

+30 m.

48°

16:49

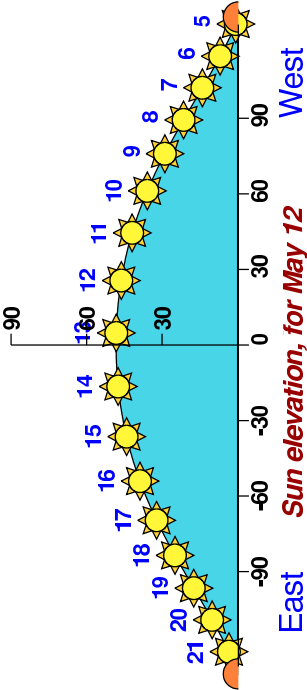
+35 m.

48°

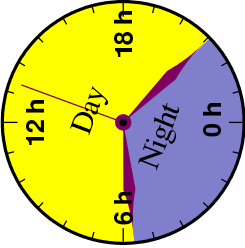
Duration of the day - Variation - Sun maximal elevation (°)

Week 20

August 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Aug. 18

Monday 12

Tuesday 13

Wednesday 14

Thursday 15

Friday 22

Saturday 23

Sunday 24

Sunrise and Sunset at Oslo (TL ± 1 mn)

131 - 234
04:48 - 21:41

131 - 234
04:45 - 21:43

131 - 234
04:43 - 21:46

131 - 234
04:41 - 21:48

229 - 136
05:48 - 20:50

229 - 136
05:50 - 20:48

229 - 136
05:53 - 20:45

16:54

+5 m.

48°

16:58

+9 m.

49°

17:03

+14 m.

49°

17:08

+19 m.

49°

15:02

-27 m.

42°

14:57

-32 m.

41°

14:52

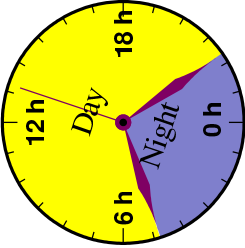
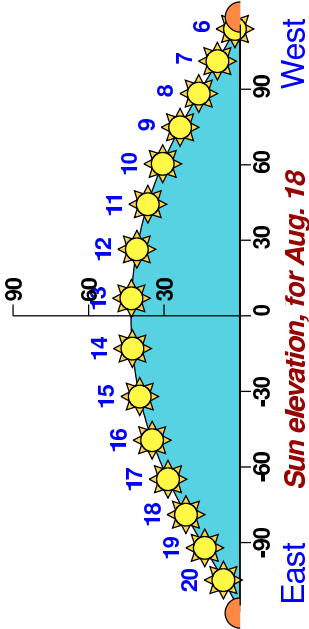
-37 m.

41°

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

Week 34

May 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for May 12

Monday 18

Tuesday 19

Wednesday 20

Thursday 21

Friday 16

Saturday 17

Sunday 18

Sunrise and Sunset at Oslo (TL ± 1 mn)

229 - 136
05:39 - 21:02

229 - 136
05:41 - 20:59

229 - 136
05:43 - 20:56

229 - 136
05:46 - 20:53

131 - 234
04:38 - 21:50

131 - 234
04:36 - 21:53

131 - 234
04:34 - 21:55

15:23

-6 m.

43°

15:18

-11 m.

43°

15:13

-16 m.

42°

15:08

-21 m.

42°

17:12

+23 m.

49°

17:17

+28 m.

49°

17:21

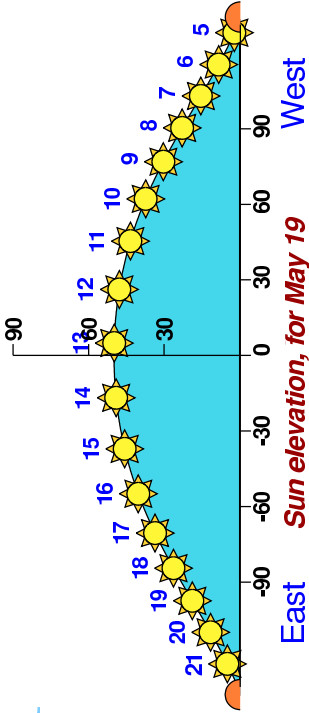
+32 m.

50°

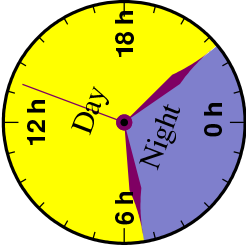
Duration of the day - Variation - Sun maximal elevation (°)

Week 21

August 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for Aug. 17

Monday 19

Tuesday 20

Wednesday 21

Thursday 22

Friday 15

Saturday 16

Sunday 17

Sunrise and Sunset at Oslo (TL ± 1 mn)

138 - 227
04:32 - 21:57

138 - 227
04:29 - 22:00

138 - 227
04:27 - 22:02

138 - 227
04:25 - 22:04

222 - 143
05:31 - 21:10

222 - 143
05:34 - 21:08

222 - 143
05:36 - 21:05

17:26

+5 m.

50 °

17:30

+9 m.

50 °

17:35

+14 m.

50 °

17:39

+18 m.

51 °

15:39

-26 m.

44 °

15:34

-31 m.

44 °

15:29

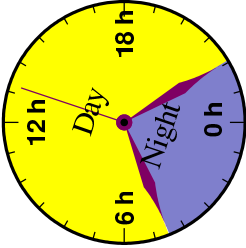
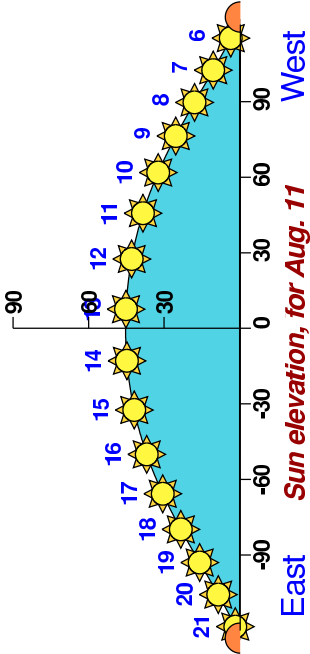
-36 m.

43 °

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

Week 33

May 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for May 19

Monday 11

Tuesday 12

Wednesday 13

Thursday 14

Friday 23

Saturday 24

Sunday 25

Sunrise and Sunset at Oslo (TL ± 1 mn)

222 - 143
05:22 - 21:21

222 - 143
05:24 - 21:19

222 - 143
05:27 - 21:16

222 - 143
05:29 - 21:13

138 - 227
04:23 - 22:06

138 - 227
04:21 - 22:08

138 - 227
04:19 - 22:10

16:00

-5 m.

45°

15:55

-10 m.

45°

15:49

-16 m.

45°

15:44

-21 m.

44°

17:43

+22 m.

51°

17:47

+26 m.

51°

17:51

+30 m.

51°

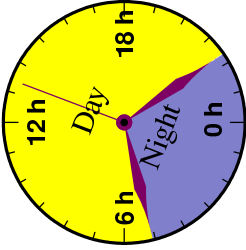
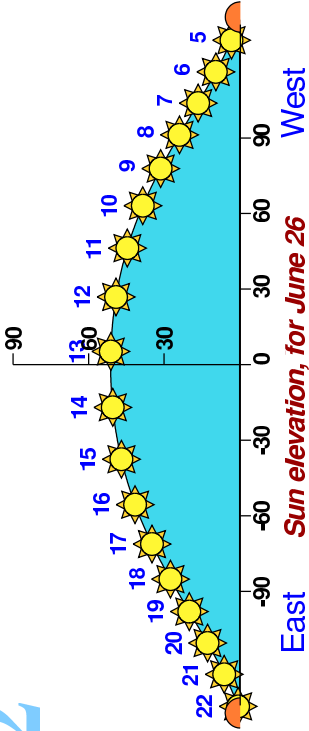
Duration of the day - Variation - Sun maximal elevation (°)

Week 22

August 2014

Oslo

10.75°E, 59.916°N



Duration of the day, for Aug. 4

Monday 26

Tuesday 27

Wednesday 28

Thursday 29

Friday 8

Saturday 9

Sunday 10

Sunrise and Sunset at Oslo (TL ± 1 mn)

145 - 220
04:17 - 22:12

145 - 220
04:16 - 22:14

145 - 220
04:14 - 22:16

145 - 220
04:12 - 22:18

215 - 150
05:15 - 21:29

215 - 150
05:17 - 21:27

215 - 150
05:19 - 21:24

17:55 +4 m. 51°

17:59 +8 m. 51°

18:02 +11 m. 52°

18:06 +15 m. 52°

16:15 -25 m. 46°

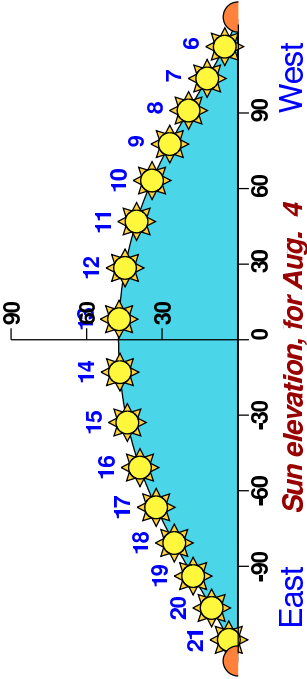
16:10 -30 m. 46°

16:05 -35 m. 46°

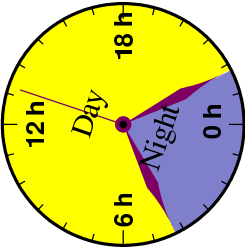
Duration of the day - Variation - Sun maximal elevation (°)

Week 32

May - June 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for May 28

Monday 4

Tuesday 5

Wednesday 6

Thursday 7

Friday 30

Saturday 31

Sunday 1

Sunrise and Sunset at Oslo (TL ± 1 mn)

215 - 150
05:05 - 21:40

215 - 150
05:07 - 21:37

215 - 150
05:10 - 21:35

215 - 150
05:12 - 21:32

145 - 220
04:11 - 22:20

145 - 220
04:09 - 22:22

145 - 220
04:08 - 22:24

16:35

-5 m.

47°

16:30

-10 m.

47°

16:25

-15 m.

47°

16:20

-20 m.

46°

18:10

+19 m.

52°

18:13

+22 m.

52°

18:16

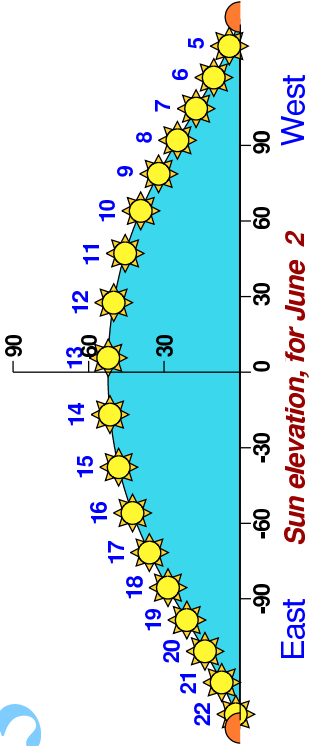
+25 m.

52°

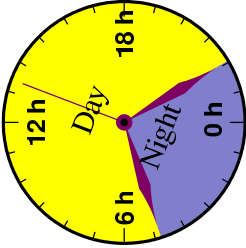
Duration of the day - Variation - Sun maximal elevation (°)

Week 23

July - Aug. 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for July 28

Monday 2

Tuesday 3

Wednesday 4

Thursday 5

Friday 1

Saturday 2

Sunday 3

Sunrise and Sunset at Oslo (TL ± 1 mn)

152 - 213
04:06 - 22:25

152 - 213
04:05 - 22:27

152 - 213
04:03 - 22:29

152 - 213
04:02 - 22:30

208 - 157
04:58 - 21:47

208 - 157
05:00 - 21:45

208 - 157
05:03 - 21:42

18:19 +3 m. 52°

18:22 +6 m. 52°

18:25 +9 m. 53°

18:28 +12 m. 53°

16:50 -23 m. 48°

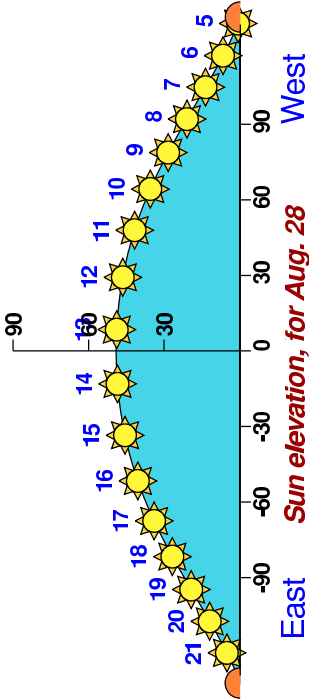
16:45 -28 m. 48°

16:40 -33 m. 48°

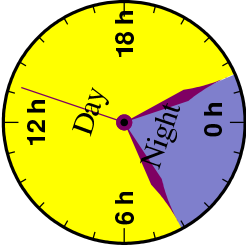
Duration of the day - Variation - Sun maximal elevation (°)

Week 31

June 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for June 28

Monday 28

Tuesday 29

Wednesday 30

Thursday 31

Friday 6

Saturday 7

Sunday 8

Sunrise and Sunset at Oslo (TL ± 1 mn)

208 - 157
04:49 - 21:57

208 - 157
04:51 - 21:55

208 - 157
04:53 - 21:52

152 - 213
04:01 - 22:32

152 - 213
04:00 - 22:33

152 - 213
03:59 - 22:34

17:08

-5 m.

49°

17:04

-9 m.

49°

16:59

-14 m.

49°

16:54

-19 m.

48°

18:31

+15 m.

53°

18:33

+17 m.

53°

18:35

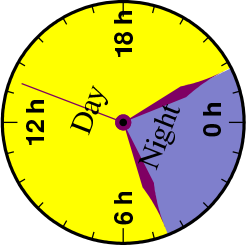
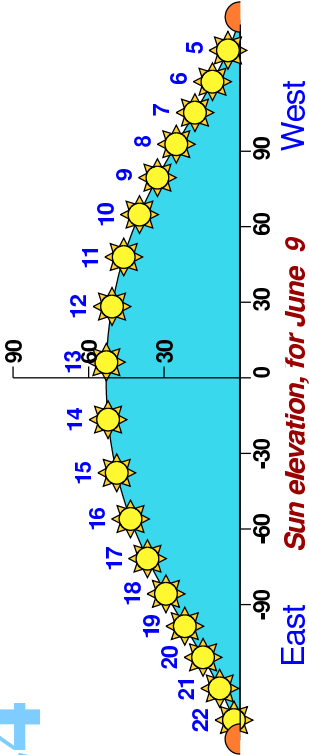
+19 m.

53°

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

Week **24**

July 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for July 21

Monday 9

Tuesday 10

Wednesday 11

Thursday 12

Friday 25

Saturday 26

Sunday 27

Sunrise and Sunset at Oslo (TL ± 1 mn)

159 - 206
03:58 - 22:36

159 - 206
03:57 - 22:37

159 - 206
03:56 - 22:38

159 - 206
03:56 - 22:39

201 - 164
04:42 - 22:04

201 - 164
04:44 - 22:02

201 - 164
04:46 - 21:59

18:38

+3 m. 53°

+5 m. 53°

+6 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

+8 m. 53°

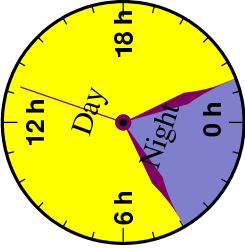
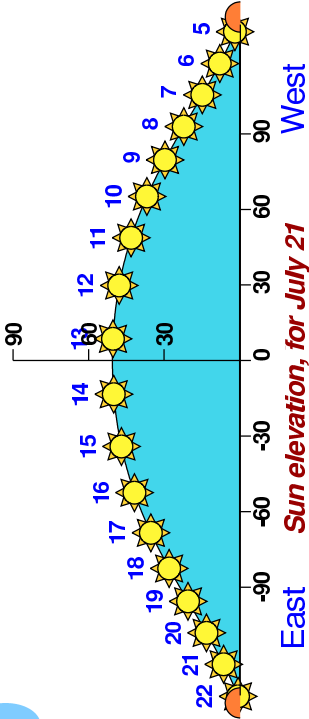
+8 m. 53°

+8 m. 53°

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

Week 30

June 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for June 9

Monday 21

Tuesday 22

Wednesday 23

Thursday 24

Friday 13

Saturday 14

Sunday 15

Sunrise and Sunset at Oslo (TL ± 1 mn)

201 - 164
04:33 - 22:12

201 - 164
04:35 - 22:10

201 - 164
04:38 - 22:08

201 - 164
04:40 - 22:06

159 - 206
03:55 - 22:40

159 - 206
03:55 - 22:41

159 - 206
03:54 - 22:41

17:39

-4 m.

51 °

17:35

-8 m.

50 °

17:31

-12 m.

50 °

17:26

-17 m.

50 °

18:45

+10 m.

53 °

18:46

+11 m.

53 °

18:47

+12 m.

53 °

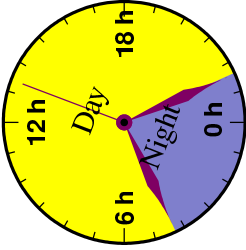
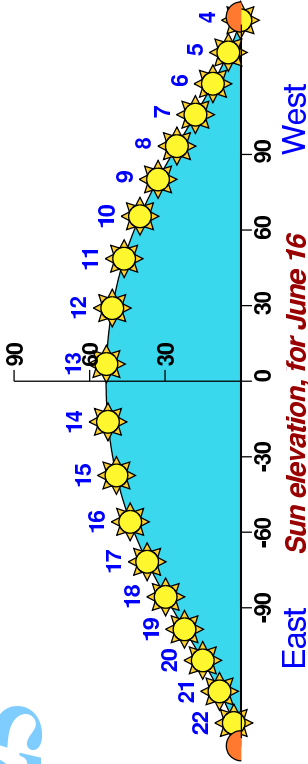
Duration of the day - Variation - Sun maximal elevation (°)

Week 25

July 2014

Oslo

10.75°E, 59.916°N



Duration of the day, for July 14

Monday 16

Tuesday 17

Wednesday 18

Thursday 19

Friday 18

Saturday 19

Sunday 20

Sunrise and Sunset at Oslo (TL ± 1 mn)

166 - 199
03:54 - 22:42

166 - 199
03:54 - 22:43

166 - 199
03:54 - 22:43

166 - 199
03:54 - 22:43

194 - 171
04:27 - 22:18

194 - 171
04:29 - 22:16

194 - 171
04:31 - 22:14

18:48

+1 m.

53°

18:49

+2 m.

53°

18:49

+2 m.

54°

18:50

+3 m.

54°

17:51

-19 m.

51°

17:47

-23 m.

51°

17:43

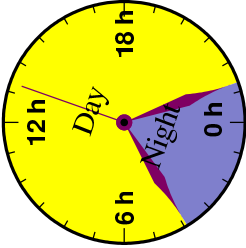
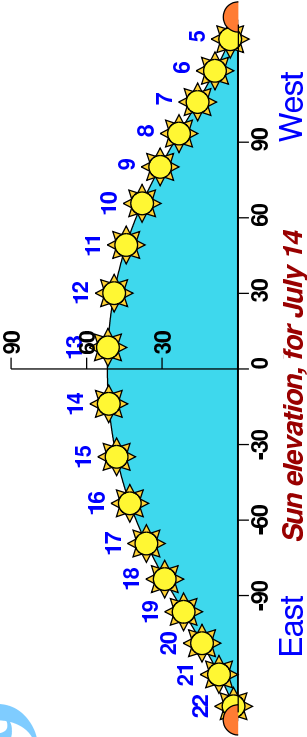
-27 m.

51°

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

Week 29

June 2014



Oslo
10.75°E, 59.916°N

Duration of the day, for June 16

Monday 14

Tuesday 15

Wednesday 16

Thursday 17

Friday 20

Saturday 21

Sunday 22

Sunrise and Sunset at Oslo (TL ± 1 mn)

194 - 171
04:19 - 22:25

194 - 171
04:21 - 22:24

194 - 171
04:23 - 22:22

194 - 171
04:25 - 22:20

166 - 199
03:54 - 22:44

166 - 199
03:54 - 22:44

166 - 199
03:54 - 22:44

18:06

-4 m.

52°

18:03

-7 m.

52°

17:59

-11 m.

51°

17:55

-15 m.

51°

18:50

+3 m.

54°

18:50

+3 m.

54°

18:50

+3 m.

54°

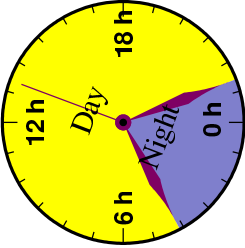
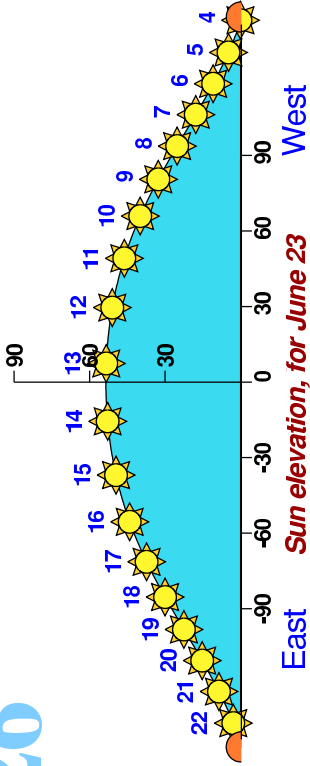
Duration of the day - Variation - Sun maximal elevation (°)

Week 26

July 2014

Oslo

10.75°E, 59.916°N



Duration of the day, for July 27

Monday 23

Tuesday 24

Wednesday 25

Thursday 26

Friday 11

Saturday 12

Sunday 13

Sunrise and Sunset at Oslo (TL ± 1 mn)

173 - 192
03:54 - 22:44

173 - 192
03:55 - 22:44

173 - 192
03:55 - 22:44

173 - 192
03:56 - 22:44

187 - 178
04:14 - 22:30

187 - 178
04:16 - 22:29

187 - 178
04:17 - 22:27

18:50 +0 m. 54°

18:50 +0 m. 54°

18:49 -1 m. 53°

18:48 -2 m. 53°

18:16 -15 m. 52°

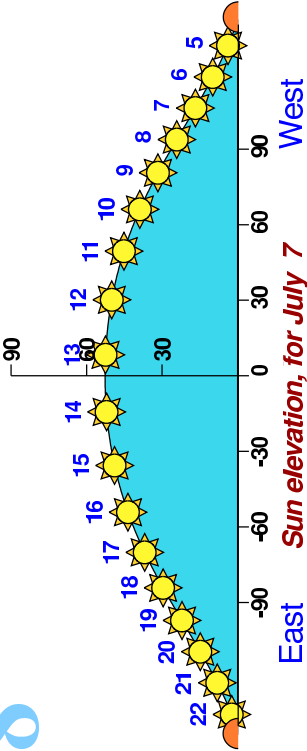
18:13 -18 m. 52°

18:10 -21 m. 52°

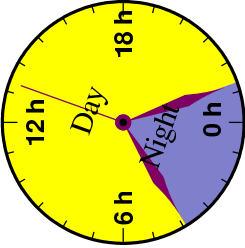
Duration of the day - Variation - Sun maximal elevation (°)

Week 28

June 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for June 23

Monday 7

Tuesday 8

Wednesday 9

Thursday 10

Friday 27

Saturday 28

Sunday 29

Sunrise and Sunset at Oslo (TL ± 1 mn)

187 - 178
04:08 - 22:36

187 - 178
04:09 - 22:34

187 - 178
04:11 - 22:33

187 - 178
04:12 - 22:32

173 - 192
03:57 - 22:43

173 - 192
03:57 - 22:43

173 - 192
03:58 - 22:43

18:28

-3 m.

53°

18:25

-6 m.

53°

18:22

-9 m.

52°

18:19

-12 m.

52°

18:47

-3 m.

53°

18:46

-4 m.

53°

18:45

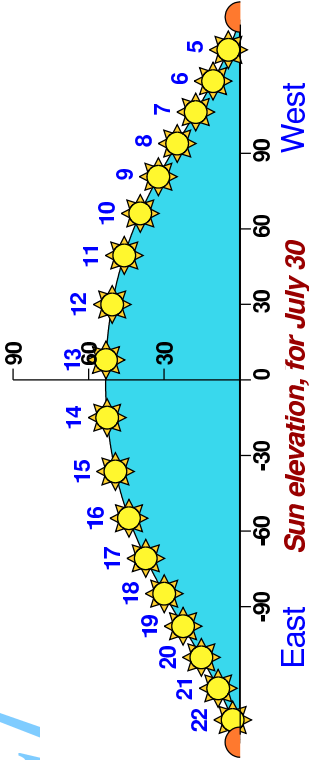
-5 m.

53°

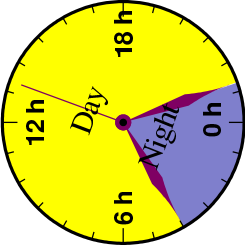
Duration of the day - Variation - Sun maximal elevation (°)

Week 27

June - July 2014



Oslo
10.75°E, 59.916°N



Duration of the day, for June 30

Monday 30

Tuesday 1

Wednesday 2

Thursday 3

Friday 4

Saturday 5

Sunday 6

Sunrise and Sunset at Oslo (TL ± 1 mn)

180 - 185	180 - 185	180 - 185	180 - 185	180 - 185	180 - 185
03:59 - 22:42	04:00 - 22:41	04:01 - 22:41	04:02 - 22:40	04:04 - 22:39	04:05 - 22:38
18:43	18:41	18:40	18:38	18:35	18:33
-2 m.	-4 m.	-5 m.	-7 m.	-10 m.	-12 m.
53°	53°	53°	53°	53°	53°
18:31	18:31	18:31	18:31	18:31	18:31
-14 m.					
53°					

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