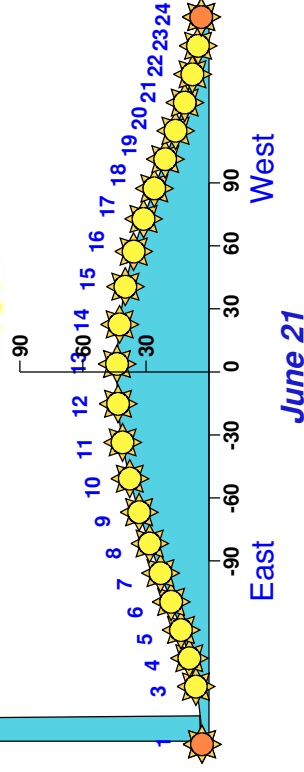


Sun Calendar 2024

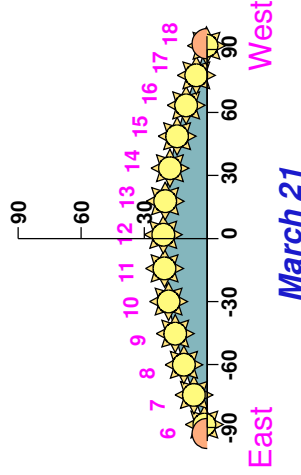
Produced by *ScientiDev*
www.scientidev.fr



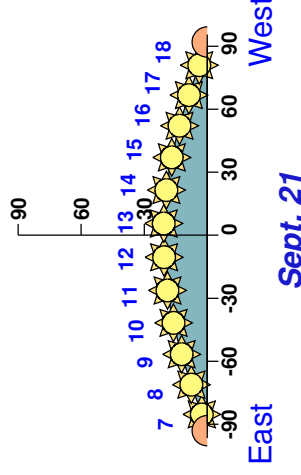
Summer



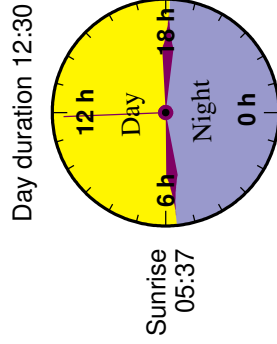
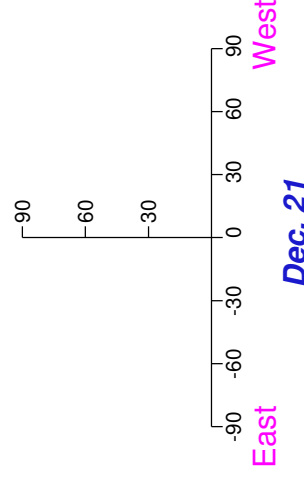
Spring



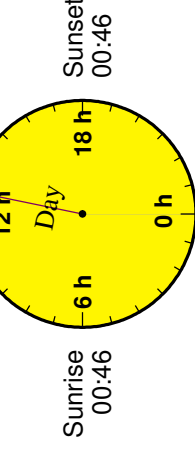
Autumn



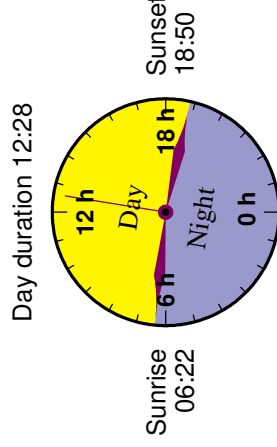
Winter



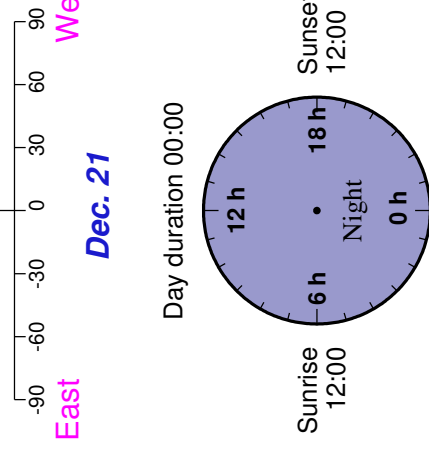
Spring Equinox



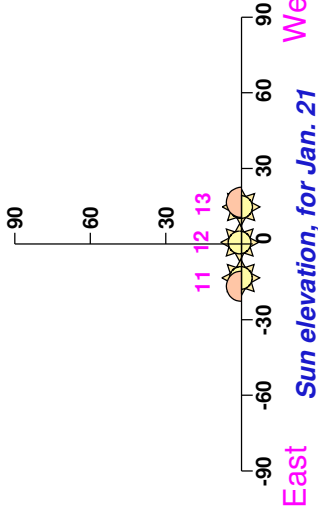
Summer Solstice



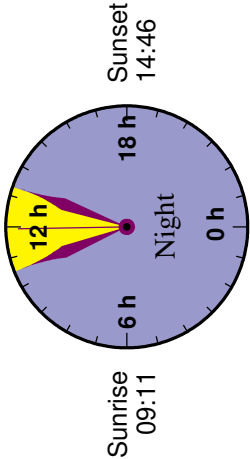
Autumn Equinox



January 2024



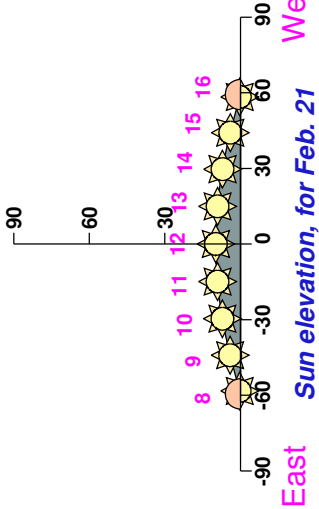
Tromsø
18.95°E, 69.65°N



Duration of the day, for January 21

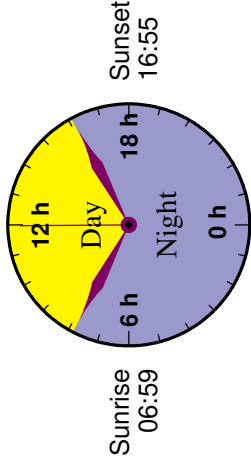
Sunrise and Sunset at Tromsø (TL ± 1 mn) and sun maximal elevation (°)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	1 - 365 Polar Night	2 - 364 Polar Night	3 - 363 Polar Night	4 - 362 Polar Night	5 - 361 Polar Night	6 - 360 Polar Night	7 - 359 Polar Night
2	8 - 358 Polar Night	9 - 357 Polar Night	10 - 356 Polar Night	11 - 355 Polar Night	12 - 354 Polar Night	13 - 353 Polar Night	14 - 352 Polar Night
3	15 - 351 11:45 - 12:03 0°	16 - 350 11:21 - 12:28 0°	17 - 349 11:08 - 12:42 0°	18 - 348 10:57 - 12:53 0°	19 - 347 10:48 - 13:02 1°	20 - 346 10:40 - 13:11 1°	21 - 345 10:33 - 13:19 1°
4	22 - 344 10:26 - 13:27 1°	23 - 343 10:19 - 13:34 1°	24 - 342 10:12 - 13:41 1°	25 - 341 10:06 - 13:48 2°	26 - 340 10:00 - 13:54 2°	27 - 339 09:54 - 14:01 2°	28 - 338 09:49 - 14:07 2°
5	29 - 337 09:43 - 14:13 3°	30 - 336 09:38 - 14:19 3°	31 - 335 09:32 - 14:24 3°				



February 2024

Tromsø
18.95°E, 69.65°N

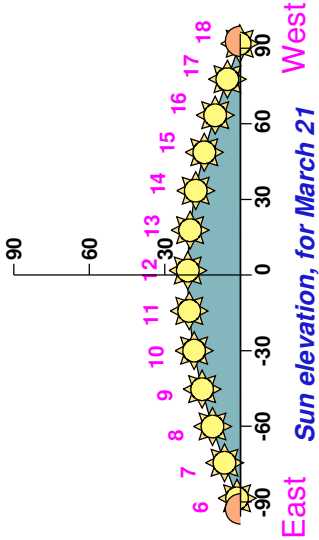


Sun elevation, for Feb. 21

Duration of the day, for February 21

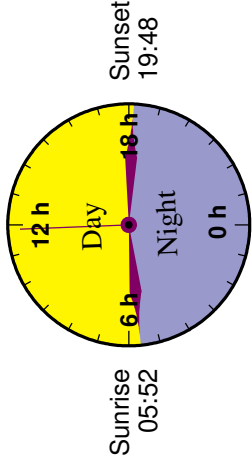
Sunrise and Sunset at Tromsø (TL $\pm$ 1 mn) and sun maximal elevation (°)

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5 36 - 330 09:06 - 14:51 5°	6 37 - 329 09:01 - 14:57 5°	7 38 - 328 08:56 - 15:02 5°	1 32 - 334 09:27 - 14:30 3°	2 33 - 333 09:22 - 14:35 4°	3 34 - 332 09:17 - 14:41 4°	4 35 - 331 09:11 - 14:46 4°
12 43 - 323 08:32 - 15:27 7°	13 44 - 322 08:27 - 15:31 7°	14 45 - 321 08:22 - 15:36 7°	8 39 - 327 08:51 - 15:07 5°	9 40 - 326 08:46 - 15:12 6°	10 41 - 325 08:42 - 15:17 6°	11 42 - 324 08:37 - 15:22 6°
19 50 - 316 07:59 - 15:59 9°	20 51 - 315 07:54 - 16:04 9°	21 52 - 314 07:50 - 16:08 10°	15 46 - 320 08:18 - 15:41 8°	16 47 - 319 08:13 - 15:45 8°	17 48 - 318 08:08 - 15:50 8°	18 49 - 317 08:04 - 15:55 9°
26 57 - 309 07:26 - 16:30 12°	27 58 - 308 07:22 - 16:34 12°	28 59 - 307 07:17 - 16:38 12°	22 53 - 313 07:45 - 16:12 10°	23 54 - 312 07:40 - 16:17 11°	24 55 - 311 07:36 - 16:21 11°	25 56 - 310 07:31 - 16:26 11°



March 2024

Tromsø
18.95°E, 69.65°N



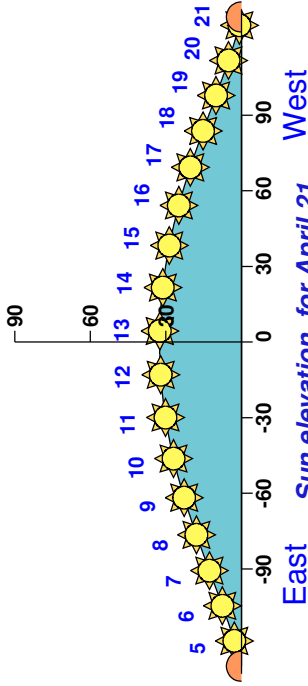
Duration of the day, for March 21

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

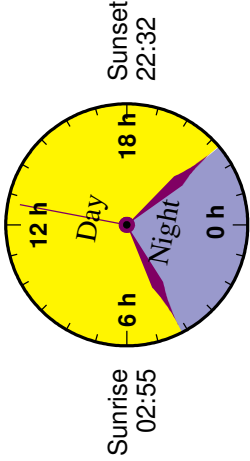
Time change March 31

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9	4 64 - 302 06:55 - 16:59 14°	5 65 - 301 06:50 - 17:03 15°	6 66 - 300 06:45 - 17:07 15°	7 67 - 299 06:41 - 17:12 15°	1 61 - 305 07:08 - 16:47 13°	2 62 - 304 07:04 - 16:51 13°	3 63 - 303 06:59 - 16:55 14°
10	11 71 - 295 06:23 - 17:28 17°	12 72 - 294 06:18 - 17:32 17°	13 73 - 293 06:14 - 17:36 18°	14 74 - 292 06:09 - 17:40 18°	8 68 - 298 06:36 - 17:16 16°	9 69 - 297 06:32 - 17:20 16°	10 70 - 296 06:27 - 17:24 17°
11	18 78 - 288 05:51 - 17:56 20°	19 79 - 287 05:46 - 18:00 20°	20 80 - 286 05:42 - 18:04 21°	21 81 - 285 05:37 - 18:08 21°	15 75 - 291 06:05 - 17:44 19°	16 76 - 290 06:00 - 17:48 19°	17 77 - 289 05:56 - 17:52 19°
12	25 85 - 281 05:19 - 18:24 22°	26 86 - 280 05:15 - 18:28 23°	27 87 - 279 05:10 - 18:32 23°	28 88 - 278 05:05 - 18:36 24°	22 82 - 284 05:33 - 18:12 21°	23 83 - 283 05:28 - 18:16 22°	24 84 - 282 05:24 - 18:20 22°
13					29 89 - 277 05:01 - 18:40 24°	30 90 - 276 04:56 - 18:44 24°	31 91 - 275 05:52 - 19:48 25°

April 2024



Tromsø
18.95°E, 69.65°N

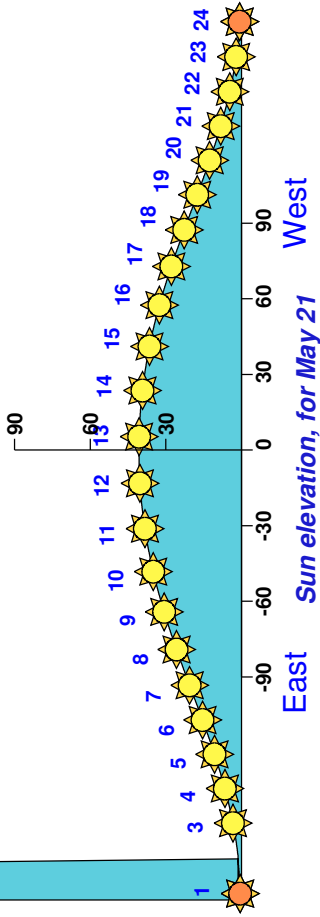


Duration of the day, for April 21

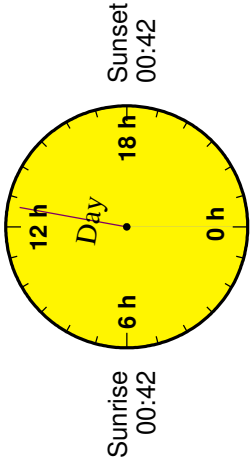
Sunrise and Sunset at Tromsø (TL $\pm$ 1 mn) and sun maximal elevation ($^{\circ}$)

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
1	92 - 274 05:47 - 19:52 25°	2	93 - 273 05:42 - 19:56 26°	3	94 - 272 05:38 - 20:00 26°	4	95 - 271 05:33 - 20:04 26°	5	96 - 270 05:28 - 20:08 27°	6	97 - 269 05:24 - 20:12 27°	7	98 - 268 05:19 - 20:17 27°
8	99 - 267 05:14 - 20:21 28°	9	100 - 266 05:10 - 20:25 28°	10	101 - 265 05:05 - 20:29 29°	11	102 - 264 05:00 - 20:33 29°	12	103 - 263 04:55 - 20:38 29°	13	104 - 262 04:50 - 20:42 30°	14	105 - 261 04:46 - 20:46 30°
15	106 - 260 04:41 - 20:51 30°	16	107 - 259 04:36 - 20:55 31°	17	108 - 258 04:31 - 21:00 31°	18	109 - 257 04:26 - 21:04 31°	19	110 - 256 04:21 - 21:09 32°	20	111 - 255 04:16 - 21:14 32°	21	112 - 254 04:11 - 21:18 32°
22	113 - 253 04:06 - 21:23 33°	23	114 - 252 04:01 - 21:28 33°	24	115 - 251 03:56 - 21:33 33°	25	116 - 250 03:51 - 21:38 34°	26	117 - 249 03:46 - 21:43 34°	27	118 - 248 03:40 - 21:48 34°	28	119 - 247 03:35 - 21:53 35°
29	120 - 246 03:29 - 21:58 35°	30	121 - 245 03:24 - 22:03 35°										

May 2024



Tromsø
18.95°E, 69.65°N

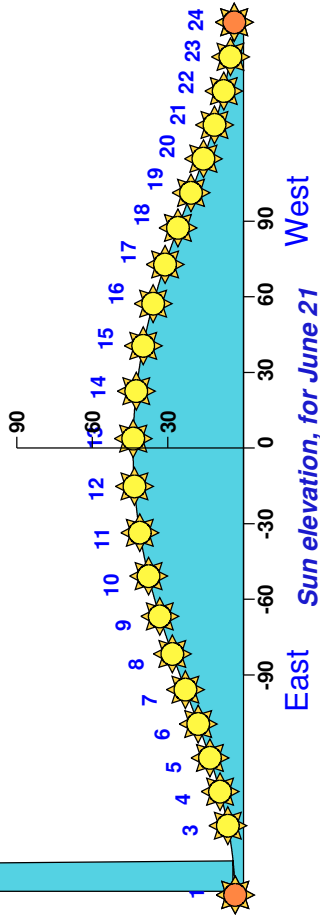


Duration of the day, for May 21

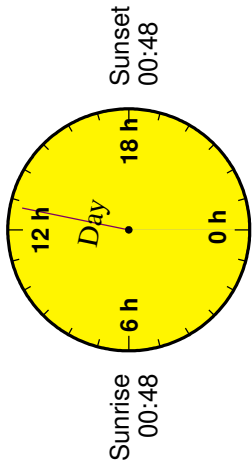
Sunrise and Sunset at Tromsø (TL ± 1 mn) and sun maximal elevation (°)

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
6	127 - 239 02:49 - 22:38 37°	7	128 - 238 02:42 - 22:45 37°	8	129 - 237 02:36 - 22:52 38°	9	130 - 236 02:29 - 22:59 38°	10	131 - 235 02:22 - 23:06 38°	11	132 - 234 02:14 - 23:14 38°	12	133 - 233 01:58 - 23:22 39°
13	134 - 232 01:49 - 23:32 39°	14	135 - 231 01:38 - 23:42 39°	15	136 - 230 01:26 - 23:55 39°	16	137 - 229 01:08 - 00:13 40°	17	138 - 228 Day at anytime	18	139 - 227 Day at anytime	19	140 - 226 Day at anytime
20	141 - 225 Day at anytime	21	142 - 224 Day at anytime	22	143 - 223 Day at anytime	23	144 - 222 Day at anytime	24	145 - 221 Day at anytime	25	146 - 220 Day at anytime	26	147 - 219 Day at anytime
27	148 - 218 Day at anytime	28	149 - 217 Day at anytime	29	150 - 216 Day at anytime	30	151 - 215 Day at anytime	31	152 - 214 Day at anytime				

June 2024



Tromsø
18.95°E, 69.65°N

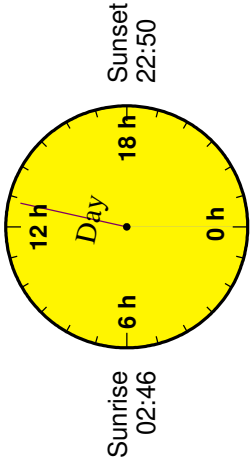
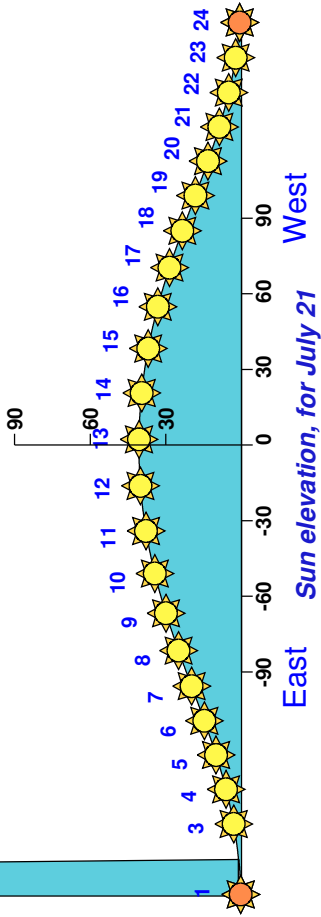


Duration of the day, for June 21

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

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
22	3 155 - 211 Day at anytime	4 156 - 210 Day at anytime	5 157 - 209 Day at anytime	6 158 - 208 Day at anytime	7 159 - 207 Day at anytime	8 160 - 206 Day at anytime	9 161 - 205 Day at anytime	10 162 - 204 Day at anytime	11 163 - 203 Day at anytime	12 164 - 202 Day at anytime	13 165 - 201 Day at anytime	14 166 - 200 Day at anytime	15 167 - 199 Day at anytime
	17 169 - 197 Day at anytime	18 170 - 196 Day at anytime	19 171 - 195 Day at anytime	20 172 - 194 Day at anytime	21 173 - 193 Day at anytime	22 174 - 192 Day at anytime	23 175 - 191 Day at anytime	24 176 - 190 Day at anytime	25 177 - 189 Day at anytime	26 178 - 188 Day at anytime	27 179 - 187 Day at anytime	28 180 - 186 Day at anytime	29 181 - 185 Day at anytime
	26	25	26	27	28	29	30	31	1	2	3	4	5
	6	7	8	9	10	11	12	13	14	15	16	17	18
	19	20	21	22	23	24	25	26	27	28	29	30	31

July 2024

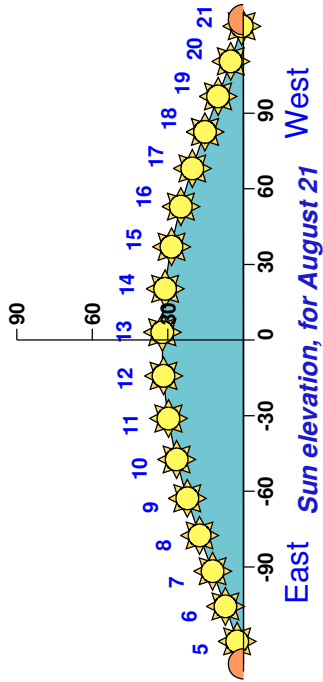


Duration of the day, for July 21

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

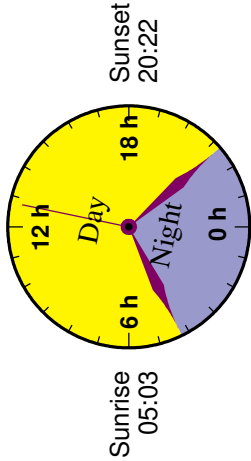
Tromsø
18.95°E, 69.65°N

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 183 - 183 Day at anytime	2 184 - 182 Day at anytime	3 185 - 181 Day at anytime	4 186 - 180 Day at anytime	5 187 - 179 Day at anytime	6 188 - 178 Day at anytime	7 189 - 177 Day at anytime
8 190 - 176 Day at anytime	9 191 - 175 Day at anytime	10 192 - 174 Day at anytime	11 193 - 173 Day at anytime	12 194 - 172 Day at anytime	13 195 - 171 Day at anytime	14 196 - 170 Day at anytime
15 197 - 169 Day at anytime	16 198 - 168 Day at anytime	17 199 - 167 Day at anytime	18 200 - 166 Day at anytime	19 201 - 165 Day at anytime	20 202 - 164 Day at anytime	21 203 - 163 Day at anytime
22 204 - 162 Day at anytime	23 205 - 161 Day at anytime	24 206 - 160 Day at anytime	25 207 - 159 01:19 - 00:23 40°	26 208 - 158 01:37 - 00:06 40°	27 209 - 157 01:49 - 23:54 39°	28 210 - 156 02:00 - 23:43 39°
29 211 - 155 Day at anytime	30 212 - 154 02:09 - 23:25 39°	31 213 - 153 02:17 - 23:17 38°				



August 2024

Tromsø
18.95°E, 69.65°N



Duration of the day, for August 21

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

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
5	218 - 148 02:52 - 22:43 37°	6	219 - 147 02:59 - 22:37 37°	7	220 - 146 03:04 - 22:31 37°	8	221 - 145 03:10 - 22:25 36°	9	222 - 144 03:16 - 22:19 36°	10	223 - 143 03:21 - 22:14 36°	11	224 - 142 03:27 - 22:08 35°
12	225 - 141 03:32 - 22:03 35°	13	226 - 140 03:37 - 21:57 35°	14	227 - 139 03:42 - 21:52 35°	15	228 - 138 03:47 - 21:46 34°	16	229 - 137 03:52 - 21:41 34°	17	230 - 136 03:57 - 21:36 34°	18	231 - 135 04:02 - 21:31 33°
19	232 - 134 04:06 - 21:26 33°	20	233 - 133 04:11 - 21:21 33°	21	234 - 132 04:16 - 21:16 32°	22	235 - 131 04:20 - 21:11 32°	23	236 - 130 04:25 - 21:06 32°	24	237 - 129 04:29 - 21:01 31°	25	238 - 128 04:34 - 20:56 31°
26	239 - 127 04:38 - 20:51 31°	27	240 - 126 04:42 - 20:46 30°	28	241 - 125 04:46 - 20:42 30°	29	242 - 124 04:51 - 20:37 29°	30	243 - 123 04:55 - 20:32 29°	31	244 - 122 04:59 - 20:27 29°		

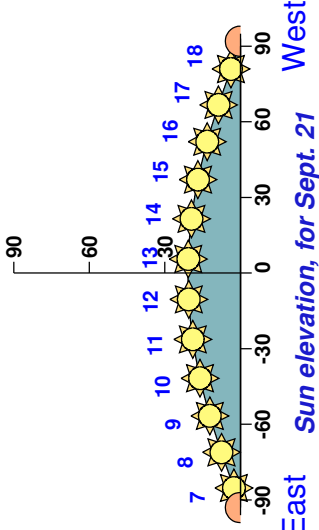
31

32

33

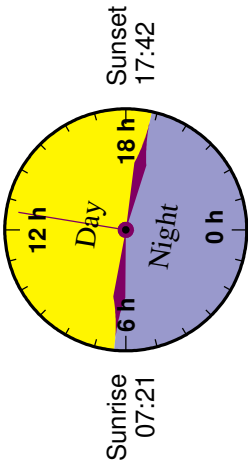
34

35



September 2024

Tromsø
18.95°E, 69.65°N



Sun elevation, for Sept. 21

Duration of the day, for September 21

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

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2 05:07 - 20:18 28°	3 05:11 - 20:13 28°	4 05:15 - 20:08 27°	5 05:19 - 20:04 27°	6 05:23 - 19:59 27°	7 05:27 - 19:54 26°	1 05:03 - 20:22 28°
9 05:35 - 19:45 25°	10 05:39 - 19:41 25°	11 05:43 - 19:36 25°	12 05:47 - 19:31 24°	13 05:51 - 19:27 24°	14 05:55 - 19:22 24°	8 05:31 - 19:50 26°
16 06:03 - 19:13 23°	17 06:07 - 19:08 22°	18 06:11 - 19:04 22°	19 06:14 - 18:59 22°	20 06:18 - 18:55 21°	21 06:22 - 18:50 21°	15 05:59 - 19:18 23°
23 06:30 - 18:41 20°	24 06:34 - 18:37 20°	25 06:38 - 18:32 19°	26 06:41 - 18:28 19°	27 06:45 - 18:23 18°	28 06:49 - 18:19 18°	22 06:26 - 18:46 20°
30 06:57 - 18:09 17°						29 06:53 - 18:14 18°

35

36

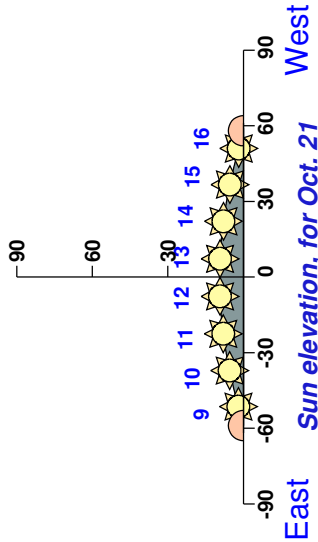
37

38

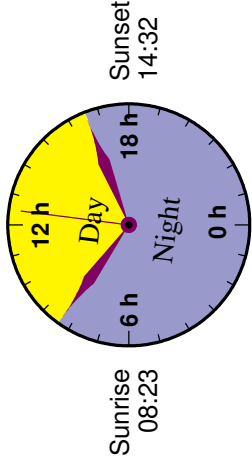
39

40

October 2024



Tromsø
18.95°E, 69.65°N



Sun elevation, for Oct. 21

Duration of the day, for October 21

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

Time change *October 27*

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

7 281 - 85 07:25 - 17:38 15°	1 275 - 91 07:01 - 18:05 17°	2 276 - 90 07:05 - 18:00 17°	3 277 - 89 07:09 - 17:56 16°	4 278 - 88 07:13 - 17:51 16°	5 279 - 87 07:17 - 17:47 15°	6 280 - 86 07:21 - 17:42 15°
14 288 - 78 07:53 - 17:06 12°	8 282 - 84 07:29 - 17:33 14°	9 283 - 83 07:33 - 17:29 14°	10 284 - 82 07:37 - 17:24 14°	11 285 - 81 07:41 - 17:20 13°	12 286 - 80 07:45 - 17:15 13°	13 287 - 79 07:49 - 17:10 12°
21 295 - 71 08:23 - 16:34 9°	15 289 - 77 07:57 - 17:01 12°	16 290 - 76 08:01 - 16:57 11°	17 291 - 75 08:06 - 16:52 11°	18 292 - 74 08:10 - 16:48 11°	19 293 - 73 08:14 - 16:43 10°	20 294 - 72 08:18 - 16:38 10°
28 302 - 64 07:54 - 15:01 7°	29 303 - 63 07:59 - 14:56 7°	30 304 - 62 08:03 - 14:51 6°	24 298 - 68 08:36 - 16:20 8°	25 299 - 67 08:40 - 16:15 8°	26 300 - 66 08:45 - 16:10 8°	27 301 - 65 07:49 - 15:06 7°

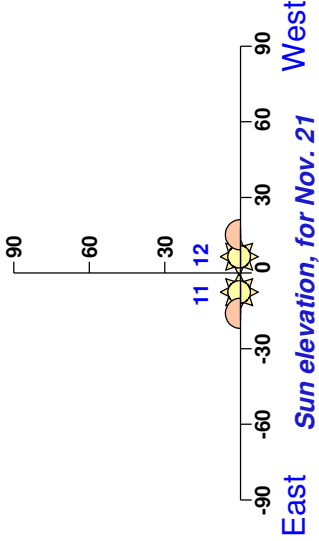
40

41

42

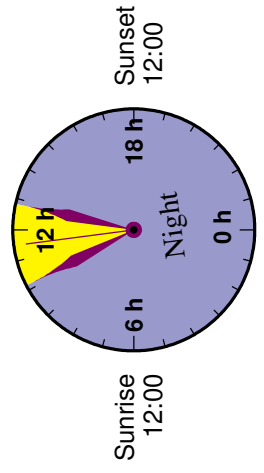
43

44



November 2024

Tromsø
18.95°E, 69.65°N

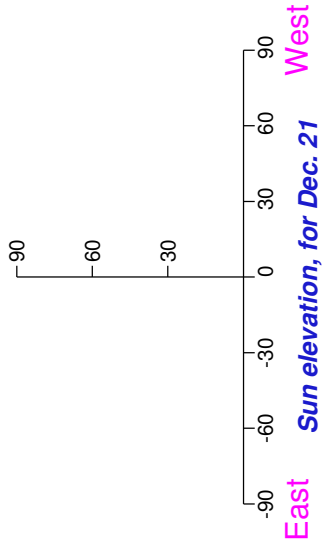


Sun elevation, for Nov. 21

Duration of the day, for November 21

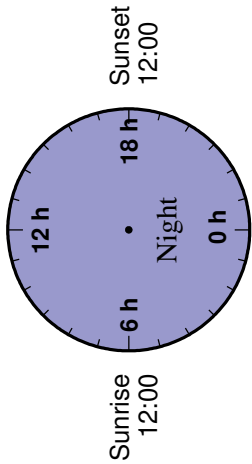
Sunrise and Sunset at Tromsø (TL ± 1 mn) and sun maximal elevation (°)

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
44 4 309 - 57 08:28 - 14:27 5°	45 5 310 - 56 08:33 - 14:22 5°	46 6 311 - 55 08:38 - 14:17 4°	47 7 312 - 54 08:43 - 14:12 4°	48 8 313 - 53 08:49 - 14:07 4°	3 307 - 59 08:18 - 14:37 6°	10 314 - 52 08:54 - 14:01 4°
45 11 316 - 50 09:05 - 13:51 3°	46 12 317 - 49 09:11 - 13:45 3°	47 13 318 - 48 09:17 - 13:40 2°	48 14 319 - 47 09:23 - 13:34 2°	15 320 - 46 09:29 - 13:28 2°	16 321 - 45 09:35 - 13:23 2°	17 322 - 44 09:41 - 13:16 2°
46 18 323 - 43 09:48 - 13:10 1°	47 19 324 - 42 09:55 - 13:04 1°	48 20 325 - 41 10:02 - 12:57 1°	21 326 - 40 10:10 - 12:50 1°	22 327 - 39 10:19 - 12:42 1°	23 328 - 38 10:28 - 12:33 0°	24 329 - 37 10:38 - 12:24 0°
47 25 330 - 36 10:50 - 12:13 0°	48 26 331 - 35 11:06 - 11:57 0°	27 332 - 34 Polar Night	28 333 - 33 Polar Night	29 334 - 32 Polar Night	30 335 - 31 Polar Night	



December 2024

Tromsø
18.95°E, 69.65°N

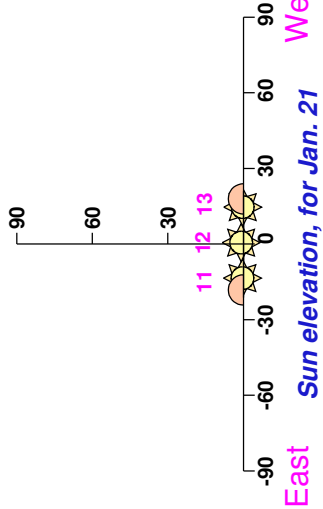


East **Sun elevation, for Dec. 21** **West**

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

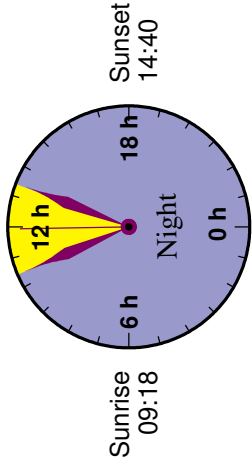
Duration of the day, for December 21

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2 337 - 29 Polar Night	3 338 - 28 Polar Night	4 339 - 27 Polar Night	5 340 - 26 Polar Night	6 341 - 25 Polar Night	7 342 - 24 Polar Night	1 336 - 30 Polar Night
9 344 - 22 Polar Night	10 345 - 21 Polar Night	11 346 - 20 Polar Night	12 347 - 19 Polar Night	13 348 - 18 Polar Night	14 349 - 17 Polar Night	8 343 - 23 Polar Night
16 351 - 15 Polar Night	17 352 - 14 Polar Night	18 353 - 13 Polar Night	19 354 - 12 Polar Night	20 355 - 11 Polar Night	21 356 - 10 Polar Night	15 350 - 16 Polar Night
23 358 - 8 Polar Night	24 359 - 7 Polar Night	25 360 - 6 Polar Night	26 361 - 5 Polar Night	27 362 - 4 Polar Night	28 363 - 3 Polar Night	22 357 - 9 Polar Night
30 365 - 1 Polar Night	31 366 - 0 Polar Night	25 360 - 6 Polar Night	26 361 - 5 Polar Night	27 362 - 4 Polar Night	28 363 - 3 Polar Night	29 364 - 2 Polar Night



January 2025

Tromsø
18.95°E, 69.65°N



East West
Sun elevation, for Jan. 21

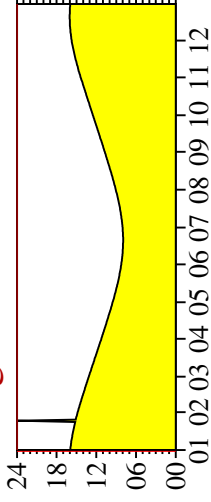
Duration of the day, for January 21

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

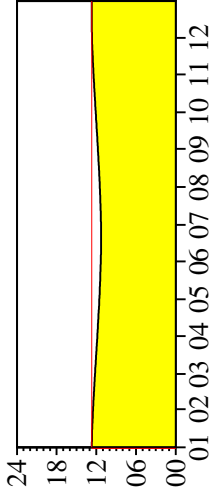
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	6 6 - 359 Polar Night		1 1 - 365 Polar Night	2 2 - 363 Polar Night	3 3 - 362 Polar Night	4 4 - 361 Polar Night	5 5 - 360 Polar Night
2	13 13 - 352 Polar Night	7 7 - 358 Polar Night	8 8 - 357 Polar Night	9 9 - 356 Polar Night	10 10 - 355 Polar Night	11 11 - 354 Polar Night	12 12 - 353 Polar Night
3		14 14 - 351 Polar Night	15 15 - 350 11:25 - 12:24 0°	16 16 - 349 11:10 - 12:39 0°	17 17 - 348 11:00 - 12:50 0°	18 18 - 347 10:50 - 13:00 1°	19 19 - 346 10:42 - 13:09 1°
4	20 20 - 345 10:34 - 13:17 1°	21 21 - 344 10:27 - 13:25 1°	22 22 - 343 10:20 - 13:32 1°	23 23 - 342 10:14 - 13:39 1°	24 24 - 341 10:08 - 13:46 2°	25 25 - 340 10:02 - 13:53 2°	26 26 - 339 09:56 - 13:59 2°
5	27 27 - 338 09:50 - 14:05 2°	28 28 - 337 09:44 - 14:11 3°	29 29 - 336 09:39 - 14:17 3°	30 30 - 335 09:34 - 14:23 3°	31 31 - 334 09:28 - 14:29 3°		

Day duration for any cities for 2024

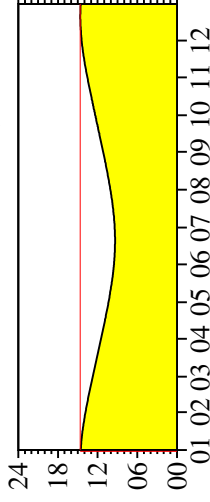
Kerguelen 69.33°E, -49.33°N



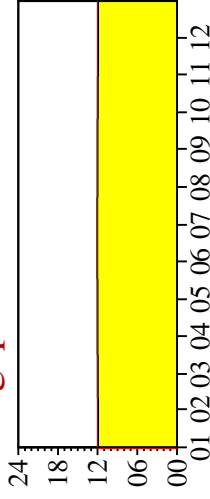
Lima -77.03°E, -12.05°N



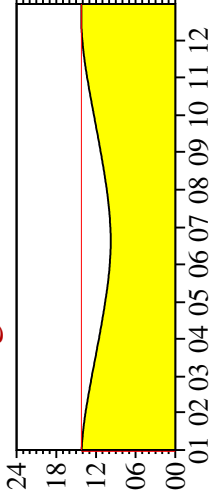
Melbourne 144.97°E, -37.81°N



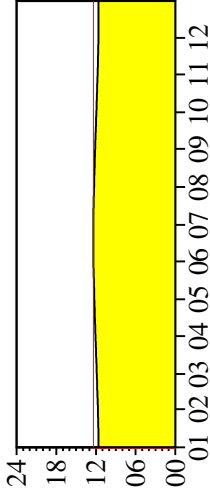
Singapour 103.85°E, 1.03°N



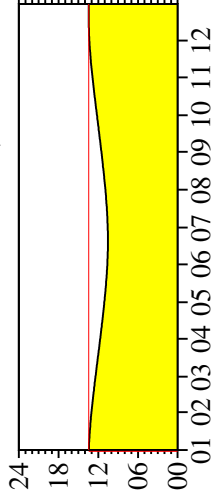
Santiago -70.65°E, -33.43°N



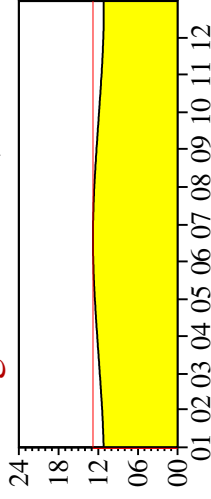
Colombo 79.83°E, 6.92°N



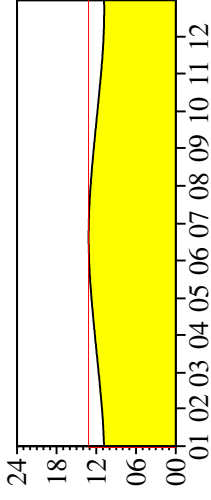
Sao Paulo -46.63°E, -23.55°N



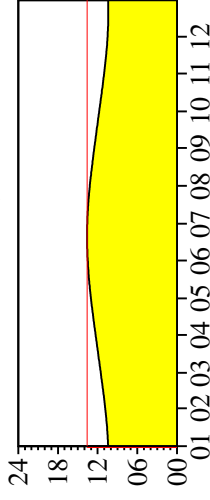
Bangkok 100.49°E, 13.75°N



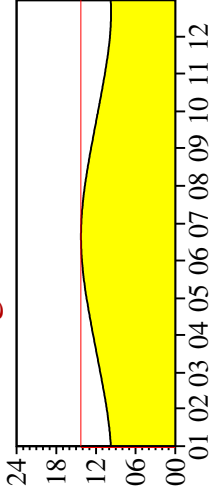
Mexico -99.13°E, 19.43°N



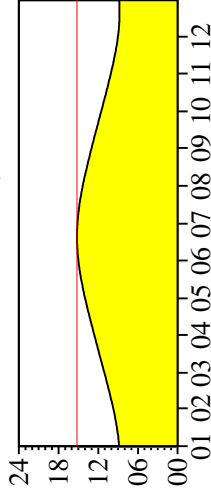
Miami -80.22°E, 25.78°N



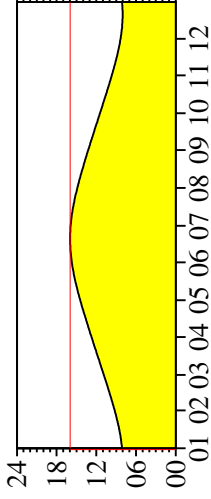
Los Angeles -118.24°E, 34.05°N



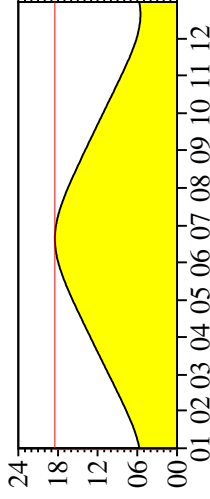
Marseille 5.38°E, 43.3°N



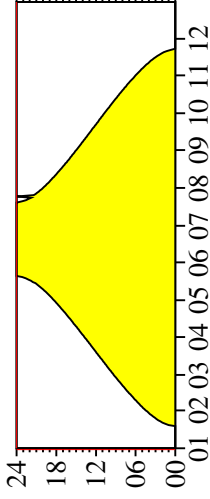
Paris 2.35°E, 48.86°N



Oslo 10.75°E, 59.92°N



Tromso 18.97°E, 69.66°N



Ny Alesund 11.92°E, 78.92°N

