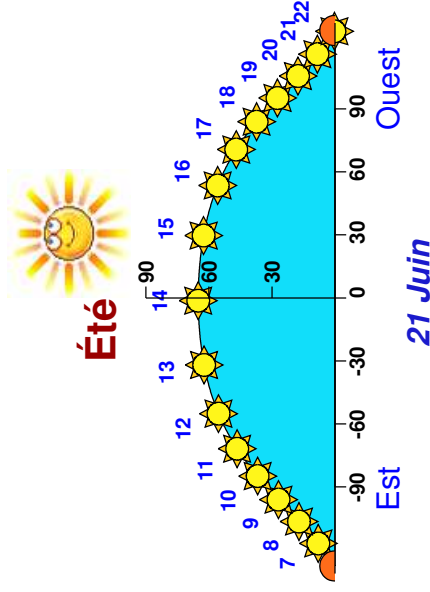


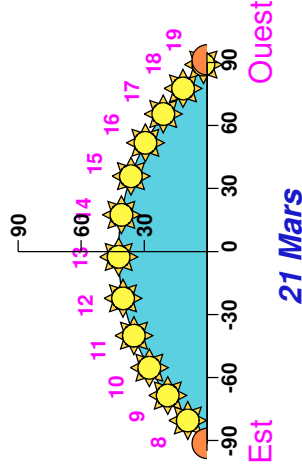
# Calendrier solaire 2024

Produit par *ScientiDev*  
www.scientidev.fr

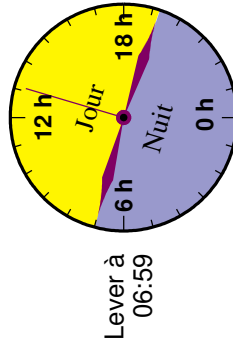
**Mamers**  
0.37°E, 48.35°N



**Printemps**



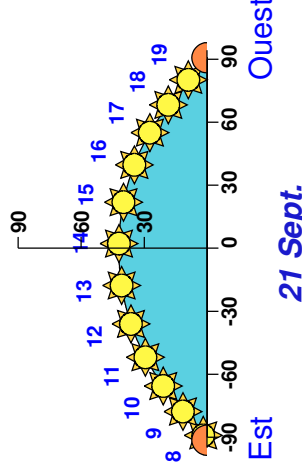
Durée jour: 12:15



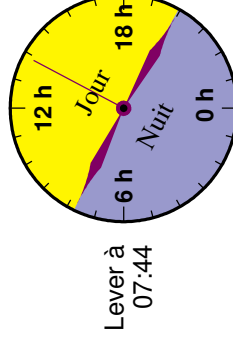
**Équinoxe de printemps**



**Automne**



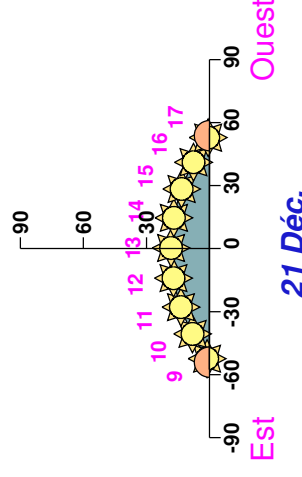
Durée jour: 12:14



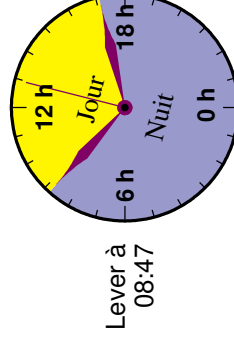
**Équinoxe d'automne**



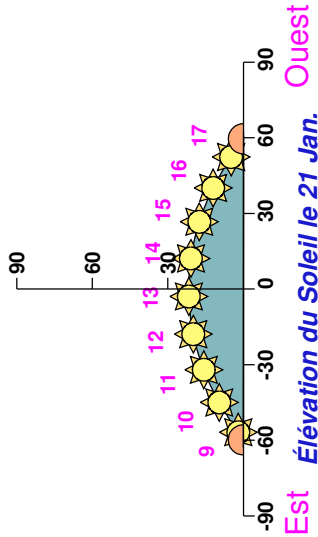
**Hiver**



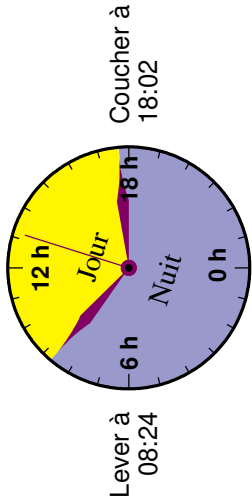
Durée jour: 8:19



# Janvier 2024



Mamers  
0.37°E, 48.35°N

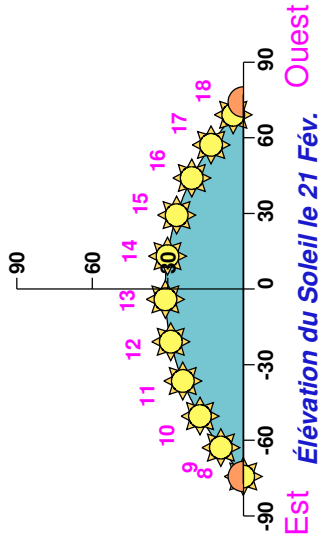


Durée du jour le 21 Janvier

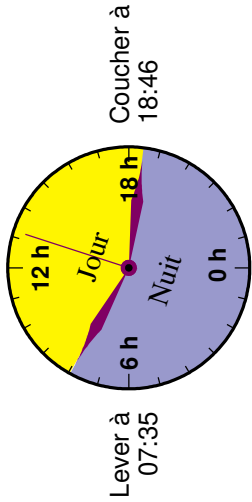
Levers et couchers du Soleil à Mamers (TL ± 1 mn) et élévation maximale du Soleil (°)

|   | Lundi                         | Mardi                         | Mercredi                      | Jeudi                         | Vendredi                      | Samedi                        | Dimanche                      |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1 | 1 - 365<br>08:50 - 17:14 19°  | 2 - 364<br>08:50 - 17:15 19°  | 3 - 363<br>08:50 - 17:16 19°  | 4 - 362<br>08:50 - 17:17 19°  | 5 - 361<br>08:50 - 17:18 19°  | 6 - 360<br>08:49 - 17:19 19°  | 7 - 359<br>08:49 - 17:21 19°  |
| 2 | 8 - 358<br>08:49 - 17:22 19°  | 9 - 357<br>08:48 - 17:23 20°  | 10 - 356<br>08:48 - 17:24 20° | 11 - 355<br>08:48 - 17:26 20° | 12 - 354<br>08:47 - 17:27 20° | 13 - 353<br>08:47 - 17:28 20° | 14 - 352<br>08:46 - 17:30 20° |
| 3 | 15 - 351<br>08:45 - 17:31 21° | 16 - 350<br>08:45 - 17:32 21° | 17 - 349<br>08:44 - 17:34 21° | 18 - 348<br>08:43 - 17:35 21° | 19 - 347<br>08:42 - 17:37 21° | 20 - 346<br>08:41 - 17:38 22° | 21 - 345<br>08:41 - 17:40 22° |
| 4 | 22 - 344<br>08:40 - 17:41 22° | 23 - 343<br>08:39 - 17:43 22° | 24 - 342<br>08:38 - 17:44 22° | 25 - 341<br>08:37 - 17:46 23° | 26 - 340<br>08:35 - 17:47 23° | 27 - 339<br>08:34 - 17:49 23° | 28 - 338<br>08:33 - 17:50 23° |
| 5 | 29 - 337<br>08:32 - 17:52 24° | 30 - 336<br>08:31 - 17:54 24° | 31 - 335<br>08:29 - 17:55 24° |                               |                               |                               |                               |

# Février 2024



Marners  
0.37°E, 48.35°N



Est Élévation du Soleil le 21 Fév. Ouest

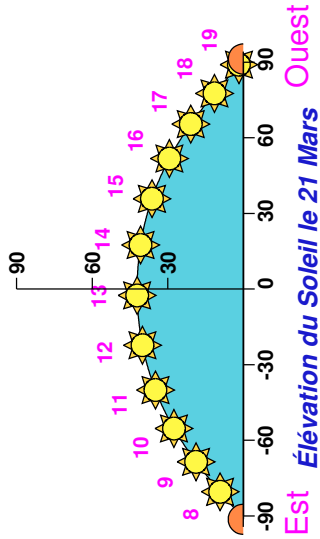
Durée du jour le 21 Février

Levers et couchers du Soleil à Marners (TL  $\pm$  1 mn) et élévation maximale du Soleil (°)

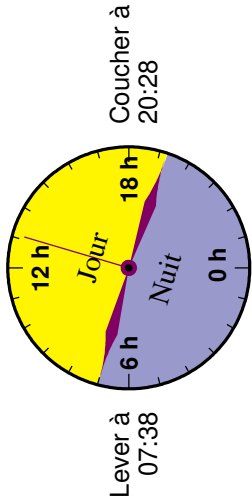
Lundi Mardi Mercredi Jeudi Vendredi Samedi Dimanche

|                                     |                                     |                                     |                                     |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 5<br>36 - 330<br>08:23 - 18:03 26°  | 6<br>37 - 329<br>08:21 - 18:05 26°  | 7<br>38 - 328<br>08:20 - 18:07 26°  | 1<br>32 - 334<br>08:28 - 17:57 25°  | 2<br>33 - 333<br>08:27 - 17:58 25°  | 3<br>34 - 332<br>08:25 - 18:00 25°  | 4<br>35 - 331<br>08:24 - 18:02 25°  |
| 12<br>43 - 323<br>08:12 - 18:15 28° | 13<br>44 - 322<br>08:10 - 18:16 28° | 14<br>45 - 321<br>08:09 - 18:18 29° | 8<br>39 - 327<br>08:18 - 18:08 27°  | 9<br>40 - 326<br>08:17 - 18:10 27°  | 10<br>41 - 325<br>08:15 - 18:11 27° | 11<br>42 - 324<br>08:13 - 18:13 28° |
| 19<br>50 - 316<br>08:00 - 18:26 30° | 20<br>51 - 315<br>07:58 - 18:28 31° | 21<br>52 - 314<br>07:56 - 18:29 31° | 15<br>46 - 320<br>08:07 - 18:19 29° | 16<br>47 - 319<br>08:05 - 18:21 29° | 17<br>48 - 318<br>08:03 - 18:23 30° | 18<br>49 - 317<br>08:02 - 18:24 30° |
| 26<br>57 - 309<br>07:47 - 18:37 33° | 27<br>58 - 308<br>07:45 - 18:39 33° | 28<br>59 - 307<br>07:43 - 18:40 34° | 22<br>53 - 313<br>07:54 - 18:31 31° | 23<br>54 - 312<br>07:53 - 18:32 32° | 24<br>55 - 311<br>07:51 - 18:34 32° | 25<br>56 - 310<br>07:49 - 18:35 33° |

# Mars 2024



Marners  
0.37°E, 48.35°N



Est Élévation du Soleil le 21 Mars Ouest

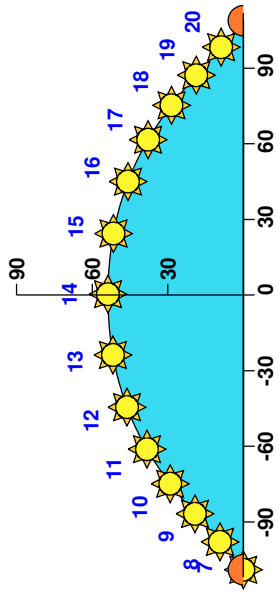
Levers et couchers du Soleil à Marners (TL ± 1 mn) et élévation maximale du Soleil (°)

Durée du jour le 21 Mars

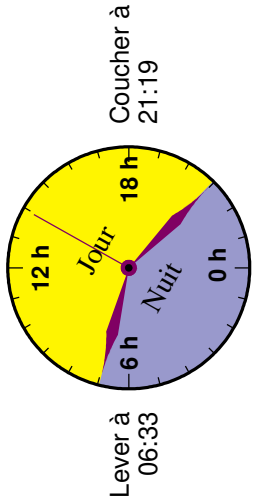
Heure d'été le 31 Mars

|    | Lundi                               | Mardi                               | Mercredi                            | Jeudi                               | Vendredi                            | Samedi                              | Dimanche                            |
|----|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 9  | 4<br>64 - 302<br>07:33 - 18:48 36°  | 5<br>65 - 301<br>07:31 - 18:49 36°  | 6<br>66 - 300<br>07:29 - 18:51 36°  | 7<br>67 - 299<br>07:27 - 18:53 37°  | 1<br>61 - 305<br>07:39 - 18:43 34°  | 2<br>62 - 304<br>07:37 - 18:45 35°  | 3<br>63 - 303<br>07:35 - 18:46 35°  |
| 10 | 11<br>71 - 295<br>07:19 - 18:59 38° | 12<br>72 - 294<br>07:17 - 19:00 39° | 13<br>73 - 293<br>07:15 - 19:02 39° | 14<br>74 - 292<br>07:13 - 19:03 39° | 8<br>68 - 298<br>07:25 - 18:54 37°  | 9<br>69 - 297<br>07:23 - 18:56 37°  | 10<br>70 - 296<br>07:21 - 18:57 38° |
| 11 | 18<br>78 - 288<br>07:05 - 19:09 41° | 19<br>79 - 287<br>07:03 - 19:11 41° | 20<br>80 - 286<br>07:01 - 19:12 42° | 21<br>81 - 285<br>06:59 - 19:14 42° | 15<br>75 - 291<br>07:11 - 19:05 40° | 16<br>76 - 290<br>07:09 - 19:06 40° | 17<br>77 - 289<br>07:07 - 19:08 41° |
| 12 |                                     |                                     |                                     |                                     |                                     |                                     |                                     |
| 13 | 25<br>85 - 281<br>06:50 - 19:19 44° | 26<br>86 - 280<br>06:48 - 19:21 44° | 27<br>87 - 279<br>06:46 - 19:22 45° | 28<br>88 - 278<br>06:44 - 19:24 45° | 29<br>89 - 277<br>06:42 - 19:25 45° | 30<br>90 - 276<br>06:40 - 19:27 46° | 31<br>91 - 275<br>07:38 - 20:28 46° |

# Avril 2024



Marmers  
0.37°E, 48.35°N

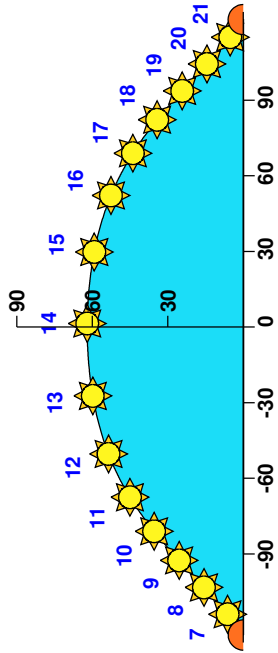


Est Élévation du Soleil le 21 Avril Ouest

Durée du jour le 21 Avril

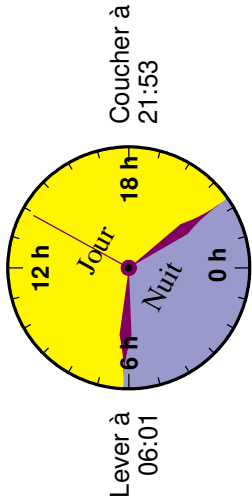
Levers et couchers du Soleil à Marmers (TL ± 1 mn) et élévation maximale du Soleil (°)

|    | Lundi                                | Mardi                                | Mercredi                             | Jeudi                                | Vendredi                             | Samedi                               | Dimanche                             |
|----|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| 14 | 1<br>92 - 274<br>07:36 - 20:30 47°   | 2<br>93 - 273<br>07:34 - 20:31 47°   | 3<br>94 - 272<br>07:32 - 20:33 47°   | 4<br>95 - 271<br>07:30 - 20:34 48°   | 5<br>96 - 270<br>07:28 - 20:36 48°   | 6<br>97 - 269<br>07:26 - 20:37 48°   | 7<br>98 - 268<br>07:24 - 20:38 49°   |
| 15 | 8<br>99 - 267<br>07:22 - 20:40 49°   | 9<br>100 - 266<br>07:20 - 20:41 50°  | 10<br>101 - 265<br>07:18 - 20:43 50° | 11<br>102 - 264<br>07:16 - 20:44 50° | 12<br>103 - 263<br>07:14 - 20:46 51° | 13<br>104 - 262<br>07:12 - 20:47 51° | 14<br>105 - 261<br>07:10 - 20:49 51° |
| 16 | 15<br>106 - 260<br>07:08 - 20:50 52° | 16<br>107 - 259<br>07:06 - 20:52 52° | 17<br>108 - 258<br>07:04 - 20:53 52° | 18<br>109 - 257<br>07:02 - 20:55 53° | 19<br>110 - 256<br>07:00 - 20:56 53° | 20<br>111 - 255<br>06:58 - 20:57 53° | 21<br>112 - 254<br>06:57 - 20:59 54° |
| 17 | 22<br>113 - 253<br>06:55 - 21:00 54° | 23<br>114 - 252<br>06:53 - 21:02 54° | 24<br>115 - 251<br>06:51 - 21:03 55° | 25<br>116 - 250<br>06:49 - 21:05 55° | 26<br>117 - 249<br>06:48 - 21:06 55° | 27<br>118 - 248<br>06:46 - 21:08 56° | 28<br>119 - 247<br>06:44 - 21:09 56° |
| 18 | 29<br>120 - 246<br>06:42 - 21:11 56° | 30<br>121 - 245<br>06:41 - 21:12 57° |                                      |                                      |                                      |                                      |                                      |



# Mai 2024

Marners  
0.37°E, 48.35°N



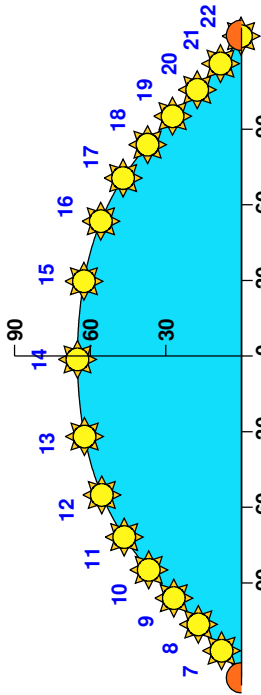
Est Élévation du Soleil le 21 Mai Ouest

Durée du jour le 21 Mai

Levers et couchers du Soleil à Marners (TL ± 1 mn) et élévation maximale du Soleil (°)

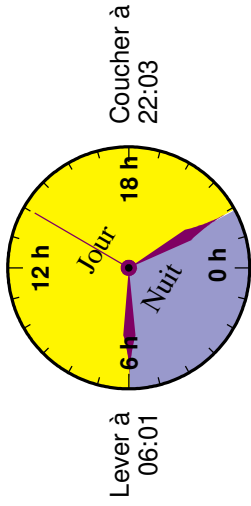
| Lundi |                                | Mardi |                                | Mercredi |                                | Jeudi |                                | Vendredi |                                | Samedi |                                | Dimanche |                                |
|-------|--------------------------------|-------|--------------------------------|----------|--------------------------------|-------|--------------------------------|----------|--------------------------------|--------|--------------------------------|----------|--------------------------------|
| 6     | 127 - 239<br>06:31 - 21:20 58° | 7     | 128 - 238<br>06:30 - 21:22 59° | 1        | 122 - 244<br>06:39 - 21:13 57° | 2     | 123 - 243<br>06:37 - 21:15 57° | 3        | 124 - 242<br>06:36 - 21:16 58° | 4      | 125 - 241<br>06:34 - 21:18 58° | 5        | 126 - 240<br>06:33 - 21:19 58° |
| 13    | 134 - 232<br>06:21 - 21:30 60° | 14    | 135 - 231<br>06:20 - 21:31 60° | 8        | 129 - 237<br>06:28 - 21:23 59° | 9     | 130 - 236<br>06:27 - 21:25 59° | 10       | 131 - 235<br>06:25 - 21:26 59° | 11     | 132 - 234<br>06:24 - 21:27 60° | 12       | 133 - 233<br>06:22 - 21:29 60° |
| 20    | 141 - 225<br>06:12 - 21:39 62° | 21    | 142 - 224<br>06:11 - 21:40 62° | 15       | 136 - 230<br>06:18 - 21:33 61° | 16    | 137 - 229<br>06:17 - 21:34 61° | 17       | 138 - 228<br>06:16 - 21:35 61° | 18     | 139 - 227<br>06:15 - 21:36 61° | 19       | 140 - 226<br>06:13 - 21:38 62° |
| 27    | 148 - 218<br>06:05 - 21:47 63° | 28    | 149 - 217<br>06:05 - 21:48 63° | 22       | 143 - 223<br>06:10 - 21:41 62° | 23    | 144 - 222<br>06:09 - 21:43 62° | 24       | 145 - 221<br>06:08 - 21:44 63° | 25     | 146 - 220<br>06:07 - 21:45 63° | 26       | 147 - 219<br>06:06 - 21:46 63° |

# Juin 2024



Marmers

0.37°E, 48.35°N



Durée du jour le 21 Juin

Est Élévation du Soleil le 21 Juin Ouest

Lundi

Mardi

Mercredi

Jeudi

Vendredi

Samedi

Dimanche

22

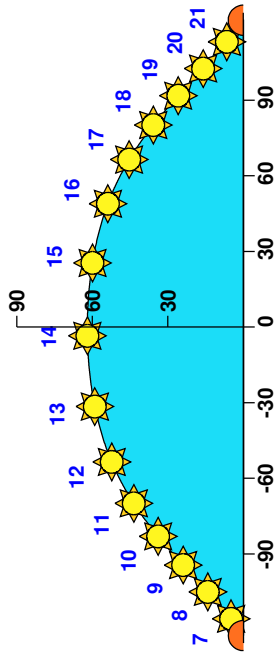
23

24

25

26

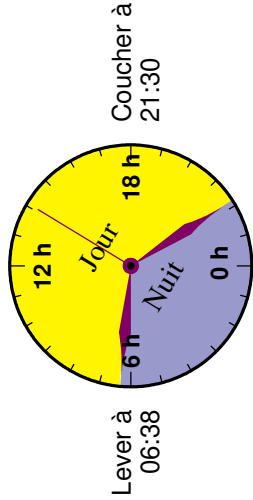
|                                             |                                             |                                             |                                             |                                             |                                             |                                             |
|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| <b>3</b><br>155 - 211<br>06:01 - 21:54 64°  | <b>4</b><br>156 - 210<br>06:00 - 21:55 64°  | <b>5</b><br>157 - 209<br>05:59 - 21:56 64°  | <b>6</b><br>158 - 208<br>05:59 - 21:56 64°  | <b>7</b><br>159 - 207<br>05:59 - 21:57 64°  | <b>1</b><br>153 - 213<br>06:02 - 21:52 64°  | <b>2</b><br>154 - 212<br>06:01 - 21:53 64°  |
| <b>10</b><br>162 - 204<br>05:58 - 21:59 65° | <b>11</b><br>163 - 203<br>05:57 - 22:00 65° | <b>12</b><br>164 - 202<br>05:57 - 22:00 65° | <b>13</b><br>165 - 201<br>05:57 - 22:01 65° | <b>14</b><br>166 - 200<br>05:57 - 22:01 65° | <b>8</b><br>160 - 206<br>05:58 - 21:58 65°  | <b>9</b><br>161 - 205<br>05:58 - 21:59 65°  |
| <b>17</b><br>169 - 197<br>05:57 - 22:03 65° | <b>18</b><br>170 - 196<br>05:57 - 22:03 65° | <b>19</b><br>171 - 195<br>05:57 - 22:03 65° | <b>20</b><br>172 - 194<br>05:57 - 22:03 65° | <b>21</b><br>173 - 193<br>05:58 - 22:04 65° | <b>15</b><br>167 - 199<br>05:57 - 22:02 65° | <b>16</b><br>168 - 198<br>05:57 - 22:02 65° |
| <b>24</b><br>176 - 190<br>05:58 - 22:04 65° | <b>25</b><br>177 - 189<br>05:59 - 22:04 65° | <b>26</b><br>178 - 188<br>05:59 - 22:04 65° | <b>27</b><br>179 - 187<br>06:00 - 22:04 65° | <b>28</b><br>180 - 186<br>06:00 - 22:04 65° | <b>22</b><br>174 - 192<br>05:58 - 22:04 65° | <b>23</b><br>175 - 191<br>05:58 - 22:04 65° |
| <b>26</b><br>182 - 184<br>06:01 - 22:03 65° |                                             |                                             |                                             |                                             | <b>29</b><br>181 - 185<br>06:01 - 22:04 65° | <b>30</b><br>182 - 184<br>06:01 - 22:03 65° |



Est Élévation du Soleil le 21 Juil Ouest

# Juillet 2024

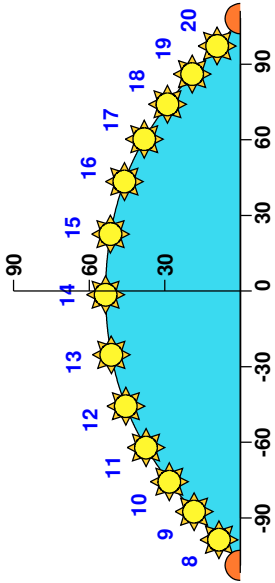
Mamers  
0.37°E, 48.35°N



Durée du jour le 21 Juillet

Levers et couchers du Soleil à Mamers (TL ± 1 mn) et élévation maximale du Soleil (°)

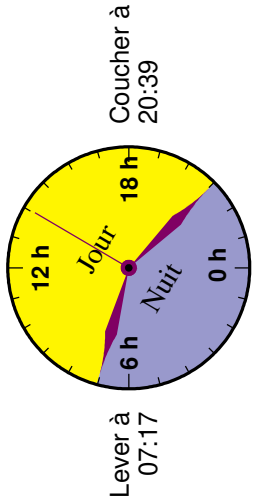
| Lundi |                                | Mardi |                                | Mercredi |                                | Jeudi |                                | Vendredi |                                | Samedi |                                | Dimanche |                                |
|-------|--------------------------------|-------|--------------------------------|----------|--------------------------------|-------|--------------------------------|----------|--------------------------------|--------|--------------------------------|----------|--------------------------------|
| 1     | 183 - 183<br>06:02 - 22:03 65° | 2     | 184 - 182<br>06:03 - 22:03 65° | 3        | 185 - 181<br>06:03 - 22:03 65° | 4     | 186 - 180<br>06:04 - 22:02 64° | 5        | 187 - 179<br>06:05 - 22:02 64° | 6      | 188 - 178<br>06:05 - 22:01 64° | 7        | 189 - 177<br>06:06 - 22:01 64° |
| 8     | 190 - 176<br>06:07 - 22:00 64° | 9     | 191 - 175<br>06:08 - 22:00 64° | 10       | 192 - 174<br>06:09 - 21:59 64° | 11    | 193 - 173<br>06:10 - 21:58 64° | 12       | 194 - 172<br>06:11 - 21:57 64° | 13     | 195 - 171<br>06:12 - 21:57 63° | 14       | 196 - 170<br>06:13 - 21:56 63° |
| 15    | 197 - 169<br>06:14 - 21:55 63° | 16    | 198 - 168<br>06:15 - 21:54 63° | 17       | 199 - 167<br>06:16 - 21:53 63° | 18    | 200 - 166<br>06:17 - 21:52 63° | 19       | 201 - 165<br>06:18 - 21:51 62° | 20     | 202 - 164<br>06:19 - 21:50 62° | 21       | 203 - 163<br>06:20 - 21:49 62° |
| 22    | 204 - 162<br>06:22 - 21:48 62° | 23    | 205 - 161<br>06:23 - 21:47 62° | 24       | 206 - 160<br>06:24 - 21:46 61° | 25    | 207 - 159<br>06:25 - 21:44 61° | 26       | 208 - 158<br>06:27 - 21:43 61° | 27     | 209 - 157<br>06:28 - 21:42 61° | 28       | 210 - 156<br>06:29 - 21:41 60° |
| 29    | 211 - 155<br>06:30 - 21:39 60° | 30    | 212 - 154<br>06:32 - 21:38 60° | 31       | 213 - 153<br>06:33 - 21:36 60° |       |                                |          |                                |        |                                |          |                                |



Est Élévation du Soleil le 21 Août Ouest

# Août 2024

Mamers  
0.37°E, 48.35°N

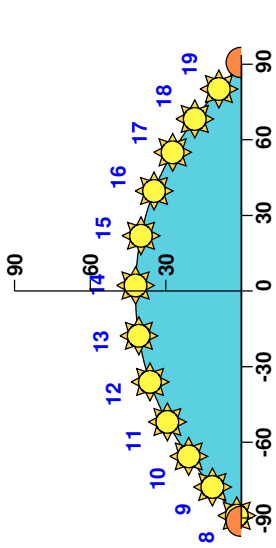


Durée du jour le 21 Août

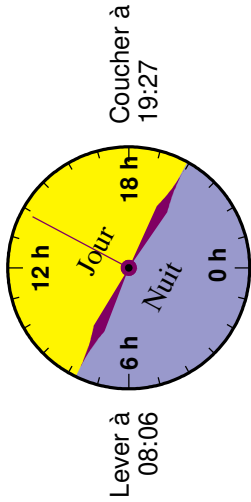
Levers et couchers du Soleil à Mamers (TL ± 1 mn) et élévation maximale du Soleil (°)

| Lundi                                |  | Mardi                                |  | Mercredi                             |  | Jeudi                                |  | Vendredi                             |  | Samedi                               |  | Dimanche                             |  |
|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|
| 5<br>218 - 148<br>06:40 - 21:29 58°  |  | 6<br>219 - 147<br>06:41 - 21:27 58°  |  | 7<br>220 - 146<br>06:42 - 21:26 58°  |  | 8<br>221 - 145<br>06:44 - 21:24 58°  |  | 9<br>222 - 144<br>06:45 - 21:22 57°  |  | 10<br>223 - 143<br>06:46 - 21:21 57° |  | 11<br>224 - 142<br>06:48 - 21:19 57° |  |
| 12<br>225 - 141<br>06:49 - 21:17 56° |  | 13<br>226 - 140<br>06:50 - 21:16 56° |  | 14<br>227 - 139<br>06:52 - 21:14 56° |  | 15<br>228 - 138<br>06:53 - 21:12 55° |  | 16<br>229 - 137<br>06:55 - 21:10 55° |  | 17<br>230 - 136<br>06:56 - 21:08 55° |  | 18<br>231 - 135<br>06:57 - 21:07 54° |  |
| 19<br>232 - 134<br>06:59 - 21:05 54° |  | 20<br>233 - 133<br>07:00 - 21:03 54° |  | 21<br>234 - 132<br>07:01 - 21:01 54° |  | 22<br>235 - 131<br>07:03 - 20:59 53° |  | 23<br>236 - 130<br>07:04 - 20:57 53° |  | 24<br>237 - 129<br>07:06 - 20:55 52° |  | 25<br>238 - 128<br>07:07 - 20:53 52° |  |
| 26<br>239 - 127<br>07:08 - 20:51 52° |  | 27<br>240 - 126<br>07:10 - 20:49 51° |  | 28<br>241 - 125<br>07:11 - 20:47 51° |  | 29<br>242 - 124<br>07:13 - 20:45 51° |  | 30<br>243 - 123<br>07:14 - 20:43 50° |  | 31<br>244 - 122<br>07:15 - 20:41 50° |  |                                      |  |

# Septembre 2024



Marmers  
0.37°E, 48.35°N



Est Élévation du Soleil le 21 Sept. Ouest

Levers et couchers du Soleil à Marmers (TL ± 1 mn) et élévation maximale du Soleil (°)

Durée du jour le 21 Septembre

Lundi

Mardi

Mercredi

Jeudi

Vendredi

Samedi

Dimanche

35

36

37

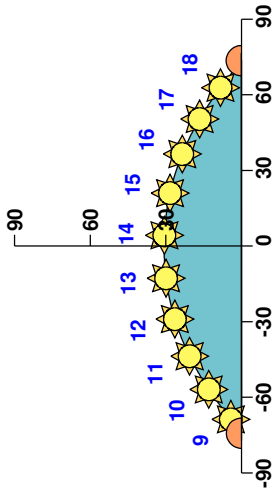
38

39

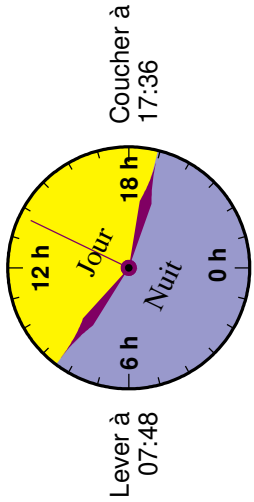
40

|                                             |                                             |                                             |                                             |                                             |                                             |                                             |                                            |
|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|--------------------------------------------|
| <b>2</b><br>246 - 120<br>07:18 - 20:37 49°  | <b>3</b><br>247 - 119<br>07:19 - 20:35 49°  | <b>4</b><br>248 - 118<br>07:21 - 20:33 49°  | <b>5</b><br>249 - 117<br>07:22 - 20:31 48°  | <b>6</b><br>250 - 116<br>07:24 - 20:29 48°  | <b>7</b><br>251 - 115<br>07:25 - 20:27 47°  | <b>8</b><br>252 - 114<br>07:26 - 20:25 47°  | <b>1</b><br>245 - 121<br>07:17 - 20:39 50° |
| <b>9</b><br>253 - 113<br>07:28 - 20:23 47°  | <b>10</b><br>254 - 112<br>07:29 - 20:21 46° | <b>11</b><br>255 - 111<br>07:31 - 20:19 46° | <b>12</b><br>256 - 110<br>07:32 - 20:17 46° | <b>13</b><br>257 - 109<br>07:33 - 20:15 45° | <b>14</b><br>258 - 108<br>07:35 - 20:13 45° | <b>15</b><br>259 - 107<br>07:36 - 20:10 44° |                                            |
| <b>16</b><br>260 - 106<br>07:37 - 20:08 44° | <b>17</b><br>261 - 105<br>07:39 - 20:06 44° | <b>18</b><br>262 - 104<br>07:40 - 20:04 43° | <b>19</b><br>263 - 103<br>07:42 - 20:02 43° | <b>20</b><br>264 - 102<br>07:43 - 20:00 42° | <b>21</b><br>265 - 101<br>07:44 - 19:58 42° | <b>22</b><br>266 - 100<br>07:46 - 19:56 42° |                                            |
| <b>23</b><br>267 - 99<br>07:47 - 19:54 41°  | <b>24</b><br>268 - 98<br>07:49 - 19:52 41°  | <b>25</b><br>269 - 97<br>07:50 - 19:49 41°  | <b>26</b><br>270 - 96<br>07:51 - 19:47 40°  | <b>27</b><br>271 - 95<br>07:53 - 19:45 40°  | <b>28</b><br>272 - 94<br>07:54 - 19:43 39°  | <b>29</b><br>273 - 93<br>07:56 - 19:41 39°  |                                            |
| <b>30</b><br>274 - 92<br>07:57 - 19:39 39°  |                                             |                                             |                                             |                                             |                                             |                                             |                                            |

# Octobre 2024



Marners  
0.37°E, 48.35°N



Est Élévation du Soleil le 21 Oct. Ouest

Durée du jour le 21 Octobre

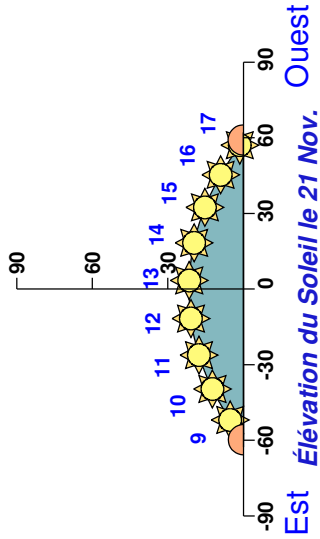
Levers et couchers du Soleil à Marners (TL  $\pm$  1 mn) et élévation maximale du Soleil (°)

Heure d'hiver le 27 Octobre

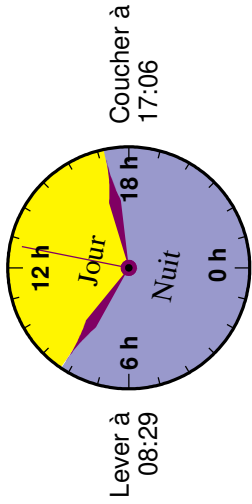
Lundi Mardi Mercredi Jeudi Vendredi Samedi Dimanche

|                                     |                                     |                                     |                                     |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 7<br>281 - 85<br>08:07 - 19:25 36°  | 1<br>275 - 91<br>07:59 - 19:37 38°  | 2<br>276 - 90<br>08:00 - 19:35 38°  | 3<br>277 - 89<br>08:01 - 19:33 37°  | 4<br>278 - 88<br>08:03 - 19:31 37°  | 5<br>279 - 87<br>08:04 - 19:29 37°  | 6<br>280 - 86<br>08:06 - 19:27 36°  |
| 14<br>288 - 78<br>08:17 - 19:11 33° | 8<br>282 - 84<br>08:09 - 19:23 35°  | 9<br>283 - 83<br>08:10 - 19:21 35°  | 10<br>284 - 82<br>08:12 - 19:19 35° | 11<br>285 - 81<br>08:13 - 19:17 34° | 12<br>286 - 80<br>08:14 - 19:15 34° | 13<br>287 - 79<br>08:16 - 19:13 34° |
| 21<br>295 - 71<br>08:28 - 18:58 31° | 15<br>289 - 77<br>08:19 - 19:09 33° | 16<br>290 - 76<br>08:20 - 19:07 33° | 17<br>291 - 75<br>08:22 - 19:05 32° | 18<br>292 - 74<br>08:23 - 19:03 32° | 19<br>293 - 73<br>08:25 - 19:01 31° | 20<br>294 - 72<br>08:26 - 19:00 31° |
| 28<br>302 - 64<br>07:39 - 17:45 28° | 29<br>303 - 63<br>07:40 - 17:44 28° | 30<br>304 - 62<br>07:42 - 17:42 28° | 24<br>298 - 68<br>08:33 - 18:52 30° | 25<br>299 - 67<br>08:34 - 18:51 29° | 26<br>300 - 66<br>08:36 - 18:49 29° | 27<br>301 - 65<br>07:37 - 17:47 29° |

# Novembre 2024



Mangers  
0.37°E, 48.35°N



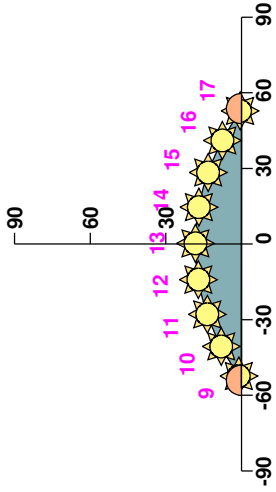
Est Élévation du Soleil le 21 Nov.

Durée du jour le 21 Novembre

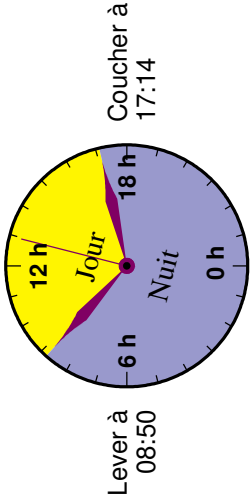
Levers et couchers du Soleil à Mangers (TL  $\pm$  1 mn) et élévation maximale du Soleil (°)

| Lundi                               | Mardi                               | Mercredi                            | Jeudi                               | Vendredi                            | Samedi                              | Dimanche                            |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 4<br>309 - 57<br>07:50 - 17:34 26°  | 5<br>310 - 56<br>07:51 - 17:33 26°  | 6<br>311 - 55<br>07:53 - 17:31 25°  | 7<br>312 - 54<br>07:54 - 17:30 25°  | 8<br>313 - 53<br>07:56 - 17:28 25°  | 9<br>314 - 52<br>07:57 - 17:27 25°  | 10<br>315 - 51<br>07:59 - 17:26 24° |
| 11<br>316 - 50<br>08:01 - 17:24 24° | 12<br>317 - 49<br>08:02 - 17:23 24° | 13<br>318 - 48<br>08:04 - 17:22 24° | 14<br>319 - 47<br>08:05 - 17:21 23° | 15<br>320 - 46<br>08:07 - 17:20 23° | 16<br>321 - 45<br>08:08 - 17:18 23° | 17<br>322 - 44<br>08:10 - 17:17 23° |
| 18<br>323 - 43<br>08:11 - 17:16 22° | 19<br>324 - 42<br>08:13 - 17:15 22° | 20<br>325 - 41<br>08:14 - 17:14 22° | 21<br>326 - 40<br>08:16 - 17:13 22° | 22<br>327 - 39<br>08:17 - 17:12 21° | 23<br>328 - 38<br>08:18 - 17:12 21° | 24<br>329 - 37<br>08:20 - 17:11 21° |
| 25<br>330 - 36<br>08:21 - 17:10 21° | 26<br>331 - 35<br>08:23 - 17:09 21° | 27<br>332 - 34<br>08:24 - 17:09 20° | 28<br>333 - 33<br>08:25 - 17:08 20° | 29<br>334 - 32<br>08:27 - 17:07 20° | 30<br>335 - 31<br>08:28 - 17:07 20° |                                     |

# Décembre 2024



Mangers  
0.37°E, 48.35°N



Est **Élévation du Soleil le 21 Déc.** Ouest

Durée du jour le 21 Décembre

Levers et couchers du Soleil à Mangers (TL  $\pm$  1 mn) et élévation maximale du Soleil (°)

Lundi Mardi Mercredi Jeudi Vendredi Samedi Dimanche

|    |                                          |    |                                          |    |                                          |    |                                          |    |                                          |    |                                          |    |                                          |   |                                          |
|----|------------------------------------------|----|------------------------------------------|----|------------------------------------------|----|------------------------------------------|----|------------------------------------------|----|------------------------------------------|----|------------------------------------------|---|------------------------------------------|
| 2  | <sup>337 - 29</sup><br>08:30 - 17:06 20° | 3  | <sup>338 - 28</sup><br>08:32 - 17:05 19° | 4  | <sup>339 - 27</sup><br>08:33 - 17:05 19° | 5  | <sup>340 - 26</sup><br>08:34 - 17:05 19° | 6  | <sup>341 - 25</sup><br>08:35 - 17:04 19° | 7  | <sup>342 - 24</sup><br>08:36 - 17:04 19° | 8  | <sup>343 - 23</sup><br>08:37 - 17:04 19° | 1 | <sup>336 - 30</sup><br>08:29 - 17:06 20° |
| 9  | <sup>344 - 22</sup><br>08:38 - 17:04 19° | 10 | <sup>345 - 21</sup><br>08:39 - 17:04 19° | 11 | <sup>346 - 20</sup><br>08:40 - 17:04 19° | 12 | <sup>347 - 19</sup><br>08:41 - 17:04 19° | 13 | <sup>348 - 18</sup><br>08:42 - 17:04 19° | 14 | <sup>349 - 17</sup><br>08:43 - 17:04 18° | 15 | <sup>350 - 16</sup><br>08:44 - 17:04 18° |   |                                          |
| 16 | <sup>351 - 15</sup><br>08:44 - 17:05 18° | 17 | <sup>352 - 14</sup><br>08:45 - 17:05 18° | 18 | <sup>353 - 13</sup><br>08:46 - 17:05 18° | 19 | <sup>354 - 12</sup><br>08:46 - 17:06 18° | 20 | <sup>355 - 11</sup><br>08:47 - 17:06 18° | 21 | <sup>356 - 10</sup><br>08:47 - 17:07 18° | 22 | <sup>357 - 9</sup><br>08:48 - 17:07 18°  |   |                                          |
| 23 | <sup>358 - 8</sup><br>08:48 - 17:08 18°  | 24 | <sup>359 - 7</sup><br>08:49 - 17:08 18°  | 25 | <sup>360 - 6</sup><br>08:49 - 17:09 18°  | 26 | <sup>361 - 5</sup><br>08:49 - 17:10 18°  | 27 | <sup>362 - 4</sup><br>08:50 - 17:11 18°  | 28 | <sup>363 - 3</sup><br>08:50 - 17:11 18°  | 29 | <sup>364 - 2</sup><br>08:50 - 17:12 19°  |   |                                          |
| 30 | <sup>365 - 1</sup><br>08:50 - 17:13 19°  | 31 | <sup>366 - 0</sup><br>08:50 - 17:14 19°  |    |                                          |    |                                          |    |                                          |    |                                          |    |                                          |   |                                          |

48

49

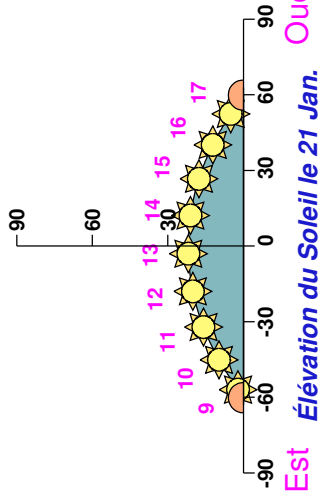
50

51

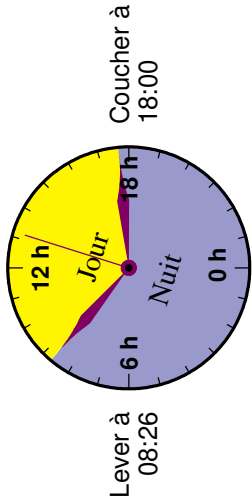
52

53

# Janvier 2025



Mamers  
0.37°E, 48.35°N



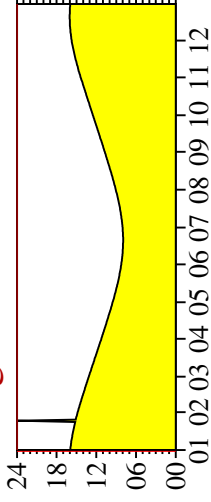
Durée du jour le 21 Janvier

Levers et couchers du Soleil à Mamers (TL ± 1 mn) et élévation maximale du Soleil (°)

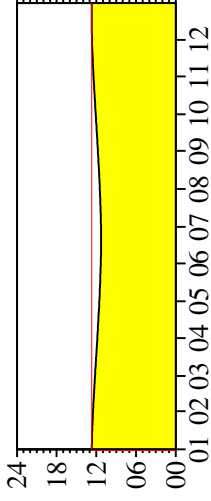
|   | Lundi                   | Mardi                   | Mercredi                | Jeudi                   | Vendredi                | Samedi                  | Dimanche                |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 1 | 6<br>08:49 - 17:20 19°  | 7<br>08:49 - 17:22 19°  | 1<br>08:50 - 17:15 19°  | 2<br>08:50 - 17:16 19°  | 3<br>08:50 - 17:17 19°  | 4<br>08:50 - 17:18 19°  | 5<br>08:49 - 17:19 19°  |
| 2 | 13<br>08:46 - 17:29 20° | 14<br>08:45 - 17:31 20° | 8<br>08:49 - 17:23 20°  | 9<br>08:48 - 17:24 20°  | 10<br>08:48 - 17:25 20° | 11<br>08:47 - 17:27 20° | 12<br>08:47 - 17:28 20° |
| 3 | 20<br>08:41 - 17:39 22° | 21<br>08:40 - 17:41 22° | 15<br>08:45 - 17:32 21° | 16<br>08:44 - 17:33 21° | 17<br>08:43 - 17:35 21° | 18<br>08:42 - 17:36 21° | 19<br>08:42 - 17:38 21° |
| 4 | 27<br>08:33 - 17:50 23° | 28<br>08:32 - 17:52 24° | 22<br>08:39 - 17:42 22° | 23<br>08:38 - 17:44 22° | 24<br>08:37 - 17:45 23° | 25<br>08:36 - 17:47 23° | 26<br>08:35 - 17:48 23° |
| 5 |                         |                         | 29<br>08:31 - 17:53 24° | 30<br>08:30 - 17:55 24° | 31<br>08:28 - 17:56 24° |                         |                         |

# Day duration for any cities for 2024

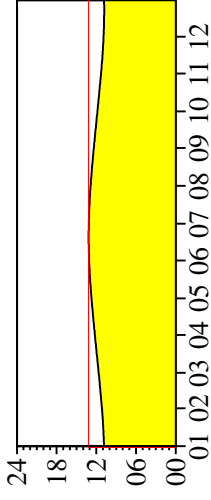
**Kerguelen** 69.33°E, -49.33°N



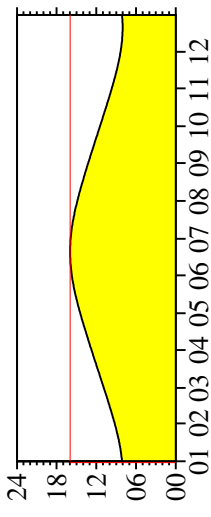
**Lima** -77.03°E, -12.05°N



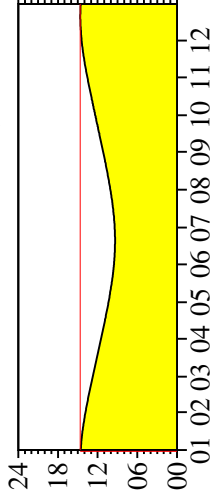
**Mexico** -99.13°E, 19.43°N



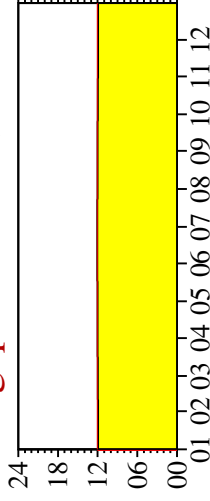
**Paris** 2.35°E, 48.86°N



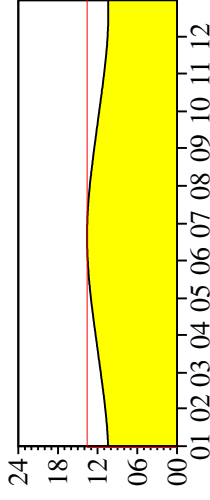
**Melbourne** 144.97°E, -37.81°N



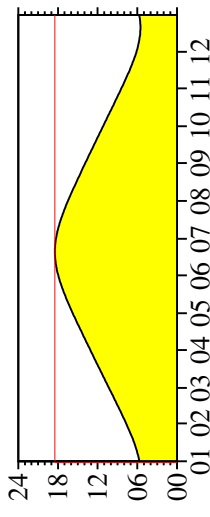
**Singapour** 103.85°E, 1.03°N



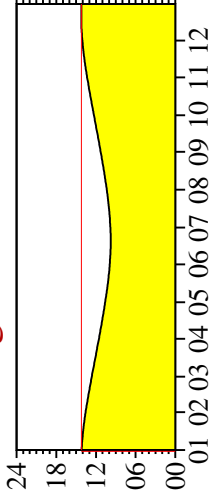
**Miami** -80.22°E, 25.78°N



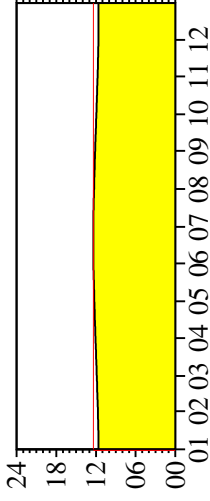
**Oslo** 10.75°E, 59.92°N



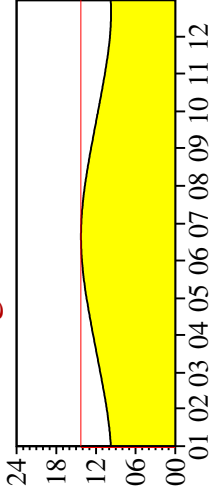
**Santiago** -70.65°E, -33.43°N



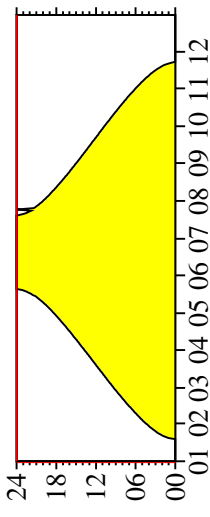
**Colombo** 79.83°E, 6.92°N



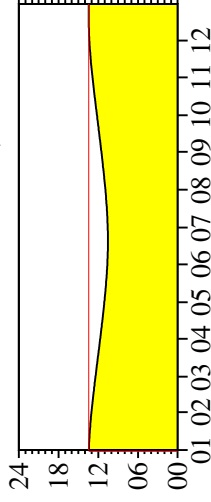
**Los Angeles** -118.24°E, 34.05°N



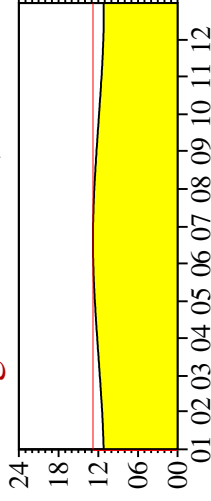
**Tromso** 18.97°E, 69.66°N



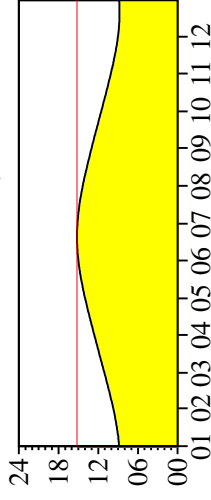
**Sao Paulo** -46.63°E, -23.55°N



**Bangkok** 100.49°E, 13.75°N



**Marseille** 5.38°E, 43.3°N



**Ny Alesund** 11.92°E, 78.92°N

