

太陽、金星、火星 Sun, Venus, Mars 2019年

太陽の視赤経 (R. A.), 視赤緯 (Dec.), 地心距離 (Dist.)

| CN | 1月0日 - 5月1日 a=0, b=121 | | | 4月30日 - 9月1日 a=120, b=244 | | | 8月31日 - 12月32日 a=243, b=366 | | | CN |
|----|------------------------|-----------|-------------|---------------------------|-----------|-------------|-----------------------------|-----------|-------------|----|
| | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | |
| 0 | 22.696400 | -5.85509 | 0.993121 | 6.599667 | 17.17705 | 1.012388 | 14.525213 | -10.58204 | 0.994695 | 0 |
| 1 | 3.896948 | 19.99447 | 0.012666 | 4.135950 | -3.27497 | 0.001199 | 4.050617 | -16.89248 | -0.013897 | 1 |
| 2 | -0.103656 | 1.75027 | 0.002290 | -0.040841 | -5.79420 | -0.004187 | 0.151517 | 3.49425 | 0.001825 | 2 |
| 3 | 0.034727 | -0.98562 | -0.000646 | -0.040829 | 0.20830 | -0.000056 | 0.013548 | 0.97511 | 0.000724 | 3 |
| 4 | 0.006648 | 0.01226 | -0.000043 | 0.005193 | 0.16020 | 0.000106 | -0.013395 | -0.02577 | -0.000027 | 4 |
| 5 | -0.002283 | 0.00800 | 0.000016 | 0.003291 | -0.01044 | 0.000004 | -0.002113 | -0.02312 | -0.000017 | 5 |
| 6 | 0.000073 | -0.00368 | 0.000005 | -0.000422 | -0.00503 | 0.000004 | 0.000297 | -0.00523 | 0.000005 | 6 |
| 7 | 0.000064 | 0.00067 | 0.000013 | -0.000118 | 0.00073 | 0.000005 | 0.000215 | -0.00008 | -0.000009 | 7 |
| 8 | -0.000002 | 0.00016 | -0.000004 | 0.000049 | 0.00012 | -0.000010 | 0.000008 | 0.00042 | -0.000007 | 8 |
| 9 | 0.000012 | 0.00014 | 0.000005 | 0.000017 | -0.00019 | 0.000001 | 0.000002 | -0.00005 | -0.000002 | 9 |
| 10 | 0.000053 | 0.00022 | -0.000008 | 0.000012 | 0.00016 | -0.000012 | -0.000040 | 0.00004 | -0.000011 | 10 |
| 11 | -0.000038 | -0.00011 | -0.000015 | -0.000071 | 0.00002 | -0.000006 | -0.000056 | 0.00029 | 0.000011 | 11 |
| 12 | -0.000053 | -0.00028 | 0.000007 | -0.000019 | 0.00004 | 0.000016 | 0.000037 | -0.00017 | 0.000013 | 12 |
| 13 | 0.000023 | 0.00002 | 0.000009 | 0.000050 | 0.00006 | 0.000004 | 0.000037 | -0.00022 | -0.000007 | 13 |
| 14 | 0.000021 | 0.00014 | -0.000003 | 0.000010 | -0.00007 | -0.000008 | -0.000016 | 0.00011 | -0.000006 | 14 |
| 15 | -0.000007 | 0.00000 | -0.000003 | -0.000018 | -0.00004 | -0.000001 | -0.000012 | 0.00009 | 0.000003 | 15 |
| 16 | -0.000003 | -0.00003 | 0.000001 | -0.000007 | 0.00002 | 0.000002 | 0.000004 | -0.00003 | 0.000001 | 16 |
| 17 | 0.000002 | -0.00001 | 0.000001 | 0.000006 | 0.00003 | 0.000000 | 0.000004 | -0.00002 | -0.000001 | 17 |

金星の視赤経 (R. A.), 視赤緯 (Dec.), 地心距離 (Dist.)

| CN | 1月0日 - 5月1日 a=0, b=121 | | | 4月30日 - 9月1日 a=120, b=244 | | | 8月31日 - 12月32日 a=243, b=366 | | | CN |
|----|------------------------|-----------|-------------|---------------------------|-----------|-------------|-----------------------------|-----------|-------------|----|
| | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | |
| 0 | 20.089400 | -12.22805 | 1.054744 | 5.827986 | 13.89664 | 1.630704 | 15.923639 | -12.22232 | 1.533443 | 0 |
| 1 | 4.770818 | 9.61427 | 0.411713 | 5.202986 | 2.88981 | 0.141151 | 5.149740 | -14.72841 | -0.223213 | 1 |
| 2 | -0.004287 | 6.78204 | -0.018687 | 0.049994 | -8.86463 | -0.051406 | 0.151701 | 7.56495 | -0.033985 | 2 |
| 3 | -0.070212 | -0.41480 | -0.002435 | -0.078962 | -0.43301 | -0.001594 | -0.031983 | 1.47170 | 0.001937 | 3 |
| 4 | 0.021819 | -0.39134 | 0.000187 | -0.010601 | 0.42723 | 0.000519 | -0.034715 | -0.27205 | -0.000248 | 4 |
| 5 | 0.004282 | 0.05256 | -0.000100 | 0.009797 | 0.03293 | 0.000048 | 0.000704 | -0.08298 | -0.000017 | 5 |
| 6 | -0.001415 | 0.00901 | 0.000025 | 0.001418 | -0.02073 | -0.000002 | 0.003079 | -0.00353 | 0.000017 | 6 |
| 7 | -0.000295 | -0.00365 | 0.000004 | -0.000796 | -0.00349 | 0.000000 | 0.000513 | 0.00611 | -0.000005 | 7 |
| 8 | 0.000167 | -0.00038 | -0.000004 | -0.000175 | 0.00152 | -0.000008 | -0.000191 | 0.00149 | -0.000006 | 8 |
| 9 | 0.000029 | 0.00048 | 0.000002 | 0.000089 | 0.00036 | 0.000001 | -0.000079 | -0.00039 | -0.000002 | 9 |
| 10 | 0.000015 | -0.00006 | -0.000016 | 0.000027 | -0.00001 | -0.000015 | -0.000014 | -0.00024 | -0.000015 | 10 |
| 11 | -0.000067 | -0.00008 | -0.000006 | -0.000053 | -0.00009 | -0.000002 | -0.000036 | 0.00013 | 0.000006 | 11 |
| 12 | -0.000014 | -0.00013 | 0.000015 | -0.000006 | 0.00005 | 0.000016 | 0.000012 | -0.00005 | 0.000015 | 12 |
| 13 | 0.000039 | 0.00001 | 0.000003 | 0.000028 | 0.00006 | 0.000001 | 0.000026 | -0.00010 | -0.000003 | 13 |
| 14 | 0.000002 | 0.00010 | -0.000006 | 0.000002 | -0.00006 | -0.000007 | -0.000003 | 0.00005 | -0.000006 | 14 |
| 15 | -0.000012 | -0.00001 | -0.000001 | -0.000009 | -0.00002 | 0.000000 | -0.000008 | 0.00005 | 0.000001 | 15 |
| 16 | 0.000002 | -0.00002 | 0.000001 | -0.000003 | 0.00001 | 0.000002 | 0.000000 | -0.00001 | 0.000001 | 16 |
| 17 | 0.000004 | 0.00001 | 0.000001 | 0.000003 | 0.00002 | 0.000000 | 0.000003 | -0.00001 | 0.000000 | 17 |

火星の視赤経 (R. A.), 視赤緯 (Dec.), 地心距離 (Dist.)

| CN | 1月0日 - 5月1日 a=0, b=121 | | | 4月30日 - 9月1日 a=120, b=244 | | | 8月31日 - 12月32日 a=243, b=366 | | | CN |
|----|------------------------|-----------|-------------|---------------------------|-----------|-------------|-----------------------------|-----------|-------------|----|
| | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | |
| 0 | 17.276047 | -20.78864 | 1.401083 | 20.309333 | -23.92195 | 0.551795 | 21.821948 | -14.92304 | 0.818327 | 0 |
| 1 | 2.498974 | -3.73864 | -0.565525 | 0.124195 | -2.38036 | -0.211706 | 2.007783 | 13.10119 | 0.412109 | 1 |
| 2 | -0.042877 | 1.97982 | 0.003805 | -0.471304 | -0.70456 | 0.101381 | 0.235051 | 1.78355 | 0.034200 | 2 |
| 3 | -0.026908 | -0.08484 | 0.005826 | 0.108992 | 0.85186 | 0.010580 | -0.075494 | -0.23715 | -0.003992 | 3 |
| 4 | -0.003106 | -0.05557 | -0.000094 | 0.075872 | 0.34277 | -0.001950 | 0.015783 | -0.02255 | 0.000545 | 4 |
| 5 | 0.000040 | -0.00372 | -0.000002 | 0.007326 | -0.08191 | -0.001224 | -0.000858 | -0.00460 | -0.000228 | 5 |
| 6 | -0.000056 | 0.00023 | 0.000006 | -0.008337 | -0.06755 | -0.000112 | -0.000467 | 0.00399 | 0.000036 | 6 |
| 7 | -0.000029 | 0.00008 | 0.000015 | -0.003415 | -0.00179 | 0.000118 | 0.000163 | -0.00128 | -0.000006 | 7 |
| 8 | 0.000028 | -0.00003 | 0.000003 | 0.000254 | 0.01088 | 0.000029 | -0.000079 | 0.00003 | 0.000012 | 8 |
| 9 | 0.000015 | 0.00008 | 0.000001 | 0.000550 | 0.00306 | -0.000003 | 0.000044 | -0.00001 | 0.000001 | 9 |
| 10 | 0.000040 | -0.00001 | 0.000004 | 0.000101 | -0.00116 | -0.000010 | -0.000049 | -0.00007 | 0.000009 | 10 |
| 11 | 0.000015 | -0.00007 | -0.000017 | -0.000161 | -0.00098 | 0.000000 | 0.000083 | 0.00033 | 0.000005 | 11 |
| 12 | -0.000047 | 0.00006 | -0.000006 | -0.000012 | 0.00018 | 0.000018 | 0.000022 | 0.00004 | -0.000017 | 12 |
| 13 | -0.000018 | 0.00003 | 0.000012 | 0.000145 | 0.00047 | -0.000001 | -0.000073 | -0.00020 | -0.000004 | 13 |
| 14 | 0.000021 | -0.00004 | 0.000003 | 0.000013 | -0.00010 | -0.000013 | 0.000002 | -0.00003 | 0.000009 | 14 |
| 15 | 0.000008 | 0.00000 | -0.000005 | -0.000081 | -0.00028 | 0.000000 | 0.000029 | 0.00007 | 0.000001 | 15 |
| 16 | -0.000004 | 0.00001 | -0.000001 | -0.000014 | 0.00003 | 0.000004 | 0.000000 | 0.00004 | -0.000003 | 16 |
| 17 | -0.000003 | 0.00000 | 0.000001 | 0.000030 | 0.00014 | 0.000000 | -0.000009 | -0.00002 | 0.000000 | 17 |

木星、土星、R、黄道傾角 Jupiter, Saturn, R, ϵ 2019年

木星の視赤経 (R. A.), 視赤緯 (Dec.), 地心距離 (Dist.)

| CN | 1月0日-5月1日 a=0, b=121 | | | 4月30日-9月1日 a=120, b=244 | | | 8月31日-12月32日 a=243, b=366 | | | CN |
|----|----------------------|-----------|-------------|-------------------------|-----------|-------------|---------------------------|-----------|-------------|----|
| | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | |
| 0 | 17.262161 | -22.33443 | 5.400653 | 17.156602 | -22.36728 | 4.574932 | 17.607309 | -22.88778 | 5.758440 | 0 |
| 1 | 0.451380 | -0.52240 | -0.865515 | -0.353476 | 0.25682 | 0.272889 | 0.797786 | -0.52286 | 0.604648 | 1 |
| 2 | -0.153496 | 0.23378 | -0.034434 | 0.087959 | -0.09651 | 0.232273 | 0.096214 | 0.17528 | -0.136776 | 2 |
| 3 | -0.016255 | -0.03561 | 0.032606 | 0.043448 | -0.06685 | -0.019647 | -0.017469 | 0.06353 | -0.019988 | 3 |
| 4 | 0.001508 | 0.00117 | 0.002163 | -0.006070 | 0.00040 | -0.006724 | 0.000052 | -0.00682 | 0.002544 | 4 |
| 5 | 0.000535 | 0.00169 | -0.000193 | -0.001409 | 0.00547 | 0.000835 | 0.000053 | -0.00119 | 0.000035 | 5 |
| 6 | 0.000083 | 0.00002 | -0.000042 | 0.000390 | 0.00015 | 0.000153 | -0.000022 | 0.00015 | -0.000003 | 6 |
| 7 | 0.000012 | -0.00007 | -0.000011 | 0.000032 | -0.00038 | -0.000040 | 0.000010 | -0.00002 | 0.000002 | 7 |
| 8 | -0.000006 | -0.00002 | -0.000013 | -0.000022 | 0.00000 | 0.000011 | 0.000001 | -0.00002 | -0.000015 | 8 |
| 9 | -0.000004 | 0.00001 | 0.000002 | 0.000009 | 0.00000 | 0.000002 | -0.000004 | 0.00002 | -0.000001 | 9 |
| 10 | -0.000004 | 0.00000 | -0.000007 | 0.000000 | 0.00000 | 0.000001 | 0.000001 | -0.00001 | -0.000006 | 10 |
| 11 | -0.000013 | 0.00003 | 0.000006 | 0.000008 | -0.00003 | 0.000000 | -0.000013 | 0.00001 | -0.000002 | 11 |
| 12 | 0.000005 | -0.00001 | 0.000017 | -0.000001 | -0.00001 | -0.000017 | 0.000000 | 0.00000 | 0.000017 | 12 |
| 13 | 0.000010 | -0.00002 | -0.000005 | -0.000016 | 0.00004 | 0.000001 | 0.000011 | -0.00002 | 0.000003 | 13 |
| 14 | -0.000002 | 0.00000 | -0.000010 | 0.000001 | 0.00001 | 0.000013 | 0.000001 | 0.00001 | -0.000011 | 14 |
| 15 | -0.000004 | 0.00001 | 0.000002 | 0.000010 | -0.00002 | -0.000001 | -0.000003 | 0.00002 | -0.000001 | 15 |
| 16 | 0.000001 | 0.00001 | 0.000003 | -0.000002 | 0.00001 | -0.000005 | 0.000000 | 0.00001 | 0.000004 | 16 |
| 17 | 0.000002 | 0.00000 | 0.000000 | -0.000002 | 0.00001 | 0.000000 | 0.000002 | 0.00000 | 0.000000 | 17 |

土星の視赤経 (R. A.), 視赤緯 (Dec.), 地心距離 (Dist.)

| CN | 1月0日-5月1日 a=0, b=121 | | | 4月30日-9月1日 a=120, b=244 | | | 8月31日-12月32日 a=243, b=366 | | | CN |
|----|----------------------|-----------|-------------|-------------------------|-----------|-------------|---------------------------|-----------|-------------|----|
| | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | R. A. h | Dec. ° | Dist. AU | |
| 0 | 19.211573 | -21.90420 | 10.487121 | 19.266784 | -21.94143 | 9.305274 | 19.199122 | -22.23992 | 10.286342 | 0 |
| 1 | 0.340852 | 0.53084 | -0.716778 | -0.248079 | -0.52976 | -0.138917 | 0.266874 | 0.38305 | 0.831128 | 1 |
| 2 | -0.068200 | -0.07553 | -0.134950 | -0.018756 | -0.02557 | 0.253598 | 0.085015 | 0.17417 | -0.086975 | 2 |
| 3 | -0.009981 | -0.03518 | 0.029320 | 0.022421 | 0.04469 | 0.007840 | -0.008949 | 0.00042 | -0.036969 | 3 |
| 4 | 0.000753 | 0.00050 | 0.003080 | 0.000946 | -0.00161 | -0.007015 | -0.001281 | -0.00148 | 0.002546 | 4 |
| 5 | 0.000125 | 0.00087 | -0.000239 | -0.000608 | -0.00159 | -0.000222 | 0.000219 | -0.00039 | 0.000365 | 5 |
| 6 | 0.000015 | 0.00005 | -0.000025 | -0.000042 | 0.00018 | 0.000130 | -0.000014 | -0.00003 | -0.000037 | 6 |
| 7 | 0.000004 | 0.00000 | 0.000000 | 0.000013 | 0.00005 | 0.000004 | 0.000001 | 0.00001 | 0.000007 | 7 |
| 8 | 0.000000 | -0.00003 | -0.000014 | 0.000001 | -0.00002 | 0.000010 | 0.000005 | -0.00001 | -0.000013 | 8 |
| 9 | -0.000001 | 0.00002 | -0.000001 | 0.000004 | 0.00000 | 0.000004 | -0.000002 | 0.00001 | -0.000004 | 9 |
| 10 | 0.000000 | -0.00002 | -0.000007 | -0.000001 | 0.00000 | 0.000001 | 0.000000 | 0.00000 | -0.000004 | 10 |
| 11 | -0.000008 | 0.00002 | -0.000001 | 0.000002 | -0.00001 | 0.000006 | -0.000008 | -0.00002 | -0.000007 | 11 |
| 12 | -0.000001 | -0.00003 | 0.000018 | 0.000003 | 0.00000 | -0.000015 | -0.000002 | 0.00000 | 0.000015 | 12 |
| 13 | 0.000006 | 0.00002 | 0.000002 | -0.000007 | -0.00001 | -0.000007 | 0.000005 | 0.00000 | 0.000008 | 13 |
| 14 | 0.000000 | -0.00002 | -0.000011 | -0.000003 | 0.00000 | 0.000011 | 0.000002 | 0.00000 | -0.000010 | 14 |
| 15 | -0.000001 | 0.00002 | -0.000001 | 0.000005 | 0.00001 | 0.000004 | -0.000002 | 0.00001 | -0.000004 | 15 |
| 16 | 0.000000 | 0.00001 | 0.000003 | 0.000000 | 0.00001 | -0.000004 | -0.000002 | 0.00001 | 0.000004 | 16 |
| 17 | 0.000001 | 0.00001 | 0.000000 | 0.000000 | 0.00000 | -0.000002 | 0.000001 | 0.00000 | 0.000001 | 17 |

R, 黄道傾角 (ϵ)

| CN | 1月0日-5月1日 a=0, b=121 | | 4月30日-9月1日 a=120, b=244 | | 8月31日-12月32日 a=243, b=366 | | CN |
|----|----------------------|-----------------|-------------------------|-----------------|---------------------------|-----------------|----|
| | R h | ϵ ° | R h | ϵ ° | R h | ϵ ° | |
| 0 | 10.600171 | 23.43577 | 18.583902 | 23.43595 | 2.633341 | 23.43623 | 0 |
| 1 | 3.975419 | 0.00023 | 4.074025 | 0.00018 | 4.041146 | -0.00005 | 1 |
| 2 | -0.000011 | -0.00008 | -0.000005 | 0.00012 | 0.000020 | -0.00002 | 2 |
| 3 | 0.000007 | -0.00003 | -0.000004 | -0.00002 | 0.000003 | 0.00004 | 3 |
| 4 | 0.000001 | 0.00000 | 0.000001 | -0.00002 | -0.000003 | 0.00000 | 4 |
| 5 | 0.000000 | 0.00000 | 0.000001 | 0.00000 | 0.000001 | -0.00001 | 5 |
| 6 | 0.000000 | 0.00001 | 0.000002 | 0.00002 | 0.000002 | 0.00001 | 6 |
| 7 | 0.000003 | 0.00000 | 0.000002 | -0.00001 | 0.000002 | -0.00001 | 7 |

月 Moon 2019年

月の視赤経 (R. A.), 視赤緯 (Dec.), 地平視差 (H. P.)

| CN | 1月0日-2月1日 a=0, b=32 | | | 1月31日-3月1日 a=31, b=60 | | | 2月28日-4月1日 a=59, b=91 | | | CN |
|----|---------------------|-----------|------------|-----------------------|-----------|------------|-----------------------|-----------|------------|----|
| | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | |
| 0 | 3.765985 | -6.98645 | 0.944374 | 5.651248 | -8.07941 | 0.939605 | 7.572834 | -8.99824 | 0.932941 | 0 |
| 1 | 14.095494 | 2.04756 | 0.010676 | 12.838319 | 2.61057 | 0.022941 | 14.128959 | -0.37741 | 0.009518 | 1 |
| 2 | 0.320709 | -12.50678 | -0.015544 | 0.355987 | -18.98418 | -0.031740 | 0.302605 | -17.88345 | -0.039017 | 2 |
| 3 | -0.076141 | -12.49114 | -0.043882 | -0.138208 | -5.04837 | -0.037892 | -0.215141 | 3.10741 | -0.027807 | 3 |
| 4 | -0.237210 | 6.48929 | 0.002378 | -0.213567 | 7.37798 | 0.006544 | -0.152338 | 10.08827 | 0.017464 | 4 |
| 5 | -0.018322 | 3.74401 | 0.015998 | 0.081327 | 1.89528 | 0.013128 | 0.120751 | -0.21645 | 0.012583 | 5 |
| 6 | 0.149778 | -0.45142 | 0.004257 | 0.097591 | -0.90564 | 0.002665 | 0.017162 | -2.11936 | -0.000224 | 6 |
| 7 | 0.028211 | -0.84684 | -0.004100 | -0.029195 | -0.70112 | -0.003307 | -0.067395 | -0.35757 | -0.004693 | 7 |
| 8 | -0.055473 | -0.33339 | -0.002447 | -0.035426 | 0.01806 | -0.001640 | -0.003363 | 0.45854 | -0.001171 | 8 |
| 9 | -0.018827 | 0.20741 | 0.000486 | 0.002054 | 0.24235 | 0.000450 | 0.025558 | 0.17796 | 0.001249 | 9 |
| 10 | 0.010138 | 0.21144 | 0.000844 | 0.011649 | 0.04315 | 0.000563 | 0.004424 | -0.11991 | 0.000615 | 10 |
| 11 | 0.010429 | -0.02962 | 0.000161 | 0.002437 | -0.07021 | 0.000055 | -0.008268 | -0.06287 | -0.000221 | 11 |
| 12 | 0.000702 | -0.08302 | -0.000208 | -0.003864 | -0.02777 | -0.000141 | -0.002486 | 0.03380 | -0.000237 | 12 |
| 13 | -0.004668 | -0.01322 | -0.000124 | -0.001682 | 0.01629 | -0.000061 | 0.002853 | 0.02200 | 0.000005 | 13 |
| 14 | -0.001737 | 0.02401 | 0.000025 | 0.001153 | 0.01291 | 0.000022 | 0.000974 | -0.00969 | 0.000074 | 14 |
| 15 | 0.001513 | 0.01382 | 0.000047 | 0.000848 | -0.00262 | 0.000024 | -0.001082 | -0.00788 | 0.000019 | 15 |
| 16 | 0.001121 | -0.00442 | 0.000008 | -0.000258 | -0.00502 | 0.000001 | -0.000392 | 0.00285 | -0.000018 | 16 |
| 17 | -0.000235 | -0.00719 | -0.000012 | -0.000381 | -0.00011 | -0.000007 | 0.000426 | 0.00276 | -0.000011 | 17 |
| 18 | -0.000539 | -0.00049 | -0.000007 | 0.000017 | 0.00173 | -0.000002 | 0.000178 | -0.00092 | 0.000003 | 18 |
| 19 | -0.000101 | 0.00270 | 0.000002 | 0.000154 | 0.00039 | 0.000001 | -0.000166 | -0.00096 | 0.000004 | 19 |
| 20 | 0.000204 | 0.00104 | 0.000003 | 0.000026 | -0.00054 | 0.000001 | -0.000082 | 0.00033 | 0.000000 | 20 |
| 21 | 0.000115 | -0.00072 | 0.000000 | -0.000055 | -0.00025 | 0.000000 | 0.000063 | 0.00035 | -0.000001 | 21 |
| 22 | -0.000052 | -0.00067 | -0.000001 | -0.000022 | 0.00015 | 0.000000 | 0.000036 | -0.00013 | 0.000000 | 22 |
| 23 | -0.000066 | 0.00007 | 0.000000 | 0.000017 | 0.00012 | 0.000000 | -0.000024 | -0.00014 | 0.000000 | 23 |
| 24 | 0.000000 | 0.00030 | 0.000000 | 0.000013 | -0.00003 | 0.000000 | -0.000016 | 0.00005 | 0.000000 | 24 |
| 25 | 0.000028 | 0.00007 | 0.000000 | -0.000004 | -0.00005 | 0.000000 | 0.000009 | 0.00006 | 0.000000 | 25 |
| 26 | 0.000010 | -0.00011 | 0.000000 | -0.000006 | 0.00000 | 0.000000 | 0.000007 | -0.00002 | 0.000000 | 26 |
| 27 | -0.000008 | -0.00007 | 0.000000 | 0.000000 | 0.00002 | 0.000000 | -0.000004 | -0.00003 | 0.000000 | 27 |
| 28 | -0.000006 | 0.00003 | 0.000000 | 0.000002 | 0.00000 | 0.000000 | -0.000002 | 0.00001 | 0.000000 | 28 |
| 29 | 0.000001 | 0.00005 | 0.000000 | 0.000001 | -0.00001 | 0.000000 | 0.000002 | 0.00001 | 0.000000 | 29 |

月の視赤経 (R. A.), 視赤緯 (Dec.), 地平視差 (H. P.)

| CN | 3月31日-5月1日 a=90, b=121 | | | 4月30日-6月1日 a=120, b=152 | | | 5月31日-7月1日 a=151, b=182 | | | CN |
|----|------------------------|-----------|------------|-------------------------|-----------|------------|-------------------------|-----------|------------|----|
| | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | |
| 0 | 10.285663 | -5.70853 | 0.931986 | 12.943444 | -0.39433 | 0.937568 | 15.647569 | 4.99121 | 0.949897 | 0 |
| 1 | 13.707936 | -3.87836 | 0.003092 | 14.059681 | -3.06041 | -0.002198 | 13.591879 | -3.55300 | -0.009999 | 1 |
| 2 | 0.118193 | -11.93684 | -0.043758 | -0.194797 | 0.49171 | -0.027981 | -0.424660 | 13.37031 | -0.000042 | 2 |
| 3 | -0.322022 | 13.11265 | -0.002464 | -0.291341 | 17.54038 | 0.023337 | -0.033905 | 12.77246 | 0.036394 | 3 |
| 4 | -0.004847 | 6.17049 | 0.020625 | 0.086994 | -0.51430 | 0.016263 | 0.103374 | -6.80789 | 0.002649 | 4 |
| 5 | 0.048975 | -3.42907 | 0.005220 | -0.023697 | -4.79932 | -0.002339 | 0.004038 | -2.19268 | -0.003962 | 5 |
| 6 | -0.066601 | -1.36067 | -0.003280 | 0.007896 | 0.52614 | -0.003121 | 0.098666 | 1.45284 | -0.000998 | 6 |
| 7 | 0.006391 | 0.63244 | -0.002920 | 0.069668 | 0.82156 | -0.001226 | -0.006107 | -0.05272 | -0.001094 | 7 |
| 8 | 0.037786 | 0.27877 | 0.000451 | -0.013186 | -0.18268 | 0.000739 | -0.045670 | -0.18505 | 0.000448 | 8 |
| 9 | -0.003062 | -0.12700 | 0.000972 | -0.027984 | -0.08283 | 0.000479 | 0.010830 | -0.01270 | 0.000230 | 9 |
| 10 | -0.012963 | -0.03661 | -0.000033 | 0.007203 | 0.01341 | -0.000266 | 0.009041 | -0.02892 | -0.000207 | 10 |
| 11 | 0.001132 | 0.02894 | -0.000275 | 0.006646 | -0.02576 | -0.000128 | -0.003683 | 0.04424 | 0.000007 | 11 |
| 12 | 0.003397 | -0.00394 | -0.000024 | -0.002350 | 0.01438 | 0.000081 | -0.000819 | 0.01219 | 0.000052 | 12 |
| 13 | -0.000835 | -0.00823 | 0.000071 | -0.000364 | 0.01675 | 0.000031 | -0.000444 | -0.02122 | -0.000011 | 13 |
| 14 | -0.000647 | 0.00470 | 0.000017 | 0.000261 | -0.00950 | -0.000019 | 0.000214 | 0.00102 | -0.000006 | 14 |
| 15 | 0.000558 | 0.00232 | -0.000017 | -0.000579 | -0.00479 | -0.000008 | 0.000697 | 0.00511 | 0.000002 | 15 |
| 16 | 0.000058 | -0.00212 | -0.000008 | 0.000216 | 0.00351 | 0.000004 | -0.000289 | -0.00082 | 0.000000 | 16 |
| 17 | -0.000283 | -0.00040 | 0.000003 | 0.000337 | 0.00050 | 0.000002 | -0.000241 | -0.00037 | 0.000000 | 17 |
| 18 | 0.000024 | 0.00079 | 0.000003 | -0.000174 | -0.00074 | -0.000001 | 0.000144 | -0.00029 | 0.000000 | 18 |
| 19 | 0.000113 | -0.00007 | -0.000001 | -0.000103 | 0.00029 | -0.000001 | 0.000039 | -0.00008 | 0.000000 | 19 |
| 20 | -0.000023 | -0.00027 | -0.000001 | 0.000071 | -0.00004 | 0.000000 | -0.000025 | 0.00034 | 0.000000 | 20 |
| 21 | -0.000036 | 0.00011 | 0.000000 | 0.000011 | -0.00019 | 0.000000 | -0.000006 | -0.00003 | 0.000000 | 21 |
| 22 | 0.000014 | 0.00009 | 0.000000 | -0.000016 | 0.00012 | 0.000000 | -0.000007 | -0.00013 | 0.000000 | 22 |
| 23 | 0.000009 | -0.00006 | 0.000000 | 0.000007 | 0.00006 | 0.000000 | 0.000007 | 0.00003 | 0.000000 | 23 |
| 24 | -0.000008 | -0.00003 | 0.000000 | -0.000002 | -0.00006 | 0.000000 | 0.000005 | 0.00002 | 0.000000 | 24 |
| 25 | -0.000001 | 0.00003 | 0.000000 | -0.000005 | -0.00001 | 0.000000 | -0.000005 | 0.00000 | 0.000000 | 25 |
| 26 | 0.000003 | 0.00001 | 0.000000 | 0.000004 | 0.00002 | 0.000000 | -0.000001 | 0.00000 | 0.000000 | 26 |
| 27 | 0.000000 | -0.00001 | 0.000000 | 0.000001 | 0.00000 | 0.000000 | 0.000002 | 0.00000 | 0.000000 | 27 |
| 28 | -0.000001 | 0.00000 | 0.000000 | -0.000002 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 28 |
| 29 | 0.000001 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 29 |

月 Moon 2019年

月の視赤経 (R. A.), 視赤緯 (D e c.), 地平視差 (H. P.)

| CN | 6月30日-8月1日 a=181,b=213 | | | 7月31日-9月1日 a=212,b=244 | | | 8月31日-10月1日 a=243,b=274 | | | CN |
|----|------------------------|-----------|------------|------------------------|-----------|------------|-------------------------|-----------|------------|----|
| | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | |
| 0 | 18.487598 | 8.16800 | 0.965019 | 21.879230 | 5.74513 | 0.976382 | 0.744573 | -0.35207 | 0.973984 | 0 |
| 1 | 14.015475 | 0.07356 | -0.003928 | 13.951603 | 1.89599 | 0.000525 | 13.446144 | 5.12288 | 0.007137 | 1 |
| 2 | -0.320125 | 19.48679 | 0.033508 | 0.004665 | 14.07947 | 0.058371 | 0.187830 | 0.52066 | 0.057322 | 2 |
| 3 | 0.286098 | 1.69153 | 0.035359 | 0.398512 | -13.28369 | 0.008677 | 0.309417 | -18.16877 | -0.018810 | 3 |
| 4 | 0.143801 | -10.06442 | -0.011729 | 0.068687 | -7.07254 | -0.021673 | -0.052475 | -0.65780 | -0.018368 | 4 |
| 5 | 0.072552 | 0.42605 | -0.003416 | -0.043940 | 2.41203 | -0.002043 | -0.150110 | 2.90223 | -0.001501 | 5 |
| 6 | 0.021111 | 0.87652 | -0.001347 | -0.118826 | 0.21410 | -0.003487 | -0.021946 | 0.40793 | -0.002578 | 6 |
| 7 | -0.085756 | -0.48933 | -0.001841 | -0.016022 | 0.08703 | -0.000039 | 0.058500 | 0.29307 | 0.001871 | 7 |
| 8 | -0.003060 | 0.00197 | 0.000915 | 0.037387 | 0.25303 | 0.001545 | 0.012396 | -0.03518 | 0.001176 | 8 |
| 9 | 0.019413 | 0.04545 | 0.000180 | 0.001851 | 0.05568 | -0.000005 | -0.005764 | -0.14182 | 0.000001 | 9 |
| 10 | -0.006697 | 0.07133 | -0.000185 | -0.000191 | -0.04957 | 0.000053 | -0.002555 | -0.04220 | -0.000029 | 10 |
| 11 | -0.002204 | 0.01620 | 0.000107 | 0.002910 | -0.05157 | 0.000033 | -0.003493 | 0.01755 | -0.000095 | 11 |
| 12 | 0.001610 | -0.03452 | 0.000014 | -0.001025 | 0.00341 | -0.000056 | -0.000539 | 0.01417 | -0.000035 | 12 |
| 13 | 0.001261 | 0.00558 | -0.000022 | -0.001997 | 0.00430 | -0.000006 | 0.001563 | 0.00382 | -0.000002 | 13 |
| 14 | 0.000127 | 0.00727 | 0.000005 | -0.000226 | -0.00129 | -0.000005 | 0.000579 | -0.00037 | 0.000003 | 14 |
| 15 | -0.000758 | -0.00439 | -0.000002 | 0.000526 | 0.00327 | -0.000001 | -0.000185 | -0.00270 | 0.000006 | 15 |
| 16 | 0.000107 | -0.00129 | -0.000001 | 0.000048 | 0.00153 | 0.000003 | -0.000158 | -0.00108 | 0.000002 | 16 |
| 17 | 0.000241 | 0.00058 | 0.000001 | -0.000005 | -0.00088 | 0.000000 | -0.000097 | 0.00056 | 0.000000 | 17 |
| 18 | -0.000118 | 0.00058 | 0.000000 | 0.000082 | -0.00060 | 0.000000 | -0.000013 | 0.00042 | 0.000000 | 18 |
| 19 | -0.000055 | -0.00005 | 0.000000 | -0.000015 | 0.00004 | 0.000000 | 0.000053 | 0.00007 | 0.000000 | 19 |
| 20 | 0.000028 | -0.00029 | 0.000000 | -0.000048 | 0.00001 | 0.000000 | 0.000026 | -0.00004 | 0.000000 | 20 |
| 21 | 0.000020 | 0.00011 | 0.000000 | -0.000004 | -0.00003 | 0.000000 | -0.000007 | -0.00008 | 0.000000 | 21 |
| 22 | -0.000004 | 0.00009 | 0.000000 | 0.000010 | 0.00006 | 0.000000 | -0.000009 | -0.00003 | 0.000000 | 22 |
| 23 | -0.000011 | -0.00005 | 0.000000 | 0.000000 | 0.00003 | 0.000000 | -0.000004 | 0.00002 | 0.000000 | 23 |
| 24 | 0.000004 | -0.00002 | 0.000000 | 0.000000 | -0.00002 | 0.000000 | 0.000000 | 0.00002 | 0.000000 | 24 |
| 25 | 0.000004 | 0.00001 | 0.000000 | 0.000002 | -0.00001 | 0.000000 | 0.000002 | 0.00000 | 0.000000 | 25 |
| 26 | -0.000002 | 0.00001 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 0.000001 | 0.00000 | 0.000000 | 26 |
| 27 | -0.000001 | 0.00000 | 0.000000 | -0.000001 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 27 |
| 28 | 0.000001 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 28 |
| 29 | 0.000001 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 0.000000 | 0.00000 | 0.000000 | 29 |

月の視赤経 (R. A.), 視赤緯 (D e c.), 地平視差 (H. P.)

| CN | 9月30日-11月1日 a=273,b=305 | | | 10月31日-12月1日 a=304,b=335 | | | 11月30日-12月31日 a=334,b=366 | | | CN |
|----|-------------------------|-----------|------------|--------------------------|-----------|------------|---------------------------|-----------|------------|----|
| | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | R. A. h | Dec. ° | H. P. ° | |
| 0 | 3.575934 | -6.42792 | 0.963714 | 6.406657 | -9.03243 | 0.948766 | 9.189017 | -7.70064 | 0.936960 | 0 |
| 1 | 13.970772 | 2.36669 | 0.006817 | 13.590961 | 0.89874 | 0.012424 | 14.072149 | -1.50863 | 0.003264 | 1 |
| 2 | 0.271812 | -13.23692 | 0.031545 | 0.358534 | -20.56212 | -0.001404 | 0.291419 | -16.22457 | -0.028059 | 2 |
| 3 | 0.217121 | -14.33743 | -0.039272 | 0.047298 | -2.52312 | -0.037943 | -0.192066 | 10.10035 | -0.023674 | 3 |
| 4 | -0.172405 | 6.35147 | -0.012307 | -0.157199 | 9.54793 | 0.001400 | -0.078847 | 9.10790 | 0.014860 | 4 |
| 5 | -0.049665 | 3.46326 | 0.001845 | 0.105835 | 1.45931 | 0.003036 | 0.081910 | -2.18714 | 0.001936 | 5 |
| 6 | 0.102446 | 0.02192 | 0.000243 | 0.028230 | -1.11586 | 0.000594 | -0.103077 | -2.01030 | -0.001432 | 6 |
| 7 | 0.015568 | -0.35629 | 0.002947 | -0.070850 | -0.58518 | 0.001755 | -0.040027 | 0.15639 | 0.001516 | 7 |
| 8 | -0.033596 | -0.32346 | 0.000680 | -0.016876 | 0.10885 | 0.000069 | 0.053713 | 0.37579 | 0.000091 | 8 |
| 9 | -0.010227 | 0.02576 | -0.000430 | 0.016820 | 0.12201 | -0.000488 | 0.020526 | -0.10197 | -0.000636 | 9 |
| 10 | 0.002189 | 0.07796 | -0.000293 | 0.009452 | -0.05654 | -0.000197 | -0.014613 | -0.04190 | -0.000099 | 10 |
| 11 | 0.005060 | 0.00151 | -0.000091 | -0.002882 | -0.02674 | 0.000053 | -0.006635 | 0.08147 | 0.000182 | 11 |
| 12 | 0.001774 | -0.01461 | 0.000039 | -0.003351 | 0.02208 | 0.000062 | 0.004201 | 0.00526 | 0.000042 | 12 |
| 13 | -0.001776 | -0.00514 | 0.000031 | 0.001069 | 0.01328 | 0.000006 | 0.000640 | -0.03759 | -0.000041 | 13 |
| 14 | -0.000921 | 0.00276 | 0.000011 | 0.001171 | -0.00519 | -0.000007 | -0.001903 | -0.00352 | -0.000010 | 14 |
| 15 | 0.000369 | 0.00355 | 0.000000 | -0.000403 | -0.00578 | -0.000003 | 0.000383 | 0.01288 | 0.000008 | 15 |
| 16 | 0.000373 | -0.00015 | -0.000004 | -0.000515 | 0.00096 | -0.000001 | 0.000986 | 0.00072 | 0.000001 | 16 |
| 17 | 0.000038 | -0.00143 | -0.000002 | 0.000079 | 0.00198 | 0.000000 | -0.000221 | -0.00387 | -0.000001 | 17 |
| 18 | -0.000134 | -0.00030 | 0.000000 | 0.000216 | -0.00018 | 0.000000 | -0.000424 | 0.00059 | 0.000000 | 18 |
| 19 | -0.000071 | 0.00037 | 0.000000 | -0.000001 | -0.00070 | 0.000000 | 0.000093 | 0.00128 | 0.000000 | 19 |
| 20 | 0.000033 | 0.00024 | 0.000000 | -0.000080 | 0.00000 | 0.000000 | 0.000143 | -0.00057 | 0.000000 | 20 |
| 21 | 0.000036 | -0.00004 | 0.000000 | -0.000006 | 0.00027 | 0.000000 | -0.000053 | -0.00050 | 0.000000 | 21 |
| 22 | -0.000001 | -0.00011 | 0.000000 | 0.000030 | 0.00003 | 0.000000 | -0.000042 | 0.00030 | 0.000000 | 22 |
| 23 | -0.000013 | -0.00002 | 0.000000 | 0.000005 | -0.00010 | 0.000000 | 0.000033 | 0.00019 | 0.000000 | 23 |
| 24 | -0.000005 | 0.00003 | 0.000000 | -0.000011 | -0.00002 | 0.000000 | 0.000013 | -0.00013 | 0.000000 | 24 |
| 25 | 0.000003 | 0.00002 | 0.000000 | -0.000003 | 0.00003 | 0.000000 | -0.000018 | -0.00005 | 0.000000 | 25 |
| 26 | 0.000003 | -0.00001 | 0.000000 | 0.000004 | 0.00001 | 0.000000 | -0.000004 | 0.00005 | 0.000000 | 26 |
| 27 | 0.000000 | -0.00001 | 0.000000 | 0.000002 | -0.00001 | 0.000000 | 0.000008 | 0.00001 | 0.000000 | 27 |
| 28 | -0.000001 | 0.00000 | 0.000000 | -0.000001 | 0.00000 | 0.000000 | 0.000001 | -0.00002 | 0.000000 | 28 |
| 29 | -0.000001 | 0.00000 | 0.000000 | -0.000001 | 0.00001 | 0.000000 | -0.000005 | 0.00000 | 0.000000 | 29 |

恒星 Star 2019年

恒星の視赤経 (R. A.), 視赤緯 (Dec.)

1月0日~12月32日

2019

| | | No. 1 Polaris | | No. 2 Kochab | | No. 3 Dubhe | | No. 4 β Cassiop. | | | |
|----|---|-----------------------|----------|-------------------|----------|------------------|----------|------------------------|----------|----|---|
| | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | | |
| CN | N | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | N |
| | | h | ° | h | ° | h | ° | h | ° | | |
| 0 | | 2.941474 | 89.34558 | 14.844107 | 74.07616 | 11.081599 | 61.64524 | 0.170288 | 59.25686 | | 0 |
| 1 | | 0.024150 | 0.00053 | -0.000562 | -0.00033 | 0.000146 | -0.00296 | 0.000771 | 0.00365 | | 1 |
| 2 | | 0.019367 | 0.00451 | -0.000770 | -0.00452 | 0.000297 | -0.00477 | -0.000064 | 0.00460 | | 2 |
| 3 | | -0.016910 | 0.00191 | 0.000720 | -0.00220 | 0.000448 | 0.00055 | -0.000450 | -0.00119 | | 3 |
| 4 | | -0.004943 | -0.00141 | 0.000207 | 0.00141 | -0.000097 | 0.00135 | 0.000042 | -0.00134 | | 4 |
| 5 | | 0.002540 | -0.00016 | -0.000094 | 0.00020 | -0.000040 | -0.00016 | 0.000073 | 0.00026 | | 5 |
| 6 | | -0.000205 | 0.00014 | 0.000001 | -0.00014 | 0.000012 | -0.00005 | -0.000017 | 0.00007 | | 6 |
| 7 | | -0.000098 | -0.00004 | -0.000001 | 0.00004 | -0.000009 | 0.00004 | -0.000005 | -0.00004 | | 7 |
| | | | | | | | | | | | |
| | | No. 5 Merak | | No. 6 Alioth | | No. 7 Schedir | | No. 8 Mizar | | | |
| | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | | |
| CN | N | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | N |
| | | h | ° | h | ° | h | ° | h | ° | | |
| 0 | | 11.049785 | 56.27758 | 12.914369 | 55.85473 | 0.693546 | 56.64349 | 13.411465 | 54.82447 | | 0 |
| 1 | | 0.000184 | -0.00280 | 0.000029 | -0.00181 | 0.000779 | 0.00338 | 0.000012 | -0.00143 | | 1 |
| 2 | | 0.000261 | -0.00453 | -0.000059 | -0.00482 | 0.000036 | 0.00447 | -0.000141 | -0.00467 | | 2 |
| 3 | | 0.000382 | 0.00039 | 0.000416 | -0.00100 | -0.000422 | -0.00082 | 0.000399 | -0.00139 | | 3 |
| 4 | | -0.000083 | 0.00128 | 0.000011 | 0.00143 | 0.000011 | -0.00132 | 0.000035 | 0.00141 | | 4 |
| 5 | | -0.000032 | -0.00014 | -0.000041 | 0.00003 | 0.000071 | 0.00022 | -0.000040 | 0.00009 | | 5 |
| 6 | | 0.000009 | -0.00004 | 0.000004 | -0.00009 | -0.000014 | 0.00008 | 0.000002 | -0.00010 | | 6 |
| 7 | | -0.000008 | 0.00003 | -0.000006 | 0.00004 | -0.000006 | -0.00005 | -0.000005 | 0.00004 | | 7 |
| | | | | | | | | | | | |
| | | No. 9 α Persei | | No. 10 Benetnasch | | No. 11 Capella | | No. 12 Deneb | | | |
| | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | | |
| CN | N | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | N |
| | | h | ° | h | ° | h | ° | h | ° | | |
| 0 | | 3.428524 | 49.92819 | 13.804794 | 49.21714 | 5.301986 | 46.01502 | 20.701329 | 45.35080 | | 0 |
| 1 | | 0.000785 | 0.00128 | 0.000046 | -0.00106 | 0.000686 | -0.00031 | 0.000395 | 0.00416 | | 1 |
| 2 | | 0.000405 | 0.00285 | -0.000179 | -0.00424 | 0.000515 | 0.00098 | -0.000441 | 0.00192 | | 2 |
| 3 | | -0.000272 | 0.00079 | 0.000343 | -0.00173 | -0.000120 | 0.00131 | -0.000165 | -0.00320 | | 3 |
| 4 | | -0.000105 | -0.00093 | 0.000050 | 0.00129 | -0.000142 | -0.00042 | 0.000143 | -0.00044 | | 4 |
| 5 | | 0.000057 | -0.00002 | -0.000034 | 0.00013 | 0.000038 | -0.00012 | 0.000030 | 0.00048 | | 5 |
| 6 | | -0.000003 | 0.00011 | 0.000000 | -0.00011 | 0.000003 | 0.00011 | -0.000017 | -0.00006 | | 6 |
| 7 | | -0.000008 | -0.00004 | -0.000005 | 0.00004 | -0.000009 | -0.00002 | -0.000003 | -0.00002 | | 7 |
| | | | | | | | | | | | |
| | | No. 13 Vega | | No. 14 Castor | | No. 15 Alpheratz | | No. 16 Pollux | | | |
| | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | a = 0 , b = 366 | | | |
| CN | N | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | N |
| | | h | ° | h | ° | h | ° | h | ° | | |
| 0 | | 18.626331 | 38.80318 | 7.597098 | 31.84332 | 0.156399 | 29.19695 | 7.774887 | 27.97728 | | 0 |
| 1 | | 0.000258 | 0.00295 | 0.000456 | -0.00118 | 0.000623 | 0.00396 | 0.000427 | -0.00106 | | 1 |
| 2 | | -0.000471 | -0.00018 | 0.000429 | -0.00119 | -0.000038 | 0.00241 | 0.000407 | -0.00124 | | 2 |
| 3 | | 0.000009 | -0.00335 | 0.000065 | 0.00052 | -0.000263 | -0.00154 | 0.000074 | 0.00025 | | 3 |
| 4 | | 0.000147 | 0.00020 | -0.000122 | 0.00022 | 0.000024 | -0.00068 | -0.000116 | 0.00023 | | 4 |
| 5 | | 0.000008 | 0.00044 | 0.000010 | -0.00007 | 0.000050 | 0.00031 | 0.000008 | -0.00004 | | 5 |
| 6 | | -0.000014 | -0.00011 | 0.000005 | 0.00007 | -0.000009 | 0.00002 | 0.000004 | 0.00007 | | 6 |
| 7 | | -0.000004 | 0.00001 | -0.000008 | 0.00000 | -0.000006 | -0.00004 | -0.000007 | 0.00000 | | 7 |

恒星 Star 2019年

恒星の視赤経 (R. A.), 視赤緯 (Dec.)

1月0日~12月32日

| No.17 α Cor. Bor. | | | No.18 Arcturus | | | No.19 Aldebaran | | | No.20 Markab | | |
|--------------------------|-----------|----------|----------------|----------|-----------|-----------------|-----------|----------|--------------|--|--|
| CN | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | | |
| N | h | ° | h | ° | h | ° | h | ° | N | | |
| 0 | 15.591566 | 26.65111 | 14.275534 | 19.08292 | 4.617165 | 16.54569 | 23.095260 | 15.30924 | 0 | | |
| 1 | 0.000181 | 0.00017 | 0.000175 | -0.00110 | 0.000561 | 0.00177 | 0.000577 | 0.00402 | 1 | | |
| 2 | -0.000290 | -0.00204 | -0.000162 | -0.00199 | 0.000344 | 0.00035 | -0.000139 | 0.00107 | 2 | | |
| 3 | 0.000191 | -0.00241 | 0.000228 | -0.00186 | -0.000126 | -0.00058 | -0.000219 | -0.00181 | 3 | | |
| 4 | 0.000090 | 0.00070 | 0.000052 | 0.00064 | -0.000094 | -0.00021 | 0.000051 | -0.00024 | 4 | | |
| 5 | -0.000014 | 0.00024 | -0.000018 | 0.00015 | 0.000034 | 0.00016 | 0.000044 | 0.00033 | 5 | | |
| 6 | -0.000008 | -0.00010 | -0.000006 | -0.00007 | 0.000001 | 0.00009 | -0.000009 | -0.00003 | 6 | | |
| 7 | -0.000005 | 0.00003 | -0.000005 | 0.00004 | -0.000007 | -0.00004 | -0.000006 | -0.00004 | 7 | | |

| No.21 Denebola | | | No.22 α Ophiuchi | | | No.23 Regulus | | | No.24 Altair | | |
|----------------|-----------|----------|-------------------------|----------|-----------|---------------|-----------|----------|--------------|--|--|
| CN | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | | |
| N | h | ° | h | ° | h | ° | h | ° | N | | |
| 0 | 11.833949 | 14.46420 | 17.596974 | 12.54794 | 10.156581 | 11.87200 | 19.861871 | 8.92091 | 0 | | |
| 1 | 0.000209 | -0.00158 | 0.000310 | 0.00117 | 0.000266 | -0.00129 | 0.000443 | 0.00265 | 1 | | |
| 2 | 0.000081 | -0.00178 | -0.000361 | -0.00058 | 0.000232 | -0.00137 | -0.000349 | 0.00000 | 2 | | |
| 3 | 0.000236 | -0.00125 | 0.000069 | -0.00218 | 0.000188 | -0.00102 | -0.000067 | -0.00198 | 3 | | |
| 4 | -0.000020 | 0.00048 | 0.000114 | 0.00030 | -0.000064 | 0.00031 | 0.000112 | 0.00014 | 4 | | |
| 5 | -0.000017 | 0.00008 | 0.000003 | 0.00025 | -0.000010 | 0.00008 | 0.000022 | 0.00028 | 5 | | |
| 6 | -0.000001 | 0.00000 | -0.000012 | -0.00011 | 0.000001 | 0.00004 | -0.000012 | -0.00010 | 6 | | |
| 7 | -0.000006 | 0.00004 | -0.000005 | 0.00002 | -0.000006 | 0.00002 | -0.000006 | 0.00000 | 7 | | |

| No.25 Betelgeuse | | | No.26 Bellatrix | | | No.27 Procyon | | | No.28 Rigel | | |
|------------------|-----------|----------|-----------------|----------|-----------|---------------|-----------|----------|-------------|--|--|
| CN | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | | |
| N | h | ° | h | ° | h | ° | h | ° | N | | |
| 0 | 5.936960 | 7.40823 | 5.436123 | 6.36468 | 7.671866 | 5.17327 | 5.257781 | -8.18182 | 0 | | |
| 1 | 0.000469 | 0.00132 | 0.000490 | 0.00173 | 0.000367 | 0.00010 | 0.000456 | 0.00255 | 1 | | |
| 2 | 0.000376 | -0.00035 | 0.000364 | -0.00028 | 0.000366 | -0.00065 | 0.000359 | -0.00073 | 2 | | |
| 3 | -0.000046 | -0.00104 | -0.000075 | -0.00112 | 0.000056 | -0.00118 | -0.000086 | -0.00194 | 3 | | |
| 4 | -0.000105 | -0.00003 | -0.000101 | -0.00004 | -0.000103 | 0.00006 | -0.000101 | 0.00010 | 4 | | |
| 5 | 0.000022 | 0.00019 | 0.000026 | 0.00021 | 0.000008 | 0.00016 | 0.000026 | 0.00033 | 5 | | |
| 6 | 0.000003 | 0.00009 | 0.000002 | 0.00008 | 0.000003 | 0.00008 | 0.000003 | 0.00007 | 6 | | |
| 7 | -0.000006 | -0.00002 | -0.000006 | -0.00003 | -0.000006 | 0.00000 | -0.000006 | -0.00003 | 7 | | |

| No.29 α Hydrae | | | No.30 Spica | | | No.31 Sirius | | | No.32 β Ceti | | |
|-----------------------|-----------|----------|-------------|-----------|-----------|--------------|-----------|-----------|--------------------|--|--|
| CN | RA | Dec | RA | Dec | RA | Dec | RA | Dec | CN | | |
| N | h | ° | h | ° | h | ° | h | ° | N | | |
| 0 | 9.475588 | -8.74304 | 13.436748 | -11.26033 | 6.766606 | -16.74492 | 0.742508 | -17.88246 | 0 | | |
| 1 | 0.000252 | -0.00024 | 0.000214 | -0.00147 | 0.000348 | 0.00177 | 0.000615 | 0.00390 | 1 | | |
| 2 | 0.000281 | 0.00011 | -0.000074 | 0.00069 | 0.000394 | -0.00046 | 0.000020 | -0.00204 | 2 | | |
| 3 | 0.000158 | -0.00188 | 0.000234 | -0.00133 | 0.000000 | -0.00244 | -0.000244 | -0.00142 | 3 | | |
| 4 | -0.000077 | -0.00015 | 0.000031 | -0.00020 | -0.000111 | 0.00000 | -0.000002 | 0.00063 | 4 | | |
| 5 | -0.000008 | 0.00021 | -0.000018 | 0.00008 | 0.000013 | 0.00036 | 0.000049 | 0.00030 | 5 | | |
| 6 | 0.000001 | 0.00008 | -0.000007 | 0.00000 | 0.000004 | 0.00009 | -0.000002 | -0.00006 | 6 | | |
| 7 | -0.000005 | 0.00001 | -0.000005 | 0.00004 | -0.000005 | -0.00002 | -0.000007 | -0.00004 | 7 | | |

