DAILY POLYNOMIAL COEFFICIENTS FOR LUNAR COORDINATES

**Notes and formulae**

On the following pages, for each day of the year, the apparent right ascension ($\alpha$) and declination ($\delta$) of the Moon are represented by economised polynomials of the fifth degree, and the horizontal parallax ($\pi$) is represented by an economised polynomial of the fourth degree.

The formulae to be evaluated are of the form:

$$a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$$

where $a_5$ is zero for the parallax.

The time-interval from $0^h$ TT is expressed as a fraction of a day to form the interpolation factor $p$, where $0 \leq p < 1$, and the polynomial is evaluated directly, or by re-expressing it in the nested form:

$$((((a_5 p + a_4)p + a_3)p + a_2)p + a_1)p + a_0$$

to avoid the separate formation of the powers of $p$. Alternatively this nested form for $\alpha$ and $\delta$ may be written as:

$$b_{n+1} = b_n p + a_{5-n}, \text{ for } n = 1 \text{ to } 5,$$

where $b_1 = a_5$ and $b_6$ is the required value. For the parallax $a_5$ is zero, so that:

$$b_{n+1} = b_n p + a_{4-n}, \text{ for } n = 1 \text{ to } 4,$$

where $b_1 = a_4$ and $b_5$ is the required value.

The polynomial coefficients are expressed in decimals of a degree, even for $\alpha$, and the signs are given on the right-hand sides of the coefficients to facilitate their use with small calculators. Subtract $360^\circ$ from $\alpha$ if it exceeds $360^\circ$. In order to obtain the full precision of the polynomial ephemeris the interpolating factor $p$ must be evaluated to 8 decimal places ($10^{-3}$ s); estimates of the precision of unrounded interpolated values are:

| RA | Dec | HP |
|---|---|---|
| $\pm 0^s.0003$ | $\pm 0''.003$ | $\pm 0''.0003$ |

Particular care must be taken to ensure that the coefficients are entered with the correct signs.

*Example*. To calculate the apparent right ascens ion ($\alpha$) the declination ($\delta$) and the horizontal parallax ($\pi$) for the Moon on 2012 January $21^d\ 13^h\ 23^m\ 48^s.32$ UT1, using an assumed value of $\Delta T = 67^s$.

TT = $13^h\ 24^m\ 55^s.32$, hence $p = 0{\cdot}558\ 973\ 61$

| | right ascension | declination | horizontal parallax |
|---|---|---|---|
| | ° | ° | ° |
| $b_1$ | +0·000 4415 | +0·000 5125 | +0·000 011 08 |
| $b_2$ | +0·005 3605 | −0·005 2771 | +0·000 017 92 |
| $b_3$ | −0·051 5407 | −0·029 6870 | −0·001 022 45 |
| $b_4$ | −0·240 5065 | +0·658 1163 | −0·006 383 67 |
| $b_5$ | +14·900 9577 | +1·646 7790 | $\pi$ = +0·975 936 18 |
| $b_6$ | $\alpha$ = 279·150 2434 | $\delta$ = −20·982 2134 | |
| | = $18^h\ 36^m\ 36^s.058$ | = $-20^\circ\ 58'\ 55''.97$ | = $58'\ 33''.370$ |

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | January 0 | | | January 8 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 353·4028 765+ | 2·7547 066+ | 0·9150 6885+ | 91·6468 703+ | 21·8615 632+ | 0·9327 7257+ |
| $a_1$ | 11·2276 448+ | 4·6151 550+ | 0·0081 8699− | 13·6465 300+ | 1·2462 241− | 0·0092 4705+ |
| $a_2$ | 625 624− | 966 800− | 13 2944+ | 236 132+ | 5733 731− | 1 8346+ |
| $a_3$ | 358 988+ | 234 181− | 5773+ | 343 918− | 32 438+ | 1 0277− |
| $a_4$ | 6 209− | 7 819+ | 891− | 10 297+ | 36 887+ | 312+ |
| $a_5$ | 755− | 1 346− | | 4 707+ | 464− | |
| | January 1 | | | January 9 | | |
| $a_0$ | 4·6031 612+ | 7·2504 109+ | 0·9082 6014+ | 105·2841 221+ | 20·0488 521+ | 0·9421 0344+ |
| $a_1$ | 11·2073 547+ | 4·3539 958+ | 0·0053 9054− | 13·5970 501+ | 2·3687 176− | 0·0093 1816+ |
| $a_2$ | 406 539+ | 1635 908− | 14 4956+ | 686 735− | 5419 785− | 1 0535− |
| $a_3$ | 326 430+ | 216 125− | 2214+ | 257 187− | 174 634+ | 9005− |
| $a_4$ | 9 878− | 983+ | 772− | 34 150+ | 34 230+ | 561+ |
| $a_5$ | 1 061− | 935− | | 1 981+ | 1 698− | |
| | January 2 | | | January 10 | | |
| $a_0$ | 15·8827 191+ | 11·4192 080+ | 0·9043 3357+ | 118·7903 931+ | 17·1588 726+ | 0·9512 3182+ |
| $a_1$ | 11·3821 094+ | 3·9619 028+ | 0·0024 5590− | 13·3971 945+ | 3·3874 416− | 0·0088 5979+ |
| $a_2$ | 1315 939+ | 2287 761− | 14 6994+ | 1233 663− | 4707 532− | 3 4143− |
| $a_3$ | 276 005+ | 221 175− | 869− | 102 300− | 294 412+ | 6714− |
| $a_4$ | 15 222− | 3 816− | 674− | 43 605+ | 25 362+ | 697+ |
| $a_5$ | 1 603− | 299− | | 676− | 1 968− | |
| | January 3 | | | January 11 | | |
| $a_0$ | 27·4223 404+ | 15·1298 057+ | 0·9033 3218+ | 132·0582 842+ | 13·3324 585+ | 0·9596 9001+ |
| $a_1$ | 11·7212 083+ | 3·4363 232+ | 0·0004 3096+ | 13·1368 740+ | 4·2314 629− | 0·0080 0342+ |
| $a_2$ | 2036 544+ | 2977 193− | 14 0371+ | 1285 798− | 3691 827− | 5 0113− |
| $a_3$ | 198 926+ | 238 910− | 3561− | 64 526+ | 376 458+ | 3866− |
| $a_4$ | 23 521− | 5 430− | 592− | 39 602+ | 15 330+ | 662+ |
| $a_5$ | 1 914− | 595+ | | 2 084− | 1 468− | |
| | January 4 | | | January 12 | | |
| $a_0$ | 39·3645 523+ | 18·2440 351+ | 0·9051 2533+ | 145·0767 828+ | 8·7708 448+ | 0·9671 6026+ |
| $a_1$ | 12·1778 305+ | 2·7673 382+ | 0·0031 0787+ | 12·9138 706+ | 4·8514 920− | 0·0069 1171+ |
| $a_2$ | 2472 964+ | 3720 558− | 12 6162+ | 875 500− | 2485 149− | 5 7801− |
| $a_3$ | 86 083+ | 254 080− | 5936− | 201 853+ | 423 534+ | 1167− |
| $a_4$ | 33 680− | 2 473− | 507− | 28 867+ | 8 000+ | 452+ |
| $a_5$ | 1 298− | 1 640+ | | 2 486− | 692− | |
| | January 5 | | | January 13 | | |
| $a_0$ | 51·7947 897+ | 20·6138 263+ | 0·9094 3037+ | 157·9259 268+ | 3·7139 220+ | 0·9734 8681+ |
| $a_1$ | 12·6841 298+ | 1·9468 344+ | 0·0054 3271+ | 12·8096 301+ | 5·2186 070− | 0·0057 3876+ |
| $a_2$ | 2516 054+ | 4481 204− | 10 5346+ | 121 602− | 1173 438− | 5 8691− |
| $a_3$ | 60 421− | 247 124− | 7981− | 292 333+ | 448 962+ | 662+ |
| $a_4$ | 40 819− | 5 942+ | 388− | 16 463+ | 4 708+ | 127+ |
| $a_5$ | 749+ | 2 430+ | | 2 693− | 83− | |
| | January 6 | | | January 14 | | |
| $a_0$ | 64·7204 757+ | 22·0886 651+ | 0·9158 3285+ | 170·7540 069+ | 1·5766 701− | 0·9786 4655+ |
| $a_1$ | 13·1532 640+ | 0·9800 480+ | 0·0072 8467+ | 12·8782 472+ | 5·3167 642− | 0·0045 8987+ |
| $a_2$ | 2097 339+ | 5162 563− | 7 9131+ | 827 253+ | 200 915+ | 5 6047− |
| $a_3$ | 214 571− | 199 099− | 9555− | 330 879+ | 467 010+ | 1154+ |
| $a_4$ | 37 155− | 18 537+ | 209− | 3 159+ | 4 595+ | 208− |
| $a_5$ | 3 643+ | 2 370+ | | 3 331− | 8+ | |
| | January 7 | | | January 15 | | |
| $a_0$ | 78·0586 653+ | 22·5346 376+ | 0·9238 1120+ | 183·7480 500+ | 6·8261 815− | 0·9826 8540+ |
| $a_1$ | 13·4953 219+ | 0·1035 957− | 0·0085 7227+ | 13·1425 581+ | 5·1346 372− | 0·0034 9518+ |
| $a_2$ | 1267 230+ | 5624 879− | 4 9287+ | 1805 517+ | 1629 655+ | 5 3908− |
| $a_3$ | 325 748− | 101 907− | 1 0410− | 309 614+ | 485 044+ | 272+ |
| $a_4$ | 18 131− | 30 782+ | 34+ | 13 513− | 5 038+ | 443− |
| $a_5$ | 5 479+ | 1 217+ | | 4 395− | 714− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | January 16 | | | January 24 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 197·1003 303+ | 11·7489 164− | 0·9856 3980+ | 313·0450 830+ | 13·0399 531− | 0·9539 7846+ |
| $a_1$ | 13·5889 421+ | 4·6615 368− | 0·0024 0744+ | 12·9622 712+ | 4·2146 227+ | 0·0105 2547− |
| $a_2$ | 2609 210+ | 3107 924+ | 5 5762− | 3671 269− | 2728 449+ | 3 6496− |
| $a_3$ | 211 420+ | 497 124+ | 1568− | 164 785+ | 483 857− | 1 2611+ |
| $a_4$ | 36 192− | 1 802+ | 490− | 37 379+ | 13 298+ | 257+ |
| $a_5$ | 4 821− | 2 331− | | 3 977− | 1 234+ | |
| | January 17 | | | January 25 | | |
| $a_0$ | 210·9672 341+ | 16·0500 013− | 0·9874 6903+ | 325·6600 460+ | 8·5994 180− | 0·9432 1671+ |
| $a_1$ | 14·1573 255+ | 3·8912 618− | 0·0012 2550+ | 12·2904 176+ | 4·6210 898+ | 0·0108 6678− |
| $a_2$ | 2977 857+ | 4586 774+ | 6 3354− | 2992 438− | 1368 952+ | 2755+ |
| $a_3$ | 19 839+ | 479 971+ | 3601− | 275 331+ | 419 150− | 1 3614+ |
| $a_4$ | 61 930− | 10 004− | 315− | 17 390+ | 19 141+ | 152− |
| $a_5$ | 2 495− | 4 204− | | 2 548− | 174− | |
| | January 18 | | | January 26 | | |
| $a_0$ | 225·4178 866+ | 19·4360 093− | 0·9880 2183+ | 337·6802 371+ | 3·8814 515− | 0·9325 1210+ |
| $a_1$ | 14·7328 359+ | 2·8360 192− | 0·0001 6224− | 11·7802 127+ | 4·7767 033+ | 0·0104 0935− |
| $a_2$ | 2640 639+ | 5924 491+ | 7 5933− | 2087 569− | 224 560+ | 4 2594+ |
| $a_3$ | 249 334− | 397 710+ | 4911− | 320 069+ | 344 756− | 1 2965+ |
| $a_4$ | 75 754− | 32 001− | 55+ | 4 814+ | 18 002+ | 450− |
| $a_5$ | 3 665+ | 4 650− | | 1 413− | 897− | |
| | January 19 | | | January 27 | | |
| $a_0$ | 240·3826 441+ | 21·6434 736− | 0·9870 5170+ | 349·2840 399+ | 0·8849 428+ | 0·9226 5385+ |
| $a_1$ | 15·1577 016+ | 1·5469 309− | 0·0018 2604− | 11·4599 393+ | 4·7249 406+ | 0·0091 8652− |
| $a_2$ | 1474 928+ | 6878 935+ | 9 0194− | 1112 591− | 710 697− | 7 8738+ |
| $a_3$ | 512 156− | 224 622+ | 4698− | 325 515+ | 281 857− | 1 1128+ |
| $a_4$ | 56 235− | 56 475− | 517+ | 2 073− | 13 333+ | 619− |
| $a_5$ | 10 082+ | 2 175− | | 870− | 1 127− | |
| | January 20 | | | January 28 | | |
| $a_0$ | 255·6320 077+ | 22·4859 138− | 0·9842 8192+ | 0·6649 773+ | 5·5118 486+ | 0·9143 5981+ |
| $a_1$ | 15·2815 877+ | 0·1274 300− | 0·0037 5016− | 11·3338 111+ | 4·5030 141+ | 0·0073 0269− |
| $a_2$ | 297 687− | 7192 181+ | 10 1063− | 157 181− | 1487 559− | 10 8384+ |
| $a_3$ | 636 064− | 20 601− | 2583− | 308 539+ | 239 740− | 8627+ |
| $a_4$ | 2 654− | 67 483− | 918+ | 6 306− | 7 569+ | 691− |
| $a_5$ | 10 463+ | 2 146+ | | 844− | 1 035− | |
| | January 21 | | | January 29 | | |
| $a_0$ | 270·8210 013+ | 21·9027 194− | 0·9795 0448+ | 12·0132 092+ | 9·8427 863+ | 0·9082 2033+ |
| $a_1$ | 15·0353 945+ | 1·2789 094+ | 0·0058 1215− | 11·3919 920+ | 4·1360 910+ | 0·0049 0381− |
| $a_2$ | 2116 966− | 6747 105+ | 10 3247− | 722 155+ | 2171 732− | 13 0116+ |
| $a_3$ | 545 371− | 267 372− | 1173+ | 274 708+ | 219 616− | 5856+ |
| $a_4$ | 51 137+ | 55 636− | 1108+ | 10 501− | 2 280+ | 711− |
| $a_5$ | 4 415+ | 5 125+ | | 1 139− | 698− | |
| | January 22 | | | January 30 | | |
| $a_0$ | 285·5957 173+ | 19·9808 877− | 0·9726 8268+ | 23·5037 235+ | 13·7399 007+ | 0·9046 6913+ |
| $a_1$ | 14·4710 451+ | 2·5284 272+ | 0·0077 9751− | 11·6140 650+ | 3·6364 235+ | 0·0021 5424− |
| $a_2$ | 3402 292− | 5662 586+ | 9 3105− | 1471 854+ | 2823 898− | 14 3415+ |
| $a_3$ | 300 260− | 438 619− | 5696+ | 221 131+ | 217 141− | 3014+ |
| $a_4$ | 71 990+ | 28 898− | 1019+ | 16 320− | 1 324− | 722− |
| $a_5$ | 1 930− | 5 134+ | | 1 469− | 126− | |
| | January 23 | | | January 31 | | |
| $a_0$ | 299·7035 132+ | 16·9324 401− | 0·9640 2126+ | 35·2853 080+ | 17·0720 752+ | 0·9039 7196+ |
| $a_1$ | 13·7283 366+ | 3·5203 648+ | 0·0094 4795− | 11·9675 125+ | 3·0059 098+ | 0·0007 7560+ |
| $a_2$ | 3890 693− | 4224 733+ | 7 0005− | 2022 574+ | 3484 541− | 14 8117+ |
| $a_3$ | 33 112− | 503 908− | 9829+ | 141 217+ | 223 246− | 132+ |
| $a_4$ | 60 619+ | 2 876− | 693+ | 24 003− | 2 038− | 748− |
| $a_5$ | 4 482− | 3 272+ | | 1 387− | 657+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | February 1 | | | February 9 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 47·4666 604+ | 19·7070 683+ | 0·9062 2256+ | 153·8863 230+ | 5·4594 887+ | 0·9831 8915+ |
| $a_1$ | 12·4040 984+ | 2·2415 422+ | 0·0037 1198+ | 13·1875 922+ | 5·2256 816− | 0·0073 9022+ |
| $a_2$ | 2288 248+ | 4159 933− | 14 4015+ | 209 157− | 1787 780− | 12 8053− |
| $a_3$ | 31 913+ | 224 347− | 2856− | 209 816+ | 500 055+ | 6534− |
| $a_4$ | 31 446− | 1 272+ | 787− | 19 817+ | 12 489+ | 1490+ |
| $a_5$ | 392− | 1 498+ | | 2 744− | 1 466− | |
| | February 2 | | | February 10 | | |
| $a_0$ | 60·0995 911+ | 21·5104 596+ | 0·9113 3826+ | 167·0756 884+ | 0·1061 370+ | 0·9892 4840+ |
| $a_1$ | 12·8585 499+ | 1·3435 102+ | 0·0064 7509+ | 13·2152 596+ | 5·4289 582− | 0·0046 9279+ |
| $a_2$ | 2191 330+ | 4810 330− | 13 0713+ | 511 735+ | 227 322− | 13 8779− |
| $a_3$ | 96 653− | 203 971− | 6016− | 261 337+ | 535 413+ | 457− |
| $a_4$ | 33 777− | 8 963+ | 816− | 6 064+ | 5 251+ | 1288+ |
| $a_5$ | 1 593+ | 2 044+ | | 3 258− | 1 353− | |
| | February 3 | | | February 11 | | |
| $a_0$ | 73·1643 903+ | 22·3536 403+ | 0·9190 5216+ | 180·3685 359+ | 5·2916 222− | 0·9925 6171+ |
| $a_1$ | 13·2551 080+ | 0·3248 596+ | 0·0088 7622+ | 13·3968 040+ | 5·3123 747− | 0·0019 5507+ |
| $a_2$ | 1714 656+ | 5347 983− | 10 7780+ | 1299 528+ | 1396 929+ | 13 2573− |
| $a_3$ | 214 656− | 147 763− | 9310− | 252 714+ | 542 788+ | 4763+ |
| $a_4$ | 25 617− | 19 506+ | 783− | 10 344− | 1 323− | 789+ |
| $a_5$ | 3 691+ | 1 911+ | | 3 818− | 1 519− | |
| | February 4 | | | February 12 | | |
| $a_0$ | 86·5673 058+ | 22·1310 670+ | 0·9289 0526+ | 193·9191 479+ | 10·4103 095− | 0·9932 4656+ |
| $a_1$ | 13·5252 421+ | 0·7803 091− | 0·0107 2119+ | 13·7264 775+ | 4·8714 423− | 0·0005 2195− |
| $a_2$ | 953 992+ | 5655 092− | 7 5205+ | 1957 332+ | 3002 188+ | 11 3734− |
| $a_3$ | 279 815− | 51 124− | 1 2492− | 173 247+ | 521 961+ | 7916+ |
| $a_4$ | 6 425− | 29 305+ | 622− | 30 009− | 8 739− | 193+ |
| $a_5$ | 4 442+ | 1 046+ | | 3 729− | 2 114− | |
| | February 5 | | | February 13 | | |
| $a_0$ | 100·1597 673+ | 20·7831 715+ | 0·9402 4737+ | 207·8553 095+ | 14·9304 222− | 0·9916 6834+ |
| $a_1$ | 13·6317 459+ | 1·9144 208− | 0·0118 2562+ | 14·1560 525+ | 4·1189 698− | 0·0025 5148− |
| $a_2$ | 120 503+ | 5622 167− | 3 4104+ | 2259 557+ | 4494 489+ | 8 8983− |
| $a_3$ | 261 806− | 75 890+ | 1 5042− | 17 134+ | 465 480+ | 8628+ |
| $a_4$ | 16 432+ | 34 548+ | 281− | 49 773− | 19 388− | 299− |
| $a_5$ | 3 211+ | 127− | | 1 684− | 2 822− | |
| | February 6 | | | February 14 | | |
| $a_0$ | 113·7793 473+ | 18·3175 651+ | 0·9522 6081+ | 222·2338 854+ | 18·5556 160− | 0·9883 1031+ |
| $a_1$ | 13·5854 807+ | 3·0023 329− | 0·0120 4517+ | 14·5923 582+ | 3·0895 937− | 0·0040 8433− |
| $a_2$ | 534 212− | 5188 507− | 1 2549− | 1995 355+ | 5746 312+ | 6 4980− |
| $a_3$ | 165 291− | 212 268+ | 1 6213− | 196 240− | 359 787+ | 7349+ |
| $a_4$ | 32 547+ | 33 748+ | 235+ | 59 031− | 34 022− | 566− |
| $a_5$ | 912+ | 1 066− | | 2 797+ | 2 736− | |
| | February 7 | | | February 15 | | |
| $a_0$ | 127·2982 235+ | 14·8208 765+ | 0·9640 2071+ | 237·0005 317+ | 21·0382 756− | 0·9836 4400+ |
| $a_1$ | 13·4425 234+ | 3·9633 880− | 0·0113 1721+ | 14·9103 480+ | 1·8473 701− | 0·0051 8617− |
| $a_2$ | 825 753− | 4359 892− | 5 9595− | 1080 515+ | 6594 090+ | 4 6340− |
| $a_3$ | 27 158− | 336 337+ | 1 5270− | 401 872− | 197 289+ | 5008+ |
| $a_4$ | 36 715+ | 28 246+ | 828+ | 44 284− | 48 343− | 587− |
| $a_5$ | 1 073− | 1 530− | | 7 326+ | 1 085− | |
| | February 8 | | | February 16 | | |
| $a_0$ | 140·6590 200+ | 10·4578 045+ | 0·9745 9755+ | 251·9750 483+ | 22·2114 507− | 0·9780 3865+ |
| $a_1$ | 13·2833 735+ | 4·7239 321− | 0·0097 0034+ | 14·9918 399+ | 0·4892 421− | 0·0059 8620− |
| $a_2$ | 697 741− | 3196 716− | 10 0292− | 317 254− | 6885 040+ | 3 4779− |
| $a_3$ | 108 281+ | 433 983+ | 1 1891− | 505 400− | 5 451− | 2612+ |
| $a_4$ | 30 943+ | 20 496+ | 1309+ | 5 594− | 53 836− | 410− |
| $a_5$ | 2 188− | 1 599− | | 7 948+ | 1 539+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | February 17 | | | February 25 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 266·8848 582 + | 22·0179 637 − | 0·9717 2669 + | 8·2030 623 + | 8·2204 260 + | 0·9105 5928 + |
| $a_1$ | 14·7785 008 + | 0·8653 674 + | 0·0066 1982 − | 11·4330 849 + | 4·2705 293 + | 0·0056 6954 − |
| $a_2$ | 1787 387 − | 6561 143 + | 2 9314 − | 410 050 + | 1940 992 − | 8 2022 + |
| $a_3$ | 450 444 − | 204 332 − | 954 + | 240 558 + | 246 538 − | 8133 + |
| $a_4$ | 35 312 + | 45 530 − | 123 − | 8 989 − | 6 170 + | 254 − |
| $a_5$ | 4 078 + | 3 428 + | | 842 − | 477 − | |
| | February 18 | | | February 26 | | |
| $a_0$ | 281·4435 151 + | 20·5211 254 − | 0·9648 2204 + | 19·7002 248 + | 12·2727 717 + | 0·9057 8875 + |
| $a_1$ | 14·3020 491 + | 2·0997 986 + | 0·0071 8241 − | 11·5832 454 + | 3·8105 997 + | 0·0037 9526 − |
| $a_2$ | 2886 153 − | 5709 339 + | 2 7100 − | 1069 344 + | 2648 366 − | 10 4856 + |
| $a_3$ | 271 071 − | 352 046 − | 472 + | 196 123 + | 226 468 − | 7109 + |
| $a_4$ | 55 121 + | 27 727 − | 175 + | 13 300 − | 3 696 + | 392 − |
| $a_5$ | 641 − | 3 616 + | | 976 − | 217 − | |
| | February 19 | | | February 27 | | |
| $a_0$ | 295·4352 898 + | 17·8880 086 − | 0·9573 7511 + | 31·4085 894 + | 15·7962 359 + | 0·9031 0922 + |
| $a_1$ | 13·6652 224 + | 3·1267 687 + | 0·0077 0321 − | 11·8501 432 + | 3·2143 564 + | 0·0015 0054 − |
| $a_2$ | 3375 231 − | 4523 034 + | 2 4563 − | 1568 113 + | 3307 778 − | 12 3795 + |
| $a_3$ | 58 459 − | 427 358 − | 1208 + | 133 243 + | 213 612 − | 5539 + |
| $a_4$ | 50 743 + | 9 384 − | 400 + | 18 392 − | 2 543 + | 512 − |
| $a_5$ | 3 100 − | 2 616 + | | 877 − | 199 + | |
| | February 20 | | | February 28 | | |
| $a_0$ | 308·7619 075 + | 14·3523 492 − | 0·9494 4235 + | 43·4269 412 + | 18·6587 275 + | 0·9028 9690 + |
| $a_1$ | 12·9913 859 + | 3·9007 209 + | 0·0081 4219 − | 12·1959 438 + | 2·4898 345 + | 0·0011 2105 + |
| $a_2$ | 3277 270 − | 3210 800 + | 1 8507 − | 1848 661 + | 3931 369 − | 13 7302 + |
| $a_3$ | 113 364 + | 439 453 − | 2854 + | 51 270 + | 201 166 − | 3496 + |
| $a_4$ | 34 479 + | 3 621 + | 498 + | 23 088 − | 3 525 + | 635 − |
| $a_5$ | 3 223 − | 1 384 + | | 261 − | 691 + | |
| | February 21 | | | February 29 | | |
| $a_0$ | 321·4400 283 + | 10·1739 931 − | 0·9411 4861 + | 55·8105 433 + | 20·7357 302 + | 0·9054 1958 + |
| $a_1$ | 12·3821 220 + | 4·4131 842 + | 0·0084 0675 − | 12·5716 929 + | 1·6449 667 + | 0·0039 4658 + |
| $a_2$ | 2762 583 − | 1927 975 + | 6967 − | 1861 289 + | 4506 804 − | 14 3935 + |
| $a_3$ | 219 529 + | 411 685 − | 4888 + | 42 996 − | 179 931 − | 965 + |
| $a_4$ | 18 111 + | 10 354 + | 459 + | 24 653 − | 7 044 + | 779 − |
| $a_5$ | 2 338 − | 435 + | | 942 + | 1 096 + | |
| | February 22 | | | March 1 | | |
| $a_0$ | 333·5694 221 + | 5·6081 009 − | 0·9327 2566 + | 68·5616 945 + | 21·9128 375 + | 0·9108 0736 + |
| $a_1$ | 11·9015 401 + | 4·6796 321 + | 0·0083 8109 − | 12·9216 635 + | 0·6929 926 + | 0·0068 2306 + |
| $a_2$ | 2018 718 − | 759 368 + | 1 0405 + | 1593 798 + | 4993 352 − | 14 2103 + |
| $a_3$ | 269 130 + | 366 252 − | 6749 + | 131 399 − | 140 713 − | 2148 − |
| $a_4$ | 6 450 + | 12 367 + | 314 + | 19 933 − | 12 654 + | 946 − |
| $a_5$ | 1 450 − | 154 − | | 2 323 + | 1 239 + | |
| | February 23 | | | March 2 | | |
| $a_0$ | 345·2965 034 + | 0·8879 359 − | 0·9245 1924 + | 81·6278 368 + | 22·0938 129 + | 0·9190 2052 + |
| $a_1$ | 11·5803 910 + | 4·7264 994 + | 0·0079 5796 − | 13·1941 923 + | 0·3422 106 − | 0·0095 6286 + |
| $a_2$ | 1187 116 − | 266 749 − | 3 2474 + | 1103 269 + | 5327 158 − | 12 9937 + |
| $a_3$ | 280 775 + | 318 497 − | 8012 + | 187 466 − | 77 806 − | 5942 − |
| $a_4$ | 678 − | 11 481 + | 117 + | 7 979 − | 18 966 + | 1105 − |
| $a_5$ | 921 − | 464 − | | 3 091 + | 1 064 + | |
| | February 24 | | | March 3 | | |
| $a_0$ | 356·7861 003 + | 3·7811 407 + | 0·9169 6731 + | 94·9131 206 + | 21·2131 091 + | 0·9298 1229 + |
| $a_1$ | 11·4264 685 + | 4·5819 611 + | 0·0070 6344 − | 13·3569 595 + | 1·4228 656 − | 0·0119 3915 + |
| $a_2$ | 358 068 − | 1158 005 − | 5 7150 + | 523 953 + | 5436 126 − | 10 5462 + |
| $a_3$ | 268 954 + | 277 264 − | 8473 + | 188 694 − | 8 497 + | 1 0403 − |
| $a_4$ | 5 192 − | 9 071 + | 82 − | 7 897 + | 24 329 + | 1183 − |
| $a_5$ | 758 − | 561 − | | 2 695 + | 704 + | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | March 4 | | | March 12 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 108·3046 651+ | 19·2499 840+ | 0·9426 9019+ | 218·2070 029+ | 17·4104 876− | 1·0035 9736+ |
| $a_1$ | 13·4096 465+ | 2·4974 583− | 0·0136 8893+ | 14·9163 494+ | 3·4770 416− | 0·0058 1968− |
| $a_2$ | 32 217+ | 5257 617− | 6 7195+ | 1847 763+ | 5789 072+ | 15 1919− |
| $a_3$ | 130 924− | 112 644+ | 1 5219− | 247 208− | 422 484+ | 1 6447+ |
| $a_4$ | 21 562+ | 27 840+ | 1064− | 59 884− | 45 838− | 262+ |
| $a_5$ | 1 357+ | 338+ | | 3 743+ | 2 649− | |
| | March 5 | | | March 13 | | |
| $a_0$ | 121·7067 329+ | 16·2408 462+ | 0·9568 8824+ | 233·2777 937+ | 20·2712 222− | 0·9964 2557+ |
| $a_1$ | 13·3861 144+ | 3·5038 837− | 0·0145 3364+ | 15·1896 625+ | 2·2121 383− | 0·0083 5423− |
| $a_2$ | 217 640− | 4749 253− | 1 5294+ | 784 430+ | 6754 949+ | 10 1255− |
| $a_3$ | 32 025− | 227 186+ | 1 9592− | 446 845− | 214 196+ | 1 7384+ |
| $a_4$ | 28 237+ | 29 562+ | 622− | 39 987− | 59 507− | 541− |
| $a_5$ | 201− | 11− | | 8 163+ | 73+ | |
| | March 6 | | | March 14 | | |
| $a_0$ | 135·0706 844+ | 12·2877 109+ | 0·9713 7268+ | 248·4980 323+ | 21·7923 895− | 0·9872 2721+ |
| $a_1$ | 13·3441 720+ | 4·3737 602− | 0·0142 2679+ | 15·2005 813+ | 0·8206 528− | 0·0098 7952− |
| $a_2$ | 146 343− | 3890 418− | 4 6967− | 714 085− | 7041 276+ | 5 2481− |
| $a_3$ | 78 140+ | 345 044+ | 2 2191− | 525 328− | 21 481− | 1 5094+ |
| $a_4$ | 27 015+ | 29 615+ | 186+ | 3 072+ | 58 790− | 964− |
| $a_5$ | 1 472− | 495− | | 7 850+ | 2 938+ | |
| | March 7 | | | March 15 | | |
| $a_0$ | 148·4105 903+ | 7·5623 253+ | 0·9849 0976+ | 263·5757 645+ | 21·9166 478− | 0·9769 6418+ |
| $a_1$ | 13·3484 142+ | 5·0367 328− | 0·0126 2917+ | 14·9053 143+ | 0·5591 130+ | 0·0105 1491− |
| $a_2$ | 235 413+ | 2682 518− | 11 2102− | 2193 022− | 6653 606+ | 1 3003− |
| $a_3$ | 170 873+ | 458 134+ | 2 1471− | 437 132− | 226 530− | 1 1143+ |
| $a_4$ | 19 506+ | 27 282+ | 1222+ | 43 217+ | 43 227− | 1033− |
| $a_5$ | 2 455− | 1 240− | | 3 194+ | 4 189+ | |
| | March 8 | | | March 16 | | |
| $a_0$ | 161·8013 383+ | 2·3057 583+ | 0·9962 1543+ | 278·2227 044+ | 20·7187 311− | 0·9664 2034+ |
| $a_1$ | 13·4533 327+ | 5·4255 047− | 0·0097 9193+ | 14·3544 489+ | 1·8066 781+ | 0·0104 8203− |
| $a_2$ | 840 499+ | 1156 811− | 16 8907− | 3213 312− | 5756 630+ | 1 4279+ |
| $a_3$ | 223 798+ | 554 315+ | 1 6474− | 234 998− | 357 911− | 6955+ |
| $a_4$ | 7 162+ | 21 161+ | 2132+ | 58 297+ | 21 675− | 864− |
| $a_5$ | 3 379− | 2 193− | | 1 497− | 3 510+ | |
| | March 9 | | | March 17 | | |
| $a_0$ | 175·3614 791+ | 3·1780 992− | 1·0041 7487+ | 292·2380 023+ | 18·3739 976− | 0·9561 4201+ |
| $a_1$ | 13·6897 469+ | 5·4832 059− | 0·0060 0496+ | 13·6638 550+ | 2·8437 143+ | 0·0100 2236− |
| $a_2$ | 1521 037+ | 611 166+ | 20 5423− | 3583 687− | 4587 957+ | 3 0050+ |
| $a_3$ | 218 210+ | 616 472+ | 7727− | 17 985− | 410 369− | 3479+ |
| $a_4$ | 9 957− | 10 175+ | 2510+ | 49 570+ | 4 061− | 577− |
| $a_5$ | 4 156− | 3 160− | | 3 497− | 1 994+ | |
| | March 10 | | | March 18 | | |
| $a_0$ | 189·2237 393+ | 8·5378 398− | 1·0080 7342+ | 305·5462 973+ | 15·1127 312− | 0·9464 4916+ |
| $a_1$ | 14·0533 571+ | 5·1735 421− | 0·0017 6519+ | 12·9598 017+ | 3·6375 663+ | 0·0093 4009− |
| $a_2$ | 2074 245+ | 2490 012+ | 21 3650− | 3375 299− | 3352 391+ | 3 7120+ |
| $a_3$ | 136 966+ | 625 165+ | 2535+ | 145 405+ | 407 426− | 1174+ |
| $a_4$ | 31 492− | 5 766− | 2169+ | 31 427+ | 5 682+ | 265− |
| $a_5$ | 3 938− | 3 884− | | 3 260− | 699+ | |
| | March 11 | | | March 19 | | |
| $a_0$ | 203·4946 745+ | 13·4008 291− | 1·0077 4915+ | 318·1859 263+ | 11·1800 303− | 0·9374 8937+ |
| $a_1$ | 14·4947 332+ | 4·4922 384− | 0·0023 4492− | 12·3393 056+ | 4·1884 384+ | 0·0085 7304− |
| $a_2$ | 2256 616+ | 4292 024+ | 19 3300− | 2783 149− | 2171 159+ | 3 9139+ |
| $a_3$ | 26 869− | 563 264+ | 1 1327+ | 239 062+ | 378 141− | 134+ |
| $a_4$ | 52 454− | 25 560− | 1286+ | 14 995+ | 8 932+ | 9+ |
| $a_5$ | 1 341− | 3 930− | | 2 240− | 24− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | March 20 | | | March 28 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 330·2720 988+ | 6·8113 993− | 0·9293 0915+ | 64·6625 327+ | 21·4084 686+ | 0·9040 5054+ |
| $a_1$ | 11·8592 740+ | 4·5127 882+ | 0·0077 8587− | 12·7033 988+ | 0·9696 483+ | 0·0040 4979+ |
| $a_2$ | 1998 385− | 1090 055+ | 3 9658+ | 1291 814+ | 4761 593− | 12 6678+ |
| $a_3$ | 277 138+ | 342 826− | 199+ | 127 149− | 123 719− | 3404+ |
| $a_4$ | 3 870+ | 8 642+ | 208+ | 14 727− | 13 502+ | 542− |
| $a_5$ | 1 353− | 290− | | 2 251+ | 542+ | |
| | March 21 | | | March 29 | | |
| $a_0$ | 341·9594 999+ | 2·2230 529− | 0·9219 2394+ | 77·4811 504+ | 21·8909 902+ | 0·9093 9572+ |
| $a_1$ | 11·5436 108+ | 4·6312 634+ | 0·0069 7838− | 12·9188 522+ | 0·0141 141− | 0·0066 6377+ |
| $a_2$ | 1157 271− | 110 515+ | 4 1539+ | 844 553+ | 5046 312− | 13 3561+ |
| $a_3$ | 279 360+ | 311 175− | 1064+ | 163 320− | 64 415− | 1247+ |
| $a_4$ | 2 788− | 7 104+ | 314+ | 3 179− | 16 222+ | 781− |
| $a_5$ | 864− | 303− | | 2 635+ | 315+ | |
| | March 22 | | | March 30 | | |
| $a_0$ | 353·4149 545+ | 2·3888 245+ | 0·9153 7473+ | 90·4680 715+ | 21·3674 572+ | 0·9173 9974+ |
| $a_1$ | 11·3944 178+ | 4·5627 039+ | 0·0061 0310− | 13·0388 120+ | 1·0360 548− | 0·0093 4114+ |
| $a_2$ | 344 559− | 783 431− | 4 6621+ | 361 895+ | 5139 084− | 13 2531+ |
| $a_3$ | 259 645+ | 285 741− | 2349+ | 149 975− | 3 546+ | 1870− |
| $a_4$ | 7 062− | 5 531+ | 328+ | 10 268+ | 17 724+ | 1052− |
| $a_5$ | 717− | 201− | | 2 128+ | 177+ | |
| | March 23 | | | March 31 | | |
| $a_0$ | 4·8001 030+ | 6·8451 442+ | 0·9097 6461+ | 103·5293 151+ | 19·8196 387+ | 0·9280 3697+ |
| $a_1$ | 11·4002 162+ | 4·3224 071+ | 0·0050 8707− | 13·0713 683+ | 2·0556 296− | 0·0118 9358+ |
| $a_2$ | 384 820+ | 1609 494− | 5 5618+ | 5 144− | 5020 347− | 12 0529+ |
| $a_3$ | 224 211+ | 265 539− | 3682+ | 88 246− | 76 270+ | 6090− |
| $a_4$ | 10 684− | 4 476+ | 265+ | 20 967+ | 18 511+ | 1317− |
| $a_5$ | 761− | 42− | | 1 031+ | 284+ | |
| | March 24 | | | April 1 | | |
| $a_0$ | 16·2600 778+ | 10·9804 913+ | 0·9052 7319+ | 116·5935 442+ | 17·2714 809+ | 0·9410 6178+ |
| $a_1$ | 11·5397 895+ | 3·9226 159+ | 0·0038 5363− | 13·0527 668+ | 3·0292 714− | 0·0140 6876+ |
| $a_2$ | 985 717+ | 2379 689− | 6 8220+ | 133 794− | 4677 635− | 9 4308+ |
| $a_3$ | 173 873+ | 247 937− | 4756+ | 5 276+ | 153 321+ | 1 1414− |
| $a_4$ | 14 598− | 4 229+ | 150+ | 25 990+ | 19 905+ | 1480− |
| $a_5$ | 780− | 164+ | | 129− | 595+ | |
| | March 25 | | | April 2 | | |
| $a_0$ | 27·9142 884+ | 14·6407 840+ | 0·9021 5082+ | 129·6360 454+ | 13·7918 281+ | 0·9559 4468+ |
| $a_1$ | 11·7828 656+ | 3·3740 710+ | 0·0023 4054− | 13·0379 212+ | 3·9105 424− | 0·0155 5323+ |
| $a_2$ | 1411 903+ | 3096 489− | 8 3342+ | 36 652+ | 4092 273− | 5 1220+ |
| $a_3$ | 107 828+ | 229 244− | 5362+ | 107 396+ | 239 018+ | 1 7453− |
| $a_4$ | 18 712− | 5 032+ | 4+ | 25 197+ | 23 000+ | 1376− |
| $a_5$ | 530− | 401+ | | 1 086− | 844+ | |
| | March 26 | | | April 3 | | |
| $a_0$ | 39·8472 027+ | 17·6828 250+ | 0·9006 9735+ | 142·6907 825+ | 9·4983 446+ | 0·9718 2182+ |
| $a_1$ | 12·0898 451+ | 2·6882 134+ | 0·0005 1270− | 13·0870 049+ | 4·6476 698− | 0·0159 9889+ |
| $a_2$ | 1617 761+ | 3750 021− | 9 9398+ | 499 146+ | 3228 732− | 9219− |
| $a_3$ | 28 078+ | 204 997− | 5381+ | 196 802+ | 339 318+ | 2 3130− |
| $a_4$ | 21 622− | 7 055+ | 160− | 19 743+ | 27 514+ | 813− |
| $a_5$ | 161+ | 599+ | | 1 979− | 630+ | |
| | March 27 | | | April 4 | | |
| $a_0$ | 52·0994 857+ | 19·9763 020+ | 0·9012 3085+ | 155·8491 586+ | 4·5645 478+ | 0·9874 8910+ |
| $a_1$ | 12·4132 540+ | 1·8798 318+ | 0·0016 3032+ | 13·2527 810+ | 5·1803 013− | 0·0150 8800+ |
| $a_2$ | 1573 847+ | 4316 682− | 11 4527+ | 1188 224+ | 2039 328− | 8 3146− |
| $a_3$ | 56 178− | 170 749− | 4749+ | 255 314+ | 455 057+ | 2 6545− |
| $a_4$ | 20 973− | 10 114+ | 339− | 9 939+ | 31 081+ | 289+ |
| $a_5$ | 1 234+ | 664+ | | 3 146− | 412− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | April 5 | | | April 13 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 169·2469 727+ | 0·7711 137− | 1·0014 8310+ | 288·8237 066+ | 18·8201 654− | 0·9679 0179+ |
| $a_1$ | 13·5694 208+ | 5·4394 259− | 0·0126 4030+ | 14·0663 221+ | 2·6457 084+ | 0·0139 3725− |
| $a_2$ | 1982 324+ | 491 737− | 16 0603− | 4265 183− | 4888 277+ | 2 5447+ |
| $a_3$ | 262 783+ | 574 100+ | 2 5423− | 41 631− | 466 749− | 1 3972+ |
| $a_4$ | 5 823− | 29 396+ | 1724+ | 65 727+ | 595− | 1374− |
| $a_5$ | 4 640− | 2 393− | | 5 046− | 2 784+ | |
| | April 6 | | | April 14 | | |
| $a_0$ | 183·0398 579+ | 6·1996 032− | 1·0122 8039+ | 302·4654 155+ | 15·7320 853− | 0·9543 4500+ |
| $a_1$ | 14·0400 702+ | 5·3549 845− | 0·0087 3461+ | 13·2245 645+ | 3·4844 907+ | 0·0130 6413− |
| $a_2$ | 2689 223+ | 1383 014+ | 22 6154− | 4046 327− | 3512 238+ | 5 9193+ |
| $a_3$ | 192 660+ | 666 312+ | 1 8350− | 171 081+ | 442 558− | 8427+ |
| $a_4$ | 29 710− | 17 479+ | 2946+ | 39 530+ | 12 899+ | 1131− |
| $a_5$ | 5 540− | 4 882− | | 4 482− | 580+ | |
| | April 7 | | | April 15 | | |
| $a_0$ | 197·3645 915+ | 11·3483 952− | 1·0185 9942+ | 315·3059 601+ | 11·9392 788− | 0·9419 4576+ |
| $a_1$ | 14·6210 613+ | 4·8739 389− | 0·0037 7903+ | 12·4801 960+ | 4·0596 190+ | 0·0116 7269− |
| $a_2$ | 3033 278+ | 3437 923+ | 26 3410− | 3340 753− | 2267 692+ | 7 7791+ |
| $a_3$ | 19 652+ | 686 417+ | 6234− | 285 304+ | 385 830− | 3892+ |
| $a_4$ | 59 169− | 7 555− | 3345+ | 17 013+ | 15 369+ | 800− |
| $a_5$ | 3 568− | 6 659− | | 2 855− | 561− | |
| | April 8 | | | April 16 | | |
| $a_0$ | 212·2846 721+ | 15·8113 217− | 1·0197 1546+ | 327·4820 271+ | 7·6899 928− | 0·9310 8190+ |
| $a_1$ | 15·2081 681+ | 3·9867 799− | 0·0015 4223− | 11·9030 161+ | 4·4032 748+ | 0·0100 3213− |
| $a_2$ | 2701 277+ | 5385 058+ | 26 2238− | 2411 289− | 1196 759+ | 8 4767+ |
| $a_3$ | 248 989− | 590 082+ | 7452+ | 325 570+ | 330 164− | 699+ |
| $a_4$ | 78 762− | 42 212− | 2702+ | 2 931+ | 12 294+ | 469− |
| $a_5$ | 2 922+ | 5 896− | | 1 556− | 887− | |
| | April 9 | | | April 17 | | |
| $a_0$ | 227·7304 849+ | 19·2053 984− | 1·0156 5239+ | 339·1766 088+ | 3·1989 179− | 0·9218 9974+ |
| $a_1$ | 15·6436 910+ | 2·7525 716− | 0·0064 5524− | 11·5188 247+ | 4·5480 516+ | 0·0083 3458− |
| $a_2$ | 1511 091+ | 6842 905+ | 22 4071− | 1432 530− | 271 137+ | 8 4138+ |
| $a_3$ | 530 618− | 364 656+ | 1 8382+ | 322 129+ | 289 798− | 1161− |
| $a_4$ | 63 152− | 72 888− | 1375+ | 4 655− | 7 722+ | 180− |
| $a_5$ | 10 490+ | 1 715− | | 893− | 774− | |
| | April 10 | | | April 18 | | |
| $a_0$ | 243·4669 571+ | 21·2446 743− | 1·0071 5400+ | 350·5838 387+ | 1·3479 624+ | 0·9143 9314+ |
| $a_1$ | 15·7667 092+ | 1·3046 008− | 0·0103 3025− | 11·3266 496+ | 4·5180 417+ | 0·0066 9383− |
| $a_2$ | 354 268− | 7482 441+ | 16 1099− | 502 989− | 559 680− | 7 9648+ |
| $a_3$ | 677 657− | 58 976+ | 2 3804+ | 294 673+ | 266 479− | 1859− |
| $a_4$ | 7 068− | 81 117− | 3− | 9 009− | 3 783+ | 50+ |
| $a_5$ | 11 692+ | 3 671+ | | 729− | 463− | |
| | April 11 | | | April 19 | | |
| $a_0$ | 259·1309 362+ | 21·8028 781− | 0·9954 5076+ | 1·8886 828+ | 5·7837 201+ | 0·9084 7769+ |
| $a_1$ | 15·4955 699+ | 0·1789 718+ | 0·0128 3834− | 11·3104 857+ | 4·3274 438+ | 0·0051 5464− |
| $a_2$ | 2312 462− | 7209 607+ | 9 0006− | 319 679+ | 1341 066− | 7 4422+ |
| $a_3$ | 592 571− | 227 210− | 2 3616+ | 251 276+ | 255 765− | 1635− |
| $a_4$ | 53 326+ | 61 139− | 963− | 12 652− | 1 424+ | 212+ |
| $a_5$ | 5 201+ | 6 416+ | | 824− | 67− | |
| | April 12 | | | April 20 | | |
| $a_0$ | 274·3418 555+ | 20·9311 390− | 0·9819 3889+ | 13·2549 164+ | 9·9516 165+ | 0·9040 5304+ |
| $a_1$ | 14·8792 292+ | 1·5314 812+ | 0·0139 6859− | 11·4443 315+ | 3·9830 379+ | 0·0037 0675− |
| $a_2$ | 3718 398− | 6225 471+ | 2 5069− | 989 325+ | 2100 492− | 7 0818+ |
| $a_3$ | 331 358− | 408 123− | 1 9600+ | 192 359+ | 250 504− | 762− |
| $a_4$ | 78 042+ | 27 851− | 1380− | 16 900− | 1 067+ | 302+ |
| $a_5$ | 2 066− | 5 426+ | | 902− | 361+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | April 21 | | | April 29 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 24·8156 361+ | 13·6996 976+ | 0·9010 4986+ | 125·3681 259+ | 14·8476 751+ | 0·9387 2981+ |
| $a_1$ | 11·6926 937+ | 3·4883 960+ | 0·0023 0119− | 12·6867 830+ | 3·5322 597− | 0·0130 4459+ |
| $a_2$ | 1455 934+ | 2841 996− | 7 0346+ | 331 827− | 3964 934− | 9 8931+ |
| $a_3$ | 115 864+ | 242 415− | 467+ | 115 386+ | 200 184+ | 6623− |
| $a_4$ | 21 670− | 2 885+ | 318+ | 28 074+ | 13 366+ | 1401− |
| $a_5$ | 649− | 754+ | | 987− | 652+ | |
| | April 22 | | | April 30 | | |
| $a_0$ | 36·6632 776+ | 16·8800 165+ | 0·8994 5999+ | 138·0359 736+ | 10·9403 422+ | 0·9526 8347+ |
| $a_1$ | 12·0096 482+ | 2·8488 035+ | 0·0008 6750− | 12·6657 691+ | 4·2595 182− | 0·0147 6844+ |
| $a_2$ | 1666 961+ | 3544 384− | 7 3642+ | 172 891+ | 3277 640− | 7 0608+ |
| $a_3$ | 23 154+ | 223 211− | 1761+ | 217 481+ | 260 494+ | 1 2298− |
| $a_4$ | 25 233− | 6 731+ | 267+ | 23 074+ | 16 770+ | 1568− |
| $a_5$ | 176+ | 991+ | | 1 538− | 1 224+ | |
| | April 23 | | | May 1 | | |
| $a_0$ | 48·8394 315+ | 19·3528 327+ | 0·8993 4921+ | 150·7429 335+ | 6·3809 089+ | 0·9680 1934+ |
| $a_1$ | 12·3399 829+ | 2·0761 511+ | 0·0006 6889+ | 12·7740 512+ | 4·8295 778− | 0·0157 4887+ |
| $a_2$ | 1586 751+ | 4163 705− | 8 0496+ | 948 412+ | 2383 244− | 2 4362+ |
| $a_3$ | 75 279− | 186 422− | 2848+ | 293 904+ | 339 825+ | 1 8712− |
| $a_4$ | 24 535− | 11 818+ | 157+ | 15 538+ | 23 227+ | 1401− |
| $a_5$ | 1 485+ | 927+ | | 2 365− | 1 268+ | |
| | April 24 | | | May 2 | | |
| $a_0$ | 61·3282 567+ | 20·9952 455+ | 0·9008 5310+ | 163·6425 336+ | 1·3494 387+ | 0·9838 1070+ |
| $a_1$ | 12·6256 796+ | 1·1926 736+ | 0·0023 7052+ | 13·0569 357+ | 5·1943 555− | 0·0156 1862+ |
| $a_2$ | 1228 569+ | 4642 779− | 8 9929+ | 1899 733+ | 1211 642− | 3 9957− |
| $a_3$ | 157 885− | 130 121− | 3490+ | 331 496+ | 444 819+ | 2 4512− |
| $a_4$ | 16 970− | 16 570+ | 4− | 3 997+ | 30 122+ | 694− |
| $a_5$ | 2 706+ | 515+ | | 3 934− | 274+ | |
| | April 25 | | | May 3 | | |
| $a_0$ | 74·0595 783+ | 21·7123 377+ | 0·9041 5776+ | 176·9225 984+ | 3·9185 597− | 0·9987 7771+ |
| $a_1$ | 12·8185 935+ | 0·2319 665+ | 0·0042 7364+ | 13·5359 602+ | 5·2910 557− | 0·0140 5630+ |
| $a_2$ | 680 204+ | 4928 569− | 10 0309+ | 2878 840+ | 306 381+ | 11 7252− |
| $a_3$ | 198 500− | 59 024− | 3487+ | 306 920+ | 566 609+ | 2 7452− |
| $a_4$ | 3 050− | 19 150+ | 211− | 15 702− | 32 142+ | 604+ |
| $a_5$ | 3 081+ | 70− | | 6 075− | 2 199− | |
| | April 26 | | | May 4 | | |
| $a_0$ | 86·9263 453+ | 21·4474 529+ | 0·9094 6724+ | 190·7749 569+ | 9·1193 221− | 1·0113 9302+ |
| $a_1$ | 12·8954 041+ | 0·7638 299− | 0·0063 7597+ | 14·1944 853+ | 5·0480 439− | 0·0109 1187+ |
| $a_2$ | 97 255+ | 4991 459− | 10 9422+ | 3644 437+ | 2177 107+ | 19 5497− |
| $a_3$ | 180 303− | 16 638+ | 2656+ | 182 945+ | 671 102+ | 2 5034− |
| $a_4$ | 12 685+ | 18 668+ | 464− | 47 353− | 21 411+ | 2186+ |
| $a_5$ | 2 354+ | 489− | | 6 927− | 5 865− | |
| | April 27 | | | May 5 | | |
| $a_0$ | 99·8149 485+ | 20·1879 587+ | 0·9169 5936+ | 205·3467 525+ | 13·8809 906− | 1·0201 2145+ |
| $a_1$ | 12·8670 134+ | 1·7499 078− | 0·0086 2556+ | 14·9558 572+ | 4·4056 633− | 0·0063 3849+ |
| $a_2$ | 344 016− | 4834 457− | 11 4514+ | 3839 464+ | 4260 084+ | 25 7114− |
| $a_3$ | 106 789− | 86 422+ | 814+ | 73 225− | 696 544+ | 1 6045− |
| $a_4$ | 24 471+ | 16 032+ | 763− | 84 874− | 8 905− | 3389+ |
| $a_5$ | 1 017+ | 478− | | 2 704− | 8 706− | |
| | April 28 | | | May 6 | | |
| $a_0$ | 112·6394 302+ | 17·9648 027+ | 0·9267 3056+ | 220·6704 759+ | 17·7927 522− | 1·0237 6223+ |
| $a_1$ | 12·7764 691+ | 2·6846 985− | 0·0109 0974+ | 15·6664 928+ | 3·3525 965− | 0·0008 5059+ |
| $a_2$ | 507 427− | 4483 799− | 11 2276+ | 3083 256+ | 6208 887+ | 28 4864− |
| $a_3$ | 564+ | 146 026+ | 2232− | 433 916− | 574 778+ | 2105− |
| $a_4$ | 29 334+ | 13 507+ | 1092− | 100 119− | 54 792− | 3570+ |
| $a_5$ | 205− | 26− | | 7 713+ | 7 226− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | May 7 | | | May 15 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 236·5926 622 + | 20·4731 841 − | 1·0217 7884 + | 347·8097 726 + | 0·3422 271 + | 0·9194 6072 + |
| $a_1$ | 16·1167 874 + | 1·9639 079 − | 0·0047 6685 − | 11·3927 370 + | 4·5376 750 + | 0·0093 2652 − |
| $a_2$ | 1258 405 + | 7531 989 + | 27 0043 − | 1015 437 − | 495 426 − | 11 5443 + |
| $a_3$ | 752 729 − | 287 181 + | 1 2483 + | 345 954 + | 254 539 − | 42 + |
| $a_4$ | 58 133 − | 92 478 − | 2627 + | 8 998 − | 7 314 + | 550 − |
| $a_5$ | 16 061 + | 420 − | | 760 − | 1 038 − | |
| | May 8 | | | May 16 | | |
| $a_0$ | 252·7558 102 + | 21·6644 648 − | 1·0144 6265 + | 359·1345 854 + | 4·8055 333 + | 0·9112 8356 + |
| $a_1$ | 16·1274 238 + | 0·4085 491 − | 0·0096 8810 − | 11·2894 565 + | 4·3646 353 + | 0·0070 3838 − |
| $a_2$ | 1187 237 − | 7834 657 + | 21 7305 − | 39 163 − | 1225 552 − | 11 2352 + |
| $a_3$ | 826 588 − | 82 946 − | 2 3064 + | 302 319 + | 235 383 − | 2143 − |
| $a_4$ | 27 327 + | 93 219 − | 1081 + | 12 732 − | 2 051 + | 285 − |
| $a_5$ | 12 501 + | 6 698 + | | 836 − | 552 − | |
| | May 9 | | | May 17 | | |
| $a_0$ | 268·6858 343 + | 21·3064 948 − | 1·0028 4295 + | 10·4490 008 + | 9·0242 251 + | 0·9053 4442 + |
| $a_1$ | 15·6591 693 + | 1·0995 624 + | 0·0132 9908 − | 11·3668 089 + | 4·0494 553 + | 0·0048 6702 − |
| $a_2$ | 3377 984 − | 7093 856 + | 14 2068 − | 783 028 + | 1924 922 − | 10 4281 + |
| $a_3$ | 598 376 − | 387 739 − | 2 7259 + | 242 908 + | 232 358 − | 3269 − |
| $a_4$ | 90 181 + | 57 189 − | 355 − | 16 975 − | 758 − | 67 − |
| $a_5$ | 1 491 + | 8 519 + | | 1 057 − | 36 + | |
| | May 10 | | | May 18 | | |
| $a_0$ | 283·9565 348 + | 19·5411 877 − | 0·9883 9223 + | 21·9166 000 + | 12·8578 802 + | 0·9014 8686 + |
| $a_1$ | 14·8408 695 + | 2·3833 925 + | 0·0153 3695 − | 11·5889 683 + | 3·5944 790 + | 0·0028 8211 − |
| $a_2$ | 4617 551 − | 5672 850 + | 6 2697 − | 1399 284 + | 2626 193 − | 9 4130 + |
| $a_3$ | 226 957 − | 532 879 − | 2 5641 + | 164 446 + | 234 673 − | 3521 − |
| $a_4$ | 94 665 + | 13 502 − | 1248 − | 22 506 − | 598 − | 106 + |
| $a_5$ | 5 777 − | 5 631 + | | 1 032 − | 672 + | |
| | May 11 | | | May 19 | | |
| $a_0$ | 298·3218 423 + | 16·6445 851 − | 0·9726 7223 + | 33·6595 876 + | 16·1662 800 + | 0·8995 1190 + |
| $a_1$ | 13·8842 489 + | 3·3555 097 + | 0·0158 7169 − | 11·9086 415 + | 2·9989 358 + | 0·0011 0088 − |
| $a_2$ | 4788 513 − | 4049 466 + | 6634 + | 1747 200 + | 3327 076 − | 8 4244 + |
| $a_3$ | 93 354 + | 532 677 − | 2 0483 + | 64 483 + | 230 043 − | 3079 − |
| $a_4$ | 63 678 + | 14 311 + | 1560 − | 28 057 − | 2 824 + | 231 + |
| $a_5$ | 6 581 − | 1 938 + | | 373 − | 1 212 + | |
| | May 12 | | | May 20 | | |
| $a_0$ | 311·7422 851 + | 12·9357 717 − | 0·9570 5611 + | 45·7465 545 + | 18·8099 073 + | 0·8992 2497 + |
| $a_1$ | 12·9767 356 + | 4·0122 903 + | 0·0151 8698 − | 12·2660 187 + | 2·2662 433 + | 0·0005 0085 + |
| $a_2$ | 4192 271 − | 2556 575 + | 5 8746 + | 1768 518 + | 3988 119 − | 7 6412 + |
| $a_3$ | 283 417 + | 457 416 − | 1 4149 + | 50 656 − | 206 519 − | 2137 − |
| $a_4$ | 30 302 + | 23 312 + | 1471 − | 30 254 − | 9 064 + | 300 + |
| $a_5$ | 4 471 − | 388 − | | 1 063 + | 1 415 + | |
| | May 13 | | | May 21 | | |
| $a_0$ | 324·3307 183 + | 8·7112 731 − | 0·9425 8337 + | 58·1814 403 + | 20·6577 346 + | 0·9004 7157 + |
| $a_1$ | 12·2331 940 + | 4·3955 102 + | 0·0136 4646 − | 12·5929 575 + | 1·4109 962 + | 0·0019 7697 + |
| $a_2$ | 3204 897 − | 1320 243 + | 9 2451 + | 1445 652 + | 4539 115 − | 7 1800 + |
| $a_3$ | 361 115 + | 368 593 − | 8229 + | 160 070 − | 156 318 − | 917 − |
| $a_4$ | 8 185 + | 20 888 + | 1190 − | 24 929 − | 16 366 + | 304 + |
| $a_5$ | 2 372 − | 1 288 − | | 2 771 + | 1 071 + | |
| | May 14 | | | May 22 | | |
| $a_0$ | 336·2801 155 + | 4·2186 380 − | 0·9299 3181 + | 70·9007 403 + | 21·6009 311 + | 0·9031 6041 + |
| $a_1$ | 11·7026 387 + | 4·5566 917 + | 0·0115 9818 − | 12·8254 821 + | 0·4633 585 + | 0·0033 9764 + |
| $a_2$ | 2096 124 − | 326 867 + | 11 0100 + | 843 639 + | 4899 150 − | 7 0853 + |
| $a_3$ | 370 834 + | 297 979 − | 3468 + | 231 526 − | 80 612 − | 323 + |
| $a_4$ | 3 359 − | 14 199 + | 859 − | 10 625 − | 21 843 + | 237 + |
| $a_5$ | 1 168 − | 1 353 − | | 3 710 + | 253 + | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | May 23 | | | May 31 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 83·7867 422+ | 21·5685 230+ | 0·9072 7218+ | 185·4124 269+ | 7·1976 090− | 0·9918 9809+ |
| $a_1$ | 12·9223 564+ | 0·5317 924− | 0·0048 3389+ | 13·4794 543+ | 5·0100 018− | 0·0131 1473+ |
| $a_2$ | 122 479+ | 5007 409− | 7 3202+ | 3365 364+ | 1272 729+ | 7 1959− |
| $a_3$ | 237 196− | 8 801+ | 1296+ | 315 157+ | 547 732+ | 2 2599− |
| $a_4$ | 8 462+ | 23 020+ | 99+ | 24 033− | 28 073+ | 286− |
| $a_5$ | 3 200+ | 610− | | 6 859− | 2 226− | |
| | May 24 | | | June 1 | | |
| $a_0$ | 96·6987 931+ | 20·5391 108+ | 0·9128 5202+ | 199·2568 440+ | 12·0229 800− | 1·0040 6438+ |
| $a_1$ | 12·8806 763+ | 1·5217 315− | 0·0063 4075+ | 14·2340 315+ | 4·5810 245− | 0·0109 8607+ |
| $a_2$ | 506 323− | 4849 021− | 7 7615+ | 4097 769+ | 3062 151+ | 14 1083− |
| $a_3$ | 172 225− | 94 538+ | 1711+ | 150 481+ | 635 527+ | 2 3854− |
| $a_4$ | 24 628+ | 19 731+ | 110− | 60 154− | 17 251+ | 980+ |
| $a_5$ | 1 624+ | 1 032− | | 7 018− | 6 150− | |
| | May 25 | | | June 2 | | |
| $a_0$ | 109·5142 398+ | 18·5438 008+ | 0·9199 8494+ | 213·9089 833+ | 16·2331 265− | 1·0134 1089+ |
| $a_1$ | 12·7384 056+ | 2·4557 976− | 0·0079 4001+ | 15·0711 662+ | 3·7741 135− | 0·0074 8804+ |
| $a_2$ | 859 031− | 4457 368− | 8 2006+ | 4117 618+ | 5010 567+ | 20 6346− |
| $a_3$ | 58 385− | 163 255+ | 1290+ | 156 589− | 641 457+ | 1 9871− |
| $a_4$ | 32 511+ | 14 348+ | 380− | 98 591− | 14 716− | 2341+ |
| $a_5$ | 8+ | 833− | | 721− | 9 047− | |
| | May 26 | | | June 3 | | |
| $a_0$ | 122·1641 556+ | 15·6599 434+ | 0·9287 5412+ | 229·3663 211+ | 19·4444 140− | 1·0186 6018+ |
| $a_1$ | 12·5620 911+ | 3·2929 715− | 0·0096 0365+ | 15·8079 292+ | 2·5899 704− | 0·0028 5877+ |
| $a_2$ | 839 100− | 3889 860− | 8 3498+ | 3048 981+ | 6755 782+ | 25 1653− |
| $a_3$ | 71 168+ | 212 683+ | 219− | 551 447− | 493 451+ | 1 0246− |
| $a_4$ | 32 197+ | 10 077+ | 697− | 102 958− | 62 675− | 3192+ |
| $a_5$ | 976− | 186− | | 11 311+ | 6 817− | |
| | May 27 | | | June 4 | | |
| $a_0$ | 134·6525 756+ | 12·0002 434+ | 0·9391 8359+ | 245·4148 392+ | 21·3164 103− | 1·0189 3188+ |
| $a_1$ | 12·4280 118+ | 4·0031 997− | 0·0112 3916+ | 16·2167 709+ | 1·1192 485− | 0·0023 5382− |
| $a_2$ | 442 214− | 3193 200− | 7 8556+ | 890 717+ | 7791 722+ | 26 3276− |
| $a_3$ | 189 943+ | 251 581+ | 3013− | 846 704− | 178 944+ | 2856+ |
| $a_4$ | 27 109+ | 9 175+ | 1027− | 41 338− | 98 114− | 3077+ |
| $a_5$ | 1 389− | 598+ | | 17 720+ | 994+ | |
| | May 28 | | | June 5 | | |
| $a_0$ | 147·0579 324+ | 7·7038 591+ | 0·9511 6792+ | 261·6336 497+ | 21·6483 042− | 1·0140 0461+ |
| $a_1$ | 12·4067 009+ | 4·5623 956− | 0·0126 7881+ | 16·1332 200+ | 0·4540 383+ | 0·0074 1048− |
| $a_2$ | 276 382+ | 2377 399− | 6 3274+ | 1719 560− | 7750 086+ | 23 6558− |
| $a_3$ | 284 272+ | 294 609+ | 7157− | 838 772− | 199 646− | 1 5387+ |
| $a_4$ | 20 206+ | 12 324+ | 1296− | 51 971+ | 91 199− | 2057+ |
| $a_5$ | 1 744− | 1 208+ | | 10 487+ | 7 993+ | |
| | May 29 | | | June 6 | | |
| $a_0$ | 159·5225 449+ | 2·9345 378+ | 0·9643 9494+ | 277·5172 822+ | 20·4475 424− | 1·0044 0298+ |
| $a_1$ | 12·5544 679+ | 4·9439 588− | 0·0136 7767+ | 15·5636 950+ | 1·9116 798+ | 0·0115 9773− |
| $a_2$ | 1233 020+ | 1407 492− | 3 4002+ | 3819 352− | 6684 262+ | 17 8483− |
| $a_3$ | 347 114+ | 356 020+ | 1 2431− | 532 623− | 483 975− | 2 3633+ |
| $a_4$ | 11 753+ | 18 699+ | 1375− | 103 245+ | 48 609− | 657+ |
| $a_5$ | 2 656− | 1 288+ | | 1 387− | 8 784+ | |
| | May 30 | | | June 7 | | |
| $a_0$ | 172·2359 359+ | 2·1125 693− | 0·9782 7457+ | 292·6559 654+ | 17·9198 164− | 0·9912 6332+ |
| $a_1$ | 12·9085 774+ | 5·1105 284− | 0·0139 2968+ | 14·6806 353+ | 3·0882 840+ | 0·0144 3218− |
| $a_2$ | 2318 363+ | 214 267− | 1 1451− | 4812 115− | 5028 638+ | 10 4010− |
| $a_3$ | 366 498+ | 443 115+ | 1 8079− | 136 864− | 592 558− | 2 6129+ |
| $a_4$ | 1 199− | 25 714+ | 1087− | 92 994+ | 3 877− | 540− |
| $a_5$ | 4 526− | 326+ | | 7 062− | 5 182+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | June 8 | | | June 16 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 306·8502 959+ | 14·3877 939− | 0·9760 4693+ | 42·5326 149+ | 18·1794 318+ | 0·9006 1198+ |
| $a_1$ | 13·7108 197+ | 3·9172 800+ | 0·0157 5021− | 12·1640 571+ | 2·4742 003+ | 0·0001 2255− |
| $a_2$ | 4735 627− | 3279 442+ | 2 9084− | 1830 042+ | 3800 045− | 10 4163+ |
| $a_3$ | 164 695+ | 558 429− | 2 3795+ | 16 832+ | 209 651− | 4982− |
| $a_4$ | 55 989+ | 21 504+ | 1238− | 31 564− | 4 088+ | 39− |
| $a_5$ | 6 488− | 1 378+ | | 120+ | 1 465+ | |
| | June 9 | | | June 17 | | |
| $a_0$ | 320·1089 726+ | 10·1961 244− | 0·9602 3144+ | 54·8782 151+ | 20·2532 178+ | 0·9014 8085+ |
| $a_1$ | 12·8322 574+ | 4·4149 279+ | 0·0156 6763− | 12·5225 517+ | 1·6536 639+ | 0·0018 0969+ |
| $a_2$ | 3970 521− | 1746 853+ | 3 4804+ | 1692 314+ | 4389 784− | 8 9026+ |
| $a_3$ | 325 176+ | 459 915− | 1 8711+ | 107 171− | 178 586− | 5132− |
| $a_4$ | 23 397+ | 27 673+ | 1451− | 31 204− | 11 660+ | 103+ |
| $a_5$ | 3 974− | 806− | | 1 932+ | 1 576+ | |
| | June 10 | | | June 18 | | |
| $a_0$ | 332·5786 379+ | 5·6498 160− | 0·9450 8445+ | 67·5563 539+ | 21·4513 684+ | 0·9041 3051+ |
| $a_1$ | 12·1430 801+ | 4·6369 892+ | 0·0144 6829− | 12·8173 492+ | 0·7275 828+ | 0·0034 4038+ |
| $a_2$ | 2894 313− | 525 011+ | 8 2263+ | 1202 921+ | 4839 781− | 7 4283+ |
| $a_3$ | 380 165+ | 357 742− | 1 2839+ | 211 727− | 116 501− | 4709− |
| $a_4$ | 3 872+ | 23 173+ | 1348− | 21 282− | 19 806+ | 218+ |
| $a_5$ | 1 992− | 1 558− | | 3 582+ | 1 019+ | |
| | June 11 | | | June 19 | | |
| $a_0$ | 344·4704 911+ | 0·9939 384− | 0·9315 5370+ | 80·4710 525+ | 21·6854 054+ | 0·9082 6881+ |
| $a_1$ | 11·6788 206+ | 4·6431 591+ | 0·0124 9180− | 12·9876 939+ | 0·2668 933− | 0·0047 9351+ |
| $a_2$ | 1750 474− | 424 794− | 11 2765+ | 475 951+ | 5060 249− | 6 1486+ |
| $a_3$ | 376 299+ | 280 617− | 7423+ | 260 840− | 27 666− | 3819− |
| $a_4$ | 5 773− | 15 149+ | 1105− | 2 738− | 24 988+ | 287+ |
| $a_5$ | 1 023− | 1 520− | | 3 925+ | 4+ | |
| | June 12 | | | June 20 | | |
| $a_0$ | 356·0112 146+ | 3·5800 425+ | 0·9202 5273+ | 93·4803 762+ | 20·9122 198+ | 0·9136 4186+ |
| $a_1$ | 11·4387 952+ | 4·4793 151+ | 0·0100 5802− | 13·0054 981+ | 1·2772 467− | 0·0059 2015+ |
| $a_2$ | 666 425− | 1190 973− | 12 8487+ | 283 690− | 4993 301− | 5 1751+ |
| $a_3$ | 343 109+ | 234 995− | 3005+ | 233 236− | 71 806+ | 2646− |
| $a_4$ | 10 710− | 7 433+ | 835− | 17 335+ | 24 852+ | 288+ |
| $a_5$ | 816− | 1 126− | | 2 696+ | 907− | |
| | June 13 | | | June 21 | | |
| $a_0$ | 7·4165 255+ | 7·9173 915+ | 0·9115 0128+ | 106·4361 848+ | 19·1452 181+ | 0·9200 5595+ |
| $a_1$ | 11·4037 506+ | 4·1730 327+ | 0·0074 3151− | 12·8870 692+ | 2·2448 784− | 0·0068 8733+ |
| $a_2$ | 290 477+ | 1862 636− | 13 2569+ | 852 443− | 4637 882− | 4 5515+ |
| $a_3$ | 292 011+ | 216 191− | 324− | 138 009− | 161 942+ | 1465− |
| $a_4$ | 14 764− | 1 723+ | 590− | 30 759+ | 20 048+ | 205+ |
| $a_5$ | 1 007− | 555− | | 794+ | 1 245− | |
| | June 14 | | | June 22 | | |
| $a_0$ | 18·8769 479+ | 11·8826 583+ | 0·9053 8632+ | 119·2273 642+ | 16·4546 261+ | 0·9273 8581+ |
| $a_1$ | 11·5430 402+ | 3·7360 607+ | 0·0048 1346− | 12·6878 770+ | 3·1164 751− | 0·0077 6186+ |
| $a_2$ | 1067 829+ | 2506 432− | 12 8122+ | 1074 035− | 4044 244− | 4 2293+ |
| $a_3$ | 222 789+ | 214 442− | 2673− | 7 886− | 229 848+ | 619− |
| $a_4$ | 19 945− | 1 113− | 381− | 34 366+ | 13 621+ | 32+ |
| $a_5$ | 1 208− | 138+ | | 679− | 954− | |
| | June 15 | | | June 23 | | |
| $a_0$ | 30·5469 346+ | 15·3465 341+ | 0·9018 2354+ | 131·8104 179+ | 12·9579 781+ | 0·9355 6473+ |
| $a_1$ | 11·8148 609+ | 3·1700 663+ | 0·0023 4644− | 12·4841 105+ | 3·8513 970− | 0·0085 9044+ |
| $a_2$ | 1604 386+ | 3155 058− | 11 7876+ | 898 348− | 3282 513− | 4 0552+ |
| $a_3$ | 131 093+ | 217 081− | 4188− | 122 359+ | 275 177+ | 469− |
| $a_4$ | 26 324− | 427− | 200− | 30 621+ | 8 792+ | 217− |
| $a_5$ | 961− | 880+ | | 1 365− | 295− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | June 24 | | | July 2 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 144·2198 549+ | 8·8066 972+ | 0·9445 5383+ | 254·8439 428+ | 21·6850 127− | 1·0084 1021+ |
| $a_1$ | 12·3527 138+ | 4·4219 763− | 0·0093 7873+ | 15·9613 532+ | 0·2245 615− | 0·0010 2785− |
| $a_2$ | 361 229− | 2407 165− | 3 7753+ | 183 558+ | 7622 377+ | 20 9635− |
| $a_3$ | 231 019+ | 307 805+ | 1329− | 797 340− | 35 573+ | 3701− |
| $a_4$ | 23 664+ | 7 382+ | 510− | 11 477− | 89 004− | 2428+ |
| $a_5$ | 1 606− | 410+ | | 14 614+ | 2 491+ | |
| | June 25 | | | July 3 | | |
| $a_0$ | 156·5617 535+ | 4·1755 641+ | 0·9542 9170+ | 270·7442 316+ | 21·1524 304− | 1·0052 7328+ |
| $a_1$ | 12·3584 357+ | 4·8079 096− | 0·0100 7354+ | 15·7615 695+ | 1·2762 351+ | 0·0052 3434− |
| $a_2$ | 457 757+ | 1435 330− | 3 0622+ | 2130 826− | 7220 245+ | 20 6249− |
| $a_3$ | 309 366+ | 341 698+ | 3383− | 701 688− | 292 744− | 6232+ |
| $a_4$ | 15 742+ | 9 610+ | 791− | 64 163+ | 74 677− | 2170+ |
| $a_5$ | 1 996− | 878+ | | 6 200+ | 7 422+ | |
| | June 26 | | | July 4 | | |
| $a_0$ | 168·9982 762+ | 0·7406 599− | 0·9646 2972+ | 286·2295 861+ | 19·1901 707− | 0·9980 6046+ |
| $a_1$ | 12·5480 946+ | 4·9881 835− | 0·0105 5284+ | 15·1536 531+ | 2·6063 010+ | 0·0090 8552− |
| $a_2$ | 1460 379+ | 343 748− | 1 5675+ | 3789 180− | 5968 445+ | 17 4786− |
| $a_3$ | 351 755+ | 388 852+ | 6594− | 388 196− | 517 233− | 1 5038+ |
| $a_4$ | 6 035+ | 14 329+ | 974− | 93 313+ | 35 666− | 1352+ |
| $a_5$ | 3 053− | 790+ | | 2 974− | 7 290+ | |
| | June 27 | | | July 5 | | |
| $a_0$ | 181·7278 823+ | 5·7228 210− | 0·9752 6364+ | 300·9745 355+ | 16·0415 860− | 0·9873 9097+ |
| $a_1$ | 12·9465 821+ | 4·9341 522− | 0·0106 2954+ | 14·3151 926+ | 3·6341 952+ | 0·0120 7602− |
| $a_2$ | 2521 334+ | 916 761+ | 9937− | 4424 009− | 4275 716+ | 12 1869− |
| $a_3$ | 344 319+ | 453 425+ | 1 0576− | 46 667− | 588 739− | 2 0441+ |
| $a_4$ | 9 064− | 18 802+ | 945− | 75 878+ | 1 254+ | 346+ |
| $a_5$ | 4 884− | 292− | | 6 294− | 4 159+ | |
| | June 28 | | | July 6 | | |
| $a_0$ | 194·9596 349+ | 10·5181 037− | 0·9856 7862+ | 314·8496 188+ | 12·0381 519− | 0·9743 0412+ |
| $a_1$ | 13·5480 754+ | 4·6074 006− | 0·0100 7570+ | 13·4435 954+ | 4·3152 940+ | 0·0138 8640− |
| $a_2$ | 3450 964+ | 2387 014+ | 4 7219− | 4171 855− | 2558 543+ | 5 8731− |
| $a_3$ | 258 383+ | 524 301+ | 1 4473− | 194 453+ | 543 902− | 2 1728+ |
| $a_4$ | 34 108− | 17 917+ | 589− | 43 334+ | 21 609+ | 490− |
| $a_5$ | 6 449− | 2 730− | | 5 236− | 1 078+ | |
| | June 29 | | | July 7 | | |
| $a_0$ | 208·8745 892+ | 14·8328 539− | 0·9951 3152+ | 327·8992 837+ | 7·5191 251− | 0·9600 4279+ |
| $a_1$ | 14·2989 175+ | 3·9669 088− | 0·0086 7352+ | 12·6822 779+ | 4·6730 121+ | 0·0144 2884− |
| $a_2$ | 3956 653+ | 4040 129+ | 9 3946− | 3380 867− | 1067 180+ | 3358+ |
| $a_3$ | 58 518+ | 566 848+ | 1 6940− | 316 627+ | 447 749− | 1 9651+ |
| $a_4$ | 68 505− | 4 278+ | 136+ | 17 152+ | 26 432+ | 982− |
| $a_5$ | 4 813− | 5 967− | | 3 149− | 734− | |
| | June 30 | | | July 8 | | |
| $a_0$ | 223·5676 919+ | 18·3392 340− | 1·0026 9754+ | 340·2765 379+ | 2·7816 001− | 0·9458 3423+ |
| $a_1$ | 15·0780 032+ | 2·9901 026− | 0·0062 9182+ | 12·1063 805+ | 4·7623 283+ | 0·0138 1145− |
| $a_2$ | 3672 671+ | 5706 469+ | 14 3652− | 2359 532− | 124 877− | 5 6368+ |
| $a_3$ | 259 249− | 523 474+ | 1 6434− | 354 623+ | 349 764− | 1 5635+ |
| $a_4$ | 95 081− | 26 953− | 1107+ | 1 698+ | 22 371+ | 1147− |
| $a_5$ | 2 827+ | 7 522− | | 1 655− | 1 407− | |
| | July 1 | | | July 9 | | |
| $a_0$ | 238·9778 119+ | 20·7097 897− | 1·0073 9958+ | 352·1824 318+ | 1·9353 605+ | 0·9327 3134+ |
| $a_1$ | 15·6981 544+ | 1·7063 049− | 0·0029 7010+ | 11·7407 135+ | 4·6406 686+ | 0·0122 6094− |
| $a_2$ | 2352 840+ | 7039 645+ | 18 6036− | 1301 998− | 1054 050− | 9 6406+ |
| $a_3$ | 605 862− | 342 279+ | 1 1915− | 345 266+ | 274 353− | 1 0999+ |
| $a_4$ | 79 938− | 66 751− | 2003+ | 6 335− | 15 116+ | 1097− |
| $a_5$ | 12 725+ | 4 353− | | 991− | 1 398− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | July 10 | | | July 18 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 3·8267 393+ | 6·4445 606+ | 0·9215 3348+ | 102·7775 556+ | 19·7477 831+ | 0·9220 1679+ |
| $a_1$ | 11·5808 638+ | 4·3529 004+ | 0·0100 4674− | 13·0443 781+ | 1·9628 576− | 0·0076 3244+ |
| $a_2$ | 314 119− | 1800 415− | 12 2867+ | 463 864− | 4876 877− | 4 1724+ |
| $a_3$ | 310 070+ | 227 660− | 6595+ | 186 122− | 121 834+ | 7501− |
| $a_4$ | 11 178− | 8 003+ | 949− | 21 827+ | 24 823+ | 240+ |
| $a_5$ | 911− | 1 033− | | 1 833+ | 828− | |
| | July 11 | | | July 19 | | |
| $a_0$ | 15·4059 892+ | 10·5953 505+ | 0·9127 7187+ | 115·7593 012+ | 17·3118 207+ | 0·9299 9387+ |
| $a_1$ | 11·6061 340+ | 3·9272 046+ | 0·0074 2950− | 12·9054 141+ | 2·8921 681− | 0·0082 5151+ |
| $a_2$ | 539 899+ | 2445 726− | 13 7011+ | 872 978− | 4370 746− | 2 0701+ |
| $a_3$ | 256 163+ | 205 655− | 2802+ | 81 473− | 212 684+ | 6520− |
| $a_4$ | 15 765− | 2 752+ | 781− | 30 803+ | 20 482+ | 367+ |
| $a_5$ | 1 076− | 468− | | 132+ | 1 104− | |
| | July 12 | | | July 20 | | |
| $a_0$ | 27·0900 453+ | 14·2576 454+ | 0·9067 3269+ | 128·5723 636+ | 14·0057 841+ | 0·9383 9086+ |
| $a_1$ | 11·7841 184+ | 3·3772 305+ | 0·0046 3646− | 12·7187 624+ | 3·6948 712− | 0·0084 8463+ |
| $a_2$ | 1202 993+ | 3050 870− | 14 0778+ | 931 322− | 3620 859− | 3355+ |
| $a_3$ | 182 338+ | 198 926− | 315− | 42 388+ | 283 679+ | 5018− |
| $a_4$ | 21 354− | 359+ | 630− | 31 096+ | 14 830+ | 407+ |
| $a_5$ | 1 094− | 226+ | | 1 013− | 911− | |
| | July 13 | | | July 21 | | |
| $a_0$ | 39·0104 519+ | 17·3099 549+ | 0·9034 9456+ | 141·2052 409+ | 9·9785 868+ | 0·9468 6293+ |
| $a_1$ | 12·0703 302+ | 2·7076 364+ | 0·0018 5556− | 12·5571 458+ | 4·3284 625− | 0·0084 1747+ |
| $a_2$ | 1610 878+ | 3643 228− | 13 6092+ | 627 754− | 2689 958− | 9284− |
| $a_3$ | 86 306+ | 194 818− | 2830− | 156 330+ | 334 138+ | 3352− |
| $a_4$ | 27 189− | 1 508+ | 501− | 25 785+ | 10 243+ | 330+ |
| $a_5$ | 547− | 936+ | | 1 543− | 464− | |
| | July 14 | | | July 22 | | |
| $a_0$ | 51·2477 270+ | 19·6340 310+ | 0·9029 6661+ | 153·7176 684+ | 5·4155 202+ | 0·9551 5734+ |
| $a_1$ | 12·4072 502+ | 1·9216 170+ | 0·0007 6133+ | 12·4880 361+ | 4·7623 471− | 0·0081 4445+ |
| $a_2$ | 1701 133+ | 4209 257− | 12 4632+ | 19 497− | 1630 713− | 1 7418− |
| $a_3$ | 27 164− | 179 146− | 4835− | 243 835+ | 370 726+ | 2000− |
| $a_4$ | 30 274− | 6 328+ | 381− | 18 042+ | 7 994+ | 141+ |
| $a_5$ | 774+ | 1 432+ | | 1 861− | 19− | |
| | July 15 | | | July 23 | | |
| $a_0$ | 63·8194 241+ | 21·1175 837+ | 0·9049 2209+ | 166·2297 565+ | 0·5279 718+ | 0·9631 0903+ |
| $a_1$ | 12·7276 070+ | 1·0292 690+ | 0·0030 9366+ | 12·5635 730+ | 4·9740 838− | 0·0077 4176+ |
| $a_2$ | 1445 719+ | 4694 375− | 10 7879+ | 801 659+ | 470 732− | 2 2650− |
| $a_3$ | 139 568− | 139 523− | 6366− | 297 027+ | 402 618+ | 1423− |
| $a_4$ | 26 445− | 13 729+ | 252− | 8 854+ | 8 086+ | 118− |
| $a_5$ | 2 489+ | 1 432+ | | 2 456− | 169+ | |
| | July 16 | | | July 24 | | |
| $a_0$ | 76·6752 505+ | 21·6649 790+ | 0·9090 2836+ | 178·9038 378+ | 4·4520 978− | 0·9706 0888+ |
| $a_1$ | 12·9655 480+ | 0·0547 439+ | 0·0050 5016+ | 12·8153 248+ | 4·9441 260− | 0·0072 4136+ |
| $a_2$ | 893 275+ | 5016 221− | 8 7315+ | 1721 303+ | 787 383+ | 2 7703− |
| $a_3$ | 219 858− | 70 631− | 7382− | 307 239+ | 436 438+ | 1909− |
| $a_4$ | 13 613− | 21 101+ | 101− | 3 311− | 9 249+ | 371− |
| $a_5$ | 3 610+ | 840+ | | 3 551− | 198− | |
| | July 17 | | | July 25 | | |
| $a_0$ | 89·7071 399+ | 21·2132 319+ | 0·9148 7685+ | 191·9213 306+ | 9·2729 366− | 0·9775 5040+ |
| $a_1$ | 13·0746 051+ | 0·9608 301− | 0·0065 7096+ | 13·2486 559+ | 4·6521 186− | 0·0066 1516+ |
| $a_2$ | 188 191+ | 5093 101− | 6 4617+ | 2587 591+ | 2150 276+ | 3 5705− |
| $a_3$ | 238 382− | 21 651+ | 7790− | 257 839+ | 470 754+ | 3439− |
| $a_4$ | 4 979+ | 25 338+ | 71+ | 21 333− | 8 659+ | 528− |
| $a_5$ | 3 319+ | 74− | | 4 707− | 1 406− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | July 26 | | | August 3 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 205·4519 253+ | 13·6622 269− | 0·9837 6884+ | 322·8136 326+ | 9·4504 164− | 0·9663 5376+ |
| $a_1$ | 13·8326 394+ | 4·0780 791− | 0·0057 7672+ | 13·0437 511+ | 4·5476 771+ | 0·0113 1220− |
| $a_2$ | 3185 860+ | 3600 460+ | 4 9182− | 3287 222− | 1839 151+ | 6 2624− |
| $a_3$ | 125 697+ | 490 204+ | 5621− | 212 641+ | 494 684− | 1 5210+ |
| $a_4$ | 46 013− | 1 836+ | 502− | 27 238+ | 17 516+ | 224+ |
| $a_5$ | 4 357− | 3 375− | | 3 535− | 778+ | |
| | July 27 | | | August 4 | | |
| $a_0$ | 219·6106 835+ | 17·3313 936− | 0·9889 9250+ | 335·5522 959+ | 4·7664 633− | 0·9545 6966+ |
| $a_1$ | 14·4869 418+ | 3·2118 810− | 0·0046 0431+ | 12·4592 283+ | 4·7744 961+ | 0·0120 9944− |
| $a_2$ | 3243 038+ | 5048 268+ | 6 8978− | 2521 224− | 467 923+ | 1 5808− |
| $a_3$ | 99 602− | 462 881+ | 7708− | 287 010+ | 417 547− | 1 6059+ |
| $a_4$ | 69 607− | 15 518− | 242− | 9 607+ | 21 072+ | 285− |
| $a_5$ | 388− | 5 042− | | 2 167− | 423− | |
| | July 28 | | | August 5 | | |
| $a_0$ | 234·4049 694+ | 19·9942 157− | 0·9928 2754+ | 347·7888 468+ | 0·0151 353+ | 0·9424 6989+ |
| $a_1$ | 15·0776 398+ | 2·0720 903− | 0·0029 8380+ | 12·0438 469+ | 4·7510 330+ | 0·0119 4526− |
| $a_2$ | 2522 624+ | 6293 205+ | 9 3406− | 1624 206− | 662 562− | 3 0555+ |
| $a_3$ | 377 944− | 350 769+ | 8732− | 304 279+ | 337 806− | 1 4858+ |
| $a_4$ | 72 085− | 41 999− | 234+ | 1 056− | 18 697+ | 620− |
| $a_5$ | 6 663+ | 4 448− | | 1 281− | 948− | |
| | July 29 | | | August 6 | | |
| $a_0$ | 249·6905 351+ | 21·4065 534− | 0·9947 9230+ | 359·7004 674+ | 4·6679 063+ | 0·9309 7256+ |
| $a_1$ | 15·4432 841+ | 0·7272 382− | 0·0008 6308+ | 11·8092 268+ | 4·5241 834+ | 0·0109 1322− |
| $a_2$ | 1023 249+ | 7048 894+ | 11 8022− | 730 510− | 1573 308− | 7 1361+ |
| $a_3$ | 597 139− | 140 359+ | 7800− | 287 458+ | 272 529− | 1 2328+ |
| $a_4$ | 36 372− | 65 245− | 809+ | 7 351− | 13 778+ | 777− |
| $a_5$ | 11 224+ | 797− | | 923− | 995− | |
| | July 30 | | | August 7 | | |
| $a_0$ | 265·1739 155+ | 21·4214 705− | 0·9944 0526+ | 11·4645 617+ | 9·0087 842+ | 0·9208 8847+ |
| $a_1$ | 15·4598 525+ | 0·6981 567+ | 0·0016 9897− | 11·7459 607+ | 4·1327 768+ | 0·0091 4724− |
| $a_2$ | 873 751− | 7070 592+ | 13 6422− | 78 527+ | 2318 199− | 10 3676+ |
| $a_3$ | 631 913− | 126 097− | 4499− | 248 870+ | 227 215− | 9191+ |
| $a_4$ | 22 665+ | 68 801− | 1286+ | 11 955− | 8 682+ | 806− |
| $a_5$ | 8 439+ | 3 631+ | | 884− | 734− | |
| | July 31 | | | August 8 | | |
| $a_0$ | 280·4863 120+ | 20·0353 813− | 0·9913 0994+ | 23·2419 782+ | 12·8878 145+ | 0·9128 6185+ |
| $a_1$ | 15·1088 059+ | 2·0487 433+ | 0·0045 1088− | 11·8311 031+ | 3·6040 791+ | 0·0068 3020− |
| $a_2$ | 2549 092− | 6315 990+ | 14 2146− | 744 542+ | 2955 103− | 12 6427+ |
| $a_3$ | 460 775− | 363 800− | 760+ | 192 231+ | 199 558− | 5957+ |
| $a_4$ | 65 044+ | 49 333− | 1472+ | 16 482− | 4 935+ | 771− |
| $a_5$ | 1 390+ | 5 684+ | | 878− | 276− | |
| | August 1 | | | August 9 | | |
| $a_0$ | 295·3007 744+ | 17·3957 840− | 0·9853 9993+ | 35·1650 226+ | 16·1768 934+ | 0·9073 4778+ |
| $a_1$ | 14·4874 613+ | 3·1859 089+ | 0·0072 7204− | 12·0306 496+ | 2·9550 278+ | 0·0041 5378− |
| $a_2$ | 3527 518− | 4985 558+ | 13 1089− | 1213 525+ | 3526 933− | 13 9689+ |
| $a_3$ | 189 553− | 504 736− | 6765+ | 117 705+ | 182 257− | 2875+ |
| $a_4$ | 70 268+ | 20 015− | 1286+ | 21 100− | 3 525+ | 721− |
| $a_5$ | 3 597− | 4 831+ | | 587− | 280+ | |
| | August 2 | | | August 10 | | |
| $a_0$ | 309·4231 957+ | 13·7633 112− | 0·9768 9752+ | 47·3266 266+ | 18·7613 826+ | 0·9046 1243+ |
| $a_1$ | 13·7513 990+ | 4·0260 071+ | 0·0096 3937− | 12·2999 337+ | 2·1965 142+ | 0·0013 0261− |
| $a_2$ | 3710 756− | 3399 590+ | 10 3223− | 1434 122+ | 4049 758− | 14 3997+ |
| $a_3$ | 54 882+ | 537 688− | 1977+ | 27 900+ | 165 070− | 6− |
| $a_4$ | 50 890+ | 4 273+ | 808+ | 24 318− | 4 964+ | 683− |
| $a_5$ | 4 637− | 2 703+ | | 212+ | 794+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

## DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | August 11 | | | August 19 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 59·7703 519+ | 20·5369 900+ | 0·9047 4291+ | 162·7757 119+ | 2·0215 819+ | 0·9693 4515+ |
| $a_1$ | 12·5855 083+ | 1·3394 248+ | 0·0015 4985+ | 12·8007 755+ | 4·9970 062− | 0·0081 6183+ |
| $a_2$ | 1374 001+ | 4507 224− | 13 9890+ | 627 723+ | 881 020− | 7 7710− |
| $a_3$ | 66 556− | 137 109− | 2736− | 236 904+ | 439 488+ | 5910− |
| $a_4$ | 23 417− | 9 057+ | 657− | 9 456+ | 11 332+ | 918+ |
| $a_5$ | 1 433+ | 1 084+ | | 2 336− | 793− | |
| | August 12 | | | August 20 | | |
| $a_0$ | 72·4844 064+ | 21·4129 956+ | 0·9076 5773+ | 175·6636 621+ | 3·0185 236− | 0·9766 7996+ |
| $a_1$ | 12·8316 927+ | 0·4010 120+ | 0·0042 3930+ | 13·0000 050+ | 5·0372 282− | 0·0064 6707+ |
| $a_2$ | 1048 168+ | 4853 348− | 12 7753+ | 1371 801+ | 497 524+ | 8 9978− |
| $a_3$ | 145 268− | 90 088− | 5370− | 250 914+ | 476 707+ | 2169− |
| $a_4$ | 16 126− | 14 632+ | 624− | 2 232− | 7 512+ | 777+ |
| $a_5$ | 2 543+ | 1 008+ | | 3 118− | 1 085− | |
| | August 13 | | | August 21 | | |
| $a_0$ | 85·4050 307+ | 21·3212 280+ | 0·9131 1461+ | 188·8254 036+ | 7·9576 860− | 0·9822 3333+ |
| $a_1$ | 12·9925 672+ | 0·5903 276− | 0·0066 0826+ | 13·3471 868+ | 4·7922 497− | 0·0046 3353+ |
| $a_2$ | 541 078+ | 5025 723− | 10 7919+ | 2079 916+ | 1961 900+ | 9 1923− |
| $a_3$ | 184 166− | 21 714− | 7887− | 210 450+ | 495 519+ | 978+ |
| $a_4$ | 3 053− | 19 777+ | 551− | 18 106− | 2 282+ | 458+ |
| $a_5$ | 2 858+ | 598+ | | 3 763− | 1 750− | |
| | August 14 | | | August 22 | | |
| $a_0$ | 98·4332 696+ | 20·2281 941+ | 0·9207 1769+ | 202·3994 401+ | 12·5041 405− | 0·9859 6199+ |
| $a_1$ | 13·0457 398+ | 1·5937 776− | 0·0085 0798+ | 13·8171 820+ | 4·2511 771− | 0·0028 4274+ |
| $a_2$ | 1 126− | 4966 227− | 8 1000+ | 2564 865+ | 3444 667+ | 8 6357− |
| $a_3$ | 168 203− | 63 064+ | 1 0122− | 100 753+ | 486 587+ | 2807+ |
| $a_4$ | 11 542+ | 22 770+ | 399− | 37 776− | 6 385− | 79+ |
| $a_5$ | 2 148+ | 64+ | | 3 202− | 2 742− | |
| | August 15 | | | August 23 | | |
| $a_0$ | 111·4634 456+ | 18·1463 836+ | 0·9299 3046+ | 216·4790 861+ | 16·3631 049− | 0·9879 7002+ |
| $a_1$ | 13·0007 431+ | 2·5589 641− | 0·0098 0833+ | 14·3436 730+ | 3·4201 932− | 0·0012 0296+ |
| $a_2$ | 415 010− | 4639 778− | 4 8317+ | 2608 264+ | 4838 659+ | 7 7554− |
| $a_3$ | 101 292− | 154 539+ | 1 1753− | 80 606− | 433 247+ | 3083+ |
| $a_4$ | 22 302+ | 23 032+ | 146− | 54 997− | 20 395− | 227− |
| $a_5$ | 854+ | 363− | | 168− | 3 452− | |
| | August 16 | | | August 24 | | |
| $a_0$ | 124·4148 741+ | 15·1411 626+ | 0·9401 0296+ | 231·0700 084+ | 19·2584 922− | 0·9884 2600+ |
| $a_1$ | 12·8966 999+ | 3·4315 266− | 0·0104 1622+ | 14·8190 668+ | 2·3323 705− | 0·0002 6475− |
| $a_2$ | 576 572− | 4041 601− | 1 2286+ | 2034 724+ | 5981 408+ | 6 9711− |
| $a_3$ | 4 243− | 242 901+ | 1 2358− | 299 450− | 317 527+ | 2112+ |
| $a_4$ | 26 373+ | 21 158+ | 194+ | 56 192− | 38 373− | 366− |
| $a_5$ | 371− | 594− | | 4 835+ | 2 828− | |
| | August 17 | | | August 25 | | |
| $a_0$ | 137·2560 927+ | 11·3318 224+ | 0·9505 2041+ | 246·0574 670+ | 20·9650 892− | 0·9874 8161+ |
| $a_1$ | 12·7904 755+ | 4·1588 101− | 0·0102 9898+ | 15·1161 213+ | 1·0575 910− | 0·0016 1028− |
| $a_2$ | 434 810− | 3191 885− | 2 3511− | 847 777+ | 6675 395+ | 6 5553− |
| $a_3$ | 97 056+ | 321 546+ | 1 1572− | 473 967− | 137 090+ | 585+ |
| $a_4$ | 24 302+ | 18 167+ | 556+ | 30 531− | 53 072− | 306− |
| $a_5$ | 1 197− | 677− | | 8 260+ | 486− | |
| | August 18 | | | August 26 | | |
| $a_0$ | 150·0151 032+ | 6·8877 274+ | 0·9604 7412+ | 261·2087 422+ | 21·3467 875− | 0·9852 1859+ |
| $a_1$ | 12·7417 517+ | 4·6937 954− | 0·0095 0385+ | 15·1354 025+ | 0·2971 461+ | 0·0029 1605− |
| $a_2$ | 9 832− | 2125 014− | 5 4809− | 674 435− | 6763 399+ | 6 5562− |
| $a_3$ | 181 949+ | 387 421+ | 9304− | 514 288− | 78 476− | 680− |
| $a_4$ | 18 202+ | 14 800+ | 830+ | 12 784+ | 55 286− | 77− |
| $a_5$ | 1 750− | 708− | | 6 835+ | 2 322+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | August 27 | | | September 4 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 276·2272 343+ | 20·3864 455− | 0·9816 3934+ | 19·2151 310+ | 11·4068 196+ | 0·9173 0032+ |
| $a_1$ | 14·8547 550+ | 1·6053 315+ | 0·0042 5079− | 11·8911 667+ | 3·8035 851+ | 0·0075 6420− |
| $a_2$ | 2072 189− | 6219 584+ | 6 7968− | 500 169+ | 2758 718− | 8 0615+ |
| $a_3$ | 397 498− | 275 533− | 998− | 169 249+ | 226 980− | 9357+ |
| $a_4$ | 47 394+ | 42 924− | 237+ | 14 425− | 9 141+ | 428− |
| $a_5$ | 2 017+ | 3 820+ | | 621− | 250− | |
| | August 28 | | | September 5 | | |
| $a_0$ | 290·8399 616+ | 18·1906 194− | 0·9767 0126+ | 31·1717 349+ | 14·9127 240+ | 0·9106 3155+ |
| $a_1$ | 14·3410 292+ | 2·7513 285+ | 0·0056 3060− | 12·0358 953+ | 3·1872 791+ | 0·0056 8834− |
| $a_2$ | 2960 309− | 5173 723+ | 6 9453− | 915 124+ | 3387 323− | 10 6083+ |
| $a_3$ | 190 098− | 409 148− | 25− | 105 521+ | 192 770− | 7628+ |
| $a_4$ | 56 447+ | 23 248− | 524+ | 17 704− | 7 848+ | 529− |
| $a_5$ | 2 073− | 3 570+ | | 301− | 13+ | |
| | August 29 | | | September 6 | | |
| $a_0$ | 304·8713 876+ | 14·9648 011− | 0·9703 8112+ | 43·3078 941+ | 17·7427 798+ | 0·9060 7504+ |
| $a_1$ | 13·7134 787+ | 3·6558 131+ | 0·0069 9942− | 12·2433 450+ | 2·4551 294+ | 0·0033 5897− |
| $a_2$ | 3212 821− | 3842 504+ | 6 6333− | 1122 414+ | 3918 416− | 12 5775+ |
| $a_3$ | 14 089+ | 467 099− | 2124+ | 32 050+ | 161 091− | 5509+ |
| $a_4$ | 44 975+ | 5 264− | 687+ | 19 402− | 7 919+ | 597− |
| $a_5$ | 3 509− | 2 411+ | | 321+ | 287+ | |
| | August 30 | | | September 7 | | |
| $a_0$ | 318·2691 396+ | 10·9717 328− | 0·9627 4649+ | 55·6647 773+ | 19·7907 791+ | 0·9040 2294+ |
| $a_1$ | 13·0913 769+ | 4·2832 832+ | 0·0082 3482− | 12·4698 433+ | 1·6264 304+ | 0·0007 0208− |
| $a_2$ | 2935 886− | 2433 721+ | 5 5840− | 1105 337+ | 4351 298− | 13 8700+ |
| $a_3$ | 159 107+ | 464 725− | 4931+ | 41 864− | 126 441− | 3125+ |
| $a_4$ | 26 900+ | 6 674+ | 675+ | 17 902− | 9 401+ | 661− |
| $a_5$ | 3 082− | 1 221+ | | 1 167+ | 469+ | |
| | August 31 | | | September 8 | | |
| $a_0$ | 331·0852 205+ | 6·4907 605− | 0·9540 0932+ | 68·2392 945+ | 20·9704 226+ | 0·9047 3249+ |
| $a_1$ | 12·5611 521+ | 4·6338 889+ | 0·0091 7667− | 12·6717 751+ | 0·7222 332+ | 0·0021 3920+ |
| $a_2$ | 2328 004− | 1091 771+ | 3 7051− | 884 005+ | 4669 521− | 14 4081+ |
| $a_3$ | 236 430+ | 426 323− | 7672+ | 101 379− | 84 134− | 485+ |
| $a_4$ | 11 414+ | 12 607+ | 502+ | 11 998− | 11 802+ | 741− |
| $a_5$ | 2 123− | 357+ | | 1 904+ | 499+ | |
| | September 1 | | | September 9 | | |
| $a_0$ | 343·4381 442+ | 1·7890 304− | 0·9445 4388+ | 80·9883 227+ | 21·2185 204+ | 0·9083 0994+ |
| $a_1$ | 12·1699 852+ | 4·7295 672+ | 0·0096 6744− | 12·8143 154+ | 0·2319 408− | 0·0050 0575+ |
| $a_2$ | 1571 459− | 108 006− | 1 1105− | 526 940+ | 4846 115− | 14 1062+ |
| $a_3$ | 261 299+ | 372 623− | 9696+ | 130 196− | 31 985− | 2476− |
| $a_4$ | 873+ | 14 242+ | 237+ | 2 278− | 14 326+ | 835− |
| $a_5$ | 1 354− | 158− | | 2 134+ | 413+ | |
| | September 2 | | | September 10 | | |
| $a_0$ | 355·4770 654+ | 2·8938 824+ | 0·9348 6472+ | 93·8422 980+ | 20·5002 437+ | 0·9146 9320+ |
| $a_1$ | 11·9337 559+ | 4·6017 968+ | 0·0095 8919− | 12·8807 998+ | 1·2048 222− | 0·0077 1929+ |
| $a_2$ | 795 860− | 1142 022− | 1 9319+ | 144 038+ | 4851 983− | 12 8598+ |
| $a_3$ | 251 509+ | 317 369− | 1 0635+ | 118 204− | 29 393+ | 5828− |
| $a_4$ | 5 834− | 13 327+ | 40− | 8 566+ | 16 379+ | 917− |
| $a_5$ | 939− | 394− | | 1 704+ | 318+ | |
| | September 3 | | | September 11 | | |
| $a_0$ | 7·3557 089+ | 7·3510 334+ | 0·9255 7467+ | 106·7267 082+ | 18·8148 321+ | 0·9236 3102+ |
| $a_1$ | 11·8472 339+ | 4·2833 152+ | 0·0088 8535− | 12·8784 233+ | 2·1596 905− | 0·0100 7971+ |
| $a_2$ | 85 733− | 2018 128− | 5 0914+ | 142 145− | 4662 352− | 10 5610+ |
| $a_3$ | 218 902+ | 268 010− | 1 0455+ | 67 384− | 98 071+ | 9530− |
| $a_4$ | 10 524− | 11 257+ | 269− | 17 120+ | 17 947+ | 929− |
| $a_5$ | 764− | 409− | | 840+ | 295+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | September 12 | | | September 20 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 119·5859 746+ | 16·2005 377+ | 0·9346 6224+ | 227·4134 499+ | 18·4175 416− | 0·9980 4711+ |
| $a_1$ | 12·8370 461+ | 3·0554 134− | 0·0118 6882+ | 15·0151 670+ | 2·6559 545− | 0·0025 4343− |
| $a_2$ | 233 200− | 4257 502− | 7 1492+ | 1812 009+ | 5998 868+ | 13 1784− |
| $a_3$ | 8 967+ | 172 811+ | 1 3307− | 341 431− | 346 763+ | 1 0776+ |
| $a_4$ | 21 221+ | 19 444+ | 788− | 53 995− | 47 506− | 283+ |
| $a_5$ | 81− | 308+ | | 5 687+ | 2 289− | |
| | September 13 | | | September 21 | | |
| $a_0$ | 132·4027 114+ | 12·7386 303+ | 0·9471 0504+ | 242·5708 440+ | 20·4439 126− | 0·9942 9643+ |
| $a_1$ | 12·8015 430+ | 3·8471 392− | 0·0128 6789+ | 15·2563 883+ | 1·3722 959− | 0·0048 4456− |
| $a_2$ | 79 815− | 3619 310− | 2 6958+ | 520 861+ | 6731 190+ | 9 7946− |
| $a_3$ | 92 589+ | 253 605+ | 1 6540− | 498 988− | 135 552+ | 1 1836+ |
| $a_4$ | 20 675+ | 21 084+ | 419− | 23 788− | 59 209− | 320− |
| $a_5$ | 851− | 215+ | | 8 513+ | 716+ | |
| | September 14 | | | September 22 | | |
| $a_0$ | 145·2075 142+ | 8·5570 506+ | 0·9600 7292+ | 257·8278 919+ | 21·1353 835− | 0·9885 8757+ |
| $a_1$ | 12·8212 002+ | 4·4863 789− | 0·0128 9407+ | 15·2056 024+ | 0·0087 146− | 0·0064 6123− |
| $a_2$ | 313 472+ | 2729 817− | 2 4985− | 1033 447− | 6789 838+ | 6 4461− |
| $a_3$ | 166 385+ | 339 873+ | 1 8283− | 510 284− | 92 647− | 1 0464+ |
| $a_4$ | 16 354+ | 22 312+ | 192+ | 20 674+ | 55 048− | 656− |
| $a_5$ | 1 537− | 142− | | 6 225+ | 3 315+ | |
| | September 15 | | | September 23 | | |
| $a_0$ | 158·0781 817+ | 3·8338 943+ | 0·9725 3624+ | 272·8818 110+ | 20·4795 522− | 0·9815 7982+ |
| $a_1$ | 12·9395 820+ | 4·9215 272− | 0·0118 5355+ | 14·8572 040+ | 1·3010 982+ | 0·0074 6280− |
| $a_2$ | 895 371+ | 1577 713− | 7 8455− | 2378 003− | 6214 884+ | 3 7024− |
| $a_3$ | 215 967+ | 427 299+ | 1 7525− | 368 191− | 279 270− | 7759+ |
| $a_4$ | 8 695+ | 21 763+ | 932+ | 51 910+ | 37 618− | 716− |
| $a_5$ | 2 322− | 844− | | 1 146+ | 4 013+ | |
| | September 16 | | | September 24 | | |
| $a_0$ | 171·1295 349+ | 1·2005 824− | 0·9834 3931+ | 287·4697 013+ | 18·5882 532− | 0·9738 1721+ |
| $a_1$ | 13·1857 626+ | 5·1005 985− | 0·0097 9602+ | 14·2924 790+ | 2·4472 519+ | 0·0079 9919− |
| $a_2$ | 1572 208+ | 173 663− | 12 5244− | 3159 834− | 5191 551+ | 1 8000− |
| $a_3$ | 226 984+ | 505 323+ | 1 3717− | 151 247− | 390 146− | 4842+ |
| $a_4$ | 2 970− | 17 671+ | 1566+ | 56 470+ | 17 128− | 569− |
| $a_5$ | 3 260− | 1 854− | | 2 586− | 3 049+ | |
| | September 17 | | | September 25 | | |
| $a_0$ | 184·4945 938+ | 6·2664 332− | 0·9918 6138+ | 301·4364 605+ | 15·6622 689− | 0·9656 8075+ |
| $a_1$ | 13·5654 812+ | 4·9775 940− | 0·0069 4234+ | 13·6364 316+ | 3·3631 897+ | 0·0082 3671− |
| $a_2$ | 2202 680+ | 1429 802+ | 15 6917− | 3300 781− | 3948 820+ | 6809− |
| $a_3$ | 182 164+ | 556 807+ | 7304− | 48 142+ | 428 978− | 2545+ |
| $a_4$ | 19 644− | 8 431+ | 1834+ | 42 486+ | 1 945− | 310− |
| $a_5$ | 3 899− | 3 005− | | 3 605− | 1 628+ | |
| | September 18 | | | September 26 | | |
| $a_0$ | 198·2962 052+ | 11·0448 237− | 0·9971 7984+ | 314·7515 162+ | 11·9471 266− | 0·9573 9830+ |
| $a_1$ | 14·0508 608+ | 4·5227 229− | 0·0036 5833+ | 13·0059 104+ | 4·0242 952+ | 0·0083 0893− |
| $a_2$ | 2592 169+ | 3120 730+ | 16 7891− | 2937 561− | 2666 460+ | 947− |
| $a_3$ | 65 123+ | 559 956+ | 185+ | 182 383+ | 421 079− | 1312+ |
| $a_4$ | 40 108− | 6 783− | 1615+ | 24 028+ | 5 949+ | 29− |
| $a_5$ | 3 028− | 3 943− | | 2 984− | 579+ | |
| | September 19 | | | September 27 | | |
| $a_0$ | 212·6084 816+ | 15·2005 506− | 0·9991 7726+ | 327·4840 132+ | 7·6976 405− | 0·9490 9273+ |
| $a_1$ | 14·5712 786+ | 3·7352 747− | 0·0003 7071+ | 12·4812 333+ | 4·4339 320+ | 0·0082 8968− |
| $a_2$ | 2516 423+ | 4720 396+ | 15 7829− | 2276 095− | 1444 674+ | 2883+ |
| $a_3$ | 123 574− | 493 425+ | 6732+ | 249 223+ | 391 795− | 1219+ |
| $a_4$ | 56 464− | 27 034− | 1012+ | 9 093+ | 8 634+ | 201+ |
| $a_5$ | 511+ | 3 950− | | 2 016− | 60+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^h$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | September 28 | | | October 6 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 339·7632 670+ | 3·1575 512− | 0·9408 4607+ | 76·8965 048+ | 21·0225 705+ | 0·9031 8542+ |
| $a_1$ | 12·1034 112+ | 4·6088 118+ | 0·0081 8741− | 12·6770 904+ | 0·0689 177+ | 0·0024 8104+ |
| $a_2$ | 1494 023− | 321 671+ | 7785+ | 301 567+ | 4701 671− | 13 3615+ |
| $a_3$ | 265 841+ | 356 753− | 2056+ | 130 675− | 23 450− | 3361+ |
| $a_4$ | 885− | 8 809+ | 336+ | 1 333+ | 14 122+ | 596− |
| $a_5$ | 1 304− | 86− | | 2 051+ | 159− | |
| | September 29 | | | October 7 | | |
| $a_0$ | 351·7436 410+ | 1·4486 248+ | 0·9327 6043+ | 89·5910 228+ | 20·6203 723+ | 0·9070 3026+ |
| $a_1$ | 11·8833 530+ | 4·5696 010+ | 0·0079 5660− | 12·6997 595+ | 0·8728 824− | 0·0052 3034+ |
| $a_2$ | 714 858− | 696 606− | 1 5975+ | 61 939− | 4688 895− | 14 0063+ |
| $a_3$ | 249 459+ | 322 363− | 3432+ | 105 177− | 31 430+ | 987+ |
| $a_4$ | 7 355− | 8 307+ | 362+ | 11 709+ | 13 237+ | 785− |
| $a_5$ | 936− | 46− | | 1 453+ | 185− | |
| | September 30 | | | October 8 | | |
| $a_0$ | 3·5796 250+ | 5·9171 550+ | 0·9250 0152+ | 102·2753 869+ | 19·2830 486+ | 0·9136 6325+ |
| $a_1$ | 11·8118 094+ | 4·3368 710+ | 0·0075 1964− | 12·6612 279+ | 1·7960 299− | 0·0080 2983+ |
| $a_2$ | 19 985− | 1614 319− | 2 8424+ | 292 699− | 4517 046− | 13 8249+ |
| $a_3$ | 210 786+ | 289 528− | 4906+ | 44 303− | 82 652+ | 2147− |
| $a_4$ | 12 074− | 8 033+ | 295+ | 18 930+ | 12 221+ | 1000− |
| $a_5$ | 760− | 69+ | | 591+ | 34+ | |
| | October 1 | | | October 9 | | |
| $a_0$ | 15·4092 311+ | 10·0644 516+ | 0·9178 1813+ | 114·9048 667+ | 17·0448 048+ | 0·9230 4411+ |
| $a_1$ | 11·8658 390+ | 3·9303 970+ | 0·0067 9217− | 12·5972 639+ | 2·6697 375− | 0·0106 9041+ |
| $a_2$ | 532 305+ | 2434 016− | 4 4873+ | 306 146− | 4195 424− | 12 5745+ |
| $a_3$ | 155 033+ | 256 618− | 6100+ | 36 884+ | 132 112+ | 6160− |
| $a_4$ | 16 000− | 8 357+ | 167+ | 21 741+ | 12 357+ | 1207− |
| $a_5$ | 554− | 205+ | | 181− | 444+ | |
| | October 2 | | | October 10 | | |
| $a_0$ | 27·3421 485+ | 13·7266 413+ | 0·9115 3736+ | 127·4773 604+ | 13·9700 163+ | 0·9349 1830+ |
| $a_1$ | 12·0121 331+ | 3·3700 535+ | 0·0057 0503− | 12·5557 051+ | 3·4640 234− | 0·0129 7221+ |
| $a_2$ | 895 825+ | 3151 684− | 6 4126+ | 66 884− | 3720 493− | 9 9991+ |
| $a_3$ | 85 765+ | 221 075− | 6770+ | 121 704+ | 186 219+ | 1 1038− |
| $a_4$ | 18 950− | 9 387+ | 13+ | 20 708+ | 14 639+ | 1319− |
| $a_5$ | 118− | 315+ | | 756− | 867+ | |
| | October 3 | | | October 11 | | |
| $a_0$ | 39·4505 338+ | 16·7603 893+ | 0·9065 4142+ | 140·0405 427+ | 10·1541 161+ | 0·9487 6685+ |
| $a_1$ | 12·2093 894+ | 2·6773 069+ | 0·0042 1889− | 12·5867 442+ | 4·1459 671− | 0·0145 8809+ |
| $a_2$ | 1038 205+ | 3755 429− | 8 4466+ | 414 907+ | 3065 303− | 5 9007+ |
| $a_3$ | 9 218+ | 180 355− | 6819+ | 196 655+ | 253 536+ | 1 6414− |
| $a_4$ | 19 708− | 10 998+ | 142− | 16 913+ | 19 158+ | 1195− |
| $a_5$ | 617+ | 344+ | | 1 303− | 1 041+ | |
| | October 4 | | | October 12 | | |
| $a_0$ | 51·7627 564+ | 19·0452 519+ | 0·9032 3396+ | 152·6900 041+ | 5·7289 922+ | 0·9637 6892+ |
| $a_1$ | 12·4122 223+ | 1·8766 853+ | 0·0023 3067− | 12·7348 345+ | 4·6747 836− | 0·0152 2793+ |
| $a_2$ | 953 769+ | 4227 065− | 10 4026+ | 1093 320+ | 2179 288− | 2756+ |
| $a_3$ | 62 946− | 132 985− | 6249+ | 250 782+ | 340 340+ | 2 1337− |
| $a_4$ | 16 664− | 12 763+ | 289− | 10 510+ | 24 680+ | 684− |
| $a_5$ | 1 471+ | 241+ | | 2 124− | 645+ | |
| | October 5 | | | October 13 | | |
| $a_0$ | 64·2625 417+ | 20·4872 325+ | 0·9020 0315+ | 165·5600 873+ | 0·8728 464+ | 0·9788 0422+ |
| $a_1$ | 12·5781 630+ | 0·9966 023+ | 0·0000 7425− | 13·0318 735+ | 4·9983 462− | 0·0146 1554+ |
| $a_2$ | 679 670+ | 4547 028− | 12 0993+ | 1887 492+ | 1003 676− | 6 5060− |
| $a_3$ | 114 551− | 79 639− | 5095+ | 270 821+ | 444 776+ | 2 4202− |
| $a_4$ | 9 177− | 13 990+ | 435− | 10+ | 28 318+ | 270+ |
| $a_5$ | 2 059+ | 34+ | | 3 419− | 614− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | October 14 | | | October 22 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 178·8074 513 + | 4·1786 195 − | 0·9925 2985 + | 298·2384 772 + | 16·2412 087 − | 0·9727 9999 + |
| $a_1$ | 13·4889 112 + | 5·0546 310 − | 0·0125 9908 + | 13·8959 677 + | 3·1888 278 + | 0·0120 0058 − |
| $a_2$ | 2665 778 + | 494 473 + | 13 5670 − | 3975 415 − | 4130 081 + | 4771 + |
| $a_3$ | 235 876 + | 550 655 + | 2 3145 − | 53 898 + | 468 055 − | 1 2180 + |
| $a_4$ | 17 322 − | 25 597 + | 1485 + | 54 298 + | 4 355 + | 1184 − |
| $a_5$ | 4 833 − | 2 787 − | | 4 997 − | 1 866 + | |
| | October 15 | | | October 23 | | |
| $a_0$ | 192·5843 123 + | 9·1264 566 − | 1·0035 5564 + | 311·7472 232 + | 12·6855 562 − | 0·9609 5709 + |
| $a_1$ | 14·0834 844 + | 4·7816 970 − | 0·0092 5082 + | 13·1362 758 + | 3·8771 004 + | 0·0115 8715 − |
| $a_2$ | 3220 969 + | 2272 148 + | 19 5878 − | 3537 996 − | 2770 636 + | 3 4269 + |
| $a_3$ | 118 327 + | 623 749 + | 1 7059 − | 221 737 + | 432 987 − | 7392 + |
| $a_4$ | 42 607 − | 11 591 + | 2518 + | 28 780 + | 13 234 + | 975 − |
| $a_5$ | 4 840 − | 5 299 − | | 3 844 − | 128 + | |
| | October 16 | | | October 24 | | |
| $a_0$ | 206·9969 816 + | 13·6179 348 − | 1·0107 0229 + | 324·5543 667 + | 8·5733 546 − | 0·9497 7680 + |
| $a_1$ | 14·7437 180 + | 4·1381 573 − | 0·0049 2239 + | 12·5047 893 + | 4·3066 886 + | 0·0107 1901 − |
| $a_2$ | 3271 617 + | 4159 824 + | 23 1833 − | 2738 548 − | 1552 307 + | 5 0691 + |
| $a_3$ | 98 293 − | 616 408 + | 6712 − | 299 265 + | 379 210 − | 3477 + |
| $a_4$ | 68 762 − | 15 788 − | 2879 + | 9 615 + | 13 504 + | 664 − |
| $a_5$ | 1 091 − | 6 619 − | | 2 365 − | 619 − | |
| | October 17 | | | October 25 | | |
| $a_0$ | 222·0510 467 + | 17·2807 098 − | 1·0132 6800 + | 336·8159 528 + | 4·1480 679 − | 0·9395 9283 + |
| $a_1$ | 15·3405 117 + | 3·1308 932 − | 0·0001 9963 + | 12·0495 241 + | 4·5084 789 + | 0·0096 2745 − |
| $a_2$ | 2553 135 + | 5847 910 + | 23 4851 − | 1806 690 − | 489 477 + | 5 7237 + |
| $a_3$ | 380 063 − | 488 106 + | 5059 + | 314 655 + | 331 432 − | 826 + |
| $a_4$ | 75 052 − | 50 380 − | 2379 + | 2 024 − | 10 190 + | 342 − |
| $a_5$ | 6 321 + | 4 839 − | | 1 394 − | 698 − | |
| | October 18 | | | October 26 | | |
| $a_0$ | 237·6019 927 + | 19·7835 232 − | 1·0111 9349 + | 348·7159 315 + | 0·3771 647 + | 0·9305 4260 + |
| $a_1$ | 15·7102 656 + | 1·8374 453 − | 0·0042 5040 − | 11·7810 760 + | 4·5106 720 + | 0·0084 7159 − |
| $a_2$ | 1026 176 + | 6961 445 + | 20 5734 − | 888 807 − | 450 676 − | 5 7753 + |
| $a_3$ | 614 081 − | 240 944 + | 1 4687 + | 292 881 + | 297 494 − | 522 − |
| $a_4$ | 41 087 − | 75 369 − | 1287 + | 8 879 − | 6 588 + | 59 − |
| $a_5$ | 11 707 + | 38 + | | 977 − | 438 − | |
| | October 19 | | | October 27 | | |
| $a_0$ | 253·3505 298 + | 20·9082 627 − | 1·0050 4549 + | 0·4364 293 + | 4·8136 346 + | 0·9226 4273 + |
| $a_1$ | 15·7206 925 + | 0·4029 965 − | 0·0078 7301 − | 11·6871 388 + | 4·3337 049 + | 0·0073 3453 − |
| $a_2$ | 945 057 − | 7232 573 + | 15 4315 − | 73 214 − | 1308 024 − | 5 5900 + |
| $a_3$ | 662 669 − | 57 487 − | 1 9782 + | 247 685 + | 275 286 − | 733 − |
| $a_4$ | 20 733 + | 74 259 − | 108 + | 13 752 − | 4 351 + | 155 + |
| $a_5$ | 9 274 + | 4 774 + | | 869 − | 40 − | |
| | October 20 | | | October 28 | | |
| $a_0$ | 268·9134 505 + | 20·6006 992 − | 0·9958 2823 + | 12·1395 530 + | 8·9894 396 + | 0·9158 6142 + |
| $a_1$ | 15·3458 024 + | 0·9989 569 + | 0·0103 6160 − | 11·7408 658 + | 3·9912 352 + | 0·0062 3233 − |
| $a_2$ | 2715 868 − | 6662 526 + | 9 4589 − | 578 605 + | 2108 180 − | 5 4669 + |
| $a_3$ | 491 143 − | 305 982 − | 2 0073 + | 184 060 + | 258 038 − | 87 − |
| $a_4$ | 67 533 + | 48 790 − | 753 − | 18 218 − | 4 148 + | 285 + |
| $a_5$ | 1 788 + | 6 124 + | | 761 − | 377 + | |
| | October 21 | | | October 29 | | |
| $a_0$ | 283·9454 838 + | 18·9703 544 − | 0·9847 1394 + | 23·9547 874 + | 12·7445 056 + | 0·9101 7777 + |
| $a_1$ | 14·6831 867 + | 2·2232 118 + | 0·0116 8137 − | 11·9041 377 + | 3·4940 362 + | 0·0051 3014 − |
| $a_2$ | 3766 496 − | 5513 197 + | 3 9016 − | 1013 828 + | 2853 628 − | 5 6134 + |
| $a_3$ | 206 320 − | 440 852 − | 1 6918 + | 103 817 + | 237 489 − | 1081 + |
| $a_4$ | 74 637 + | 17 381 − | 1160 − | 22 239 − | 6 083 + | 331 + |
| $a_5$ | 3 754 − | 4 375 + | | 348 − | 706 + | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | October 30 | | | November 7 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 35·9684 308+ | 15·9301 089+ | 0·9056 2308+ | 135·6062 814+ | 11·4560 829+ | 0·9322 5424+ |
| $a_1$ | 12·1289 799+ | 2·8548 500+ | 0·0039 6179− | 12·2325 324+ | 3·8098 128− | 0·0125 9192+ |
| $a_2$ | 1188 321+ | 3522 531− | 6 1353+ | 1 998+ | 3055 974− | 11 4844+ |
| $a_3$ | 11 869+ | 206 046− | 2428+ | 209 755+ | 205 200+ | 6343− |
| $a_4$ | 24 225− | 9 707+ | 300+ | 20 621+ | 10 018+ | 1405− |
| $a_5$ | 528+ | 821+ | | 1 059− | 1 110+ | |
| | October 31 | | | November 8 | | |
| $a_0$ | 48·2150 600+ | 18·4131 540+ | 0·9023 0210+ | 147·8619 455+ | 7·3623 056+ | 0·9459 1713+ |
| $a_1$ | 12·3607 801+ | 2·0928 232+ | 0·0026 4987− | 12·3035 774+ | 4·3548 850− | 0·0146 4229+ |
| $a_2$ | 1083 835+ | 4074 198− | 7 0410+ | 744 412+ | 2369 137− | 8 7332+ |
| $a_3$ | 79 119− | 159 126− | 3646+ | 281 357+ | 256 594+ | 1 2026− |
| $a_4$ | 21 664− | 13 937+ | 209+ | 15 432+ | 15 753+ | 1589− |
| $a_5$ | 1 677+ | 623+ | | 1 544− | 1 507+ | |
| | November 1 | | | November 9 | | |
| $a_0$ | 60·6743 131+ | 20·0841 009+ | 0·9003 9488+ | 160·2694 886+ | 2·7978 922+ | 0·9612 9660+ |
| $a_1$ | 12·5459 858+ | 1·2361 318+ | 0·0011 2391− | 12·5422 664+ | 4·7446 801− | 0·0159 6454+ |
| $a_2$ | 733 282+ | 4461 711− | 8 2561+ | 1665 665+ | 1489 712− | 4 1765+ |
| $a_3$ | 148 523− | 97 425− | 4494+ | 326 991+ | 334 521+ | 1 8516− |
| $a_4$ | 13 112− | 17 129+ | 74+ | 7 974+ | 23 672+ | 1464− |
| $a_5$ | 2 566+ | 146+ | | 2 658− | 1 271+ | |
| | November 2 | | | November 10 | | |
| $a_0$ | 73·2777 203+ | 20·8660 466+ | 0·9001 4227+ | 173·0115 521+ | 2·0598 128− | 0·9774 7901+ |
| $a_1$ | 12·6441 238+ | 0·3214 860+ | 0·0006 6511+ | 12·9753 551+ | 4·9321 639− | 0·0161 8574+ |
| $a_2$ | 234 740+ | 4649 758− | 9 6436+ | 2667 927+ | 331 318− | 2 2358− |
| $a_3$ | 175 258− | 27 761− | 4800+ | 331 191+ | 441 077+ | 2 4566− |
| $a_4$ | 16+ | 17 819+ | 93− | 5 085− | 30 642+ | 814− |
| $a_5$ | 2 632+ | 399− | | 4 612− | 139− | |
| | November 3 | | | November 11 | | |
| $a_0$ | 85·9280 571+ | 20·7215 227+ | 0·9018 1880+ | 186·2858 494+ | 6·9779 505− | 0·9931 8737+ |
| $a_1$ | 12·6398 156+ | 0·6098 658− | 0·0027 3412+ | 13·6039 560+ | 4·8539 205− | 0·0149 6895+ |
| $a_2$ | 264 599− | 4630 130− | 11 0219+ | 3584 800+ | 1174 473+ | 10 0550− |
| $a_3$ | 149 292− | 39 350+ | 4439+ | 263 630+ | 560 525+ | 2 7998− |
| $a_4$ | 13 388+ | 15 688+ | 288− | 28 569− | 30 598+ | 441+ |
| $a_5$ | 1 843+ | 718− | | 6 620− | 3 125− | |
| | November 4 | | | November 12 | | |
| $a_0$ | 98·5280 066+ | 19·6540 759+ | 0·9056 9662+ | 200·2711 296+ | 11·6556 239− | 1·0068 7526+ |
| $a_1$ | 12·5483 836+ | 1·5181 704− | 0·0050 6016+ | 14·3852 688+ | 4·4401 961− | 0·0121 3561+ |
| $a_2$ | 613 730− | 4425 153− | 12 1736+ | 4137 771+ | 3008 386+ | 18 1413− |
| $a_3$ | 77 939− | 94 969+ | 3300+ | 83 689+ | 649 483+ | 2 6258− |
| $a_4$ | 22 562+ | 11 937+ | 519− | 63 687− | 14 961+ | 2033+ |
| $a_5$ | 702+ | 638− | | 5 870− | 7 002− | |
| | November 5 | | | November 13 | | |
| $a_0$ | 111·0095 496+ | 17·7040 170+ | 0·9120 0195+ | 215·0715 887+ | 15·7292 372− | 1·0169 5451+ |
| $a_1$ | 12·4116 303+ | 2·3702 541− | 0·0075 7314+ | 15·2095 280+ | 3·6411 923− | 0·0078 0108+ |
| $a_2$ | 705 199− | 4075 019− | 12 8439+ | 3947 581+ | 4976 359+ | 24 7595− |
| $a_3$ | 18 794+ | 136 591+ | 1239+ | 225 691− | 638 297+ | 1 7901− |
| $a_4$ | 25 855+ | 8 637+ | 792− | 95 977− | 21 635− | 3316+ |
| $a_5$ | 232− | 191− | | 1 189+ | 8 937− | |
| | November 6 | | | November 14 | | |
| $a_0$ | 123·3551 017+ | 14·9407 647+ | 0·9208 6395+ | 230·6438 268+ | 18·8120 213− | 1·0221 3378+ |
| $a_1$ | 12·2864 541+ | 3·1409 204− | 0·0101 4742+ | 15·8935 525+ | 2·4675 504− | 0·0024 4498+ |
| $a_2$ | 496 049− | 3615 334− | 12 7309+ | 2706 553+ | 6671 704+ | 28 1312− |
| $a_3$ | 119 579+ | 169 604+ | 1920− | 591 670− | 464 409+ | 4252− |
| $a_4$ | 24 482+ | 7 657+ | 1102− | 89 832− | 68 847− | 3614+ |
| $a_5$ | 756− | 460+ | | 12 162+ | 5 452− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | November 15 | | | November 23 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 246·7411 007+ | 20·5733 904− | 1·0217 5927+ | 357·6572 342+ | 3·8195 824+ | 0·9254 4248+ |
| $a_1$ | 16·2275 147+ | 1·0241 432− | 0·0031 6407− | 11·6634 123+ | 4·3698 246+ | 0·0096 9473− |
| $a_2$ | 514 874+ | 7597 240+ | 27 2643− | 525 071− | 1207 252− | 10 0049+ |
| $a_3$ | 827 279− | 138 869+ | 1 0529+ | 307 245+ | 252 796− | 28− |
| $a_4$ | 24 019− | 96 722− | 2757+ | 13 339− | 6 001+ | 503− |
| $a_5$ | 16 073+ | 2 364+ | | 911− | 671− | |
| | November 16 | | | November 24 | | |
| $a_0$ | 262·9365 804+ | 20·8333 584− | 1·0160 0162+ | 9·2974 389+ | 8·0439 353+ | 0·9167 4293+ |
| $a_1$ | 16·0807 260+ | 0·4994 652+ | 0·0081 9073− | 11·6447 807+ | 4·0546 012+ | 0·0077 1471− |
| $a_2$ | 1949 846− | 7457 471+ | 22 4982− | 307 507+ | 1936 352− | 9 7036+ |
| $a_3$ | 766 970− | 221 171− | 2 1652+ | 244 779+ | 235 153− | 2023− |
| $a_4$ | 59 880+ | 82 713− | 1228+ | 17 946− | 2 598+ | 214− |
| $a_5$ | 8 060+ | 8 031+ | | 934− | 71− | |
| | November 17 | | | November 25 | | |
| $a_0$ | 278·7524 186+ | 19·6177 314− | 1·0057 8987+ | 20·9955 601+ | 11·8816 387+ | 0·9099 7621+ |
| $a_1$ | 15·4886 359+ | 1·8955 384+ | 0·0119 9174− | 11·7720 705+ | 3·5977 893+ | 0·0058 4324− |
| $a_2$ | 3811 112− | 6378 309+ | 15 3112− | 924 786+ | 2626 935− | 8 9755+ |
| $a_3$ | 452 705− | 471 762− | 2 6446+ | 163 760+ | 225 117− | 2861− |
| $a_4$ | 98 601+ | 40 351− | 247− | 22 837− | 2 243+ | 20+ |
| $a_5$ | 2 377− | 7 792+ | | 777− | 540+ | |
| | November 18 | | | November 26 | | |
| $a_0$ | 293·8242 951+ | 17·1347 942− | 0·9925 2900+ | 32·8741 238+ | 15·1945 011+ | 0·9050 0212+ |
| $a_1$ | 14·6288 487+ | 3·0174 231+ | 0·0142 7056− | 11·9966 332+ | 3·0060 349+ | 0·0041 3313− |
| $a_2$ | 4601 823− | 4798 900+ | 7 5550− | 1271 221+ | 3283 419− | 8 1348+ |
| $a_3$ | 84 676− | 557 247− | 2 5258+ | 65 051+ | 210 475− | 2761− |
| $a_4$ | 83 806+ | 933− | 1196− | 27 033− | 5 027+ | 195+ |
| $a_5$ | 6 737− | 4 199+ | | 97− | 1 009+ | |
| | November 19 | | | November 27 | | |
| $a_0$ | 307·9922 008+ | 13·6928 792− | 0·9777 4357+ | 45·0016 713+ | 17·8517 502+ | 0·9016 5682+ |
| $a_1$ | 13·7132 357+ | 3·8117 516+ | 0·0150 7172− | 12·2595 327+ | 2·2887 241+ | 0·0025 8117− |
| $a_2$ | 4420 598− | 3163 467+ | 7061− | 1303 164+ | 3874 568− | 7 4271+ |
| $a_3$ | 183 559+ | 520 887− | 2 0305+ | 43 330− | 180 210− | 1959− |
| $a_4$ | 48 777+ | 19 482+ | 1548− | 27 756− | 10 245+ | 306+ |
| $a_5$ | 5 892− | 895+ | | 1 170+ | 1 133+ | |
| | November 20 | | | November 28 | | |
| $a_0$ | 321·2860 210+ | 9·6148 320− | 0·9627 8880+ | 57·3845 287+ | 19·7361 344+ | 0·8998 0182+ |
| $a_1$ | 12·9007 509+ | 4·2964 170+ | 0·0146 6578− | 12·4966 504+ | 1·4644 116+ | 0·0011 4229− |
| $a_2$ | 3636 203− | 1726 550+ | 4 4583+ | 1018 331+ | 4342 373− | 7 0242+ |
| $a_3$ | 321 020+ | 435 033− | 1 4011+ | 141 881− | 128 112− | 713− |
| $a_4$ | 19 249+ | 23 309+ | 1475− | 21 868− | 16 099+ | 348+ |
| $a_5$ | 3 623− | 843− | | 2 553+ | 772+ | |
| | November 21 | | | November 29 | | |
| $a_0$ | 333·8568 162+ | 5·1870 167− | 0·9486 9420+ | 69·9668 925+ | 20·7551 846+ | 0·8993 5831+ |
| $a_1$ | 12·2757 066+ | 4·5201 186+ | 0·0134 1285− | 12·6502 821+ | 0·5643 282+ | 0·0002 5511+ |
| $a_2$ | 2593 840− | 552 813+ | 7 7850+ | 487 051+ | 4622 382− | 7 0185+ |
| $a_3$ | 362 772+ | 350 529− | 8069+ | 203 435− | 56 413− | 703+ |
| $a_4$ | 1 445+ | 18 695+ | 1188− | 8 740− | 20 045+ | 320+ |
| $a_5$ | 1 921− | 1 330− | | 3 224+ | 38+ | |
| | November 22 | | | November 30 | | |
| $a_0$ | 345·9093 683+ | 0·6449 332− | 0·9361 2867+ | 82·6449 846+ | 20·8536 415+ | 0·9003 2550+ |
| $a_1$ | 11·8653 886+ | 4·5323 357+ | 0·0116 6130− | 12·6847 772+ | 0·3690 362− | 0·0016 9273+ |
| $a_2$ | 1516 036− | 399 938− | 9 5036+ | 143 404− | 4670 987− | 7 4187+ |
| $a_3$ | 349 818+ | 288 957− | 3312+ | 206 421− | 23 726+ | 2006+ |
| $a_4$ | 7 901− | 11 844+ | 838− | 7 785+ | 20 145+ | 225+ |
| $a_5$ | 1 109− | 1 149− | | 2 722+ | 696− | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | December 1 | | | December 9 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 95·2958 300+ | 20·0218 240+ | 0·9027 8240+ | 194·3501 495+ | 9·7291 270− | 0·9867 6681+ |
| $a_1$ | 12·5986 435+ | 1·2884 063− | 0·0032 4564+ | 13·5849 201+ | 4·5083 325− | 0·0150 8210+ |
| $a_2$ | 688 730− | 4485 928− | 8 1504+ | 4017 544+ | 1953 082+ | 4 7132− |
| $a_3$ | 148 801− | 97 144+ | 2924+ | 269 303+ | 538 202+ | 2 4528− |
| $a_4$ | 21 512+ | 16 463+ | 67+ | 35 274− | 28 045+ | 688− |
| $a_5$ | 1 399+ | 1 045− | | 7 356− | 3 097− | |
| | December 2 | | | December 10 | | |
| $a_0$ | 107·8130 115+ | 18·2960 812+ | 0·9068 7299+ | 208·3594 912+ | 13·9858 364− | 1·0011 2545+ |
| $a_1$ | 12·4255 600+ | 2·1503 855− | 0·0049 6612+ | 14·4514 341+ | 3·9465 907− | 0·0133 7602+ |
| $a_2$ | 992 110− | 4106 189− | 9 0610+ | 4539 864+ | 3704 995+ | 12 4425− |
| $a_3$ | 49 523− | 152 643+ | 3209+ | 55 657+ | 617 036+ | 2 7449− |
| $a_4$ | 28 298+ | 11 055+ | 148− | 74 587− | 12 607+ | 661+ |
| $a_5$ | 78+ | 877− | | 5 812− | 7 318− | |
| | December 3 | | | December 11 | | |
| $a_0$ | 120·1372 458+ | 15·7513 588+ | 0·9127 7582+ | 223·2624 374+ | 17·4996 950− | 1·0129 8934+ |
| $a_1$ | 12·2236 384+ | 2·9218 466− | 0·0068 6869+ | 15·3433 732+ | 3·0190 989− | 0·0100 9047+ |
| $a_2$ | 970 169− | 3590 719− | 9 9266+ | 4200 733+ | 5558 307+ | 20 2309− |
| $a_3$ | 63 977+ | 188 400+ | 2634+ | 295 706− | 593 207+ | 2 4799− |
| $a_4$ | 28 372+ | 6 572+ | 417− | 106 799− | 25 811− | 2293+ |
| $a_5$ | 719− | 328− | | 3 108+ | 9 403− | |
| | December 4 | | | December 12 | | |
| $a_0$ | 132·2730 302+ | 12·4899 047+ | 0·9206 5933+ | 238·9859 443+ | 19·9071 639− | 1·0208 3168+ |
| $a_1$ | 12·0597 864+ | 3·5810 048− | 0·0089 1635+ | 16·0536 558+ | 1·7444 967− | 0·0053 9218+ |
| $a_2$ | 615 238− | 2989 366− | 10 4565+ | 2704 078+ | 7088 620+ | 26 2580− |
| $a_3$ | 170 096+ | 211 813+ | 980+ | 685 340− | 398 320+ | 1 5368− |
| $a_4$ | 24 570+ | 4 927+ | 737− | 90 011− | 75 694− | 3506+ |
| $a_5$ | 1 002− | 379+ | | 14 942+ | 5 265− | |
| | December 5 | | | December 13 | | |
| $a_0$ | 144·2906 591+ | 8·6316 752+ | 0·9306 2376+ | 255·2339 670+ | 20·9110 625− | 1·0234 7943+ |
| $a_1$ | 11·9970 940+ | 4·1131 732− | 0·0110 0758+ | 16·3603 377+ | 0·2401 770− | 0·0001 8003− |
| $a_2$ | 32 430+ | 2320 566− | 10 2974+ | 258 258+ | 7776 705+ | 28 7609− |
| $a_3$ | 258 252+ | 235 694+ | 1964− | 894 996− | 47 753+ | 942− |
| $a_4$ | 19 533+ | 6 893+ | 1089− | 9 256− | 102 461− | 3641+ |
| $a_5$ | 1 148− | 1 049+ | | 16 771+ | 3 456+ | |
| | December 6 | | | December 14 | | |
| $a_0$ | 156·3186 597+ | 4·3108 089+ | 0·9426 3054+ | 271·5313 824+ | 20·3786 941− | 1·0204 5029+ |
| $a_1$ | 12·0882 938+ | 4·5032 960− | 0·0129 6455+ | 16·1481 618+ | 1·2902 400+ | 0·0058 1465− |
| $a_2$ | 912 915+ | 1561 606− | 9 0445+ | 2314 160− | 7340 134+ | 26 8899− |
| $a_3$ | 324 598+ | 273 999+ | 6345− | 770 046− | 324 297− | 1 3932+ |
| $a_4$ | 13 971+ | 12 314+ | 1418− | 77 435+ | 82 556− | 2617+ |
| $a_5$ | 1 646− | 1 481+ | | 6 247+ | 9 153+ | |
| | December 7 | | | December 15 | | |
| $a_0$ | 168·5319 374+ | 0·3198 683− | 0·9564 2191+ | 287·3794 917+ | 18·3942 106− | 1·0121 1213+ |
| $a_1$ | 12·3730 201+ | 4·7277 519− | 0·0145 2637+ | 15·4884 015+ | 2·6325 310+ | 0·0106 6994− |
| $a_2$ | 1954 114+ | 650 863− | 6 2853+ | 4097 597− | 5963 769+ | 21 1892− |
| $a_3$ | 363 249+ | 337 952+ | 1 2091− | 403 807− | 563 406− | 2 4463+ |
| $a_4$ | 6 082+ | 20 082+ | 1596− | 106 097+ | 34 491− | 1004+ |
| $a_5$ | 2 960− | 1 325+ | | 4 295− | 8 244+ | |
| | December 8 | | | December 16 | | |
| $a_0$ | 181·1370 061+ | 5·0767 707− | 0·9714 3994+ | 302·4279 328+ | 15·2242 681− | 0·9995 7793+ |
| $a_1$ | 12·8737 681+ | 4·7478 454− | 0·0153 5677+ | 14·5880 270+ | 3·6465 840+ | 0·0141 3380− |
| $a_2$ | 3050 782+ | 496 828+ | 1 7059+ | 4715 837− | 4149 091+ | 13 2929− |
| $a_3$ | 356 676+ | 430 727+ | 1 8626− | 24 318− | 621 255− | 2 8335+ |
| $a_4$ | 8 471− | 27 348+ | 1424− | 81 632+ | 7 046+ | 457− |
| $a_5$ | 5 233− | 13− | | 7 452− | 4 084+ | |

Formula: Quantity in degrees $= a_0 + a_1\,p + a_2\,p^2 + a_3\,p^3 + a_4\,p^4 + a_5\,p^5$
where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.

DAILY POLYNOMIAL COEFFICIENTS

| | Apparent Right Ascension | Apparent Declination | Horizontal Parallax | Apparent Right Ascension | Apparent Declination | Horizontal Parallax |
|---|---|---|---|---|---|---|
| | December 17 | | | December 25 | | |
| | ° | ° | ° | ° | ° | ° |
| $a_0$ | 316·5493 623+ | 11·2237 873− | 0·9843 9362+ | 54·1556 088+ | 19·2898 332+ | 0·9006 3782+ |
| $a_1$ | 13·6664 927+ | 4·2948 825+ | 0·0159 6070− | 12·4002 748+ | 1·7004 918+ | 0·0016 5198− |
| $a_2$ | 4373 682− | 2368 343+ | 5 0939− | 1192 642+ | 4185 078− | 9 9119+ |
| $a_3$ | 228 557+ | 554 268− | 2 6300+ | 76 158− | 142 889− | 4689− |
| $a_4$ | 43 331+ | 26 766+ | 1339− | 26 953− | 10 849+ | 47+ |
| $a_5$ | 5 787− | 552+ | | 1 659+ | 1 158+ | |
| | December 18 | | | December 26 | | |
| $a_0$ | 329·8050 969+ | 6·7447 656− | 0·9681 7314+ | 66·6650 027+ | 20·5587 290+ | 0·8999 3062+ |
| $a_1$ | 12·8747 654+ | 4·6132 512+ | 0·0162 4412− | 12·6060 057+ | 0·8255 277+ | 0·0001 9162+ |
| $a_2$ | 3485 883− | 871 554+ | 1 9836+ | 819 055+ | 4537 044− | 8 5380+ |
| $a_3$ | 345 407+ | 442 721− | 2 0780+ | 166 706− | 88 153− | 4490− |
| $a_4$ | 14 523+ | 28 824+ | 1625− | 18 488− | 16 834+ | 195+ |
| $a_5$ | 3 325− | 1 204− | | 2 897+ | 749+ | |
| | December 19 | | | December 27 | | |
| $a_0$ | 342·3669 345+ | 2·0858 691− | 0·9523 1894+ | 79·3346 842+ | 20·9234 954+ | 0·9009 3308+ |
| $a_1$ | 12·2853 595+ | 4·6656 729+ | 0·0152 8902− | 12·7138 585+ | 0·1012 195− | 0·0017 7230+ |
| $a_2$ | 2395 734− | 295 767− | 7 2461+ | 237 026+ | 4692 994− | 7 3111+ |
| $a_3$ | 371 176+ | 339 727− | 1 4192+ | 211 537− | 13 759− | 3695− |
| $a_4$ | 1 747− | 22 385+ | 1515− | 3 593− | 20 652+ | 300+ |
| $a_5$ | 1 718− | 1 628− | | 3 187+ | 13− | |
| | December 20 | | | December 28 | | |
| $a_0$ | 354·4494 917+ | 2·5183 302+ | 0·9378 8131+ | 92·0510 511+ | 20·3536 645+ | 0·9034 0254+ |
| $a_1$ | 11·9160 082+ | 4·5127 418+ | 0·0134 7465− | 12·6979 582+ | 1·0356 925− | 0·0031 3570+ |
| $a_2$ | 1309 847− | 1196 949− | 10 6036+ | 387 230− | 4610 504− | 6 3842+ |
| $a_3$ | 347 405+ | 266 319− | 8103+ | 194 522− | 68 307+ | 2472− |
| $a_4$ | 10 094− | 14 044+ | 1226− | 12 678+ | 20 484+ | 347+ |
| $a_5$ | 1 043− | 1 362− | | 2 320+ | 731− | |
| | December 21 | | | December 29 | | |
| $a_0$ | 6·2681 420+ | 6·8860 133+ | 0·9255 3580+ | 104·6923 340+ | 18·8657 276+ | 0·9071 5541+ |
| $a_1$ | 11·7537 013+ | 4·1983 934+ | 0·0111 5986− | 12·5683 853+ | 1·9294 732− | 0·0043 5228+ |
| $a_2$ | 338 628− | 1925 280− | 12 3091+ | 871 539− | 4290 009− | 5 8500+ |
| $a_3$ | 296 679+ | 223 437− | 3202+ | 121 438− | 142 754+ | 1058− |
| $a_4$ | 15 237− | 7 138+ | 900− | 24 280+ | 16 637+ | 320+ |
| $a_5$ | 921− | 799− | | 897+ | 1 051− | |
| | December 22 | | | December 30 | | |
| $a_0$ | 18·0160 327+ | 10·8701 688+ | 0·9156 2988+ | 117·1639 392+ | 16·5230 876+ | 0·9120 8532+ |
| $a_1$ | 11·7684 243+ | 3·7487 626+ | 0·0086 3796− | 12·3678 054+ | 2·7385 191− | 0·0055 0337+ |
| $a_2$ | 450 754+ | 2560 764− | 12 7391+ | 1081 252− | 3772 452− | 5 7213+ |
| $a_3$ | 226 530+ | 202 485− | 384− | 16 061− | 198 888+ | 250+ |
| $a_4$ | 19 936− | 3 103+ | 602− | 28 487+ | 11 222+ | 209+ |
| $a_5$ | 918− | 121− | | 292− | 891− | |
| | December 23 | | | December 31 | | |
| $a_0$ | 29·8501 000+ | 14·3429 047+ | 0·9082 5597+ | 129·4248 328+ | 13·4282 453+ | 0·9181 6542+ |
| $a_1$ | 11·9181 011+ | 3·1770 455+ | 0·0061 2572− | 12·1579 848+ | 3·4292 988− | 0·0066 6353+ |
| $a_2$ | 1001 499+ | 3150 815− | 12 2708+ | 961 488− | 3117 368− | 5 9159+ |
| $a_3$ | 137 783+ | 190 899− | 2778− | 94 593+ | 235 151+ | 1114+ |
| $a_4$ | 24 788− | 2 511+ | 349− | 26 713+ | 6 699+ | 15+ |
| $a_5$ | 613− | 555+ | | 903− | 401− | |
| | December 24 | | | December 32 | | |
| $a_0$ | 41·8795 891+ | 17·1860 853+ | 0·9033 2608+ | 141·4987 091+ | 9·7113 545+ | 0·9254 3183+ |
| $a_1$ | 12·1495 151+ | 2·4908 950+ | 0·0037 6882− | 12·0042 986+ | 3·9797 474− | 0·0078 8075+ |
| $a_2$ | 1259 933+ | 3702 887− | 11 2351+ | 526 492− | 2375 726− | 6 2509+ |
| $a_3$ | 33 014+ | 175 024− | 4160− | 192 300+ | 258 287+ | 1196+ |
| $a_4$ | 28 177− | 5 387+ | 135− | 22 036+ | 4 707+ | 253− |
| $a_5$ | 276+ | 1 054+ | | 1 095− | 208+ | |

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where $p$ is the fraction of a day from $0^{\mathrm{h}}$ TT.