

DAILY POLYNOMIAL COEFFICIENTS FOR LUNAR COORDINATES

Notes and formulae

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

The formulae to be evaluated are of the form:

$$a_0 + a_1p + a_2p^2 + a_3p^3 + a_4p^4 + a_5p^5$$

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:

$$(((a_5p + a_4)p + a_3)p + a_2)p + a_1)p + a_0$$

to avoid the separate formation of the powers of p . Alternatively this nested form for α and δ 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 α , and the signs are given on the right-hand sides of the coefficients to facilitate their use with small calculators. Subtract 360° from α if it exceeds 360° . 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 ascension (α) the declination (δ) and the horizontal parallax (π) for the Moon on 2015 January 21^d 13^h 23^m 48^s.32 UT1, using an assumed value of $\Delta T = 68^s$.

$$\text{TT} = 13^{\text{h}} 24^{\text{m}} 56^{\text{s}}.32, \text{ hence } p = 0.558\ 985\ 19$$

	right ascension	declination	horizontal parallax
b_1	$-0.000\ 0359$	$+0.000\ 5305$	$+0.000\ 031\ 27$
b_2	$+0.005\ 4862$	$-0.003\ 9854$	$-0.000\ 040\ 25$
b_3	$-0.027\ 8966$	$-0.045\ 3473$	$-0.002\ 510\ 44$
b_4	$-0.165\ 5270$	$+0.457\ 5566$	$+0.002\ 819\ 48$
b_5	$+15.046\ 9206$	$+3.429\ 9778$	$\pi = +1.015\ 971\ 14$
b_6	$\alpha = 316.497\ 4317$	$\delta = -12.178\ 4334$	
	$= 21^{\text{h}} 05^{\text{m}} 59^{\text{s}}.384$	$= -12^\circ 10' 42''.36$	$= 1^\circ 00' 57''.496$

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	January 0			January 8		
a_0	35-5885 221+	12-1765 033+	0-9613 5885+	139-7270 389+	11-3186 067+	0-9047 7139+
a_1	13-3193 417+	3-2961 552+	0-0086 5522-	11-7788 244+	3-0672 190-	0-0035 7516-
a_2	561 144+	3450 948-	7265+	1837 647-	2159 747-	8 4630+
a_3	54 288+	264 510-	2206+	141 770+	237 499+	6625+
a_4	30 290-	14 524+	367-	19 351+	3 854-	105-
a_5	206-	965+		1 174-	205-	
	January 1			January 9		
a_0	48-9663 575+	15-1026 615+	0-9527 9466+	151-3380 933+	8-0587 571+	0-9021 0772+
a_1	13-4356 401+	2-5329 046+	0-0084 5844-	11-4609 799+	3-4295 620-	0-0016 8803-
a_2	540 191+	4147 650-	1 1772+	1307 974-	1472 412-	10 3823+
a_3	67 924-	196 741-	745+	207 579+	220 337+	6203+
a_4	31 448-	19 593+	64-	13 448+	4 817-	263-
a_5	1 553+	1 016+		916-	314+	
	January 2			January 10		
a_0	62-4462 348+	17-2031 881+	0-9444 6075+	162-6902 869+	4-5035 373+	0-9015 1731+
a_1	13-5115 003+	1-6526 972+	0-0082 0321-	11-2665 803+	3-6597 128-	0-0005 6398+
a_2	163 305+	4610 115-	1 3699+	613 698-	837 157-	12 0801+
a_3	177 279-	108 543-	514+	252 329+	204 420+	5152+
a_4	23 401-	24 925+	185+	8 934+	3 188-	425-
a_5	3 151+	428+		706-	679+	
	January 3			January 11		
a_0	75-9543 127+	18-3865 547+	0-9364 0152+	173-9215 532+	0-7803 000+	0-9033 3658+
a_1	13-4831 931+	0-7082 939+	0-0079 0641-	11-2227 601+	3-7667 534-	0-0031 1759+
a_2	477 342-	4781 910-	1 6397+	189 855+	236 222-	13 3654+
a_3	239 127-	5 140-	1288+	280 985+	198 587+	3463+
a_4	7 033-	27 130+	338+	5 534+	271+	604-
a_5	3 593+	577-		739-	895+	
	January 4			January 12		
a_0	89-3655 148+	18-6187 989+	0-9286 7535+	185-1918 768+	2-9901 002-	0-9078 1930+
a_1	13-3149 687+	0-2390 676-	0-0075 2628-	11-3468 702+	3-7538 655-	0-0058 7041+
a_2	1200 918-	4640 345-	2 2305+	1058 649+	370 133+	14 0353+
a_3	231 898-	97 114+	2676+	295 495+	208 639+	1059+
a_4	11 434+	24 075+	382+	2 008+	4 842+	815-
a_5	2 580+	1 446-		1 142-	925+	
	January 5			January 13		
a_0	102-5386 033+	17-9276 711+	0-9214 0270+	196-6742 480+	6-6855 118-	0-9150 9567+
a_1	13-0110 774+	1-1290 960-	0-0069 8460-	11-6474 796+	3-6148 481-	0-0086 7662+
a_2	1802 197-	4219 058-	3 2609+	1945 780+	1034 379+	13 8562+
a_3	161 334-	178 775+	4232+	291 629+	237 085+	2196-
a_4	24 395+	16 574+	329+	3 547-	9 638+	1057-
a_5	861+	1 745-		1 960-	638+	
	January 6			January 14		
a_0	115-3558 531+	16-3960 297+	0-9147 8980+	208-5449 177+	10-1721 858-	0-9251 2538+
a_1	12-6124 246+	1-9135 176-	0-0061 9229-	12-1217 241+	3-3326 736-	0-0113 3970+
a_2	2131 259-	3600 766-	4 7241+	2779 779+	1809 879+	12 5562+
a_3	55 952-	227 785+	5564+	257 252+	281 522+	6438-
a_4	28 423+	7 655+	209+	13 361-	13 098+	1290-
a_5	543-	1 452-		2 994-	195-	
	January 7			January 15		
a_0	127-7523 447+	14-1458 343+	0-9091 2765+	220-9687 094+	13-2944 291-	0-9376 4342+
a_1	12-1804 842+	2-5629 987-	0-0050 7221-	12-7480 135+	2-8811 015-	0-0136 0618+
a_2	2134 055-	2886 011-	6 5136+	3441 358+	2731 122+	9 8472+
a_3	51 936+	244 232+	6404+	173 615+	331 061+	1 1653-
a_4	25 390+	333+	55+	28 799-	12 411+	1418-
a_5	1 172-	843-		3 487-	1 748-	

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	234.0749 916+	15.8682 460-	0.9521 0361+	351.7433 303+	1.6109 484-	1.0055 4390+
a_1	13.4751 082+	2.2314 708-	0.0151 6926+	13.9528 643+	4.6543 350+	0.0091 1877-
a_2	3754 383+	3781 287+	5 5052+	1704 689-	212-	15 3651-
a_3	24 398+	362 096+	1 7438-	176 487+	514 434-	2 1971+
a_4	47 295-	3 674+	1282-	14 038+	19 702+	34-
a_5	2 076-	3 729-		3 309-	777+	
January 17			January 25			
a_0	247.9230 409+	17.6853 840-	0.9676 3618+	5.5444 473+	2.9939 699+	0.9951 0798+
a_1	14.2133 532+	1.3669 807-	0.0156 9578+	13.6688 343+	4.5082 305+	0.0115 3413-
a_2	3522 912+	4852 233+	4775-	1124 091-	1417 587-	8 8220-
a_3	183 184-	338 834+	2 2727-	200 076+	428 420-	2 1672+
a_4	58 644-	15 630-	709-	2 504-	23 226+	918-
a_5	2 041+	4 948-		2 395-	182-	
January 18			January 26			
a_0	262.4647 066+	18.5353 157-	0.9830 4985+	19.1203 902+	7.3199 041+	0.9828 9919+
a_1	14.8405 487+	0.3036 082-	0.0148 9001+	13.5018 406+	4.1053 861+	0.0126 8516-
a_2	2641 986+	5725 313+	7 6883-	562 843-	2565 352-	2 8830-
a_3	394 634-	227 502+	2 5709-	166 634+	337 454-	1 7849+
a_4	47 903-	41 530-	358+	14 491-	22 060+	1297-
a_5	6 899+	3 823-		1 500-	364-	
January 19			January 27			
a_0	277.5258 901+	18.2481 777-	0.9969 1753+	32.5810 108+	11.1371 793+	0.9700 9126+
a_1	15.2348 435+	0.8911 858+	0.0125 9539+	13.4327 170+	3.4997 221+	0.0127 7820-
a_2	1239 962+	6120 314+	15 1450-	164 901-	3449 001-	1 6940+
a_3	516 494-	25 189+	2 4298-	94 269+	252 722-	1 2562+
a_4	11 292-	61 330-	1702+	22 080-	20 158+	1280-
a_5	8 281+	233-		477-	126-	
January 20			January 28			
a_0	292.8327 814+	16.7485 978-	1.0077 7247+	46.0044 089+	14.2687 322+	0.9575 9529+
a_1	15.3275 095+	2.0981 612+	0.0089 0562+	13.4189 487+	2.7421 055+	0.0121 1374-
a_2	294 237-	5825 641+	21 3794-	19 349-	4087 471-	4 7022+
a_3	480 822-	220 285-	1 7314-	1 894+	173 215-	7396+
a_4	31 674+	62 004-	2808+	24 527-	19 597+	1037-
a_5	4 737+	3 613+		758+	119+	
January 21			January 29			
a_0	308.0864 260+	14.0957 402-	1.0143 9509+	59.4192 353+	16.5867 407+	0.9460 1537+
a_1	15.1394 477+	3.1742 105+	0.0042 2278+	13.4062 168+	1.8805 454+	0.0109 9289-
a_2	1499 332-	4829 050+	24 8794-	153 228-	4488 317-	6 3092+
a_3	309 633-	431 195-	5773-	87 956-	93 651-	3238+
a_4	55 063+	42 819-	3127+	20 612-	20 337+	706-
a_5	359-	5 305+		1 940+	87+	
January 22			January 30			
a_0	323.0504 477+	10.4854 955-	1.0161 0347+	72.7994 665+	18.0111 317+	0.9356 7872+
a_1	14.7685 338+	3.9961 863+	0.0008 0105-	13.3419 103+	0.9629 646+	0.0096 6216-
a_2	2101 603-	3331 721+	24 7543-	521 318-	4646 364-	6 8672+
a_3	94 749-	549 844-	7014+	150 663-	11 634-	422+
a_4	52 122+	15 491-	2490+	10 574-	20 874+	373-
a_5	3 424-	4 512+		2 539+	265-	
January 23			January 31			
a_0	337.6042 161+	6.2122 194-	1.0129 2201+	86.0733 752+	18.5103 574+	0.9267 0376+
a_1	14.3389 248+	4.4936 348+	0.0054 4186-	13.1894 873+	0.0384 183+	0.0082 9100-
a_2	2107 469-	1634 387+	21 1944-	1011 307-	4558 672-	6 7786+
a_3	79 138+	567 797-	1 7077+	167 743-	68 946+	1053-
a_4	34 211+	7 224+	1242+	2 487+	19 540+	85-
a_5	3 986-	2 549+		2 229+	735-	

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 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 1			February 9			
a_0	99.1454 291+	18.1016 835+	0.9190 7924+	193.4108 953+	5.4113 179-	0.9069 6680+
a_1	12.9390 113+	0.8451 845-	0.0069 7025-	11.4417 802+	3.6185 671-	0.0055 5823+
a_2	1477 298-	4241 963-	6 4187+	1269 748+	898 761+	11 7850+
a_3	136 065-	139 570+	1368-	254 264+	221 536+	3223+
a_4	13 797+	15 759+	137+	54+	3 810+	505-
a_5	1 239+	1 055-		1 151-	580+	
February 2			February 10			
a_0	111.9246 078+	16.8477 302+	0.9127 3855+	205.0049 670+	8.9174 163-	0.9137 3070+
a_1	12.6088 696+	1.6459 298-	0.0057 2207-	11.7714 542+	3.3705 405-	0.0079 9170+
a_2	1790 328-	3739 263-	6 0948+	2021 360+	1592 049+	12 4396+
a_3	69 103-	192 042+	795-	242 589+	242 394+	1216+
a_4	19 913+	10 364+	279+	5 636-	6 857+	793-
a_5	157+	1 083-		1 807-	277+	
February 3			February 11			
a_0	124.3495 413+	14.8480 064+	0.9076 2080+	217.0020 718+	12.1037 993-	0.9229 7058+
a_1	12.2381 160+	2.3325 654-	0.0045 1576-	12.2453 441+	2.9765 324-	0.0104 8437+
a_2	1876 618-	3111 793-	6 0260+	2697 220+	2363 169+	12 3184+
a_3	11 700+	222 799+	349+	201 622+	272 153+	1949-
a_4	20 502+	4 871+	340+	14 787-	8 448+	1117-
a_5	560-	857-		2 434-	467-	
February 4			February 12			
a_0	136.4031 597+	12.2269 431+	0.9037 1453+	229.5355 779+	14.8160 013-	0.9346 5614+
a_1	11.8742 228+	2.8865 638-	0.0032 8647-	12.8381 431+	2.4191 084-	0.0128 4490+
a_2	1724 132-	2422 741-	6 3342+	3188 960+	3225 670+	11 0539+
a_3	87 952+	233 920+	1732+	118 195+	300 553+	6434-
a_4	17 535+	561+	323+	27 415-	6 293+	1431-
a_5	816-	502-		2 375-	1 712-	
February 5			February 13			
a_0	148.1154 363+	9.1215 030+	0.9010 8203+	242.7014 576+	16.8820 294-	0.9485 2778+
a_1	11.5623 878+	3.3009 624-	0.0019 5472-	13.4992 422+	1.6821 492-	0.0148 0540+
a_2	1363 242-	1722 637-	7 0453+	3355 198+	4147 954+	8 2597+
a_3	149 950+	231 356+	3044+	14 279-	307 782+	1 2225-
a_4	13 375+	1 942-	242+	40 038-	2 324-	1617-
a_5	769-	131-		782-	3 153-	
February 6			February 14			
a_0	159.5577 555+	5.6712 053+	0.8998 6470+	256.5307 096+	18.1191 529-	0.9640 2073+
a_1	11.3396 899+	3.5769 247-	0.0004 4464-	14.1495 954+	0.7627 313-	0.0160 2584+
a_2	840 835-	1041 523-	8 0998+	3064 251+	5025 747+	3 6267+
a_3	195 832+	222 471+	4027+	180 432-	266 524+	1 8834-
a_4	9 533+	2 570-	111+	44 384-	18 586-	1479-
a_5	634-	196+		2 412+	3 932-	
February 7			February 15			
a_0	170.8338 350+	2.0121 379+	0.9002 7141+	270.9644 898+	18.3549 089-	0.9802 0612+
a_1	11.2337 684+	3.7194 179-	0.0013 0056+	14.6917 719+	0.3129 758+	0.0161 2689+
a_2	202 478-	387 569-	9 3691+	2280 867+	5674 365+	2 8893-
a_3	227 646+	214 294+	4482+	332 155-	153 372+	2 4952-
a_4	6 423+	1 557-	58-	31 683-	39 041-	795-
a_5	583-	448+		5 434+	3 057-	
February 8			February 16			
a_0	182.0707 042+	1.7247 184-	0.9025 5311+	285.8485 078+	17.4633 693-	0.9957 8663+
a_1	11.2638 441+	3.7330 422-	0.0033 0650+	15.0383 425+	1.4767 182+	0.0147 6860+
a_2	513 180+	250 460+	10 6722+	1148 844+	5869 583+	10 8113-
a_3	247 416+	212 634+	4260+	404 390-	31 877-	2 8310-
a_4	3 606+	735+	263-	3 080-	54 860-	509+
a_5	733-	597+		5 732+	446-	

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 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	300.9615 609+	15.4084 110-	1.0091 9610+	55.8915 990+	15.8426 610+	0.9603 4249+
a_1	15.1484 249+	2.6189 083+	0.0117 7740+	13.6997 376+	2.1689 118+	0.0149 8643-
a_2	25 360-	5440 356+	18 9486-	705 842-	4648 207-	5 2128+
a_3	360 960-	254 014-	2 6286-	80 728-	87 184-	1 4097+
a_4	26 483+	56 930-	2144+	13 663-	25 789+	1497-
a_5	2 936+	2 649+		1 696+	879-	
February 18			February 26			
a_0	316.0742 955+	12.2762 966-	1.0188 3723+	69.5114 829+	17.5405 246+	0.9460 0334+
a_1	15.0471 217+	3.6093 299+	0.0072 8499+	13.5297 336+	1.2229 912+	0.0135 8085-
a_2	920 022-	4363 320+	25 5089-	1013 008-	4763 815-	8 5529+
a_3	227 706-	454 112-	1 7471-	118 288-	7 150+	8073+
a_4	40 918+	42 996-	3429+	4 893-	21 385+	1201-
a_5	651-	4 628+		1 935+	939-	
February 19			February 27			
a_0	331.0106 710+	8.2798 826-	1.0234 3092+	82.9277 912+	18.2898 940+	0.9333 4651+
a_1	14.8108 444+	4.3308 762+	0.0017 9646+	13.2906 555+	0.2804 579+	0.0116 7610-
a_2	1364 257-	2789 396+	28 6852-	1377 846-	4623 446-	10 2653+
a_3	71 822-	579 719-	3356-	118 752-	83 298+	3269+
a_4	36 891+	19 121-	3678+	5 013+	16 660+	851-
a_5	2 846-	4 774+		1 505+	949-	
February 20			February 28			
a_0	345.6813 121+	3.7294 735-	1.0223 6207+	96.0694 386+	18.1179 082+	0.9227 2114+
a_1	14.5297 795+	4.7095 764+	0.0038 9396-	12.9822 174+	0.6130 525-	0.0095 5897-
a_2	1386 918-	983 304+	27 5133-	1688 967-	4283 091-	10 7460+
a_3	47 008+	609 196-	1 1683+	84 106-	140 497+	120-
a_4	22 067+	5 149+	2748+	12 598+	11 870+	522-
a_5	3 289-	3 483+		707+	862-	
February 21			March 1			
a_0	0.0789 784+	1.0183 768+	1.0158 6108+	108.8756 793+	17.0916 972+	0.9142 3035+
a_1	14.2736 813+	4.7272 772+	0.0089 3615-	12.6245 841+	1.4232 041-	0.0074 3425-
a_2	1146 424-	778 567-	22 4078-	1858 638-	3799 000-	10 4056+
a_3	102 730+	554 783-	2 2761+	27 074-	179 466+	2191-
a_4	5 343+	22 553+	1164+	16 046+	7 532+	240-
a_5	2 670-	1 719+		44-	679-	
February 22			March 2			
a_0	14.2485 575+	5.6147 462+	1.0049 2339+	121.3132 924+	15.3072 251+	0.9078 1235+
a_1	14.0760 187+	4.4150 080+	0.0126 8839-	12.2511 300+	2.1264 905-	0.0054 2845-
a_2	832 893-	2290 441-	14 9269-	1844 048-	3222 199-	9 6114+
a_3	98 017+	448 197-	2 7287+	36 399+	202 933+	3135-
a_4	8 112-	30 905+	327-	15 686+	4 134+	11-
a_5	1 605-	305+		502-	456-	
February 23			March 3			
a_0	28.2501 170+	9.7590 114+	0.9910 1190+	133.3851 760+	12.8791 759+	0.9033 1357+
a_1	13.9347 996+	3.8349 745+	0.0148 6835-	11.8992 637+	2.7086 246-	0.0036 0066-
a_2	603 566-	3446 584-	6 9661-	1645 767-	2593 155-	8 6697+
a_3	50 233+	321 982-	2 5772+	94 035+	215 027+	3162-
a_4	16 169-	32 184+	1262-	13 071+	1 868+	164+
a_5	376-	472-		651-	250-	
February 24			March 4			
a_0	42.1279 288+	13.2203 004+	0.9756 9204+	145.1305 085+	9.9329 003+	0.9005 4992+
a_1	13.8225 018+	3.0617 003+	0.0155 3898-	11.6032 237+	3.1621 252-	0.0019 5499-
a_2	553 637-	4224 166-	21-	1291 754-	1939 364-	7 8233+
a_3	17 515-	198 150-	2 0554+	139 828+	220 095+	2486-
a_4	17 988-	29 691+	1590-	9 770+	637+	282+
a_5	824+	773-		612-	87-	

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 5			March 13		
a_0	156.6194 554+	6.5989 032+	0.8993 5521+	252.2658 498+	17.6940 488-	0.9459 1736+
a_1	11.3904 233+	3.4837 579-	0.0004 5364-	13.5624 476+	1.0364 653-	0.0128 6836+
a_2	819 768-	1276 124-	7 2480+	2585 455+	4511 299+	8 0248+
a_3	172 839+	221 846+	1339-	90 832-	229 757+	6593-
a_4	6 717+	217+	335+	28 560-	11 622-	1378-
a_5	524-	36+		1 120+	2 278-	
	March 6			March 14		
a_0	167.9458 051+	3.0097 429+	0.8996 1634+	266.0750 158+	18.2577 985-	0.9595 0849+
a_1	11.2807 464+	3.6723 238-	0.0009 6923+	14.0414 271+	0.0710 662-	0.0142 2037+
a_2	266 179-	608 920-	7 0472+	2152 827+	5108 014+	5 2160+
a_3	194 488+	223 128+	26+	192 870-	160 470+	1 2185-
a_4	4 138+	408+	321+	22 772-	23 311-	1523-
a_5	492-	128+		2 894+	2 319-	
	March 7			March 15		
a_0	179.2197 470+	0.7011 066-	0.9012 9375+	280.3104 508+	17.8045 793-	0.9741 1339+
a_1	11.2872 661+	3.7269 424-	0.0023 9229+	14.4064 704+	0.9881 944+	0.0148 3703+
a_2	337 201+	64 192+	7 2448+	1466 622+	5426 317+	6537+
a_3	206 067+	226 069+	1331+	254 630-	44 466+	1 8427-
a_4	1 735+	1 065+	237+	7 643-	35 232-	1310-
a_5	582-	183+		3 587+	1 569-	
	March 8			March 16		
a_0	190.5614 553+	4.3988 980-	0.9044 2620+	294.8377 148+	16.2729 866-	0.9888 1843+
a_1	11.4169 293+	3.6457 655-	0.0038 9067+	14.6221 410+	2.0719 223+	0.0143 6248+
a_2	960 003+	750 631+	7 7816+	692 839+	5332 609+	5 6362-
a_3	207 054+	232 155+	2299+	249 916-	111 333-	2 3861-
a_4	1 116-	2 022+	86+	10 951+	43 278-	547-
a_5	816-	170+		2 558+	154-	
	March 9			March 17		
a_0	202.0948 971+	7.9461 658-	0.9091 1888+	309.5054 991+	13.6832 799-	1.0023 7322+
a_1	11.6701 911+	3.4250 994-	0.0055 1941+	14.6913 915+	3.0876 581+	0.0124 9747+
a_2	1566 308+	1460 936+	8 5162+	34 412+	4737 401+	13 0815-
a_3	194 231+	241 855+	2662+	181 729-	285 005-	2 6197-
a_4	5 175-	2 942+	128-	23 935+	44 071-	779+
a_5	1 157-	24+		440+	1 542+	
	March 10			March 18		
a_0	213.9405 089+	11.2006 895-	0.9155 1525+	324.1845 963+	10.1546 351-	1.0133 0837+
a_1	12.0390 733+	3.0591 676-	0.0072 9740+	14.6535 468+	3.9327 810+	0.0091 2643+
a_2	2106 370+	2204 402+	9 2295+	362 806-	3633 399+	20 4260-
a_3	161 801+	253 649+	2168+	82 730-	444 996-	2 3053-
a_4	11 034-	3 158+	399-	25 866+	36 199-	2320+
a_5	1 445-	333-		1 545-	3 066+	
	March 11			March 19		
a_0	226.2051 514+	14.0137 693-	0.9237 5329+	338.7960 217+	5.9063 272-	1.0201 8487+
a_1	12.5037 516+	2.5410 962-	0.0091 9240+	14.5657 392+	4.5130 162+	0.0044 4256+
a_2	2511 084+	2980 985+	9 6306+	471 314-	2111 925+	25 9171-
a_3	103 272+	262 606+	586+	4 657+	558 624-	1 3511-
a_4	18 493-	1 588+	720-	17 711+	20 521-	3403+
a_5	1 362-	934-		2 622-	3 955+	
	March 12			March 20		
a_0	238.9683 531+	16.2304 411-	0.9339 0740+	353.3166 042+	1.2396 375-	1.0219 3465+
a_1	13.0288 727+	1.8659 503-	0.0111 0727+	14.4786 471+	4.7615 826+	0.0010 0985-
a_2	2696 267+	3768 989+	9 3632+	377 351-	352 532+	27 9272-
a_3	16 167+	259 187+	2295-	49 255+	601 216-	483+
a_4	25 666-	3 069-	1068-	4 205+	324-	3443+
a_5	528-	1 682-		2 664-	3 863+	

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 21			March 29		
a_0	7.7625 958+	3.4974 307+	1.0181 7134+	118.0931 723+	15.7684 047+	0.9138 7168+
a_1	14.4183 044+	4.6535 253+	0.0064 4291-	12.4119 083+	1.9528 395-	0.0082 1134-
a_2	231 043-	1414 378-	25 7475-	2228 827-	3352 920-	12 9824+
a_3	39 926+	564 463-	1 4535+	69 692+	213 015+	327-
a_4	9 440-	19 304+	2414+	17 936+	550+	596-
a_5	1 814-	2 837+		1 009-	341-	
	March 22			March 30		
a_0	22.1606 631+	7.9552 860+	1.0093 2315+	130.2908 599+	13.5015 955+	0.9069 4936+
a_1	14.3793 922+	4.2104 493+	0.0110 5979-	11.9937 208+	2.5594 690-	0.0056 4850-
a_2	186 075-	2963 556-	19 9859-	1922 235-	2713 971-	12 5341+
a_3	15 106-	459 747-	2 4235+	131 373+	212 036+	2698-
a_4	18 707-	33 579+	874+	12 783+	1 076-	360-
a_5	305-	1 316+		959-	50+	
	March 23			March 31		
a_0	36.5180 359+	11.8268 946+	0.9965 1585+	142.1066 769+	10.6918 304+	0.9025 2370+
a_1	14.3300 119+	3.4939 023+	0.0142 9504-	11.6533 197+	3.0390 577-	0.0032 3700-
a_2	346 676-	4128 170-	12 2333-	1461 009-	2083 810-	11 5151+
a_3	92 019-	313 133-	2 7588+	173 029+	208 353+	4127-
a_4	20 164-	40 068+	492-	7 970+	756-	160-
a_5	1 385+	186-		758-	256+	
	March 24			April 1		
a_0	50.8023 004+	14.8806 549+	0.9812 6844+	153.6319 198+	7.4651 769+	0.9003 9533+
a_1	14.2256 990+	2.5902 616+	0.0159 3385-	11.4158 361+	3.3934 882-	0.0010 6421-
a_2	729 814-	4829 044-	4 2777-	901 672-	1460 720-	10 1862+
a_3	158 187-	155 374-	2 5423+	197 432+	207 922+	4759-
a_4	12 856-	38 945+	1306-	4 216+	576+	11+
a_5	2 508+	1 322-		584-	312+	
	March 25			April 2		
a_0	64.9381 646+	16.9762 370+	0.9651 4799+	164.9776 952+	3.9464 977+	0.9003 0225+
a_1	14.0283 919+	1.5927 570+	0.0160 7901-	11.2961 262+	3.6228 694-	0.0008 3068+
a_2	1256 357-	5074 748-	2 5574+	289 905-	830 373-	8 7694+
a_3	184 527-	13 155-	2 0047+	208 495+	213 316+	4705-
a_4	176+	32 096+	1563-	1 355+	2 173+	155+
a_5	2 503+	1 914-		526-	260+	
	March 26			April 3		
a_0	78.8227 359+	18.0632 219+	0.9495 0957+	176.2657 632+	0.2621 659+	0.9019 6437+
a_1	13.7230 831+	0.5857 423+	0.0150 2865-	11.3009 724+	3.7239 501-	0.0024 4960+
a_2	1783 812-	4940 807-	7 6372+	338 456+	174 782-	7 4539+
a_3	159 352-	96 080+	1 3715+	208 603+	224 532+	4073-
a_4	12 969+	22 308+	1454-	1 219-	3 503+	262+
a_5	1 511+	1 928-		613-	129+	
	March 27			April 4		
a_0	92.3529 507+	18.1665 295+	0.9353 6726+	187.6212 583+	3.4564 460-	0.9051 2124+
a_1	13.3244 569+	0.3656 355-	0.0131 4792-	11.4304 501+	3.6900 814-	0.0038 2866+
a_2	2168 951-	4538 019-	10 8879+	950 827+	521 126+	6 3906+
a_3	93 093-	166 271+	7874+	197 479+	239 714+	3007-
a_4	20 476+	12 537+	1180-	4 247-	4 177+	316+
a_5	241+	1 505-		820-	74-	
	March 28			April 5		
a_0	105.4532 748+	17.3648 224+	0.9233 7506+	199.1660 323+	7.0700 331-	0.9095 6204+
a_1	12.8710 485+	1.2190 950-	0.0107 8134-	11.6777 502+	3.5123 086-	0.0050 2922+
a_2	2322 999-	3979 036-	12 5514+	1509 579+	1264 592+	5 6774+
a_3	9 304-	201 717+	3156+	172 159+	255 514+	1719-
a_4	21 456+	4 991+	874-	8 367-	3 840+	299+
a_5	662-	899-		1 054-	358-	

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
April 6						
a_0	211-0110 143+	10-4299 829-	0-9151 4480+	318-9662 106+	11-5069 874-	0-9932 5209+
a_1	12-0274 398+	3-1813 793-	0-0061 2510+	14-1637 932+	3-5279 507+	0-0104 3051+
a_2	1965 294+	2050 601+	5 3380+	196 071-	3817 872+	8 0851-
a_3	128 117+	267 086+	495-	11 916-	325 462-	1 9016-
a_4	13 758-	2 081+	200+	23 692+	29 185-	120-
a_5	1 122-	722-		1 498-	914+	
April 7						
a_0	223-2463 071+	13-3794 575-	0-9218 0073+	333-1114 245+	7-6326 229-	1-0026 8275+
a_1	12-4528 696+	2-6906 622-	0-0071 8582+	14-1297 309+	4-1826 700+	0-0082 3819+
a_2	2255 837+	2857 125+	5 3033+	104 681-	2675 494+	13 8283-
a_3	62 083+	267 960+	329+	67 300+	432 617-	1 9572-
a_4	19 603-	1 534-	15+	15 973+	24 734-	966+
a_5	750-	1 123-		2 478-	1 686+	
April 8						
a_0	235-9289 334+	15-7578 770-	0-9295 2033+	347-2387 668+	3-2279 699-	1-0093 5206+
a_1	12-9144 470+	2-0400 245-	0-0082 5699+	14-1341 344+	4-5789 343+	0-0049 2404+
a_2	2316 931+	3640 564+	5 4031+	168 241+	1246 097+	19 0864-
a_3	23 252-	250 423+	411+	106 173+	514 146-	1 5642-
a_4	23 606-	7 220-	244-	3 344+	16 317-	2078+
a_5	248+	1 431-		2 890-	2 643+	
April 9						
a_0	249-0704 125+	17-4096 680-	0-9383 1930+	1-4003 880+	1-4227 921+	1-0122 3183+
a_1	13-3615 408+	1-2403 885-	0-0093 4017+	14-1995 274+	4-6687 056+	0-0007 2072+
a_2	2108 011+	4334 182+	5 3703+	477 873+	367 780-	22 5125-
a_3	114 388-	207 213+	556-	90 819+	552 570-	7111-
a_4	22 422-	14 514-	553-	11 443-	2 894-	2733+
a_5	1 666+	1 471-		2 611-	3 371+	
April 10						
a_0	262-6292 401+	18-1975 155-	0-9481 8540+	15-6553 792+	5-9995 105+	1-0106 5752+
a_1	13-7406 922+	0-3179 290-	0-0103 7542+	14-3164 667+	4-4299 066+	0-0038 8565-
a_2	1647 019+	4854 007+	4 8620+	655 500+	2009 083-	23 0104-
a_3	186 783-	134 626+	2777-	19 680+	530 459-	4091+
a_4	13 790-	22 006-	865-	24 949-	14 360+	2593+
a_5	2 788+	1 156-		1 346-	3 339+	
April 11						
a_0	276-5148 558+	18-0188 973-	0-9590 1060+	30-0367 344+	10-1772 327+	1-0045 3766+
a_1	14-0099 394+	0-6838 805+	0-0112 2986+	14-4428 209+	3-8763 643+	0-0082 6119-
a_2	1031 891+	5114 282+	3 5023+	551 346+	3480 853-	20 2536-
a_3	214 033-	35 355+	6280-	92 274-	440 252-	1 4643+
a_4	678+	27 834-	1102-	31 984-	31 472+	1728+
a_5	2 839+	607-		920+	2 266+	
April 12						
a_0	290-6069 328+	16-8228 972-	0-9705 1686+	44-5223 561+	13-6648 603+	0-9944 1481+
a_1	14-1537 977+	1-7059 072+	0-0116 9777+	14-5130 766+	3-0618 377+	0-0118 0348-
a_2	422 316+	5047 284+	9557+	91 852+	4590 090-	14 8597-
a_3	183 570-	81 729-	1 0775-	209 669-	292 782-	2 1572+
a_4	15 268+	30 828-	1144-	27 128-	43 006+	559+
a_5	1 702+	58-		3 298+	388+	
April 13						
a_0	304-7863 020+	14-6235 230-	0-9821 9100+	59-0212 681+	16-2427 503+	0-9813 4666+
a_1	14-1901 458+	2-6784 857+	0-0115 1980+	14-4593 453+	2-0733 794+	0-0141 0599-
a_2	19 762-	4616 551+	2 9541-	666 823-	5206 543-	8 0844-
a_3	106 450-	205 352-	1 5482-	284 648-	117 982-	2 3700+
a_4	23 831+	31 097-	848-	9 812-	44 779+	454-
a_5	8+	397+		4 280+	1 544-	

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
April 22						
a_0	73.3849 132+	17.7880 007+	0.9666 6468+	173.0245 459+	1.3654 410+	0.9030 0159+
a_1	14.2388 006+	1.0138 145+	0.0150 3012-	11.2748 754+	3.7151 551-	0.0019 4221+
a_2	1536 726-	5307 321-	1 2661-	183 404+	390 237-	10 9182+
a_3	281 703-	45 037+	2 1743+	247 860+	207 508+	5978-
a_4	12 345+	36 609+	1065-	1 746-	3 715+	196-
a_5	3 188+	2 682-		717-	497+	
April 23						
a_0	87.4434 242+	18.2789 796+	0.9517 1471+	184.3423 015+	2.3675 658-	0.9059 7388+
a_1	13.8534 740+	0.0208 358-	0.0146 7373-	11.3848 570+	3.7292 158-	0.0039 3866+
a_2	2275 867-	4979 434-	4 6108+	909 347+	259 561+	9 0118+
a_3	201 698-	164 647+	1 7372+	233 553+	227 162+	6766-
a_4	28 412+	22 768+	1276-	5 264-	6 272+	46-
a_5	969+	2 683-		983-	190+	
April 24						
a_0	101.0520 799+	17.7786 736+	0.9376 6302+	195.8408 238+	6.0474 630-	0.9107 4559+
a_1	13.3496 387+	0.9595 617-	0.0132 8150-	11.6341 947+	3.6065 517-	0.0055 3618+
a_2	2700 848-	4375 743-	9 0581+	1568 588+	980 590+	6 9590+
a_3	79 416-	229 338+	1 2206+	202 469+	253 864+	6951-
a_4	32 882+	9 152+	1219-	10 189-	7 296+	109+
a_5	877-	1 887-		1 330-	299-	
April 25						
a_0	114.1268 928+	16.4051 980+	0.9253 9719+	207.6509 724+	9.5298 696-	0.9169 0926+
a_1	12.7983 580+	1.7631 903-	0.0111 5250-	12.0039 124+	3.3315 063-	0.0067 2383+
a_2	2750 633-	3651 682-	11 9937+	2101 538+	1782 977+	4 9437+
a_3	42 880+	247 651+	7307+	148 333+	279 686+	6504-
a_4	28 065+	260-	1038-	16 997-	5 851+	251+
a_5	1 661-	886-		1 484-	947-	
April 26						
a_0	126.6571 158+	14.3014 899+	0.9155 0675+	219.8780 238+	12.6546 192-	0.9240 6493+
a_1	12.2714 908+	2.4197 778-	0.0085 7606-	12.4611 800+	2.8891 387-	0.0075 2750+
a_2	2470 248-	2919 136-	13 5695+	2429 672+	2647 669+	3 1458+
a_3	138 552+	238 213+	3157+	65 786+	293 239+	5480-
a_4	19 522+	4 570-	830-	24 752-	1 079+	343+
a_5	1 602-	83-		1 026-	1 619-	
April 27						
a_0	138.6972 291+	11.6131 544+	0.9083 1092+	232.5861 719+	15.2497 210-	0.9318 5566+
a_1	11.8260 152+	2.9340 102-	0.0058 0062-	12.9564 383+	2.2720 113-	0.0080 0604+
a_2	1953 486-	2232 732-	14 0248+	2468 209+	3517 646+	1 7083+
a_3	200 845+	219 386+	152-	42 680-	281 139+	4074-
a_4	11 466+	4 862-	641-	30 256-	7 199-	352+
a_5	1 203-	405+		352+	2 024-	
April 28						
a_0	150.3490 064+	8.4773 639+	0.9039 0486+	245.7821 727+	17.1427 760-	0.9399 9530+
a_1	11.4995 566+	3.3164 829-	0.0030 2584-	13.4253 520+	1.4880 316-	0.0082 3958+
a_2	1294 180-	1599 681-	13 5998+	2162 144+	4297 590+	6944+
a_3	234 889+	204 119+	2707-	159 054-	232 225+	2630-
a_4	5 507+	2 741-	480-	28 563-	17 610-	255+
a_5	832-	623+		2 339+	1 824-	
April 29						
a_0	161.7431 014+	5.0211 131+	0.9022 0713+	259.4052 113+	18.1797 696-	0.9482 8056+
a_1	11.3129 743+	3.5759 680-	0.0004 0630-	13.7998 106+	0.5668 015-	0.0083 0976+
a_2	564 779-	997 526-	12 5039+	1537 067+	4870 325+	521+
a_3	248 697+	199 399+	4626-	249 082-	144 038+	1582-
a_4	1 440+	445+	338-	16 381-	26 958-	55+
a_5	656-	641+		3 817+	950-	

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 8						
a_0	273.3325 638+	18.2479 256-	0.9565 8027+	24.4164 148+	8.5818 204+	0.9969 4236+
a_1	14.0278 549+	0.4392 179+	0.0082 7493+	14.0763 613+	4.0688 221+	0.0031 1008-
a_2	729 809+	5131 191+	3977-	1166 522+	2635 780-	16 2564-
a_3	276 521-	27 350+	1350-	20 578+	461 526-	1354-
a_4	3 460+	31 686-	210-	34 796-	12 533+	1751+
a_5	3 674+	189+		1 089-	3 054+	
May 9						
a_0	287.4064 610+	17.2960 033-	0.9647 9983+	38.6078 976+	12.3424 707+	0.9922 1060+
a_1	14.0940 797+	1.4610 822+	0.0081 4649+	14.3013 795+	3.4097 479+	0.0063 3189-
a_2	42 186-	5025 052+	9369-	1008 540+	3914 544-	15 6169-
a_3	226 899-	97 053-	2204-	127 889-	381 181-	5798+
a_4	22 276+	30 495-	475-	40 613-	28 332+	1597+
a_5	1 971+	973+		1 714+	2 506+	
May 10						
a_0	301.4760 567+	15.3450 735-	0.9728 2585+	52.9934 524+	15.3257 298+	0.9843 9096+
a_1	14.0274 658+	2.4252 652+	0.0078 7397+	14.4493 358+	2.5250 683+	0.0092 1739-
a_2	569 534-	4560 688+	1 8886-	398 396+	4862 981-	12 9358-
a_3	119 306-	209 216-	4148-	271 619-	243 813-	1 2281+
a_4	32 047+	25 383-	653-	31 621-	41 269+	1054+
a_5	161-	1 112+		4 527+	731+	
May 11						
a_0	315.4378 271+	12.4870 882-	0.9804 6294+	67.4527 564+	17.3443 187+	0.9740 1334+
a_1	13.8905 035+	3.2650 405+	0.0073 4561+	14.4371 452+	1.4961 988+	0.0113 9396-
a_2	736 831-	3791 871+	3 5250-	560 755-	5339 506-	8 6409-
a_3	6 360+	299 774-	6835-	352 394-	72 687-	1 6506+
a_4	30 913+	19 752-	650-	7 854-	44 848+	347+
a_5	1 724-	842+		5 315+	1 490-	
May 12						
a_0	329.2582 024+	8.8747 289-	0.9873 8121+	81.7983 329+	18.3036 340+	0.9619 2382+
a_1	13.7565 475+	3.9260 027+	0.0064 0954+	14.2187 900+	0.4236 844+	0.0126 1307-
a_2	549 551-	2782 444+	5 9570-	1611 781-	5303 449-	3 5000-
a_3	112 284+	370 466-	9523-	331 696-	90 991+	1 7841+
a_4	22 040+	15 660-	389-	19 594+	36 876+	282-
a_5	2 540-	642+		3 457+	2 919-	
May 13						
a_0	342.9729 731+	4.7090 302-	0.9930 9594+	95.8250 803+	18.2094 683+	0.9491 3634+
a_1	13.6878 678+	4.3654 089+	0.0049 1684+	13.8064 879+	0.5964 174-	0.0127 8916-
a_2	105 881-	1583 474+	9 0311-	2454 737-	4838 492-	1 6703+
a_3	174 812+	426 550-	1 1156-	220 392-	209 267+	1 6637+
a_4	9 226+	12 664-	137+	36 849+	21 738+	696-
a_5	2 920-	874+		548+	2 959-	
May 14						
a_0	356.6683 645+	0.2291 079-	0.9969 9947+	109.3677 951+	17.1520 062+	0.9366 7362+
a_1	13.7213 651+	4.5495 109+	0.0027 8138+	13.2644 344+	1.4941 194-	0.0119 8386-
a_2	444 688+	236 552+	12 2749-	2889 418-	4109 894-	6 2380+
a_3	182 447+	468 053-	1 0631-	68 692-	267 155+	1 3788+
a_4	5 497-	8 465-	823+	39 009+	6 702+	882-
a_5	3 046-	1 601+		1 496-	2 015-	
May 15						
a_0	10.4515 888+	4.2965 664+	0.9984 5530+	122.3401 699+	15.2740 816+	0.9254 4262+
a_1	13.8613 157+	4.4538 208+	0.0000 4045+	12.6807 985+	2.2342 769-	0.0103 5793-
a_2	928 541+	1202 385-	14 9511-	2876 469-	3288 357-	9 8443+
a_3	130 258+	485 376-	7275-	72 016+	274 485+	1 0219+
a_4	21 061-	437-	1446+	31 012+	3 330-	904-
a_5	2 634-	2 531+		2 109-	849-	
May 16						
May 17						
May 18						
May 19						
May 20						
May 21						
May 22						
May 23						

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 24						
a_0	134.7434 133+	12.7379 996+	0.9161 6227+	228.5001 752+	14.4734 280-	0.9334 8937+
a_1	12.1384 600+	2.8113 583-	0.0081 1865-	12.8860 820+	2.5438 748-	0.0096 0986+
a_2	2495 473-	2493 352-	12 3698+	2878 046+	3212 023+	2 5979+
a_3	175 132+	253 200+	6589+	15 547+	313 480+	1 0870-
a_4	20 243+	7 425-	840-	35 659-	71-	159+
a_5	1 806-	55+		880-	2 527-	
May 25						
a_0	146.6516 830+	9.7018 891+	0.9093 3811+	241.6719 626+	16.6650 121-	0.9432 5191+
a_1	11.6990 999+	3.2370 106-	0.0054 8058-	13.4516 544+	1.8087 179-	0.0098 0968+
a_2	1866 678-	1777 731-	13 8456+	2701 861+	4126 716+	5592-
a_3	238 356+	224 365+	3231+	134 438-	287 725+	1 0226-
a_4	11 215+	7 009-	753-	40 523-	13 113-	442+
a_5	1 254-	591+		1 665+	2 911-	
May 26						
a_0	158.1889 467+	6.3089 002+	0.9052 6687+	255.3764 734+	18.0338 884-	0.9529 0783+
a_1	11.4011 304+	3.5277 551-	0.0026 4463-	13.9363 214+	0.9037 570-	0.0094 0876+
a_2	1096 846-	1140 766-	14 3657+	2072 100+	4882 026+	3 3554-
a_3	270 909+	202 380+	226+	278 302-	206 645+	8423-
a_4	5 050+	3 956-	675-	31 888-	28 201-	654+
a_5	849-	831+		4 478+	2 079-	
May 27						
a_0	169.5079 035+	2.6869 940+	0.9040 5432+	269.4894 336+	18.4318 061-	0.9619 0336+
a_1	11.2646 293+	3.6963 610-	0.0002 0828+	14.2567 354+	0.1223 244+	0.0085 1120+
a_2	262 294-	549 037-	14 0303+	1090 801+	5311 938+	5 4877-
a_3	282 675+	194 887+	2472-	360 532-	74 105+	5749-
a_4	937+	278+	614-	8 397-	38 829-	719+
a_5	745-	859+		5 458+	231-	
May 28						
a_0	180.7745 900+	1.0446 683-	0.9056 3477+	283.8189 020+	17.7747 834-	0.9698 1549+
a_1	11.2969 749+	3.7471 619-	0.0029 1561+	14.3661 042+	1.1912 985+	0.0072 6999+
a_2	583 921+	45 893+	12 9221+	13 541+	5299 011+	6 7846-
a_3	278 844+	204 490+	4932-	340 516-	82 501-	2816-
a_4	2 660-	4 659+	555-	19 849+	39 707-	603+
a_5	968-	692+		3 718+	1 560+	
May 29						
a_0	192.1574 786+	4.7662 568-	0.9097 8773+	298.1546 655+	16.0656 487-	0.9763 8489+
a_1	11.4958 636+	3.6744 271-	0.0053 2987+	14.2764 530+	2.2112 480+	0.0058 5271+
a_2	1394 823+	694 257+	11 1123+	851 718-	4828 932+	7 2759-
a_3	258 247+	229 803+	7164-	225 661-	225 299-	370-
a_4	7 421-	8 237+	469-	38 516+	31 399-	340+
a_5	1 454-	277+		671+	2 309+	
May 30						
a_0	203.8177 617+	8.3474 265-	0.9161 5250+	312.3272 994+	13.3969 463-	0.9815 0970+
a_1	11.8486 062+	3.4632 023-	0.0073 1864+	14.0541 505+	3.0980 393+	0.0044 0001+
a_2	2110 486+	1435 877+	8 6862+	1290 968-	3987 781+	7 1930-
a_3	213 730+	265 088+	9062-	66 262-	327 989-	988+
a_4	14 758-	9 760+	328-	41 349+	19 513-	22+
a_5	1 975-	462-		1 717-	1 962+	
May 31						
a_0	215.8971 162+	11.6396 026-	0.9242 4586+	326.2496 901+	9.9346 829-	0.9852 0050+
a_1	12.3279 316+	3.0928 289-	0.0087 7089+	13.7917 583+	3.7903 737+	0.0029 9188+
a_2	2643 325+	2285 090+	5 7775+	1258 899-	2906 362+	6 8918-
a_3	134 938+	298 908+	1 0397-	81 331+	386 871-	1038+
a_4	24 972-	7 535+	115-	32 274+	9 668-	239-
a_5	2 018-	1 498-		2 777-	1 158+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
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DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
June 9						
a_0	339-9266 414+	5-8932 110-	0-9875 1119+	90-6600 024+	18-4411 940+	0-9517 2997+
a_1	13-5758 988+	4-2522 962+	0-0016 3507+	13-9633 026+	0-1809 746-	0-0101 1919-
a_2	849 058-	1699 300+	6 7272-	1653 978-	5065 529-	2 7975-
a_3	182 519+	414 304-	22+	311 760-	131 752+	1 0948+
a_4	18 191+	4 052-	350-	22 639+	32 016+	267+
a_5	2 987-	552+		2 928+	2 656-	
June 10						
a_0	353-4374 066+	1-5127 653-	0-9884 7027+	104-4292 879+	17-7697 777+	0-9414 4316+
a_1	13-4666 257+	4-4665 201+	0-0002 7627+	13-5494 954+	1-1430 766-	0-0103 3961-
a_2	222 230-	437 561+	6 9278-	2424 166-	4504 808-	6363+
a_3	225 422+	425 028-	1441-	193 484-	233 237+	1 2000+
a_4	3 233+	1 536-	266-	37 122+	18 259+	71-
a_5	2 962-	486+		177+	2 670-	
June 11						
a_0	6-9043 785+	2-9549 030+	0-9880 3670+	117-7207 482+	16-2011 029+	0-9312 8647+
a_1	13-4896 187+	4-4261 530+	0-0011 6316-	13-0215 521+	1-9680 977-	0-0098 5521-
a_2	443 802+	841 909-	7 5113-	2780 201-	3722 279-	4 1853+
a_3	208 816+	426 030-	2550-	44 239-	280 050+	1 1686+
a_4	11 664-	695+	5-	37 432+	4 692+	338-
a_5	2 842-	984+		1 568-	1 814-	
June 12						
a_0	20-4578 083+	7-2544 300+	0-9860 9686+	130-4634 426+	13-8890 701+	0-9219 6327+
a_1	13-6349 379+	4-1307 331+	0-0027 4214-	12-4664 283+	2-6275 676-	0-0086 8109-
a_2	971 793+	2105 994-	8 2683-	2704 073-	2872 114-	7 4831+
a_3	134 120+	412 960-	2582-	89 548+	281 286+	1 0305+
a_4	26 217-	5 583+	352+	29 138+	4 348-	508-
a_5	2 214-	1 783+		1 987-	753-	
June 13						
a_0	34-2004 944+	11-1340 043+	0-9825 0559+	142-6711 335+	11-0019 096+	0-9141 2846+
a_1	13-8579 409+	3-5887 717+	0-0044 5918-	11-9631 398+	3-1197 192-	0-0068 9565-
a_2	1194 638+	3293 509-	8 8218-	2280 502-	2061 853-	10 2671+
a_3	8 134+	372 494-	1145-	186 413+	256 855+	8253+
a_4	37 815-	14 741+	681+	19 028+	7 983-	597-
a_5	469-	2 332+		1 637-	89+	
June 14						
a_0	48-1748 840+	14-3578 829+	0-9771 5958+	154-4266 034+	7-7009 012+	0-9083 3608+
a_1	14-0839 511+	2-8253 833+	0-0062 3065-	11-5697 564+	3-4581 813-	0-0046 1853-
a_2	987 422+	4299 161-	8 7514-	1623 465-	1338 277-	12 3835+
a_3	146 222-	290 428-	1641+	246 442+	226 121+	5857+
a_4	40 402-	26 870+	862+	10 866+	7 413-	639-
a_5	2 330+	1 975+		1 125-	611+	
June 15						
a_0	62-3391 480+	16-7271 918+	0-9700 7881+	165-8596 316+	4-1308 240+	0-9050 0808+
a_1	14-2225 758+	1-8901 564+	0-0078 9720-	11-3227 801+	3-6606 603-	0-0019 9169-
a_2	329 724+	4989 422-	7 7432-	830 179-	698 277-	13 7560+
a_3	283 158-	164 043-	5158+	278 841+	202 725+	3301+
a_4	28 188-	37 128+	829+	5 354+	4 270-	670-
a_5	4 773+	499+		799-	868+	
June 16						
a_0	76-5640 389+	18-1057 644+	0-9614 6717+	177-1277 334+	0-4202 683+	0-9044 1830+
a_1	14-1946 847+	0-8581 576+	0-0092 5791-	11-2421 389+	3-7407 720-	0-0008 3176+
a_2	640 991-	5253 801-	5 7054-	30 503+	107 027-	14 3433+
a_3	348 036-	11 629-	8525+	292 269+	194 362+	628+
a_4	3 218-	39 568+	601+	1 505+	148+	710-
a_5	5 033+	1 418-		799-	925+	
June 17						
June 18						
June 19						
June 20						
June 21						
June 22						
June 23						
June 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^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
June 25						
a_0	188.4022 201+	3.3116 628-	0.9066 8356+	293.6381 956+	16.8178 338-	0.9846 9561+
a_1	11.3361 225+	3.7033 470-	0.0036 9084+	14.6690 582+	1.8921 429+	0.0077 9614+
a_2	908 376+	486 215+	14 1039+	349 353-	5323 737+	12 9237-
a_3	290 094+	204 117+	2210-	365 137-	179 988-	8002-
a_4	2 344-	4 872+	764-	30 334+	45 720-	1495+
a_5	1 160-	773+		3 237+	2 595+	
June 26						
a_0	199.8578 393+	6.9454 120-	0.9117 5506+	308.2391 619+	14.4156 284-	0.9911 3431+
a_1	11.6033 077+	3.5425 338-	0.0064 1479+	14.5033 945+	2.8859 044+	0.0050 3120+
a_2	1753 006+	1135 556+	12 9815+	1230 431-	4535 503+	14 4305-
a_3	268 743+	231 072+	5272-	213 510-	336 478-	1898-
a_4	8 063-	8 890+	810-	46 247+	32 058-	1389+
a_5	1 814-	319+		420-	3 341+	
June 27						
a_0	211.6623 342+	10.3503 621-	0.9194 0718+	322.6027 450+	11.1126 933-	0.9947 1737+
a_1	12.0303 988+	3.2423 862-	0.0088 2052+	14.2115 415+	3.6809 079+	0.0021 4378+
a_2	2492 700+	1885 334+	10 9142+	1597 787-	3367 184+	14 1796-
a_3	217 997+	269 309+	8538-	34 029-	431 660-	3742+
a_4	17 249-	10 679+	804-	43 395+	14 952-	953+
a_5	2 452-	565-		2 663-	2 692+	
June 28						
a_0	223.9618 326+	13.3762 726-	0.9292 2570+	336.6551 781+	7.1394 589-	0.9954 9015+
a_1	12.5862 122+	2.7805 393-	0.0107 1501+	13.8978 011+	4.2202 108+	0.0005 4173-
a_2	3018 600+	2751 699+	7 8740+	1466 210-	2009 416+	12 5029-
a_3	124 549+	305 620+	1 1803-	112 534+	465 202-	7568+
a_4	29 998-	7 978+	683-	29 568+	1 473-	369+
a_5	2 369-	1 870-		3 284-	1 537+	
June 29						
a_0	236.8591 230+	15.8504 692-	0.9406 0324+	350.4202 400+	2.7648 203-	0.9937 7750+
a_1	13.2141 155+	2.1362 586-	0.0119 0836+	13.6485 048+	4.4827 118+	0.0028 0053-
a_2	3188 458+	3697 704+	3 9326+	984 059-	620 315+	10 0271-
a_3	18 131-	318 097+	1 4597-	198 056+	456 233-	8997+
a_4	42 631-	1 534-	387-	12 995+	6 006+	153-
a_5	664-	3 170-		3 107-	647+	
June 30						
a_0	250.3859 417+	17.5856 182-	0.9527 5502+	3.9911 333+	1.7349 650+	0.9900 6270+
a_1	13.8289 871+	1.3034 880-	0.0122 4146+	13.5147 547+	4.4726 305+	0.0045 4219-
a_2	2871 573+	4611 001+	6636-	342 995-	705 916-	7 4297-
a_3	193 375-	280 058+	1 6199-	219 168+	425 915-	8308+
a_4	46 400-	17 970-	96+	2 560-	8 982+	473-
a_5	2 714+	3 549-		2 761-	351+	
July 1						
a_0	264.4783 800+	18.4021 523-	0.9647 6910+	17.4929 733+	6.0953 459+	0.9848 5588+
a_1	14.3280 897+	0.3062 315-	0.0116 2663+	13.5095 024+	4.2074 418+	0.0057 9786-
a_2	2040 289+	5307 759+	5 4470-	271 524+	1926 280-	5 2238-
a_3	350 069-	173 440+	1 5825-	181 618+	386 327-	6341+
a_4	32 138-	36 433-	691+	16 484-	10 558+	553-
a_5	5 869+	2 237-		2 271-	613+	
July 2						
a_0	278.9728 650+	18.1641 310-	0.9756 9970+	31.0459 142+	10.0726 439+	0.9785 9352+
a_1	14.6212 067+	0.7916 630+	0.0100 9014+	13.6105 643+	3.7108 177+	0.0066 7456-
a_2	856 165+	5587 070+	9 7637-	694 712+	3015 786-	3 6499-
a_3	419 777-	6 790+	1 3009-	93 573+	337 679-	4076+
a_4	1 293-	47 852-	1224+	28 152-	13 614+	433-
a_5	6 144+	334+		1 247-	1 124+	
July 3						
July 4						
July 5						
July 6						
July 7						
July 8						
July 9						
July 10						

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 11						
a_0	44.7323 671 +	13.4495 890 +	0.9715 9039 +	150.7114 275 +	8.9811 239 +	0.9096 7650 +
a_1	13.7656 965 +	3.0123 648 +	0.0072 9961 -	11.7429 026 +	3.3475 498 -	0.0052 7751 -
a_2	794 007 +	3935 868 -	2 6799 -	1868 961 -	1614 788 -	8 2881 +
a_3	30 431 -	271 838 -	2319 +	185 583 +	250 837 +	7393 +
a_4	34 704 -	19 441 +	196 -	15 380 +	6 752 -	210 -
a_5	605 +	1 392 +		1 226 -	78 +	
July 12						
a_0	58.5710 114 +	16.0432 667 +	0.9640 4402 +	162.2874 077 +	5.4965 115 +	0.9052 9963 +
a_1	13.9017 923 +	2.1521 121 +	0.0077 7386 -	11.4303 246 +	3.5979 177 -	0.0034 0650 -
a_2	500 556 +	4620 764 -	2 0937 -	1232 188 -	901 998 -	10 3758 +
a_3	161 929 -	180 398 -	1540 +	235 042 +	224 861 +	6546 +
a_4	31 605 -	26 731 +	67 +	9 285 +	6 278 -	344 -
a_5	2 827 +	971 +		874 -	510 +	
July 13						
a_0	72.5037 885 +	17.7180 327 +	0.9560 7687 +	173.6188 587 +	1.8303 033 +	0.9029 9273 +
a_1	13.9420 976 +	1.1850 166 +	0.0081 4369 -	11.2576 766 +	3.7131 151 -	0.0011 4873 -
a_2	146 501 -	4991 830 -	1 5849 -	480 080 -	259 976 -	12 1292 +
a_3	259 330 -	64 402 -	1836 +	263 540 +	204 986 +	5168 +
a_4	16 834 -	31 792 +	277 +	5 015 +	3 659 -	467 -
a_5	4 160 +	151 -		698 -	750 +	
July 14						
a_0	86.4040 356 +	18.4005 903 +	0.9477 9582 +	184.8553 130 +	1.8886 016 -	0.9031 0392 +
a_1	13.8303 443 +	0.1799 699 +	0.0083 9450 -	11.2423 793 +	3.7047 028 -	0.0014 1345 +
a_2	983 783 -	4995 811 -	8647 -	333 665 +	340 543 +	13 3950 +
a_3	285 356 -	60 538 +	2981 +	276 551 +	197 894 +	3303 +
a_4	4 740 +	30 932 +	384 +	1 651 +	164 +	597 -
a_5	3 645 +	1 409 -		809 -	819 +	
July 15						
a_0	100.1083 045 +	18.0899 852 +	0.9393 4851 +	196.1587 981 +	5.5393 624 -	0.9058 8393 +
a_1	13.5516 969 +	0.7893 635 -	0.0084 6263 -	11.3923 330 +	3.5767 510 -	0.0041 6768 +
a_2	1774 921 -	4642 746 -	2596 +	1165 155 +	943 416 +	14 0231 +
a_3	231 032 -	169 772 +	4552 +	274 821 +	206 661 +	923 +
a_4	23 274 +	23 559 +	375 +	2 267 -	4 361 +	747 -
a_5	1 725 +	2 104 -		1 237 -	683 +	
July 16						
a_0	113.4619 058 +	16.8554 699 +	0.9309 6110 +	207.6947 782 +	9.0006 013 -	0.9114 5569 +
a_1	13.1375 726 +	1.6586 090 -	0.0082 5916 -	11.7062 840 +	3.3239 842 -	0.0069 7012 +
a_2	2311 161 -	4013 154 -	1 8467 +	1963 650 +	1596 415 +	13 8464 +
a_3	121 813 -	243 031 +	6074 +	253 003 +	230 666 +	2062 -
a_4	31 660 +	12 741 +	271 +	8 401 -	7 930 +	919 -
a_5	245 -	1 990 -		1 899 -	233 +	
July 17						
a_0	126.3593 226 +	14.8209 238 +	0.9229 5006 +	219.6216 975 +	12.1410 610 -	0.9197 8064 +
a_1	12.6513 370 +	2.3842 282 -	0.0076 9677 -	12.1706 041 +	2.9322 137 -	0.0096 4080 +
a_2	2489 148 -	3227 533 -	3 8265 +	2653 232 +	2338 354 +	12 6718 +
a_3	1 744 +	274 465 +	7167 +	200 100 +	264 196 +	5747 -
a_4	30 016 +	2 661 +	114 +	18 065 -	9 293 +	1082 -
a_5	1 333 -	1 339 -		2 450 -	660 -	
July 18						
a_0	138.7647 874 +	12.1415 210 +	0.9157 0876 +	232.0755 834 +	14.8121 563 -	0.9306 2033 +
a_1	12.1653 700 +	2.9469 995 -	0.0067 1189 -	12.7528 303 +	2.3818 985 -	0.0119 5944 +
a_2	2317 196 -	2401 560 -	6 0398 +	3120 572 +	3180 116 +	10 2960 +
a_3	108 355 +	272 164 +	7621 +	103 540 +	294 007 +	1 0116 -
a_4	23 057 +	4 017 -	55 -	30 842 -	6 117 +	1167 -
a_5	1 516 -	563 -		2 157 -	1 979 -	

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 27						
a_0	245-1475 251 +	16-8462 286 -	0-9434 9654 +	0-2623 697 +	0-2860 511 +	1-0042 8670 +
a_1	13-3945 941 +	1-6562 172 -	0-0136 6844 +	13-9308 983 +	4-6058 842 +	0-0058 8633 -
a_2	3224 468 +	4079 025 +	6 5646 +	870 844 -	402 517 -	15 5046 -
a_3	40 266 -	297 950 +	1 4866 -	160 324 +	497 838 -	1 6225 +
a_4	42 375 -	3 949 -	1060 -	6 452 +	14 524 +	324 +
a_5	221 -	3 281 -		2 926 -	1 050 +	
July 28						
a_0	258-8562 797 +	18-0654 713 -	0-9576 6218 +	14-1225 687 +	4-8034 573 +	0-9970 1539 +
a_1	14-0103 510 +	0-7542 475 -	0-0144 9291 +	13-8059 455 +	4-3823 634 +	0-0084 8761 -
a_2	2847 165 +	4916 287 +	1 4819 +	380 433 -	1798 419 -	10 4680 -
a_3	210 078 -	249 163 +	1 9223 -	157 274 +	429 610 -	1 7415 +
a_4	43 765 -	20 949 -	640 -	8 276 -	19 537 +	485 -
a_5	3 133 +	3 633 -		2 240 -	416 +	
July 29						
a_0	273-1262 762 +	18-3056 320 -	0-9721 0467 +	27-9051 467 +	8-9650 131 +	0-9876 5028 +
a_1	14-5008 238 +	0-2935 644 +	0-0141 8697 +	13-7726 117 +	3-9018 192 +	0-0100 7822 -
a_2	1985 788 +	5501 648 +	4 6444 -	19 307 +	2965 893 -	5 5483 -
a_3	352 302 -	129 825 +	2 1891 -	102 347 +	347 387 -	1 5350 +
a_4	27 261 -	39 844 -	144 +	19 633 -	21 458 +	925 -
a_5	5 836 +	2 266 -		1 252 -	289 +	
July 30						
a_0	287-7883 062 +	17-4531 312 -	0-9856 0973 +	41-6878 354 +	12-5376 791 +	0-9771 6149 +
a_1	14-7843 041 +	1-4157 742 +	0-0126 0711 +	13-7986 997 +	3-2131 527 +	0-0107 6441 -
a_2	823 883 +	5629 364 +	11 0939 -	196 006 +	3876 409 -	1 5009 -
a_3	403 151 -	50 684 -	2 1346 -	12 107 +	258 628 -	1 1554 +
a_4	3 347 +	51 440 -	1161 +	26 056 -	22 907 +	1014 -
a_5	5 544 +	417 +		151 +	359 +	
July 31						
a_0	302-6155 724 +	15-4845 913 -	0-9969 0560 +	55-5047 558 +	15-3396 548 +	0-9663 5240 +
a_1	14-8322 423 +	2-5060 773 +	0-0097 9443 +	13-8311 877 +	2-3696 249 +	0-0107 5854 -
a_2	309 953 -	5172 905 +	16 7732 -	77 503 +	4511 238 -	1 3618 +
a_3	336 061 -	250 856 -	1 6600 -	89 695 -	163 473 -	7443 +
a_4	31 764 +	48 940 -	2074 +	25 268 -	24 835 +	862 -
a_5	2 454 +	2 899 +		1 749 +	251 +	
August 1						
a_0	317-3866 352 +	12-4909 132 -	1-0048 7746 +	69-3323 725 +	17-2443 173 +	0-9557 9585 +
a_1	14-6833 622 +	3-4472 762 +	0-0060 2486 +	13-8105 485 +	1-4283 944 +	0-0102 9739 -
a_2	1103 063 -	4155 790 +	20 4965 -	325 646 -	4850 117 -	3 0858 +
a_3	186 410 -	417 024 -	8091 -	172 643 -	61 884 -	3973 +
a_4	43 660 +	33 748 -	2481 +	16 163 -	26 225 +	590 -
a_5	969 -	3 926 +		2 864 +	206 -	
August 2						
a_0	331-9453 192 +	8-6727 426 -	1-0087 9656 +	83-0917 621 +	18-1841 135 +	0-9458 4087 +
a_1	14-4238 040 +	4-1417 901 +	0-0017 8217 +	13-6885 930 +	0-4501 920 +	0-0095 8466 -
a_2	1410 125 -	2741 559 +	21 4446 -	911 841 -	4880 482 -	3 9327 +
a_3	22 584 -	513 022 -	2053 +	208 659 -	40 584 +	1614 +
a_4	38 092 +	13 629 -	2183 +	1 332 -	25 201 +	291 -
a_5	2 896 -	3 436 +		2 856 +	852 -	
August 3						
a_0	346-2293 719 +	4-3091 182 -	1-0084 7662 +	96-6684 574 +	18-1527 506 +	0-9366 6271 +
a_1	14-1487 922 +	4-5324 602 +	0-0023 5779 -	13-4445 207 +	0-5040 751 -	0-0087 6135 -
a_2	1278 351 -	1155 096 +	19 5451 -	1517 211 -	4616 057 -	4 2503 +
a_3	100 569 +	533 874 -	1 0904 +	186 038 -	132 595 +	467 +
a_4	23 140 +	3 667 +	1334 +	13 258 +	20 815 +	26 -
a_5	3 301 -	2 203 +		1 783 +	1 338 -	

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 12						
a_0	109.9441 574+	17.2022 769+	0.9283 3081+	204.2690 620+	7.8186 359-	0.9044 4537+
a_1	13.0914 603+	1.3798 515-	0.0078 9828-	11.4956 246+	3.3732 806-	0.0043 4875+
a_2	1977 950-	4106 793-	4 3811+	1378 609+	1429 337+	12 5838+
a_3	115 975-	202 409+	391+	232 659+	212 586+	3126+
a_4	22 136+	13 954+	169+	3 815-	3 207+	537-
a_5	377+	1 440-		1 190-	402+	
August 13						
a_0	122.8284 765+	15.4332 385+	0.9208 7624+	215.9253 130+	11.0273 634-	0.9100 7838+
a_1	12.6701 198+	2.1356 252-	0.0070 0355-	11.8390 226+	3.0221 543-	0.0069 3781+
a_2	2189 321-	3430 253-	4 6032+	2041 791+	2090 374+	13 1917+
a_3	24 250-	243 973+	1096+	205 235+	229 182+	990+
a_4	23 778+	6 642+	277+	9 789-	5 348+	779-
a_5	645-	1 184-		1 654-	24-	
August 14						
a_0	135.2795 526+	12.9795 310+	0.9143 4674+	227.9878 937+	13.8170 297-	0.9183 3747+
a_1	12.2341 691+	2.7464 187-	0.0060 3892-	12.3042 083+	2.5331 985-	0.0095 7469+
a_2	2125 882-	2670 328-	5 0990+	2582 189+	2809 793+	13 0127+
a_3	64 176+	258 949+	2231+	149 443+	249 887+	2120-
a_4	20 320+	687+	298+	18 273-	5 375+	1052-
a_5	1 049-	749-		1 842-	799-	
August 15						
a_0	147.3094 781+	9.9919 682+	0.9088 4301+	240.5632 536+	16.0438 027-	0.9291 8170+
a_1	11.8358 491+	3.2028 990-	0.0049 4025-	12.8572 492+	1.8945 249-	0.0120 7153+
a_2	1821 939-	1896 850-	5 9457+	2902 389+	3583 718+	11 7372+
a_3	134 988+	254 464+	3444+	58 304+	262 788+	6344+
a_4	14 953+	3 041-	246+	27 929-	1 442+	1316-
a_5	1 005-	300-		1 213-	1 853-	
August 16						
a_0	158.9780 269+	6.6244 965+	0.9045 3423+	253.7136 578+	17.5537 182-	0.9423 5035+
a_1	11.5174 367+	3.5072 957-	0.0036 3793-	13.4434 421+	1.0992 958-	0.0141 7599+
a_2	1337 308-	1154 697-	7 1235+	2897 533+	4362 179+	9 0400+
a_3	184 871+	239 520+	4443+	64 501-	249 486+	1 1665-
a_4	9 910+	4 502-	142+	34 449-	7 985-	1469-
a_5	790-	76+		589+	2 807-	
August 17						
a_0	170.3811 318+	3.0252 405+	0.9016 5450+	267.4370 172+	18.1929 267-	0.9572 9900+
a_1	11.3090 052+	3.6681 417-	0.0020 7426-	13.9901 163+	0.1566 120-	0.0155 7520+
a_2	731 134-	462 387-	8 5373+	2503 235+	5034 590+	4 6630+
a_3	216 705+	222 428+	5019+	195 034-	189 368+	1 7663-
a_4	6 004+	4 081-	5+	31 481-	22 462-	1346-
a_5	616-	350+		3 010+	3 011-	
August 18						
a_0	181.6392 330+	0.6672 704-	0.9004 8421+	281.6551 066+	17.8296 901-	0.9731 5041+
a_1	11.2298 836+	3.6953 483-	0.0002 1603-	14.4211 675+	0.8966 272+	0.0159 2396+
a_2	51 143-	183 914+	10 0410+	1759 457+	5437 733+	1 4253-
a_3	234 569+	209 698+	5045+	290 043-	70 008+	2 3220-
a_4	3 003+	2 285-	153-	15 685-	38 043-	760-
a_5	600-	516+		4 467+	1 973-	
August 19						
a_0	192.8876 995+	4.3234 344-	0.9013 2119+	296.2220 936+	16.3862 905-	0.9886 9205+
a_1	11.2909 267+	3.5963 122-	0.0019 3739+	14.6820 043+	1.9889 747+	0.0149 1182+
a_2	664 594+	804 465+	11 4570+	840 019+	5399 726+	8 8125-
a_3	240 467+	205 736+	4440+	308 550-	100 712-	2 6416-
a_4	92+	355+	331-	7 593+	48 182-	360+
a_5	795-	552+		3 702+	98+	

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 28						
a_0	310.9583 743+	13.8722 228-	1.0024 6207+	65.9568 927+	16.7203 909+	0.9669 2694+
a_1	14.7623 286+	3.0194 850+	0.0123 7122+	14.0343 137+	1.6977 721+	0.0139 5441-
a_2	2 998-	4809 498+	16 4776-	799 180-	4984 445-	2 7907+
a_3	242 553-	291 187-	2 5003-	161 245-	52 478-	1 3717+
a_4	26 477+	47 546-	1787+	9 493-	29 761+	1362-
a_5	1 228+	2 324+		2 483+	1 082-	
August 29						
a_0	325.6989 183+	10.4054 289-	1.0129 5338+	79.8944 630+	17.9173 386+	0.9533 7514+
a_1	14.7001 651+	3.8761 740+	0.0083 9720+	13.8235 487+	0.6965 029+	0.0130 3929-
a_2	559 556-	3673 971+	22 8700-	1314 978-	4974 144-	6 0959+
a_3	125 797-	457 290-	1 7669-	174 559-	55 599+	8222+
a_4	32 317+	35 472-	2971+	3 323+	24 262+	1116-
a_5	1 283-	3 778+		2 164+	1 340-	
August 30						
a_0	340.3336 514+	6.2107 561-	1.0189 1659+	93.5696 066+	18.1242 793+	0.9410 1650+
a_1	14.5627 983+	4.4614 817+	0.0034 1212+	13.5105 953+	0.2726 113-	0.0116 1809-
a_2	755 953-	2127 122+	26 3779-	1797 053-	4675 190-	7 9032+
a_3	10 183-	561 258-	5453-	140 215-	139 242+	3750+
a_4	25 374+	16 079-	3316+	14 310+	17 453+	787-
a_5	2 694-	4 012+		1 125+	1 347-	
August 31						
a_0	354.8221 041+	1.5938 948-	1.0196 6954+	106.8880 186+	17.3996 837+	0.9302 1837+
a_1	14.4173 553+	4.7141 017+	0.0018 9426-	13.1154 054+	1.1595 691-	0.0099 5641-
a_2	661 255-	387 033+	26 0451-	2120 601-	4166 234-	8 5664+
a_3	64 235+	585 919-	8108+	72 360-	195 709+	612+
a_4	11 491+	4 301+	2633+	19 840+	10 639+	459-
a_5	2 919-	3 199+		14+	1 118-	
September 1						
a_0	9.1806 146+	3.1010 683+	1.0152 7818+	119.7861 134+	15.8440 141+	0.9211 2013+
a_1	14.3075 125+	4.6190 513+	0.0067 5464-	12.6775 198+	1.9304 065-	0.0082 4312-
a_2	428 832-	1312 919-	22 0734-	2218 526-	3526 461-	8 4835+
a_3	81 360+	537 454-	1 8750+	6 730+	227 279+	1208-
a_4	3 375-	20 349+	1299+	19 705+	5 028+	174-
a_5	2 309-	1 925+		696-	772-	
September 2						
a_0	23.4528 114+	7.5373 097+	1.0065 1668+	132.2443 545+	13.5841 150+	0.9137 1155+
a_1	14.2436 508+	4.2043 320+	0.0105 5489-	12.2433 675+	2.5658 894-	0.0065 8957-
a_2	228 120-	2783 957-	15 7106-	2087 089-	2822 173-	8 0242+
a_3	45 451+	437 487-	2 3863+	78 451+	239 863+	1881-
a_4	15 110-	29 852+	58-	16 055+	1 190+	53+
a_5	1 134-	759+		927-	438-	
September 3						
a_0	37.6765 710+	11.4225 584+	0.9946 2877+	144.2883 710+	10.7600 698+	0.9079 0612+
a_1	14.2050 530+	3.5286 136+	0.0129 8355-	11.8554 436+	3.0581 078-	0.0050 3901-
a_2	193 774-	3909 738-	8 6157-	1764 686-	2099 816-	7 4969+
a_3	25 456-	310 980-	2 3456+	133 445+	240 396+	1645-
a_4	20 848-	33 513+	988-	11 341+	962-	213+
a_5	377+	74-		847-	181-	
September 4						
a_0	51.8576 538+	14.5324 441+	0.9810 0833+	155.9817 399+	7.5159 057+	0.9036 0249+
a_1	14.1505 121+	2.6667 397+	0.0140 4261-	11.5466 531+	3.4064 275-	0.0035 8044-
a_2	391 439-	4642 347-	2 1841-	1304 774-	1386 210-	7 1341+
a_3	104 277-	178 003-	1 9344+	170 444+	234 836+	769-
a_4	18 799-	33 072+	1381-	7 100+	1 840-	301+
a_5	1 783+	651-		663-	7-	

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 13						
a_0	167-4156 036+	3-9941 561+	0-9007 3079+	262-9063 963+	18-0141 544-	0-9397 0822+
a_1	11-3393 398+	3-6139 582-	0-0021 6461-	13-4375 156+	0-4707 450-	0-0131 9445+
a_2	757 474-	692 810-	7 0848+	2225 396+	4568 866+	9 7686+
a_3	192 291+	227 472+	459+	101 565-	175 777+	6895-
a_4	3 817+	1 857-	318+	21 020-	13 487-	1425-
a_5	519-	107+		1 576+	1 921-	
September 14						
a_0	178-6987 549+	0-3334 891+	0-8992 8242+	276-5543 505+	18-0119 758-	0-9537 9633+
a_1	11-2467 995+	3-6849 675-	0-0007 2116-	13-8445 061+	0-4894 060+	0-0148 8428+
a_2	162 882-	20 458-	7 4115+	1810 381+	4996 031+	6 8403+
a_3	202 389+	221 160+	1750+	169 314-	102 645+	1 2673-
a_4	1 274+	1 303-	266+	12 843-	23 306-	1585-
a_5	484-	179+		2 595+	1 876-	
September 15						
a_0	189-9495 840+	3-3315 207-	0-8993 2257+	290-5619 385+	17-0152 203-	0-9692 2207+
a_1	11-2752 071+	3-6231 431-	0-0008 2430+	14-1519 483+	1-5091 464+	0-0158 0869+
a_2	447 094+	636 994+	8 0927+	1251 404+	5145 344+	2 0939+
a_3	202 589+	217 748+	2832+	194 758-	8 989-	1 9161-
a_4	1 094-	384-	155+	645+	32 907-	1394-
a_5	579-	201+		2 566+	1 282-	
September 16						
a_0	201-2895 921+	6-8692 078-	0-9009 8601+	304-8198 725+	14-9958 572-	0-9850 3460+
a_1	11-4246 751+	3-4304 729-	0-0025 3399+	14-3453 414+	2-5217 162+	0-0155 9676+
a_2	1042 508+	1289 951+	9 0301+	696 719+	4908 089+	4 4675-
a_3	192 305+	218 185+	3467+	167 198-	152 798-	2 4939-
a_4	3 958-	664+	8-	13 866+	39 500-	646-
a_5	781-	140+		1 368+	182-	
September 17						
a_0	212-8372 746+	10-1487 866-	0-9044 5759+	319-2196 896+	12-0025 802-	0-9999 2877+
a_1	11-6888 942+	3-1066 917-	0-0044 4370+	14-4407 547+	3-4416 050+	0-0139 2915+
a_2	1587 861+	1949 900+	10 0587+	292 016+	4210 856+	12 2955-
a_3	168 539+	222 125+	3449+	99 052-	311 773-	2 7688-
a_4	7 884-	1 428+	218-	20 762+	40 516-	697+
a_5	1 001-	55-		386-	1 282+	
September 18						
a_0	224-7009 203+	13-0381 385-	0-9099 3947+	333-6817 783+	8-1749 904-	1-0123 5847+
a_1	12-0533 738+	2-6495 309-	0-0065 5019+	14-4775 524+	4-1746 804+	0-0106 6729+
a_2	2036 143+	2624 303+	10 9546+	115 539+	3045 265+	20 1346-
a_3	126 963+	227 069+	2592+	20 743-	460 134-	2 4886-
a_4	13 007-	1 227+	476-	18 611+	34 053-	2301+
a_5	1 058-	426-		1 911-	2 824+	
September 19						
a_0	236-9691 982+	15-4024 521-	0-9176 0628+	348-1704 804+	3-7449 197-	1-0207 8645+
a_1	12-4929 599+	2-0562 723-	0-0087 9986+	14-5009 256+	4-6334 857+	0-0059 8596+
a_2	2328 378+	3308 620+	11 4375+	145 820+	1488 833+	26 1841-
a_3	64 572+	227 407+	704+	34 131+	567 462-	1 5422-
a_4	18 517-	853-	780-	8 708+	19 641-	3476+
a_5	696-	960-		2 715-	3 945+	
September 20						
a_0	249-6995 318+	17-1053 030-	0-9275 4914+	2-6900 003+	0-9791 335+	1-0240 3454+
a_1	12-9702 534+	1-3271 482-	0-0110 7730+	14-5424 544+	4-7551 299+	0-0004 2572+
a_2	2403 998+	3976 118+	11 1705+	273 246+	291 886-	28 7219-
a_3	15 908-	214 063+	2411-	41 898+	606 480-	1124-
a_4	22 230-	5 678-	1115-	5 286-	535+	3587+
a_5	251+	1 536-		2 570-	4 123+	
September 21						
September 22						
September 23						
September 24						
September 25						
September 26						
September 27						
September 28						

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 29						
a_0	17:2631 834+	5:6448 925+	1:0216 1269+	129:2415 076+	14:1820 002+	0:9185 0618+
a_1	14:6062 747+	4:5170 829+	0:0052 0873-	12:3709 980+	2:4249 777-	0:0091 0496-
a_2	341 457+	2066 830-	26 9377-	2452 866-	2953 116-	11 7172+
a_3	4 251-	563 637-	1 3524+	116 389+	245 317+	288-
a_4	18 564-	21 556+	2570+	17 126+	2 395-	545-
a_5	1 366-	3 208+		1 386-	181-	
September 30						
a_0	31:9011 856+	9:9014 052+	1:0138 7113+	141:3804 319+	11:4859 849+	0:9105 6460+
a_1	14:6651 846+	3:9448 502+	0:0100 8772-	11:9214 994+	2:9430 539-	0:0067 9197-
a_2	203 629+	3596 297-	21 3872-	2014 808-	2233 327-	11 3118+
a_3	90 993-	446 299-	2 3860+	171 207+	234 138+	2455-
a_4	25 613-	37 797+	985+	10 142+	3 194-	280-
a_5	684+	1 529+		1 081-	173+	
October 1						
a_0	46:5751 409+	13:4459 284+	1:0018 9313+	153:1184 772+	8:3427 100+	0:9048 7646+
a_1	14:6687 113+	3:1075 825+	0:0136 1002-	11:5734 162+	3:3206 690-	0:0046 1447-
a_2	216 155-	4693 123-	13 6822-	1451 146-	1548 339-	10 4140+
a_3	185 460-	280 892-	2 7659+	201 146+	223 168+	3562-
a_4	21 933-	45 399+	446-	4 766+	2 255-	60-
a_5	2 710+	340-		757-	304+	
October 2						
a_0	61:2017 685+	16:0606 153+	0:9871 8703+	164:5672 944+	4:8893 287+	0:9012 6717+
a_1	14:5624 254+	2:1026 781+	0:0155 3460-	11:3450 590+	3:5641 367-	0:0026 4093-
a_2	876 928-	5266 845-	5 6787-	826 673-	889 323-	9 3148+
a_3	245 629-	103 549-	2 5673+	212 758+	217 176+	3789-
a_4	7 698-	43 436+	1310-	1 042+	691-	117+
a_5	3 518+	1 820-		553-	288+	
October 3						
a_0	75:6515 202+	17:6304 156+	0:9713 2819+	175:8510 108+	1:2579 371+	0:8995 2099+
a_1	14:3120 301+	1:0347 081+	0:0159 5263-	11:2436 920+	3:6769 808-	0:0008 8696-
a_2	1624 730-	5335 128-	1 2284+	187 673-	239 056-	8 2523+
a_3	241 723-	51 604+	2 0272+	211 421+	217 233+	3306-
a_4	10 497+	33 967+	1590-	1 665-	775+	246+
a_5	2 647+	2 495-		504-	185+	
October 4						
a_0	89:7782 195+	18:1399 185+	0:9556 8522+	187:0968 607+	2:4211 300-	0:8994 2867+
a_1	13:9200 879+	0:0044 969-	0:0151 6245-	11:2686 658+	3:6592 199-	0:0006 7419+
a_2	2260 425-	5001 511-	6 3590+	431 571+	419 145+	7 4108+
a_3	174 270-	162 614+	1 3822+	199 682+	222 094+	2300-
a_4	23 849+	21 187+	1480-	4 141-	1 719+	320+
a_5	863+	2 316-		582-	30+	
October 5						
a_0	103:4573 092+	17:6534 191+	0:9412 8209+	198:4281 795+	6:0160 511-	0:9008 2415+
a_1	13:4256 916+	0:9486 969-	0:0135 3520-	11:4129 368+	3:5080 601-	0:0021 0018+
a_2	2631 546-	4409 718-	9 6265+	999 947+	1096 048+	6 9132+
a_3	71 118-	224 611+	7871+	177 217+	229 158+	996-
a_4	27 884+	9 486+	1188-	7 049-	1 887+	328+
a_5	667-	1 605-		720-	167-	
October 6						
a_0	116:6154 561+	16:2869 996+	0:9287 7636+	209:9580 557+	9:3914 186-	0:9036 0896+
a_1	12:8888 666+	1:7602 643-	0:0114 2132-	11:6629 113+	3:2194 322-	0:0034 6606+
a_2	2684 313-	3695 014-	11 2850+	1482 090+	1793 173+	6 8090+
a_3	33 333+	246 967+	3118+	141 780+	234 893+	339+
a_4	24 203+	1 495+	855-	10 709-	1 066+	261+
a_5	1 374-	799-		793-	407-	

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
October 15						
a_0	221.7822 038+	12.4079 783-	0.9077 6192+	328.0396 325+	9.8104 352-	0.9919 5222+
a_1	11.9971 833+	2.7901 071-	0.0048 4849+	13.9721 211+	3.7914 756+	0.0131 2058+
a_2	1835 225+	2500 179+	7 0631+	351 136+	3394 796+	7 0786-
a_3	91 115+	234 932+	1409+	49 939+	329 304-	2 2847-
a_4	14 809-	965-	119+	17 830+	29 687-	328-
a_5	626-	675-		1 764-	449+	
October 16						
a_0	233.9704 775+	14.9247 383-	0.9133 3200+	342.0534 677+	5.7153 342-	1.0041 3320+
a_1	12.3853 265+	2.2203 153-	0.0063 0817+	14.0635 791+	4.3599 947+	0.0110 0627+
a_2	2013 425+	3192 433+	7 5507+	590 277+	2233 221+	14 0896-
a_3	25 941+	224 181+	1909+	103 069+	442 891-	2 4277-
a_4	18 116-	4 366-	95-	8 880+	27 665-	967+
a_5	66-	920-		2 719-	1 605+	
October 17						
a_0	246.5579 224+	16.8039 209-	0.9204 1338+	356.1869 976+	1.1789 126-	1.0134 9742+
a_1	12.7885 156+	1.5167 813-	0.0078 7180+	14.2147 473+	4.6635 097+	0.0074 9876+
a_2	1981 877+	3829 566+	8 0578+	925 537+	754 602+	20 7493-
a_3	46 650-	197 435+	1548+	111 121+	536 636-	2 0350-
a_4	18 552-	9 031-	373-	4 979-	19 679-	2374+
a_5	863+	1 056-		3 215-	3 119+	
October 18						
a_0	259.5381 918+	17.9190 108-	0.9291 0271+	10.5045 914+	3.5047 376+	1.0187 4150+
a_1	13.1639 077+	0.6957 779-	0.0095 1490+	14.4295 928+	4.6471 281+	0.0028 3349+
a_2	1739 257+	4357 115+	8 2885+	1196 801+	942 149-	25 4030-
a_3	111 686-	150 775+	69+	59 349+	583 499-	1 0589-
a_4	14 145-	14 387-	700-	21 589-	3 767-	3264+
a_5	1 821+	1 014-		2 744-	4 303+	
October 19						
a_0	272.8636 243+	18.1655 397-	0.9394 4015+	25.0573 659+	7.9993 545+	1.0189 6144+
a_1	13.4735 064+	0.2146 162+	0.0111 4667+	14.6767 526+	4.2842 932+	0.0024 3403-
a_2	1337 583+	4712 974+	7 8788+	1217 774+	2672 126-	26 6245-
a_3	149 802-	83 197+	2733-	53 258-	555 568-	2815+
a_4	4 736-	19 498-	1041-	36 006-	18 390+	3159+
a_5	2 274+	821-		699-	4 273+	
October 20						
a_0	286.4556 626+	17.4733 383-	0.9513 3696+	39.8468 995+	11.9631 446+	1.0139 2469+
a_1	13.6953 246+	1.1739 605+	0.0125 9879+	14.8895 817+	3.5926 884+	0.0075 4800-
a_2	882 551+	4837 367+	6 4258+	834 937+	4185 660-	23 9166-
a_3	146 230-	2 877-	6932-	202 378-	440 249-	1 5683+
a_4	6 983+	23 592-	1323-	39 747-	40 410+	2113+
a_5	1 885+	596-		2 636+	2 578+	
October 21						
a_0	300.2255 062+	15.8183 475-	0.9644 9578+	54.7960 259+	15.0975 409+	1.0041 6298+
a_1	13.8317 006+	2.1308 366+	0.0136 2302+	14.9812 775+	2.6409 313+	0.0117 7629-
a_2	504 643+	4681 231+	3 5496+	15 788+	5238 142-	17 9880-
a_3	100 065-	103 090-	1 2313-	333 497-	254 437-	2 4154+
a_4	16 610+	26 559-	1416-	25 783-	53 500+	671+
a_5	798+	412-		5 336+	237-	
October 22						
a_0	314.0994 054+	13.2323 940-	0.9783 3647+	69.7434 877+	17.1945 407+	0.9908 3613+
a_1	13.9096 514+	3.0253 264+	0.0139 0683+	14.8767 407+	1.5382 506+	0.0146 2250-
a_2	312 094+	4208 473+	9848-	1085 848-	5682 888-	10 3773-
a_3	26 411-	213 292-	1 8126-	383 310-	44 237-	2 6699+
a_4	20 613+	28 700-	1135-	2 224+	51 870+	561-
a_5	539-	157-		5 255+	2 742-	

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
October 31						
a_0	84.4740 607+	18.1649 916+	0.9754 3727+	184.0783 866+	1.3755 842-	0.9007 6356+
a_1	14.5480 926+	0.4077 780+	0.0159 1954-	11.2323 677+	3.6951 535-	0.0001 8889+
a_2	2169 783-	5531 903-	2 7268-	316 355+	204 163+	10 4415+
a_3	323 371-	135 263+	2 4275+	239 991+	208 984+	5502-
a_4	29 165+	37 425+	1276-	5 440-	2 975+	56-
a_5	2 558+	3 704-		717-	318+	
November 1						
a_0	98.7760 101+	18.0364 778+	0.9594 7505+	195.3657 731+	5.0290 938-	0.9019 4102+
a_1	14.0300 661+	0.6449 048-	0.0157 8775-	11.3651 008+	3.5902 774-	0.0021 0991+
a_2	2939 378-	4938 674-	3 7833+	996 514+	852 149+	8 7624+
a_3	182 866-	248 263+	1 9037+	210 933+	223 844+	5720-
a_4	41 614+	18 407+	1490-	9 010-	4 613+	101+
a_5	488-	3 081-		935-	56-	
November 2						
a_0	112.4979 643+	16.9240 644+	0.9442 4109+	206.8506 241+	8.5113 163-	0.9048 7099+
a_1	13.4037 303+	1.5523 372-	0.0145 1964-	11.6236 121+	3.3508 781-	0.0036 9486+
a_2	3243 273-	4114 271-	8 6033+	1565 897+	1550 799+	7 1115+
a_3	22 252-	291 837+	1 3005+	165 469+	241 453+	5304-
a_4	38 482+	2 910+	1383-	13 761-	4 365+	236+
a_5	2 134-	1 742-		1 083-	537-	
November 3						
a_0	125.5787 769+	14.9896 005+	0.9306 9799+	218.6458 883+	11.6825 864-	0.9092 2634+
a_1	12.7627 256+	2.2873 461-	0.0124 6418-	11.9803 861+	2.9668 053-	0.0049 6752+
a_2	3100 544-	3238 701-	11 6825+	1968 871+	2295 980+	5 6650+
a_3	110 213+	286 761+	7451+	99 712+	253 252+	4340-
a_4	27 352+	5 651-	1135-	19 382-	1 670+	328+
a_5	2 310-	516-		885-	1 050-	
November 4						
a_0	138.0449 736+	12.4064 436+	0.9194 6522+	230.8311 059+	14.3944 064-	0.9147 2024+
a_1	12.1854 673+	2.8515 758-	0.0099 4956-	12.3958 793+	2.4314 912-	0.0059 8346+
a_2	2628 908-	2417 462-	13 2451+	2142 823+	3055 239+	4 5604+
a_3	196 825+	259 447+	2914+	13 803+	249 211+	3002-
a_4	15 670+	8 040-	863-	24 080-	3 679-	349+
a_5	1 768-	262+		79-	1 434-	
November 5						
a_0	149.9886 228+	9.3382 885+	0.9108 6067+	243.4402 320+	16.4959 639-	0.9211 3321+
a_1	11.7241 178+	3.2603 190-	0.0072 4764-	12.8189 148+	1.7478 685-	0.0068 1944+
a_2	1962 089-	1684 726-	13 6092+	2038 937+	3766 436+	3 8667+
a_3	242 174+	230 112+	526-	82 526-	220 142+	1576-
a_4	6 880+	6 588-	617-	24 629-	11 029-	277+
a_5	1 152-	618+		1 291+	1 469-	
November 6						
a_0	161.5413 217+	5.9319 111+	0.9049 6252+	256.4524 541+	17.8464 243-	0.9283 2634+
a_1	11.4065 283+	3.5305 568-	0.0045 6626-	13.1927 398+	0.9336 839-	0.0075 5662+
a_2	1205 794-	1027 728-	13 0877+	1656 520+	4345 978+	3 5551+
a_3	258 406+	209 978+	2984-	167 366-	161 590+	435-
a_4	1 230+	3 409-	408-	17 991-	18 553-	107+
a_5	750-	685+		2 646+	1 037-	
November 7						
a_0	172.8531 592+	2.3193 070+	0.9016 7111+	269.7925 748+	18.3313 104-	0.9362 3519+
a_1	11.2430 084+	3.6741 300-	0.0020 5457-	13.4679 612+	0.0239 501-	0.0082 5889+
a_2	430 680-	411 386-	11 9535+	1073 007+	4709 054+	3 4810+
a_3	255 903+	203 128+	4609-	212 595-	77 431+	18+
a_4	2 414-	78+	224-	4 270-	23 790-	149-
a_5	620-	569+		3 136+	298-	

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
November 16			November 24			
a_0	283.3464 638+	17.8790 207-	0.9448 4088+	33.3857 908+	10.2823 037+	1.0072 2812+
a_1	13.6186 435+	0.9314 261+	0.0089 4970+	14.5089 119+	3.9027 936+	0.0006 5869-
a_2	441 035+	4795 651+	3 3876+	1795 381+	3206 663-	20 5815-
a_3	198 736-	20 335-	568-	60 574-	499 543-	5163-
a_4	11 877+	25 155-	458-	47 384-	15 381+	2426+
a_5	2 385+	350+		465-	4 344+	
November 17			November 25			
a_0	296.9907 634+	16.4725 436-	0.9541 1906+	48.0633 984+	13.8164 491+	1.0044 8390+
a_1	13.6531 711+	1.8745 690+	0.0095 9183+	14.8306 345+	3.1199 209+	0.0048 3272-
a_2	60 042-	4587 247+	2 9328+	1324 662+	4569 439-	20 6793-
a_3	128 249-	117 320-	2414-	252 356-	395 287-	4771+
a_4	23 948+	23 203-	764-	50 009-	37 986+	2276+
a_5	857+	576+		3 782+	3 130+	
November 18			November 26			
a_0	310.6275 860+	14.1532 447-	0.9639 7239+	62.9966 409+	16.4440 090+	0.9976 5371+
a_1	13.6126 941+	2.7478 286+	0.0100 7538+	15.0017 513+	2.1042 033+	0.0087 3433-
a_2	292 549-	4101 841+	1 7434+	305 532+	5496 010-	17 9056-
a_3	24 758-	204 480-	5516-	412 768-	213 751-	1 4025+
a_4	28 100+	20 202-	983-	29 944-	54 113+	1515+
a_5	656-	382+		7 011+	112+	
November 19			November 27			
a_0	324.2112 938+	11.0176 619-	0.9741 5712+	77.9853 754+	17.9826 587+	0.9872 8422+
a_1	13.5576 678+	3.4989 630+	0.0102 1920+	14.9305 546+	0.9625 738+	0.0118 3409-
a_2	204 807-	3371 007+	5018-	1042 071-	5811 527-	12 8204-
a_3	80 445+	281 626-	9533-	462 796-	2 079+	2 0099+
a_4	24 641+	18 336-	1003-	6 877+	54 237+	498+
a_5	1 745-	86+		6 358+	2 965-	
November 20			November 28			
a_0	337.7588 150+	7.2115 858-	0.9842 2078+	92.7667 667+	18.3694 149+	0.9743 7406+
a_1	13.5498 229+	4.0813 854+	0.0097 9266+	14.5892 269+	0.1788 973-	0.0137 7533-
a_2	166 911+	2416 947+	3 9542-	2325 523-	5509 657-	6 5194-
a_3	161 106+	354 082-	1 3664-	373 862-	188 639+	2 2003+
a_4	15 838+	18 113-	704-	39 332+	38 482+	391-
a_5	2 508-	112+		2 507+	4 229-	
November 21			November 29			
a_0	351.3427 727+	2.9257 140-	0.9934 7435+	107.0902 390+	17.6618 412+	0.9601 6291+
a_1	13.6366 177+	4.4513 616+	0.0085 6367+	14.0289 458+	1.2109 576-	0.0144 3480-
a_2	720 179+	1247 094+	8 4549-	3186 142-	4755 225-	1701-
a_3	199 000+	425 029-	1 6601-	193 599-	300 690+	2 0322+
a_4	3 274+	17 853-	26-	51 212+	16 707+	942-
a_5	3 167-	779+		1 236-	3 471-	
November 22			November 30			
a_0	5.0713 191+	1.6061 468+	1.0010 2627+	120.7862 082+	16.0067 536+	0.9459 0489+
a_1	13.8400 793+	4.5665 218+	0.0063 7361+	13.3535 023+	2.0668 467-	0.0138 9692-
a_2	1305 125+	127 347-	13 4207-	3472 163-	3787 642-	5 3542+
a_3	180 198+	487 875-	1 6759-	2 079-	333 728+	1 6456+
a_4	12 762-	14 177-	940+	44 114+	742-	1153-
a_5	3 593-	2 119+		2 868-	1 839-	
November 23			December 1			
a_0	19.0582 951+	6.1099 406+	1.0058 9963+	133.7964 110+	13.5942 576+	0.9326 9644+
a_1	14.1482 629+	4.3900 806+	0.0032 2435+	12.6746 576+	2.7254 709-	0.0123 7851-
a_2	1733 124+	1654 825-	17 8550-	3242 471-	2809 264-	9 6002+
a_3	93 582+	522 521-	1 2928-	145 749+	313 209+	1 1792+
a_4	31 355-	3 483-	1893+	29 279+	9 731-	1129-
a_5	3 022-	3 654+		2 721-	397-	

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
December 2						
a_0	146-1640 521+	10-6181 684+	0-9213 8458+	239-6305 685+	15-9310 909-	0-9234 6448+
a_1	12-0802 397+	3-1974 507-	0-0101 4987-	12-7984 613+	2-0334 435-	0-0079 8348+
a_2	2656 779-	1931 957-	12 4647+	2473 883+	3563 500+	3 7602+
a_3	236 107+	270 830+	7258+	44 590-	259 635+	8697-
a_4	15 593+	11 481-	993-	33 338-	5 956-	255+
a_5	1 905-	477+		447+	2 211-	
December 3						
a_0	158-0035 934+	7-2535 046+	0-9125 4384+	252-6686 700+	17-5830 377-	0-9317 3955+
a_1	11-6250 018+	3-5069 465-	0-0074 7890-	13-2667 517+	1-2463 408-	0-0084 8482+
a_2	1873 930-	1183 558-	14 0515+	2144 544+	4284 503+	1 3100+
a_3	279 857+	229 903+	3289+	172 215-	213 800+	7657-
a_4	6 182+	8 934-	832-	31 168-	17 382-	443+
a_5	1 166-	858+		2 665+	2 046-	
December 4						
a_0	169-4696 895+	3-6503 851+	0-9064 9466+	266-1298 044+	18-3814 909-	0-9402 8323+
a_1	11-3360 632+	3-6778 316-	0-0046 0320-	13-6328 634+	0-3332 749-	0-0085 3484+
a_2	1008 904-	538 855-	14 5436+	1467 630+	4801 103+	7185-
a_3	293 154+	202 792+	30-	269 336-	124 405+	5848-
a_4	508+	4 545-	687-	17 270-	27 920-	539+
a_5	774-	925+		4 260+	1 001-	
December 5						
a_0	180-7341 510+	0-0614 149-	0-9033 3866+	279-8811 962+	18-2251 071-	0-9486 9313+
a_1	11-2220 448+	3-7261 207-	0-0017 2284-	13-8408 101+	0-6526 004+	0-0082 3728+
a_2	134 114-	51 511+	14 1263+	598 722+	4996 790+	2 1509-
a_3	287 464+	193 786+	2772-	295 964-	3 529+	3645-
a_4	3 223-	153+	566-	4 878+	32 914-	498+
a_5	748-	791+		3 999+	432+	
December 6						
a_0	191-9711 337+	3-7629 115-	0-9029 9507+	293-7531 696+	17-0757 229-	0-9566 8385+
a_1	11-2797 977+	3-6572 265-	0-0009 9663+	13-8757 133+	1-6400 688+	0-0077 1768+
a_2	701 473+	641 708+	12 9587+	219 856-	4814 261+	2 9515-
a_3	266 941+	202 124+	5037-	237 563-	123 228-	1611-
a_4	6 871-	4 187+	454-	25 314+	30 441-	312+
a_5	1 012-	477+		2 057+	1 439+	
December 7						
a_0	203-3469 846+	7-3352 884-	0-9052 3268+	307-5858 782+	14-9694 511-	0-9640 9338+
a_1	11-4969 198+	3-4663 348-	0-0034 1912+	13-7716 247+	2-5544 958+	0-0070 9153+
a_2	1450 947+	1277 988+	11 1795+	760 113-	4276 372+	3 2568-
a_3	229 115+	223 335+	6860-	117 034-	230 509-	343-
a_4	11 933-	6 667+	326-	35 445+	22 898-	23+
a_5	1 401-	51-		214-	1 586+	
December 8						
a_0	215-0105 771+	10-6508 293-	0-9096 9788+	321-2733 112+	12-0125 002-	0-9708 5603+
a_1	11-8503 697+	3-1410 963-	0-0054 3616+	13-5985 610+	3-3322 505+	0-0064 3080+
a_2	2052 657+	1987 497+	8 9307+	900 741-	3463 337+	3 3554-
a_3	167 273+	249 059+	8179-	21 714+	306 524-	260-
a_4	19 111-	6 491+	164-	33 989+	14 806-	288-
a_5	1 590-	802-		1 744-	1 082+	
December 9						
a_0	227-0808 697+	13-5677 010-	0-9159 4369+	334-7871 939+	8-3659 407-	0-9769 4582+
a_1	12-3026 442+	2-6666 845-	0-0069 7038+	13-4376 494+	3-9275 790+	0-0057 4040+
a_2	2423 854+	2765 600+	6 3850+	649 146-	2465 745+	3 6131-
a_3	75 228+	266 525+	8846-	139 800+	355 281-	1451-
a_4	27 443-	2 463+	37+	25 017+	9 452-	521-
a_5	1 094-	1 642-		2 453-	453+	

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
December 18			December 26			
a_0	348.1761 652+	4.2282 153-	0.9823 0518+	101.1907 437+	18.1850 111+	0.9657 7495+
a_1	13.3585 402+	4.3105 888+	0.0049 5335+	14.3361 588+	0.7453 555-	0.0107 3014-
a_2	104 180-	1347 686+	4 3631-	2235 900-	5210 639-	6 9710-
a_3	215 119+	388 722-	3603-	348 730-	217 168+	1 3919+
a_4	12 711+	7 398-	585-	39 002+	34 132+	432+
a_5	2 813-	165+		2 102+	3 790-	
December 19			December 27			
a_0	1.5467 891+	0.1775 467+	0.9867 8035+	115.2725 499+	16.9433 425+	0.9544 9121+
a_1	13.4059 175+	4.4606 334+	0.0039 4921+	13.8010 078+	1.7105 748-	0.0116 8952-
a_2	589 317+	138 747+	5 7896-	3027 152-	4392 332-	2 5528-
a_3	237 628+	416 467-	6022-	173 633-	316 110+	1 5615+
a_4	1 339-	6 848-	415-	48 857+	14 602+	102-
a_5	3 176-	493+		1 277-	3 200-	
December 20			December 28			
a_0	15.0349 496+	4.6097 726+	0.9900 8623+	128.7582 373+	14.8262 858+	0.9427 0153+
a_1	13.5929 455+	4.3609 510+	0.0025 9400+	13.1623 903+	2.4899 656-	0.0117 3574-
a_2	1262 376+	1146 847-	7 8326-	3267 796-	3388 404-	2 0583+
a_3	200 423+	438 372-	7750-	8 197+	343 335+	1 5151+
a_4	17 417-	4 611-	10-	41 645+	1 513-	495-
a_5	3 361-	1 465+		2 677-	1 762-	
December 21			December 29			
a_0	28.7720 971+	8.8118 871+	0.9918 1938+	141.5985 645+	12.0314 859+	0.9313 1816+
a_1	13.8969 012+	3.9989 595+	0.0007 9457+	12.5266 098+	3.0661 304-	0.0108 8941-
a_2	1725 442+	2474 975-	10 1464-	3020 169-	2385 072-	6 2995+
a_3	97 639+	441 450-	7814-	148 083+	320 437+	1 3116+
a_4	34 842-	2 735+	546+	27 829+	10 163-	712-
a_5	2 556-	2 729+		2 497-	422-	
December 22			December 30			
a_0	42.8475 666+	12.5197 504+	0.9915 2664+	153.8404 989+	8.7578 335+	0.9211 8275+
a_1	14.2560 696+	3.3739 885+	0.0014 4726-	11.9768 848+	3.4512 889-	0.0092 6451-
a_2	1783 628+	3755 564-	12 1466-	2433 927-	1488 930-	9 8047+
a_3	65 742-	402 847-	5589-	234 849+	276 069+	1 0232+
a_4	48 441-	16 834+	1080+	15 284+	12 067-	788-
a_5	113+	3 423+		1 746-	440+	
December 23			December 31			
a_0	57.2705 921+	15.4799 234+	0.9888 1963+	165.5988 297+	5.1840 960+	0.9129 9315+
a_1	14.5737 576+	2.5104 653+	0.0040 0101-	11.5657 953+	3.6708 599-	0.0070 2814-
a_2	1296 874+	4828 766-	13 1661-	1655 124-	728 694-	12 4015+
a_3	256 105-	301 795-	1171-	278 897+	232 453+	7064+
a_4	48 003-	34 708+	1389+	6 664+	9 712-	783-
a_5	4 123+	2 555+		1 091-	855+	
December 24			December 32			
a_0	71.9440 386+	17.4810 590+	0.9835 0420+	177.0275 596+	1.4627 263+	0.9072 6797+
a_1	14.7391 639+	1.4693 316+	0.0066 1371-	11.3205 604+	3.7503 197-	0.0043 6724-
a_2	281 939+	5500 286-	12 6850-	789 331-	81 038-	14 0517+
a_3	405 391-	138 825-	4505+	294 830+	202 227+	3930+
a_4	26 196-	47 942+	1348+	1 365+	5 338-	754-
a_5	6 814+	67+		777-	967+	
December 25						
a_0	86.6689 191+	18.3912 804+	0.9756 8052+			
a_1	14.6668 617+	0.3468 343+	0.0089 6158-			
a_2	1023 044-	5628 484-	10 5359-			
a_3	442 595-	52 101+	9984+			
a_4	9 457+	47 952+	978+			
a_5	5 812+	2 606-				

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.