

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:

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

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 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 2011 January 21^d 13^h 23^m 48^s 32 UT1, using an assumed value of $\Delta T = 67^s$.

$$\text{TT} = 13^{\text{h}} 24^{\text{m}} 55^{\text{s}} 32, \text{ hence } p = 0.558\ 973\ 61$$

	right ascension	declination	horizontal parallax
b_1	$-0.000\ 5191$	$-0.000\ 3883$	$+0.000\ 023\ 90$
b_2	$+0.005\ 5605$	$+0.001\ 3542$	$-0.000\ 014\ 96$
b_3	$+0.011\ 0888$	$+0.064\ 1638$	$-0.002\ 099\ 91$
b_4	$-0.232\ 2632$	$-0.357\ 4416$	$+0.003\ 028\ 10$
b_5	$+14.014\ 2977$	$-5.432\ 6887$	$\pi = +1.006\ 939\ 62$
b_6	$\alpha = 144.910\ 8437$	$\delta = +9.678\ 6102$	
	$= 9^{\text{h}} 39^{\text{m}} 38^{\text{s}} 602$	$= +9^\circ 40' 43'' 00$	$= 1^\circ 00' 24'' 983$

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
January 0			January 8			
a_0	221.9575 762+	20.2244 303-	0.9702 4786+	329.1429 014+	7.9007 016-	0.9086 3286+
a_1	14.1868 718+	3.2334 163-	0.0064 9401-	11.1804 896+	4.6955 440+	0.0052 5097-
a_2	2131 758+	5882 027+	3 5257-	2039 511-	1157 719+	9 4150+
a_3	193 324-	349 715+	72+	332 769+	297 300-	8100+
a_4	71 213-	30 338-	94+	9 612+	13 297+	361-
a_5	3 220+	3 544-		1 163-	956-	
January 1			January 9			
a_0	236.3314 921+	22.8380 606-	0.9634 0294+	340.1535 618+	3.1178 816-	0.9044 0078+
a_1	14.5283 572+	1.9660 013-	0.0071 9321-	10.8756 821+	4.8427 382+	0.0031 3940-
a_2	1156 825+	6713 568+	3 4389-	995 146-	336 018+	11 6247+
a_3	442 856-	194 077+	477+	359 927+	253 862-	6649+
a_4	54 215-	49 014-	374+	3 975+	8 384+	482-
a_5	8 869+	1 534-		579-	1 276-	
January 2			January 10			
a_0	250.9267 117+	24.1183 523-	0.9558 7435+	350.9660 615+	1.7337 830+	0.9024 8553+
a_1	14.6096 150+	0.5854 335-	0.0078 5171-	10.7859 311+	4.8364 986+	0.0006 3427-
a_2	407 971-	6986 362+	3 0666-	102 710+	388 045-	13 3267+
a_3	570 627-	15 380-	2018+	370 022+	233 150-	4721+
a_4	7 212-	56 775-	535+	1 276+	1 903+	592-
a_5	9 627+	1 908+		606-	1 382-	
January 3			January 11			
a_0	265.4387 085+	24.0121 742-	0.9477 4151+	1.7993 328+	6.5082 142+	0.9032 2522+
a_1	14.3587 560+	0.7854 717+	0.0083 8305-	10.9176 861+	4.6890 151+	0.0021 4902+
a_2	2066 653-	6618 783+	2 1397-	1214 391+	1089 917-	14 3839+
a_3	505 938-	222 052-	4207+	368 673+	239 286-	2360+
a_4	42 373+	46 340-	545+	1 540-	5 137-	715-
a_5	4 690+	4 269+		1 279-	1 271-	
January 4			January 12			
a_0	279.5449 117+	22.5912 365-	0.9391 9202+	12.8750 434+	11.0636 681+	0.9068 2907+
a_1	13.8129 319+	2.0262 112+	0.0086 6295-	11.2699 090+	4.3965 559+	0.0050 6801+
a_2	3283 460-	5717 408+	5542-	2298 391+	1851 350-	14 6585+
a_3	292 792-	364 712-	6424+	348 969+	272 249-	491-
a_4	64 963+	24 085-	421+	7 773-	11 731-	862-
a_5	1 046-	4 234+		2 582-	771-	
January 5			January 13			
a_0	293.0066 102+	20.0317 408-	0.9305 4209+	24.4086 528+	15.2466 140+	0.9133 4940+
a_1	13.0938 614+	3.0527 605+	0.0085 6424-	11.8298 760+	3.9395 351+	0.0079 5049+
a_2	3782 749-	4521 145+	1 6191+	3272 806+	2746 245-	13 9890+
a_3	44 976-	419 588-	8123+	291 210+	326 169-	3940-
a_4	58 208+	2 620-	216+	20 852-	15 957-	1023-
a_5	3 714-	2 661+		4 100-	432+	
January 6			January 14			
a_0	305.7231 486+	16.5688 205-	0.9222 2314+	36.5924 353+	18.8773 552+	0.9226 4915+
a_1	12.3452 453+	3.8313 935+	0.0079 8811-	12.5614 090+	3.2862 711+	0.0105 8914+
a_2	3605 699-	3273 243+	4 1784+	3980 166+	3816 222-	12 1891+
a_3	150 779+	404 454-	8983+	166 685+	384 463-	8058-
a_4	38 789+	10 527+	8-	42 349-	14 140-	1149-
a_5	3 537-	931+		4 431-	2 517+	
January 7			January 15			
a_0	317.7264 270+	12.4494 023-	0.9147 4261+	49.5638 514+	21.7423 956+	0.9343 6514+
a_1	11.6830 874+	4.3693 808+	0.0068 8328-	13.3882 963+	2.4032 928+	0.0127 3925+
a_2	2956 035-	2132 311+	6 8622+	4181 544+	5029 260-	9 0830+
a_3	271 256+	353 747-	8937+	45 163-	414 515-	1 2714-
a_4	20 936+	14 918+	206-	66 341-	1 394-	1143-
a_5	2 287-	282-		1 335-	4 882+	

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	63.3590 181+	23.6016 596+	0.9478 7412+	177.9275 581+	4.7713 467-	1.0000 9219+
a_1	14.1838 596+	1.2749 703+	0.0141 2867+	13.3531 692+	5.8516 433-	0.0067 6542-
a_2	3634 501+	6232 200-	4 5916+	125 472+	1741 212+	12 6402-
a_3	320 009-	370 834-	1 7387-	337 191+	561 670+	1 6939+
a_4	74 027-	24 084+	880-	11 450-	17 155-	175-
a_5	5 515+	5 723+		3 729-	255-	
January 17			January 25			
a_0	77.8674 757+	24.2193 072+	0.9622 7928+	191.3254 756+	10.3944 428-	0.9922 3038+
a_1	14.7879 104+	0.0702 276-	0.0144 9009+	13.4729 766+	5.3418 899-	0.0087 9235-
a_2	2285 735+	7142 777-	1 1335-	1030 995+	3320 796+	7 6826-
a_3	557 850-	218 602-	2 1027-	254 311+	490 270+	1 6115+
a_4	44 512-	54 039+	263-	30 414-	18 084-	791-
a_5	11 203+	3 397+		3 424-	669-	
January 18			January 26			
a_0	92.8248 438+	23.4186 854+	0.9764 4313+	204.9235 989+	15.3571 015-	0.9828 2301+
a_1	15.0654 978+	1.5410 545-	0.0136 2202+	13.7415 929+	4.5382 190-	0.0098 7712-
a_2	457 602+	7440 342-	7 5705-	1577 061+	4676 419+	3 3301-
a_3	624 692-	29 027+	2 2156-	99 387+	410 757+	1 2837+
a_4	14 752+	71 273+	674+	48 413-	21 379-	1026-
a_5	9 739+	1 040-		1 797-	1 545-	
January 19			January 27			
a_0	107.8760 818+	21.1435 226+	0.9890 9328+	218.8278 157+	19.3888 953-	0.9727 3099+
a_1	14.9803 733+	2.9924 295-	0.0114 7021+	14.0665 621+	3.4890 326-	0.0101 9911-
a_2	1230 464-	6936 161-	13 7820-	1566 647+	5764 914+	925-
a_3	472 200-	301 774+	1 9423-	110 083-	309 582+	8657+
a_4	64 239+	65 106+	1683+	58 247-	29 493-	959-
a_5	2 712+	4 442-		1 944+	1 952-	
January 20			January 28			
a_0	122.6928 837+	17.4937 208+	0.9990 0788+	233.0344 040+	22.2736 228-	0.9625 9961+
a_1	14.6196 653+	4.2653 090-	0.0081 9851+	14.3245 450+	2.2559 475-	0.0099 9628-
a_2	2234 746-	5684 772-	18 5784-	906 406+	6497 095+	1 9368+
a_3	191 497-	517 337+	1 2520-	321 206-	172 623+	4784+
a_4	76 194+	41 851+	2363+	48 160-	39 852-	712-
a_5	3 231-	5 136-		6 261+	1 029-	
January 21			January 29			
a_0	137.0772 211+	12.7153 398+	1.0052 4699+	247.4132 792+	23.8666 866-	0.9528 3772+
a_1	14.1441 267+	5.2328 883-	0.0042 0190+	14.3933 326+	0.9211 946-	0.0094 9391-
a_2	2384 615-	3933 075-	20 9155-	283 327-	6765 532+	2 9543+
a_3	79 806+	634 069+	2832-	450 447-	4 070+	1926+
a_4	58 507+	15 712+	2390+	15 141-	45 210-	396-
a_5	5 191-	3 883-		7 693+	1 000+	
January 22			January 30			
a_0	150.9961 984+	7.1537 339+	1.0073 5291+	261.7324 896+	24.1153 421-	0.9436 5455+
a_1	13.7119 529+	5.8249 370-	0.0000 2952+	14.1993 199+	0.4155 507+	0.0088 6111-
a_2	1846 158-	1975 412-	20 3506-	1648 403-	6516 540+	3 3039+
a_3	262 130+	659 106+	6906+	435 655-	165 775-	355+
a_4	32 034+	3 656-	1753+	24 673+	39 795-	89-
a_5	4 739-	2 103-		4 876+	2 758+	
January 23			January 31			
a_0	164.5524 780+	1.1965 904+	1.0054 3396+	275.7263 587+	23.0684 186-	0.9351 2649+
a_1	13.4318 052+	6.0248 002-	0.0037 6327-	13.7512 454+	1.6545 874+	0.0081 9322-
a_2	914 955-	41 011-	17 2574-	2758 609-	5808 106+	3 3646+
a_3	343 277+	624 237+	1 3963+	290 695-	297 134-	25+
a_4	8 420+	13 849-	762+	48 832+	25 411-	156+
a_5	3 992-	746-		472+	3 162+	

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 1			February 9			
a_0	289.1776 041+	20.8649 589-	0.9272 7153+	20.7473 177+	13.8199 191+	0.9051 6789+
a_1	13.1320 806+	2.7184 843+	0.0075 1332-	11.5047 025+	4.0484 504+	0.0049 6430+
a_2	3333 147-	4795 903+	3 4701+	2534 139+	2499 317-	13 3747+
a_3	92 284-	367 580-	679+	279 955+	283 077-	2724+
a_4	50 130+	9 296-	308+	12 600-	8 982-	658-
a_5	2 346-	2 393+		2 643-	215-	
February 2			February 10			
a_0	301.9719 201+	17.7043 326-	0.9201 1508+	32.5319 053+	17.5892 104+	0.9114 9031+
a_1	12.4566 445+	3.5648 675+	0.0067 8661-	12.0891 544+	3.4599 648+	0.0076 9463+
a_2	3332 806-	3661 308+	3 8600+	3271 900+	3404 635-	13 7891+
a_3	84 426+	381 488-	1941+	202 760+	320 482-	103+
a_4	37 579+	2 650+	359+	26 243-	10 332-	910-
a_5	2 898-	1 255+		3 339-	944+	
February 3			February 11			
a_0	314.1071 946+	13.8110 926-	0.9137 3747+	44.9655 675+	20.6757 246+	0.9205 5578+
a_1	11.8289 942+	4.1843 691+	0.0059 4201-	12.7921 972+	2.6792 341+	0.0104 1912+
a_2	2883 093-	2545 270+	4 6564+	3689 174+	4418 655-	13 2651+
a_3	206 135+	358 890-	3402+	65 006+	351 414-	3537-
a_4	22 773+	8 777+	320+	43 982-	5 747-	1187-
a_5	2 208-	304+		2 371-	2 612+	
February 4			February 12			
a_0	325.6705 495+	9.4071 774-	0.9082 9831+	58.1285 473+	22.8776 383+	0.9322 5416+
a_1	11.3222 222+	4.5894 181+	0.0048 9587-	13.5307 594+	1.6890 875+	0.0129 1853+
a_2	2150 143-	1524 275+	5 8656+	3596 407+	5481 219-	11 4843+
a_3	275 655+	321 113-	4697+	132 500-	347 465-	8314-
a_4	11 726+	10 150+	215+	57 011-	7 624+	1428-
a_5	1 309-	326-		1 329+	4 075+	
February 5			February 13			
a_0	336.8063 645+	4.6964 607-	0.9040 3812+	72.0001 291+	23.9850 273+	0.9462 2369+
a_1	10.9789 266+	4.8018 358+	0.0035 7322-	14.1881 561+	0.4936 914+	0.0149 0878+
a_2	1265 906-	618 558+	7 3995+	2870 132+	6437 002-	8 1309+
a_3	309 818+	283 995-	5567+	344 428-	276 209-	1 4109-
a_4	5 286+	8 414+	73+	50 252-	28 799+	1505-
a_5	704-	704-		6 378+	4 118+	
February 6			February 14			
a_0	347.6901 405+	0.1396 025+	0.9012 6124+	86.4364 682+	23.8106 893+	0.9617 8943+
a_1	10.8204 537+	4.8433 622+	0.0019 2342-	14.6419 445+	0.8629 955-	0.0160 5143+
a_2	311 760-	190 001-	9 1080+	1599 376+	7051 557-	3 0043+
a_3	324 025+	257 504-	5860+	480 412-	120 933-	2 0276-
a_4	1 899+	4 810+	88-	16 454-	50 095+	1226-
a_5	529-	910-		8 637+	2 191+	
February 7			February 15			
a_0	358.5119 577+	4.9386 042+	0.9003 0634+	101.1895 274+	22.2356 733+	0.9779 2628+
a_1	10.8558 039+	4.7295 797+	0.0000 7048+	14.8154 296+	2.2884 565-	0.0159 9489+
a_2	666 428+	942 774-	10 8081+	146 030+	7091 866-	3 7887-
a_3	326 157+	247 397-	5513+	461 446-	99 738+	2 5362-
a_4	619-	162+	258-	28 516+	61 084+	419-
a_5	827-	965-		5 757+	661-	
February 8			February 16			
a_0	9.4668 755+	9.5490 864+	0.9015 1017+	115.9768 426+	19.2540 463+	0.9932 8450+
a_1	11.0862 746+	4.4663 882+	0.0023 8715+	14.7204 803+	3.6528 078-	0.0144 5946+
a_2	1632 923+	1693 668-	12 3013+	1009 664-	6432 823-	11 6082-
a_3	314 979+	256 291-	4488+	292 783-	336 179+	2 7165-
a_4	4 637-	4 806-	444-	57 260+	57 325+	895+
a_5	1 588-	790-		468+	2 878-	

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	130-5728 510+	14-9970 187+	1-0063 2046+	244-0475 929+	23-4066 274-	0-9626 3209+
a_1	14-4538 459+	4-8170 291-	0-0113 5871+	14-5630 238+	1-2624 553-	0-0136 0410-
a_2	1539 955-	5109 182-	19 1763-	667 768-	6925 306+	4 1407+
a_3	61 246-	536 100+	2 3534-	425 916-	19 040-	1 1403+
a_4	58 451+	42 488+	2346+	9 209-	46 158-	1302-
a_5	3 309-	3 878-		7 012+	2 000+	
February 18			February 26			
a_0	144-8720 910+	9-7265 424+	1-0155 4966+	258-5010 285+	23-9828 719-	0-9495 4308+
a_1	14-1492 054+	5-6629 793-	0-0069 1140+	14-3015 143+	0-0994 315+	0-0124 8595-
a_2	1406 218-	3284 772-	24 8001-	1930 511-	6611 299+	6 7900+
a_3	138 685+	667 245+	1 3884-	394 292-	183 102-	6167+
a_4	41 008+	22 807+	3294+	26 905+	35 691-	997-
a_5	4 608-	3 903-		4 028+	3 011+	
February 19			February 27			
a_0	158-8981 831+	3-8037 008+	1-0198 7515+	272-5731 559+	23-2438 888-	0-9377 8784+
a_1	13-9236 661+	6-1125 882-	0-0016 6682+	13-8098 960+	1-3539 896+	0-0109 8282-
a_2	790 255-	1185 244-	26 9906-	2911 738-	5878 024+	8 0527+
a_3	256 607+	719 780+	352-	248 656-	295 863-	2179+
a_4	17 663+	3 133+	3234+	46 689+	20 178-	650-
a_5	4 618-	3 304-		27+	2 798+	
February 20			February 28			
a_0	172-7697 889+	2-3554 508-	1-0188 7172+	286-0716 840+	21-3334 212-	0-9276 2559+
a_1	13-8473 537+	6-1341 007-	0-0036 1238-	13-1716 377+	2-4341 620+	0-0093 3288-
a_2	39 332+	959 865+	25 1873-	3377 458-	4897 365+	8 3268+
a_3	281 233+	699 750+	1 2826+	63 003-	349 150-	405-
a_4	5 547-	13 358-	2203+	45 842+	6 047-	325-
a_5	4 330-	2 477-		2 338-	1 808+	
February 21			March 1			
a_0	186-6482 114+	8-3251 735-	1-0128 9088+	298-9036 260+	18-4448 615-	0-9191 1809+
a_1	13-9352 074+	5-7387 839-	0-0081 7695-	12-4944 125+	3-3073 743+	0-0076 9268-
a_2	806 380+	2954 224+	20 0626-	3314 909-	3831 700+	8 0184+
a_3	216 187+	621 910+	2 1662+	96 740+	355 849-	1687-
a_4	27 628-	25 564-	749+	33 456+	2 889+	54-
a_5	3 609-	1 856-		2 701-	773+	
February 22			March 2			
a_0	200-6825 517+	13-7090 860-	1-0029 3178+	311-0792 971+	14-7895 359-	0-9122 0984+
a_1	14-1484 860+	4-9725 189-	0-0115 0971-	11-8724 853+	3-9685 010+	0-0061 4177-
a_2	1252 947+	4648 031+	13 1531-	2851 011-	2789 191+	7 4861+
a_3	70 839+	501 306+	2 4521+	203 905+	336 977-	1882-
a_4	46 513-	34 761-	505-	19 693+	6 583+	150+
a_5	1 501-	1 523-		2 033-	68+	
February 23			March 3			
a_0	214-9586 150+	18-1702 996-	0-9903 4692+	322-6888 377+	10-5751 484-	0-9067 9936+
a_1	14-4009 760+	3-9071 863-	0-0134 2498-	11-3703 161+	4-4279 129+	0-0046 9500-
a_2	1171 281+	5928 124+	6 1224-	2141 480-	1818 414+	7 0156+
a_3	127 992-	347 368+	2 2319+	262 789+	310 189-	1257-
a_4	54 632-	42 590-	1232-	9 526+	6 788+	281+
a_5	2 389+	977-		1 228-	300-	
February 24			March 4			
a_0	229-4586 956+	21-4542 934-	0-9765 2057+	333-8721 145+	5-9957 643-	0-9027 9616+
a_1	14-5761 807+	2-6348 739-	0-0140 2925-	11-0240 541+	4-7011 036+	0-0033 1835-
a_2	483 480+	6704 878+	1728-	1308 229-	925 554+	6 8086+
a_3	320 470-	167 987+	1 7246+	288 918+	286 140-	110-
a_4	42 096-	47 780-	1441-	3 468+	5 202+	335+
a_5	6 252+	314+		688-	458-	

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	344.7945 155+	1.2302 450-	0.9001 6093+	81.4465 102+	23.7711 757+	0.9429 1766+
a_1	10.8501 270+	4.8022 240+	0.0019 4650-	14.0592 861+	0.3630 473-	0.0139 1256+
a_2	427 545-	93 752+	6 9762+	1682 704+	6416 517-	9 4447+
a_3	296 010+	269 945-	1254+	343 254-	141 501-	8641-
a_4	108+	2 852+	317+	16 137-	32 375+	1529-
a_5	517-	512-		5 934+	1 836+	
March 6			March 14			
a_0	355.6314 481+	3.5545 937+	0.8989 2775+	95.6387 210+	22.7557 476+	0.9576 7298+
a_1	10.8532 056+	4.7408 756+	0.0005 0096-	14.2893 616+	1.6749 349-	0.0154 8104+
a_2	455 972+	704 104-	7 5399+	615 618+	6628 410-	5 9326+
a_3	291 188+	263 637-	2540+	349 064-	5 674+	1 4857-
a_4	2 400-	232+	234+	14 709+	41 599+	1611-
a_5	706-	493-		4 854+	642+	
March 7			March 15			
a_0	6.5590 591+	8.1986 691+	0.8992 0852+	109.9566 944+	20.4227 632+	0.9735 8260+
a_1	11.0304 426+	4.5208 100+	0.0010 9257+	14.3160 731+	2.9819 555-	0.0161 5732+
a_2	1308 075+	1498 571-	8 4377+	294 742-	6355 397-	5200+
a_3	274 262+	267 551-	3490+	243 503-	177 899+	2 1474-
a_4	5 873-	2 319-	96+	39 316+	44 665+	1267-
a_5	1 205-	356-		1 631+	364-	
March 8			March 16			
a_0	17.7470 277+	12.5425 994+	0.9011 8073+	124.2230 377+	16.8274 880+	0.9895 6453+
a_1	11.3713 840+	4.1397 255+	0.0028 8867+	14.2006 121+	4.1819 821-	0.0155 6634+
a_2	2083 560+	2318 717-	9 5367+	773 125-	5557 353-	6 6523-
a_3	238 365+	280 174-	3888+	71 727-	352 494+	2 6749-
a_4	11 947-	4 226-	87-	46 988+	42 808+	311-
a_5	1 841-	1+		1 489-	1 073-	
March 9			March 17			
a_0	29.3492 254+	16.4220 132+	0.9050 6107+	138.3437 145+	12.1291 935+	1.0041 9505+
a_1	11.8539 060+	3.5902 406+	0.0049 0918+	14.0425 177+	5.1711 187-	0.0134 2090+
a_2	2708 512+	3184 611-	10 6439+	721 363-	4253 728-	14 8171-
a_3	171 986+	296 686-	3555+	100 225+	512 532+	2 8121-
a_4	21 466-	4 372-	314-	38 951+	37 584+	1200+
a_5	2 183-	664+		3 354-	1 866-	
March 10			March 18			
a_0	41.4888 162+	19.6637 533+	0.9110 6705+	152.3276 781+	6.5875 270+	1.0158 6504+
a_1	12.4375 270+	2.8628 968+	0.0071 3206+	13.9422 150+	5.8540 055-	0.0096 6190+
a_2	3073 737+	4094 274-	11 5136+	220 572-	2509 273-	22 4848-
a_3	64 713+	307 012-	2315+	221 912+	643 593+	2 3230-
a_4	33 035-	1 124-	586-	21 896+	28 358+	2793+
a_5	1 487-	1 577+		4 307-	2 931-	
March 11			March 19			
a_0	54.2367 360+	22.0865 670+	0.9193 6776+	166.2717 860+	0.5494 962+	1.0230 7409+
a_1	13.0577 336+	1.9522 788+	0.0094 8081+	13.9712 786+	6.1529 056-	0.0045 7991+
a_2	3054 687+	5006 257-	11 8466+	533 434+	437 664-	27 7504-
a_3	80 964-	295 272-	16-	266 058+	727 131+	1 1729-
a_4	41 182-	6 903+	904-	194+	13 615+	3712+
a_5	812+	2 394+		4 907-	3 972-	
March 12			March 20			
a_0	67.5878 049+	23.5096 226+	0.9300 2403+	180.3225 425+	5.5734 985-	1.0247 9879+
a_1	13.6283 185+	0.8664 041+	0.0118 1349+	14.1554 072+	6.0188 402-	0.0011 7333-
a_2	2572 801+	5826 667-	11 2889+	1283 607+	1785 661+	29 0500-
a_3	235 764-	243 634-	3633-	217 813+	741 563+	3521+
a_4	37 188-	19 228+	1243-	24 920-	6 488-	3441+
a_5	4 020+	2 563+		4 848-	4 523-	

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	194.6251 149+	11.3407 175-	1.0207 9008+	308.1757 788+	15.5272 560-	0.9161 2225+
a_1	14.4650 829+	5.4440 957-	0.0067 3993-	12.0131 658+	3.7931 298+	0.0085 7283-
a_2	1738 855+	3926 136+	25 9688-	3224 911-	2916 737+	11 5713+
a_3	70 910+	670 559+	1 7521+	241 513+	338 353-	1042-
a_4	50 402-	29 483-	2138+	19 800+	11 034+	445-
a_5	2 761-	4 226-		2 440-	382-	
March 22			March 30			
a_0	209.2658 580+	16.3285 145-	1.0116 4984+	319.8923 408+	11.4752 226-	0.9086 9168+
a_1	14.8125 912+	4.4716 052-	0.0113 2256-	11.4473 386+	4.2791 936+	0.0063 0761-
a_2	1621 394+	5718 576+	19 4801-	2405 977-	1964 029+	10 9999+
a_3	155 420-	511 256+	2 6055+	296 928+	298 259-	2804-
a_4	65 320-	51 170-	498+	7 658+	8 911+	192-
a_5	2 251+	2 703-		1 357-	751-	
March 23			March 31			
a_0	224.2187 398+	20.1825 239-	0.9986 4478+	331.1294 045+	7.0286 360-	0.9034 5410+
a_1	15.0652 477+	3.1963 296-	0.0144 1714-	11.0576 069+	4.5857 106+	0.0041 9943-
a_2	785 812+	6918 233+	11 4054-	1482 804-	1115 189+	10 0498+
a_3	391 063-	281 182+	2 7864+	314 380+	270 140-	3558-
a_4	53 388-	65 109-	802-	1 010+	5 038+	13+
a_5	7 835+	156+		706-	780-	
March 24			April 1			
a_0	239.3189 071+	22.6654 074-	0.9833 5771+	342.0701 993+	2.3579 946-	0.9002 2421+
a_1	15.0876 549+	1.7542 908-	0.0158 9451-	10.8554 110+	4.7293 319+	0.0022 9567-
a_2	629 019-	7372 727+	3 5489-	540 658-	327 184+	8 9952+
a_3	525 529-	24 056+	2 4452+	311 477+	257 707-	3490-
a_4	11 789-	64 026-	1477-	2 398-	1 070+	171+
a_5	9 156+	3 253+		516-	643-	
March 25			April 2			
a_0	254.2908 440+	23.6860 973-	0.9673 3806+	352.9024 008+	2.3783 277+	0.8987 9486+
a_1	14.8040 503+	0.2965 109-	0.0159 2989-	10.8395 050+	4.7175 634+	0.0005 9452-
a_2	2184 564-	7093 405+	2 8959+	374 228+	445 958-	8 0538+
a_3	483 438-	198 668-	1 8401+	296 623+	259 719-	2790-
a_4	35 553+	46 821-	1606-	4 904-	2 207-	277+
a_5	4 960+	4 734+		711-	412-	
March 26			April 3			
a_0	268.8321 453+	23.2973 431-	0.9518 6571+	3.8084 294+	7.0250 615+	0.8989 8059+
a_1	14.2388 009+	1.0462 074+	0.0148 6296-	11.0010 196+	4.5493 674+	0.0009 4363+
a_2	3372 061-	6263 918+	7 4584+	1227 556+	1242 495-	7 3844+
a_3	294 727-	339 002-	1 1908+	269 645+	272 467-	1662-
a_4	59 738+	22 409-	1409-	8 445-	4 345-	323+
a_5	533-	4 011+		1 189-	83-	
March 27			April 4			
a_0	282.7101 878+	21.6604 839-	0.9378 5358+	14.9582 057+	11.4224 899+	0.9006 4927+
a_1	13.4995 958+	2.1903 305+	0.0130 7042-	11.3234 510+	4.2173 492+	0.0023 8359+
a_2	3903 360-	5152 588+	10 1953+	1973 907+	2086 812-	7 0788+
a_3	62 793-	389 549-	6253+	223 692+	290 391-	348-
a_4	55 655+	2 229-	1084-	14 480-	4 843-	300+
a_5	3 420-	2 196+		1 720-	394+	
March 28			April 5			
a_0	295.8183 916+	18.9938 529-	0.9258 5439+	26.4997 965+	15.4016 739+	0.9037 4026+
a_1	12.7206 371+	3.1041 874+	0.0108 8710-	11.7786 878+	3.7111 301+	0.0038 0093+
a_2	3792 156-	3992 481+	11 4316+	2540 841+	2983 113-	7 1516+
a_3	125 513+	377 450-	1926+	148 507+	305 454-	877+
a_4	37 672+	8 497+	746-	23 421-	2 938-	205+
a_5	3 528-	567+		1 838-	1 034+	

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			April 14		
a_0	38-5448 932+	18-7837 570+	0-9082 6718+	146-6978 297+	8-7064 764+	0-9964 0453+
a_1	12-3211 217+	3-0222 141+	0-0052 6578+	13-5241 423+	5-3958 676-	0-0128 8083+
a_2	2827 354+	3906 757-	7 5326+	92 311-	3118 291-	9 3607-
a_3	36 978+	306 492-	1721+	248 910+	486 782+	2 4100-
a_4	33 227-	2 265+	38+	24 398+	28 304+	54+
a_5	905-	1 695+		3 473-	302-	
	April 7			April 15		
a_0	51-1490 348+	21-3850 422+	0-9143 0381+	160-2397 243+	3-0502 581+	1-0081 0885+
a_1	12-8839 451+	2-1506 690+	0-0068 2547+	13-5883 741+	5-8623 221-	0-0102 8782+
a_2	2729 785+	4795 665-	8 0645+	766 072+	1491 075-	16 5151-
a_3	103 684-	280 303-	1895+	311 177+	596 199+	2 3955-
a_4	38 301-	10 949+	196-	7 114+	27 223+	1456+
a_5	1 375+	2 027+		4 502-	1 633-	
	April 8			April 16		
a_0	64-2918 973+	23-0294 121+	0-9219 5273+	173-9360 845+	2-8989 927-	1-0165 2017+
a_1	13-3841 669+	1-1128 381+	0-0084 8740+	13-8355 348+	5-9716 074-	0-0063 2445+
a_2	2202 680+	5550 561-	8 5063+	1697 226+	444 563+	22 7878-
a_3	241 614-	216 441-	1128+	293 977+	687 540+	1 7999-
a_4	31 314-	21 394+	489-	15 590-	19 286+	2776+
a_5	4 098+	1 671+		5 687-	3 739-	
	April 9			April 17		
a_0	77-8694 491+	23-5678 565+	0-9312 9714+	187-9686 120+	8-7558 353-	1-0204 1361+
a_1	13-7417 430+	0-0528 143-	0-0102 0292+	14-2540 943+	5-6705 906-	0-0013 3812+
a_2	1331 045+	6054 787-	8 5407+	2428 571+	2585 470+	26 5037-
a_3	325 207-	114 705-	821-	174 959+	726 122+	6578-
a_4	9 928-	29 900+	823-	45 173-	334+	3376+
a_5	5 351+	701+		5 476-	5 795-	
	April 10			April 18		
a_0	91-7113 182+	22-9011 531+	0-9423 3768+	202-4779 944+	14-0958 129-	1-0190 6934+
a_1	13-9090 930+	1-2858 738-	0-0118 5348+	14-7714 942+	4-9384 247-	0-0040 2475-
a_2	349 490+	6212 516-	7 7901+	2627 340+	4707 748+	26 4654-
a_3	312 132-	11 364+	4126-	58 013-	669 255+	7259+
a_4	17 723+	33 241+	1154-	74 652-	29 617-	2921+
a_5	4 063+	247-		1 247-	6 307-	
	April 11			April 19		
a_0	105-6263 256+	20-9984 636+	0-9549 1737+	217-4988 314+	18-5001 296-	1-0124 9984+
a_1	13-8944 689+	2-5117 952-	0-0132 4154+	15-2490 829+	3-8110 957-	0-0089 8313-
a_2	439 932-	5981 490-	5 8526+	1992 782+	6474 547+	22 5736-
a_3	202 191-	141 673+	8793-	364 516-	489 227+	1 9109+
a_4	38 169+	31 706+	1392-	81 747-	62 540-	1661+
a_5	1 271+	557-		6 938+	3 729-	
	April 12			April 20		
a_0	119-4605 262+	17-9058 016+	0-9686 4232+	232-9032 600+	21-6214 748-	1-0014 6704+
a_1	13-7617 257+	3-6531 870-	0-0140 9253+	15-5090 610+	2-3962 931-	0-0128 5817-
a_2	804 855-	5371 819-	2 3800+	478 504+	7529 621+	15 8886-
a_3	38 222-	263 085+	1 4471-	618 986-	204 708+	2 5707+
a_4	44 055+	28 792+	1383-	44 358-	81 699-	221+
a_5	1 199-	258-		12 699+	1 464+	
	April 13			April 21		
a_0	133-1422 299+	13-7445 946+	0-9828 1432+	248-3951 069+	23-2523 585-	0-9872 7927+
a_1	13-6063 091+	4-6372 371-	0-0140 7900+	15-4076 690+	0-8608 994-	0-0152 5594-
a_2	667 254-	4412 362-	2 7770-	1517 110-	7668 358+	8 0776-
a_3	125 179+	375 829+	2 0171-	671 038-	104 990-	2 6424+
a_4	37 598+	27 675+	939-	22 712+	73 201-	862-
a_5	2 615-	47+		9 757+	5 822+	

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	263-5872 081+	23-3636 590-	0-9714 7120+	0-8918 054+	5-9094 580+	0-9001 1275+
a_1	14-9168 899+	0-6149 065+	0-0161 1331-	10-9519 496+	4-5690 252+	0-0005 0762+
a_2	3296 348-	6972 634+	6846-	1080 838+	1012 032-	10 0119+
a_3	487 169-	339 182-	2 2803+	305 075+	255 824-	5188-
a_4	71 775+	42 467-	1398-	9 122-	6 210-	12+
a_5	1 572+	6 440+		1 234-	356-	
April 23						
a_0	278-1330 809+	22-0890 101-	0-9555 0347+	11-9813 108+	10-3510 412+	0-9015 6980+
a_1	14-1409 590+	1-8939 093+	0-0156 2214-	11-2553 732+	4-2872 107+	0-0023 5485+
a_2	4311 795-	5764 780+	5 3144+	1928 976+	1820 339-	8 4669+
a_3	187 636-	445 918-	1 7094+	255 866+	283 818-	5133-
a_4	77 558+	9 622-	1481-	15 350-	8 103-	149+
a_5	4 124-	4 141+		1 924-	326+	
April 24						
a_0	291-8314 403+	19-6637 627-	0-9405 6890+	23-4534 408+	14-4270 584+	0-9047 2150+
a_1	13-2512 692+	2-9113 086+	0-0141 0572-	11-7108 258+	3-8349 203+	0-0039 0021+
a_2	4450 845-	4410 667+	9 5592+	2585 165+	2717 166-	7 0197+
a_3	80 699+	444 543-	1 1116+	175 055+	312 442-	4524-
a_4	55 299+	10 828+	1305-	25 342-	6 565-	253+
a_5	5 112-	1 431+		2 232-	1 241+	
April 25						
a_0	304-6507 135+	16-3546 158-	0-9275 1722+	35-4375 311+	17-9584 856+	0-9092 8098+
a_1	12-4048 749+	3-6651 238+	0-0119 1259-	12-2691 233+	3-1957 501+	0-0051 7858+
a_2	3928 159-	3156 245+	12 1195+	2935 838+	3681 467-	5 8161+
a_3	251 555+	387 948-	5886+	51 897+	325 762-	3490-
a_4	29 242+	17 505+	1033-	37 228-	303-	305+
a_5	3 668-	326-		1 329-	2 180+	
April 26						
a_0	316-6904 853+	12-4109 444-	0-9168 6511+	48-0015 723+	20-7537 005+	0-9150 0931+
a_1	11-7045 741+	4-1868 266+	0-0093 5343-	12-8563 075+	2-3626 975+	0-0062 4929+
a_2	3034 719-	2094 121+	13 2740+	2854 756+	4638 724-	4 9510+
a_3	332 794+	321 641-	1762+	108 803-	304 931-	2245-
a_4	11 007+	15 529+	760-	44 600-	10 918+	281+
a_5	1 995-	1 086-		1 298+	2 626+	
April 27						
a_0	328-1257 681+	8-0454 255-	0-9088 4910+	61-1281 447+	22-6233 869+	0-9217 3406+
a_1	11-2008 750+	4-5148 270+	0-0066 7618-	13-3774 300+	1-3491 528+	0-0071 8340+
a_2	1990 221-	1211 481+	13 3539+	2273 722+	5461 683-	4 4426+
a_3	357 489+	270 487-	1266-	272 338-	235 354-	1091-
a_4	1 262+	9 907+	522-	38 030-	24 525+	169+
a_5	929-	1 243-		4 662+	2 021+	
April 28						
a_0	339-1634 032+	3-4356 327-	0-9034 9044+	74-7023 763+	23-4054 907+	0-9293 5249+
a_1	10-9101 184+	4-6793 183+	0-0040 6424-	13-7375 936+	0-1970 289+	0-0080 4595+
a_2	919 450-	447 009+	12 6674+	1275 297+	6000 348-	4 2103+
a_3	353 483+	243 216-	3342-	376 930-	117 931-	389-
a_4	3 197-	3 583+	320-	13 593-	34 875+	32-
a_5	537-	1 108-		6 309+	455+	
April 29						
a_0	350-0165 516+	1-2643 124+	0-9006 5632+	88-5290 781+	22-9942 247+	0-9378 1525+
a_1	10-8307 260+	4-6966 346+	0-0016 4381-	13-8772 893+	1-0242 444-	0-0088 7505+
a_2	116 462+	272 242-	11 4783+	126 189+	6140 379-	4 0658+
a_3	335 259+	239 788-	4615-	369 078-	25 230+	500-
a_4	5 755-	2 046-	145-	19 092+	36 904+	303-
a_5	687-	813-		4 765+	1 108-	

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	102.3844 643+	21.3620 450+	0.9470 8886+	210.9673 311+	16.7647 083-	1.0085 9816+
a_1	13.8018 194+	2.2305 443-	0.0096 6109+	14.8583 731+	4.2353 283-	0.0022 2898-
a_2	818 831-	5854 414-	3 7245+	3062 900+	5401 285+	21 4827-
a_3	246 944-	161 434+	1712-	167 735-	600 845+	980-
a_4	43 042+	30 872+	607-	90 234-	31 443-	2479+
a_5	1 397+	1 677-		1 083+	6 902-	
May 9						
a_0	116.0841 500+	18.5651 223+	0.9570 9921+	226.1063 056+	20.4036 582-	1.0042 3589+
a_1	13.5818 818+	3.3414 860-	0.0103 3035+	15.3850 912+	2.9908 422-	0.0064 5567-
a_2	1287 549-	5201 694-	2 8386+	2029 133+	6945 882+	20 3035-
a_3	62 395-	268 438+	4162-	512 444-	407 951+	9143+
a_4	49 372+	22 162+	877-	84 687-	67 789-	2019+
a_5	1 373-	1 154-		10 815+	3 615-	
May 10						
a_0	129.5358 373+	14.7324 116+	0.9676 6303+	241.6356 786+	22.6662 574-	0.9958 6148+
a_1	13.3247 143+	4.2930 040-	0.0107 3811+	15.6087 218+	1.5081 962-	0.0101 6127-
a_2	1192 335-	4274 936-	1 0597+	92 431+	7726 813+	16 3779-
a_3	120 620+	346 098+	7729-	740 985-	104 170+	1 7310+
a_4	41 879+	16 398+	1018-	26 341-	86 188-	1079+
a_5	2 615-	185-		14 623+	2 664+	
May 11						
a_0	142.7573 065+	10.0481 452+	0.9784 1963+	257.1783 734+	23.3997 077-	0.9842 4631+
a_1	13.1378 770+	5.0376 940-	0.0106 7740+	15.4016 807+	0.0352 791+	0.0128 7440-
a_2	605 386-	3140 056-	1 8661-	2141 878-	7549 087+	10 5684-
a_3	261 745+	410 227+	1 1901-	703 755-	211 469-	2 1587+
a_4	28 614+	15 741+	907-	50 038+	71 115-	68+
a_5	2 989-	494+		7 983+	7 027+	
May 12						
a_0	155.8633 819+	4.7390 919+	0.9887 8235+	272.3012 929+	22.6370 757-	0.9705 3162+
a_1	13.1052 737+	5.5360 938-	0.0099 1081+	14.7861 751+	1.4567 226+	0.0143 3781-
a_2	321 658+	1809 922-	5 9660-	3873 255-	6558 507+	4 0752-
a_3	345 967+	478 045+	1 5655-	429 049-	425 780-	2 1746+
a_4	13 852+	18 645+	438-	88 814+	34 230-	691-
a_5	3 546-	359+		1 388-	6 708+	
May 13						
a_0	169.0364 487+	0.9282 892-	0.9979 3563+	286.6659 802+	20.5698 326-	0.9559 9684+
a_1	13.2771 618+	5.7470 288-	0.0082 3038+	13.9176 362+	2.6303 487+	0.0145 2816-
a_2	1407 233+	260 248-	10 8995-	4641 780-	5142 923+	2 0219+
a_3	365 166+	555 474+	1 7509-	90 262-	497 307-	1 8869+
a_4	3 656-	20 965+	397+	79 285+	297-	1083-
a_5	4 841-	911-		5 753-	3 684+	
May 14						
a_0	182.4900 007+	6.6437 900-	1.0049 0495+	300.1177 654+	17.4745 836-	0.9418 4873+
a_1	13.6642 737+	5.6245 083-	0.0055 4109+	12.9910 393+	3.5114 613+	0.0136 0108-
a_2	2432 314+	1522 920+	15 8827-	4494 595-	3685 997+	7 0299+
a_3	301 366+	628 841+	1 5926-	169 522+	463 293-	1 4459+
a_4	28 243-	16 827+	1413+	49 179+	17 677+	1169-
a_5	6 253-	3 318-		5 295-	830+	
May 15						
a_0	196.4241 928+	12.0517 713-	1.0087 1265+	312.6806 858+	13.6390 011-	0.9290 8354+
a_1	14.2267 243+	5.1262 031-	0.0019 4336+	12.1600 033+	4.1171 571+	0.0118 0810-
a_2	3104 163+	3477 204+	19 7876-	3743 939-	2410 405+	10 6692+
a_3	126 530+	661 438+	1 0143-	314 428+	385 236-	9746+
a_4	61 261-	56+	2234+	22 544+	21 304+	1074-
a_5	5 291-	6 038-		3 251-	789-	

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	324.4996 673+	9.3172 756-	0.9184 2909+	57.3648 946+	22.2005 267+	0.9238 9285+
a_1	11.5129 378+	4.4917 937+	0.0094 2483-	13.3693 598+	1.6440 519+	0.0079 1759+
a_2	2697 876-	1374 580+	12 9539+	2757 880+	5315 168-	3 5827+
a_3	373 059+	308 278-	5443+	241 037-	286 642-	7342-
a_4	6 539+	17 029+	908-	50 978-	20 422+	284+
a_5	1 569-	1 399-		3 929+	3 199+	
May 25						
a_0	335.7806 202+	4.7172 887-	0.9103 4499+	70.9812 339+	23.2867 597+	0.9320 9813+
a_1	11.0871 120+	4.6803 381+	0.0067 0709-	13.8302 016+	0.5047 920+	0.0084 2524+
a_2	1555 130-	537 898+	14 0472+	1768 327+	6020 486-	1 5538+
a_3	384 021+	254 200-	1816+	403 795-	173 890-	6181-
a_4	1 039-	9 864+	739-	30 311-	37 025+	391+
a_5	715-	1 469-		7 249+	1 571+	
May 26						
a_0	346.7504 459+	0.0077 412-	0.9050 5340+	84.9455 825+	23.1759 737+	0.9406 2085+
a_1	10.8905 194+	4.7148 690+	0.0038 7272-	14.0542 278+	0.7358 795-	0.0085 6625+
a_2	416 428-	180 225-	14 1532+	447 801+	6304 300-	655-
a_3	372 794+	229 320-	1132-	452 811-	11 451-	4579-
a_4	4 410-	2 420+	593-	7 658+	44 870+	400+
a_5	597-	1 284-		6 756+	851-	
May 27						
a_0	357.6361 011+	4.6662 869+	0.9025 7875+	99.0007 507+	21.8129 209+	0.9491 3877+
a_1	10.9170 087+	4.6103 545+	0.0010 9976-	14.0143 811+	1.9826 542-	0.0084 3182+
a_2	669 536+	866 523-	13 4618+	797 043-	6078 029-	1 2024-
a_3	348 925+	232 256-	3499-	356 742-	158 604+	2939-
a_4	7 246-	4 102-	467-	42 103+	40 019+	289+
a_5	1 053-	912-		2 922+	2 445-	
May 28						
a_0	8.6541 261+	9.1662 619+	0.9027 8550+	112.9042 558+	19.2420 815+	0.9574 2385+
a_1	11.1521 675+	4.3652 767+	0.0014 6891+	13.7662 476+	3.1358 941-	0.0081 1474+
a_2	1662 300+	1597 053-	12 1353+	1585 535-	5386 642-	1 9175-
a_3	308 928+	257 414-	5371-	161 310-	294 203+	1756-
a_4	12 469-	8 815-	347-	56 047+	27 199+	72+
a_5	1 889-	274-		978-	2 451-	
May 29						
a_0	20.0019 806+	13.3451 830+	0.9054 1077+	126.5013 258+	15.5994 183+	0.9653 3000+
a_1	11.5713 732+	3.9649 800+	0.0037 2098+	13.4226 751+	4.1153 061-	0.0076 8144+
a_2	2495 340+	2424 958-	10 3203+	1743 112-	4365 374-	2 4094-
a_3	239 732+	294 829-	6764-	51 978+	379 078+	1464-
a_4	22 148-	10 372-	212-	50 219+	14 733+	197-
a_5	2 663-	741+		2 875-	1 401-	
May 30						
a_0	31.8443 799+	17.0372 211+	0.9100 9401+	139.7596 219+	11.0868 159+	0.9727 5389+
a_1	12.1321 704+	3.3877 627+	0.0055 7362+	13.1082 958+	4.8694 631-	0.0071 4777+
a_2	3054 903+	3364 286-	8 1687+	1314 689-	3153 726-	2 9738-
a_3	124 666+	328 147-	7620-	223 911+	424 678+	2275-
a_4	36 178-	6 755-	54-	35 382+	7 856+	435-
a_5	2 462-	2 067+		3 157-	216-	
May 31						
a_0	44.2906 432+	20.0552 718+	0.9164 0777+	152.7620 625+	5.9452 120+	0.9795 7719+
a_1	12.7648 510+	2.6147 943+	0.0069 7663+	12.9251 057+	5.3697 699-	0.0064 6736+
a_2	3187 052+	4368 551-	5 8560+	462 232-	1834 668-	3 9204-
a_3	43 325-	333 859-	7836-	333 874+	454 335+	4067-
a_4	49 524-	3 822+	121+	19 650+	7 087+	548-
a_5	198-	3 194+		3 127-	471+	

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 9			June 17			
a_0	165.6759 847+	0.4381 648+	0.9856 0635+	280.9913 407+	21.5195 375-	0.9631 7286+
a_1	12.9391 172+	5.5973 322-	0.0055 3928+	14.3736 532+	2.2150 936+	0.0117 1844-
a_2	626 051+	424 356-	5 4668-	4002 518-	5872 668+	4 9727-
a_3	380 855+	487 301+	6337-	305 085-	459 653-	1 5827+
a_4	4 302+	9 872+	457-	85 009+	22 989-	56+
a_5	3 727-	310+		3 134-	5 609+	
June 10			June 18			
a_0	178.7158 500+	5.1518 547-	0.9905 3102+	294.9424 210+	18.7648 803-	0.9511 1598+
a_1	13.1784 395+	5.5319 107-	0.0042 3749+	13.5140 574+	3.2453 374+	0.0122 3594-
a_2	1757 156+	1099 956+	7 6318-	4439 376-	4411 890+	2052-
a_3	360 051+	529 159+	8242-	2 186+	497 085-	1 5998+
a_4	14 245-	11 924+	125-	67 227+	5 197+	410-
a_5	5 051-	936-		5 520-	2 811+	
June 11			June 19			
a_0	192.1040 806+	10.5197 549-	0.9939 2167+	308.0189 301+	15.1272 616-	0.9390 1540+
a_1	13.6296 619+	5.1488 723-	0.0024 5886+	12.6509 696+	3.9820 715+	0.0118 1348-
a_2	2701 205+	2749 677+	10 1630-	4084 790-	2979 865+	4 3392+
a_3	252 196+	566 179+	8786-	216 495+	449 554-	1 4296+
a_4	40 277-	7 600+	402+	38 802+	18 829+	691-
a_5	5 831-	3 221-		4 396-	437+	
June 12			June 20			
a_0	206.0244 718+	15.3366 037-	0.9952 8041+	320.2865 108+	10.8902 324-	0.9277 7188+
a_1	14.2265 386+	4.4276 560-	0.0001 7879+	11.9122 849+	4.4509 268+	0.0105 4442-
a_2	3157 513+	4461 560+	12 5397-	3246 461-	1748 482+	8 2100+
a_3	34 364+	563 057+	7160-	328 808+	370 642-	1 1488+
a_4	71 491-	8 844-	978+	16 842+	20 586+	802-
a_5	3 244-	5 569-		2 519-	876-	
June 13			June 21			
a_0	220.5627 245+	19.2632 393-	0.9941 4342+	331.9084 627+	6.2995 506-	0.9181 5533+
a_1	14.8381 404+	3.3727 489-	0.0025 0478-	11.3671 141+	4.6972 264+	0.0085 8987-
a_2	2798 948+	6041 775+	14 0882-	2184 143-	751 268+	11 1752+
a_3	279 678-	471 970+	3163-	371 760+	297 365-	8257+
a_4	89 539-	38 101-	1392+	4 499+	15 935+	803-
a_5	4 421+	5 704-		1 195-	1 384-	
June 14			June 22			
a_0	235.6442 802+	21.9889 942-	0.9902 1211+	343.0946 689+	1.5554 788-	0.9107 5751+
a_1	15.2804 306+	2.0408 909-	0.0053 6157-	11.0430 161+	4.7639 525+	0.0061 3926-
a_2	1467 121+	7171 824+	14 1997-	1053 793-	59 077-	13 1716+
a_3	589 171-	264 677+	2527+	378 133+	247 504-	5037+
a_4	65 803-	68 132-	1470+	1 230-	8 872+	757-
a_5	12 479+	1 922-		648-	1 451-	
June 15			June 23			
a_0	251.0071 734+	23.2932 403-	0.9834 7054+	354.0699 312+	3.1785 578+	0.9059 7821+
a_1	15.3770 212+	0.5553 303-	0.0080 6683-	10.9448 812+	4.6807 096+	0.0033 8413-
a_2	569 833-	7537 877+	12 5683-	66 767+	762 883-	14 2298+
a_3	727 589-	23 939-	8515+	366 666+	226 425-	2010+
a_4	818+	77 531-	1179+	4 277-	1 513+	707-
a_5	12 466+	3 671+		776-	1 278-	
June 16			June 24			
a_0	266.2557 809+	23.1045 628-	0.9742 4381+	5.0576 502+	7.7603 600+	0.9040 3008+
a_1	15.0513 293+	0.9158 898+	0.0102 7786-	11.0661 344+	4.4601 720+	0.0005 0616-
a_2	2622 807-	7037 830+	9 3229-	1133 347+	1445 887-	14 4096+
a_3	604 062-	295 654-	1 3279+	341 410+	232 920-	814-
a_4	64 751+	57 456-	641+	8 028-	5 013-	671-
a_5	4 424+	6 635+		1 446-	875-	

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			July 3			
a_0	16:2703 130+	12:0520 625+	0.9049 5002+	122:7941 917+	16:7153 796+	0.9715 2735+
a_1	11:3912 916+	4:0986 767+	0.0023 2448+	13:7992 365+	3:9405 851-	0.0078 0996+
a_2	2094 935+	2183 511-	13 7634+	1819 408-	4865 338-	8 1464-
a_3	294 288+	261 282-	3500-	75 223-	400 968+	4936-
a_4	15 285-	9 587-	645-	57 330+	25 242+	884+
a_5	2 409-	117-		2 381-	2 793-	
June 26			July 4			
a_0	27:8987 575+	15:9052 896+	0.9086 0939+	136:4094 600+	12:3306 024+	0.9784 8214+
a_1	11:8912 460+	3:5796 981+	0.0049 4635+	13:4345 282+	4:7846 608-	0.0060 6798+
a_2	2861 931+	3026 083-	12 3277+	1725 039-	3538 927-	9 1029-
a_3	208 729+	300 089-	6090-	129 624+	474 635+	1337-
a_4	27 737-	10 383-	604-	44 581+	11 151+	688+
a_5	3 014-	1 117+		3 469-	1 676-	
June 27			July 5			
a_0	40:0939 944+	19:1514 439+	0.9147 2157+	149:6885 579+	7:2404 599+	0.9836 3334+
a_1	12:5136 506+	2:8808 621+	0.0072 0501+	13:1445 052+	5:3464 322-	0.0042 3483+
a_2	3291 411+	3977 481-	10 1410+	1103 422-	2064 850-	9 1017-
a_3	68 214+	329 574-	8530-	273 274+	503 112+	1443+
a_4	43 769-	4 830-	513-	26 991+	2 934+	346+
a_5	2 068-	2 658+		3 387-	566-	
June 28			July 6			
a_0	52:9390 238+	21:6013 833+	0.9228 5026+	162:7524 087+	1:7380 907+	0.9869 7589+
a_1	13:1738 594+	1:9858 919+	0.0089 5679+	13:0149 057+	5:6075 773-	0.0024 7162+
a_2	3212 598+	4968 544-	7 2799+	155 512-	543 519-	8 4722-
a_3	125 578-	321 717-	1 0613-	347 352+	509 514+	2812+
a_4	55 172-	8 867+	336-	10 205+	421+	15-
a_5	1 343+	3 736+		3 404-	4+	
June 29			July 7			
a_0	66:4162 022+	23:0595 094+	0.9324 2556+	175:7871 785+	3:8728 445-	0.9886 2825+
a_1	13:7573 132+	0:9010 822+	0.0100 8092+	13:0903 882+	5:5632 566-	0.0008 6090+
a_2	2518 265+	5843 018-	3 9031+	913 748+	987 655+	7 6457-
a_3	330 246-	249 175-	1 1987-	353 781+	511 086+	2701+
a_4	48 362-	28 341+	58-	6 653-	847+	272-
a_5	5 946+	3 258+		4 036-	255-	
June 30			July 8			
a_0	80:3880 759+	23:3545 322+	0.9427 7634+	189:0032 508+	9:2861 678-	0.9887 4887+
a_1	14:1455 235+	0:3293 110-	0.0104 9959+	13:3745 922+	5:2121 897-	0.0005 9813-
a_2	1297 053+	6387 835-	2829+	1894 756+	2523 508+	7 0011-
a_3	463 043-	104 505-	1 2233-	286 443+	511 234+	1547+
a_4	16 943-	45 185+	292+	27 137-	39-	347-
a_5	8 090+	1 004+		4 743-	1 451-	
July 1			July 9			
a_0	94:6161 152+	22:3806 061+	0.9531 8481+	202:5927 748+	14:1950 323-	0.9874 6263+
a_1	14:2632 864+	1:6196 564-	0.0102 0087+	13:8262 508+	4:5548 608-	0.0019 6587-
a_2	112 612-	6420 230-	3 2014-	2543 637+	4042 484+	6 7417-
a_3	451 255-	84 769+	1 1046-	131 082+	495 565+	100+
a_4	25 109+	49 978+	635+	52 070-	7 214-	228-
a_5	5 660+	1 656-		3 778-	3 225-	
July 2			July 10			
a_0	108:8260 918+	20:1322 358+	0.9629 6143+	216:6809 127+	18:2971 321-	0.9848 2131+
a_1	14:1182 559+	2:8591 103-	0.0092 5461+	14:3515 911+	3:6021 938-	0.0033 2034-
a_2	1259 130-	5882 719-	6 1276-	2586 431+	5453 554+	6 8403-
a_3	296 833-	267 311+	8454-	112 354-	433 868+	844-
a_4	53 414+	40 993+	861+	72 617-	23 970-	36+
a_5	990+	3 044-		770+	4 321-	

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	231.2727 268 +	21.3134 129 -	0.9808 0886 +	339.2900 415 +	3.2747 052 -	0.9149 7390 +
a_1	14.8065 172 +	2.3930 699 -	0.0047 1227 -	11.2293 379 +	4.7885 733 +	0.0070 7410 -
a_2	1821 352 +	6567 957 +	7 0622 -	1512 702 -	202 205 +	8 9714 +
a_3	391 304 -	295 528 +	697 -	344 312 +	286 847 -	8789 +
a_4	68 825 -	46 754 -	348 +	2 711 +	12 711 +	470 -
a_5	7 635 +	3 056 -		869 -	1 131 -	
July 12						
a_0	246.2161 298 +	23.0251 153 -	0.9753 8688 +	350.4027 246 +	1.5065 620 +	0.9088 8013 +
a_1	15.0296 876 +	1.0110 456 -	0.0061 3169 -	11.0307 411 +	4.7474 792 +	0.0050 3495 -
a_2	311 199 +	7143 372 +	7 0549 -	472 177 -	593 402 -	11 3237 +
a_3	588 406 -	80 030 +	732 +	346 585 +	247 361 -	6899 +
a_4	28 052 -	62 632 -	598 +	1 468 -	6 930 +	552 -
a_5	11 039 +	622 +		662 -	1 207 -	
July 13						
a_0	261.2163 954 +	23.3200 219 -	0.9685 6300 +	1.4206 936 +	6.1705 371 +	0.9050 4102 +
a_1	14.9097 002 +	0.4168 996 +	0.0074 9675 -	11.0393 626 +	4.5567 590 +	0.0025 8533 -
a_2	1511 590 -	7013 988 +	6 4733 -	552 161 +	1305 997 -	13 0601 +
a_3	592 252 -	162 290 -	3180 +	333 913 +	231 623 -	4687 +
a_4	29 650 +	58 804 -	699 +	4 641 -	780 +	613 -
a_5	7 337 +	4 150 +		989 -	1 059 -	
July 14						
a_0	275.9194 100 +	22.2234 178 -	0.9604 5770 +	12.5481 005 +	10.5735 061 +	0.9038 0245 +
a_1	14.4452 276 +	1.7495 649 +	0.0086 6804 -	11.2476 169 +	4.2258 556 +	0.0001 4281 +
a_2	3037 112 -	6215 968 +	5 1023 -	1516 165 +	2006 800 -	14 0966 +
a_3	404 093 -	355 432 -	6029 +	305 050 +	238 844 -	2241 +
a_4	66 132 +	36 860 -	623 +	9 519 -	4 663 -	677 -
a_5	538 +	5 109 +		1 713 -	643 -	
July 15						
a_0	290.0271 842 +	19.8909 744 -	0.9513 4595 +	23.9767 156 +	14.5742 666 +	0.9053 7056 +
a_1	13.7432 946 +	2.8739 379 +	0.0094 8268 -	11.6376 997 +	3.7506 563 +	0.0030 0226 +
a_2	3847 474 -	4979 687 +	2 9262 -	2357 038 +	2757 776 -	14 3599 +
a_3	136 655 -	452 538 -	8556 +	249 406 +	263 459 -	463 -
a_4	67 106 +	10 714 -	408 +	18 236 -	8 079 -	758 -
a_5	3 681 -	3 739 +		2 497 -	159 +	
July 16						
a_0	303.3784 084 +	16.5650 191 -	0.9416 6028 +	35.8729 863 +	18.0220 073 +	0.9097 9660 +
a_1	12.9578 045 +	3.7316 953 +	0.0097 9493 -	12.1753 861 +	3.1169 124 +	0.0058 3002 +
a_2	3891 806 -	3595 163 +	1232 -	2970 777 +	3595 069 -	13 7632 +
a_3	94 557 +	459 166 -	1 0195 +	151 481 +	293 471 -	3498 -
a_4	47 453 +	7 918 +	131 +	31 291 -	7 458 -	848 -
a_5	4 232 -	1 713 +		2 570 -	1 399 +	
July 17						
a_0	315.9608 101 +	12.5187 610 -	0.9319 5628 +	48.3572 121 +	20.7494 599 +	0.9169 5948 +
a_1	12.2246 768 +	4.3170 002 +	0.0095 0848 -	12.8011 862 +	2.3075 752 +	0.0084 4378 +
a_2	3365 805 -	2282 258 +	3 0058 +	3211 622 +	4506 235 -	12 2029 +
a_3	242 724 +	411 269 -	1 0705 +	1 622 +	308 525 -	6909 -
a_4	25 903 +	16 175 +	132 -	45 099 -	407 -	911 -
a_5	3 015 -	144 +		867 -	2 788 +	
July 18						
a_0	327.8754 676 +	8.0130 300 -	0.9228 5410 +	61.4751 260 +	22.5757 971 +	0.9265 4535 +
a_1	11.6331 881 +	4.6566 119 +	0.0085 9150 -	13.4255 283 +	1.3150 024 +	0.0106 4062 +
a_2	2512 359 -	1146 898 +	6 1314 +	2937 122 +	5406 310 -	9 5845 +
a_3	316 975 +	345 646 -	1 0152 +	185 340 -	281 873 -	1 0596 -
a_4	10 925 +	16 624 +	336 -	50 092 -	13 995 +	883 -
a_5	1 684 -	747 -		2 825 +	3 526 +	

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			August 4			
a_0	75.1711 059+	23.3237 333+	0.9380 2963+	185.7878 644+	7.8641 268-	0.9973 6853+
a_1	13.9387 306+	0.1565 385+	0.0122 0429+	13.5408 139+	5.4128 912-	0.0031 0659-
a_2	2108 886+	6132 603-	5 8824+	1245 132+	2386 909+	12 2415-
a_3	355 417-	191 076-	1 4195-	261 799+	545 905+	1 0873+
a_4	35 333-	32 311+	681-	21 077-	10 087-	97+
a_5	6 456+	2 770+		4 050-	1 302-	
July 28			August 5			
a_0	89.2822 958+	22.8514 120+	0.9506 7340+	199.4768 587+	12.9848 754-	0.9931 4750+
a_1	14.2429 779+	1.1129 978-	0.0129 2764+	13.8579 255+	4.7764 242-	0.0052 2484-
a_2	895 421+	6484 211-	1 2289+	1863 438+	3951 110+	8 9370-
a_3	431 921-	35 334-	1 6997-	137 585+	492 104+	1 1183+
a_4	1 418-	46 520+	246-	42 163-	16 450-	413-
a_5	6 908+	650+		3 112-	2 079-	
July 29			August 6			
a_0	103.5721 726+	21.0911 767+	0.9635 5151+	213.5303 591+	17.3188 311-	0.9871 3667+
a_1	14.2953 687+	2.4015 097-	0.0126 5365+	14.2534 715+	3.8461 911-	0.0066 9329-
a_2	339 641-	6304 625-	3 9978-	1991 919+	5307 891+	5 8372-
a_3	370 280-	155 974+	1 8034-	60 231-	405 203+	9443+
a_4	34 108+	49 530+	401+	58 887-	27 134-	653-
a_5	3 705+	1 580-		250+	2 661-	
July 30			August 7			
a_0	117.8003 304+	18.0795 968+	0.9756 2904+	227.9711 356+	20.5966 923-	0.9799 4754+
a_1	14.1318 473+	3.5966 220-	0.0113 2909+	14.6103 618+	2.6752 352-	0.0076 0363-
a_2	1208 851-	5555 394-	9 1458-	1460 364+	6333 991+	3 3962-
a_3	199 110-	337 597+	1 6415-	290 400-	270 481+	6759+
a_4	52 262+	41 120+	1112+	57 845-	41 120-	642-
a_5	374-	2 776-		5 357+	1 954-	
July 31			August 8			
a_0	131.7965 704+	13.9650 295+	0.9858 9052+	242.6932 450+	22.6157 877-	0.9720 6547+
a_1	13.8510 591+	4.5913 616-	0.0090 5199+	14.7948 585+	1.3447 150-	0.0081 0577-
a_2	1496 493-	4323 689-	13 3872-	295 887+	6879 112+	1 7478-
a_3	4 731+	474 294+	1 1868-	466 461-	87 736+	4152+
a_4	49 490+	26 871+	1639+	29 439-	51 342-	457-
a_5	2 845-	2 806-		8 504+	295+	
August 1			August 9			
a_0	145.5031 179+	8.9911 348+	0.9935 0151+	257.4689 526+	23.2689 227-	0.9638 2188+
a_1	13.5715 526+	5.3044 654-	0.0060 8417+	14.7065 716+	0.0370 416+	0.0083 4904-
a_2	1213 904-	2767 657-	15 9601-	1194 825-	6837 262+	7681-
a_3	173 761+	554 075+	5158-	500 183-	113 305-	2314+
a_4	34 680+	12 723+	1761+	15 040+	49 550-	194-
a_5	3 577-	2 179-		6 675+	2 738+	
August 2			August 10			
a_0	158.9737 665+	3.4663 657+	0.9979 5569+	272.0081 950+	22.5641 665-	0.9554 1723+
a_1	13.3929 836+	5.6877 735-	0.0028 0791+	14.3269 000+	1.3520 530+	0.0084 4101-
a_2	520 338-	1050 863-	16 4613-	2538 346-	6227 538+	1826-
a_3	276 640+	583 598+	2019+	376 023-	283 533-	1550+
a_4	16 669+	1 918+	1424+	48 706+	35 113-	61+
a_5	3 652-	1 449-		1 743+	3 750+	
August 3			August 11			
a_0	172.3436 820+	2.2680 873-	0.9991 5190+	286.0487 029+	20.6208 493-	0.9469 7408+
a_1	13.3767 495+	5.7228 235-	0.0003 6679-	13.7267 734+	2.5003 301+	0.0084 2855-
a_2	373 069+	696 988+	15 0210-	3356 915-	5203 837+	3250+
a_3	306 678+	576 998+	7771+	166 004-	386 807-	1824+
a_4	1 563-	5 084-	782+	56 322+	15 870-	248+
a_5	3 855-	1 062-		2 153-	3 139+	

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	299.4286 013+	17.6400 894-	0.9385 9875+	32.0623 650+	16.7927 698+	0.9042 1482+
a_1	13.0270 400+	3.4202 751+	0.0082 9889-	11.8929 046+	3.3027 410+	0.0034 2450+
a_2	3538 691-	3979 589+	1 0237+	2439 165+	3318 598-	13 6281+
a_3	37 019+	419 643-	2850+	168 566+	260 224-	2395+
a_4	44 482+	119-	334+	21 878-	4 071-	651-
a_5	3 357-	1 830+		1 933-	552+	
August 13						
a_0	312.1095 865+	13.8636 485-	0.9304 3408+	44.2136 616+	19.7372 766+	0.9090 1956+
a_1	12.3465 221+	4.0911 665+	0.0079 9525-	12.4215 905+	2.5596 026+	0.0061 9591+
a_2	3194 395-	2738 228+	2 0790+	2794 167+	4118 190-	13 9497+
a_3	181 661+	402 499-	4218+	62 174+	270 436-	202-
a_4	27 226+	8 872+	319+	32 141-	1 371-	844-
a_5	2 782-	650+		1 192-	1 520+	
August 14						
a_0	324.1572 795+	9.5379 569-	0.9226 9211+	56.9175 530+	21.8580 315+	0.9165 9998+
a_1	11.7716 416+	4.5219 353+	0.0074 4012-	12.9856 263+	1.6550 464+	0.0089 4606+
a_2	2513 900-	1590 432+	3 5331+	2775 829+	4922 502-	13 3766+
a_3	263 312+	360 972-	5515+	77 069-	260 239-	3576-
a_4	13 251+	11 931+	226+	38 706-	6 378+	1053-
a_5	1 757-	132-		952+	2 369+	
August 15						
a_0	335.7050 118+	4.8918 957-	0.9156 6270+	70.1692 799+	22.9956 785+	0.9268 3742+
a_1	11.3522 780+	4.7364 360+	0.0065 5902-	13.5026 682+	0.5962 101+	0.0114 7198+
a_2	1662 023-	577 758+	5 3188+	2321 896+	5641 214-	11 6669+
a_3	299 204+	314 819-	6427+	220 769-	210 939-	7811-
a_4	4 557+	11 125+	89+	33 956-	18 581+	1227-
a_5	990-	568-		3 789+	2 561+	
August 16						
a_0	346.9213 646+	0.1281 101-	0.9097 0073+	83.8790 442+	23.0087 875+	0.9393 8571+
a_1	11.1109 628+	4.7617 074+	0.0052 9889-	13.8891 308+	0.5866 023-	0.0135 2192+
a_2	746 955-	305 651-	7 2955+	1493 860+	6136 880-	8 5865+
a_3	307 752+	276 111-	6782+	317 806-	111 424-	1 2785-
a_4	264-	8 182+	61-	14 160-	31 746+	1264-
a_5	660-	767-		5 389+	1 825+	
August 17						
a_0	357.9883 146+	4.5761 627+	0.9051 9860+	97.8849 033+	21.8007 119+	0.9536 2580+
a_1	11.0534 611+	4.6206 333+	0.0036 3875-	14.0895 904+	1.8337 963-	0.0148 0504+
a_2	168 115+	1092 577-	9 2892+	509 508+	6262 414-	4 0003+
a_3	300 060+	251 055-	6536+	321 129-	33 050+	1 7957-
a_4	3 467-	4 256+	206-	13 794+	40 981+	1019-
a_5	749-	786-		4 359+	504+	
August 18						
a_0	9.0881 716+	9.0627 798+	0.9025 5207+	111.9951 469+	19.3481 277+	0.9686 4112+
a_1	11.1753 405+	4.3281 108+	0.0015 9306-	14.1028 473+	3.0597 213-	0.0150 2557+
a_2	1040 004+	1828 088-	11 1222+	327 492-	5912 354-	1 9778-
a_3	278 475+	241 789-	5712+	223 974-	201 274+	2 2173-
a_4	7 155-	219+	345-	35 865+	43 394+	368-
a_5	1 165-	615-		1 493+	768-	
August 19						
a_0	20.3945 280+	13.1838 633+	0.9021 2491+	126.0465 835+	15.7215 610+	0.9832 4350+
a_1	11.4634 388+	3.8897 371+	0.0007 8896+	13.9852 463+	4.1648 373-	0.0139 5003+
a_2	1820 831+	2558 314-	12 6246+	769 363-	5055 864-	8 8186-
a_3	237 901+	246 812-	4338+	67 162-	366 626+	2 3743-
a_4	13 049-	2 993-	488-	42 888+	39 430+	671+
a_5	1 702-	187-		1 272-	1 687-	

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	139.9523 390+	11.0915 741+	0.9960 8096+	254.1506 710+	23.0174 705-	0.9693 9186+
a_1	13-8277 426+	5-0510 948-	0-0115 0088+	14-8000 223+	0-2872 721-	0-0118 0340-
a_2	726 325-	3736 288-	15 5034-	1470 510-	6912 379+	1 2204+
a_3	90 703+	507 105+	2 1028-	470 863-	126 259-	1 0366+
a_4	36 000+	30 919+	1828+	18 796+	47 567-	1076-
a_5	2 918-	2 312-		5 892+	3 296+	
August 29						
a_0	153.7198 276+	5.7204 217+	1.0058 3951+	268.7590 249+	22.6305 577-	0.9578 0339+
a_1	13-7226 290+	5-6350 099-	0-0078 4259+	14-3751 207+	1-0399 475+	0-0112 9142-
a_2	267 442-	2052 587-	20 6903-	2711 400-	6281 255+	3 6919+
a_3	205 029+	607 435+	1 3525-	339 403-	283 376-	6025+
a_4	21 146+	19 284+	2634+	48 338+	30 405-	832-
a_5	3 694-	2 716-		1 181+	3 608+	
August 30						
a_0	167.4379 604+	0.0574 467-	1-0115 0417+	282.8340 171+	20.9935 020-	0.9469 3309+
a_1	13-7372 601+	5-8569 416-	0-0034 0429+	13-7509 413+	2-2008 266+	0-0104 0556-
a_2	437 544+	141 743-	23 1654-	3427 940-	5284 821+	5 0100+
a_3	252 360+	657 321+	2717-	136 238-	369 471-	2692+
a_4	2 523+	5 650+	2694+	53 163+	12 043-	523-
a_5	4 157-	2 892-		2 271-	2 615+	
August 31						
a_0	181.2440 475+	5.8625 547-	1-0125 9169+	296.2336 298+	18.3020 833-	0.9370 5022+
a_1	13-8994 075+	5-6872 801-	0-0012 0241-	13-0446 107+	3-1434 380+	0-0093 4371-
a_2	1168 122+	1835 202+	22 3857-	3540 534-	4130 282+	5 5132+
a_3	220 839+	650 986+	8267+	53 117+	392 249-	613+
a_4	18 645-	8 808-	1981+	40 837+	963+	223-
a_5	4 235-	2 923-		3 215-	1 302+	
September 1						
a_0	195.2800 630+	11.3023 890-	1-0092 5318+	308.9332 608+	14.7846 154-	0.9282 6173+
a_1	14-1897 096+	5-1299 281-	0-0053 5228-	12-3671 664+	3-8528 550+	0-0082 3160-
a_2	1676 278+	3706 087+	18 7514-	3168 390-	2972 302+	5 5709+
a_3	104 677+	586 574+	1 6242+	184 628+	375 940-	258-
a_4	40 707-	23 458-	858+	24 341+	7 260+	24+
a_5	2 948-	2 869-		2 613-	329+	
September 2						
a_0	209.6435 026+	16.0056 837-	1-0021 9675+	321.0042 237+	10.6713 654-	0.9205 8488+
a_1	14-5386 157+	4-2235 555-	0-0085 8102-	11-7973 075+	4-3376 010+	0-0071 2419-
a_2	1716 425+	5296 335+	13 3965-	2494 607-	1891 299+	5 5131+
a_3	85 546-	464 353+	1 9589+	256 405+	343 918-	137-
a_4	56 498-	38 082-	197-	11 242+	8 721+	196+
a_5	684+	2 393-		1 661-	192-	
September 3						
a_0	224.3396 249+	19.6572 178-	0.9924 7000+	332.5786 691+	6.1781 735-	0.9140 1260+
a_1	14-8339 854+	3-0414 101-	0-0106 8061-	11-3789 745+	4.6160 772+	0-0060 1781-
a_2	1127 636+	6436 909+	7 6595-	1674 550-	909 924+	5 5925+
a_3	301 949-	288 963+	1 8658+	285 162+	311 085-	674+
a_4	53 047-	50 508-	882-	3 036+	7 646+	286+
a_5	5 585+	908-		955-	398-	
September 4						
a_0	239.2514 327+	22.0311 824-	0.9812 0121+	343.8189 130+	1.5014 876-	0.9085 6364+
a_1	14-9505 040+	1-6879 943-	0-0116 8809-	11-1303 506+	4.7075 959+	0-0048 6764-
a_2	40 418-	6991 647+	2 5993-	810 391-	18 550+	5 9665+
a_3	456 898-	79 171+	1 5006+	287 925+	284 517-	1840+
a_4	23 446-	55 179-	1140-	1 632-	5 589+	296+
a_5	8 104+	1 422+		638-	439-	

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	354.8967 900+	3.1800 265+	0.9043 1401+	92.8939 679+	22.1219 724+	0.9374 9551+
a_1	11.0536 781+	4.6279 667+	0.0036 0729-	13.6606 123+	1.3379 569-	0.0134 5155+
a_2	37 209+	805 874-	6 6944+	686 408+	5873 440-	10 3885+
a_3	274 986+	266 534-	3043+	238 991-	13 471-	8633-
a_4	4 769-	3 332+	240+	9 294+	27 932+	1465-
a_5	662-	388-		3 414+	701+	
September 14						
a_0	5.9811 445+	7.7010 468+	0.9014 0898+	106.6005 928+	20.1981 877+	0.9518 8493+
a_1	11.1413 770+	4.3879 708+	0.0021 6753-	13.7316 197+	2.5051 634-	0.0152 1162+
a_2	826 925+	1589 376-	7 7478+	59 375+	5739 263-	6 9179+
a_3	249 140+	257 002-	4015+	168 693-	105 070+	1 4582-
a_4	8 082-	1 323+	133+	26 631+	31 358+	1535-
a_5	924-	246-		1 620+	364+	
September 15						
a_0	17.2292 274+	11.9044 874+	0.9000 5771+	120.3241 059+	17.1327 771+	0.9676 2718+
a_1	11.3778 087+	3.9934 009+	0.0004 9219-	13.7043 471+	3.6087 701-	0.0160 9626+
a_2	1516 587+	2354 928-	9 0278+	270 754-	5232 260-	1 6326+
a_3	207 401+	254 016-	4558+	47 155-	234 019+	2 0882-
a_4	12 794-	9+	9-	34 554+	33 193+	1215-
a_5	1 230-	27+		418-	164+	
September 16						
a_0	28.7780 324+	15.6369 975+	0.9005 1379+	134.0000 756+	13.0275 186+	0.9836 6574+
a_1	11.7376 136+	3.4462 283+	0.0014 4975+	13.6496 605+	4.5716 578-	0.0157 4761+
a_2	2049 679+	3116 663-	10 3844+	209 128-	4329 374-	5 3335-
a_3	143 912+	253 460-	4531+	85 956+	368 179+	2 5935-
a_4	19 192-	69+	180-	32 157+	34 216+	331-
a_5	1 266-	456+		1 992-	249-	
September 17						
a_0	40.7329 592+	18.7462 661+	0.9030 4548+	147.6404 354+	8.0631 381+	0.9986 1735+
a_1	12.1824 137+	2.7471 139+	0.0036 5537+	13.6454 871+	5.3135 179-	0.0138 8955+
a_2	2353 529+	3872 075-	11 6295+	221 730+	3021 982-	13 2694-
a_3	54 854+	248 327-	3823+	193 981+	501 977+	2 7381-
a_4	25 934-	2 327+	381-	22 037+	33 268+	1071+
a_5	627-	978+		3 174-	1 229-	
September 18						
a_0	53.1535 551+	21.0816 702+	0.9078 9821+	161.3293 799+	2.5008 237+	1.0109 1687+
a_1	12.6588 904+	1.8996 208+	0.0060 8070+	13.7552 535+	5.7546 298-	0.0104 5712+
a_2	2356 154+	4593 307-	12 5400+	904 131+	1328 694-	20 7954-
a_3	54 286-	229 003-	2311+	249 748+	621 872+	2 3022-
a_4	29 453-	7 298+	621-	6 109+	27 312+	2567+
a_5	875+	1 401+		4 294-	2 769-	
September 19						
a_0	66.0397 744+	22.4999 300+	0.9152 4980+	175.2002 028+	3.3220 340-	1.0190 8990+
a_1	13.1024 936+	0.9158 785+	0.0086 3318+	14.0112 998+	5.8242 685-	0.0057 1019+
a_2	2025 310+	5222 491-	12 8518+	1647 026+	673 097+	26 1347-
a_3	162 284-	185 751-	161-	230 790+	702 486+	1 2458-
a_4	25 100-	14 471+	903-	15 723-	13 398+	3469+
a_5	2 762+	1 488+		5 133-	4 415-	
September 20						
a_0	79.3263 368+	22.8765 802+	0.9251 5751+	189.3971 985+	9.0078 459-	1.0220 9672+
a_1	13.4502 125+	0.1778 128-	0.0111 6258+	14.4010 872+	5.4757 528-	0.0002 4844+
a_2	1415 533+	5678 015-	12 2522+	2193 547+	2816 736+	27 7967-
a_3	234 433-	113 160-	3773-	117 083+	711 360+	1788+
a_4	10 811-	22 048+	1207-	42 533-	9 081-	3283+
a_5	3 896+	1 177+		4 340-	5 425-	
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			October 7			
a_0	204.0246 614+	14.1322 396-	1.0196 1619+	318.1653 444+	11.5109 005-	0.9223 8787+
a_1	14.8557 433+	4.7053 414-	0.0051 2584-	11.8699 716+	4.1857 495+	0.0089 9131-
a_2	2245 956+	4841 975+	25 3262-	2807 266-	2025 363+	9 6710+
a_3	94 005-	621 116+	1 5151+	294 105+	333 993-	697-
a_4	65 863-	36 989-	2118+	10 030+	11 674+	365-
a_5	144-	4 903-		1 872-	687-	
September 30			October 8			
a_0	219.0889 991+	18.2954 611-	1.0121 3042+	329.7848 156+	7.1549 152-	0.9143 5304+
a_1	15.2503 234+	3.5678 556-	0.0096 5181-	11.3998 266+	4.4949 504+	0.0070 9261-
a_2	1567 275+	6434 234+	19 5566-	1883 482-	1086 533+	9 2510+
a_3	355 125-	425 699+	2 3625+	316 002+	294 230-	2139-
a_4	66 869-	62 384-	592+	829+	8 078+	105-
a_5	6 571+	2 186-		988-	780-	
October 1			October 9			
a_0	234.4545 077+	21.1837 804-	1.0007 6512+	341.0278 783+	2.5800 047-	0.9081 6310+
a_1	15.4337 828+	2.1793 413-	0.0128 3077-	11.1177 689+	4.6268 293+	0.0053 1077-
a_2	166 713+	7315 145+	12 1526-	940 373-	244 494+	8 5527+
a_3	554 721-	156 639+	2 5834+	309 649+	269 634-	2539-
a_4	31 689-	73 446-	660-	3 991-	4 087+	97+
a_5	10 515+	1 946+		627-	633-	
October 2			October 10			
a_0	249.8473 725+	22.6230 933-	0.9869 7081+	352.0821 131+	2.0446 560+	0.9036 8318+
a_1	15.2932 879+	0.6977 226-	0.0145 1279-	11.0206 791+	4.5961 565+	0.0036 7250-
a_2	1582 074-	7363 986+	4 8201-	41 641-	546 226-	7 8538+
a_3	577 898-	115 958-	2 3002+	287 416+	259 454-	2129-
a_4	23 475+	62 735-	1343-	7 069-	862+	238+
a_5	7 636+	4 994+		664-	374-	
October 3			October 11			
a_0	264.9277 743+	22.6017 871-	0.9721 9261+	3.1265 964+	6.5602 932+	0.9007 7715+
a_1	14.8167 044+	0.7176 908+	0.0148 4054-	11.0954 156+	4.4092 331+	0.0021 5609-
a_2	3098 555-	6689 814+	1 2693+	771 545+	1323 165-	7 3601+
a_3	411 269-	316 803-	1 7489+	252 382+	259 536-	1156-
a_4	61 734+	36 598-	1502-	10 395-	1 057-	313+
a_5	1 119+	5 206+		935-	45-	
October 4			October 12			
a_0	279.3997 816+	21.2499 343-	0.9576 3886+	14.3232 717+	10.8111 461+	0.8993 4864+
a_1	14.0988 609+	1.9485 744+	0.0141 2216-	11.3208 135+	4.0662 945+	0.0007 0622-
a_2	3951 003-	5571 938+	5 6196+	1456 949+	2108 571-	7 2012+
a_3	155 725-	412 160-	1 1406+	201 321+	263 971-	117+
a_4	65 732+	10 131-	1332-	15 163-	1 317-	320+
a_5	3 365-	3 363+		1 196-	357+	
October 5			October 13			
a_0	293.0942 063+	18.7860 589-	0.9441 7941+	25.8082 764+	14.6400 904+	0.8993 6691+
a_1	13.2865 517+	2.9369 408+	0.0127 0933-	11.6659 368+	3.5650 414+	0.0007 5034+
a_2	4057 637-	4308 273+	8 2521+	1957 925+	2904 817-	7 4263+
a_3	72 984+	420 250-	6056+	128 751+	265 414-	1417+
a_4	47 617+	6 483+	1017-	21 413-	454+	260+
a_5	4 249-	1 267+		1 098-	807+	
October 6			October 14			
a_0	305.9866 294+	15.4595 407-	0.9323 4568+	37.6806 296+	17.8882 348+	0.9008 7665+
a_1	12.5138 425+	3.6757 458+	0.0109 1790-	12.0870 340+	2.9050 395+	0.0022 8850+
a_2	3595 553-	3099 037+	9 4694+	2204 651+	3690 258-	8 0034+
a_3	221 537+	382 441-	1992+	32 575+	255 321-	2475+
a_4	25 931+	12 447+	676-	27 321-	4 536+	138+
a_5	3 191-	99-		276-	1 187+	

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			October 23		
a_0	49-9886 266+	20-3992 886+	0-9039 9161+	155-4851 802+	4-7558 364+	0-9935 2967+
a_1	12-5266 726+	2-0927 992+	0-0039 6895+	13-3206 049+	5-4111 693-	0-0145 2708+
a_2	2135 641+	4417 122-	8 8230+	1018 693+	2107 625-	8 2414-
a_3	78 565-	225 260-	3044+	298 034+	478 464+	2 6292-
a_4	29 012-	10 610+	42-	12 019+	30 763+	108-
a_5	1 320+	1 292+		3 643-	75-	
	October 16			October 24		
a_0	62-7182 376+	22-0290 400+	0-9088 7288+	168-9382 955+	0-8151 801-	1-0069 6863+
a_1	12-9192 885+	1-1466 870+	0-0058 2320+	13-6167 381+	5-6768 894-	0-0120 8569+
a_2	1739 079+	5016 291-	9 7037+	1948 480+	488 317-	16 1464-
a_3	180 441-	170 080-	2894+	308 734+	599 530+	2 6824-
a_4	22 317-	17 242+	276-	6 134-	30 918+	1421+
a_5	3 056+	974+		5 339-	2 199-	
	October 17			October 25		
a_0	75-7914 639+	22-6589 115+	0-9156 9263+	182-7796 077+	6-4780 763-	1-0171 8566+
a_1	13-2055 741+	0-0997 880+	0-0078 3974+	14-0939 301+	5-5834 294-	0-0081 0861+
a_2	1094 480+	5413 328-	10 3975+	2784 368+	1473 821+	23 2947-
a_3	238 718-	91 725-	1807+	230 219+	699 486+	2 1013-
a_4	6 520-	22 168+	563-	33 571-	20 101+	2931+
a_5	3 821+	349+		6 496-	5 209-	
	October 18			October 26		
a_0	89-0823 443+	22-2104 459+	0-9245 8456+	197-1709 898+	11-8426 858-	1-0227 8398+
a_1	13-3521 561+	1-0013 539-	0-0099 5095+	14-7031 960+	5-0733 859-	0-0029 3669+
a_2	377 478+	5552 022-	10 5917+	3208 313+	3640 698+	27 8173-
a_3	227 023-	138+	432-	32 394+	726 469+	8942-
a_4	13 110+	23 784+	895-	68 238-	6 637-	3682+
a_5	3 045+	180-		4 230-	7 601-	
	October 19			October 27		
a_0	102-4511 614+	20-6562 641+	0-9355 8140+	212-1910 098+	16-4807 788-	1-0228 8634+
a_1	13-3663 096+	2-1022 929-	0-0120 2051+	15-3251 756+	4-1337 598-	0-0027 4754-
a_2	194 470-	5410 726-	9 9143+	2853 448+	5704 023+	28 3038-
a_3	145 125-	93 444+	4018-	278 313-	624 384+	6170+
a_4	28 451+	22 671+	1240-	91 570-	46 394-	3246+
a_5	1 285+	239-		3 698+	6 860-	
	October 20			October 28		
a_0	115-7864 851+	18-0244 861+	0-9485 4076+	227-7649 115+	19-9870 233-	1-0174 0257+
a_1	13-2958 991+	3-1474 557-	0-0138 3321+	15-7776 019+	2-8276 216-	0-0080 9326-
a_2	446 334-	4996 774-	7 9567+	1506 266+	7229 996+	24 5471-
a_3	19 455-	181 973+	9022-	602 605-	373 137+	1 9352+
a_4	34 625+	21 351+	1512-	71 609-	82 236-	1872+
a_5	425-	182+		12 807+	1 709-	
	October 21			October 29		
a_0	129-0392 252+	14-3977 037+	0-9630 6432+	243-6269 995+	22-0627 261-	1-0070 6683+
a_1	13-2144 317+	4-0835 866-	0-0150 9339+	15-8758 346+	1-3034 229-	0-0123 4724-
a_2	301 255-	4320 915-	4 3425+	602 477-	7838 984+	17 6671-
a_3	114 104+	269 490+	1 5177-	760 593-	30 764+	2 6794+
a_4	32 213+	22 343+	1549-	2 925-	90 207-	273+
a_5	1 587-	713+		13 514+	4 823+	
	October 22			October 30		
a_0	142-2380 044+	9-9112 801+	0-9784 2470+	259-3675 860+	22-5877 126-	0-9932 2354+
a_1	13-2005 023+	4-8576 291-	0-0154 4452+	15-5327 390+	0-2399 350+	0-0150 6604-
a_2	218 440+	3371 209-	1 1268-	2766 386-	7438 567+	9 5026-
a_3	226 555+	366 029+	2 1553-	641 814-	280 162-	2 7697+
a_4	24 207+	26 229+	1134-	66 650+	63 971-	930-
a_5	2 467-	805+		5 018+	7 720+	

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	274.5666 717+	21.6375 621-	0.9774 7491+	11.4027 308+	9.8133 308+	0.9000 1398+
a_1	14.8160 772+	1.6218 696+	0.0161 7295-	11.2432 704+	4.1292 921+	0.0009 8525-
a_2	4242 037-	6291 653+	1 7700-	1391 358+	1867 080-	9 2184+
a_3	329 775-	459 742-	2 3783+	239 092+	254 601-	4411-
a_4	89 775+	24 001-	1514-	16 213-	4 411-	129+
a_5	3 339-	6 025+		1 397-	251+	
November 1						
a_0	288.9342 113+	19.4342 989-	0.9613 4763+	22.8072 851+	13.7300 388+	0.8999 0775+
a_1	13.9029 744+	2.7356 864+	0.0158 7411-	11.5860 856+	3.6778 577+	0.0007 3126+
a_2	4726 457-	4828 676+	4 4537+	1997 332+	2654 847-	7 9762+
a_3	5 719-	497 369-	1 7598+	160 248+	269 317-	3882-
a_4	70 735+	6 114+	1589-	23 496-	3 194-	252+
a_5	6 037-	2 696+		1 483-	963+	
November 2						
a_0	302.3704 379+	16.2646 008-	0.9460 7898+	34.6066 308+	17.1152 568+	0.9014 0033+
a_1	12.9812 443+	3.5560 018+	0.0145 1903-	12.0234 874+	3.0652 976+	0.0022 2014+
a_2	4379 715-	3400 133+	8 7860+	2322 187+	3472 325-	6 9652+
a_3	217 476+	447 401-	1 1184+	51 900+	272 093-	2854-
a_4	39 623+	19 025+	1376-	31 409-	1 695+	324+
a_5	4 825-	189+		695-	1 613+	
November 3						
a_0	314.9389 381+	12.4114 044-	0.9325 3663+	46.8643 163+	19.8064 435+	0.9042 9169+
a_1	12.1839 828+	4.1095 111+	0.0124 8137-	12.4905 854+	2.2906 897+	0.0035 4054+
a_2	3537 812-	2173 892+	11 3251+	2282 400+	4262 267-	6 3038+
a_3	328 869+	370 119-	5666+	79 619-	249 048-	1533-
a_4	15 514+	19 477+	1060-	35 339-	9 994+	330+
a_5	2 788-	1 001-		1 197+	1 860+	
November 4						
a_0	326.8032 992+	8.1196 684-	0.9212 3384+	59.5717 656+	21.6471 872+	0.9084 5058+
a_1	11.5798 946+	4.4405 437+	0.0100 8875-	12.9096 453+	1.3684 493+	0.0047 6855+
a_2	2485 967-	1170 342+	12 3989+	1843 476+	4930 798-	6 0400+
a_3	363 892+	302 405-	1436+	207 715-	190 741-	185-
a_4	1 843+	14 191+	743-	29 314-	19 602+	259+
a_5	1 346-	1 301-		3 492+	1 393+	
November 5						
a_0	338.1710 362+	3.5910 419-	0.9123 9190+	72.6424 048+	22.5055 821+	0.9138 2386+
a_1	11.1919 342+	4.5889 166+	0.0075 9563-	13.2060 478+	0.3336 034+	0.0059 8136+
a_2	1396 660-	335 239+	12 3923+	1079 456+	5371 459-	6 1349+
a_3	358 202+	258 571-	1523-	289 390-	99 020-	876+
a_4	4 649-	7 551+	465-	11 167-	26 720+	104+
a_5	698-	1 164-		4 672+	309+	
November 6						
a_0	349.2585 899+	1.0061 802+	0.9060 1561+	85.9268 098+	22.2948 406+	0.9204 2851+
a_1	11.0178 542+	4.5808 319+	0.0051 8149-	13.3329 904+	0.7595 530-	0.0072 3880+
a_2	356 918-	406 825-	11 6634+	191 103+	5505 128-	6 4530+
a_3	332 655+	239 813-	3372-	287 824-	10 337+	1317+
a_4	7 991-	1 653+	231-	12 937+	28 115+	128-
a_5	654-	826-		3 803+	775-	
November 7						
a_0	0.2731 535+	5.5224 310+	0.9019 6444+	99.2518 020+	20.9885 425+	0.9283 2450+
a_1	11.0427 438+	4.4277 718+	0.0029 5920-	13.2919 374+	1.8466 194-	0.0085 6380+
a_2	586 564+	1124 621-	10 5193+	556 705-	5313 223-	6 7621+
a_3	293 968+	241 190-	4285-	199 297-	114 799+	823+
a_4	11 218-	2 554-	34-	32 119+	23 905+	425-
a_5	978-	355-		1 582+	1 206-	

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	112-4715 094+	18-6243 506+	0-9375 6848+	220-4726 207+	18-5312 826-	1-0160 3513+
a_1	13-1344 438+	2-8658 649-	0-0099 2393+	15-4736 014+	3-4105 528-	0-0001 3094-
a_2	946 121-	4837 494-	6 7438+	3147 068+	6288 202+	24 9675-
a_3	56 183-	198 568+	870-	401 738-	564 047+	4457-
a_4	39 655+	17 606+	760-	104 662-	50 750-	3129+
a_5	483-	830-		7 084+	7 437-	
November 17			November 25			
a_0	125-5096 400+	15-2962 707+	0-9481 5050+	236-2109 973+	21-2624 292-	1-0133 9414+
a_1	12-9439 841+	3-7671 650-	0-0112 1620+	15-9441 808+	2-0077 095-	0-0051 3287-
a_2	881 641-	4144 461-	6 0170+	1385 163+	7601 217+	24 4424-
a_3	96 940+	261 172+	3926-	744 498-	290 275+	8353+
a_4	36 789+	13 388+	1082-	66 060-	89 758-	2643+
a_5	1 613-	13+		16 379+	1 057-	
November 18			November 26			
a_0	138-3786 716+	11-1421 169+	0-9599 1831+	252-2142 765+	22-4900 710-	1-0059 2697+
a_1	12-8106 462+	4-5123 430-	0-0122 5851+	15-9796 266+	0-4368 071-	0-0096 6499-
a_2	386 259-	3280 466-	4 1836+	1080 119-	7923 081+	20 3872-
a_3	227 663+	315 313+	8309-	846 485-	75 183-	1 9063+
a_4	28 532+	13 585+	1296-	21 383+	93 940-	1455+
a_5	2 088-	824+		13 586+	6 358+	
November 19			November 27			
a_0	151-1761 026+	6-3346 995+	0-9724 9914+	268-0047 397+	22-1508 465-	0-9944 2844+
a_1	12-8120 614+	5-0679 962-	0-0127 9409+	15-5249 913+	1-0908 601+	0-0131 1236-
a_2	447 055+	2244 729-	9152+	3355 317-	7197 851+	13 8358-
a_3	320 559+	378 058+	1 3601-	631 372-	385 967-	2 4835-
a_4	18 231+	18 028+	1254-	90 037+	59 540-	135+
a_5	2 667-	1 132+		2 257+	8 709+	
November 20			November 28			
a_0	164-0664 817+	1-0819 521+	0-9852 3620+	283-1402 915+	20-3838 812-	0-9801 8219+
a_1	13-0035 970+	5-3957 483-	0-0125 1885+	14-7016 509+	2-3951 752+	0-0151 2914-
a_2	1491 479+	990 986-	3 9028-	4687 087-	5769 977+	6 3345-
a_3	366 018+	461 082+	1 8775-	253 249-	538 503-	2 5224+
a_4	5 217+	24 218+	790-	98 267+	14 727-	846-
a_5	4 017-	453+		5 686-	6 001+	
November 21			November 29			
a_0	177-2559 484+	4-3643 193-	0-9971 6913+	297-3571 669+	17-4664 312-	0-9646 6338+
a_1	13-4117 742+	5-4457 093-	0-0111 4338+	13-7247 212+	3-3847 251+	0-0156 7324-
a_2	2580 661+	542 206+	9 9791-	4914 436-	4126 076+	7098+
a_3	345 523+	561 253+	2 2087-	82 192+	539 578-	2 1685+
a_4	14 806-	27 152+	177+	67 552+	15 007+	1330-
a_5	6 117-	1 667-		6 778-	2 172+	
November 22			November 30			
a_0	190-9582 487+	9-6971 343-	1-0070 9551+	310-6047 410+	13-7213 385-	0-9492 6466+
a_1	14-0225 813+	5-1588 690-	0-0084 9198+	12-7901 257+	4-0551 528+	0-0149 3400-
a_2	3467 041+	2372 266+	16 4592-	4330 421-	2619 003+	6 4147+
a_3	224 581+	651 208+	2 1430-	285 783+	459 303-	1 6263+
a_4	46 538-	19 210+	1481+	33 115+	25 174+	1406-
a_5	7 216-	5 140-		4 615-	354-	
November 23			December 1			
a_0	205-3446 168+	14-5522 488-	1-0137 4209+	322-9932 529+	9-4477 337-	0-9351 2070+
a_1	14-7611 454+	4-4839 427-	0-0046 1656+	12-0207 176+	4-4510 538+	0-0132 1944-
a_2	3788 964+	4389 642+	21 9638-	3320 507-	1388 522+	10 4546+
a_3	31 438-	674 942+	1 5368-	373 359+	362 778-	1 0593+
a_4	85 532-	7 254-	2654+	10 272+	22 899+	1250-
a_5	3 408-	8 242-		2 380-	1 409-	

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			December 10			
a_0	334.7200 450+	4.8919 566-	0.9230 4014+	69.0501 006+	22.3775 712+	0.9159 2235+
a_1	11.4715 444+	4.6283 796+	0.0108 6076-	13.2650 337+	0.6202 641+	0.0063 5019+
a_2	2162 557-	423 450+	12 8895+	1544 641+	5359 662-	4 4070+
a_3	391 403+	285 390-	5582+	299 948-	148 185-	5327-
a_4	1 292-	15 593+	1012-	25 744-	27 175+	349+
a_5	1 080-	1 588-		5 122+	1 325+	
December 3			December 11			
a_0	346.0142 368+	0.2483 705-	0.9135 1403+	82.4375 415+	22.4499 006+	0.9226 6346+
a_1	11.1553 977+	4.6328 958+	0.0081 5588-	13.4762 414+	0.4845 930-	0.0070 8574+
a_2	1006 872-	355 066-	13 9642+	541 701+	5627 904-	3 0192+
a_3	375 687+	238 775-	1542+	351 628-	27 151-	3903-
a_4	6 448-	7 526+	775-	942+	33 873+	386+
a_5	660-	1 367-		5 261+	296-	
December 4			December 12			
a_0	357.1058 051+	4.3257 571+	0.9067 6223+	95.9334 104+	21.4031 597+	0.9300 1594+
a_1	11.0638 197+	4.4925 776+	0.0053 4780-	13.4820 976+	1.6049 195-	0.0075 8793+
a_2	74 909+	1039 920-	13 9680+	454 848-	5509 125-	2 0777+
a_3	343 186+	222 097-	1548-	296 517-	104 662+	2324-
a_4	9 611-	602+	570-	27 855+	32 066+	321+
a_5	852-	949-		3 008+	1 560-	
December 5			December 13			
a_0	8.2103 880+	8.6920 984+	0.9027 9004+	109.3434 579+	19.2608 446+	0.9377 9161+
a_1	11.1774 866+	4.2177 318+	0.0026 2347-	13.3148 159+	2.6632 997-	0.0079 4661+
a_2	1038 279+	1712 105-	13 1667+	1147 232-	5018 401-	1 5677+
a_3	295 930+	228 828-	3823-	156 631-	217 175+	1005-
a_4	13 860-	4 248-	396-	42 645+	23 840+	147+
a_5	1 373-	349-		178+	1 813-	
December 6			December 14			
a_0	19.5197 723+	12.7152 772+	0.9014 4107+	122.5321 699+	16.1196 250+	0.9458 8640+
a_1	11.4676 905+	3.8047 894+	0.0001 2063-	13.0555 255+	3.5931 971-	0.0082 3587+
a_2	1829 141+	2427 591-	11 7876+	1359 570-	4241 994-	1 3458+
a_3	226 508+	248 837-	5403-	14 677+	294 763+	396-
a_4	20 920-	6 106-	235-	42 903+	14 540+	119-
a_5	1 837-	469+		1 611-	1 184-	
December 7			December 15			
a_0	31.1907 518+	16.2518 602+	0.9024 4282+	135.4573 353+	12.1330 403+	0.9542 5170+
a_1	11.8921 845+	3.2424 134+	0.0020 6540+	12.8043 696+	4.3479 420-	0.0084 8840+
a_2	2364 687+	3206 056-	10 0306+	1074 304-	3282 301-	1 1462+
a_3	124 601+	268 015-	6345-	169 812+	341 636+	867-
a_4	30 592-	3 796-	76-	34 407+	8 624+	428-
a_5	1 607-	1 443+		2 200-	218-	
December 8			December 16			
a_0	43.3286 453+	19.1466 312+	0.9054 4709+	148.1744 763+	7.4918 725+	0.9628 4176+
a_1	12.3894 639+	2.5200 018+	0.0038 7817+	12.6531 147+	4.8985 696-	0.0086 7449+
a_2	2538 762+	4018 424-	8 0869+	380 447-	2207 798-	6206+
a_3	12 924-	268 319-	6647-	285 330+	374 411+	2602-
a_4	39 313-	3 579+	86+	23 356+	7 707+	709-
a_5	42-	2 243+		2 346-	582+	
December 9			December 17			
a_0	55.9667 575+	21.2385 409+	0.9100 6835+	160.8201 802+	2.4107 931+	0.9715 4521+
a_1	12.8775 959+	1.6383 747+	0.0052 9962+	12.6707 929+	5.2244 317-	0.0086 9217+
a_2	2263 634+	4779 415-	6 1495+	592 242+	1032 452-	5901-
a_3	169 014-	231 536-	6294-	354 959+	411 201+	5494-
a_4	39 865-	15 193+	237+	11 857+	10 934+	868-
a_5	2 718+	2 314+		2 888-	841+	

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	173.5865 900+	2.8745 862-	0.9801 1475+	291.2684 828+	18.8795 502-	0.9757 7406+
a_1	12.8990 260+	5.3027 685-	0.0083 7457+	14.3465 024+	3.0253 849+	0.0122 8530-
a_2	1699 410+	275 241+	2 7567-	4469 940-	5095 029+	8 8807-
a_3	372 697+	462 956+	9055-	162 256-	547 541-	1 9268+
a_4	2 304-	15 624+	798-	86 075+	8 778-	172+
a_5	4 283-	184+		5 670-	5 053+	
December 19			December 27			
a_0	186.6921 680+	8.1019 542-	0.9881 1510+	305.1598 060+	15.3997 889-	0.9627 9509+
a_1	13.3476 522+	5.1024 942-	0.0075 1957+	13.4354 318+	3.8791 401+	0.0134 7656-
a_2	2760 809+	1759 781+	5 9404-	4497 222-	3450 228+	3 0183-
a_3	319 665+	526 160+	1 2357-	125 163+	533 975-	1 9871+
a_4	23 918-	17 129+	415-	56 028+	16 222+	517-
a_5	6 069-	1 755-		5 817-	1 804+	
December 20			December 28			
a_0	200.3448 689+	12.9743 169-	0.9949 1292+	318.1630 528+	11.2272 210-	0.9492 1023+
a_1	13.9831 120+	4.5867 193-	0.0059 4413+	12.5930 406+	4.4163 813+	0.0135 0482-
a_2	3515 371+	3423 525+	9 8750-	3843 794-	1963 587+	2 6205+
a_3	163 431+	575 399+	1 4104-	292 246+	452 310-	1 7707+
a_4	55 784-	8 615+	282+	26 648+	24 676+	912-
a_5	6 023-	4 784-		3 791-	361-	
December 21			December 29			
a_0	214.6896 803+	17.1607 607-	0.9997 3134+	330.4032 243+	6.6572 806-	0.9361 3543+
a_1	14.7098 963+	3.7283 430-	0.0035 5728+	11.9207 212+	4.6830 943+	0.0124 8599-
a_2	3610 323+	5153 449+	13 9108-	2845 052-	751 036+	7 3816+
a_3	116 823-	560 744+	1 2987-	361 995+	357 789-	1 3990+
a_4	88 611-	16 179-	1139+	7 938+	22 443+	1041-
a_5	699-	7 130-		1 955-	1 322-	
December 22			December 30			
a_0	229.7399 956+	20.3200 154-	1.0017 7906+	342.0762 382+	1.9327 495-	0.9245 1709+
a_1	15.3611 314+	2.5394 650-	0.0004 3114+	11.4625 081+	4.7342 804+	0.0106 3163-
a_2	2721 082+	6667 010+	17 1015-	1730 956-	200 936-	10 9551+
a_3	472 636-	425 615+	8329-	374 781+	281 369-	9789+
a_4	92 873-	53 890-	1854+	1 549-	15 591+	1002-
a_5	9 386+	5 674-		974-	1 528-	
December 23			December 31			
a_0	245.3176 229+	22.1561 743-	1.0004 3531+	353.4028 765+	2.7547 066+	0.9150 6885+
a_1	15.7311 073+	1.1027 648-	0.0031 6476-	11.2276 448+	4.6151 550+	0.0081 8699-
a_2	840 342+	7563 601+	18 4796-	625 624-	966 800-	13 2944+
a_3	747 018-	156 658+	728-	358 988+	234 181-	5773+
a_4	42 066-	83 495-	2113+	6 209-	7 819+	891-
a_5	15 337+	279+		755-	1 346-	
December 24			December 32			
a_0	261.0553 898+	22.4952 348-	0.9954 3644+	4.6031 612+	7.2504 109+	0.9082 6014+
a_1	15.6659 067+	0.4237 010+	0.0067 9791-	11.2073 547+	4.3539 958+	0.0053 9054-
a_2	1499 151-	7535 573+	17 4401-	406 539+	1635 908-	14 4956+
a_3	764 717-	171 203-	7902+	326 430+	216 125-	2214+
a_4	38 759+	80 848-	1789+	9 878-	983+	772-
a_5	10 104+	6 222+		1 061-	935-	
December 25						
a_0	276.4997 961+	21.3425 594-	0.9869 9143+			
a_1	15.1572 061+	1.8502 279+	0.0099 7726-			
a_2	3459 773-	6599 396+	14 0192-			
a_3	514 260-	431 549-	1 5147+			
a_4	88 843+	47 624-	1035+			
a_5	4-	7 589+				

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.