

DAILY POLYNOMIAL COEFFICIENTS FOR LUNAR COORDINATES

Notes and formulae

On the following pages (previously pages D23–D45 of *The Astronomical Almanac*), 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 2003 January 21^d 13^h 23^m 48^s 32 UT, using an assumed value of $\Delta T = 65^s$.

$$\text{TT} = 13^{\text{h}} 24^{\text{m}} 53^{\text{s}} 32, \text{ hence } p = 0.558\ 950\ 46$$

	right ascension	declination	horizontal parallax
b_1	$-0.000\ 4915$	$-0.000\ 2289$	$+0.000\ 008\ 18$
b_2	$+0.005\ 6995$	$+0.000\ 8485$	$+0.000\ 002\ 94$
b_3	$+0.016\ 1392$	$+0.054\ 4187$	$-0.001\ 021\ 83$
b_4	$-0.252\ 2693$	$-0.396\ 5374$	$+0.004\ 796\ 26$
b_5	$+13.406\ 5186$	$-5.299\ 2837$	$\pi = +0.983\ 241\ 23$
b_6	$\alpha = 164.522\ 5650$	$\delta = +12.104\ 8004$	
	$= 10^{\text{h}} 58^{\text{m}} 05^{\text{s}} 416$	$= +12^\circ 06' 17''.28$	$= 58' 59''.668$

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
January 0						
a_0	239.7919 454+	19.9152 695-	0.9922 0555+	352.1202 992+	8.9243 679-	0.9170 5501+
a_1	14.6218 808+	4.1327 184-	0.0024 7081-	11.2569 359+	5.0253 090+	0.0084 0062-
a_2	3590 804+	6050 467+	13 6878-	2686 535-	1195 488+	11 4901+
a_3	164 586-	574 033+	3904-	413 872+	326 278-	8511+
a_4	104 508-	27 577-	1406+	6 146+	19 685+	830-
a_5	826+	7 376-		1 395-	1 624-	
January 1						
a_0	254.7460 798+	23.3890 333-	0.9883 4098+	3.1504 440+	3.8103 317-	0.9098 8020+
a_1	15.2492 887+	2.7651 308-	0.0052 6919-	10.8455 524+	5.1735 854+	0.0058 8047-
a_2	2478 248+	7533 020+	14 0117-	1421 954-	318 502+	13 5467+
a_3	567 747-	391 629+	1849+	425 028+	263 865-	5185+
a_4	100 403-	66 711-	1529+	486-	11 403+	788-
a_5	12 800+	4 522-		499-	1 765-	
January 2						
a_0	270.1776 583+	25.3688 226-	0.9817 0438+	13.8962 054+	1.3696 811+	0.9053 9837+
a_1	15.5408 581+	1.1699 760-	0.0079 5488-	10.6882 265+	5.1618 048+	0.0030 4711-
a_2	301 356+	8262 322+	12 5483-	154 738-	422 346-	14 6307+
a_3	838 868-	83 423+	8080+	418 101+	235 848-	2037+
a_4	30 924-	90 002-	1257+	2 705-	2 477+	743-
a_5	17 492+	2 397+		495-	1 661-	
January 3						
a_0	285.6634 222+	25.7129 846-	0.9725 8803+	24.6104 482+	6.4657 482+	0.9038 2726+
a_1	15.3458 364+	0.4727 190+	0.0101 7185-	10.7813 788+	5.0067 421+	0.0000 8960-
a_2	2225 302-	7996 830+	9 3872-	1078 413+	1131 657-	14 7966+
a_3	792 320-	249 691-	1 3162+	401 875+	242 362-	930-
a_4	60 566+	76 067-	710+	4 929-	5 958-	716-
a_5	8 968+	7 591+		1 272-	1 350-	
January 4						
a_0	300.7144 497+	24.4723 993-	0.9616 1617+	35.5392 358+	11.3343 575+	0.9052 0086+
a_1	14.6917 780+	1.9705 460+	0.0116 2607-	11.1150 149+	4.7046 446+	0.0028 1319+
a_2	4149 441-	6867 556+	5 0318-	2241 762+	1908 032-	14 0887+
a_3	466 782-	478 096-	1 5987+	368 598+	279 281-	3793-
a_4	103 652+	36 060-	99+	11 120-	12 952-	699-
a_5	2 379-	7 389+		2 724-	648-	
January 5						
a_0	314.9547 326+	21.8657 744-	0.9496 4778+	46.9139 023+	15.8189 108+	0.9093 7800+
a_1	13.7621 210+	3.1898 952+	0.0121 4889-	11.6681 353+	4.2337 509+	0.0054 8916+
a_2	4952 143-	5290 863+	1918-	3253 557+	2830 119-	12 5323+
a_3	78 748-	550 320-	1 6325+	295 983+	336 749-	6602-
a_4	88 531+	1 335+	397-	24 967-	16 549-	666-
a_5	7 006-	4 024+		4 312-	751+	
January 6						
a_0	328.2219 170+	18.2012 889-	0.9376 3898+	58.9340 636+	19.7343 952+	0.9160 4770+
a_1	12.7799 784+	4.0855 145+	0.0117 1343-	12.3954 987+	3.5604 610+	0.0077 7090+
a_2	4727 485-	3688 081+	4 4579+	3948 400+	3932 186-	10 1551+
a_3	205 831+	506 558-	1 4672+	152 999+	394 185-	9293-
a_4	52 056+	20 944+	699-	47 697-	13 052-	572-
a_5	5 918-	859+		4 405-	2 923+	
January 7						
a_0	340.5543 438+	13.7954 418-	0.9265 1106+	71.7344 919+	22.8612 062+	0.9247 3546+
a_1	11.9140 971+	4.6799 680+	0.0104 0969-	13.2098 012+	2.6520 110+	0.0095 0021+
a_2	3856 851-	2302 569+	8 4360+	4076 866+	5163 780-	7 0300+
a_3	356 341+	415 245-	1 1827+	79 624-	415 988-	1 1621-
a_4	22 421+	24 662+	822-	71 713-	1 905+	374-
a_5	3 328-	926-		648-	5 034+	

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
January 16						
a_0	85-3367 812+	24-9559 342+	0-9348 1872+	196-0366 502+	2-5217 112-	0-9879 9400+
a_1	13-9722 860+	1-4977 377+	0-0105 4260+	12-7820 915+	6-1533 149-	0-0000 9090-
a_2	3401 115+	6349 797-	3 3293+	520 392+	660 570+	7 2618-
a_3	368 780-	357 983-	1 3156-	442 041+	535 701+	4475+
a_4	75 722-	28 284+	52-	2 157-	941-	370-
a_5	6 777+	5 173+		3 908-	503+	
January 17						
a_0	99-6054 062+	25-7862 397+	0-9455 6218+	208-9143 786+	8-5554 427-	0-9872 1797+
a_1	14-5149 804+	0-1342 801+	0-0108 1171+	13-0159 641+	5-8606 166-	0-0014 2387-
a_2	1908 549+	7202 147-	6356-	1794 494+	2267 140+	6 1453-
a_3	601 027-	194 824-	1 3380-	393 562+	536 323+	2922+
a_4	39 402-	55 303+	363+	21 620-	2 096+	490-
a_5	12 049+	2 162+		5 288-	613-	
January 18						
a_0	114-2484 037+	25-1865 693+	0-9561 8017+	222-1464 574+	14-1355 648-	0-9852 0388+
a_1	14-7066 434+	1-3413 989-	0-0102 9771+	13-4816 392+	5-2457 625-	0-0025 8493-
a_2	9 994-	7433 201-	4 4193-	2792 424+	3882 605+	5 5601-
a_3	639 590-	45 598+	1 1906-	253 988+	537 320+	894+
a_4	24 102+	65 928+	773+	49 070-	613-	392-
a_5	9 437+	2 141-		5 812-	2 802-	
January 19						
a_0	128-8934 427+	23-1127 888+	0-9659 2463+	235-9272 495+	18-9396 762-	0-9820 6798+
a_1	14-5271 190+	2-7890 617-	0-0090 8764+	14-0937 904+	4-3096 937-	0-0036 8581-
a_2	1689 732-	6922 418-	7 5190-	3201 495+	5462 822+	5 5186-
a_3	453 002-	286 526+	8748-	1 709+	505 625+	715-
a_4	71 633+	54 030+	1042+	80 480-	14 989-	123-
a_5	1 897+	4 527-		2 281-	5 015-	
January 20						
a_0	143-2136 413+	19-6650 881+	0-9741 8329+	250-3330 841+	22-6545 257-	0-9778 2192+
a_1	14-0828 673+	4-0682 387-	0-0073 6311+	14-7012 789+	3-0739 451-	0-0048 1591-
a_2	2600 245-	5784 062-	9 5177-	2700 704+	6839 401+	5 7963-
a_3	150 645-	457 563+	4491-	338 109-	395 610+	1213-
a_4	79 265+	30 487+	1063+	93 418-	41 492-	222+
a_5	3 609-	4 107-		6 388+	4 935-	
January 21						
a_0	157-0289 852+	15-0668 375+	0-9805 6036+	265-2619 197+	25-0096 123-	0-9724 1648+
a_1	13-5475 246+	5-0776 389-	0-0053 6741+	15-1058 221+	1-6064 415-	0-0060 0265-
a_2	2612 903-	4269 548-	10 2347-	1190 105+	7727 743+	6 0174-
a_3	129 535+	539 445+	163-	643 774-	182 458+	294-
a_4	59 742+	9 764+	818+	58 956-	67 512-	530+
a_5	4 915-	2 289-		13 878+	1 116-	
January 22						
a_0	170-3336 557+	9-6169 359+	0-9849 1084+	280-4178 672+	25-8318 965-	0-9658 1445+
a_1	13-0852 446+	5-7669 519-	0-0033 4830+	15-1340 653+	0-0337 125-	0-0071 9373-
a_2	1915 057-	2615 482-	9 8059-	955 558-	7858 947+	5 7825-
a_3	319 788+	556 608+	3141+	741 910-	95 891-	1880+
a_4	34 809+	1 446-	398+	14 813+	72 670-	700+
a_5	4 104-	540-		11 851+	3 992+	
January 23						
a_0	183-2624 438+	3-6438 979+	0-9873 1393+	295-3848 520+	25-0961 711-	0-9580 6827+
a_1	12-8100 417+	6-1239 134-	0-0014 9725+	14-7322 212+	1-4822 404+	0-0082 6580-
a_2	787 848-	959 677-	8 6386-	2973 789-	7175 409+	4 7990-
a_3	418 346+	546 009+	4714+	569 186-	345 324-	4739+
a_4	14 586+	3 761-	46-	74 899+	51 071-	686+
a_5	3 437-	471+		2 750+	6 286+	

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 where p is the fraction of a day from 0^h TT.

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	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
February 1			February 9			
a_0	309.7705 405 +	22.9354 007 -	0.9493 7682 +	42.8367 795 +	14.5495 448 +	0.9050 5563 +
a_1	13.9980 341 +	2.7964 384 +	0.0090 5597 -	11.3821 389 +	4.3848 117 +	0.0031 4831 +
a_2	4204 796 -	5896 025 +	2 9713 -	2634 158 +	2603 277 -	14 6889 +
a_3	246 082 -	487 406 -	7525 +	326 943 +	290 169 -	55 +
a_4	86 332 +	18 591 -	508 +	15 126 -	11 996 -	793 -
a_5	4 205 -	5 033 +		3 227 -	301 -	
February 2			February 10			
a_0	323.3316 995 +	19.5994 562 -	0.9401 0403 +	54.5131 932 +	18.6437 821 +	0.9096 6545 +
a_1	13.1156 788 +	3.8244 988 +	0.0094 0418 -	11.9993 885 +	3.7721 584 +	0.0060 5602 +
a_2	4467 397 -	4372 597 +	4176 -	3491 873 +	3548 824 -	14 2262 +
a_3	56 283 +	512 891 -	9572 +	233 611 +	340 269 -	3115 -
a_4	63 321 +	6 609 +	237 +	31 801 -	13 841 -	905 -
a_5	5 649 -	2 456 +		4 270 -	1 237 +	
February 3			February 11			
a_0	336.0120 342 +	15.3880 802 -	0.9307 5618 +	66.8815 229 +	22.0257 708 +	0.9171 0388 +
a_1	12.2615 902 +	4.5490 201 +	0.0091 9106 -	12.7529 927 +	2.9553 972 +	0.0087 7158 +
a_2	3975 208 -	2898 077 +	2 5877 +	3958 984 +	4640 329 -	12 7456 +
a_3	253 953 +	463 102 -	1 0513 +	64 493 +	382 053 -	6752 -
a_4	34 451 +	18 495 +	42 -	54 595 -	7 776 -	998 -
a_5	4 064 -	366 +		3 026 -	3 363 +	
February 4			February 12			
a_0	347.9045 376 +	10.5936 767 -	0.9219 2860 +	80.0311 012 +	24.4784 886 +	0.9270 7252 +
a_1	11.5544 851 +	4.9972 840 +	0.0083 5983 -	13.5407 922 +	1.9112 888 +	0.0110 7821 +
a_2	3047 273 -	1623 338 +	5 7090 +	3794 394 +	5799 430 -	10 1214 +
a_3	352 246 +	386 154 -	1 0322 +	181 210 -	378 631 -	1 0787 -
a_4	14 246 +	19 958 +	273 -	71 333 -	9 592 +	1000 -
a_5	2 132 -	818 -		2 077 +	4 982 +	
February 5			February 13			
a_0	359.1907 315 +	5.4707 603 -	0.9142 4016 +	93.9262 862 +	25.7734 286 +	0.9390 4501 +
a_1	11.0553 382 +	5.2136 790 +	0.0069 1930 -	14.2178 207 +	0.6441 403 +	0.0127 3884 +
a_2	1926 343 -	576 410 +	8 6367 +	2843 589 +	6827 787 -	6 2911 +
a_3	388 657 +	314 799 -	9208 +	442 029 -	290 812 -	1 4864 -
a_4	3 872 +	15 644 +	435 -	60 528 -	35 663 +	816 -
a_5	897 -	1 341 -		8 790 +	4 382 +	
February 6			February 14			
a_0	10.0925 986 +	0.2294 900 -	0.9082 7226 +	108.3790 892 +	25.7097 135 +	0.9522 5616 +
a_1	10.7877 673 +	5.2401 080 +	0.0049 3310 -	14.6341 159 +	0.7922 082 -	0.0135 1843 +
a_2	746 081 -	287 558 -	11 1351 +	1242 638 +	7442 319 -	1 3564 +
a_3	395 435 +	265 725 -	7455 +	595 045 -	106 113 -	1 8222 -
a_4	344 -	8 813 +	540 -	13 674 -	58 319 +	361 -
a_5	479 -	1 502 -		10 968 +	1 242 +	
February 7			February 15			
a_0	20.8452 190 +	4.9560 208 +	0.9045 2182 +	123.0776 938 +	24.1686 183 +	0.9657 2441 +
a_1	10.7568 039 +	5.1056 531 +	0.0025 0402 -	14.7041 393 +	2.2885 610 -	0.0132 2857 +
a_2	433 392 +	1046 895 -	13 0454 +	514 561 -	7398 375 -	4 3045 -
a_3	389 082 +	245 458 -	5292 +	542 671 -	137 578 +	1 9738 -
a_4	2 502 -	1 197 +	617 -	43 279 +	64 128 +	362 +
a_5	791 -	1 440 -		6 191 +	2 301 -	
February 8			February 16			
a_0	31.6839 411 +	9.9324 144 +	0.9033 6909 +	137.6810 569 +	21.1601 603 +	0.9783 2878 +
a_1	10.9588 097 +	4.8223 963 +	0.0002 3915 +	14.4588 254 +	3.7024 637 -	0.0117 9002 +
a_2	1577 738 +	1790 509 -	14 2605 +	1821 084 -	6624 011 -	9 9829 -
a_3	370 585 +	254 872 -	2829 +	311 421 -	370 073 +	1 8284 -
a_4	6 259 -	6 167 -	695 -	73 600 +	51 704 +	1198 +
a_5	1 778 -	1 110 -		568 -	4 013 -	

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 where p is the fraction of a day from 0^h TT.

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	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
February 17						
a_0	151.9339 349+	16.8370 719+	0.9889 4966+	261.7831 899+	24.8264 068-	0.9699 6092+
a_1	14.0303 337+	4.8975 687-	0.0092 9290+	14.8980 721+	1.9086 128-	0.0086 9691-
a_2	2319 682-	5243 781-	14 7291-	1038 686+	7548 286+	4473+
a_3	24 855-	536 874+	1 3381-	523 017-	166 763+	4763+
a_4	69 080+	31 055+	1855+	54 889-	56 419-	630-
a_5	4 258-	3 751-		10 860+	847-	
February 18						
a_0	165.7362 972+	11.4715 430+	0.9966 5438+	276.7284 261+	25.9692 413-	0.9612 6061+
a_1	13.5844 433+	5.7747 147-	0.0060 1993+	14.9323 782+	0.3719 141-	0.0086 6872-
a_2	2022 492-	3484 351-	17 6246-	750 637-	7701 603+	6121+
a_3	208 550+	624 253+	5781-	634 227-	65 411-	2225+
a_4	46 848+	12 169+	2047+	2 714+	60 542-	343-
a_5	4 729-	2 574-		10 397+	2 676+	
February 19						
a_0	179.1435 582+	5.4117 780+	1.0008 7451+	291.5236 292+	25.5833 229-	0.9526 7192+
a_1	13.2588 855+	6.2807 268-	0.0024 0355+	14.5982 598+	1.1259 065+	0.0084 9327-
a_2	1163 060-	1564 287-	18 1420-	2532 898-	7169 025+	1 0828+
a_3	348 930+	647 899+	2570+	523 070-	279 701-	861+
a_4	23 145+	566-	1683+	55 887+	46 123-	46-
a_5	4 153-	1 368-		3 766+	4 630+	
February 20						
a_0	192.3229 299+	0.9607 810-	1.0015 0638+	305.8222 575+	23.7726 334-	0.9442 9508+
a_1	13.1381 340+	6.4001 243-	0.0010 8040-	13.9589 902+	2.4596 661+	0.0082 5269-
a_2	18 904-	362 384+	16 3842-	3729 342-	6099 597+	1 3212+
a_3	399 976+	632 383+	9376+	265 404-	418 157-	705+
a_4	2 654+	7 090-	936+	73 265+	22 154-	195+
a_5	4 101-	643-		2 440-	4 116+	
February 21						
a_0	205.4990 264+	7.2622 020-	0.9988 9067+	319.3888 555+	20.7466 272-	0.9361 8351+
a_1	13.2533 562+	6.1410 906-	0.0040 3856-	13.1615 840+	3.5473 326+	0.0079 5947-
a_2	1155 930+	2210 627+	13 0351-	4110 626-	4753 376+	1 6544+
a_3	369 213+	597 523+	1 3091+	1 953+	466 584-	1522+
a_4	17 789-	9 873-	120+	59 348+	1 440-	339+
a_5	4 751-	767-		4 570-	2 399+	
February 22						
a_0	218.9026 429+	13.1235 415-	0.9936 8071+	332.1450 500+	16.7705 196-	0.9284 0809+
a_1	13.5858 153+	5.5240 419-	0.0062 4808-	12.3614 997+	4.3586 538+	0.0075 6936-
a_2	2109 208+	3936 349+	9 0548-	3794 501-	3368 931+	2 3154+
a_3	250 558+	549 762+	1 3480+	194 028+	449 278-	2912+
a_4	42 288-	13 350-	498-	35 753+	10 326+	373+
a_5	4 840-	1 830-		3 787-	817+	
February 23						
a_0	232.7197 220+	18.2004 902-	0.9866 5697+	344.1496 992+	12.1187 862-	0.9211 0312+
a_1	14.0634 924+	4.5780 996-	0.0076 7462-	11.6732 180+	4.9021 946+	0.0070 0398-
a_2	2558 495+	5487 222+	5 3193-	3035 778-	2091 186+	3 4110+
a_3	34 695+	477 323+	1 1384+	300 027+	400 396-	4431+
a_4	68 197-	22 631-	804-	16 772+	14 155+	312+
a_5	2 020-	3 172-		2 247-	183-	
February 24						
a_0	247.0355 118+	22.1847 158-	0.9785 5620+	355.5507 946+	7.0461 154-	0.9144 8767+
a_1	14.5573 189+	3.3480 970-	0.0084 2920-	11.1616 572+	5.2058 830+	0.0061 7636-
a_2	2233 020+	6751 558+	2 3875-	2057 520-	973 069+	4 9236+
a_3	254 522-	355 083+	8085+	345 305+	345 925-	5693+
a_4	79 521-	39 356-	818-	5 713+	13 060+	187+
a_5	4 614+	3 225-		1 085-	712-	

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	6-5416 930+	1-7762 832-	0-9088 6246+	102-7221 060+	26-1381 061+	0-9385 8522+
a_1	10-8554 878+	5-3015 868+	0-0050 1338-	14-2174 706+	0-2459 666-	0-0136 6477+
a_2	998 158-	6 511+	6 7387+	1860 107+	7020 622-	9 4236+
a_3	357 615+	300 957-	6444+	453 038-	180 978-	1 2045-
a_4	485+	9 387+	32+	28 220-	38 904+	1376-
a_5	557-	963-		8 551+	2 496+	
	March 6			March 14		
a_0	17-3331 193+	3-4967 013+	0-9045 8771+	117-0783 168+	25-1761 195+	0-9530 5813+
a_1	10-7630 560+	5-2158 748+	0-0034 7104-	14-4465 668+	1-6875 774-	0-0151 3302+
a_2	72 044+	849 690-	8 6860+	417 472+	7305 157-	4 9897+
a_3	353 954+	273 083-	6570+	481 175-	1 653-	1 7666-
a_4	2 133-	4 475+	128-	16 601+	51 492+	1207-
a_5	630-	1 039-		7 162+	286+	
	March 7			March 15		
a_0	28-1384 989+	8-6006 424+	0-9020 4969+	131-5208 896+	22-7630 388+	0-9685 0140+
a_1	10-8824 823+	4-9652 827+	0-0015 4188-	14-3959 248+	3-1283 668-	0-0155 5263+
a_2	1114 825+	1652 495-	10 5750+	854 763-	6998 354-	1 0154-
a_3	338 788+	265 492-	6055+	345 906-	206 152+	2 2649-
a_4	5 136-	838-	285-	52 909+	52 543+	609-
a_5	1 243-	924-		2 234+	1 489-	
	March 8			March 16		
a_0	39-1657 047+	13-3739 501+	0-9016 2302+	145-8022 619+	18-9605 572+	0-9837 1992+
a_1	11-2044 069+	4-5543 391+	0-0007 4339+	14-1434 763+	4-4459 201-	0-0146 4566+
a_2	2087 946+	2463 274-	12 2157+	1552 833-	6079 571-	8 1424-
a_3	305 245+	277 832-	4919+	114 398-	400 961+	2 5214-
a_4	11 292-	5 639-	444-	63 089+	44 775+	454+
a_5	2 250-	496-		2 116-	2 263-	
	March 9			March 17		
a_0	50-6080 766+	17-6535 652+	0-9036 3273+	159-7851 123+	13-9510 273+	0-9973 0376+
a_1	11-7079 273+	3-9758 325+	0-0033 1637+	13-8227 651+	5-5247 681-	0-0122 7894+
a_2	2913 385+	3335 598-	13 4197+	1538 813-	4630 682-	15 3944-
a_3	237 073+	304 817-	3152+	115 699+	557 271+	2 3402-
a_4	22 816-	8 359-	621-	51 497+	33 384+	1747+
a_5	3 154-	414+		4 013-	2 481-	
	March 10			March 18		
a_0	62-6284 528+	21-2645 617+	0-9083 1638+	173-4703 145+	8-0220 083+	1-0078 2672+
a_1	12-3510 235+	3-2141 330+	0-0060 7006+	13-5683 039+	6-2716 101-	0-0085 6799+
a_2	3456 032+	4296 087-	13 9866+	922 922-	2783 368-	21 3356-
a_3	114 496+	333 303-	681+	281 323+	665 930+	1 6233-
a_4	39 461-	6 462-	828-	31 108+	20 986+	2767+
a_5	2 823-	1 821+		4 396-	2 578-	
	March 11			March 19		
a_0	75-3323 007+	24-0152 916+	0-9157 8363+	186-9771 297+	1-5404 952+	1-0141 2649+
a_1	13-0593 861+	2-2532 519+	0-0088 5470+	13-4783 614+	6-6213 995-	0-0039 2472+
a_2	3534 333+	5316 539-	13 6871+	63 745+	685 437-	24 5378-
a_3	69 899-	340 135-	2625-	361 589+	724 060+	4865-
a_4	54 822-	2 798+	1060-	9 258+	8 105+	3011+
a_5	61+	3 256+		4 722-	2 636-	
	March 12			March 20		
a_0	88-7326 542+	25-7034 813+	0-9259 7018+	200-4984 783+	5-0764 951-	1-0155 7889+
a_1	13-7233 905+	1-0906 508+	0-0114 7094+	13-6009 293+	6-5393 450-	0-0010 0818-
a_2	2996 250+	6287 514-	12 2569+	1156 835+	1509 035+	24 2104-
a_3	285 765-	296 145-	6883-	350 995+	730 053+	7438+
a_4	54 918-	19 687+	1276-	14 366-	4 970-	2352+
a_5	5 046+	3 711+		5 423-	2 762-	

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						
a_0	214.2482 116+	11.3927 045-	1.0122 4757+	329.1372 907+	17.9359 098-	0.9265 7581+
a_1	13.9291 373+	6.0218 917-	0.0055 3298-	12.3901 460+	4.1793 098+	0.0083 1025-
a_2	2069 256+	3641 779+	20 6048-	3915 327-	3605 425+	6 6068+
a_3	239 404+	682 337+	1 6935+	211 843+	429 599-	809-
a_4	42 351-	18 627-	1140+	33 474+	10 953+	62-
a_5	5 318-	3 160-		3 808-	313+	
March 22						
a_0	228.4034 480+	16.9843 632-	1.0048 3485+	341.1600 549+	13.4378 908-	0.9189 1754+
a_1	14.3952 142+	5.0978 658-	0.0091 0035-	11.6821 210+	4.7760 523+	0.0070 1561-
a_2	2479 902+	5545 401+	14 8779-	3117 041-	2385 436+	6 3335+
a_3	18 807+	576 068+	2 1416+	308 560+	383 104-	1033-
a_4	70 808-	34 624-	75-	14 451+	12 235+	148+
a_5	1 979-	3 495-		2 196-	438-	
March 23						
a_0	243.0412 544+	21.4738 940-	0.9944 6011+	352.5625 533+	8.4604 256-	0.9125 2644+
a_1	14.8675 323+	3.8315 612-	0.0114 3653-	11.1559 647+	5.1428 829+	0.0057 7397-
a_2	2091 515+	7030 796+	8 5239-	2126 594-	1305 123+	6 1163+
a_3	280 080-	403 213+	2 0961+	345 045+	338 714-	416-
a_4	81 857-	52 898-	904-	3 680+	9 883+	277+
a_5	5 301+	2 524-		1 040-	693-	
March 24						
a_0	258.0822 747+	24.5675 966-	0.9823 7176+	3.5406 272+	3.2199 828-	0.9073 6271+
a_1	15.1717 261+	2.3268 560-	0.0125 4873-	10.8351 123+	5.3059 000+	0.0045 5208-
a_2	813 413+	7897 710+	2 7893-	1079 760-	341 332+	6 1593+
a_3	551 016-	168 089+	1 7199+	349 638+	306 143-	718+
a_4	53 412-	66 198-	1253-	1 339-	6 333+	325+
a_5	11 618+	484+		528-	721-	
March 25						
a_0	273.2760 611+	26.0944 441-	0.9697 0356+	14.3025 407+	2.0899 973+	0.9034 3699+
a_1	15.1535 465+	0.7231 207-	0.0126 4079-	10.7232 524+	5.2844 961+	0.0032 8567-
a_2	1043 442-	8009 696+	1 6190+	44 146-	546 326-	6 5688+
a_3	649 134-	89 967-	1 2091+	338 962+	287 993-	2039+
a_4	8 172+	63 322-	1227-	3 838-	2 667+	297+
a_5	10 428+	3 861+		576-	657-	
March 26						
a_0	288.2622 101+	26.0315 378-	0.9573 3332+	25.0548 334+	7.2912 625+	0.9008 3156+
a_1	14.7585 930+	0.8284 318+	0.0120 0336-	10.8142 882+	5.0895 716+	0.0018 9884-
a_2	2837 399-	7398 644+	4 5174+	943 958+	1400 886-	7 3562+
a_3	516 188-	303 945-	7137+	317 556+	283 801-	3246+
a_4	61 259+	42 851-	987-	6 622-	696-	208+
a_5	3 145+	5 061+		1 069-	497-	
March 27						
a_0	302.6918 850+	24.4974 152-	0.9458 4320+	35.9945 040+	12.2122 462+	0.8997 0289+
a_1	14.0623 263+	2.2023 657+	0.0109 2525-	11.0951 625+	4.7237 277+	0.0003 2188-
a_2	3987 207-	6280 408+	6 0765+	1846 196+	2261 457-	8 4508+
a_3	243 232-	425 412-	3180+	279 944+	291 351-	4092+
a_4	75 285+	16 862-	664-	11 980-	3 309-	73+
a_5	3 045-	3 826+		1 844-	153-	
March 28						
a_0	316.3383 913+	21.7108 535-	0.9355 5076+	47.3008 980+	16.6803 469+	0.9002 6773+
a_1	13.2205 046+	3.3259 896+	0.0096 4110-	11.5426 700+	4.1826 317+	0.0014 9396+
a_2	4295 903-	4941 250+	6 6422+	2595 662+	3156 919-	9 7168+
a_3	26 358+	455 741-	534+	213 257+	305 741-	4394+
a_4	58 331+	2 218+	340-	21 459-	4 229-	99-
a_5	4 838-	1 815+		2 473-	486+	

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	59.1220 667+	20.5163 383+	0.9027 7633+	167.4317 041+	10.8497 410+	0.9972 1742+
a_1	12.1159 597+	3.4580 782+	0.0035 6520+	13.4347 175+	5.9331 742-	0.0143 8596+
a_2	3081 840+	4094 669-	10 9693+	618 473-	3827 614-	11 7984-
a_3	102 946+	317 266-	4010+	264 413+	536 435+	2 7790-
a_4	34 500-	1 890-	304-	34 759+	32 645+	722+
a_5	2 105-	1 404+		3 663-	661-	
April 7			April 15			
a_0	71.5528 446+	23.5331 745+	0.9074 7552+	180.8341 251+	4.5906 473+	1.0101 5287+
a_1	12.7483 621+	2.5439 120+	0.0058 6723+	13.4024 178+	6.5250 406-	0.0112 2149+
a_2	3162 493+	5043 742-	11 9826+	346 705+	2028 998-	19 6539-
a_3	54 779-	310 294-	2809+	366 276+	659 734+	2 4880-
a_4	45 934-	5 261+	547-	16 635+	29 677+	2289+
a_5	156+	2 267+		4 542-	1 826-	
April 8			April 16			
a_0	84.6074 003+	25.5424 357+	0.9145 6362+	194.3090 504+	2.0685 346-	1.0191 8307+
a_1	13.3461 356+	1.4453 131+	0.0083 2615+	13.5860 228+	6.7219 643-	0.0066 3601+
a_2	2724 054+	5920 339-	12 4884+	1499 934+	110 040+	25 7100-
a_3	234 810-	266 489-	635+	386 474+	759 180+	1 5464-
a_4	45 487-	16 984+	832-	5 914-	20 740+	3418+
a_5	3 942+	2 454+		6 141-	3 575-	
April 9			April 17			
a_0	98.1983 059+	26.3710 097+	0.9241 3664+	208.0825 085+	8.7018 605-	1.0231 2762+
a_1	13.8042 831+	0.1893 182+	0.0108 0962+	13.9965 145+	6.4656 962-	0.0011 6700+
a_2	1786 257+	6593 310-	12 1703+	2562 340+	2476 263+	28 2959-
a_3	375 746-	174 485-	2687-	300 789+	805 305+	1408-
a_4	24 803-	29 629+	1146-	37 387-	2 832+	3503+
a_5	6 784+	1 625+		7 399-	5 442-	
April 10			April 18			
a_0	112.1418 383+	25.8866 738+	0.9361 2497+	222.3608 574+	14.8396 607-	1.0214 8596+
a_1	14.0422 812+	1.1690 268-	0.0131 1724+	14.5805 680+	5.7304 409-	0.0043 9416-
a_2	578 254+	6922 744-	10 6679+	3166 026+	4854 680+	26 6472-
a_3	407 458-	40 458-	7294-	78 879+	761 585+	1 2890+
a_4	10 636+	37 744+	1435-	76 872-	24 923-	2497+
a_5	6 166+	316+		4 867-	6 582-	
April 11			April 19			
a_0	126.2028 793+	24.0251 329+	0.9502 2171+	237.2577 420+	20.0116 258-	1.0145 8094+
a_1	14.0430 281+	2.5504 580-	0.0149 7458+	15.2042 648+	4.5442 885-	0.0092 3697-
a_2	518 572-	6814 536-	7 6149+	2892 389+	6923 871+	21 3289-
a_3	305 229-	113 214+	1 3109-	272 011-	596 867+	2 2933+
a_4	42 033+	38 992+	1573-	103 775-	59 222-	953+
a_5	2 657+	496-		4 292+	5 275-	
April 12			April 20			
a_0	140.1679 962+	20.8083 924+	0.9658 1097+	252.7140 963+	23.8102 902-	1.0034 4993+
a_1	13.8658 824+	3.8640 522-	0.0160 4130+	15.6617 868+	3.0067 749-	0.0127 7671-
a_2	1155 588-	6245 932-	2 7453+	1496 888+	8306 211+	13 9199-
a_3	112 585-	264 198+	1 9548-	638 438-	310 023+	2 6607+
a_4	54 739+	36 280+	1364-	80 458-	86 871-	435-
a_5	917-	507-		14 735+	365-	
April 13			April 21			
a_0	153.9124 435+	16.3497 441+	0.9819 1768+	268.4551 560+	25.9641 653-	0.9895 4295+
a_1	13.6224 241+	5.0197 206-	0.0159 4923+	15.7448 178+	1.2874 504-	0.0147 7997-
a_2	1174 199-	5240 710-	3 9141-	753 042-	8711 497+	6 2246-
a_3	96 039+	404 339+	2 5202-	812 755-	37 851-	2 4671+
a_4	49 393+	33 859+	608-	1 240-	88 021-	1271-
a_5	2 870-	313-		15 023+	5 473+	

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	284.0447 723 +	26.3925 057 -	0.9743 7452 +	22.3332 635 +	5.9810 102 +	0.9002 6138 +
a_1	15.3573 869 +	0.4110 245 +	0.0153 3567 -	10.7258 378 +	5.1647 922 +	0.0019 8829 -
a_2	3048 237 -	8124 845 +	4056 +	834 683 +	1117 909 -	7 8264 +
a_3	673 037 -	333 952 -	1 9430 +	333 333 +	280 417 -	1965 -
a_4	75 900 +	58 601 -	1539 -	8 475 -	3 285 -	284 +
a_5	4 876 +	7 625 +		1 029 -	434 -	
April 23						
a_0	299.0381 093 +	25.2074 894 -	0.9592 5831 +	33.1749 525 +	11.0055 980 +	0.8990 3892 +
a_1	14.5786 159 +	1.9161 781 +	0.0147 3327 -	10.9888 690 +	4.8555 552 +	0.0004 7058 -
a_2	4563 560 -	6847 807 +	5 3143 +	1773 531 +	1983 224 -	7 4086 +
a_3	325 891 -	493 234 -	1 3185 +	288 660 +	297 592 -	807 -
a_4	97 747 +	19 297 -	1425 -	13 614 -	5 552 -	320 +
a_5	4 297 -	5 526 +		1 839 -	88 +	
April 24						
a_0	313.1371 250 +	22.6572 311 -	0.9451 7408 +	44.3684 954 +	15.6325 251 +	0.8993 0433 +
a_1	13.6050 836 +	3.1328 100 +	0.0133 3185 -	11.4238 079 +	4.3674 567 +	0.0009 9974 +
a_2	4998 116 -	5307 564 +	8 4242 +	2539 391 +	2908 457 -	7 3575 +
a_3	20 617 +	517 029 -	7455 +	215 442 +	318 499 -	495 +
a_4	73 652 +	8 181 +	1128 -	23 086 -	5 230 -	287 +
a_5	6 714 -	2 227 +		2 468 -	833 +	
April 25						
a_0	326.2511 526 +	19.0443 267 -	0.9327 4791 +	56.0652 312 +	19.6768 465 +	0.9010 4764 +
a_1	12.6377 511 +	4.0435 977 +	0.0114 6851 -	11.9858 513 +	3.6885 409 +	0.0024 9758 +
a_2	4561 634 -	3827 749 +	9 9941 +	3022 411 +	3887 015 -	7 6751 +
a_3	248 997 +	463 359 -	2941 +	98 674 +	330 587 -	1665 +
a_4	39 204 +	18 720 +	787 -	36 142 -	1 097 -	188 +
a_5	4 997 -	53 -		2 034 -	1 728 +	
April 26						
a_0	338.4610 606 +	14.6624 235 -	0.9223 0036 +	68.3593 734 +	22.9436 902 +	0.9043 3124 +
a_1	11.8133 089 +	4.6775 996 +	0.0094 1293 -	12.6044 648 +	2.8123 873 +	0.0040 9005 +
a_2	3629 386 -	2549 385 +	10 4141 +	3081 101 +	4868 057 -	8 2819 +
a_3	357 173 +	389 603 -	194 -	64 870 -	317 342 -	2434 +
a_4	14 337 +	17 993 +	468 -	47 234 -	7 747 +	24 +
a_5	2 662 -	1 040 -		337 +	2 378 +	
April 27						
a_0	349.9483 158 +	9.7671 503 -	0.9139 2221 +	81.2607 715 +	25.2385 501 +	0.9092 7407 +
a_1	11.1989 895 +	5.0772 727 +	0.0073 5466 -	13.1825 031 +	1.7478 608 +	0.0058 2044 +
a_2	2498 419 -	1478 094 +	10 0833 +	2606 408 +	5749 760 -	9 0199 +
a_3	388 819 +	328 154 -	2051 -	248 285 -	262 704 -	2550 +
a_4	1 355 +	12 550 +	197 -	45 816 -	20 077 +	198 -
a_5	1 115 -	1 234 -		4 177 +	2 173 +	
April 28						
a_0	0.9363 693 +	4.5737 522 -	0.9075 5340 +	94.6749 230 +	26.3873 896 +	0.9160 2002 +
a_1	10.8159 369 +	5.2788 481 +	0.0054 0740 -	13.6130 644 +	0.5282 138 +	0.0076 9301 +
a_2	1334 945 -	556 568 +	9 3567 +	1628 565 +	6395 628 -	9 6575 +
a_3	383 490 +	290 210 -	2820 -	388 280 -	161 373 -	1775 +
a_4	3 946 -	6 273 +	21 +	23 895 -	31 281 +	475 -
a_5	467 -	1 084 -		6 905 +	922 +	
April 29						
a_0	11.6567 193 +	0.7322 507 +	0.9030 5368 +	108.4103 169 +	26.2631 237 +	0.9246 9178 +
a_1	10.6621 826 +	5.3050 665 +	0.0036 1981 -	13.8161 869 +	0.7863 518 -	0.0096 5877 +
a_2	212 808 -	287 273 -	8 5284 +	389 608 +	6682 857 -	9 8950 +
a_3	363 021 +	275 790 -	2717 -	415 271 -	27 885 -	113 -
a_4	6 099 -	795 +	183 +	12 120 +	35 758 +	797 -
a_5	498 -	802 -		6 088 +	605 -	

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	122.2257 583+	24.8092 130+	0.9353 3095+	230.3581 632+	17.8070 878-	1.0220 7280+
a_1	13.7774 151+	2.1172 886-	0.0116 0251+	15.0459 405+	5.2017 764-	0.0019 3549-
a_2	722 549-	6558 078-	9 3726+	4110 601+	5845 607+	27 7479-
a_3	307 910-	108 709+	3304-	86 795-	789 486+	3329+
a_4	43 031+	32 249+	1134-	113 588-	29 371-	3264+
a_5	2 523+	1 291-		2 715-	9 789-	
May 9						
a_0	135.9046 828+	22.0500 833+	0.9478 2634+	245.7948 541+	22.3492 709-	1.0174 2844+
a_1	13.5590 020+	3.3840 369-	0.0133 3254+	15.7952 465+	3.8124 480-	0.0072 5453-
a_2	1362 972-	6051 420-	7 6925+	3141 268+	7939 538+	24 8265-
a_3	112 509-	225 059+	7877-	559 675-	576 171+	1 6614+
a_4	54 991+	25 415+	1413-	129 051-	81 195-	2100+
a_5	881-	810-		12 748+	6 303-	
May 10						
a_0	149.3215 477+	18.0858 708+	0.9618 3522+	261.8366 297+	25.3188 978-	1.0078 7839+
a_1	13.2742 088+	4.5170 409-	0.0145 7816+	16.2103 617+	2.0873 084-	0.0116 3742-
a_2	1379 490-	5231 851-	4 4795+	816 340+	9117 697+	18 6291-
a_3	97 671+	319 206+	1 3622-	943 247-	193 419+	2 5013+
a_4	49 788+	21 343+	1492-	58 791-	113 827-	576+
a_5	2 515-	232+		22 292+	2 758+	
May 11						
a_0	162.4723 019+	13.0797 228+	0.9767 1020+	278.0306 510+	26.4862 014-	0.9946 3393+
a_1	13.0462 692+	5.4589 954-	0.0150 0564+	16.0782 754+	0.2498 870-	0.0145 8989-
a_2	812 953-	4143 807-	4919-	2142 273-	9042 950+	10 8183-
a_3	271 399+	407 319+	1 9749-	960 321-	230 353-	2 7159+
a_4	36 918+	22 804+	1173-	59 401+	97 411-	676-
a_5	2 914-	978+		13 254+	9 813+	
May 12						
a_0	175.4678 161+	7.2494 569+	0.9914 5744+	293.8059 325+	25.8635 884-	0.9792 2703+
a_1	12.9784 076+	6.1559 508-	0.0142 6777+	15.3920 950+	1.4555 391+	0.0159 6594-
a_2	193 635+	2775 169-	7 0929-	4534 531-	7865 973+	3 0980-
a_3	389 583+	508 182+	2 4632-	598 785-	521 990-	2 4265+
a_4	22 599+	28 209+	293-	123 982+	45 466-	1365-
a_5	3 448-	771+		2 227-	9 397+	
May 13						
a_0	188.5064 606+	0.8697 054+	1.0047 6668+	308.6968 713+	23.6772 579-	0.9631 8029+
a_1	13.1413 231+	6.5468 627-	0.0120 9845+	14.3540 249+	2.8586 437+	0.0159 1225-
a_2	1463 567+	1073 560-	14 6154-	5609 925-	6121 250+	3 3572+
a_3	444 461+	627 818+	2 5922-	129 167-	612 470-	1 8670+
a_4	5 911+	32 696+	1097+	108 330+	2 016+	1536-
a_5	5 207-	791-		8 984-	4 743+	
May 14						
a_0	201.8386 569+	5.7185 411-	1.0151 5535+	322.4869 217+	20.2670 604-	0.9477 7510+
a_1	13.5671 326+	6.5605 501-	0.0084 4163+	13.2321 313+	3.9023 257+	0.0147 4218-
a_2	2780 351+	998 245+	21 6887-	5437 587-	4343 240+	8 0411+
a_3	414 386+	748 941+	2 1458-	214 946+	559 308-	1 2458+
a_4	20 014-	29 319+	2573+	61 397+	24 906+	1387-
a_5	8 123-	3 815-		7 608-	713+	
May 15						
a_0	215.7224 495+	12.1018 222-	1.0212 3926+	335.2021 677+	15.9837 795-	0.9339 4775+
a_1	14.2354 505+	6.1264 030-	0.0035 6322+	12.2298 564+	4.6134 981+	0.0128 1571-
a_2	3821 904+	3382 840+	26 5555-	4500 457-	2821 767+	10 9551+
a_3	252 570+	825 889+	1 0870-	386 396+	453 719-	6891+
a_4	62 513-	10 285+	3458+	23 356+	27 682+	1103-
a_5	9 328-	7 640-		4 172-	1 255-	

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	347.0225 364+	11.1308 339-	0.9222 8543+	78.0466 482+	24.7716 821+	0.9091 0944+
a_1	11.4529 429+	5.0521 803+	0.0104 6208-	13.1279 322+	2.0375 030+	0.0050 5260+
a_2	3242 790-	1614 084+	12 3699+	2842 521+	5619 077-	6 0725+
a_3	439 549+	355 874-	2483+	245 706-	294 460-	1047-
a_4	3 003+	20 982+	801-	54 904-	20 107+	254+
a_5	1 688-	1 789-		4 003+	2 906+	
May 25						
a_0	358.1952 867+	5.9509 133-	0.9130 7717+	91.4291 717+	26.2201 327+	0.9147 6136+
a_1	10.9366 083+	5.2757 335+	0.0079 4564-	13.6027 683+	0.8348 436+	0.0062 4586+
a_2	1922 949-	654 438+	12 6427+	1816 150+	6352 674-	5 9068+
a_3	435 376+	289 776-	708-	423 178-	185 880-	5-
a_4	5 015-	11 862+	529-	33 821-	35 195+	126+
a_5	538-	1 678-		7 780+	1 308+	
May 26						
a_0	8.9825 825+	0.6376 952-	0.9063 8342+	105.1686 332+	26.4047 712+	0.9215 9910+
a_1	10.6803 566+	5.3235 946+	0.0054 5951-	13.8294 060+	0.4767 258-	0.0074 3210+
a_2	652 255-	160 514-	12 1198+	421 756+	6686 076-	5 9742+
a_3	410 055+	258 911-	2813-	480 860-	33 301-	522+
a_4	7 431-	3 389+	299-	7 012+	41 671+	82-
a_5	369-	1 338-		7 418+	958-	
May 27						
a_0	19.6379 390+	4.6441 621+	0.9021 0477+	118.9935 718+	25.2601 790+	0.9296 3301+
a_1	10.6697 643+	5.2145 059+	0.0031 3189-	13.7760 082+	1.8077 435-	0.0086 3931+
a_2	529 648+	930 303-	11 1026+	904 471-	6545 627-	6 0729+
a_3	376 352+	258 454-	3999-	380 922-	123 040+	211+
a_4	9 100-	3 380-	105-	44 878+	36 247+	356-
a_5	879-	871-		3 298+	2 283-	
May 28						
a_0	30.3973 055+	9.7393 672+	0.9000 4210+	132.6458 582+	22.8135 732+	0.9388 7815+
a_1	10.8845 195+	4.9491 223+	0.0010 3553-	13.5004 328+	3.0665 992-	0.0098 4596+
a_2	1595 323+	1734 679-	9 8452+	1745 107-	5981 936-	5 9127+
a_3	330 617+	280 302-	4408-	170 813-	245 351+	1209-
a_4	13 416-	7 859-	58+	60 614+	24 245+	669-
a_5	1 826-	211-		888-	1 989-	
May 29						
a_0	41.4728 948+	14.4861 844+	0.8999 4760+	145.9606 716+	19.1755 411+	0.9492 9660+
a_1	11.2964 890+	4.5148 478+	0.0008 0361+	13.1239 668+	4.1806 760-	0.0109 6547+
a_2	2488 380+	2624 880-	8 5619+	1902 910-	5120 322-	5 1395+
a_3	258 149+	313 299-	4162-	61 624+	323 180+	3900-
a_4	22 754-	9 072-	188+	55 106+	14 122+	968-
a_5	2 762-	750+		2 795-	689-	
May 30						
a_0	53.0414 850+	18.7063 820+	0.9015 6765+	158.9057 408+	14.5164 943+	0.9607 2733+
a_1	11.8611 270+	3.8926 296+	0.0023 9865+	12.7825 164+	5.1024 803-	0.0118 3762+
a_2	3098 563+	3611 722-	7 4288+	1415 439-	4072 911-	3 3829+
a_3	139 564+	341 392-	3393-	254 006+	373 564+	7823-
a_4	37 313-	5 394-	274+	40 626+	10 832+	1163-
a_5	2 718-	1 965+		2 877-	681+	
May 31						
a_0	65.2224 216+	22.2033 575+	0.9046 7799+	171.5758 889+	9.0452 306+	0.9728 1338+
a_1	12.5064 272+	3.0666 941+	0.0037 9359+	12.5904 424+	5.8003 190-	0.0122 3292+
a_2	3266 022+	4648 575-	6 5761+	438 427-	2880 363-	3394+
a_3	35 522-	342 751-	2275-	387 825+	424 162+	1 2576-
a_4	52 056-	4 661+	301+	26 365+	14 581+	1125-
a_5	451-	2 970+		2 683-	1 492+	

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	184.1636 393+	3.0008 989+	0.9849 4324+	302.7979 663+	24.6835 707-	0.9797 4526+
a_1	12.6283 081+	6.2425 647-	0.0118 7845+	15.1578 736+	2.4024 596+	0.0145 6964-
a_2	856 485+	1505 388-	4 0953-	5297 890-	7239 781+	6 6541-
a_3	465 945+	497 288+	1 7216-	447 077-	628 494-	2 3798+
a_4	13 519+	22 566+	709-	138 550+	28 916-	672-
a_5	3 543-	1 313+		7 224-	8 982+	
	June 10			June 18		
a_0	196.9251 879+	3.3400 881-	0.9962 3292+	317.3944 758+	21.6219 758-	0.9647 4147+
a_1	12.9400 214+	6.3847 756-	0.0105 1450+	14.0159 769+	3.6547 862+	0.0152 1345-
a_2	2300 085+	135 109+	9 6586-	5880 692-	5270 601+	665+
a_3	483 070+	599 679+	2 0186-	32 997+	657 413-	2 0971+
a_4	3 533-	29 888+	150+	98 132+	15 824+	1174-
a_5	6 176-	370-		10 140-	3 507+	
	June 11			June 19		
a_0	210.1455 539+	9.6484 331-	1.0055 8121+	330.8344 823+	17.5039 376-	0.9497 3265+
a_1	13.5434 545+	6.1660 842-	0.0079 8318+	12.8839 236+	4.5197 614+	0.0146 1803-
a_2	3666 283+	2109 899+	15 5887-	5294 476-	3428 226+	5 6494+
a_3	405 241+	713 417+	1 9631-	325 957+	561 229-	1 6176+
a_4	34 700-	28 875+	1309+	46 413+	32 330+	1297-
a_5	9 702-	4 009-		6 759-	248-	
	June 12			June 20		
a_0	224.0917 205+	15.5296 990-	1.0118 2230+	343.2255 194+	12.6942 684-	0.9358 2835+
a_1	14.3795 531+	5.5205 389-	0.0043 2892+	11.9380 053+	5.0498 440+	0.0130 5478-
a_2	4576 301+	4383 315+	20 6602-	4105 661-	1935 927+	9 7271+
a_3	169 852+	786 096+	1 4281-	446 101+	435 315-	1 0938+
a_4	86 422-	8 848+	2369+	13 078+	30 350+	1189-
a_5	9 362-	8 846-		3 133-	1 790-	
	June 13			June 21		
a_0	238.9363 104+	20.5332 967-	1.0139 6609+	354.7985 630+	7.4915 072-	0.9238 4377+
a_1	15.3065 316+	4.4089 331-	0.0001 3665-	11.2543 701+	5.3176 794+	0.0108 2880-
a_2	4472 932+	6705 897+	23 5086-	2720 149-	794 125+	12 3014+
a_3	262 835-	731 946+	4551-	468 292+	332 001-	6169+
a_4	138 560-	37 679-	2840+	1 998-	21 051+	985-
a_5	2 023+	10 975-		1 063-	2 072-	
	June 14			June 22		
a_0	254.6501 981+	24.2033 109-	1.0114 6145+	5.8274 413+	2.1257 176-	0.9142 9695+
a_1	16.0678 748+	2.8687 225-	0.0048 6119-	10.8494 980+	5.3842 888+	0.0082 2286-
a_2	2873 437+	8565 395+	23 1815-	1337 839-	96 316-	13 5676+
a_3	786 973-	474 780+	7072+	450 086+	268 397-	2233+
a_4	127 472-	96 171-	2471+	6 908-	10 552+	771-
a_5	20 105+	5 236-		368-	1 854-	
	June 15			June 23		
a_0	270.9159 828+	26.1781 567-	1.0043 7753+	16.5874 364+	3.2229 697+	0.9074 4547+
a_1	16.3655 381+	1.0542 837-	0.0091 8643-	10.7140 089+	5.2878 010+	0.0054 7317-
a_2	49 893-	9360 335+	19 6086-	32 673-	856 747-	13 7810+
a_3	1093 948-	43 833+	1 7094+	418 636+	244 487-	840-
a_4	17 244-	122 455-	1452+	8 481-	1 199+	581-
a_5	23 628+	5 787+		613-	1 445-	
	June 16			June 24		
a_0	287.1677 754+	26.3036 902-	0.9934 1569+	27.3391 322+	8.4006 228+	0.9033 3620+
a_1	16.0322 745+	0.7848 514+	0.0125 3726-	10.8293 651+	5.0428 634+	0.0027 6539-
a_2	3198 305-	8815 519+	13 6456-	1166 234+	1597 484-	13 1857+
a_3	935 294-	384 774-	2 2878+	378 052+	253 788-	3155-
a_4	105 170+	89 713-	262+	11 383-	6 151-	417-
a_5	7 594+	11 650+		1 514-	846-	

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	38.3216 362+	13.2576 592+	0.9018 5365+	142.9129 242+	20.0070 962+	0.9476 7739+
a_1	11.1707 159+	4.6443 478+	0.0002 3960-	13.2789 441+	3.9806 772-	0.0085 2491+
a_2	2216 933+	2404 246-	11 9934+	2287 707-	5280 264-	9205+
a_3	316 670+	286 303-	4822-	27 702-	358 584+	1384-
a_4	18 996-	10 577-	269-	63 180+	17 129+	92-
a_5	2 731-	95+		2 971-	2 019-	
June 26						
a_0	49.7435 395+	17.6319 039+	0.9027 6247+	155.9663 482+	15.5357 621+	0.9562 7960+
a_1	11.7001 386+	4.0734 260+	0.0020 0363+	12.8368 777+	4.9233 105-	0.0086 6384+
a_2	3025 562+	3325 698-	10 3896+	2021 580-	4121 915-	4420+
a_3	212 992+	326 860-	5901-	195 035+	407 800+	1747-
a_4	33 199-	10 293-	124-	47 480+	7 054+	365-
a_5	3 418-	1 486+		3 369-	462-	
June 27						
a_0	61.7638 717+	21.3391 934+	0.9057 4483+	168.6249 825+	10.2416 992+	0.9649 6653+
a_1	12.3541 614+	3.3068 560+	0.0038 9960+	12.5083 803+	5.6227 619-	0.0086 8526+
a_2	3430 972+	4353 168-	8 5499+	1185 311-	2860 779-	3082-
a_3	46 830+	352 290-	6395-	351 576+	432 122+	3228-
a_4	51 523-	2 805-	25+	30 534+	4 980+	608-
a_5	2 068-	3 041+		2 767-	803+	
June 28						
a_0	74.4604 542+	24.1755 273+	0.9104 3572+	181.0527 660+	4.3766 500+	0.9735 8261+
a_1	13.0327 666+	2.3309 349+	0.0054 1873+	12.3876 209+	6.0628 866-	0.0085 0243+
a_2	3241 466+	5396 375-	6 6508+	24 998+	1526 442-	1 6452-
a_3	177 433-	332 687-	6290-	446 037+	460 423+	5716-
a_4	63 049-	12 969+	167+	17 096+	9 352+	732-
a_5	2 301+	3 805+		2 730-	1 405+	
June 29						
a_0	87.7935 493+	25.9352 334+	0.9164 5830+	193.4889 271+	1.7917 628-	0.9818 5605+
a_1	13.6037 665+	1.1589 426+	0.0065 6686+	12.5319 033+	6.2256 053-	0.0079 7259+
a_2	2353 935+	6278 450-	4 8673+	1438 468+	74 931-	3 7963-
a_3	403 649-	243 408-	5608-	486 259+	511 636+	8728-
a_4	51 094-	32 853+	278+	4 092+	16 905+	640-
a_5	7 629+	2 695+		4 195-	1 010+	
June 30						
a_0	101.5879 979+	26.4455 449+	0.9234 5859+	206.2132 927+	7.9719 062-	0.9893 5532+
a_1	13.9368 376+	0.1552 843-	0.0073 8322+	12.9650 102+	6.0798 364-	0.0069 2583+
a_2	913 031+	6784 559-	3 3532+	2879 887+	1571 619+	6 7871-
a_3	530 839-	86 585-	4470-	458 946+	588 211+	1 1383-
a_4	10 698-	46 672+	327+	16 500-	22 732+	266-
a_5	9 240+	31-		7 244-	923-	
July 1						
a_0	115.5629 088+	25.6078 102+	0.9311 3569+	219.5098 118+	13.8335 787-	0.9954 8595+
a_1	13.9605 284+	1.5195 213-	0.0079 3283+	13.6684 470+	5.5804 223-	0.0052 1623+
a_2	651 053-	6764 674-	2 2067+	4085 087+	3463 524+	10 3421-
a_3	483 301-	98 408+	3132-	319 254+	667 704+	1 2516-
a_4	37 123+	45 969+	284+	53 976-	18 846+	371+
a_5	5 475+	2 465-		9 678-	4 746-	
July 2						
a_0	129.4142 617+	23.4260 127+	0.9392 6072+	233.6123 275+	18.9994 682-	0.9995 4652+
a_1	13.7029 084+	2.8257 795-	0.0082 9161+	14.5548 165+	4.6822 456-	0.0027 8715+
a_2	1823 536-	6218 407-	1 4331+	4621 593+	5532 177+	13 8517-
a_3	283 064-	257 267+	1964-	9 180+	693 256+	1 1030-
a_4	64 047+	32 825+	139+	106 586-	5 394-	1116+
a_5	95+	3 055-		5 510-	9 018-	

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	248-6190 116+	23-0606 117-	1-0008 4937+	2-0227 438+	3-8064 137-	0-9241 3761+
a_1	15-4365 160+	3-3744 998-	0-0002 6939-	11-1384 089+	5-4810 460+	0-0102 2409-
a_2	3954 008+	7488 997+	16 4729-	2029 099-	76 368+	10 6181+
a_3	463 974-	581 572+	6468-	454 994+	317 344-	9285+
a_4	137 674-	53 311-	1705+	3 309-	18 723+	922-
a_5	9 215+	9 114-		735-	1 978-	
July 12						
a_0	264-3916 852+	25-6342 972-	0-9988 8506+	13-0033 377+	1-6522 092+	0-9150 5895+
a_1	16-0376 781+	1-7281 018-	0-0036 8973-	10-8673 964+	5-4076 168+	0-0078 5882-
a_2	1828 892+	8822 324+	17 3850-	691 283-	783 130-	12 8530+
a_3	915 270-	281 387+	512+	434 550+	262 125-	5586+
a_4	86 658-	101 596-	1880+	6 654-	8 701+	831-
a_5	22 682+	1 652-		490-	1 779-	
July 13						
a_0	280-5143 280+	26-4623 526-	0-9934 8075+	23-8443 465+	6-9559 927+	0-9085 3298+
a_1	16-1055 476+	0-0793 254+	0-0070 7608-	10-8565 976+	5-1749 448+	0-0051 5389-
a_2	1208 859-	9040 586+	16 1131-	567 567+	1535 106-	14 0333+
a_3	1037 875-	136 294-	8182+	402 696+	244 864-	2264+
a_4	35 149+	108 496-	1559+	8 880-	310-	730-
a_5	17 435+	7 752+		1 070-	1 360-	
July 14						
a_0	296-4004 606+	25-5026 722-	0-9848 9075+	34-7969 753+	11-9527 736+	0-9047 9775+
a_1	15-5751 720+	1-8070 354+	0-0099 9086-	11-0868 314+	4-7936 615+	0-0023 0851-
a_2	3937 230-	8058 742+	12 7440-	1711 678+	2285 184-	14 2773+
a_3	732 062-	491 111-	1 4489+	355 824+	259 284-	650-
a_4	122 376+	66 300-	884+	14 135-	7 287-	644-
a_5	756+	10 498+		2 205-	651-	
July 15						
a_0	311-5210 166+	22-9444 538-	0-9737 7923+	46-0889 229+	16-4911 945+	0-9039 0404+
a_1	14-6174 249+	3-2501 759+	0-0120 6962-	11-5291 563+	4-2556 005+	0-0005 0170+
a_2	5392 308-	6292 806+	7 8899-	2672 243+	3113 305-	13 6983+
a_3	240 548-	653 282-	1 8009+	276 608+	294 252-	3223-
a_4	121 277+	12 353-	129+	25 419-	10 781-	572-
a_5	8 803-	6 858+		3 340-	526+	
July 16						
a_0	325-5864 033+	19-1308 751-	0-9611 0199+	57-9100 883+	20-4050 138+	0-9057 3762+
a_1	13-5109 080+	4-3112 348+	0-0131 0223-	12-1347 498+	3-5406 164+	0-0031 2179+
a_2	5474 734-	4327 348+	2 4287-	3316 006+	4055 510-	12 3908+
a_3	156 489+	636 759-	1 8451+	141 664+	331 168-	5515-
a_4	74 508+	21 453+	474-	43 050-	8 299-	494-
a_5	8 569-	2 213+		3 213-	2 171+	
July 17						
a_0	338-5720 807+	14-4482 147-	0-9479 3665+	70-3859 788+	23-5063 496+	0-9100 3840+
a_1	12-4884 303+	4-9953 613+	0-0130 5345-	12-8216 271+	2-6279 316+	0-0054 1473+
a_2	4643 961-	2567 794+	2 8111+	3450 355+	5077 061-	10 4432+
a_3	370 826+	530 486-	1 6472+	60 900-	341 800-	7507-
a_4	31 397+	31 661+	825-	60 542-	2 820+	386-
a_5	5 008-	644-		226-	3 689+	
July 18						
a_0	350-6358 364+	9-2460 209-	0-9353 2077+	83-5404 746+	25-5930 460+	0-9164 1851+
a_1	11-6809 440+	5-3621 153+	0-0120 3012-	13-4691 043+	1-5129 519+	0-0072 6270+
a_2	3393 114-	1159 777+	7 2535+	2902 053+	6048 535-	7 9646+
a_3	447 992+	410 966-	1 3109+	302 195-	293 569-	9071-
a_4	6 896+	27 887+	948-	62 217-	22 076+	223-
a_5	2 140-	1 779-		5 326+	3 835+	

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	97.2638 755 +	26.4743 786 +	0.9243 8474 +	203.2277 228 +	6.8007 099 -	0.9845 1154 +
a_1	13.9366 370 +	0.2259 197 +	0.0085 7457 +	12.7716 246 +	6.1134 096 -	0.0035 0994 +
a_2	1675 647 +	6758 322 -	5 1164 +	2015 915 +	1480 082 +	6 1690 -
a_3	495 548 -	168 037 -	9980 -	446 691 +	550 353 +	385 -
a_4	33 960 -	42 047 +	1 -	9 574 -	10 087 +	340 -
a_5	9 425 +	1 859 +		5 397 -	62 -	
July 28						
a_0	111.3160 690 +	26.0120 530 +	0.9333 7113 +	216.2441 109 +	12.7100 734 -	0.9873 9732 +
a_1	14.1142 290 +	1.1584 110 -	0.0092 9839 +	13.3022 844 +	5.6482 861 -	0.0022 5094 +
a_2	79 823 +	6991 569 -	2 1296 +	3244 489 +	3191 141 +	6 4892 -
a_3	537 926 -	17 057 +	9988 -	353 201 +	588 762 +	1810 -
a_4	15 528 +	51 307 +	255 +	37 042 -	10 430 +	357 -
a_5	7 983 +	1 121 -		7 644 -	2 329 -	
July 29						
a_0	125.3868 389 +	24.1612 094 +	0.9427 8515 +	229.9016 958 +	17.9795 592 -	0.9889 7768 +
a_1	13.9790 125 +	2.5316 474 -	0.0094 3487 +	14.0385 056 +	4.8304 257 -	0.0008 8451 +
a_2	1360 884 -	6643 871 -	7068 -	4005 020 +	4996 733 +	7 2403 -
a_3	399 009 -	209 992 +	8949 -	129 441 +	605 306 +	3298 -
a_4	55 992 +	44 950 +	486 +	77 811 -	1 077 -	172 -
a_5	2 526 +	3 006 -		6 438 -	5 660 -	
July 30						
a_0	139.1957 138 +	20.9903 685 +	0.9520 6471 +	244.3452 226 +	22.2504 547 -	0.9891 0346 +
a_1	13.6107 874 +	3.7809 470 -	0.0090 4451 +	14.8440 088 +	3.6527 498 -	0.0006 6941 -
a_2	2196 881 -	5774 351 -	3 0957 -	3861 586 +	6749 393 +	8 3226 -
a_3	152 407 -	359 713 +	6962 -	240 956 -	543 427 +	4026 -
a_4	67 428 +	29 248 +	619 +	113 528 -	30 756 -	172 +
a_5	2 071 -	2 987 -		2 613 +	7 518 -	
July 31						
a_0	152.5781 079 +	16.6705 837 +	0.9607 3623 +	259.5402 030 +	25.1777 499 -	0.9875 6325 +
a_1	13.1516 225 +	4.8176 965 -	0.0082 4133 +	15.4999 489 +	2.1559 010 -	0.0024 4783 -
a_2	2270 436 -	4549 627 -	4 8132 -	2483 822 +	8119 613 +	9 4148 -
a_3	95 656 +	447 481 +	4430 -	661 842 -	347 048 +	3333 -
a_4	55 841 +	14 100 +	599 +	99 488 -	70 752 -	572 +
a_5	3 643 -	1 811 -		15 482 +	4 365 -	
August 1						
a_0	165.5174 722 +	11.4439 016 +	0.9684 5792 +	275.2139 494 +	26.4944 966 -	0.9841 4632 +
a_1	12.7467 472 +	5.5886 413 -	0.0071 6978 +	15.7661 091 +	0.4583 394 -	0.0044 0790 -
a_2	1684 925 -	3140 671 -	5 7881 -	57 109 +	8692 518 +	10 0623 -
a_3	282 764 +	486 535 +	1987 -	903 543 -	24 407 +	997 -
a_4	37 193 +	5 149 +	421 +	15 537 -	93 104 -	886 +
a_5	3 302 -	470 -		18 103 +	2 856 +	
August 2						
a_0	178.1273 925 +	5.5903 147 +	0.9750 3324 +	290.8956 717 +	26.0901 684 -	0.9787 3108 +
a_1	12.5078 184 +	6.0689 890 -	0.0059 6940 +	15.5092 924 +	1.2516 781 +	0.0064 1481 -
a_2	646 471 -	1654 826 -	6 1403 -	2565 247 -	8235 974 +	9 8267 -
a_3	398 759 +	502 985 +	284 -	790 655 -	316 623 -	2623 +
a_4	20 885 +	3 046 +	139 +	78 288 +	76 705 -	995 +
a_5	2 844 -	481 +		7 061 +	7 851 +	
August 3						
a_0	190.6122 438 +	0.5935 058 -	0.9803 8716 +	306.0779 088 +	24.0534 407 -	0.9713 6977 +
a_1	12.5050 831 +	6.2475 999 -	0.0047 3838 +	14.7938 796 +	2.7771 287 +	0.0082 6163 -
a_2	646 737 +	122 731 -	6 1509 -	4397 269 -	6904 661 +	8 4470 -
a_3	453 495 +	520 125 +	257 +	413 321 -	545 127 -	6677 +
a_4	7 157 +	5 824 +	149 -	110 840 +	35 503 -	861 +
a_5	3 430 -	741 +		4 343 -	7 358 +	
August 4						
August 5						
August 6						
August 7						
August 8						
August 9						
August 10						
August 11						

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	320-4013 792+	20-6431 731-	0-9623 3882+	53-8645 662+	19-4260 342+	0-9045 9559+
a_1	13-8325 902+	3-9839 968+	0-0097 1624-	11-9085 358+	3-7835 923+	0-0011 5485+
a_2	5016 097-	5129 889+	5 9370-	2923 398+	3833 912-	14 4236+
a_3	15 450-	615 421-	1 0164+	197 648+	298 159-	247-
a_4	85 877+	1 622+	540+	32 501-	7 700-	721-
a_5	7 719-	4 015+		3 137-	1 049+	
August 13						
a_0	333-7386 303+	16-2071 658-	0-9521 3593+	66-0816 427+	22-7957 543+	0-9071 8312+
a_1	12-8552 284+	4-8280 012+	0-0105 7710-	12-5379 426+	2-9248 085+	0-0040 0333+
a_2	4624 558-	3333 433+	2 5757-	3289 793+	4764 097-	13 9159+
a_3	251 866+	570 519-	1 2328+	37 156+	317 602-	3129-
a_4	46 156+	21 190+	148+	49 317-	2 451-	760-
a_5	5 817-	1 001+		1 674-	2 566+	
August 14						
a_0	346-1606 234+	11-1006 539-	0-9414 2601+	78-9471 810+	25-2124 044+	0-9125 3914+
a_1	12-0214 334+	5-3325 068+	0-0107 1650-	13-1864 885+	1-8770 120+	0-0066 6221+
a_2	3650 183-	1758 944+	1 2006+	3088 459+	5705 886-	12 5203+
a_3	379 892+	476 760-	1 2894+	174 494-	301 218-	6184-
a_4	17 222+	25 661+	204-	58 697-	10 824+	782-
a_5	3 078-	722-		2 459+	3 523+	
August 15						
a_0	357-8564 422+	5-6374 349-	0-9309 5648+	92-4194 423+	26-4901 407+	0-9203 8372+
a_1	11-4107 164+	5-5511 700+	0-0100 9771-	13-7295 884+	0-6515 598+	0-0089 4945+
a_2	2437 898-	475 357+	4 9389+	2237 455+	6509 260-	10 1973+
a_3	419 049+	381 762-	1 2043+	382 040-	223 042-	9345-
a_4	2 264+	21 720+	453-	45 887-	29 182+	737-
a_5	1 297-	1 437-		7 218+	2 930+	
August 16						
a_0	9-0653 703+	0-0748 771-	0-9214 6856+	106-3307 053+	26-4716 815+	0-9302 5209+
a_1	11-0491 093+	5-5396 822+	0-0087 6676-	14-0477 227+	0-7040 694-	0-0106 7907+
a_2	1180 096-	554 008-	8 2758+	888 468+	6973 935-	6 9573+
a_3	415 536+	309 348-	1 0201+	492 733-	78 204-	1 2342-
a_4	3 877-	14 349+	592-	7 768-	44 234+	564-
a_5	622-	1 594-		8 466+	821+	
August 17						
a_0	20-0375 738+	5-3797 451+	0-9136 2547+	120-4180 713+	25-0669 036+	0-9414 9783+
a_1	10-9358 888+	5-3410 193+	0-0068 2927-	14-0787 183+	2-1042 160-	0-0116 7768+
a_2	37 053+	1411 915-	10 9788+	551 485-	6934 971-	2 9271+
a_3	393 709+	267 797-	7813+	441 098-	105 685+	1 4654-
a_4	6 753-	6 249+	652-	35 967+	48 048+	220-
a_5	801-	1 441-		4 937+	1 393-	
August 18						
a_0	31-0157 832+	10-5532 740+	0-9079 6568+	134-4016 216+	22-2844 245+	0-9533 1949+
a_1	11-0583 091+	4-9800 766+	0-0044 2521-	13-8529 414+	3-4409 835-	0-0118 1468+
a_2	1169 658+	2192 250-	12 9308+	1609 677-	6343 643-	1 5855-
a_3	358 233+	256 960-	5199+	250 639-	283 339+	1 5572-
a_4	10 621-	1 106-	673-	60 248+	40 513+	280+
a_5	1 599-	1 018-		3+	2 417-	
August 19						
a_0	42-2256 594+	15-2882 171+	0-9048 7881+	148-0745 564+	18-2412 201+	0-9648 2270+
a_1	11-3946 614+	4-4635 877+	0-0017 1001-	13-4799 118+	4-6097 137-	0-0110 4162+
a_2	2164 623+	2979 986-	14 0860+	2000 252-	5274 767-	6 0723-
a_3	299 169+	271 100-	2509+	11 316-	421 302+	1 4444-
a_4	18 683-	6 400-	690-	59 096+	28 090+	830+
a_5	2 654-	220-		2 899-	2 243-	

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	161.3589 311 +	13.1487 446 +	0.9751 2096 +	271.3751 705 +	26.5428 216 -	0.9781 6902 +
a_1	13.0986 547 +	5.5281 614 -	0.0094 2708 +	15.5069 901 +	0.8353 220 -	0.0060 6466 -
a_2	1708 734 -	3864 757 -	9 8945 -	254 141 +	8442 549 +	3 9426 -
a_3	195 683 +	511 621 +	1 1054 -	774 763 -	52 310 +	2508 +
a_4	43 849 +	16 829 +	1255 +	25 344 -	78 002 -	303 -
a_5	3 493 -	1 553 -		15 485 +	1 687 +	
August 29						
a_0	174.3103 162 +	7.2867 972 +	0.9834 6060 +	286.8291 126 +	26.5362 892 -	0.9717 3216 +
a_1	12.8314 060 +	6.1416 705 -	0.0071 6682 +	15.3229 863 +	0.8385 280 +	0.0067 9005 -
a_2	893 541 -	2244 430 -	12 4538 -	2066 884 -	8148 523 +	3 3636 -
a_3	336 249 +	563 800 +	5923 -	725 387 -	240 531 -	1285 +
a_4	26 313 +	9 163 +	1386 +	55 439 +	68 245 -	35 -
a_5	3 265 -	872 -		7 936 +	5 765 +	
August 30						
a_0	187.0882 978 +	0.9778 927 +	0.9893 3668 +	301.8792 093 +	24.9132 101 -	0.9646 1825 +
a_1	12.7624 647 +	6.4181 871 -	0.0045 5389 +	14.7181 260 +	2.3716 577 +	0.0074 2559 -
a_2	240 469 +	506 739 -	13 4055 -	3831 263 -	7075 320 +	2 9909 -
a_3	408 659 +	591 946 +	271 -	429 836 -	455 676 -	1162 +
a_4	10 311 +	5 012 +	1168 +	93 667 +	37 909 -	225 +
a_5	3 558 -	494 -		1 975 -	6 005 +	
August 31						
a_0	199.9163 505 +	5.4313 219 -	0.9925 5899 +	316.1803 946 +	21.8827 784 -	0.9569 0743 +
a_1	12.9355 000 +	6.3401 939 -	0.0019 1141 +	13.8593 972 +	3.6378 555 +	0.0079 7992 -
a_2	1492 767 +	1294 288 +	12 8006 -	4578 923 -	5540 952 +	2 5021 -
a_3	413 563 +	606 894 +	4456 +	77 432 -	548 495 -	2096 +
a_4	7 167 -	2 918 +	693 +	81 031 +	7 459 -	401 +
a_5	4 891 -	748 -		6 218 -	3 770 +	
September 1						
a_0	213.0412 778 +	11.5811 808 -	0.9932 4183 +	329.5816 375 +	17.7460 460 -	0.9487 0228 +
a_1	13.3528 088 +	5.8984 768 -	0.0004 8731 -	12.9496 866 +	4.5803 966 +	0.0084 0138 -
a_2	2641 484 +	3125 066 +	11 0647 -	4387 422 -	3888 374 +	1 6310 -
a_3	335 140 +	610 342 +	7218 +	184 851 +	541 962 -	3742 +
a_4	31 985 -	344 -	149 +	48 634 +	11 099 +	454 +
a_5	6 465 -	2 015 -		5 465 -	1 443 +	
September 2						
a_0	226.6879 039 +	17.1063 526 -	0.9917 2170 +	342.1153 839 +	12.8297 540 -	0.9401 7975 +
a_1	13.9656 224 +	5.0915 083 -	0.0024 7780 -	12.1443 809 +	5.2006 423 +	0.0085 9717 -
a_2	3390 053 +	4933 906 +	8 8234 -	3595 743 -	2343 453 +	2385 -
a_3	143 220 +	587 631 +	7756 +	325 959 +	483 999 -	5590 +
a_4	66 218 -	10 252 -	282 -	21 222 +	17 926 +	385 +
a_5	5 487 -	4 118 -		3 262 -	21 -	
September 3						
a_0	240.9996 830 +	21.6471 442 -	0.9884 3630 +	353.9345 824 +	7.4413 759 -	0.9316 1849 +
a_1	14.6573 762 +	3.9345 988 -	0.0040 2113 -	11.5298 798 +	5.5312 920 +	0.0084 6174 -
a_2	3367 134 +	6593 986 +	6 6726 -	2523 123 -	998 756 +	1 6650 +
a_3	172 537 -	504 764 +	6552 +	379 192 +	412 938 -	7150 +
a_4	96 390 -	31 691 -	497 -	5 202 +	17 554 +	233 +
a_5	1 399 +	5 410 -		1 561 -	733 -	
September 4						
a_0	255.9670 198 +	24.8755 781 -	0.9838 0846 +	5.2504 332 +	1.8498 201 -	0.9233 9707 +
a_1	15.2411 969 +	2.4797 514 -	0.0051 7902 -	11.1403 139 +	5.6138 164 +	0.0079 0494 -
a_2	2285 203 +	7863 798 +	5 0052 -	1369 916 -	142 093 -	3 9438 +
a_3	538 338 -	325 076 +	4495 +	384 854 +	350 220 -	8084 +
a_4	89 144 -	60 390 -	486 -	2 326 -	13 728 +	46 +
a_5	11 815 +	3 405 -		764 -	1 010 -	

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	16.2919 317+	3.7160 368+	0.9159 6780+	115.1478 335+	25.9524 646+	0.9321 4708+
a_1	10.9804 739+	5.4853 178+	0.0068 7186-	13.9048 730+	1.5885 405-	0.0121 5856+
a_2	236 935-	1120 508-	6 3906+	41 569+	6865 960-	9 6790+
a_3	367 941+	305 421-	8259+	398 364-	17 607+	1 1252-
a_4	5 940-	8 564+	134-	19 874+	38 756+	1141-
a_5	729-	1 037-		5 397+	68-	
September 14						
a_0	27.2848 393+	9.0595 145+	0.9098 1625+	129.0195 541+	23.6829 576+	0.9451 4960+
a_1	11.0407 279+	5.1724 975+	0.0053 5134-	13.8043 214+	2.9409 829-	0.0137 1111+
a_2	823 963+	1995 775-	8 7831+	980 295-	6581 327-	5 6247+
a_3	336 602+	281 414-	7713+	267 050-	171 468+	1 5907-
a_4	9 464-	3 258+	286-	47 029+	38 089+	960-
a_5	1 243-	843-		1 572+	898-	
September 15						
a_0	38.4405 531+	14.0045 346+	0.9054 1749+	142.7040 010+	20.1047 078+	0.9592 5453+
a_1	11.3020 935+	4.6898 004+	0.0033 7477-	13.5477 412+	4.1910 216-	0.0143 2040+
a_2	1764 547+	2828 928-	10 9215+	1483 674-	5847 395-	2928+
a_3	285 882+	276 532-	6563+	65 013-	314 767+	1 9862-
a_4	15 708-	1 114-	411-	54 121+	33 406+	448-
a_5	2 021-	364-		1 559-	997-	
September 16						
a_0	49.9459 165+	18.3836 413+	0.9031 9639+	156.1021 296+	15.3636 643+	0.9734 0111+
a_1	11.7334 731+	4.0404 286+	0.0010 1000-	13.2523 696+	5.2532 064-	0.0137 6512+
a_2	2507 670+	3668 877-	12 6405+	1369 694-	4712 612-	5 9085-
a_3	202 587+	284 148-	4920+	135 073+	438 480+	2 1747-
a_4	26 173-	3 097-	525-	45 613+	28 481+	400+
a_5	2 486-	468+		2 899-	882-	
September 17						
a_0	61.9475 494+	22.0285 045+	0.9034 9440+	169.2353 085+	9.6858 046+	0.9863 6191+
a_1	12.2840 720+	3.2204 054+	0.0016 4472+	13.0357 480+	6.0532 336-	0.0119 4700+
a_2	2933 408+	4535 231-	13 7978+	719 827-	3235 076-	12 1617-
a_3	73 529+	291 236-	2827+	288 289+	543 514+	2 0143-
a_4	39 399-	810-	649-	30 920+	24 241+	1401+
a_5	1 675-	1 549+		3 242-	1 011-	
September 18						
a_0	74.5282 077+	24.7663 370+	0.9065 4068+	182.2306 706+	3.3657 377+	0.9969 0533+
a_1	12.8762 184+	2.2264 394+	0.0044 6313+	12.9890 158+	6.5280 045-	0.0089 6650+
a_2	2900 715+	5398 287-	14 2520+	298 165+	1469 172-	17 3397-
a_3	99 202-	278 505-	240+	379 192+	630 099+	1 4402-
a_4	48 639-	7 145+	795-	14 922+	19 349+	2187+
a_5	1 136+	2 418+		3 821-	1 474-	
September 19						
a_0	87.6798 271+	26.4260 534+	0.9124 2345+	195.2885 324+	3.2443 865-	1.0040 1572+
a_1	13.4077 174+	1.0672 973+	0.0072 8890+	13.1664 635+	6.6258 073-	0.0051 5412+
a_2	2322 624+	6166 690-	13 8415+	1487 100+	522 511+	20 3414-
a_3	280 234-	225 759-	2941-	399 856+	692 286+	5431-
a_4	42 959-	19 690+	959-	3 912-	12 161+	2399+
a_5	4 993+	2 414+		5 279-	2 258-	
September 20						
a_0	101.2879 869+	26.8563 163+	0.9210 5749+	208.6427 723+	9.7477 237-	1.0071 0536+
a_1	13.7734 872+	0.2246 865-	0.0099 3060+	13.5796 339+	6.3098 850-	0.0010 1895+
a_2	1274 272+	6701 637-	12 3794+	2610 330+	2649 798+	20 5457-
a_3	401 002-	123 467-	6795-	330 566+	717 624+	4361+
a_4	16 719-	32 107+	1102-	30 718-	1 109+	1933+
a_5	7 043+	1 345+		6 896-	3 493-	
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	222.5127 343+	15.7211 047-	1.0061 3268+	338.9014 975+	14.2774 090-	0.9367 3892+
a_1	14.1851 357+	5.5659 423-	0.0028 8198-	12.1423 298+	5.0273 810+	0.0084 0145-
a_2	3348 449+	4774 399+	18 1053-	3688 093-	2682 663+	3 5523+
a_3	139 507+	686 280+	1 2175+	334 477+	459 193-	285+
a_4	67 212-	16 383-	1024+	19 781+	15 995+	76+
a_5	5 781-	5 007-		3 253-	377-	
September 30						
a_0	237.0393 662+	20.7431 182-	1.0015 7215+	350.7101 185+	9.0261 193-	0.9286 9632+
a_1	14.8669 107+	4.4142 355-	0.0060 9687-	11.5113 421+	5.4323 647+	0.0076 7938-
a_2	3305 472+	6684 737+	13 8681-	2598 468-	1397 243+	3 6888+
a_3	182 902-	570 540+	1 6225+	382 081+	399 225-	619+
a_4	98 957-	42 350-	66+	3 838+	13 851+	245+
a_5	1 569+	5 356-		1 538-	783-	
October 1						
a_0	252.2087 951+	24.4365 966-	0.9942 5138+	2.0000 520+	3.4926 459-	0.9213 9447+
a_1	15.4343 482+	2.9257 408-	0.0083 8115-	11.1070 401+	5.5971 950+	0.0069 1320-
a_2	2178 765+	8088 481+	8 9826-	1444 540-	274 829+	4 0241+
a_3	557 039-	349 269+	1 6375+	382 529+	351 658-	1630+
a_4	90 710-	70 648-	631-	3 556-	9 819+	321+
a_5	12 449+	2 446-		744-	800-	
October 2						
a_0	267.7974 900+	26.5258 717-	0.9851 2941+	13.0004 610+	2.0977 682+	0.9149 0319+
a_1	15.6729 340+	1.2327 396-	0.0097 1173-	10.9310 965+	5.5501 914+	0.0060 4663-
a_2	88 589+	8687 915+	4 4592-	325 710-	729 243-	4 7052+
a_3	793 512-	45 232+	1 3732+	360 902+	320 302-	2938+
a_4	23 414-	83 106-	958-	7 081-	5 752+	308+
a_5	15 927+	2 935+		688-	665-	
October 3						
a_0	283.3991 830+	26.8933 137-	0.9750 9950+	23.9342 998+	7.5435 138+	0.9093 5954+
a_1	15.4511 871+	0.4866 421+	0.0102 2996-	10.9710 481+	5.3102 209+	0.0050 0510-
a_2	2272 689-	8354 555+	9145-	707 634+	1662 300-	5 7693+
a_3	732 356-	255 836-	9816+	325 439+	303 803-	4190+
a_4	59 566+	66 835-	964-	10 418-	2 354+	228+
a_5	7 742+	6 474+		1 130-	425-	
October 4						
a_0	298.5565 965+	25.6028 357-	0.9648 6660+	35.0075 003+	12.6573 173+	0.9049 7555+
a_1	14.8046 289+	2.0573 049+	0.0101 5697-	11.2054 735+	4.8873 497+	0.0037 1642-
a_2	4035 185-	7250 991+	1 4581+	1610 122+	2563 851-	7 1592+
a_3	422 406-	458 701-	5915+	272 086+	298 403-	5113+
a_4	96 587+	32 994-	764-	16 124-	125+	104+
a_5	2 445-	5 897+		1 772-	21-	
October 5						
a_0	312.9248 804+	22.8690 115-	0.9549 0696+	46.3994 050+	17.2584 519+	0.9020 2723+
a_1	13.9082 775+	3.3596 405+	0.0097 1848-	11.6017 879+	4.2850 984+	0.0021 2703-
a_2	4747 755-	5735 922+	2 7829+	2311 857+	3458 545-	8 7507+
a_3	62 957-	533 222-	2843+	189 680+	297 766-	5533+
a_4	81 508+	3 284-	473-	25 319-	88-	45-
a_5	6 525-	3 190+		2 099-	595+	
October 6						
a_0	326.3595 850+	18.9891 105-	0.9454 9047+	58.2486 048+	21.1679 700+	0.9008 3015+
a_1	12.9691 811+	4.3471 371+	0.0090 9552-	12.1098 873+	3.5043 230+	0.0002 1268-
a_2	4513 024-	4148 387+	3 3613+	2707 885+	4346 421-	10 3787+
a_3	198 290+	515 807-	959+	67 870+	291 752-	5359+
a_4	47 600+	12 216+	174-	36 494-	2 878+	208-
a_5	5 552-	847+		1 306-	1 327+	

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	70-6322 877+	24-2088 960+	0-9017 0685+	176-5329 815+	6-2676 848+	0-9903 1409+
a_1	12-6565 780+	2-5493 281+	0-0020 1551+	12-8688 105+	6-3454 552-	0-0146 3261+
a_2	2679 364+	5191 117-	11 8560+	442 467+	2566 151-	10 0928-
a_3	89 782-	266 707-	4535+	386 644+	537 693+	2 6800-
a_4	43 732-	9 698+	388-	20 449+	31 521+	625+
a_5	1 125+	1 810+		3 354-	103+	
October 16						
a_0	83-5435 632+	26-2135 926+	0-9049 4942+	189-4864 125+	0-2774 539-	1-0036 7570+
a_1	13-1485 897+	1-4358 766+	0-0045 0723+	13-0797 975+	6-6847 200-	0-0118 3509+
a_2	2158 870+	5914 902-	12 9768+	1691 616+	762 847-	17 7130-
a_3	251 642-	209 945-	2992+	433 743+	663 788+	2 4285-
a_4	38 101-	19 083+	597-	4 188+	32 505+	2075+
a_5	4 373+	1 593+		5 301-	1 658-	
October 17						
a_0	96-8795 029+	27-0390 521+	0-9107 7828+	202-7786 346+	6-9689 952-	1-0135 1738+
a_1	13-4918 193+	0-1983 413+	0-0071 6847+	13-5472 651+	6-6259 833-	0-0076 4703+
a_2	1219 206+	6414 280-	13 5084+	2964 944+	1407 028+	23 7212-
a_3	359 334-	118 212-	615+	395 849+	775 645+	1 5758-
a_4	15 225-	27 250+	844-	22 357-	24 594+	3146+
a_5	6 147+	654+		8 209-	4 401-	
October 18						
a_0	110-4564 016+	26-5869 346+	0-9192 9530+	216-6589 224+	13-3746 919-	1-0186 6617+
a_1	13-6248 424+	1-1087 526-	0-0098 5487+	14-2459 609+	6-1042 505-	0-0025 5607+
a_2	111 477+	6598 902-	13 1783+	3935 943+	3837 509+	26 5570-
a_3	359 453-	3 238-	2755-	224 075+	828 240+	2826-
a_4	16 636+	30 364+	1119-	65 478-	2 504+	3281+
a_5	4 911+	345-		8 960-	7 515-	
October 19						
a_0	124-0586 011+	24-8209 699+	0-9304 2927+	231-3134 412+	19-0128 686-	1-0185 7109+
a_1	13-5484 080+	2-4175 319-	0-0123 6311+	15-0697 088+	5-0910 340-	0-0027 0870-
a_2	817 941-	6429 937-	11 6726+	4125 054+	6261 904+	25 4624-
a_3	245 563-	114 588+	7252-	123 089-	762 410+	1 0572+
a_4	41 392+	28 283+	1373-	114 654-	36 454-	2409+
a_5	1 780+	646-		1 625-	8 876-	
October 20						
a_0	137-5049 758+	21-7746 668+	0-9438 7339+	246-7717 185+	23-4060 042-	1-0134 4595+
a_1	13-3285 944+	3-6581 522-	0-0144 2512+	15-8111 355+	3-6289 454-	0-0073 8763-
a_2	1288 579-	5922 965-	8 6697+	3051 435+	8241 287+	20 8886-
a_3	63 758-	221 524+	1 2814-	589 469-	530 042+	2 0271+
a_4	49 694+	24 837+	1492-	124 018-	83 378-	1001+
a_5	932-	162-		13 663+	5 108-	
October 21						
a_0	150-7032 127+	17-5488 380+	0-9590 2242+	262-8180 154+	26-1666 654-	1-0041 8217+
a_1	13-0711 614+	4-7664 334-	0-0157 1489+	16-2018 154+	1-8575 714-	0-0109 1722-
a_2	1191 106-	5110 975-	3 9369+	676 515+	9279 957+	14 2468-
a_3	124 942+	319 644+	1 8915-	944 584-	150 135+	2 4160+
a_4	44 415+	24 111+	1294-	48 913-	109 673-	307-
a_5	2 200-	543+		21 700+	3 295+	
October 22						
a_0	163-6719 793+	12-3057 367+	0-9749 2893+	278-9903 027+	27-0918 653-	0-9920 7879+
a_1	12-8870 886+	5-6828 196-	0-0158 8299+	16-0450 172+	0-0012 458+	0-0130 5417-
a_2	571 820-	4001 902-	2 4918-	2232 867-	9105 642+	7 2088-
a_3	280 333+	421 640+	2 4268-	928 542-	252 219-	2 2750+
a_4	33 240+	27 156+	597-	65 578+	90 664-	1129-
a_5	2 619-	783+		11 809+	9 311+	

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	294.7269 176+	26.2134 125-	0.9785 1995+	32.0150 770+	11.3237 535+	0.9039 3589+
a_1	15.3520 004+	1.7150 975+	0.0138 5867-	11.0717 501+	5.0135 509+	0.0034 8892-
a_2	4507 237-	7898 468+	1 0706-	1559 072+	2229 832-	6 7045+
a_3	556 367-	522 117-	1 8081+	291 080+	303 212-	412-
a_4	122 527+	41 608-	1420-	17 248-	3 137-	332+
a_5	2 951-	8 510+		1 819-	180+	
November 1						
a_0	309.5845 151+	23.7639 897-	0.9647 2084+	43.2699 356+	16.0837 045+	0.9011 1661+
a_1	14.3311 711+	3.1257 633+	0.0135 8718-	11.4630 796+	4.4754 576+	0.0021 4711-
a_2	5471 316-	6167 622+	3 5045+	2310 577+	3156 495-	6 7799+
a_3	99 314-	605 858-	1 2312+	203 651+	313 515-	938+
a_4	103 492+	1 272+	1332-	26 693-	2 313-	329+
a_5	8 858-	4 178+		2 253-	949+	
November 2						
a_0	323.3680 866+	20.0815 051-	0.9515 9392+	54.9815 435+	20.2120 247+	0.8996 6017+
a_1	13.2440 828+	4.1801 236+	0.0125 7021-	11.9744 878+	3.7496 542+	0.0007 4980-
a_2	5237 159-	4399 339+	6 4077+	2738 726+	4101 427-	7 2568+
a_3	226 848+	561 063-	6948+	74 815+	312 835-	2275+
a_4	57 421+	21 378+	1050-	38 717-	2 465+	260+
a_5	7 267-	599+		1 487-	1 735+	
November 3						
a_0	336.1161 536+	15.5153 563-	0.9397 2346+	67.2333 650+	23.5206 726+	0.8996 6139+
a_1	12.2840 437+	4.9005 211+	0.0111 2224-	12.5284 500+	2.8373 721+	0.0007 8020+
a_2	4284 765-	2850 299+	7 8725+	2715 872+	5007 758-	8 0912+
a_3	385 734+	470 560-	2742+	93 414-	285 421-	3331+
a_4	21 142+	23 656+	709-	46 951-	11 404+	134+
a_5	3 968-	1 084-		1 103+	2 111+	
November 4						
a_0	348.0120 117+	10.3746 040-	0.9294 0882+	80.0194 760+	25.8300 784+	0.9012 8536+
a_1	11.5492 864+	5.3383 331+	0.0094 9380-	13.0253 753+	1.7558 108+	0.0025 0373+
a_2	3040 326-	1569 662+	8 2802+	2164 946+	5774 426-	9 1652+
a_3	431 965+	387 017-	81-	268 179-	219 002-	3880+
a_4	1 811+	17 860+	381-	41 427-	22 376+	40-
a_5	1 668-	1 479-		4 660+	1 583+	
November 5						
a_0	359.3004 764+	4.9163 684-	0.9207 3841+	93.2308 514+	26.9889 423+	0.9047 4401+
a_1	11.0707 027+	5.5425 651+	0.0078 5542-	13.3636 721+	0.5449 654+	0.0044 5156+
a_2	1750 189-	500 954+	8 0361+	1158 596+	6281 316-	10 2981+
a_3	423 126+	330 273-	1586-	386 213-	114 450-	3732+
a_4	6 120-	10 307+	101-	16 994-	30 505+	259-
a_5	652-	1 297-		6 615+	203+	
November 6						
a_0	10.2377 956+	0.6441 658+	0.9136 6973+	106.6707 238+	26.8974 020+	0.9102 6010+
a_1	10.8448 289+	5.5471 487+	0.0062 9982-	13.4760 356+	0.7333 305-	0.0066 1279+
a_2	524 022-	441 010-	7 5064+	35 691-	6439 634-	11 2540+
a_3	392 175+	301 801-	1968-	388 817-	8 840+	2712+
a_4	9 137-	3 745+	116+	17 327+	31 285+	524-
a_5	569-	914-		5 227+	1 151-	
November 7						
a_0	21.0684 691+	6.1173 165+	0.9081 0203+	120.1065 640+	25.5240 055+	0.9180 2017+
a_1	10.8537 369+	5.3694 479+	0.0048 5293-	13.3617 929+	2.0066 673-	0.0089 2398+
a_2	591 997+	1333 099-	6 9900+	1045 890-	6236 983-	11 7432+
a_3	349 633+	295 687-	1482-	269 160-	122 243+	629+
a_4	11 852-	890-	261+	43 649+	25 047+	837-
a_5	1 070-	431-		1 802+	1 540-	

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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
November 16						
a_0	133.3413 970+	22.9082 150+	0.9281 1638+	239.5421 114+	21.5619 319-	1.0242 3535+
a_1	13.0902 244+	3.2081 411-	0.0112 5800+	15.7544 105+	4.4288 182-	0.0001 7343-
a_2	1573 565-	5735 415-	11 4189+	4782 252+	7415 604+	29 0963-
a_3	78 168-	207 430+	2716-	392 274-	797 301+	747+
a_4	51 952+	17 005+	1180-	161 551-	54 888-	3607+
a_5	1 026-	835-		5 729+	12 425-	
November 17						
a_0	146.2715 408+	19.1488 924+	0.9404 7731+	255.7199 377+	25.1761 910-	1.0211 9583+
a_1	12.7723 277+	4.2866 091-	0.0134 1309+	16.5314 456+	2.7346 644-	0.0058 2585-
a_2	1506 729-	5019 445-	9 8865+	2693 946+	9353 369+	26 7438-
a_3	118 719+	267 812+	7464-	970 030-	458 619+	1 5457+
a_4	46 095+	12 782+	1491-	129 231-	121 002-	2433+
a_5	2 124-	404+		26 395+	3 387-	
November 18						
a_0	158.9094 647+	14.3884 385+	0.9547 8950+	272.4134 914+	26.9420 954-	1.0128 7449+
a_1	12.5239 738+	5.2048 387-	0.0151 0680+	16.7407 286+	0.7764 848-	0.0106 1356-
a_2	895 285-	4135 251-	6 7486+	725 849-	9969 548+	20 6976-
a_3	281 824+	323 618+	1 3514-	1223 875-	52 187-	2 5213+
a_4	35 218+	14 987+	1633-	15 056+	136 526-	776+
a_5	2 133-	1 525+		24 699+	9 431+	
November 19						
a_0	171.3754 008+	8.8040 876+	0.9704 1970+	288.9632 232+	26.7395 536-	1.0004 5105+
a_1	12.4424 843+	5.9280 460-	0.0159 8571+	16.2467 447+	1.1518 781+	0.0139 6574-
a_2	140 191+	3059 169-	1 7228+	4059 855-	9088 833+	12 7118-
a_3	401 238+	399 082+	2 0206-	928 298-	501 608-	2 8149+
a_4	24 805+	22 998+	1390-	140 574+	84 493-	633-
a_5	2 296-	2 008+		3 195+	13 447+	
November 20						
a_0	183.8742 789+	2.6125 335+	0.9863 6174+	304.7255 293+	24.7360 576-	0.9854 8930+
a_1	12.5996 658+	6.4099 529-	0.0156 6840+	15.2140 955+	2.7920 832+	0.0156 8904-
a_2	1469 860+	1703 757-	5 1465-	5970 312-	7211 818+	4 6714-
a_3	476 606+	510 735+	2 5976-	342 206-	707 814-	2 5408+
a_4	13 997+	33 676+	552-	149 924+	15 240-	1425-
a_5	3 792-	1 320+		10 874-	8 395+	
November 21						
a_0	196.6696 117+	3.9132 221-	1.0012 5022+	319.3222 780+	21.2942 584-	0.9695 7294+
a_1	13.0403 179+	6.5833 565-	0.0138 3767+	13.9719 032+	4.0201 976+	0.0159 1819-
a_2	2945 835+	43 839+	13 2257-	6206 726-	5080 769+	2 0888+
a_3	492 625+	657 149+	2 8340-	148 365+	688 332-	1 9550+
a_4	4 204-	41 185+	891+	91 526+	25 888+	1634-
a_5	7 359-	1 199-		11 040-	2 236+	
November 22						
a_0	210.0526 193+	10.4224 811-	1.0134 9085+	332.6963 937+	16.8320 047-	0.9540 4279+
a_1	13.7719 066+	6.3615 748-	0.0103 7800+	12.8061 633+	4.8413 213+	0.0149 7933-
a_2	4324 791+	2250 540+	21 1425-	5322 936-	3193 285+	6 9781+
a_3	399 866+	807 153+	2 4733-	406 690+	564 403-	1 2933+
a_4	41 580-	36 067+	2541+	35 973+	35 841+	1474-
a_5	11 673-	5 947-		6 331-	1 137-	
November 23						
a_0	224.2916 661+	16.4752 746-	1.0215 3268+	345.0138 966+	11.7243 248-	0.9398 7586+
a_1	14.7343 581+	5.6578 736-	0.0055 0930+	11.8748 110+	5.3244 243+	0.0132 5470-
a_2	5157 501+	4828 873+	27 0042-	3950 239-	1703 650+	9 9833+
a_3	117 989+	888 854+	1 4272-	489 450+	433 031-	7012+
a_4	104 466-	5 926+	3652+	5 063+	29 455+	1157-
a_5	10 151-	11 490-		2 586-	2 158-	
November 24						
November 25						
November 26						
November 27						
November 28						
November 29						
November 30						
December 1						

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	356.5428 764+	6.2701 088-	0.9276 7804+	89.8893 641+	26.7738 137+	0.9038 8493+
a_1	11.2323 324+	5.5459 483+	0.0110 9395-	13.3587 979+	0.8483 025+	0.0034 3269+
a_2	2477 288-	559 665+	11 4036+	1443 003+	6245 541-	6 6960+
a_3	484 914+	336 754-	2390+	418 607-	147 259-	687+
a_4	7 226-	18 383+	813-	29 100-	34 203+	260+
a_5	791-	2 074-		7 526+	803+	
December 3						
a_0	7.5751 697+	0.7002 385-	0.9177 4023+	103.3484 443+	26.9863 367+	0.9079 9670+
a_1	10.8790 633+	5.5631 720+	0.0087 7405-	13.5139 389+	0.4309 032-	0.0048 0293+
a_2	1073 769-	361 054-	11 6424+	88 084+	6474 090-	7 0534+
a_3	448 351+	283 691-	848-	460 183-	3 602-	1751+
a_4	10 798-	7 910+	502-	10 256+	38 080+	107+
a_5	393-	1 613-		6 733+	1 296-	
December 4						
a_0	18.3905 721+	4.7990 888+	0.9101 1692+	116.8268 721+	25.9113 427+	0.9135 2354+
a_1	10.7942 984+	5.4082 124+	0.0064 9106-	13.4009 649+	1.7122 190-	0.0062 7041+
a_2	202 586+	1180 807-	11 0954+	1163 534-	6269 463-	7 6357+
a_3	400 975+	267 823-	2839-	354 039-	135 127+	2200+
a_4	12 550-	229-	237-	44 468+	30 993+	117-
a_5	846-	1 010-		2 760+	2 389-	
December 5						
a_0	29.2438 869+	10.0623 142+	0.9047 0465+	130.0808 026+	23.5885 505+	0.9205 7836+
a_1	10.9496 641+	5.0911 085+	0.0043 6663-	13.0812 096+	2.9143 704-	0.0078 5890+
a_2	1321 750+	1995 767-	10 1082+	1931 360-	5702 088-	8 2168+
a_3	341 795+	278 387-	3774-	150 689-	235 421+	1752+
a_4	16 734-	5 388-	19-	57 501+	18 522+	403-
a_5	1 754-	241-		959-	1 994-	
December 6						
a_0	40.3580 567+	14.9254 444+	0.9013 1090+	142.9594 615+	20.1291 663+	0.9292 7242+
a_1	11.3089 813+	4.6061 647+	0.0024 5897-	12.6722 502+	3.9777 483-	0.0095 3871+
a_2	2229 148+	2865 684-	8 9698+	2048 164-	4904 653-	8 4902+
a_3	256 872+	301 759-	3837-	68 806+	290 306+	152+
a_4	25 767-	6 720-	153+	51 711+	8 387+	737-
a_5	2 577-	769+		2 483-	703-	
December 7						
a_0	51.9128 055+	19.2142 697+	0.8997 1208+	155.4386 988+	15.6907 517+	0.9396 5430+
a_1	11.8202 773+	3.9401 979+	0.0007 7398-	12.3027 024+	4.8685 820-	0.0112 1182+
a_2	2819 269+	3803 598-	7 9146+	1556 387-	3990 425-	8 0827+
a_3	128 229+	320 282-	3206-	250 886+	317 644+	2801-
a_4	39 414-	2 895-	277+	38 814+	4 959+	1085-
a_5	2 319-	1 930+		2 313-	721+	
December 8						
a_0	64.0236 593+	22.7419 831+	0.8997 0027+	167.6145 012+	10.4554 595+	0.9516 3553+
a_1	12.4056 774+	3.0832 018+	0.0007 2385+	12.0810 604+	5.5690 285-	0.0127 0091+
a_2	2944 122+	4762 472-	7 1209+	593 972-	3000 495-	6 5826+
a_3	51 187-	312 095-	2078-	383 278+	345 333+	7179-
a_4	52 057-	7 034+	342+	27 322+	8 771+	1371-
a_5	99+	2 756+		1 811-	1 838+	
December 9						
a_0	76.7134 343+	25.3187 072+	0.9011 1885+	179.6770 433+	4.6219 758+	0.9649 0920+
a_1	12.9583 772+	2.0412 700+	0.0020 9936+	12.0872 725+	6.0610 996-	0.0137 4717+
a_2	2479 148+	5628 915-	6 7023+	701 757+	1893 435-	3 6039+
a_3	256 023-	256 580-	689-	474 209+	399 085+	1 2757-
a_4	51 941-	21 390+	338+	18 787+	18 310+	1456-
a_5	4 342+	2 471+		2 196-	2 356+	

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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
December 18						
a_0	191.8835 716+	1.5864 922-	0.9788 7463+	313.4036 072+	22.7577 793-	0.9901 3793+
a_1	12.3763 010+	6.3115 601-	0.0140 2692+	14.9479 280+	3.7010 412+	0.0148 5236-
a_2	2215 274+	562 662-	1 0870-	6429 228-	6381 241+	9 9044-
a_3	526 036+	495 495+	1 8739-	156 563-	793 062-	2 7140+
a_4	8 706+	30 753+	1149-	144 122+	2 272+	666-
a_5	4 504-	1 735+		13 597-	7 236+	
December 19						
a_0	204.5344 238+	7.9015 202-	0.9925 9398+	327.7060 087+	18.4969 693-	0.9745 5987+
a_1	12.9783 917+	6.2622 787-	0.0132 0130+	13.6659 671+	4.7438 909+	0.0160 4575-
a_2	3800 674+	1125 861+	7 3712-	6170 554-	4087 864+	2 1833-
a_3	513 124+	634 214+	2 3521-	285 583+	715 173-	2 4292+
a_4	13 057-	40 569+	291-	73 494+	37 154+	1350-
a_5	9 199-	1 034-		10 339-	1 047+	
December 20						
a_0	217.9419 696+	13.9838 379-	1.0048 2005+	340.7897 942+	13.4119 892-	0.9585 2522+
a_1	13.8826 370+	5.8311 380-	0.0110 0974+	12.5417 652+	5.3622 935+	0.0158 0771-
a_2	5169 469+	3261 758+	14 5601-	4976 181-	2175 555+	4 2885+
a_3	366 572+	782 838+	2 4801-	479 188+	557 817-	1 8757+
a_4	60 585-	36 595+	1066+	22 236+	41 156+	1528-
a_5	13 581-	6 786-		5 021-	1 852-	
December 21						
a_0	232.3707 938+	19.4075 354-	1.0141 3644+	352.8835 817+	7.8839 915-	0.9433 1864+
a_1	14.9954 841+	4.9326 971-	0.0073 9637+	11.6966 732+	5.6455 950+	0.0144 4846-
a_2	5768 889+	5761 865+	21 3166-	3455 291-	730 427+	9 0028+
a_3	8 143-	857 709+	2 0463-	519 831+	412 147-	1 2578+
a_4	135 102-	1 875+	2510+	1 974-	31 277+	1392-
a_5	8 201-	13 405-		1 752-	2 539-	
December 22						
a_0	247.9280 221+	23.6794 282-	1.0192 2162+	4.2863 364+	2.2036 948-	0.9298 8233+
a_1	16.0887 020+	3.5289 632-	0.0026 1970+	11.1599 005+	5.6792 776+	0.0123 2624-
a_2	4851 050+	8211 507+	25 9232-	1925 077-	343 783-	11 9492+
a_3	618 077-	731 571+	1 0136-	495 157+	312 303-	6991+
a_4	181 697-	69 921-	3380+	10 127-	18 346+	1127-
a_5	14 068+	13 063-		516-	2 291-	
December 23						
a_0	264.4232 587+	26.3223 820-	1.0191 8144+	15.3021 807+	3.4115 796+	0.9188 0965+
a_1	16.8078 646+	1.7016 763-	0.0027 3363-	10.9191 234+	5.5230 233+	0.0097 7173-
a_2	2048 630+	9855 506+	26 9415-	505 487-	1193 550-	13 3793+
a_3	1194 338-	328 203+	3744+	449 468+	261 511-	2491+
a_4	102 124-	139 209-	3198+	12 366-	6 789+	846-
a_5	32 632+	581-		567-	1 732-	
December 24						
a_0	281.3096 035+	27.0196 664-	1.0138 2307+	26.2144 088+	8.7896 026+	0.9103 9231+
a_1	16.8347 419+	0.3119 262+	0.0078 8157-	10.9476 354+	5.2077 107+	0.0070 5496-
a_2	1819 063-	9999 522+	23 9341-	763 063+	1954 685-	13 6269+
a_3	1282 950-	227 044-	1 6763+	393 865+	251 244-	879-
a_4	73 399+	138 742-	2063+	15 036-	1 976-	597-
a_5	20 383+	12 819+		1 369-	997-	
December 25						
a_0	297.8435 222+	25.7430 846-	1.0037 3634+			
a_1	16.1255 683+	2.1946 316+	0.0120 8297-			
a_2	5024 091-	8614 884+	17 7131-			
a_3	799 008-	652 886-	2 5019+			
a_4	172 422+	69 364-	569+			
a_5	4 155-	14 103+				

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.