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 ascens ion (α) the declination (δ) and the horizontal parallax (π) for the Moon on 2013 January $21^d\ 13^h\ 23^m\ 48^s.32$ UT1, using an assumed value of $\Delta T = 67^s$.

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

	right ascension	declination	horizontal parallax
	°	°	°
b_1	+0.000 0772	+0.000 0815	−0.000 004 93
b_2	−0.002 3947	+0.000 7546	−0.000 029 94
b_3	−0.001 3841	−0.012 7469	+0.001 358 78
b_4	+0.099 2617	−0.414 3609	−0.003 006 75
b_5	+12.392 0487	+1.727 8722	π = +0.902 660 54
b_6	α = 57.594 0620	δ = +19.561 4122	
	= $3^h\ 50^m\ 22^s.575$	= +19° 33′ 41″.08	= 54′ 09″.578

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	January 0			January 8		
	°	°	°	°	°	°
a_0	129·4248 328+	13·4282 453+	0·9181 6542+	232·4886 968+	18·9677 047−	1·0021 1202+
a_1	12·1579 848+	3·4292 988−	0·0066 6353+	15·2476 669+	2·2542 917−	0·0096 5616+
a_2	961 488−	3117 368−	5 9159+	3662 435+	5987 998+	13 1285−
a_3	94 593+	235 151+	1114+	348 293−	470 221+	2 1866−
a_4	26 713+	6 699+	15+	93 339−	33 441−	801+
a_5	903−	401−		5 293+	7 404−	
	January 1			January 9		
a_0	141·4987 091+	9·7113 545+	0·9254 3183+	248·0589 733+	20·5802 590−	1·0102 4468+
a_1	12·0042 986+	3·9797 474−	0·0078 8075+	15·8409 863+	0·9326 995−	0·0064 0651+
a_2	526 492−	2375 726−	6 2509+	2110 753+	7123 679+	19 1689−
a_3	192 300+	258 287+	1196+	664 104−	264 735+	1 8624−
a_4	22 036+	4 707+	253−	64 712−	72 539−	2081+
a_5	1 095−	208+		13 746+	3 348−	
	January 2			January 10		
a_0	153·4716 826+	5·5203 547+	0·9339 4709+	264·0395 280+	20·7817 059−	1·0145 6888+
a_1	11·9649 568+	4·3754 190−	0·0091 5669+	16·0448 928+	0·5407 748+	0·0020 9738+
a_2	171 668+	1570 525−	6 4477+	131 718−	7449 162+	23 4810−
a_3	269 390+	279 507+	196+	786 047−	55 019−	1 0074−
a_4	16 583+	5 831+	575−	8 683+	89 312−	2944+
a_5	1 270−	751+		12 762+	3 598+	
	January 3			January 11		
a_0	165·4822 765+	1·0164 921+	0·9437 4476+	279·9947 888+	19·5100 881−	1·0142 4686+
a_1	12·0861 048+	4·6029 634−	0·0104 2910+	15·7925 793+	1·9801 805+	0·0027 8311−
a_2	1066 655+	689 474−	6 1510+	2309 959−	6784 501+	24 7368−
a_3	322 675+	310 501+	2109−	628 776−	373 893−	2014+
a_4	10 424+	9 766+	912−	73 805+	69 300−	2940+
a_5	1 871−	1 036+		3 558+	7 797+	
	January 4			January 12		
a_0	177·7081 696+	3·6232 884−	0·9547 5875+	295·5012 309+	16·8949 971−	1·0090 3961+
a_1	12·3994 707+	4·6432 838−	0·0115 5955+	15·1732 472+	3·2010 905+	0·0075 5232−
a_2	2078 544+	311 041+	4 9628+	3718 209−	5325 237+	22 3951−
a_3	344 884+	359 747+	5789−	302 396−	573 484−	1 4000+
a_4	1 340+	15 288+	1191−	89 316+	28 617−	2067+
a_5	3 217−	749+		4 174−	7 042+	
	January 5			January 13		
a_0	190·3497 954+	8·1978 896−	0·9667 4477+	310·2809 319+	13·2208 888−	0·9994 0844+
a_1	12·9175 702+	4·4666 629−	0·0123 3075+	14·3725 240+	4·0861 635+	0·0115 2863−
a_2	3089 062+	1489 591+	2 5084+	4131 559−	3503 551+	16 9946−
a_3	316 984+	427 608+	1 0635−	11 882+	619 369−	2 2308+
a_4	14 729−	19 583+	1294−	66 293+	6 912+	772+
a_5	5 155−	582−		6 150−	3 771+	
	January 6			January 14		
a_0	203·6059 818+	12·4709 323−	0·9792 0707+	324·2475 024+	8·8452 388−	0·9864 1114+
a_1	13·6220 076+	4·0329 229−	0·0124 6153+	13·5732 202+	4·6057 099+	0·0142 2749−
a_2	3899 938+	2884 178+	1 4511−	3759 780−	1724 555+	9 8750−
a_3	205 984+	498 568+	1 5946−	216 271+	555 740−	2 5285+
a_4	41 466−	17 216+	1060−	34 814+	25 292+	395−
a_5	6 224−	3 272−		4 727−	783+	
	January 7			January 15		
a_0	217·6338 125+	16·1641 862−	0·9913 5343+	337·4693 805+	4·1200 399−	0·9714 4504+
a_1	14·4440 952+	3·3012 698−	0·0116 5045+	12·8977 101+	4·7944 055+	0·0154 5983−
a_2	4206 494+	4450 432+	6 8487−	2949 348−	216 835+	2 5492−
a_3	20 336−	532 909+	2 0347−	309 321+	447 733−	2 3544+
a_4	74 974−	659+	352−	11 262+	28 638+	1119−
a_5	3 292−	6 488−		2 819−	898−	

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	350·1039 322+	0·6540 497+	0·9559 5454+	88·4014 302+	20·5310 336+	0·9043 1890+
a_1	12·4037 336+	4·7144 579+	0·0153 0818−	12·7135 939+	0·7290 485−	0·0032 8143+
a_2	1981 978−	963 582−	3 8342+	10 471−	4648 896−	9 1405+
a_3	326 892+	342 496−	1 8938+	170 511−	27 246+	6737−
a_4	2 584−	23 749+	1381−	2 335+	18 650+	19−
a_5	1 577−	1 438−		2 452+	20+	
	January 17			January 25		
a_0	2·3417 410+	5·2401 309+	0·9412 0535+	101·0974 047+	19·3416 870+	0·9084 4681+
a_1	12·1035 840+	4·4277 734+	0·0140 2847−	12·6625 055+	1·6431 848−	0·0049 0664+
a_2	1032 564−	1862 992−	8 6885+	483 459−	4455 073−	7 1127+
a_3	301 109+	261 801−	1 3342+	137 159−	101 759+	6813−
a_4	10 308−	16 341+	1327−	14 752+	18 682+	142+
a_5	1 028−	1 287−		1 540+	468−	
	January 18			January 26		
a_0	14·3710 459+	9·4569 304+	0·9281 6589+	113·6994 775+	17·2649 922+	0·9139 9802+
a_1	11·9827 671+	3·9825 283+	0·0119 4360−	12·5313 353+	2·4964 332−	0·0061 3049+
a_2	201 368−	2563 235−	11 9011+	791 049−	4042 398−	5 1586+
a_3	249 713+	209 024−	8008+	63 411−	171 671+	6233−
a_4	15 436−	9 800+	1124−	22 372+	16 229+	286+
a_5	847−	796−		404+	705−	
	January 19			January 27		
a_0	26·3570 192+	13·1631 332+	0·9174 8124+	126·1476 445+	14·3830 388+	0·9205 8490+
a_1	12·0108 096+	3·4106 968+	0·0093 6811−	12·3632 523+	3·2472 720−	0·0069 8666+
a_2	446 656+	3139 473−	13 6362+	843 051−	3437 066−	3 4629+
a_3	179 618+	177 425−	3512+	29 596+	229 574+	5068−
a_4	19 808−	5 783+	889−	24 163+	12 616+	376+
a_5	663−	178−		458−	653−	
	January 20			January 28		
a_0	38·4284 091+	16·2427 007+	0·9095 0299+	138·4319 219+	10·8162 138+	0·9278 7094+
a_1	12·1457 721+	2·7317 994+	0·0065 7104−	12·2129 568+	3·8610 930−	0·0075 4229+
a_2	859 989+	3638 830−	14 1634+	613 902−	2679 183−	2 1686+
a_3	94 057+	155 733−	32−	121 375+	273 655+	3529−
a_4	23 359−	4 921+	674−	21 665+	9 313+	379+
a_5	162−	413+		924−	399−	
	January 21			January 29		
a_0	50·6672 338+	18·5955 772+	0·9043 4123+	150·5977 000+	6·7154 594+	0·9355 9859+
a_1	12·3365 640+	1·9594 890+	0·0037 6627−	12·1347 925+	4·3113 071−	0·0078 8533+
a_2	1000 354+	4072 357−	13 7551+	129 050−	1806 324−	1 3343+
a_3	455−	131 687−	2718−	198 620+	307 110+	1975−
a_4	24 379−	7 090+	493−	16 961+	7 338+	272+
a_5	772+	815+		1 186−	70−	
	January 22			January 30		
a_0	63·1014 269+	20·1354 523+	0·9019 1836+	162·7410 271+	2·2549 577+	0·9436 0032+
a_1	12·5271 338+	1·1087 550+	0·0011 1650−	12·1747 595+	4·5775 386−	0·0081 0386+
a_2	860 418+	4416 708−	12 6490+	556 712+	841 653−	8987+
a_3	89 630−	95 147−	4685−	254 369+	335 907+	854−
a_4	20 549−	11 318+	333−	11 072+	7 075+	59+
a_5	1 880+	874+		1 566−	188+	
	January 23			January 31		
a_0	75·7037 725+	20·7942 411+	0·9020 1659+	174·9978 452+	2·3724 292−	0·9517 8609+
a_1	12·6650 495+	0·2018 335+	0·0012 5944+	12·3660 572+	4·6421 732−	0·0082 6032+
a_2	487 054+	4625 477−	11 0485+	1370 594+	210 426+	6687+
a_3	152 636−	41 314−	6018−	282 550+	366 072+	604−
a_4	10 930−	15 825+	179−	3 360+	8 195+	228−
a_5	2 593+	557+		2 323−	177+	

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	187·5293 204+	6·9561 153−	0·9601 0496+	304·0193 715+	14·8988 160−	0·9965 6575+
a_1	12·7251 219+	4·4869 006−	0·0083 6682+	14·5323 109+	3·6357 492+	0·0051 7841−
a_2	2215 162+	1359 626+	3415+	3127 027−	4387 992+	17 4564−
a_3	272 115+	400 294+	1524−	131 374−	531 113−	3656+
a_4	8 240−	9 375+	527−	60 977+	18 141−	1907+
a_5	3 442−	371−		3 622−	4 577+	
	February 2			February 10		
a_0	200·5020 017+	11·2661 234−	0·9684 8541+	318·2315 778+	10·8787 353−	0·9896 9732+
a_1	13·2447 707+	4·0913 240−	0·0083 6827+	13·8900 723+	4·3490 437+	0·0084 8366−
a_2	2947 564+	2613 102+	4392−	3191 675−	2731 595+	15 2316−
a_3	204 291+	433 325+	3672−	75 961+	558 951−	1 1417+
a_4	25 903−	7 861+	755−	41 773+	4 884+	1375+
a_5	4 258−	1 681−		4 164−	2 729+	
	February 3			February 11		
a_0	214·0589 418+	15·0521 865−	0·9767 6548+	331·8138 397+	6·3116 660−	0·9798 1843+
a_1	13·8830 820+	3·4364 037−	0·0081 4002+	13·2891 540+	4·7309 935+	0·0111 3244−
a_2	3362 249+	3943 456+	1 9955−	2754 852−	1111 305+	11 0057−
a_3	58 769+	446 909+	6764−	201 981+	513 145−	1 6952+
a_4	48 425−	450−	811−	20 618+	18 326+	581+
a_5	3 186−	3 542−		3 156−	949+	
	February 4			February 12		
a_0	228·2789 645+	18·0499 530−	0·9846 3021+	344·8494 527+	1·5189 291−	0·9677 6074+
a_1	14·5522 047+	2·5155 922−	0·0075 0550+	12·8054 483+	4·8071 142+	0·0128 0181−
a_2	3215 929+	5245 979+	4 5048−	2056 762−	308 733−	5 5948−
a_3	164 252−	408 995+	1 0107−	253 563+	431 041−	1 9224+
a_4	65 808−	18 742−	602−	4 885+	22 775+	176−
a_5	1 214+	4 814−		2 018−	243−	
	February 5			February 13		
a_0	243·1298 774+	20·0024 033−	0·9915 7815+	357·4748 679+	3·2164 609+	0·9545 8993+
a_1	15·1204 052+	1·3536 003−	0·0062 7722+	12·4711 108+	4·6250 433+	0·0133 5114−
a_2	2340 476+	6312 206+	7 8816−	1286 933−	1467 673−	504+
a_3	411 933−	286 488+	1 2610−	253 381+	342 687−	1 8431+
a_4	59 582−	43 984−	81−	5 093−	21 301+	700−
a_5	7 316+	3 810−		1 256−	790−	
	February 6			February 14		
a_0	258·4379 103+	20·7009 136−	0·9969 4030+	9·8419 885+	7·6625 192+	0·9414 2114+
a_1	15·4447 481+	0·0247 073−	0·0043 1932+	12·2870 736+	4·2368 279+	0·0128 1618−
a_2	820 674+	6869 559+	11 6900−	569 914−	2375 858−	5 1516+
a_3	575 691−	74 460+	1 2984−	220 701+	265 417−	1 5549+
a_4	20 584−	63 771−	678+	11 334−	17 168+	951−
a_5	9 901+	256−		829−	838−	
	February 7			February 15		
a_0	273·9060 884+	20·0376 217−	0·9999 6757+	22·0929 245+	11·6368 526+	0·9292 6609+
a_1	15·4328 883+	1·3459 106+	0·0016 1894+	12·2343 533+	3·6884 796+	0·0113 5747−
a_2	930 608−	6707 825+	15 1546−	15 875+	3077 499−	9 2442+
a_3	561 057−	180 998−	1 0228−	167 262+	204 982−	1 1693+
a_4	31 018+	64 557−	1454+	15 549−	12 873+	993−
a_5	6 239+	3 608+		508−	579−	
	February 8			February 16		
a_0	289·1935 359+	18·0451 233−	0·9999 8331+	34·3439 858+	14·9983 134+	0·9189 4005+
a_1	15·0939 698+	2·6091 595+	0·0016 6060−	12·2812 339+	3·0163 452+	0·0091 9755−
a_2	2365 330−	5813 731+	17 3361−	419 257+	3621 007−	12 1587+
a_3	378 041−	402 154−	4273−	100 237+	159 066−	7700+
a_4	61 908+	45 405−	1938+	18 233−	9 944+	921−
a_5	121+	5 305+		78−	198−	

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	46·6753 381+	17·6376 260+	0·9110 2616+	146·8017 042+	8·0597 778+	0·9389 9288+
a_1	12·3878 251+	2·2483 032+	0·0065 7165−	12·3217 306+	4·1893 847−	0·0095 8488+
a_2	609 761+	4040 517−	13 9193+	32 641+	2261 494−	2044+
a_3	26 894+	121 070−	4013+	159 394+	300 162+	1 0216−
a_4	18 765−	8 983+	814−	14 601+	13 805+	426+
a_5	560+	151+		1 047−	225−	
	February 18			February 26		
a_0	59·1250 083+	19·4706 837+	0·9058 7844+	159·1439 936+	3·6756 180+	0·9485 0030+
a_1	12·5106 204+	1·4075 472+	0·0036 9995−	12·3813 930+	4·5462 255−	0·0093 3634+
a_2	583 436+	4348 317−	14 6379+	587 946+	1280 414−	2 5980−
a_3	42 152−	83 517−	763+	207 070+	353 031+	8479−
a_4	16 014−	9 804+	716−	9 359+	12 745+	650+
a_5	1 288+	352+		1 505−	390−	
	February 19			February 27		
a_0	71·6882 844+	20·4360 632+	0·9036 4276+	171·6056 737+	0·9621 102−	0·9574 9855+
a_1	12·6089 008+	0·5169 268+	0·0007 7809−	12·5640 938+	4·6914 960−	0·0085 8838+
a_2	373 778+	4536 508−	14 4399+	1250 259+	148 731−	4 7495−
a_3	93 031−	40 768−	2093−	229 093+	399 932+	5824−
a_4	9 489−	11 637+	637−	1 864+	10 888+	730+
a_5	1 808+	365+		2 161−	688−	
	February 20			February 28		
a_0	84·3244 918+	20·4964 626+	0·9042 8135+	184·3176 730+	5·6274 661−	0·9655 6104+
a_1	12·6528 554+	0·3977 680−	0·0020 2160+	12·8825 379+	4·5972 521−	0·0074 9298+
a_2	55 842+	4585 331−	13 4318+	1927 091+	1109 535+	6 0621−
a_3	112 886−	9 362+	4644−	214 524+	436 292+	2845−
a_4	289−	13 503+	567−	9 035−	7 584+	625+
a_5	1 836+	240+		2 907−	1 218−	
	February 21			March 1		
a_0	96·9717 974+	19·6424 720+	0·9075 9403+	197·4131 782+	10·0694 988−	0·9724 2559+
a_1	12·6309 594+	1·3065 048−	0·0045 4596+	13·3272 453+	4·2420 335−	0·0062 2021+
a_2	266 190−	4473 830−	11 7013+	2487 302+	2451 761+	6 5490−
a_3	95 957−	65 677+	6923−	149 184+	453 980+	305−
a_4	9 002+	14 701+	478−	24 027−	1 622+	359+
a_5	1 350+	79+		3 179−	2 032−	
	February 22			March 2		
a_0	109·5675 772+	17·8966 299+	0·9132 3610+	211·0013 516+	14·0209 993−	0·9779 9143+
a_1	12·5532 087+	2·1756 478−	0·0066 5937+	13·8582 624+	3·6158 559−	0·0049 1560+
a_2	486 570−	4187 803−	9 3417+	2758 761+	3803 100+	6 4357−
a_3	46 882−	125 202+	8856−	22 051+	439 642+	1137+
a_4	15 725+	15 081+	340−	40 837−	8 597−	19+
a_5	599+	36−		1 908−	2 921−	
	February 23			March 3		
a_0	122·0690 731+	15·3162 265+	0·9207 3769+	225·1334 206+	17·2137 329−	0·9822 7502+
a_1	12·4484 187+	2·9696 334−	0·0082 4843+	14·3993 448+	2·7282 430−	0·0036 6330+
a_2	526 906−	3722 066−	6 4875+	2560 675+	5041 174+	6 0927−
a_3	21 609+	185 128+	1 0238−	158 407−	375 903+	1181+
a_4	18 578+	14 906+	131−	51 246−	23 617−	282−
a_5	111−	94−		1 529+	3 203−	
	February 24			March 4		
a_0	134·4688 088+	11·9943 804+	0·9295 3118+	239·7680 205+	19·4029 501−	0·9853 3803+
a_1	12·3568 949+	3·6525 932−	0·0092 3353+	14·8442 284+	1·6182 840−	0·0024 6887+
a_2	351 755−	3078 185−	3 3457+	1793 296+	5995 067+	5 9126−
a_3	94 527+	243 769+	1 0779−	345 782−	250 043+	7−
a_4	17 875+	14 461+	139+	43 331−	40 253−	441−
a_5	642−	139−		5 671+	2 117−	

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	254·7532 343+	20·4009 601−	0·9872 1117+	5·0698 926+	5·8552 550+	0·9467 0890+
a_1	15·0846 578+	0·3614 151−	0·0012 6848+	12·4143 055+	4·3857 062+	0·0105 7191−
a_2	552 892+	6482 462+	6 1776−	463 756−	1892 520−	1 1949−
a_3	461 541−	69 163+	1840−	186 876+	325 263−	1 2662+
a_4	13 389−	51 122−	395−	11 012−	16 015+	44+
a_5	7 217+	184+		841−	47−	
	March 6			March 14		
a_0	269·8464 099+	20·1123 065−	0·9878 3955+	17·4553 250+	10·0207 797+	0·9361 4456+
a_1	15·0550 237+	0·9354 720+	0·0000 3805−	12·3727 926+	3·9160 055+	0·0104 2929−
a_2	839 720−	6385 111+	6 9585−	22 371+	2772 707−	2 6198+
a_3	444 340−	132 228−	3479−	134 691+	261 736−	1 2806+
a_4	24 027+	49 851−	141−	15 299−	15 706+	289−
a_5	4 688+	2 390+		389−	149−	
	March 7			March 15		
a_0	284·7758 991+	18·5562 924−	0·9870 6946+	29·8422 548+	13·6348 966+	0·9261 0241+
a_1	14·7657 277+	2·1540 812+	0·0015 3977−	12·4113 604+	3·2891 512+	0·0095 3273−
a_2	1981 726−	5713 301+	8 0747−	330 729+	3465 177−	6 2814+
a_3	303 749−	307 188−	4072−	69 933+	200 403−	1 1613+
a_4	47 345+	37 308−	254+	17 372−	14 918+	510−
a_5	433+	3 322+		167+	151−	
	March 8			March 16		
a_0	299·3178 570+	15·8649 984−	0·9846 8404+	42·2919 610+	16·5589 666+	0·9173 0885+
a_1	14·2974 088+	3·1913 226+	0·0032 6670−	12·4916 219+	2·5418 869+	0·0079 4847−
a_2	2604 726−	4601 158+	9 1311−	437 952+	3978 385−	9 4557+
a_3	111 716−	423 366−	3036−	2 509+	142 225−	9545+
a_4	48 530+	20 341−	667+	16 613−	14 160+	625−
a_5	2 468−	3 003+		832+	131−	
	March 9			March 17		
a_0	313·3482 279+	12·2576 304−	0·9804 8055+	54·8260 508+	18·6901 955+	0·9103 9514+
a_1	13·7611 260+	3·9779 085+	0·0051 5727−	12·5737 362+	1·7091 413+	0·0057 9602−
a_2	2673 502−	3239 048+	9 6329−	354 111+	4321 403−	11 9424+
a_3	57 256+	475 186−	305−	55 285−	86 899−	7029+
a_4	35 375+	5 272−	951+	12 437−	13 518+	673−
a_5	3 225−	2 148+		1 425+	146−	
	March 10			March 18		
a_0	326·8509 443+	8·0036 482−	0·9743 6644+	67·4285 685+	19·9598 439+	0·9058 5692+
a_1	13·2561 406+	4·4821 264+	0·0070 5493−	12·6237 112+	0·8241 254+	0·0032 2359−
a_2	2321 790−	1803 322+	9 1524−	127 896+	4502 451−	13 6466+
a_3	166 775+	475 279−	3581+	90 624−	34 312−	4335+
a_4	18 909+	5 384+	1000+	5 199−	12 786+	694−
a_5	2 723−	1 310+		1 693+	192−	
	March 11			March 19		
a_0	339·8932 019+	3·3880 482−	0·9664 4208+	80·0556 563+	20·3315 524+	0·9040 3440+
a_1	12·8480 178+	4·7030 145+	0·0087 3793−	12·6208 700+	0·0816 400−	0·0003 9198−
a_2	1735 263−	422 863+	7 4840−	158 231−	4530 595−	14 5299+
a_3	215 641+	441 019−	7652+	94 596−	14 906+	1563+
a_4	5 219+	11 816+	803+	3 385+	11 797+	721−
a_5	1 940−	663+		1 503+	203−	
	March 12			March 20		
a_0	352·5895 855+	1·3143 986+	0·9570 4029+	92·6517 323+	19·7995 029+	0·9051 0383+
a_1	12·5667 757+	4·6603 386+	0·0099 7303−	12·5629 495+	0·9786 698−	0·0025 3208+
a_2	1076 433−	822 689−	4 7176−	406 689−	4417 131−	14 5652+
a_3	217 520+	387 375−	1 0898+	66 340−	60 117+	1314−
a_4	4 465−	15 027+	443+	10 931+	10 736+	763−
a_5	1 309−	215+		960+	110−	

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	105·1685 679+	18·3861 944+	0·9090 7166+	206·8206 383+	12·7678 130−	0·9881 0487+
a_1	12·4665 612+	1·8398 209−	0·0053 7516+	14·0658 196+	3·8990 170−	0·0059 6923+
a_2	530 545−	4173 462−	13 7116+	2939 234+	3521 824+	13 9636−
a_3	13 388−	102 084+	4371−	9 283−	510 387+	3587−
a_4	15 654+	10 156+	810−	46 603−	7 947−	1465+
a_5	320+	99+		1 835−	4 199−	
	March 22			March 30		
a_0	117·5823 331+	16·1402 612+	0·9157 6617+	221·1746 091+	16·2648 235−	0·9926 5653+
a_1	12·3628 564+	2·6397 760−	0·0079 5395+	14·6313 277+	3·0468 139−	0·0031 2758+
a_2	473 618−	3805 282−	11 9142+	2613 275+	4963 216+	14 1717−
a_3	52 112+	143 846+	7630−	211 632−	436 812+	2374+
a_4	17 124+	10 663+	821−	56 705−	29 659−	1097+
a_5	214−	361+		2 423+	3 903−	
	March 23			March 31		
a_0	129·9047 299+	13·1354 440+	0·9248 2703+	236·0406 729+	18·7749 907−	0·9944 0165+
a_1	12·2905 086+	3·3532 329−	0·0100 7500+	15·0690 276+	1·9369 394−	0·0004 0836+
a_2	216 702−	3306 148−	9 1350+	1662 452+	6056 571+	12 8190−
a_3	118 237+	190 215+	1 0958−	411 669−	280 410+	6794+
a_4	15 946+	12 538+	737−	43 985−	49 883−	518+
a_5	601−	557+		7 040+	1 709−	
	March 24			April 1		
a_0	142·1869 265+	9·4719 273+	0·9356 9858+	251·2310 844+	20·0833 912−	0·9936 0123+
a_1	12·2887 167+	3·9521 042−	0·0115 4374+	15·2639 445+	0·6623 060−	0·0019 3091−
a_2	227 660+	2654 683−	5 4130+	234 214+	6581 421+	10 4874−
a_3	175 797+	245 925+	1 3967−	516 695−	65 584+	8832+
a_4	12 899+	15 455+	492−	6 764−	58 419−	53−
a_5	971−	550+		7 987+	1 454+	
	March 25			April 2		
a_0	154·5171 819+	5·2805 480+	0·9476 3903+	266·4669 030+	20·0866 931−	0·9907 0937+
a_1	12·3916 617+	4·4028 061−	0·0121 8760+	15·1570 627+	0·6510 155+	0·0037 6558−
a_2	822 739+	1818 641−	9410+	1276 407−	6442 314+	7 8816−
a_3	217 374+	313 049+	1 5997−	465 920−	152 324−	8547+
a_4	8 099+	18 383+	55−	34 467+	50 382−	446−
a_5	1 501−	206+		4 313+	3 593+	
	March 26			April 3		
a_0	167·0135 148+	0·7290 415+	0·9597 6021+	281·4536 110+	18·8113 575−	0·9862 3664+
a_1	12·6239 102+	4·6651 644−	0·0118 9369+	14·7779 433+	1·8754 248+	0·0051 0337−
a_2	1508 444+	767 101−	3 8729−	2424 312−	5719 086+	5 5897−
a_3	234 286+	388 195+	1 6244−	287 643−	317 832−	6683+
a_4	633+	19 625+	527+	55 540+	31 655−	592−
a_5	2 312−	566−		509−	3 709+	
	March 27			April 4		
a_0	179·8115 301+	3·9721 075−	0·9711 0944+	295·9658 619+	16·3986 019−	0·9806 3521+
a_1	12·9949 808+	4·6945 605−	0·0106 5289+	14·2287 462+	2·9130 835+	0·0060 4454−
a_2	2191 951+	509 601+	8 4120−	2959 276−	4612 782+	3 9377−
a_3	213 190+	460 334+	1 4100−	72 146−	408 019−	4252+
a_4	11 061−	16 974+	1104+	51 796+	12 866−	513−
a_5	3 244−	1 759−		3 207−	2 526+	
	March 28			April 5		
a_0	193·0455 944+	8·5681 530−	0·9807 9119+	309·8963 248+	13·0660 760−	0·9742 3428+
a_1	13·4912 809+	4·4486 316−	0·0085 9171+	13·6343 616+	3·7093 494+	0·0067 2507−
a_2	2732 616+	1974 861+	11 9685−	2897 135−	3336 766+	2 9628−
a_3	136 394+	509 823+	9585−	102 742+	434 960−	2167+
a_4	27 853−	8 199+	1468+	34 971+	388−	281−
a_5	3 528−	3 165−		3 529−	1 236+	

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	323·2543 913+	9·0664 612−	0·9672 3180+	63·2409 359+	19·5062 397+	0·9071 4516+
a_1	13·0979 821+	4·2466 769+	0·0072 6386−	12·6660 887+	1·1114 840+	0·0044 1286−
a_2	2414 416−	2041 884+	2 4726−	123 120+	4478 833−	9 5512+
a_3	207 758+	424 611−	1038+	131 144−	50 626−	7310+
a_4	17 081+	5 539+	7+	5 949−	17 138+	315−
a_5	2 758−	446+		2 209+	401−	
	April 7			April 15		
a_0	336·1331 399+	4·6574 585−	0·9597 3113+	75·9058 482+	20·1664 514+	0·9037 5736+
a_1	12·6828 804+	4·5301 086+	0·0077 2693−	12·6500 937+	0·2071 837+	0·0022 9594−
a_2	1716 247−	805 711+	2 1489−	283 901−	4531 911−	11 5510+
a_3	248 981+	398 166−	1090+	133 039−	13 762+	6044+
a_4	3 303+	7 571+	263+	5 297+	15 045+	442−
a_5	1 922−	166+		1 876+	663−	
	April 8			April 16		
a_0	348·6694 317+	0·0858 217−	0·9518 0285+	88·5149 653+	19·9232 584+	0·9026 7255+
a_1	12·4146 858+	4·5749 124+	0·0081 1346−	12·5564 579+	0·6893 835−	0·0001 7792+
a_2	968 714−	341 720−	1 6592−	632 475−	4407 003−	13 0954+
a_3	243 300+	366 212−	2181+	93 542−	67 310+	4279+
a_4	6 253−	8 300+	419+	14 719+	11 610+	564−
a_5	1 356−	194+		1 065+	664−	
	April 9			April 17		
a_0	1·0108 152+	4·4191 470+	0·9435 4946+	101·0003 998+	18·8010 003+	0·9041 9715+
a_1	12·2907 545+	4·4001 222+	0·0083 6310−	12·4083 193+	1·5462 785−	0·0029 0279+
a_2	289 903−	1388 621−	7526−	814 166−	4142 059−	14 0361+
a_3	204 950+	330 993−	3899+	24 501−	107 277+	2029+
a_4	13 064−	9 234+	447+	19 919+	8 200+	702−
a_5	975−	337+		208+	384−	
	April 10			April 18		
a_0	13·2916 704+	8·6482 648+	0·9351 5457+	113·3268 652+	16·8520 253+	0·9085 1681+
a_1	12·2885 461+	4·0269 623+	0·0083 7874−	12·2462 068+	2·3394 184−	0·0057 4279+
a_2	236 782+	2322 828−	6827+	766 109−	3774 868−	14 2184+
a_3	143 199+	290 619−	5720+	56 916+	136 509+	773−
a_4	18 082−	10 922+	359+	20 768+	6 245+	864−
a_5	550−	458+		383−	83+	
	April 11			April 19		
a_0	25·6163 514+	12·4150 205+	0·9269 0488+	125·5041 911+	14·1494 038+	0·9156 6508+
a_1	12·3713 550+	3·4798 091+	0·0080 5624−	12·1181 749+	3·0508 993−	0·0085 2874+
a_2	552 350+	3124 564−	2 6090+	474 616−	3327 038−	13 4631+
a_3	65 771+	242 339−	7172+	135 976+	162 613+	4231−
a_4	21 015−	13 256+	197+	18 700+	6 685+	1034−
a_5	115+	468+		688−	599+	
	April 12			April 20		
a_0	38·0474 286+	15·5595 117+	0·9191 8323+	137·5903 032+	10·7827 903+	0·9254 8748+
a_1	12·4932 088+	2·7877 306+	0·0073 1142−	12·0711 803+	3·6645 491−	0·0110 5307+
a_2	624 697+	3767 360−	4 8726+	38 618+	2793 086−	11 5700+
a_3	16 614−	184 728−	7959+	203 773+	195 576+	8393−
a_4	20 551−	15 659+	9+	15 213+	9 771+	1159−
a_5	1 015+	308+		901−	1 017+	
	April 13			April 21		
a_0	50·5994 919+	17·9536 303+	0·9124 3874+	149·6871 537+	6·8595 691+	0·9376 0203+
a_1	12·6054 515+	1·9852 575+	0·0060 9778−	12·1456 695+	4·1600 762−	0·0130 6890+
a_2	461 690+	4224 505−	7 2601+	732 201+	2137 529−	8 3577+
a_3	88 193−	119 201−	7986+	255 366+	244 906+	1 3093−
a_4	15 428−	17 242+	167−	10 791+	15 032+	1140−
a_5	1 856+	17−		1 312−	1 157+	

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			April 30		
	°	°	°	°	°	°
a_0	161·9325 278+	2·5118 495+	0·9513 6438+	277·4690 816+	19·1825 927−	0·9999 9942+
a_1	12·3723 790+	4·5075 191−	0·0143 0201+	15·2927 921+	1·6085 154+	0·0074 8606−
a_2	1549 941+	1300 995−	3 7551+	2756 931−	6202 275+	12 4068−
a_3	284 893+	316 373+	1 7759−	429 087−	349 386−	1 7387+
a_4	4 399+	21 120+	850−	72 657+	43 097−	225−
a_5	2 180−	757+		103+	5 896+	
	April 23			May 1		
a_0	174·4886 121+	2·0919 441−	0·9658 5582+	292·4505 479+	16·9925 085−	0·9914 4429+
a_1	12·7685 029+	4·6639 811−	0·0144 8620+	14·6417 888+	2·7298 618+	0·0094 5489−
a_2	2409 210+	217 519−	2 0622−	3607 513−	4954 587+	7 3441−
a_3	279 886+	407 697+	2 1278−	140 059−	463 893−	1 6361+
a_4	6 425−	25 330+	198−	71 240+	12 998−	812−
a_5	3 571−	484−		4 394−	3 926+	
	April 24			May 2		
a_0	187·5250 250+	6·7344 227−	0·9799 2104+	306·7242 640+	13·8144 844−	0·9814 1048+
a_1	13·3299 540+	4·5752 882−	0·0134 2745+	13·9045 667+	3·5783 725+	0·0104 6541−
a_2	3174 544+	1152 770+	8 5349−	3644 392−	3524 146+	2 9296−
a_3	217 786+	502 899+	2 2141−	100 600+	477 998−	1 3001+
a_4	24 662−	23 284+	765+	47 962+	6 409+	1022−
a_5	4 848−	2 692−		4 894−	1 520+	
	April 25			May 3		
a_0	201·1912 610+	11·1420 848−	0·9922 8124+	320·2787 583+	9·9307 041−	0·9707 7191+
a_1	14·0179 108+	4·1858 996−	0·0110 8686+	13·2226 075+	4·1431 245+	0·0107 0220−
a_2	3631 242+	2774 245+	14 6874−	3103 819−	2143 743+	3601+
a_3	71 124+	567 646+	1 9032−	244 226+	438 053−	8842+
a_4	50 270−	9 743+	1773+	23 154+	13 556+	942−
a_5	4 169−	5 291−		3 597−	20−	
	April 26			May 4		
a_0	215·5739 645+	14·9933 501−	1·0017 2677+	333·2173 622+	5·6156 571−	0·9601 8471+
a_1	14·7433 091+	3·4595 067−	0·0076 4941+	12·6825 760+	4·4458 689+	0·0104 0265−
a_2	3501 014+	4482 579+	19 3139−	2268 183−	910 667+	2 4546+
a_3	168 896−	553 034+	1 1761−	301 637+	384 365−	5038+
a_4	73 018−	17 722−	2415+	5 276+	13 102+	699−
a_5	586+	6 540−		2 274−	594−	
	April 27			May 5		
a_0	230·6432 420+	17·9517 217−	1·0073 5133+	345·7035 838+	1·1159 072−	0·9500 7092+
a_1	15·3639 369+	2·4074 369−	0·0035 3052+	12·3204 049+	4·5176 364+	0·0097 8853−
a_2	2562 047+	5969 725+	21 3942−	1354 339−	169 794−	3 5563+
a_3	450 933−	417 990+	1865−	300 472+	337 870−	2239+
a_4	70 219−	51 998−	2385+	5 929−	9 926+	396−
a_5	8 084+	4 409−		1 486−	536−	
	April 28			May 6		
a_0	246·2120 768+	19·7260 278−	1·0087 4762+	357·9178 605+	3·3519 018+	0·9406 5645+
a_1	15·7170 248+	1·1110 927−	0·0007 0879−	12·1365 647+	4·3860 195+	0·0090 2594−
a_2	869 180+	6867 533+	20 5437−	503 357−	1129 223−	3 9993+
a_3	648 943−	168 780+	7843+	262 122+	303 306−	669+
a_4	26 876−	74 651−	1701+	13 313−	7 147+	108−
a_5	11 806+	688+		1 126−	160−	
	April 29			May 7		
a_0	261·9496 183+	20·1408 856−	1·0060 7990+	10·0288 579+	7·5953 670+	0·9320 3607+
a_1	15·6913 255+	0·2835 364+	0·0045 1417−	12·1086 421+	4·0719 622+	0·0082 1028−
a_2	1120 464−	6933 010+	17 2008−	191 848+	1997 869−	4 1426+
a_3	640 699−	120 456−	1 4682+	197 780+	276 048−	263+
a_4	34 932+	70 077−	696+	19 040−	6 325+	119+
a_5	7 609+	5 087+		866−	308+	

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			May 16		
	°	°	°	°	°	°
a_0	22·1744 721+	11·4406 008+	0·9242 4387+	121·7501 509+	15·0418 248+	0·9072 8779+
a_1	12·1982 971+	3·5922 582+	0·0073 6910−	12·0172 153+	2·8065 424−	0·0057 8547+
a_2	662 243+	2784 980−	4 2973+	908 815−	3314 383−	13 0785+
a_3	113 266+	247 448−	769+	107 724+	168 441+	1982+
a_4	23 588−	7 918+	260+	23 098+	3 637+	681−
a_5	349−	695+		733−	69+	
	May 9			May 17		
a_0	34·4479 264+	14·7304 776+	0·9173 1479+	133·6894 935+	11·9210 587+	0·9143 9411+
a_1	12·3551 170+	2·9645 429+	0·0064 7614−	11·8766 418+	3·4173 969−	0·0084 3338+
a_2	856 983+	3472 849−	4 6857+	454 416−	2786 546−	13 2564+
a_3	15 965+	208 756−	1838+	192 707+	184 031+	732−
a_4	25 553−	11 514+	310+	19 304+	4 012+	940−
a_5	598+	827+		851−	685+	
	May 10			May 18		
a_0	46·8878 426+	17·3280 940+	0·9113 2870+	145·5418 098+	8·2438 800+	0·9241 3641+
a_1	12·5213 823+	2·2123 648+	0·0054 7144−	11·8508 668+	3·9175 492−	0·0110 2510+
a_2	757 522+	4021 748−	5 4224+	231 017+	2203 519−	12 4645+
a_3	79 622−	154 579−	3103+	261 330+	207 223+	4495−
a_4	22 610−	15 795+	279+	15 073+	7 524+	1211−
a_5	1 788+	592+		989−	1 203+	
	May 11			May 19		
a_0	59·4749 327+	19·1244 648+	0·9064 3332+	157·4433 197+	4·1275 738+	0·9363 5090+
a_1	12·6408 511+	1·3682 548+	0·0042 8270−	11·9810 032+	4·2924 750−	0·0133 3469+
a_2	400 889+	4384 787−	6 5179+	1095 570+	1524 650−	10 3830+
a_3	151 736−	85 808−	4235+	311 414+	249 480+	9376−
a_4	13 482−	18 834+	187+	10 299+	13 720+	1421−
a_5	2 646+	37+		1 523−	1 452+	
	May 12			May 20		
a_0	72·1396 155+	20·0475 472+	0·9028 4663+	169·5658 989+	0·2909 010−	0·9506 1592+
a_1	12·6714 384+	0·4731 066+	0·0028 4457−	12·2968 979+	4·5163 477−	0·0150 7312+
a_2	108 713−	4528 840−	7 8968+	2076 405+	679 318−	6 7175+
a_3	179 213−	10 454−	4994+	336 647+	318 658+	1 5153−
a_4	63+	18 974+	57+	2 957+	21 334+	1431−
a_5	2 631+	585−		2 778−	1 102+	
	May 13			May 21		
a_0	84·7825 307+	20·0685 633+	0·9008 4225+	182·1041 200+	4·8410 711−	0·9661 9496+
a_1	12·5972 715+	0·4285 009−	0·0011 1310−	12·8129 648+	4·5475 310−	0·0159 0471+
a_2	619 645−	4452 228−	9 4245+	3076 317+	415 769+	1 3250+
a_3	153 130−	59 381+	5228+	319 581+	414 151+	2 1030−
a_4	13 415+	15 901+	96−	10 822−	27 429+	1053−
a_5	1 763+	958−		4 751−	352−	
	May 14			May 22		
a_0	97·3040 426+	19·2022 720+	0·9007 2293+	195·2551 173+	9·3029 025−	0·9820 1134+
a_1	12·4336 498+	1·2952 510−	0·0009 2481+	13·5173 965+	4·3293 398−	0·0154 9659+
a_2	980 931−	4188 286−	10 9301+	3922 506+	1819 364+	5 5879−
a_3	82 496−	113 424+	4851+	227 970+	518 653+	2 5416−
a_4	22 160+	10 946+	265−	35 277−	26 262+	152−
a_5	592+	917−		6 324−	3 262−	
	May 15			May 23		
a_0	109·6336 249+	17·5005 376+	0·9027 8661+	209·1834 012+	13·3961 406−	0·9966 9347+
a_1	12·2218 736+	2·0949 607−	0·0032 4575+	14·3530 180+	3·8010 012−	0·0136 1040+
a_2	1089 587−	3791 523−	12 2202+	4331 182+	3500 257+	13 2627−
a_3	11 539+	148 263+	3798+	24 793+	589 055+	2 6116−
a_4	24 879+	6 256+	457−	69 096−	9 819+	1185+
a_5	307−	519−		4 519−	6 844−	

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			June 1		
	°	°	°	°	°	°
a_0	223·9646 552+	16·7879 132−	1·0087 2830+	342·7833 383+	2·2299 062−	0·9592 9322+
a_1	15·1968 033+	2·9237 292−	0·0102 2183+	12·5361 256+	4·5729 922+	0·0134 4814−
a_2	3945 440+	5257 655+	20 3453−	2137 045−	103 766−	4 7211+
a_3	292 300−	559 175+	2 1280−	340 999+	356 278−	1 0368+
a_4	94 115−	26 066−	2531+	1 595−	18 325+	1214−
a_5	3 290+	8 228−		1 920−	1 176−	
	May 25			June 2		
a_0	239·5176 900+	19·1333 888−	1·0167 2812+	355·1395 079+	2·2987 965+	0·9464 0873+
a_1	15·8622 110+	1·7189 816−	0·0056 1578+	12·2094 192+	4·4520 980+	0·0122 4145−
a_2	2536 916+	6696 178+	25 1882−	1142 799−	1074 439−	7 1125+
a_3	630 542−	374 842+	1 0869−	315 811+	294 592−	5489+
a_4	76 450−	69 499−	3265+	11 004−	12 252+	909−
a_5	12 967+	4 375−		1 259−	910−	
	May 26			June 3		
a_0	255·5641 901+	20·1526 558−	1·0197 4904+	7·2650 020+	6·6151 257+	0·9349 2434+
a_1	16·1563 364+	0·2972 723−	0·0003 8286+	12·0705 722+	4·1532 791+	0·0106 9062−
a_2	316 938+	7359 925+	26 4979−	273 984−	1893 819−	8 2244+
a_3	805 959−	57 202+	2525+	259 358+	254 376−	1858+
a_4	6 755−	91 622−	2994+	17 280−	7 617+	577−
a_5	14 325+	2 973+		1 002−	361−	
	May 27			June 4		
a_0	271·6723 816+	19·7170 803−	1·0175 3730+	19·3322 835+	10·5543 110+	0·9250 6896+
a_1	15·9823 875+	1·1567 162+	0·0047 2109−	12·0861 703+	3·7010 699+	0·0090 1309−
a_2	1997 888−	7011 831+	23 9780−	390 358+	2614 854−	8 4448+
a_3	694 465−	276 859−	1 4696+	180 381+	227 167−	436−
a_4	67 222+	74 624−	1873+	22 450−	5 805+	275−
a_5	5 684+	7 722+		719−	252+	
	May 28			June 5		
a_0	287·3928 244+	17·8935 572−	1·0105 8408+	31·4732 109+	13·9717 846+	0·9168 9324+
a_1	15·4041 913+	2·4500 351+	0·0090 0092−	12·2090 176+	3·1123 977+	0·0073 4821−
a_2	3621 396−	5810 997+	18 4887−	789 562+	3258 995−	8 1565+
a_3	373 821−	498 416−	2 2173+	83 778+	201 148−	1518−
a_4	93 687+	34 127−	472+	26 318−	7 139+	28−
a_5	3 311−	7 092+		52−	741+	
	May 29			June 6		
a_0	302·4065 316+	14·9149 675−	0·9999 6073+	43·7669 254+	16·7389 559+	0·9103 4522+
a_1	14·6035 813+	3·4526 013+	0·0120 1467−	12·3815 115+	2·4034 804+	0·0057 6355−
a_2	4214 222−	4181 956+	11 5884−	882 429+	3812 176−	7 6900+
a_3	34 072−	565 889−	2 3912+	21 368−	165 093−	1608−
a_4	74 636+	1 652+	653−	26 780−	11 000+	154+
a_5	6 431−	3 710+		1 078+	906+	
	May 30			June 7		
a_0	316·5921 040+	11·1002 233−	0·9870 1980+	56·2319 728+	18·7458 999+	0·9053 3612+
a_1	13·7771 554+	4·1217 381+	0·0136 4121−	12·5414 155+	1·5963 696+	0·0042 6765−
a_2	3933 088−	2531 219+	4 8257−	668 422+	4232 377−	7 3031+
a_3	200 712+	523 896−	2 1127+	117 038−	112 204−	971−
a_4	41 477+	19 653+	1256−	21 344−	15 704+	265+
a_5	5 341−	731+		2 301+	627+	
	May 31			June 8		
a_0	329·9996 354+	6·7757 145−	0·9730 9473+	68·8266 224+	19·9094 446+	0·9017 9172+
a_1	13·0646 740+	4·4790 381+	0·0140 2286−	12·6326 024+	0·7228 276+	0·0028 2556−
a_2	3135 510−	1084 670+	7544+	212 289+	4468 483−	7 1719+
a_3	314 346+	438 878−	1 5976+	179 081−	43 485−	111+
a_4	14 782+	22 712+	1385−	9 538−	18 923+	304+
a_5	3 330−	801−		2 923+	5−	

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	81·4618 842+	20·1829 672+	0·8996 8750+	177·8317 654+	3·1853 560−	0·9481 6551+
a_1	12·6189 823+	0·1763 485−	0·0013 7567−	12·2601 801+	4·4375 152−	0·0142 9761+
a_2	352 905−	4485 461−	7 3868+	2390 185+	53 128+	8 0266+
a_3	188 238−	31 773+	1349+	351 336+	327 475+	1 0439−
a_4	5 421+	18 831+	276+	990+	19 477+	1521−
a_5	2 525+	671−		3 182−	999+	
	June 10			June 18		
a_0	94·0275 468+	19·5630 658+	0·8990 6675+	190·3658 784+	7·5827 633−	0·9631 4619+
a_1	12·4953 597+	1·0567 123−	0·0001 5318+	12·8424 205+	4·3203 588−	0·0155 2886+
a_2	859 834−	4283 889−	7 9540+	3418 308+	1162 494+	3 9839+
a_3	141 948−	100 182+	2469+	322 244+	414 469+	1 6642−
a_4	18 138+	15 310+	186+	14 877−	25 082+	1478−
a_5	1 387+	1 028−		5 337−	533−	
	June 11			June 19		
a_0	106·4246 808+	18·0894 110+	0·9000 4188+	203·5803 327+	11·7429 709−	0·9788 9223+
a_1	12·2887 556+	1·8778 252−	0·0018 2552+	13·6141 350+	3·9537 563−	0·0157 6714+
a_2	1163 017−	3901 782−	8 8021+	4242 253+	2551 159+	1 8794−
a_3	56 198−	151 189+	3230+	208 707+	507 698+	2 2739−
a_4	24 888+	10 009+	44+	42 568−	23 038+	960−
a_5	183+	944−		6 628−	3 606−	
	June 12			June 20		
a_0	118·5940 219+	15·8374 330+	0·9027 8035+	217·6346 441+	15·3888 983−	0·9942 3445+
a_1	12·0493 384+	2·6092 928−	0·0036 8461+	14·5048 602+	3·2838 070−	0·0146 7060+
a_2	1180 502−	3397 611−	9 7917+	4546 300+	4176 386+	9 2423−
a_3	44 757+	182 030+	3421+	26 001−	561 733+	2 6762−
a_4	25 535+	5 200+	144−	78 307−	4 773+	154+
a_5	569−	518−		3 623−	7 275−	
	June 13			June 21		
a_0	130·5322 824+	12·9070 503+	0·9074 7689+	232·5833 412+	18·1991 436−	1·0077 1475+
a_1	11·8365 939+	3·2323 842−	0·0057 3982+	15·3731 962+	2·2817 389−	0·0120 2539+
a_2	898 759−	2825 497−	10 7242+	3961 916+	5817 199+	17 1318−
a_3	141 036+	197 990+	2859+	370 209−	507 599+	2 6211−
a_4	22 473+	2 598+	379−	98 551−	33 530−	1682+
a_5	828−	65+		5 624+	8 265−	
	June 14			June 22		
a_0	142·2952 686+	9·4121 816+	0·9143 1394+	248·3064 154+	19·8525 821−	1·0177 8169+
a_1	11·7077 285+	3·7370 144−	0·0079 5530+	16·0179 184+	0·9835 582−	0·0078 8009+
a_2	349 109−	2215 281−	11 3460+	2316 559+	7055 836+	23 9436−
a_3	222 611+	209 377+	1359+	703 173−	293 512+	1 9315−
a_4	18 254+	2 962+	659−	68 033−	77 198−	3061+
a_5	856−	657+		14 775+	3 556−	
	June 15			June 23		
a_0	153·9920 871+	5·4749 386+	0·9234 1084+	264·4803 467+	20·1092 809−	1·0231 0489+
a_1	11·7115 634+	4·1157 442−	0·0102 3891+	16·2504 514+	0·4830 142+	0·0026 3455+
a_2	419 687+	1562 800−	11 3482+	52 684−	7437 641+	27 8852−
a_3	286 949+	228 073+	1270−	828 255−	46 505−	6714−
a_4	14 040+	6 331+	979−	10 987+	94 861−	3598+
a_5	1 019−	1 147+		13 528+	4 213+	
	June 16			June 24		
a_0	165·7756 162+	1·2264 695+	0·9347 6208+	280·6451 557+	18·8962 179−	1·0229 1975+
a_1	11·8866 912+	4·3567 763−	0·0124 3132+	16·0025 860+	1·9207 577+	0·0029 9983−
a_2	1354 605+	829 099−	10 3704+	2336 065−	6771 430+	27 7595−
a_3	332 510+	264 990+	5195−	654 593−	381 356−	8024+
a_4	9 158+	12 243+	1298−	79 917+	71 405−	2987+
a_5	1 694−	1 374+		3 425+	8 515+	

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	296·3570 101+	16·3427 417−	1·0172 5408+	40·8363 028+	16·0268 746+	0·9137 9466+
a_1	15·3726 651+	3·1363 312+	0·0081 9142−	12·3237 880+	2·6026 541+	0·0078 1258−
a_2	3786 470−	5284 343+	23 6029−	662 771+	3706 880−	11 3274+
a_3	305 341−	582 469−	2 0123+	48 016+	152 808−	1448−
a_4	94 466+	27 025−	1575+	25 553−	8 075+	360−
a_5	4 758−	7 235+		399+	615+	
	June 26			July 4		
a_0	311·3294 649+	12·7382 021−	1·0069 1934+	53·2286 541+	18·2444 289+	0·9070 9675+
a_1	14·5591 737+	4·0112 626+	0·0122 4535−	12·4607 265+	1·8189 733+	0·0056 0492−
a_2	4183 624−	3447 162+	16 6675−	657 466+	4110 683−	10 6843+
a_3	23 777+	620 307−	2 6348+	49 583−	114 290−	2873−
a_4	68 367+	9 324+	61+	23 662−	11 306+	130−
a_5	6 634−	3 509+		1 493+	736+	
	June 27			July 5		
a_0	325·4788 272+	8·4429 707−	0·9932 7132+	65·7479 521+	19·6421 091+	0·9025 3024+
a_1	13·7536 135+	4·5200 834+	0·0147 8605−	12·5686 277+	0·9674 399+	0·0035 5942−
a_2	3768 543−	1677 182+	8 7596−	381 684+	4378 334−	9 7504+
a_3	231 800+	549 691−	2 6405+	128 787−	61 866−	3377−
a_4	34 500+	26 250+	1012−	16 071−	15 134+	54+
a_5	5 004−	439+		2 415+	456+	
	June 28			July 6		
a_0	338·8817 160+	3·8074 693−	0·9778 6324+	78·3405 039+	20·1670 881+	0·8999 1263+
a_1	13·0807 452+	4·7013 301+	0·0157 8639−	12·6011 078+	0·0794 944+	0·0017 0848−
a_2	2916 169−	189 904+	1 4606−	76 916−	4468 559−	8 7741+
a_3	320 923+	441 196−	2 2176+	168 813−	2 918+	3144−
a_4	9 631+	27 824+	1492−	3 687−	17 469+	191+
a_5	2 983−	1 076−		2 611+	91−	
	June 29			July 7		
a_0	351·7036 014+	0·8714 063+	0·9621 3763+	90·9169 311+	19·8017 563+	0·8990 5203+
a_1	12·5961 509+	4·6175 431+	0·0154 7298−	12·5349 105+	0·8064 006−	0·0000 4032−
a_2	1925 411−	977 564−	4 2960+	579 347−	4355 914−	7 9483+
a_3	330 366+	340 864−	1 6092+	157 843−	71 579+	2360−
a_4	5 011−	22 052+	1510−	9 608+	16 944+	275+
a_5	1 706−	1 394−		1 955+	618−	
	June 30			July 8		
a_0	4·1395 761+	5·3591 726+	0·9472 4007+	103·3792 790+	18·5685 549+	0·8997 8570+
a_1	12·3073 217+	4·3278 957+	0·0141 9144−	12·3765 079+	1·6496 410−	0·0014 8956+
a_2	981 431−	1881 811−	8 2248+	975 688−	4045 706−	7 4062+
a_3	293 612+	266 409−	1 0003+	100 504−	133 036+	1238−
a_4	13 403−	14 889+	1275−	19 367+	13 722+	299+
a_5	1 120−	1 063−		861+	869−	
	July 1			July 9		
a_0	16·3766 635+	9·4736 290+	0·9339 5838+	115·6501 905+	16·5289 322+	0·9020 0649+
a_1	12·1931 979+	3·8770 360+	0·0122 9742−	12·1593 952+	2·4138 169−	0·0029 4564+
a_2	192 234−	2602 341−	10 4703+	1152 431−	3572 969−	7 2127+
a_3	228 984+	217 133−	4892+	14 986−	179 290+	21−
a_4	19 043−	9 503+	954−	23 448+	9 262+	254+
a_5	821−	465−		97−	772−	
	July 2			July 10		
a_0	28·5715 499+	13·0696 213+	0·9227 4738+	127·6951 791+	13·7765 963+	0·9056 7573+
a_1	12·2154 188+	3·2949 972+	0·0100 9475−	11·9337 433+	3·0713 048−	0·0043 9772+
a_2	372 211+	3201 375−	11 3754+	1057 715−	2987 259−	7 3552+
a_3	144 862+	183 411−	1086+	77 532+	208 815+	1018+
a_4	23 333−	7 189+	637−	22 717+	5 340+	138+
a_5	399−	158+		627−	418−	

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			July 19		
	°	°	°	°	°	°
a_0	139·5331 131+	10·4279 394+	0·9108 2053+	241·9913 525+	19·2121 147−	1·0008 9264+
a_1	11·7542 332+	3·6041 846−	0·0059 0483+	15·3307 068+	1·5236 194−	0·0117 9214+
a_2	695 115−	2332 953−	7 7375+	3346 764+	6169 381+	12 1010−
a_3	162 028+	226 267+	1591+	418 074−	391 547+	2 3947−
a_4	19 433+	3 245+	48−	81 388−	41 271−	579+
a_5	790−	52+		7 354+	6 343−	
	July 12			July 20		
a_0	151·2359 020+	6·6134 159+	0·9175 1454+	257·6075 249+	20·0844 027−	1·0112 4100+
a_1	11·6711 969+	4·0015 704−	0·0074 9817+	15·8457 650+	0·1919 538−	0·0086 7669+
a_2	100 345−	1634 150−	8 1786+	1678 149+	7032 741+	18 8952−
a_3	231 807+	240 042+	1420+	667 048−	165 622+	2 1629−
a_4	15 446+	3 550+	297−	41 764−	74 558−	1966+
a_5	858−	520+		12 897+	1 769−	
	July 13			July 21		
a_0	162·9217 040+	2·4728 418+	0·9258 4179+	273·5515 134+	19·5641 529−	1·0178 3156+
a_1	11·7264 191+	4·2547 073−	0·0091 6460+	15·9710 195+	1·2335 802+	0·0043 2753+
a_2	679 176+	887 507−	8 4168+	444 112−	7064 631+	24 1721−
a_3	284 833+	259 645+	245+	706 976−	146 865−	1 3559−
a_4	11 242+	6 246+	600−	26 297+	82 974−	3026+
a_5	1 154−	876+		9 525+	4 349+	
	July 14			July 22		
a_0	174·7455 328+	1·8439 394−	0·9358 4451+	289·4110 064+	17·6466 586−	1·0196 3655+
a_1	11·9516 230+	4·3513 785−	0·0108 3129+	15·6853 765+	2·5714 354+	0·0007 9244−
a_2	1589 606+	62 301−	8 1199+	2311 994−	6169 947+	26 4185−
a_3	317 787+	293 424+	2154−	511 214−	433 525−	1123−
a_4	5 671+	10 818+	929−	74 060+	59 391−	3215+
a_5	1 969−	945+		1 119+	7 369+	
	July 15			July 23		
a_0	186·8882 652+	6·1710 293−	0·9474 5696+	304·8215 799+	14·5067 832−	1·0162 2316+
a_1	12·3661 621+	4·2710 126−	0·0123 5347+	15·0997 904+	3·6552 942+	0·0059 8111−
a_2	2557 313+	892 381+	6 9071+	3390 409−	4586 904+	24 8509−
a_3	319 932+	345 816+	5895−	207 061−	597 990−	1 2007+
a_4	3 997−	15 895+	1225−	77 518+	21 232−	2423+
a_5	3 439−	404+		4 525−	6 241+	
	July 16			July 24		
a_0	199·5414 082+	10·3165 923−	0·9604 2994+	319·5689 226+	10·4540 967−	1·0079 0125+
a_1	12·9702 843+	3·9822 334−	0·0135 0901+	14·3883 338+	4·3879 023+	0·0104 9412−
a_2	3458 693+	2029 319+	4 3992+	3591 981−	2727 976+	19 8364−
a_3	268 634+	412 514+	1 0865−	57 140+	622 193−	2 1777+
a_4	21 422−	18 429+	1375−	53 273+	10 149+	1071+
a_5	5 091−	1 173−		5 451−	3 254+	
	July 17			July 25		
a_0	212·8817 737+	14·0529 168−	0·9742 5646+	333·6085 546+	5·8542 759−	0·9956 5196+
a_1	13·7314 986+	3·4458 335−	0·0140 0779+	13·7056 651+	4·7525 229+	0·0137 6532−
a_2	4084 952+	3365 759+	3196+	3155 506−	954 761+	12 7010−
a_3	132 084+	472 947+	1 6497−	216 497+	550 568−	2 5960+
a_4	48 153−	12 935+	1213−	25 554+	25 979+	231−
a_5	5 139−	3 880−		4 059−	632+	
	July 18			July 26		
a_0	227·0296 467+	17·1139 744−	0·9881 1911+	347·0224 683+	1·0586 726−	0·9808 7382+
a_1	14·5662 883+	2·6275 670−	0·0135 2818+	13·1477 068+	4·7890 104+	0·0155 3604−
a_2	4140 566+	4823 331+	5 3373−	2393 276−	534 830−	5 0781−
a_3	109 428−	484 418+	2 1522−	279 030+	441 183−	2 4865+
a_4	76 057−	6 963−	571−	5 365+	28 627+	1085−
a_5	906−	6 518−		2 496−	818−	

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	359·9590 374+	3·6355 175+	0·9650 6777+	100·1377 494+	18·8933 137+	0·9009 0419+
a_1	12·7536 599+	4·5607 309+	0·0158 4919−	12·4301 296+	1·3926 172−	0·0012 4040+
a_2	1548 941−	1694 852−	1 7194+	746 008−	4144 882−	9 3887+
a_3	276 133+	335 103−	2 0376+	95 438−	104 771+	5126−
a_4	6 949−	24 173+	1427−	12 310+	13 793+	61+
a_5	1 478−	1 230−		1 129+	413−	
	July 28			August 5		
a_0	12·5845 739+	7·9955 472+	0·9495 8001+	112·4850 784+	17·0980 235+	0·9030 3280+
a_1	12·5231 939+	4·1302 840+	0·0149 5114−	12·2577 847+	2·1848 514−	0·0029 6679+
a_2	777 013−	2567 456−	6 9769+	947 191−	3751 944−	7 8911+
a_3	233 909+	250 591−	1 4582+	35 394−	155 761+	4874−
a_4	14 281−	17 828+	1398−	17 852+	11 665+	185+
a_5	906−	1 010−		321+	514−	
	July 29			August 6		
a_0	25·0519 385+	11·8457 083+	0·9354 5841+	124·6464 218+	14·5546 689+	0·9067 4182+
a_1	12·4317 988+	3·5482 420+	0·0131 7422−	12·0650 289+	2·8841 029−	0·0044 0621+
a_2	170 057−	3222 379−	10 5195+	943 088−	3219 816−	6 5426+
a_3	167 993+	189 104−	8957+	38 861+	197 325+	4118−
a_4	18 888−	12 709+	1182−	19 263+	9 048+	270+
a_5	457−	520−		286−	438−	
	July 30			August 7		
a_0	37·4815 964+	15·0540 208+	0·9234 1388+	136·6229 258+	11·3691 778+	0·9117 6381+
a_1	12·4404 025+	2·8518 590+	0·0108 4891−	11·8956 317+	3·4654 684−	0·0056 0200+
a_2	215 996+	3718 637−	12 5056+	713 814−	2577 937−	5 4699+
a_3	88 219+	143 181−	4226+	112 861+	229 251+	3015−
a_4	21 324−	10 133+	913−	17 679+	6 836+	294+
a_5	134+	19−		605−	239−	
	July 31			August 8		
a_0	49·9503 014+	17·5207 095+	0·9138 4866+	148·4601 696+	7·6695 004+	0·9178 8559+
a_1	12·5016 057+	2·0692 215+	0·0082 5751−	11·7934 961+	3·9096 655−	0·0066 1732+
a_2	354 022+	4087 559−	13 2337+	275 229−	1851 556−	4 7402+
a_3	4 714+	102 650−	585+	177 428+	254 349+	1810−
a_4	20 773−	10 125+	658−	14 560+	5 655+	239+
a_5	924+	311+		763−	14+	
	August 1			August 9		
a_0	62·4857 958+	19·1719 536+	0·9069 1380+	160·2452 652+	3·6006 811+	0·9249 6122+
a_1	12·5659 778+	1·2251 201+	0·0056 1953−	11·7971 207+	4·2014 027−	0·0075 2063+
a_2	252 753+	4331 636−	13 0213+	336 774+	1054 427−	4 3360+
a_3	68 709−	59 010−	2036−	227 917+	277 239+	827−
a_4	16 137−	11 789+	439−	10 745+	5 776+	94+
a_5	1 693+	368+		987−	250+	
	August 2			August 10		
a_0	75·0687 336+	19·9592 248+	0·9025 7165+	172·0998 308+	0·6778 378−	0·9329 0812+
a_1	12·5903 076+	0·3459 892+	0·0030 9392−	11·9366 545+	4·3266 812−	0·0083 6679+
a_2	33 257−	4434 241−	12 1528+	1075 132+	185 541−	4 1372+
a_3	116 122−	8 286−	3784−	260 751+	302 892+	428−
a_4	7 509−	13 711+	252−	5 909+	7 125+	134−
a_5	2 073+	171+		1 477−	354+	
	August 3			August 11		
a_0	87·6435 596+	19·8623 496+	0·9006 5266+	184·1705 167+	4·9920 361−	0·9416 8301+
a_1	12·5468 521+	0·5377 752−	0·0007 8693−	12·2315 299+	4·2698 952−	0·0091 7606+
a_2	405 932−	4375 122−	10 8718+	1878 066+	769 454+	3 9199+
a_3	125 572−	48 084+	4785−	269 106+	334 803+	950−
a_4	3 041+	14 579+	87−	1 389−	9 090+	418−
a_5	1 839+	148−		2 349−	144+	

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			August 20		
	°	°	°	°	°	°
a_0	196·6163 899+	9·1505 822−	0·9512 3737+	313·3491 321+	12·2722 711−	1·0069 5910+
a_1	12·6861 433+	4·0118 565−	0·0099 1479+	14·5775 392+	4·0221 669+	0·0039 7734−
a_2	2653 531+	1829 889+	3 3748+	2736 939−	3690 304+	21 1748−
a_3	239 468+	372 152+	2630−	72 586−	561 675−	3164+
a_4	13 246−	10 106+	712−	52 056+	14 282−	2342+
a_5	3 399−	623−		3 729−	4 365+	
	August 13			August 21		
a_0	209·5901 687+	12·9412 862−	0·9614 5622+	327·6505 516+	7·9382 331−	1·0009 1935+
a_1	13·2816 920+	3·5305 039−	0·0104 8235+	14·0273 335+	4·5881 927+	0·0080 2358−
a_2	3258 371+	3000 792+	2 1516+	2679 778−	1963 249+	18 8409−
a_3	152 334+	405 498+	5515−	98 255+	576 142−	1 2700+
a_4	30 869−	7 268+	938−	32 593+	7 665+	1659+
a_5	3 753−	2 086−		3 821−	2 631+	
	August 14			August 22		
a_0	223·2094 690+	16·1306 429−	0·9720 8919+	341·4226 099+	3·2103 002−	0·9911 5526+
a_1	13·9648 446+	2·8068 337−	0·0107 0963+	13·5319 820+	4·8123 793+	0·0113 4440−
a_2	3492 436+	4240 031+	675−	2227 712−	307 090+	14 0665−
a_3	7 564−	412 716+	9345−	190 971+	520 140−	1 9369+
a_4	50 896−	3 215−	990−	13 249+	20 632+	656+
a_5	1 899−	3 852−		2 842−	949+	
	August 15			August 23		
a_0	237·5175 214+	18·4729 085−	0·9826 8871+	354·7519 585+	1·5829 322+	0·9786 0446+
a_1	14·6397 604+	1·8382 253−	0·0103 7610+	13·1476 106+	4·7264 814+	0·0135 5041−
a_2	3145 228+	5420 270+	3 4575−	1603 732−	1120 090−	7 8905−
a_3	227 449−	360 908+	1 3419−	216 147+	428 775−	2 1919+
a_4	61 405−	23 186−	746−	935−	25 094+	269−
a_5	2 816+	4 666−		1 822−	183−	
	August 16			August 24		
a_0	252·4432 007+	19·7358 012−	0·9925 7740+	7·7605 349+	6·1570 182+	0·9644 8149+
a_1	15·1774 223+	0·6575 044−	0·0092 5208+	12·8904 242+	4·3837 766+	0·0144 8179−
a_2	2122 707+	6317 067+	7 9120−	979 126−	2257 718−	1 4955−
a_3	442 134−	222 398+	1 6526−	194 643+	330 524−	2 0723+
a_4	46 556−	47 597−	129−	10 011−	23 926+	877−
a_5	7 802+	3 137−		1 046−	686−	
	August 17			August 25		
a_0	267·7848 048+	19·7444 325−	1·0008 7174+	20·5714 050+	10·2842 946+	0·9500 4862+
a_1	15·4546 025+	0·6520 251+	0·0071 6869+	12·7484 648+	3·8423 030+	0·0141 9432−
a_2	595 304+	6667 240+	12 9187−	465 745−	3112 622−	4 1871+
a_3	549 933−	2 673+	1 7112−	144 495+	241 709−	1 7113+
a_4	5 248−	63 754−	799+	15 278−	20 333+	1134−
a_5	8 500+	454+		422−	718−	
	August 18			August 26		
a_0	283·2442 698+	18·4317 461−	1·0065 8544+	33·2861 748+	13·7931 260+	0·9364 3279+
a_1	15·4108 297+	1·9610 042+	0·0041 0357+	12·6923 431+	3·1550 405+	0·0128 8891−
a_2	1000 795−	6297 356+	17 5431−	128 166−	3722 943−	8 6403+
a_3	488 302−	245 870−	1 3868−	79 523+	167 450−	1 2515+
a_4	38 587+	60 895−	1771+	17 472−	16 676+	1136−
a_5	4 165+	3 854+		202+	515−	
	August 19			August 27		
a_0	298·5104 649+	15·8712 974−	1·0088 1373+	45·9719 265+	16·5607 433+	0·9245 2170+
a_1	15·0816 912+	3·1242 851+	0·0002 4983+	12·6836 795+	2·3666 299+	0·0108 3086−
a_2	2192 641−	5233 057+	20 6223−	7 569+	4130 390−	11 7171+
a_3	295 255−	450 145−	6608−	12 022+	105 770−	7946+
a_4	58 723+	40 649−	2386+	16 524−	14 107+	1006−
a_5	1 067−	5 149+		849+	284−	

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			September 5		
	°	°	°	°	°	°
a_0	58·6559 977+	18·5051 395+	0·9149 3195+	156·9919 810+	4·7810 120+	0·9275 7273+
a_1	12·6826 157+	1·5143 217+	0·0082 8933−	11·9323 577+	4·1376 347−	0·0081 5550+
a_2	47 021−	4365 897−	13 5022+	358 228+	1386 777−	2 5717+
a_3	45 276−	52 108−	3918+	196 803+	281 348+	7053−
a_4	12 255−	12 726+	838−	8 398+	9 735+	349+
a_5	1 381+	147−		940−	12−	
	August 29			September 6		
a_0	71·3282 962+	19·5789 186+	0·9080 2364+	168·9805 877+	0·5338 066+	0·9359 1837+
a_1	12·6554 175+	0·6305 271+	0·0055 0488−	12·0659 332+	4·3266 981−	0·0084 7224+
a_2	242 561−	4447 326−	14 1795+	989 627+	484 431−	6678+
a_3	80 361−	2 654−	572+	220 756+	320 066+	5624−
a_4	5 249−	12 027+	681−	3 730+	9 749+	429+
a_5	1 591+	119−		1 377−	174−	
	August 30			September 7		
a_0	83·9510 557+	19·7656 384+	0·9039 3561+	181·1677 946+	3·8083 705−	0·9444 0544+
a_1	12·5814 928+	0·2549 832−	0·0026 7908−	12·3308 885+	4·3237 526−	0·0084 5427+
a_2	499 220−	4384 317−	13 9465+	1660 503+	532 535+	7631−
a_3	85 562−	44 248+	2146−	221 544+	357 119+	3868−
a_4	2 807+	11 438+	547−	3 143−	8 985+	394+
a_5	1 383+	145−		2 021−	510−	
	August 31			September 8		
a_0	96·4744 893+	19·0777 776+	0·9026 2424+	193·6863 714+	8·0423 102−	0·9527 4865+
a_1	12·4577 937+	1·1140 696−	0·0000 2395+	12·7271 840+	4·1067 715−	0·0082 0138+
a_2	725 244−	4184 399−	12 9781+	2286 031+	1652 727+	1 6921−
a_3	60 801−	88 543+	4333−	188 414+	387 609+	2255−
a_4	9 739+	10 699+	428−	13 423−	6 580+	235+
a_5	869+	152−		2 634−	1 116−	
	September 1			September 9		
a_0	108·8547 392+	17·5551 771+	0·9038 9840+	206·6593 942+	11·9445 016−	0·9607 6062+
a_1	12·2988 339+	1·9201 828−	0·0024 7247+	13·2342 282+	3·6578 703−	0·0078 0472+
a_2	840 544−	3856 096−	11 4255+	2744 305+	2843 890+	2 2352−
a_3	13 490−	129 841+	6048−	108 451+	402 259+	1293−
a_4	14 000+	9 928+	303−	27 138−	1 104+	16−
a_5	285+	109−		2 570−	1 996−	
	September 2			September 10		
a_0	121·0695 982+	15·2633 508+	0·9074 4989+	220·1759 272+	15·2778 463−	0·9683 2872+
a_1	12·1324 200+	2·6485 327−	0·0045 6397+	13·8034 862+	2·9689 721−	0·0073 1824+
a_2	794 194−	3408 088−	9 4335+	2880 998+	4037 313+	2 6412−
a_3	45 098+	168 505+	7270−	24 817−	386 228+	1363−
a_4	15 285+	9 396+	158−	40 837−	8 989−	293−
a_5	179−	34−		927−	2 851−	
	September 3			September 11		
a_0	133·1286 193+	12·2917 959+	0·9128 8294+	234·2608 551+	17·8056 483−	0·9753 6629+
a_1	11·9931 348+	3·2758 573−	0·0062 2626+	14·3554 462+	2·0506 623−	0·0067 3738+
a_2	569 006−	2846 529−	7 1632+	2552 165+	5113 492+	3 2323−
a_3	104 290+	205 781+	7908−	195 517−	321 692+	2571−
a_4	14 266+	9 258+	14+	46 029−	23 680−	505−
a_5	476−	30+		2 425+	3 000−	
	September 4			September 12		
a_0	145·0766 615+	8·7527 926+	0·9197 4658+	248·8476 057+	19·3154 602−	0·9817 4969+
a_1	11·9160 887+	3·7797 102−	0·0074 2222+	14·7900 287+	0·9424 269−	0·0059 9359+
a_2	175 318−	2173 323−	4 8049+	1713 762+	5906 410+	4 3079−
a_3	156 489+	243 120+	7850−	353 559−	197 627+	4654−
a_4	11 818+	9 454+	195+	33 345−	39 226−	559−
a_5	682−	45+		5 678+	1 861−	

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			September 21		
	°	°	°	°	°	°
a_0	263·7708 881+	19·6515 922−	0·9872 6036+	15·5085 129+	8·5901 626+	0·9583 4911+
a_1	15·0162 151+	0·2815 246+	0·0049 6999+	12·9245 572+	4·0808 257+	0·0119 9235−
a_2	509 991+	6245 296+	6 0341−	297 050−	2700 118−	3 2551−
a_3	429 901−	23 308+	6970−	112 411+	316 080−	1 6176+
a_4	3 531−	48 721−	386−	15 749−	21 201+	118−
a_5	6 136+	245+		429−	55+	
	September 14			September 22		
a_0	278·7953 728+	18·7480 546−	0·9915 5338+	28·4129 884+	12·3714 942+	0·9461 9183+
a_1	14·9908 957+	1·5182 129+	0·0035 3860+	12·8923 573+	3·4544 859+	0·0121 6285−
a_2	739 416−	6025 393+	8 3439−	58 626−	3520 611−	1 5141+
a_3	384 219−	168 026−	8584−	45 590+	230 886−	1 5643+
a_4	28 045+	47 179−	26+	17 984−	21 418+	526−
a_5	3 338+	2 160+		379+	219−	
	September 15			September 23		
a_0	293·6770 432+	16·6486 070−	0·9941 7201+	41·3022 816+	15·4529 504+	0·9343 3155+
a_1	14·7406 297+	2·6550 929+	0·0016 1331+	12·8873 059+	2·6895 556+	0·0114 1182−
a_2	1690 477−	5259 902+	10 8862−	25 984−	4086 954−	5 8843+
a_3	240 745−	334 639−	8509−	22 117−	147 519−	1 3480+
a_4	44 431+	35 915−	595+	16 096−	20 293+	746−
a_5	326−	3 025+		1 160+	416−	
	September 16			September 24		
a_0	308·2289 612+	13·5042 768−	0·9946 1756+	54·1832 839+	17·7210 464+	0·9236 3550+
a_1	14·3479 177+	3·5938 279+	0·0007 9539−	12·8696 163+	1·8358 181+	0·0098 6041−
a_2	2149 522−	4070 782+	13 0651−	177 306−	4411 919−	9 4786+
a_3	67 606−	448 101−	6088−	74 620−	70 601−	1 0458+
a_4	41 934+	20 513−	1145+	10 197−	18 186+	814−
a_5	2 575−	2 916+		1 672+	570−	
	September 17			September 25		
a_0	322·3591 019+	9·5499 405−	0·9924 6624+	67·0268 551+	19·1103 741+	0·9148 1938+
a_1	13·9132 170+	4·2668 063+	0·0035 4519−	12·8085 262+	0·9392 432+	0·0076 8355−
a_2	2126 589−	2632 572+	14 1946−	445 619−	4520 317−	12 1278+
a_3	74 055+	501 323−	1403−	98 679−	3 613−	7183+
a_4	28 417+	5 853−	1464+	1 696−	15 288+	796−
a_5	3 073−	2 339+		1 694+	658−	
	September 18			September 26		
a_0	336·0696 000+	5·0703 608−	0·9875 0219+	79·7809 513+	19·5986 873+	0·9084 1247+
a_1	13·5199 468+	4·6417 512+	0·0063 6759−	12·6899 669+	0·0398 820+	0·0050 7437−
a_2	1764 700−	1116 867+	13 7387−	734 887−	4446 018−	13 8061+
a_3	157 229+	501 751−	4578+	88 773−	50 979+	3995+
a_4	12 775+	5 825+	1415+	6 866+	11 938+	750−
a_5	2 603−	1 655+		1 247+	622−	
	September 19			September 27		
a_0	349·4298 169+	0·3663 500−	0·9798 2066+	92·3893 634+	19·2001 971+	0·9047 5116+
a_1	13·2179 849+	4·7177 562+	0·0089 2133−	12·5197 268+	0·8295 632−	0·0022 2329−
a_2	1242 419−	336 896−	11 5282−	947 554−	4227 676−	14 5560+
a_3	182 694+	462 286−	1 0330+	49 219−	92 619+	1001+
a_4	337−	14 043+	1021+	13 064+	8 776+	709−
a_5	1 884−	1 005+		582+	436−	
	September 20			September 28		
a_0	2·5416 072+	4·2729 928+	0·9698 6001+	104·8107 775+	17·9579 623+	0·9039 8640+
a_1	13·0232 336+	4·5178 102+	0·0108 7624−	12·3209 663+	1·6440 197−	0·0006 8959+
a_2	715 214−	1629 463−	7 8347−	1011 036−	3901 520−	14 4317+
a_3	162 918+	396 389−	1 4438+	8 512+	123 538+	1831−
a_4	9 816−	18 990+	443+	15 838+	6 574+	684−
a_5	1 167−	459+		13−	138−	

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	117·0330 739+	15·9367 880+	0·9060 9401+	216·5044 440+	14·3573 058−	0·9751 0093+
a_1	12·1276 408+	2·3847 012−	0·0034 9363+	13·9463 602+	3·2190 798−	0·0069 5431+
a_2	890 637−	3492 836−	13 4726+	2904 174+	3878 832+	9 1708−
a_3	71 508+	148 643+	4572−	65 616−	431 681+	3220−
a_4	15 615+	5 902+	662−	45 419−	11 465−	915+
a_5	390−	189+		395−	3 603−	
	September 30			October 8		
a_0	129·0803 242+	13·2182 767+	0·9108 8256+	230·7300 786+	17·1468 411−	0·9811 1511+
a_1	11·9770 165+	3·0362 199−	0·0060 2449+	14·4891 498+	2·3201 960−	0·0050 6020+
a_2	586 350−	3009 594−	11 7052+	2430 794+	5068 968+	9 5966−
a_3	129 951+	174 294+	7237−	249 076−	350 137+	499+
a_4	13 550+	6 905+	611−	47 822−	30 100−	622+
a_5	582−	455+		3 479+	3 044−	
	October 1			October 9		
a_0	141·0129 977+	9·8992 628+	0·9179 9909+	245·4329 660+	18·9284 410−	0·9852 2685+
a_1	11·9038 608+	3·5828 607−	0·0081 2396+	14·8832 004+	1·2149 211−	0·0031 8072+
a_2	121 031−	2440 713−	9 1713+	1431 547+	5908 271+	9 0864−
a_3	178 242+	206 537+	9711−	403 856−	200 457+	2999+
a_4	10 599+	9 272+	489−	29 520−	45 793−	214+
a_5	725−	577+		6 598+	1 020−	
	October 2			October 10		
a_0	152·9235 670+	6·0939 694+	0·9269 3820+	260·4166 433+	19·5371 707−	0·9875 3105+
a_1	11·9370 040+	4·0050 449−	0·0096 4735+	15·0398 432+	0·0080 456+	0·0014 6195+
a_2	470 031+	1759 676−	5 9721+	109 050+	6224 703+	8 0699−
a_3	213 223+	249 341+	1 1702−	456 190−	8 491+	3823+
a_4	6 993+	12 283+	261−	5 056+	50 748−	163−
a_5	984−	476+		6 193+	1 459+	
	October 3			October 11		
a_0	164·9294 972+	1·9391 668+	0·9370 6314+	275·4228 974+	18·9107 346−	0·9882 2262+
a_1	12·0972 814+	4·2770 275−	0·0104 8028+	14·9299 111+	1·2359 654+	0·0000 4387−
a_2	1141 812+	933 176−	2 3157+	1167 168−	5960 368+	7 0276−
a_3	231 050+	302 999+	1 2774−	376 026−	179 070−	3111+
a_4	2 122+	14 816+	76+	36 686+	42 831−	390−
a_5	1 487−	79+		2 627+	2 916+	
	October 4			October 12		
a_0	177·1641 282+	2·3993 890−	0·9476 4801+	290·2024 204+	17·1006 308−	0·9875 0319+
a_1	12·3950 631+	4·3667 982−	0·0105 6322+	14·5996 532+	2·3586 439+	0·0013 7171−
a_2	1832 809+	65 531+	1 4590−	2048 959−	5195 407+	6 3290−
a_3	224 233+	362 619+	1 2475−	205 144−	321 239−	1482+
a_4	5 320−	15 378+	469+	49 220+	27 737−	409−
a_5	2 222−	668−		1 112−	2 872+	
	October 5			October 13		
a_0	189·7641 414+	6·7219 011−	0·9579 4527+	304·5814 742+	14·2570 566−	0·9855 0931+
a_1	12·8256 553+	4·2390 902−	0·0099 1592+	14·1474 484+	3·2916 940+	0·0026 0945−
a_2	2451 326+	1238 999+	4 9099−	2380 330−	4094 007+	6 1245−
a_3	180 383+	416 831+	1 0565−	20 489−	403 947−	211−
a_4	16 672−	12 169+	812+	42 739+	13 256−	231−
a_5	2 857−	1 741−		2 985−	2 012+	
	October 6			October 14		
a_0	202·8510 147+	10·7943 655−	0·9672 7267+	318·4928 162+	10·5974 811−	0·9822 8299+
a_1	13·3619 387+	3·8622 451−	0·0086 4952+	13·6808 390+	3·9850 138+	0·0038 4993−
a_2	2863 771+	2545 096+	7 5867−	2215 301−	2822 724+	6 3169−
a_3	85 324+	447 429+	7245−	120 492+	437 331−	1161−
a_4	31 614−	3 434+	986+	27 248+	3 346−	76+
a_5	2 574−	2 911−		3 143−	1 184+	

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	331·9665 848+	6·3741 442−	0·9777 9052+	75·3500 687+	19·4434 390+	0·9122 3311+
a_1	13·2832 549+	4·4176 122+	0·0051 4508−	12·8387 874+	0·3476 230+	0·0064 3911−
a_2	1721 802−	1502 459+	6 6092−	767 333−	4545 668−	9 7432+
a_3	198 364+	439 132−	844−	145 793−	40 562+	8548+
a_4	11 347+	2 374+	407+	8 114+	17 136+	494−
a_5	2 582−	756+		1 846+	1 080−	
	October 16			October 24		
a_0	345·0983 723+	1·8498 862−	0·9719 8015+	88·0985 394+	19·3421 570+	0·9068 4886+
a_1	13·0016 522+	4·5876 920+	0·0064 7595−	12·6457 499+	0·5430 275−	0·0042 5381−
a_2	1084 463−	206 844+	6 6110−	1137 585−	4331 985−	12 0085+
a_3	218 292+	422 125−	827+	95 467−	98 338+	6562+
a_4	1 595−	6 024+	648+	17 334+	11 593+	576−
a_5	1 961−	683+		825+	1 024−	
	October 17			October 25		
a_0	358·0130 519+	2·7169 484+	0·9648 5786+	100·6228 000+	18·3768 218+	0·9038 5575+
a_1	12·8486 295+	4·5051 745+	0·0077 4739−	12·3969 378+	1·3757 972−	0·0016 7832−
a_2	458 784−	1016 566−	5 9719−	1311 770−	3977 661−	13 6290+
a_3	192 629+	391 156−	3478+	18 410−	134 680+	4256+
a_4	11 460−	9 396+	721+	21 266+	6 386+	645−
a_5	1 414−	764+		93−	661−	
	October 18			October 26		
a_0	10·8337 785+	7·0823 666+	0·9565 5528+	112·8888 371+	16·6172 989+	0·9035 7645+
a_1	12·8093 709+	4·1886 546+	0·0088 0853−	12·1375 200+	2·1287 010−	0·0011 4938+
a_2	36 167+	2126 023−	4 4988−	1240 379−	3541 916−	14 5165+
a_3	133 028+	345 914−	6417+	65 414+	153 911+	1684+
a_4	18 683−	13 241+	614+	20 565+	3 065+	724−
a_5	771−	807+		614−	144−	
	October 19			October 27		
a_0	23·6581 234+	11·0252 322+	0·9473 6719+	124·9108 557+	14·1500 893+	0·9061 8707+
a_1	12·8486 548+	3·6653 753+	0·0094 9119−	11·9169 872+	2·7897 568−	0·0040 7423+
a_2	315 402+	3076 245−	2 2125−	926 920−	3063 233−	14 5841+
a_3	51 123+	284 961−	8903+	141 431+	165 027+	1207−
a_4	22 734−	17 345+	376+	17 328+	2 376+	823−
a_5	151+	677+		775−	379+	
	October 20			October 28		
a_0	36·5411 724+	14·3562 890+	0·9377 4754+	136·7509 493+	11·0707 873+	0·9116 9941+
a_1	12·9180 552+	2·9719 137+	0·0096 5157−	11·7805 762+	3·3517 551−	0·0069 2192+
a_2	333 853+	3820 284−	6749+	406 427−	2550 095−	13 7250+
a_3	37 640−	209 025−	1 0407+	202 971+	178 569+	4504−
a_4	22 080−	20 805+	89+	13 389+	4 341+	927−
a_5	1 279+	311+		796−	807+	
	October 21			October 29		
a_0	49·4867 687+	16·9273 833+	0·9282 6843+	148·5124 392+	7·4823 944+	0·9199 3953+
a_1	12·9653 418+	2·1536 260+	0·0092 0081−	11·7651 397+	3·8060 633−	0·0094 9472+
a_2	101 247+	4319 420−	3 8424+	274 857+	1980 253−	11 8160+
a_3	112 626−	123 008−	1 0746+	248 480+	204 144+	8236−
a_4	15 557−	22 392+	172−	9 442+	8 493+	986−
a_5	2 200+	237−		933−	1 053+	
	October 22			October 30		
a_0	62·4496 370+	18·6389 820+	0·9195 5759+	160·3307 635+	3·4996 748+	0·9305 2363+
a_1	12·9466 807+	1·2616 773+	0·0081 1685−	11·8979 646+	4·1369 469−	0·0115 7136+
a_2	307 943−	4556 468−	6 9569+	1067 620+	1306 299−	8 7557+
a_3	152 714−	36 113−	1 0035+	276 633+	248 599+	1 2236−
a_4	4 262−	21 154+	367−	4 884+	13 949+	920−
a_5	2 430+	777−		1 411−	980+	

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			November 8		
	°	°	°	°	°	°
a_0	172·3635 008+	0·7415 491−	0·9428 3900+	286·6350 999+	17·6180 056−	0·9964 2979+
a_1	12·1957 258+	4·3175 576−	0·0129 1857+	14·9722 489+	2·1386 332+	0·0044 9480−
a_2	1912 725+	466 956−	4 5417+	2566 423−	5528 470+	11 2178−
a_3	281 529+	313 832+	1 6000−	304 219−	362 119−	1 2772+
a_4	2 057−	19 144+	636−	66 465+	32 513−	161−
a_5	2 354−	373+		1 301−	4 639+	
	November 1			November 9		
a_0	184·7782 108+	5·0724 674−	0·9560 4539+	301·3268 010+	14·9655 246−	0·9909 3931+
a_1	12·6607 282+	4·3089 567−	0·0133 2142+	14·3936 309+	3·1250 041+	0·0063 6171−
a_2	2721 409+	593 189+	6228−	3093 529−	4293 473+	7 4977−
a_3	249 096+	393 333+	1 8632−	53 045−	446 771−	1 2028+
a_4	13 901−	21 364+	81−	58 442+	9 009−	633−
a_5	3 567−	990−		4 137−	2 853+	
	November 2			November 10		
a_0	197·7342 427+	9·2807 345−	0·9691 1741+	315·4112 050+	11·4564 659−	0·9839 4179+
a_1	13·2723 941+	4·0642 707−	0·0126 3463+	13·7803 196+	3·8474 886+	0·0075 2577−
a_2	3349 512+	1891 509+	6 2375−	2943 521−	2927 603+	4 2743−
a_3	157 561+	467 695+	1 9000−	139 296+	455 316−	9402+
a_4	32 380−	16 633+	685+	36 900+	5 006+	798−
a_5	4 110−	3 063−		4 142−	1 031+	
	November 3			November 11		
a_0	211·3536 951+	13·1077 279−	0·9809 4514+	328·9143 779+	7·3611 449−	0·9760 7462+
a_1	13·9745 601+	3·5405 411−	0·0108 4455+	13·2460 944+	4·2989 311+	0·0081 3053−
a_2	3586 599+	3363 717+	11 5031−	2345 690−	1601 943+	1 9300−
a_3	11 926−	502 475+	1 6213−	246 053+	425 594−	6143+
a_4	54 344−	1 013+	1449+	16 012+	9 783+	711−
a_5	2 224−	5 061−		3 104−	14−	
	November 4			November 12		
a_0	225·6800 656+	16·2620 545−	0·9904 9175+	341·9517 993+	2·9436 020−	0·9678 0541+
a_1	14·6654 580+	2·7191 806−	0·0081 1559+	12·8556 255+	4·4955 474+	0·0083 6070−
a_2	3202 325+	4826 459+	15 4831−	1542 506−	383 676+	5062−
a_3	248 565−	455 798+	1 0275−	279 595+	386 755−	3266+
a_4	66 698−	25 346−	1916+	567+	9 423+	468−
a_5	2 994+	5 330−		2 178−	276−	
	November 5			November 13		
a_0	240·6345 291+	18·4560 771−	0·9969 7543+	354·6809 726+	1·5525 523+	0·9594 2208+
a_1	15·2061 776+	1·6299 500−	0·0047 8743+	12·6301 412+	4·4598 875+	0·0083 8267−
a_2	2086 498+	5988 307+	17 4175−	722 103−	722 839−	2022+
a_3	482 235−	302 642+	2436−	260 426+	351 680−	1391+
a_4	50 870−	53 169−	1872+	10 273−	7 874+	168−
a_5	8 700+	2 651−		1 625−	34−	
	November 6			November 14		
a_0	255·9969 160+	19·4625 142−	1·0000 1547+	7·2637 563+	5·9057 720+	0·9510 7186+
a_1	15·4628 094+	0·3640 844−	0·0013 0581+	12·5589 273+	4·2129 490+	0·0083 0723−
a_2	421 944+	6550 696+	17 0412−	18 729−	1730 984−	5270+
a_3	598 256−	65 907+	5180+	203 360+	320 255−	737+
a_4	4 686−	66 493−	1341+	18 475−	7 653+	107+
a_5	9 529+	1 710+		1 205−	425+	
	November 7			November 15		
a_0	271·4425 786+	19·1714 167−	0·9996 8237+	19·8391 787+	9·9144 049+	0·9428 2577+
a_1	15·3706 063+	0·9400 876+	0·0018 9335−	12·6081 978+	3·7739 500+	0·0081 7541−
a_2	1305 438−	6366 713+	14 7061−	468 410+	2641 573−	8185+
a_3	524 451−	181 297−	1 0575+	117 815+	285 152−	1198+
a_4	44 472+	56 825−	564+	24 729−	9 833+	300+
a_5	4 567+	4 644+		541−	839+	

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	32·5034	720+	13·3967	496+	0·9347	4720+	132·8725	548+	12·2013	167+	0·9046	1990+
a_1	12·7270	632+	3·1644	426+	0·0079	6373−	11·6999	374+	3·1416	608−	0·0041	8229+
a_2	668	021+	3429	620−	1	3608+	928	925−	2587	264−	13	9503+
a_3	14	153+	237	358−		2437+	183	667+	182	330+		2296+
a_4	27	694−	14	174+		384+	18	259+		76+		707−
a_5		589+		960+				877−		427+		
	November 17						November 25					
a_0	45·2960	421+	16·1960	079+	0·9269	4776+	144·4997	047+	8·8192	127+	0·9102	1311+
a_1	12·8541	315+	2·4134	609+	0·0076	0309−	11·5761	181+	3·6041	704−	0·0070	1296+
a_2	550	184+	4047	018−	2	3214+	277	147−	2035	540−	14	2082+
a_3	89	926−	171	240−		4003+	247	958+	187	193+		522−
a_4	24	814−	19	153+		360+	13	850+	2	277+		924−
a_5	1	962+		631+				811−		933+		
	November 18						November 26					
a_0	58·1939	141+	18·1896	214+	0·9196	2043+	156·0742	078+	5·0305	285+	0·9186	3242+
a_1	12·9282	466+	1·5606	612+	0·0070	0432−	11·6002	105+	3·9537	430−	0·0098	0197+
a_2	151	170+	4439	494−	3	7349+	541	725+	1450	955−	13	4900+
a_3	169	007−	88	716−		5462+	295	133+	205	825+		4220−
a_4	14	721−	22	411+		254+	9	893+	7	045+		1157−
a_5	2	914+		78−				994−	1	279+		
	November 19						November 27					
a_0	71·1191	962+	19·2996	949+	0·9130	4677+	167·7589	940+	0·9531	050+	0·9297	2962+
a_1	12·9033	468+	0·6550	720+	0·0060	8329−	11·8005	550+	4·1787	287−	0·0123	2705+
a_2	414	991−	4571	968−	5	5216+	1476	568+	778	382−	11	5239+
a_3	198	798−		289−		6488+	324	352+	246	811+		8881−
a_4		256+	21	956+		105+	5	125+	13	643+		1343−
a_5	2	842+		841−			1	701−	1	311+		
	November 20						November 28					
a_0	83·9614	739+	19·4996	526+	0·9075	8157+	179·7399	835+	3·2772	854−	0·9431	0682+
a_1	12·7622	314+	0·2510	470−	0·0047	8011−	12·1943	720+	4·2542	498−	0·0143	1161+
a_2	981	408−	4449	535−	7	5261+	2463	382+	57	078+	8	0533+
a_3	169	946−	78	876+		6909+	327	033+	314	126+	1	4336−
a_4	14	676+	17	562+		57−	3	172−	20	572+		1357−
a_5	1	794+	1	277−			3	098−		701+		
	November 21						November 29					
a_0	96·6102	170+	18·8131	682+	0·9036	2259+	192·2127	698+	7·4922	875−	0·9580	6683+
a_1	12·5217	320+	1·1109	047−	0·0030	6989−	12·7823	382+	4·1400	190−	0·0154	3785+
a_2	1385	272−	4120	329−	9	5599+	3394	436+	1129	981+	2	9489+
a_3	94	059−	136	386+		6680+	282	371+	402	429+	1	9900−
a_4	23	543+	10	989+		213−	18	774−	24	616+		1028−
a_5		463+	1	219−			4	855−		997−		
	November 22						November 30					
a_0	108·9864	166+	17·3048	461+	0·9015	7337+	205·3604	257+	11·4767	036−	0·9735	9030+
a_1	12·2261	077+	1·8902	687−	0·0009	6602−	13·5359	989+	3·7839	497−	0·0153	8943+
a_2	1521	611−	3657	449−	11	4315+	4080	182+	2475	051+	3	6130−
a_3	4	187+	168	396+		5828+	158	471+	489	261+	2	4170−
a_4	25	562+	4	789+		364−	44	130−	20	031+		229−
a_5		496−		777−			5	412−	3	891−		
	November 23						December 1					
a_0	121·0632	884+	15·0660	733+	0·9018	0514+	219·3153	358+	14·9626	082−	0·9883	7444+
a_1	11·9330	179+	2·5697	119−	0·0014	8057+	14·3792	229+	3·1360	975−	0·0139	3251+
a_2	1360	687−	3131	298−	12	9566+	4236	369+	4024	042+	10	9641−
a_3	101	239+	180	130+		4378+	70	130−	528	873+	2	5177−
a_4	22	814+		892+		523−	73	395−		102+		981+
a_5		881−		171−			1	995−	6	774−		

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	234·1036 435 +	17·6440 814 −	1·0009 6860 +	351·8452 440 +	0·4255 515 +	0·9652 4944 +
a_1	15·1751 114 +	2·1759 734 −	0·0110 2365 +	12·7260 349 +	4·5139 950 +	0·0122 0702 −
a_2	3565 465 +	5543 280 +	17 8904 −	1515 018 −	667 399 −	2 8257 +
a_3	379 103 −	461 578 +	2 1184 −	310 579 +	349 953 −	9665 +
a_4	84 688 −	35 529 −	2237 +	5 530 −	15 722 +	1141 −
a_5	6 086 +	6 821 −		1 890 −	897 −	
	December 3			December 11		
a_0	249·5895 310 +	19·2238 040 −	1·0100 1374 +	4·4500 929 +	4·8392 939 +	0·9534 1023 +
a_1	15·7436 491 +	0·9464 607 −	0·0068 9967 +	12·5130 486 +	4·2813 702 +	0·0113 9758 −
a_2	1981 220 +	6646 392 +	22 8805 −	635 360 −	1631 921 −	5 0498 +
a_3	653 277 −	253 839 +	1 1988 −	269 863 +	295 813 −	5073 +
a_4	51 896 −	71 316 −	2986 +	14 903 −	11 076 +	846 −
a_5	12 896 +	2 258 −		1 367 −	496 −	
	December 4			December 12		
a_0	265·4620 746 +	19·4875 990 −	1·0145 3534 +	16·9249 647 +	8·9289 486 +	0·9425 5992 +
a_1	15·9295 980 +	0·4293 208 +	0·0020 8352 +	12·4602 912 +	3·8704 249 +	0·0102 6924 −
a_2	160 466 −	6957 491 +	24 6900 −	71 110 +	2457 878 −	6 0749 +
a_3	732 972 −	50 486 −	260 +	196 816 +	256 133 −	1690 +
a_4	16 545 +	82 181 −	2837 +	21 855 −	8 547 +	508 −
a_5	10 964 +	4 027 +		946 −	113 +	
	December 5			December 13		
a_0	281·3050 797 +	18·3753 930 −	1·0141 8082 +	29·4097 683 +	12·5288 384 +	0·9329 0999 +
a_1	15·6897 038 +	1·7748 179 +	0·0027 3310 −	12·5243 437 +	3·3054 853 +	0·0090 2387 −
a_2	2150 370 −	6353 497 +	22 9391 −	520 919 +	3173 861 −	6 2868 +
a_3	561 840 −	337 195 −	1 1805 +	100 359 +	220 511 −	328 −
a_4	72 150 +	60 089 −	1878 +	26 849 −	9 168 +	195 −
a_5	2 527 +	7 053 +		217 −	656 +	
	December 6			December 14		
a_0	296·7310 301 +	16·0042 486 −	1·0092 9062 +	41·9935 332 +	15·4958 689 +	0·9245 0958 +
a_1	15·1211 938 +	2·9238 484 +	0·0068 9168 −	12·6477 883 +	2·6085 553 +	0·0077 8413 −
a_2	3378 026 −	5052 102 +	18 3105 −	658 690 +	3773 801 −	6 0795 +
a_3	251 779 −	507 697 −	1 9326 +	8 511 −	177 148 −	1084 −
a_4	82 724 +	23 496 −	594 +	28 163 −	12 610 +	60 +
a_5	4 084 −	5 750 +		970 +	880 +	
	December 7			December 15		
a_0	311·4971 074 +	12·6277 343 −	1·0007 6708 +	54·7036 201 +	17·7106 783 +	0·9173 2317 +
a_1	14·4011 005 +	3·7754 328 +	0·0099 5029 −	12·7661 943 +	1·8061 345 +	0·0065 9831 −
a_2	3678 139 −	3445 541 +	12 1897 −	473 873 +	4220 755 −	5 7959 +
a_3	37 243 +	545 880 −	2 1579 +	110 711 −	118 051 −	817 −
a_4	60 457 +	5 318 +	492 −	23 287 −	17 207 +	237 +
a_5	5 708 −	2 741 +		2 276 +	623 +	
	December 8			December 16		
a_0	325·5395 932 +	8·5615 295 −	0·9898 0868 +	67·5040 296 +	19·0847 154 +	0·9112 9865 +
a_1	13·6979 759 +	4·3042 721 +	0·0117 6063 −	12·8195 798 +	0·9337 623 +	0·0054 5415 −
a_2	3260 845 −	1867 145 +	6 0306 −	24 817 +	4465 414 −	5 6958 +
a_3	222 631 +	498 571 −	1 9452 +	180 704 −	43 366 −	157 +
a_4	31 302 +	18 508 +	1115 −	11 571 −	20 433 +	328 +
a_5	4 503 −	362 +		2 997 +	39 −	
	December 9			December 17		
a_0	338·9364 276 +	4·1185 130 −	0·9776 2837 +	80·3071 632 +	19·5696 390 +	0·9064 1893 +
a_1	13·1228 673 +	4·5357 130 +	0·0124 2785 −	12·7672 016 +	0·0358 224 +	0·0042 9713 −
a_2	2450 168 −	486 029 +	8693 −	556 711 −	4473 314 −	5 9403 +
a_3	303 716 +	421 574 −	1 4867 +	197 235 −	37 557 +	1496 +
a_4	8 860 +	19 814 +	1282 −	3 777 +	20 180 +	338 +
a_5	2 918 −	754 −		2 654 +	769 −	

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
	December 18		
	°	°	°
a_0	92·9996 133+	19·1638 267+	0·9027 3416+
a_1	12·5995 255+	0·8398 866−	0·0030 5067−
a_2	1099 202−	4247 283−	6 5899+
a_3	156 241−	110 337+	2867+
a_4	17 163+	16 156+	277+
a_5	1 476+	1 191−	
	December 19		
a_0	105·4754 584+	17·9117 420+	0·9003 7392+
a_1	12·3404 144+	1·6503 752−	0·0016 3560−
a_2	1450 218−	3831 272−	7 6126+
a_3	73 533−	163 068+	3989+
a_4	24 377+	10 026+	162+
a_5	204+	1 149−	
	December 20		
a_0	117·6659 559+	15·8954 340+	0·8995 4108+
a_1	12·0381 629+	2·3642 729−	0·0000 1307+
a_2	1522 565−	3293 415−	8 9018+
a_3	25 558+	191 908+	4648+
a_4	25 101+	4 188+	9+
a_5	606−	747−	
	December 21		
a_0	129·5568 676+	13·2213 545+	0·9004 9090+
a_1	11·7510 543+	2·9640 812−	0·0019 3323+
a_2	1301 392−	2700 033−	10 2957+
a_3	119 743+	201 509+	4692+
a_4	21 829+	441+	176−
a_5	865−	191−	
	December 22		
a_0	141·1918 536+	10·0074 460+	0·9034 9887+
a_1	11·5349 984+	3·4435 533−	0·0041 2610+
a_2	819 860−	2094 759−	11 5909+
a_3	198 432+	201 691+	4000+
a_4	17 385+	476−	394−
a_5	804−	366+	
	December 23		
a_0	152·6663 672+	6·3745 749+	0·9088 2012+
a_1	11·4371 079+	3·8020 047−	0·0065 4853+
a_2	128 305−	1488 871−	12 5464+
a_3	259 956+	203 726+	2438+
a_4	13 357+	1 416+	653−
a_5	748−	848+	
	December 24		
a_0	164·1179 011+	2·4442 821+	0·9166 4113+
a_1	11·4944 021+	4·0376 703−	0·0091 0484+
a_2	724 235+	860 702−	12 8766+
a_3	305 765+	218 063+	161−
a_4	9 737+	5 750+	957−
a_5	996−	1 193+	
	December 25		
a_0	175·7161 773+	1·6569 579−	0·9270 2245+
a_1	11·7343 743+	4·1414 954−	0·0116 3705+
a_2	1690 016+	160 054−	12 2440+
a_3	334 276+	253 018+	3990−
a_4	4 985+	11 903+	1284−
a_5	1 819−	1 251+	

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	December 26		
	°	°	°
a_0	187·6532 974+	5·7878 415−	0·9398 3116+
a_1	12·1737 428+	4·0922 149−	0·0139 1479+
a_2	2704 582+	682 986+	10 2685+
a_3	335 126+	312 800+	9163−
a_4	3 892−	18 528+	1557−
a_5	3 370−	686+	
	December 27		
a_0	200·1302 848+	9·7785 565−	0·9546 6560+
a_1	12·8119 535+	3·8540 259−	0·0156 3127+
a_2	3652 877+	1739 493+	6 5838+
a_3	284 819+	392 779+	1 5493−
a_4	20 911−	22 522+	1619−
a_5	5 221−	1 001−	
	December 28		
a_0	213·3333 948+	13·4172 031−	0·9707 8414+
a_1	13·6169 999+	3·3797 887−	0·0164 1841+
a_2	4329 466+	3043 019+	9768+
a_3	148 844+	471 144+	2 2145−
a_4	48 283−	17 969+	1244−
a_5	5 563−	3 990−	
	December 29		
a_0	227·3928 410+	16·4441 777−	0·9870 6636+
a_1	14·5054 562+	2·6246 527−	0·0158 9958+
a_2	4430 310+	4524 291+	6 3818−
a_3	97 477−	501 422+	2 7328−
a_4	78 498−	2 468−	250−
a_5	1 432−	7 042−	
	December 30		
a_0	242·3235 875+	18·5672 102−	1·0020 5200+
a_1	15·3301 698+	1·5738 761−	0·0137 9331+
a_2	3652 413+	5943 053+	14 6830−
a_3	420 848−	421 185+	2 8449−
a_4	86 742−	39 587−	1287+
a_5	7 328+	7 063−	
	December 31		
a_0	257·9689 725+	19·5093 275−	1·0141 0539+
a_1	15·9033 721+	0·2782 707−	0·0100 5476+
a_2	1943 109+	6898 197+	22 3974−
a_3	691 043−	195 019+	2 3196−
a_4	47 158−	76 718−	2866+
a_5	13 687+	2 094−	
	December 32		
a_0	273·9942 042+	19·0861 577−	1·0217 1712+
a_1	16·0726 575+	1·1281 480+	0·0049 9423+
a_2	275 539−	7002 078+	27 6104−
a_3	744 568−	129 000−	1 1389−
a_4	25 273+	86 698−	3727+
a_5	10 434+	4 679+	

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.