

NOTES AND FORMULAE

Use of the polynomial coefficients for the lunar coordinates

On pages D23–D45 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:

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

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

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

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
$\pm 0^{\circ}0003$	$\pm 0^{\circ}003$	$\pm 0^{\circ}0003$

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 2001 January 21^d 13^h 23^m 48^s32 UT, using an assumed value of $\Delta T = 66^{\text{s}}$.

$$\text{TT} = 13^{\text{h}} 24^{\text{m}} 53^{\text{s}}92, \text{ hence } p = 0.558\ 957\ 41$$

	right ascension	declination	horizontal parallax
b_1	+0 ^o .000 3042	−0 ^o .000 0938	+0 ^o .000 000 39
b_2	−0.002 7475	−0.001 8717	−0.000 029 17
b_3	−0.017 3550	+0.010 5360	+0.000 878 11
b_4	+0.068 5205	+0.496 5805	−0.005 301 80
b_5	+12.837 6021	−1.408 9318	$\pi = +0.906 426 25$
b_6	$\alpha = 269.170\ 6830$	$\delta = -21.948\ 0209$	
	$= 17^{\text{h}}\ 56^{\text{m}}\ 40^{\text{s}}964$	$= -21^{\circ}\ 56'\ 52''88$	$= 54'\ 23''134$

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	January 0			January 8		
a_0	340-0082 751+	12-8903 538-	0-9055 4680+	81-2713 670+	21-0580 777+	1-0080 4338+
a_1	11-5707 057+	3-8156 999+	0-0051 7914+	15-7000 970+	2-1419 409+	0-0120 6601+
a_2	1219 914-	2718 586+	12 4065+	4249 360+	6941 916-	18 7905-
a_3	216 578+	223 921-	3351+	540 849-	548 735-	2 6302-
a_4	22 593+	1 314+	551-	122 187-	51 444+	2159+
a_5	1 119-	463-		10 945+	9 684+	
	January 1			January 9		
a_0	351-4807 945+	8-8251 024-	0-9119 9460+	97-3311 909+	22-4570 664+	1-0179 8892+
a_1	11-4001 741+	4-2925 339+	0-0077 3897+	16-3443 227+	0-6143 480+	0-0076 0535+
a_2	445 822-	2050 057+	13 0729+	2003 908+	8182 238-	25 3473-
a_3	295 900+	223 696-	1163+	914 845-	250 563-	1 7424-
a_4	16 999+	1 083-	828-	62 008-	102 507+	3416+
a_5	844-	1 135-		20 812+	1 756+	
	January 2			January 10		
a_0	2-8675 919+	4-3501 541-	0-9210 4421+	113-7803 004+	22-2385 606+	1-0229 1946+
a_1	11-4061 570+	4-6344 355+	0-0103 5531+	16-4562 458+	1-0553 981-	0-0021 5002+
a_2	535 447+	1361 106+	12 9152+	903 626-	8301 532-	28 5180-
a_3	355 381+	239 670-	2142-	958 532-	171 721+	3364-
a_4	12 958+	6 865-	1141-	48 637+	109 803+	3642+
a_5	951-	1 644-		13 763+	7 769-	
	January 3			January 11		
a_0	14-3640 324+	0-3955 740+	0-9326 5821+	130-0565 704+	20-3803 849+	1-0222 2046+
a_1	11-6245 672+	4-8311 876+	0-0128 2844+	16-0142 811+	2-6241 544-	0-0035 0864-
a_2	1669 871+	584 431+	11 5787+	3349 895-	7205 720-	27 3704-
a_3	397 151+	283 663-	6723-	634 439-	531 570+	1 1522+
a_4	8 567+	15 308-	1442-	116 594+	67 580+	2707+
a_5	1 880-	1 822-		871-	10 566-	
	January 4			January 12		
a_0	26-1959 705+	5-2551 254+	0-9465 6286+	145-6839 903+	17-0945 169+	1-0161 1705+
a_1	12-0801 709+	4-8559 412+	0-0148 8476+	15-2001 637+	3-8840 747-	0-0085 2876-
a_2	2893 983+	376 705-	8 6913+	4562 973-	5311 407-	22 3378-
a_3	411 367+	362 743-	1 2561-	181 166-	698 135+	2 2430+
a_4	364-	24 908-	1615-	108 068+	13 265+	1136+
a_5	4 023-	1 210-		8 333-	7 038-	
	January 5			January 13		
a_0	38-6062 376+	10-0345 100+	0-9621 7499+	160-4197 136+	12-7497 377+	1-0055 9017+
a_1	12-7802 170+	4-6612 117+	0-0161 8151+	14-2722 803+	4-7351 234-	0-0122 7804-
a_2	4085 665+	1626 608-	3 9590+	4541 719-	3207 730-	14 9724-
a_3	367 934+	473 180-	1 9163-	167 905+	683 483+	2 6845+
a_4	20 433-	31 795-	1462-	64 254+	21 504-	335-
a_5	7 112-	983+		7 821-	2 360-	
	January 6			January 14		
a_0	51-8290 601+	14-4826 616+	0-9785 4615+	174-2602 559+	7-7598 032+	0-9920 7998+
a_1	13-6959 998+	4-1817 146+	0-0163 3982+	13-4361 027+	5-1814 028-	0-0144 8067-
a_2	4995 492+	3227 196-	2 6453-	3730 720-	1309 774-	7 1484-
a_3	214 369+	588 074-	2 5212-	348 357+	575 590+	2 5301+
a_4	57 671-	27 649-	766-	25 002+	32 415-	1254-
a_5	8 608-	5 240+		4 873-	584+	
	January 7			January 15		
a_0	66-0394 182+	18-2806 083+	0-9943 6167+	187-3601 353+	2-5017 990+	0-9771 2494+
a_1	14-7320 436+	3-3514 184+	0-0150 2365+	12-8020 330+	5-2833 534-	0-0152 0158-
a_2	5205 909+	5104 814-	10 6283-	2584 307-	228 442+	3210-
a_3	99 059-	643 732-	2 8452-	400 928+	452 408+	2 0114+
a_4	104 728-	772-	540+	1 090+	28 845-	1575-
a_5	3 070-	9 829+		2 647-	1 649+	

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	199·9436 745+	2·7161 891-	0·9620 7664+	300·5116 988+	21·6582 471-	0·8993 3280+
a_1	12·4045 633+	5·1126 564-	0·0147 2544-	12·6594 163+	1·3433 162+	0·0011 1183-
a_2	1401 416-	1429 138+	4 7706+	1307 294-	4791 319+	7 0192+
a_3	379 416+	353 471+	1 3715+	197 074-	143 446-	586-
a_4	11 790-	20 246-	1480-	24 040+	18 919-	357+
a_5	1 639-	1 551+		1 570+	1 418+	
January 17						
a_0	212·2446 949+	7·6524 541-	0·9479 5061+	313·0232 392+	19·8518 938-	0·8989 2060+
a_1	12·2325 696+	4·7281 112-	0·0134 1909-	12·3492 343+	2·2516 873+	0·0002 8872+
a_2	350 297-	2383 612+	8 0063+	1738 634-	4261 675+	7 0566+
a_3	316 045+	287 616+	7759+	86 236-	204 979-	866+
a_4	19 890-	12 325-	1180-	31 586+	11 607-	322+
a_5	1 364-	886+		141-	1 364+	
January 18						
a_0	224·4717 139+	12·1145 865-	0·9353 9794+	325·1931 309+	17·1955 611-	0·8999 2686+
a_1	12·2486 862+	4·1695 923-	0·0116 3229-	11·9881 995+	3·0385 675+	0·0017 3891+
a_2	464 827+	3181 375+	9 6368+	1809 311-	3590 753+	7 5063+
a_3	222 995+	246 670+	3036+	38 139+	238 052-	2175+
a_4	26 881-	7 849-	824-	30 434+	4 683-	218+
a_5	1 147-	14+		1 043-	870+	
January 19						
a_0	236·7863 795+	15·9421 578-	0·9247 5145+	337·0071 524+	13·8221 048-	0·9024 4033+
a_1	12·3972 252+	3·4624 500-	0·0096 4680-	11·6494 312+	3·6838 637+	0·0033 1415+
a_2	960 991+	3874 420+	10 0637+	1522 773-	2857 199+	8 2844+
a_3	104 450+	214 956+	247-	149 347+	248 467-	3066+
a_4	32 990-	7 856-	486-	24 909+	331-	52+
a_5	375-	783-		1 168-	210+	
January 20						
a_0	249·2868 123+	18·9965 342-	0·9161 0368+	348·5216 151+	9·8773 800-	0·9066 1410+
a_1	12·6073 768+	2·6266 137-	0·0076 6093-	11·3990 609+	4·1807 350+	0·0050 6511+
a_2	1072 593+	4464 292+	9 7068+	936 976-	2111 897+	9 2287+
a_3	30 372-	175 476+	2175-	237 425+	248 074-	3293+
a_4	35 209-	11 984-	196-	18 964+	670+	169-
a_5	1 199+	1 186-		930-	434-	
January 21						
a_0	261·9950 102+	21·1604 881-	0·9093 8973+	359·8525 244+	5·5102 393-	0·9126 3331+
a_1	12·7993 021+	1·6864 991-	0·0057 9263-	11·2900 141+	4·5287 422+	0·0070 0287+
a_2	782 212+	4906 913+	8 9442+	120 218-	1367 338+	10 1064+
a_3	158 193-	115 822+	2939-	304 053+	250 059-	2632+
a_4	29 175-	18 193-	39+	14 362+	1 574-	444-
a_5	3 042+	938-		780-	986-	
January 22						
a_0	274·8541 009+	22·3466 269-	0·9044 6252+	11·1622 803+	0·8700 251-	0·9206 6870+
a_1	12·8981 388+	0·6781 152-	0·0040 9039-	11·3625 412+	4·7260 692+	0·0090 8537+
a_2	163 069+	5135 818+	8 0912+	870 342+	597 839+	10 6196+
a_3	243 946-	34 149+	2764-	353 511+	266 439-	870+
a_4	13 451-	23 048-	213+	10 672+	6 615-	768-
a_5	4 003+	100-		1 103-	1 381-	
January 23						
a_0	287·7432 072+	22·5100 601-	0·9011 5574+	22·6481 636+	3·8883 843+	0·9308 1705+
a_1	12·8541 891+	0·3500 250+	0·0025 4654-	11·6463 786+	4·7623 684+	0·0112 0470+
a_2	609 372-	5098 987+	7 3931+	1983 917+	255 021-	10 4092+
a_3	258 103-	58 496-	1891-	384 483+	306 727-	2197-
a_4	7 156+	23 475-	320+	5 509+	13 756-	1121-
a_5	3 343+	864+		2 264-	1 422-	

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	34.5317 067+	8.5930 601+	0.9430 2949+	153.6723 907+	14.8318 007+	1.0208 3109+
a_1	12.1595 759+	4.6131 339+	0.0131 7578+	15.0167 886+	4.5123 968-	0.0060 6529-
a_2	3147 816+	1272 027-	9 0678+	4073 244-	4601 166-	26 8646-
a_3	382 602+	375 501-	6705-	93 029-	731 190+	1 4631+
a_4	5 483-	21 349-	1444-	89 584+	10 593+	2551+
a_5	4 472-	651-		7 577-	6 529-	
	February 2			February 10		
a_0	47.0433 290+	13.0392 413+	0.9570 3055+	168.2807 526+	9.9328 127+	1.0122 5114+
a_1	12.8994 878+	4.2372 160+	0.0147 3038+	14.2062 768+	5.2122 959-	0.0108 9724-
a_2	4217 944+	2533 241-	6 1850+	3890 823-	2409 292-	20 9947-
a_3	314 554+	466 078-	1 2561-	190 010+	710 530+	2 4882+
a_4	28 176-	25 350-	1607-	50 225+	21 806-	925+
a_5	6 997-	1 608+		6 609-	2 543-	
	February 3			February 11		
a_0	60.3925 492+	16.9741 511+	0.9722 3775+	182.1213 097+	4.5482 056+	0.9995 1249+
a_1	13.8226 742+	3.5814 126+	0.0155 2618+	13.5019 031+	5.4909 862-	0.0143 1280-
a_2	4922 259+	4067 572-	1 4590+	3085 548-	433 870-	13 0196-
a_3	132 111+	549 172-	1 9144-	326 226+	599 463+	2 8431+
a_4	65 265-	17 817-	1406-	17 166+	33 829-	515-
a_5	6 841-	5 506+		4 166-	221+	
	February 4			February 12		
a_0	74.7134 497+	20.0926 582+	0.9877 0435+	195.3485 806+	0.9295 821-	0.9841 7688+
a_1	14.8172 407+	2.5987 765+	0.0151 8732+	12.9874 466+	5.4113 409-	0.0160 8453-
a_2	4858 080+	5766 789-	5 1034-	2045 494-	1163 848+	4 8262-
a_3	193 151-	563 467-	2 4975-	354 258+	467 054+	2 6161+
a_4	102 933-	10 678+	630-	3 302-	32 129-	1366-
a_5	361+	8 999+		2 415-	1 399+	
	February 5			February 13		
a_0	89.9869 261+	22.0603 768+	1.0021 2530+	208.1663 320+	6.1809 059-	0.9678 5767+
a_1	15.6899 322+	1.2851 477+	0.0133 9212+	12.6820 980+	5.0506 074-	0.0163 1967-
a_2	3664 606+	7302 739-	12 9311-	1026 663-	2386 282+	2 1940+
a_3	594 388-	431 576-	2 7659-	317 404+	352 565+	2 0536+
a_4	101 332-	58 420+	752+	15 162-	24 763-	1627-
a_5	12 778+	7 717+		1 554-	1 432+	
	February 6			February 14		
a_0	105.9750 248+	22.5787 067+	1.0139 5525+	220.7758 324+	10.9599 617-	0.9519 4649+
a_1	16.2103 987+	0.2776 548-	0.0100 0623+	12.5651 453+	4.4767 715-	0.0153 2994-
a_2	1402 024+	8169 525-	20 7275-	180 980-	3309 746+	7 3818+
a_3	869 160-	124 886-	2 4630-	241 499+	267 515+	1 3940+
a_4	31 796-	98 774+	2386+	22 970-	17 429-	1504-
a_5	17 914+	291+		1 079-	861+	
	February 7			February 15		
a_0	122.2373 218+	21.4815 172+	1.0216 6631+	233.3446 248+	15.0806 640-	0.9374 7910+
a_1	16.2262 845+	1.9093 792-	0.0052 1743+	12.5916 727+	3.7411 102-	0.0134 9554-
a_2	1216 489-	7948 846-	26 6490-	394 869+	4016 325+	10 6705+
a_3	821 914-	268 788+	1 4811-	139 229+	205 981+	7897+
a_4	62 046+	98 705+	3558+	28 604-	13 112-	1210-
a_5	9 192+	7 422-		413-	117+	
	February 8			February 16		
a_0	138.2668 898+	18.8132 605+	1.0241 0631+	245.9868 057+	18.4008 431-	0.9251 1748+
a_1	15.7658 140+	3.3827 433-	0.0004 1417-	12.7007 688+	2.8812 377-	0.0111 7292-
a_2	3218 286-	6624 848-	28 9556-	636 758+	4556 752+	12 3238+
a_3	488 424-	588 164+	174-	21 371+	154 380+	3061+
a_4	106 246+	58 957+	3627+	30 946-	12 644-	883-
a_5	2 667-	9 438-		760+	452-	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
February 17						
a_0	258.7503 689+	20.8122 772-	0.9151 9873+	357.0787 820+	6.5057 279-	0.9116 5696+
a_1	12.8225 352+	1.9288 571-	0.0086 5165-	11.3592 790+	4.5137 075+	0.0056 0209+
a_2	522 782+	4939 480+	12 7215+	402 696-	1532 004+	5 9747+
a_3	93 978-	99 204+	457-	251 765+	274 673-	361+
a_4	27 194-	15 099-	586-	13 746+	2 393-	184+
a_5	2 209+	593-		798-	369-	
February 18						
a_0	271.6132 860+	22.2388 351-	0.9078 0880+	8.4242 628+	1.8665 636-	0.9178 6198+
a_1	12.8891 260+	0.9175 356-	0.0061 4448-	11.3593 690+	4.7365 642+	0.0068 1525+
a_2	99 804+	5140 545+	12 2408+	427 108+	689 920+	6 1871+
a_3	180 116-	33 071+	2786-	298 678+	288 124-	1122+
a_4	15 845-	18 227-	333-	9 861+	4 308-	18-
a_5	3 189+	255-		941-	687-	
February 19						
a_0	284.4931 152+	22.6408 574-	0.9028 5720+	19.8571 025+	2.9096 807+	0.9253 0698+
a_1	12.8503 083+	0.1130 769+	0.0037 9324-	11.5378 674+	4.7860 440+	0.0080 8562+
a_2	503 670-	5127 841+	11 2116+	1372 921+	207 196-	6 5043+
a_3	211 700-	42 051-	4107-	328 319+	312 299-	1070+
a_4	544+	19 531-	120-	5 351+	7 883-	292-
a_5	3 026+	335+		1 604-	817-	
February 20						
a_0	297.2722 436+	22.0211 210-	0.9001 4286+	31.5654 686+	7.6429 053+	0.9340 5081+
a_1	12.6877 937+	1.1183 858+	0.0016 7893-	11.9122 841+	4.6473 540+	0.0094 0691+
a_2	1105 222-	4887 871+	9 9129+	2373 964+	1199 602-	6 6401+
a_3	179 949-	116 547-	4578-	332 906+	351 812-	86-
a_4	15 909+	17 749-	59+	2 463-	12 239-	615-
a_5	1 832+	818+		2 947-	513-	
February 21						
a_0	309.8332 943+	20.4272 959-	0.8994 1003+	43.7478 987+	12.1338 426+	0.9441 1471+
a_1	12.4200 431+	2.0543 056+	0.0001 6869+	12.4844 883+	4.2967 391+	0.0107 0774+
a_2	1531 317-	4439 938+	8 5795+	3328 412+	2333 669-	6 2350+
a_3	98 837-	179 278-	4329-	292 618+	405 234-	2553-
a_4	24 939+	13 516-	203+	17 287-	15 239-	947-
a_5	389+	967+		4 665-	611+	
February 22						
a_0	322.0928 548+	17.9481 793-	0.9003 9541+	56.5922 948+	16.1552 285+	0.9554 1096+
a_1	12.0942 976+	2.8835 864+	0.0017 6284+	13.2287 082+	3.7026 475+	0.0118 4028+
a_2	1674 364-	3830 684+	7 4056+	4055 736+	3634 758-	4 8932+
a_3	4 210+	223 779-	3500-	176 524+	458 808-	6377-
a_4	26 548+	8 593-	302+	41 613-	12 615-	1211-
a_5	601-	791+		5 293-	2 812+	
February 23						
a_0	334.0227 315+	14.7046 825-	0.9028 6683+	70.2395 383+	19.4475 391+	0.9676 6467+
a_1	11.7710 056+	3.5795 476+	0.0031 5107+	14.0735 243+	2.8344 164+	0.0125 7911+
a_2	1508 515-	3115 701+	6 5381+	4282 379+	5058 734-	2 2512+
a_3	104 156+	250 450-	2269-	41 002-	479 665-	1 1308-
a_4	23 251+	4 611-	341+	70 186-	1 576+	1285-
a_5	959-	433+		2 173-	5 452+	
February 24						
a_0	345.6555 304+	10.8390 276-	0.9066 5243+	84.7299 642+	21.7288 186+	0.9803 4297+
a_1	11.5093 705+	4.1259 243+	0.0044 0425+	14.8885 468+	1.6821 278+	0.0126 3863+
a_2	1066 161-	2341 007+	6 0605+	3716 315+	6433 572-	1 9033-
a_3	187 576+	264 811-	881-	339 140-	418 354-	1 6587-
a_4	18 303+	2 465-	304+	82 426-	30 071+	1006-
a_5	907-	23+		5 520+	6 398+	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	March 5			March 13		
a_0	99-9485 379+	22-7294 006+	0-9926 1534+	215-7253 497+	9-3204 195-	0-9710 4687+
a_1	15-4998 651+	0-2851 310+	0-0117 2002+	12-9797 964+	4-9020 525-	0-0155 4153-
a_2	2259 836+	7444 000-	7 4596-	381 490-	3165 712+	2 1468-
a_3	609 907-	235 708-	2 0772-	216 160+	365 393+	2 3189+
a_4	52 719-	63 677+	251-	20 429-	27 233-	1149-
a_5	12 331+	3 579+		1 237-	743+	
	March 6			March 14		
a_0	115-6093 572+	22-2532 864+	1-0033 7918+	228-6864 465+	13-8720 106-	0-9555 1105+
a_1	15-7539 364+	1-2471 272-	0-0095 9485+	12-9595 572+	4-1698 143-	0-0153 2125-
a_2	237 649+	7733 234-	13 8054-	132 005+	4105 943+	4 1132+
a_3	698 269-	51 775+	2 1875-	122 613+	263 782+	1 8469+
a_4	12 795+	81 850+	929+	26 796-	23 381-	1377-
a_5	10 879+	1 778-		317-	545+	
	March 7			March 16		
a_0	131-3195 990+	20-2460 203+	1-0113 8403+	241-6687 541+	17-6071 361-	0-9407 7205+
a_1	15-6025 340+	2-7463 954-	0-0062 1471+	13-0118 663+	3-2785 716-	0-0139 9963-
a_2	1671 467-	7104 765-	19 7720-	335 856+	4762 449+	8 8300+
a_3	542 763-	359 103+	1 8102-	12 968+	175 540+	1 2895+
a_4	68 157+	71 736+	2188+	28 564-	20 674-	1305-
a_5	2 802+	5 790-		920+	248+	
	March 8			March 17		
a_0	146-7078 059+	16-8316 534+	1-0154 6241+	254-7127 385+	20-3939 514-	0-9277 7131+
a_1	15-1340 682+	4-0338 187-	0-0018 0492+	13-0719 641+	2-2815 657-	0-0118 9902-
a_2	2863 073-	5655 121-	23 8654-	212 575+	5167 487+	11 9216+
a_3	245 935-	587 724+	9110-	91 349-	95 263+	7651+
a_4	80 249+	41 503+	2979+	23 937-	19 538-	1097-
a_5	3 891-	6 453-		2 211+	147+	
	March 9			March 18		
a_0	161-5386 090+	12-2945 999+	1-0148 1947+	267-7946 526+	22-1511 813-	0-9171 2999+
a_1	14-5178 246+	4-9751 492-	0-0031 2217-	13-0786 059+	1-2272 311-	0-0093 2907-
a_2	3158 578-	3707 537-	24 8142-	182 951-	5337 505+	13 5658+
a_3	34 984+	690 139+	3111+	164 586-	18 672+	3264+
a_4	58 957+	8 690+	2885+	12 581-	18 885-	861-
a_5	5 771-	4 777-		2 921+	311+	
	March 10			March 19		
a_0	175-7493 928+	7-0181 021+	1-0092 7583+	280-8375 387+	22-8446 522-	0-9091 8153+
a_1	13-9173 023+	5-5085 251-	0-0078 7614-	12-9890 674+	0-1615 268-	0-0065 5241-
a_2	2757 706-	1632 744-	22 1779-	722 945-	5283 322+	14 0351+
a_3	213 629+	678 448+	1 4862+	185 882-	53 608-	169-
a_4	29 443+	15 154-	1956+	2 385+	17 319-	648-
a_5	4 739-	2 476-		2 604+	576+	
	March 11			March 20		
a_0	189-4147 577+	1-4123 845+	0-9993 5007+	293-7362 223+	22-4848 817-	0-9040 2446+
a_1	13-4392 592+	5-6388 369-	0-0117 8761-	12-7909 685+	0-8724 163+	0-0037 7637-
a_2	1987 561-	286 966+	16 5855-	1240 233-	5024 363+	13 6014+
a_3	284 872+	594 166+	2 2709+	150 943-	117 040-	2751-
a_4	5 772+	27 218-	659+	15 540+	14 354-	466-
a_5	3 196-	598-		1 480+	713+	
	March 12			March 20		
a_0	202-6840 057+	4-1411 208-	0-9861 3759+	306-3897 752+	21-1230 972-	0-9015 7607+
a_1	13-1279 209+	5-4143 789-	0-0143 9711-	12-5045 935+	1-8367 917+	0-0011 5726-
a_2	1130 265-	1900 233+	9 4119-	1585 054-	4594 260+	12 5014+
a_3	276 646+	479 940+	2 5229+	74 690-	167 374-	4612-
a_4	10 089-	29 832-	470-	22 777+	10 711-	307-
a_5	2 061-	460+		236+	622+	

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	318.7306 955+	18.8446 258-	0.9016 1976+	53.5733 467+	15.5196 311+	0.9517 2689+
a_1	12.1744 030+	2.7014 578+	0.0011 9240+	13.0810 729+	3.8977 378+	0.0085 8711+
a_2	1670 161-	4034 092+	10 9386+	3520 754+	3521 113-	1 0450+
a_3	18 304+	204 140-	5839-	140 450+	445 402-	1035-
a_4	23 664+	7 578-	153-	36 876-	5 235-	297-
a_5	587-	370+		3 878-	2 459+	
March 22						
a_0	330.7422 205+	15.7608 936-	0.9038 4610+	67.0164 646+	19.0204 398+	0.9604 0518+
a_1	11.8550 336+	3.4441 877+	0.0031 9882+	13.8106 725+	3.0590 318+	0.0087 5318+
a_2	1479 182-	3379 897+	9 0998+	3681 841+	4864 116-	5477+
a_3	106 918+	230 913-	6453-	44 306-	440 901-	2235-
a_4	20 485+	5 756-	2+	57 765-	7 223+	580-
a_5	880-	88+		1 270-	3 981+	
March 23						
a_0	342.4619 881+	12.0023 743-	0.9078 9040+	81.1849 869+	21.5500 903+	0.9691 8498+
a_1	11.5990 263+	4.0486 345+	0.0048 2528+	14.5100 139+	1.9588 183+	0.0087 7246+
a_2	1044 348-	2653 489+	7 1698+	3189 493+	6103 561-	4765-
a_3	180 073+	253 186-	6441-	284 876-	372 045-	4597-
a_4	15 951+	5 372-	154+	65 003-	27 902+	776-
a_5	855-	136-		4 368+	4 306+	
March 24						
a_0	353.9760 965+	7.7142 602-	0.9133 6979+	95.9793 991+	22.8645 689+	0.9778 5606+
a_1	11.4501 316+	4.5011 597+	0.0060 7218+	15.0386 381+	0.6398 046+	0.0085 0816+
a_2	416 981-	1860 330+	5 3338+	1988 719+	7009 089-	2 3214-
a_3	235 366+	276 110-	5813-	498 470-	218 461-	7778-
a_4	11 664+	6 108-	281+	41 769-	50 340+	786-
a_5	799-	275-		9 310+	2 406+	
March 25						
a_0	5.4091 532+	3.0553 168-	0.9199 2003+	111.1638 163+	22.7868 931+	0.9860 4644+
a_1	11.4416 114+	4.7878 121+	0.0069 7580+	15.2747 877+	0.8062 161-	0.0077 7907+
a_2	351 119+	992 591+	3 7608+	336 165+	7338 355-	5 1177-
a_3	273 938+	303 316-	4664-	572 793-	5 113+	1 1019-
a_4	7 753+	7 543-	351+	7 422+	62 490+	517-
a_5	960-	321-		8 672+	862-	
March 26						
a_0	16.9139 496+	1.8006 364+	0.9272 2878+	126.4165 506+	21.2535 156+	0.9931 9838+
a_1	11.5966 372+	4.8921 577+	0.0076 0209+	15.1774 814+	2.2477 911-	0.0064 0421+
a_2	1209 863+	34 152+	2 5716+	1250 833-	6956 796-	8 7160-
a_3	295 011+	336 647-	3227-	459 482-	245 042+	1 3180-
a_4	3 087+	9 251-	333+	51 730+	57 487+	57+
a_5	1 526-	227-		3 080+	3 315-	
March 27						
a_0	28.6612 303+	6.6615 969+	0.9350 5910+	141.4284 814+	18.3399 663+	0.9985 9976+
a_1	11.9275 837+	4.7941 807+	0.0080 3296+	14.8116 958+	3.5443 010-	0.0042 6786+
a_2	2098 162+	1033 594-	1 7996+	2288 274-	5909 992-	12 6116-
a_3	291 497+	375 699-	1860-	224 813-	441 459+	1 2986-
a_4	4 444-	10 567-	209+	66 001+	40 237+	841+
a_5	2 562-	146+		2 287-	3 924-	
March 28						
a_0	40.8270 792+	11.3138 062+	0.9432 5551+	155.9952 399+	14.2524 432+	1.0014 8501+
a_1	12.4316 050+	4.4705 996+	0.0083 4546+	14.3118 513+	4.5797 284-	0.0013 8961+
a_2	2920 330+	2222 670-	1 3602+	2589 789-	4383 467-	15 9802-
a_3	247 435+	415 997-	996-	15 031+	563 468+	9561-
a_4	17 412-	10 094-	13-	53 172+	20 381+	1586+
a_5	3 728-	1 015+		4 471-	3 353-	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
April 6						
a_0	170-0544 854+	9-2924 178+	1-0011 9685+	276-4523 637+	22-9979 756-	0-9185 1694+
a_1	13-8174 360+	5-2809 045-	0-0020 2975-	13-2717 898+	0-5311 032-	0-0090 7706-
a_2	2270 483-	2604 301-	17 8848-	870 462-	5577 130+	12 2822+
a_3	183 105+	611 941+	3064-	229 653-	58 064-	7114+
a_4	30 154+	3 643+	1987+	5 783+	22 071-	899-
a_5	4 256-	2 507-		3 040+	1 318+	
April 7						
a_0	183-6657 735+	3-8123 909+	0-9973 6785+	289-6150 244+	22-9792 475-	0-9107 3025+
a_1	13-4282 059+	5-6179 778-	0-0056 1905-	13-0326 333+	0-5587 343+	0-0064 4317-
a_2	1582 824-	771 677-	17 6157-	1494 309-	5283 720+	13 8804+
a_3	261 702+	601 881+	5062+	177 029-	133 161-	3517+
a_4	8 771+	8 816-	1857+	21 114+	15 297-	787-
a_5	3 326-	1 744-		1 435+	1 326+	
April 8						
a_0	196-9624 117+	1-8236 225-	0-9900 5641+	302-4827 788+	21-9068 543-	0-9057 0243+
a_1	13-1919 978+	5-5961 465-	0-0089 1601-	12-6898 240+	1-5700 738+	0-0035 9303-
a_2	778 363-	963 649+	15 0017-	1884 414-	4805 729+	14 4667+
a_3	264 014+	549 542+	1 2604+	79 125-	181 316-	377+
a_4	7 844-	17 447-	1254+	28 017+	8 548-	685-
a_5	2 497-	1 119-		129-	930+	
April 9						
a_0	210-1019 404+	7-2703 066-	0-9797 7881+	314-9790 377+	19-8751 011-	0-9035 5299+
a_1	13-1111 440+	5-2460 919-	0-0114 8805-	12-3003 450+	2-4738 697+	0-0007 1579-
a_2	58 388-	2496 422+	10 4928-	1955 043-	4219 790+	14 1712+
a_3	208 136+	468 826+	1 7637+	31 147+	206 545-	2359-
a_4	20 465-	22 936-	444+	26 980+	3 887-	603-
a_5	1 730-	663-		991-	344+	
April 10						
a_0	223-2258 396+	12-2222 336-	0-9674 2228+	327-0895 918+	17-0002 611-	0-9042 2470+
a_1	13-1528 571+	4-6156 652-	0-0130 3980-	11-9289 763+	3-2544 808+	0-0020 2356+
a_2	425 876+	3758 664+	4 9582-	1709 689-	3580 260+	13 1043+
a_3	109 654+	370 620+	1 9348+	129 046+	218 971-	4771-
a_4	29 399-	26 186-	284-	21 740+	2 234-	525-
a_5	617-	364-		1 160-	205-	
April 11						
a_0	236-4292 481+	16-4276 254-	0-9540 7728+	338-8625 618+	13-4098 952-	0-9075 0573+
a_1	13-2588 622+	3-7634 024-	0-0134 6243-	11-6338 687+	3-9038 451+	0-0044 8027+
a_2	572 227+	4709 768+	6606+	1203 731-	2907 876+	11 3609+
a_3	13 133-	262 401+	1 8119+	204 496+	230 181-	6883-
a_4	32 738-	28 024-	761-	15 836+	3 354-	428-
a_5	1 047+	82-		987-	588-	
April 12						
a_0	249-7408 507+	19-6966 215-	0-9408 5448+	350-3979 919+	9-2386 748-	0-9130 4898+
a_1	13-3567 981+	2-7539 788-	0-0128 1725-	11-4603 124+	4-4147 301+	0-0065 2884+
a_2	346 876+	5327 998+	5 6328-	505 106-	2191 307+	9 0439+
a_3	132 599-	149 734+	1 4996+	258 027+	249 588-	8612-
a_4	27 421-	28 498-	970-	10 920+	6 402-	284-
a_5	2 790+	352+		834-	761-	
April 13						
a_0	263-1166 133+	21-9056 417-	0-9287 4078+	1-8346 050+	4-6304 892-	0-9203 9326+
a_1	13-3768 208+	1-6546 816-	0-0112 7962-	11-4406 501+	4-7751 738+	0-0080 6791+
a_2	187 488-	5609 732+	9 5492+	326 158+	1396 496+	6 2965+
a_3	213 889-	39 577+	1 1070+	293 254+	282 782-	9766-
a_4	12 976-	26 739-	984-	6 846+	10 335-	80-
a_5	3 648+	908+		975-	704-	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
April 22						
a_0	13:3377 834+	0:2549 521+	0:9289 9237+	122:9765 294+	21:9740 140+	0:9859 3761+
a_1	11:5961 081+	4:9651 528+	0:0090 3103+	15:0767 090+	1:9122 434-	0:0029 6144+
a_2	1237 258+	479 071+	3 3266+	1619 040-	6932 218-	6 0715-
a_3	310 516+	330 965-	1 0094-	459 151-	248 683+	1359-
a_4	2 112+	14 021-	170+	59 175+	51 137+	406-
a_5	1 601-	365-		2 473+	3 988-	
April 23						
a_0	25:0887 200+	5:2334 768+	0:9382 5681+	137:8515 842+	19:3981 320+	0:9882 7425+
a_1	11:9367 572+	4:9558 874+	0:0094 0032+	14:6400 564+	3:2056 207-	0:0016 9008+
a_2	2165 473+	601 634-	4080+	2616 921-	5919 326-	6 7196-
a_3	302 312+	390 260-	9402-	200 778-	413 576+	3052-
a_4	5 786-	16 063-	419+	70 135+	30 500+	295-
a_5	2 753-	368+		2 878-	3 526-	
April 24						
a_0	37:2714 018+	10:0886 054+	0:9476 0810+	152:2165 963+	15:6446 337+	0:9892 5890+
a_1	12:4568 531+	4:7122 428+	0:0092 1662+	14:0830 515+	4:2549 744-	0:0002 4277+
a_2	3010 125+	1865 153-	2 1561-	2827 444-	4530 857-	7 8028-
a_3	250 969+	450 097-	7692-	49 902+	501 093+	4284-
a_4	19 758-	14 470-	594+	54 323+	12 839+	9+
a_5	4 017-	1 617+		4 659-	2 140-	
April 25						
a_0	50:0519 867+	14:5680 380+	0:9565 3812+	166:0268 600+	10:9877 527+	0:9886 7864+
a_1	13:1242 568+	4:1992 057+	0:0085 7839+	13:5519 335+	5:0067 514-	0:0014 4597-
a_2	3604 162+	3286 107-	4 1067-	2398 481-	2971 903-	9 0700-
a_3	131 825+	490 839-	5266-	220 847+	531 656+	4264-
a_4	40 797-	6 485-	629+	30 480+	2 425+	422+
a_5	4 065-	3 285+		4 153-	1 085-	
April 26						
a_0	63:5453 559+	18:3892 292+	0:9646 5948+	179:3636 628+	5:7371 106+	0:9862 8726+
a_1	13:8662 885+	3:3937 829+	0:0076 2427+	13:1486 079+	5:4412 073-	0:0033 7100-
a_2	3713 951+	4764 624-	5 3131-	1594 605-	1373 190-	10 0843-
a_3	70 169-	483 180-	2699-	301 750+	530 737+	2543-
a_4	62 764-	10 327+	499+	9 720+	2 716-	808+
a_5	953-	4 621+		3 205-	709-	
April 27						
a_0	77:7696 509+	21:2597 265+	0:9717 3044+	192:3836 366+	0:2113 155+	0:9818 9048+
a_1	14:5624 528+	2:3023 447+	0:0065 0065+	12:9224 981+	5:5580 653-	0:0054 3179-
a_2	3117 205+	6105 858-	5 8316-	663 082-	195 662+	10 3559-
a_3	327 199-	395 929-	674-	308 907+	512 725+	762+
a_4	68 324-	34 405+	237+	6 204-	6 093-	1024+
a_5	5 341+	4 213+		2 620-	827-	
April 28						
a_0	92:6048 061+	22:9157 543+	0:9776 4355+	205:2698 349+	5:2766 032-	0:9754 4096+
a_1	15:0630 808+	0:9782 595+	0:0053 2360+	12:8787 629+	5:3679 668-	0:0074 3911-
a_2	1779 328+	7044 972-	5 9008-	200 196+	1689 018+	9 5141-
a_3	544 341-	217 781-	273+	258 102+	479 901+	4941+
a_4	39 821-	56 294+	69-	19 385-	10 172-	988+
a_5	10 288+	1 399+		2 271-	1 150-	
April 29						
a_0	107:7884 324+	23:1735 077+	0:9823 7911+	218:1922 620+	10:4288 104-	0:9671 0972+
a_1	15:2448 581+	0:4728 561-	0:0041 4884+	12:9873 442+	4:8908 374-	0:0091 5414-
a_2	10 660+	7346 598-	5 8679-	835 419+	3056 179+	7 4471-
a_3	601 541-	19 372+	40-	158 295+	427 562+	8955+
a_4	14 466+	63 024+	315-	31 112-	15 975-	720+
a_5	8 804+	2 173-		1 528-	1 419-	

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	231.2757 136+	14.9730 131-	0.9573 0763+	335.0341 940+	14.8763 591-	0.9055 3960+
a_1	13.1887 097+	4.1584 326-	0.0103 4609-	11.6752 667+	3.7047 556+	0.0027 0356+
a_2	1108 267+	4228 799+	4 3408-	1631 595-	3071 954+	14 2697+
a_3	19 570+	349 515+	1 1855+	215 566+	226 778-	1927-
a_4	39 274-	23 243-	324+	19 842+	1 682+	740-
a_5	200+	1 356-		1 314-	632-	
May 9						
a_0	244.5732 997+	18.6760 742-	0.9466 4925+	346.5697 105+	10.8869 809-	0.9096 4347+
a_1	13.4006 277+	3.2177 928-	0.0108 4563-	11.4208 975+	4.2514 693+	0.0054 7010+
a_2	933 303+	5124 293+	6019-	878 997-	2395 372+	13 2467+
a_3	134 093-	243 359+	1 3135+	282 006+	226 641-	4894-
a_4	38 456-	30 266-	71-	13 277+	1 597-	770-
a_5	2 717+	714-		930-	1 099-	
May 10						
a_0	258.0502 745+	21.3601 999-	0.9358 7406+	357.9321 435+	6.4189 080-	0.9163 8160+
a_1	13.5330 386+	2.1323 890-	0.0105 7485-	11.3345 456+	4.6613 633+	0.0079 4182+
a_2	327 523+	5665 612+	3 2862+	37 391+	1694 862+	11 3172+
a_3	259 663-	115 817+	1 2812+	325 836+	244 138-	7995-
a_4	24 346-	33 964-	377-	8 765+	7 220-	755-
a_5	4 659+	449+		868-	1 314-	
May 11						
a_0	271.5881 304+	22.9177 975-	0.9257 5217+	9.3038 015+	1.6133 257-	0.9253 6764+
a_1	13.5132 354+	0.9778 812-	0.0095 4837-	11.4428 460+	4.9235 495+	0.0099 3518+
a_2	550 832-	5813 793+	6 8975+	1058 835+	905 955+	8 4692+
a_3	310 514-	14 891-	1 1266+	351 894+	286 089-	1 1058-
a_4	155-	31 563-	564-	4 654+	13 985-	641-
a_5	4 554+	1 605+		1 396-	1 196-	
May 12						
a_0	285.0156 711+	23.3187 843-	0.9170 0057+	20.8880 461+	3.3706 922+	0.9360 3274+
a_1	13.3121 277+	0.1685 877+	0.0078 5346-	11.7613 431+	5.0127 224+	0.0112 7160+
a_2	1437 703-	5595 838+	9 9361+	2128 506+	48 233-	4 7756+
a_3	266 742-	124 807-	8984+	355 779+	353 594-	1 3676-
a_4	23 080+	23 189-	651-	2 065-	20 276-	373-
a_5	2 514+	2 111+		2 707-	529-	
May 13						
a_0	298.1599 137+	22.6052 013-	0.9102 2405+	32.8973 406+	8.3411 515+	0.9476 4140+
a_1	12.9550 509+	1.2420 927+	0.0056 2275-	12.2915 967+	4.8886 248+	0.0118 0146+
a_2	2074 355-	5103 432+	12 2400+	3156 382+	1236 023-	4620+
a_3	150 663-	196 636-	6370+	319 370+	439 091-	1 5218-
a_4	35 379+	12 345-	679-	15 566-	23 348-	60+
a_5	109+	1 786+		4 604-	999+	
May 14						
a_0	310.8960 116+	20.8734 850-	0.9058 8220+	45.5344 954+	13.0600 300+	0.9593 3749+
a_1	12.5091 853+	2.1997 422+	0.0030 1083-	13.0101 541+	4.5008 561+	0.0114 3970+
a_2	2313 076-	4457 324+	13 7431+	3974 912+	2683 446-	4 0512-
a_3	8 906-	228 626-	3653+	210 452+	521 061-	1 4992-
a_4	35 340+	3 322-	689-	39 444-	18 699-	593+
a_5	1 336-	961+		5 766-	3 486+	
May 15						
a_0	323.1763 990+	18.2511 092-	0.9042 7533+	58.9586 649+	17.2389 141+	0.9702 2809+
a_1	12.0573 658+	3.0217 699+	0.0001 8017-	13.8496 147+	3.8021 146+	0.0102 0346+
a_2	2141 189-	3761 114+	14 4250+	4311 619+	4323 926-	8 1779-
a_3	118 901+	232 813-	901+	3 481-	559 544-	1 2574-
a_4	28 218+	1 427+	708-	70 467-	972-	1079+
a_5	1 638-	74+		3 305-	6 088+	

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	73:2317 162+	20:5531 933+	0.9794 9881+	189:1434 238+	1:7436 027+	0.9750 9650+
a_1	14:6810 637+	2:7721 219+	0.0082 3386+	12:6978 013+	5:4726 538-	0.0064 0079-
a_2	3845 038+	5947 305-	11 2948-	1113 844-	111 792-	3 8212-
a_3	313 945-	502 352-	8161-	367 534+	462 713+	1629+
a_4	88 927-	30 884+	1339+	3 462-	8 281-	123-
a_5	4 543+	6 538+		2 539-	351+	
May 25						
a_0	88:2574 509+	22:6840 917+	0.9865 3496+	201:7659 940+	3:6947 520-	0.9683 2864+
a_1	15:3225 978+	1:4475 736+	0.0057 8368+	12:5826 389+	5:3593 360-	0.0071 2108-
a_2	2415 309+	7203 450-	12 9421-	57 396-	1230 202+	3 3980-
a_3	619 661-	315 489-	2694-	328 433+	432 782+	1143+
a_4	64 502-	65 193+	1265+	16 052-	6 326-	146+
a_5	12 860+	2 943+		2 325-	205-	
May 26						
a_0	103:7544 493+	23:3865 850+	0.9910 1013+	214:3738 989+	8:8884 427-	0.9608 8065+
a_1	15:6003 902+	0:0602 210-	0.0031 6505+	12:6621 066+	4:9860 947-	0.0077 6054-
a_2	298 529+	7729 346-	13 0033-	808 300+	2488 557+	2 9610-
a_3	749 142-	28 484-	2441+	241 104+	404 962+	1757+
a_4	4 200+	79 820+	887+	27 904-	7 285-	355+
a_5	12 735+	2 762-		2 152-	1 023-	
May 27						
a_0	119:3114 717+	22:5582 867+	0.9929 0814+	227:1379 402+	13:5860 163-	0.9528 4513+
a_1	15:4433 915+	1:5840 920-	0.0006 7314+	12:8838 615+	4:3703 211-	0.0082 8579-
a_2	1796 123-	7363 735-	11 7546-	1342 578+	3649 488+	2 2177-
a_3	609 635-	261 305+	6007+	108 581+	365 199+	3220+
a_4	69 504+	64 327+	363+	39 232-	12 523-	451+
a_5	4 293+	6 036-		1 122-	1 722-	
May 28						
a_0	134:5216 671+	20:2697 808+	0.9924 6951+	240:1628 822+	17:5562 933-	0.9443 7428+
a_1	14:9312 157+	2:9557 341-	0.0014 8307-	13:1687 003+	3:5367 345-	0.0086 1467-
a_2	3165 364-	6254 406-	9 7495-	1421 611+	4652 674+	9821-
a_3	293 141-	458 600+	7418+	58 204-	297 847+	5061+
a_4	89 005+	32 837+	118-	45 435-	21 470-	419+
a_5	3 531-	5 322-		1 283+	1 807-	
May 29						
a_0	149:1155 798+	16:7372 176+	0.9900 8450+	253:4635 079+	20:6003 034-	0.9357 1620+
a_1	14:2440 344+	4:0585 586-	0.0032 1516-	13:4180 321+	2:5263 362-	0.0086 4247-
a_2	3546 387-	4734 822-	7 6039-	987 220+	5399 269+	7838+
a_3	26 057+	538 153+	6877+	225 453-	194 412+	6763+
a_4	69 203+	6 078+	418-	38 949-	30 895-	288+
a_5	6 006-	2 780-		4 243+	917-	
May 30						
a_0	163:0139 008+	12:2593 219+	0.9861 7355+	266:9542 461+	22:5704 527-	0.9272 2263+
a_1	13:5672 530+	4:8430 335-	0.0045 4638-	13:5343 836+	1:4009 735-	0.0082 7128-
a_2	3113 189-	3111 627-	5 7939-	119 722+	5787 948+	2 9800+
a_3	243 310+	535 885+	5133+	338 012-	62 566+	7923+
a_4	38 387+	7 376-	491-	16 776-	35 600-	105+
a_5	5 010-	662-		5 702+	676+	
May 31						
a_0	176:2975 037+	7:1579 103+	0.9810 9421+	280:4656 932+	23:3898 672-	0.9193 2964+
a_1	13:0304 599+	5:3078 740-	0.0055 7080-	13:4530 637+	0:2385 144-	0.0074 3336-
a_2	2203 034-	1554 780-	4 5444-	937 813-	5768 850+	5 4145+
a_3	347 644+	500 336+	3119+	348 814-	72 290-	8340+
a_4	13 425+	10 209-	367-	12 727+	31 924-	81-
a_5	3 432-	318+		4 412+	2 052+	

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						
a_0	293.7918 081+	23.0617 128-	0.9125 2031+	28.2951 008+	6.3932 012+	0.9392 3712+
a_1	13.1681 503+	0.8818 254+	0.0061 0351-	11.9036 413+	4.9164 548+	0.0129 9183+
a_2	1863 762-	5381 020+	7 8629+	2892 564+	644 165-	7 3372+
a_3	255 417-	179 238-	8006+	391 944+	370 211-	1 3816-
a_4	34 912+	21 207-	242-	5 021-	24 468-	1021-
a_5	1 490+	2 433+		3 966-	660-	
June 10						
a_0	306.7516 807+	21.6615 865-	0.9072 8074+	40.5262 942+	11.2057 056+	0.9528 1431+
a_1	12.7334 796+	1.8969 911+	0.0043 0043-	12.5957 432+	4.6664 440+	0.0140 0393+
a_2	2405 736-	4740 436+	10 1152+	3998 576+	1908 307-	2 5916+
a_3	102 246-	240 060-	7028+	330 775+	473 350-	1 8002-
a_4	41 773+	8 752-	373-	25 022-	28 447-	658-
a_5	945-	1 839+		6 550-	1 603+	
June 11						
a_0	319.2384 450+	19.3152 492-	0.9040 5838+	53.5518 152+	15.6312 995+	0.9668 9080+
a_1	12.2378 943+	2.7704 776+	0.0020 8147-	13.4814 065+	4.1322 044+	0.0139 5580+
a_2	2471 387-	3986 134+	11 9963+	4774 997+	3483 075-	3 1824-
a_3	54 842+	257 258-	5533+	165 038+	568 978-	2 0737-
a_4	36 397+	481+	484-	59 549-	20 870-	36+
a_5	1 898-	822+		7 070-	5 319+	
June 12						
a_0	331.2381 347+	16.1717 538-	0.9032 2701+	67.5205 633+	19.3567 435+	0.9803 2136+
a_1	11.7736 795+	3.4911 289+	0.0004 6439+	14.4585 693+	3.2592 110+	0.0126 9863+
a_2	2107 521-	3225 444+	13 3619+	4841 614+	5261 911-	9 3532-
a_3	181 539+	247 670-	3599+	140 313-	597 457-	2 0631-
a_4	26 543+	4 492+	597-	98 317-	6 613+	964+
a_5	1 724-	140-		1 110-	8 613+	
June 13						
a_0	342.8216 979+	12.3824 123-	0.9050 5761+	82.4393 200+	22.0315 404+	0.9918 8801+
a_1	11.4163 928+	4.0636 427+	0.0032 2087+	15.3449 298+	2.0345 424+	0.0102 4767+
a_2	1420 905-	2507 969+	14 0795+	3819 523+	6928 104-	14 9374-
a_3	270 791+	231 521-	1219+	537 886-	485 576-	1 6697-
a_4	17 846+	3 675+	726-	104 902-	52 221+	1835+
a_5	1 163-	868-		11 049+	7 505+	
June 14						
a_0	354.1247 475+	8.0908 442-	0.9096 9135+	98.1030 283+	23.3306 873+	1.0004 9332+
a_1	11.2200 061+	4.4968 154+	0.0060 4429+	15.9110 399+	0.5278 817+	0.0068 3278+
a_2	513 086-	1826 753+	14 0048+	1687 644+	7996 217-	18 8317-
a_3	330 760+	225 796-	1682-	843 219-	205 498-	9170-
a_4	12 125+	773-	877-	44 647-	91 442+	2285+
a_5	776-	1 371-		18 070+	620+	
June 15						
a_0	5.3276 559+	3.4341 475-	0.9171 1055+	114.0958 531+	23.0476 037+	1.0053 7408+
a_1	11.2210 788+	4.7934 322+	0.0087 5974+	15.9867 716+	1.0961 325-	0.0028 8285+
a_2	544 210+	1130 994+	12 9699+	928 492-	8058 065-	20 2176-
a_3	371 414+	242 757-	5196-	844 894-	162 437+	176+
a_4	8 463+	7 760-	1023-	50 724+	93 092+	2098+
a_5	921-	1 651-		11 126+	6 595-	
June 16						
a_0	16.6410 512+	1.4471 674+	0.9271 0508+	129.9114 712+	21.1705 581+	1.0062 5791+
a_1	11.4442 681+	4.9428 750+	0.0111 5687+	15.5734 444+	2.6250 770-	0.0010 7139-
a_2	1700 056+	339 622+	10 7946+	3047 715-	7078 511-	18 9280-
a_3	395 476+	290 230-	9324-	537 555-	467 799+	8696+
a_4	4 198+	16 253-	1105-	105 346+	57 582+	1373+
a_5	1 915-	1 551-		1 100-	8 338-	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
June 25						
a_0	145·1368 131+	17·8893 342+	1·0033 9439+	249·8089 320+	19·8520 302-	0·9326 6069+
a_1	14·8442 162+	3·8815 731-	0·0045 4120-	13·1727 441+	2·7861 449-	0·0081 1806-
a_2	4039 804-	5413 157-	15 5240-	1275 096+	5057 729+	3 4631+
a_3	130 773-	616 299+	1 4192+	132 045-	220 498+	890+
a_4	96 444+	14 871+	445+	44 500-	22 016-	182+
a_5	7 214-	5 474-		2 642+	1 624-	
June 26						
a_0	159·5728 946+	13·5290 150+	0·9974 4715+	263·0917 954+	22·1127 166-	0·9248 9966+
a_1	14·0319 943+	4·7760 996-	0·0072 0250-	13·3716 737+	1·7180 673-	0·0073 9142-
a_2	3925 865-	3529 725-	11 0240-	638 449+	5570 829+	3 8427+
a_3	182 931+	623 078+	1 5883+	282 199-	116 807+	1650+
a_4	58 616+	12 146-	342-	30 790-	30 504-	279+
a_5	6 884-	1 897-		5 138+	542-	
June 27						
a_0	173·2357 689+	8·4608 464+	0·9892 9767+	276·4965 290+	23·2651 250-	0·9179 1181+
a_1	13·3217 079+	5·3009 255-	0·0089 4455-	13·4049 571+	0·5813 304-	0·0065 6219-
a_2	3094 243-	1752 235-	6 4787-	341 358-	5732 803+	4 5056+
a_3	349 853+	556 820+	1 4399+	353 828-	9 733-	2793+
a_4	24 065+	20 945-	801-	3 994-	33 219-	289+
a_5	4 556-	323+		5 392+	1 043+	
June 28						
a_0	186·2849 886+	3·0383 173+	0·9798 4122+	289·8321 072+	23·2773 660-	0·9118 3101+
a_1	12·8151 649+	5·4925 416-	0·0098 4044-	13·2316 329+	0·5495 457+	0·0055 6569-
a_2	1945 812-	204 125-	2 6440-	1372 802-	5514 778+	5 5151+
a_3	401 533+	476 730+	1 1097+	317 129-	131 541-	3969+
a_4	1 672+	18 796-	924-	23 627+	27 636-	227+
a_5	2 849-	1 078+		3 174+	2 151+	
June 29						
a_0	198·9456 077+	2·4287 356-	0·9698 3810+	302·8974 272+	22·1920 452-	0·9068 5879+
a_1	12·5457 071+	5·3973 273-	0·0100 7334-	12·8729 688+	1·6030 600+	0·0043 3451-
a_2	759 641-	1124 121+	1341+	2150 724-	4975 906+	6 8388+
a_3	380 106+	412 202+	7340+	192 514-	220 520-	4890+
a_4	12 269-	13 078-	802-	39 256+	16 469-	118+
a_5	2 207-	847+		296+	2 233+	
June 30						
a_0	211·4519 136+	7·6736 536-	0·9598 4355+	315·5400 273+	20·1148 700-	0·9032 5824+
a_1	12·5017 995+	5·0536 509-	0·0098 5844-	12·4009 180+	2·5266 137+	0·0028 1533-
a_2	284 978+	2290 762+	1 8623+	2489 881-	4237 894+	8 3723+
a_3	309 019+	367 913+	4105+	33 580-	264 465-	5368+
a_4	23 306-	8 660-	550-	40 054+	5 104-	18-
a_5	2 118-	58+		1 487-	1 523+	
July 1						
a_0	224·0105 704+	12·4622 974-	0·9502 0690+	327·6924 559+	17·1912 715-	0·9013 3363+
a_1	12·6411 198+	4·4885 611-	0·0093 8481-	11·9081 453+	3·2935 720+	0·0009 8055-
a_2	1050 948+	3343 123+	2 7729+	2365 258-	3429 103+	9 9672+
a_3	194 865+	333 283+	1907+	111 513+	270 207-	5300+
a_4	34 291-	8 345-	261-	32 080+	2 502+	169-
a_5	1 706-	936-		1 860-	562+	
July 2						
a_0	236·7726 717+	16·5841 460-	0·9411 1582+	339·3782 487+	13·5815 035-	0·9014 0111+
a_1	12·8952 013+	3·7237 585-	0·0087 8349-	11·4804 502+	3·8996 112+	0·0011 6512+
a_2	1412 632+	4283 516+	3 1960+	1856 881-	2639 093+	11 4505+
a_3	41 568+	290 125+	879+	221 455+	255 081-	4629+
a_4	43 482-	13 220-	4-	22 545+	5 209+	335-
a_5	128-	1 679-		1 431-	288-	

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	350.6972 677+	9.4429 989-	0.9037 5421+	91.3383 397+	22.9652 781+	0.9981 5116+
a_1	11.1838 135+	4.3528 443+	0.0035 8069+	15.7192 455+	1.1906 450+	0.0127 3007+
a_2	1071 568-	1902 204+	12 6324+	3489 843+	7593 468-	14 7499-
a_3	297 633+	237 506-	3299+	684 846-	416 603-	2 4663-
a_4	15 381+	3 663+	524-	99 509-	68 470+	1530+
a_5	880-	937-		15 612+	6 931+	
	July 12			July 20		
a_0	1.8051 377+	4.9234 123-	0.9086 2589+	107.3296 953+	23.3624 561+	1.0091 7491+
a_1	11.0645 022+	4.6630 293+	0.0061 8519+	16.1797 660+	0.4221 858-	0.0091 0147+
a_2	95 174-	1202 276+	13 3008+	995 319+	8362 986-	21 1948-
a_3	350 486+	232 497-	1215+	925 244-	78 165-	1 8394-
a_4	11 120+	1 112-	746-	14 728-	104 281+	2709+
a_5	650-	1 412-		18 463+	1 600-	
	July 13			July 21		
a_0	12.8962 181+	0.1636 575-	0.9161 4584+	123.5168 425+	22.1064 232+	1.0160 0005+
a_1	11.1547 354+	4.8325 842+	0.0088 5195+	16.1045 850+	2.0773 279-	0.0044 1920+
a_2	1016 531+	483 972+	13 2097+	1683 656-	7988 115-	25 0739-
a_3	388 214+	251 216-	1763-	805 690-	319 054+	7255-
a_4	8 142+	8 297-	999-	81 063+	94 013+	3161+
a_5	1 068-	1 691-		7 162+	8 544-	
	July 14			July 22		
a_0	24.1921 355+	4.6912 035+	0.9262 9115+	139.3813 154+	19.2707 361+	1.0178 7092+
a_1	11.4772 271+	4.8498 497+	0.0114 0105+	15.5621 405+	3.5459 023-	0.0006 8663-
a_2	2219 396+	336 414-	12 0739+	3543 128-	6552 683-	25 3697-
a_3	409 276+	301 222-	5770-	416 503-	609 342+	5682+
a_4	3 209+	17 027-	1249-	114 068+	48 743+	2644+
a_5	2 472-	1 556-		4 621-	8 955-	
	July 15			July 23		
a_0	35.9323 035+	9.4754 312+	0.9388 2940+	154.5584 376+	15.1344 785+	1.0147 3057+
a_1	12.0439 338+	4.6846 128+	0.0135 9275+	14.7718 767+	4.6586 125-	0.0054 8428-
a_2	3441 795+	1357 886-	9 5889+	4154 928-	4521 847-	22 1154-
a_3	395 926+	384 235-	1 0815-	8 669-	716 823+	1 6389+
a_4	8 818-	25 363-	1406-	87 637+	3 278+	1443+
a_5	5 007-	469-		8 214-	5 254-	
	July 16			July 24		
a_0	48.3586 269+	13.9832 487+	0.9532 5883+	168.9218 969+	10.0951 660+	1.0072 1306+
a_1	12.8450 374+	4.2873 887+	0.0151 2980+	13.9692 403+	5.3492 467-	0.0093 5801-
a_2	4526 510+	2667 577-	5 5039+	3737 422-	2404 173-	16 3733-
a_3	309 142+	488 767-	1 6546-	260 614+	679 569+	2 2104+
a_4	34 388-	28 510-	1320-	45 463+	22 466-	134+
a_5	7 641-	2 282+		6 484-	1 481-	
	July 17			July 25		
a_0	61.6830 265+	17.9523 804+	0.9687 6037+	182.5473 544+	4.5710 642+	0.9964 4010+
a_1	13.8255 074+	3.5969 855+	0.0156 8131+	13.3148 862+	5.6359 351-	0.0119 6426-
a_2	5170 799+	4282 163-	2360-	2747 628-	514 965-	9 6912-
a_3	95 881+	577 532-	2 1984-	379 014+	576 171+	2 2485+
a_4	75 212-	17 452-	814-	13 225+	29 133-	820-
a_5	6 690-	6 592+		4 009-	688+	
	July 18			July 26		
a_0	76.0270 116+	21.0623 104+	0.9841 9010+	195.6263 007+	1.0615 948-	0.9837 2336+
a_1	14.8550 119+	2.5636 117+	0.0149 4193+	12.8823 519+	5.5773 855-	0.0132 6083-
a_2	4939 736+	6053 342-	7 2887-	1571 278-	1045 710+	3 4517-
a_3	266 631-	579 752-	2 5395-	392 670+	466 905+	1 9049+
a_4	112 326-	16 957+	194+	6 419-	25 147-	1268-
a_5	2 383+	9 695+		2 560-	1 326+	

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	208:3898 939+	6:4901 008-	0:9702 9517+	312:2104 173+	20:7323 507-	0:9022 4498+
a_1	12:6820 506+	5:2375 679-	0:0134 3049-	12:4965 134+	2:3083 693+	0:0028 0783-
a_2	457 361-	2308 857+	1 5007+	2286 136-	4454 593+	7 0067+
a_3	341 724+	379 383+	1 3869+	92 591-	247 333-	933+
a_4	19 039-	18 194-	1300-	36 581+	10 566-	293+
a_5	2 032-	967+		667-	1 647+	
July 28						
a_0	221:0582 737+	11:4605 675-	0:9571 4044+	324:4726 493+	18:0041 473-	0:9001 5008+
a_1	12:6844 646+	4:6687 768-	0:0127 6631-	12:0258 067+	3:1216 845+	0:0013 6677-
a_2	433 224+	3347 534+	4 8878+	2351 181-	3665 680+	7 4608+
a_3	245 479+	315 786+	8616+	46 554+	273 496-	2124+
a_4	29 372-	13 222-	1087-	32 700+	2 251-	238+
a_5	1 672-	105+		1 545-	988+	
July 29						
a_0	233:8075 042+	15:7643 239-	0:9449 3820+	336:2711 088+	14:5433 707-	0:8995 5301+
a_1	12:8321 696+	3:9097 714-	0:0115 7376-	11:5818 443+	3:7723 645+	0:0001 9865+
a_2	976 629+	4216 606+	6 8299+	2030 826-	2841 558+	8 2375+
a_3	111 882+	263 434+	4253+	161 938+	273 043-	3093+
a_4	38 216-	12 755-	774-	24 646+	2 651+	129+
a_5	638-	803-		1 467-	252+	
July 30						
a_0	246:7446 396+	19:2274 470-	0:9340 8223+	347:6683 822+	10:5138 645-	0:9006 0762+
a_1	13:0454 569+	2:9929 240-	0:0101 1114-	11:2333 860+	4:2599 487+	0:0019 4409+
a_2	1076 523+	4922 309+	7 6513+	1411 830-	2040 840+	9 2378+
a_3	46 155-	204 125+	1163+	246 105+	260 287-	3622+
a_4	41 863-	17 038-	453-	17 211+	3 835+	26-
a_5	1 447+	1 261-		1 013-	380-	
July 31						
a_0	259:8890 916+	21:7095 576-	0:9247 4332+	358:7868 156+	6:0755 150-	0:9035 1146+
a_1	13:2308 956+	1:9546 700-	0:0085 6411-	11:0312 301+	4:5913 739+	0:0038 9928+
a_2	701 352+	5419 795+	7 7370+	580 376-	1279 172+	10 3025+
a_3	197 775-	123 576+	634-	305 030+	249 039-	3531+
a_4	34 512-	23 698-	171-	12 196+	1 858+	224-
a_5	3 842+	890-		652-	880-	
August 1						
a_0	273:1672 779+	23:1123 494-	0:9169 4487+	9:7916 656+	1:3810 300-	0:9084 7406+
a_1	13:2999 507+	0:8435 615-	0:0070 4253-	11:0112 166+	4:7727 995+	0:0060 5677+
a_2	60 525-	5639 404+	7 4514+	401 392+	534 390+	11 2199+
a_3	296 791-	20 498+	1296-	347 271+	250 617-	2650+
a_4	14 521-	28 332-	52+	9 103+	2 622-	466-
a_5	4 934+	199+		700-	1 252-	
August 2						
a_0	286:4305 383+	23:3927 341-	0:9106 3503+	20:8785 888+	3:4197 593+	0:9156 7465+
a_1	13:1954 659+	0:2792 363+	0:0055 8905-	11:1989 665+	4:8028 169+	0:0083 6163+
a_2	988 579-	5532 912+	7 0984+	1490 852+	245 744-	11 7266+
a_3	306 150-	90 191-	1066-	376 250+	273 715-	802+
a_4	10 916+	27 199-	204+	5 880+	9 030-	753-
a_5	3 813+	1 342+		1 433-	1 415-	
August 3						
a_0	299:4980 042+	22:5718 113-	0:9057 4720+	32:2647 103+	8:1695 858+	0:9252 0942+
a_1	12:9121 751+	1:3485 538+	0:0041 9317-	11:6116 455+	4:6672 344+	0:0107 0087+
a_2	1803 397-	5112 616+	6 9036+	2640 593+	1135 269-	11 5052+
a_3	225 701-	185 251-	226-	384 472+	323 779-	2205-
a_4	30 084+	20 169-	284+	943-	16 419-	1074-
a_5	1 394+	1 871+		3 105-	1 090-	

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	44·1784 575+	12·6891 645+	0·9370 2803+	162·9518 180+	12·2300 280+	1·0216 1467+
a_1	12·2531 734+	4·3359 359+	0·0128 9280+	14·6133 194+	5·2640 484-	0·0042 3972-
a_2	3757 302+	2216 105-	10 1899+	3573 443-	3637 435-	26 9239-
a_3	348 285+	399 546-	6521-	79 465+	756 631+	1 1636+
a_4	16 406-	22 438-	1378-	67 669+	148+	2650+
a_5	5 520-	266+		7 249-	4 904-	
August 13						
a_0	56·8399 970+	16·7613 180+	0·9508 6083+	177·2217 817+	6·6774 236+	1·0148 2542+
a_1	13·0997 956+	3·7640 122+	0·0146 8001+	13·9459 152+	5·7669 353-	0·0091 6934-
a_2	4648 348+	3546 810-	7 4019+	3001 624-	1415 641-	21 8890-
a_3	226 721+	484 960-	1 2102-	278 637+	710 006+	2 2320+
a_4	45 113-	21 770-	1549-	30 834+	24 017-	1135+
a_5	6 971-	3 160+		5 446-	1 713-	
August 14						
a_0	70·4220 911+	20·1202 922+	0·9661 4452+	190·8979 370+	0·8373 519+	1·0037 0171+
a_1	14·0759 549+	2·9020 385+	0·0157 3529+	13·4387 945+	5·8475 224-	0·0128 3221-
a_2	4987 699+	5100 699-	2 8468+	2035 144-	553 237+	14 5561-
a_3	21 396-	538 308-	1 8438-	348 643+	597 978+	2 6739+
a_4	82 836-	5 917-	1399-	3 816+	31 988-	297-
a_5	3 627-	6 943+		3 524-	312+	
August 15						
a_0	84·9860 299+	22·4585 327+	0·9819 6613+	204·1681 106+	4·8982 167-	0·9896 7831+
a_1	15·0321 392+	1·7215 128+	0·0156 9543+	13·1361 241+	5·5701 203-	0·0149 5324-
a_2	4389 895+	6681 441-	3 5030-	1001 538-	2158 436+	6 7409-
a_3	383 282-	491 711-	2 4229-	329 357+	473 555+	2 5354+
a_4	103 204-	30 539+	722-	13 574-	29 923-	1205-
a_5	6 524+	8 556+		2 391-	1 018+	
August 16						
a_0	100·4091 626+	23·4666 398+	0·9970 6175+	217·2354 201+	10·2080 284-	0·9742 9246+
a_1	15·7571 247+	0·2542 001+	0·0142 3898+	13·0279 995+	5·0078 270-	0·0155 8909-
a_2	2686 473+	7887 439-	11 1659-	118 834-	3409 791+	1318+
a_3	725 667-	286 241-	2 7285-	251 609+	363 910+	2 0370+
a_4	67 684-	75 744+	541+	25 570-	24 529-	1534-
a_5	16 065+	4 640+		1 661-	775+	
August 17						
a_0	116·3572 060+	22·9115 103+	1·0099 1671+	230·2739 739+	14·8408 607-	0·9589 0491+
a_1	16·0576 753+	1·3765 507-	0·0112 0887+	13·0686 580+	4·2261 208-	0·0150 1304-
a_2	264 797+	8245 255-	18 9792-	465 905+	4362 105+	5 3245+
a_3	836 966-	58 897+	2 5130-	133 343+	273 168+	1 4139+
a_4	18 216+	99 221+	2102+	34 195-	20 584-	1457-
a_5	13 845+	2 946-		616-	117+	
August 18						
a_0	132·3608 705+	20·7259 512+	1·0189 9739+	243·3990 755+	18·6055 009-	0·9445 5114+
a_1	15·8737 412+	2·9697 232-	0·0067 4335+	13·1878 576+	3·2799 250-	0·0135 8227-
a_2	1998 220-	7502 991-	25 2198-	654 540+	5059 258+	8 7005+
a_3	631 828-	423 408+	1 6489-	8 589-	191 712+	8275+
a_4	88 437+	82 452+	3317+	37 617-	20 140-	1180-
a_5	2 617+	8 039-		1 133+	401-	
August 19						
a_0	147·9807 122+	17·0557 110+	1·0230 8704+	256·6478 799+	21·3623 829-	0·9319 0987+
a_1	15·3212 225+	4·3143 376-	0·0013 3760+	13·3017 110+	2·2188 162-	0·0116 4113-
a_2	3337 344-	5818 710-	28 1695-	414 400+	5509 510+	10 4852+
a_3	256 684-	672 795+	2843-	146 592-	107 156+	3553+
a_4	98 579+	40 413+	3543+	31 903-	22 395-	849-
a_5	5 717-	7 952-		3 127+	380-	

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	269·9734 942+	23·0218 101-	0·9213 4429+	7·0544 071+	2·4219 561-	0·9061 0350+
a_1	13·3294 169+	1·0939 149-	0·0094 7146-	11·0106 697+	4·7851 877+	0·0044 3677+
a_2	185 454-	5692 786+	11 0514+	61 553+	662 677+	7 6091+
a_3	242 339-	14 109+	169+	304 004+	269 655-	1644+
a_4	15 711-	24 458-	536-	8 058+	1 568-	86+
a_5	4 177+	203+		645-	715-	
August 29						
a_0	283·2589 784+	23·5474 611-	0·9129 7430+	18·1023 738+	2·4023 054+	0·9113 1847+
a_1	13·2154 277+	0·0391 938+	0·0072 7755-	11·1170 818+	4·8358 414+	0·0060 1135+
a_2	964 885-	5590 396+	10 7888+	1015 482+	162 869-	8 1473+
a_3	263 784-	81 277-	1960-	329 551+	283 172-	2008+
a_4	5 804+	23 398-	268-	4 995+	5 244-	120-
a_5	3 490+	942+		1 060-	881-	
August 30						
a_0	296·3524 686+	22·9596 010-	0·9067 5334+	29·3543 525+	7·1929 302+	0·9181 6343+
a_1	12·9473 800+	1·1240 022+	0·0051 8933-	11·4205 102+	4·7157 779+	0·0076 9626+
a_2	1686 494-	5215 625+	10 0465+	2023 526+	1052 692-	8 6694+
a_3	206 720-	165 209-	3018-	338 332+	312 884-	1546+
a_4	23 429+	18 495-	49-	90-	9 836-	387-
a_5	1 595+	1 355+		2 111-	775-	
August 31						
a_0	309·1130 297+	21·3322 712-	0·9025 3800+	41·0108 283+	11·7710 893+	0·9267 3822+
a_1	12·5582 324+	2·1108 437+	0·0032 7251-	11·9256 217+	4·4070 532+	0·0094 6105+
a_2	2150 183-	4622 597+	9 1170+	3016 876+	2058 161-	8 8913+
a_3	98 094-	225 682-	3199-	315 945+	359 562-	12+
a_4	31 089+	11 548-	121+	10 551-	14 042-	703-
a_5	232-	1 275+		3 725-	85-	
September 1						
a_0	321·4495 200+	18·7827 633-	0·9001 4641+	53·2683 045+	15·9349 575+	0·9370 8149+
a_1	12·1110 856+	2·9636 764+	0·0015 4023-	12·6176 963+	3·8818 951+	0·0112 1155+
a_2	2260 333-	3889 023+	8 2336+	3864 073+	3222 014-	8 4627+
a_3	23 369+	259 353-	2697-	235 773+	415 630-	2801-
a_4	29 472+	5 104-	240+	29 692-	14 911-	1038-
a_5	1 193-	868+		5 049-	1 544+	
September 2						
a_0	333·3397 372+	15·4565 435-	0·8994 0496+	66·2925 114+	19·4517 514+	0·9491 0091+
a_1	11·6772 222+	3·6620 670+	0·0000 3517+	13·4468 432+	3·1076 137+	0·0127 7851+
a_2	2025 375-	3089 015+	7 5701+	4342 504+	4542 962-	6 9907+
a_3	129 247+	271 372-	1719-	67 242+	458 418-	6987-
a_4	23 178+	787-	301+	56 569-	7 405-	1324-
a_5	1 307-	376+		3 917-	4 027+	
September 3						
a_0	344·8295 336+	11·5127 532-	0·9001 8296+	80·1742 804+	22·0588 893+	0·9624 9538+
a_1	11·3195 392+	4·1983 311+	0·0015 0966+	14·3109 365+	2·0605 497+	0·0139 1402+
a_2	1511 666-	2273 926+	7 2347+	4165 346+	5922 282-	4 0969+
a_3	209 058+	271 015-	495-	194 927-	446 653-	1 2369-
a_4	16 499+	1 036+	298+	78 136-	13 360+	1431-
a_5	1 010-	68-		1 779+	6 049+	
September 4						
a_0	356·0203 609+	7·1140 342-	0·9024 1413+	94·8746 229+	23·4844 866+	0·9766 8109+
a_1	11·0860 181+	4·5721 919+	0·0029 5368+	15·0551 710+	0·7504 654+	0·0143 0500+
a_2	795 609-	1466 407+	7 2626+	3129 583+	7121 372-	4643-
a_3	265 132+	267 760-	718+	485 287-	333 155-	1 8243-
a_4	11 457+	645+	226+	68 860-	45 091+	1174-
a_5	698-	431-		9 679+	5 345+	
September 5						
September 6						
September 7						
September 8						
September 9						
September 10						
September 11						
September 12						

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	110-1883 055+	23-4945 429+	0-9907 4551+	225-4498 057+	13-4558 472-	0-9780 6885+
a_1	15-5127 999+	0-7530 510-	0-0136 1782+	13-4510 425+	4-7038 270-	0-0158 2977-
a_2	1357 843+	7796 692-	6 6167-	340 403+	4362 772+	3 3986-
a_3	662 508-	101 616-	2 3120-	116 036+	363 376+	2 4456+
a_4	16 958-	72 832+	387-	33 812-	31 635-	1271-
a_5	12 294+	1 308+		658-	200+	
September 14						
a_0	125-7701 724+	21-9590 750+	1-0034 6660+	238-9430 450+	17-6902 029-	0-9621 3106+
a_1	15-5849 732+	2-3130 929-	0-0115 8533+	13-5400 823+	3-7348 136-	0-0158 2674-
a_2	608 140-	7651 535-	13 7452-	479 007+	5265 093+	3 1681+
a_3	610 573-	200 139+	2 4796-	24 630-	238 844+	1 9231+
a_4	47 063+	78 892+	905+	37 387-	30 643-	1499-
a_5	6 553+	3 387-		1 350+	194+	
September 15						
a_0	141-2386 358+	18-9083 929+	1-0134 3851+	252-5249 613+	20-8776 676-	0-9467 9846+
a_1	15-3022 660+	3-7534 979-	0-0081 2864+	13-6142 171+	2-6223 015-	0-0146 7618-
a_2	2092 088-	6611 806-	20 5969-	194 310+	5799 692+	8 0411+
a_3	361 276-	480 430+	2 1126-	159 517-	118 346+	1 3160+
a_4	78 952+	60 777+	2340+	30 473-	29 802-	1392-
a_5	1 372-	5 802-		3 376+	423+	
September 16						
a_0	156-3033 233+	14-5472 550+	1-0193 1961+	266-1399 481+	22-9111 032-	0-9330 4406+
a_1	14-8063 558+	4-9103 202-	0-0034 6922+	13-5947 236+	1-4385 680-	0-0127 2889-
a_2	2716 231-	4863 990-	25 5019-	433 241-	5980 143+	11 1613+
a_3	61 591-	665 591+	1 1503-	247 179-	3 657+	7566+
a_4	70 041+	30 957+	3283+	12 955-	27 741-	1136-
a_5	5 415-	5 627-		4 210+	931+	
September 17						
a_0	170-8383 596+	9-2196 279+	1-0201 5645+	279-6657 552+	23-7539 722-	0-9214 9559+
a_1	14-2699 415+	5-6738 698-	0-0018 4470-	13-4308 434+	0-2520 728-	0-0103 1512-
a_2	2535 079-	2737 779-	26 9843-	1210 337-	5833 992+	12 7580+
a_3	164 252+	734 039+	1986+	257 439-	97 749-	3023+
a_4	41 820+	2 548+	3226+	8 693+	22 974-	852-
a_5	5 560-	4 074-		3 254+	1 375+	
September 18						
a_0	184-8748 444+	3-3452 316+	1-0156 6542+	292-9510 157+	23-4345 807-	0-9124 7798+
a_1	13-8261 508+	6-0022 294-	0-0070 5283-	13-1166 461+	0-8768 985+	0-0077 0691-
a_2	1847 046-	561 098-	24 4844-	1897 959-	5416 672+	13 1617+
a_3	276 630+	704 558+	1 5134+	191 259-	175 872-	373-
a_4	13 789+	17 747-	2196+	25 038+	15 914-	594-
a_5	4 296-	2 222-		1 258+	1 420+	
September 19						
a_0	198-5449 030+	2-6446 487-	1-0063 3743+	305-8613 697+	22-0350 517-	0-9060 7757+
a_1	13-5431 000+	5-9112 897-	0-0114 0783-	12-6903 191+	1-9018 150+	0-0051 0950-
a_2	977 378-	1423 919+	18 6712-	2308 988-	4807 783+	12 7004+
a_3	289 532+	612 204+	2 3947+	79 519-	225 535-	2737-
a_4	7 631-	28 581-	736+	30 949+	8 701-	374-
a_5	3 099-	744-		483-	1 057+	
September 20						
a_0	212-0181 454+	8-3552 585-	0-9933 0931+	318-3158 848+	19-6757 763-	0-9022 0700+
a_1	13-4298 832+	5-4546 482-	0-0143 9428-	12-2168 029+	2-7927 586+	0-0026 6650-
a_2	185 587-	3081 653+	11 0844-	2366 759-	4089 541+	11 6607+
a_3	228 628+	490 895+	2 6755+	38 970+	250 068-	4225-
a_4	23 215-	31 982-	529-	28 076+	3 417-	186-
a_5	2 054-	29+		1 303-	527+	

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	330:3025 860+	16:4993 594-	0:9006 6245+	63:1575 481+	18:9414 673+	0:9419 0653+
a_1	11:7657 206+	3:5345 427+	0:0004 6857-	13:1900 509+	3:3197 516+	0:0092 5769+
a_2	2094 480-	3324 096+	10 2865+	3788 899+	4353 806-	4 4016+
a_3	138 220+	258 729-	4964-	50 752+	425 940-	795-
a_4	21 266+	852-	21-	47 985-	1 227-	514-
a_5	1 331-	60+		2 719-	3 096+	
September 30			October 8			
a_0	341:8746 742+	12:6583 592-	0:9011 7270+	76:7264 937+	21:7834 311+	0:9515 9129+
a_1	11:3961 318+	4:1214 320+	0:0014 3901+	13:9425 078+	2:3222 666+	0:0100 9360+
a_2	1565 559-	2543 383+	8 7896+	3625 848+	5607 969-	3 8454+
a_3	210 161+	261 713-	5038-	165 910-	399 289-	2862-
a_4	14 497+	637-	124+	62 938-	14 693+	817-
a_5	1 011-	251-		1 598+	4 199+	
October 1			October 9			
a_0	353:1366 149+	8:3088 491-	0:9034 4153+	91:0088 613+	23:5068 612+	0:9620 3264+
a_1	11:1513 620+	4:5512 138+	0:0030 5077+	14:5935 345+	1:0888 622+	0:0107 4413+
a_2	858 210-	1751 893+	7 3563+	2766 492+	6675 561-	2 4901+
a_3	258 222+	266 868-	4529-	398 475-	298 897-	6172-
a_4	9 445+	1 967-	239+	54 706-	36 565+	1037-
a_5	717-	421-		7 352+	3 581+	
October 2			October 10			
a_0	4:2288 509+	3:6093 716-	0:9071 8503+	105:8344 621+	23:9022 922+	0:9729 5369+
a_1	11:0606 064+	4:8205 343+	0:0043 9572+	15:0090 862+	0:3195 053-	0:0110 1547+
a_2	34 035-	935 261+	6 1430+	1316 670+	7316 972-	160+
a_3	288 863+	278 986-	3555-	542 558-	118 242-	1 0405-
a_4	5 954+	4 128-	306+	15 624-	55 010+	1057-
a_5	681-	491-		9 575+	1 076+	
October 3			October 11			
a_0	15:3154 674+	1:2763 283+	0:9121 6256+	120:9203 547+	22:8448 742+	0:9838 5614+
a_1	11:1424 993+	4:9219 942+	0:0055 2993+	15:1081 867+	1:7958 331-	0:0106 6415+
a_2	861 485+	68 612+	5 2601+	308 726-	7330 921-	3 7300-
a_3	305 643+	300 392-	2306-	511 335-	110 989+	1 4758-
a_4	2 701+	6 650-	304+	34 195+	60 071+	746-
a_5	1 039-	455-		5 882+	1 687-	
October 4			October 12			
a_0	26:5748 457+	6:1744 339+	0:9181 9849+	135:9505 430+	20:3328 864+	0:9939 9225+
a_1	11:4070 494+	4:8427 116+	0:0065 2497+	14:9096 535+	3:2055 372-	0:0094 4549+
a_2	1784 244+	877 038-	4 7483+	1578 790-	6654 488-	8 5827-
a_3	305 538+	331 421-	1060-	319 081-	333 574+	1 7870-
a_4	2 355-	9 058-	218+	63 324+	50 984+	29-
a_5	1 876-	228-		67-	3 099-	
October 5			October 13			
a_0	38:1904 501+	10:8953 710+	0:9251 8987+	150:6767 351+	16:5000 462+	1:0024 0049+
a_1	11:8536 782+	4:5641 413+	0:0074 5159+	14:5234 631+	4:4175 189-	0:0071 9166+
a_2	2667 954+	1927 966-	4 5559+	2156 970-	5378 898-	13 9293-
a_3	276 655+	369 590-	159-	68 655-	506 431+	1 8047-
a_4	11 753-	10 424-	43+	61 600+	35 162+	1002+
a_5	3 056-	374+		3 822-	3 211-	
October 6			October 14			
a_0	50:3371 084+	15:2287 517+	0:9330 9590+	164:9834 134+	11:5984 757+	1:0080 2877+
a_1	12:4640 358+	4:0636 899+	0:0083 5975+	14:0942 006+	5:3289 098-	0:0039 0450+
a_2	3396 763+	3095 580-	4 5263+	2031 706-	3680 744-	18 7111-
a_3	198 641+	406 880-	36+	138 953+	615 140+	1 3966-
a_4	27 515-	8 814-	210-	41 514+	19 107+	2022+
a_5	3 851-	1 531+		4 696-	2 903-	

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	178.8920 206+	5.9646 259+	1.0099 4273+	288.7538 510+	23.9182 545-	0.9228 9209+
a_1	13.7438 036+	5.8743 251-	0.0001 7569-	13.4816 966+	0.5379 303+	0.0105 6606-
a_2	1412 775-	1749 703-	21 6702-	2163 777-	5810 210+	12 3552+
a_3	258 285+	662 706+	5666-	246 387-	198 788-	7092+
a_4	17 738+	4 641+	2588+	33 031+	19 489-	1010-
a_5	4 234-	2 620-		1 396+	2 354+	
October 16						
a_0	192.5217 254+	0.0181 967-	1.0075 6925+	301.9979 739+	22.8208 955-	0.9136 2237+
a_1	13.5437 125+	6.0249 068-	0.0045 7602-	12.9889 329+	1.6337 164+	0.0079 2265-
a_2	573 856-	240 071+	21 8222-	2690 883-	5120 477+	13 8826+
a_3	287 254+	655 250+	4937+	101 668-	253 638-	3054+
a_4	3 479-	8 457-	2411+	39 427+	7 533-	825-
a_5	3 617-	2 321-		991-	1 586+	
October 17						
a_0	206.0360 682+	5.9546 493-	1.0008 8448+	314.7114 954+	20.7010 899-	0.9071 1027+
a_1	13.5119 186+	5.7848 605-	0.0086 9583-	12.4355 301+	2.5794 991+	0.0050 8750-
a_2	230 828+	2131 874+	18 9199-	2769 336-	4330 219+	14 3090+
a_3	237 607+	598 436+	1 4740+	45 576+	268 466-	237-
a_4	21 769-	20 064-	1577+	33 825+	365+	659-
a_5	2 921-	1 934-		1 937-	612+	
October 18						
a_0	219.5923 612+	11.4686 787-	0.9904 5982+	326.8778 382+	17.7153 178-	0.9034 4472+
a_1	13.6191 998+	5.1879 473-	0.0119 7453-	11.9078 973+	3.3654 542+	0.0022 5914-
a_2	783 741+	3787 452+	13 5853-	2449 088-	3533 110+	13 8472+
a_3	122 172+	499 111+	2 1058+	161 592+	261 338-	2865-
a_4	36 881-	29 758-	482+	23 779+	3 289+	518-
a_5	1 494-	1 464-		1 784-	174-	
October 19						
a_0	233.2983 147+	16.2310 919-	0.9773 4215+	338.5591 854+	14.0223 749-	0.9025 3647+
a_1	13.7971 034+	4.2933 581-	0.0140 4062-	11.4751 773+	3.9949 026+	0.0004 0361+
a_2	913 950+	5091 581+	7 0077-	1839 504-	2767 063+	12 6807+
a_3	38 792-	365 840+	2 2885+	239 188+	250 199-	4938-
a_4	44 861-	37 191-	457-	14 762+	2 275+	390-
a_5	1 131+	788-		1 237-	652-	
October 20						
a_0	247.1785 610+	19.9825 059-	0.9628 2504+	349.8756 836+	9.7756 236-	0.9041 5487+
a_1	13.9508 805+	3.1805 594-	0.0147 7396-	11.1843 196+	4.4738 391+	0.0027 7600+
a_2	539 728+	5958 050+	4341-	1045 740-	2023 574+	10 9694+
a_3	205 229-	209 811+	2 0927+	286 127+	247 742-	6505-
a_4	39 087-	41 279-	1023-	8 636+	1 100-	255-
a_5	4 152+	275+		793-	861-	
October 21						
a_0	261.1593 979+	22.5503 797-	0.9482 0671+	0.9848 262+	5.1243 975-	0.9079 6022+
a_1	13.9837 004+	1.9423 789-	0.0142 7393-	11.0640 676+	4.8033 606+	0.0047 6455+
a_2	268 829-	6342 564+	5 2241+	143 467-	1265 116+	8 8701+
a_3	319 248-	48 168+	1 6735+	312 784+	260 756-	7532-
a_4	17 366-	39 869-	1220-	4 793+	5 508-	97-
a_5	5 582+	1 545+		694-	857-	
October 22						
a_0	275.0831 122+	23.8575 177-	0.9346 1033+	12.0662 354+	0.2212 373-	0.9135 3550+
a_1	13.8300 031+	0.6745 899-	0.0127 7590-	11.1307 792+	4.9755 259+	0.0063 0875+
a_2	1274 824-	6263 348+	9 5139+	816 719+	441 213+	6 5581+
a_3	333 613-	95 376-	1 1799+	324 772+	291 237-	7924-
a_4	11 517+	31 834-	1172-	1 489+	9 907-	83+
a_5	4 278+	2 394+		1 080-	647-	

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	23:3112 046+	4:7682 308+	0:9204 2166+	132:3220 177+	21:2983 963+	0:9814 6754+
a_1	11:3916 095+	4:9721 118+	0:0073 8598+	14:6919 728+	2:8252 911-	0:0061 2779+
a_2	1789 186+	498 438-	4 2363+	1938 589-	6543 090-	3 9088-
a_3	319 360+	337 056-	7586-	304 308-	316 713+	5231-
a_4	3 745-	13 304-	262+	68 202+	40 288+	630-
a_5	2 001-	152-		633-	3 307-	
November 1						
a_0	34:9130 941+	9:6554 477+	0:9281 5804+	146:7964 576+	17:8541 655+	0:9871 4585+
a_1	11:8427 552+	4:7659 112+	0:0080 1617+	14:2399 228+	4:0244 327-	0:0051 6389+
a_2	2704 774+	1590 982-	2 1222+	2448 863-	5384 337-	5 8490-
a_3	283 615+	391 261-	6515-	39 819-	445 345+	7835-
a_4	13 786-	14 293-	400+	63 518+	23 470+	415-
a_5	3 273-	769+		4 026-	2 283-	
November 2						
a_0	47:0529 823+	14:2217 822+	0:9363 2528+	160:7934 613+	13:3379 523+	0:9916 4235+
a_1	12:4616 427+	4:3250 053+	0:0082 6118+	13:7615 979+	4:9594 487-	0:0037 4242+
a_2	3440 076+	2842 868-	4092+	2227 613-	3930 273-	8 4336-
a_3	195 318+	439 930-	4879-	173 671+	517 020+	9567-
a_4	30 730-	10 656-	449+	42 488+	12 279+	56+
a_5	4 054-	2 183+		4 496-	1 184-	
November 3						
a_0	59:8746 860+	18:2176 604+	0:9445 8308+	174:3534 642+	8:0382 878+	0:9944 4630+
a_1	13:1939 362+	3:6212 837+	0:0082 1466+	13:3829 246+	5:5860 773-	0:0017 7090+
a_2	3800 901+	4204 750-	7871-	1496 660-	2317 325-	11 2508-
a_3	32 730+	459 838-	3040-	298 989+	554 526+	9369-
a_4	52 351-	348+	376+	19 860+	6 716+	687+
a_5	2 609-	3 747+		3 895-	787-	
November 4						
a_0	73:4464 894+	21:3728 948+	0:9526 9239+	187:6182 182+	2:2765 234+	0:9950 0531+
a_1	13:9416 965+	2:6443 954+	0:0079 8112+	13:1792 861+	5:8808 925-	0:0007 3281-
a_2	3558 693+	5544 616-	1 4794-	519 477-	621 285-	13 6310-
a_3	199 980-	420 651-	1500-	339 703+	573 328+	6568-
a_4	66 768-	19 737+	180+	508+	3 051+	1279+
a_5	2 287+	4 377+		3 519-	1 115-	
November 5						
a_0	87:7176 091+	23:4231 750+	0:9605 1237+	200:7792 258+	3:6089 711-	0:9928 5651+
a_1	14:5678 841+	1:4193 589+	0:0076 4746+	13:1757 453+	5:8324 887-	0:0036 0484-
a_2	2581 081+	6644 236-	1 8299-	467 475+	1105 880+	14 8245-
a_3	440 843-	298 787-	763-	306 600+	573 961+	1334-
a_4	54 818-	42 570+	99-	17 125-	2 406-	1597+
a_5	8 317+	2 897+		3 499-	1 848-	
November 6						
a_0	102:4948 669+	24:1527 783+	0:9679 6823+	214:0303 161+	9:2739 011-	0:9877 7185+
a_1	14:9340 804+	0:0193 486+	0:0072 5464+	13:3526 213+	5:4410 113-	0:0065 4582-
a_2	1013 177+	7256 165-	2 1271-	1249 451+	2794 843+	14 2696-
a_3	576 019-	101 316-	1170-	203 458+	545 445+	5190+
a_4	10 615-	57 347+	389-	35 130-	11 723-	1501+
a_5	10 003+	259-		2 996-	2 570-	
November 7						
a_0	117:4726 021+	23:4420 876+	0:9749 9455+	227:5244 158+	14:3823 129-	0:9798 6597+
a_1	14:9646 608+	1:4394 725-	0:0067 7849+	13:6480 018+	4:7243 835-	0:0091 8395-
a_2	678 284-	7218 716-	2 7183-	1618 945+	4335 098+	11 8263-
a_3	520 914-	124 018+	2770-	34 287+	472 768+	1 1287+
a_4	41 233+	55 350+	598-	51 047-	24 901-	1036+
a_5	5 514+	2 841-		781-	2 746-	

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						
a_0	241.3325 580+	18.6286 746-	0.9696 2262+	346.2231 809+	11.3884 445-	0.9038 8287+
a_1	13.9612 722+	3.7268 662-	0.0111 6913-	11.2288 266+	4.3372 000+	0.0010 0115+
a_2	1407 623+	5576 457+	7 8381-	1541 031-	2198 210+	14 4972+
a_3	175 395-	346 259+	1 5450+	313 912+	240 287-	2394-
a_4	55 513-	39 151-	396+	11 147+	4 472+	688-
a_5	3 309+	1 799-		1 023-	1 152-	
November 17						
a_0	255.4118 326+	21.7673 642-	0.9578 2814+	357.3303 080+	6.8551 202-	0.9063 0292+
a_1	14.1696 315+	2.5242 548-	0.0122 5744-	11.0187 420+	4.7059 683+	0.0038 0124+
a_2	581 556+	6362 288+	2 9841-	542 625-	1492 638+	13 3671+
a_3	362 329-	172 866+	1 6989+	348 481+	234 045-	5151-
a_4	38 141-	48 476-	199-	6 188+	1 407-	657-
a_5	6 952+	309+		654-	1 364-	
November 18						
a_0	269.6002 679+	23.6429 203-	0.9454 4018+	8.3301 891+	2.0235 697-	0.9113 8278+
a_1	14.1654 636+	1.2191 707-	0.0123 5258-	11.0169 097+	4.9330 375+	0.0062 9383+
a_2	664 518-	6593 163+	1 9804+	533 436+	768 397+	11 4297+
a_3	445 330-	16 680-	1 6125+	366 548+	253 296-	7797-
a_4	1 649-	46 657-	611-	3 146+	8 357-	591-
a_5	6 995+	2 541+		882-	1 334-	
November 19						
a_0	283.6552 813+	24.2088 544-	0.9334 4078+	19.4373 236+	2.9600 088+	0.9187 3571+
a_1	13.9017 946+	0.0770 664+	0.0114 9722-	11.2343 777+	5.0067 190+	0.0083 2221+
a_2	1940 340-	6288 684+	6 4448+	1643 165+	55 005-	8 7406+
a_3	383 942-	177 337-	1 3620+	369 732+	299 835-	1 0192-
a_4	34 185+	33 268-	815-	1 006-	15 240-	448-
a_5	3 433+	3 518+		1 835-	944-	
November 20						
a_0	297.3284 095+	23.5236 282-	0.9227 1608+	30.8727 068+	7.9296 255+	0.9278 2557+
a_1	13.4139 301+	1.2700 535+	0.0098 3230-	11.6726 083+	4.8992 006+	0.0097 4661+
a_2	2852 816-	5592 325+	10 0400+	2727 986+	1055 448-	5 4218+
a_3	215 126-	275 546-	1 0320+	346 389+	369 645-	1 2022-
a_4	50 773+	15 154-	863-	10 033-	20 311-	197-
a_5	566-	2 919+		3 509-	66+	
November 21						
a_0	310.4405 661+	21.7231 202-	0.9139 8235+	42.8513 984+	12.6842 923+	0.9379 9217+
a_1	12.7988 530+	2.3012 510+	0.0075 4924-	12.3163 529+	4.5691 284+	0.0104 6240+
a_2	3199 371-	4703 965+	12 6191+	3671 804+	2285 649-	1 7078+
a_3	18 866-	307 759-	6852+	270 248+	449 120-	1 2838-
a_4	46 928+	455-	827-	27 943-	20 383-	156+
a_5	2 574-	1 532+		5 194-	1 965+	
November 22						
a_0	322.9220 309+	18.9821 409-	0.9077 5527+	55.5586 428+	16.9781 018+	0.9484 9854+
a_1	12.1708 033+	3.1502 989+	0.0048 5293-	13.1180 146+	3.9700 943+	0.0104 2507+
a_2	3000 239-	3793 251+	14 1803+	4262 712+	3735 678-	2 0378-
a_3	143 052+	295 021-	3543+	106 864+	509 552-	1 2211-
a_4	33 418+	7 046+	768-	55 439-	10 658-	549+
a_5	2 617-	221+		4 738-	4 521+	
November 23						
a_0	334.8101 955+	15.4812 923-	0.9043 4813+	69.1075 972+	20.5230 595+	0.9586 0322+
a_1	11.6257 305+	3.8233 705+	0.0019 4127-	13.9780 780+	3.0680 925+	0.0096 7319+
a_2	2396 784-	2952 639+	14 7842+	4202 950+	5282 955-	5 3615-
a_3	250 999+	265 148-	478+	159 249-	506 033-	9969-
a_4	20 145+	7 946+	719-	81 414-	12 743+	871+
a_5	1 811-	664-		552+	6 258+	
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	83-4819 591+	23-0141 534+	0-9676 4927+	197-0979 522+	1-8774 567-	0-9817 3991+
a_1	14-7386 138+	1-8679 160+	0-0083 3668+	12-7895 574+	5-7380 259-	0-0036 9556-
a_2	3242 201+	6661 790-	7 8258-	39 400+	636 153+	6 2878-
a_3	474 561-	393 313-	6410-	379 954+	494 125+	1815-
a_4	78 889-	45 634+	1002+	10 896-	1 654-	110+
a_5	9 303+	4 874+		3 181-	147-	
December 3						
a_0	98-4903 784+	24-1816 098+	0-9751 4929+	209-9280 373+	7-5026 349-	0-9773 9852+
a_1	15-2177 868+	0-4382 493+	0-0066 1932+	12-9054 746+	5-4632 941-	0-0050 0315-
a_2	1438 711+	7519 066-	9 1516-	1082 045+	2107 169+	6 7552-
a_3	694 761-	164 693-	2324-	304 445+	485 377+	1359-
a_4	28 866-	70 856+	882+	26 968-	2 190-	467+
a_5	13 597+	155+		3 445-	1 306-	
December 4						
a_0	113-7810 334+	23-8585 843+	0-9808 3902+	222-9691 196+	12-7070 239-	0-9717 1094+
a_1	15-2923 472+	1-0865 570-	0-0047 5458+	13-2007 083+	4-8977 773-	0-0063 7625-
a_2	682 338-	7586 598-	9 3299-	1798 994+	3537 099+	6 8749-
a_3	677 044-	117 728+	1256+	162 607+	462 834+	559+
a_4	42 368+	70 651+	549+	44 999-	8 785-	719+
a_5	8 446+	4 375-		2 703-	2 586-	
December 5						
a_0	128-9425 239+	22-0317 679+	0-9846 7866+	236-3612 177+	17-2059 450-	0-9646 5997+
a_1	14-9739 268+	2-5424 862-	0-0029 4825+	13-5899 412+	4-0563 145-	0-0077 0568-
a_2	2374 890-	6853 474-	8 6366-	1989 611+	4846 969+	6 2738-
a_3	427 970-	355 923+	3460+	42 608-	401 539+	3501+
a_4	84 038+	47 220+	124+	59 659-	22 198-	785+
a_5	286-	5 454-		397+	3 142-	
December 6						
a_0	143-6445 399+	18-8437 033+	0-9867 9909+	250-1399 330+	20-7399 428-	0-9563 6977+
a_1	14-4040 243+	3-7902 410-	0-0013 2967+	13-9514 214+	2-9769 081-	0-0088 2399-
a_2	3157 772-	5557 018-	7 5357-	1507 760+	5886 868+	4 7567-
a_3	97 513-	491 240+	3918+	274 526-	281 952+	6697+
a_4	80 334+	19 287+	248-	57 914-	38 661-	654+
a_5	5 148-	3 657-		5 274+	2 067-	
December 7						
a_0	157-7305 543+	14-5484 476+	0-9874 1189+	264-2094 139+	23-1040 417-	0-9471 4361+
a_1	13-7727 749+	4-7483 834-	0-0000 6989-	14-1500 907+	1-7314 439-	0-0095 4826-
a_2	3019 999-	4004 107-	6 5156-	389 649+	6480 036+	2 3638-
a_3	172 059+	533 140+	2859+	451 724-	108 111+	9341+
a_4	53 237+	1 217+	455-	30 021-	49 367-	385+
a_5	5 488-	1 340-		8 394+	532+	
December 8						
a_0	171-2233 100+	9-4529 551+	0-9867 1449+	278-3511 345+	24-1815 543-	0-9374 5623+
a_1	13-2389 449+	5-3894 445-	0-0013 0547-	14-0846 903+	0-4224 810-	0-0097 2539-
a_2	2239 320-	2410 713-	5 9305-	1061 441-	6513 561+	6599+
a_3	330 846+	525 438+	968+	488 780-	82 612-	1 0881+
a_4	25 605+	4 995-	444-	13 856+	46 246-	73+
a_5	4 170-	94+		6 745+	3 039+	
December 9						
a_0	184-2735 510+	3-8744 931+	0-9848 2120+	292-2828 629+	23-9652 610-	0-9279 0636+
a_1	12-8984 928+	5-7159 063-	0-0024 8033-	13-7346 780+	0-8384 697+	0-0092 6409-
a_2	1134 820-	863 362-	5 9001-	2377 153-	6018 761+	3 9591+
a_3	392 095+	506 592+	865-	368 566-	236 739-	1 1150+
a_4	5 045+	4 084-	231-	47 918+	30 215-	204-
a_5	3 236-	419+		1 982+	3 829+	

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

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
December 18						
a_0	305.7479 590+	22.5512 279-	0.9191 4764+	38.1280 101+	10.8513 469+	0.9312 8258+
a_1	13.1688 314+	1.9610 273+	0.0081 4595-	11.9085 256+	4.6820 654+	0.0117 5061+
a_2	3175 683-	5165 610+	7 1754+	3487 104+	1652 681-	8 4879+
a_3	159 290-	319 828-	1 0308+	369 077+	389 383-	1 2720-
a_4	56 780+	10 578-	404-	14 918-	24 929-	904-
a_5	1 881-	2 889+		5 058-	181+	
December 19						
a_0	318.5887 830+	20.1063 911-	0.9118 1826+	50.4201 562+	15.3267 311+	0.9437 4574+
a_1	12.5076 777+	2.8954 127+	0.0064 1783-	12.7081 716+	4.2248 366+	0.0130 3039+
a_2	3331 851-	4171 553+	10 0210+	4454 111+	2968 683-	4 1395+
a_3	48 270+	334 140-	8669+	257 808+	485 660-	1 6419-
a_4	46 297+	3 881+	530-	41 054-	24 633-	593-
a_5	3 124-	1 314+		6 916-	2 994+	
December 20						
a_0	330.7724 199+	16.8267 176-	0.9064 8392+	63.5947 228+	19.2039 695+	0.9570 1996+
a_1	11.8727 460+	3.6316 892+	0.0041 7475-	13.6564 599+	3.4770 497+	0.0133 4192+
a_2	2940 575-	3205 528+	12 3013+	4911 654+	4543 518-	1 1243-
a_3	202 521+	306 242-	6539+	25 875+	552 209-	1 8877-
a_4	30 185+	10 244+	607-	78 328-	9 629-	11-
a_5	2 571-	20-		4 611-	6 629+	
December 21						
a_0	342.3741 220+	12.9040 773-	0.9035 9862+	77.7366 416+	22.1711 464+	0.9700 6057+
a_1	11.3561 770+	4.1850 091+	0.0015 4261-	14.6129 266+	2.4021 477+	0.0125 5027+
a_2	2177 628-	2348 038+	13 8966+	4472 801+	6191 399-	6 7703-
a_3	298 147+	265 959-	4110+	328 194-	523 598-	1 8959-
a_4	17 278+	9 944+	671-	104 114-	25 136+	768+
a_5	1 535-	875-		4 744+	8 249+	
December 22						
a_0	353.5439 253+	8.5099 535-	0.9034 8007+	92.7540 919+	23.9051 329+	0.9817 5192+
a_1	11.0162 402+	4.5783 684+	0.0013 3320+	15.3697 663+	1.0209 633+	0.0106 5822+
a_2	1194 855-	1601 049+	14 7249+	2911 251+	7528 547-	11 9739-
a_3	352 356+	235 222-	1434+	691 356-	342 660-	1 5829-
a_4	9 740+	5 434+	746-	78 393-	68 741+	1520+
a_5	767-	1 363-		15 401+	4 587+	
December 23						
a_0	4.4768 129+	3.7945 954-	0.9062 9262+	108.3395 487+	24.1463 085+	0.9910 6967+
a_1	10.8864 889+	4.8295 029+	0.0042 9133+	15.7209 533+	0.5577 620-	0.0078 4947+
a_2	86 992-	914 331+	14 7042+	521 656+	8098 168-	15 7974-
a_3	383 759+	227 275-	1546-	850 933-	25 875-	9601-
a_4	6 118+	1 486-	842-	4 403+	91 947+	1946+
a_5	572-	1 624-		15 366+	2 685-	
December 24						
a_0	15.3935 331+	1.1033 020+	0.9120 3048+	124.0295 512+	22.7850 683+	0.9972 6286+
a_1	10.9863 789+	4.9427 799+	0.0071 5209+	15.5794 372+	2.1497 273-	0.0044 7991+
a_2	1095 313+	207 320+	13 7321+	1850 786-	7651 265-	17 5127-
a_3	402 181+	249 475-	4920-	685 533-	312 391+	1640-
a_4	3 556+	9 754-	940-	83 202+	76 406+	1851+
a_5	1 136-	1 654-		4 658+	7 378-	
December 25						
a_0	26.5299 033+	6.0407 256+	0.9204 9719+			
a_1	11.3269 480+	4.9046 734+	0.0097 1329+			
a_2	2311 869+	616 217-	11 6906+			
a_3	404 142+	304 767-	8708-			
a_4	1 761-	18 321-	988-			
a_5	2 664-	1 216-				

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.