

Passage de Vénus devant le Soleil

mardi 8 juin 2004

Ephémérides du Soleil et de Vénus

(Obtenues sur le site de l'IMCCE www.imcce.fr)

Les coordonnées topocentriques sont calculées pour l'Observatoire de Lyon à Saint Genis Laval
Les coordonnées sont données de 4h00 TU à 12h00 TU toutes les 10 minutes.
Les coordonnées sont apparentes ou moyennes pour l'observation.

- Écliptiques géocentrique (sol_eclipt.txt et ven_eclipt.txt)
- Écliptiques topocentriques (sol_eclipt_stgenis.txt et ven_eclipt_stgenis.txt)
- Equatoriales géocentrique (sol_equat.txt et ven_equat.txt)
- Equatoriales topocentriques (sol_equat_stgenis.txt et ven_equat_stgenis.txt)
- Horaires topocentriques (sol_hor_stgenis.txt et ven_hor_stgenis.txt)
- Locales topocentriques (sol_local_stgenis.txt et ven_local_stgenis.txt)

Coordonnées calculées suivant les repères :

R.A., Dec. :	Ascension droite et déclinaison,
Lambda, Beta :	Longitude et latitude écliptiques,
Az, h :	Azimut et hauteur (non corrigée de la réfraction astronomique) comptés respectivement de 0° à 360° à partir du nord et de 0° à 90° à partir de l'horizon,
H, Dec. :	Angle horaire et déclinaison.
Distance :	Distance héliocentrique (Dh) ou géocentrique (Dg) ou topocentrique du corps (en Unité astronomique),
V.Mag :	Magnitude visuelle apparente (1),
Phase :	Angle de phase (en degré),
Elong. :	Elongation du corps (angle entre les directions Terre/corps et Terre/Soleil).

Coordonnées écliptiques

Théorie planétaire DE405/LE405

Repère Moyen de la date

Coordonnées écliptiques (lambda, beta)

Centre du repère : géocentre

Centre du repere : topocentre : ST-GENIS-LAVAL

0 h 19 m 8.004 s E ; 45 d 42 ' 0.004 " N ; 0.00 m

Format des donnees : (1x,I2,1x,I2,1x,I5,1x,I2,1x,I2,1x,F5.2,2x,I3,1x,I2,1x,F7.4,2x,A1,
I2.2,1x,I2,1x,F7.4,2x,F13.9,2x,F6.2,2x,F6.2,3x,F6.2)

Soleil : coordonnées éclipitiques géocentriques

			Date UTC			Long.			Lat.			Distance	V.Mag	Phase	Elong.
			h	m	s	°	'	"	°	'	"	ua.		°	°
8	6	2004	4	0	0.00	77	42	34.9807	-00	0	0.6064	1.015063109	-26.71	0.00	0.00
8	6	2004	4	10	0.00	77	42	58.8879	-00	0	0.6062	1.015064004	-26.71	0.00	0.00
8	6	2004	4	20	0.00	77	43	22.7951	-00	0	0.6060	1.015064899	-26.71	0.00	0.00
8	6	2004	4	30	0.00	77	43	46.7022	-00	0	0.6058	1.015065794	-26.71	0.00	0.00
8	6	2004	4	40	0.00	77	44	10.6094	-00	0	0.6056	1.015066688	-26.71	0.00	0.00
8	6	2004	4	50	0.00	77	44	34.5165	-00	0	0.6055	1.015067582	-26.71	0.00	0.00
8	6	2004	5	0	0.00	77	44	58.4236	-00	0	0.6053	1.015068476	-26.71	0.00	0.00
8	6	2004	5	10	0.00	77	45	22.3307	-00	0	0.6051	1.015069370	-26.71	0.00	0.00
8	6	2004	5	20	0.00	77	45	46.2377	-00	0	0.6049	1.015070264	-26.71	0.00	0.00
8	6	2004	5	30	0.00	77	46	10.1447	-00	0	0.6047	1.015071157	-26.71	0.00	0.00
8	6	2004	5	40	0.00	77	46	34.0517	-00	0	0.6045	1.015072051	-26.71	0.00	0.00
8	6	2004	5	50	0.00	77	46	57.9587	-00	0	0.6043	1.015072944	-26.71	0.00	0.00
8	6	2004	6	0	0.00	77	47	21.8656	-00	0	0.6041	1.015073837	-26.71	0.00	0.00
8	6	2004	6	10	0.00	77	47	45.7725	-00	0	0.6039	1.015074729	-26.71	0.00	0.00
8	6	2004	6	20	0.00	77	48	9.6794	-00	0	0.6037	1.015075622	-26.71	0.00	0.00
8	6	2004	6	30	0.00	77	48	33.5862	-00	0	0.6035	1.015076514	-26.71	0.00	0.00
8	6	2004	6	40	0.00	77	48	57.4931	-00	0	0.6033	1.015077406	-26.71	0.00	0.00
8	6	2004	6	50	0.00	77	49	21.3999	-00	0	0.6031	1.015078298	-26.71	0.00	0.00
8	6	2004	7	0	0.00	77	49	45.3067	-00	0	0.6029	1.015079190	-26.71	0.00	0.00
8	6	2004	7	10	0.00	77	50	9.2134	-00	0	0.6027	1.015080082	-26.71	0.00	0.00
8	6	2004	7	20	0.00	77	50	33.1201	-00	0	0.6025	1.015080973	-26.71	0.00	0.00
8	6	2004	7	30	0.00	77	50	57.0268	-00	0	0.6023	1.015081864	-26.71	0.00	0.00
8	6	2004	7	40	0.00	77	51	20.9335	-00	0	0.6021	1.015082755	-26.71	0.00	0.00
8	6	2004	7	50	0.00	77	51	44.8402	-00	0	0.6018	1.015083646	-26.71	0.00	0.00
8	6	2004	8	0	0.00	77	52	8.7468	-00	0	0.6016	1.015084537	-26.71	0.00	0.00
8	6	2004	8	10	0.00	77	52	32.6534	-00	0	0.6014	1.015085427	-26.71	0.00	0.00
8	6	2004	8	20	0.00	77	52	56.5600	-00	0	0.6012	1.015086318	-26.71	0.00	0.00
8	6	2004	8	30	0.00	77	53	20.4665	-00	0	0.6010	1.015087208	-26.71	0.00	0.00
8	6	2004	8	40	0.00	77	53	44.3730	-00	0	0.6007	1.015088098	-26.71	0.00	0.00
8	6	2004	8	50	0.00	77	54	8.2795	-00	0	0.6005	1.015088988	-26.71	0.00	0.00
8	6	2004	9	0	0.00	77	54	32.1860	-00	0	0.6003	1.015089877	-26.71	0.00	0.00
8	6	2004	9	10	0.00	77	54	56.0924	-00	0	0.6001	1.015090766	-26.71	0.00	0.00
8	6	2004	9	20	0.00	77	55	19.9988	-00	0	0.5998	1.015091656	-26.71	0.00	0.00
8	6	2004	9	30	0.00	77	55	43.9052	-00	0	0.5996	1.015092545	-26.71	0.00	0.00
8	6	2004	9	40	0.00	77	56	7.8116	-00	0	0.5994	1.015093433	-26.71	0.00	0.00
8	6	2004	9	50	0.00	77	56	31.7179	-00	0	0.5992	1.015094322	-26.71	0.00	0.00
8	6	2004	10	0	0.00	77	56	55.6242	-00	0	0.5989	1.015095210	-26.71	0.00	0.00
8	6	2004	10	10	0.00	77	57	19.5305	-00	0	0.5987	1.015096099	-26.71	0.00	0.00
8	6	2004	10	20	0.00	77	57	43.4368	-00	0	0.5985	1.015096987	-26.71	0.00	0.00
8	6	2004	10	30	0.00	77	58	7.3430	-00	0	0.5982	1.015097874	-26.71	0.00	0.00
8	6	2004	10	40	0.00	77	58	31.2492	-00	0	0.5980	1.015098762	-26.71	0.00	0.00
8	6	2004	10	50	0.00	77	58	55.1554	-00	0	0.5977	1.015099650	-26.71	0.00	0.00
8	6	2004	11	0	0.00	77	59	19.0616	-00	0	0.5975	1.015100537	-26.71	0.00	0.00
8	6	2004	11	10	0.00	77	59	42.9677	-00	0	0.5973	1.015101424	-26.71	0.00	0.00
8	6	2004	11	20	0.00	78	0	6.8738	-00	0	0.5970	1.015102311	-26.71	0.00	0.00
8	6	2004	11	30	0.00	78	0	30.7799	-00	0	0.5968	1.015103197	-26.71	0.00	0.00
8	6	2004	11	40	0.00	78	0	54.6860	-00	0	0.5965	1.015104084	-26.71	0.00	0.00
8	6	2004	11	50	0.00	78	1	18.5920	-00	0	0.5963	1.015104970	-26.71	0.00	0.00
8	6	2004	12	0	0.00	78	1	42.4980	-00	0	0.5960	1.015105856	-26.71	0.00	0.00
8	6	2004	12	10	0.00	78	2	6.4040	-00	0	0.5958	1.015106742	-26.71	0.00	0.00

Vénus : coordonnées écliptiques géocentriques

Date UTC				Long.			Lat.			Distance	V.Mag	Phase	Elong.		
		h	m	s	°	'	"	°	'	"	ua.	°	°		
8	6	2004	4	0	0.00	78	0	52.7089	-00	7	48.4259	0.288884566	-3.69	179.54	0.39
8	6	2004	4	10	0.00	78	0	36.9948	-00	7	54.3407	0.288884313	-3.69	179.55	0.38
8	6	2004	4	20	0.00	78	0	21.2806	-00	8	0.2554	0.288884075	-3.69	179.56	0.37
8	6	2004	4	30	0.00	78	0	5.5665	-00	8	6.1701	0.288883853	-3.69	179.58	0.36
8	6	2004	4	40	0.00	77	59	49.8522	-00	8	12.0848	0.288883645	-3.69	179.59	0.35
8	6	2004	4	50	0.00	77	59	34.1379	-00	8	17.9994	0.288883453	-3.69	179.60	0.34
8	6	2004	5	0	0.00	77	59	18.4236	-00	8	23.9140	0.288883275	-3.69	179.61	0.33
8	6	2004	5	10	0.00	77	59	2.7092	-00	8	29.8286	0.288883113	-3.69	179.63	0.32
8	6	2004	5	20	0.00	77	58	46.9948	-00	8	35.7431	0.288882966	-3.68	179.64	0.31
8	6	2004	5	30	0.00	77	58	31.2804	-00	8	41.6575	0.288882834	-3.68	179.65	0.30
8	6	2004	5	40	0.00	77	58	15.5660	-00	8	47.5719	0.288882718	-3.68	179.66	0.30
8	6	2004	5	50	0.00	77	57	59.8515	-00	8	53.4863	0.288882616	-3.68	179.67	0.29
8	6	2004	6	0	0.00	77	57	44.1370	-00	8	59.4006	0.288882530	-3.68	179.68	0.28
8	6	2004	6	10	0.00	77	57	28.4226	-00	9	5.3149	0.288882458	-3.68	179.69	0.27
8	6	2004	6	20	0.00	77	57	12.7081	-00	9	11.2291	0.288882402	-3.68	179.70	0.26
8	6	2004	6	30	0.00	77	56	56.9936	-00	9	17.1433	0.288882361	-3.68	179.71	0.25
8	6	2004	6	40	0.00	77	56	41.2791	-00	9	23.0574	0.288882336	-3.68	179.72	0.25
8	6	2004	6	50	0.00	77	56	25.5647	-00	9	28.9714	0.288882325	-3.68	179.72	0.24
8	6	2004	7	0	0.00	77	56	9.8502	-00	9	34.8854	0.288882330	-3.68	179.73	0.23
8	6	2004	7	10	0.00	77	55	54.1358	-00	9	40.7994	0.288882349	-3.68	179.74	0.23
8	6	2004	7	20	0.00	77	55	38.4214	-00	9	46.7132	0.288882384	-3.68	179.74	0.22
8	6	2004	7	30	0.00	77	55	22.7071	-00	9	52.6271	0.288882434	-3.68	179.75	0.21
8	6	2004	7	40	0.00	77	55	6.9928	-00	9	58.5408	0.288882499	-3.68	179.75	0.21
8	6	2004	7	50	0.00	77	54	51.2785	-00	10	4.4545	0.288882579	-3.68	179.75	0.20
8	6	2004	8	0	0.00	77	54	35.5643	-00	10	10.3682	0.288882675	-3.68	179.76	0.20
8	6	2004	8	10	0.00	77	54	19.8501	-00	10	16.2817	0.288882785	-3.68	179.76	0.19
8	6	2004	8	20	0.00	77	54	4.1360	-00	10	22.1953	0.288882911	-3.68	179.76	0.19
8	6	2004	8	30	0.00	77	53	48.4220	-00	10	28.1087	0.288883052	-3.68	179.76	0.19
8	6	2004	8	40	0.00	77	53	32.7080	-00	10	34.0221	0.288883208	-3.68	179.75	0.19
8	6	2004	8	50	0.00	77	53	16.9941	-00	10	39.9354	0.288883379	-3.68	179.75	0.18
8	6	2004	9	0	0.00	77	53	1.2802	-00	10	45.8486	0.288883566	-3.68	179.75	0.18
8	6	2004	9	10	0.00	77	52	45.5665	-00	10	51.7618	0.288883767	-3.68	179.74	0.18
8	6	2004	9	20	0.00	77	52	29.8528	-00	10	57.6749	0.288883984	-3.68	179.74	0.18
8	6	2004	9	30	0.00	77	52	14.1393	-00	11	3.5879	0.288884215	-3.68	179.73	0.18
8	6	2004	9	40	0.00	77	51	58.4258	-00	11	9.5009	0.288884462	-3.68	179.72	0.19
8	6	2004	9	50	0.00	77	51	42.7124	-00	11	15.4138	0.288884724	-3.68	179.71	359.81
8	6	2004	10	0	0.00	77	51	26.9991	-00	11	21.3266	0.288885002	-3.68	179.71	359.81
8	6	2004	10	10	0.00	77	51	11.2860	-00	11	27.2393	0.288885294	-3.68	179.70	359.81
8	6	2004	10	20	0.00	77	50	55.5730	-00	11	33.1519	0.288885602	-3.68	179.69	359.80
8	6	2004	10	30	0.00	77	50	39.8601	-00	11	39.0645	0.288885924	-3.68	179.68	359.80
8	6	2004	10	40	0.00	77	50	24.1473	-00	11	44.9770	0.288886262	-3.68	179.67	359.79
8	6	2004	10	50	0.00	77	50	8.4346	-00	11	50.8894	0.288886615	-3.68	179.66	359.79
8	6	2004	11	0	0.00	77	49	52.7221	-00	11	56.8017	0.288886983	-3.68	179.65	359.78
8	6	2004	11	10	0.00	77	49	37.0097	-00	12	2.7140	0.288887366	-3.68	179.63	359.77
8	6	2004	11	20	0.00	77	49	21.2975	-00	12	8.6261	0.288887765	-3.69	179.62	359.77
8	6	2004	11	30	0.00	77	49	5.5854	-00	12	14.5382	0.288888178	-3.69	179.61	359.76
8	6	2004	11	40	0.00	77	48	49.8735	-00	12	20.4502	0.288888607	-3.69	179.60	359.75
8	6	2004	11	50	0.00	77	48	34.1617	-00	12	26.3621	0.288889051	-3.69	179.59	359.74
8	6	2004	12	0	0.00	77	48	18.4501	-00	12	32.2739	0.288889510	-3.69	179.57	359.74
8	6	2004	12	10	0.00	77	48	2.7387	-00	12	38.1856	0.288889984	-3.69	179.56	359.73

Soleil : coordonnées écliptiques topocentriques

Date UTC				Long.			Lat.			Distance	V.Mag	Phase	Elong.		
		h	m	s	°	'	"	°	'	"	ua.		°	°	
8	6	2004	4	0	0.00	77	42	39.8377	-00	0	7.7625	1.015062915	-26.71	0.00	0.00
8	6	2004	4	10	0.00	77	43	3.8599	-00	0	7.6781	1.015062712	-26.71	0.00	0.00
8	6	2004	4	20	0.00	77	43	27.8716	-00	0	7.5911	1.015062488	-26.71	0.00	0.00
8	6	2004	4	30	0.00	77	43	51.8726	-00	0	7.5015	1.015062247	-26.71	0.00	0.00
8	6	2004	4	40	0.00	77	44	15.8627	-00	0	7.4096	1.015061990	-26.71	0.00	0.00
8	6	2004	4	50	0.00	77	44	39.8418	-00	0	7.3155	1.015061719	-26.71	0.00	0.00
8	6	2004	5	0	0.00	77	45	3.8097	-00	0	7.2193	1.015061437	-26.71	0.00	0.00
8	6	2004	5	10	0.00	77	45	27.7664	-00	0	7.1214	1.015061146	-26.71	0.00	0.00
8	6	2004	5	20	0.00	77	45	51.7117	-00	0	7.0218	1.015060847	-26.71	0.00	0.00
8	6	2004	5	30	0.00	77	46	15.6455	-00	0	6.9207	1.015060544	-26.71	0.00	0.00
8	6	2004	5	40	0.00	77	46	39.5679	-00	0	6.8184	1.015060239	-26.71	0.00	0.00
8	6	2004	5	50	0.00	77	47	3.4787	-00	0	6.7150	1.015059933	-26.71	0.00	0.00
8	6	2004	6	0	0.00	77	47	27.3780	-00	0	6.6108	1.015059629	-26.71	0.00	0.00
8	6	2004	6	10	0.00	77	47	51.2658	-00	0	6.5059	1.015059330	-26.71	0.00	0.00
8	6	2004	6	20	0.00	77	48	15.1421	-00	0	6.4006	1.015059037	-26.71	0.00	0.00
8	6	2004	6	30	0.00	77	48	39.0070	-00	0	6.2949	1.015058754	-26.71	0.00	0.00
8	6	2004	6	40	0.00	77	49	2.8605	-00	0	6.1893	1.015058481	-26.71	0.00	0.00
8	6	2004	6	50	0.00	77	49	26.7028	-00	0	6.0837	1.015058222	-26.71	0.00	0.00
8	6	2004	7	0	0.00	77	49	50.5340	-00	0	5.9785	1.015057978	-26.71	0.00	0.00
8	6	2004	7	10	0.00	77	50	14.3543	-00	0	5.8739	1.015057753	-26.71	0.00	0.00
8	6	2004	7	20	0.00	77	50	38.1637	-00	0	5.7699	1.015057547	-26.71	0.00	0.00
8	6	2004	7	30	0.00	77	51	1.9625	-00	0	5.6670	1.015057362	-26.71	0.00	0.00
8	6	2004	7	40	0.00	77	51	25.7509	-00	0	5.5651	1.015057202	-26.71	0.00	0.00
8	6	2004	7	50	0.00	77	51	49.5291	-00	0	5.4646	1.015057068	-26.71	0.00	0.00
8	6	2004	8	0	0.00	77	52	13.2974	-00	0	5.3657	1.015056962	-26.71	0.00	0.00
8	6	2004	8	10	0.00	77	52	37.0560	-00	0	5.2684	1.015056886	-26.71	0.00	0.00
8	6	2004	8	20	0.00	77	53	0.8052	-00	0	5.1731	1.015056841	-26.71	0.00	0.00
8	6	2004	8	30	0.00	77	53	24.5453	-00	0	5.0798	1.015056830	-26.71	0.00	0.00
8	6	2004	8	40	0.00	77	53	48.2766	-00	0	4.9888	1.015056854	-26.71	0.00	0.00
8	6	2004	8	50	0.00	77	54	11.9995	-00	0	4.9002	1.015056914	-26.71	0.00	0.00
8	6	2004	9	0	0.00	77	54	35.7143	-00	0	4.8142	1.015057014	-26.71	0.00	0.00
8	6	2004	9	10	0.00	77	54	59.4214	-00	0	4.7310	1.015057153	-26.71	0.00	0.00
8	6	2004	9	20	0.00	77	55	23.1211	-00	0	4.6507	1.015057333	-26.71	0.00	0.00
8	6	2004	9	30	0.00	77	55	46.8139	-00	0	4.5735	1.015057556	-26.71	0.00	0.00
8	6	2004	9	40	0.00	77	56	10.5001	-00	0	4.4995	1.015057823	-26.71	0.00	0.00
8	6	2004	9	50	0.00	77	56	34.1802	-00	0	4.4289	1.015058135	-26.71	0.00	0.00
8	6	2004	10	0	0.00	77	56	57.8546	-00	0	4.3618	1.015058493	-26.71	0.00	0.00
8	6	2004	10	10	0.00	77	57	21.5238	-00	0	4.2983	1.015058898	-26.71	0.00	0.00
8	6	2004	10	20	0.00	77	57	45.1881	-00	0	4.2386	1.015059352	-26.71	0.00	0.00
8	6	2004	10	30	0.00	77	58	8.8481	-00	0	4.1827	1.015059855	-26.71	0.00	0.00
8	6	2004	10	40	0.00	77	58	32.5043	-00	0	4.1308	1.015060407	-26.71	0.00	0.00
8	6	2004	10	50	0.00	77	58	56.1570	-00	0	4.0830	1.015061009	-26.71	0.00	0.00
8	6	2004	11	0	0.00	77	59	19.8069	-00	0	4.0393	1.015061663	-26.71	0.00	0.00
8	6	2004	11	10	0.00	77	59	43.4543	-00	0	3.9999	1.015062367	-26.71	0.00	0.00
8	6	2004	11	20	0.00	78	0	7.0998	-00	0	3.9648	1.015063124	-26.71	0.00	0.00
8	6	2004	11	30	0.00	78	0	30.7439	-00	0	3.9341	1.015063932	-26.71	0.00	0.00
8	6	2004	11	40	0.00	78	0	54.3870	-00	0	3.9078	1.015064792	-26.71	0.00	0.00
8	6	2004	11	50	0.00	78	1	18.0297	-00	0	3.8861	1.015065705	-26.71	0.00	0.00
8	6	2004	12	0	0.00	78	1	41.6725	-00	0	3.8688	1.015066669	-26.71	0.00	0.00
8	6	2004	12	10	0.00	78	2	5.3159	-00	0	3.8562	1.015067686	-26.71	0.00	0.00

Vénus : coordonnées écliptiques topocentriques

Date UTC				Long.			Lat.			Distance	V.Mag	Phase	Elong.		
	h	m	s	°	'	"	°	'	"	ua.		°	°		
8	6	2004	4	0	0.00	78	1	9.7759	-00	8	13.5705	0.288884581	-3.69	179.53	0.39
8	6	2004	4	10	0.00	78	0	54.4698	-00	8	19.1915	0.288883228	-3.69	179.54	0.38
8	6	2004	4	20	0.00	78	0	39.1266	-00	8	24.8031	0.288881870	-3.69	179.56	0.37
8	6	2004	4	30	0.00	78	0	23.7457	-00	8	30.4058	0.288880509	-3.69	179.57	0.37
8	6	2004	4	40	0.00	78	0	8.3263	-00	8	36.0002	0.288879147	-3.69	179.58	0.36
8	6	2004	4	50	0.00	77	59	52.8680	-00	8	41.5870	0.288877786	-3.69	179.59	0.35
8	6	2004	5	0	0.00	77	59	37.3703	-00	8	47.1667	0.288876428	-3.69	179.61	0.34
8	6	2004	5	10	0.00	77	59	21.8327	-00	8	52.7400	0.288875077	-3.69	179.62	0.33
8	6	2004	5	20	0.00	77	59	6.2549	-00	8	58.3076	0.288873733	-3.69	179.63	0.32
8	6	2004	5	30	0.00	77	58	50.6366	-00	9	3.8701	0.288872399	-3.68	179.64	0.31
8	6	2004	5	40	0.00	77	58	34.9777	-00	9	9.4282	0.288871078	-3.68	179.65	0.30
8	6	2004	5	50	0.00	77	58	19.2781	-00	9	14.9826	0.288869772	-3.68	179.66	0.29
8	6	2004	6	0	0.00	77	58	3.5377	-00	9	20.5340	0.288868483	-3.68	179.67	0.28
8	6	2004	6	10	0.00	77	57	47.7565	-00	9	26.0830	0.288867214	-3.68	179.68	0.28
8	6	2004	6	20	0.00	77	57	31.9348	-00	9	31.6303	0.288865967	-3.68	179.69	0.27
8	6	2004	6	30	0.00	77	57	16.0728	-00	9	37.1767	0.288864743	-3.68	179.70	0.26
8	6	2004	6	40	0.00	77	57	0.1706	-00	9	42.7229	0.288863547	-3.68	179.71	0.25
8	6	2004	6	50	0.00	77	56	44.2287	-00	9	48.2696	0.288862378	-3.68	179.72	0.24
8	6	2004	7	0	0.00	77	56	28.2475	-00	9	53.8174	0.288861241	-3.68	179.72	0.24
8	6	2004	7	10	0.00	77	56	12.2276	-00	9	59.3670	0.288860137	-3.68	179.73	0.23
8	6	2004	7	20	0.00	77	55	56.1695	-00	10	4.9193	0.288859068	-3.68	179.74	0.22
8	6	2004	7	30	0.00	77	55	40.0738	-00	10	10.4747	0.288858036	-3.68	179.74	0.22
8	6	2004	7	40	0.00	77	55	23.9414	-00	10	16.0342	0.288857044	-3.68	179.75	0.21
8	6	2004	7	50	0.00	77	55	7.7730	-00	10	21.5982	0.288856094	-3.68	179.75	0.21
8	6	2004	8	0	0.00	77	54	51.5695	-00	10	27.1675	0.288855187	-3.68	179.75	0.20
8	6	2004	8	10	0.00	77	54	35.3319	-00	10	32.7427	0.288854325	-3.68	179.75	0.20
8	6	2004	8	20	0.00	77	54	19.0611	-00	10	38.3246	0.288853510	-3.68	179.75	0.19
8	6	2004	8	30	0.00	77	54	2.7583	-00	10	43.9136	0.288852745	-3.68	179.75	0.19
8	6	2004	8	40	0.00	77	53	46.4245	-00	10	49.5105	0.288852030	-3.68	179.75	0.19
8	6	2004	8	50	0.00	77	53	30.0610	-00	10	55.1158	0.288851368	-3.68	179.75	0.19
8	6	2004	9	0	0.00	77	53	13.6690	-00	11	0.7302	0.288850760	-3.68	179.74	0.19
8	6	2004	9	10	0.00	77	52	57.2498	-00	11	6.3541	0.288850208	-3.68	179.74	0.19
8	6	2004	9	20	0.00	77	52	40.8048	-00	11	11.9882	0.288849713	-3.68	179.73	0.19
8	6	2004	9	30	0.00	77	52	24.3353	-00	11	17.6330	0.288849276	-3.68	179.73	0.19
8	6	2004	9	40	0.00	77	52	7.8429	-00	11	23.2889	0.288848899	-3.68	179.72	0.19
8	6	2004	9	50	0.00	77	51	51.3290	-00	11	28.9566	0.288848583	-3.68	179.71	0.19
8	6	2004	10	0	0.00	77	51	34.7953	-00	11	34.6363	0.288848329	-3.68	179.70	359.81
8	6	2004	10	10	0.00	77	51	18.2431	-00	11	40.3287	0.288848138	-3.68	179.70	359.80
8	6	2004	10	20	0.00	77	51	1.6743	-00	11	46.0341	0.288848011	-3.68	179.69	359.80
8	6	2004	10	30	0.00	77	50	45.0903	-00	11	51.7529	0.288847949	-3.68	179.68	359.79
8	6	2004	10	40	0.00	77	50	28.4930	-00	11	57.4855	0.288847952	-3.68	179.67	359.79
8	6	2004	10	50	0.00	77	50	11.8840	-00	12	3.2322	0.288848022	-3.68	179.65	359.78
8	6	2004	11	0	0.00	77	49	55.2650	-00	12	8.9933	0.288848158	-3.69	179.64	359.78
8	6	2004	11	10	0.00	77	49	38.6377	-00	12	14.7691	0.288848362	-3.69	179.63	359.77
8	6	2004	11	20	0.00	77	49	22.0040	-00	12	20.5599	0.288848634	-3.69	179.62	359.76
8	6	2004	11	30	0.00	77	49	5.3657	-00	12	26.3659	0.288848973	-3.69	179.61	359.76
8	6	2004	11	40	0.00	77	48	48.7244	-00	12	32.1873	0.288849380	-3.69	179.60	359.75
8	6	2004	11	50	0.00	77	48	32.0819	-00	12	38.0243	0.288849855	-3.69	179.58	359.74
8	6	2004	12	0	0.00	77	48	15.4402	-00	12	43.8770	0.288850398	-3.69	179.57	359.73
8	6	2004	12	10	0.00	77	47	58.8009	-00	12	49.7455	0.288851009	-3.69	179.56	359.73

Coordonnées équatoriales

Théorie planétaire DE405/LE405

Repère Apparent (équateur vrai ; équinoxe de la date)

Coordonnées équatoriales (R.A, Dec.)

Centre du repère : géocentre

Centre du repere : topocentre : ST-GENIS-LAVAL

0 h 19 m 8.004 s E ; 45 d 42 ' 0.004 " N ; 0.00 m

Format des donnees : (1x,I2,1x,I2,1x,I5,1x,I2,1x,I2,1x,F5.2,3x,I2,1x,I2,1x,F8.5,1x,A1,
I2.2,1x,I2,1x,F7.4,2x,F13.9,2x,F6.2,2x,F6.2,3x,F6.2,3x,F8.2,1x,F8.2)

Soleil : coordonnées équatoriales géocentriques

Date UTC		R.A		Dec.		Distance ua.	V.Mag	Phase O	Elong. O	dot_alpha °/h	dot_delta "/h					
h	m	h	m	°	'											
8	6	2004	4	0	0.00	5	6	31.91895	+22	52	17.2767	-26.71	0.00	0.00	155.02	13.19
8	6	2004	4	10	0.00	5	6	33.64145	+22	52	19.4753	-26.71	0.00	0.00	155.02	13.19
8	6	2004	4	20	0.00	5	6	35.36396	+22	52	21.6727	-26.71	0.00	0.00	155.02	13.18
8	6	2004	4	30	0.00	5	6	37.08648	+22	52	23.8690	-26.71	0.00	0.00	155.02	13.17
8	6	2004	4	40	0.00	5	6	38.80902	+22	52	26.0641	-26.71	0.00	0.00	155.02	13.16
8	6	2004	4	50	0.00	5	6	40.53157	+22	52	28.2581	-26.71	0.00	0.00	155.02	13.16
8	6	2004	5	0	0.00	5	6	42.25413	+22	52	30.4509	-26.71	0.00	0.00	155.02	13.15
8	6	2004	5	10	0.00	5	6	43.97671	+22	52	32.6426	-26.71	0.00	0.00	155.03	13.14
8	6	2004	5	20	0.00	5	6	45.69930	+22	52	34.8330	-26.71	0.00	0.00	155.03	13.14
8	6	2004	5	30	0.00	5	6	47.42190	+22	52	37.0224	-26.71	0.00	0.00	155.03	13.13
8	6	2004	5	40	0.00	5	6	49.14452	+22	52	39.2105	-26.71	0.00	0.00	155.03	13.12
8	6	2004	5	50	0.00	5	6	50.86715	+22	52	41.3975	-26.71	0.00	0.00	155.03	13.12
8	6	2004	6	0	0.00	5	6	52.58979	+22	52	43.5834	-26.71	0.00	0.00	155.03	13.11
8	6	2004	6	10	0.00	5	6	54.31245	+22	52	45.7680	-26.71	0.00	0.00	155.03	13.11
8	6	2004	6	20	0.00	5	6	56.03512	+22	52	47.9516	-26.71	0.00	0.00	155.03	13.10
8	6	2004	6	30	0.00	5	6	57.75780	+22	52	50.1339	-26.71	0.00	0.00	155.03	13.09
8	6	2004	6	40	0.00	5	6	59.48050	+22	52	52.3151	-26.71	0.00	0.00	155.04	13.08
8	6	2004	6	50	0.00	5	7	1.20321	+22	52	54.4951	-26.71	0.00	0.00	155.04	13.07
8	6	2004	7	0	0.00	5	7	2.92593	+22	52	56.6740	-26.71	0.00	0.00	155.04	13.07
8	6	2004	7	10	0.00	5	7	4.64867	+22	52	58.8517	-26.71	0.00	0.00	155.04	13.06
8	6	2004	7	20	0.00	5	7	6.37141	+22	53	1.0283	-26.71	0.00	0.00	155.04	13.05
8	6	2004	7	30	0.00	5	7	8.09418	+22	53	3.2036	-26.71	0.00	0.00	155.04	13.05
8	6	2004	7	40	0.00	5	7	9.81695	+22	53	5.3779	-26.71	0.00	0.00	155.04	13.05
8	6	2004	7	50	0.00	5	7	11.53974	+22	53	7.5509	-26.71	0.00	0.00	155.04	13.04
8	6	2004	8	0	0.00	5	7	13.26255	+22	53	9.7228	-26.71	0.00	0.00	155.05	13.03
8	6	2004	8	10	0.00	5	7	14.98536	+22	53	11.8936	-26.71	0.00	0.00	155.05	13.02
8	6	2004	8	20	0.00	5	7	16.70819	+22	53	14.0632	-26.71	0.00	0.00	155.05	13.01
8	6	2004	8	30	0.00	5	7	18.43103	+22	53	16.2316	-26.71	0.00	0.00	155.05	13.00
8	6	2004	8	40	0.00	5	7	20.15389	+22	53	18.3988	-26.71	0.00	0.00	155.05	13.00
8	6	2004	8	50	0.00	5	7	21.87676	+22	53	20.5649	-26.71	0.00	0.00	155.05	12.99
8	6	2004	9	0	0.00	5	7	23.59964	+22	53	22.7298	-26.71	0.00	0.00	155.05	12.98
8	6	2004	9	10	0.00	5	7	25.32253	+22	53	24.8936	-26.71	0.00	0.00	155.06	12.98
8	6	2004	9	20	0.00	5	7	27.04544	+22	53	27.0562	-26.71	0.00	0.00	155.06	12.97
8	6	2004	9	30	0.00	5	7	28.76836	+22	53	29.2177	-26.71	0.00	0.00	155.06	12.96
8	6	2004	9	40	0.00	5	7	30.49130	+22	53	31.3779	-26.71	0.00	0.00	155.06	12.96
8	6	2004	9	50	0.00	5	7	32.21425	+22	53	33.5371	-26.71	0.00	0.00	155.06	12.95
8	6	2004	10	0	0.00	5	7	33.93721	+22	53	35.6950	-26.71	0.00	0.00	155.06	12.94
8	6	2004	10	10	0.00	5	7	35.66018	+22	53	37.8518	-26.71	0.00	0.00	155.06	12.93
8	6	2004	10	20	0.00	5	7	37.38317	+22	53	40.0074	-26.71	0.00	0.00	155.06	12.93
8	6	2004	10	30	0.00	5	7	39.10617	+22	53	42.1619	-26.71	0.00	0.00	155.06	12.92
8	6	2004	10	40	0.00	5	7	40.82918	+22	53	44.3152	-26.71	0.00	0.00	155.07	12.91
8	6	2004	10	50	0.00	5	7	42.55221	+22	53	46.4674	-26.71	0.00	0.00	155.07	12.91
8	6	2004	11	0	0.00	5	7	44.27525	+22	53	48.6184	-26.71	0.00	0.00	155.07	12.90
8	6	2004	11	10	0.00	5	7	45.99830	+22	53	50.7682	-26.71	0.00	0.00	155.07	12.89
8	6	2004	11	20	0.00	5	7	47.72137	+22	53	52.9168	-26.71	0.00	0.00	155.07	12.89
8	6	2004	11	30	0.00	5	7	49.44445	+22	53	55.0643	-26.71	0.00	0.00	155.07	12.88
8	6	2004	11	40	0.00	5	7	51.16754	+22	53	57.2107	-26.71	0.00	0.00	155.07	12.87
8	6	2004	11	50	0.00	5	7	52.89064	+22	53	59.3558	-26.71	0.00	0.00	155.07	12.87
8	6	2004	12	0	0.00	5	7	54.61376	+22	54	1.4998	-26.71	0.00	0.00	155.08	12.86

Vénus : coordonnées équatoriales géocentriques

Date UTC		R.A		Dec.		Distance ua.	V.Mag	Phase O	Elong. O	dot_alpha dot_delta						
h	m	h	m	°	'					$\frac{\dot{\alpha}}{h}$	$\frac{\dot{\delta}}{h}$					
8	6	2004	4	0	0.00	5	7	55.77619	+22 46	14.6364	0.288884566	-3.69	179.53	0.39	-98.40	-43.79
8	6	2004	4	10	0.00	5	7	54.68295	+22 46	7.3375	0.288884313	-3.69	179.54	0.38	-98.40	-43.80
8	6	2004	4	20	0.00	5	7	53.58974	+22 46	0.0381	0.288884075	-3.69	179.55	0.37	-98.39	-43.80
8	6	2004	4	30	0.00	5	7	52.49656	+22 45	52.7383	0.288883853	-3.69	179.57	0.36	-98.39	-43.80
8	6	2004	4	40	0.00	5	7	51.40340	+22 45	45.4381	0.288883645	-3.69	179.58	0.35	-98.39	-43.81
8	6	2004	4	50	0.00	5	7	50.31027	+22 45	38.1374	0.288883453	-3.69	179.59	0.34	-98.39	-43.81
8	6	2004	5	0	0.00	5	7	49.21717	+22 45	30.8363	0.288883275	-3.69	179.61	0.33	-98.38	-43.81
8	6	2004	5	10	0.00	5	7	48.12411	+22 45	23.5348	0.288883113	-3.69	179.62	0.32	-98.38	-43.81
8	6	2004	5	20	0.00	5	7	47.03107	+22 45	16.2329	0.288882966	-3.69	179.63	0.31	-98.38	-43.82
8	6	2004	5	30	0.00	5	7	45.93806	+22 45	8.9305	0.288882834	-3.68	179.64	0.30	-98.38	-43.82
8	6	2004	5	40	0.00	5	7	44.84508	+22 45	1.6277	0.288882718	-3.68	179.65	0.29	-98.37	-43.82
8	6	2004	5	50	0.00	5	7	43.75213	+22 44	54.3245	0.288882616	-3.68	179.66	0.28	-98.37	-43.82
8	6	2004	6	0	0.00	5	7	42.65922	+22 44	47.0208	0.288882530	-3.68	179.67	0.28	-98.37	-43.83
8	6	2004	6	10	0.00	5	7	41.56633	+22 44	39.7168	0.288882458	-3.68	179.68	0.27	-98.36	-43.83
8	6	2004	6	20	0.00	5	7	40.47348	+22 44	32.4123	0.288882402	-3.68	179.69	0.26	-98.36	-43.83
8	6	2004	6	30	0.00	5	7	39.38066	+22 44	25.1074	0.288882361	-3.68	179.70	0.25	-98.36	-43.83
8	6	2004	6	40	0.00	5	7	38.28787	+22 44	17.8021	0.288882336	-3.68	179.71	0.24	-98.36	-43.84
8	6	2004	6	50	0.00	5	7	37.19512	+22 44	10.4964	0.288882325	-3.68	179.72	0.24	-98.35	-43.84
8	6	2004	7	0	0.00	5	7	36.10240	+22 44	3.1902	0.288882330	-3.68	179.73	0.23	-98.35	-43.84
8	6	2004	7	10	0.00	5	7	35.00971	+22 43	55.8837	0.288882349	-3.68	179.73	0.22	-98.35	-43.84
8	6	2004	7	20	0.00	5	7	33.91706	+22 43	48.5768	0.288882384	-3.68	179.74	0.22	-98.34	-43.85
8	6	2004	7	30	0.00	5	7	32.82444	+22 43	41.2694	0.288882434	-3.68	179.74	0.21	-98.34	-43.85
8	6	2004	7	40	0.00	5	7	31.73185	+22 43	33.9616	0.288882499	-3.68	179.75	0.20	-98.34	-43.85
8	6	2004	7	50	0.00	5	7	30.63930	+22 43	26.6535	0.288882579	-3.68	179.75	0.20	-98.33	-43.85
8	6	2004	8	0	0.00	5	7	29.54679	+22 43	19.3449	0.288882675	-3.68	179.75	0.20	-98.33	-43.86
8	6	2004	8	10	0.00	5	7	28.45431	+22 43	12.0359	0.288882785	-3.68	179.76	0.19	-98.33	-43.86
8	6	2004	8	20	0.00	5	7	27.36187	+22 43	4.7266	0.288882911	-3.68	179.76	0.19	-98.32	-43.86
8	6	2004	8	30	0.00	5	7	26.26946	+22 42	57.4168	0.288883052	-3.68	179.76	0.18	-98.32	-43.86
8	6	2004	8	40	0.00	5	7	25.17709	+22 42	50.1066	0.288883208	-3.68	179.75	0.18	-98.32	-43.86
8	6	2004	8	50	0.00	5	7	24.08476	+22 42	42.7961	0.288883379	-3.68	179.75	0.18	-98.31	-43.87
8	6	2004	9	0	0.00	5	7	22.99247	+22 42	35.4851	0.288883566	-3.68	179.75	0.18	-98.31	-43.87
8	6	2004	9	10	0.00	5	7	21.90021	+22 42	28.1738	0.288883767	-3.68	179.74	0.18	-98.31	-43.87
8	6	2004	9	20	0.00	5	7	20.80799	+22 42	20.8621	0.288883984	-3.68	179.74	0.18	-98.30	-43.87
8	6	2004	9	30	0.00	5	7	19.71581	+22 42	13.5500	0.288884215	-3.68	179.73	0.18	-98.30	-43.88
8	6	2004	9	40	0.00	5	7	18.62367	+22 42	6.2375	0.288884462	-3.68	179.73	0.18	-98.30	-43.88
8	6	2004	9	50	0.00	5	7	17.53157	+22 41	58.9246	0.288884724	-3.68	179.72	0.18	-98.29	-43.88
8	6	2004	10	0	0.00	5	7	16.43951	+22 41	51.6113	0.288885002	-3.68	179.71	0.18	-98.29	-43.88
8	6	2004	10	10	0.00	5	7	15.34749	+22 41	44.2977	0.288885294	-3.68	179.70	0.18	-98.29	-43.89
8	6	2004	10	20	0.00	5	7	14.25551	+22 41	36.9836	0.288885602	-3.68	179.69	0.18	-98.28	-43.89
8	6	2004	10	30	0.00	5	7	13.16356	+22 41	29.6692	0.288885924	-3.68	179.68	0.18	-98.28	-43.89
8	6	2004	10	40	0.00	5	7	12.07166	+22 41	22.3545	0.288886262	-3.68	179.67	0.18	-98.28	-43.89
8	6	2004	10	50	0.00	5	7	10.97981	+22 41	15.0393	0.288886615	-3.68	179.66	0.18	-98.27	-43.89
8	6	2004	11	0	0.00	5	7	9.88799	+22 41	7.7238	0.288886983	-3.68	179.65	0.18	-98.27	-43.90
8	6	2004	11	10	0.00	5	7	8.79621	+22 41	0.4079	0.288887366	-3.68	179.64	0.18	-98.26	-43.90
8	6	2004	11	20	0.00	5	7	7.70448	+22 40	53.0916	0.288887765	-3.69	179.63	0.18	-98.26	-43.90
8	6	2004	11	30	0.00	5	7	6.61279	+22 40	45.7750	0.288888178	-3.69	179.62	0.18	-98.26	-43.90
8	6	2004	11	40	0.00	5	7	5.52114	+22 40	38.4580	0.288888607	-3.69	179.60	0.18	-98.25	-43.91
8	6	2004	11	50	0.00	5	7	4.42954	+22 40	31.1406	0.288889051	-3.69	179.59	0.18	-98.25	-43.91
8	6	2004	12	0	0.00	5	7	3.33798	+22 40	23.8229	0.288889510	-3.69	179.58	0.18	-98.24	-43.91

Soleil : coordonnées équatoriales topocentriques

Date UTC		R.A		Dec.		Distance ua.	V.Mag	Phase O	Elong. O	dot_alpha "/h	dot_delta "/h					
h	m	h	m	O	"											
8	6	2004	4	0	0.00	5	6	32.31651	+22	52	10.5976	-26.71	0.00	0.00	155.74	13.75
8	6	2004	4	10	0.00	5	6	34.04671	+22	52	12.8903	-26.71	0.00	0.00	155.68	13.76
8	6	2004	4	20	0.00	5	6	35.77615	+22	52	15.1835	-26.71	0.00	0.00	155.61	13.76
8	6	2004	4	30	0.00	5	6	37.50481	+22	52	17.4772	-26.71	0.00	0.00	155.54	13.76
8	6	2004	4	40	0.00	5	6	39.23270	+22	52	19.7710	-26.71	0.00	0.00	155.47	13.76
8	6	2004	4	50	0.00	5	6	40.95979	+22	52	22.0648	-26.71	0.00	0.00	155.40	13.76
8	6	2004	5	0	0.00	5	6	42.68608	+22	52	24.3584	-26.71	0.00	0.00	155.32	13.76
8	6	2004	5	10	0.00	5	6	44.41156	+22	52	26.6517	-26.71	0.00	0.00	155.25	13.76
8	6	2004	5	20	0.00	5	6	46.13623	+22	52	28.9444	-26.71	0.00	0.00	155.18	13.75
8	6	2004	5	30	0.00	5	6	47.86008	+22	52	31.2363	-26.71	0.00	0.00	155.10	13.75
8	6	2004	5	40	0.00	5	6	49.58311	+22	52	33.5272	-26.71	0.00	0.00	155.03	13.74
8	6	2004	5	50	0.00	5	6	51.30532	+22	52	35.8170	-26.71	0.00	0.00	154.96	13.73
8	6	2004	6	0	0.00	5	6	53.02671	+22	52	38.1055	-26.71	0.00	0.00	154.88	13.72
8	6	2004	6	10	0.00	5	6	54.74728	+22	52	40.3924	-26.71	0.00	0.00	154.81	13.71
8	6	2004	6	20	0.00	5	6	56.46703	+22	52	42.6775	-26.71	0.00	0.00	154.73	13.70
8	6	2004	6	30	0.00	5	6	58.18598	+22	52	44.9608	-26.71	0.00	0.00	154.66	13.69
8	6	2004	6	40	0.00	5	6	59.90412	+22	52	47.2418	-26.71	0.00	0.00	154.59	13.68
8	6	2004	6	50	0.00	5	7	1.62148	+22	52	49.5206	-26.71	0.00	0.00	154.52	13.66
8	6	2004	7	0	0.00	5	7	3.33805	+22	52	51.7969	-26.71	0.00	0.00	154.45	13.65
8	6	2004	7	10	0.00	5	7	5.05384	+22	52	54.0704	-26.71	0.00	0.00	154.38	13.63
8	6	2004	7	20	0.00	5	7	6.76888	+22	52	56.3411	-26.71	0.00	0.00	154.31	13.61
8	6	2004	7	30	0.00	5	7	8.48318	+22	52	58.6088	-26.71	0.00	0.00	154.25	13.59
8	6	2004	7	40	0.00	5	7	10.19675	+22	53	0.8732	-26.71	0.00	0.00	154.18	13.57
8	6	2004	7	50	0.00	5	7	11.90961	+22	53	3.1342	-26.71	0.00	0.00	154.12	13.55
8	6	2004	8	0	0.00	5	7	13.62178	+22	53	5.3916	-26.71	0.00	0.00	154.06	13.53
8	6	2004	8	10	0.00	5	7	15.33328	+22	53	7.6453	-26.71	0.00	0.00	154.00	13.51
8	6	2004	8	20	0.00	5	7	17.04413	+22	53	9.8952	-26.71	0.00	0.00	153.94	13.48
8	6	2004	8	30	0.00	5	7	18.75436	+22	53	12.1409	-26.71	0.00	0.00	153.89	13.46
8	6	2004	8	40	0.00	5	7	20.46398	+22	53	14.3825	-26.71	0.00	0.00	153.83	13.43
8	6	2004	8	50	0.00	5	7	22.17302	+22	53	16.6198	-26.71	0.00	0.00	153.78	13.41
8	6	2004	9	0	0.00	5	7	23.88152	+22	53	18.8526	-26.71	0.00	0.00	153.73	13.38
8	6	2004	9	10	0.00	5	7	25.58949	+22	53	21.0808	-26.71	0.00	0.00	153.69	13.35
8	6	2004	9	20	0.00	5	7	27.29696	+22	53	23.3042	-26.71	0.00	0.00	153.65	13.32
8	6	2004	9	30	0.00	5	7	29.00397	+22	53	25.5229	-26.71	0.00	0.00	153.60	13.29
8	6	2004	9	40	0.00	5	7	30.71055	+22	53	27.7366	-26.71	0.00	0.00	153.57	13.26
8	6	2004	9	50	0.00	5	7	32.41672	+22	53	29.9452	-26.71	0.00	0.00	153.53	13.23
8	6	2004	10	0	0.00	5	7	34.12252	+22	53	32.1487	-26.71	0.00	0.00	153.50	13.20
8	6	2004	10	10	0.00	5	7	35.82798	+22	53	34.3470	-26.71	0.00	0.00	153.47	13.17
8	6	2004	10	20	0.00	5	7	37.53313	+22	53	36.5400	-26.71	0.00	0.00	153.44	13.14
8	6	2004	10	30	0.00	5	7	39.23801	+22	53	38.7276	-26.71	0.00	0.00	153.42	13.11
8	6	2004	10	40	0.00	5	7	40.94265	+22	53	40.9097	-26.71	0.00	0.00	153.40	13.07
8	6	2004	10	50	0.00	5	7	42.64709	+22	53	43.0864	-26.71	0.00	0.00	153.39	13.04
8	6	2004	11	0	0.00	5	7	44.35136	+22	53	45.2575	-26.71	0.00	0.00	153.37	13.01
8	6	2004	11	10	0.00	5	7	46.05550	+22	53	47.4230	-26.71	0.00	0.00	153.36	12.97
8	6	2004	11	20	0.00	5	7	47.75955	+22	53	49.5829	-26.71	0.00	0.00	153.35	12.94
8	6	2004	11	30	0.00	5	7	49.46353	+22	53	51.7372	-26.71	0.00	0.00	153.35	12.91
8	6	2004	11	40	0.00	5	7	51.16749	+22	53	53.8859	-26.71	0.00	0.00	153.35	12.87
8	6	2004	11	50	0.00	5	7	52.87147	+22	53	56.0288	-26.71	0.00	0.00	153.35	12.84
8	6	2004	12	0	0.00	5	7	54.57549	+22	53	58.1662	-26.71	0.00	0.00	153.36	12.80

Vénus : coordonnées équatoriales topocentriques

Date UTC		R.A		Dec.		Distance ua.	V.Mag	Phase O	Elong. O	dot_alpha "/h	dot_delta "/h		
h	m	h	m	°	'								
8	6	2004	4	0	0.00	5 7 57.16111	+22 45 51.0435	0.288884581	-3.69	179.52	0.39	-95.80	-41.84
8	6	2004	4	10	0.00	5 7 56.09602	+22 45 44.0728	0.288883228	-3.69	179.53	0.38	-96.04	-41.80
8	6	2004	4	20	0.00	5 7 55.02825	+22 45 37.1079	0.288881870	-3.69	179.55	0.37	-96.29	-41.77
8	6	2004	4	30	0.00	5 7 53.95774	+22 45 30.1481	0.288880509	-3.69	179.56	0.36	-96.54	-41.74
8	6	2004	4	40	0.00	5 7 52.88445	+22 45 23.1928	0.288879147	-3.69	179.57	0.35	-96.79	-41.72
8	6	2004	4	50	0.00	5 7 51.80834	+22 45 16.2414	0.288877786	-3.69	179.59	0.34	-97.05	-41.70
8	6	2004	5	0	0.00	5 7 50.72939	+22 45 9.2931	0.288876428	-3.69	179.60	0.33	-97.30	-41.68
8	6	2004	5	10	0.00	5 7 49.64756	+22 45 2.3474	0.288875077	-3.69	179.61	0.33	-97.56	-41.67
8	6	2004	5	20	0.00	5 7 48.56283	+22 44 55.4035	0.288873733	-3.69	179.62	0.32	-97.83	-41.66
8	6	2004	5	30	0.00	5 7 47.47519	+22 44 48.4606	0.288872399	-3.69	179.63	0.31	-98.09	-41.66
8	6	2004	5	40	0.00	5 7 46.38463	+22 44 41.5183	0.288871078	-3.68	179.64	0.30	-98.35	-41.66
8	6	2004	5	50	0.00	5 7 45.29114	+22 44 34.5756	0.288869772	-3.68	179.66	0.29	-98.62	-41.66
8	6	2004	6	0	0.00	5 7 44.19473	+22 44 27.6321	0.288868483	-3.68	179.67	0.28	-98.88	-41.67
8	6	2004	6	10	0.00	5 7 43.09539	+22 44 20.6868	0.288867214	-3.68	179.68	0.27	-99.14	-41.68
8	6	2004	6	20	0.00	5 7 41.99316	+22 44 13.7393	0.288865967	-3.68	179.69	0.26	-99.40	-41.70
8	6	2004	6	30	0.00	5 7 40.88803	+22 44 6.7888	0.288864743	-3.68	179.70	0.26	-99.66	-41.72
8	6	2004	6	40	0.00	5 7 39.78005	+22 43 59.8345	0.288863547	-3.68	179.70	0.25	-99.91	-41.75
8	6	2004	6	50	0.00	5 7 38.66922	+22 43 52.8759	0.288862378	-3.68	179.71	0.24	-100.17	-41.78
8	6	2004	7	0	0.00	5 7 37.55561	+22 43 45.9123	0.288861241	-3.68	179.72	0.23	-100.42	-41.81
8	6	2004	7	10	0.00	5 7 36.43923	+22 43 38.9430	0.288860137	-3.68	179.73	0.23	-100.66	-41.85
8	6	2004	7	20	0.00	5 7 35.32014	+22 43 31.9674	0.288859068	-3.68	179.73	0.22	-100.90	-41.89
8	6	2004	7	30	0.00	5 7 34.19839	+22 43 24.9848	0.288858036	-3.68	179.74	0.22	-101.14	-41.93
8	6	2004	7	40	0.00	5 7 33.07404	+22 43 17.9946	0.288857044	-3.68	179.74	0.21	-101.37	-41.98
8	6	2004	7	50	0.00	5 7 31.94715	+22 43 10.9962	0.288856094	-3.68	179.75	0.20	-101.59	-42.03
8	6	2004	8	0	0.00	5 7 30.81777	+22 43 3.9891	0.288855187	-3.68	179.75	0.20	-101.81	-42.09
8	6	2004	8	10	0.00	5 7 29.68600	+22 42 56.9725	0.288854325	-3.68	179.75	0.20	-102.02	-42.14
8	6	2004	8	20	0.00	5 7 28.55189	+22 42 49.9461	0.288853510	-3.68	179.75	0.19	-102.23	-42.21
8	6	2004	8	30	0.00	5 7 27.41554	+22 42 42.9092	0.288852745	-3.68	179.75	0.19	-102.42	-42.27
8	6	2004	8	40	0.00	5 7 26.27702	+22 42 35.8613	0.288852030	-3.68	179.75	0.19	-102.61	-42.34
8	6	2004	8	50	0.00	5 7 25.13642	+22 42 28.8019	0.288851368	-3.68	179.75	0.18	-102.79	-42.41
8	6	2004	9	0	0.00	5 7 23.99385	+22 42 21.7305	0.288850760	-3.68	179.74	0.18	-102.97	-42.48
8	6	2004	9	10	0.00	5 7 22.84939	+22 42 14.6467	0.288850208	-3.68	179.74	0.18	-103.13	-42.56
8	6	2004	9	20	0.00	5 7 21.70314	+22 42 7.5501	0.288849713	-3.68	179.74	0.18	-103.28	-42.64
8	6	2004	9	30	0.00	5 7 20.55522	+22 42 0.4402	0.288849276	-3.68	179.73	0.18	-103.43	-42.72
8	6	2004	9	40	0.00	5 7 19.40572	+22 41 53.3166	0.288848899	-3.68	179.72	0.19	-103.56	-42.81
8	6	2004	9	50	0.00	5 7 18.25477	+22 41 46.1791	0.288848583	-3.68	179.72	359.81	-103.68	-42.89
8	6	2004	10	0	0.00	5 7 17.10246	+22 41 39.0271	0.288848329	-3.68	179.71	359.81	-103.80	-42.98
8	6	2004	10	10	0.00	5 7 15.94892	+22 41 31.8606	0.288848138	-3.68	179.70	359.80	-103.90	-43.07
8	6	2004	10	20	0.00	5 7 14.79427	+22 41 24.6791	0.288848011	-3.68	179.69	359.80	-103.99	-43.16
8	6	2004	10	30	0.00	5 7 13.63862	+22 41 17.4824	0.288847949	-3.68	179.68	359.80	-104.07	-43.25
8	6	2004	10	40	0.00	5 7 12.48211	+22 41 10.2702	0.288847952	-3.68	179.67	359.79	-104.14	-43.34
8	6	2004	10	50	0.00	5 7 11.32485	+22 41 3.0425	0.288848022	-3.68	179.66	359.78	-104.20	-43.44
8	6	2004	11	0	0.00	5 7 10.16697	+22 40 55.7991	0.288848158	-3.68	179.65	359.78	-104.25	-43.53
8	6	2004	11	10	0.00	5 7 9.00860	+22 40 48.5397	0.288848362	-3.69	179.64	359.77	-104.29	-43.63
8	6	2004	11	20	0.00	5 7 7.84987	+22 40 41.2643	0.288848634	-3.69	179.63	359.77	-104.31	-43.73
8	6	2004	11	30	0.00	5 7 6.69090	+22 40 33.9729	0.288848973	-3.69	179.61	359.76	-104.32	-43.82
8	6	2004	11	40	0.00	5 7 5.53182	+22 40 26.6653	0.288849380	-3.69	179.60	359.75	-104.32	-43.92
8	6	2004	11	50	0.00	5 7 4.37277	+22 40 19.3416	0.288849855	-3.69	179.59	359.74	-104.31	-44.02
8	6	2004	12	0	0.00	5 7 3.21388	+22 40 12.0017	0.288850398	-3.69	179.58	359.73	-104.29	-44.11

Coordonnées horaires

Théorie planétaire DE405/LE405

Repère Apparent (équateur vrai ; équinoxe de la date)

Coordonnées horaires (AH, Dec.)

Centre du repere : topocentre : ST-GENIS-LAVAL

0 h 19 m 8.004 s E ; 45 d 42 ' 0.004 " N ; 0.00 m

Format des donnees : (1x,I2,1x,I2,1x,I5,1x,I2,1x,I2,1x,F5.2,2x,I2,1x,I2,1x,F5.2,1x,A1,
I2.2,1x,I2,1x,F5.2,2x,F9.6,2x,F6.2,2x,F6.2,3x,F6.2)

Soleil : coordonnées horaires topocentriques

		Date UTC			Ang.Horaire				Dec.		Distance	V.Mag	Phase	Elong.	
		h	m	s	h	m	s	°	'	"	ua.		°	°	
8	6	2004	4	0	0.00	16	20	6.42	+22	52	10.60	1.015063	-26.71	0.00	0.00
8	6	2004	4	10	0.00	16	30	6.33	+22	52	12.89	1.015063	-26.71	0.00	0.00
8	6	2004	4	20	0.00	16	40	6.24	+22	52	15.18	1.015062	-26.71	0.00	0.00
8	6	2004	4	30	0.00	16	50	6.16	+22	52	17.48	1.015062	-26.71	0.00	0.00
8	6	2004	4	40	0.00	17	0	6.07	+22	52	19.77	1.015062	-26.71	0.00	0.00
8	6	2004	4	50	0.00	17	10	5.99	+22	52	22.06	1.015062	-26.71	0.00	0.00
8	6	2004	5	0	0.00	17	20	5.90	+22	52	24.36	1.015061	-26.71	0.00	0.00
8	6	2004	5	10	0.00	17	30	5.82	+22	52	26.65	1.015061	-26.71	0.00	0.00
8	6	2004	5	20	0.00	17	40	5.74	+22	52	28.94	1.015061	-26.71	0.00	0.00
8	6	2004	5	30	0.00	17	50	5.66	+22	52	31.24	1.015061	-26.71	0.00	0.00
8	6	2004	5	40	0.00	18	0	5.58	+22	52	33.53	1.015060	-26.71	0.00	0.00
8	6	2004	5	50	0.00	18	10	5.50	+22	52	35.82	1.015060	-26.71	0.00	0.00
8	6	2004	6	0	0.00	18	20	5.42	+22	52	38.11	1.015060	-26.71	0.00	0.00
8	6	2004	6	10	0.00	18	30	5.34	+22	52	40.39	1.015059	-26.71	0.00	0.00
8	6	2004	6	20	0.00	18	40	5.26	+22	52	42.68	1.015059	-26.71	0.00	0.00
8	6	2004	6	30	0.00	18	50	5.19	+22	52	44.96	1.015059	-26.71	0.00	0.00
8	6	2004	6	40	0.00	19	0	5.11	+22	52	47.24	1.015058	-26.71	0.00	0.00
8	6	2004	6	50	0.00	19	10	5.04	+22	52	49.52	1.015058	-26.71	0.00	0.00
8	6	2004	7	0	0.00	19	20	4.96	+22	52	51.80	1.015058	-26.71	0.00	0.00
8	6	2004	7	10	0.00	19	30	4.89	+22	52	54.07	1.015058	-26.71	0.00	0.00
8	6	2004	7	20	0.00	19	40	4.82	+22	52	56.34	1.015058	-26.71	0.00	0.00
8	6	2004	7	30	0.00	19	50	4.75	+22	52	58.61	1.015057	-26.71	0.00	0.00
8	6	2004	7	40	0.00	20	0	4.68	+22	53	0.87	1.015057	-26.71	0.00	0.00
8	6	2004	7	50	0.00	20	10	4.61	+22	53	3.13	1.015057	-26.71	0.00	0.00
8	6	2004	8	0	0.00	20	20	4.54	+22	53	5.39	1.015057	-26.71	0.00	0.00
8	6	2004	8	10	0.00	20	30	4.47	+22	53	7.65	1.015057	-26.71	0.00	0.00
8	6	2004	8	20	0.00	20	40	4.40	+22	53	9.90	1.015057	-26.71	0.00	0.00
8	6	2004	8	30	0.00	20	50	4.33	+22	53	12.14	1.015057	-26.71	0.00	0.00
8	6	2004	8	40	0.00	21	0	4.26	+22	53	14.38	1.015057	-26.71	0.00	0.00
8	6	2004	8	50	0.00	21	10	4.20	+22	53	16.62	1.015057	-26.71	0.00	0.00
8	6	2004	9	0	0.00	21	20	4.13	+22	53	18.85	1.015057	-26.71	0.00	0.00
8	6	2004	9	10	0.00	21	30	4.07	+22	53	21.08	1.015057	-26.71	0.00	0.00
8	6	2004	9	20	0.00	21	40	4.00	+22	53	23.30	1.015057	-26.71	0.00	0.00
8	6	2004	9	30	0.00	21	50	3.94	+22	53	25.52	1.015058	-26.71	0.00	0.00
8	6	2004	9	40	0.00	22	0	3.87	+22	53	27.74	1.015058	-26.71	0.00	0.00
8	6	2004	9	50	0.00	22	10	3.81	+22	53	29.95	1.015058	-26.71	0.00	0.00
8	6	2004	10	0	0.00	22	20	3.75	+22	53	32.15	1.015058	-26.71	0.00	0.00
8	6	2004	10	10	0.00	22	30	3.69	+22	53	34.35	1.015059	-26.71	0.00	0.00
8	6	2004	10	20	0.00	22	40	3.62	+22	53	36.54	1.015059	-26.71	0.00	0.00
8	6	2004	10	30	0.00	22	50	3.56	+22	53	38.73	1.015060	-26.71	0.00	0.00
8	6	2004	10	40	0.00	23	0	3.50	+22	53	40.91	1.015060	-26.71	0.00	0.00
8	6	2004	10	50	0.00	23	10	3.44	+22	53	43.09	1.015061	-26.71	0.00	0.00
8	6	2004	11	0	0.00	23	20	3.38	+22	53	45.26	1.015062	-26.71	0.00	0.00
8	6	2004	11	10	0.00	23	30	3.31	+22	53	47.42	1.015062	-26.71	0.00	0.00
8	6	2004	11	20	0.00	23	40	3.25	+22	53	49.58	1.015063	-26.71	0.00	0.00
8	6	2004	11	30	0.00	23	50	3.19	+22	53	51.74	1.015064	-26.71	0.00	0.00
8	6	2004	11	40	0.00	0	0	3.13	+22	53	53.89	1.015065	-26.71	0.00	0.00
8	6	2004	11	50	0.00	0	10	3.07	+22	53	56.03	1.015066	-26.71	0.00	0.00
8	6	2004	12	0	0.00	0	20	3.01	+22	53	58.17	1.015067	-26.71	0.00	0.00
8	6	2004	12	10	0.00	0	30	2.95	+22	54	0.30	1.015068	-26.71	0.00	0.00

Vénus : coordonnées horaires topocentriques

		Date UTC			Ang.Horaire			Dec.		Distance	V.Mag	Phase	Elong.
		h	m	s	h	m	s	°	'	ua.		°	°
8	6	2004	4	0	0.00	16	18	41.57	+22 45 51.04	0.288885	-3.69	179.52	0.39
8	6	2004	4	10	0.00	16	28	44.28	+22 45 44.07	0.288883	-3.69	179.53	0.38
8	6	2004	4	20	0.00	16	38	46.99	+22 45 37.11	0.288882	-3.69	179.55	0.37
8	6	2004	4	30	0.00	16	48	49.70	+22 45 30.15	0.288881	-3.69	179.56	0.36
8	6	2004	4	40	0.00	16	58	52.42	+22 45 23.19	0.288879	-3.69	179.57	0.35
8	6	2004	4	50	0.00	17	8	55.14	+22 45 16.24	0.288878	-3.69	179.59	0.34
8	6	2004	5	0	0.00	17	18	57.86	+22 45 9.29	0.288876	-3.69	179.60	0.33
8	6	2004	5	10	0.00	17	29	0.58	+22 45 2.35	0.288875	-3.69	179.61	0.33
8	6	2004	5	20	0.00	17	39	3.31	+22 44 55.40	0.288874	-3.69	179.62	0.32
8	6	2004	5	30	0.00	17	49	6.04	+22 44 48.46	0.288872	-3.69	179.63	0.31
8	6	2004	5	40	0.00	17	59	8.77	+22 44 41.52	0.288871	-3.68	179.64	0.30
8	6	2004	5	50	0.00	18	9	11.51	+22 44 34.58	0.288870	-3.68	179.66	0.29
8	6	2004	6	0	0.00	18	19	14.25	+22 44 27.63	0.288868	-3.68	179.67	0.28
8	6	2004	6	10	0.00	18	29	16.99	+22 44 20.69	0.288867	-3.68	179.68	0.27
8	6	2004	6	20	0.00	18	39	19.74	+22 44 13.74	0.288866	-3.68	179.69	0.26
8	6	2004	6	30	0.00	18	49	22.49	+22 44 6.79	0.288865	-3.68	179.70	0.26
8	6	2004	6	40	0.00	18	59	25.24	+22 43 59.83	0.288864	-3.68	179.70	0.25
8	6	2004	6	50	0.00	19	9	27.99	+22 43 52.88	0.288862	-3.68	179.71	0.24
8	6	2004	7	0	0.00	19	19	30.75	+22 43 45.91	0.288861	-3.68	179.72	0.23
8	6	2004	7	10	0.00	19	29	33.50	+22 43 38.94	0.288860	-3.68	179.73	0.23
8	6	2004	7	20	0.00	19	39	36.27	+22 43 31.97	0.288859	-3.68	179.73	0.22
8	6	2004	7	30	0.00	19	49	39.03	+22 43 24.98	0.288858	-3.68	179.74	0.22
8	6	2004	7	40	0.00	19	59	41.80	+22 43 17.99	0.288857	-3.68	179.74	0.21
8	6	2004	7	50	0.00	20	9	44.57	+22 43 11.00	0.288856	-3.68	179.75	0.20
8	6	2004	8	0	0.00	20	19	47.34	+22 43 3.99	0.288855	-3.68	179.75	0.20
8	6	2004	8	10	0.00	20	29	50.11	+22 42 56.97	0.288854	-3.68	179.75	0.20
8	6	2004	8	20	0.00	20	39	52.89	+22 42 49.95	0.288854	-3.68	179.75	0.19
8	6	2004	8	30	0.00	20	49	55.67	+22 42 42.91	0.288853	-3.68	179.75	0.19
8	6	2004	8	40	0.00	20	59	58.45	+22 42 35.86	0.288852	-3.68	179.75	0.19
8	6	2004	8	50	0.00	21	10	1.24	+22 42 28.80	0.288851	-3.68	179.75	0.18
8	6	2004	9	0	0.00	21	20	4.02	+22 42 21.73	0.288851	-3.68	179.74	0.18
8	6	2004	9	10	0.00	21	30	6.81	+22 42 14.65	0.288850	-3.68	179.74	0.18
8	6	2004	9	20	0.00	21	40	9.60	+22 42 7.55	0.288850	-3.68	179.74	0.18
8	6	2004	9	30	0.00	21	50	12.39	+22 42 0.44	0.288849	-3.68	179.73	0.18
8	6	2004	9	40	0.00	22	0	15.18	+22 41 53.32	0.288849	-3.68	179.72	0.19
8	6	2004	9	50	0.00	22	10	17.97	+22 41 46.18	0.288849	-3.68	179.72	359.81
8	6	2004	10	0	0.00	22	20	20.77	+22 41 39.03	0.288848	-3.68	179.71	359.81
8	6	2004	10	10	0.00	22	30	23.56	+22 41 31.86	0.288848	-3.68	179.70	359.80
8	6	2004	10	20	0.00	22	40	26.36	+22 41 24.68	0.288848	-3.68	179.69	359.80
8	6	2004	10	30	0.00	22	50	29.16	+22 41 17.48	0.288848	-3.68	179.68	359.80
8	6	2004	10	40	0.00	23	0	31.96	+22 41 10.27	0.288848	-3.68	179.67	359.79
8	6	2004	10	50	0.00	23	10	34.76	+22 41 3.04	0.288848	-3.68	179.66	359.78
8	6	2004	11	0	0.00	23	20	37.56	+22 40 55.80	0.288848	-3.68	179.65	359.78
8	6	2004	11	10	0.00	23	30	40.36	+22 40 48.54	0.288848	-3.69	179.64	359.77
8	6	2004	11	20	0.00	23	40	43.16	+22 40 41.26	0.288849	-3.69	179.63	359.77
8	6	2004	11	30	0.00	23	50	45.96	+22 40 33.97	0.288849	-3.69	179.61	359.76
8	6	2004	11	40	0.00	0	0	48.77	+22 40 26.67	0.288849	-3.69	179.60	359.75
8	6	2004	11	50	0.00	0	10	51.57	+22 40 19.34	0.288850	-3.69	179.59	359.74
8	6	2004	12	0	0.00	0	20	54.37	+22 40 12.00	0.288850	-3.69	179.58	359.73
8	6	2004	12	10	0.00	0	30	57.17	+22 40 4.65	0.288851	-3.69	179.56	359.73

Coordonnées locales

Théorie planétaire DE405/LE405

Repère Apparent (équateur vrai ; équinoxe de la date) horaires (AH, Dec.)

Centre du repere : topocentre : ST-GENIS-LAVAL

0 h 19 m 8.004 s E ; 45 d 42 ' 0.004 " N ; 0.00 m

Format des donnees : (1x,I2,1x,I2,1x,I5,1x,I2,1x,I2,1x,F5.2,2x,I3,1x,I2,1x,F6.3,1x,A1,
I2.2,1x,I2,1x,F5.2,2x,F9.6,2x,F6.2,2x,F6.2,3x,F6.2)

Soleil : coordonnées locales topocentriques

Date UTC				Azimut			Hauteur			Distance	V.Mag	Phase	Elong.		
		h	m	s	°	'	"	°	'	"	ua.		°	°	
8	6	2004	4	0	0.00	56	38	35.798	+00	22	11.41	1.015063	-26.71	0.00	0.00
8	6	2004	4	10	0.00	58	24	49.953	+01	50	35.32	1.015063	-26.71	0.00	0.00
8	6	2004	4	20	0.00	60	9	43.844	+03	20	40.31	1.015062	-26.71	0.00	0.00
8	6	2004	4	30	0.00	61	53	24.445	+04	52	20.13	1.015062	-26.71	0.00	0.00
8	6	2004	4	40	0.00	63	35	59.036	+06	25	28.77	1.015062	-26.71	0.00	0.00
8	6	2004	4	50	0.00	65	17	35.195	+08	0	0.39	1.015062	-26.71	0.00	0.00
8	6	2004	5	0	0.00	66	58	20.800	+09	35	49.30	1.015061	-26.71	0.00	0.00
8	6	2004	5	10	0.00	68	38	24.039	+11	12	50.00	1.015061	-26.71	0.00	0.00
8	6	2004	5	20	0.00	70	17	53.428	+12	50	57.12	1.015061	-26.71	0.00	0.00
8	6	2004	5	30	0.00	71	56	57.838	+14	30	5.41	1.015061	-26.71	0.00	0.00
8	6	2004	5	40	0.00	73	35	46.527	+16	10	9.73	1.015060	-26.71	0.00	0.00
8	6	2004	5	50	0.00	75	14	29.188	+17	51	5.03	1.015060	-26.71	0.00	0.00
8	6	2004	6	0	0.00	76	53	15.996	+19	32	46.30	1.015060	-26.71	0.00	0.00
8	6	2004	6	10	0.00	78	32	17.681	+21	15	8.58	1.015059	-26.71	0.00	0.00
8	6	2004	6	20	0.00	80	11	45.593	+22	58	6.89	1.015059	-26.71	0.00	0.00
8	6	2004	6	30	0.00	81	51	51.799	+24	41	36.24	1.015059	-26.71	0.00	0.00
8	6	2004	6	40	0.00	83	32	49.176	+26	25	31.59	1.015058	-26.71	0.00	0.00
8	6	2004	6	50	0.00	85	14	51.537	+28	9	47.77	1.015058	-26.71	0.00	0.00
8	6	2004	7	0	0.00	86	58	13.763	+29	54	19.48	1.015058	-26.71	0.00	0.00
8	6	2004	7	10	0.00	88	43	11.958	+31	39	1.24	1.015058	-26.71	0.00	0.00
8	6	2004	7	20	0.00	90	30	3.629	+33	23	47.30	1.015058	-26.71	0.00	0.00
8	6	2004	7	30	0.00	92	19	7.889	+35	8	31.61	1.015057	-26.71	0.00	0.00
8	6	2004	7	40	0.00	94	10	45.690	+36	53	7.73	1.015057	-26.71	0.00	0.00
8	6	2004	7	50	0.00	96	5	20.087	+38	37	28.76	1.015057	-26.71	0.00	0.00
8	6	2004	8	0	0.00	98	3	16.536	+40	21	27.20	1.015057	-26.71	0.00	0.00
8	6	2004	8	10	0.00	100	5	3.227	+42	4	54.91	1.015057	-26.71	0.00	0.00
8	6	2004	8	20	0.00	102	11	11.454	+43	47	42.91	1.015057	-26.71	0.00	0.00
8	6	2004	8	30	0.00	104	22	16.019	+45	29	41.23	1.015057	-26.71	0.00	0.00
8	6	2004	8	40	0.00	106	38	55.659	+47	10	38.77	1.015057	-26.71	0.00	0.00
8	6	2004	8	50	0.00	109	1	53.486	+48	50	23.02	1.015057	-26.71	0.00	0.00
8	6	2004	9	0	0.00	111	31	57.415	+50	28	39.88	1.015057	-26.71	0.00	0.00
8	6	2004	9	10	0.00	114	10	0.526	+52	5	13.31	1.015057	-26.71	0.00	0.00
8	6	2004	9	20	0.00	116	57	1.302	+53	39	45.03	1.015057	-26.71	0.00	0.00
8	6	2004	9	30	0.00	119	54	3.634	+55	11	54.15	1.015058	-26.71	0.00	0.00
8	6	2004	9	40	0.00	123	2	16.430	+56	41	16.75	1.015058	-26.71	0.00	0.00
8	6	2004	9	50	0.00	126	22	52.626	+58	7	25.51	1.015058	-26.71	0.00	0.00
8	6	2004	10	0	0.00	129	57	7.295	+59	29	49.26	1.015058	-26.71	0.00	0.00
8	6	2004	10	10	0.00	133	46	14.505	+60	47	52.67	1.015059	-26.71	0.00	0.00
8	6	2004	10	20	0.00	137	51	22.520	+62	0	56.08	1.015059	-26.71	0.00	0.00
8	6	2004	10	30	0.00	142	13	27.007	+63	8	15.63	1.015060	-26.71	0.00	0.00
8	6	2004	10	40	0.00	146	53	2.090	+64	9	3.72	1.015060	-26.71	0.00	0.00
8	6	2004	10	50	0.00	151	50	9.593	+65	2	30.15	1.015061	-26.71	0.00	0.00
8	6	2004	11	0	0.00	157	4	7.556	+65	47	44.01	1.015062	-26.71	0.00	0.00
8	6	2004	11	10	0.00	162	33	20.114	+66	23	56.27	1.015062	-26.71	0.00	0.00
8	6	2004	11	20	0.00	168	15	11.728	+66	50	23.17	1.015063	-26.71	0.00	0.00
8	6	2004	11	30	0.00	174	6	8.926	+67	6	29.88	1.015064	-26.71	0.00	0.00
8	6	2004	11	40	0.00	180	1	51.636	+67	11	53.88	1.015065	-26.71	0.00	0.00
8	6	2004	11	50	0.00	185	57	33.692	+67	6	27.38	1.015066	-26.71	0.00	0.00
8	6	2004	12	0	0.00	191	48	28.992	+66	50	18.26	1.015067	-26.71	0.00	0.00
8	6	2004	12	10	0.00	197	30	17.640	+66	23	49.11	1.015068	-26.71	0.00	0.00

Vénus : coordonnées locales topocentriques

Date UTC				Azimut			Hauteur			Distance	V.Mag	Phase	Elong.		
		h	m	s	°	'	"	°	'	"	ua.		°		
8	6	2004	4	0	0.00	56	27	26.849	+00	4	55.70	0.288885	-3.69	179.52	0.39
8	6	2004	4	10	0.00	58	14	33.361	+01	33	26.60	0.288883	-3.69	179.53	0.38
8	6	2004	4	20	0.00	60	0	18.053	+03	3	40.48	0.288882	-3.69	179.55	0.37
8	6	2004	4	30	0.00	61	44	47.979	+04	35	30.98	0.288881	-3.69	179.56	0.36
8	6	2004	4	40	0.00	63	28	10.504	+06	8	51.94	0.288879	-3.69	179.57	0.35
8	6	2004	4	50	0.00	65	10	33.300	+07	43	37.40	0.288878	-3.69	179.59	0.34
8	6	2004	5	0	0.00	66	52	4.345	+09	19	41.56	0.288876	-3.69	179.60	0.33
8	6	2004	5	10	0.00	68	32	51.934	+10	56	58.79	0.288875	-3.69	179.61	0.33
8	6	2004	5	20	0.00	70	13	4.695	+12	35	23.62	0.288874	-3.69	179.62	0.32
8	6	2004	5	30	0.00	71	52	51.616	+14	14	50.68	0.288872	-3.69	179.63	0.31
8	6	2004	5	40	0.00	73	32	22.077	+15	55	14.74	0.288871	-3.68	179.64	0.30
8	6	2004	5	50	0.00	75	11	45.897	+17	36	30.62	0.288870	-3.68	179.66	0.29
8	6	2004	6	0	0.00	76	51	13.384	+19	18	33.22	0.288868	-3.68	179.67	0.28
8	6	2004	6	10	0.00	78	30	55.401	+21	1	17.48	0.288867	-3.68	179.68	0.27
8	6	2004	6	20	0.00	80	11	3.444	+22	44	38.32	0.288866	-3.68	179.69	0.26
8	6	2004	6	30	0.00	81	51	49.726	+24	28	30.66	0.288865	-3.68	179.70	0.26
8	6	2004	6	40	0.00	83	33	27.282	+26	12	49.35	0.288864	-3.68	179.70	0.25
8	6	2004	6	50	0.00	85	16	10.088	+27	57	29.12	0.288862	-3.68	179.71	0.24
8	6	2004	7	0	0.00	87	0	13.198	+29	42	24.56	0.288861	-3.68	179.72	0.23
8	6	2004	7	10	0.00	88	45	52.899	+31	27	30.08	0.288860	-3.68	179.73	0.23
8	6	2004	7	20	0.00	90	33	26.894	+33	12	39.83	0.288859	-3.68	179.73	0.22
8	6	2004	7	30	0.00	92	23	14.504	+34	57	47.62	0.288858	-3.68	179.74	0.22
8	6	2004	7	40	0.00	94	15	36.903	+36	42	46.89	0.288857	-3.68	179.74	0.21
8	6	2004	7	50	0.00	96	10	57.383	+38	27	30.59	0.288856	-3.68	179.75	0.20
8	6	2004	8	0	0.00	98	9	41.653	+40	11	51.10	0.288855	-3.68	179.75	0.20
8	6	2004	8	10	0.00	100	12	18.174	+41	55	40.07	0.288854	-3.68	179.75	0.20
8	6	2004	8	20	0.00	102	19	18.523	+43	38	48.35	0.288854	-3.68	179.75	0.19
8	6	2004	8	30	0.00	104	31	17.798	+45	21	5.79	0.288853	-3.68	179.75	0.19
8	6	2004	8	40	0.00	106	48	55.040	+47	2	21.02	0.288852	-3.68	179.75	0.19
8	6	2004	8	50	0.00	109	12	53.667	+48	42	21.31	0.288851	-3.68	179.75	0.18
8	6	2004	9	0	0.00	111	44	1.879	+50	20	52.25	0.288851	-3.68	179.74	0.18
8	6	2004	9	10	0.00	114	23	13.011	+51	57	37.49	0.288850	-3.68	179.74	0.18
8	6	2004	9	20	0.00	117	11	25.730	+53	32	18.38	0.288850	-3.68	179.74	0.18
8	6	2004	9	30	0.00	120	9	44.000	+55	4	33.63	0.288849	-3.68	179.73	0.18
8	6	2004	9	40	0.00	123	19	16.627	+56	33	58.90	0.288849	-3.68	179.72	0.19
8	6	2004	9	50	0.00	126	41	16.182	+58	0	6.36	0.288849	-3.68	179.72	359.81
8	6	2004	10	0	0.00	130	16	57.006	+59	22	24.36	0.288848	-3.68	179.71	359.81
8	6	2004	10	10	0.00	134	7	31.932	+60	40	17.05	0.288848	-3.68	179.70	359.80
8	6	2004	10	20	0.00	138	14	7.351	+61	53	4.28	0.288848	-3.68	179.69	359.80
8	6	2004	10	30	0.00	142	37	36.277	+63	0	1.76	0.288848	-3.68	179.68	359.80
8	6	2004	10	40	0.00	147	18	29.337	+64	0	21.56	0.288848	-3.68	179.67	359.79
8	6	2004	10	50	0.00	152	16	44.057	+64	53	13.37	0.288848	-3.68	179.66	359.78
8	6	2004	11	0	0.00	157	31	33.631	+65	37	46.39	0.288848	-3.68	179.65	359.78
8	6	2004	11	10	0.00	163	1	17.295	+66	13	12.04	0.288848	-3.69	179.64	359.77
8	6	2004	11	20	0.00	168	43	15.309	+66	38	47.36	0.288849	-3.69	179.63	359.77
8	6	2004	11	30	0.00	174	33	51.549	+66	53	58.59	0.288849	-3.69	179.61	359.76
8	6	2004	11	40	0.00	180	28	45.574	+66	58	24.53	0.288849	-3.69	179.60	359.75
8	6	2004	11	50	0.00	186	23	13.453	+66	51	58.77	0.288850	-3.69	179.59	359.74
8	6	2004	12	0	0.00	192	12	33.676	+66	34	50.47	0.288850	-3.69	179.58	359.73
8	6	2004	12	10	0.00	197	52	32.522	+66	7	23.27	0.288851	-3.69	179.56	359.73