

Astéroïde : 2007 WD5

Calcul de l'éphéméride de l'astéroïde 2007 WD5.
Code IMC de l'astéroïde : K07W05D.
Source des éléments osculateurs : P. Rocher. IMCCE
Date de mise à jour des éléments : 2007/12/23.

Éléments osculateurs sélectionnés :

Epoque 2008 février 4.0 TT = JDT 2454500.5

T 2007 octobre 18.32780 TT

Rocher

q	1.005971500	(2000)	P	Q
n	0.246618654	Peri 312.1795148	0.94040376	-0.33788223
a	2.518365537	Noeud 67.6010392	0.32296717	0.85204386
e	0.600545876	Incl 2.3818422	0.10645644	0.39982103
P	4.00			

Coefficient H0 de la magnitude H0 = 24.30

A partir de 26 observations comprises entre le 8 novembre 2007 et le 19 décembre 2007, rms 0.27"

Éléments : époque 2008 février 4.0 TT = JDT 2454500.5

Inclinaison (i)	:	2,38184215316065°
Argument de la latitude du périhélie (ω)	:	312,179514803401°
Longitude du nœud ascendant (Ω)	:	67,6010391780722°
Excentricité (e)	:	0,600545875653761
Demi grand axe (a)	:	2,51836553720816 ua
Distance au périhélie (q)	:	1,00597150044923ua
Anomalie moyenne (M)	:	26,8005909393020°
Moyen mouvement (n)	:	0,246618653662589°/jour
Période (P)	:	3,99656014956615 ans
Passage au périhélie (τ)	:	2454391,82780290 jour julien
Passage au périhélie (τ)	:	18/10/2007 fraction de jour : 0,327802900224924

Ajustement de l'orbite sur les observations

Date de l'observation	Ascension droite	Déclinaison	O-C ascension droite en "	O-C Déclinaison en "
2007 12 19.21845	04 56 48.02	+25 35 13.0	0.21	0.11
2007 12 19.20196	04 56 47.53	+25 35 07.6	0.07	-0.01
2007 12 19.17742	04 56 46.81	+25 34 59.6	0.20	0.06
2007 12 19.14808	04 56 45.91	+25 34 49.9	0.19	0.31
2007 12 05.23453	04 45 21.47	+23 38 06.3	-0.69	-1.04*
2007 12 05.23041	04 45 21.26	+23 38 03.6	-0.62	-0.32
2007 12 05.22618	04 45 20.89	+23 37 58.8	-2.86*	-1.59*
2007 12 04.22377	04 44 10.94	+23 24 18.6	-2.34*	0.04
2007 12 04.21967	04 44 10.84	+23 24 15.1	-0.35	0.23
2007 12 04.21564	04 44 10.57	+23 24 11.7	-0.94*	0.46
2007 11 21.41367	04 17 44.44	+18 08 29.2	0.25	-0.15
2007 11 21.41097	04 17 43.94	+18 08 22.8	-0.02	-0.11
2007 11 21.40833	04 17 43.47	+18 08 16.6	-0.02	-0.01
2007 11 21.40572	04 17 43.00	+18 08 10.5	-0.10	0.12
2007 11 20.42841	04 14 15.74	+17 26 12.6	0.13	0.30
2007 11 20.42510	04 14 15.09	+17 26 03.6	0.28	-0.05
2007 11 20.42236	04 14 14.53	+17 25 56.5	0.06	0.01
2007 11 20.42001	04 14 14.10	+17 25 50.5	0.62	0.16
2007 11 20.36722	04 14 03.94	+17 23 33.1	0.08	-0.19
2007 11 20.36365	04 14 03.26	+17 23 23.6	0.25	-0.13
2007 11 20.36003	04 14 02.54	+17 23 14.3	-0.04	0.27
2007 11 20.35642	04 14 01.86	+17 23 04.2	0.24	-0.15
2007 11 20.33215	04 13 57.14	+17 21 58.7	-0.19	-0.16
2007 11 20.32652	04 13 56.06	+17 21 43.0	-0.07	-0.58
2007 11 20.32096	04 13 54.98	+17 21 28.1	-0.15	-0.36
2007 11 08.37443	02 48 42.99	-00 56 57.4	-0.38	-0.11
2007 11 08.37192	02 48 41.22	-00 57 21.8	-0.31	0.31
2007 11 08.37108	02 48 40.67	-00 57 30.3	0.34	0.12

(*) Ces observations ont été exclues par le test du κ^2

Positions équatoriales géocentriques apparentes

Date en UTC	Ascension droite apparente	Déclinaison apparente	Distance à la Terre	Distance au Soleil	Distance à Mars	Magnitude
2007 déc. 27 0h 0m 0,00s	5h 2m 26,579s	26° 6' 19,91"	0,36825ua	1,33841ua	38492512,41km	+23,53
28 0h 0m 0,00s	5h 3m 6,844s	26° 9' 10,36"	0,37748ua	1,34606ua	37315887,68km	+23,62
29 0h 0m 0,00s	5h 3m 47,528s	26° 11' 49,49"	0,38684ua	1,35374ua	36145085,02km	+23,70
30 0h 0m 0,00s	5h 4m 28,705s	26° 14' 18,02"	0,39634ua	1,36145ua	34979928,78km	+23,78
31 0h 0m 0,00s	5h 5m 10,440s	26° 16' 36,61"	0,40597ua	1,36920ua	33820241,83km	+23,87
2008 janv. 1 0h 0m 0,00s	5h 5m 52,798s	26° 18' 45,91"	0,41573ua	1,37697ua	32665845,80km	+23,95
2 0h 0m 0,00s	5h 6m 35,838s	26° 20' 46,49"	0,42564ua	1,38477ua	31516561,24km	+24,03
3 0h 0m 0,00s	5h 7m 19,612s	26° 22' 38,92"	0,43568ua	1,39260ua	30372207,87km	+24,11
4 0h 0m 0,00s	5h 8m 4,172s	26° 24' 23,70"	0,44586ua	1,40045ua	29232604,72km	+24,18
5 0h 0m 0,00s	5h 8m 49,560s	26° 26' 1,30"	0,45618ua	1,40832ua	28097570,31km	+24,26
6 0h 0m 0,00s	5h 9m 35,817s	26° 27' 32,18"	0,46664ua	1,41622ua	26966922,86km	+24,34
7 0h 0m 0,00s	5h 10m 22,978s	26° 28' 56,73"	0,47723ua	1,42414ua	25840480,41km	+24,41
8 0h 0m 0,00s	5h 11m 11,073s	26° 30' 15,33"	0,48797ua	1,43207ua	24718060,99km	+24,49
9 0h 0m 0,00s	5h 12m 0,131s	26° 31' 28,31"	0,49885ua	1,44003ua	23599482,79km	+24,56
10 0h 0m 0,00s	5h 12m 50,172s	26° 32' 36,00"	0,50986ua	1,44800ua	22484564,29km	+24,63
11 0h 0m 0,00s	5h 13m 41,217s	26° 33' 38,66"	0,52102ua	1,45599ua	21373124,40km	+24,70
12 0h 0m 0,00s	5h 14m 33,279s	26° 34' 36,56"	0,53231ua	1,46400ua	20264982,62km	+24,78
13 0h 0m 0,00s	5h 15m 26,370s	26° 35' 29,92"	0,54374ua	1,47202ua	19159959,11km	+24,85
14 0h 0m 0,00s	5h 16m 20,496s	26° 36' 18,97"	0,55531ua	1,48006ua	18057874,93km	+24,91
15 0h 0m 0,00s	5h 17m 15,661s	26° 37' 3,89"	0,56702ua	1,48810ua	16958552,04km	+24,98
16 0h 0m 0,00s	5h 18m 11,864s	26° 37' 44,88"	0,57886ua	1,49616ua	15861813,53km	+25,05
17 0h 0m 0,00s	5h 19m 9,099s	26° 38' 22,10"	0,59084ua	1,50423ua	14767483,74km	+25,12
18 0h 0m 0,00s	5h 20m 7,357s	26° 38' 55,74"	0,60296ua	1,51231ua	13675388,35km	+25,18
19 0h 0m 0,00s	5h 21m 6,623s	26° 39' 25,93"	0,61521ua	1,52040ua	12585354,66km	+25,25
20 0h 0m 0,00s	5h 22m 6,880s	26° 39' 52,81"	0,62759ua	1,52849ua	11497211,71km	+25,31
21 0h 0m 0,00s	5h 23m 8,109s	26° 40' 16,50"	0,64010ua	1,53660ua	10410790,68km	+25,38
22 0h 0m 0,00s	5h 24m 10,291s	26° 40' 37,10"	0,65275ua	1,54471ua	9325925,27km	+25,44
23 0h 0m 0,00s	5h 25m 13,408s	26° 40' 54,69"	0,66553ua	1,55283ua	8242452,54km	+25,50
24 0h 0m 0,00s	5h 26m 17,446s	26° 41' 9,35"	0,67844ua	1,56095ua	7160214,31km	+25,56
25 0h 0m 0,00s	5h 27m 22,391s	26° 41' 21,15"	0,69148ua	1,56907ua	6079060,00km	+25,62
26 0h 0m 0,00s	5h 28m 28,234s	26° 41' 30,14"	0,70465ua	1,57720ua	4998853,27km	+25,68
27 0h 0m 0,00s	5h 29m 34,967s	26° 41' 36,40"	0,71795ua	1,58534ua	3919489,50km	+25,74
28 0h 0m 0,00s	5h 30m 42,583s	26° 41' 39,97"	0,73138ua	1,59347ua	2840953,70km	+25,80
29 0h 0m 0,00s	5h 31m 51,075s	26° 41' 40,93"	0,74494ua	1,60161ua	1763593,04km	+25,86
30 0h 0m 0,00s	5h 33m 0,441s	26° 41' 39,30"	0,75863ua	1,60975ua	690973,24km	+25,92
31 0h 0m 0,00s	5h 34m 10,511s	26° 41' 35,11"	0,77246ua	1,61790ua	414866,32km	+25,97

Distance minimum à Mars le mercredi 30 janvier 2008 à 15h 8m 50,06s UTC distance au centre de la planète : 116770,65km

Positions équatoriales astrométriques J2000

Date en UTC	Ascension droite Astrométrique J2000	Déclinaison Astrométrique J2000	Distance à la Terre	Distance au Soleil	Distance à Mars	Magnitude
2007 déc. 27 0h 0m 0,00s	5h 1m 54,910s	26° 5' 29,57"	0,36825ua	1,33841ua	38492512,41km	+23,53
28 0h 0m 0,00s	5h 2m 35,154s	26° 8' 20,42"	0,37748ua	1,34606ua	37315887,68km	+23,62
29 0h 0m 0,00s	5h 3m 15,823s	26° 10' 59,98"	0,38684ua	1,35374ua	36145085,02km	+23,70
30 0h 0m 0,00s	5h 3m 56,986s	26° 13' 28,96"	0,39634ua	1,36145ua	34979928,78km	+23,78
31 0h 0m 0,00s	5h 4m 38,709s	26° 15' 48,04"	0,40597ua	1,36920ua	33820241,83km	+23,87
2008 janv. 1 0h 0m 0,00s	5h 5m 21,055s	26° 17' 57,84"	0,41573ua	1,37697ua	32665845,80km	+23,95
2 0h 0m 0,00s	5h 6m 4,081s	26° 19' 58,96"	0,42564ua	1,38477ua	31516561,24km	+24,03
3 0h 0m 0,00s	5h 6m 47,841s	26° 21' 51,92"	0,43568ua	1,39260ua	30372207,87km	+24,11
4 0h 0m 0,00s	5h 7m 32,383s	26° 23' 37,25"	0,44586ua	1,40045ua	29232604,72km	+24,18
5 0h 0m 0,00s	5h 8m 17,751s	26° 25' 15,41"	0,45618ua	1,40832ua	28097570,31km	+24,26
6 0h 0m 0,00s	5h 9m 3,987s	26° 26' 46,83"	0,46664ua	1,41622ua	26966922,86km	+24,34
7 0h 0m 0,00s	5h 9m 51,126s	26° 28' 11,92"	0,47723ua	1,42414ua	25840480,41km	+24,41
8 0h 0m 0,00s	5h 10m 39,201s	26° 29' 31,05"	0,48797ua	1,43207ua	24718060,99km	+24,49
9 0h 0m 0,00s	5h 11m 28,239s	26° 30' 44,56"	0,49885ua	1,44003ua	23599482,79km	+24,56
10 0h 0m 0,00s	5h 12m 18,265s	26° 31' 52,78"	0,50986ua	1,44800ua	22484564,29km	+24,63
11 0h 0m 0,00s	5h 13m 9,298s	26° 32' 55,98"	0,52102ua	1,45599ua	21373124,40km	+24,70
12 0h 0m 0,00s	5h 14m 1,352s	26° 33' 54,44"	0,53231ua	1,46400ua	20264982,62km	+24,78
13 0h 0m 0,00s	5h 14m 54,439s	26° 34' 48,40"	0,54374ua	1,47202ua	19159959,11km	+24,85
14 0h 0m 0,00s	5h 15m 48,564s	26° 35' 38,07"	0,55531ua	1,48006ua	18057874,93km	+24,91
15 0h 0m 0,00s	5h 16m 43,727s	26° 36' 23,66"	0,56702ua	1,48810ua	16958552,04km	+24,98
16 0h 0m 0,00s	5h 17m 39,926s	26° 37' 5,36"	0,57886ua	1,49616ua	15861813,53km	+25,05
17 0h 0m 0,00s	5h 18m 37,154s	26° 37' 43,31"	0,59084ua	1,50423ua	14767483,74km	+25,12
18 0h 0m 0,00s	5h 19m 35,399s	26° 38' 17,69"	0,60296ua	1,51231ua	13675388,35km	+25,18
19 0h 0m 0,00s	5h 20m 34,649s	26° 38' 48,61"	0,61521ua	1,52040ua	12585354,66km	+25,25
20 0h 0m 0,00s	5h 21m 34,887s	26° 39' 16,22"	0,62759ua	1,52849ua	11497211,71km	+25,31
21 0h 0m 0,00s	5h 22m 36,098s	26° 39' 40,61"	0,64010ua	1,53660ua	10410790,68km	+25,38
22 0h 0m 0,00s	5h 23m 38,265s	26° 40' 1,91"	0,65275ua	1,54471ua	9325925,27km	+25,44
23 0h 0m 0,00s	5h 24m 41,371s	26° 40' 20,19"	0,66553ua	1,55283ua	8242452,54km	+25,50
24 0h 0m 0,00s	5h 25m 45,403s	26° 40' 35,56"	0,67844ua	1,56095ua	7160214,31km	+25,56
25 0h 0m 0,00s	5h 26m 50,348s	26° 40' 48,09"	0,69148ua	1,56907ua	6079060,00km	+25,62
26 0h 0m 0,00s	5h 27m 56,194s	26° 40' 57,85"	0,70465ua	1,57720ua	4998853,27km	+25,68
27 0h 0m 0,00s	5h 29m 2,931s	26° 41' 4,90"	0,71795ua	1,58534ua	3919489,50km	+25,74
28 0h 0m 0,00s	5h 30m 10,552s	26° 41' 9,31"	0,73138ua	1,59347ua	2840953,70km	+25,80
29 0h 0m 0,00s	5h 31m 19,048s	26° 41' 11,12"	0,74494ua	1,60161ua	1763593,04km	+25,86
30 0h 0m 0,00s	5h 32m 28,414s	26° 41' 10,37"	0,75863ua	1,60975ua	690973,24km	+25,92
31 0h 0m 0,00s	5h 33m 38,483s	26° 41' 7,07"	0,77246ua	1,61790ua	414866,32km	+25,97

Distance minimum à Mars le mercredi 30 janvier 2008 à 15h 8m 50,06s UTC distance au centre de la planète: 116770,65km