Table T4

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref. (See p.T-57)
10002 GRASSE						
A	S001	S002	0.542 0.003	36.489 0.003	-4.421 0.003	Ref: (3)
		M003	6.007 0.003	-33.777 0.003	-8.036 0.003	Ref: (3)
		S014	-11.353	6.551	11.633	Ref: (3)
10003 TOULOUSE						
A	M003	S001	97.450 0.003	-173.325 0.003	-75.239 0.003	Ref: (3)
10004 BREST						
A	M002	S001	1.232 0.003	-0.097 0.003	1.393 0.003	Ref: (3)
10302 TROMSO						
A	M002	M003	36.289 0.003	-33.115 0.003	-9.215 0.003	Ref: (13)
		S010	11.225 0.003	-1.567 0.003	-0.514 0.003	Ref: (3)
10317 NY-ALESUND						
A	M001	S002	363.330 0.003	1536.449 0.003	-158.180 0.003	Ref: (3)
10402 ONSALA						
A	S002	M006	35.927 0.003	-51.366 0.003	-34.575 0.003	Ref: (13)
		M004	52.631 0.003	-40.464 0.003	-43.865 0.003	Ref: (20)
10503 METSAHOVI						
A	M002	S011	1918.178 0.004	1548.001 0.004	-1324.664 0.004	Ref: (16)
		S001	1942.700 0.004	1512.472 0.004	-1347.868 0.004	Ref: (9)
		S013	-11.609 0.003	15.220 0.003	6.232 0.003	Ref: (3)
11001 GRAZ						
A	S002	M002	-2.558 0.003	8.516 0.003	-1.321 0.003	Ref: (20)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
12205 BOROWIEC						
A	S001	M002	25.767 0.003	-72.908 0.003	-0.324 0.003	Ref: (20)
12602 DIONYSOS						
A	M002	S011	-1.226 0.003	40.030 0.003	-14.416 0.003	Ref: (3)
		S001	1.953 0.003	29.359 0.003	-15.192 0.003	Ref: (3)
12711 BOLOGNA-MEDICINA						
A	M002	S001	-29.531 0.001	29.904 0.001	48.556 0.005	Ref: (1,2)
12717 NOTO						
A	M001	S001	34.242 0.003	67.907 0.003	-38.223 0.003	Ref: (5)
12734 MATERA						
A	S001	S005	-26.120 0.007	-67.073 0.007	63.166 0.007	Ref: (17)
		M008	-15.173 0.003	-24.827 0.003	24.964 0.003	Ref: (17)
		M005	19.533 0.003	-12.202 0.003	-28.771 0.003	Ref: (17)
		M004	25.263 0.003	-27.625 0.003	-30.369 0.003	Ref: (17)
		M007	-14.128 0.003	-13.229 0.003	18.027 0.003	Ref: (17)
13212 HERSTMONCEUX						
A	S001	M007	6.505 0.003	10.278 0.003	-3.945 0.003	Ref: (18)
13407 MADRID						
A	S010	S012	-134.246 0.003	159.664 0.003	164.275 0.003	Ref: (14)
13504 KOOTWIJK						
A	M002	M003	-12.458 0.003	-37.501 0.003	23.025 0.003	Ref: (5)
		S001	-13.621 0.003	-26.287 0.003	18.705 0.003	Ref: (3)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
14001 ZIMMERWALD						
A	S001	M004	13.680 0.003	6.012 0.003	-6.242 0.003	Ref: (20)
14106 POTSDAM						
A	S009	M003	50.091 0.003	95.219 0.003	-40.438 0.003	Ref: (20)
14201 WETTZELL						
A	S002	S004	10.003 0.003	-46.149 0.003	11.072 0.003	Ref: (3,4)
		M004	52.559 0.003	55.916 0.003	-58.337 0.003	Ref: (11)
		M005	72.017 0.003	45.135 0.003	-70.501 0.003	Ref: (11)
		M009	48.700 0.003	71.268 0.003	-48.250 0.003	Ref: (15)
		S018	46.976 0.003	4.049 0.003	-34.728 0.003	Ref: (5)
		M010	50.805 0.003	72.249 0.003	-50.245 0.003	Ref: (20)
		M003	21.341 0.003	44.130 0.003	-30.432 0.003	Ref: (11)
		M006	49.387 0.003	25.829 0.003	-47.290 0.003	Ref: (11)
21605 SHANGHAI						
A	S001	S009	-598.875 0.010	-469.603 0.010	154.995 0.010	Ref: (2)
21730 TSUKUBA						
A	S001	S005	-26.306 0.003	-38.284 0.003	2.761 0.003	Ref: (20)
21732 CHICHIJIMA						
A	S001	S002	-1716.283 0.040	-1462.147 0.040	-539.508 0.040	Ref: (10)
30302 HARTEBEESTHOEK						
A	S001	M002	-817.332 0.010	2103.129 0.010	203.079 0.010	Ref: (3)
		S202	-801.257 0.010	2086.234 0.010	199.848 0.050	Ref: (3)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
31903 SANTA MARIA / 31906 SAO MIGUEL						
A	/M001	S001	65216.646	17120.897	-67374.720	Ref: (3)
			0.040	0.040	0.040	
33710 ARLIT						
A		S001 S002	-1362.690	-2163.732	4825.937	Ref: (3)
			0.006	0.006	0.006	
40102 OTTAWA / 40104 ALGONQUIN						
A	/M002	/S001	-94.756	-61.021	-6.665	Ref: (12)
			0.003	0.003	0.003	
A		/M003	83.510	4.669	-20.142	Ref: (20)
			0.003	0.003	0.003	
A		S005	189494.025	-1182.617	-43239.634	Ref: (3)
			0.050	0.050	0.050	
40104 ALGONQUIN (see 40102 OTTAWA)						
40105 PENTICTON						
A	M001	M002	-324.180	178.052	11.636	Ref: (19)
			0.003	0.003	0.003	
40127 YELLOWKNIFE						
A	M001	M003	-327.855	314.587	82.910	Ref: (20)
			0.003	0.003	0.003	
A		M004	-274.922	257.432	64.914	Ref: (20)
			0.003	0.003	0.003	
A		S007	-299.391	303.283	89.824	Ref: (3)
			0.003	0.003	0.003	
40129 VICTORIA						
A	M001	M003	-22.740	34.377	23.036	Ref: (20)
			0.003	0.003	0.003	
40400 PASADENA						
A	M003	M001	94.064	-31.945	55.121	Ref: (2)
			0.003	0.002	0.002	
		M006	1.987	-18.063	-22.052	Ref: (12)
			0.003	0.003	0.003	
		M005	-21.464	19.012	10.889	Ref: (5)
			0.003	0.003	0.003	

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
40405 GOLDSTONE						
A	S009	M013	-323.113 0.007	148.213 0.013	-43.993 0.010	Ref: (2)
		M006	-304.746 0.003	137.590 0.003	-45.871 0.003	Ref: (3)
40405 GOLDSTONE (cont.)						
B	M001	S001	-227.005 0.003	188.001 0.003	153.150 0.003	Ref: (5)
		S019	-144.572 0.003	-119.976 0.003	-229.148 0.003	Ref: (2)
		M013	-3099.925 0.011	-5078.130 0.011	-8472.555 0.011	Ref: (22)
		M002	2532.581 0.022	-14016.673 0.022	-15901.337 0.022	Ref: (22)
C	M013	S028	2880.020 0.011	5222.261 0.011	8549.860 0.011	Ref: (14)
		S035	-9.691 0.003	23.663 0.003	26.579 0.003	Ref: (3)
D	M002	S014	-267.503 0.002	69.179 0.003	-40.943 0.002	Ref: (2)
40407 PINYON FLATS						
A	M001	M002	125.588 0.003	117.655 0.003	279.910 0.003	Ref: (12)
40408 FAIRBANKS						
A	S002	M001	-74.141 0.003	49.280 0.003	-31.231 0.003	Ref: (14)
		S004	-955.770 0.003	228.045 0.003	-298.634 0.003	Ref: (3)
40420 VANDENBERG						
A	M002	M007	5.037 0.003	12.908 0.003	21.229 0.003	Ref: (5)
		M001	9278.854 0.011	-5310.196 0.011	1277.219 0.011	Ref: (5)
		M004	9226.714 0.011	-5291.788 0.011	1274.701 0.011	Ref: (5)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
40424 KAUAI						
A	S001	M004	7.941 0.003	-23.616 0.003	-4.407 0.003	Ref: (12,13)
		S008	-128.587 0.003	-26.268 0.003	-325.949 0.003	Ref: (3)
40432 ELY						
A	M001	M002	16.416 0.003	-9.261 0.003	-2.199 0.003	Ref: (5)
40433 QUINCY						
A	M002	M001	341.581 0.003	-288.817 0.003	-158.149 0.003	Ref: (5)
		M004	3.890 0.002	-38.987 0.001	-38.409 0.001	Ref: (8)
		M005	-7.611 0.003	5.310 0.003	0.619 0.003	Ref: (5)
		M006	250.895 0.003	-256.065 0.003	-178.592 0.003	Ref: (5)
40436 SAN DIEGO-OTAY MOUNTAIN / 40497 MONUMENT PEAK						
A	M002	/M003	42536.518 0.051	-2596.062 0.051	27611.264 0.051	Ref: (5)
		M003	-0.756 0.003	-3.831 0.003	-5.638 0.003	Ref: (5)
B	/M001	/M002	-14.269 0.003	6.872 0.003	-0.596 0.003	Ref: (3)
		/M003	-11.395 0.003	7.802 0.003	2.523 0.003	Ref: (2)
40438 BEAR LAKE						
A	M002	M001	5.825 0.003	1.270 0.003	3.391 0.003	Ref: (5)
40439 OWENS VALLEY						
A	M004	M001	-1.223 0.003	-2.261 0.003	-3.617 0.003	Ref: (3)
		S002	820.489 0.005	-549.119 0.009	-87.117 0.009	Ref: (2)
		M003	-169.108 0.003	55.235 0.003	-41.459 0.003	Ref: (5)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
40440 WESTFORD						
A	M001	S002	-48.865	12.264	65.806	Ref: (2,3)
			0.001	0.002	0.002	
		S003	-247.002	-851.720	-800.428	Ref: (2,3)
			0.003	0.004	0.004	
B	S003	S020	26.807	40.999	30.496	Ref: (20)
			0.100	0.100	0.100	
40442 FORT DAVIS						
A	M001	S001	4.356	-5.631	-3.556	Ref: (3)
			0.003	0.003	0.003	
		S002	-655.977	-228.944	-452.568	Ref: (3)
			0.003	0.003	0.003	
		M005	0.000	0.000	0.000	Ref: (3)
			0.003	0.003	0.003	
		S003	5914.397	-3496.510	-4031.862	Ref: (2)
			0.004	0.012	0.007	
		M008	117.202	135.062	352.484	Ref: (5)
			0.003	0.003	0.003	
40442 FORT DAVIS (cont.)						
B	S003	M006	-5810.069	3621.294	4362.423	Ref: (2)
			0.003	0.010	0.006	
		M009	-16.971	-39.906	-95.339	Ref: (5)
			0.003	0.003	0.003	
		S017	201.879	-158.810	-155.893	Ref: (6)
			0.003	0.003	0.003	
C	M008	M012	9.512	-1.795	1.484	Ref: (6)
			0.003	0.003	0.003	
40445 MAUI						
A	M001	S005	-.483	-.212	1.003	Ref: (3)
			0.003	0.003	0.003	
		M002	8.044	19.381	40.992	Ref: (3)
			0.003	0.003	0.003	
40451 WASHINGTON						
A	M105	M112	-4.947	-17.162	-19.125	Ref: (3)
			0.003	0.003	0.003	
		M106	635.813	182.229	25.164	Ref: (3)
			0.003	0.003	0.003	
		M101	520.577	170.825	41.961	Ref: (3)
			0.003	0.003	0.003	

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
40451 WASHINGTON (cont.)						
	M102		-33.112	-2.452	4.398	Ref: (3)
			0.003	0.003	0.003	
	M103		-34.066	1.868	9.839	Ref: (3)
			0.003	0.003	0.003	
	M104		376.110	153.626	64.228	Ref: (3)
			0.003	0.003	0.003	
	M111		645.036	181.778	22.412	Ref: (3)
			0.003	0.003	0.003	
	M125		75.125	116.762	110.510	Ref: (3)
			0.003	0.003	0.003	
	M114		26.038	-17.460	-29.389	Ref: (5)
			0.003	0.003	0.003	
	M117		22.182	-19.215	-30.410	Ref: (5)
			0.003	0.003	0.003	
	M120		-14.419	5.137	9.456	Ref: (5)
			0.003	0.003	0.003	
	M123		54.241	97.013	93.863	Ref: (5)
			0.003	0.003	0.003	
	M107		-30.463	8.595	16.961	Ref: (5)
			0.003	0.003	0.003	
	M108		-28.408	-0.491	5.446	Ref: (5)
			0.003	0.003	0.003	
	M116		15.577	25.904	25.854	Ref: (5)
			0.003	0.003	0.003	
	M118		14.413	26.236	26.367	Ref: (5)
			0.003	0.003	0.003	
40456 PIETOWN						
A	S001	M001	36.916	34.827	35.255	Ref: (5)
			0.003	0.003	0.003	
40465 NORTH LIBERTY						
A	S001	M001	-62.228	25.387	3.626	Ref: (20)
			0.003	0.003	0.003	
40491 FLAGSTAF						
A	M002	M003	-15.933	17.213	14.367	Ref: (2)
			0.001	0.003	0.003	
40496 PLATTEVILLE						
A	M001	M002	-29.894	9.036	1.025	Ref: (2)
			0.001	0.001	0.001	
40497 MONUMENT PEAK (see 40436 SAN DIEGO-OTAY MOUNTAIN)						

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
40499 RICHMOND						
A	M002	S001	-60.877 0.003	0.931 0.002	44.212 0.002	Ref: (2,4)
		M005	-76.090 0.003	69.330 0.003	168.048 0.003	Ref: (20)
		S018	15.832 0.003	16.844 0.003	45.521 0.003	Ref: (20)
		S015	-239.169 0.003	514.840 0.003	1149.683 0.003	Ref: (3)
		S016	-562.116 0.003	405.892 0.003	1039.924 0.003	Ref: (3)
40503 SOCORRO ISLAND						
A	S003	S002	-202.980 0.003	30.260 0.003	-148.510 0.003	Ref: (3)
41507 RIO GRANDE						
A	S004	S003	-4.283 0.003	-4.105 0.003	2.101 0.003	Ref: (3)
41602 FORTALEZA						
A	M001	S001	-16.598 0.003	-21.732 0.003	-45.805 0.003	Ref: (20)
41703 EASTER ISLAND						
A	M002	M001	0.424 0.003	1.204 0.003	0.650 0.003	Ref: (5)
		M003	32.016 0.003	12.485 0.003	-37.088 0.003	Ref: (20)
		S008	-9.956 0.003	3.329 0.003	-5.267 0.003	Ref: (3)
41705 SANTIAGO						
A	M003	M001	6.309 0.003	-38.829 0.003	61.146 0.003	Ref: (20)
		M002	31.374 0.003	61.808 0.003	-75.245 0.003	
		S006	-0.230 0.003	69.610 0.003	-113.927 0.003	Ref: (20)
B	S007	S006	-6653.688 0.100	-17960.224 0.100	22748.646 0.100	Ref: (3)

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
42202 AREQUIPA						
A	M003	M004	-23.075	-11.900	4.458	Ref: (3)
			0.003	0.003	0.003	
		M005	18.615	-0.548	21.499	Ref: (20)
			0.003	0.003	0.003	
		S001	-16.022	-7.911	-3.665	Ref: (3)
			0.003	0.003	0.003	
		S005	-11.368	-8.020	-3.627	Ref: (3)
			0.003	0.003	0.003	
50103 CANBERRA						
A	S007	S003	-1072.033	-992.958	1255.113	Ref: (7)
			0.010	0.010	0.010	
		S010	-14458.373	4638.716	21870.004	Ref: (7)
			0.027	0.027	0.027	
		S201	6.411	-25.040	-22.873	Ref: (3)
			0.003	0.003	0.003	
B	S010	S001	40.710	-404.168	-367.147	Ref: (21)
			0.003	0.003	0.003	
		S005	-45.694	-352.212	-200.582	Ref: (7)
			0.003	0.003	0.003	
		M108	-60.720	-208.617	-62.493	Ref: (21)
			0.005	0.005	0.005	
50107 YARRAGADEE						
A	M001	M004	-18.605	-12.471	-5.835	Ref: (7,14)
			0.003	0.003	0.003	
		S006	2.990	11.270	11.823	Ref: (3)
			0.003	0.003	0.003	
50505 KWAJALEIN ATOLL						
A	M001	S003	-89.234	-702.977	544.240	Ref: (3,4)
			0.003	0.003	0.003	
66008 O'HIGGINS						
A	S001	M001	39.447	-17.634	28.448	Ref: (20)
			0.003	0.003	0.003	
91201 KERGUELEN						
A	M002	S002	-510.991	120.575	-36.781	Ref: (3)
			0.003	0.003	0.003	
		S003	-510.926	120.724	-36.935	Ref: (3)
			0.003	0.003	0.003	

Table T4 (cont.)

LOCAL ECCENTRICITIES FOR IERS SITES

			DX/sigX m	DY/sigY m	DZ/sigZ m	Ref.
92202 HUAHINE						
A	M004	S009	-6.282	7.965	-0.173	Ref: (3)
			0.003	0.003	0.003	
		M002	1.458	0.807	0.501	Ref: (5)
97301 KOUROU						
A	M210	S004	15669.825	9832.780	-16899.080	Ref: (3)
			0.025	0.025	0.025	
		S005	15123.675	9589.762	-15209.338	Ref: (3)
			0.024	0.024	0.024	

References

(1) Message from D. Robertson, NGS, 7 April 1989.

(2) Draft "Comparison of GSFC/VLBI and CSR/SLR geocentric coordinates. Epoch 1988 Jan 01", Presented at CDP Investigator Meeting, Pasadena, 1989.

(3) IGN data base.

(4) Message from B. Carter, NGS,, 27 Feb. 1989.

(5) CDP Catalogue of Site Information, March 1993.

(6) CDP Catalogue of Site Information, Update 1, September 1993.

(7) Information package on geodetic connection at Orroral, Tidbinbilla and Yaragadee, from John Luck, Director, Orroral Geodetic Observatory, 19 November 1992.

(8) Comparaison of VLBI and SLR geocentric site coordinates, J.R. Ray, J.W. Ryan, C. Ma, T.A. Clark, B.E. Schutz, R.J. Eanes, M.M. Watkins, B.D. Tapley, 29 March 1990.

(9) Message from J. Kakkuri, Finnish Geodetic Institut, 17 April 1990.

(10) Tobita M., S. Matsuzaka, Y. Takahashi, A. Sengoku, (1991), VLBI, SLR Colocation in Chichijima, IERS Workshop, April 29 - May 3, 1991, Mizusawa, Japan.

(11) Schluter, W., Rottcher, K, R. Stoger, T. Klesen, (1990), Local Surveys at the fundamentalstation Wettwzll, Status: October 1990.

(12) GIG'91, Rogue GPS Network, Status Report: Analysis Support Package, Daily Logs and Site Specific Information, April 18, 1991

(13) GPS Bulletin Vol. 5 No. 1, March-April, 1992.

(14) Blewitt G., Heflin M.B., Webb F.H., Lindqwister U.J., Malla R. P., Global Coordinates in the International Terrestrial Reference Frame using GPS, AGU, 1992.

(15) SGMS Newsletter April, 1991, page 60.

(16) Message from Matti Paunonen, 1994.

(17) Survey of the Matera site, Telespazio, March 1992

(18) Message from A. Sinclair, 16-jun-1992.

(19) Message from M. Caissy, 25-jun-1992.

(20) Site Information Forms, IGS Central Bureau Data Information System.

(21) Message from Brian Murphy, AUSLIG, 7 December, 1994: Update of the Tidbinbilla local ties on 29 November, 1994.

(22) Goldstone GPS Site Information Report, JPL, june 1992.