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 Following IAU Conventions 2000, IERS provides new products dX, dY, celestial pole offsets with respect to the new IAU2000A Precession-Nutation theory.

The present Bulletin B version includes the celestial pole offsets dX, dY:

$$dX = X_{obs} - X_{IAU2000A} \text{ and } dY = Y_{obs} - Y_{IAU2000A}$$

where

X\_obs, Y\_obs are the observed coordinates of the Celestial Intermediate Pole (CIP) in the Geocentric Celestial Reference System, and

X\_IAU2000A, Y\_IAU2000A are the celestial pole coordinates provided by using the IAU2000A Precession-Nutation theory.

The current Bulletin B including (dpsi,deps)\_1980 will be maintained until December 2004.

For more details refer to IERS Messages 38, on IAU 2000 Resolution Compliancy Information.

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 Contents are described in the Explanatory Supplement available at  
<http://hpiers.obspm.fr/eop-pc/>

1 - EARTH ORIENTATION PARAMETERS (IERS evaluation).

The values in this section are samplings of section 2 given at five-day intervals.

Date 2003 (0h UTC)	MJD	x "	y "	UT1R-UTC s	UT1R-TAI s	dX 0.001"	dY 0.001"
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Final Bulletin B values.

JUN	4	52794	.02781	.54785	-.375842	-32.375842	.32	.04
JUN	9	52799	.04481	.54793	-.375162	-32.375162	-.01	.15
JUN	14	52804	.06217	.54663	-.374263	-32.374263	.50	-.18
JUN	19	52809	.08314	.54468	-.372631	-32.372631	.13	.04
JUN	24	52814	.10364	.54306	-.370905	-32.370905	.30	-.10
JUN	29	52819	.12274	.54042	-.369090	-32.369090	.17	.23
JUL	4	52824	.13998	.53589	-.366747	-32.366747	.24	.08

Preliminary extension, to be updated weekly in Bulletin A and monthly in Bulletin B.

JUL	9	52829	.15674	.52818	-.363312	-32.363312	.32	-.26
JUL	14	52834	.17324	.52119	-.359972	-32.359972	.40	-.13
JUL	19	52839	.18636	.51262	-.357619	-32.357619	.10	-.24
JUL	24	52844	.20015	.50173	-.355812	-32.355812	.12	.02
JUL	29	52849	.21137	.48924	-.354904	-32.354904	.00	.00
AUG	3	52854	.22211	.47654	-.354191	-32.354191	.00	.00
AUG	8	52859	.23021	.46402	-.353672	-32.353672	.00	.00
AUG	13	52864	.23702	.45114	-.353313	-32.353313	.00	.00
AUG	18	52869	.24258	.43785	-.353146	-32.353146	.00	.00
AUG	23	52874	.24695	.42419	-.353176	-32.353176	.00	.00
AUG	28	52879	.25014	.41026	-.353451	-32.353451	.00	.00
SEP	2	52884	.25216	.39611	-.354000	-32.354000	.00	.00
SEP	7	52889	.25303	.38185	-.354801	-32.354801	.00	.00
SEP	12	52894	.25274	.36755	-.355877	-32.355877	.00	.00
SEP	17	52899	.25132	.35330	-.357235	-32.357235	.00	.00
SEP	22	52904	.24879	.33919	-.358868	-32.358868	.00	.00

SEP 27 52909 .24518 .32532 -.360767 -32.360767 .00 .00

Note. In UT1R, the effects of zonal tides with periods shorter than 35 days are removed ; UT1-UT1R (smaller than 0.0025s in absolute value) should be added after quadratic interpolation of UT1R. Section 2 of this Bulletin gives the daily interpolation of x, y, UT1, duration of day, dX, and dY.

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2 - SMOOTHED VALUES OF X, Y, UT1, D, dX, dY (IERS EVALUATION) at one-day intervals. For smoothing characteristics, see Table2 in the explanatory supplement. The reference system is described in the 2002 IERS Annual Report.

2003		MJD	x	y	UT1-UTC	UT1-UT1R	D	dX	dY
(0 h UTC)			"	"	s	ms	ms	0.001"	0.001"
JUN	4	52794	.02781	.54785	-.374552	1.290	-.462	.32	.04
JUN	5	52795	.03154	.54789	-.374074	1.645	-.402	.30	-.07
JUN	6	52796	.03502	.54791	-.373749	1.811	-.204	.21	-.12
JUN	7	52797	.03819	.54781	-.373678	1.739	.067	.09	-.08
JUN	8	52798	.04141	.54781	-.373878	1.417	.311	-.01	.05
JUN	9	52799	.04481	.54793	-.374277	.884	.471	-.01	.15
JUN	10	52800	.04833	.54805	-.374779	.234	.521	.08	.12
JUN	11	52801	.05179	.54806	-.375270	-.400	.437	.25	-.03
JUN	12	52802	.05526	.54775	-.375612	-.879	.197	.45	-.14
JUN	13	52803	.05873	.54723	-.375643	-1.106	-.148	.55	-.15
JUN	14	52804	.06217	.54663	-.375323	-1.060	-.452	.50	-.18
JUN	15	52805	.06587	.54610	-.374770	-.802	-.633	.35	-.30
JUN	16	52806	.06983	.54557	-.374100	-.446	-.686	.19	-.37
JUN	17	52807	.07414	.54504	-.373436	-.118	-.621	.06	-.26
JUN	18	52808	.07863	.54484	-.372882	.090	-.474	.04	-.05
JUN	19	52809	.08314	.54468	-.372493	.139	-.309	.13	.04
JUN	20	52810	.08777	.54452	-.372255	.035	-.184	.30	-.07
JUN	21	52811	.09207	.54442	-.372107	-.179	-.115	.43	-.21
JUN	22	52812	.09598	.54408	-.372005	-.446	-.082	.44	-.22
JUN	23	52813	.09988	.54362	-.371923	-.706	-.089	.37	-.14
JUN	24	52814	.10364	.54306	-.371809	-.904	-.176	.30	-.10
JUN	25	52815	.10734	.54248	-.371559	-.992	-.348	.24	-.12
JUN	26	52816	.11103	.54205	-.371106	-.939	-.496	.19	-.10
JUN	27	52817	.11484	.54152	-.370566	-.733	-.630	.14	.03
JUN	28	52818	.11873	.54099	-.369854	-.384	-.782	.14	.19
JUN	29	52819	.12274	.54042	-.369018	.073	-.884	.17	.23
JUN	30	52820	.12679	.53986	-.368109	.580	-.909	.21	.09
JUL	1	52821	.13056	.53929	-.367227	1.063	-.857	.24	-.12
JUL	2	52822	.13398	.53857	-.366421	1.441	-.778	.25	-.22
JUL	3	52823	.13704	.53750	-.365692	1.642	-.651	.25	-.12
JUL	4	52824	.13998	.53589	-.365129	1.618	-.472	.24	.08
JUL	5	52825	.14320	.53410	-.364743	1.361	-.300	.18	.24
JUL	6	52826	.14652	.53258	-.364510	.906	-.166	.09	.25
JUL	7	52827	.14969	.53119	-.364378	.333	-.103	.07	.10
JUL	8	52828	.15309	.52974	-.364263	-.249	-.155	.17	-.13
JUL	9	52829	.15674	.52818	-.364029	-.717	-.354	.32	-.26
JUL	10	52830	.16045	.52666	-.363530	-.976	-.606	.43	-.25
JUL	11	52831	.16407	.52528	-.362815	-.984	-.811	.45	-.16
JUL	12	52832	.16755	.52395	-.361930	-.769	-.941	.42	-.09
JUL	13	52833	.17065	.52265	-.360972	-.423	-.966	.39	-.11
JUL	14	52834	.17324	.52119	-.360039	-.067	-.886	.40	-.13
JUL	15	52835	.17569	.51967	-.359230	.191	-.714	.39	-.05
JUL	16	52836	.17829	.51812	-.358623	.287	-.495	.27	-.07
JUL	17	52837	.18097	.51653	-.358234	.210	-.292	.15	-.16
JUL	18	52838	.18358	.51470	-.358021	-.003	-.150	.09	-.27
JUL	19	52839	.18636	.51262	-.357911	-.292	-.098	.10	-.24
JUL	20	52840	.18935	.51062	-.357803	-.590	-.122	.06	-.16
JUL	21	52841	.19204	.50858	-.357648	-.833	-.184	-.06	-.13
JUL	22	52842	.19446	.50630	-.357421	-.970	-.275	-.18	-.26
JUL	23	52843	.19725	.50389	-.357089	-.967	-.400	-.26	-.56
JUL	24	52844	.20015	.50173	-.356621	-.808	-.528	.12	.02
JUL	25	52845	.20259	.49961	-.356040	-.501	-.612	.13	-.06
JUL	26	52846	.20477	.49728	-.355425	-.075	-.642	.00	.00
JUL	27	52847	.20689	.49485	-.354792	.419	-.640	.00	.00
JUL	28	52848	.20910	.49210	-.354161	.910	-.603	.00	.00

JUL 29	52849	.21137	.48924	-.353590	1.314	-.527	.00	.00
JUL 30	52850	.21399	.48651	-.353180	1.551	-.332	.00	.00
JUL 31	52851	.21637	.48394	-.353001	1.561	-.078	.00	.00

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3 - NORMAL VALUES OF THE EARTH ORIENTATION PARAMETERS AT FIVE-DAY INTERVALS (IERS evaluation).

		Raw normal values					Uncertainties				
2003	MJD	x	y	UT1-UTC	dX	dY	x	y	UT1	dX	dY
(0 h UTC)		"	"	s	0.001"		0.001"	0.0001s	0.001"		
JUN 4	52794	.02781	.54778	-.374532	.320	.043	.01	.01	.02	.02	.02
JUN 9	52799	.04481	.54794	-.374277	-.012	.195	.01	.01	.02	.02	.03
JUN 14	52804	.06217	.54665	-.375323	.566	-.220	.01	.01	.06	.08	.08
JUN 19	52809	.08314	.54467	-.372492	.126	.039	.01	.01	.03	.02	.02
JUN 24	52814	.10364	.54306	-.371809	.297	-.114	.01	.01	.02	.02	.03
JUN 29	52819	.12274	.54042	-.369017	.179	.225	.01	.01	.02	.02	.02
JUL 4	52824	.13998	.53588	-.365128	.238	.118	.01	.01	.03	.04	.04
JUL 9	52829	.15674	.52819	-.364030	.332	-.268	.01	.01	.02	.02	.02
JUL 14	52834	.17324	.52120	-.360038	.353	-.097	.02	.01	.02	.02	.02
JUL 19	52839	.18635	.51262	-.357910	.038	-.264	.01	.01	.03	.03	.03
JUL 24	52844	.20013	.50170	-.356613	-	-	.02	.02	.02	-	-
JUL 29	52849	.21136	.48923	-	-	-	.02	.02	-	-	-

4 - DURATION OF THE DAY AND ANGULAR VELOCITY OF THE EARTH (IERS evaluation).

The data of this section are smoothed, with the same characteristics as UT1R in section 1. They are corrected for the effects of zonal tides with periods up to 35 days. Section 2 gives the daily interpolation of D.

Date (0h UTC)	DR	OmegaR		
2003 MJD	s	(microrad/s)		
JUN 4	52794	-.00004	72.921	15150
JUN 9	52799	-.00015		15159
JUN 14	52804	-.00029		15171
JUN 19	52809	-.00035		15176
JUN 24	52814	-.00033		15175
JUN 29	52819	-.00040		15180
JUL 4	52824	-.00062		15199

5 - INFORMATION ON TIME SCALES

No leap second was introduced in UTC on 30 June 2003.  
 No leap second will be introduced in UTC on 31 December 2003.  
 All information concerning time scales : announcements of the leap seconds (Bulletin C) and of the value of DUT1 (Bulletin D) can be found in our web/ftp site :

World Wide Web : <http://hpiers.obspm.fr>  
 Anonymous ftp : [hpiers.obspm.fr](http://hpiers.obspm.fr) or 145.238.100.28

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6 - SUMMARY OF CONTRIBUTED EARTH ORIENTATION PARAMETERS SERIES

This section gives the average precision of the individual series contributing to the combination and their average agreement with it. The periods covered start at the beginning of the first month in Section 1 and end with the last available value in the individual series considered.

Units : 0.001" for x,y , 0.0001s for UT1, 0.001" for dX, dY.

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EOP series		Mean formal uncertainty						Data Number
Periods covered		Weighted RMS agreement with Bulletin B						
		x	y	UT	D	dX	dY	
VLBI								
EOP(AUS)	1 R 01	.27	.35	.17	-	-	-	13
	52796.27 to 52838.27	.19	.36	.17	-	-	-	
EOP(BKG)	3 R 03	.16	.14	.05	-	-	-	13
	52796.00 to 52838.00	.25	.18	.05	-	-	-	
EOP(BKG)	3 R 02	-	-	.13	-	-	-	23
	52794.79 to 52845.81	-	-	.13	-	-	-	
EOP(GSFC)	3 R 06	.09	.07	.03	-	-	-	13
	52796.27 to 52838.27	.24	.18	.10	-	-	-	
EOP(GSFC)	3 R 05	-	-	.15	-	-	-	23
	52794.79 to 52845.81	-	-	.15	-	-	-	
EOP(IAA)	3 R 04	.09	.08	.04	-	-	-	13
	52796.27 to 52838.27	.17	.15	.03	-	-	-	
EOP(IAA)	3 R 03	-	-	.13	-	-	-	28
	52794.79 to 52845.81	-	-	.15	-	-	-	
EOP(SPBU)	1 R 02	.12	.09	.04	-	-	-	12
	52796.27 to 52835.20	.59	.31	.13	-	-	-	
EOP(SPBU)	2 R 01	-	-	.15	-	-	-	21
	52794.79 to 52843.79	-	-	.09	-	-	-	
EOP(IVS)	2 R 01	.07	.06	.03	-	-	-	13
	52796.00 to 52838.00	.09	.14	.08	-	-	-	
GPS								
EOP(CODE)	98 P 01	.01	.01	-	.22	-	-	57
	52794.50 to 52850.50	.05	.04	-	.23	-	-	
EOP(EMR)	96 P 03	.03	.03	-	.04	-	-	57
	52794.50 to 52850.50	.06	.06	-	.29	-	-	
EOP(ESOC)	96 P 01	.02	.02	-	.02	-	-	57
	52794.50 to 52850.50	.11	.06	-	.24	-	-	
EOP(GFZ)	96 P 02	.01	.01	-	.01	-	-	57
	52794.50 to 52850.50	.06	.09	-	.28	-	-	
EOP(IAA)	1 P 01	.03	.03	-	.06	-	-	56
	52794.50 to 52849.50	.13	.14	-	.35	-	-	
EOP(JPL)	96 P 03	.02	.02	-	.09	-	-	57
	52794.50 to 52850.50	.08	.08	-	.48	-	-	
EOP(NOAA)	96 P 01	.03	.03	-	.02	-	-	39
	52794.50 to 52832.50	.20	.18	-	.78	-	-	
EOP(SIO)	96 P 01	.06	.06	-	.12	-	-	46
	52794.50 to 52839.50	.12	.06	-	.28	-	-	
EOP(IGS F)	95 P 02	.02	.02	.08	.06	-	-	39
	52794.50 to 52832.50	.06	.03	.22	.22	-	-	
EOP(IGS R)	96 P 02	.04	.03	.21	.06	-	-	56
	52794.50 to 52849.50	.06	.05	.99	.26	-	-	
EOP(IERS)	97 P 01	.04	.04	.20	.11	-	-	57
	52794.50 to 52850.50	.02	.02	.29	.24	-	-	
SLR								
EOP(CGS)	97 L 02	.20	.21	-	-	-	-	20
	52794.00 to 52813.00	.79	.76	-	-	-	-	
EOP(IAA)	2 L 01	.03	.03	.02	.02	-	-	56
	52794.00 to 52849.00	.11	.21	.33	.13	-	-	
EOP(MCC)	97 L 01	.05	.05	-	.07	-	-	51
	52794.00 to 52844.00	.16	.18	-	.47	-	-	
Bulletin A								
EOP(NEOS)	97 C 01	.04	.06	.08	-	-	-	58

52794.00 to 52851.00

.13 .07 .19 - - -