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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:

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

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.

MAR	1	52699	-.15380	.34463	-.321589	-32.321589	.16	.22
MAR	6	52704	-.15370	.35831	-.323970	-32.323970	-.10	.04
MAR	11	52709	-.15552	.37238	-.327178	-32.327178	.06	.15
MAR	16	52714	-.15691	.38688	-.331161	-32.331161	.26	.35
MAR	21	52719	-.15308	.40339	-.335106	-32.335106	.06	-.13
MAR	26	52724	-.14749	.41835	-.338610	-32.338610	.11	-.06
MAR	31	52729	-.13538	.43283	-.342123	-32.342123	-.04	.16
APR	5	52734	-.12458	.44754	-.345994	-32.345994	.21	.01

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

APR	10	52739	-.11467	.46235	-.350337	-32.350337	.14	.14
APR	15	52744	-.10525	.47528	-.354096	-32.354096	.10	.15
APR	20	52749	-.09549	.48570	-.357123	-32.357123	.00	.00
APR	25	52754	-.08281	.49591	-.359359	-32.359359	.00	.00
APR	30	52759	-.07016	.50628	-.361889	-32.361889	.00	.00
MAY	5	52764	-.05543	.51397	-.364224	-32.364224	.00	.00
MAY	10	52769	-.04048	.52025	-.366604	-32.366604	.00	.00
MAY	15	52774	-.02531	.52517	-.369167	-32.369167	.00	.00
MAY	20	52779	-.00997	.52889	-.371700	-32.371700	.00	.00
MAY	25	52784	.00545	.53144	-.374065	-32.374065	.00	.00
MAY	30	52789	.02087	.53285	-.376171	-32.376171	.00	.00
JUN	4	52794	.03622	.53314	-.377972	-32.377972	.00	.00
JUN	9	52799	.05137	.53231	-.379436	-32.379436	.00	.00
JUN	14	52804	.06626	.53040	-.380566	-32.380566	.00	.00
JUN	19	52809	.08078	.52742	-.381382	-32.381382	.00	.00

JUN	24	52814	.09485	.52340	-.381886	-32.381886	.00	.00
JUN	29	52819	.10838	.51839	-.382107	-32.382107	.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 2001 IERS Annual Report.

2003		MJD	x	y	UT1-UTC	UT1-UT1R	D	dX	dY
(0 h UTC)			"	"	s	ms	ms	0.001"	0.001"
MAR	1	52699	-.15380	.34463	-.321341	.248	.334	.16	.22
MAR	2	52700	-.15315	.34719	-.321735	.348	.483	.13	.28
MAR	3	52701	-.15281	.35019	-.322294	.299	.611	.08	.21
MAR	4	52702	-.15304	.35313	-.322942	.133	.667	.01	.09
MAR	5	52703	-.15337	.35583	-.323609	-.096	.688	-.07	.01
MAR	6	52704	-.15370	.35831	-.324297	-.327	.702	-.10	.04
MAR	7	52705	-.15409	.36075	-.324995	-.501	.688	-.10	.11
MAR	8	52706	-.15449	.36347	-.325660	-.570	.629	-.09	.12
MAR	9	52707	-.15469	.36629	-.326247	-.502	.537	-.06	.09
MAR	10	52708	-.15486	.36930	-.326736	-.290	.434	.00	.09
MAR	11	52709	-.15552	.37238	-.327124	.054	.345	.06	.15
MAR	12	52710	-.15640	.37548	-.327442	.492	.305	.04	.17
MAR	13	52711	-.15703	.37859	-.327756	.970	.326	-.03	.12
MAR	14	52712	-.15729	.38137	-.328125	1.406	.430	-.03	.07
MAR	15	52713	-.15711	.38401	-.328648	1.704	.618	.12	.18
MAR	16	52714	-.15691	.38688	-.329389	1.772	.874	.26	.35
MAR	17	52715	-.15665	.38976	-.330408	1.550	1.169	.23	.35
MAR	18	52716	-.15595	.39263	-.331712	1.044	1.425	.09	.07
MAR	19	52717	-.15489	.39581	-.333217	.341	1.551	-.02	-.27
MAR	20	52718	-.15384	.39960	-.334760	-.413	1.498	.00	-.34
MAR	21	52719	-.15308	.40339	-.336161	-1.055	1.292	.06	-.13
MAR	22	52720	-.15228	.40664	-.337311	-1.457	.998	.06	.10
MAR	23	52721	-.15144	.40960	-.338153	-1.566	.682	-.01	.16
MAR	24	52722	-.15048	.41241	-.338695	-1.406	.412	-.05	.09
MAR	25	52723	-.14906	.41539	-.339011	-1.060	.257	.01	.01
MAR	26	52724	-.14749	.41835	-.339245	-.635	.253	.11	-.06
MAR	27	52725	-.14567	.42116	-.339548	-.237	.339	.17	-.09
MAR	28	52726	-.14335	.42403	-.339943	.058	.465	.14	-.03
MAR	29	52727	-.14057	.42687	-.340485	.208	.634	.03	.11
MAR	30	52728	-.13777	.42984	-.341206	.207	.786	-.05	.21
MAR	31	52729	-.13538	.43283	-.342044	.079	.870	-.04	.16
APR	1	52730	-.13325	.43562	-.342929	-.130	.925	.04	-.02
APR	2	52731	-.13117	.43859	-.343874	-.362	.982	.15	-.16
APR	3	52732	-.12905	.44174	-.344874	-.556	.968	.24	-.15
APR	4	52733	-.12695	.44467	-.345794	-.656	.876	.27	-.05
APR	5	52734	-.12458	.44754	-.346617	-.623	.777	.21	.01
APR	6	52735	-.12209	.45076	-.347346	-.440	.657	.14	.02
APR	7	52736	-.11977	.45404	-.347937	-.115	.504	.11	.05
APR	8	52737	-.11760	.45698	-.348369	.322	.370	.14	.16
APR	9	52738	-.11596	.45971	-.348698	.820	.316	.17	.23
APR	10	52739	-.11467	.46235	-.349027	1.310	.345	.14	.14
APR	11	52740	-.11322	.46485	-.349418	1.705	.450	.16	.00
APR	12	52741	-.11140	.46749	-.349958	1.914	.649	.26	-.04
APR	13	52742	-.10929	.47029	-.350736	1.856	.936	.37	.12
APR	14	52743	-.10716	.47288	-.351830	1.499	1.253	.30	.27
APR	15	52744	-.10525	.47528	-.353217	.880	1.467	.10	.15
APR	16	52745	-.10378	.47740	-.354715	.114	1.478	.02	.01
APR	17	52746	-.10218	.47924	-.356114	-.634	1.302	.07	.03
APR	18	52747	-.10029	.48116	-.357272	-1.200	1.018	.10	.18
APR	19	52748	-.09802	.48338	-.358129	-1.481	.650	.04	.26
APR	20	52749	-.09549	.48570	-.358581	-1.458	.290	-.09	.10
APR	21	52750	-.09300	.48786	-.358740	-1.198	.079	-.13	-.16
APR	22	52751	-.09071	.48984	-.358780	-.812	.046	-.03	-.36
APR	23	52752	-.08851	.49182	-.358870	-.419	.122	-.09	.22

APR 24	52753	-.08588	.49383	-.359049	-.111	.209	.19	.12
APR 25	52754	-.08281	.49591	-.359298	.062	.314	.37	.09
APR 26	52755	-.07998	.49799	-.359700	.086	.463	.37	.23
APR 27	52756	-.07757	.50015	-.360278	-.019	.610	.25	.47
APR 28	52757	-.07528	.50244	-.360978	-.214	.704	.13	.62
APR 29	52758	-.07286	.50448	-.361754	-.445	.742	.06	.58
APR 30	52759	-.07016	.50628	-.362542	-.653	.685	.03	.47

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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"		
MAR 1	52699	-.15380	.34463	-.321335	.158	.196	.01	.02	.03	.03	.03
MAR 6	52704	-.15370	.35831	-.324297	-.104	.035	.01	.01	.01	.02	.02
MAR 11	52709	-.15552	.37239	-.327125	.057	.176	.02	.02	.02	.02	.02
MAR 16	52714	-.15692	.38688	-.329388	.270	.386	.02	.02	.02	.02	.02
MAR 21	52719	-.15309	.40339	-.336161	.049	-.142	.02	.02	.02	.02	.03
MAR 26	52724	-.14750	.41836	-.339247	.111	-.059	.02	.02	.02	.02	.02
MAR 31	52729	-.13537	.43283	-.342043	-.061	.164	.02	.02	.02	.03	.04
APR 5	52734	-.12458	.44755	-.346617	.268	.061	.02	.02	.02	.03	.03
APR 10	52739	-.11468	.46235	-.349027	.113	.147	.01	.01	.01	.02	.02
APR 15	52744	-.10524	.47529	-.353223	.101	.142	.03	.02	.02	.04	.04
APR 20	52749	-.09549	.48570	-.358581	-	-	.02	.02	.04	-	-
APR 25	52754	-.08281	.49592	-.359288	-	-	.03	.04	.05	-	-
APR 30	52759	-.07014	.50628	-.362405	-	-	.05	.06	.26	-	-

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)		
MAR 1	52699	.00052	72.921	15103
MAR 6	52704	.00050		15105
MAR 11	52709	.00075		15083
MAR 16	52714	.00081		15079
MAR 21	52719	.00076		15083
MAR 26	52724	.00068		15089
MAR 31	52729	.00070		15088
APR 5	52734	.00089		15072

5 - INFORMATION ON TIME SCALES

No leap second was introduced in UTC on 31 December 2002.

No leap second will be introduced in UTC on 30 June 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 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.

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	.22	.28	.14	-	-	-	17
	52705.27 to 52740.27	.13	.25	.06	-	-	-	
EOP(BKG)	3 R 01	.10	.09	.04	-	-	-	13
	52702.00 to 52746.00	.24	.14	.06	-	-	-	
EOP(BKG)	1 R 02	-	-	.07	-	-	-	29
	52702.79 to 52754.81	-	-	.08	-	-	-	
EOP(GSFC)	3 R 04	.06	.05	.02	-	-	-	14
	52702.20 to 52746.27	.13	.10	.05	-	-	-	
EOP(GSFC)	3 R 03	-	-	.11	-	-	-	30
	52702.79 to 52757.79	-	-	.24	-	-	-	
EOP(IAA)	3 R 02	.07	.06	.02	-	-	-	10
	52702.21 to 52737.20	.18	.12	.05	-	-	-	
EOP(IAA)	3 R 01	-	-	.09	-	-	-	26
	52702.79 to 52747.79	-	-	.08	-	-	-	
EOP(SPBU)	2 R 01	-	-	.11	-	-	-	29
	52702.79 to 52754.81	-	-	.17	-	-	-	
EOP(IVS)	2 R 01	.05	.05	.02	-	-	-	7
	52705.00 to 52726.00	.16	.09	.02	-	-	-	
GPS								
EOP(CODE)	98 P 01	.01	.01	-	.32	-	-	60
	52699.50 to 52758.50	.05	.05	-	.26	-	-	
EOP(EMR)	96 P 03	.03	.03	-	.04	-	-	60
	52699.50 to 52758.50	.09	.09	-	.37	-	-	
EOP(ESOC)	96 P 01	.19	.19	-	.23	-	-	60
	52699.50 to 52758.50	.10	.17	-	.21	-	-	
EOP(GFZ)	96 P 02	.01	.01	-	.01	-	-	60
	52699.50 to 52758.50	.08	.10	-	.31	-	-	
EOP(IAA)	1 P 01	.03	.03	-	.06	-	-	58
	52699.50 to 52757.50	.18	.16	-	.35	-	-	
EOP(JPL)	96 P 03	.03	.03	-	.14	-	-	53
	52699.50 to 52751.50	.12	.09	-	.77	-	-	
EOP(NOAA)	96 P 01	.02	.02	-	.07	-	-	55
	52699.50 to 52753.50	.20	.19	-	.46	-	-	
EOP(SIO)	96 P 01	.06	.06	-	.13	-	-	60
	52699.50 to 52758.50	.27	.18	-	.48	-	-	
EOP(IGS F)	95 P 02	.02	.03	.12	.07	-	-	43
	52699.50 to 52741.50	.05	.04	.26	.18	-	-	
EOP(IGS R)	96 P 02	.04	.04	.19	.07	-	-	60
	52699.50 to 52758.50	.08	.08	.64	.22	-	-	
EOP(IERS)	97 P 01	.05	.05	.26	.16	-	-	60
	52699.50 to 52758.50	.03	.02	.40	.18	-	-	
SLR								
EOP(CGS)	97 L 02	.26	.27	.23	-	-	-	55
	52699.00 to 52753.00	.90	.85	1.18	-	-	-	
EOP(CSR)	95 L 01	.23	.26	.32	-	-	-	8
	52701.11 to 52721.68	.33	.21	1.15	-	-	-	
EOP(DUT)	98 L 01	.06	.06	-	-	-	-	11

52701.00 to 52752.00	.72	.53	-	-	-	-	
EOP(IAA) 2 L 01	.03	.04	.02	.02	-	-	60
52699.00 to 52758.00	.16	.22	.35	.19	-	-	
EOP(MCC) 97 L 01	.05	.05	-	.04	-	-	34
52699.00 to 52753.00	.16	.17	-	.46	-	-	
Bulletin A							
EOP(NEOS) 97 C 01	.06	.05	.08	-	-	-	61
52699.00 to 52759.00	.06	.06	.22	-	-	-	