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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 as long as necessary.

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 2005 (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.

APR 4	53464	-0.03343	0.24532	-0.575439	-32.575439	-0.06	-0.23
APR 9	53469	-0.03831	0.25232	-0.578578	-32.578578	-0.09	-0.31
APR 14	53474	-0.04612	0.26029	-0.581881	-32.581881	-0.10	-0.24
APR 19	53479	-0.05234	0.27151	-0.586476	-32.586476	-0.01	-0.09
APR 24	53484	-0.05759	0.28312	-0.591348	-32.591348	-0.10	-0.28
APR 29	53489	-0.05777	0.29223	-0.596272	-32.596272	0.03	-0.23
MAY 4	53494	-0.05994	0.30372	-0.600584	-32.600584	0.02	-0.16

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

MAY 9	53499	-0.06043	0.31285	-0.604625	-32.604625	0.01	-0.13
MAY 14	53504	-0.06484	0.32017	-0.608683	-32.608683	0.10	-0.05
MAY 19	53509	-0.06898	0.32749	-0.612188	-32.612188	-0.11	-0.34
MAY 24	53514	-0.07141	0.33538	-0.614611	-32.614611	0.00	0.00
MAY 29	53519	-0.06685	0.34550	-0.615335	-32.615335	0.00	0.00
JUN 3	53524	-0.06078	0.35423	-0.616054	-32.616054	0.00	0.00
JUN 8	53529	-0.05835	0.36426	-0.616135	-32.616135	0.00	0.00
JUN 13	53534	-0.05607	0.37387	-0.615837	-32.615837	0.00	0.00
JUN 18	53539	-0.05337	0.38320	-0.615181	-32.615181	0.00	0.00
JUN 23	53544	-0.05013	0.39225	-0.614204	-32.614204	0.00	0.00
JUN 28	53549	-0.04632	0.40097	-0.612938	-32.612938	0.00	0.00
JUL 3	53554	-0.04195	0.40931	-0.611420	-32.611420	0.00	0.00
JUL 8	53559	-0.03705	0.41723	-0.609703	-32.609703	0.00	0.00
JUL 13	53564	-0.03165	0.42470	-0.607849	-32.607849	0.00	0.00
JUL 18	53569	-0.02578	0.43168	-0.605904	-32.605904	0.00	0.00
JUL 23	53574	-0.01948	0.43813	-0.603935	-32.603935	0.00	0.00

JUL 28 53579 -0.01279 0.44403 -0.601982 -32.601982 0.00 0.00

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 2003 IERS Annual Report.

2005	MJD	x	y	UT1-UTC	UT1-UT1R	D	dX	dY
(0 h UTC)	"	"	"	s	ms	ms	0.001"	0.001"
APR 4	53464	-0.03343	0.24532	-0.574323	1.117	0.614	-0.06	-0.23
APR 5	53465	-0.03433	0.24599	-0.575078	1.012	0.874	-0.02	-0.29
APR 6	53466	-0.03498	0.24611	-0.576054	0.631	1.092	0.02	-0.33
APR 7	53467	-0.03548	0.24802	-0.577226	0.048	1.258	0.03	-0.33
APR 8	53468	-0.03668	0.24981	-0.578523	-0.605	1.292	-0.02	-0.30
APR 9	53469	-0.03831	0.25232	-0.579764	-1.185	1.180	-0.09	-0.31
APR 10	53470	-0.04072	0.25366	-0.580851	-1.573	0.932	-0.15	-0.34
APR 11	53471	-0.04241	0.25522	-0.581617	-1.703	0.606	-0.15	-0.35
APR 12	53472	-0.04420	0.25661	-0.582070	-1.571	0.349	-0.12	-0.32
APR 13	53473	-0.04532	0.25849	-0.582336	-1.218	0.249	-0.11	-0.25
APR 14	53474	-0.04612	0.26029	-0.582595	-0.714	0.237	-0.10	-0.24
APR 15	53475	-0.04665	0.26220	-0.582839	-0.142	0.276	-0.10	-0.26
APR 16	53476	-0.04786	0.26464	-0.583173	0.414	0.404	-0.09	-0.29
APR 17	53477	-0.04926	0.26704	-0.583669	0.880	0.567	-0.07	-0.23
APR 18	53478	-0.05096	0.26929	-0.584324	1.196	0.737	-0.05	-0.13
APR 19	53479	-0.05234	0.27151	-0.585153	1.323	0.921	-0.01	-0.09
APR 20	53480	-0.05375	0.27395	-0.586167	1.248	1.126	0.04	-0.12
APR 21	53481	-0.05492	0.27618	-0.587393	0.985	1.311	0.06	-0.21
APR 22	53482	-0.05570	0.27838	-0.588768	0.581	1.399	0.03	-0.28
APR 23	53483	-0.05685	0.28063	-0.590161	0.115	1.464	-0.03	-0.30
APR 24	53484	-0.05759	0.28312	-0.591659	-0.312	1.377	-0.10	-0.28
APR 25	53485	-0.05838	0.28497	-0.592882	-0.595	1.200	-0.10	-0.23
APR 26	53486	-0.05874	0.28665	-0.594041	-0.659	1.007	-0.03	-0.18
APR 27	53487	-0.05875	0.28840	-0.594902	-0.487	0.728	0.04	-0.13
APR 28	53488	-0.05847	0.29019	-0.595524	-0.125	0.504	0.06	-0.15
APR 29	53489	-0.05777	0.29223	-0.595952	0.319	0.464	0.03	-0.23
APR 30	53490	-0.05725	0.29459	-0.596496	0.716	0.573	-0.01	-0.33
MAY 1	53491	-0.05723	0.29734	-0.597133	0.942	0.744	-0.02	-0.38
MAY 2	53492	-0.05782	0.29988	-0.598000	0.922	0.995	0.00	-0.36
MAY 3	53493	-0.05902	0.30187	-0.599115	0.641	1.230	0.03	-0.27
MAY 4	53494	-0.05994	0.30372	-0.600432	0.152	1.390	0.02	-0.16
MAY 5	53495	-0.06051	0.30578	-0.601855	-0.442	1.409	-0.01	-0.11
MAY 6	53496	-0.06096	0.30754	-0.603207	-1.011	1.289	-0.03	-0.13
MAY 7	53497	-0.06051	0.30956	-0.604397	-1.439	1.116	-0.04	-0.20
MAY 8	53498	-0.06080	0.31128	-0.605420	-1.642	0.910	-0.02	-0.21
MAY 9	53499	-0.06043	0.31285	-0.606216	-1.591	0.678	0.01	-0.13
MAY 10	53500	-0.06112	0.31449	-0.606790	-1.306	0.471	0.06	0.01
MAY 11	53501	-0.06096	0.31592	-0.607182	-0.846	0.324	0.11	0.11
MAY 12	53502	-0.06239	0.31732	-0.607465	-0.289	0.241	0.12	0.08
MAY 13	53503	-0.06266	0.31869	-0.607692	0.280	0.206	0.11	0.00
MAY 14	53504	-0.06484	0.32017	-0.607901	0.782	0.287	0.10	-0.05
MAY 15	53505	-0.06541	0.32142	-0.608284	1.154	0.473	0.08	-0.02
MAY 16	53506	-0.06699	0.32337	-0.608857	1.351	0.651	0.02	-0.01
MAY 17	53507	-0.06721	0.32472	-0.609589	1.355	0.778	-0.05	-0.11
MAY 18	53508	-0.06846	0.32630	-0.610407	1.170	0.892	-0.12	-0.25
MAY 19	53509	-0.06898	0.32749	-0.611358	0.830	1.009	-0.11	-0.34
MAY 20	53510	-0.07006	0.32909	-0.612401	0.393	1.014	-0.02	-0.29
MAY 21	53511	-0.07051	0.33032	-0.613353	-0.053	0.930	0.00	0.00
MAY 22	53512	-0.07093	0.33208	-0.614227	-0.406	0.767	0.00	0.00
MAY 23	53513	-0.07111	0.33372	-0.614861	-0.574	0.448	0.00	0.00
MAY 24	53514	-0.07141	0.33538	-0.615117	-0.506	0.124	0.00	0.00
MAY 25	53515	-0.07120	0.33708	-0.615128	-0.223	-0.139	0.00	0.00
MAY 26	53516	-0.07059	0.33900	-0.614880	0.184	-0.328	0.00	0.00
MAY 27	53517	-0.06868	0.34126	-0.614520	0.580	-0.265	0.00	0.00
MAY 28	53518	-0.06823	0.34348	-0.614390	0.827	-0.008	0.00	0.00

MAY	29	53519	-0.06685	0.34550	-0.614498	0.837	0.225	0.00	0.00
MAY	30	53520	-0.06608	0.34770	-0.614858	0.587	0.503	0.00	0.00
MAY	31	53521	-0.06445	0.34952	-0.615469	0.128	0.692	0.00	0.00

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

Raw normal values							Uncertainties					
2005	MJD	x	y	UT1-UTC	dX	dY	x	y	UT1	dX	dY	
(0 h UTC)		"	"	s	0.001"		0.001"	0.0001s	0.001"			
APR	4	53464	-0.03345	0.24535	-0.574315	-.076	-.221	0.02	0.02	0.03	0.04	0.05
APR	9	53469	-0.03831	0.25233	-0.579759	-.082	-.248	0.02	0.03	0.02	0.04	0.05
APR	14	53474	-0.04609	0.26026	-0.582596	-.063	-.221	0.02	0.02	0.01	0.04	0.04
APR	19	53479	-0.05233	0.27152	-0.585150	0.017	-.121	0.02	0.01	0.02	0.02	0.02
APR	24	53484	-0.05758	0.28313	-0.591662	-.103	-.274	0.01	0.01	0.01	0.02	0.02
APR	29	53489	-0.05777	0.29223	-0.595952	0.016	-.332	0.01	0.01	0.02	0.03	0.03
MAY	4	53494	-0.05993	0.30372	-0.600432	0.011	-.140	0.01	0.01	0.01	0.02	0.02
MAY	9	53499	-0.06041	0.31284	-0.606216	0.075	-.085	0.02	0.02	0.02	0.06	0.06
MAY	14	53504	-0.06485	0.32017	-0.607890	0.060	0.015	0.03	0.03	0.04	0.05	0.07
MAY	19	53509	-0.06898	0.32749	-0.611358	-.101	-.336	0.01	0.01	0.02	0.02	0.03
MAY	24	53514	-0.07141	0.33538	-0.615120	-	-	0.01	0.01	0.03	-	-
MAY	29	53519	-0.06685	0.34550	-0.614501	-	-	0.02	0.02	0.04	-	-

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		
2005 MJD	s	(microrad/s)		
APR 4	53464	0.00066	72.921	15091
APR 9	53469	0.00069		15089
APR 14	53474	0.00079		15080
APR 19	53479	0.00095		15066
APR 24	53484	0.00101		15061
APR 29	53489	0.00091		15070
MAY 4	53494	0.00083		15076

5 - INFORMATION ON TIME SCALES

No leap second was introduced in UTC on 31 December 2004.  
 No leap second will be introduced in UTC on 30 June 2005.  
 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](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.

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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 1	0.07	0.07	0.03	-	-	-	13
53465.21 to 53507.21			0.19	0.24	0.07	-	-	-	
EOP(BKG)	3	R 4	0.10	0.09	0.04	-	-	-	13
53465.20 to 53507.21			0.26	0.23	0.06	-	-	-	
EOP(BKG)	3	R 2	-	-	0.11	-	-	-	43
53464.79 to 53519.33			-	-	0.19	-	-	-	
EOP(USNO)	5	R 1	-	-	0.11	-	-	-	44
53464.79 to 53519.33			-	-	0.15	-	-	-	
EOP(GSFC)	4	R 2	0.06	0.06	0.02	-	-	-	14
53465.20 to 53510.27			0.17	0.06	0.11	-	-	-	
EOP(GSFC)	4	R 1	-	-	0.11	-	-	-	44
53464.79 to 53519.33			-	-	0.15	-	-	-	
EOP(IAA)	5	R 1	0.06	0.06	0.03	-	0.11	0.04	13
53465.21 to 53507.21			0.23	0.15	0.05	-	0.15	0.07	
EOP(IAA)	3	R 3	-	-	0.11	-	-	-	42
53464.79 to 53519.33			-	-	0.18	-	-	-	
EOP(SPBU)	3	R 3	0.22	0.27	0.13	-	-	-	13
53465.21 to 53507.21			0.12	0.14	0.10	-	-	-	
EOP(SPBU)	2	R 1	-	-	0.11	-	-	-	43
53464.79 to 53519.33			-	-	0.18	-	-	-	
EOP(MAO)	3	R 1	0.07	0.07	0.03	-	0.13	0.05	10
53465.27 to 53496.28			0.25	0.09	0.08	-	0.17	0.10	
EOP(USNO)	5	R 1	0.07	0.07	0.03	-	-	-	14
53465.20 to 53510.27			0.15	0.08	0.04	-	-	-	
EOP(IVS)	0	R 1	0.09	0.09	0.04	-	-	-	13
53465.00 to 53507.00			0.17	0.11	0.07	-	-	-	
GPS									
EOP(CODE)	98	P 1	0.02	0.02	-	0.18	-	-	57
53464.50 to 53520.50			0.04	0.06	-	0.26	-	-	
EOP(EMR)	96	P 3	0.03	0.03	-	0.04	-	-	57
53464.50 to 53520.50			0.05	0.13	-	0.48	-	-	
EOP(ESOC)	96	P 1	0.01	0.02	-	0.07	-	-	53
53464.50 to 53516.50			0.06	0.08	-	0.48	-	-	
EOP(GFZ)	96	P 2	0.01	0.01	-	0.02	-	-	57
53464.50 to 53520.50			0.05	0.05	-	0.33	-	-	
EOP(IAA)	1	P 1	0.03	0.03	-	0.06	-	-	57
53464.50 to 53520.50			0.19	0.34	-	0.70	-	-	
EOP(JPL)	96	P 3	0.02	0.02	-	0.13	-	-	48
53464.50 to 53511.50			0.04	0.04	-	0.39	-	-	
EOP(NOAA)	96	P 1	0.01	0.01	-	0.02	-	-	51
53464.50 to 53514.50			0.15	0.13	-	0.33	-	-	
EOP(SIO)	96	P 1	0.08	0.08	-	0.17	-	-	57
53464.50 to 53520.50			0.06	0.08	-	0.34	-	-	
EOP(IGS F)	95	P 2	0.02	0.03	0.07	0.05	-	-	41
53464.50 to 53504.50			0.03	0.09	0.24	0.22	-	-	
EOP(IGS R)	96	P 2	0.03	0.04	0.18	0.07	-	-	57
53464.50 to 53520.50			0.07	0.06	0.89	0.22	-	-	
EOP(IERS)	97	P 1	0.03	0.03	0.15	0.10	-	-	57
53464.50 to 53520.50			0.01	0.03	0.31	0.24	-	-	
SLR									
EOP(ASI)	3	L 2	0.06	0.07	-	0.14	-	-	57
53464.50 to 53520.50			0.25	0.28	-	0.87	-	-	

EOP(CSR) 95 L 1	0.33	0.47	0.36	-	-	-	18
53465.77 to 53516.10	0.33	0.48	0.62	-	-	-	
EOP(DUT) 98 L 1	0.09	0.10	-	-	-	-	48
53464.00 to 53511.00	0.51	0.32	-	-	-	-	
EOP(IAA) 2 L 1	0.04	0.04	0.02	0.02	-	-	58
53464.00 to 53521.00	0.24	0.21	0.30	0.16	-	-	
EOP(MCC) 97 L 1	0.04	0.06	-	0.10	-	-	53
53464.00 to 53516.00	0.19	0.23	-	0.44	-	-	
EOP(ILRS) 5 L 1	0.11	0.12	-	0.23	-	-	62
53464.50 to 53518.50	0.33	0.19	-	0.67	-	-	
Bulletin A							
EOP(NEOS) 97 C 1	0.05	0.06	0.08	-	-	-	58
53464.00 to 53521.00	0.15	0.12	0.21	-	-	-	