BULLETIN B 206
(IAU 2000)
1 april 2005

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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 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"
Final Bulletin B values.								
FEB	3	53404	0.08667	0.20685	-0.522104	-32.522104	-0.07	-0.36
FEB	8	53409	0.07315	0.20528	-0.525106	-32.525106	0.06	-0.40
FEB	13	53414	0.05918	0.20291	-0.529237	-32.529237	-0.02	-0.34
FEB	18	53419	0.04591	0.20306	-0.533737	-32.533737	0.10	-0.47
FEB	23	53424	0.03320	0.20603	-0.539370	-32.539370	0.05	-0.34
FEB	28	53429	0.02589	0.20965	-0.545675	-32.545675	-0.20	-0.35
MAR	5	53434	0.01518	0.21570	-0.552579	-32.552579	0.01	-0.44
Preliminary extension, to be updated weekly in Bulletin A and monthly in Bulletin B.								
MAR	10	53439	0.00489	0.21932	-0.558265	-32.558265	-0.05	-0.36
MAR	15	53444	-0.00365	0.22314	-0.562376	-32.562376	-0.07	-0.24
MAR	20	53449	-0.00973	0.22566	-0.565507	-32.565507	0.00	0.00
MAR	25	53454	-0.01652	0.23264	-0.568843	-32.568843	0.00	0.00
MAR	30	53459	-0.02461	0.24036	-0.572549	-32.572549	0.00	0.00
APR	4	53464	-0.03295	0.24673	-0.575958	-32.575958	0.00	0.00
APR	9	53469	-0.03999	0.25387	-0.579498	-32.579498	0.00	0.00
APR	14	53474	-0.04647	0.26157	-0.582901	-32.582901	0.00	0.00
APR	19	53479	-0.05233	0.26965	-0.586136	-32.586136	0.00	0.00
APR	24	53484	-0.05756	0.27811	-0.589172	-32.589172	0.00	0.00
APR	29	53489	-0.06211	0.28686	-0.591995	-32.591995	0.00	0.00
MAY	4	53494	-0.06600	0.29588	-0.594559	-32.594559	0.00	0.00
MAY	9	53499	-0.06920	0.30509	-0.596832	-32.596832	0.00	0.00
MAY	14	53504	-0.07171	0.31446	-0.598808	-32.598808	0.00	0.00
MAY	19	53509	-0.07352	0.32391	-0.600464	-32.600464	0.00	0.00
MAY	24	53514	-0.07465	0.33342	-0.601768	-32.601768	0.00	0.00

MAY	29	53519	-0.07508	0.34292	-0.602722	-32.602722	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 (0 h UTC)		MJD	x "	y "	UT1-UTC s	UT1-UT1R ms	D ms	dX 0.001"	dY 0.001"
FEB	3	53404	0.08667	0.20685	-0.522426	-0.322	0.426	-0.07	-0.36
FEB	4	53405	0.08392	0.20604	-0.522755	-0.208	0.267	-0.04	-0.49
FEB	5	53406	0.08157	0.20585	-0.522978	0.096	0.160	0.07	-0.61
FEB	6	53407	0.07892	0.20558	-0.523116	0.499	0.342	0.19	-0.52
FEB	7	53408	0.07610	0.20577	-0.523714	0.860	0.457	0.18	-0.38
FEB	8	53409	0.07315	0.20528	-0.524073	1.033	0.581	0.06	-0.40
FEB	9	53410	0.07003	0.20502	-0.524895	0.922	0.990	-0.02	-0.44
FEB	10	53411	0.06686	0.20409	-0.526038	0.521	1.303	-0.04	-0.37
FEB	11	53412	0.06412	0.20361	-0.527460	-0.085	1.517	-0.05	-0.28
FEB	12	53413	0.06167	0.20315	-0.529021	-0.755	1.583	-0.05	-0.25
FEB	13	53414	0.05918	0.20291	-0.530580	-1.342	1.444	-0.02	-0.34
FEB	14	53415	0.05748	0.20302	-0.531881	-1.736	1.205	0.02	-0.42
FEB	15	53416	0.05456	0.20327	-0.532982	-1.879	0.932	0.03	-0.36
FEB	16	53417	0.05210	0.20299	-0.533752	-1.771	0.647	0.04	-0.27
FEB	17	53418	0.04825	0.20283	-0.534293	-1.448	0.464	0.07	-0.30
FEB	18	53419	0.04591	0.20306	-0.534703	-0.966	0.402	0.10	-0.47
FEB	19	53420	0.04238	0.20371	-0.535122	-0.399	0.478	0.09	-0.60
FEB	20	53421	0.04051	0.20436	-0.535685	0.179	0.576	0.04	-0.57
FEB	21	53422	0.03757	0.20513	-0.536298	0.691	0.702	0.02	-0.41
FEB	22	53423	0.03571	0.20559	-0.537108	1.072	0.892	0.03	-0.32
FEB	23	53424	0.03320	0.20603	-0.538094	1.276	1.092	0.05	-0.34
FEB	24	53425	0.03176	0.20599	-0.539294	1.280	1.314	0.00	-0.40
FEB	25	53426	0.03033	0.20657	-0.540713	1.095	1.510	-0.08	-0.41
FEB	26	53427	0.02943	0.20740	-0.542295	0.765	1.694	-0.15	-0.37
FEB	27	53428	0.02772	0.20853	-0.544073	0.359	1.723	-0.19	-0.34
FEB	28	53429	0.02589	0.20965	-0.545711	-0.036	1.646	-0.20	-0.35
MAR	1	53430	0.02411	0.21109	-0.547336	-0.329	1.571	-0.19	-0.39
MAR	2	53431	0.02188	0.21275	-0.548833	-0.447	1.383	-0.16	-0.41
MAR	3	53432	0.01944	0.21397	-0.550097	-0.352	1.187	-0.10	-0.43
MAR	4	53433	0.01716	0.21493	-0.551220	-0.056	1.040	-0.04	-0.46
MAR	5	53434	0.01518	0.21570	-0.552211	0.369	0.969	0.01	-0.44
MAR	6	53435	0.01283	0.21647	-0.553204	0.802	0.905	0.04	-0.34
MAR	7	53436	0.01057	0.21688	-0.554067	1.101	0.994	0.05	-0.25
MAR	8	53437	0.00891	0.21763	-0.555222	1.150	1.220	0.02	-0.27
MAR	9	53438	0.00674	0.21852	-0.556509	0.895	1.348	-0.01	-0.35
MAR	10	53439	0.00489	0.21932	-0.557890	0.375	1.460	-0.05	-0.36
MAR	11	53440	0.00242	0.22022	-0.559382	-0.295	1.534	-0.12	-0.24
MAR	12	53441	0.00068	0.22103	-0.560906	-0.962	1.477	-0.20	-0.14
MAR	13	53442	-0.00153	0.22199	-0.562296	-1.484	1.255	-0.21	-0.15
MAR	14	53443	-0.00246	0.22225	-0.563396	-1.767	0.931	-0.15	-0.22
MAR	15	53444	-0.00365	0.22314	-0.564158	-1.781	0.587	-0.07	-0.24
MAR	16	53445	-0.00560	0.22300	-0.564584	-1.547	0.290	0.03	-0.21
MAR	17	53446	-0.00676	0.22360	-0.564760	-1.122	0.099	0.09	-0.23
MAR	18	53447	-0.00800	0.22378	-0.564808	-0.579	0.028	0.12	-0.30
MAR	19	53448	-0.00893	0.22470	-0.564843	0.001	0.068	0.00	0.00
MAR	20	53449	-0.00973	0.22566	-0.564969	0.538	0.127	0.00	0.00
MAR	21	53450	-0.01068	0.22674	-0.565119	0.962	0.224	0.00	0.00
MAR	22	53451	-0.01171	0.22823	-0.565431	1.218	0.447	0.00	0.00
MAR	23	53452	-0.01314	0.22994	-0.566020	1.276	0.737	0.00	0.00
MAR	24	53453	-0.01524	0.23184	-0.566918	1.131	1.005	0.00	0.00
MAR	25	53454	-0.01652	0.23264	-0.568028	0.815	1.174	0.00	0.00
MAR	26	53455	-0.01771	0.23464	-0.569236	0.391	1.222	0.00	0.00
MAR	27	53456	-0.01918	0.23572	-0.570440	-0.051	1.171	0.00	0.00
MAR	28	53457	-0.02073	0.23804	-0.571545	-0.410	0.949	0.00	0.00
MAR	29	53458	-0.02264	0.23875	-0.572460	-0.596	0.829	0.00	0.00

MAR 30	53459	-0.02461	0.24036	-0.573109	-0.560	0.505	0.00	0.00
MAR 31	53460	-0.02691	0.24075	-0.573481	-0.304	0.308	0.00	0.00

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

	Raw normal values					Uncertainties				
2005 (0 h UTC)	MJD	x "	y "	UT1-UTC s	dX 0.001"	dY	x 0.001"	y	UT1 0.0001s	dX 0.001"	dY
FEB 3	53404	0.08666	0.20686	-0.522424	-.077	-.352	0.02	0.02	0.02	0.02	0.03
FEB 8	53409	0.07315	0.20528	-0.524070	0.017	-.443	0.01	0.02	0.02	0.02	0.02
FEB 13	53414	0.05918	0.20291	-0.530580	-.039	-.345	0.01	0.01	0.01	0.02	0.02
FEB 18	53419	0.04588	0.20305	-0.534700	0.112	-.422	0.02	0.02	0.02	0.05	0.05
FEB 23	53424	0.03319	0.20603	-0.538090	0.076	-.345	0.01	0.01	0.01	0.02	0.02
FEB 28	53429	0.02589	0.20966	-0.545712	-.200	-.387	0.02	0.02	0.02	0.04	0.04
MAR 5	53434	0.01518	0.21568	-0.552210	0.027	-.406	0.02	0.02	0.01	0.04	0.04
MAR 10	53439	0.00488	0.21931	-0.557891	-.053	-.372	0.01	0.01	0.01	0.02	0.02
MAR 15	53444	-0.00363	0.22318	-0.564157	-.067	-.244	0.02	0.02	0.02	0.03	0.04
MAR 20	53449	-0.00972	0.22565	-0.564971	-	-	0.01	0.01	0.01	-	-
MAR 25	53454	-0.01652	0.23264	-0.568023	-	-	0.01	0.02	0.03	-	-
MAR 30	53459	-0.02461	0.24036	-	-	-	0.04	0.05	-	-	-

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) 2005	MJD	DR s	OmegaR (microrad/s)	
FEB 3	53404	0.00044	72.921	15110
FEB 8	53409	0.00063		15094
FEB 13	53414	0.00094		15067
FEB 18	53419	0.00094		15067
FEB 23	53424	0.00120		15045
FEB 28	53429	0.00129		15038
MAR 5	53434	0.00143		15026

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 or 145.238.100.28

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

Periods covered	Weighted RMS agreement with Bulletin B							
	x	y	UT	D	dX	dY	Data	Number
VLBI								
EOP(AUS) 1 R 1	0.08	0.07	0.03	-	-	-		13
53405.27 to 53447.27	0.17	0.18	0.05	-	-	-		
EOP(BKG) 3 R 4	0.13	0.10	0.08	-	-	-		14
53405.27 to 53447.27	0.16	0.17	0.06	-	-	-		
EOP(BKG) 3 R 2	-	-	0.11	-	-	-		46
53404.79 to 53452.79	-	-	0.13	-	-	-		
EOP(USNO) 5 R 1	-	-	0.11	-	-	-		46
53404.79 to 53452.79	-	-	0.12	-	-	-		
EOP(GSFC) 4 R 2	0.09	0.07	0.07	-	-	-		14
53405.27 to 53447.27	0.17	0.13	0.08	-	-	-		
EOP(GSFC) 4 R 1	-	-	0.11	-	-	-		46
53404.79 to 53452.79	-	-	0.13	-	-	-		
EOP(IAA) 5 R 1	0.08	0.07	0.03	-	0.13	0.06	13	
53405.27 to 53447.27	0.22	0.16	0.08	-	0.27	0.05		
EOP(IAA) 3 R 3	-	-	0.11	-	-	-		46
53404.79 to 53452.79	-	-	0.12	-	-	-		
EOP(SPBU) 3 R 3	0.22	0.27	0.14	-	-	-		13
53405.27 to 53447.27	0.13	0.13	0.11	-	-	-		
EOP(SPBU) 2 R 1	-	-	0.14	-	-	-		33
53404.79 to 53452.79	-	-	0.13	-	-	-		
EOP(MAO) 3 R 1	0.09	0.08	0.03	-	0.16	0.06	13	
53405.27 to 53447.26	0.26	0.18	0.10	-	0.24	0.11		
EOP(USNO) 5 R 1	0.07	0.07	0.02	-	-	-		13
53405.27 to 53447.27	0.13	0.17	0.05	-	-	-		
EOP(IVS) 0 R 1	0.06	0.06	0.02	-	-	-		11
53405.00 to 53440.00	0.26	0.15	0.06	-	-	-		
GPS								
EOP(CODE) 98 P 1	0.02	0.02	-	0.18	-	-		56
53404.50 to 53459.50	0.03	0.09	-	0.28	-	-		
EOP(EMR) 96 P 3	0.03	0.03	-	0.04	-	-		56
53404.50 to 53459.50	0.06	0.17	-	0.52	-	-		
EOP(ESOC) 96 P 1	0.02	0.02	-	0.08	-	-		55
53404.50 to 53458.50	0.06	0.12	-	0.34	-	-		
EOP(GFZ) 96 P 2	0.01	0.01	-	0.01	-	-		56
53404.50 to 53459.50	0.03	0.06	-	0.26	-	-		
EOP(IAA) 1 P 1	0.03	0.03	-	0.06	-	-		55
53404.50 to 53458.50	0.15	0.37	-	0.41	-	-		
EOP(JPL) 96 P 3	0.02	0.02	-	0.15	-	-		45
53404.50 to 53448.50	0.05	0.03	-	0.28	-	-		
EOP(NOAA) 96 P 1	0.01	0.01	-	0.02	-	-		50
53404.50 to 53453.50	0.13	0.13	-	0.34	-	-		
EOP(SIO) 96 P 1	0.05	0.05	-	0.13	-	-		56
53404.50 to 53459.50	0.07	0.09	-	0.34	-	-		
EOP(IGS F)95 P 2	0.02	0.03	0.07	0.06	-	-		38
53404.50 to 53441.50	0.04	0.12	0.24	0.22	-	-		
EOP(IGS R)96 P 2	0.03	0.04	0.18	0.07	-	-		56
53404.50 to 53459.50	0.07	0.10	0.60	0.20	-	-		
EOP(IERS) 97 P 1	0.03	0.03	0.25	0.13	-	-		56
53404.50 to 53459.50	0.02	0.03	0.32	0.19	-	-		
SLR								
EOP(ASI) 3 L 2	0.09	0.10	-	0.20	-	-		55
53404.50 to 53458.50	0.23	0.36	-	0.91	-	-		

EOP(ILRS) 5 L 1	0.13	0.15	-	0.29	-	-	52
53404.50 to 53455.50	0.34	0.25	-	0.84	-	-	
EOP(DUT) 98 L 1	0.12	0.13	-	-	-	-	45
53404.00 to 53448.00	0.56	0.38	-	-	-	-	
EOP(IAA) 2 L 1	0.05	0.05	0.03	0.03	-	-	55
53404.00 to 53458.00	0.26	0.23	0.76	0.37	-	-	
EOP(MCC) 97 L 1	0.06	0.07	-	0.10	-	-	50
53404.00 to 53453.00	0.18	0.28	-	0.62	-	-	
Bulletin A							
EOP(NEOS) 97 C 1	0.07	0.07	0.08	-	-	-	57
53404.00 to 53460.00	0.13	0.21	0.32	-	-	-	