

BULLETIN B 224  
 (IAU 2000)  
 3 october 2006

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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:

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

where

$X_{\text{obs}}$ ,  $Y_{\text{obs}}$  are the observed coordinates of the Celestial Intermediate Pole (CIP) in the Geocentric Celestial Reference System, and

$X_{\text{IAU2000A}}$ ,  $Y_{\text{IAU2000A}}$  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.

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 2006 (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.

AUG 2	53949	0.11139	0.27035	0.181219	-32.818781	-0.06	-0.41
AUG 7	53954	0.10844	0.26496	0.179694	-32.820306	-0.11	-0.35
AUG 12	53959	0.10602	0.26058	0.178440	-32.821560	0.00	-0.10
AUG 17	53964	0.10074	0.25781	0.176714	-32.823286	-0.04	-0.10
AUG 22	53969	0.09409	0.25497	0.174751	-32.825249	-0.05	-0.27
AUG 27	53974	0.08857	0.25392	0.172551	-32.827449	0.01	-0.08
SEP 1	53979	0.08252	0.25393	0.170025	-32.829975	0.13	-0.13

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

SEP 6	53984	0.07684	0.25424	0.167231	-32.832769	0.06	-0.23
SEP 11	53989	0.07086	0.25388	0.163803	-32.836197	-0.19	0.46
SEP 16	53994	0.06338	0.25187	0.159591	-32.840409	0.00	0.00
SEP 21	53999	0.05425	0.25289	0.155508	-32.844492	0.00	0.00
SEP 26	54004	0.04327	0.25204	0.150924	-32.849076	0.00	0.00
OCT 1	54009	0.03276	0.25240	0.145394	-32.854606	0.00	0.00
OCT 6	54014	0.02398	0.25378	0.139736	-32.860264	0.00	0.00
OCT 11	54019	0.01739	0.25623	0.134609	-32.865391	0.00	0.00
OCT 16	54024	0.01199	0.25942	0.129734	-32.870266	0.00	0.00
OCT 21	54029	0.00741	0.26319	0.125080	-32.874920	0.00	0.00
OCT 26	54034	0.00345	0.26747	0.120609	-32.879391	0.00	0.00
OCT 31	54039	0.00000	0.27221	0.116337	-32.883663	0.00	0.00
NOV 5	54044	-0.00297	0.27736	0.112240	-32.887760	0.00	0.00
NOV 10	54049	-0.00550	0.28288	0.108326	-32.891674	0.00	0.00
NOV 15	54054	-0.00757	0.28875	0.104588	-32.895412	0.00	0.00
NOV 20	54059	-0.00918	0.29494	0.101017	-32.898983	0.00	0.00

NOV	25	54064	-0.01030	0.30142	0.097629	-32.902371	0.00	0.00
NOV	30	54069	-0.01093	0.30815	0.094410	-32.905590	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 2005 IERS Annual Report.

	2006 (0 h UTC)	MJD	x "	y "	UT1-UTC s	UT1-UT1R ms	D ms	dX 0.001"	dY 0.001"
AUG	2	53949	0.11139	0.27035	0.180816	-0.403	0.311	-0.06	-0.41
AUG	3	53950	0.11034	0.26969	0.180590	-0.353	0.160	-0.03	-0.41
AUG	4	53951	0.10943	0.26872	0.180496	-0.131	0.000	0.00	-0.33
AUG	5	53952	0.10888	0.26754	0.180578	0.248	-0.124	-0.03	-0.30
AUG	6	53953	0.10861	0.26624	0.180717	0.728	-0.181	-0.09	-0.35
AUG	7	53954	0.10844	0.26496	0.180899	1.205	-0.157	-0.11	-0.35
AUG	8	53955	0.10851	0.26390	0.180985	1.545	0.010	-0.09	-0.29
AUG	9	53956	0.10848	0.26320	0.180843	1.623	0.320	-0.10	-0.29
AUG	10	53957	0.10792	0.26249	0.180335	1.363	0.687	-0.11	-0.38
AUG	11	53958	0.10697	0.26152	0.179492	0.787	0.970	-0.07	-0.37
AUG	12	53959	0.10602	0.26058	0.178447	0.007	1.115	0.00	-0.10
AUG	13	53960	0.10522	0.25979	0.177324	-0.801	1.071	0.04	0.27
AUG	14	53961	0.10447	0.25915	0.176360	-1.459	0.850	0.02	0.45
AUG	15	53962	0.10351	0.25870	0.175654	-1.840	0.571	-0.01	0.35
AUG	16	53963	0.10217	0.25837	0.175219	-1.899	0.292	-0.03	0.12
AUG	17	53964	0.10074	0.25781	0.175048	-1.666	0.045	-0.04	-0.10
AUG	18	53965	0.09950	0.25710	0.175094	-1.226	-0.124	-0.03	-0.30
AUG	19	53966	0.09819	0.25632	0.175259	-0.687	-0.191	-0.01	-0.46
AUG	20	53967	0.09667	0.25562	0.175444	-0.152	-0.122	0.01	-0.51
AUG	21	53968	0.09517	0.25521	0.175478	0.292	0.045	-0.02	-0.41
AUG	22	53969	0.09409	0.25497	0.175340	0.589	0.218	-0.05	-0.27
AUG	23	53970	0.09299	0.25466	0.175040	0.711	0.411	-0.09	-0.21
AUG	24	53971	0.09167	0.25415	0.174525	0.663	0.587	-0.09	-0.26
AUG	25	53972	0.09060	0.25376	0.173880	0.479	0.687	-0.07	-0.30
AUG	26	53973	0.08972	0.25376	0.173171	0.212	0.712	-0.03	-0.21
AUG	27	53974	0.08857	0.25392	0.172480	-0.071	0.724	0.01	-0.08
AUG	28	53975	0.08717	0.25395	0.171745	-0.303	0.689	-0.01	-0.05
AUG	29	53976	0.08586	0.25387	0.171119	-0.425	0.557	-0.05	-0.17
AUG	30	53977	0.08461	0.25387	0.170642	-0.397	0.393	-0.05	-0.26
AUG	31	53978	0.08349	0.25388	0.170335	-0.198	0.224	0.03	-0.22
SEP	1	53979	0.08252	0.25393	0.170186	0.161	0.081	0.13	-0.13
SEP	2	53980	0.08132	0.25402	0.170153	0.639	-0.003	0.18	-0.18
SEP	3	53981	0.07983	0.25408	0.170158	1.154	0.041	0.16	-0.34
SEP	4	53982	0.07836	0.25412	0.170026	1.588	0.234	0.13	-0.44
SEP	5	53983	0.07736	0.25413	0.169646	1.809	0.529	0.10	-0.36
SEP	6	53984	0.07684	0.25424	0.168942	1.711	0.887	0.06	-0.23
SEP	7	53985	0.07622	0.25454	0.167876	1.258	1.256	0.01	-0.13
SEP	8	53986	0.07515	0.25475	0.166470	0.517	1.514	0.00	0.04
SEP	9	53987	0.07387	0.25462	0.164913	-0.356	1.572	-0.02	0.34
SEP	10	53988	0.07247	0.25429	0.163392	-1.163	1.443	-0.11	0.59
SEP	11	53989	0.07086	0.25388	0.162076	-1.728	1.170	-0.19	0.46
SEP	12	53990	0.06914	0.25353	0.161069	-1.954	0.846	-0.14	0.00
SEP	13	53991	0.06741	0.25304	0.160369	-1.840	0.601	0.00	-0.34
SEP	14	53992	0.06591	0.25238	0.159831	-1.466	0.421	0.10	-0.36
SEP	15	53993	0.06466	0.25193	0.159486	-0.947	0.304	0.08	-0.19
SEP	16	53994	0.06338	0.25187	0.159186	-0.404	0.297	0.00	0.00
SEP	17	53995	0.06189	0.25193	0.158865	0.067	0.376	0.00	0.00
SEP	18	53996	0.06028	0.25203	0.158418	0.401	0.564	0.00	0.00
SEP	19	53997	0.05854	0.25240	0.157731	0.567	0.798	0.00	0.00
SEP	20	53998	0.05650	0.25272	0.156827	0.562	0.913	0.00	0.00
SEP	21	53999	0.05425	0.25289	0.155918	0.410	1.029	0.00	0.00
SEP	22	54000	0.05175	0.25299	0.154787	0.159	1.189	0.00	0.00
SEP	23	54001	0.04926	0.25284	0.153563	-0.125	1.133	0.00	0.00
SEP	24	54002	0.04715	0.25262	0.152405	-0.375	1.114	0.00	0.00

SEP	25	54003	0.04508	0.25239	0.151353	-0.524	1.010	0.00	0.00
SEP	26	54004	0.04327	0.25204	0.150397	-0.527	0.913	0.00	0.00
SEP	27	54005	0.04170	0.25183	0.149531	-0.357	0.724	0.00	0.00
SEP	28	54006	0.03981	0.25189	0.148814	-0.019	0.655	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					
2006	MJD	x "	y "	UT1-UTC s	dx 0.001"	dy 0.001"	x 0.001"	y 0.0001s	UT1 0.0001s	dx 0.001"	dy 0.001"				
AUG	2	53949	0.11138	0.27035	0.180817	-.073	-.422	0.02	0.02	0.02	0.03	0.03			
AUG	7	53954	0.10846	0.26495	0.180900	-.088	-.306	0.01	0.01	0.02	0.02	0.02			
AUG	12	53959	0.10602	0.26059	0.178446	-.008	-.110	0.01	0.01	0.02	0.03	0.03			
AUG	17	53964	0.10074	0.25781	0.175048	-.031	-.094	0.01	0.01	0.02	0.02	0.02			
AUG	22	53969	0.09409	0.25497	0.175339	-.045	-.280	0.01	0.01	0.02	0.02	0.02			
AUG	27	53974	0.08857	0.25391	0.172479	0.008	-.078	0.02	0.02	0.02	0.02	0.02			
SEP	1	53979	0.08252	0.25393	0.170184	0.052	-.137	0.01	0.01	0.02	0.03	0.04			
SEP	6	53984	0.07686	0.25424	0.168947	0.072	-.235	0.02	0.02	0.02	0.02	0.02			
SEP	11	53989	0.07086	0.25389	0.162078	-.211	0.389	0.02	0.02	0.02	0.03	0.03			
SEP	16	53994	0.06337	0.25186	0.159183	-	-	0.01	0.01	0.02	-	-			
SEP	21	53999	0.05425	0.25289	0.155924	-	-	0.01	0.01	0.03	-	-			
SEP	26	54004	0.04329	0.25204	0.150404	-	-	0.02	0.01	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) 2006	MJD	DR s	OmegaR (microrad/s)
AUG 2	53949	0.00028	72.921 15123
AUG 7	53954	0.00028	15123
AUG 12	53959	0.00030	15122
AUG 17	53964	0.00040	15113
AUG 22	53969	0.00043	15110
AUG 27	53974	0.00046	15108
SEP 1	53979	0.00051	15103

5 - INFORMATION ON TIME SCALES

No leap second will be introduced in UTC on 31 December 2006.

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.

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EOP series Periods covered		x	y	UT	D	dx	dy	Weighted RMS agreement with Bulletin B	Data Number
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VLBI									
EOP(AUS) 1 R 1 53951.27 to 53993.27		0.07 0.12	0.07 0.12	0.03 0.08	- -	- -	- -		13
EOP(BKG) 3 R 4 53951.27 to 53993.27		0.07 0.09	0.07 0.10	0.03 0.09	- -	- -	- -		13
EOP(BKG) 3 R 2 53949.79 to 54000.80		- -	- -	0.15 0.19	- -	- -	- -		47
EOP(USNO) 5 R 1 53949.79 to 54005.79		- -	- -	0.17 0.13	- -	- -	- -		52
EOP(GSFC) 4 R 1 53949.79 to 54003.79		- -	- -	0.15 0.20	- -	- -	- -		48
EOP(IAA) 5 R 2 53951.27 to 53993.27		0.06 0.09	0.07 0.13	0.03 0.08	- -	0.04 0.06	0.05 0.04		13
EOP(IAA) 5 R 1 53949.79 to 54003.79		- -	- -	0.15 0.12	- -	- -	- -		48
EOP(SPBU) 3 R 3 53951.27 to 53993.27		0.27 0.16	0.36 0.11	0.18 0.09	- -	- -	- -		11
EOP(SPBU) 2 R 1 53949.79 to 54003.79		- -	- -	0.15 0.18	- -	- -	- -		48
EOP(MAO) 3 R 1 53951.29 to 53993.21		0.08 0.11	0.09 0.09	0.04 0.08	- -	0.06 0.08	0.06 0.05		12
EOP(USNO) 6 R 2 53951.27 to 53993.27		0.07 0.12	0.07 0.14	0.03 0.06	- -	- -	- -		13
EOP(IVS) 0 R 1 53951.00 to 53986.00		0.04 0.13	0.04 0.09	0.02 0.07	- -	- -	- -		10
GPS									
EOP(CODE) 98 P 1 53949.50 to 54005.50		0.01 0.06	0.01 0.03	- -	0.08 0.20	- -	- -		57
EOP(EMR) 96 P 3 53949.50 to 54005.50		0.03 0.08	0.03 0.06	- -	0.04 0.36	- -	- -		57
EOP(ESOC) 96 P 1 53949.50 to 54005.50		0.01 0.05	0.01 0.05	- -	0.04 0.38	- -	- -		57
EOP(GFZ) 96 P 2 53949.50 to 54005.50		0.01 0.06	0.01 0.07	- -	0.02 0.25	- -	- -		57
EOP(IAA) 1 P 1 53949.50 to 54005.50		0.03 0.23	0.03 0.13	- -	0.06 0.48	- -	- -		57
EOP(JPL) 96 P 3 53949.50 to 53994.50		0.02 0.03	0.02 0.05	- -	0.13 0.30	- -	- -		46
EOP(NOAA) 96 P 1 53949.50 to 53997.50		0.01 0.13	0.01 0.13	- -	0.02 0.20	- -	- -		49
EOP(SIO) 96 P 1 53949.50 to 54005.50		0.04 0.14	0.05 0.28	- -	0.08 0.15	- -	- -		57
EOP(IGS F)95 P 2 53949.50 to 53994.50		0.02 0.03	0.02 0.08	0.09 0.16	0.06 0.15	- -	- -		46
EOP(IGS R)96 P 2 53949.50 to 54005.50		0.04 0.06	0.05 0.04	0.21 0.53	0.07 0.20	- -	- -		57
EOP(IERS) 97 P 1 53949.50 to 54005.50		0.03 0.02	0.03 0.02	0.17 0.45	0.12 0.16	- -	- -		57
SLR									
EOP(ASI) 3 L 2 53949.50 to 54004.50		0.06 0.18	0.06 0.17	- -	0.13 0.59	- -	- -		56
EOP(IAA) 2 L 1 53949.00 to 54006.00		0.03 0.13	0.03 0.21	0.02 0.23	0.06 0.15	- -	- -		58

EOP(MCC) 97 L 1	0.14	0.17	-	0.10	-	-	51
53949.00 to 53999.00	0.19	0.32	-	2.75	-	-	
EOP(ILRS) 5 L 1	0.04	0.05	-	0.09	-	-	53
53949.50 to 54001.50	0.13	0.14	-	0.46	-	-	
Bulletin A							
EOP(NEOS) 97 C 1	0.04	0.05	0.09	-	-	-	58
53949.00 to 54006.00	0.04	0.13	0.17	-	-	-	