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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 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 2004 (0h UTC)	MJD	x "	y "	UT1R-UTC s	UT1R-TAI s	dX 0.001"	dY 0.001"
Final Bulletin B values.							
JUL 3	53189	-.00175	.51171	-.467829	-32.467829	.12	-.29
JUL 8	53194	.00968	.51475	-.465262	-32.465262	.22	-.07
JUL 13	53199	.02434	.51877	-.462514	-32.462514	.11	.03
JUL 18	53204	.03597	.52075	-.460287	-32.460287	.17	-.15
JUL 23	53209	.05024	.51941	-.458058	-32.458058	.03	-.10
JUL 28	53214	.06401	.51856	-.456102	-32.456103	.23	.05
AUG 2	53219	.07551	.51560	-.454321	-32.454321	.20	-.55

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

AUG 7	53224	.08885	.51477	-.453039	-32.453039	.18	.06
AUG 12	53229	.10289	.51270	-.452548	-32.452548	.46	-.42
AUG 17	53234	.11730	.51301	-.452114	-32.452114	.21	-.17
AUG 22	53239	.12834	.50933	-.452336	-32.452336	.00	.00
AUG 27	53244	.13850	.50235	-.452705	-32.452705	.00	.00
SEP 1	53249	.15189	.49554	-.452435	-32.452435	.00	.00
SEP 6	53254	.16165	.48727	-.452572	-32.452572	.00	.00
SEP 11	53259	.17020	.47777	-.453075	-32.453075	.00	.00
SEP 16	53264	.17783	.46752	-.453938	-32.453938	.00	.00
SEP 21	53269	.18463	.45665	-.455112	-32.455112	.00	.00
SEP 26	53274	.19060	.44525	-.456562	-32.456562	.00	.00
OCT 1	53279	.19574	.43338	-.458286	-32.458286	.00	.00
OCT 6	53284	.20001	.42111	-.460239	-32.460239	.00	.00
OCT 11	53289	.20342	.40853	-.462360	-32.462360	.00	.00
OCT 16	53294	.20596	.39570	-.464619	-32.464619	.00	.00
OCT 21	53299	.20763	.38269	-.466961	-32.466961	.00	.00

OCT 26	53304	.20843	.36960	-.469349	-32.469349	.00	.00
OCT 31	53309	.20837	.35649	-.471744	-32.471744	.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 2003 IERS Annual Report.

2004		MJD	x	y	UT1-UTC	UT1-UT1R	D	dX	dY
(0 h UTC)		"	"	"	s	ms	ms	0.001"	0.001"
JUL	3	53189	-.00175	.51171	-.467605	.224	-.656	.12	-.29
JUL	4	53190	.00041	.51232	-.467113	.451	-.535	.03	-.40
JUL	5	53191	.00274	.51291	-.466554	.462	-.489	-.01	-.30
JUL	6	53192	.00514	.51365	-.466127	.239	-.290	.01	-.08
JUL	7	53193	.00738	.51420	-.465947	-.162	-.094	.09	-.01
JUL	8	53194	.00968	.51475	-.465902	-.640	-.083	.22	-.07
JUL	9	53195	.01235	.51516	-.465747	-1.092	-.167	.33	-.06
JUL	10	53196	.01546	.51611	-.465544	-1.430	-.269	.29	.09
JUL	11	53197	.01829	.51701	-.465196	-1.601	-.456	.18	.25
JUL	12	53198	.02137	.51765	-.464629	-1.577	-.663	.12	.22
JUL	13	53199	.02434	.51877	-.463874	-1.360	-.841	.11	.03
JUL	14	53200	.02625	.51904	-.462958	-.974	-.994	.13	-.15
JUL	15	53201	.02829	.51992	-.461904	-.465	-1.051	.15	-.18
JUL	16	53202	.03046	.52030	-.460880	.106	-1.028	.16	-.14
JUL	17	53203	.03254	.52065	-.459874	.664	-.876	.17	-.11
JUL	18	53204	.03597	.52075	-.459151	1.136	-.768	.17	-.15
JUL	19	53205	.03857	.52068	-.458356	1.459	-.744	.18	-.15
JUL	20	53206	.04152	.52048	-.457672	1.590	-.521	.18	-.07
JUL	21	53207	.04409	.52019	-.457314	1.514	-.230	.18	-.01
JUL	22	53208	.04690	.51971	-.457201	1.246	-.035	.13	-.02
JUL	23	53209	.05024	.51941	-.457222	.836	.068	.03	-.10
JUL	24	53210	.05303	.51917	-.457308	.359	.164	-.08	-.12
JUL	25	53211	.05617	.51896	-.457516	-.089	.043	-.12	-.08
JUL	26	53212	.05916	.51899	-.457363	-.406	-.256	-.06	-.03
JUL	27	53213	.06162	.51901	-.456986	-.517	-.433	.07	.03
JUL	28	53214	.06401	.51856	-.456500	-.397	-.625	.23	.05
JUL	29	53215	.06652	.51832	-.455764	-.093	-.760	.31	.03
JUL	30	53216	.06851	.51760	-.455026	.282	-.696	.32	-.15
JUL	31	53217	.07036	.51699	-.454420	.585	-.572	.28	-.44
AUG	1	53218	.07301	.51615	-.453916	.691	-.324	.25	-.64
AUG	2	53219	.07551	.51560	-.453778	.543	.003	.20	-.55
AUG	3	53220	.07841	.51528	-.453900	.166	.209	.09	-.26
AUG	4	53221	.08105	.51523	-.454158	-.349	.287	.03	-.08
AUG	5	53222	.08397	.51494	-.454434	-.880	.218	.07	-.09
AUG	6	53223	.08658	.51491	-.454562	-1.317	.104	.15	-.11
AUG	7	53224	.08885	.51477	-.454622	-1.582	.001	.18	.06
AUG	8	53225	.09182	.51403	-.454557	-1.640	-.159	.15	.30
AUG	9	53226	.09482	.51372	-.454307	-1.486	-.370	.15	.35
AUG	10	53227	.09742	.51316	-.453830	-1.146	-.552	.21	.16
AUG	11	53228	.09972	.51290	-.453221	-.666	-.599	.34	-.18
AUG	12	53229	.10289	.51270	-.452654	-.107	-.649	.46	-.42
AUG	13	53230	.10573	.51324	-.451948	.459	-.635	.54	-.49
AUG	14	53231	.10890	.51347	-.451409	.955	-.506	.52	-.42
AUG	15	53232	.11165	.51372	-.450956	1.314	-.366	.43	-.35
AUG	16	53233	.11473	.51339	-.450690	1.483	-.141	.31	-.29
AUG	17	53234	.11730	.51301	-.450676	1.438	.114	.21	-.17
AUG	18	53235	.11970	.51231	-.450907	1.189	.338	.24	-.12
AUG	19	53236	.12220	.51162	-.451329	.785	.492	.28	-.12
AUG	20	53237	.12425	.51110	-.451859	.308	.555	.25	-.19
AUG	21	53238	.12670	.51030	-.452404	-.142	.486	.00	.00
AUG	22	53239	.12834	.50933	-.452801	-.466	.303	.00	.00
AUG	23	53240	.13024	.50777	-.452993	-.589	.100	.00	.00
AUG	24	53241	.13221	.50650	-.453001	-.486	-.092	.00	.00
AUG	25	53242	.13457	.50466	-.452829	-.187	-.263	.00	.00

AUG 26 53243 .13614 .50395 -.452514 .215 -.381 .00 .00
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3 - NORMAL VALUES OF THE EARTH ORIENTATION PARAMETERS AT FIVE-DAY INTERVALS
 (IERS evaluation).

		Raw normal values					Uncertainties				
2004	MJD	x	y	UT1-UTC	dX	dY	x	y	UT1	dX	dY
(0 h UTC)		"	"	s	0.001"		0.001"	0.0001s	0.001"		
JUL 3	53189	-.00174	.51168	-.467606	.133	-.388	.03	.03	.07	.06	.08
JUL 8	53194	.00967	.51475	-.465903	.226	-.133	.02	.02	.02	.03	.03
JUL 13	53199	.02434	.51877	-.463874	.092	.036	.01	.01	.03	.03	.03
JUL 18	53204	.03598	.52076	-.459151	.130	-.146	.02	.02	.03	.02	.02
JUL 23	53209	.05022	.51941	-.457221	.179	-.129	.02	.03	.05	.10	.09
JUL 28	53214	.06398	.51857	-.456500	.211	.069	.02	.02	.03	.04	.04
AUG 2	53219	.07551	.51560	-.453778	.205	-.518	.02	.02	.03	.03	.03
AUG 7	53224	.08884	.51477	-.454614	.143	.049	.02	.02	.04	.08	.08
AUG 12	53229	.10290	.51271	-.452652	.450	-.381	.02	.02	.02	.03	.03
AUG 17	53234	.11729	.51301	-.450676	.203	-.156	.02	.02	.03	.03	.03
AUG 22	53239	.12833	.50932	-.452801	-	-	.02	.02	.03	-	-

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
2004 MJD	s	(microrad/s)
JUL 3 53189	-.00035	72.921 15176
JUL 8 53194	-.00057	15195
JUL 13 53199	-.00054	15192
JUL 18 53204	-.00037	15178
JUL 23 53209	-.00040	15180
JUL 28 53214	-.00040	15181
AUG 2 53219	-.00028	15170

5 - INFORMATION ON TIME SCALES

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

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 01	1.14	1.19	.70	-	-	-	13
53193.20 to 53237.27	.09	.18	.05	-	-	-	
EOP(BKG) 3 R 04	.13	.11	.05	-	-	-	13
53193.20 to 53237.27	.16	.21	.08	-	-	-	
EOP(BKG) 3 R 02	-	-	.14	-	-	-	40
53189.33 to 53242.79	-	-	.12	-	-	-	
EOP(GSFC) 4 R 02	.24	.15	.13	-	-	-	15
53192.00 to 53237.27	.22	.13	.06	-	-	-	
EOP(GSFC) 4 R 01	-	-	.13	-	-	-	35
53192.79 to 53242.79	-	-	.16	-	-	-	
EOP(IAA) 3 R 04	.10	.08	.04	-	.14	.06	12
53193.20 to 53237.27	.13	.15	.05	-	.21	.06	
EOP(IAA) 3 R 03	-	-	.13	-	-	-	37
53189.33 to 53242.79	-	-	.16	-	-	-	
EOP(SPBU) 3 R 03	.36	.37	.23	-	-	-	12
53193.20 to 53237.27	.32	.26	.06	-	-	-	
EOP(SPBU) 2 R 01	-	-	.13	-	-	-	30
53195.81 to 53241.79	-	-	.12	-	-	-	
EOP(MAO) 3 R 01	.10	.09	.04	-	.16	.06	11
53193.22 to 53234.25	.16	.18	.08	-	.27	.11	
EOP(USNO) 4 R 01	.10	.09	.03	-	-	-	13
53193.20 to 53237.27	.15	.13	.05	-	-	-	
EOP(IVS) 0 R 01	.08	.07	.03	-	-	-	11
53193.00 to 53227.00	.21	.10	.06	-	-	-	
GPS							
EOP(CODE) 98 P 01	.01	.01	-	.24	-	-	54
53189.50 to 53242.50	.07	.08	-	.51	-	-	
EOP(EMR) 96 P 03	.03	.03	-	.04	-	-	54
53189.50 to 53242.50	.10	.08	-	.60	-	-	
EOP(ESOC) 96 P 01	.01	.02	-	.05	-	-	54
53189.50 to 53242.50	.28	.08	-	.64	-	-	
EOP(GFZ) 96 P 02	.01	.01	-	.01	-	-	54
53189.50 to 53242.50	.08	.08	-	.39	-	-	
EOP(IAA) 1 P 01	.03	.03	-	.06	-	-	54
53189.50 to 53242.50	.19	.22	-	.73	-	-	
EOP(JPL) 96 P 03	.02	.02	-	.11	-	-	54
53189.50 to 53242.50	.06	.07	-	.27	-	-	
EOP(NOAA) 96 P 01	.02	.02	-	.03	-	-	53
53189.50 to 53241.50	.26	.16	-	.37	-	-	
EOP(SIO) 96 P 01	.05	.05	-	.11	-	-	54
53189.50 to 53242.50	.06	.06	-	.66	-	-	
EOP(IGS F)95 P 02	.02	.02	.08	.04	-	-	43
53189.50 to 53231.50	.06	.07	.48	.46	-	-	
EOP(IGS R)96 P 02	.03	.03	.22	.06	-	-	54
53189.50 to 53242.50	.14	.06	.76	.39	-	-	
EOP(IERS) 97 P 01	.03	.04	.21	.14	-	-	54
53189.50 to 53242.50	.04	.03	.63	.55	-	-	
SLR							
EOP(ASI) 3 L 02	.06	.07	-	.16	-	-	53
53189.50 to 53241.50	.29	.26	-	.88	-	-	
EOP(CSR) 95 L 01	.36	.40	.33	-	-	-	18
53190.18 to 53240.89	.22	.41	.69	-	-	-	
EOP(DUT) 98 L 01	.12	.13	-	-	-	-	8
53189.00 to 53196.00	.44	.46	-	-	-	-	

EOP(IAA) 2 L 01	.04	.04	.03	.03	-	-	55
53189.00 to 53243.00	.28	.19	.39	.23	-	-	
EOP(MCC) 97 L 01	.06	.06	-	.10	-	-	55
53189.00 to 53243.00	.17	.18	-	.57	-	-	
Bulletin A							
EOP(NEOS) 97 C 01	.06	.06	.08	-	-	-	55
53189.00 to 53243.00	.13	.12	.56	-	-	-	