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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_{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 2009 (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.

FEB	2	54864	-0.10749	0.21066	0.380983	-33.619017	-0.20	-0.14
FEB	7	54869	-0.11381	0.22798	0.377247	-33.622753	-0.18	-0.08
FEB	12	54874	-0.12139	0.24415	0.372964	-33.627036	-0.25	-0.08
FEB	17	54879	-0.12863	0.26215	0.369570	-33.630430	0.08	-0.03
FEB	22	54884	-0.13420	0.27587	0.366235	-33.633765	-0.20	0.04
FEB	27	54889	-0.13361	0.29257	0.362578	-33.637422	-0.07	-0.01
MAR	4	54894	-0.13417	0.30972	0.357345	-33.642655	-0.22	-0.10

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

MAR	9	54899	-0.13280	0.32885	0.351735	-33.648265	0.14	-0.10
MAR	14	54904	-0.13089	0.34676	0.345948	-33.654052	0.02	-0.04
MAR	19	54909	-0.12725	0.36337	0.340164	-33.659836	0.02	-0.04
MAR	24	54914	-0.12211	0.38049	0.334089	-33.665911	0.02	-0.04
MAR	29	54919	-0.11805	0.39818	0.327921	-33.672079	0.02	-0.04
APR	3	54924	-0.11725	0.41217	0.322100	-33.677900	0.02	-0.05
APR	8	54929	-0.11111	0.42816	0.315954	-33.684046	0.02	-0.05
APR	13	54934	-0.10497	0.44238	0.309702	-33.690298	0.02	-0.05
APR	18	54939	-0.09814	0.45744	0.303507	-33.696493	0.02	-0.05
APR	23	54944	-0.08983	0.46986	0.297374	-33.702626	0.02	-0.05
APR	28	54949	-0.07831	0.48266	0.291327	-33.708673	0.02	-0.05
MAY	3	54954	-0.06793	0.49361	0.285453	-33.714547	0.00	0.00
MAY	8	54959	-0.05589	0.50194	0.279737	-33.720263	0.00	0.00
MAY	13	54964	-0.04447	0.50959	0.274268	-33.725732	0.00	0.00
MAY	18	54969	-0.02981	0.51795	0.269077	-33.730923	0.00	0.00
MAY	23	54974	-0.01225	0.52472	0.264158	-33.735842	0.00	0.00

MAY 28 54979 0.00452 0.53048 0.259563 -33.740437 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 2007 IERS Annual Report.

2009		MJD	x	y	UT1-UTC	UT1-UT1R	D	dX	dY
(0 h UTC)			"	"	s	ms	ms	0.001"	0.001"
FEB	2	54864	-0.10749	0.21066	0.380714	-0.269	0.714	-0.20	-0.14
FEB	3	54865	-0.10840	0.21358	0.380043	-0.304	0.557	-0.19	-0.08
FEB	4	54866	-0.10902	0.21701	0.379507	-0.142	0.450	-0.17	-0.02
FEB	5	54867	-0.11004	0.22074	0.379066	0.174	0.423	-0.15	0.00
FEB	6	54868	-0.11167	0.22443	0.378629	0.547	0.467	-0.15	-0.02
FEB	7	54869	-0.11381	0.22798	0.378094	0.847	0.641	-0.18	-0.08
FEB	8	54870	-0.11590	0.23143	0.377335	0.952	0.896	-0.23	-0.13
FEB	9	54871	-0.11809	0.23448	0.376304	0.793	1.169	-0.29	-0.16
FEB	10	54872	-0.11973	0.23723	0.375024	0.378	1.393	-0.33	-0.16
FEB	11	54873	-0.12054	0.24042	0.373583	-0.204	1.458	-0.31	-0.13
FEB	12	54874	-0.12139	0.24415	0.372143	-0.821	1.380	-0.25	-0.08
FEB	13	54875	-0.12238	0.24776	0.370881	-1.338	1.137	-0.11	-0.05
FEB	14	54876	-0.12369	0.25126	0.369921	-1.662	0.842	0.05	-0.05
FEB	15	54877	-0.12527	0.25496	0.369211	-1.749	0.613	0.18	-0.05
FEB	16	54878	-0.12682	0.25880	0.368679	-1.604	0.422	0.17	-0.05
FEB	17	54879	-0.12863	0.26215	0.368304	-1.265	0.300	0.08	-0.03
FEB	18	54880	-0.13049	0.26510	0.368065	-0.788	0.188	-0.07	-0.01
FEB	19	54881	-0.13235	0.26800	0.367905	-0.239	0.137	-0.19	0.01
FEB	20	54882	-0.13338	0.27047	0.367770	0.307	0.182	-0.25	0.03
FEB	21	54883	-0.13371	0.27309	0.367614	0.780	0.231	-0.24	0.03
FEB	22	54884	-0.13420	0.27587	0.367353	1.118	0.344	-0.20	0.04
FEB	23	54885	-0.13382	0.27872	0.366872	1.277	0.589	-0.19	-0.01
FEB	24	54886	-0.13312	0.28218	0.366152	1.240	0.841	-0.16	-0.01
FEB	25	54887	-0.13336	0.28568	0.365217	1.020	1.002	-0.14	-0.02
FEB	26	54888	-0.13358	0.28900	0.364077	0.666	1.173	-0.10	-0.02
FEB	27	54889	-0.13361	0.29257	0.362829	0.251	1.263	-0.07	-0.01
FEB	28	54890	-0.13399	0.29622	0.361563	-0.132	1.232	-0.06	-0.01
MAR	1	54891	-0.13438	0.29986	0.360343	-0.394	1.159	-0.09	-0.02
MAR	2	54892	-0.13479	0.30332	0.359210	-0.470	1.041	-0.13	-0.05
MAR	3	54893	-0.13478	0.30639	0.358197	-0.339	0.930	-0.19	-0.08
MAR	4	54894	-0.13417	0.30972	0.357310	-0.035	0.793	-0.22	-0.10
MAR	5	54895	-0.13371	0.31326	0.356538	0.359	0.717	-0.20	-0.11
MAR	6	54896	-0.13345	0.31688	0.355776	0.726	0.847	-0.12	-0.11
MAR	7	54897	-0.13314	0.32077	0.354879	0.947	1.021	0.01	-0.11
MAR	8	54898	-0.13300	0.32466	0.353779	0.934	1.222	0.11	-0.12
MAR	9	54899	-0.13280	0.32885	0.352396	0.661	1.537	0.14	-0.10
MAR	10	54900	-0.13252	0.33300	0.350766	0.173	1.744	0.06	-0.05
MAR	11	54901	-0.13213	0.33680	0.349016	-0.420	1.770	-0.10	0.04
MAR	12	54902	-0.13199	0.34068	0.347276	-0.988	1.668	-0.25	0.13
MAR	13	54903	-0.13174	0.34389	0.345696	-1.412	1.489	-0.26	0.14
MAR	14	54904	-0.13089	0.34676	0.344332	-1.616	1.263	0.02	-0.04
MAR	15	54905	-0.13026	0.35022	0.343205	-1.580	1.013	0.02	-0.04
MAR	16	54906	-0.12951	0.35340	0.342281	-1.326	0.809	0.02	-0.04
MAR	17	54907	-0.12850	0.35663	0.341524	-0.907	0.639	0.02	-0.04
MAR	18	54908	-0.12770	0.35995	0.340894	-0.390	0.567	0.02	-0.04
MAR	19	54909	-0.12725	0.36337	0.340317	0.153	0.595	0.02	-0.04
MAR	20	54910	-0.12680	0.36680	0.339695	0.650	0.672	0.02	-0.04
MAR	21	54911	-0.12593	0.37014	0.338929	1.034	0.871	0.02	-0.04
MAR	22	54912	-0.12482	0.37367	0.337930	1.256	1.136	0.02	-0.04
MAR	23	54913	-0.12353	0.37684	0.336682	1.285	1.359	0.02	-0.04
MAR	24	54914	-0.12211	0.38049	0.335211	1.122	1.546	0.02	-0.04
MAR	25	54915	-0.12091	0.38435	0.333594	0.795	1.652	0.02	-0.04
MAR	26	54916	-0.11989	0.38801	0.331944	0.370	1.675	0.02	-0.04
MAR	27	54917	-0.11918	0.39161	0.330283	-0.063	1.633	0.02	-0.04
MAR	28	54918	-0.11854	0.39497	0.328711	-0.405	1.501	0.02	-0.04

MAR	29	54919	-0.11805	0.39818	0.327350	-0.571	1.269	0.02	-0.04
MAR	30	54920	-0.11841	0.40090	0.326253	-0.520	1.001	0.02	-0.04
MAR	31	54921	-0.11887	0.40354	0.325328	-0.272	0.890	0.02	-0.04
APR	1	54922	-0.11879	0.40627	0.324567	0.099	0.774	0.02	-0.05
APR	2	54923	-0.11818	0.40907	0.323775	0.480	0.836	0.02	-0.05
APR	3	54924	-0.11725	0.41217	0.322854	0.754	1.005	0.02	-0.05
APR	4	54925	-0.11619	0.41532	0.321722	0.831	1.241	0.02	-0.05
APR	5	54926	-0.11475	0.41859	0.320343	0.672	1.486	0.02	-0.05
APR	6	54927	-0.11328	0.42198	0.318737	0.298	1.678	0.02	-0.05
APR	7	54928	-0.11213	0.42525	0.316982	-0.214	1.771	0.02	-0.05
APR	8	54929	-0.11111	0.42816	0.315200	-0.753	1.743	0.02	-0.05
APR	9	54930	-0.10988	0.43068	0.313497	-1.205	1.608	0.02	-0.05
APR	10	54931	-0.10870	0.43321	0.311975	-1.477	1.400	0.02	-0.05
APR	11	54932	-0.10752	0.43599	0.310677	-1.525	1.169	0.02	-0.05
APR	12	54933	-0.10618	0.43904	0.309602	-1.349	0.959	0.02	-0.05
APR	13	54934	-0.10497	0.44238	0.308714	-0.988	0.802	0.02	-0.05
APR	14	54935	-0.10369	0.44585	0.307952	-0.505	0.713	0.02	-0.05
APR	15	54936	-0.10243	0.44932	0.307243	0.028	0.698	0.02	-0.05
APR	16	54937	-0.10115	0.45224	0.306514	0.539	0.754	0.02	-0.05
APR	17	54938	-0.09972	0.45485	0.305704	0.961	0.870	0.02	-0.05
APR	18	54939	-0.09814	0.45744	0.304750	1.243	1.031	0.02	-0.05
APR	19	54940	-0.09634	0.45998	0.303625	1.348	1.216	0.02	-0.05
APR	20	54941	-0.09446	0.46267	0.302312	1.265	1.400	0.02	-0.05
APR	21	54942	-0.09281	0.46511	0.300831	1.008	1.556	0.02	-0.05
APR	22	54943	-0.09143	0.46742	0.299217	0.623	1.651	0.02	-0.05
APR	23	54944	-0.08983	0.46986	0.297556	0.182	1.657	0.02	-0.05
APR	24	54945	-0.08788	0.47224	0.295939	-0.216	1.562	0.02	-0.05
APR	25	54946	-0.08593	0.47462	0.294464	-0.477	1.379	0.02	-0.05
APR	26	54947	-0.08371	0.47738	0.293196	-0.533	1.153	0.02	-0.05
APR	27	54948	-0.08101	0.48008	0.292150	-0.376	0.952	0.02	-0.05
APR	28	54949	-0.07831	0.48266	0.291263	-0.064	0.839	0.02	-0.05
APR	29	54950	-0.07603	0.48535	0.290433	0.293	0.850	0.02	-0.05
APR	30	54951	-0.07371	0.48754	0.289529	0.573	0.978	0.02	-0.05

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

Raw normal values							Uncertainties				
2009	MJD	x	y	UT1-UTC	dX	dY	x	y	UT1	dX	dY
(0 h UTC)		"	"	s	0.001"		0.001"	0.0001s		0.001"	
FEB 2	54864	-0.10750	0.21064	0.380717	-.239	-.120	0.01	0.01	0.02	0.05	0.08
FEB 7	54869	-0.11382	0.22796	0.378097	-.127	-.117	0.01	0.01	0.01	0.03	0.05
FEB 12	54874	-0.12139	0.24413	0.372141	-.222	-.096	0.01	0.01	0.01	0.03	0.04
FEB 17	54879	-0.12864	0.26213	0.368307	0.020	0.021	0.01	0.01	0.01	0.03	0.05
FEB 22	54884	-0.13421	0.27584	0.367352	-.178	0.081	0.01	0.01	0.01	0.02	0.04
FEB 27	54889	-0.13362	0.29255	0.362829	-.016	0.066	0.01	0.01	0.01	0.02	0.04
MAR 4	54894	-0.13418	0.30970	0.357310	-.092	-.079	0.01	0.01	0.01	0.01	0.04
MAR 9	54899	-0.13281	0.32884	0.352424	0.109	-.019	0.01	0.01	0.02	0.13	0.14
MAR 14	54904	-0.13090	0.34675	0.344325	0.003	-.016	0.01	0.01	0.02	0.08	0.08

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	
2009	MJD			(microrad/s)	
FEB 2	54864		0.00059	72.921	15097
FEB 7	54869		0.00087		15074
FEB 12	54874		0.00080		15079

FEB 17	54879	0.00072	15086
FEB 22	54884	0.00060	15096
FEB 27	54889	0.00085	15075
MAR 4	54894	0.00116	15048

5 - INFORMATION ON TIME SCALES

No leap second will be introduced in UTC on 30 June 2009

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