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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 2007 (0h UTC) | MJD | x " | y " | UT1R-UTC s | UT1R-TAI s | dX 0.001" | dY 0.001" |
|--------------------------|-----|--------|--------|---------------|---------------|--------------|--------------|
|--------------------------|-----|--------|--------|---------------|---------------|--------------|--------------|

Final Bulletin B values.

| | | | | | | | | |
|-----|----|-------|----------|---------|-----------|------------|------|-------|
| FEB | 3 | 54134 | -0.04778 | 0.40280 | -0.002566 | -33.002566 | 0.15 | -0.28 |
| FEB | 8 | 54139 | -0.03854 | 0.41238 | -0.009635 | -33.009635 | 0.15 | -0.11 |
| FEB | 13 | 54144 | -0.03375 | 0.42166 | -0.016457 | -33.016457 | 0.33 | -0.26 |
| FEB | 18 | 54149 | -0.02951 | 0.42890 | -0.021575 | -33.021575 | 0.06 | -0.36 |
| FEB | 23 | 54154 | -0.02343 | 0.43570 | -0.025533 | -33.025533 | 0.35 | -0.12 |
| FEB | 28 | 54159 | -0.01460 | 0.44178 | -0.030101 | -33.030101 | 0.27 | -0.26 |
| MAR | 5 | 54164 | -0.01160 | 0.44986 | -0.034465 | -33.034465 | 0.36 | -0.52 |

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

| | | | | | | | | |
|-----|----|-------|----------|---------|-----------|------------|------|-------|
| MAR | 10 | 54169 | -0.00812 | 0.45570 | -0.039730 | -33.039730 | 0.13 | -0.19 |
| MAR | 15 | 54174 | -0.00439 | 0.46068 | -0.045169 | -33.045169 | 0.28 | -0.53 |
| MAR | 20 | 54179 | 0.00514 | 0.46864 | -0.050724 | -33.050724 | 0.00 | 0.00 |
| MAR | 25 | 54184 | 0.00956 | 0.47321 | -0.057095 | -33.057095 | 0.00 | 0.00 |
| MAR | 30 | 54189 | 0.01813 | 0.47682 | -0.062996 | -33.062996 | 0.00 | 0.00 |
| APR | 4 | 54194 | 0.02974 | 0.48061 | -0.069031 | -33.069031 | 0.00 | 0.00 |
| APR | 9 | 54199 | 0.04054 | 0.48269 | -0.074944 | -33.074944 | 0.00 | 0.00 |
| APR | 14 | 54204 | 0.05110 | 0.48382 | -0.080757 | -33.080757 | 0.00 | 0.00 |
| APR | 19 | 54209 | 0.06149 | 0.48412 | -0.086418 | -33.086418 | 0.00 | 0.00 |
| APR | 24 | 54214 | 0.07184 | 0.48360 | -0.091927 | -33.091927 | 0.00 | 0.00 |
| APR | 29 | 54219 | 0.08216 | 0.48230 | -0.097259 | -33.097259 | 0.00 | 0.00 |
| MAY | 4 | 54224 | 0.09241 | 0.48021 | -0.102387 | -33.102387 | 0.00 | 0.00 |
| MAY | 9 | 54229 | 0.10255 | 0.47733 | -0.107277 | -33.107277 | 0.00 | 0.00 |
| MAY | 14 | 54234 | 0.11252 | 0.47370 | -0.111900 | -33.111900 | 0.00 | 0.00 |
| MAY | 19 | 54239 | 0.12226 | 0.46930 | -0.116234 | -33.116234 | 0.00 | 0.00 |
| MAY | 24 | 54244 | 0.13172 | 0.46416 | -0.120255 | -33.120255 | 0.00 | 0.00 |

MAY 29 54249 0.14082 0.45829 -0.123939 -33.123939 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.

| 2007 | MJD | x | y | UT1-UTC | UT1-UT1R | D | dX | dY |
|-----------|-------|----------|---------|-----------|----------|-------|--------|--------|
| (0 h UTC) | " | " | " | s | ms | ms | 0.001" | 0.001" |
| FEB 3 | 54134 | -0.04778 | 0.40280 | -0.001954 | 0.612 | 1.509 | 0.15 | -0.28 |
| FEB 4 | 54135 | -0.04555 | 0.40403 | -0.003534 | 0.466 | 1.637 | 0.12 | -0.29 |
| FEB 5 | 54136 | -0.04362 | 0.40559 | -0.005208 | 0.206 | 1.703 | 0.09 | -0.23 |
| FEB 6 | 54137 | -0.04122 | 0.40756 | -0.006916 | -0.102 | 1.709 | 0.09 | -0.11 |
| FEB 7 | 54138 | -0.03954 | 0.40994 | -0.008604 | -0.388 | 1.663 | 0.11 | -0.05 |
| FEB 8 | 54139 | -0.03854 | 0.41238 | -0.010223 | -0.588 | 1.538 | 0.15 | -0.11 |
| FEB 9 | 54140 | -0.03774 | 0.41464 | -0.011665 | -0.653 | 1.361 | 0.19 | -0.22 |
| FEB 10 | 54141 | -0.03686 | 0.41651 | -0.012934 | -0.553 | 1.184 | 0.22 | -0.23 |
| FEB 11 | 54142 | -0.03600 | 0.41817 | -0.014037 | -0.284 | 1.029 | 0.29 | -0.13 |
| FEB 12 | 54143 | -0.03497 | 0.41989 | -0.015002 | 0.133 | 0.876 | 0.33 | -0.11 |
| FEB 13 | 54144 | -0.03375 | 0.42166 | -0.015812 | 0.646 | 0.756 | 0.33 | -0.26 |
| FEB 14 | 54145 | -0.03270 | 0.42329 | -0.016548 | 1.168 | 0.717 | 0.32 | -0.46 |
| FEB 15 | 54146 | -0.03147 | 0.42494 | -0.017286 | 1.588 | 0.828 | 0.36 | -0.50 |
| FEB 16 | 54147 | -0.03076 | 0.42648 | -0.018121 | 1.787 | 0.923 | 0.35 | -0.36 |
| FEB 17 | 54148 | -0.03031 | 0.42764 | -0.019153 | 1.675 | 1.114 | 0.23 | -0.25 |
| FEB 18 | 54149 | -0.02951 | 0.42890 | -0.020342 | 1.233 | 1.371 | 0.06 | -0.36 |
| FEB 19 | 54150 | -0.02856 | 0.43034 | -0.021856 | 0.530 | 1.595 | -0.01 | -0.55 |
| FEB 20 | 54151 | -0.02769 | 0.43172 | -0.023473 | -0.284 | 1.564 | 0.09 | -0.58 |
| FEB 21 | 54152 | -0.02691 | 0.43308 | -0.025003 | -1.029 | 1.391 | 0.25 | -0.42 |
| FEB 22 | 54153 | -0.02560 | 0.43429 | -0.026291 | -1.544 | 1.115 | 0.36 | -0.23 |
| FEB 23 | 54154 | -0.02343 | 0.43570 | -0.027276 | -1.743 | 0.847 | 0.35 | -0.12 |
| FEB 24 | 54155 | -0.02133 | 0.43687 | -0.028038 | -1.624 | 0.616 | 0.31 | -0.11 |
| FEB 25 | 54156 | -0.01917 | 0.43781 | -0.028562 | -1.259 | 0.464 | 0.27 | -0.13 |
| FEB 26 | 54157 | -0.01748 | 0.43906 | -0.029006 | -0.760 | 0.421 | 0.26 | -0.18 |
| FEB 27 | 54158 | -0.01593 | 0.44018 | -0.029441 | -0.248 | 0.446 | 0.27 | -0.23 |
| FEB 28 | 54159 | -0.01460 | 0.44178 | -0.029924 | 0.178 | 0.537 | 0.27 | -0.26 |
| MAR 1 | 54160 | -0.01377 | 0.44344 | -0.030529 | 0.448 | 0.688 | 0.27 | -0.19 |
| MAR 2 | 54161 | -0.01312 | 0.44531 | -0.031302 | 0.534 | 0.866 | 0.31 | -0.19 |
| MAR 3 | 54162 | -0.01274 | 0.44713 | -0.032252 | 0.447 | 1.029 | 0.37 | -0.30 |
| MAR 4 | 54163 | -0.01226 | 0.44855 | -0.033343 | 0.226 | 1.151 | 0.39 | -0.46 |
| MAR 5 | 54164 | -0.01160 | 0.44986 | -0.034532 | -0.068 | 1.227 | 0.36 | -0.52 |
| MAR 6 | 54165 | -0.01109 | 0.45099 | -0.035770 | -0.362 | 1.237 | 0.30 | -0.34 |
| MAR 7 | 54166 | -0.01056 | 0.45210 | -0.036985 | -0.587 | 1.197 | 0.22 | -0.21 |
| MAR 8 | 54167 | -0.00980 | 0.45354 | -0.038150 | -0.687 | 1.119 | 0.00 | 0.00 |
| MAR 9 | 54168 | -0.00901 | 0.45478 | -0.039213 | -0.626 | 0.985 | 0.13 | -0.19 |
| MAR 10 | 54169 | -0.00812 | 0.45570 | -0.040121 | -0.391 | 0.776 | 0.13 | -0.19 |
| MAR 11 | 54170 | -0.00726 | 0.45656 | -0.040854 | 0.002 | 0.662 | 0.15 | -0.09 |
| MAR 12 | 54171 | -0.00640 | 0.45740 | -0.041464 | 0.509 | 0.572 | 0.15 | -0.03 |
| MAR 13 | 54172 | -0.00573 | 0.45843 | -0.042026 | 1.062 | 0.554 | 0.12 | -0.15 |
| MAR 14 | 54173 | -0.00527 | 0.45964 | -0.042606 | 1.561 | 0.609 | 0.19 | -0.47 |
| MAR 15 | 54174 | -0.00439 | 0.46068 | -0.043279 | 1.891 | 0.789 | 0.28 | -0.53 |
| MAR 16 | 54175 | -0.00280 | 0.46185 | -0.044214 | 1.944 | 1.121 | 0.35 | -0.26 |
| MAR 17 | 54176 | -0.00084 | 0.46310 | -0.045529 | 1.658 | 1.537 | 0.00 | 0.00 |
| MAR 18 | 54177 | 0.00127 | 0.46442 | -0.047267 | 1.050 | 1.889 | 0.00 | 0.00 |
| MAR 19 | 54178 | 0.00336 | 0.46631 | -0.049257 | 0.232 | 2.050 | 0.00 | 0.00 |
| MAR 20 | 54179 | 0.00514 | 0.46864 | -0.051341 | -0.617 | 2.072 | 0.00 | 0.00 |
| MAR 21 | 54180 | 0.00640 | 0.47041 | -0.053382 | -1.304 | 1.830 | 0.00 | 0.00 |
| MAR 22 | 54181 | 0.00701 | 0.47138 | -0.055127 | -1.689 | 1.434 | 0.00 | 0.00 |
| MAR 23 | 54182 | 0.00747 | 0.47206 | -0.056431 | -1.725 | 1.066 | 0.00 | 0.00 |
| MAR 24 | 54183 | 0.00833 | 0.47270 | -0.057349 | -1.459 | 0.773 | 0.00 | 0.00 |
| MAR 25 | 54184 | 0.00956 | 0.47321 | -0.058102 | -1.007 | 0.691 | 0.00 | 0.00 |
| MAR 26 | 54185 | 0.01067 | 0.47376 | -0.058816 | -0.502 | 0.706 | 0.00 | 0.00 |
| MAR 27 | 54186 | 0.01169 | 0.47452 | -0.059546 | -0.058 | 0.776 | 0.00 | 0.00 |
| MAR 28 | 54187 | 0.01351 | 0.47528 | -0.060387 | 0.246 | 0.948 | 0.00 | 0.00 |
| MAR 29 | 54188 | 0.01576 | 0.47600 | -0.061447 | 0.377 | 1.109 | 0.00 | 0.00 |

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

| | | Raw normal values | | | | | Uncertainties | | | | |
|-----------|-------|-------------------|---------|-----------|--------|-------|---------------|---------|--------|------|------|
| 2007 | 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 3 | 54134 | -0.04777 | 0.40281 | -0.001956 | 0.128 | -.309 | 0.02 | 0.01 | 0.01 | 0.03 | 0.03 |
| FEB 8 | 54139 | -0.03852 | 0.41239 | -0.010227 | 0.285 | -.212 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 |
| FEB 13 | 54144 | -0.03372 | 0.42166 | -0.015813 | 0.339 | -.256 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |
| FEB 18 | 54149 | -0.02952 | 0.42891 | -0.020340 | 0.037 | -.350 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
| FEB 23 | 54154 | -0.02342 | 0.43573 | -0.027278 | 0.345 | -.122 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| FEB 28 | 54159 | -0.01457 | 0.44176 | -0.029923 | 0.244 | -.255 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| MAR 5 | 54164 | -0.01161 | 0.44986 | -0.034534 | 0.378 | -.564 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 |
| MAR 10 | 54169 | -0.00812 | 0.45571 | -0.040125 | - | - | 0.01 | 0.02 | 0.02 | - | - |
| MAR 15 | 54174 | -0.00437 | 0.46069 | -0.043277 | 0.369 | -.542 | 0.01 | 0.01 | 0.01 | 0.02 | 0.03 |
| MAR 20 | 54179 | 0.00514 | 0.46864 | -0.051343 | - | - | 0.02 | 0.02 | 0.02 | - | - |
| MAR 25 | 54184 | 0.00956 | 0.47321 | -0.058104 | - | - | 0.01 | 0.01 | 0.02 | - | - |

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 |
|---------------|-------|--------------|
| 2007 MJD | s | (microrad/s) |
| FEB 3 | 54134 | 0.00144 |
| FEB 8 | 54139 | 0.00140 |
| FEB 13 | 54144 | 0.00130 |
| FEB 18 | 54149 | 0.00078 |
| FEB 23 | 54154 | 0.00082 |
| FEB 28 | 54159 | 0.00090 |
| MAR 5 | 54164 | 0.00093 |

5 - INFORMATION ON TIME SCALES

No leap second was introduced in UTC on 31 December 2006.
 No leap second will be introduced in UTC on 30 June 2007.
 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

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 | 0.07 | 0.07 | 0.03 | - | - | - | 12 |
| 54137.21 to 54175.27 | 0.09 | 0.13 | 0.06 | - | - | - | |
| EOP(BKG) 3 R 4 | 0.06 | 0.06 | 0.03 | - | - | - | 11 |
| 54137.21 to 54175.27 | 0.09 | 0.13 | 0.06 | - | - | - | |
| EOP(BKG) 3 R 2 | - | - | 0.09 | - | - | - | 48 |
| 54134.33 to 54187.79 | - | - | 0.11 | - | - | - | |
| EOP(USNO) 5 R 1 | - | - | 0.10 | - | - | - | 50 |
| 54134.33 to 54187.79 | - | - | 0.09 | - | - | - | |
| EOP(GSFC) 6 R 1 | - | - | 0.09 | - | - | - | 48 |
| 54134.33 to 54187.79 | - | - | 0.11 | - | - | - | |
| EOP(IAA) 5 R 2 | 0.05 | 0.05 | 0.02 | - | 0.04 | 0.04 | 11 |
| 54137.21 to 54175.28 | 0.18 | 0.13 | 0.06 | - | 0.10 | 0.09 | |
| EOP(IAA) 5 R 1 | - | - | 0.09 | - | - | - | 47 |
| 54134.33 to 54186.79 | - | - | 0.13 | - | - | - | |
| EOP(SPBU) 3 R 3 | 0.21 | 0.28 | 0.13 | - | - | - | 10 |
| 54137.21 to 54175.27 | 0.17 | 0.31 | 0.08 | - | - | - | |
| EOP(SPBU) 2 R 1 | - | - | 0.10 | - | - | - | 48 |
| 54134.33 to 54187.79 | - | - | 0.12 | - | - | - | |
| EOP(MAO) 3 R 1 | 0.06 | 0.07 | 0.03 | - | 0.05 | 0.05 | 10 |
| 54137.22 to 54166.24 | 0.11 | 0.13 | 0.07 | - | 0.09 | 0.08 | |
| EOP(GSFC) 6 R 1 | 0.05 | 0.05 | 0.02 | - | - | - | 10 |
| 54137.21 to 54166.27 | 0.08 | 0.11 | 0.10 | - | - | - | |
| EOP(USNO) 6 R 2 | 0.05 | 0.05 | 0.02 | - | - | - | 12 |
| 54137.21 to 54175.27 | 0.07 | 0.09 | 0.06 | - | - | - | |
| EOP(IVS) 7 R 1 | 0.02 | 0.02 | 0.01 | - | - | - | 8 |
| 54137.21 to 54166.27 | 0.08 | 0.19 | 0.08 | - | - | - | |

GPS

| | | | | | | | |
|----------------------|------|------|------|------|---|---|----|
| EOP(CODE) 98 P 1 | 0.01 | 0.01 | - | 0.07 | - | - | 54 |
| 54134.50 to 54187.50 | 0.05 | 0.04 | - | 0.25 | - | - | |
| EOP(EMR) 96 P 3 | 0.03 | 0.03 | - | 0.04 | - | - | 54 |
| 54134.50 to 54187.50 | 0.06 | 0.05 | - | 0.47 | - | - | |
| EOP(ESOC) 96 P 1 | 0.01 | 0.01 | - | 0.04 | - | - | 54 |
| 54134.50 to 54187.50 | 0.05 | 0.05 | - | 0.79 | - | - | |
| EOP(GFZ) 96 P 2 | 0.01 | 0.01 | - | 0.02 | - | - | 54 |
| 54134.50 to 54187.50 | 0.04 | 0.14 | - | 0.32 | - | - | |
| EOP(IAA) 1 P 1 | 0.03 | 0.03 | - | 0.06 | - | - | 54 |
| 54134.50 to 54187.50 | 0.17 | 0.61 | - | 0.36 | - | - | |
| EOP(JPL) 96 P 3 | 0.02 | 0.02 | - | 0.13 | - | - | 43 |
| 54134.50 to 54176.50 | 0.04 | 0.04 | - | 0.25 | - | - | |
| EOP(NOAA) 96 P 1 | 0.01 | 0.01 | - | 0.01 | - | - | 53 |
| 54134.50 to 54186.50 | 0.09 | 0.10 | - | 0.21 | - | - | |
| EOP(SIO) 96 P 1 | 0.04 | 0.05 | - | 0.12 | - | - | 54 |
| 54134.50 to 54187.50 | 0.08 | 0.28 | - | 0.24 | - | - | |
| EOP(IGS F)95 P 2 | 0.01 | 0.02 | 0.08 | 0.04 | - | - | 43 |
| 54134.50 to 54176.50 | 0.02 | 0.05 | 0.15 | 0.09 | - | - | |
| EOP(IGS R)96 P 2 | 0.03 | 0.04 | 0.18 | 0.07 | - | - | 54 |
| 54134.50 to 54187.50 | 0.05 | 0.07 | 0.72 | 0.21 | - | - | |
| EOP(IERS) 97 P 1 | 0.03 | 0.03 | 0.15 | 0.10 | - | - | 54 |
| 54134.50 to 54187.50 | 0.03 | 0.02 | 0.24 | 0.12 | - | - | |

SLR

| | | | | | | | |
|----------------------|------|------|------|------|---|---|----|
| EOP(ASI) 3 L 2 | 0.07 | 0.07 | - | 0.00 | - | - | 53 |
| 54134.50 to 54186.50 | 0.29 | 0.25 | - | 0.00 | - | - | |
| EOP(IAA) 2 L 1 | 0.04 | 0.04 | 0.02 | 0.02 | - | - | 55 |
| 54134.00 to 54188.00 | 0.14 | 0.13 | 0.24 | 0.25 | - | - | |
| EOP(MCC) 97 L 1 | 0.14 | 0.14 | - | 0.10 | - | - | 34 |

| | | | | | | | |
|----------------------|------|------|------|------|---|---|----|
| 54134.00 to 54181.00 | 0.28 | 0.15 | - | 2.64 | - | - | |
| EOP(ILRS) 5 L 1 | 0.08 | 0.07 | - | 0.15 | - | - | 50 |
| 54134.50 to 54183.50 | 0.13 | 0.14 | - | 0.41 | - | - | |
| Bulletin A | | | | | | | |
| EOP(NEOS) 97 C 1 | 0.06 | 0.06 | 0.09 | - | - | - | 55 |
| 54134.00 to 54188.00 | 0.05 | 0.04 | 0.09 | - | - | - | |