

Table 7. Mean fractional deviation of the TAI scale interval from that of TT

The fractional deviation d of the scale interval of TAI from that of TT (in practice the SI second on the geoid), and its relative uncertainty, are computed by the BIPM for all the intervals of computation of TAI, according to the method described in 'Azoubib J., Granveaud M., Guinot B., Metrologia 1977, 13, pp. 87-93', using all available measurements from the most accurate primary frequency standards (PFS) IT-CSF1, KRIS-1, NICT-CSF1, NIST-F1, NMIJ-F1, NPL-CSF1, NPL-CSF2, PTB-CS1, PTB-CS2, PTB-CSF1, PTB-CSF2, SYRTE-FO1, SYRTE-FO2, SYRTE-FOM, SYRTE-JPO and secondary frequency standard (SFS) SYRTE-FORb consistently corrected for the black-body radiation shift.

In this computation, the uncertainty of the link to TAI has been computed using the standard uncertainty of [UTC-UTC(k)], following the recommendation of the CCTF working group on PFS. The model for the instability of EAL has been expressed as the quadratic sum of three components: a white frequency noise $1.7 \times 10^{-15} / \sqrt{t}$, a flicker frequency noise 0.35×10^{-15} and a random walk frequency noise $0.4 \times 10^{-16} \times \sqrt{t}$, with t in days. The relation between EAL and TAI is given in Table 5.

Month	Interval	d/10 ⁻¹⁵	uncertainty/10 ⁻¹⁵
Jan.	2011 55559-55589	+6.54	0.38
Feb.	2011 55589-55619	+6.24	0.45
Mar.	2011 55619-55649	+5.83	0.33
Apr.	2011 55649-55679	+5.97	0.31
May	2011 55679-55709	+5.72	0.31
Jun.	2011 55709-55739	+6.16	0.32
Jul.	2011 55739-55769	+5.90	0.36
Aug.	2011 55769-55804	+5.41	0.27
Sep.	2011 55804-55834	+5.03	0.28
Oct.	2011 55834-55864	+4.62	0.37
Nov.	2011 55864-55894	+3.93	0.24
Dec.	2011 55894-55924	+2.99	0.26
Jan.	2012 55924-55954	+3.45	0.24
Feb.	2012 55954-55984	+3.17	0.23
Mar.	2012 55984-56014	+3.80	0.28
Apr.	2012 56014-56044	+2.63	0.19
May	2012 56044-56074	+2.50	0.23
Jun.	2012 56074-56104	+2.47	0.21
Jul.	2012 56104-56139	+1.56	0.25
Aug.	2012 56139-56169	+0.60	0.21
Sep.	2012 56169-56199	+0.32	0.29
Oct.	2012 56199-56229	-0.18	0.25
Nov.	2012 56229-56259	-0.26	0.24
Dec.	2012 56259-56289	-0.32	0.25
Jan.	2013 56289-56319	-0.09	0.20
Feb.	2013 56319-56349	+0.11	0.22
Mar.	2013 56349-56379	+0.57	0.22
Apr.	2013 56379-56409	-0.19	0.22
May	2013 56409-56439	-0.33	0.19
Jun.	2013 56439-56469	-0.01	0.25
Jul.	2013 56469-56504	-0.41	0.22
Aug.	2013 56504-56534	-0.52	0.29
Sep.	2013 56534-56564	+0.31	0.25
Oct.	2013 56564-56594	+0.29	0.21
Nov.	2013 56594-56624	+0.42	0.21
Dec.	2013 56624-56654	-0.34	0.29