

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

(File available on <http://www.bipm.org> under the name SITAI04.AR)

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 IEN-CSF1, NICT-O1, NIST-F1, NPL-CSF1, PTB-CS1, PTB-CS2, PTB-CSF1, SYRTE-FO2, SYRTE-FOM and SYRTE-JPO consistently corrected for the black-body radiation shift.

In this computation, a model for the instability of EAL is needed. Starting in 1998, it has been expressed as the quadratic sum of three components: a white frequency noise $6.0 \times 10^{-15} / \sqrt{\tau}$, a flicker frequency noise 0.6×10^{-15} and a random walk frequency noise $1.6 \times 10^{-16} \chi(\tau)$, with τ in days. The relation between EAL and TAI is given in Table 5.

Month	Interval	$d/10^{-15}$	uncertainty/ 10^{-15}
Jan. 2002	52274-52304	+9.7	1.9
Feb. 2002	52304-52329	+10.2	1.5
Mar. 2002	52329-52364	+10.6	1.4
Apr. 2002	52364-52394	+9.7	1.7
May 2002	52394-52424	+10.2	1.7
Jun. 2002	52424-52454	+9.5	1.9
Jul. 2002	52454-52484	+10.8	1.5
Aug. 2002	52484-52514	+8.9	1.9
Sep. 2002	52514-52544	+8.9	1.4
Oct. 2002	52544-52574	+8.7	1.7
Nov. 2002	52574-52604	+9.8	1.5
Dec. 2002	52604-52639	+10.7	1.5
Jan. 2003	52639-52669	+9.5	1.9
Feb. 2003	52669-52694	+9.0	1.6
Mar. 2003	52694-52729	+8.9	1.0
Apr. 2003	52729-52759	+10.0	1.5
May 2003	52759-52789	+6.8	1.4
Jun. 2003	52789-52819	+6.2	1.5
Jul. 2003	52819-52849	+8.2	1.7
Aug. 2003	52849-52879	+10.2	1.7
Sep. 2003	52879-52909	+10.3	0.9
Oct. 2003	52909-52939	+9.7	1.5
Nov. 2003	52939-52969	+10.5	1.6
Dec. 2003	52969-53004	+9.8	1.0
Jan. 2004	53004-53034	+8.9	1.1
Feb. 2004	53034-53064	+6.3	1.2
Mar. 2004	53064-53094	+5.0	1.3
Apr. 2004	53094-53124	+4.0	1.0
May 2004	53124-53154	+5.1	0.9
Jun. 2004	53154-53184	+6.6	1.3
Jul. 2004	53184-53214	+3.8	1.5
Aug. 2004	53214-53244	+3.0	1.7
Sep. 2004	53244-53274	+2.9	2.0
Oct. 2004	53274-53309	+3.0	1.7
Nov. 2004	53309-53339	+3.6	1.2
Dec. 2004	53339-53369	+4.2	1.6