

BUREAU INTERNATIONAL DES POIDS ET MESURES

(BIPM)

Circular T 3 (1988 May 2)

1 - COORDINATED UNIVERSAL TIME UTC

(Since 1988 January 1, Oh UTC, TAI-UTC = 24s)

A - Computed values of UTC-UTC(k)

Date 1988 (Oh UTC)	MAR 9	MAR 19	MAR 29
MJD	47229	47239	47249
Laboratory k	UTC-UTC(k) (Unit = 1 microsecond)		
AOS (Borowiec)	2.16	1.65	0.90
APL (Laurel)	0.03	0.04	0.03
ASMW (Berlin)	0.08	0.07	0.03
AUS (Canberra)	-12.79	-12.93	-13.07
BEV (Wien)	-4.93	-5.44	-6.09
CAO (Cagliari)	1.08	1.32	1.54
CH (Berne)	1.49	1.47	1.44
CRL (Tokyo)	-1.69	-1.74	-1.78
CSAO (Shaanxi) (1)	0.63	0.60	0.57
FTZ (Darmstadt)	16.12	16.28	16.46
IEN (Torino)	-1.35	-1.29	-1.07
IFAG (Wetzell)	-2.04	-1.34	-0.88
ILOM (Mizusawa)	-35.73	-35.75	-35.77
INPL (Jerusalem)	56.74	57.83	58.98
JATC (Xian) (1)	1.11	0.96	0.82
KSRI (Daejeon) (1)	-5.47	-5.64	-5.80
NBS (Boulder)	-0.62	-0.67	-0.75
NIM (Beijing) (1)	9.93	9.80	9.67
NPL (Teddington)	4.15	4.17	4.20
NPLI (New-Delhi) (2)	-9.90	-10.38	-10.91
NRC (Ottawa)	-9.49	-9.43	-9.41
NRLM (Tsukuba)	-23.05	-23.21	-23.38
OMH (Budapest)	-	-	-
OMSF (San Fernando)	3.59	3.71	3.82
OP (Paris)	-0.52	-0.57	-0.59
ORB (Bruxelles) (3)	-48.92	-9.16	-9.23
PKNM (Warsaw)	-1.15	-0.77	-
PTB (Braunschweig)	4.27	4.29	4.30
SO (Shanghai) (1)	1.99	2.05	2.10
STA (Stockholm)	0.48	0.48	0.44
SU (Moscow)	20.76	20.56	20.38
TAO (Tokyo)	-1.90	-1.93	-1.97
TL (Taiwan) (1)	268.95	270.41	271.86
TP (Praha) (4)	0.24	0.56	0.86
TUG (Graz)	-2.04	-1.77	-1.51
USNO (Washington) (USNO MC)	-4.25	-4.17	-4.11
VSL (Delft)	3.91	3.88	3.84
YUZM (Beograd)	-0.18	-0.71	-0.97
ZIPE (Potsdam)	0.43	0.46	0.46

B - Direct measurement of UTC(j)-UTC(k) by clock transportation

Date MJD Time comparisons uncert. source  
1988 (Unit : 1 microsecond)

MAR 28 47248.22 UTC(TAO ) - UTC(CRL ) = 0.159 0.005 TAO message

2 - INTERNATIONAL ATOMIC TIME TAI AND LOCAL ATOMIC TIME SCALES TA(k)

A - Computed values of TAI-TA(k)

Date 1988 (Oh UTC)	MAR 9	MAR 19	MAR 29
MJD	47229	47239	47249
Laboratory k	TAI-TA(k) (Unit = 1 microsecond)		
AOS (Borowiec)	-88.40	-90.31	-92.46
APL (Laurel) (2)	0.03	0.04	0.03
CH (Berne)	-47.95	-48.16	-48.37
CRL (Tokyo)	-3.44	-3.47	-3.52
CSAO(Shaanxi) (1)(2)	39.61	39.58	39.55
DDR (Berlin)	-26.07	-26.30	-26.56
F (Paris)	52.13	52.55	52.94
JATC(Xian) (1)(2)	-0.27	-0.06	-0.22
NBS (Boulder)	-45108.02	-45108.39	-45108.78
NIM (Beijing) (1)	-7.61	-7.67	-7.79
NRC (Ottawa)	21.58	21.64	21.65
PTB (Braunschweig)	-359.13	-359.11	-359.10
SO (Shanghai) (1)	-45.69	-45.66	-45.65
SU (Moscow)	2827270.76	2827270.56	2827270.38
USNO(Washington) (A1(MEAN))	-34555.12	-34555.67	-34556.24

B - Duration of the TAI scale interval (BIPM evaluation)

For FEB.1988-MAR.1988  $1+0.1*10^{**}-13$  +OR-  $1.0*10^{**}-13$

in SI second at sea level, based on CRL, NBS, NRC, PTB and SU data.

3 - NOTES ON SECTIONS 1 and 2

(1) CSAO, JATC, KSRI, NIM, SO, TL . On MJD=47229 and 47239 interpolated values for the LORAN-C time link.

(2) Data for January and February 1988

MJD	47169	47179	47189	47199	47209	47219
TAI-TA(APL )	0.02	0.01	0.03	0.03	0.04	0.03
TAI-TA(CSAO)	39.88	39.73	39.76	39.66	39.68	39.63
TAI-TA(JATC)(revised)	-0.32					
UTC-UTC(NPLI)						-9.32

(3) ORB . Time step of UTC(ORB) of  $-40 \mu\text{s}$  on MJD = 47232.40

(4) TP . On MJD=47239 interpolated value for the TV time link.

4 - ERRATUM. The values of UTC-UTC(i) and TAI-TAI(i) of Circular T 2 require the addition of the following corrections.

MJD=47199 :  $-0.02 \mu\text{s}$ , MJD=47209 :  $-0.03 \mu\text{s}$ , MJD=47219 :  $-0.04 \mu\text{s}$ .