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1 - Coordinated Universal Time UTC and its local realizations UTC(k). Computed values of [*UTC-UTC*(*k*)] and uncertainties valid for the period of this Circular. From 2006 January 1, 0h UTC, *TAI-UTC* = 33 s.

Date 2007 0h UTC	FEB 28	MAR 5	MAR 10	MAR 15	MAR 20	MAR 25	MAR 30	Uncertainty/ns			Notes
MJD	54159	54164	54169	54174	54179	54184	54189	u_A	u_B	u	
Laboratory *k*	[*UTC-UTC*(*k*)]/ns										
AOS (Borowiec)	-9.8	-0.8	-9.1	-17.5	-1.7	-15.3	-3.1	1.5	5.1	5.3	
APL (Laurel)	-5.4	-15.2	-15.2	-17.9	-15.3	-17.6	-19.4	1.5	5.0	5.3	
AUS (Sydney)	58.0	68.2	63.7	81.5	80.4	112.3	102.5	1.5	5.1	5.3	
BEV (Wien)	2.7	4.0	-4.8	-3.7	-7.9	-4.3	-10.0	2.0	5.0	5.4	
BIM (Sofiya)	-5213.0	-5230.6	-5256.3	-5251.3	-5263.0	-5284.8	-5310.7	5.0	20.0	20.6	
BIRM (Beijing)	-2736.6	-2764.6	-2781.0	-2806.8	-2826.1	-2850.7	-2879.0	3.5	20.0	20.3	
BY (Minsk)	-	284.3	287.8	282.0	280.8	294.3	319.3	7.0	20.0	21.2	(1)
CAO (Cagliari)	-862.5	-865.3	-876.5	-860.5	-851.3	-861.7	-866.4	1.5	7.1	7.2	
CH (Bern)	-2.1	-1.3	-2.8	-3.4	-5.3	-6.1	-7.2	0.7	5.1	5.1	
CNM (Queretaro)	-23.0	-23.8	-28.2	-34.9	-44.4	-37.9	-41.7	5.0	5.1	7.1	
CNMP (Panama)	-65.1	-72.8	-67.5	-97.8	-81.6	-58.6	-56.1	3.0	5.1	5.9	
DLR (Oberpfaffenhofen)	-	-	-	-	-	-	-	-	-	-	
DTAG (Darmstadt)	-	419.7	430.7	427.9	411.6	399.2	396.8	3.0	10.1	10.5	
HKO (Hong Kong)	41.8	45.5	46.0	47.1	52.1	55.1	61.7	2.5	5.1	5.7	
IFAG (Wettzell)	-330.7	-328.7	-336.0	-338.1	-335.4	-328.7	-330.9	0.7	5.1	5.1	
IGMA (Buenos Aires)	767.6	759.6	752.6	745.8	742.2	735.9	732.9	2.5	5.1	5.7	
INPL (Jerusalem)	284.7	281.4	-12.5	-6.9	2.7	8.0	11.2	5.0	10.1	11.2	(2)
IT (Torino)	29.5	29.8	32.5	39.3	45.6	50.0	50.4	0.5	1.4	1.5	
JATC (Lintong)	8.7	14.7	20.5	22.7	21.7	15.5	11.0	1.4	4.9	5.1	
JV (Kjeller)	-543.9	-438.5	-390.4	-359.5	-311.5	-259.1	-184.4	5.0	20.0	20.6	
KRIS (Daejeon)	-9.9	-11.0	-17.0	-15.6	-19.7	-13.5	-11.9	0.7	5.1	5.2	
LDS (Leeds)	1642.7	1691.9	1740.3	1786.2	1818.3	1873.2	1913.0	3.0	20.0	20.3	
LT (Vilnius)	107.1	115.0	109.0	110.9	120.0	127.0	144.9	1.5	5.1	5.3	
MIKE (Espoo)	-108.1	-98.9	-95.4	-86.5	-94.1	-92.4	-94.2	5.0	19.8	20.5	
MKEH (Budapest)	11866.1	11881.9	11882.2	11892.7	11911.3	11903.8	11911.1	2.5	20.0	20.2	
MSL (Lower Hutt)	-2.2	22.5	7.2	-12.0	-5.3	-6.7	-11.0	1.0	20.0	20.1	
NAO (Mizusawa)	195.8	189.3	189.5	180.1	181.3	189.2	185.0	3.0	19.8	20.0	
NICT (Tokyo)	8.2	11.0	14.3	16.7	17.9	21.8	20.3	0.5	4.8	4.9	
NIM (Beijing)	-51.0	-52.3	-53.6	-53.8	-52.5	-50.7	-52.4	1.5	19.8	19.8	
NIMB (Bucharest)	-	-580.6	-585.9	-596.0	-616.5	-626.9	-622.2	2.5	20.0	20.2	

Date 2007 0h UTC	FEB 28	MAR 5	MAR 10	MAR 15	MAR 20	MAR 25	MAR 30	Uncertainty/ns			Notes
MJD	54159	54164	54169	54174	54179	54184	54189	u_A	u_B	u	
Laboratory *k*				[*UTC-UTC*(*k*)]/ns							
NIMT (Bangkok)	-1281.6	-1283.5	-1287.0	-1282.6	-1282.5	-1283.5	-1286.2	1.0	20.0	20.1	
NIS (Cairo)	-4.8	-4.2	-6.7	-4.0	-5.5	-3.2	-2.8	2.5	7.1	7.5	
NIST (Boulder)	15.2	15.5	15.2	14.8	13.6	13.4	12.5	0.5	4.8	4.9	
NMIJ (Tsukuba)	10.9	11.3	14.8	21.5	25.6	22.3	21.0	0.7	5.1	5.1	
NMLS (Sepang)	-710.0	-711.4	-717.3	-710.8	-715.5	-721.1	-728.2	2.0	20.0	20.1	
NPL (Teddington)	-8.3	-7.5	-14.1	-19.2	-14.3	-14.2	-16.7	1.5	5.1	5.3	
NPLI (New-Delhi)	-	54.3	-117.6	-91.4	-67.9	-36.3	-11.1	4.0	7.1	8.1	(3)
NRC (Ottawa)	-23.5	-16.5	-6.0	-2.5	2.0	3.6	3.6	0.7	5.1	5.2	
NTSC (Lintong)	18.1	22.7	25.5	24.7	19.3	12.9	3.8	1.4	4.8	5.0	
ONBA (Buenos Aires)	-11290.1	-11257.7	-93.2	-110.1	-138.7	-140.1	-155.2	5.0	5.1	7.2	(4)
ONRJ (Rio de Janeiro)	-18.5	-17.5	-21.6	-24.6	-19.4	-10.4	-6.5	4.0	20.0	20.4	
OP (Paris)	-21.9	-20.8	-21.8	-27.6	-32.6	-33.9	-29.9	0.5	1.4	1.5	
ORB (Bruxelles)	-44.4	-47.1	-44.2	-37.6	-29.1	-18.4	-10.1	0.7	5.1	5.1	
PL (Warszawa)	2.7	1.3	1.3	-0.5	-4.9	3.1	10.6	1.4	4.8	5.0	
PTB (Braunschweig)	8.3	8.5	10.6	12.0	14.9	16.5	18.5	0.2	1.0	1.1	
ROA (San Fernando)	-60.8	-59.5	-64.4	-65.6	-78.4	-78.0	-86.1	0.7	5.0	5.1	
SCL (Hong Kong)	8.3	2.6	-2.9	-0.5	-2.8	-3.4	-11.2	-	-	-	
SG (Singapore)	12.1	6.1	-3.4	-11.3	-25.2	-34.7	-47.1	2.0	5.1	5.4	
SMU (Bratislava)	-193.4	-199.2	-194.6	-193.0	-195.1	-193.8	-191.6	5.0	20.0	20.6	
SP (Boras)	-42.6	-40.1	-34.0	-31.2	-33.7	-29.9	-29.2	0.5	1.4	1.5	
SU (Moskva)	-15.3	-13.6	-9.5	-5.6	-3.0	1.7	5.5	3.0	5.1	5.9	
TCC (Concepcion)	-3905.3	-3923.1	-3923.1	-3941.9	-3947.3	-3961.8	-3953.9	1.5	19.9	20.0	
TL (Chung-Li)	6.9	5.8	5.2	6.3	2.8	0.1	-1.6	0.7	4.9	5.0	
TP (Praha)	5.8	16.1	19.0	23.1	22.7	19.7	13.3	0.9	5.1	5.2	
UME (Gebze-Kocaeli)	20.7	25.1	27.1	30.9	26.5	27.4	28.2	1.5	7.1	7.2	
USNO (Washington DC)	-3.3	-2.5	-2.7	-1.9	-3.3	-1.9	-1.2	0.4	1.5	1.5	
VSL (Delft)	-3.5	-3.8	-0.6	-4.6	0.8	0.4	2.2	0.6	1.4	1.5	
ZA (Pretoria)	-3279.1	-3363.6	-3441.3	-3509.9	-3566.1	-3598.0	-3642.7	2.5	20.0	20.2	
ZMDM (Belgrade)	438.8	460.5	492.4	521.9	553.5	584.5	609.0	2.0	7.1	7.3	

- Notes on section 1:

(1) BY : Belarussian State Institute of Metroloy, Minsk.
(2) INPL : Time step of UTC(INPL) of +300 ns on MJD 54164.3
(3) NPLI : Time step of UTC(NPLI) of +250 ns on MJD 54164.3
(4) ONBA : Timestep of UTC(ONBA) on MJD 54164.5 due to master clock change.

2 - International Atomic Time TAI and Local atomic time scales TA(k). Computed values of [*TAI-TA(k)*].

Date 2007 0h UTC	FEB 28	MAR 5	MAR 10	MAR 15	MAR 20	MAR 25	MAR 30	
MJD	54159	54164	54169	54174	54179	54184	54189	
Laboratory *k*				[*TAI-TA(k)*]/ns				
CH (Bern)	53794.2	53799.1	53801.7	53805.2	53807.4	53810.7	53813.7	
F (Paris)	168332.0	168332.4	168332.6	168329.9	168330.3	168329.4	168330.4	
IT (Torino)	60826.4	60959.1	61091.2	61219.7	61354.3	61489.2	61623.3	
JATC (Lintong)	-41708.1	-41740.5	-41771.7	-41802.2	-41834.5	-41862.3	-41893.9	
KRIS (Daejeon)	15977.5	16050.6	16119.1	16194.3	16264.7	16344.5	16420.1	
NICT (Tokyo)	3.9	7.5	9.7	12.5	12.9	17.9	16.5	
NIST (Boulder)	-45303710.8	-45303902.0	-45304093.8	-45304285.5	-45304477.2	-45304667.9	-45304859.3	
NRC (Ottawa)	30372.8	30373.4	30376.8	30380.7	30393.7	30400.3	30410.2	
NTSC (Lintong)	4168.5	4192.9	4217.1	4242.5	4265.9	4293.9	4318.4	
ONRJ (Rio de Janeiro)	-1317.7	-1332.3	-1348.2	-1365.7	-1384.2	-1401.0	-1416.9	
PL (Warszawa)	-4140.3	-4145.8	-4155.8	-4163.4	-4168.4	-4176.6	-4182.2	
PTB (Braunschweig)	-357836.5	-357828.8	-357819.3	-357810.5	-357800.2	-357790.9	-357781.2	
SU (Moskva)	27243398.5	27243423.9	27243451.8	27243479.4	27243505.8	27243535.5	27243564.4	(1)(2)
TL (Chung-Li)	593.8	590.2	590.0	592.8	598.1	601.2	600.9	
USNO (Washington DC)	-34994040.7	-34994345.7	-34994650.1	-34994954.5	-34995259.0	-34995562.2	-34995866.4	

- Notes on section 2:

(1) SU : Listed values are *TAI-TA(SU)* - 2.80 seconds.

(2) SU : Revised values for Circular T 230

MJD	*TAI-TA(SU)*
54149	27243348.5
54154	27243372.8
54159	27243398.5

3 - Difference between the normalized frequencies of EAL (free atomic time scale) and TAI.

	Interval of validity	*f(EAL)-f(TAI)*	
Steering correction	54159 - 54189	6.802×10^{-13}	(2007 FEB 28 - 2007 MAR 30)
New correction	54189 - 54219	6.802×10^{-13}	(2007 MAR 30 - 2007 APR 29)
New correction foreseen	54219 - 54249	6.802×10^{-13}	(2007 APR 29 - 2007 MAY 29)

4 - Duration of the TAI scale interval.

TAI is a realization of coordinate time TT. The following tables give the fractional deviation d of the scale interval of TAI from that of TT (the SI second on the geoid), i.e. the fractional frequency deviation of TAI with the opposite sign: $d = -y_{TAI}$. In this section, a frequency over a time interval is defined as the ratio of the end-point phase difference to the duration of the interval. Whenever needed, the instability of EAL should be expressed as the quadratic sum of three components with τ in days: (1) a white frequency noise of $3.0\times10^{-15} / \sqrt{\tau}$, (2) a flicker frequency noise of 0.5×10^{-15} and (3) a random walk frequency noise of $1.0\times10^{-16} \times \sqrt{\tau}$. The relation between EAL and TAI is given in *Circular T* and the *Annual Report of the BIPM Time Section*.

In the first table, d is obtained, on the given periods of estimation by comparison of the TAI frequency with that of the given individual Primary Frequency Standards (PFS). In this table: u_A is the uncertainty originating in the instability of the PFS, u_B is the combined uncertainty from systematic effects, Ref(u_B) is a reference giving information on the stated value of u_B or is the *Circular T* where this reference was first given, $u_{l/lab}$ is the uncertainty in the link between the PFS and the clock participating to TAI, including the uncertainty due to the dead-time, $u_{l/TAI}$ is the uncertainty in the link to TAI, u is the quadratic sum of all four uncertainty values. All values are expressed in 10^{-15}.

Standard	Period of Estimation		d	u_A	u_B	Ref(u_B)	$u_{l/Lab}$	$u_{l/Tai}$	u	Note
SYRTE-JPO	54159	54189	11.9	0.7	6.3	T160	0.3	0.3	6.4	(1)
PTB-CS1	54159	54189	-10.2	5.0	8.0	T148	0.0	0.2	9.4	(2)
PTB-CS2	54159	54189	-4.3	3.0	12.0	T148	0.0	0.2	12.4	(2)

Notes:
(1) Report 5 April 2007 by LNE-SYRTE.
(2) Continuously operating as a clock participating to TAI.

The second table gives the BIPM estimate of d, based on all available PFS measurements over the period MJD 53799-54189, taking into account their individual uncertainties and characterizing the instability of EAL as noted above. u is the computed standard uncertainty of d

Period of estimation	d	u	
54159-54189	1.0×10^{-15}	1.4×10^{-15}	(2007 FEB 28 - 2007 MAR 30)

5 - Relations of UTC and TAI with GPS time and GLONASS time.

[*UTC-GPS time*] = -14 s + C_0, [*TAI-GPS time*] = 19 s + C_0, global uncertainty is of order 10 ns.
[*UTC-GLONASS time*] = 0 s + C_1, [*TAI-GLONASS time*] = 33 s + C_1, global uncertainty is of order hundreds ns.

The C_0 values are obtained using the values [*UTC-UTC(OP)*] and the GPS data taken at the Paris Observatory, corrected for IGS precise orbits, clocks and ionosphere maps. The C_1 values are obtained using the values [*UTC-UTC(AOS)*] and the GLONASS data taken at the Astrogeodynamical Observatory Borowiec (AOS). N_0 and N_1 are the numbers of measurements, when N_0 or N_1 is 0, the corresponding values of C_0 or C_1 are interpolated.
The standard deviations σ_0 and σ_1 characterize the dispersion of individual measurements. The actual uncertainty of user's access to GPS and GLONASS times may differ from these values.
For this circular, σ_0 = 2.4 ns, σ_1 = 15.6 ns

Date 2007 0h UTC	MJD	C_0/ns	N_0	C_1/ns	N_1
FEB 28	54159	-1.2	47	-451.7	87
MAR 1	54160	-2.5	46	-454.4	87
MAR 2	54161	-2.8	45	-463.9	85
MAR 3	54162	-2.9	46	-459.2	79
MAR 4	54163	-0.7	47	-457.8	78
MAR 5	54164	-1.5	46	-466.6	78
MAR 6	54165	-2.4	45	-481.9	86
MAR 7	54166	-5.7	45	-492.9	89
MAR 8	54167	-7.0	47	-494.0	90
MAR 9	54168	-5.6	45	-498.4	89
MAR 10	54169	-4.2	44	-507.5	87
MAR 11	54170	-3.2	46	-516.4	85
MAR 12	54171	-2.3	46	-523.8	76
MAR 13	54172	-4.7	46	-523.2	84
MAR 14	54173	-3.4	46	-519.4	77
MAR 15	54174	-3.6	46	-522.5	72
MAR 16	54175	-3.1	45	-530.6	77
MAR 17	54176	-2.2	46	-535.2	81
MAR 18	54177	-4.5	46	-537.0	60
MAR 19	54178	-6.0	46	-539.7	75
MAR 20	54179	-5.5	46	-543.2	70
MAR 21	54180	-3.0	46	-553.0	78
MAR 22	54181	-2.3	46	-566.1	67
MAR 23	54182	-2.7	46	-559.3	75
MAR 24	54183	-3.6	46	-546.0	42
MAR 25	54184	-3.1	46	-545.8	46
MAR 26	54185	-4.1	46	-552.7	78
MAR 27	54186	-4.8	45	-558.7	65
MAR 28	54187	-4.9	46	-563.3	73
MAR 29	54188	-5.1	46	-562.8	70
MAR 30	54189	-2.9	46	-563.4	54

6 - Time links used for the computation of TAI and their uncertainties.

The time links used in the elaboration of this *Circular T* are listed in this section. The technique for the link is indicated as follows: GPS SC for GPS all-in-view single-channel C/A data; GPS MC for GPS all-in-view multi-channel C/A data; GPS P3 for GPS all-in-view multi-channel dual-frequency P code data; GPS GT for 'GPS time' observations; INT LK for internal cable link and TWSTFT for two-way satellite time and frequency transfer data.

For each link, the following uncertainties are provided: u_A is the statistical uncertainty evaluated by taking into account the level of phase noise in the raw data, the interpolation interval between data points and the effects with typical duration between 5 and 30 days. u_B is the estimated uncertainty on the calibration.

The calibration type of the link is indicated as: GPS EC for GPS equipment calibration; TW EC for two-way equipment calibration; LC (technique) for a link calibrated using 'technique'; BC (technique) for a link calibrated using 'technique' to transfer a past equipment calibration through a discontinuity of link operation. DIC is used for direct internal calibration.

The calibration dates indicate: the most recent calibration results for the two laboratories in the case of EC and
the most recent calibration of the link in the case of LC and BC,
NA stands for not available, in this case estimated values are provided

Link	Type	u_A/ns	u_B/ns	Calibration Type	Calibration Dates
AOS /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2003 Sep/2004 Jul
APL /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2003 Dec/2004 Jul
AUS /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2004 Nov/2004 Jul
BEV /PTB	GPS MC	2.0	5.0	GPS EC/GPS EC	2001 Dec/2004 Jul
BIM /PTB	GPS SC	5.0	20.0	NA /GPS EC	NA /2004 Jul
BIRM/PTB	GPS SC	3.5	20.0	NA /GPS EC	NA /2004 Jul
BY /PTB	GPS SC	7.0	20.0	NA /GPS EC	NA /2004 Jul
CAO /PTB	GPS MC	1.5	7.0	GPS EC/GPS EC	2004 Nov/2004 Jul
CH /PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2004 Nov/2004 Aug
CNM /PTB	GPS SC	5.0	5.0	GPS EC/GPS EC	2005 Nov/2004 Jul
CNMP/PTB	GPS MC	3.0	5.0	GPS EC/GPS EC	2004 May/2004 Jul
DLR /PTB	NA				
DTAG/PTB	GPS MC	3.0	10.0	GPS EC/GPS EC	1998 May/2004 Jul
HKO /PTB	GPS MC	2.5	5.0	GPS EC/GPS EC	2004 Sep/2004 Jul
IFAG/PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2003 Jun/2004 Aug
IGMA/PTB	GPS MC	2.5	5.0	GPS EC/GPS EC	2004 Aug/2004 Jul
INPL/PTB	GPS SC	5.0	10.0	GPS EC/GPS EC	1987 Jun/2004 Jul
IT /PTB	TWSTFT	0.5	1.0	LC(TWSTFT)	2005 Nov
JATC/NTSC	INT LK	0.2	1.0	DIC	/2006 Sep
JV /PTB	GPS GT	5.0	20.0	NA /GPS EC	NA /2003 Aug

Link	Type	u_A/ns	u_B/ns	Calibration Type	Calibration Dates
KRIS/PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2005 Aug/2004 Aug
LDS /PTB	GPS SC	3.0	20.0	NA /GPS EC	NA /2004 Jul
LT /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2001 Nov/2004 Jul
MIKE/PTB	GPS MC	5.0	20.0	NA /GPS EC	NA /2004 Jul
MKEH/PTB	GPS SC	2.5	20.0	NA /GPS EC	NA /2004 Jul
MSL /PTB	GPS P3	1.0	20.0	NA /GPS EC	NA /2004 Aug
NAO /PTB	GPS SC	3.0	20.0	NA /GPS EC	NA /2004 Jul
NICT/PTB	TWSTFT	0.5	5.0	BC(GPS P3)	2007 Mar
NIM /PTB	GPS MC	1.5	20.0	NA /GPS EC	NA /2004 Jul
NIMB/PTB	GPS MC	2.5	20.0	NA /GPS EC	NA /2004 Jul
NIMT/PTB	GPS P3	1.0	20.0	NA /GPS EC	NA /2004 Aug
NIS /PTB	GPS MC	2.5	7.0	GPS EC/GPS EC	2005 May/2004 Jul
NIST/PTB	TWSTFT	0.5	5.0	BC(GPS P3)	2005 May
NMIJ/PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2002 Apr/2004 Aug
NMLS/PTB	GPS MC	2.0	20.0	NA /GPS EC	NA /2004 Jul
NPL /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2002 Jun/2004 Jul
NPLI/PTB	GPS MC	4.0	7.0	GPS EC/GPS EC	2005 Jul/2004 Jul
NRC /PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2003 Nov/2004 Aug
NTSC/PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2004 Sep/2004 Jul
ONBA/PTB	GPS MC	5.0	5.0	GPS EC/GPS EC	2004 Jul/2004 Jul
ONRJ/PTB	GPS MC	4.0	20.0	NA /GPS EC	NA /2004 Jul
OP /PTB	TWSTFT	0.5	1.0	LC(TWSTFT)	2005 Nov
ORB /PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2003 Jul/2004 Aug
PL /PTB	GPS MC	1.5	5.0	GPS EC/GPS EC	2001 Oct/2004 Jul
ROA /PTB	TWSTFT	0.7	5.0	BC(GPS P3)	2005 May
SCL /PTB	GPS MC	???	10.0	LC(GPS SC)	1993 May
SG /PTB	GPS MC	2.0	5.0	GPS EC/GPS EC	2004 Nov/2004 Jul
SMU /PTB	GPS SC	5.0	20.0	NA /GPS EC	NA /2004 Jul
SP /PTB	TWSTFT	0.5	1.0	LC(TWSTFT)	2005 Nov
SU /PTB	GPS SC	3.0	5.0	GPS EC/GPS EC	2003 Apr/2004 Jul
TCC /PTB	GPS P3	1.5	20.0	NA /GPS EC	NA /2004 Aug
TL /PTB	GPS P3	0.7	5.0	GPS EC/GPS EC	2005 May/2004 Aug
TP /PTB	GPS P3	0.9	5.0	LC(GPS SC)	2004 Jul
UME /PTB	GPS MC	1.5	7.0	GPS EC/GPS EC	2005 Dec/2004 Jul
USNO/PTB	TWSTFT	0.5	2.0	BC(TW X-Band)	2005 May
VSL /PTB	TWSTFT	0.5	1.0	LC(TWSTFT)	2005 Nov
ZA /PTB	GPS MC	2.5	20.0	NA /GPS EC	NA /2004 Jul
ZMDM/PTB	GPS MC	2.0	7.0	GPS EC/GPS EC	2005 Mar/2004 Jul