### README of ftp2.bipm.org/pub/tai/data structure

### THIS DIRECTORY CONTAINS:

Files used in the computation of TAI: Clock and link data are ordered in yearly sub-directories.

In the case you would like to access raw data files generated by the Circular T participating laboratories, only twstft and meteorological data are made available here.

For any other raw data, please directly contact the concerned laboratories.

Description of the raw data file formats can be accessed via <a href="http://webtai.bipm.org/database/guidelines.html">http://webtai.bipm.org/database/guidelines.html</a>. This document gives information on BIPM modified files only.

In the following part of the document, some acronyms are used:

'xxxx' stands for the laboratory acronym,

'yy' stands for the last 2-digits of the year,

'mm' stands for the month number of the year,

'gnss' stands for the GNSS system ( 'gps' for GPS, 'glo' for GLONASS, 'gal' for GALILEO, 'bds' for BEIDOU),

'dd.ddd' is used for Modified Julian Date ddddd,

'LA' is the laboratory 2-characters acronym

# 1. CLOCK DATA FILES (<a href="ftp://ftp2.bipm.org/pub/tai/data/yyyy/clocks/">ftp://ftp2.bipm.org/pub/tai/data/yyyy/clocks/</a>)

Files xxxxyymm.clk contain monthly clock data. Each file contains for each date, one or several lines in the 'clock format', ended by a line '99999'.

WARNING: Clock data reported as those used in Circular T computation and some clocks may have not be used by the BIPM Time Department if they shown inappropriate behavior.

## 2. CLOCK STEP DATA FILES (ftp://ftp2.bipm.org/pub/tai/data/yyyy/clocks/)

Files stepyymm contain all clock step data (NEW[clock value]-OLD[clock value]) for year yy, month mm.

WARNING: Clock steps are either reported by the laboratory, or introduced by the Time Department to ensure the continuity of clocks in the ALGOS algorithm. For each clock step data, one line in the 'clock step format'.

3. TIME TRANSFER DATA FILES (ftp://ftp2.bipm.org/pub/tai/data/yyyy/time\_transfer/)

### 3.a. CGGTTS DATA FILES

For each GNSS system raw and corrected data are available in :

- raw\_gnss\_data/

files named xxxxyymm.gnss are the GPS CA raw data files named xxxxyymm.p3 are the GPS P1/P2 (ionosphere-free combination, also called 'P3')

- corrected gnss data/

files named xxxxyymm.gnss-cor are the GPS CA corrected data files named xxxxyymm.p3-cor are the GPS P1/P2 (ionosphere-free combination, also called 'P3')

Corrections applied to the raw CGGTTS files: IGS Precise orbit correction and IGS Ionosphere correction (only to single-frequency).

### 3.b. PPP DATA FILES

Files /ppp/xxxxyymm.gpi contain monthly PPP solution in pseudo-CGGTTS format.

#### 3.C. TWSTFT DATA FILES

Folder /twstft/xxxx/TWxxxxDD.DDD contain raw daily twstft data in the ITU-R format, as received by the BIPM.

4. METEOROLOGICAL DATA FILES (<a href="ftp://ftp2.bipm.org/pub/tai/data/yyyy/meteo/">ftp://ftp2.bipm.org/pub/tai/data/yyyy/meteo/</a>)

Folder /meteo/metLLdd.ddd contain raw daily meteorological data in the meteo format, as received by the BIPM.