

Contents

1	Preface	1
2	Installation:	1
3	Usage	1
4	Legal matter and availability:	2
4.1	License	2
4.2	Source Code	2
4.3	Generating the program	2
5	History	2
6	Known Bugs and Outlook	2

1 Preface

I have wrote the program for my own use, but if anyone else could use it I would be happy.

The program is used to correct the date in GPX-Files which contain a wrong date because of the GPS Week Rollover. The error occurs because they wanted to save a few bits in GPS and instead of date and time GPS uses the number of the week and the seconds within the week. That would be OK if they had used more than 10 bits for the week number. So after week 1023 comes again week 0. So this happens every 19.6 years, most recently on 6.4.2019. If the logger, its firmware or any conversion software continues to assume that week 0 was in 1999 then you have a problem. Since it would be very optimistic to hope that all loggers, or said software soon get an update, I wrote this program to correct incorrect GPX files. The program is kept deliberately simple, both internally and in the application. It searches for dates in the GPX file, adds $7 * 1024 = 7168$ days and uses this date for the corrected GPX file, unless the date so obtained is in the future.

2 Installation:

An installation is not necessary, one must unpack only the Zip file.

3 Usage

The only operation consists of dragging one or more files or folders onto the program. This is located in the bin folder. For folders, all GPX files contained therein are processed, even those in subfolders. The extension of the files must be GPX, otherwise they will be ignored. In each folder a new subfolder is created with the name: gpswrok into which the corrected files are written. If you call the program several times with the same folder as a parameter, then in gpswrok another folder gpswrok would be created in the folder ... Since this is probably not what you want, the program ignores folders with this name.

4 Legal matter and availability:

4.1 License

This program is under the [GPL V3 License](#).

From Version 2 on this Program is created with [QT-Creator](#) and dynamically linked to the [QT-Librarys](#) (V5.x). These are under the [LGPL V2.1](#).

4.2 Source Code

Since the program is so small I do not distribute the source code separately and just add it to the program package. It is located in the folder SRC

4.3 Generating the program

If you want to generate the program yourself you need [QT-Creator](#).

After linking you have to copy the necessary dlls ... to GPSRO_Kor.exe, this is most easily done with the tool windeployqt.exe. On my PC it is found as:

C: \ Qt \ 5.12.0 \ mingw73_64 \ bin \ windeployqt.exe

The exact path depends of course on the installation location of QT and the chosen kit.

Dimitri Junker

5 History

1.00 from 20.Aug.2019

- The first version has no changes ;-)

6 Known Bugs and Outlook

- The program is not programmed effectively, It could certainly be accelerated, but as long as you do'nt not want to correct hundreds of GPX files at once it should be acceptable.
- It is not flexible, e.g. all files whose extension is not gpx are ignored.
- At the above, nothing will change, unless someone contacts me and describes me what he needs.