<https://github.com/emilybradley00/runstats>

<https://github.com/pe-st/garmin-connect-export>

One hour spent at Functional Threshold Power (FTP) is equal to 100 points

Intensity Factor (IF) for TSS: For any workout or part of a workout, the ratio of the Normalized Power to the rider's functional threshold power, which gives the user a relative intensity in relation to their threshold power. IF is used to calculate TSS.

the elements of the normalized graded pace (NGP, see below), relative to the functional threshold pace. Coupled with the duration of the workout, we can determine an appropriate rTSS score for each workout

* Normalized Graded Pace (NGP): The adjusted pace reported from a global positioning system (GPS), or other speed/distance device, that reflects the changes in grade and intensity that contribute to the physiological cost of running on varied terrain. For more information on NGP, please see:
* Intensity Factor (IF) for rTSS: For any workout or part of a workout, the ratio of the Normalized Graded Pace to the runner's functional threshold running pace, which gives the user a relative intensity in relation to their threshold pace. IF is used to calculate rTSS.

rTSS = running training stress score

NGP = normalised graded pace (GAP)

IF = intensity factor

S = duration in seconds

FTP = functional threshold pace (all-out effort for an hour pace)

Threshold = 1.07 x 5km pace??

<https://github.com/pe-st/garmin-connect-export>

<https://www.garmin.com/en-US/account/datamanagement/exportdata/>

<https://uphillathlete.com/aerobic-training/trainingpeaks-metrics-ctl-tss/>

<https://www.trainingpeaks.com/learn/articles/the-science-of-the-performance-manager/>

garmin-connect-export-pest/gcexport.py

usage:

* -f tcx (file type)
* -sd 2023-07-31 (start date)
* -c 50 (count, how many recent files to include)
* -d em\_files\_updated\_April24

Upgrades:

* post graph report – what % of files failed and why
* tweak rTSS (26km long run getting similar to Cambridge half? 22/4/23), does it favour no-lap activities?
* Why is yellow line negative?
* indoor/treadmill running
* swimming
* custom graph length display (6, 12, 18 months or all data)
* Change graph length in UI
* UI to enter garmin username & password, graph length, threshold pace or estimated 5km time right now