Time difference, (1 PPS$_{GPS}$-1 PPS$_{Maser}$)

A HP 53131A Universal Counter, in the left rack in the control room, is measuring the time difference between 1 PPS$_{GPS}$ and 1 PPS$_{Maser}$. To measure and trig correctly, it needs to have the following setting:

`CH1:`	TAC 1 PPS signal, in parallel with a 50Ω termination
`CH2:`	Maser 1 PPS signal, in parallel with a 50Ω termination

`Time & Period`	`External Reference`	`Level: 1.5V`
`Sensitivity: HIGH`	`Common 1: OFF`	`Auto Trig: OFF`
`AC-mode`	`Slope: POS`	`Impedance:` 1 MΩ

The reading on the counter display can sometimes be very close to 1, ex. 0.999998063 [s]. This happens when the 1 PPS$_{Maser}$ is leading the 1 PPS$_{GPS}$. The counter starts always a count with a start trig from CH1. Since the CH2 signal is leading `CH1`, it skips the first `CH2` flank trig and counts from the first `CH1` flank until the next `CH2` flank. To get the right time, calculate simply (1-ΔT), where ΔT is the displayed time difference.
On CETUS, there is a piece of software, `GPS-Maser.600s`, that is normally running and stores the time difference every 10th minute (see section "CETUS, Data log `GPS-Maser.600s.dat`").