Calculating CTR Time Faults

Time faults are calculated using minutes and seconds. One second into the NEXT minute begins the new time fault.

If the time allowed for a ride is 2 hours that is written thus: 2:00:00. The minutes are FULL minutes (1-60 seconds with 60 or 00 being the TOP of the minute, but not yet the NEXT minute). The minute BEGINS at ONE and finishes at SIXTY OR 00.

LATE
For late time faults, round UP to the end of the minute (60 or 00). Late time faults are calculated at one time fault for every minute (or part thereof) late.

If the rider comes across the line at 2:00:45, that is 45 seconds into the next minute after the due time – therefore that is one time fault.
If the rider comes across the line at 2:00:00 dead, there are no time faults.
 There is a ONE SECOND window.
If the rider comes across the line at 2:01:00, they are still within the FIRST MINUTE; therefore it is still only ONE time fault.
If the rider comes across the line at 2:01:01, they are then into the SECOND minute after due time, and it is two time faults.

EARLY
For early time faults, round DOWN to the beginning of the minute. Early time faults are calculated at two time faults for every minute (or part thereof) early.

If the rider comes across the line early, calculate time faults as follows.
If the rider comes across the line at 1:59:30, then they are in the ONE minute prior to the optimum finishing time of 2:00:00. That is two time faults.
If the rider comes across the line at 1:59:00, they are still in the FIRST minute prior to the optimum finish time, and it is two time faults.

If rider comes across the line early, here is an easy way to calculate the minutes and seconds early in order to calculate the time faults.

If the rider comes across the line at 1:55:55, then round DOWN to the beginning of the MINUTE, (you get five minutes) then minus the seconds, and you will have the minutes and seconds early (in this case 4 minutes and 5 seconds).

In this case the rider has TEN time faults, because they are in the FIFTH minute prior to optimum ride time. The five seconds are within the FIFTH minute. If the rider comes across the line at 1:56:00, they are in the FOURTH minute prior, so it is eight time faults. If the rider comes across the line at 1:56:01, then they are still in the FOURTH minute prior to optimum finish time, and have EIGHT time faults.