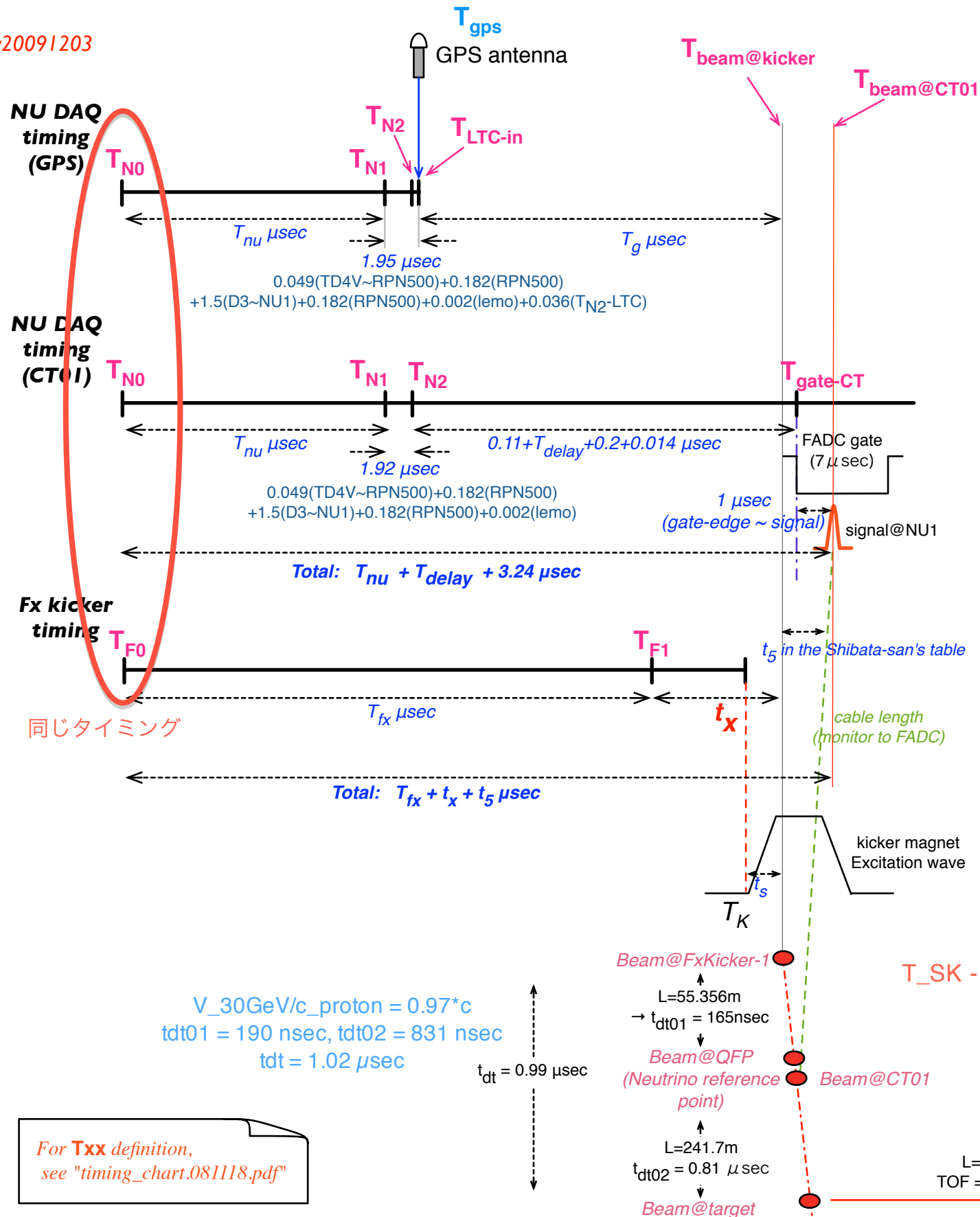


v20091203



T_{nu} : TD4V set value for NU

T_{fx} : TD4V set value for FX

T_{delay} : RPN300 set value for each monitor

t_x : TF1 to beam (originally, this is $17.17 \mu\text{s} + t_s$)

t_5 : beam monitor cable delay

t_{dt} : Time-of-flight of beam from Fx kicker to NU target

t_{dt01} : Time-of-flight of beam from Fx kicker to NU reference point

t_{dt02} : Time-of-flight of beam from NU reference point to NU target

TOF : Time-of-flight from NU target to SK

T_g : time difference between $T_{beam@kicker}$ and $T_{LTC-in}(=T_{gps})$

T_{nu} , T_{fx} , t_x will change run by run

$T_{nu} = 23.1 \mu\text{sec}$, $T_{fx} = 40.3 \mu\text{sec}$ (2009/12/8)

$T_{LTC-in} - T_{N2} = ???$

For CT01:

$T_{delay} = 34.59 \mu\text{sec}$ 設定値 (09/12/8に確認)

$t_5 = 0.632 \mu\text{sec}$ 測定値(timing_chart_091120)
FxKicker-1からCT01にビームが到達する時間

$\text{Total} = T_{nu} + 1.92 + 0.11 + T_{delay} + 0.2 + 0.014 + 1 = 60.93$

$t_x = \text{Total} - T_{fx} - t_5 = 19.998 \sim 20$

$T_{SK} - T_{N0} = T_{fx} + t_x + t_{dt} + \text{TOF} = 1046.418 \mu\text{sec}$

$T_{LTC-in} - T_{N0} = T_{nu} + 1.95 + ??? = 25.05 + ???$

$T_{SK} - T_{LTC-in} = 1046.418 - (25.05 + ???) = 1021.368 - ??? \sim 1021 \mu\text{sec}$

$T_{gps} = (T_{fx} + t_x) - T_{nu} - 1.92 - (T_{LTC-in} - T_{N2}) = 40.3 + 19.998 - 23.1 - 1.92 - ??? = 35.278 - ??? \sim 35$

$\text{TOF} = L_{j\text{-parc2sk}} / c = 0.000985138192 \sim 985.1 \mu\text{sec}$

$L_{j\text{-parc2sk}} = 295337 \text{ m}$ (survey by ishii-san)