

- Test Conditions

- BDC

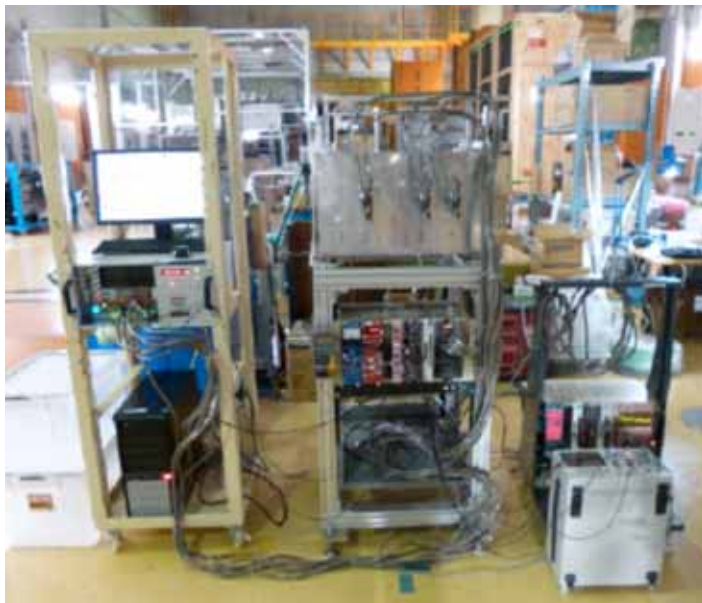
- $x_1 y_1 x_2' y_2' x_3 y_3 x_4' y_4' x_5 y_5$
 - 16ch ASD ($\tau = 80 \text{ nsec} \ \& \ 16 \text{ nsec}$) $\times 6 \rightarrow 64\text{ch VME-TDC} \times 2 (0.78 \text{ nsec/ch})$
 - $V_{\text{th}}(\text{ASD}) = -0.8\text{V}$
 - gas : Ar+CH₄(10%) (tentative, Ar+C₂H₆(50%) next week for HIMAC exp.)

- Trigger scintillators

- S1 : 50 x 50 x 1 mm^t
 - S2 : 65 x 65 x 5 mm^t

- β source : ⁹⁰Sr

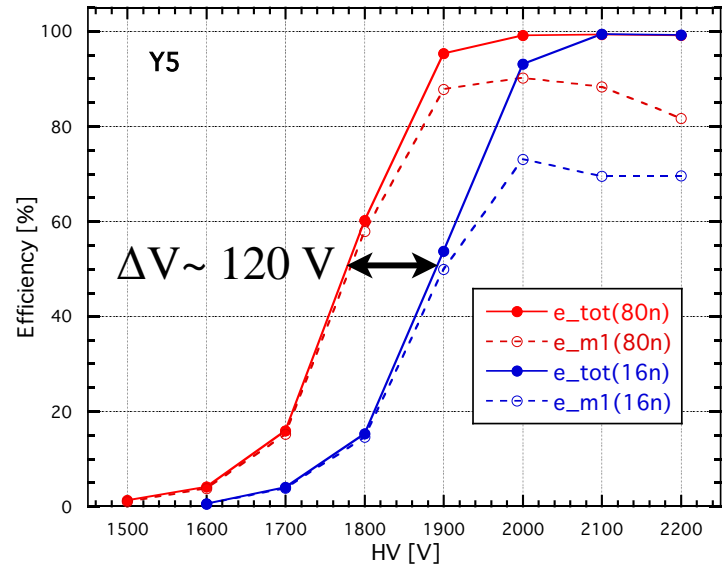
- Setup @B2F Samurai



- Trigger = S1 * S2

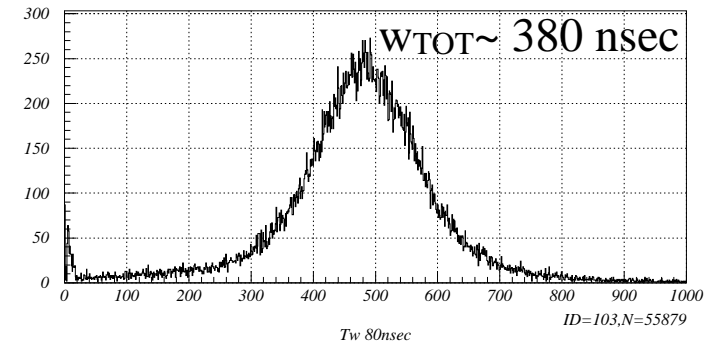
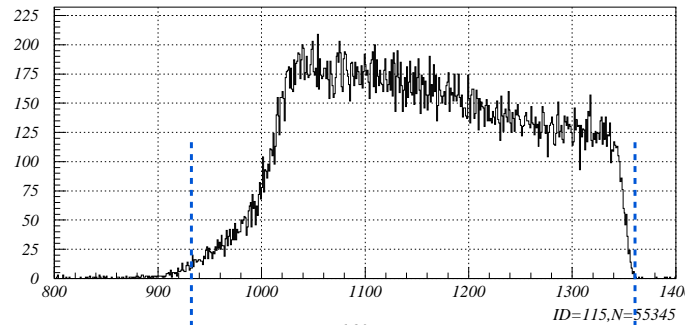
- TDC common stop delay : $\sim 1 \mu\text{sec}$
 - typical dead time $\sim 80 \mu\text{sec}$

- Efficiency
 - @ $V_{th}(ASD) = -0.8V$
 - no noise
 - $\Delta V(80nsec, 16 nsec) \sim 120 V$
 - no dead channels
 - unstable @ 2.3 kV

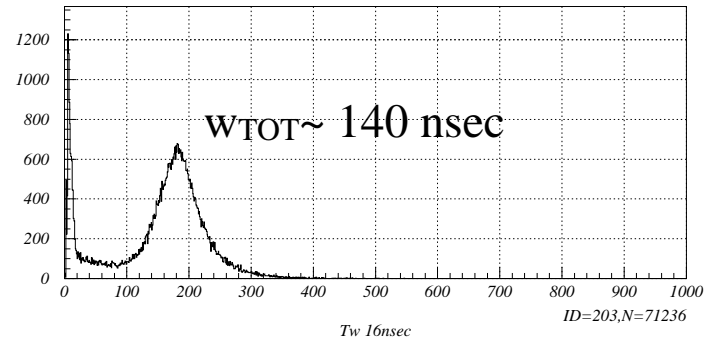
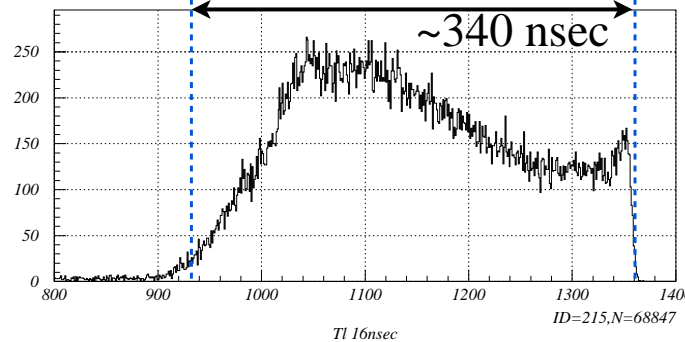


- Drift time & width (TOT: Time Over Threshold)

80 nsec
@ 2.1 kV



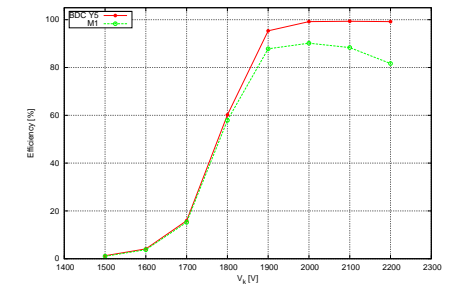
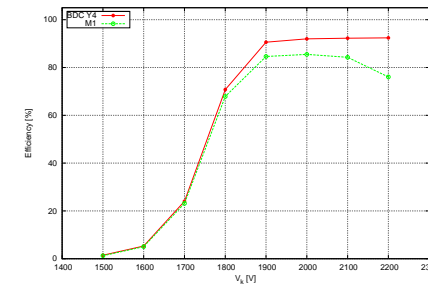
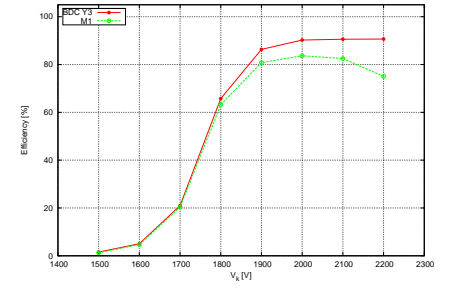
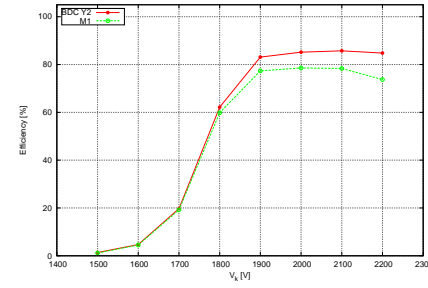
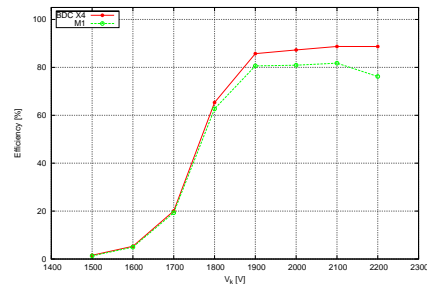
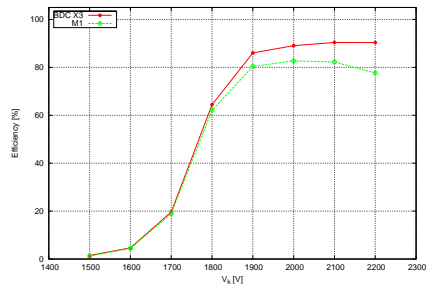
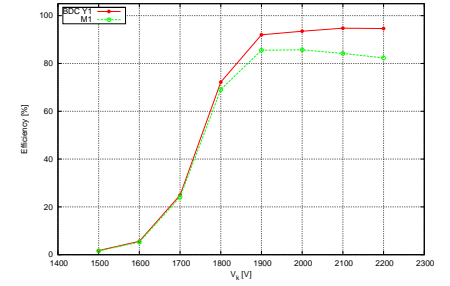
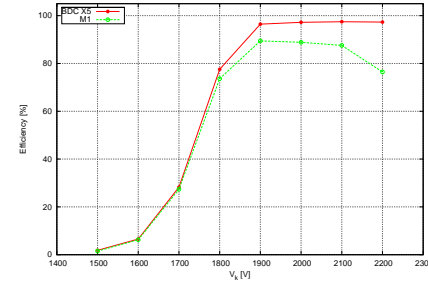
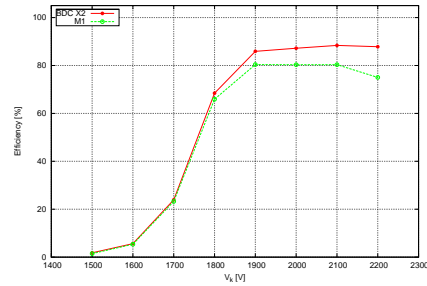
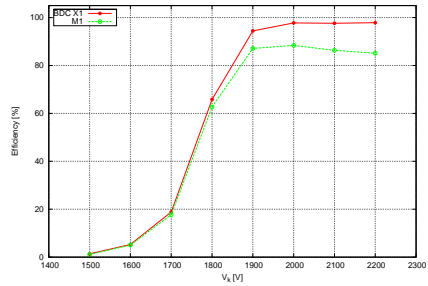
16 nsec
@ 2.2 kV



Drift time [ch]

TOT width [ch]

HV plateau (80nsec) β



HV plateau (16nsec) β

