

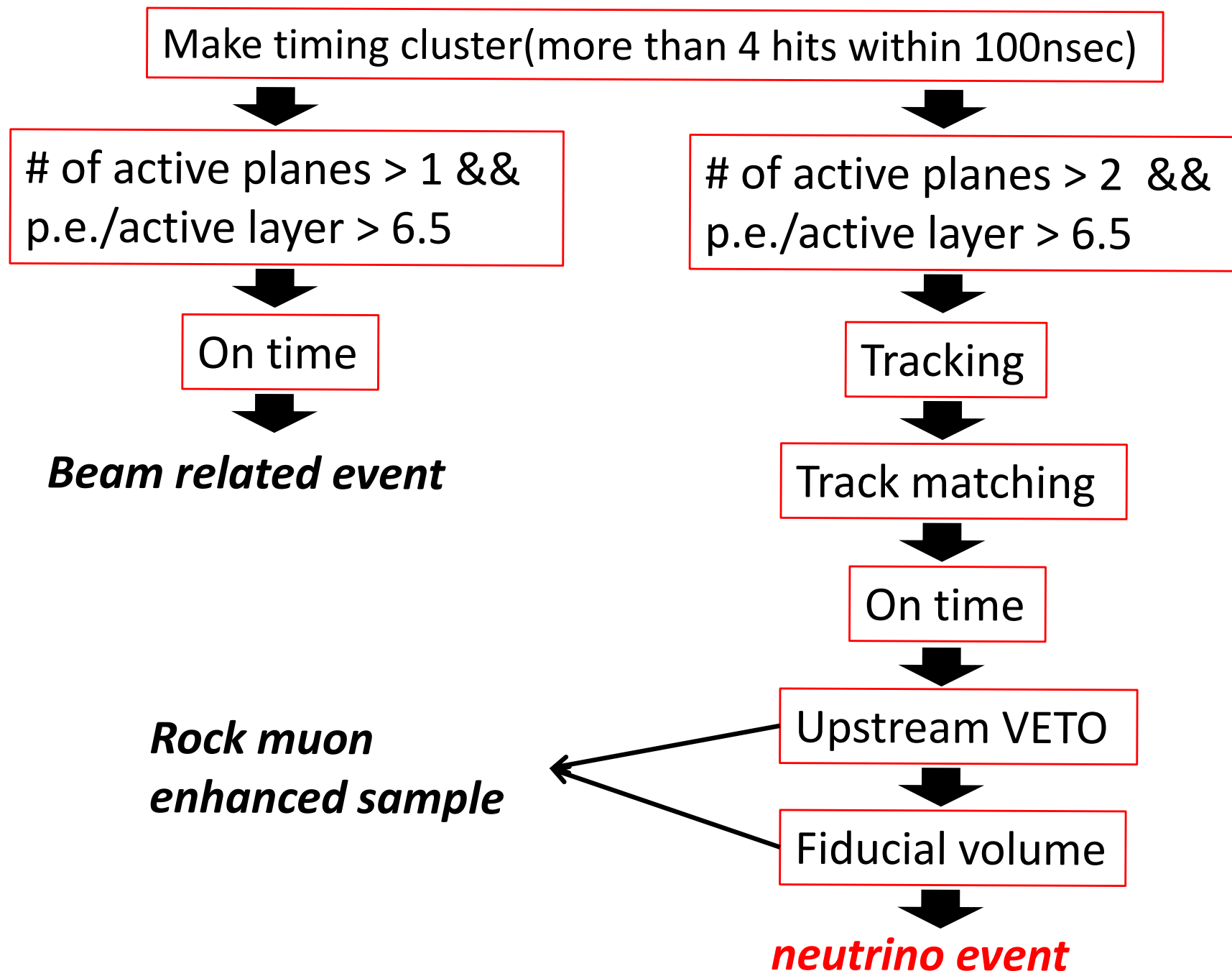
Run34 quick beam analysis report

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2010.6.21

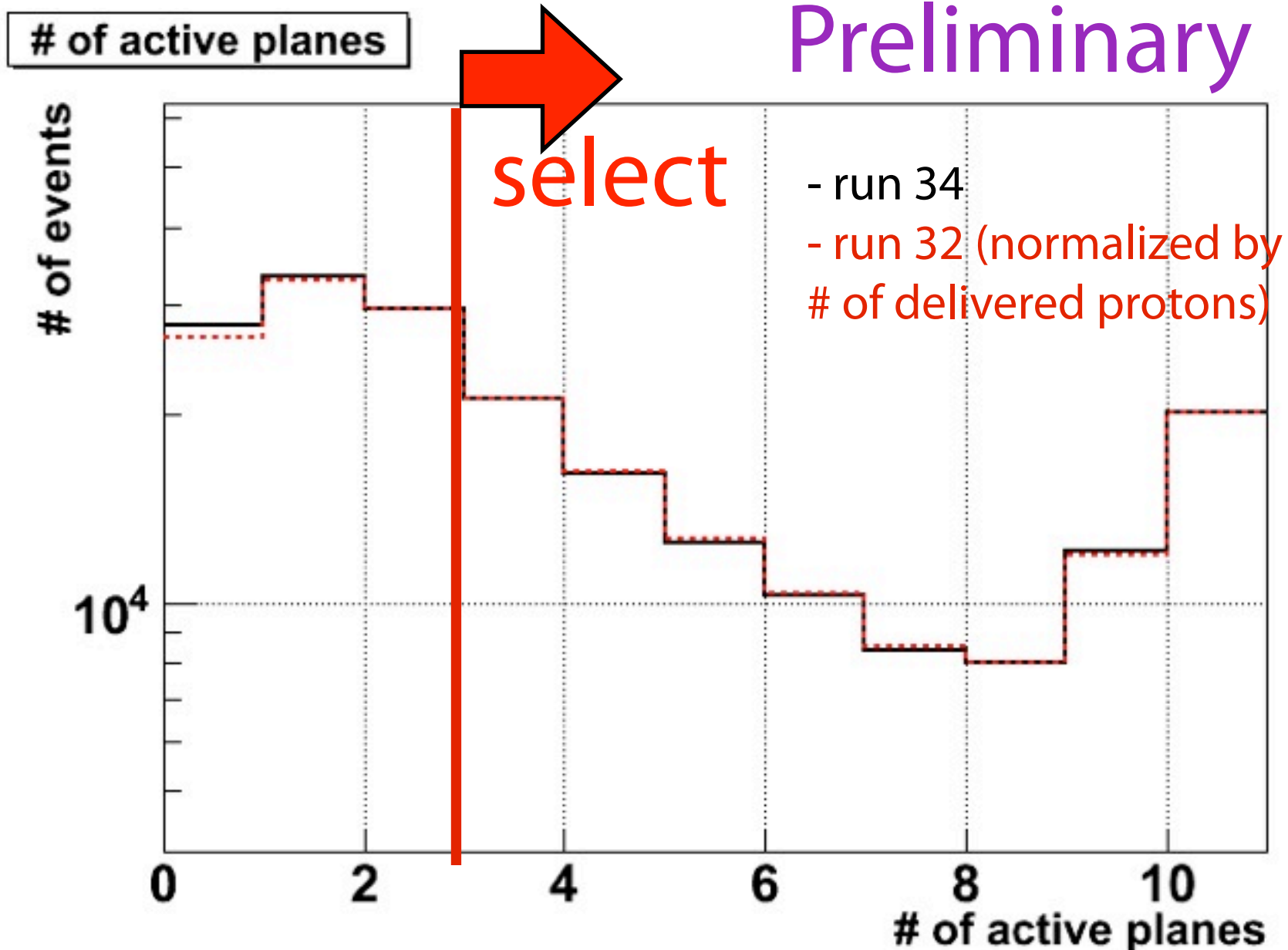
Quick analysis of Run34 data

- Analyzed the data set.
 - June.17th ~ June. 21th. data is analyzed with quick beam summary (ver p02).
- Total # of good spills $\sim 5.0 \times 10^4$, total delivered protons $\sim 1.87 \times 10^{18}$

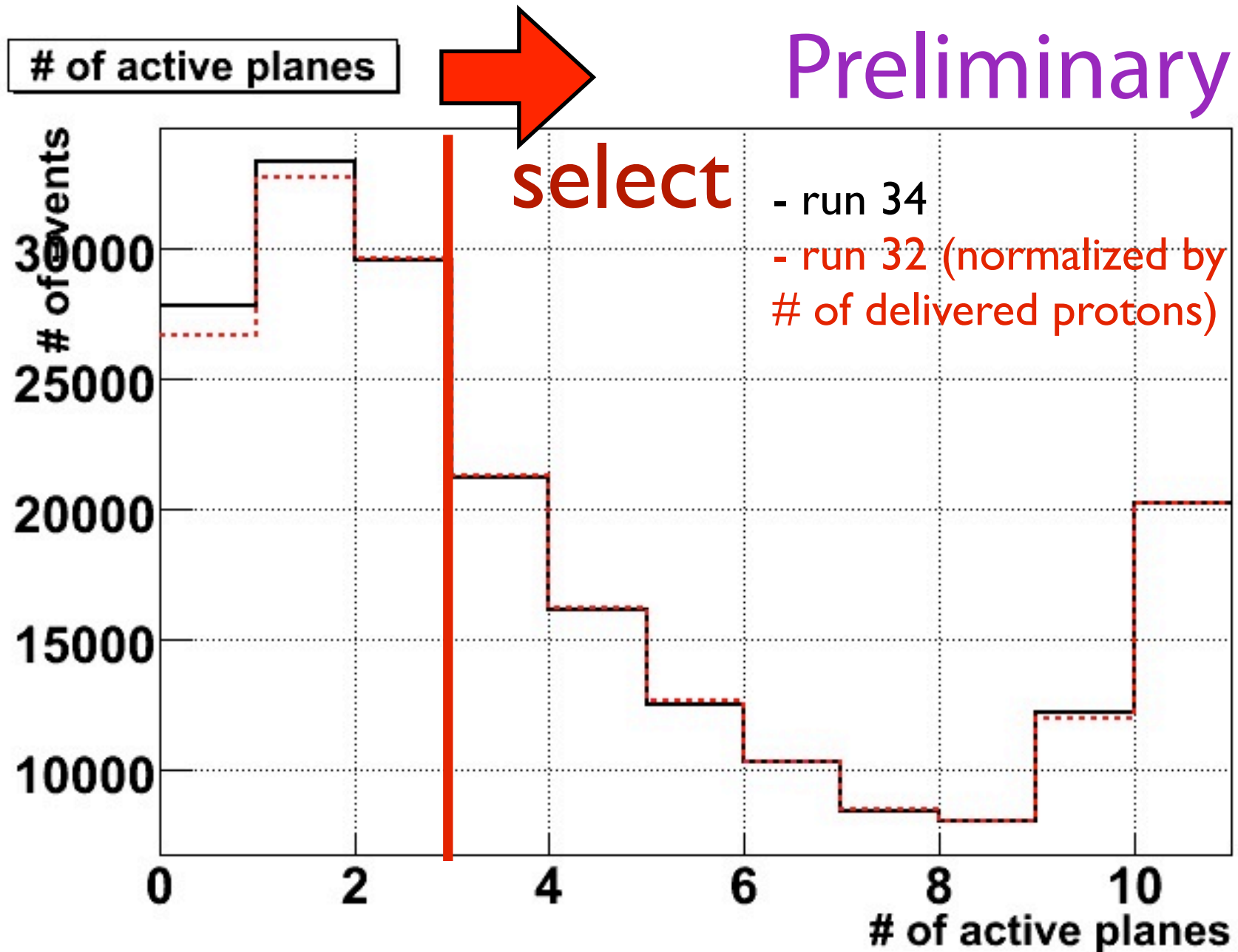
Analysis flow chart



of active plane (log)



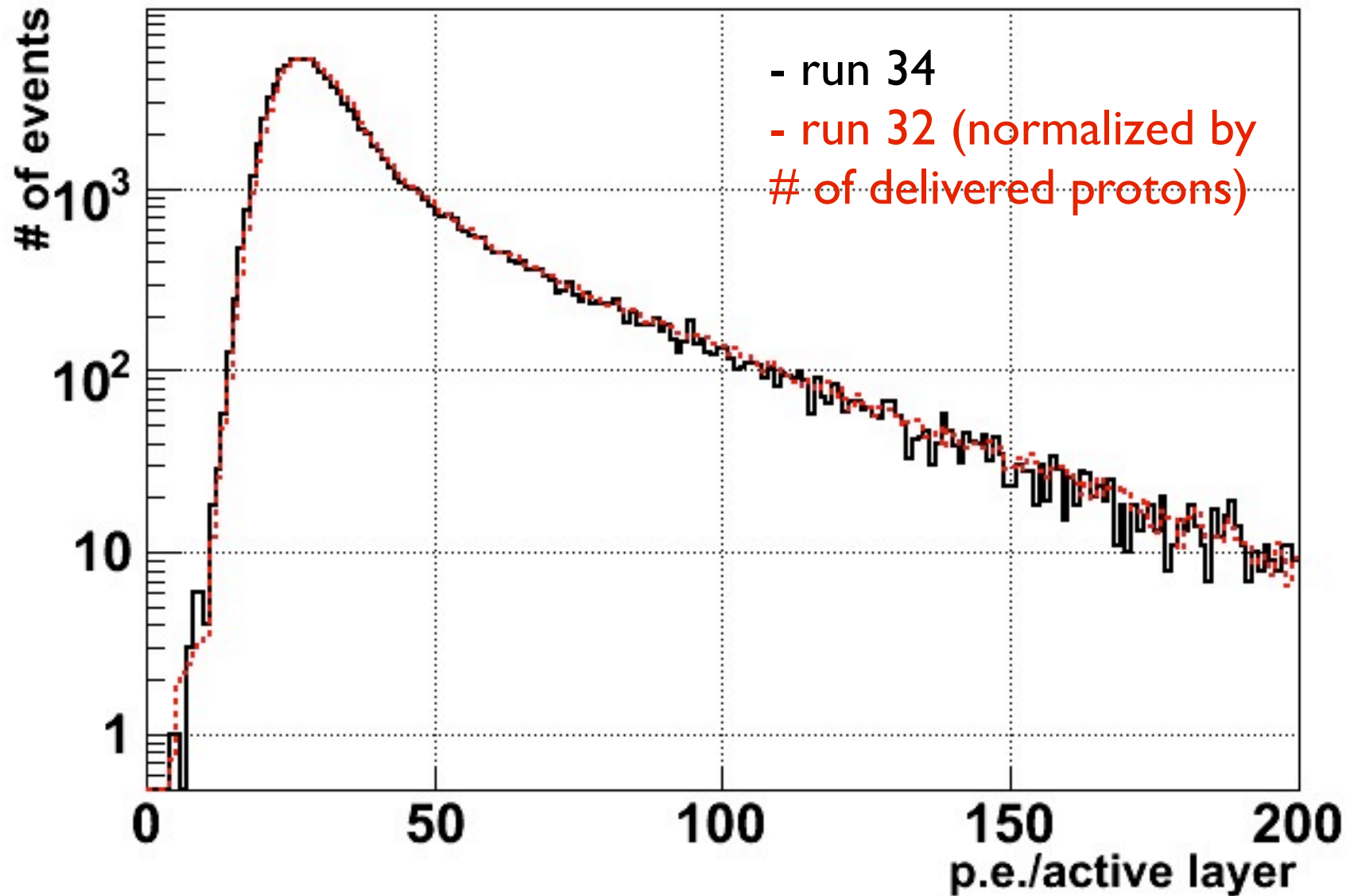
of active plane (linear)



p.e. / active layer(log)

Preliminary

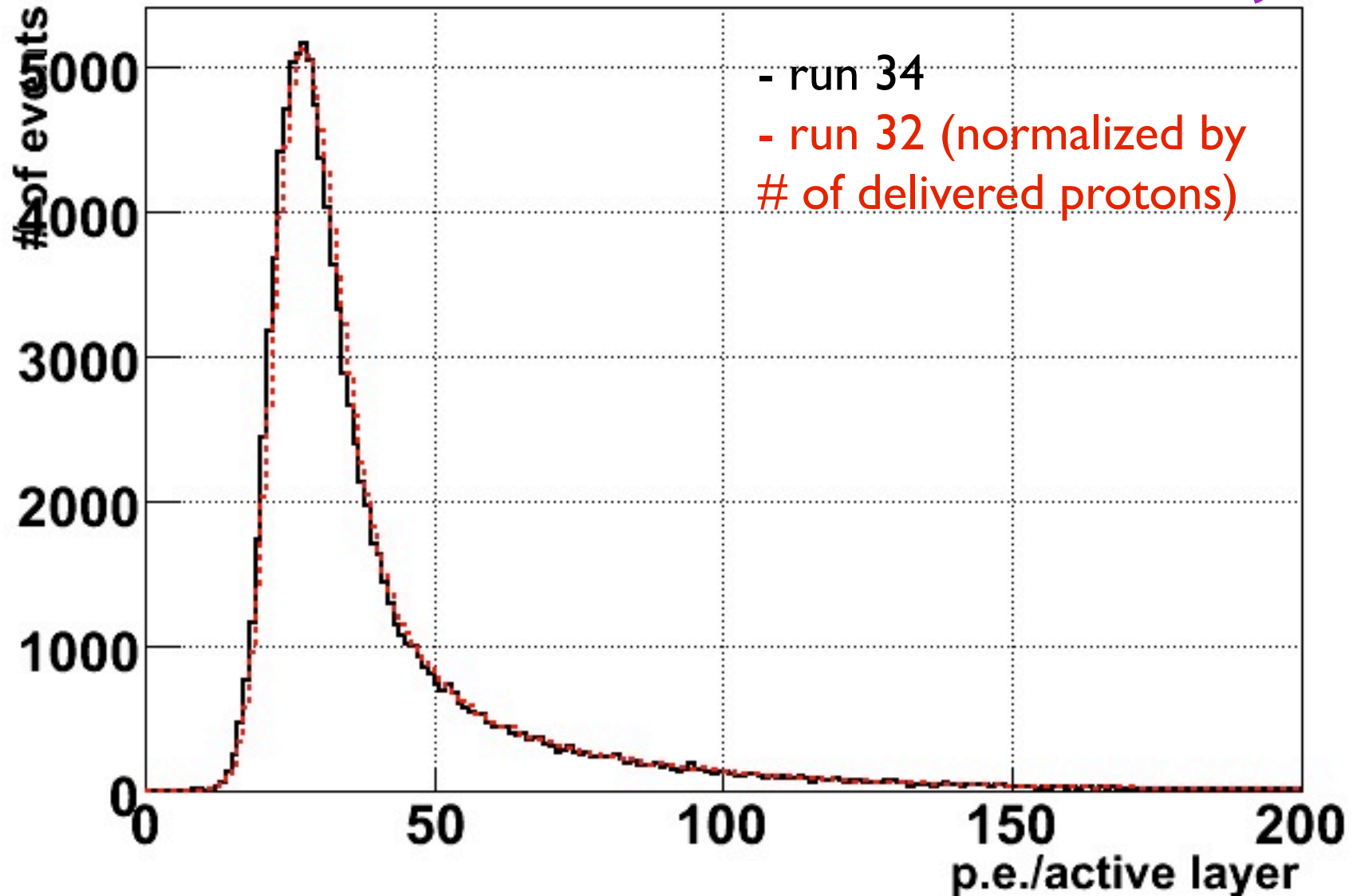
p.e./active layer



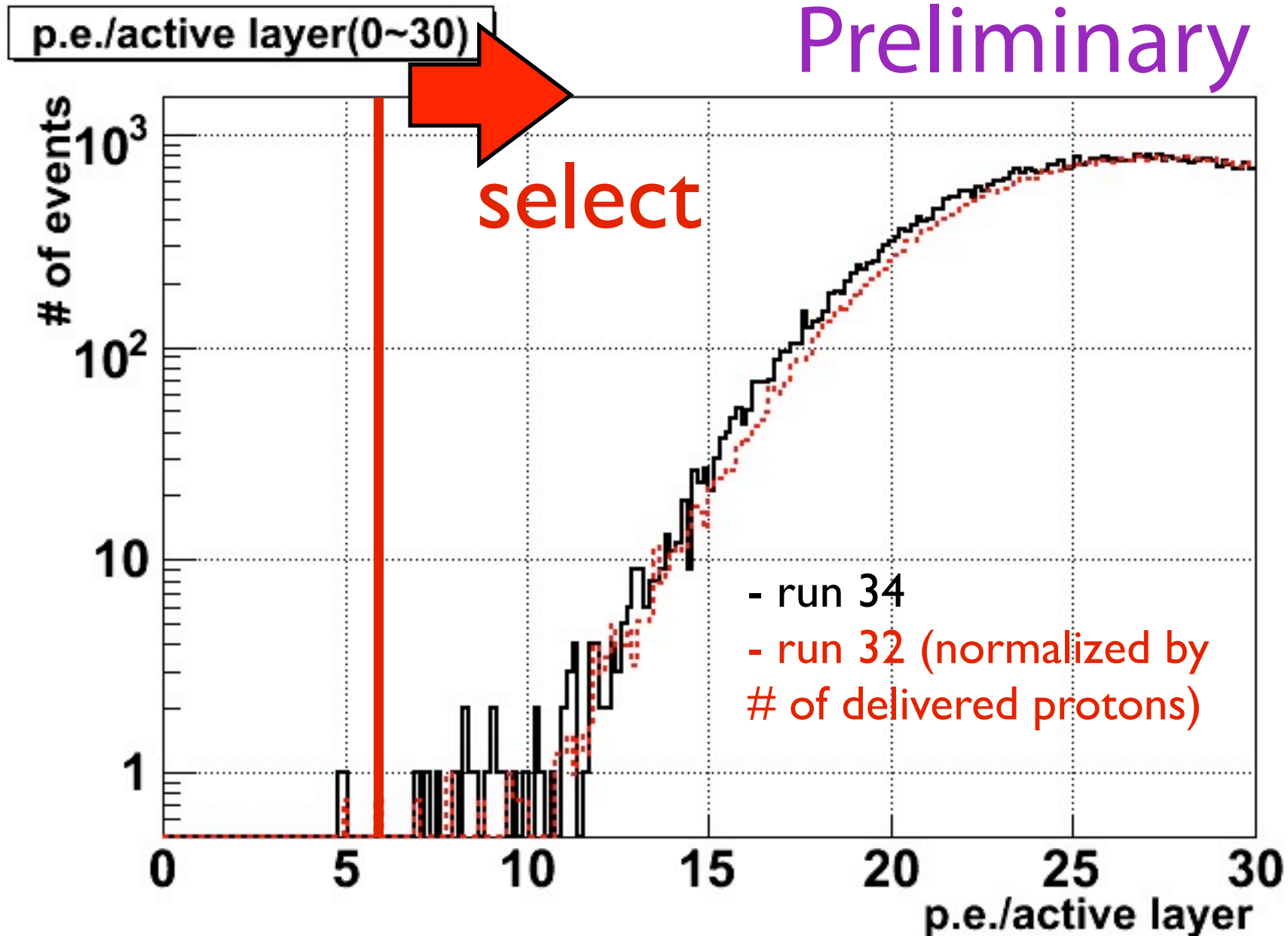
p.e. / active layer(linear)

p.e./active layer

Preliminary



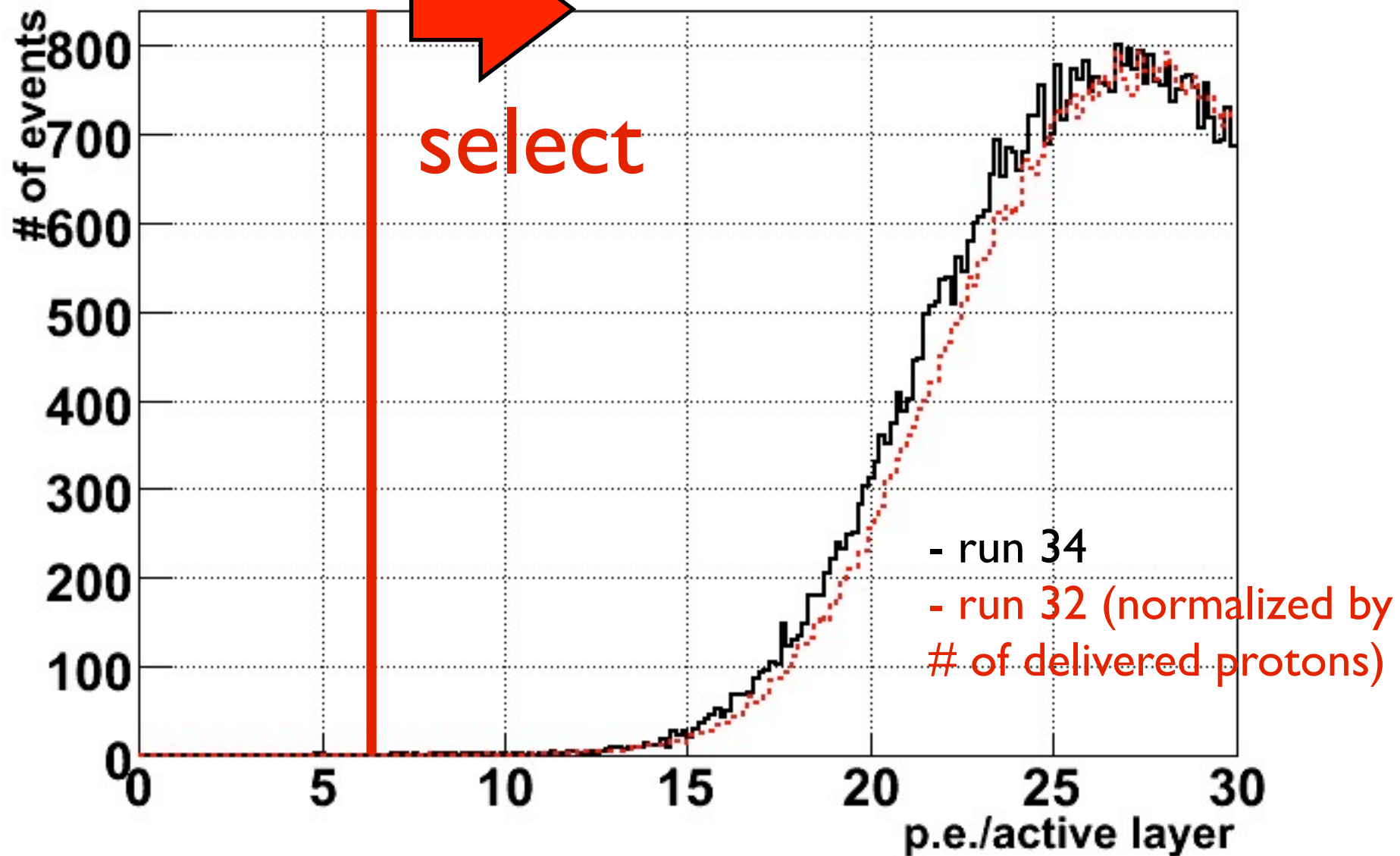
p.e. / active layer (log, zoom)



p.e. / active layer (linear, zoom)

p.e./active layer(0~30)

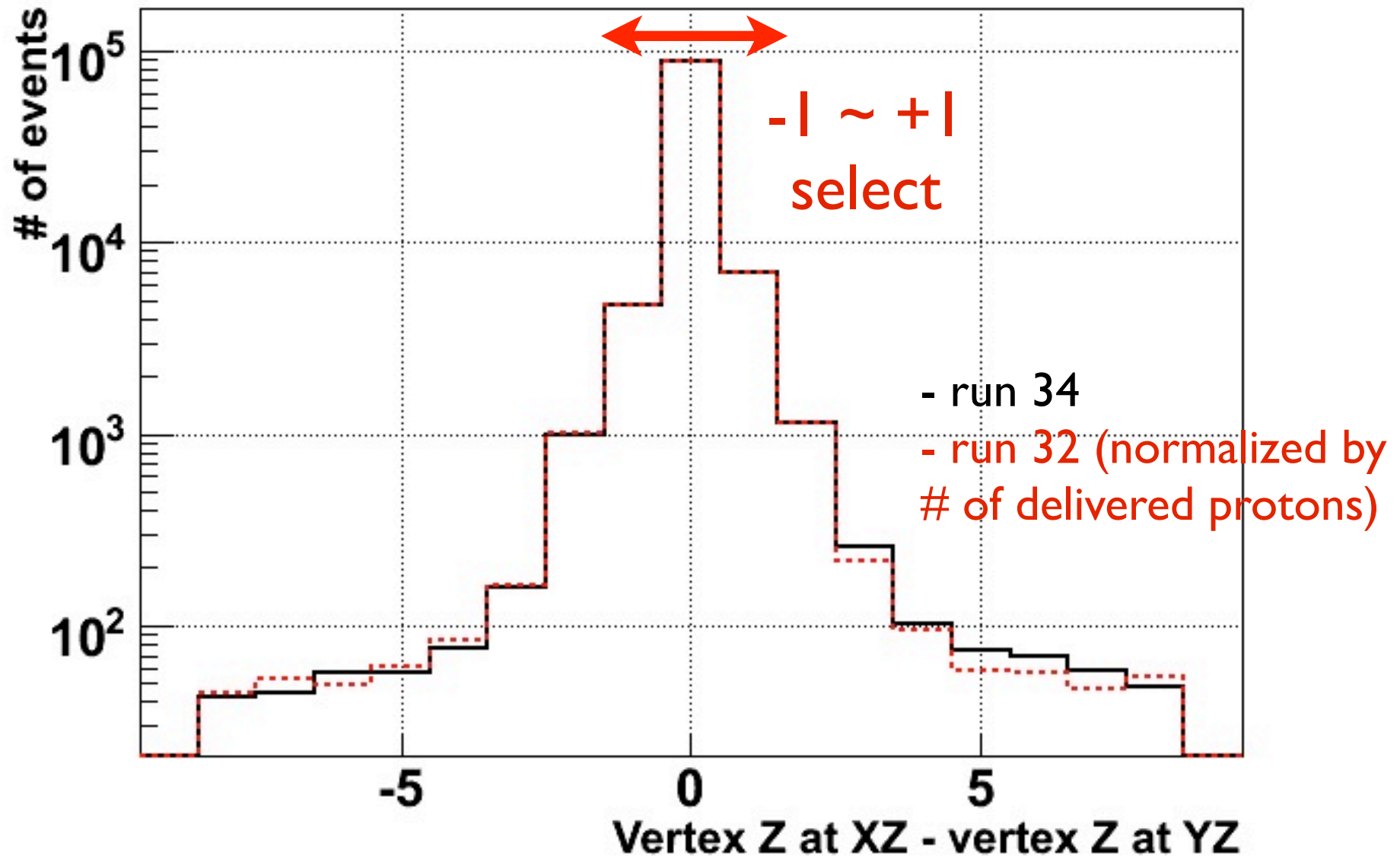
Preliminary



XZ and YZ Track matching

Preliminary

diff. b/w vertex Z at XZ and YZ



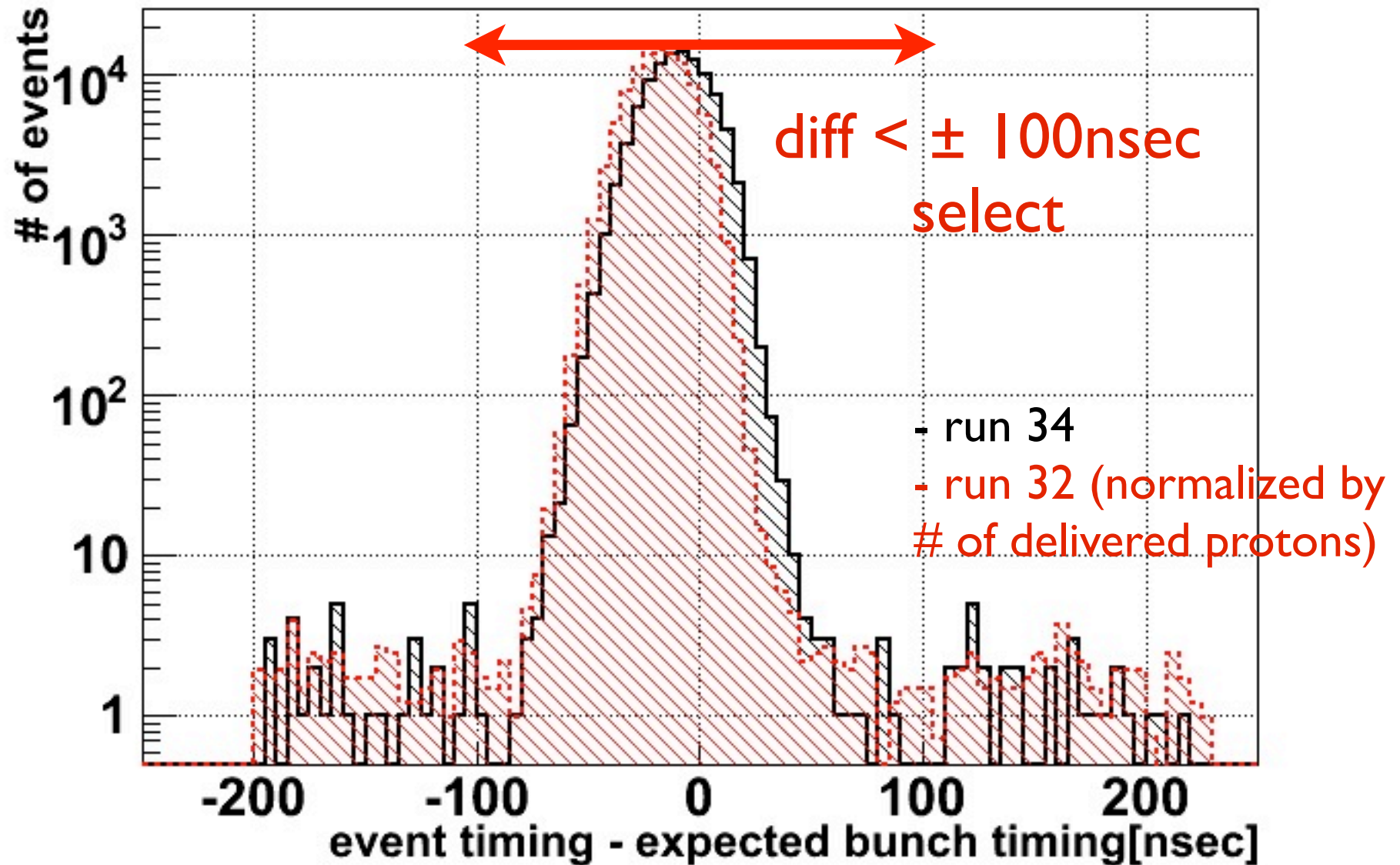
- run 34

- run 32 (normalized by
of delivered protons)

On time

Preliminary

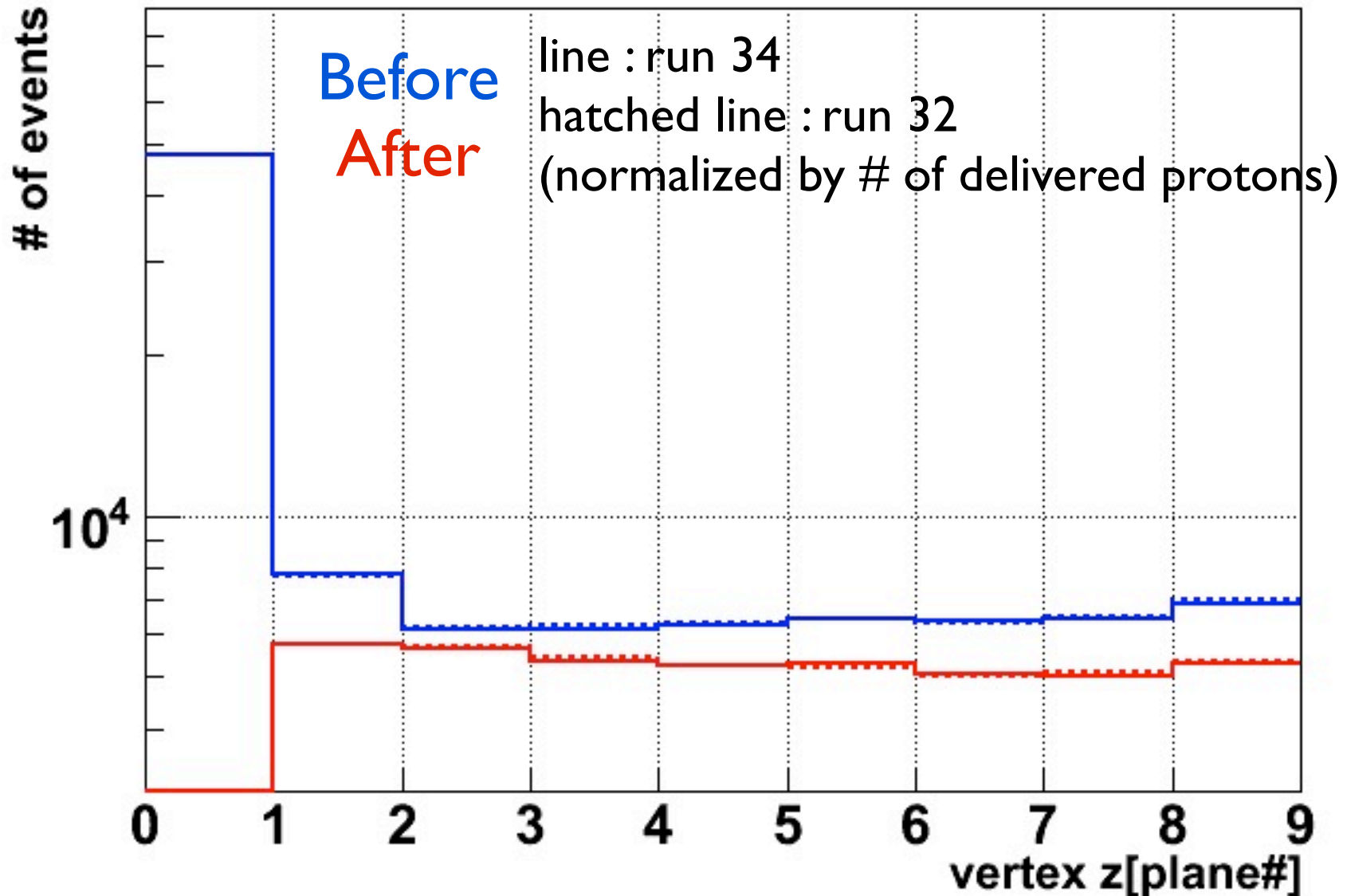
diff. from expected timing



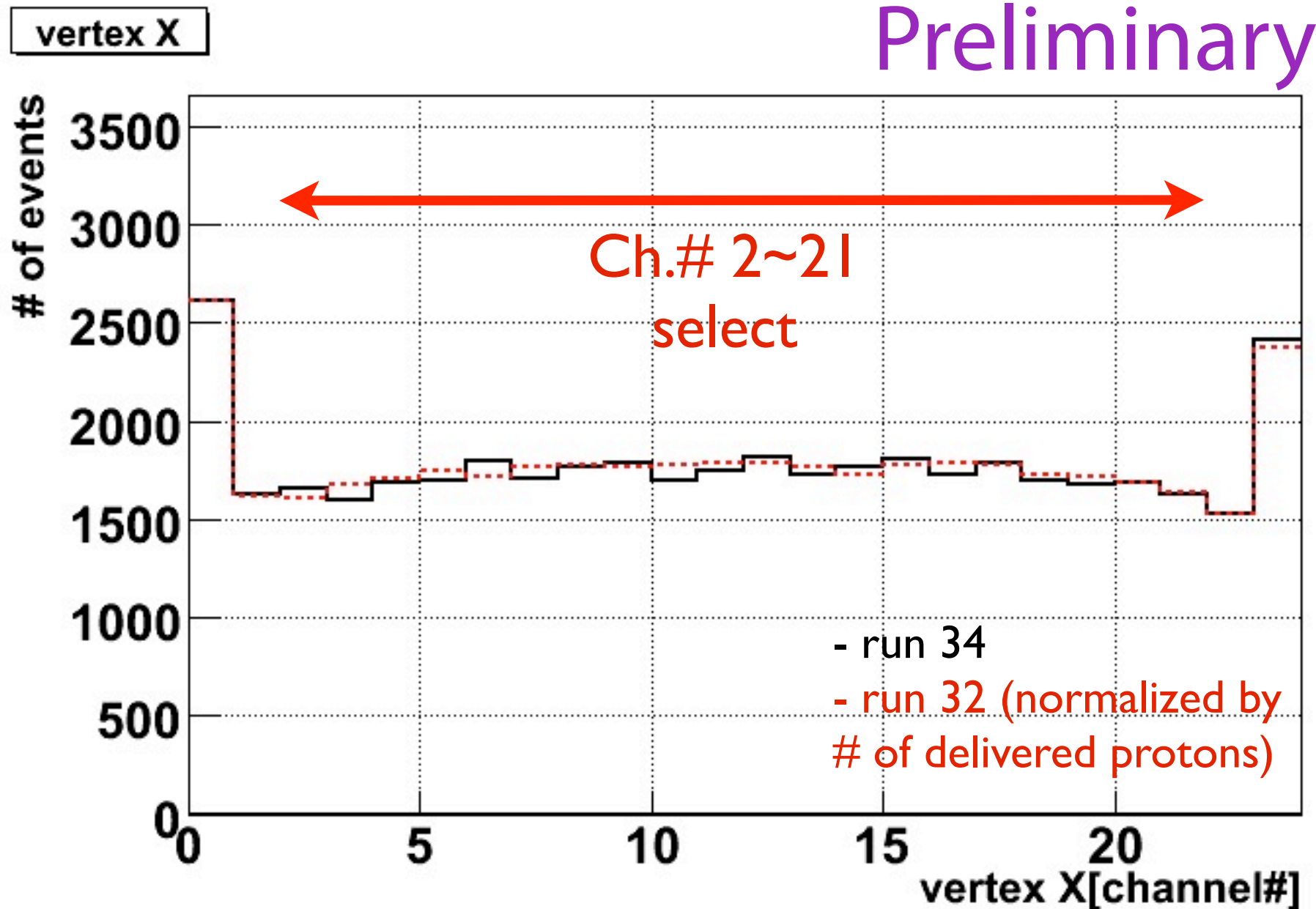
Upstream VETO

vertex z before/after upstream VETO

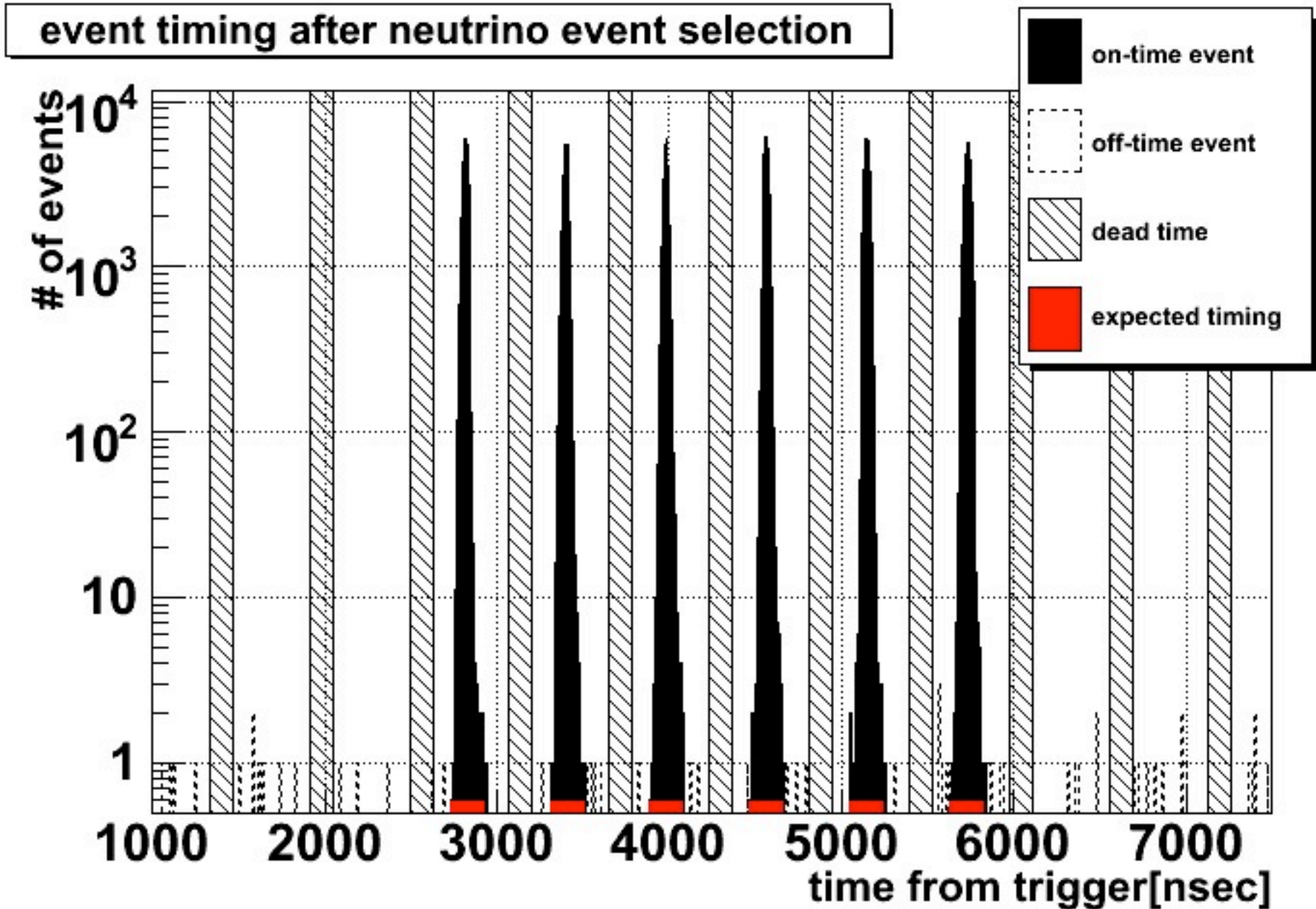
Preliminary



Fiducial volume cut



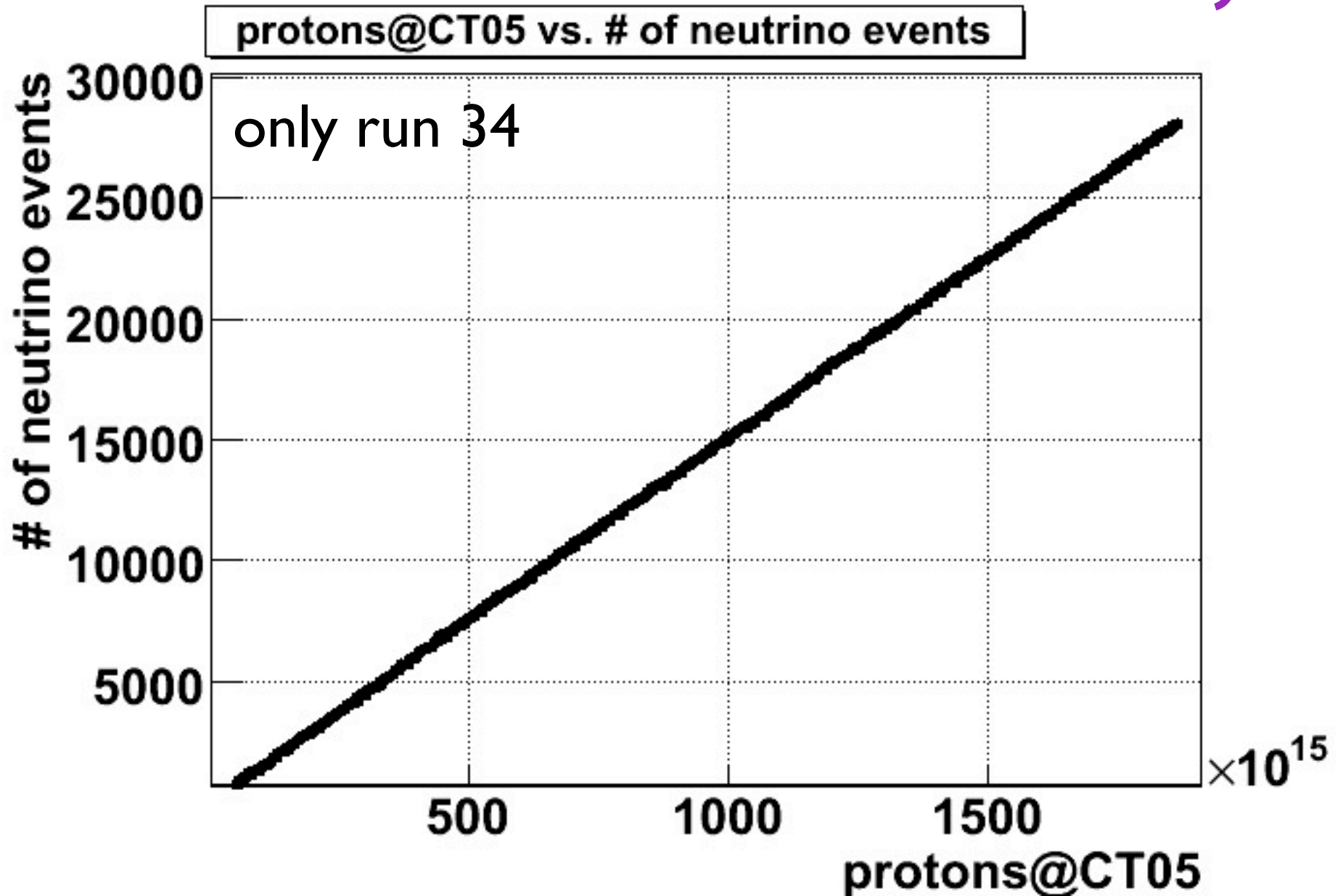
Event timing Preliminary



→ you can see the six bunch structure clearly.

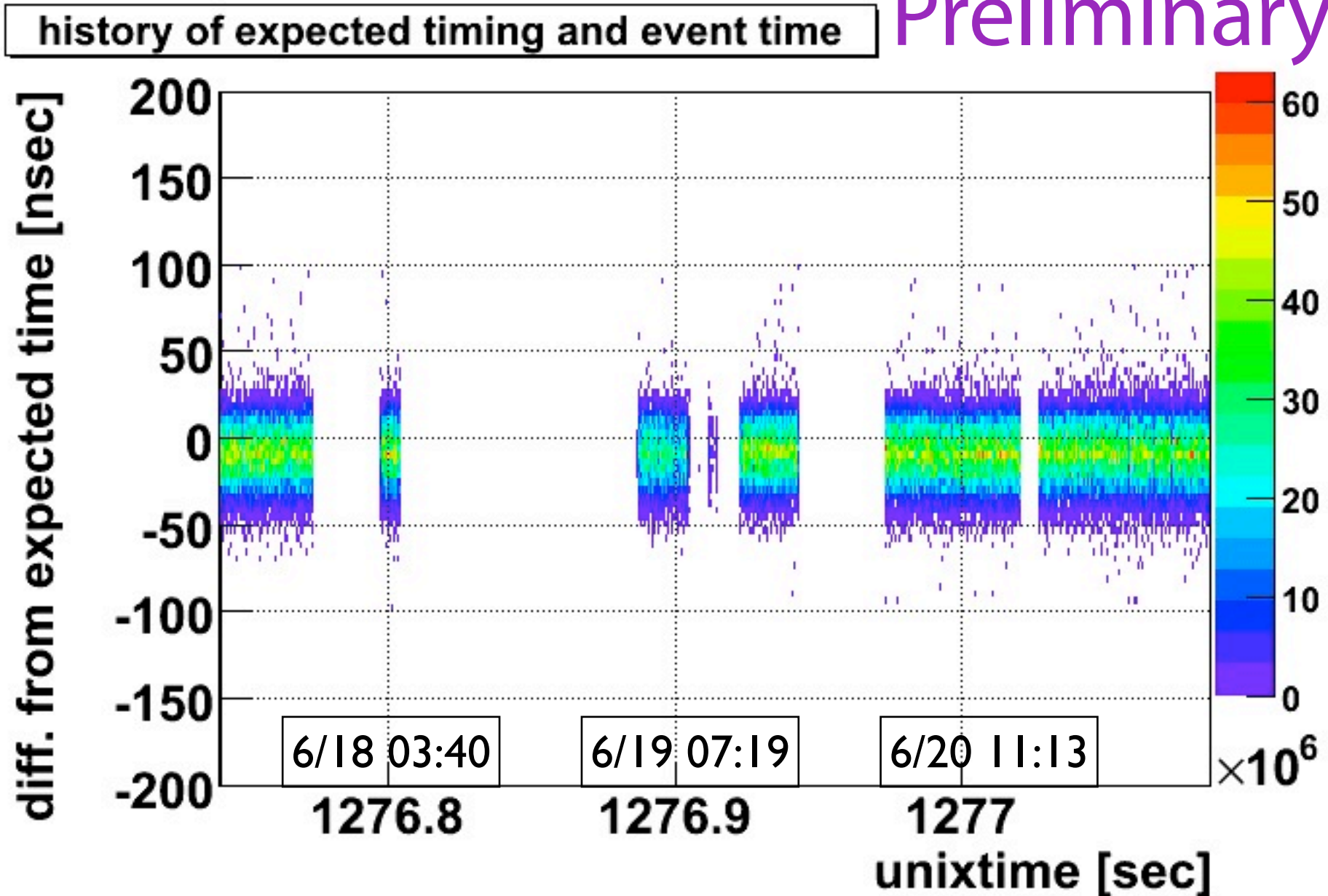
protons@CT05 vs neutrino events

Preliminary



History of diff. of observed timing from expectation.

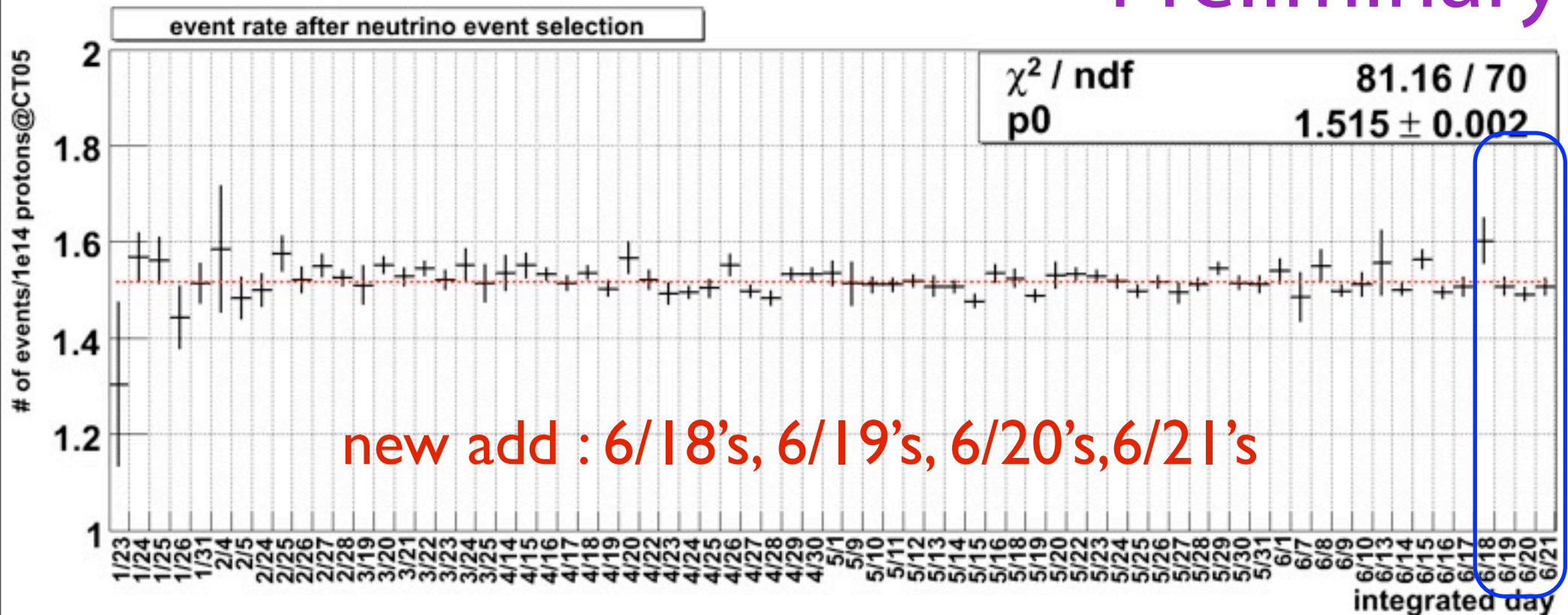
Preliminary



Neutrino event rate

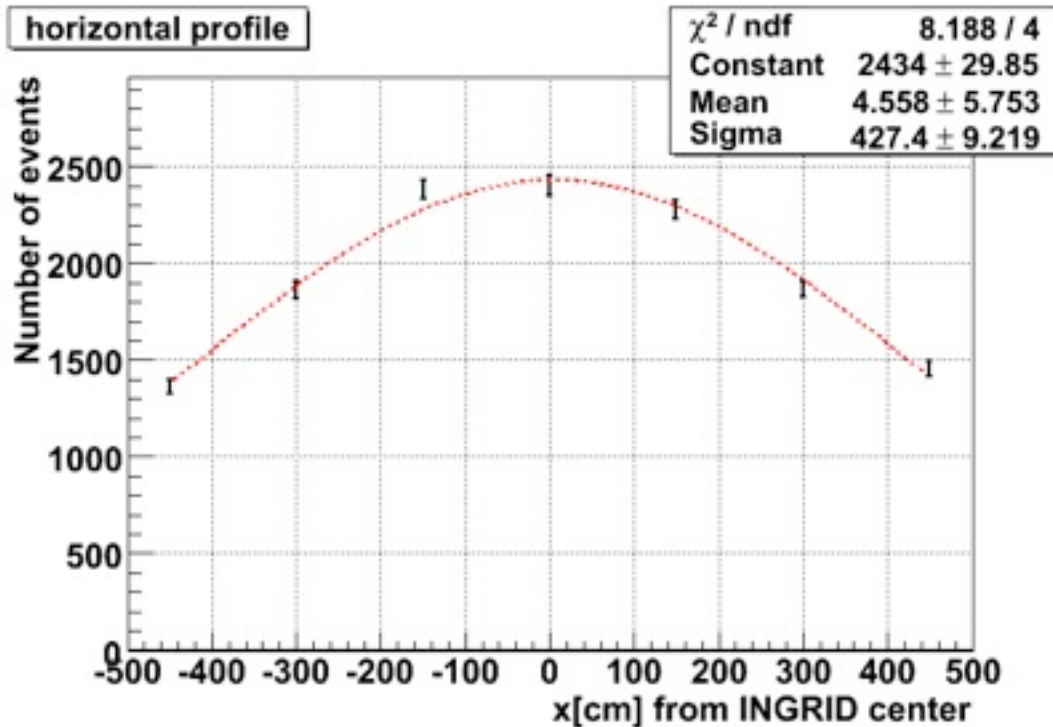
red dash line shows mean

Preliminary

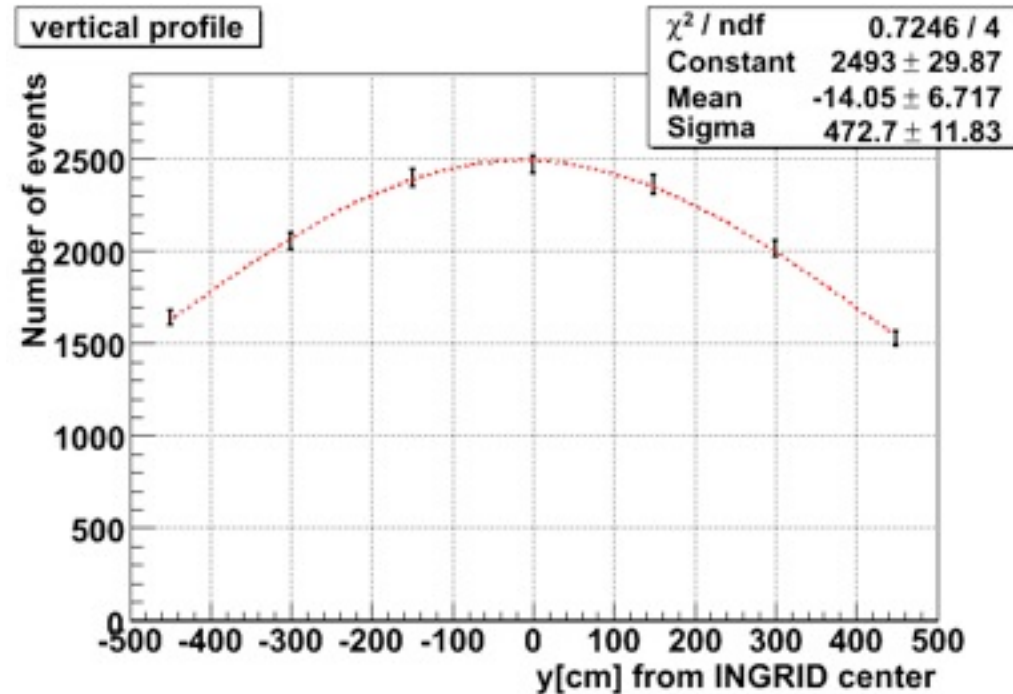


Event rate is as usual

Beam Profile Preliminary



center: $4.6 \pm 5.8 \text{ cm}$
(to south)
Sigma: $427 \pm 9 \text{ cm}$



center: $-14.1 \pm 6.7 \text{ cm}$
(on axis = -1.9 cm)
Sigma: $473 \pm 12 \text{ cm}$

(1 mrad beam shift at INGRID = 28 cm)