

Analysis results of Test Beam 2015

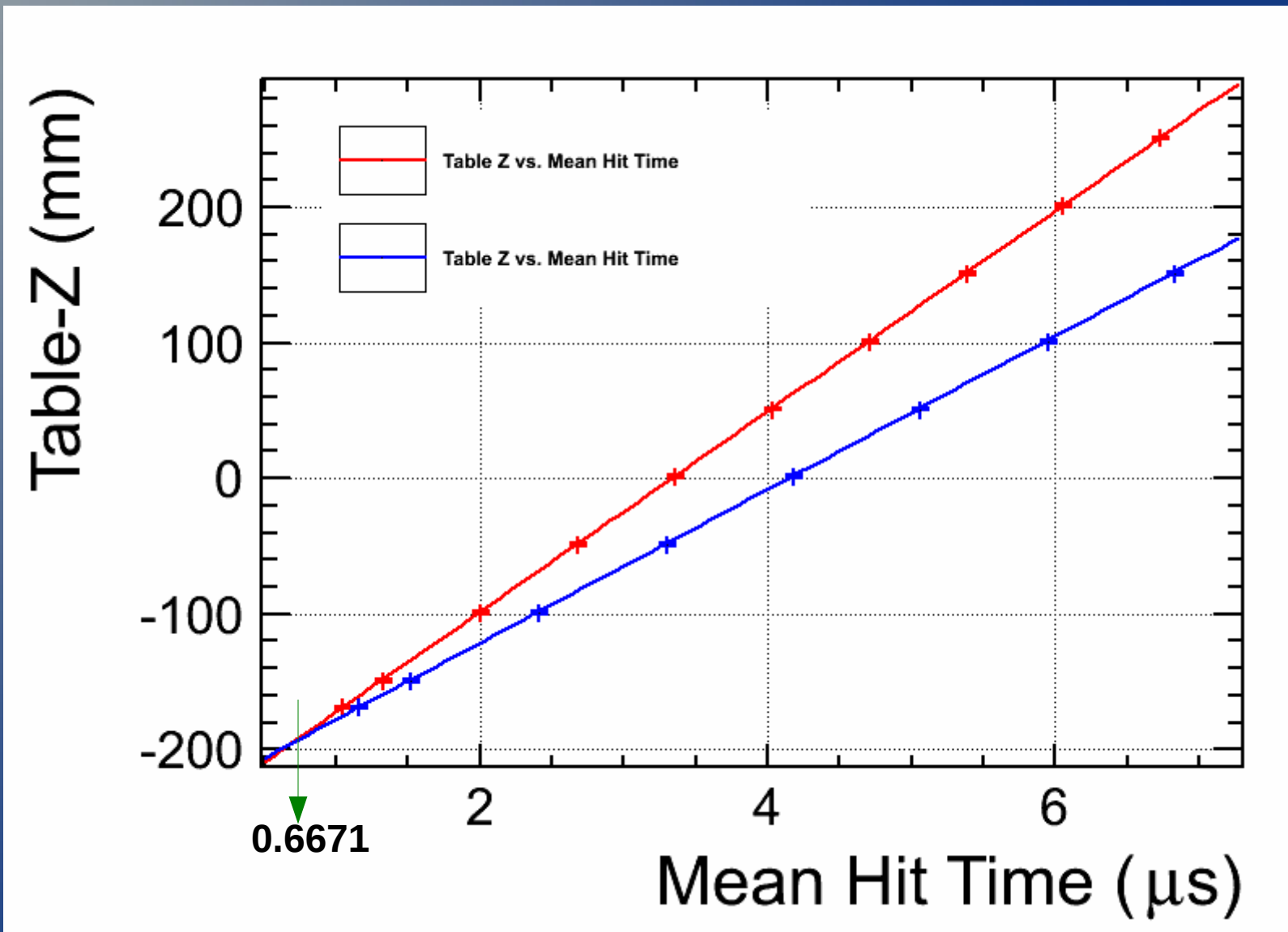
Group meeting, 15 April 2015

Deb Sankar Bhattacharya, PhD student, CEA & SINP

- T0 calculation from Hit time reconstruction and Time bin contents
- r_phi resolution VS Peaking time

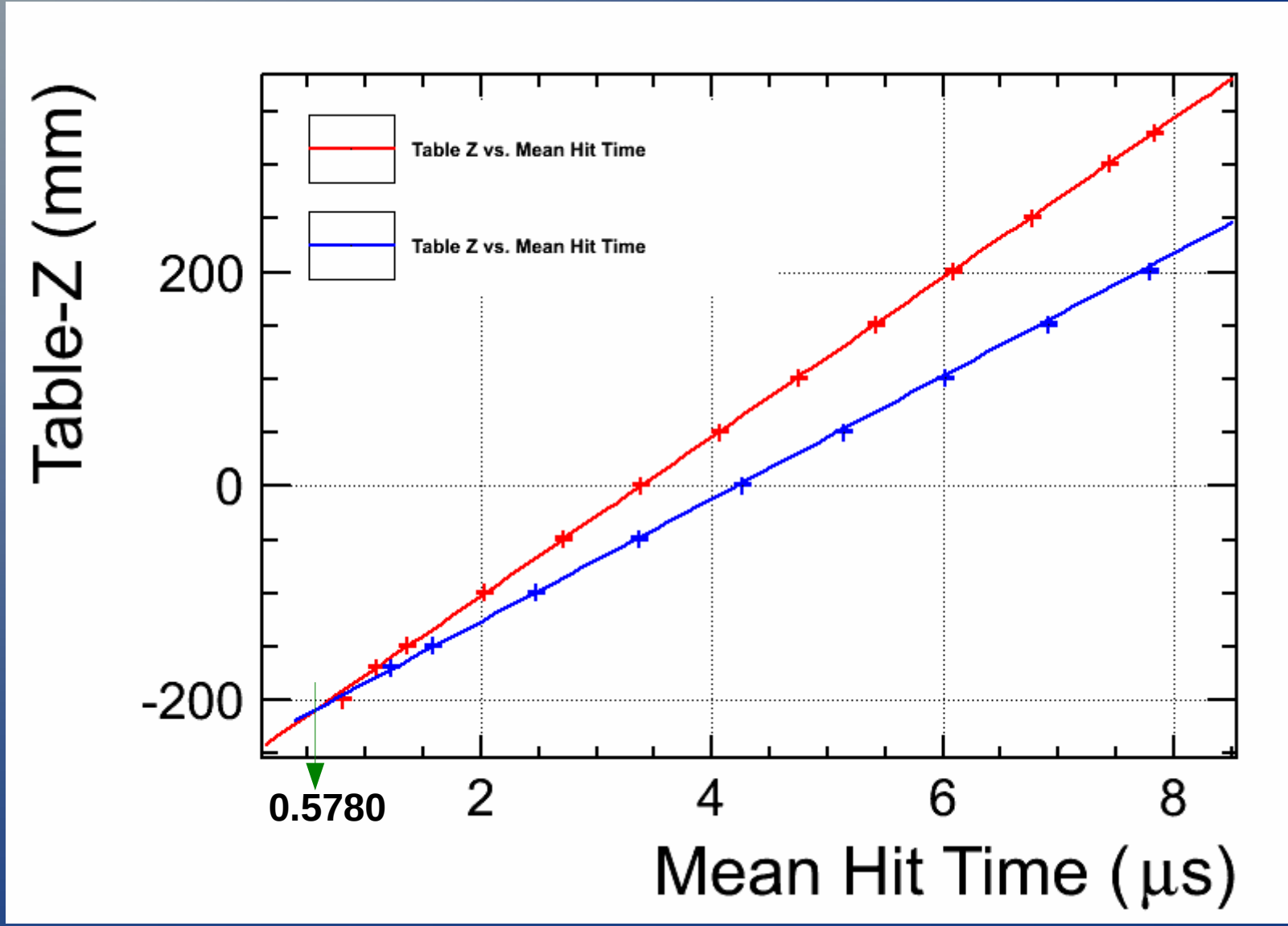
Runs: 5108-5122 (high field), and 5123-5134 (low field), B = 1 T, peaking time = 100 ns, 4.5 sigma, on 11 March

$T_0 = 671.6 \text{ ns}$



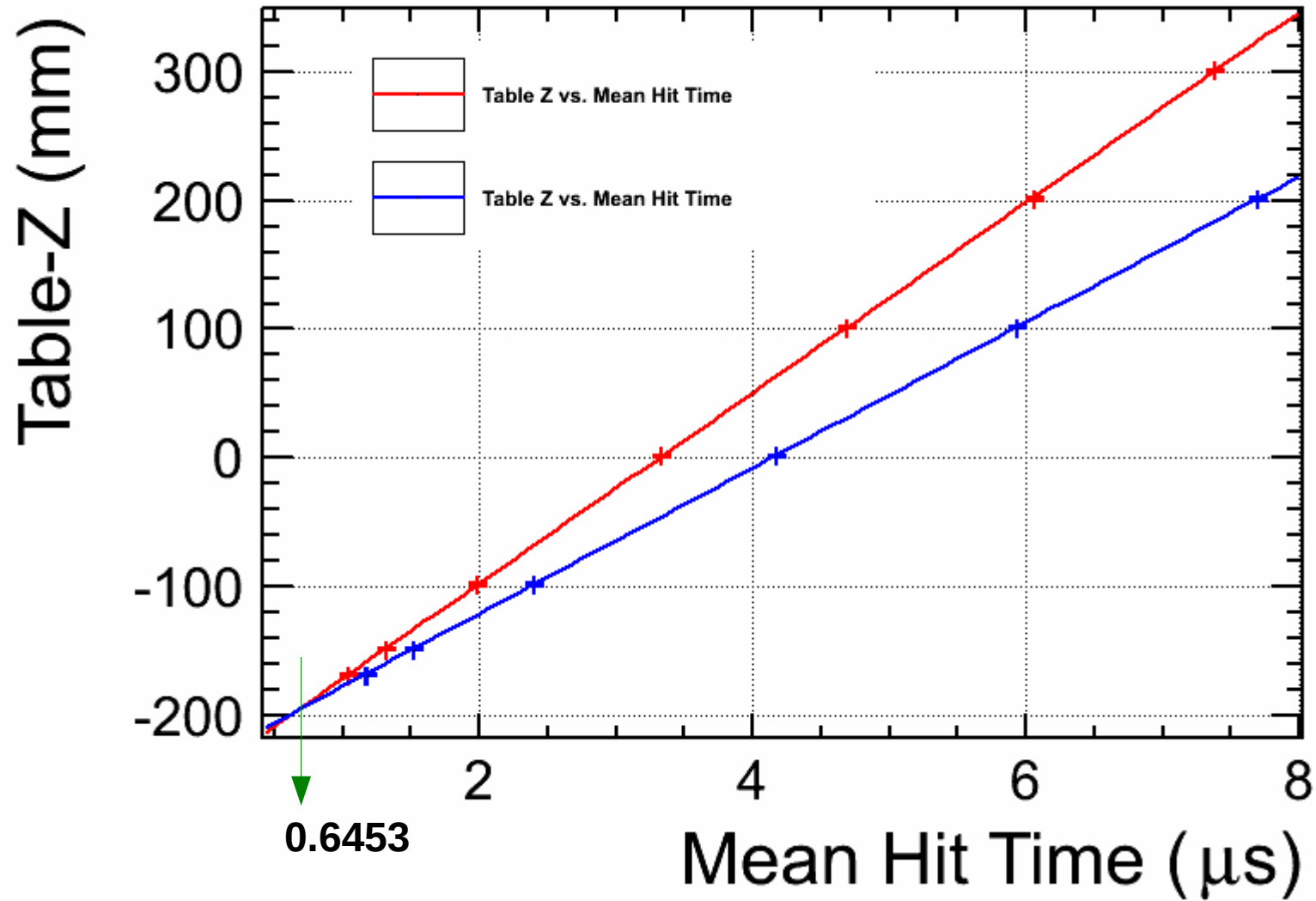
Runs: 5148-5161 (high field), and 5135-5147 (low field), B = 1 T, peaking time = 200 ns, 4.5 sigma, on 11 March

$T_0 = 578 \text{ ns}$



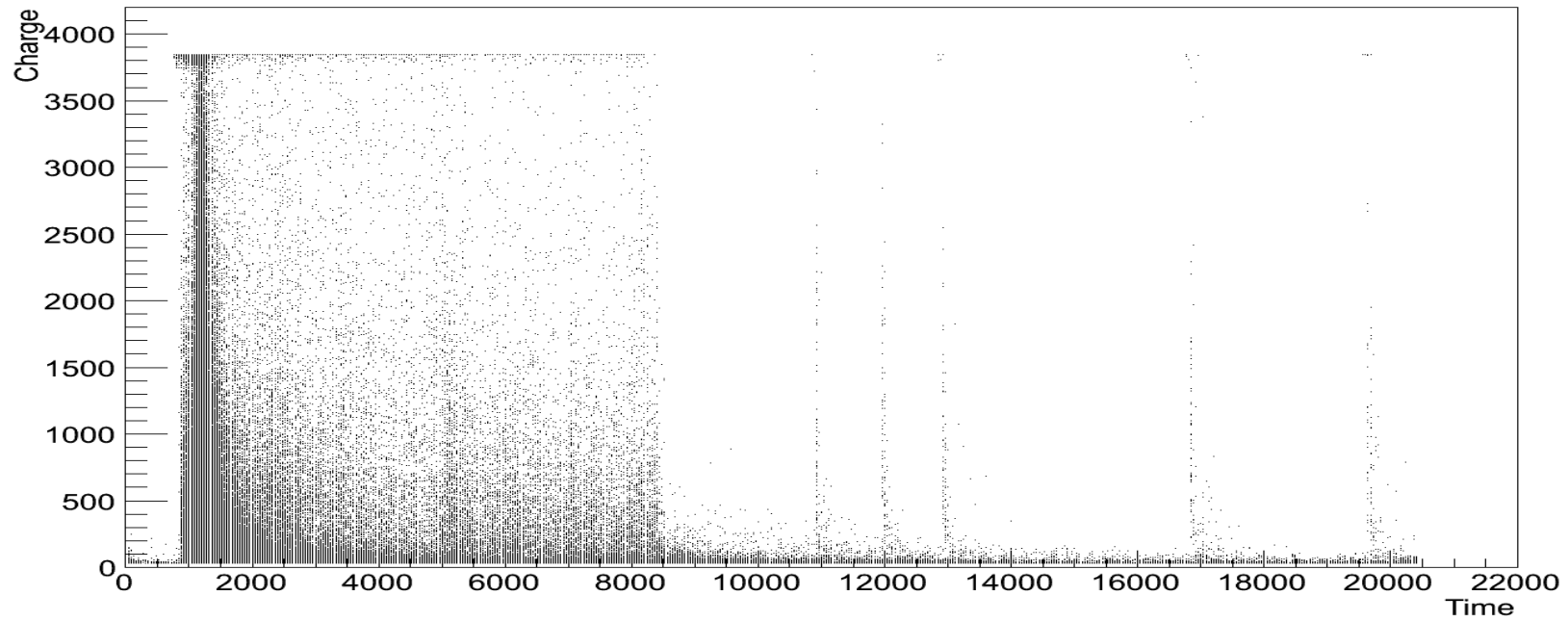
Runs: 5148-5161 (high field), and 5135-5147 (low field), B = 1 T, peaking time = 100 ns, 3 sigma, on 12 March

$T_0 = 645.35$ ns

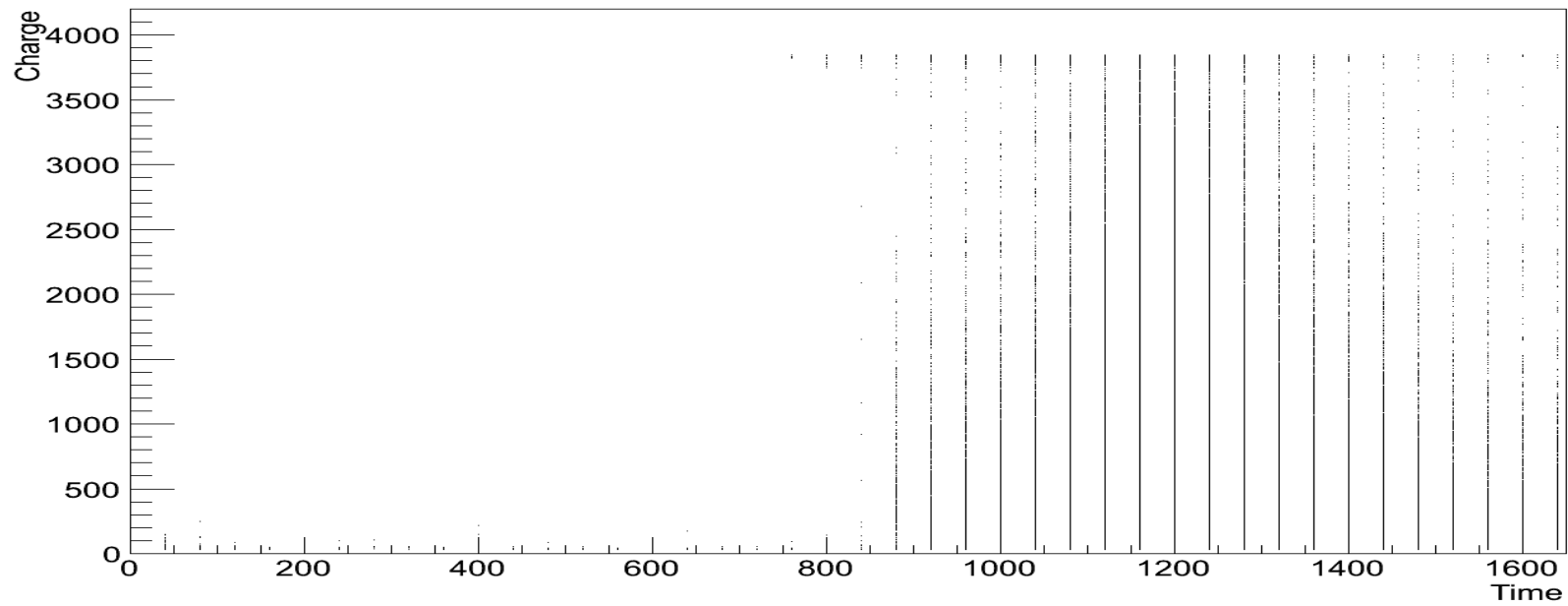


Run: 5149 , B = 1 T, peaking time = 200 ns, 4.5 sigma, on 11 March

Charge:Time

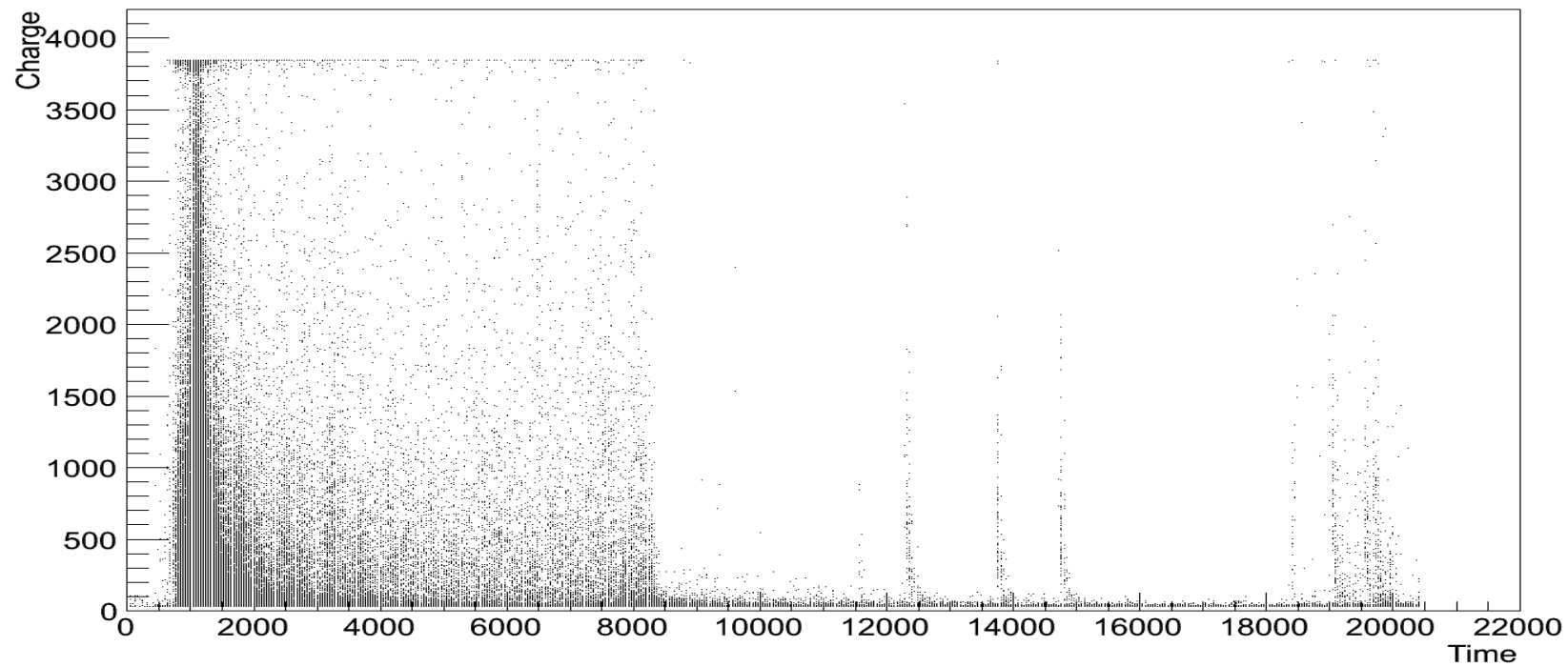


Charge:Time

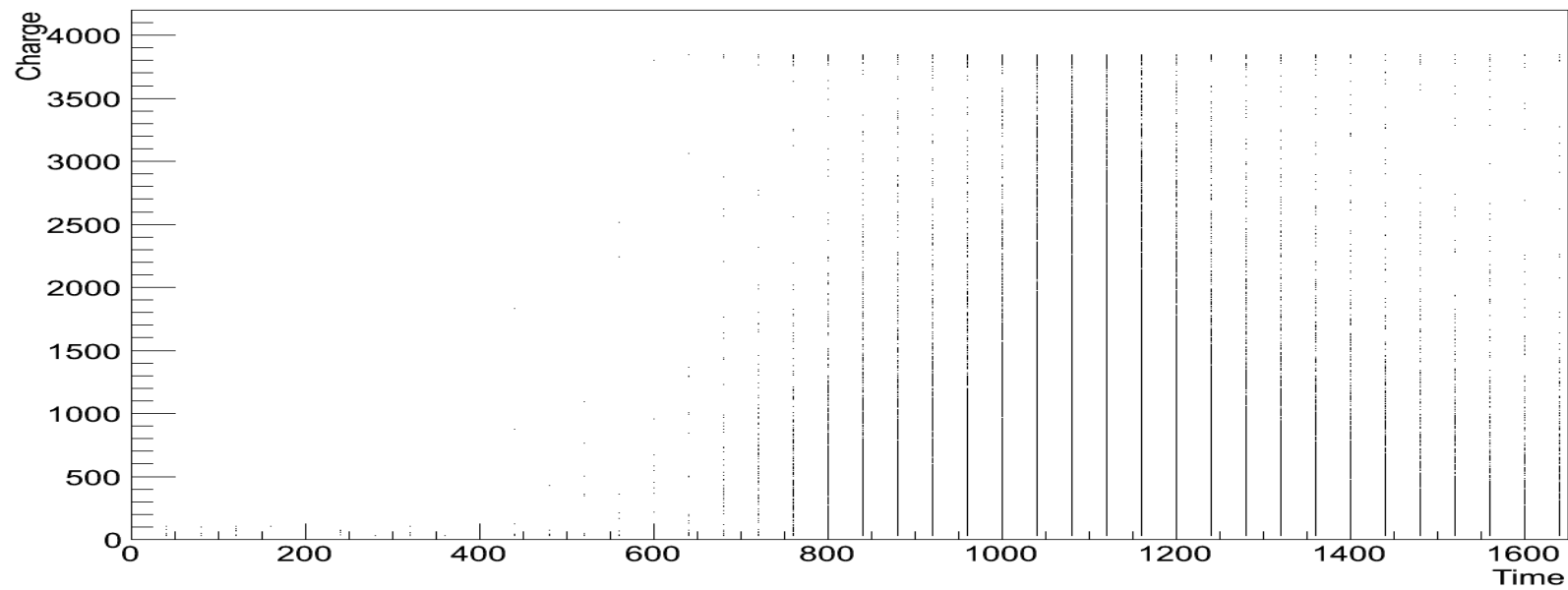


Run: 5201 , B = 1 T, peaking time = 100 ns, 3 sigma, on 12 March

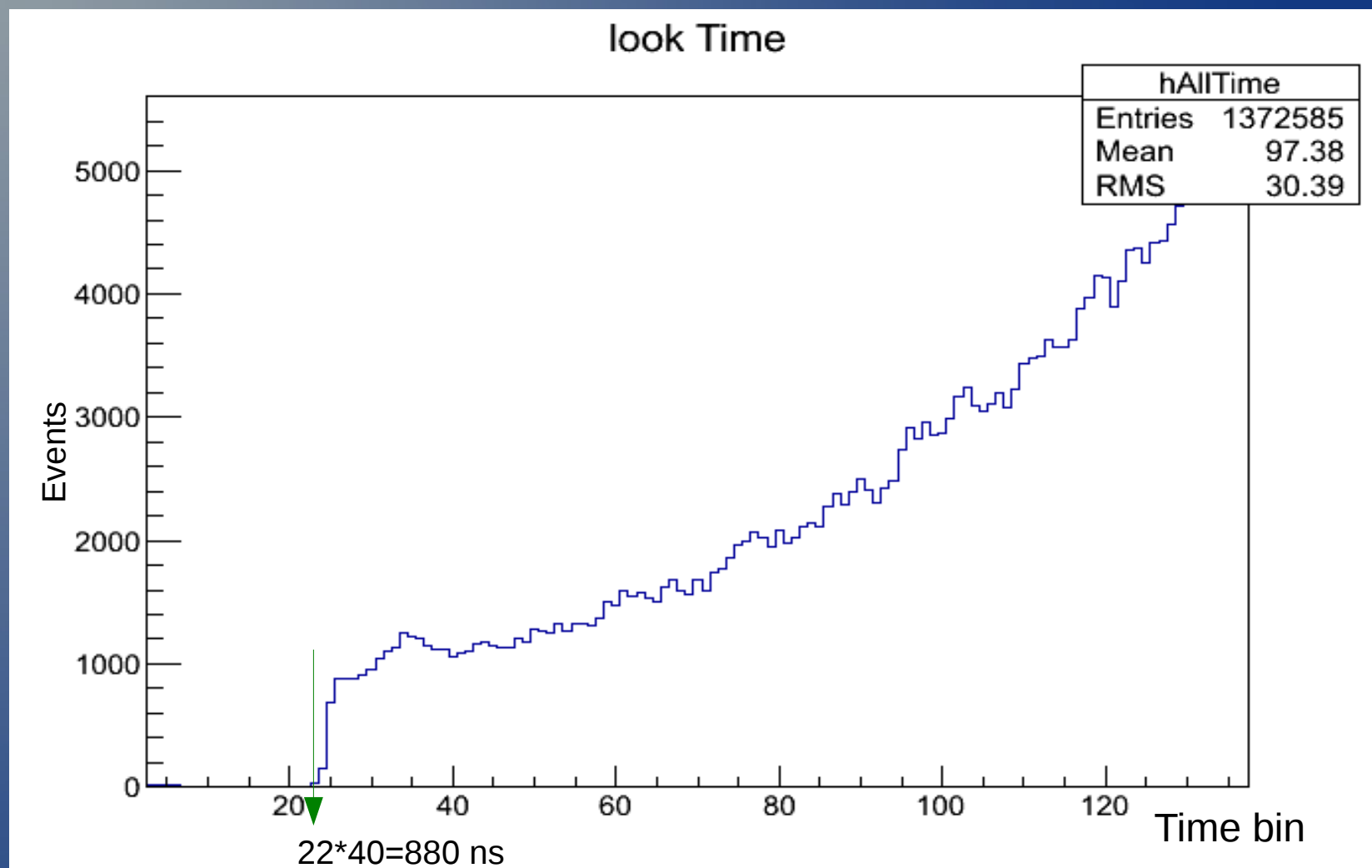
Charge:Time



Charge:Time

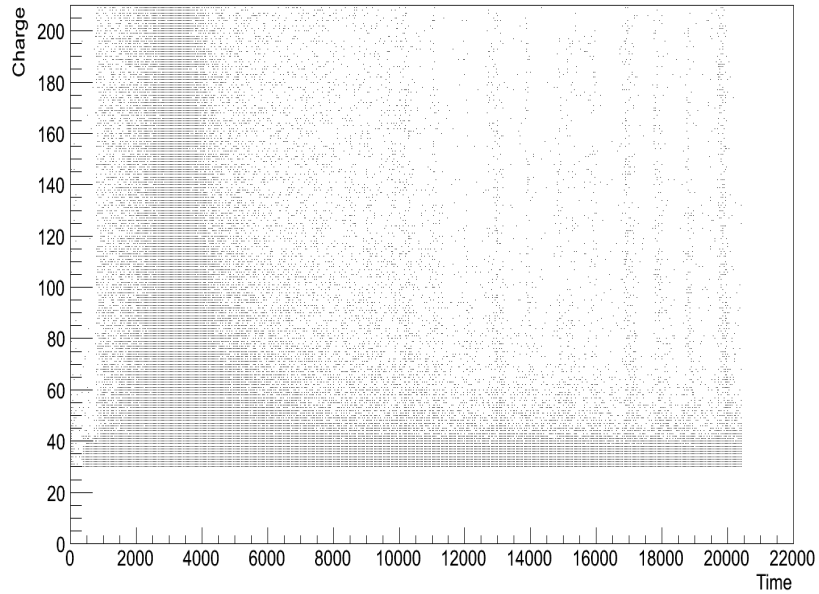


Run: 5231 , B = 0 T, cosmics

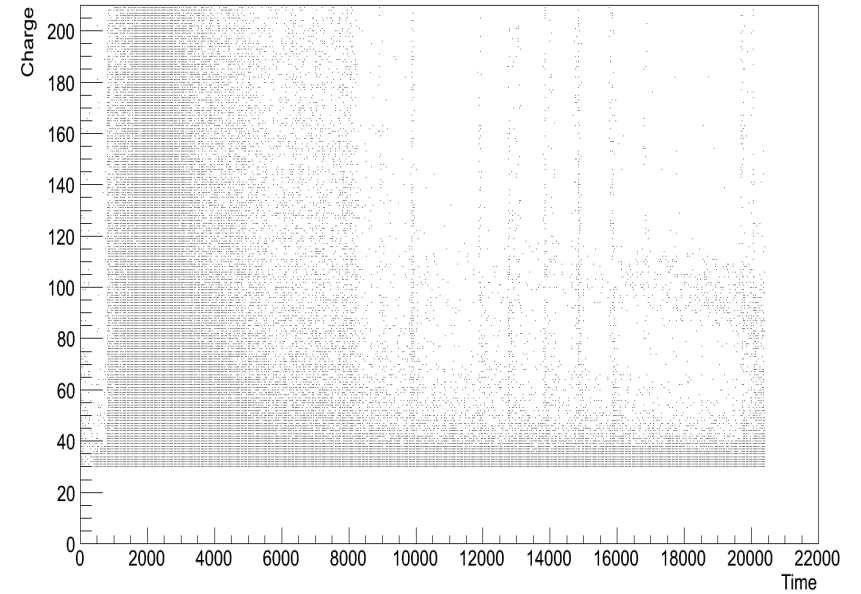


Threshold of the charge collection : last 2 years data

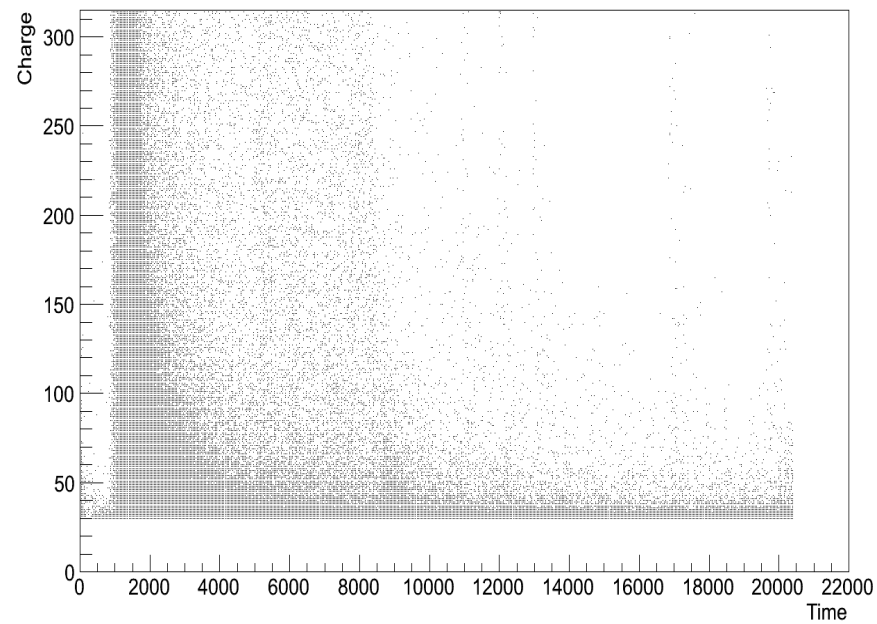
TB 2013, Run 3061 Charge:Time



TB 2014, Run 4108 Charge:Time

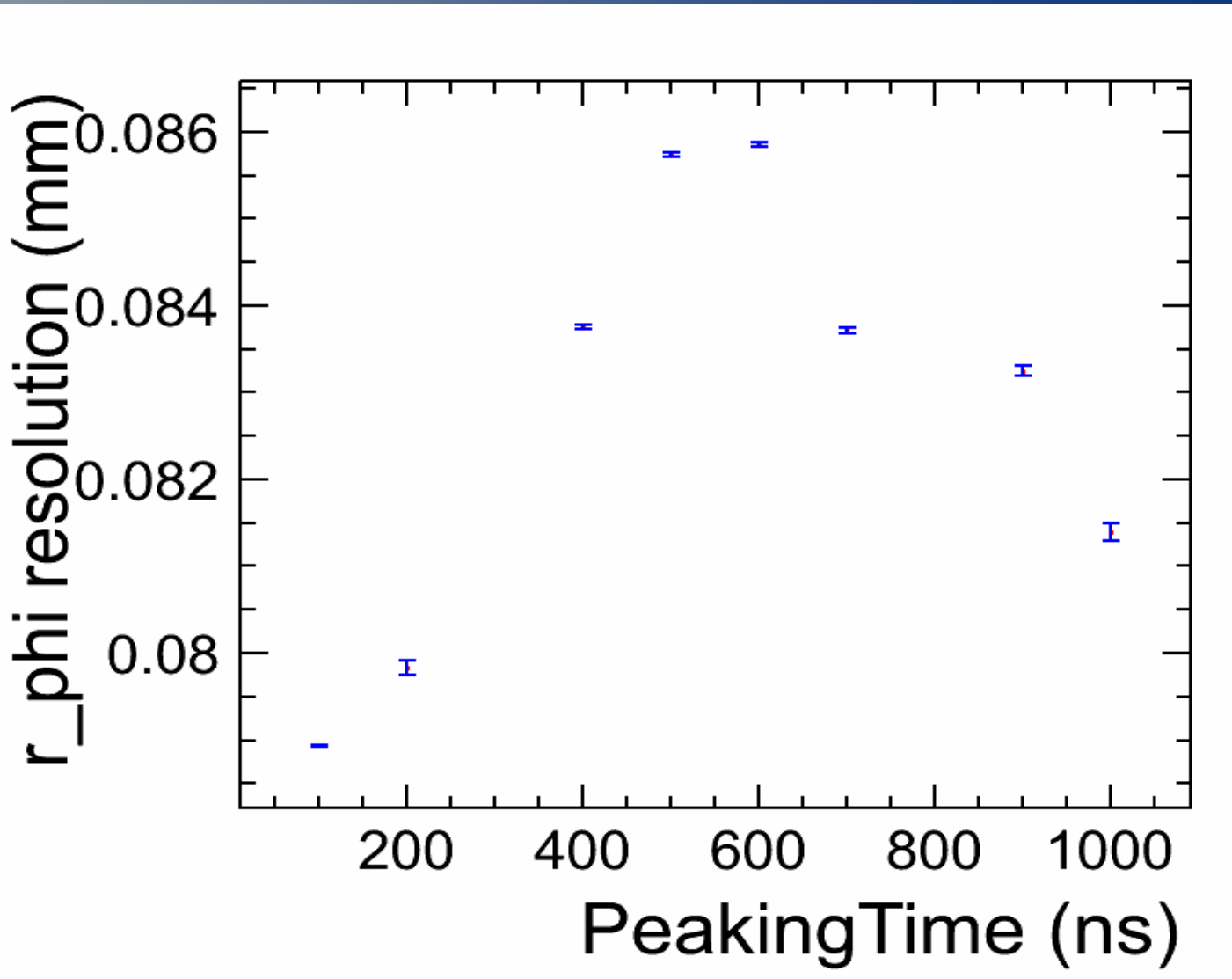


TB 2015, Run 5149 Charge:Time



r_phi resolution VS peaking time plot at z = 5 cm

Resolution is extracted from 'ResolutionPerformanceProcessor' → 'bestrow' tuple



Thanks