

Status of the FPCCD software

Physics and Software meeting

2010/10/01

D.Kamai (Tohoku University)

Current Status of FPCCD software

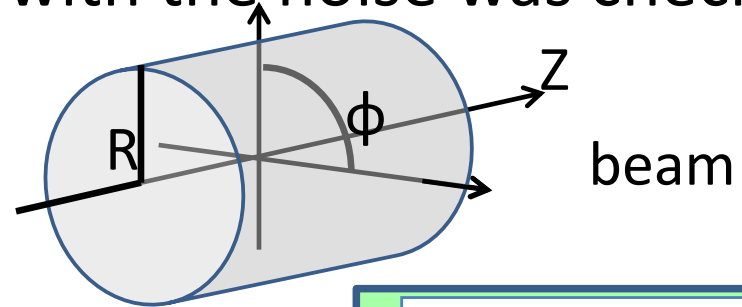
- FPCCD Digitizer
 - The noise was put on each pixel.

- FPCCD Clustering
 - The value of error matrix is correctly calculated.

- The Impact parameter resolution of VTX detector was checked.
 - Only SiliconTracker was used.

Impact parameter resolution

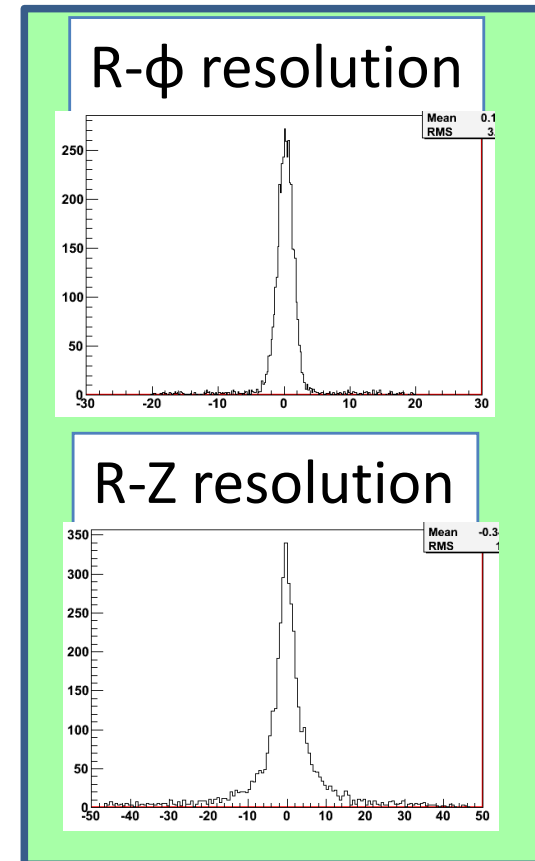
- Impact parameter resolution with the noise was checked.
 - μ^- (Mom = 100, 10 GeV)
 - σ_{noise} : 50 electron
 - Threshold : 200 electron



Momentum	rms90 R- ϕ	rms90 R-Z
100 GeV	3.4 μm	11 μm
10 GeV	6.5 μm	30 μm

The resolution with noise worsens by cluster width is wide.

100 GeV



Summary/Plan

Summary

- The Impact parameter resolution of VTX detector was checked.
 - μ^- (Mom = 100, 10 GeV)
 - σ_{noise} : 50 electron
 - Threshold : 200 electron

Momentum	rms90 R- ϕ	rms90 R-Z
100 GeV	3.4 μm	11 μm
10 GeV	6.5 μm	30 μm

Plan

- The Impact parameter will checked with TPC.
- The effect of pair-Background on Tracking will be checked.