

KEK test overview

Koji Yoshimura
KEK

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Outline

- KEK test step by step
- Motivation of step I
- Participants
- Time table
- Summary

STEP

- Adopting staging approach?
 - Feb, 2005 TOF and ACC test w/o KEK Step 0
 - Performance of single counter
 - May, 2005 TOF and ACC test w/ Bfiled (final layout) KEK Step I
 - Participants from UK
 - International collaboration
 - Aug, 2005 Cosmic-ray test at FNAL/KEK
 - Sep, 2005 SciFi tracker test KEK Step II

Motivation of Step I

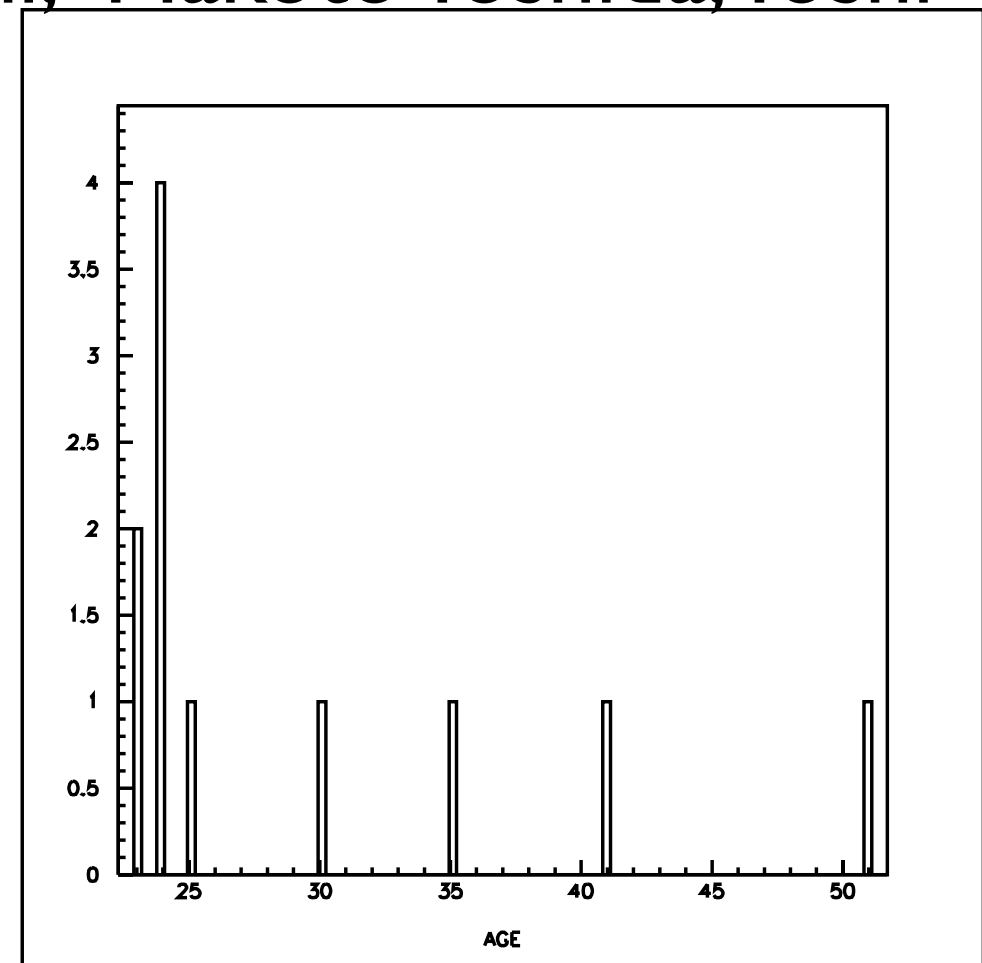
- Calibration of TOF hodoscope w/ magnetic field
- ACC performance check
- VME-TOF system test
- Beam tuning for various momentum/configuration
- Degrader/Diffuser test

Tune the beam and the detector parameters and take data in the same configurations as SciFi tracker test so that the next test could be efficiently performed.

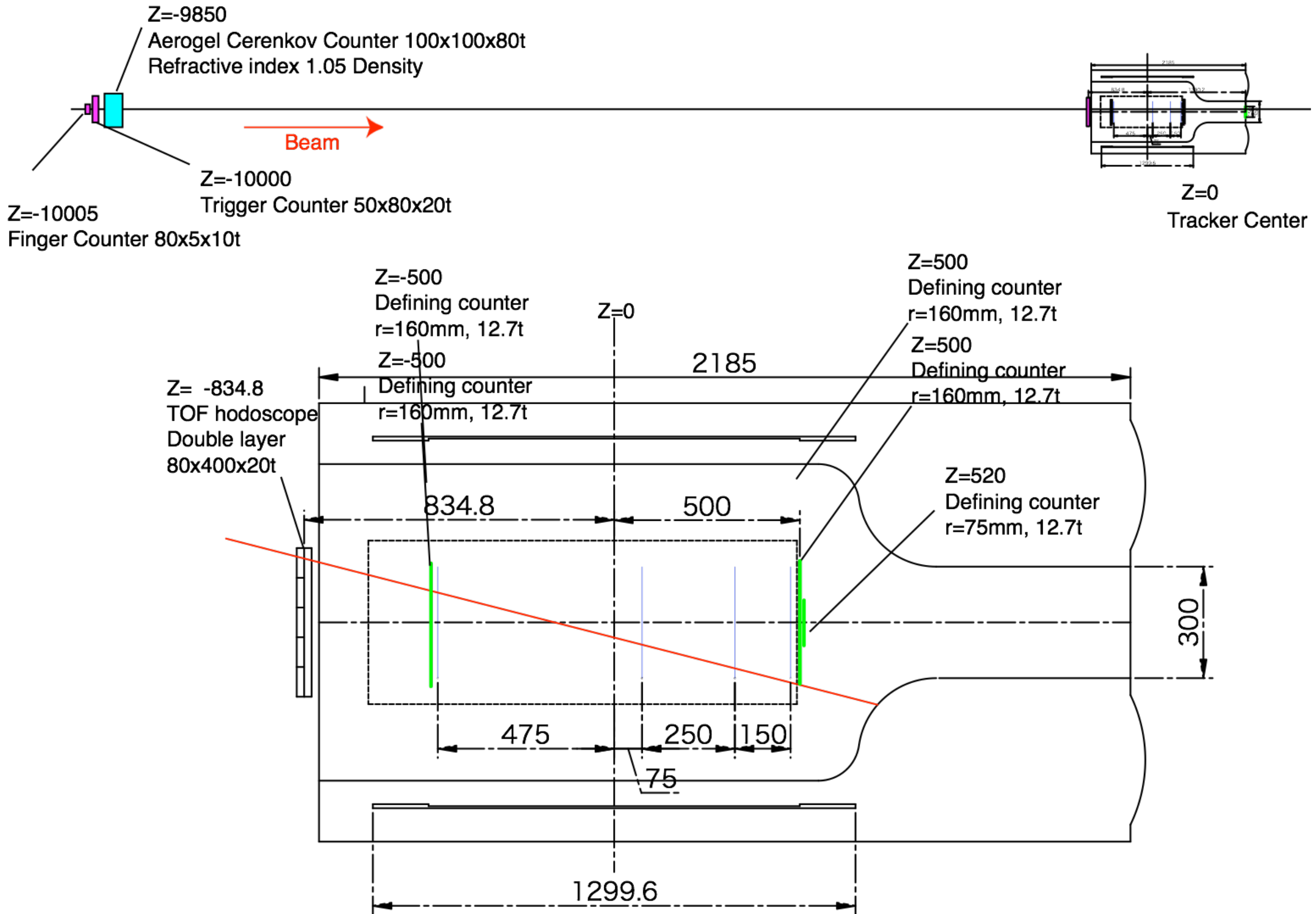
Participants

- Aron Fish, Malcolm Ellis (IC)
- Kenny Walaron (RAL/
- Taisuke Takayanagi, Kaoru Yamada, Hideyuki Sakamoto, Atsushi Horikoshi, Makoto Yoshida, Yoshi Kuno (Osaka)
- Kenichi Sakai (U Tokyo)
- Koji Yoshimura (KEK)

Total 10 people

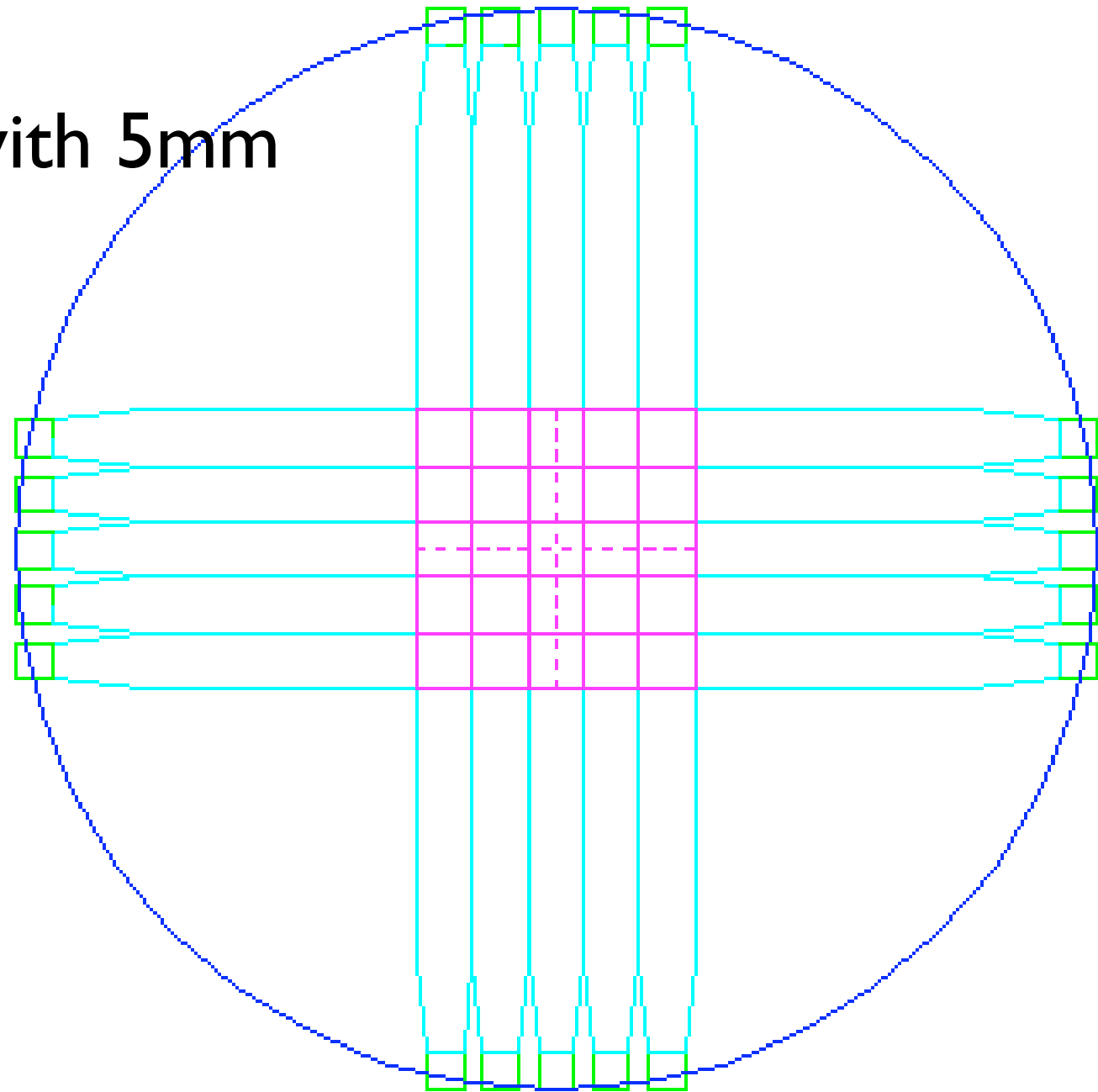


Layout1



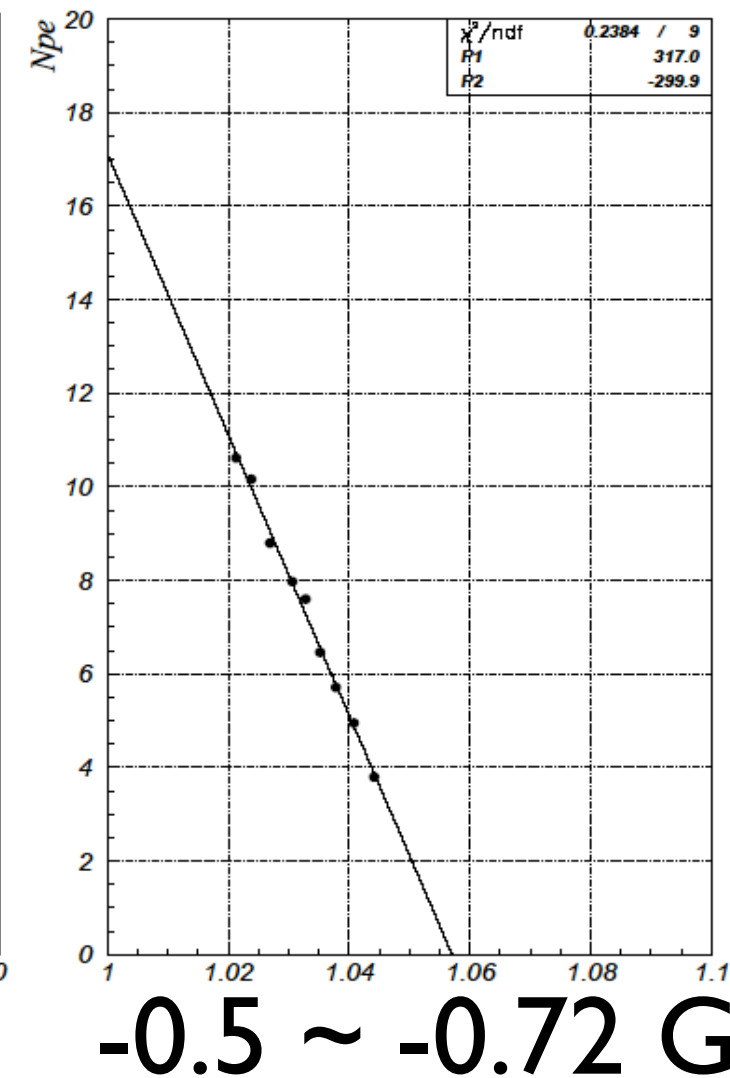
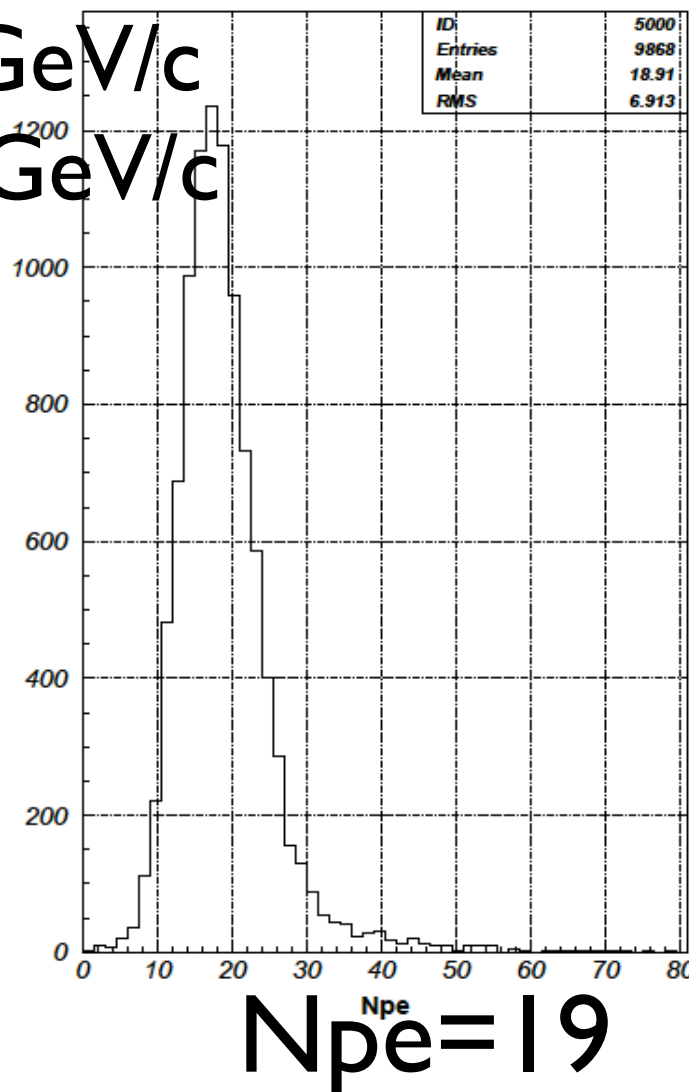
TOF Performance check

- Layout I (TOF located at the upstream)
- BOFF run
 - with finger counter with 5mm
 - Focused beam
 - Diffused beam
- BON run
 - Focused beam
 - Diffused beam

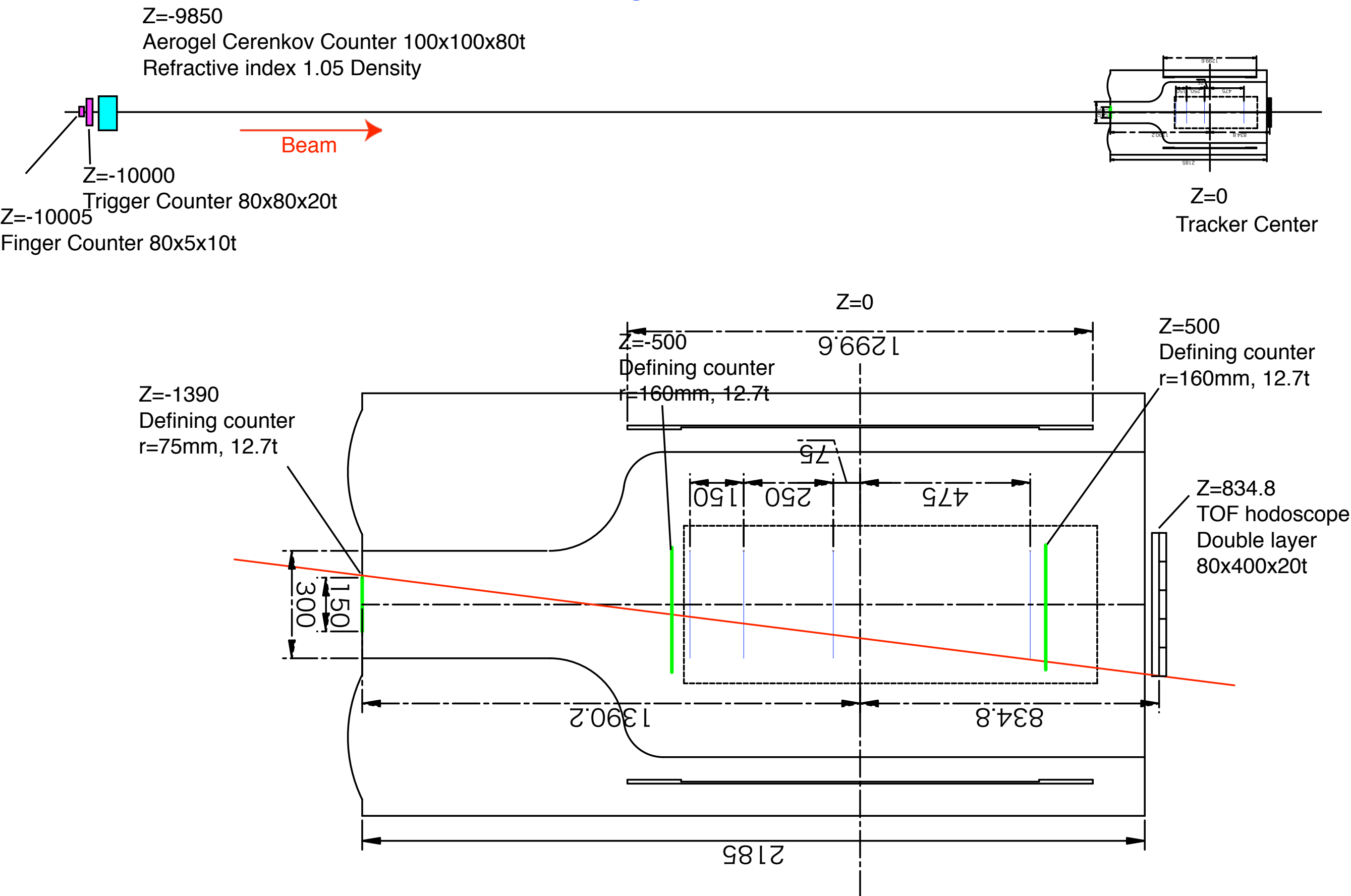


Aerogel Cerenkov

- Refractive Index changed
 - 1.03 => 1.05
 - PID for 0.4 GeV/c muon
- Momentum scan
 - 0.2 ~ 0.5 GeV/c with 0.05 GeV/c



Layout II



What happened?

- 5/26 01:00 Beam time start
- 5/26 21:00 TOF setup completed and start DAQ
- 5/27 16:00 Still DAQ tuning
- 5/27 18:00 Magnet on, Several accelerator trouble
- 5/28 10:00 Beam steadily supplied TOF Calib
- 5/29 03:00 ACC is installed P scan
- 5/30 05:00 Magnet off
- 5/31 15:00 Rotate Solenoid into Layout II
- 6/01 20:00 Magnet on Diffuser study
- 6/02 06:00 Magnet off VME DAQ

Summary

- KEK Test step I was successfully carried out
 - TOF Hodoscope
 - ACC
 - DAQ
 - Defining Counters
- Beam was monitored with realistic condition
- Ready to accept scifi tracker