

VTX software status - pisa

Correct amount of material in pisa
committed to cvs

Pixel layers:
sensor: 0.214%
passive material: 1.900%
total: 2.114%

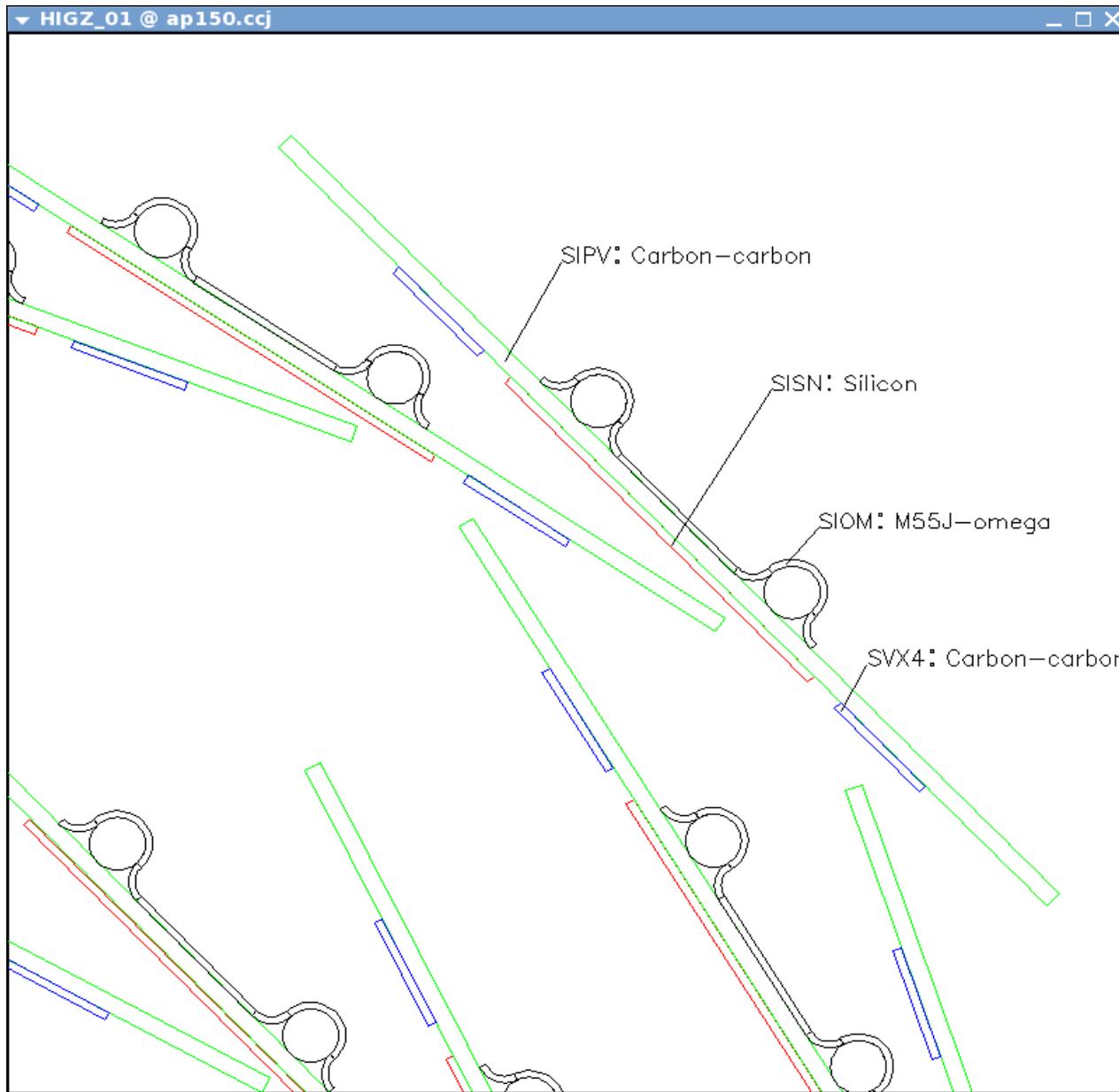
Strip layers:

“thick area” (under sensor):
2.04%

“thin area”: 1.25%
(copper, G10, Carbon)

total:
 $2.04\% + 1.3 * 1.25\% = 3.7\%$

*plus SVX4(0.16%), omega
pieces, cooling.* 1

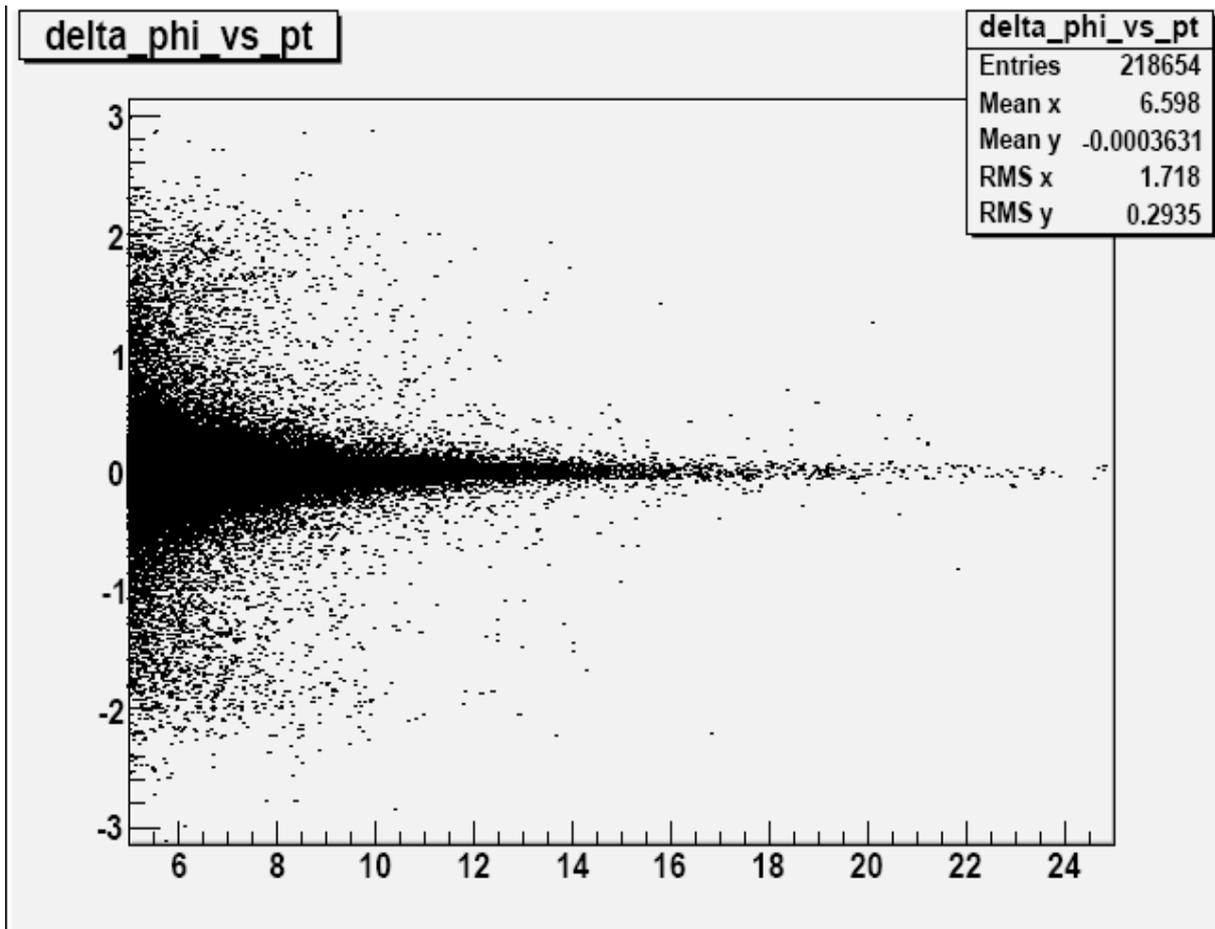


VTX software status - detector response

- Noise added (1/10 of MIP by default, can be changed in macro)
- Charge sharing between strips: in phi direction only.
Kenichi is working on z-direction sharing.
- Charge sharing between x and u:
done; asymmetry = 0.1 (default, can be changed in macro)
- Calibration: MIP (most probable) = 100 channels.
- Clustering: simplified form:
 - continuous fired strips;
 - NO ADC weight applied to position determination
 - cuts: 21 for clustering in x and u; 40 for u/x clustering
no energy asymmetry cut.

VTX software status - jet studies

PYTHIA -> FASTJET -> PISA -> Standalone VTX tracking -> FASTJET



The goal is:

to see correlation
between leading particle
and jets

Check how it works in
AuAu events

Main problem is that
standalone tracking
can determine momentum
only up to 5 GeV

Angle between PYTHIA jet and parton
which produced this jet

VTX software manpower

- Maki Kurosawa – pisa, radiation length map
- Kenich Nakano, Manabu Togawa – detector response
- Shawn Whitacker, Manabu, Kenichi – jets
- Alan Dion, Sasha Lebedev – standalone tracking in Phenix
- Andrew Bergstrom, Sasha – DCA resolution
- Stefan Bathe (?) - global tracking, conversion rejection
- Kyoichiro Ozawa (???)