

# SiD Tracker Material Model

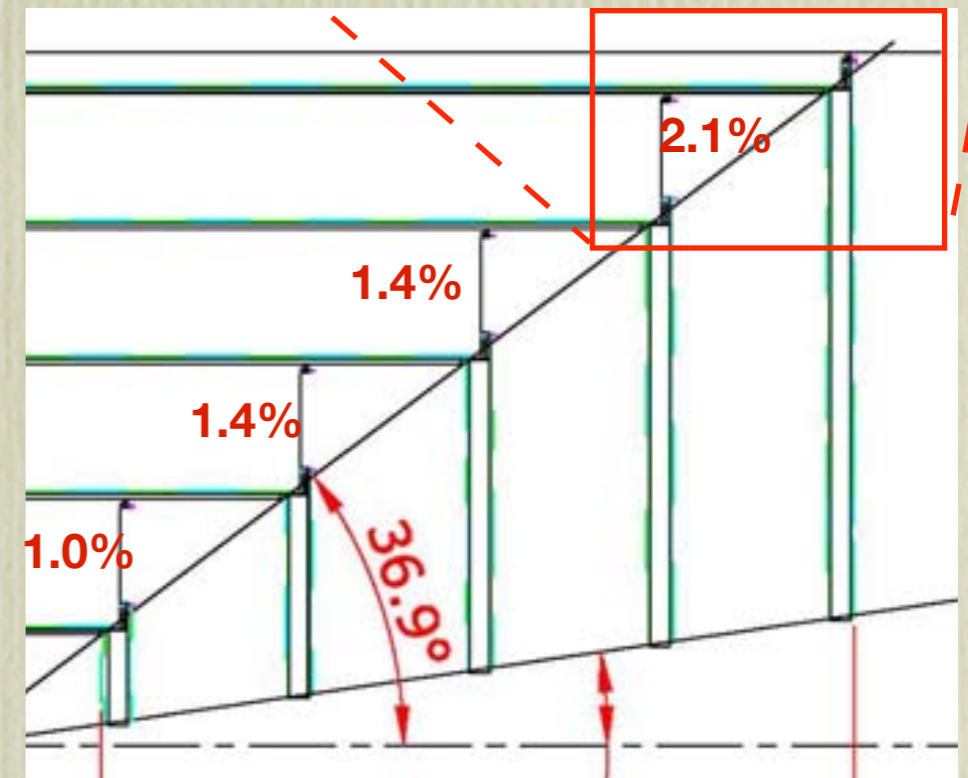
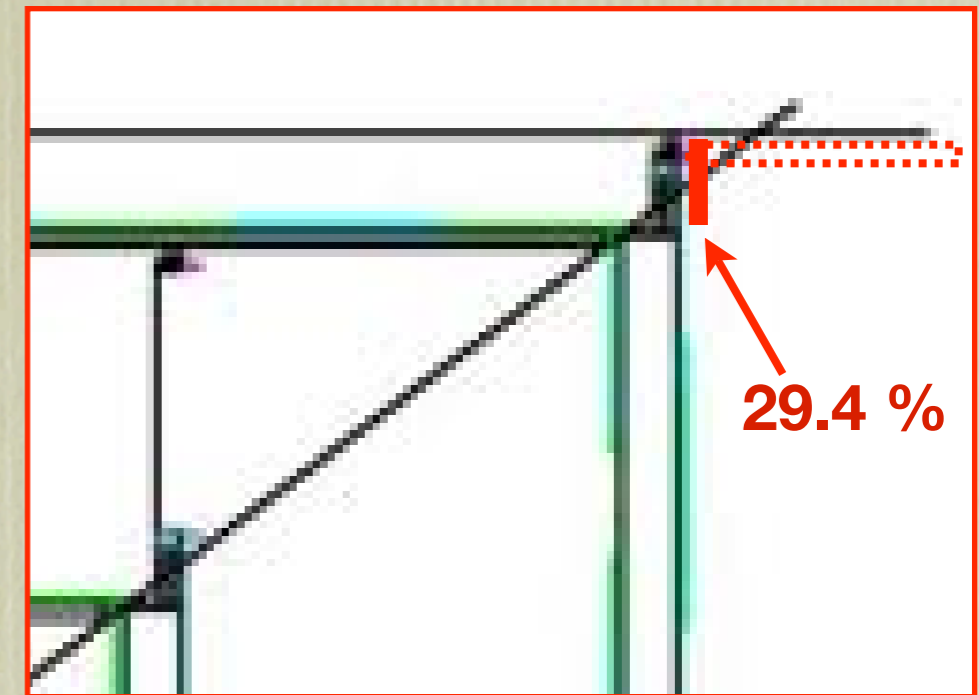
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# Issues Raised

- Concern about large material concentration at outer corner
  - This is an artifact of defining the readout electronics as mounted upon the support disks. The outermost disk has tiny radial span, so readout material is very concentrated in this projection
  - In reality, these boards would be mounted in a barrel-like configuration, but the amount of material and general location is invariant.

Total number of readout boards for Layer 5 only ~20% greater than layer 4 (116 vs. 90)



# Issues Raised

- Concerns regarding power consumption and required cooling for optical links
  - Brief investigation gives estimate of 30mW per readout board with existing components - no cooling needed
- Need for overlaps between barrel and disk detectors
  - Geometry has been slightly modified to accommodate overlap as shown in FNAL drawings

# Proposal

- To implement the material in vo.22 of this SiD tracker material document as SiDMay05 detector description.