

Sensor Time Resolution 2016

Matt Solt

SLAC National Accelerator Laboratory

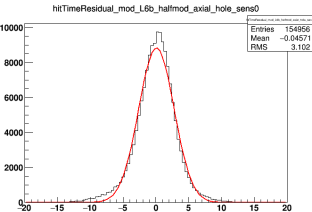
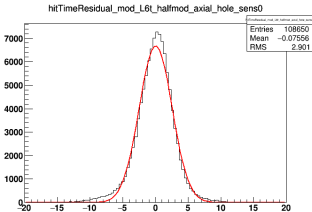
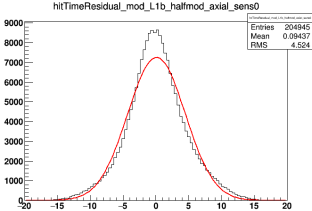
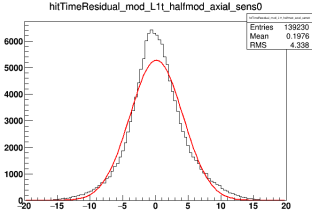
mrsolt@slac.stanford.edu

June 27, 2016

Method

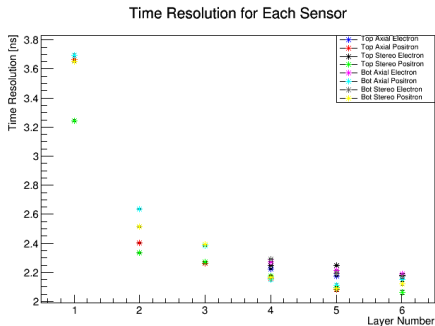
- ▶ Use run 008087 and run the DQM over file
- ▶ Take the time residuals (track time - hit time) plots and fit a gaussian to histogram
- ▶ Grab the fitted Gaussian sigma and plot for each sensor

Examples of Fits



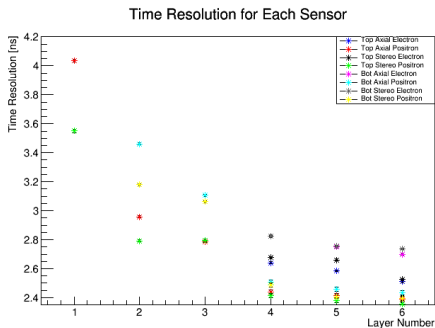
Time Resolution for 2016

- ▶ Time Resolution as a function of layer for separated top/bottom, axial/stereo, and slot/hole



Previous Results - Time Resolution for 2015

- ▶ Time Resolution as a function of layer for separated top/bottom, axial/stereo, and slot/hole **for 2015 data**
- ▶ 2016 data is definitely improved!



Previous Results - Time Resolution for 2015 Omar's Method

- ▶ Time Resolution as a function of layer for separated top/bottom, axial/stereo, and slot/hole **for 2015 data** using **Omar's method**
- ▶ What is different?

