Bhabha Calibration

Issues concerning the last bhabha calibration

- Transition between ring 5 and 6 for cut procedure around dead/noisy Xtals ⇒ *done*
- Mirrored holes from dead Xtals ⇒ *understood, testing in progress*
- Failed calibrations in ring 56 ⇒ *partially understood*
Mirrored holes opposite to dead Xtals

• one prong selection is used for calibration, but
• limited to backward region ($2.1 < \vartheta < 2.5$).
• run a (low statistic) calibration on identical dataset (run 40181-40190) with regular settings of $\vartheta$-cut and one prong bhabhas in whole EMC
• compare resulting distributions (e.g. $E$, # digi, etc...), resolution and calibration constants
Number of selected clusters
BaBar graphics

[Graph showing distribution of hits for NH2 and D, with bars indicating additional hits on a logarithmic scale.]
Comparison of Hitmaps

BaBar graphics

1prong/nocut.hbook

:3/10/15 16.46
Comparison of deduced relative constants

BaBar graphics

:3/10/15  17.10
Failed channels in last ring

- Problem is confined to $\theta = 56$, $\varphi = 30..90$
- Study of time dependent behaviour of failing constants
- no problem with statistic (one prong selection works fine here)
- reason for failing validation almost always rel. changes larger 10%
- constants scatter versus time
  $\Rightarrow$ not (only) a problem with initial value
Number of hits in ring 56 for failed and accepted channels