

Status Report on Pixel DB Conditions

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Summer15 DR Conditions

- ▶ New Bad Module list

- ▶ Twiki:

- <https://twiki.cern.ch/twiki/bin/viewauth/CMS/SiPixelQualityHistory>

- ▶ Pixel Dynamic Inefficiency

- ▶ Twiki:

- <https://twiki.cern.ch/twiki/bin/view/CMS/SiPixelDynamicInefficiencyHistory>

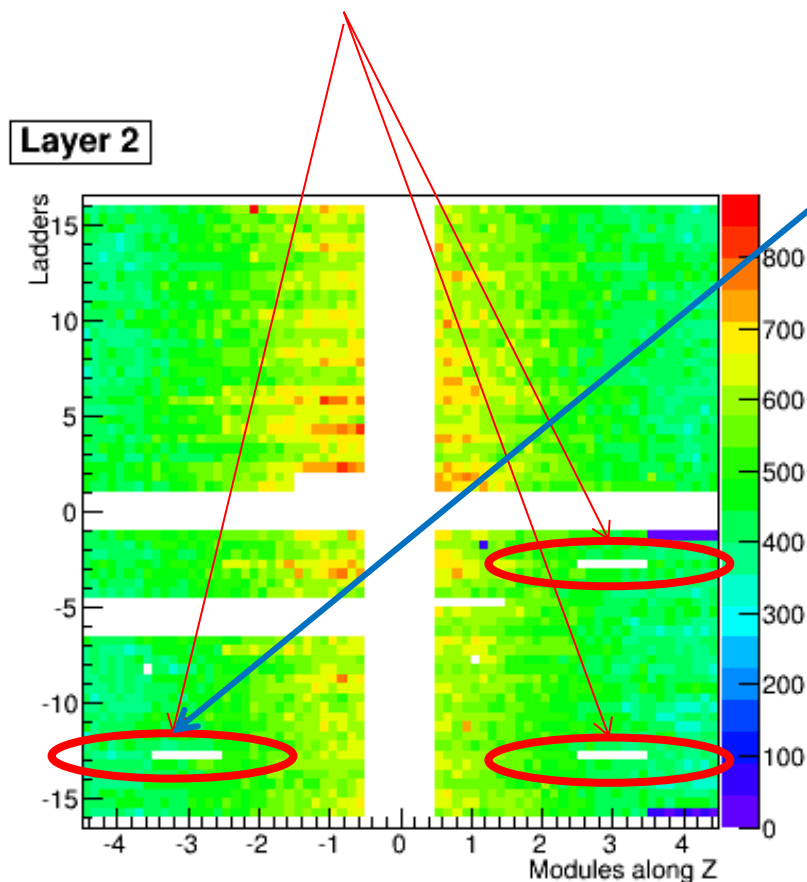
SiPixelQuality - tags

- ▶ Record: **SiPixelQualityFromDbRcd**
- ▶ Tag: **SiPixelQuality_v03_dup_hlt**
 - ▶ For HLT
 - ▶ FastTrack validation needed
- ▶ Tag: **SiPixelQuality_v5_hltvalidation**
 - ▶ Uploaded to ProdDB on 2015-09-04

Waiting for green
light

SiPixelQuality – data map

► New bad modules



Repaired during TS2

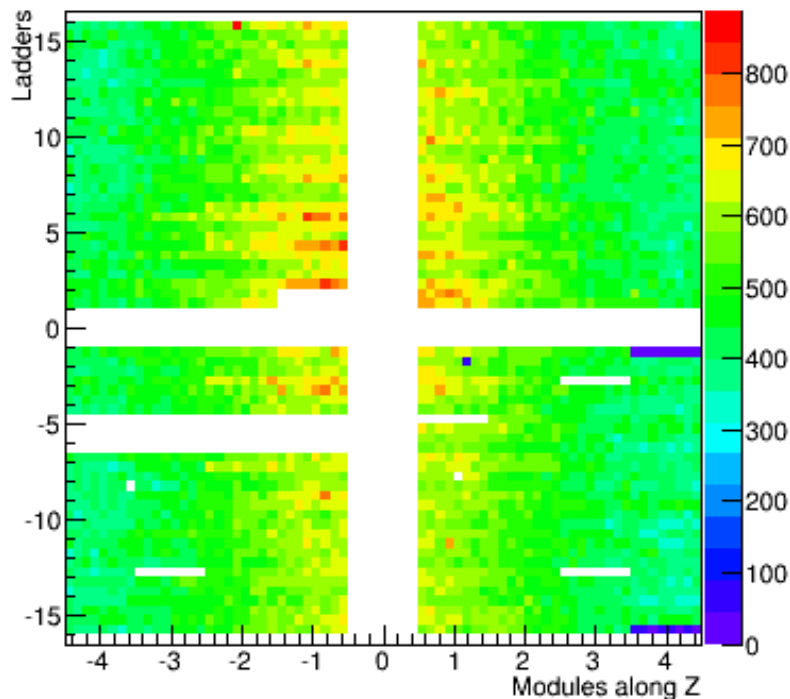
► New bad ROCs

- #BPix_BpO_LYR2_LDR8F_MOD1 (ROC3)
- #BPix_BmO_LYR2_LDR8F_MOD4 (ROC7)
- #BPix_BmI_LYR3_LDR14F_MOD4 (ROC11)
- #BPix_BpI_LYR3_LDR6F_MOD1 (ROC14)

SiPixelQuality – comparison

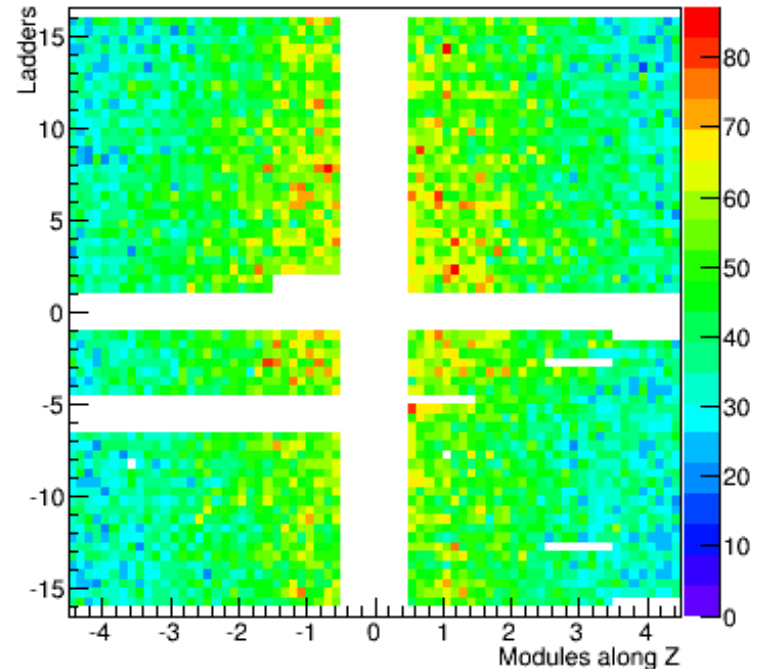
► Data

Layer 2



► Validation from MC

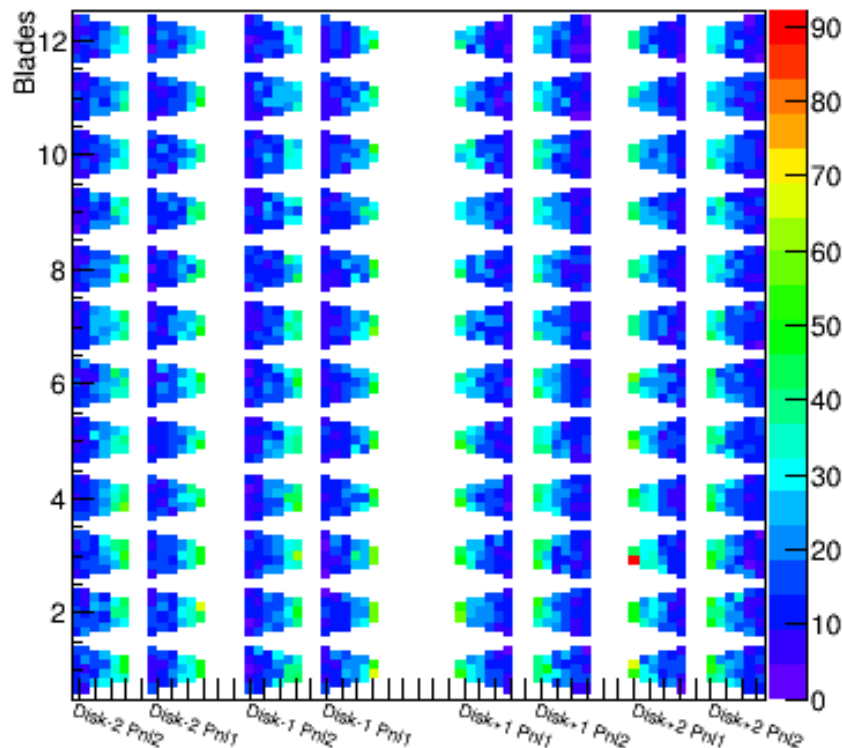
Layer 2



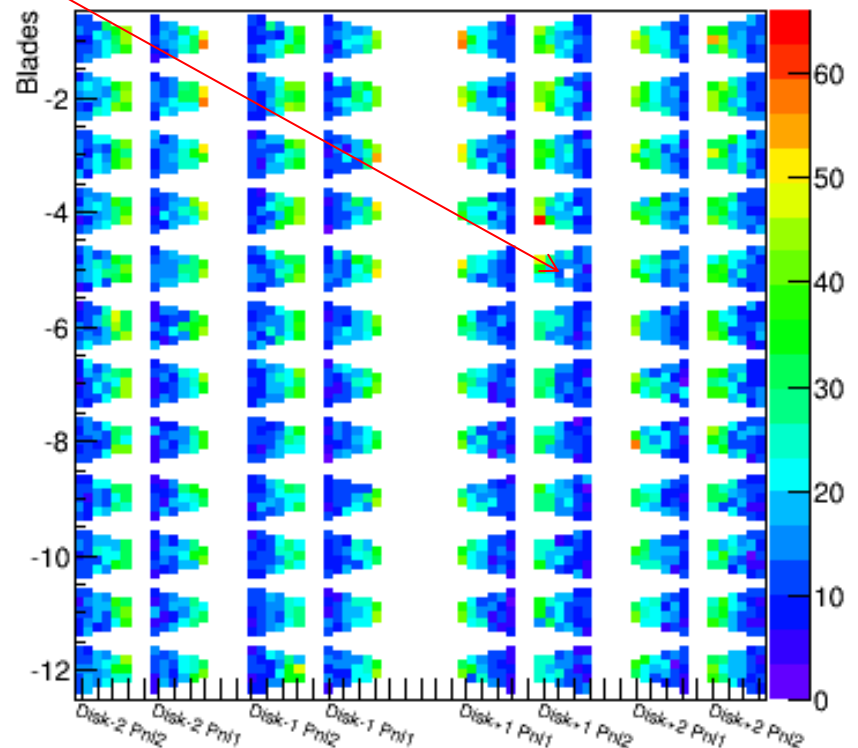
SiPixelQuality – data map

- FPix is OK, only 1 ROC is bad – included in DB

FPix Inner Shells (+x)



FPix Outer Shells (-X)



SiPixelDynamicInefficiency- tags

- ▶ Record: **SiPixelDynamicInefficiencyRcd**
- ▶ Tag: **SiPixelDynamicInefficiency_13TeV_50ns_v2_mc**
 - ▶ Payload is ready
 - ▶ Uploading today after this meeting
 - ▶ Contains 0.999 efficiency loss
- ▶ Tag: **SiPixelDynamicInefficiency_13TeV_v1_mc**
 - ▶ For 25 ns run
 - ▶ Uploaded to ProdDB on 2015-05-19