SPD DQM

Update on SPD

Update on Vertex

New QA framework : issue

Reminder on the SPD DQM monitoring histograms :
-    1 Data Format Errors, 1 MEB problem -> automatic checks
-    2 hitmaps and 1 FastOr map

First checks after the new framework showed no problems for SPD..but with root v5-27-06. At P2 the root version is v5-28-00c

❑ **When using v5-28-00e the Data Forma Errors histogram caused a floating point exception => problem in the DQM GUI at P2 + problem in the logbook summary image**

Thanks to Melinda and root core team support the problem was digged out and fixed in root *–trunk-*.
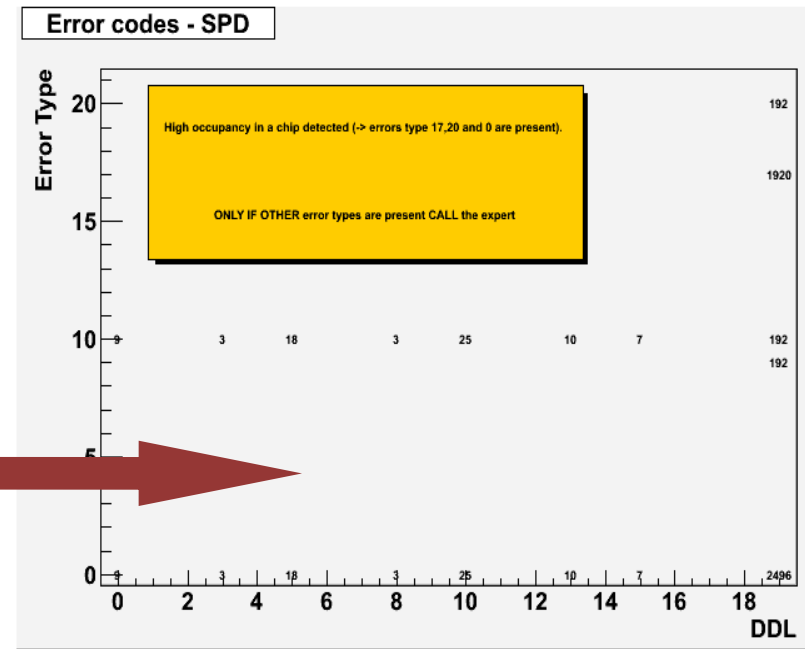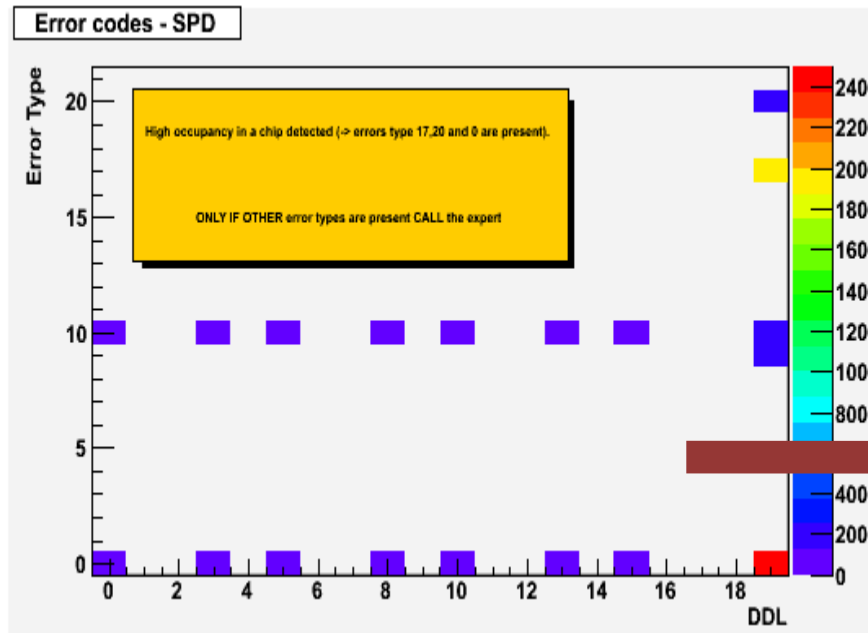
   -> Temporary fix in SPD DQM Plots

New QA framework : solution

Floating point exception occurs when a 2D histogram is filled with 0 entries in each bin and the colz option is used

In SPD DQM Data Format error plot this possibility is the *"best one"* (= 0 total errors per each DDL)
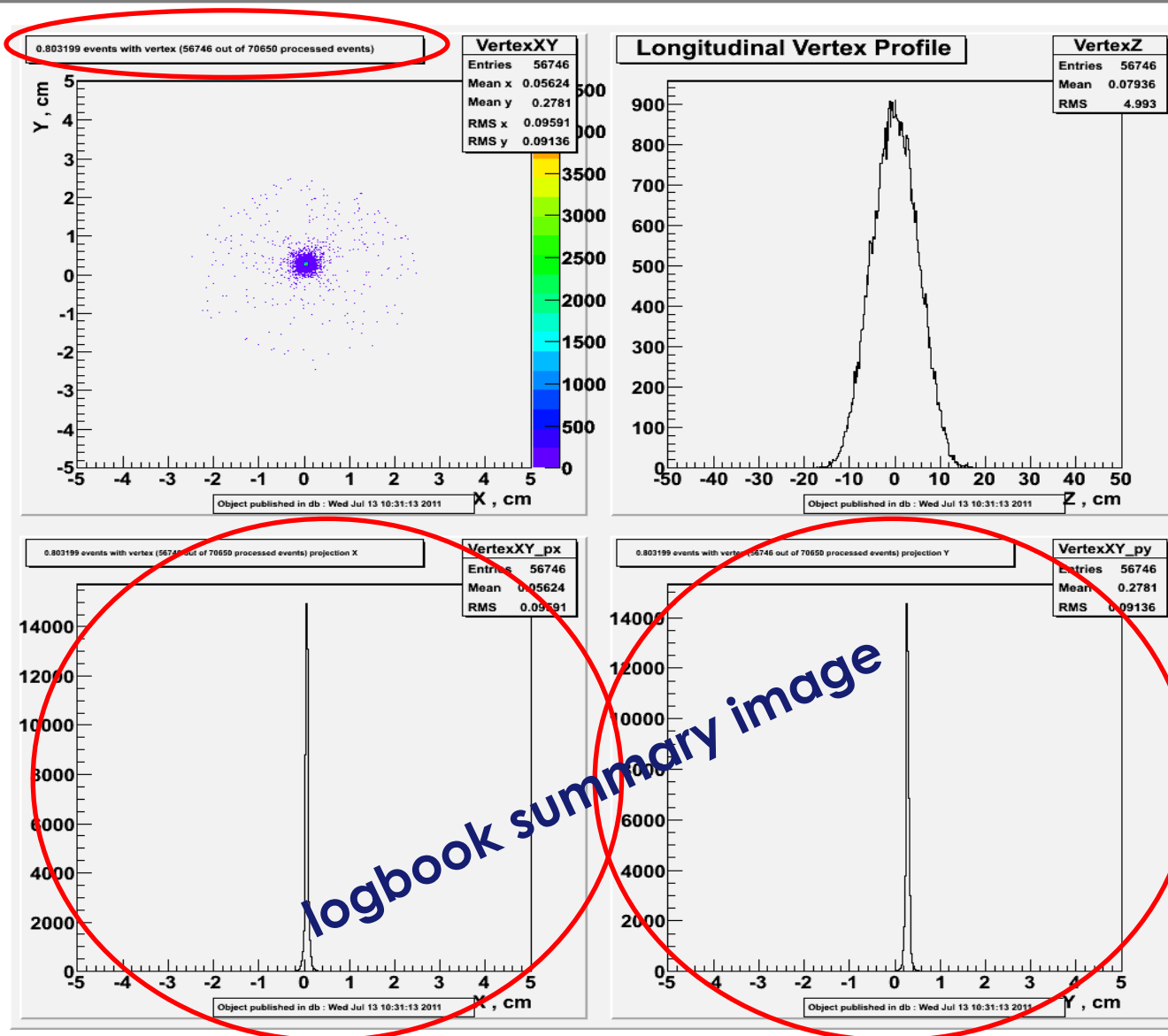
Fix : colz -> text

DQM Vertex histogram updates

Request on the Vertex DQM histograms:

1) fraction of events with reconstructed vertex wrt the total number of processed events (Vertex DA modified to this aim)

2) Display X and Y projections (thanks to Adriana and Barto)

Summary

- A problem not depending on the new QA framework has been found on one SPD DQM plot and it has been solved
  Updated documentation :
  https://twiki.cern.ch/twiki/bin/view/AliceEVE/EVESPD

- Automatic checks do not need a trigger selection so far

- Vertex histograms updated and new information provided

❑ NEWS : Foreseen change in the SPD DQM hitmaps as displayed in the DQM GUI to show the active HalfStaves on top of the hitmaps. To be done with a dedicated macro that has to be tested at P2 (discussed with Adriana).