Test of CAL failure simulation

CalFailureModeSvc (part of CalXtalResponse package) allows to specify in jobOptions file the lists of dead towers and individual front-end boards.
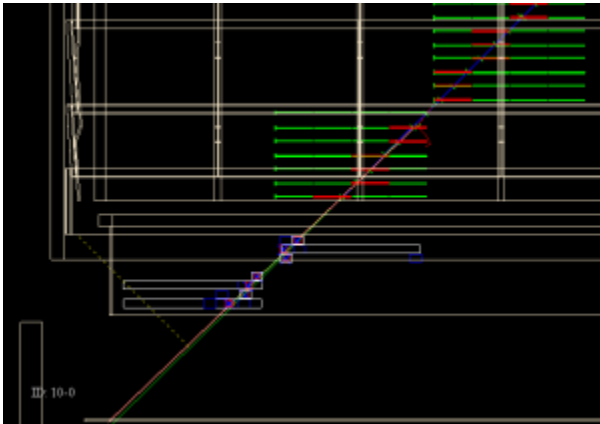
In the current version of GlastRelease (I tried v17r18) for all CAL channels in towers or front-end boards declared "dead" the special status bit is set (inside XtalDigiTool), otherwise no futher actions are implemented.

To make the failure simulation working I added a line of code setting raw ADC value (non pedestal subtracted) to zero for each dead channel.
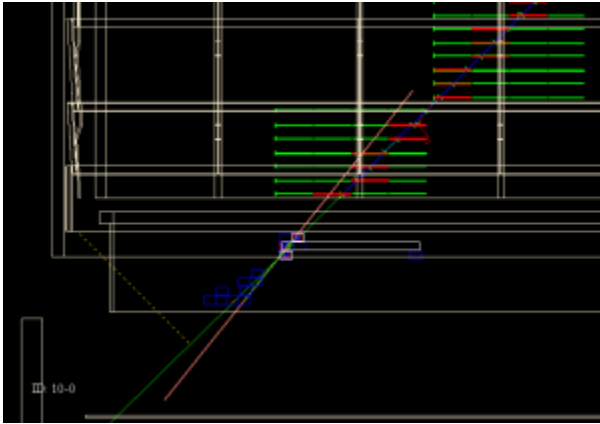
After that the dead channels disappeared from reconstruction, while they are shown in MC hits.

The failure mode functionning is illustrated by following event displays of test muon:
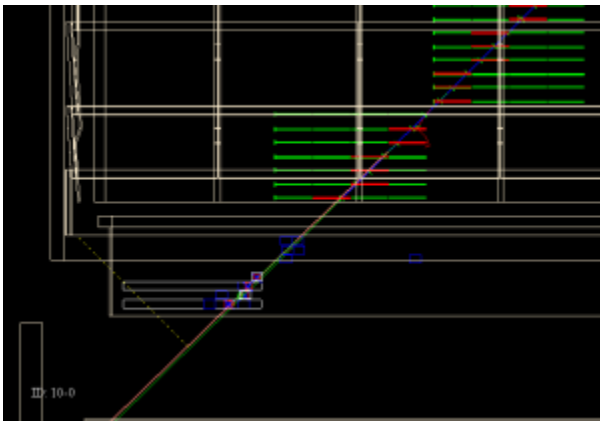
1) No failures:

2) tower 2 OFF:

3) tower 6 OFF

Similar modification should be added to trigger simulation, to take into account that dead channels do not produce trigger signals.