GlastRelease v16r1

Run Manager Summary

System Tests v16r1

System Tests Report Summary

Major differences between v16r1 and v16r0 are due to the new TKR occupancy default - see GlastRelease v15r53p3 for a more detailed discussion.

Minor differences that I do not yet understand are exposed by comparing v16r1 and v15r53p3, which removes the effect of the new occupancy value. The residual differences appear **only for the BackGndMix test** and mainly for the position hits, e.g. POSMCTKRTRAY shows a small deficit at low tray numbers and POSENERGYDEP shows less hits at low energy. Details below.

Changes

- TkrUtil, TkrRcon, TkrDigi, IdfEvent, Event, AnalysisNtuple various TKR updates for ghosts, overlays, and includes the new occupancy and max strips defaults (See GlastRelease v15r53p3)
- celestialSources/genericSources Gaussian quadrature
- celestialSources/Pulsar update for EGRET pulsars
- CRflux windows full spectrum tests
- FluxSvc, f2c removing f2c refs
- xmlBase
- rdbModel

Details on remaining differences not explained by the occupancy change

The input generated particle counts are identical.

The trigger bit frequencies are similar, but slightly different.

Same goes for the filter bit frequency. This implies a change in the trigger, filter, or calibrations, but the release notes do not indicate any changes in any of these.

After a quick consult with Leon, possibilities are that something is missed by the release notes, the particle counts are the same with different energies, I am missing the implications of something in the release notes, or there is some unexplained randomness in the detector sim (the G4 tags are the same for both versions).