DC2 Software Workshop (June 27-29)

The presentations can be found at:
http://www-glast.slac.stanford.edu/software/DataChallenges/DC2/JuneWorkshop/agenda.htm

Status of instrument performance studies:
This involves the analysis to reconstruct the direction and energy of events and the development of cuts/weights to select well-reconstructed photon events for high level science analyses.

- Review/status of reconstruction and low level analysis, input fluxes for the background model.
- Some sample background and gamma-ray datasets using the new recon. code was produced for this meeting.
- Discussed several implementations of a background rejection and event classification analysis (this is what is used to select `good` photon events.
- First preliminary studies of instrument performance with the new datasets.

Most importantly, it is clear that work in this area has begun in earnest, and a clear plan and schedule for how to proceed has been formed.

Instrument Response Functions

(The functions/data which describe things like effective area and psf as a function of energy)

- Extensive discussions on how these should be parameterised, and on what features (of the parameterisation) are optimal/necessary for use in the sciencetools.

- Discussed how to test/verify the accuracy with which the IRFs parameterisations describe the performance of the instrument.

- Available tools/methods to access and visualise the IRFs, either to study their properties or to use them to perform sensitivity/source detectability studies.

We can't start producing detailed IRFs, or decide how many event classes are necessary until the event classification analysis is complete. However, it is probably useful to develop methods to easily produce/fit IRFs parameters fairly soon.

Sky Model/Source Simulations

Review of the status of astrophysical source simulation capability.

We currently have sufficiently detailed implementation for all the major source classes that we can meet the minimal DC2 goals (this does not mean that we will not continue to refine and add details or use a better version of something should it become available)

Still a lot of work remains to pull everything together into a single coherent sky model.

Science Tools and Data servers

Reviewed the simulated data types that will be released for DC2 and described the server that users will use to access this data.

Reviewed the status and open issues with the science analysis tools and also discussed details of user support issues (installers/documentation etc).

Discussed the plans and priority for the work to be done in these areas between now and the DC2 kickoff next January.

Summary

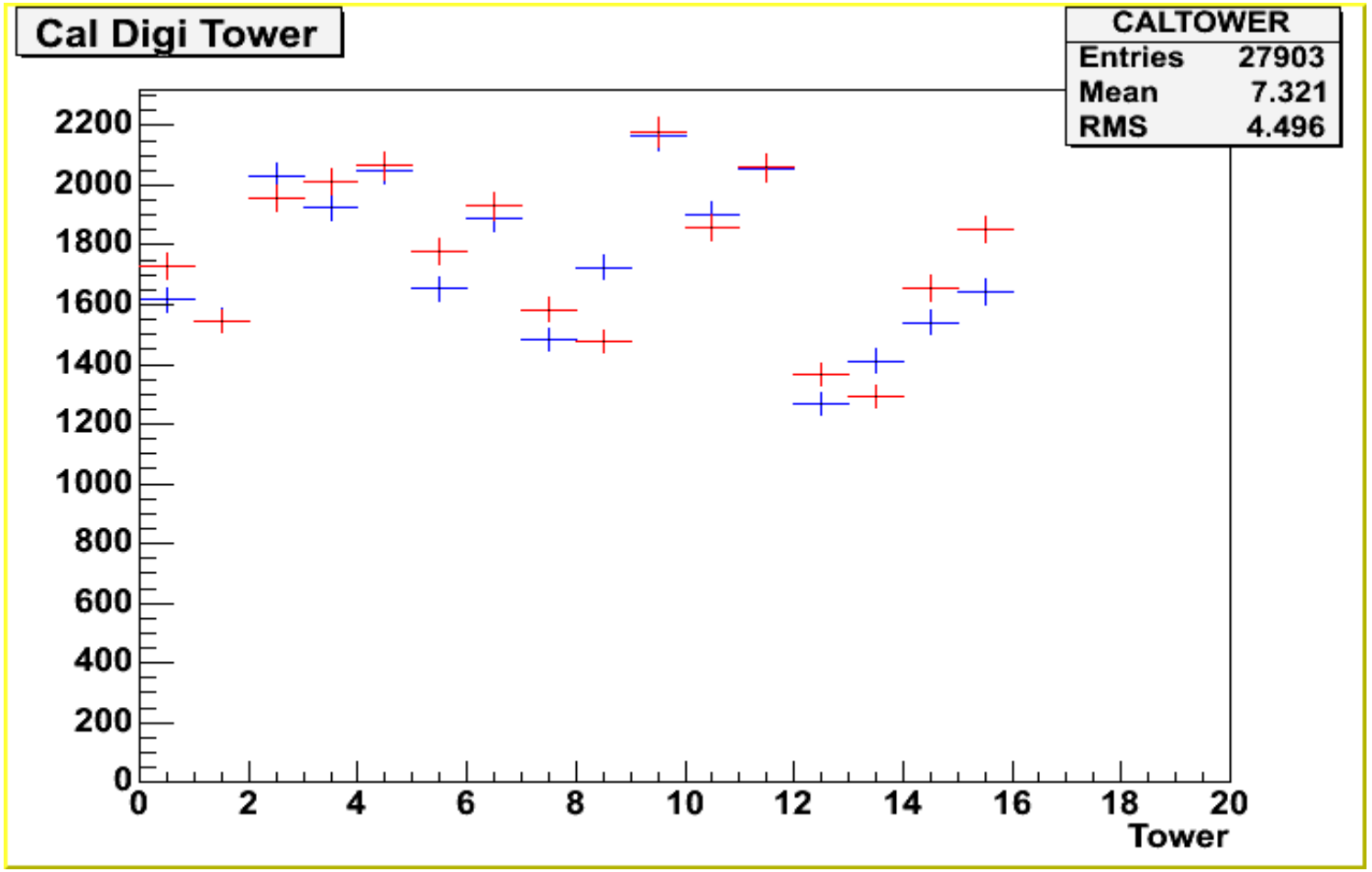
Overall the meeting was fairly successful.

Much work was done in preparation for the meeting.

We have a much clearer picture of the current status of DC2 preparations.

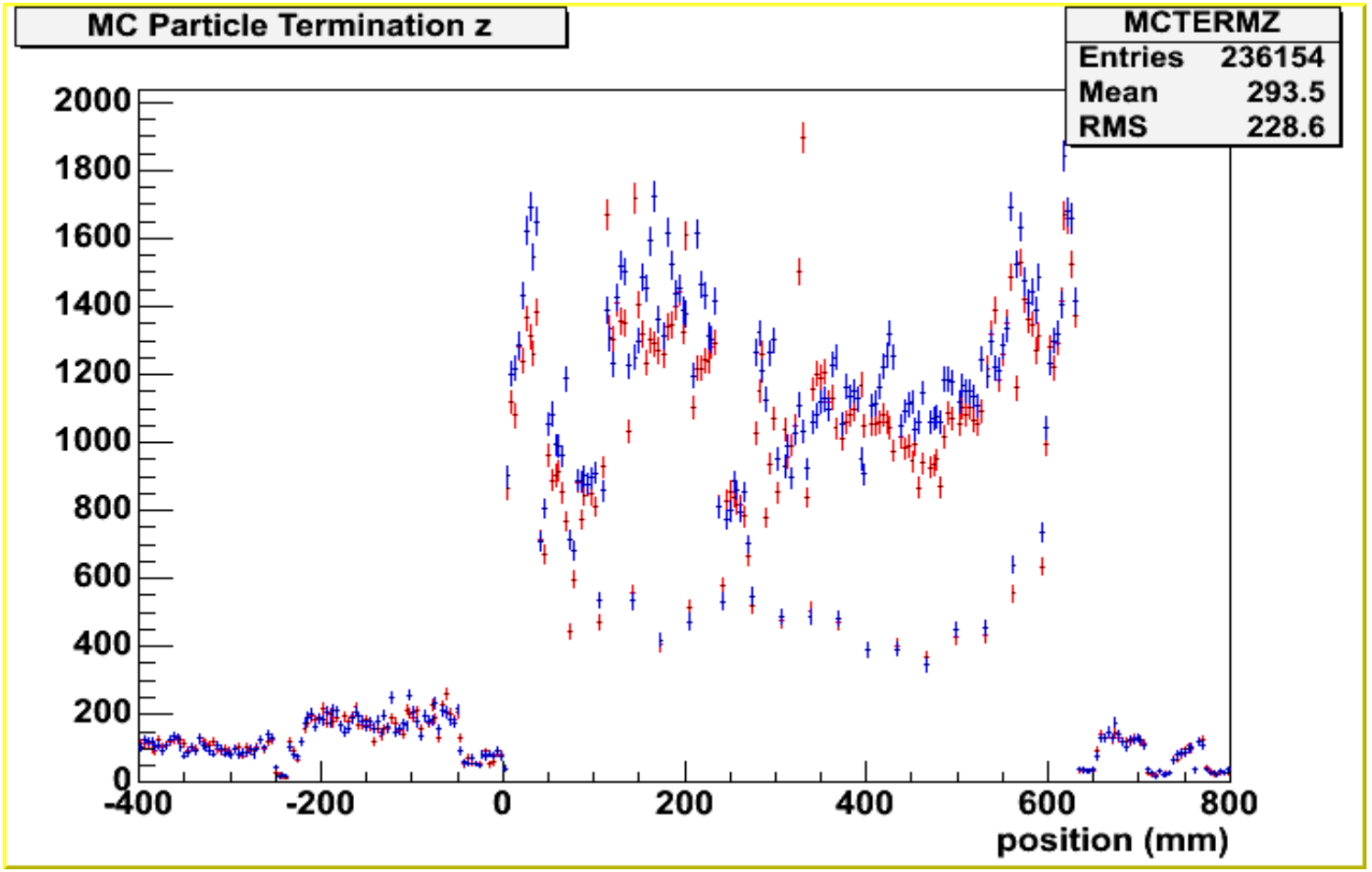
... and a clearer sense of what we need to do (and by when) to be ready in time for the January kickoff.

AllGamma



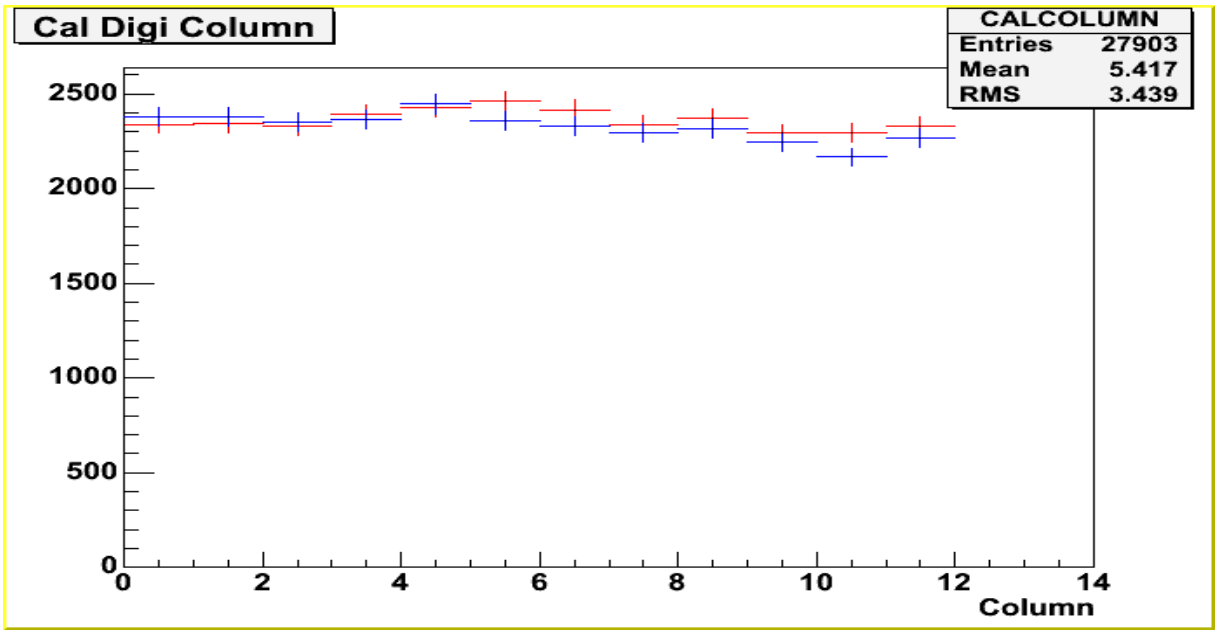
I don't understand this distribution. Shouldn't the values in towers 0,3,12 and 15 be similar or the same (these are the corner towers). Not enough statistics?

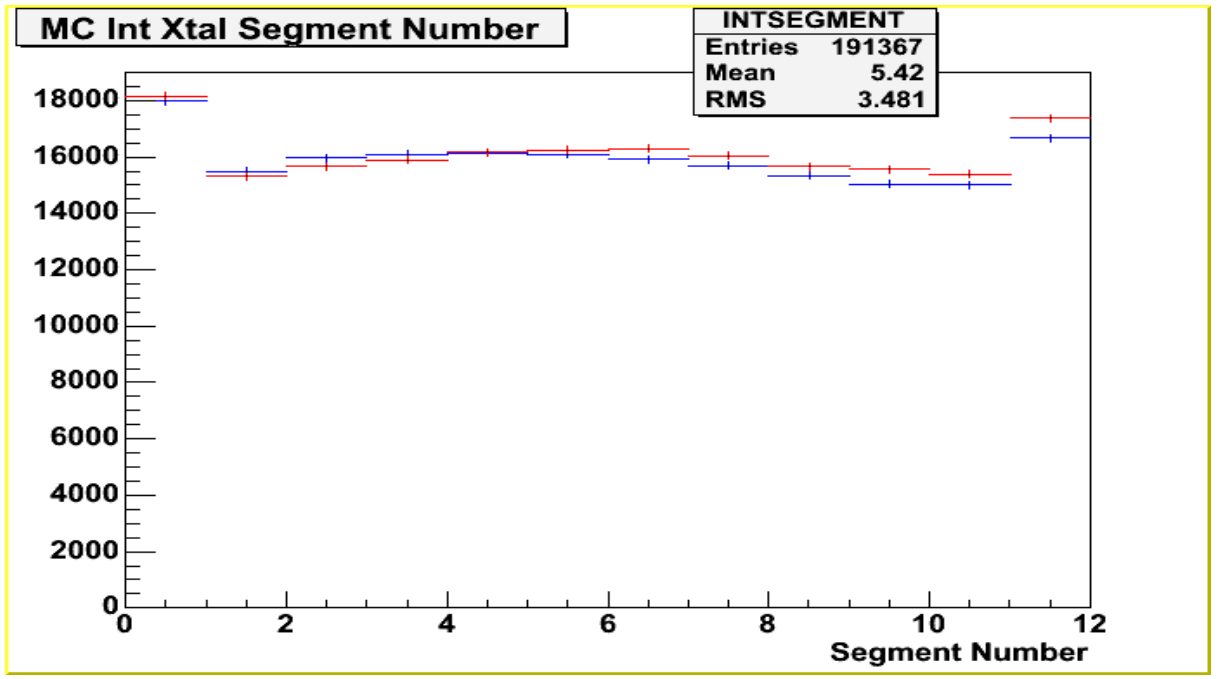
BackGndAvg



I am not sure how to interprete the features in this....

AllGamma





There seem to be systematic differences between these too distributions. The effect is not so obvious in the BackGndAvg data.