

System Tests Report – Jan 3

There has been a fairly major reorganisation of the root macros which define and fill the histograms.

- Macros have been moved to `systests/src/root/`
- Axis ranges and binning can be changed for individual systests by editing a file (`HistReDefine_local.cxx`) in the systest dir.

It is now **much** easier to maintain/change distributions because changes only need to be made in one place to appear in all the tests.

I did this because I hoped that a revamped set of TkrRecon and TkrDigi systests would appear soon...

We should consider switching to a mode where “ownership” of the histograms and the details of how they are filled is held by someone in the subsystem teams. At the moment we have Tkr, Cal, ACD, tuple, Trigger (this should include onboardfilter) and MC. Volunteers?

How does a release “pass” the systests?

We state (for the I&T code) that a code release is verified by checking that it passes the system tests, but we do not actually define what that means.

Currently the system tests look for differences between the current release and the standard (usually the previous release). Distributions with no significant changes are flagged as “passed”. This allows one to select for further study only those plots that have differences. However the presence of changed distributions does not necessarily indicate a problem with the release (bug fixes, code enhancements etc).

A Proposal:

For every system test, someone should check each “failed” distribution, understand its cause and verify that it is not a problem. For a release to pass the system tests, all distributions flagged as different should be documented somewhere as being understood.