

Tracker Review Summary

Date: 14:00, 7th December 2012

Place: CR02, R1, RAL

Attendance: D. Adey, A. Dobbs, C. Rogers, I. Taylor

No.	Task	Person	Due
1.0	Data structure		
1.1	Need to get raw tracker data into the MAUS data structure, not just the JSON. Should live under DAQData class and will require modifications to JSONtoCpp processors.	ES, YK, DA	01/02/13
1.2	Need to add errors to data structure	ES	01/02/13
1.3	Use TRef class instead of pointers for storage arrays. IT to trial first.	IT, AD	
1.4	Clusters should link back to Digits	ES	01/02/13
1.5	Have just one class of Kalman track, for both straight and helical	ES	01/02/13
1.6	Have track points as well as spacepoints in final Kalman track	ES	01/02/13
1.7	Link between Hits and Digits to be produced at MC Digitisation stage	IT, CH	07/01/13
2.0	Code Style		
2.1	All class methods must have doxygen style comments	All	12/12/12
2.2	Code comments in general should be better	All	
2.3	Use <code>std::sort()</code> and <code>std::find()</code> when searching through the elements of <code>std::vectors</code>	All	
2.4	Replace unsigned int with <code>size_t</code> when comparing with the size of a vector	All	
2.5	Consider using structs e.g. in Real Data Digitisation line 195, and for Pattern Recognition <code>spts_by_station</code>	AD, ES	
2.6	Reduce level of indentation in Pattern Recognition via predicate functions and binary searches, removing spacepoints from the vector holding them, rather than checking used flags, if (fail) continue, ...	AD	07/01/13

2.7	Too many compiler warnings. Files causing them can be found via the Jenkins interface. Please check for your code, and correct them.	All	07/01/13
3.0	JSON should not be accessed directly		
3.1	MiceModule data should be brought in using Global class, not directly from JSON	AD, ES, CH	Done
3.2	Mappers should inherit from base map class, and deal with errors through this, not via JSON directly. CR to make an example use first.	CR, AD	Waiting on MAUS
4.0	Algorithms		
4.1	Spacepoint χ^2 calculation needs review	ES	01/02/13
4.2	VLSB zero suppression variable should have a warning attached	ES	01/02/13
4.3	MC add noise function requires review. Poisson distribution, look up map, noise added as a double, etc. DA and IT to advise CH.	CH, DA, IT	07/01/13
4.4	Real Data Digitisation, line 91, do not use 0, use 1E-9, to prevent floating point errors	AD	Done
5.0	Calibration		
5.1	Can we use CDB to get calibrations yet?	ES, DA	
5.2	While they are in place, rename the .txt files used in Real Data Digitisation with the data created and data valid.	DA, ES	Not needed

Next tracker review at some point in February 2013.