



GBRAHMS

Developments and Plans

F.Videbaek

Brahms Software week

GBrahms Progress

- Component changes
 - Multiplicity Tiles and Stands final description (Hiro)
 - TOFW with present slats (no stands)
 - Shields in FS (3 all together) added
 - MRS moveable as real platform
 - Changes of placement according to *final* drawings, not yet surveys. Particular for BFS.
 - Some platforms (MRS,FS) and stands(MTP1,MTP2)
- Incorporated into release GBRAHMS-1-6
 -

Essential Parts missing

- ZDC (rough and detailed)
- RICH-detailed description
- Final DC geometry.
- Dx-D0 layout; some beam pipe
- Magnet maps rather than constant fields within effective edge.

- Geometry data-DB-simu-reconstruction and survey.

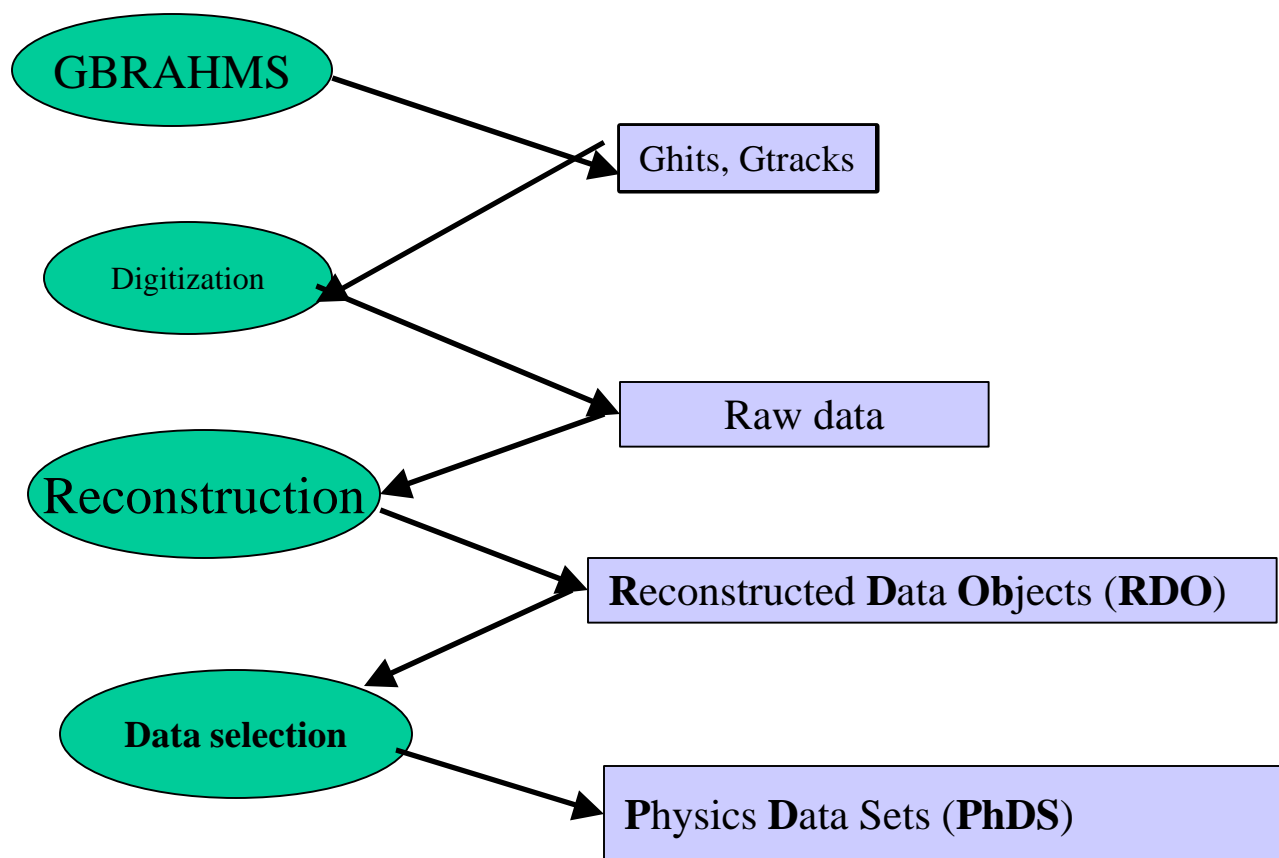
Compilation and Runtime environment

- The Portland compiler is only available at RFC. Cern libraries are fixed (98).
- Changed code so it compiles and links under g77 (on linux) ;I.e. also the default compiler for CERNLIB. Controlled by FORTRAN_COMPILER environment variable.
- Perl scripts has been written so the gbrahms job can be submitted to the CRS nodes.

Simulated Data Generation

- A large data set of simulated GEANT hits was generated for the MDC-2
 - This set is not well suited anymore due to added detectors, and changed geometry.
 - Plans should be made for data generation in the coming month or so
 - Purpose:
 - Code development and checkout
 - Trigger analysis
 - Sample spectra generation, evaluation of physics for run

Data generation



Data Generation Considerations

- With Tiles and Mult-Si included files are much bigger than before. [2Gb for 10,000 min.bias data]
- Time per event is about 40 sec per min. bias (no Dx)
- Presently 5 dual crs nodes.
- Need good statistics to look at issue of vertex distributions and spectra. (<1 track /ev).
- 10-20K events per setting

Proposed data Set

- MRS: 90,60,34 deg,2 field settings 20K.
- FS 2.3, 5, 10 deg; 3 settings
- FS (with C1) 5, 10 deg, 3 settings
- BB,Mult(ZDC!?) Au+p;O;Au -trigger
luminosity considerations.
- Vertex distribution? (fixed 0,+/-15 cm) or
distributed-in which case more statistics is
needed