Status
STT Simulator

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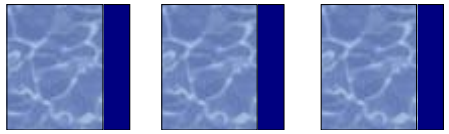
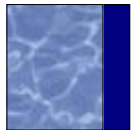
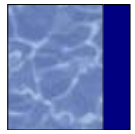
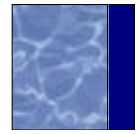


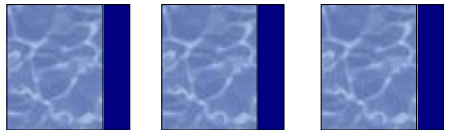
Outline

- Status
  - tsim_l2stt
  - l2stt_analyze
- A Bit About the Code
  - Design
  - Objects

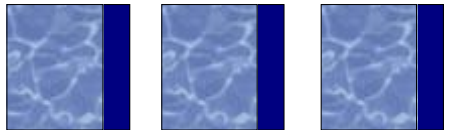
Many thanks to...

- Simulator Code
  - Silvia
- Test vectors
  - Silvia, Wendy, John, Evgeny, Tulika, Meena, Uli
- Mappings
  - Bill, Wendy, Meena
- IOGEN
  - Dugan, Vivek



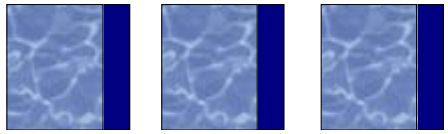
Status: tsim_l2stt

- Oct 15 Deadline
  - Code re−structured
  - Rename objects in all related packages
  - Made into a DataFlow package
  - Uses DFETrackL2Data (iogen) objects (L1 tracks)
  - Created map from CTT track to STT Sextant
  - Removed ntuple code
  - Improved FRC and STC test vectors for TFC tests



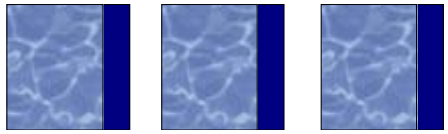
Status: tsim_l2stt

- Today
  - Several bugs fixed
  - SMT channels explicitly ordered according to (sextant,stc,hdi,chip,chan)
  - Reduced size of objects L2STTCluster and SMTChannel
  - Association between clusters and L1 tracks now takes note of STC boundaries.
  - Corrected packing of SEQID in STC test vector output (for John and Wendy)



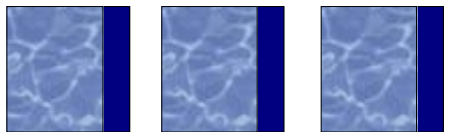
Status: l2stt_analyze

- Today
  - Uses extract<objectname>() method to get a vector iogen objects of type "objectname".
  - Uses HepTuple (mess) to create a root−tuple.
  - So far we are storing data from L2STTTracks
  - Experimenting with ways to make ntuple−code shorter and therefore cleaner. Trying out idea of "smart" buffers.
  - Association between clusters and L1 tracks now takes note of STC boundaries.

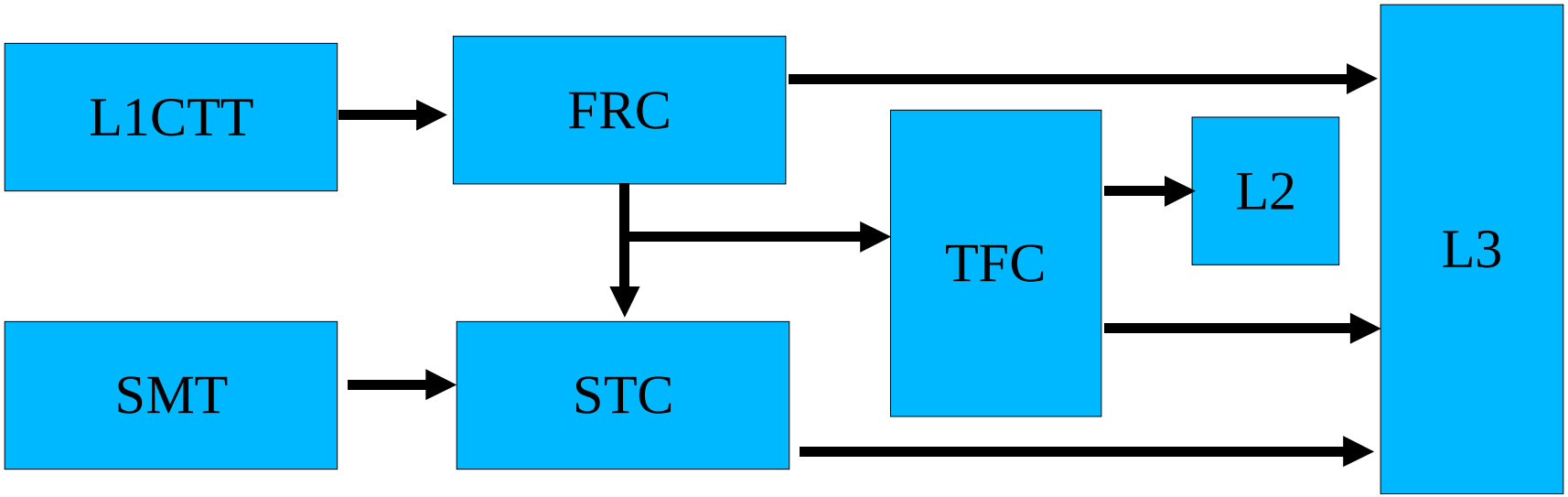


Code: Design

- Ground Rules
  - Think in terms of coarse−grained modeling
  - Re−use as much code as possible
  - Keep code modules short
  - Keep code visually tidy
  - Use a uniform naming convention when possible
  - Make objects do the do the work, not the user

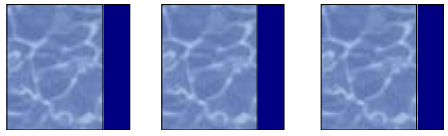


Model



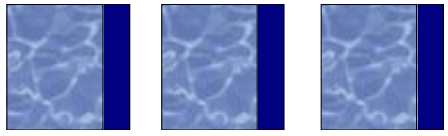
Objects (1)

- L1CCTTrack
  - Models a Level 1 CTT track
- SMTChannel
  - Models an SMT channel.
- L2STTCluster
  - Models an STT cluster
- L2STTRoad
  - Models association between an L1CTTTrack and one or more L2STTClusters per STC!



Objects (2)

- L2STTTrack
  - Models a Level 2 STT track
- <objectname>Data (iogen object)
  - Models "hardware" data associated with the object "objectname". <objectname>IO is the packed form.
- <objectname>Bag
  - Models a container for objects of type "objectname"
- Hit
  - A cluster associated with an L1 track



Plans

- Complete l2stt_analyze
- Test, test, test!
- Incorporate modeling of cluster and road output to Level3