Mock data status

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Production status

- Generating beam background (main CPU expense) now; this will take about a month
  - Plan is for everything else to be ready and tested by then
- Working on trident background and signal
- Readout simulation and recon ready for testing
- Scripts, parameters, data locations: `https://confluence.slac.stanford.edu/display/hpsg/Finding+Monte+Carlo+data+at+JLab`
- Expect small samples next week; full data sets by May

Obligatory review slide

- MC production steps: primary generators, SLIC detector simulation, readout simulation, recon/DST
- Output of this process is two kinds of events: unbiased background (1 minute) and trident triggers (1 week)
- Input is two kinds of primary events: beam background and preselected “trigger tridents”
  - 1 unbiased background trigger = 8 ms (1/13 kHz) beam background
  - 1 trident trigger: 1 trigger trident + 500 ns beam background

What you'll get

- Reconstructed LCIO (contains raw data) and ROOT DST for three mock samples: one vertexing signal, one bump-hunt signal, one no-signal
  - 1 week of 2.2 GeV beam each; same beam background for all samples
- The same files, plus truth information in the recon LCIO file, plus SLIC output (hits in detectors, before readout simulation), for test datasets:
  - Background triggers: 1 million triggers
  - Small MC samples: A', radiative tridents, BH tridents

What you won't get

- Detector geometry is final, no more changes
  - Details: `https://confluence.slac.stanford.edu/display/hpsg/Detector+Geometry+Overview`
- No nonuniform magnetic field
- You can use this data for detector studies, but since most detector studies will need much less data, it's easy to make any needed changes later — getting this out the door takes priority over putting in all the truth information, detector effects, etc.

What you'll get if you ask

- Still time to change readout/trigger sim
  - Trigger parameters could be retuned
  - Detector readout simulations may be improved
- EVIO conversion is easy if someone's going to use it

What I need

- Data quality monitor
  - In this context: make sure the reconstruction is working
- Some basic review from detector groups: is there anything I need that I don't have? is there anything you need that I can add?