Report from the GTOCC TeleCon on Monday, August 21.

Seth Digel   Science Simulations
Arache Djannati-Atai   CAL-TKR Interface
Eduardo do Couto e Silva   BTEM Analysis
Jose Hernando   Tracker Performance
Tune Kamae   Design Parameters
Steve Ritz   Backgrounds
Hartmut Sadrozinski
Dave Thompson   Science Interface (to GBM etc)

1) Discussion on proposed layouts to be studied
Hans M.-H. liked it.
Uniform converters means fairly large converter: ~8%, which will not satisfy the SRD.

2) Action Items
a.) Analyze the AO layout for low energy response with special attention
to a subset of photons converting in the last layers.
        calorimeter
Arache mentioned that even with the AO layout, he got resolutions of 40% at 30MeV
        It is not clear that the BTEM analysis is relevant for the study because the low
        photon energy spectrum might not be very well characterized. .
        Again we should concentrate on the conversions in the last layers of the RKR.
        Important to find corrections in MC and then get estimator for energy.

Berrie looked at corrections in BTEM and finds that a linear correction with Nhits
improves the energy resolution by about 30%. This should be done for each layer

Warning: check for "hardwired" constants, variables and functions in GLASTsim

        TKR at lower energy
J. Hernando: Ntuples for AO are available: see below. Verified that the results of the AO
plots and the new files are identical.
Elliott & Paul used a somewhat different xml and verified the AO numbers

It was emphasized that we want to use the AO geometry with one change only: 100kev
cut-off.

b.) Select a variant of the AO layout and do a full reconstruction and
compare with AO layout.
EL (for "Even layout") layout
12 x-y layers with 3.5% converters (up from 2.5%)
4 x-y layers with 12% radiators (down from 25%)
2 x-y layers without converters

ELP ("EL prime") Layout

10 x-y layers with 3.5% converters
4 x-y layers with 12% converters
2 x-y layers with 3.5% converters
2 x-y layers without converters.

Thomas Linder generated sets of MC files for each of the three layouts as detailed on the webpage

http://www.slac.stanford.edu/~tlindner/GTOCC/gtocc_simulations.htm

Parameters for simulation runs:
Angles: 5 deg, 35, 50deg, 60deg.
Energies 20,30,50,100,200MeV, 1GeV, 10GeV, 100GeV
Also $1/E^2$ spectrum >20MeV, all angles

This was done using the AO GLASTsim program (approx date July 1999).

The idea is to have a quick look and see if we can see differences between the layouts at low energy and then follow up with a more detailed study.

c) Review the variables in IRF files
(T. Burnett, R. Dubois, N. Johnson and J. Hernando) No result yet.

d). Science Simulation
Seth made a plea for improved PSF at low energy.
He added a write-up on low energy science topics (attached)
Arache is looking for a science figure of merit.

Next meeting during the Software workshop at SLAC. Richard will try to find a spot.
Alternatively, we will meet at irregular hrs (8am).