Geometry Status January 2006

Status:

- The tile and ribbon dimensions were obtained from the ACD engineers last summer. Joanne updated all dimensions to account for shrinkage at operating temperature.
- Overlap of top tiles (post-DC2) in GR v8r0 and beyond
Updated to go in the correct direction (thanks Joanne). Consequence was that the modeling of the ribbons on the top was modified causing the need to update some code in AcdRecon and AcdUtil.
- Curvature of the top tiles has been implemented in a more recent tag of xmlGeoDbs (thanks Joanne) (also post-DC2) not yet in GR
pretty picture
Note that this includes a small piece of ribbon that lives along the curvature of the top tiles.
This needs to be tested and the digitization and active distance calculations updated to accomodate the new volumes in the geometry.

To Do:

- Cross check the placement of the tiles and ribbons against the integration testing position maps.
Eric should have this data available soon if not already. In what form?

- Update Blanket/MMS
Dave Thompson has provided the final numbers in a PDF file.
Currently the blanket/MMS is simulated as a single layer of cooked up material as setup back for the AO. Joanne and Heather will be updating the dimensions and material to conform to the new values. What is the crown?

- Screws
Typical tiles have four iron screws each, the bottom row large tiles have 20 (I think). Much work went into this before DC2. However, there were problems in how the volumes associated with the screws were handled by the simulation. Joanne has volunteered to address this again and basically start from scratch.

- Shingling
Work on this has not yet been scheduled.

- No plans for modeling flexures, BEA, or updating the simulation of the support material.