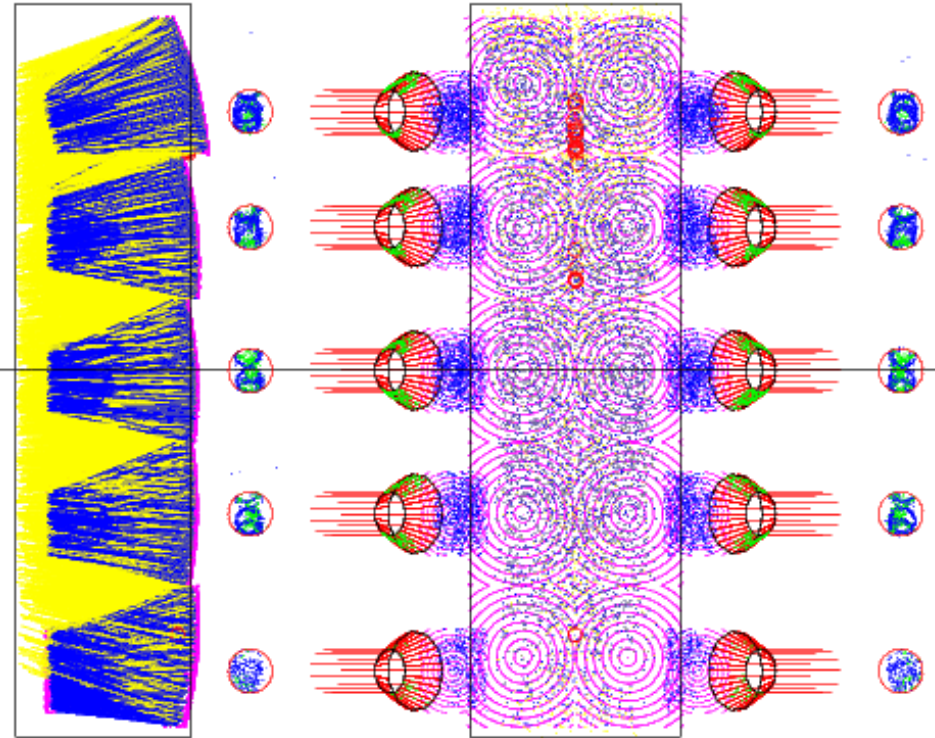
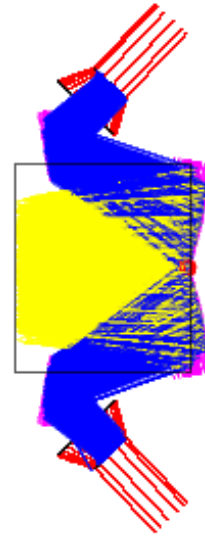


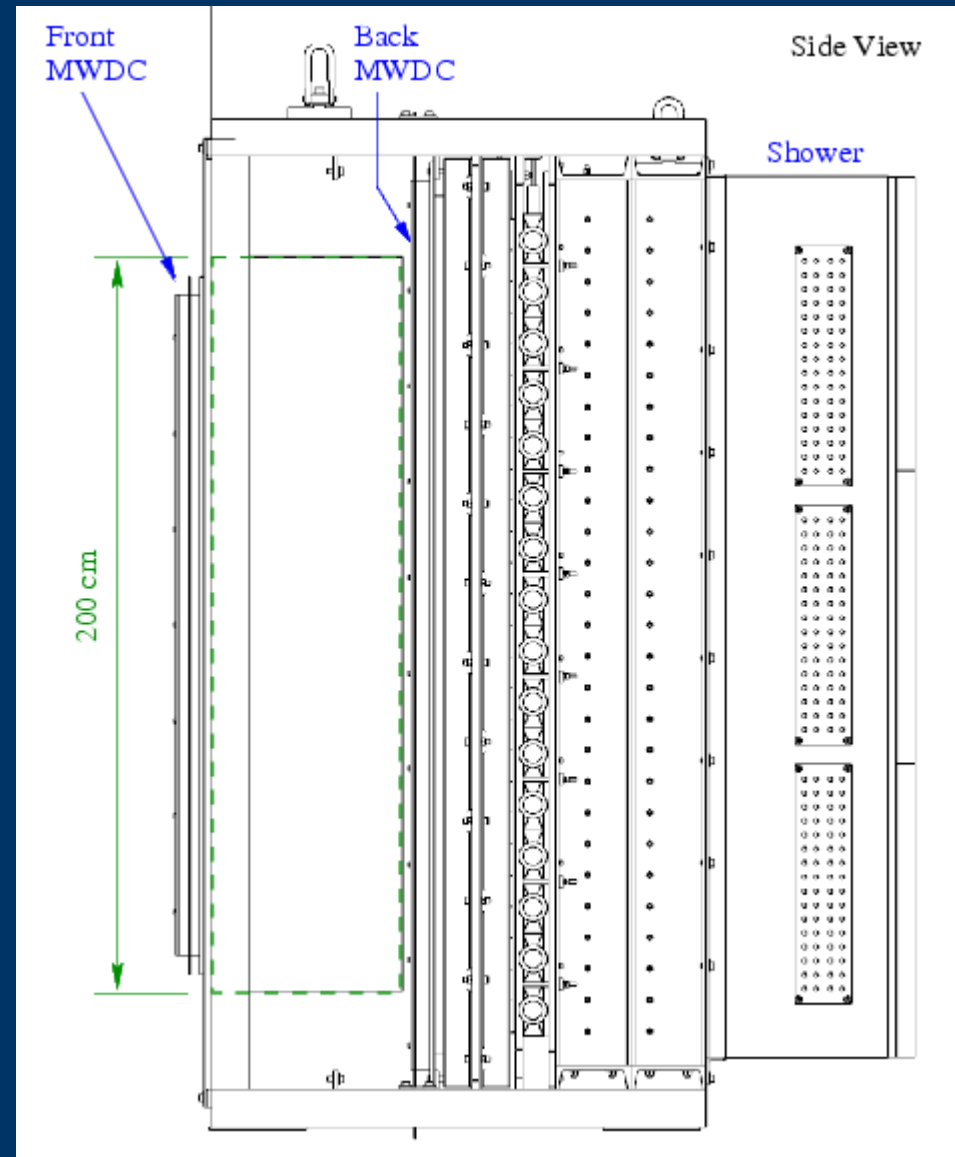
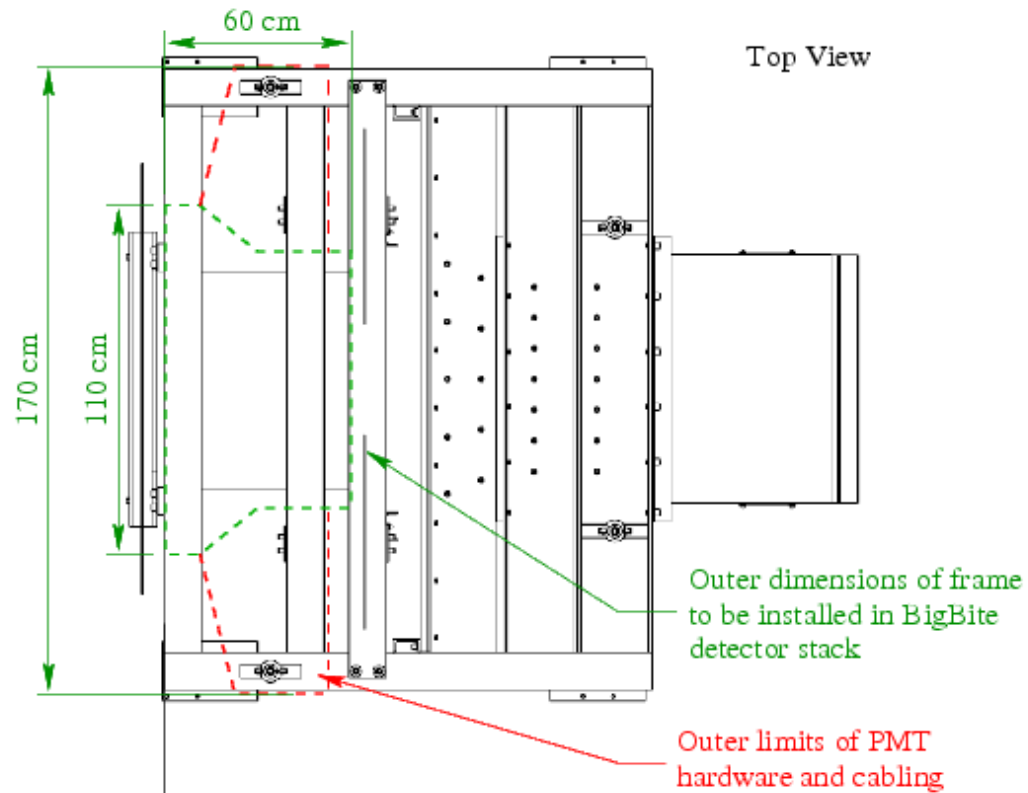
Cherenkov

- Mirror blank vendor has been located
 - Eagle Glass Specialties, Inc.
 - Sample evaluated over the summer
 - Blanks for SANE Cherenkov are ordered
 - Multiple vendors for Al coating located
 - CERN is still preferred choice, but we have options
 - PMTs are purchased
 - 12 XP4508 5” quartz tubes
 - Optics are tricky due to the large momentum acceptance of BigBite
 - we will be going with a 'two bounce' design
 - Winston cones would be preferred but \$\$ is factor
-
-

Cherenkov Optics



Cherenkov Frame



Cherenkov

Component	Units	Cost/unit	Sub-total
Cerenkov frame/mounting hw/fittings <i>Currently avail. funding from Temple U.</i>			\$30k (-\$10k)
Primary Mirrors (spherical)	10+2	\$2000	\$24k
Secondary Mirrors (flat)	10+2	\$1000	\$12k
Pseudo-Winston Cones [†]	10+2	\$500	\$6k
PMT, base, μ -metal shield (UV glass)	10+2	\$3000	(Option 1) \$36k
PMT, base, μ -metal shield (Quartz) [‡]	10+2	\$5000	(Option 2) \$60k
Quartz optical windows [*] :	10+1	\$500	\$6k
C ₄ F ₁₀ gas:		\$1700/fill	—

[†] May be omitted for purposes of E06-014 at the cost of a significant loss in efficiency for the lowest energy bins.

[‡] Quartz-face PMTs result in almost a factor of two more photons to be detected. Expensive, but probably worth it.

^{*} Not required if the PMTs can be installed inside the tank (preferred option).