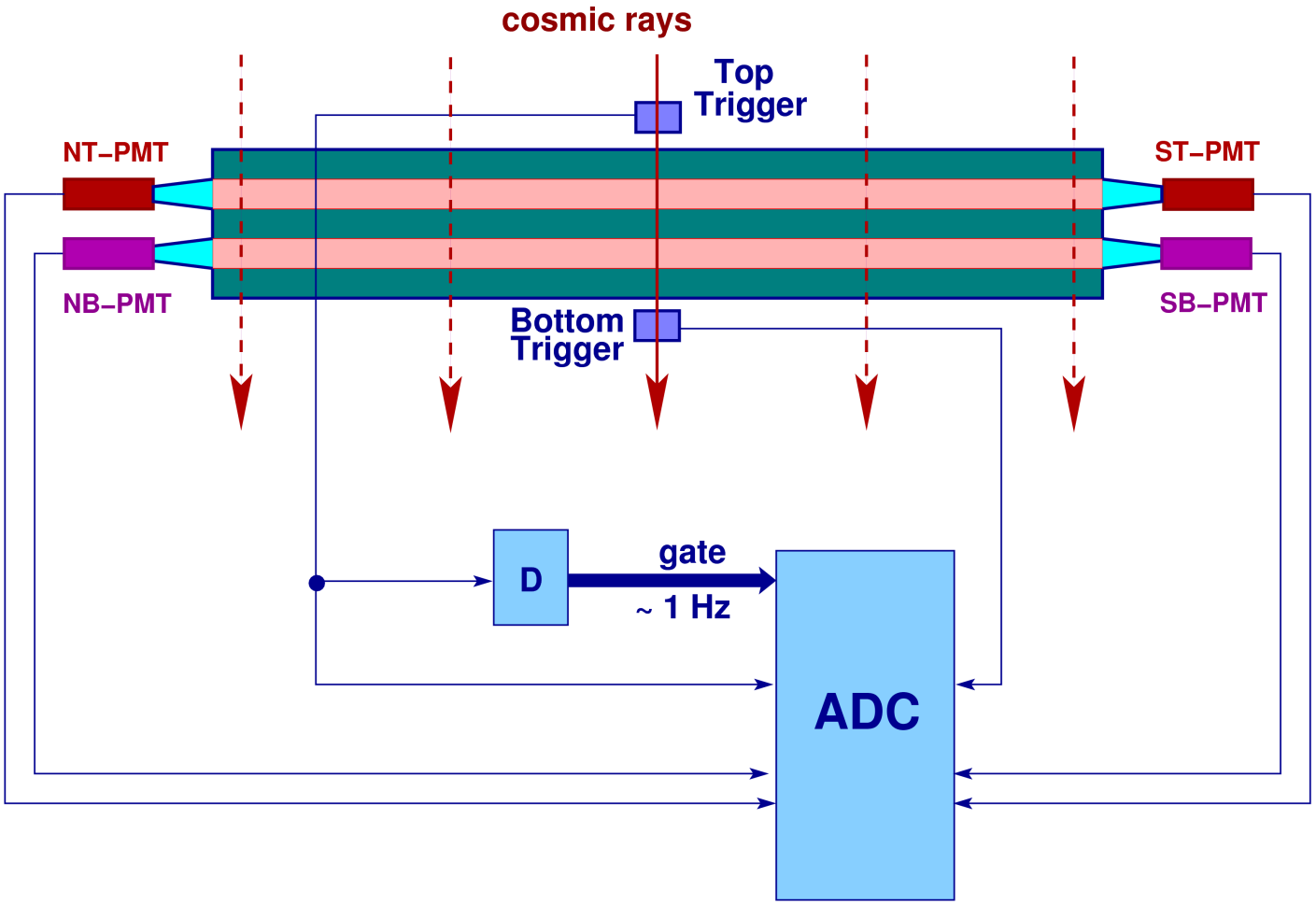
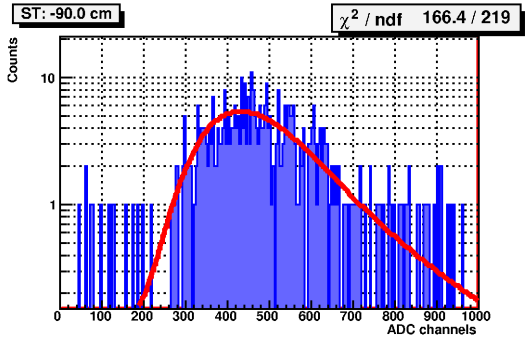
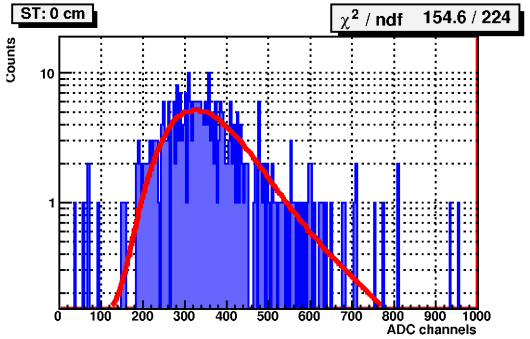
Test of BCAL Module #0 with Cosmics at UofR

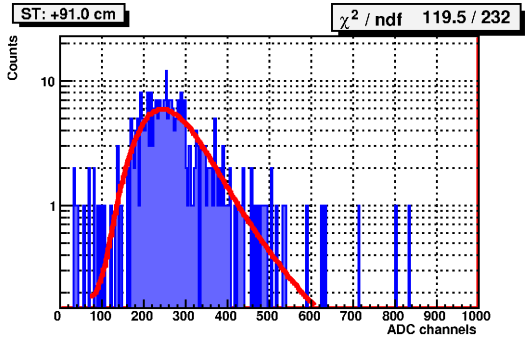
(All results are preliminary)

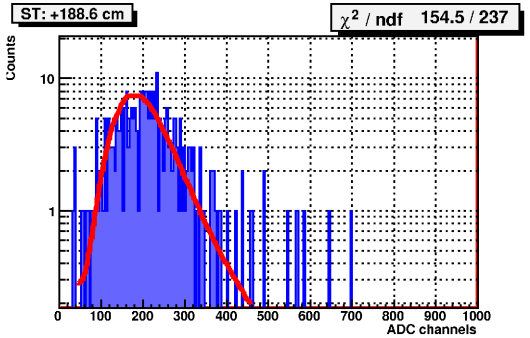


To decrease number of free parameters and improve result accuracy, we fit ADC spectra simultaneously.



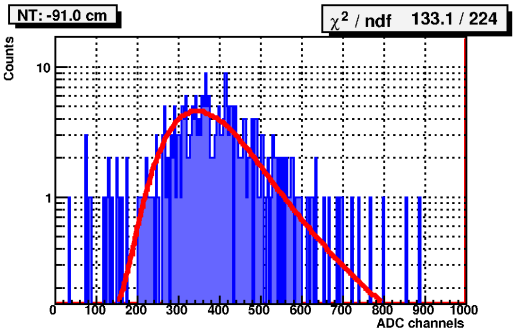


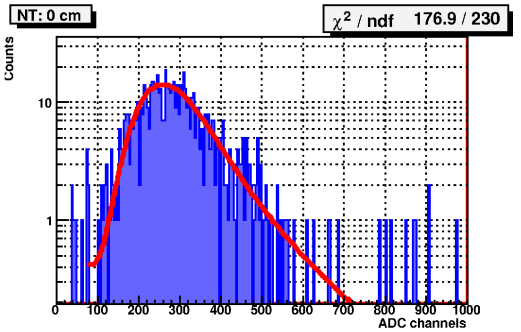


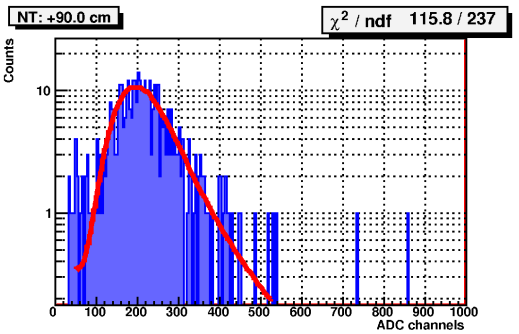


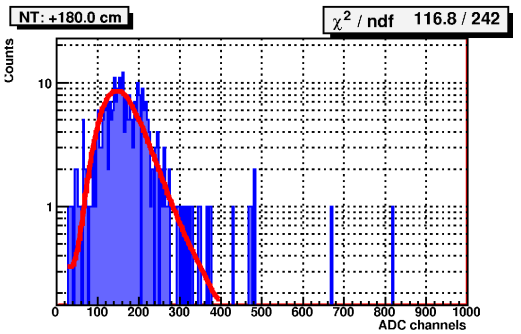
Spectra and fits for ST PMT :
Npe @ 195 cm = 64.5 ± 8.0 cm

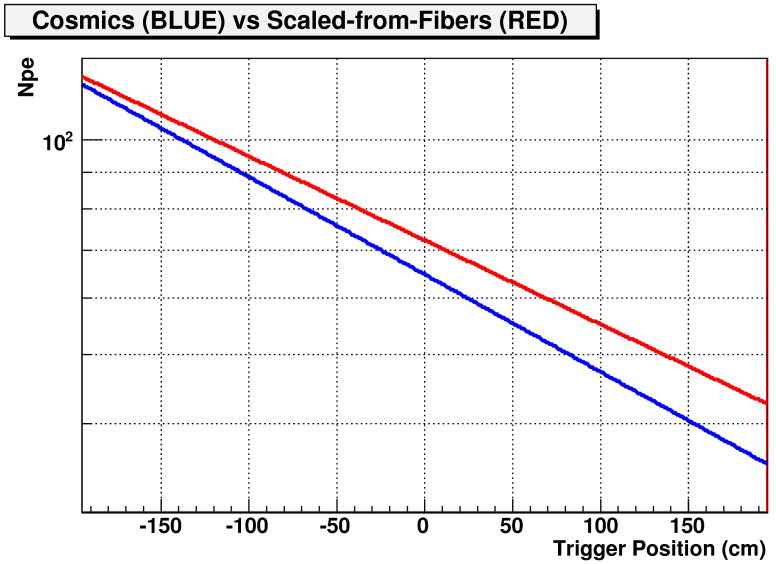
Spectra and fits for NT PMT :
Npe @ 195 cm = 58.5 ± 5.0 cm

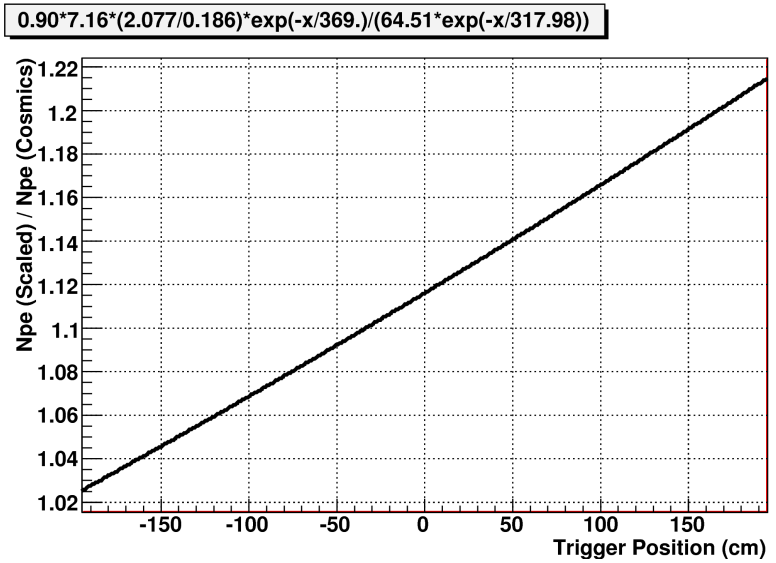












Cosmics 2010 with Hamamatsu R329-02 and the "Good Section" of the Module:

Att. Length λ = 317 ± 6 cm
Npe @ 195 cm = 64.5 ± 8.0 cm

Fiber Tests (shipment #2):

Att. Length λ = 369 cm
Npe @ 200 cm = 7.16

↓

7.16*(2.077 MeV/0.186 MeV) = 80 phe

Assuming light collection of 90%, we expect about 72 phe in the middle of the module.

It looks like we have extra 20% of increase in the dynamic range...