
Subject: Re: Position calculations on start/stop scintillators

Posted by [thuyuk](#) on Tue, 19 May 2015 10:19:35 GMT

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Hi Michael,

Thanks for the explanation in detail.

For the anomaly you detected regarding to the time delay for each PMT, this might be due to the scintillator material, that it seems to have 1.58 of refraction index according to the data sheet of the BC420 of Saint Gobain. So the theoretical formula would already need a correction just because of the n constant, what do you think? Considering that there might be imperfections inside the scintillator plastic, the times from the PMTs would differ slightly. This is my first impression, maybe I'm totally wrong.

Regarding to the part that you explained how should one treat the data without any reference interaction point, I think I'm lost when you say;

Quote:

... all possible combinations of the 64 calibration coefficients ...

What are the all possible combinations? Do you mean all combinations of the PMT pairs?

Thanks!

Tayfun
