Stony Brook University

T2KSK @ SB Meeting

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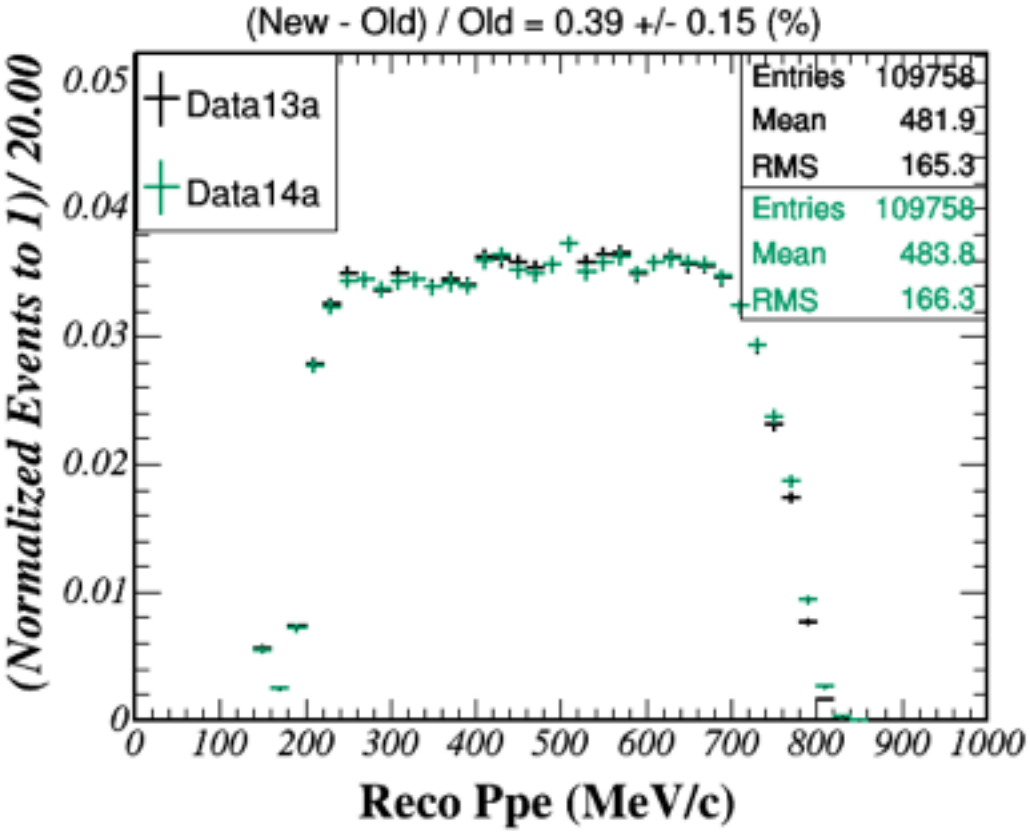
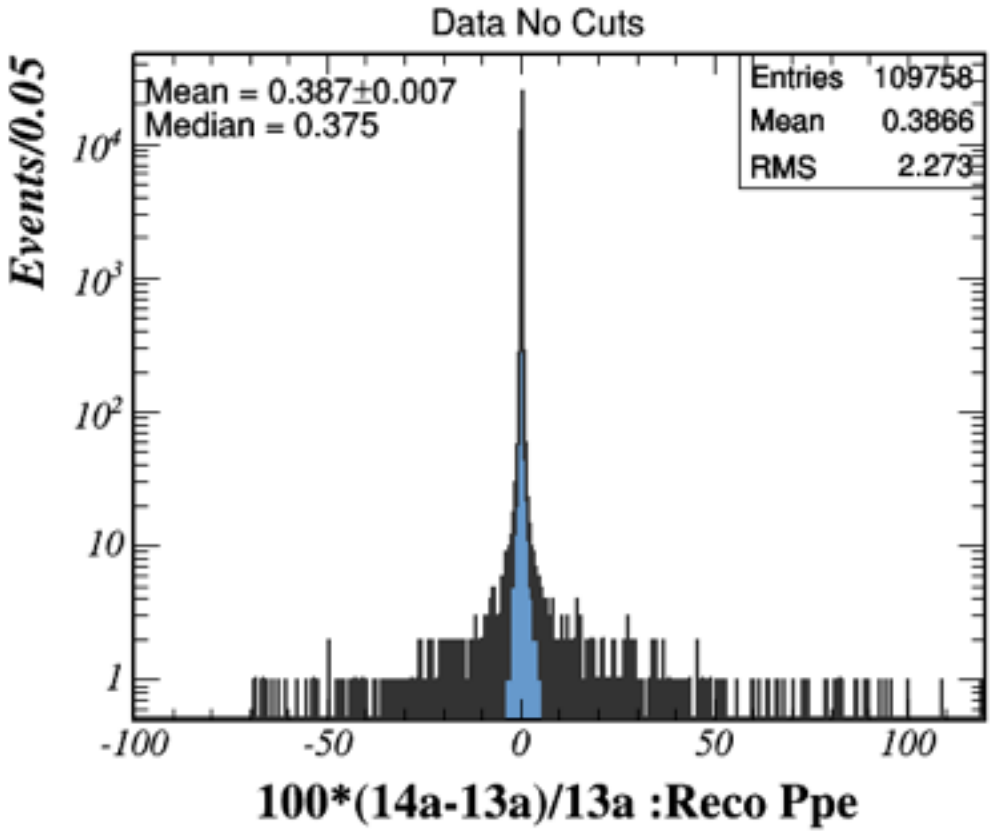
Data 13a - Data 14a

We used same zbs files

Our expectation is 0.75% relative difference for momentums



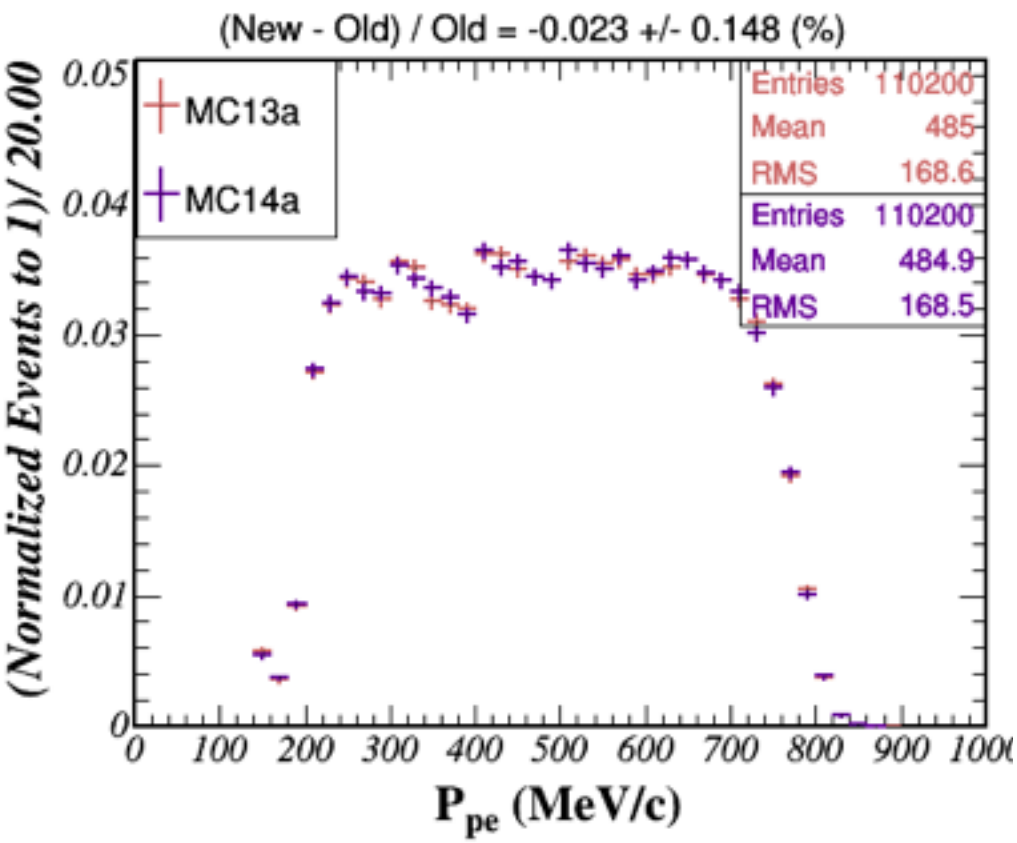
Relative Difference 14a respect to 13a (mean values) = 0.39 +/- 0.15%

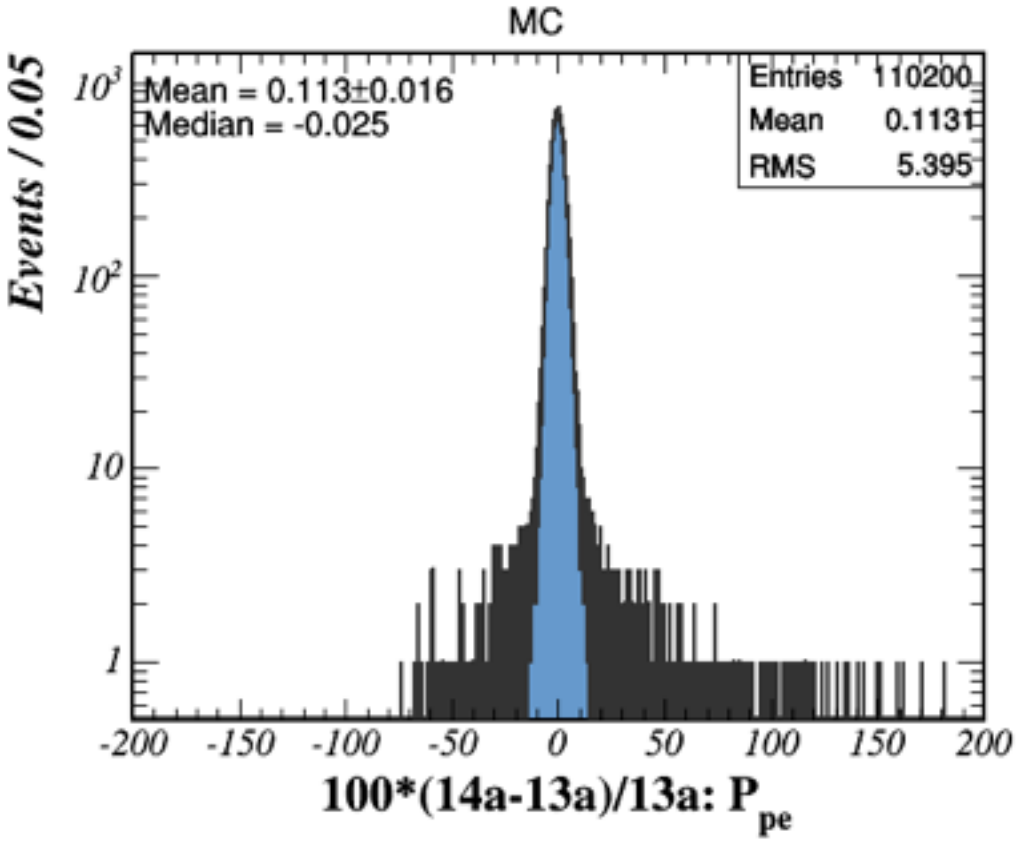


Relative Difference 14a respect to 13a (entry by entry) = 0.387 +/- 0.007%

MC 13a - MC 14a

We used same input vector file to generated MC13a and MC14a.
Our expectation is 0% relative difference for momentums





Relative Difference 14a respect to 13a (mean values) = -0.023 +/- 0.148%

Relative Difference 14a respect to 13a (entry by entry) = 0.113 +/- 0.016%

Status 13a Data vs 14 Data plan

Done

1. Check GNUmake files. (done)
2. Check output from compilation, right libraries? (done)
3. Two analyzers independently reproduced the same results? (yes)
4. Stmufit code located at: /disk/usr2/palomino/lowmu14a/ OK? (ok)
5. Check vertex, direction and angle using 13a/14a fit on same MC file.
6. Advice on this fit code. (Kameda-san)

To do

Checking stmufit

Checking stmufit code

same output

13a output

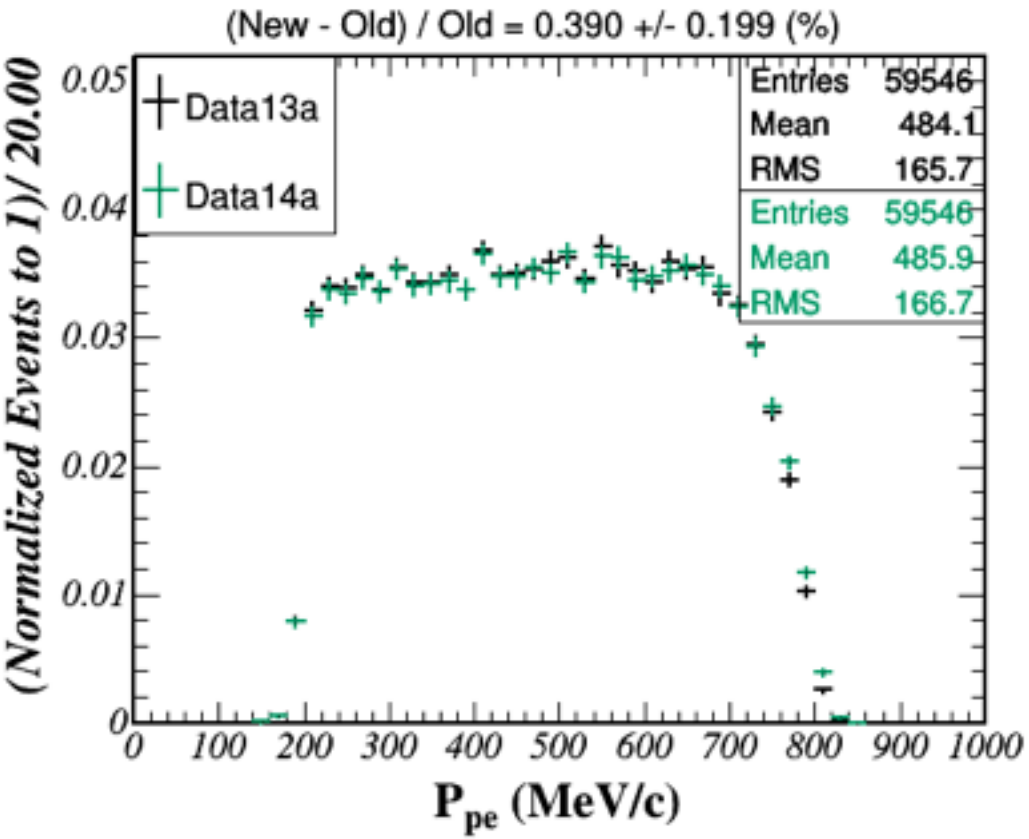
	appos(1)	appos(2)	appos(3)	apdir(1,1)	apdir(2,1)	apdir(3,1)	apangcer(1)
called tftdcfit+skcr	-874.597229	-267.629761	1800.837891	0.020565	0.132580	-0.990959	41.335239
called apfit1	-860.790344	-277.785126	1792.552490	-0.020747	0.179214	-0.983591	40.231045
called apfit8	-858.108948	-277.888702	1802.662109	0.015554	0.195759	-0.980529	41.015347
called apfit16+32	-858.108948	-277.888702	1802.662109	0.015554	0.195759	-0.980529	41.015347

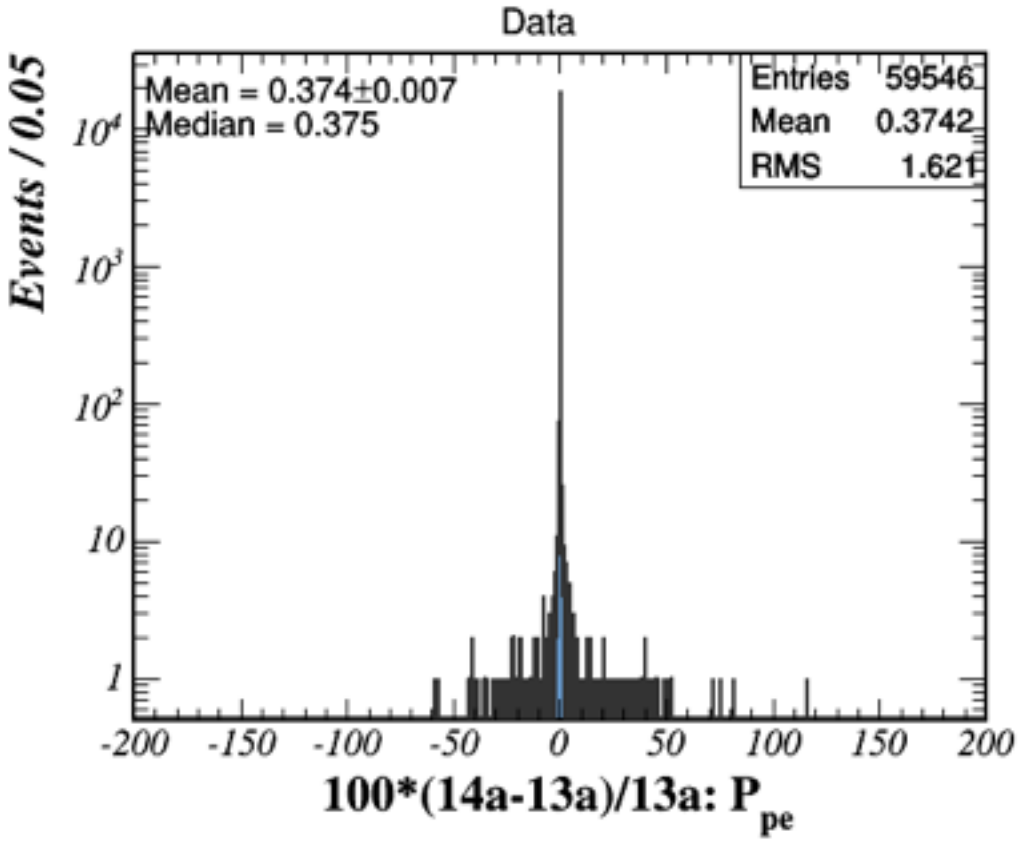
14a output

	appos(1)	appos(2)	appos(3)	apdir(1,1)	apdir(2,1)	apdir(3,1)	apangcer(1)
called tftdcfit+skcr	-874.597229	-267.629761	1800.837891	0.020565	0.132580	-0.990959	41.335239
called apfit1	-860.790344	-277.785126	1792.552490	-0.020747	0.179214	-0.983591	40.231045
called apfit8	-860.201477	-279.264557	1806.536865	0.022346	0.199512	-0.979641	41.025562
called apfit16+32	-860.201477	-279.264557	1806.536865	0.022346	0.199512	-0.979641	41.025562

different output

Ppe: Data13a - Data14a





APFIT(8) MSFIT, was not called

Next

Check the momentum table.

Check the absolute energy scaler error for stop muon sub-gev sample.

Same procedure for SK1, SK2, and SK3.