

Phi studies
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DC06 MCTruth Phi fit

- Phi angular distribution was quite doubtful
- Time dependence was wrong
- Integrated time multi-variable fit
- No acceptance
- No background
- Troublesome strategy.
- Unstable fit.

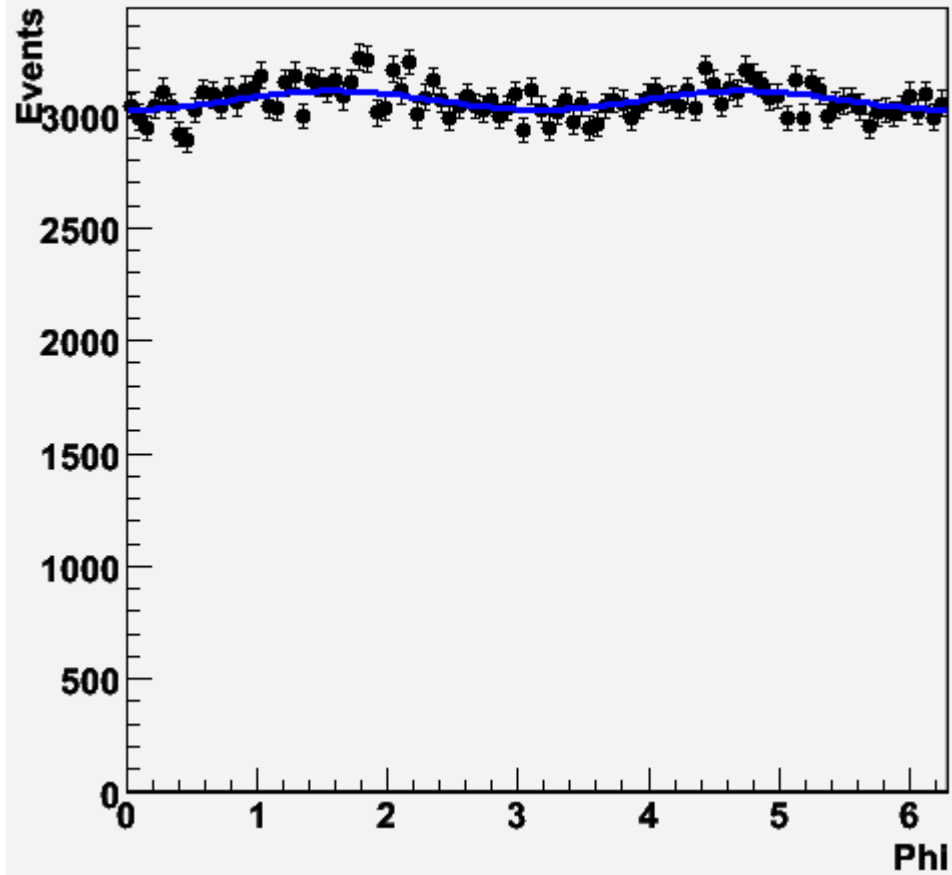
Toy MC test of time-integrated fit.

- Unstable fit?

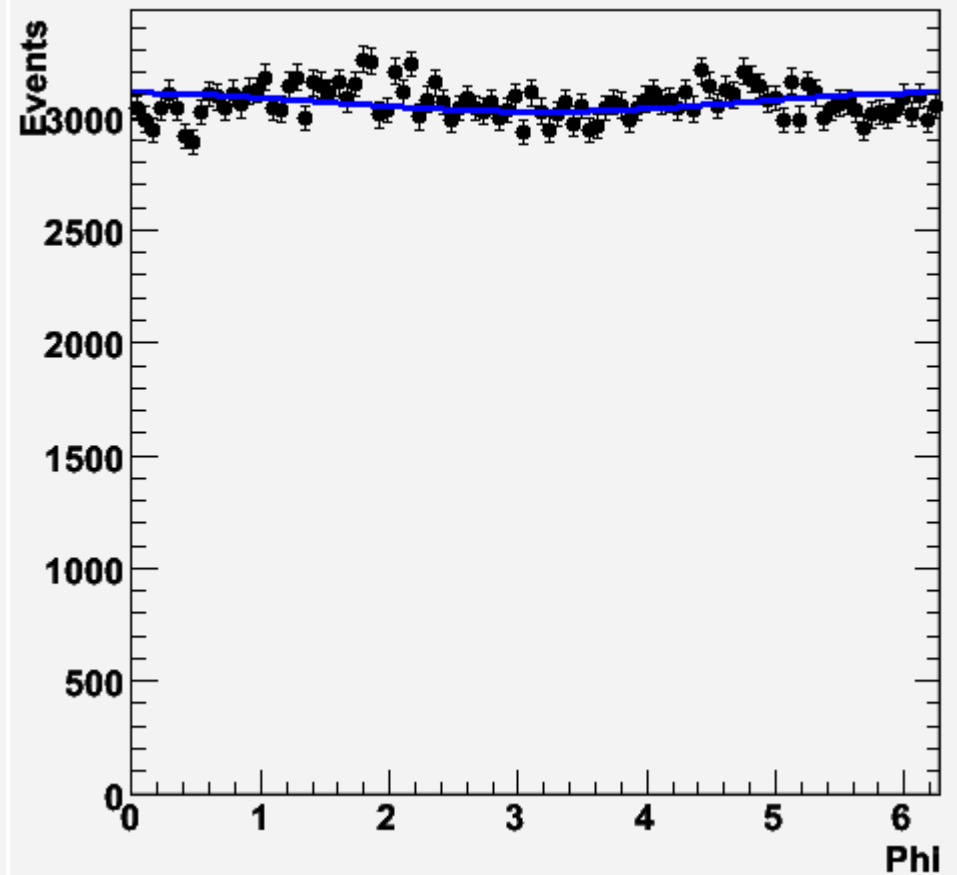
| <u>Parameter</u> | <u>Input</u> | <u>Output</u> | <u>Parab Error</u> | <u>Neg Error</u> | <u>Pos Error</u> |
|------------------|--------------|---------------|--------------------|------------------|------------------|
| Aparsq | 0,1320 | 0,0702 | 4,93E-04 | -4,92E-04 | 4,94E-04 |
| Rtper | 0,1320 | 0,0634 | 4,77E-04 | -4,78E-04 | 4,77E-04 |
| Delta 1 | 3,1416 | 3,2079 | 2,25E-01 | -2,64E-01 | 2,09E-01 |
| Delta 2 | 3,6416 | 3,6605 | 2,25E-01 | -2,64E-01 | 2,09E-01 |
| Phis | 0,0400 | 0,0352 | 4,77E-02 | -4,86E-02 | 4,78E-02 |

ToyMC test

A RooPlot of "Phi"



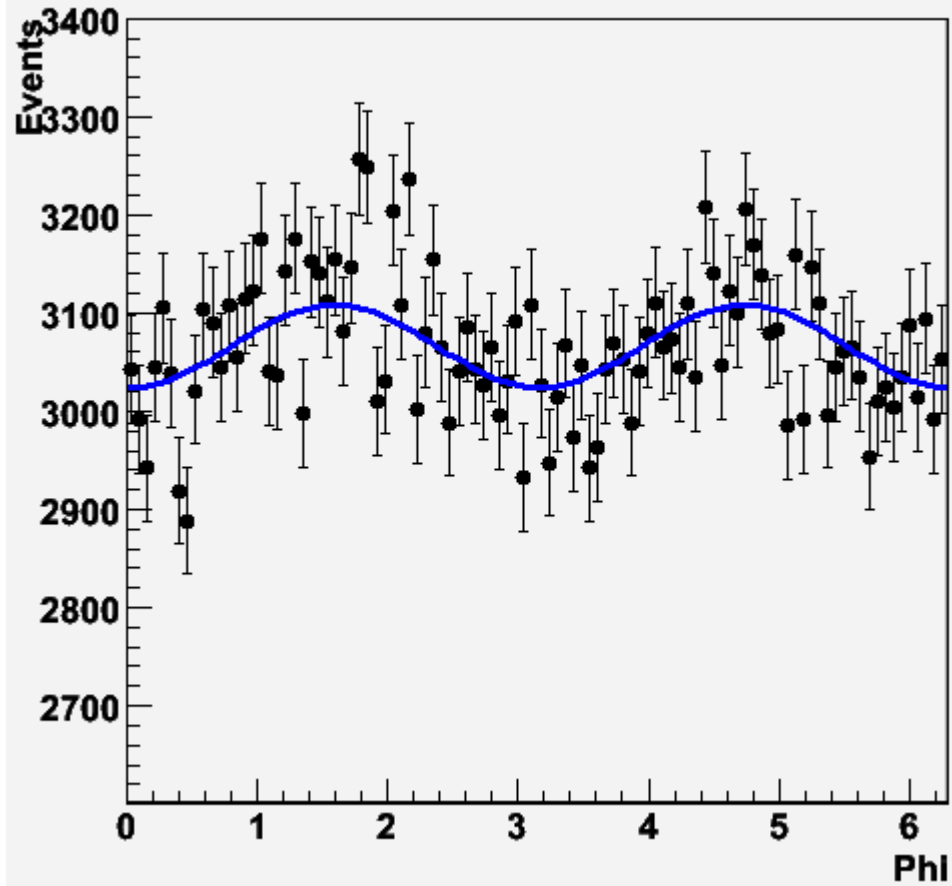
A RooPlot of "Phi"



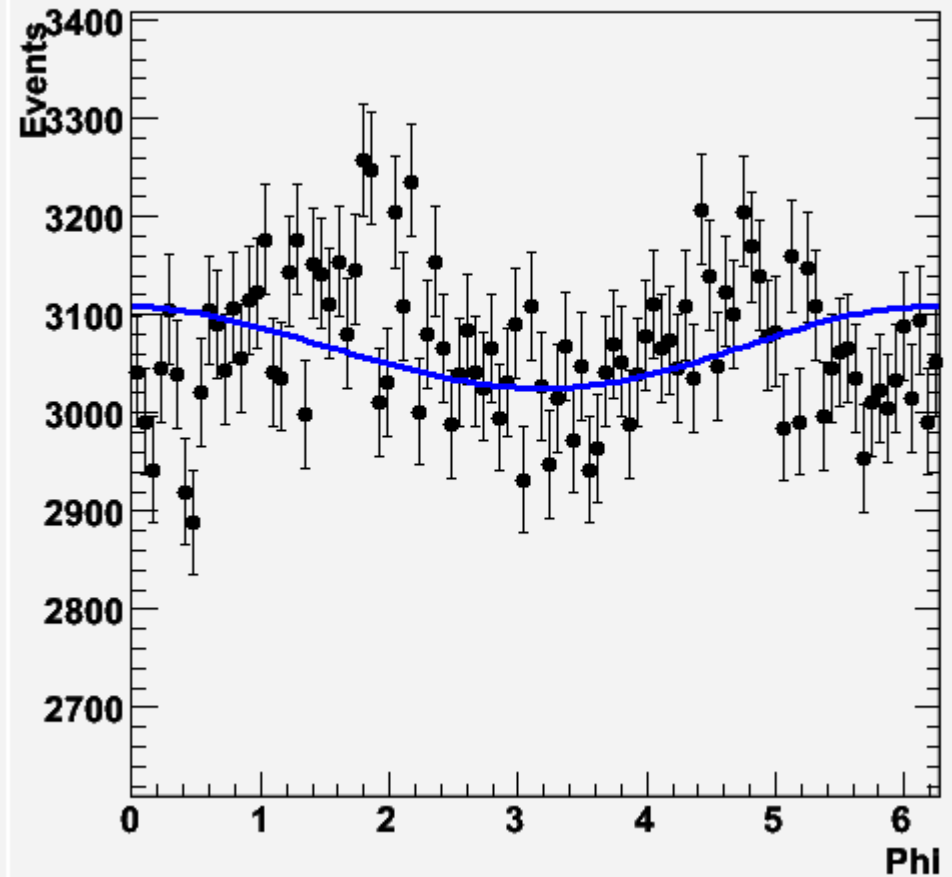
- Generated vs fitted.

ToyMC test

A RooPlot of "Phi"



A RooPlot of "Phi"



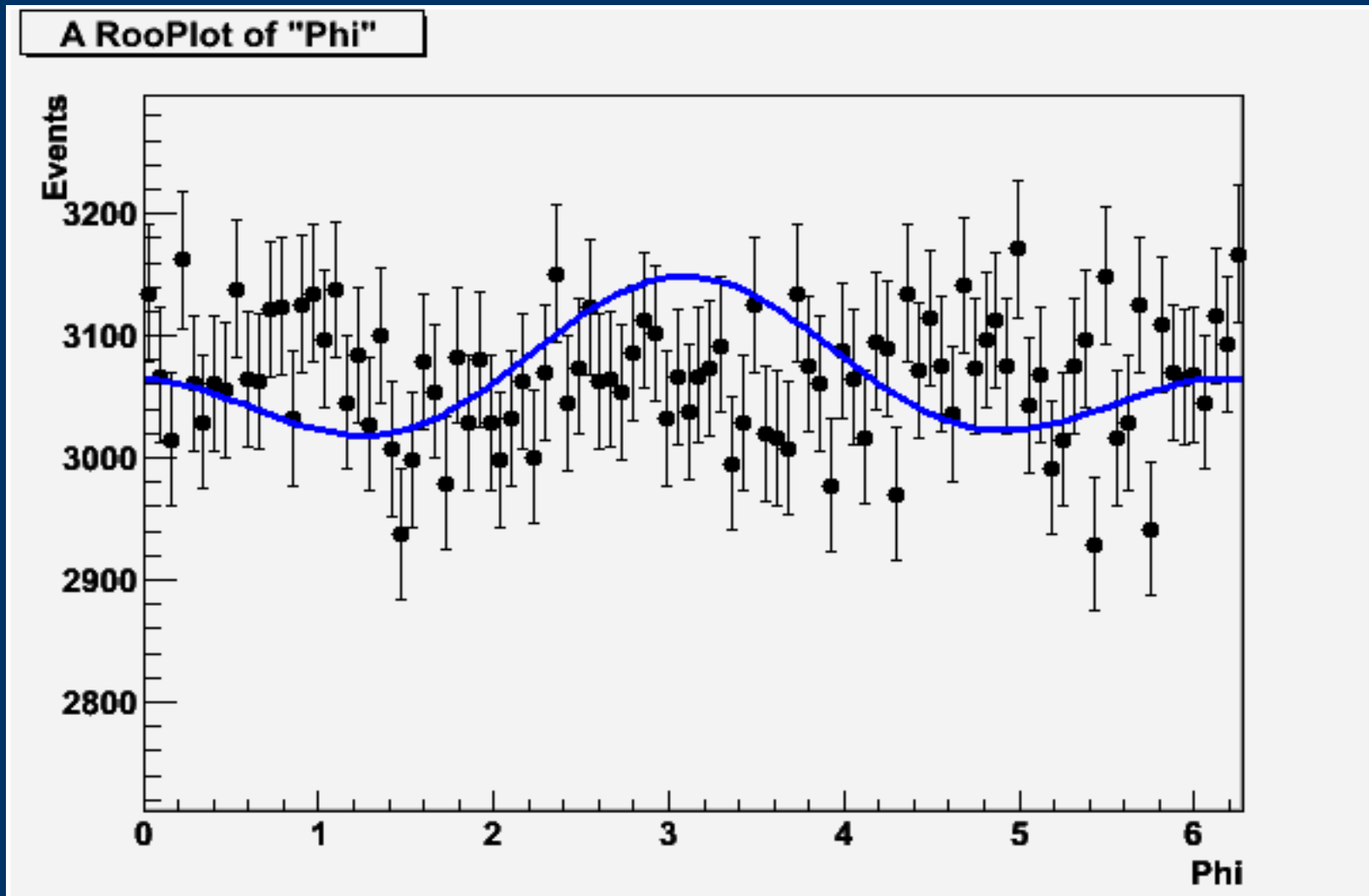
- Generated vs fitted.

DC06 MC time-integrated fit.

- Crazy fit?

| <u>Input</u> | <u>Output</u> | <u>Parab Error</u> | <u>Neg Error</u> | <u>Pos Error</u> |
|--------------|---------------|--------------------|------------------|------------------|
| 0,1320 | 0,0700 | 4,89E-04 | -4,84E-04 | 4,93E-04 |
| 0,1320 | 0,0561 | 4,54E-04 | -4,56E-04 | 4,52E-04 |
| 3,1416 | 0,6754 | 8,23E-02 | -8,04E-02 | 8,27E-02 |
| 3,6416 | 3,3435 | 8,19E-02 | -7,99E-02 | 8,23E-02 |
| 0,0400 | -0,2000 | 5,72E-04 | ---- | 5,73E-04 |

DC06 MCTRUTH Fit



- Wild fit...

Chi2 test on DC06

- To Come.