$Ds \to \eta\mu\nu$ and other cool stuff

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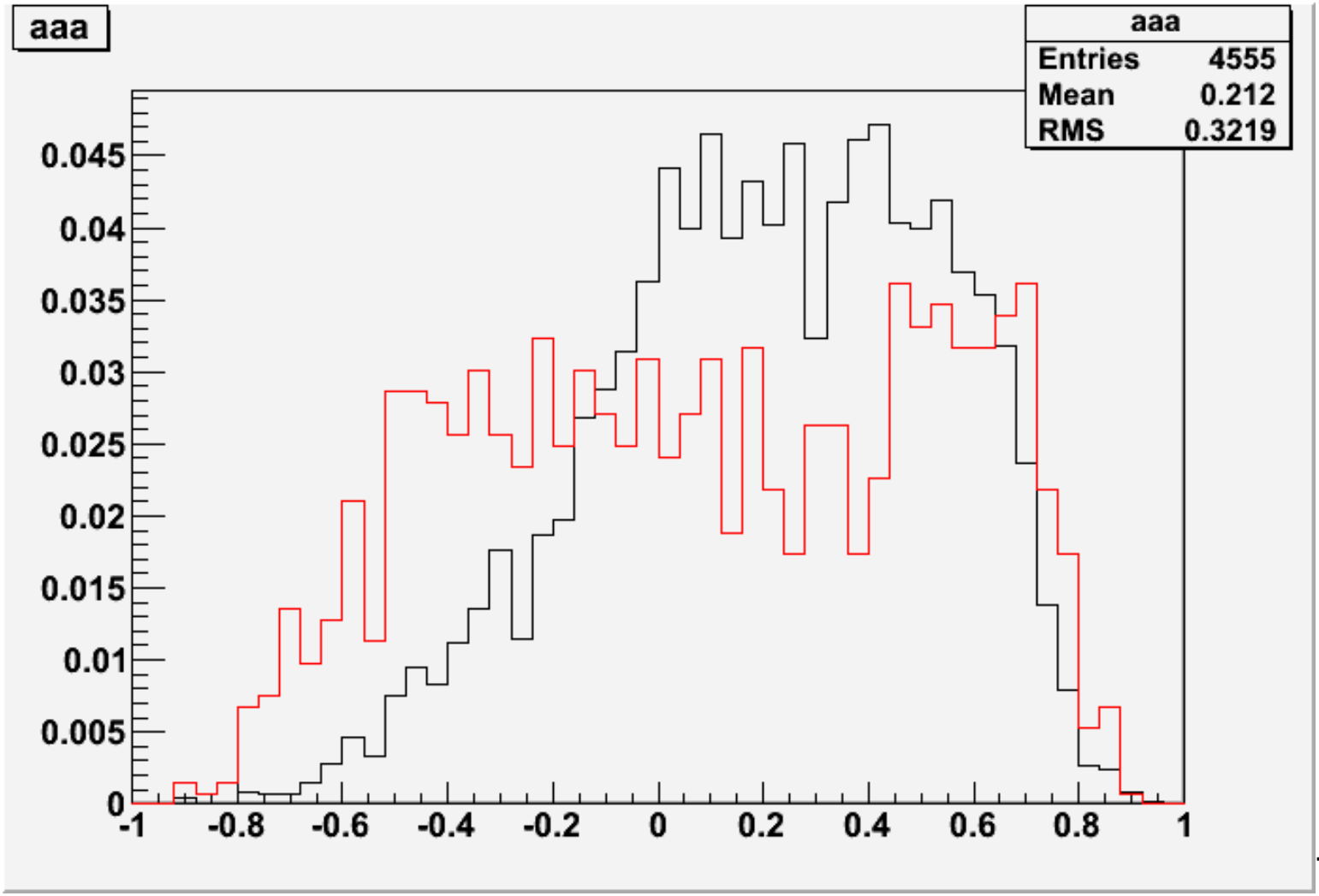
Geo efficiency in new model staided the same: $eff = 0.183 + /0.010$
This is from 4.7M events. We got full MC awaible.

Geo response



The problem was in the binning as you suggested. Now they are the same.

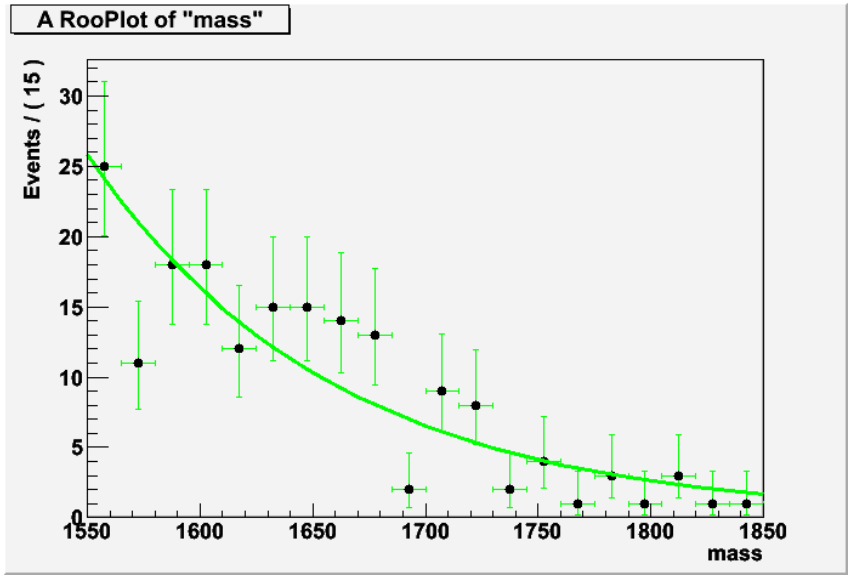
Old values

PID	Geo
−0.25	−1.0
−0.075	0.116
−0.021	0.44
0.038	0.616
1	1.0

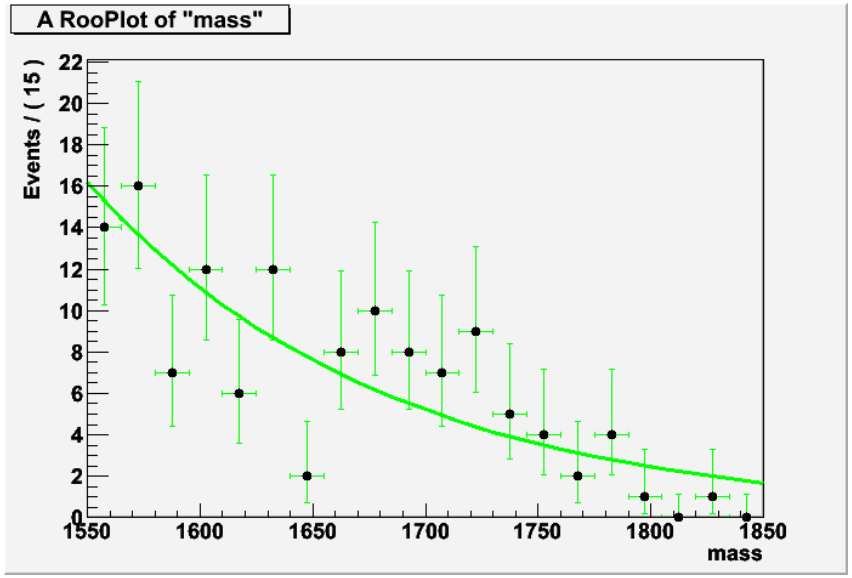
All exp, unbinned max lik. fit.(data ploted binned for easy comparison)

Exponential Linear

FITS

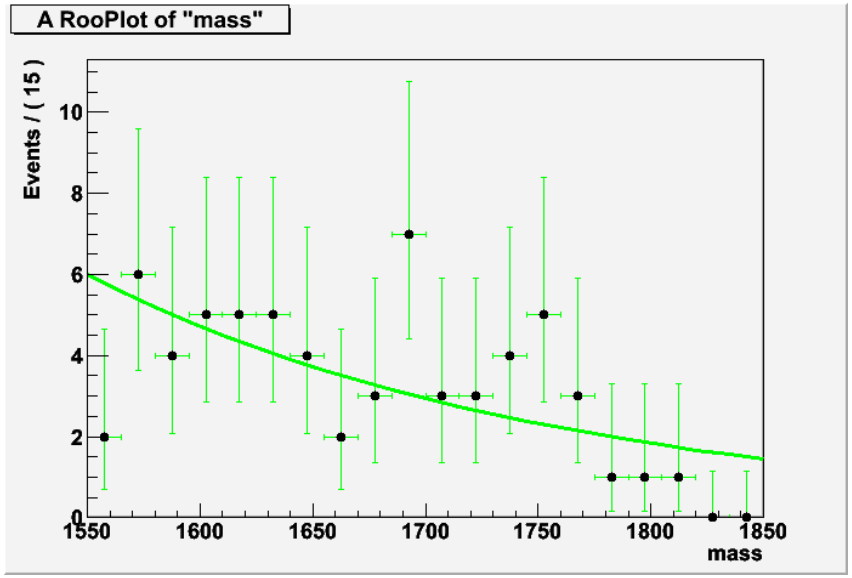


$Pid \in (-0.02, 0.03)$,
$Geo \in (0.116, 0.44)$

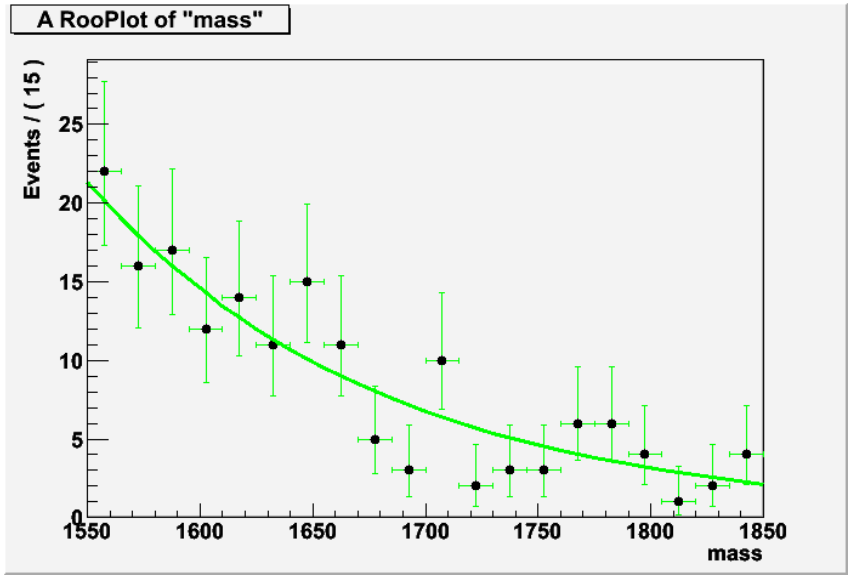


$Pid \in (-0.02, 0.03)$,
$Geo \in (0.44, 0.616)$

FITS

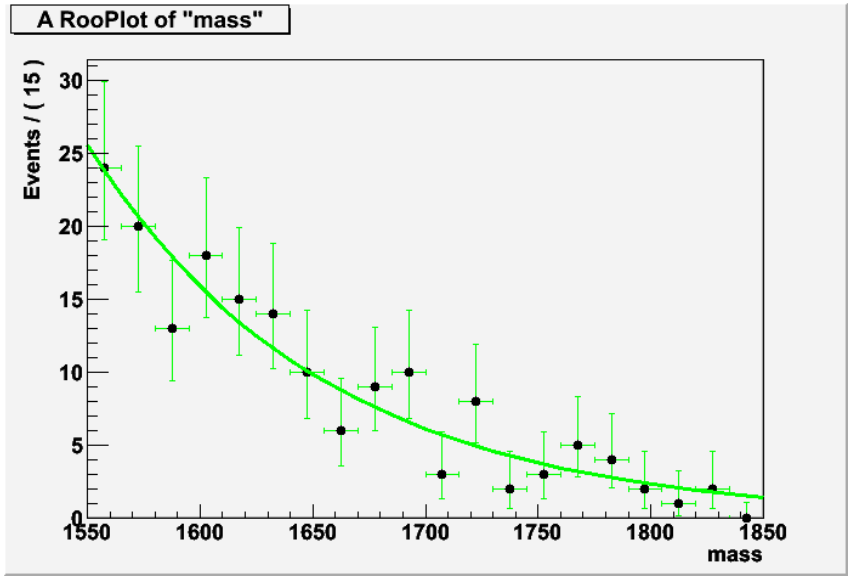


$Pid \in (-0.02, 0.03)$,
$Geo \in (-1, 0.116)$

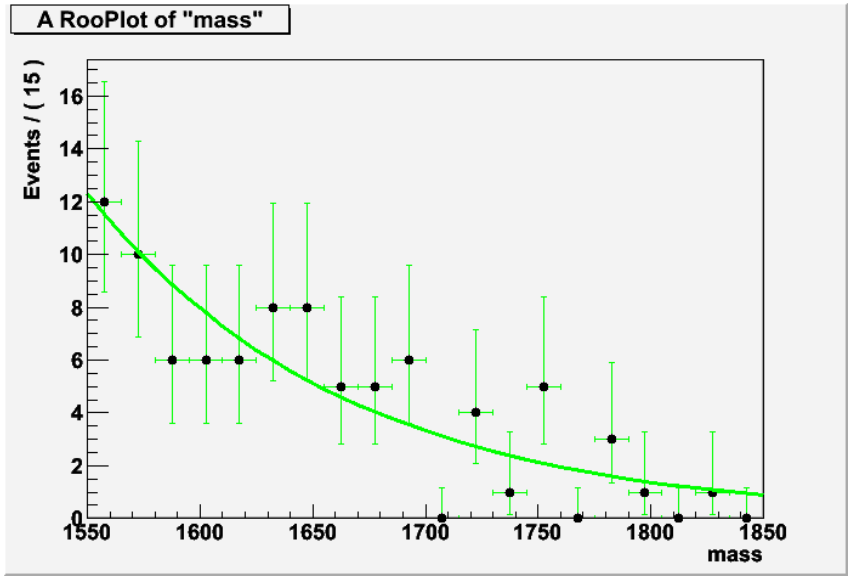


$Pid \in (-0.02, 0.03)$,
$Geo \in (0.116, 0.44)$

FITS

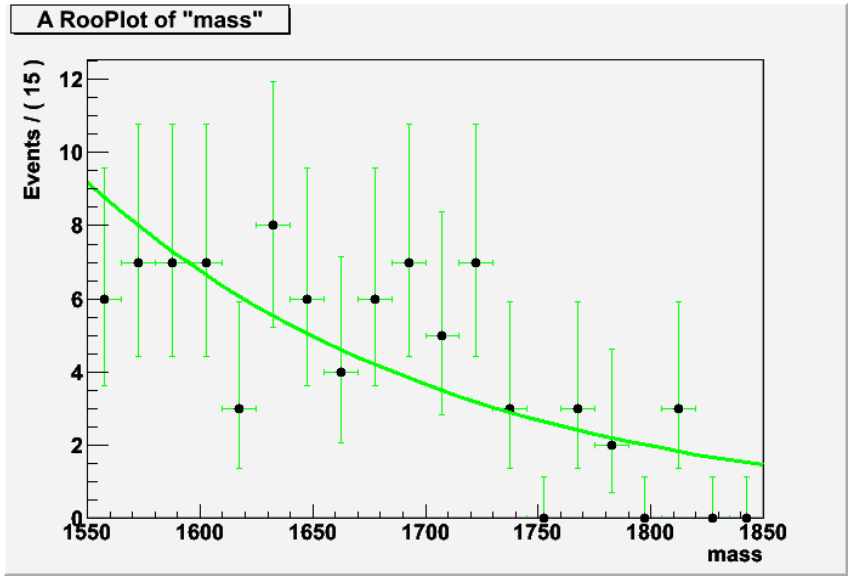


$Pid \in (0.03, 1),\ Geo \in (0.44, 0.616)$

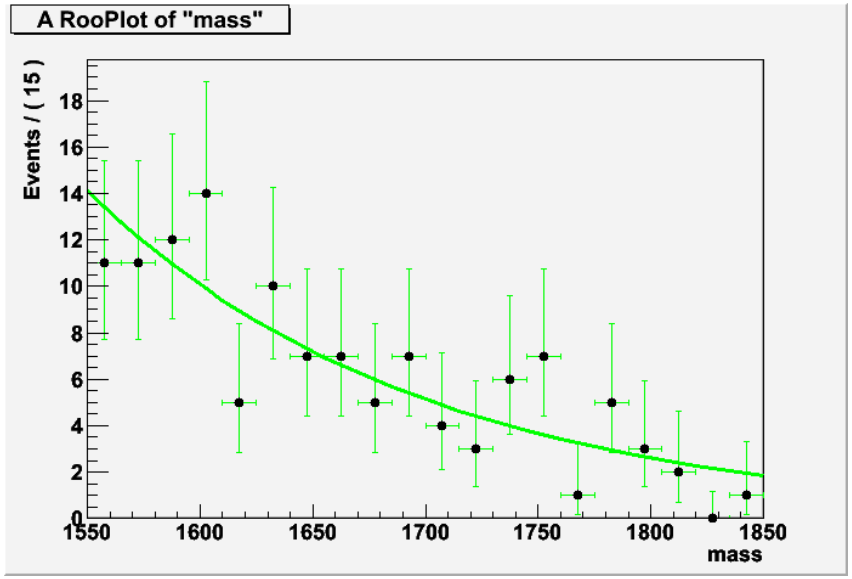


$Pid \in (0.03, 1),\ Geo \in (-1, 0.116)$

FITS

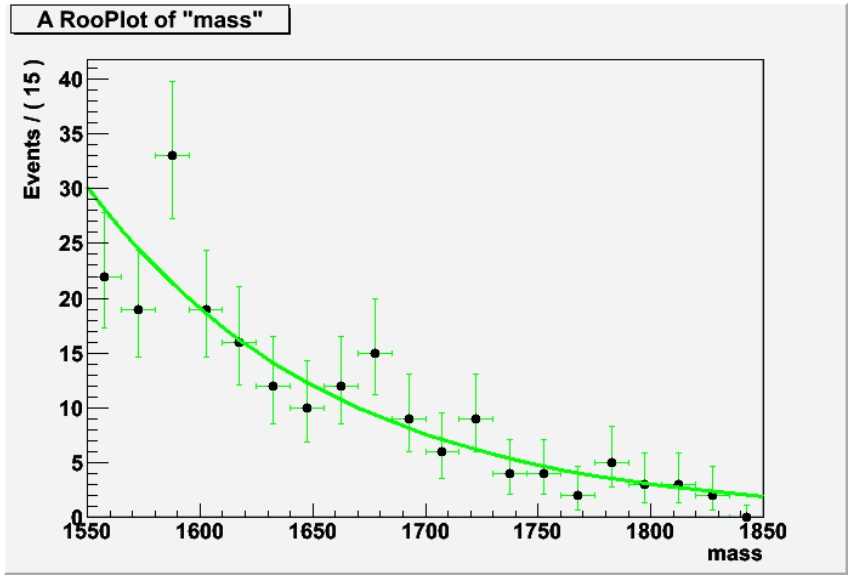


$Pid \in (0.03, 1),\ Geo \in (1, 0.616)$

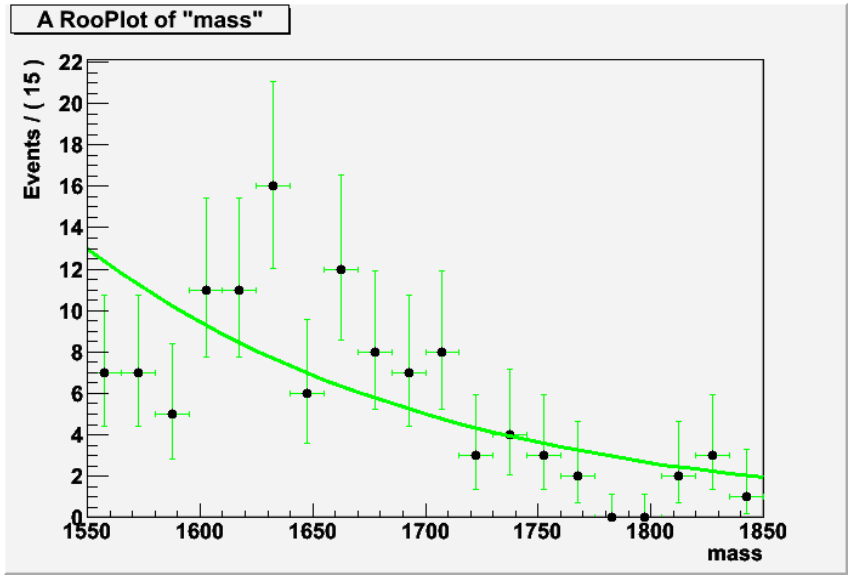


$Pid \in (0.03, 1),\ Geo \in (-1, 0.616)$

FITS

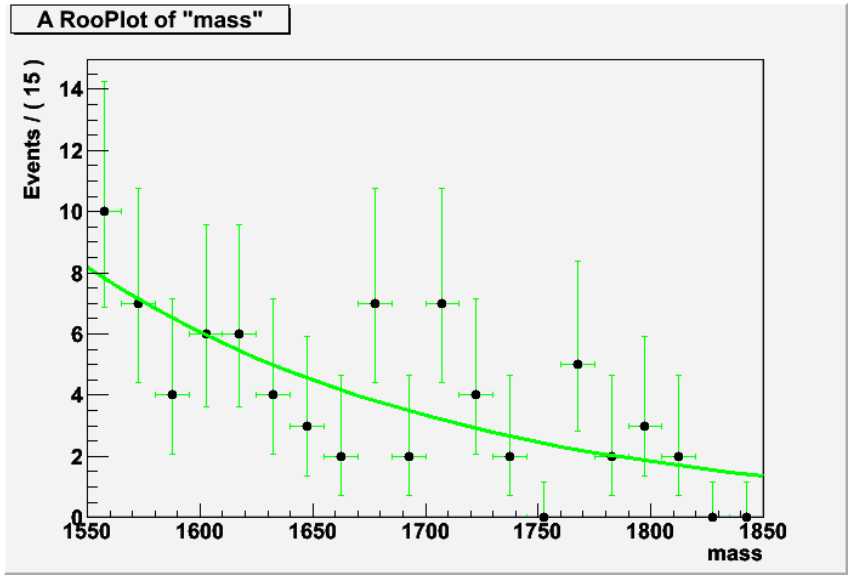


$Pid \in (-0.07, -0.02)$,
$Geo \in (0.116, 0.44)$

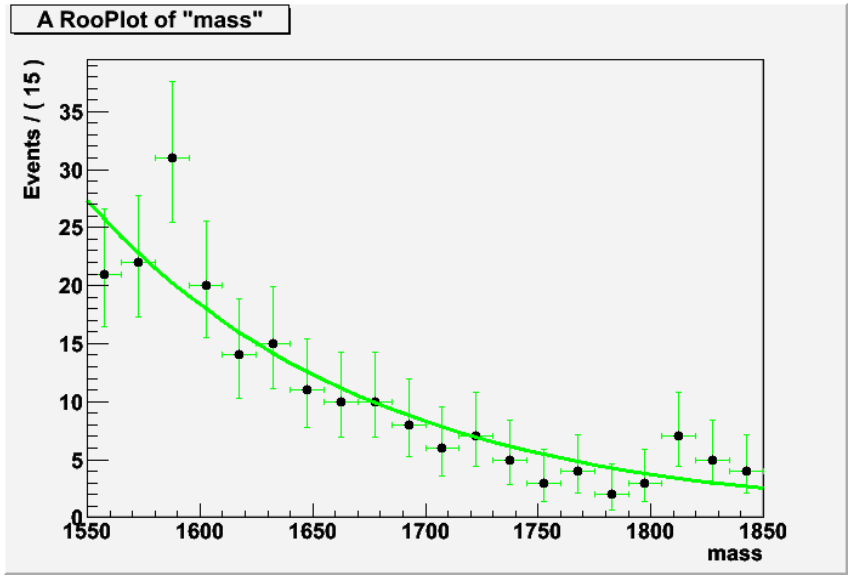


$Pid \in (-0.07, -0.02)$,
$Geo \in (0.44.616)$

FITS

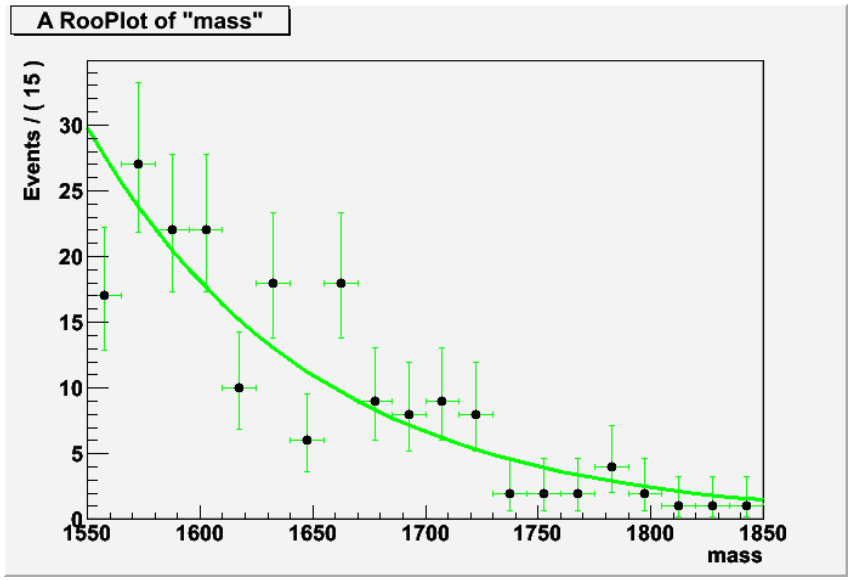


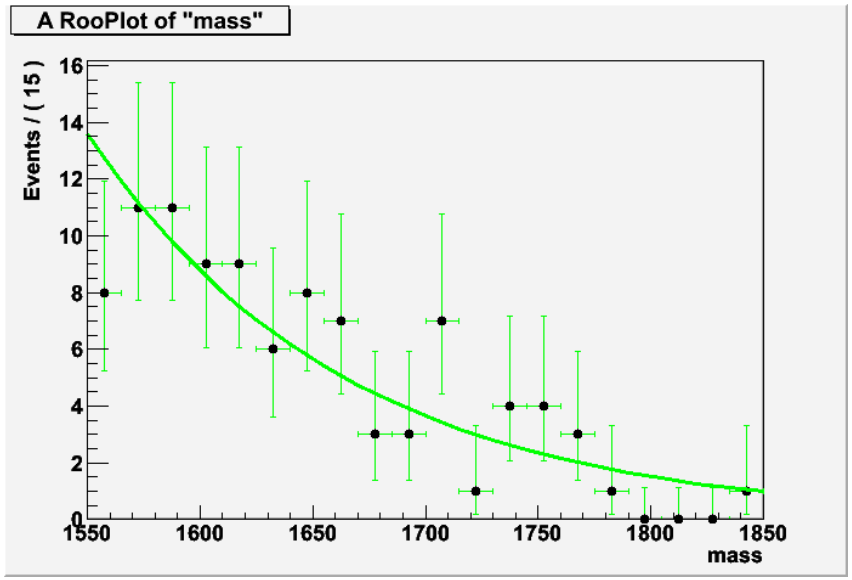
$Pid \in (-0.07, -0.02)$,
$Geo \in (0.616, 1)$



$Pid \in (-0.07, -0.02)$,
$Geo \in (-1, 0.116)$

FITS


A RooPlot of "mass"
Events / (15)
mass
1550
1600
1650
1700
1750
1800
1850
0
5
10
15
20
25
30


A RooPlot of "mass"
Events / (15)
mass
1550
1600
1650
1700
1750
1800
1850
0
2
4
6
8
10
12
14
16