New fits on K^+ with/without E_{loss}+B correction

A. Scordo, LNF (INFN)

14/08/2015

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PID with dE/dX vs P cuts

Vertex cut

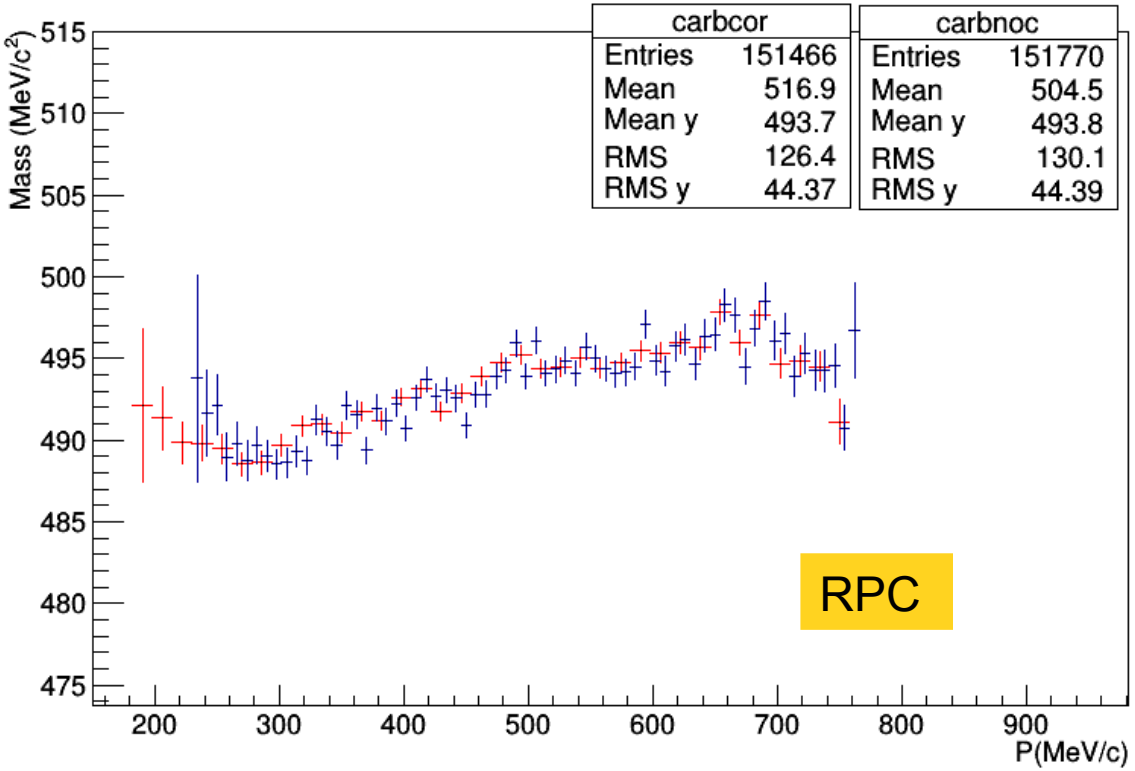
$0<\beta<1$

Eloss + B correction

Bad strips rejected

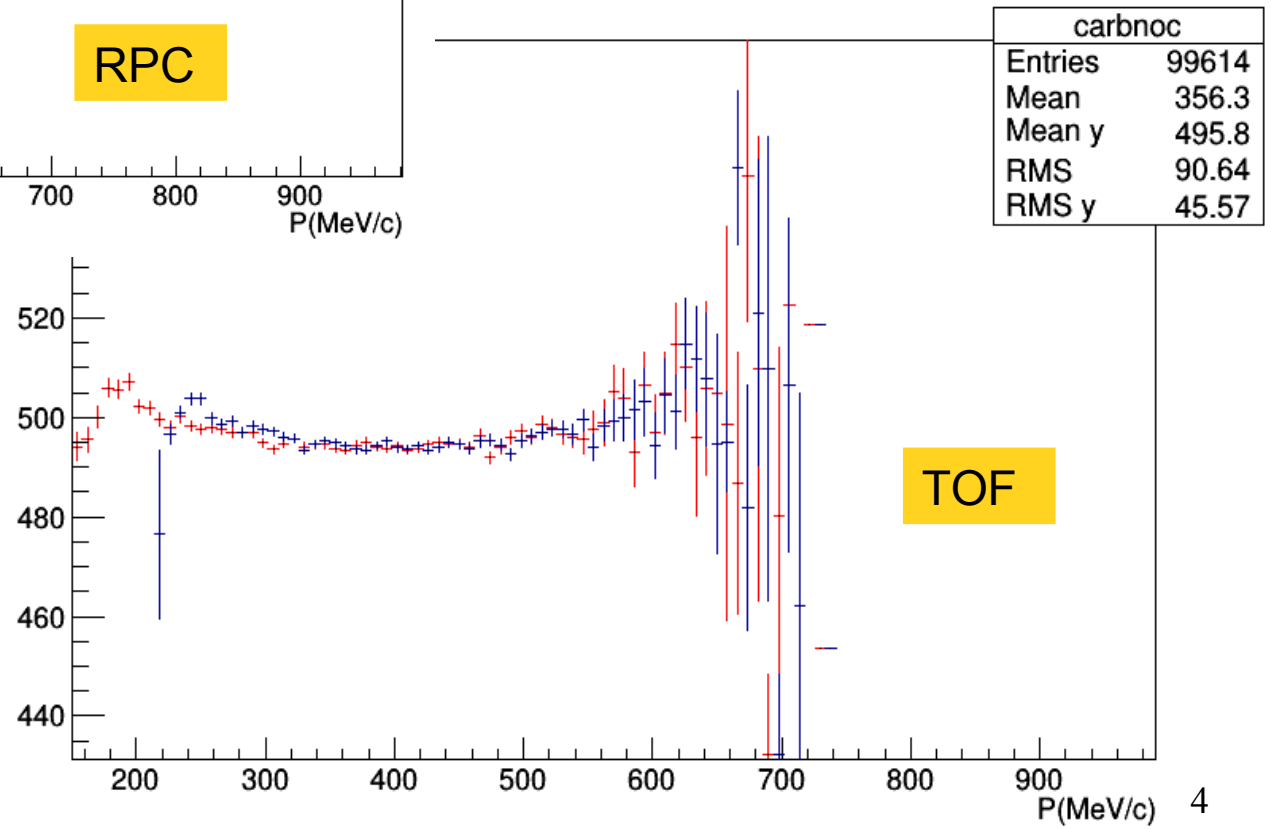
kIsUsed to reject multi hits

Mass vs P in Carbon (ProfileX)

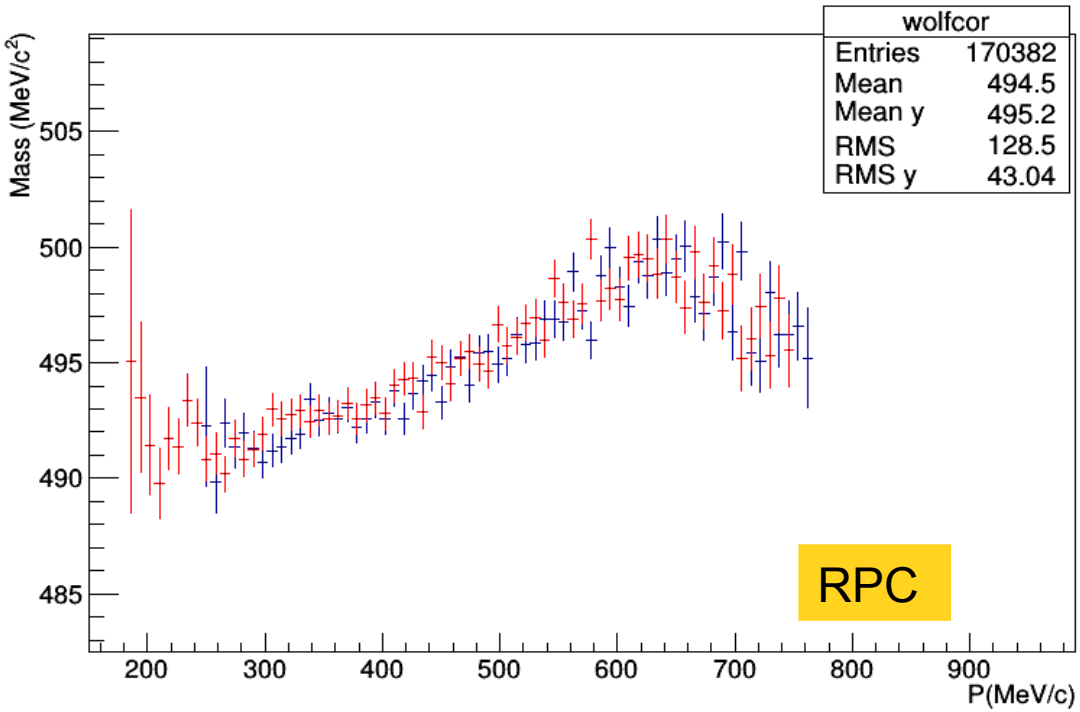


With cor

No cor

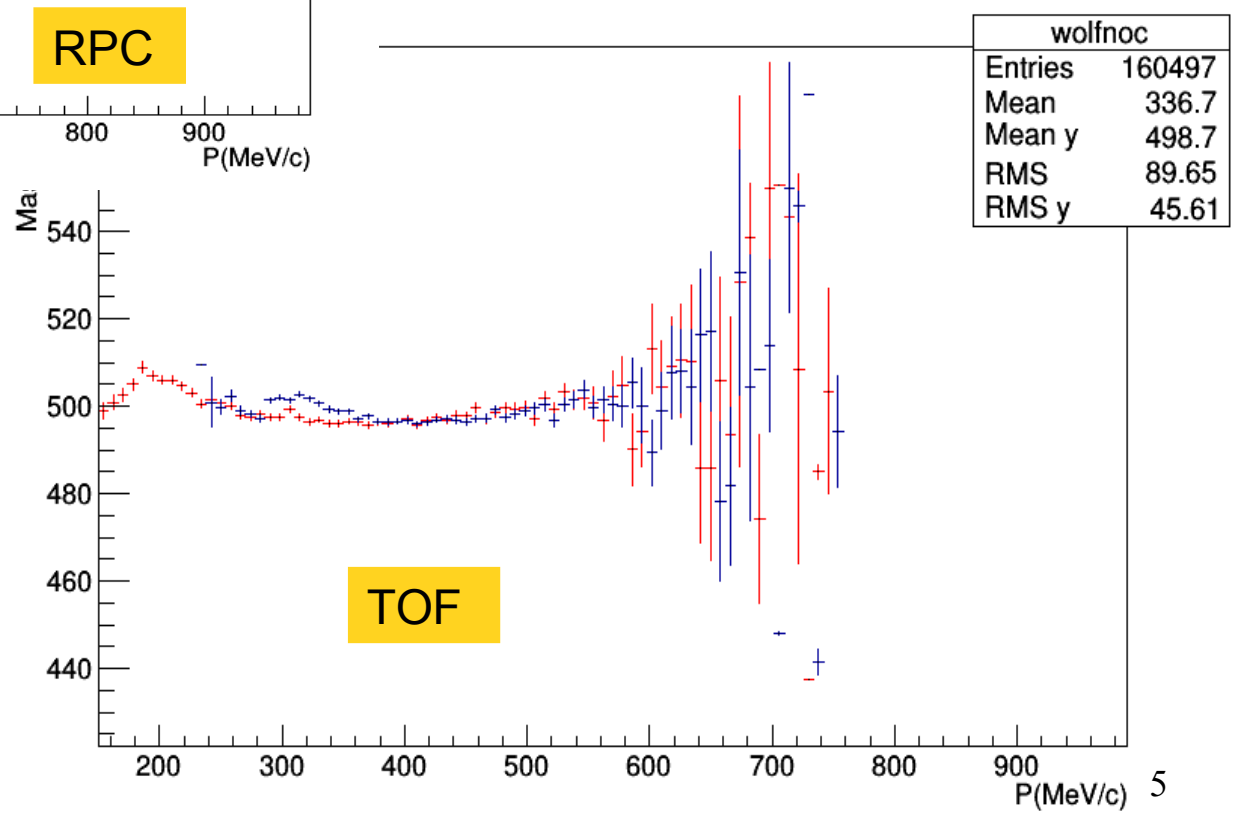


Mass vs P in Wolfram (ProfileX)

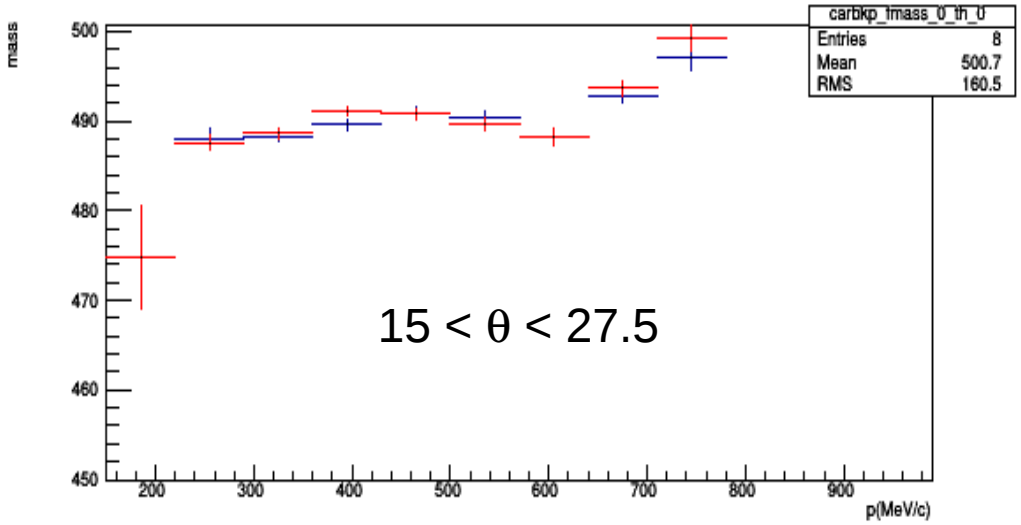


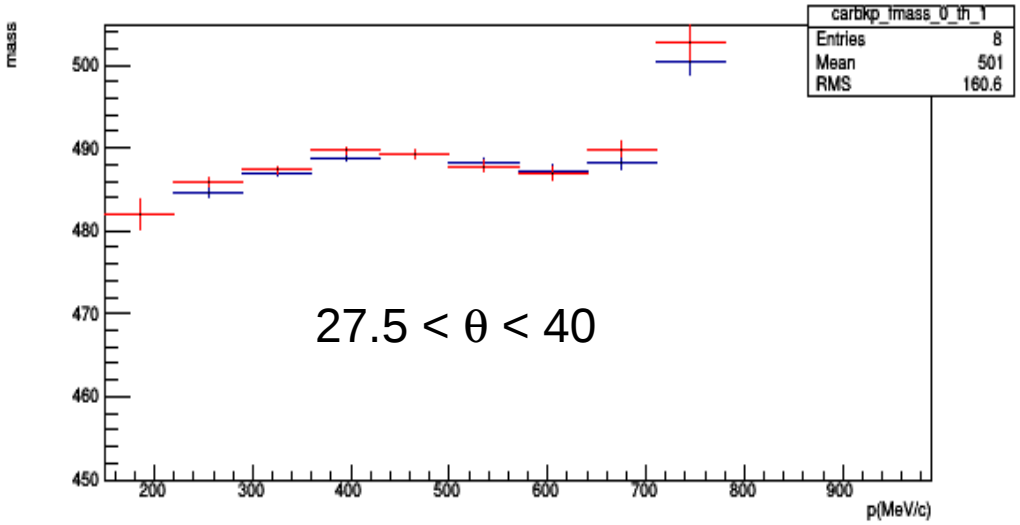
With cor

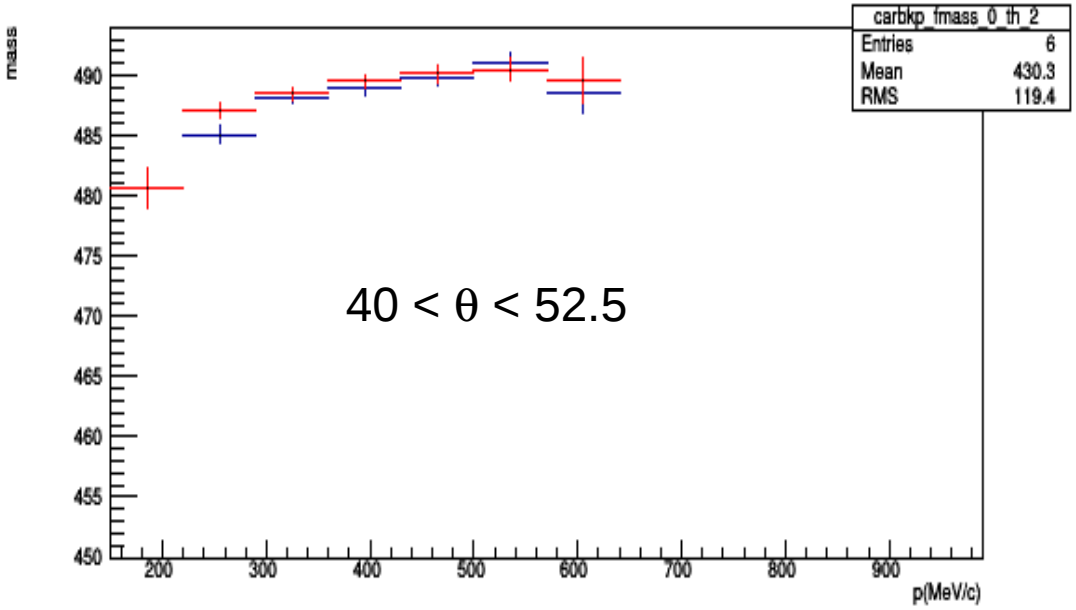
No cor



Mass vs P in Carbon RPC (fits)



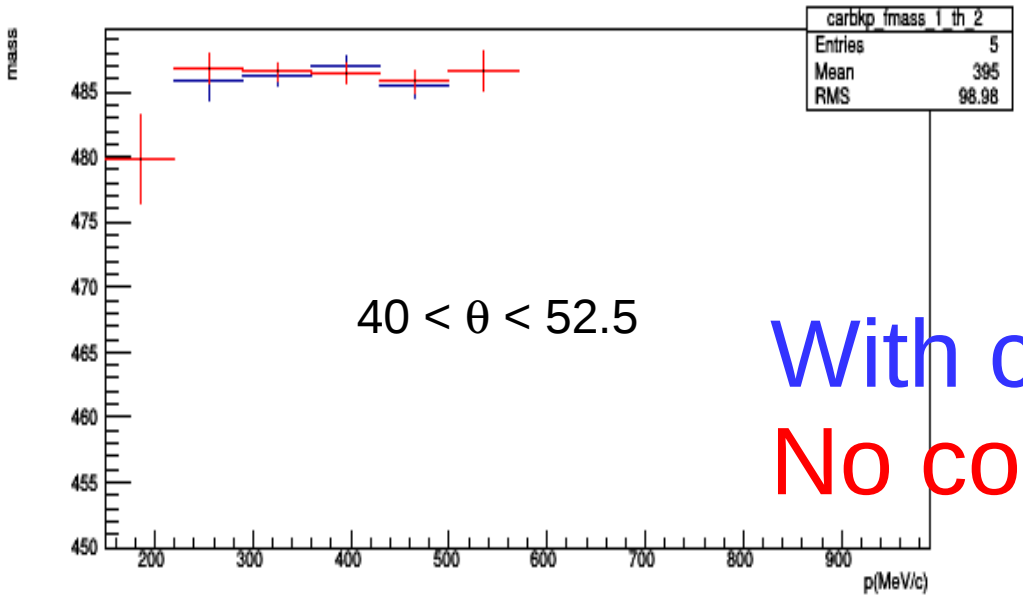




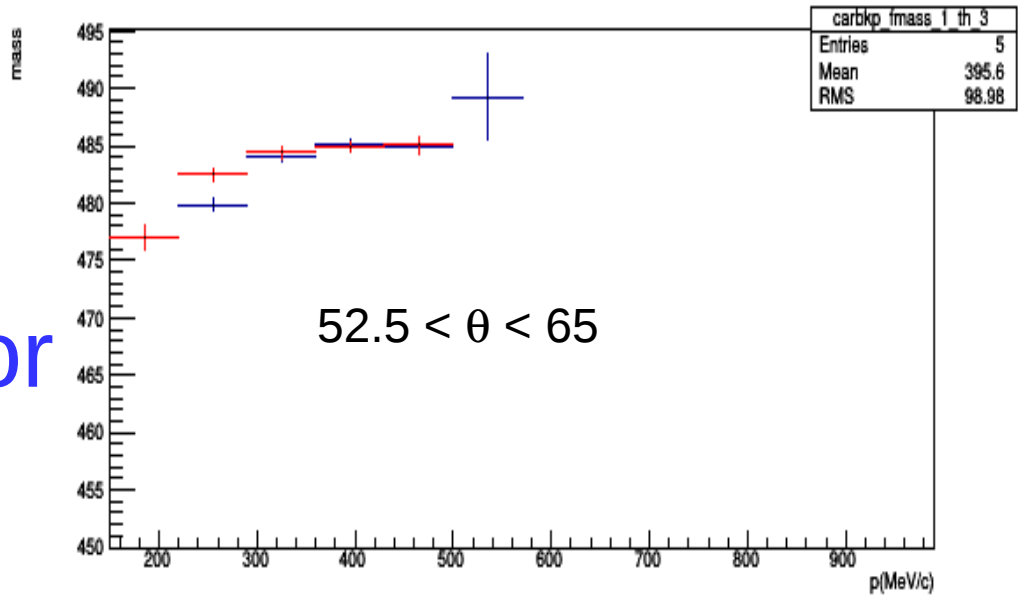
With cor

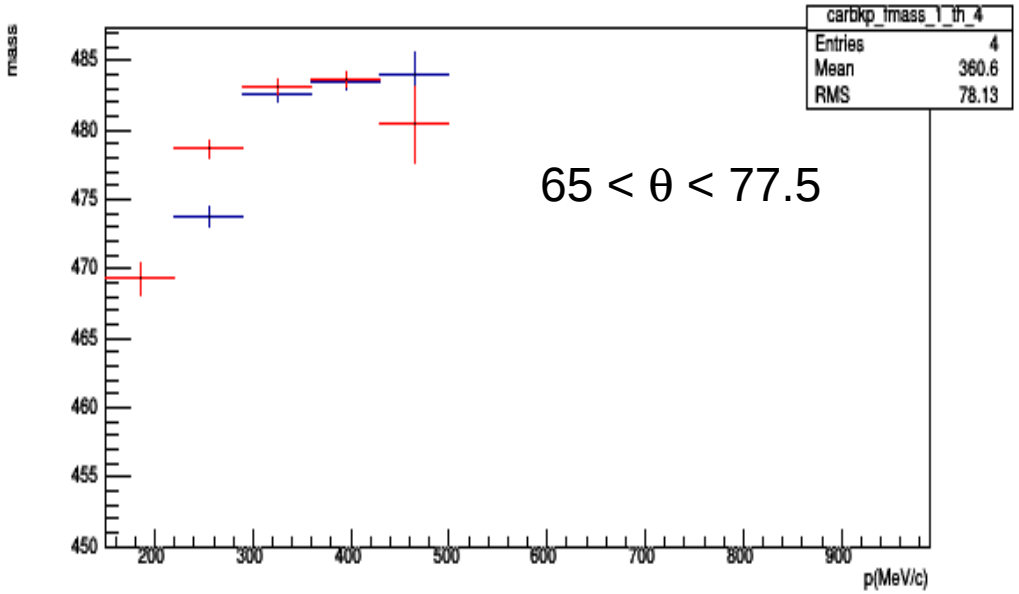
No cor

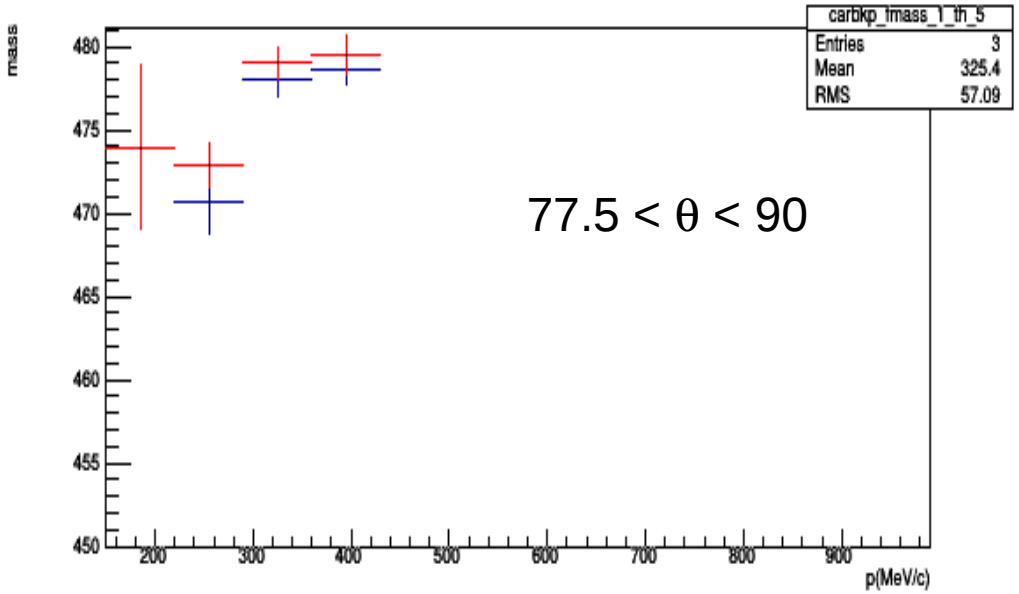
Mass vs P in Carbon TOF (fits)



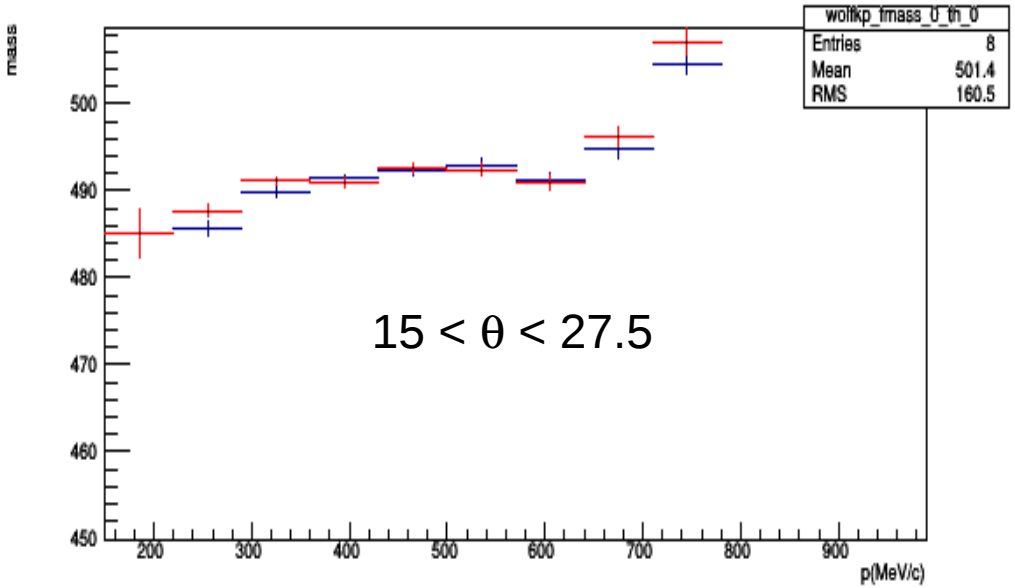
With cor
No cor

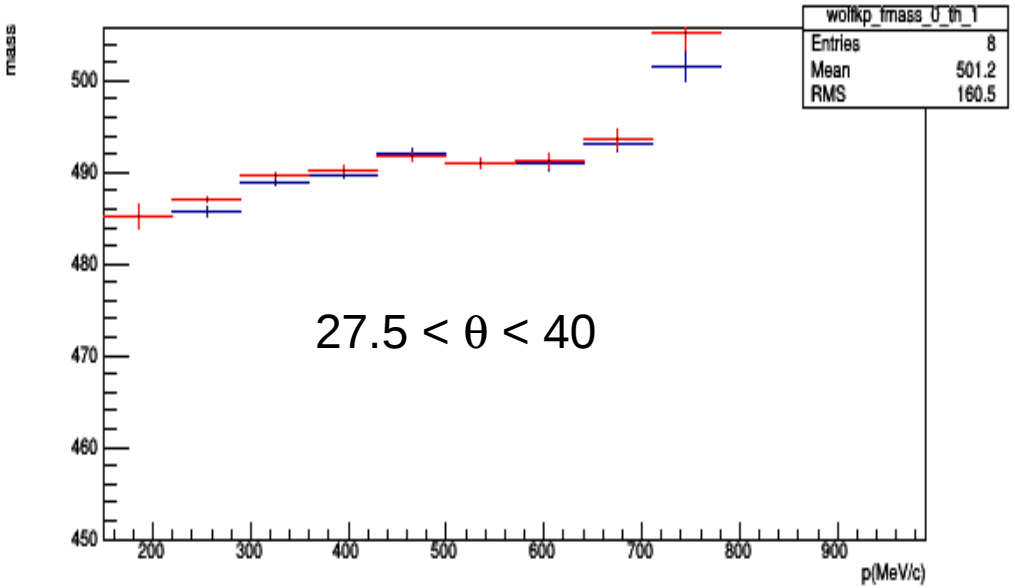


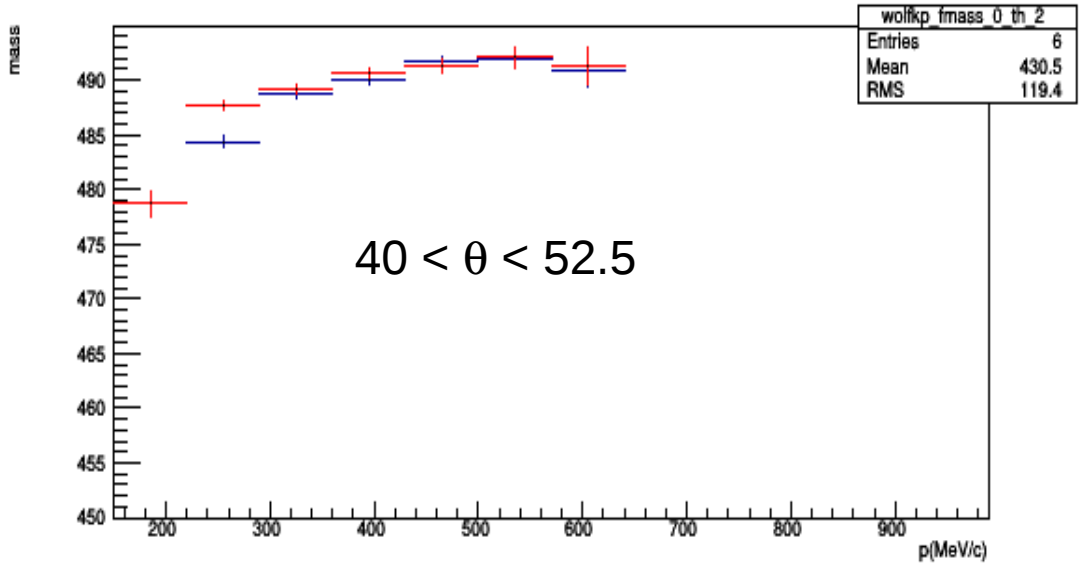




Mass vs P in Wolfram RPC (fits)



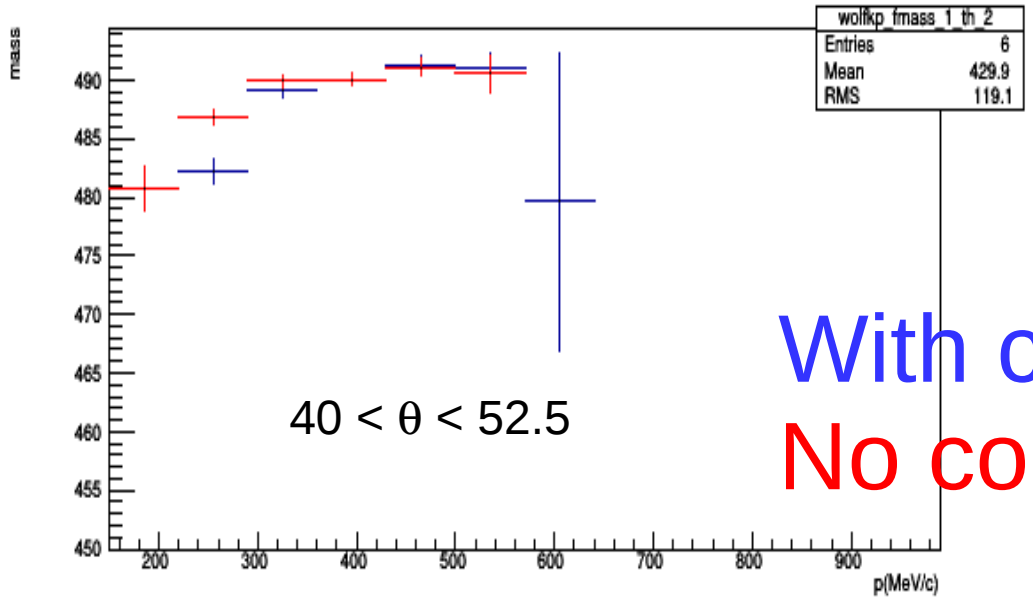




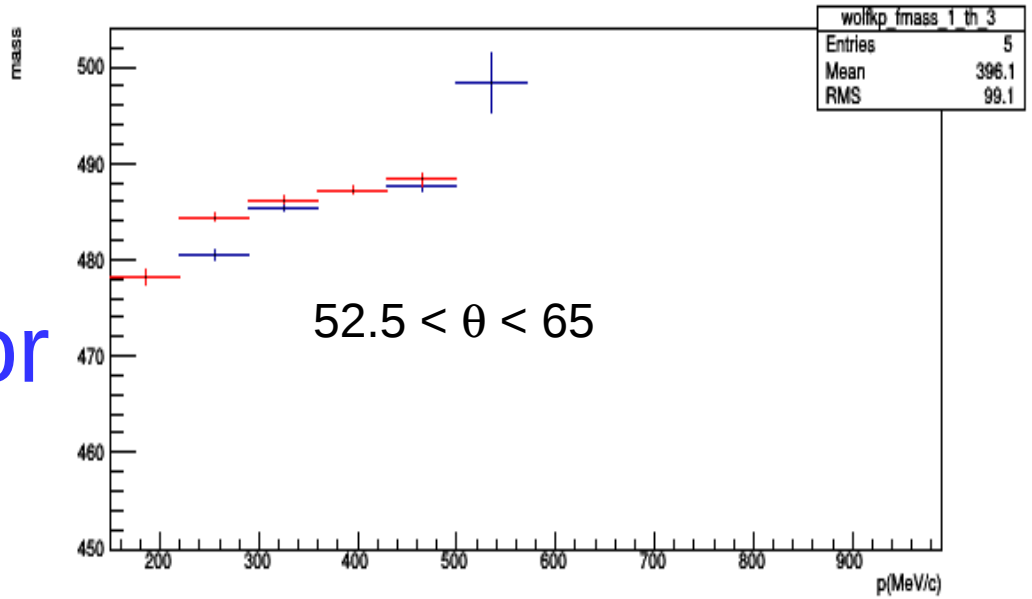
With cor

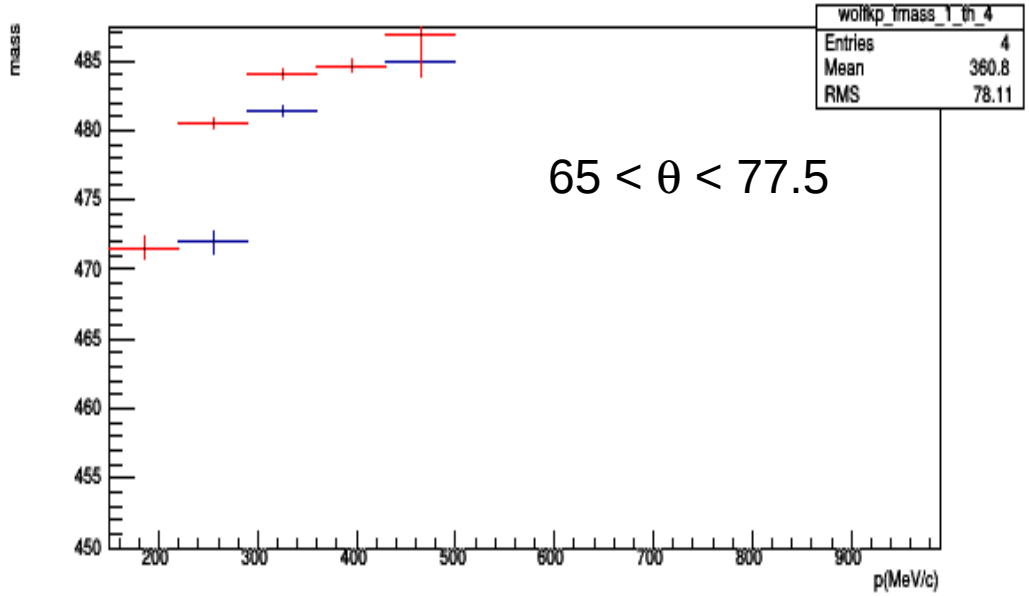
No cor

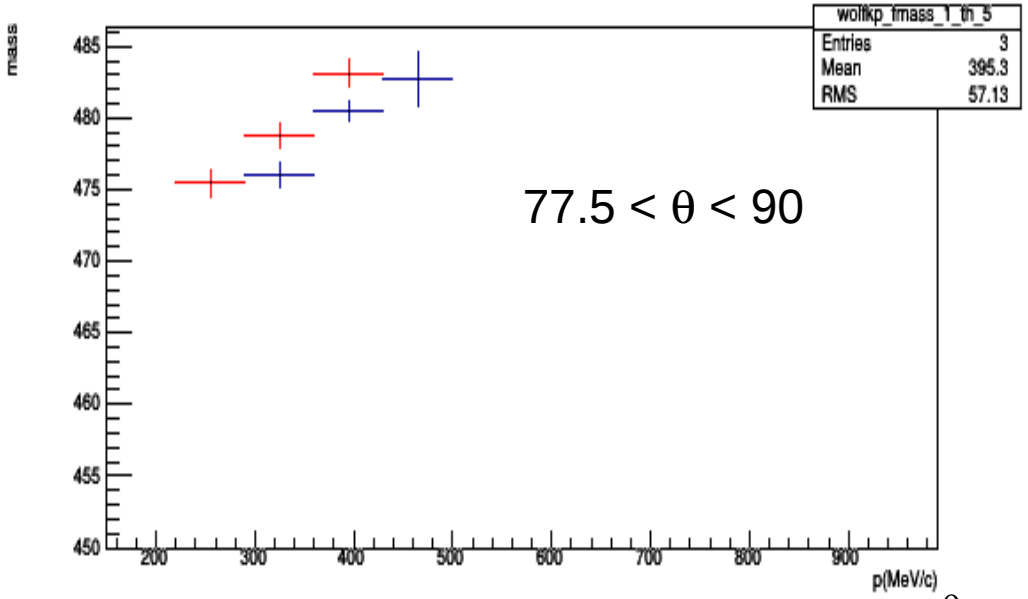
Mass vs P in Wolfram TOF (fits)



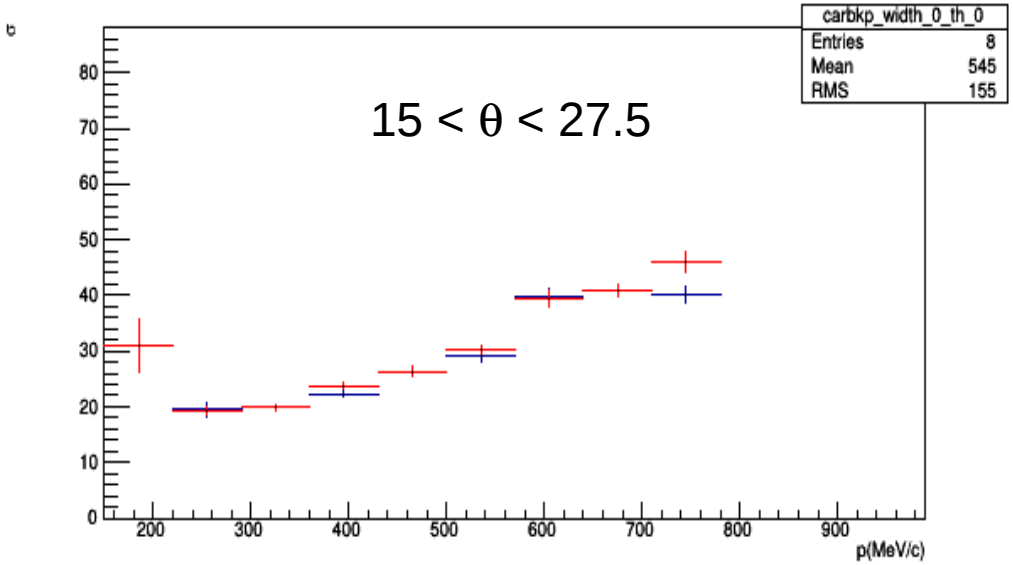
With cor
No cor

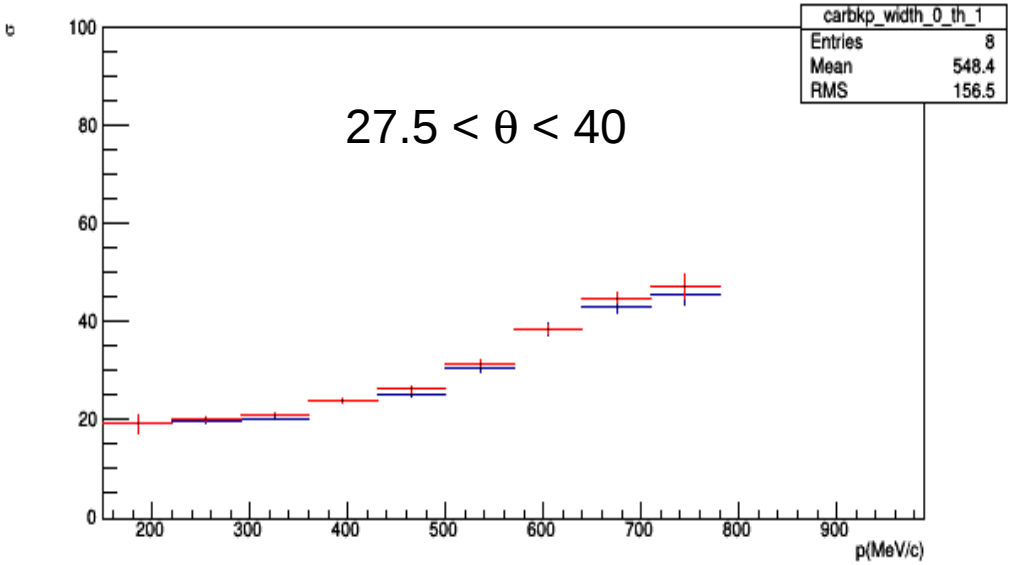


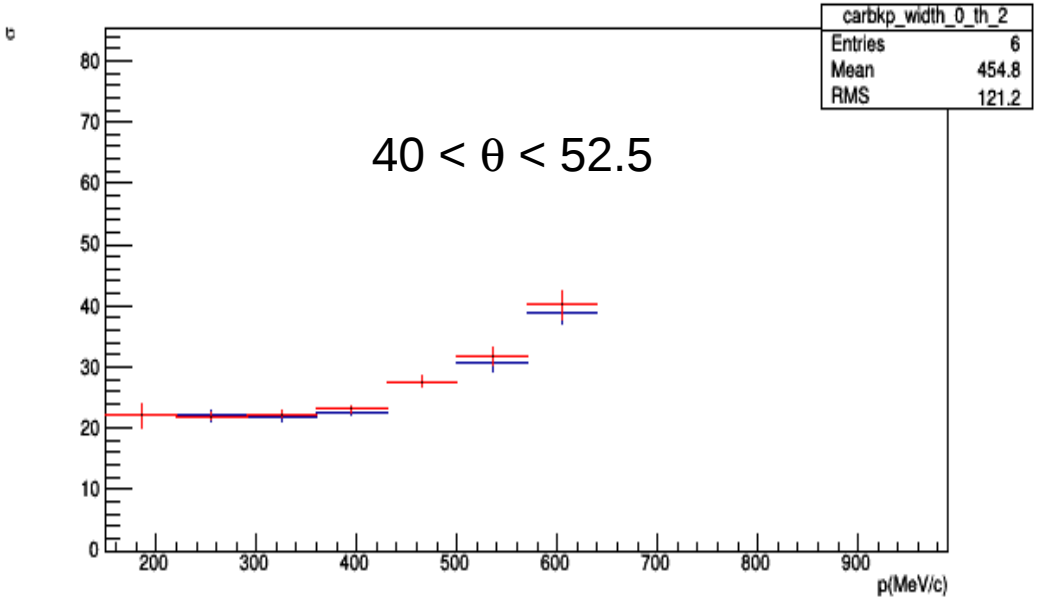




Sigma vs P in Carbon RPC (fits)



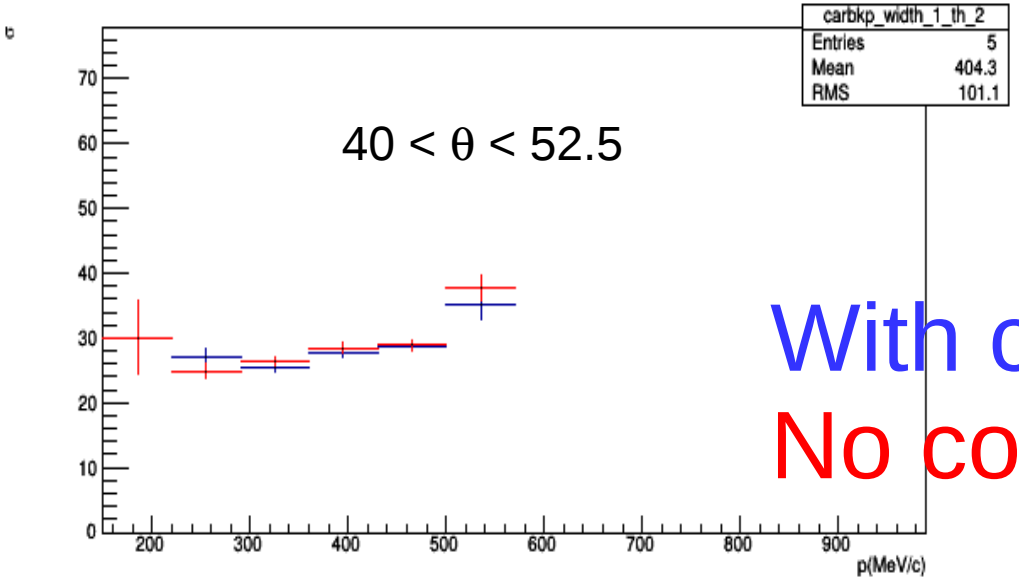




With cor

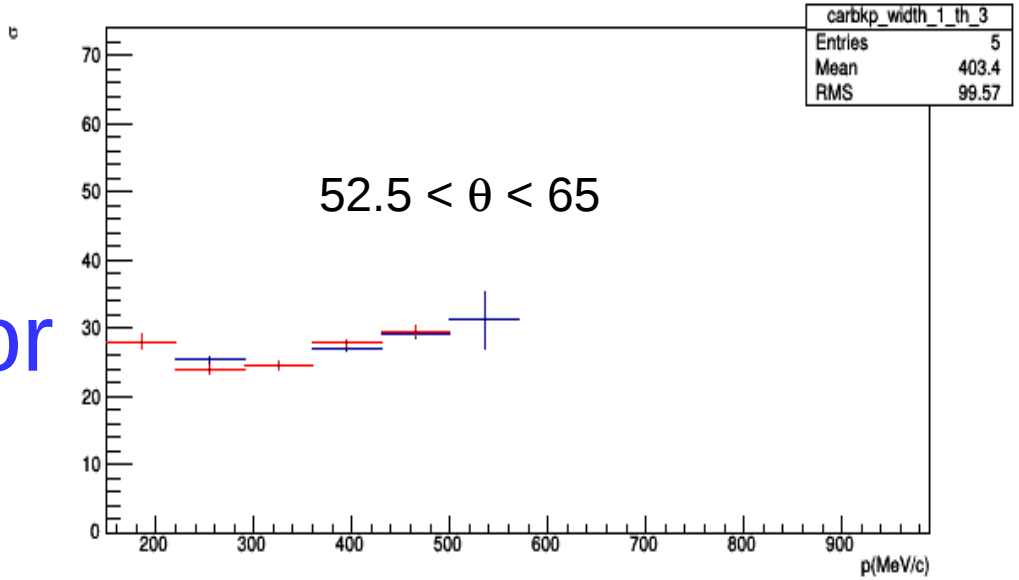
No cor

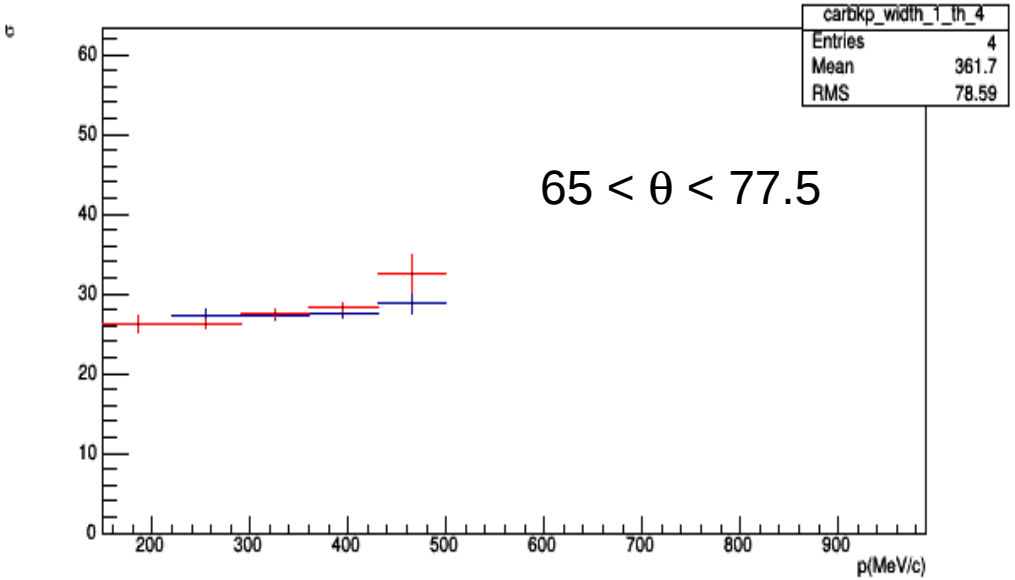
Sigma vs P in Carbon TOF (fits)

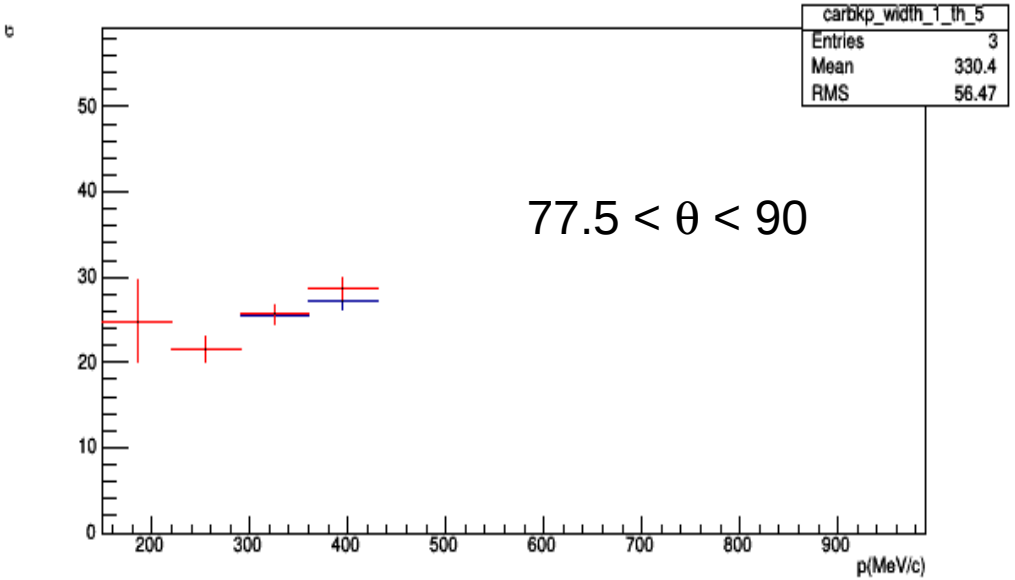


With cor

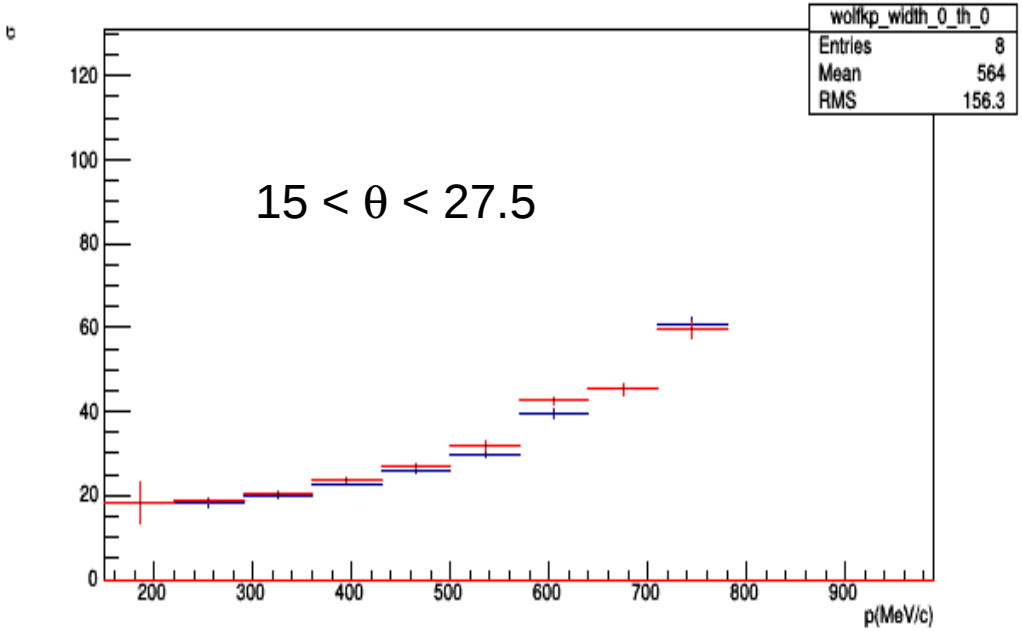
No cor

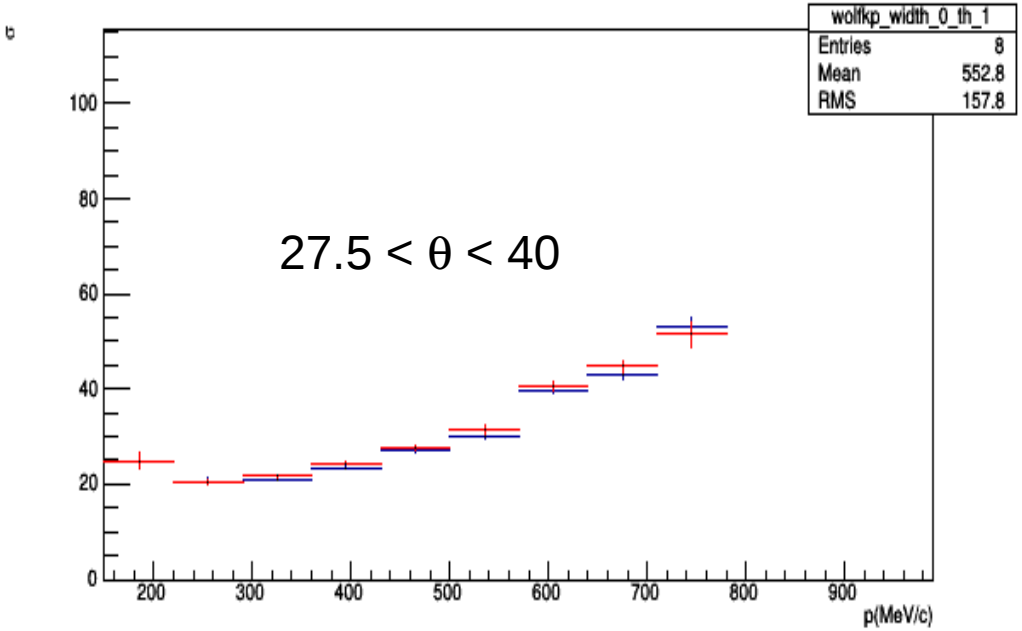


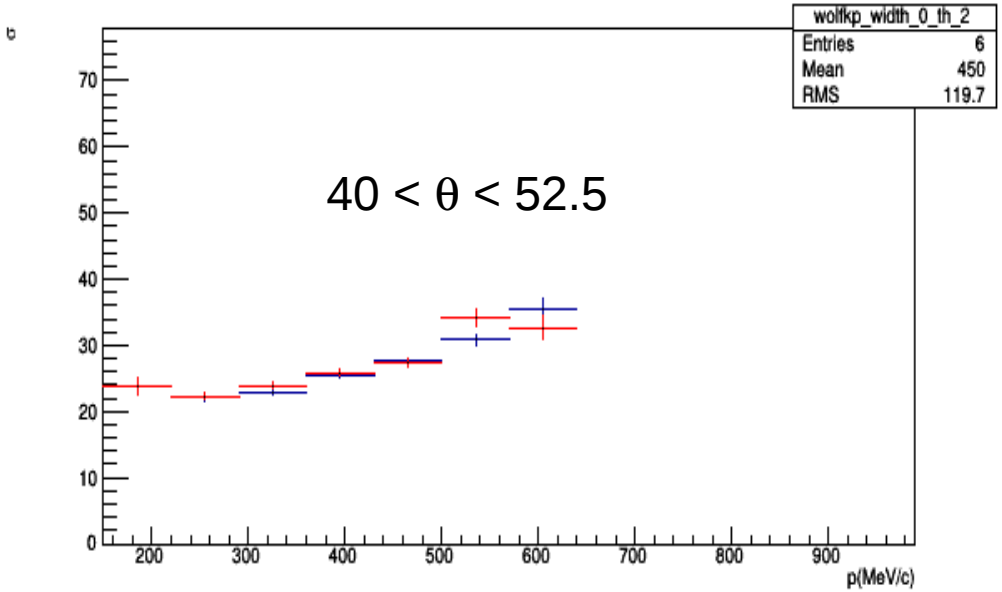




Sigma vs P in Wolfram RPC (fits)



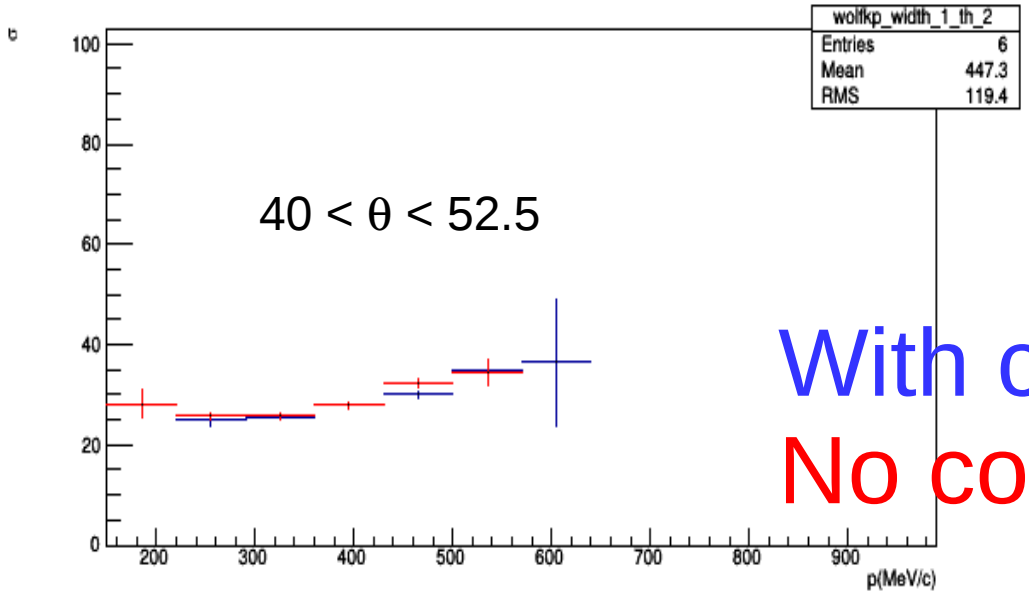




With cor

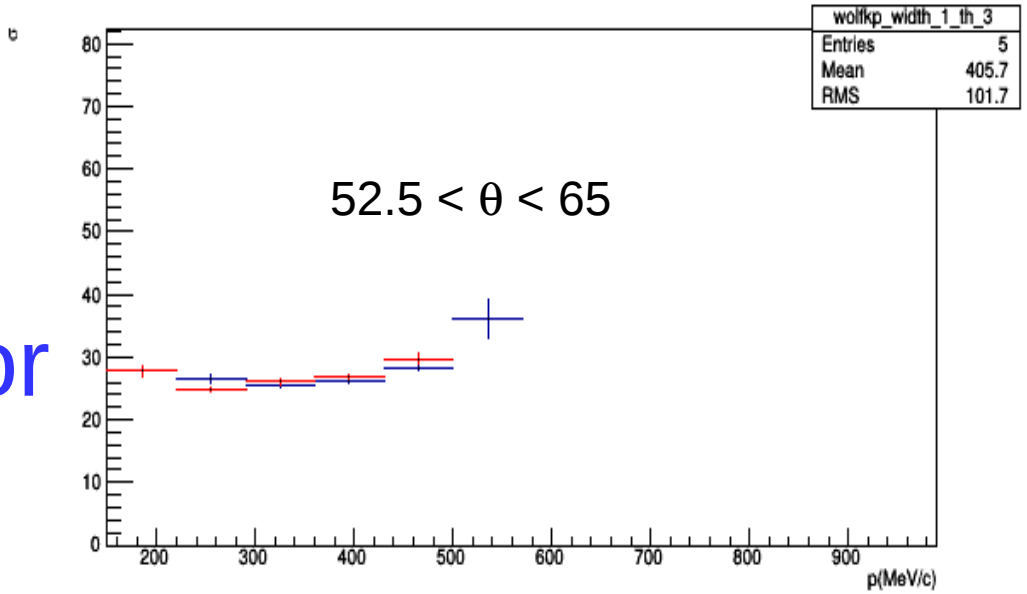
No cor

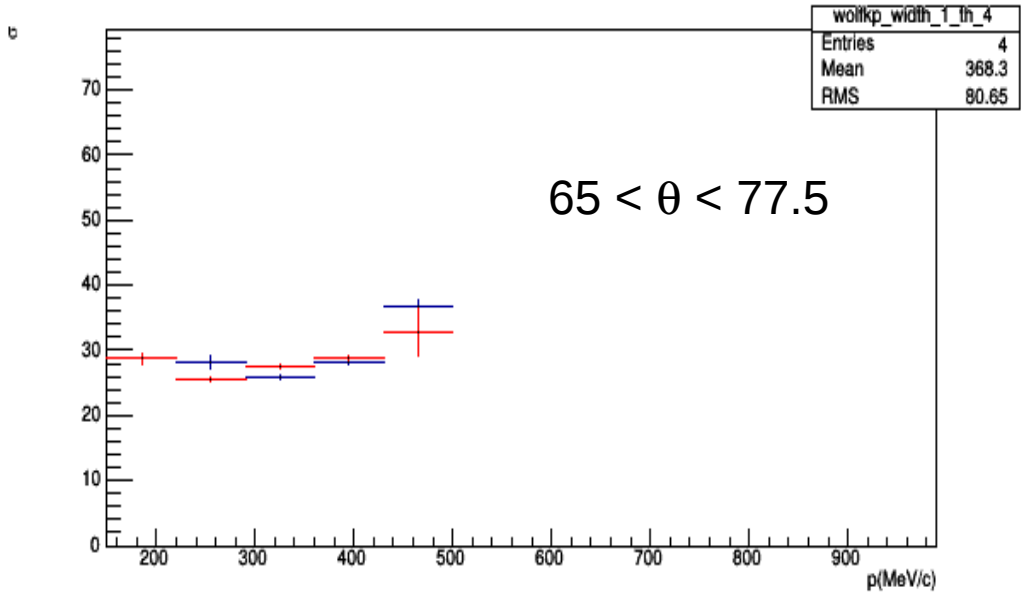
Sigma vs P in Wolfram TOF (fits)

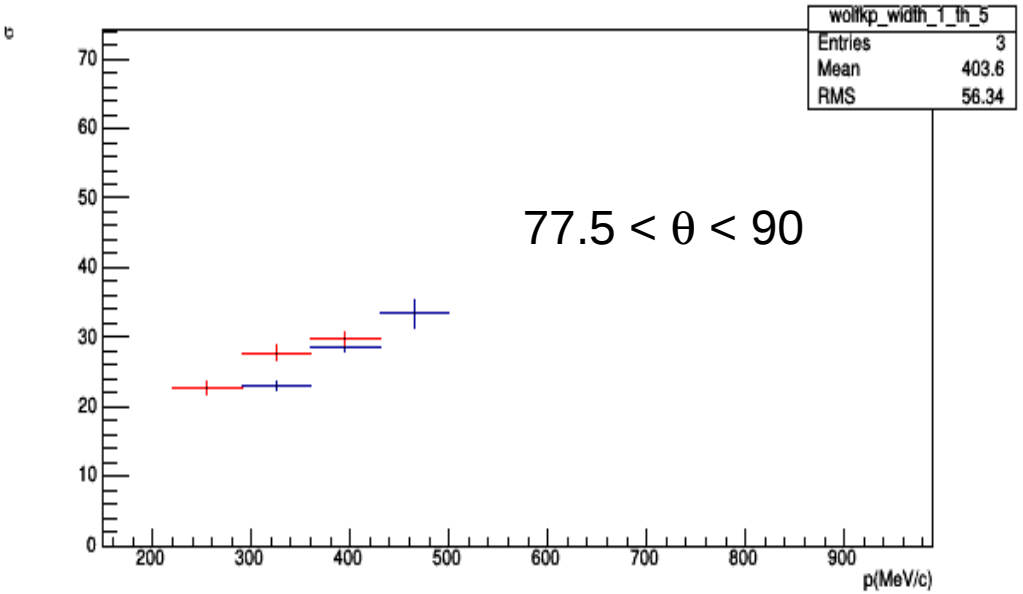


With cor

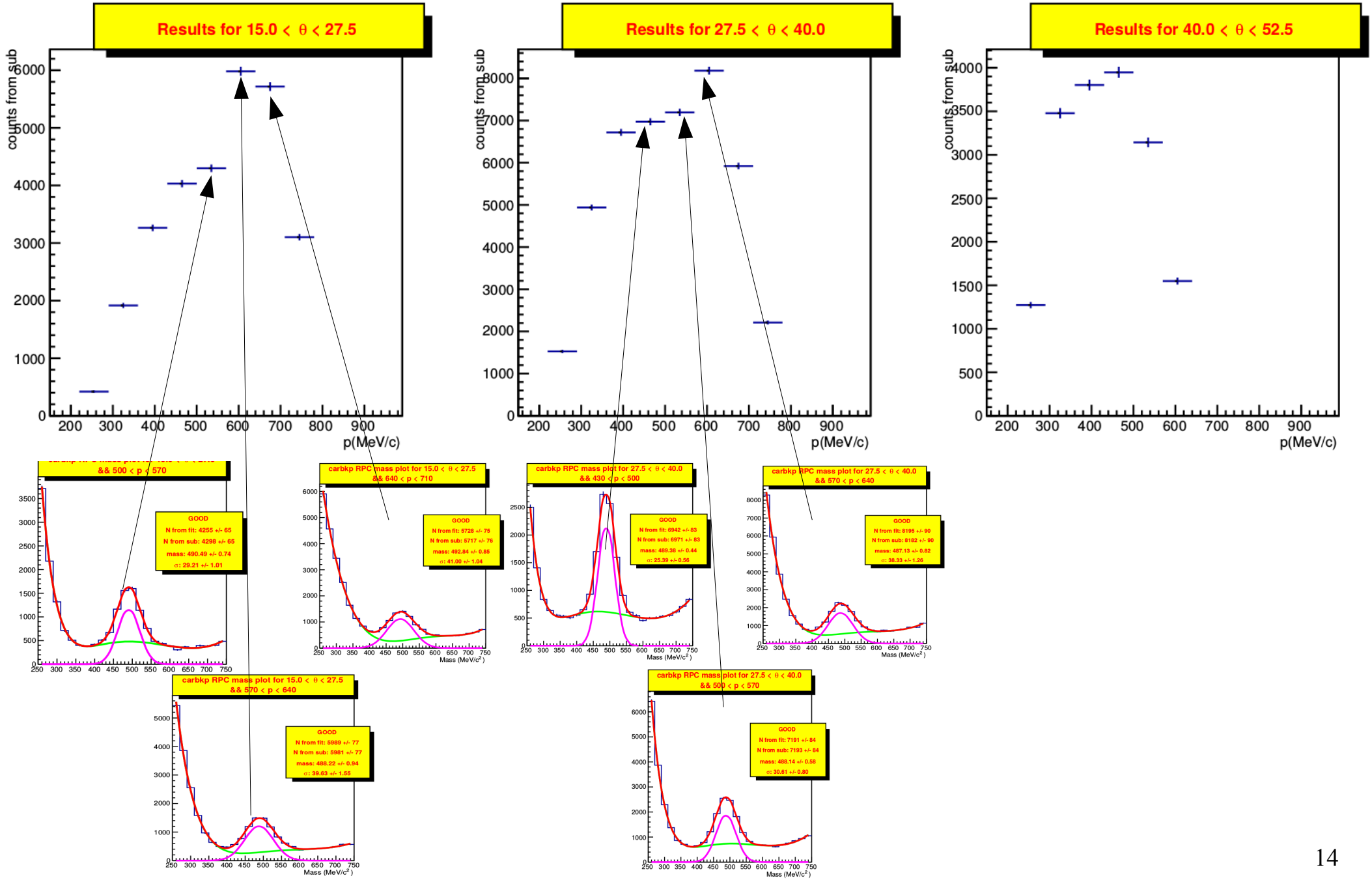
No cor



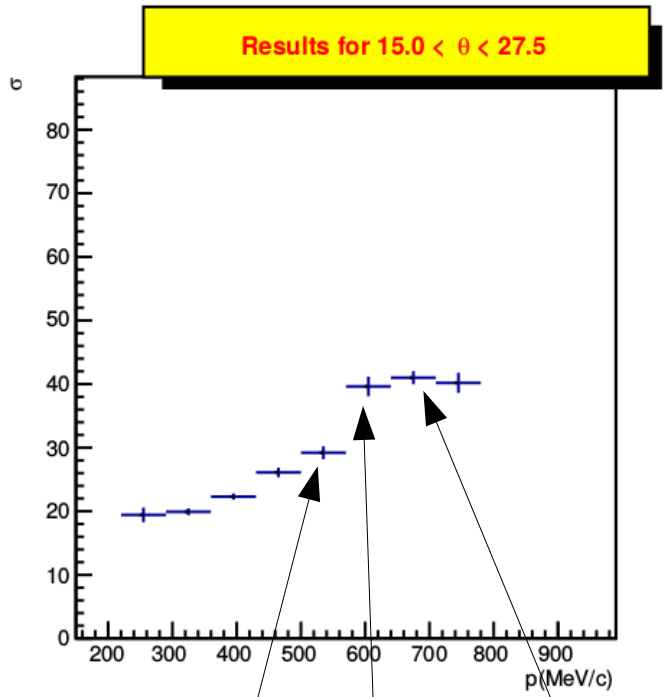


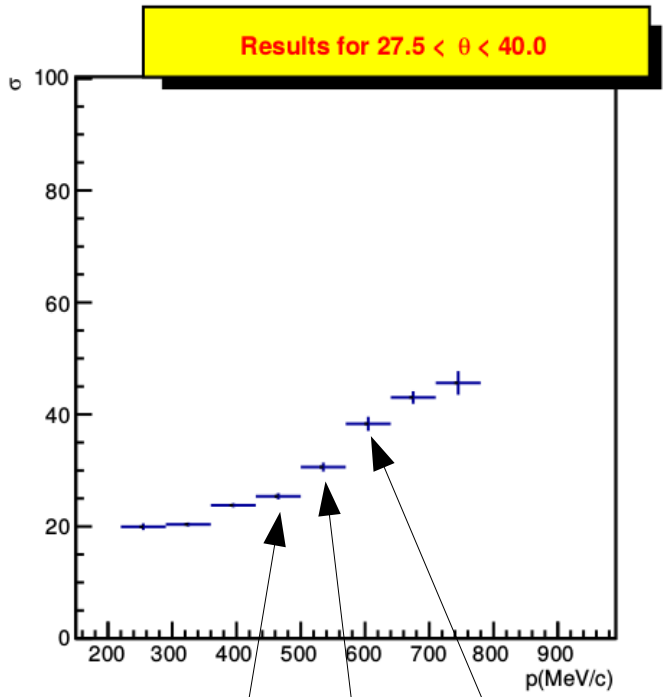


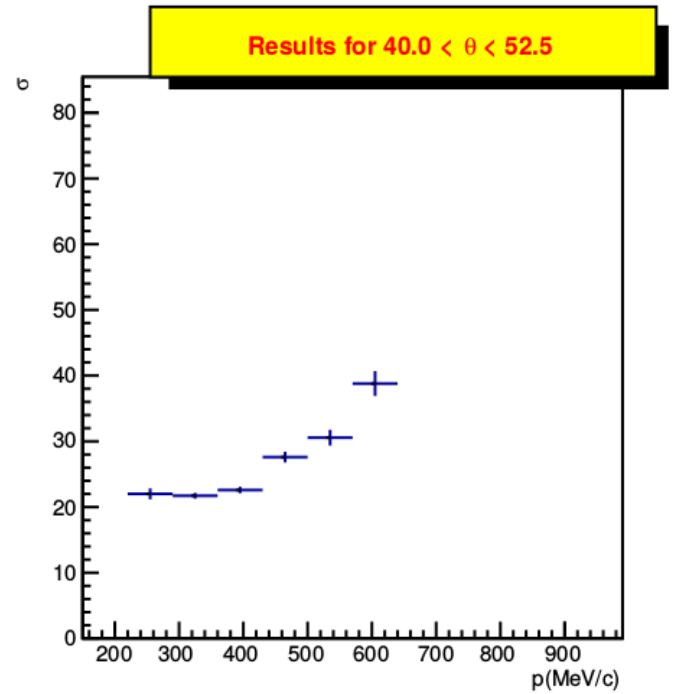
Mass vs P in Carbon RPC (cor)

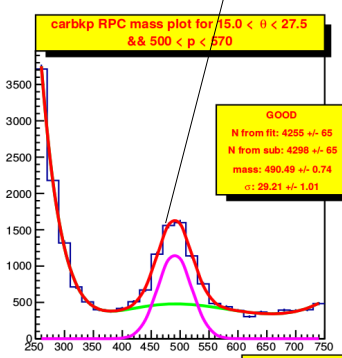


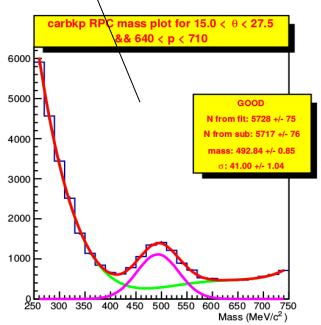
Sigma vs P in Carbon RPC (cor)

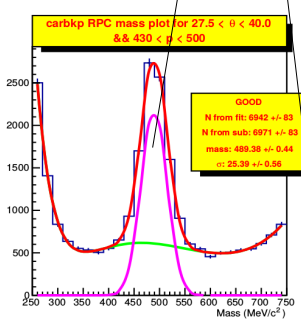


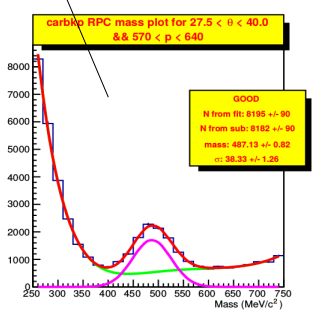


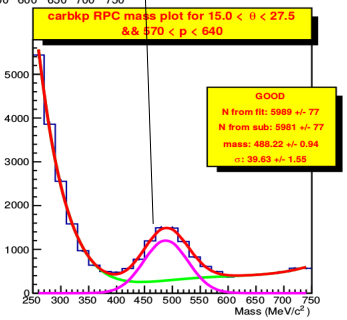


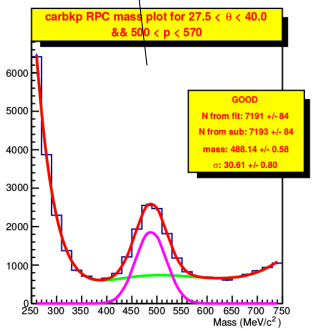




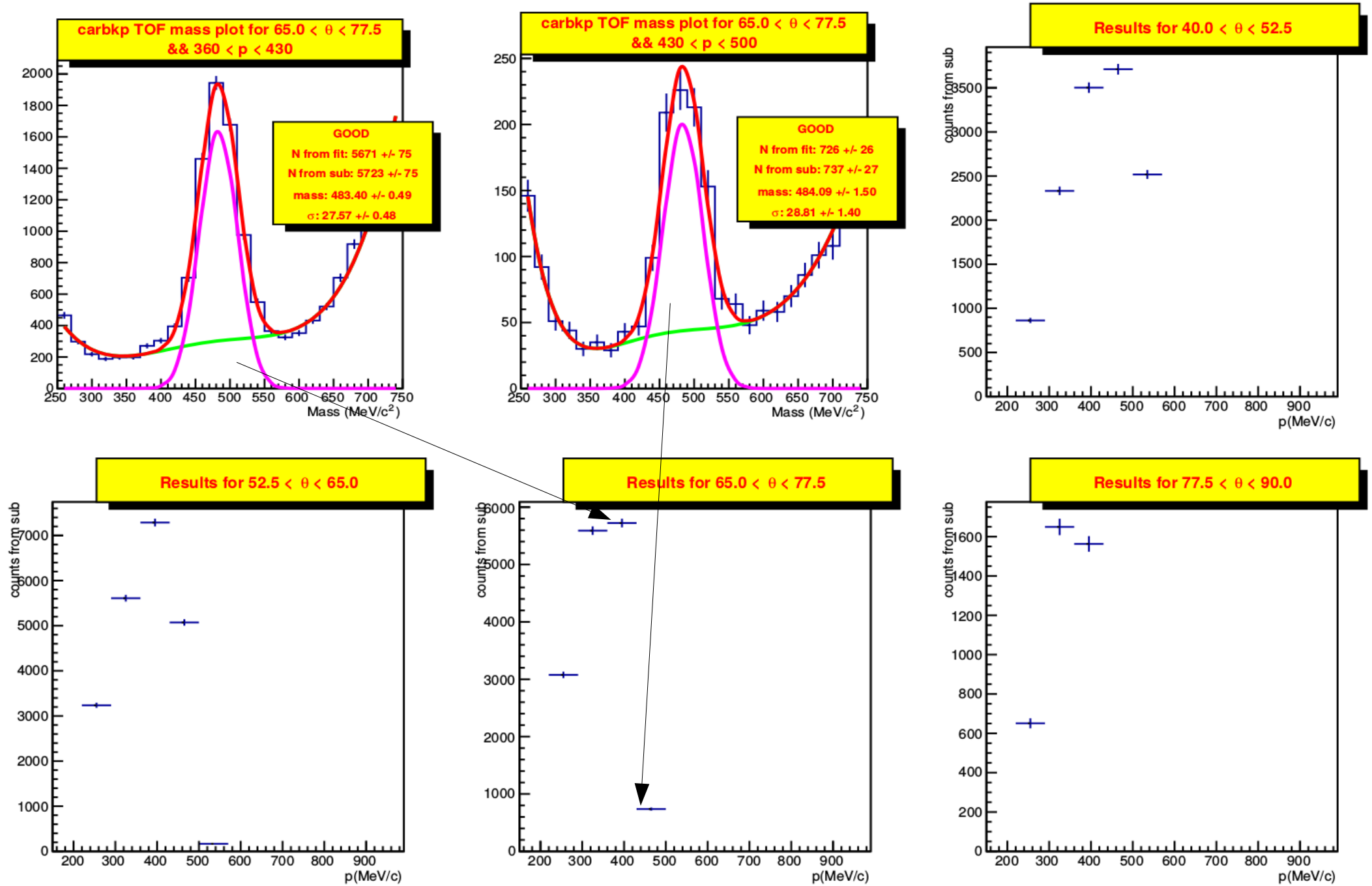




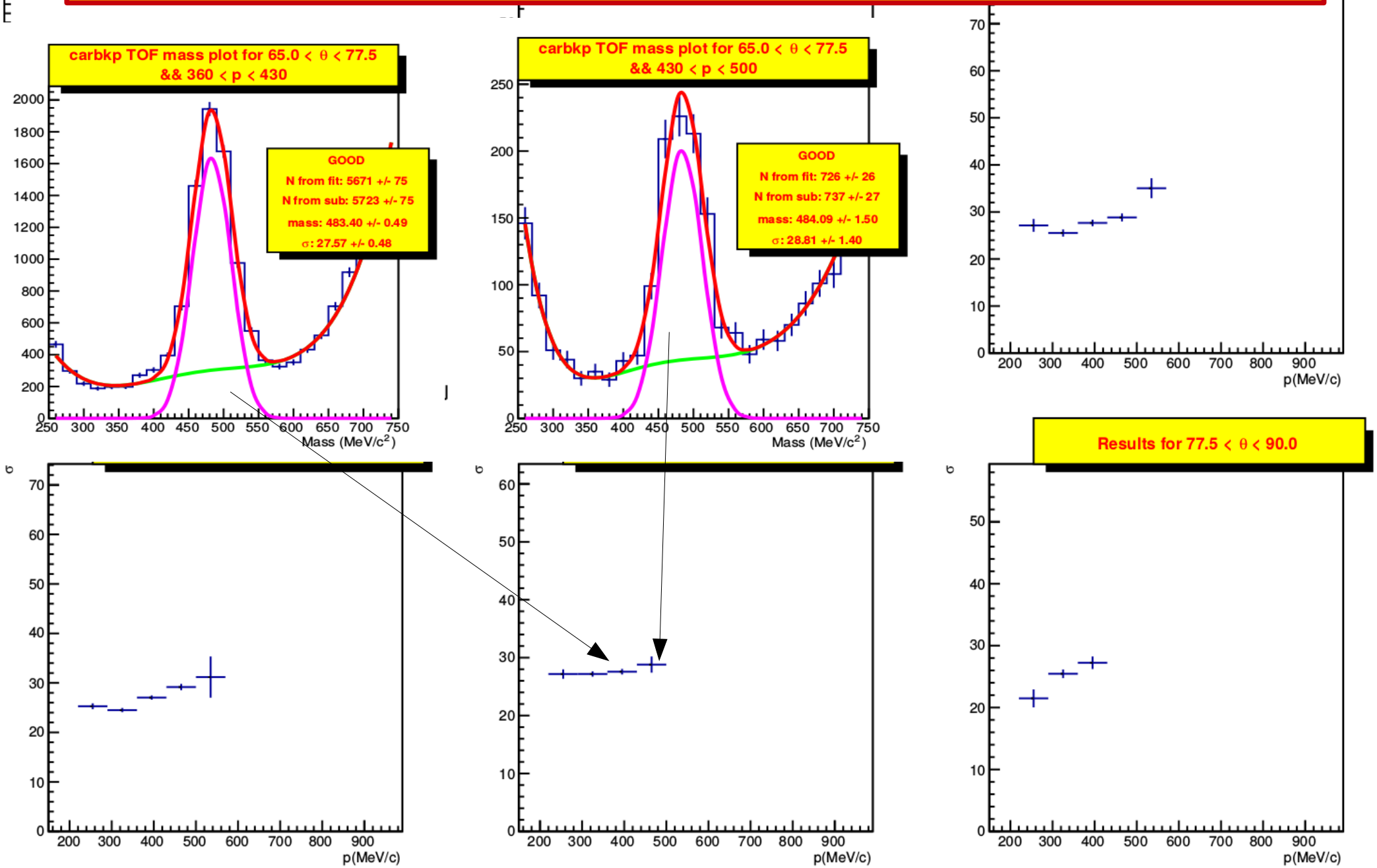




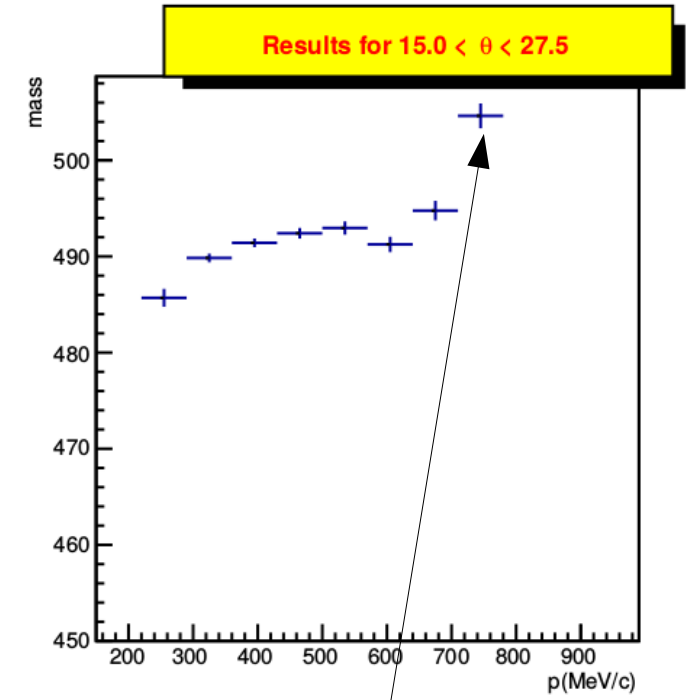
Mass vs P in Carbon TOF (cor)

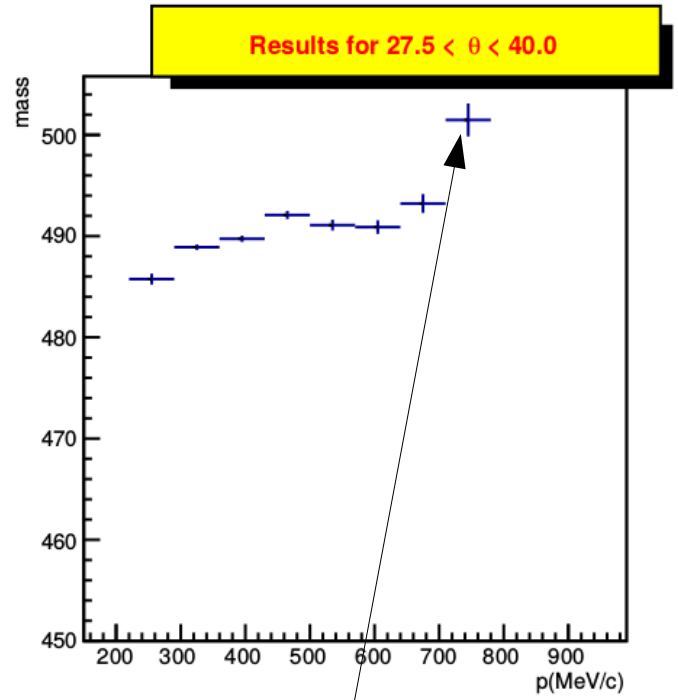


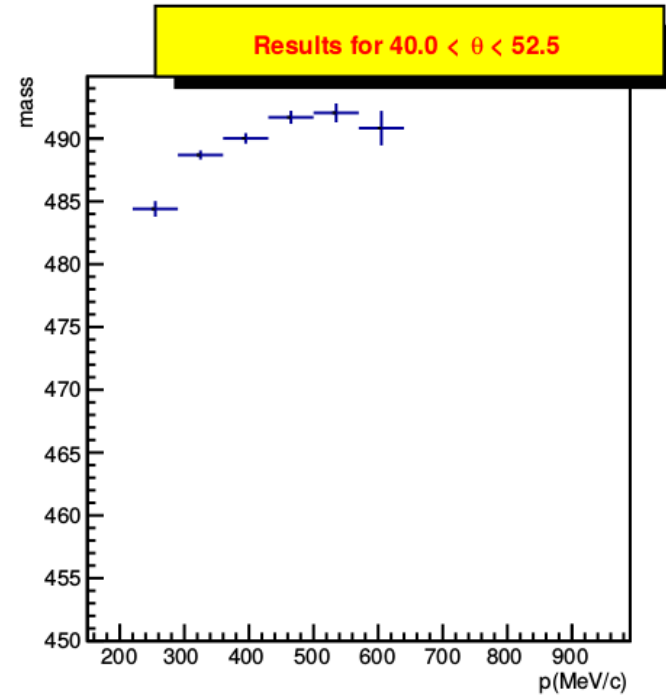
Sigma vs P in Carbon TOF (cor)

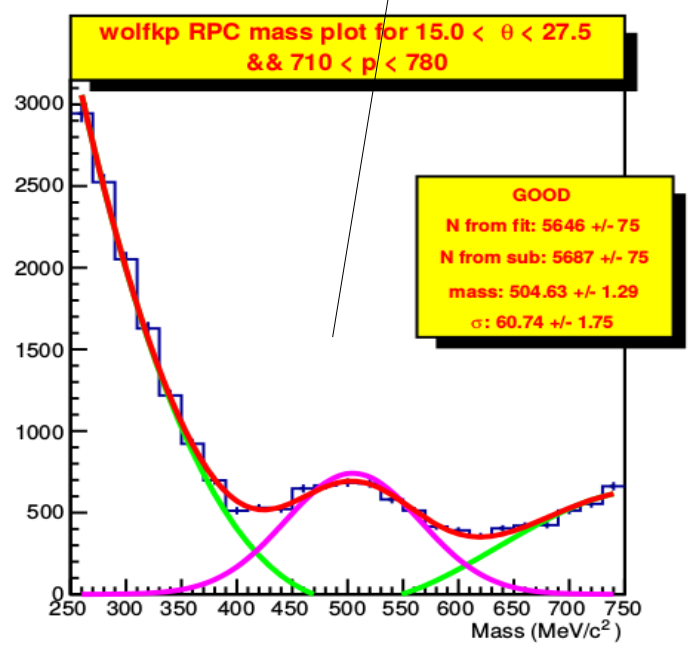


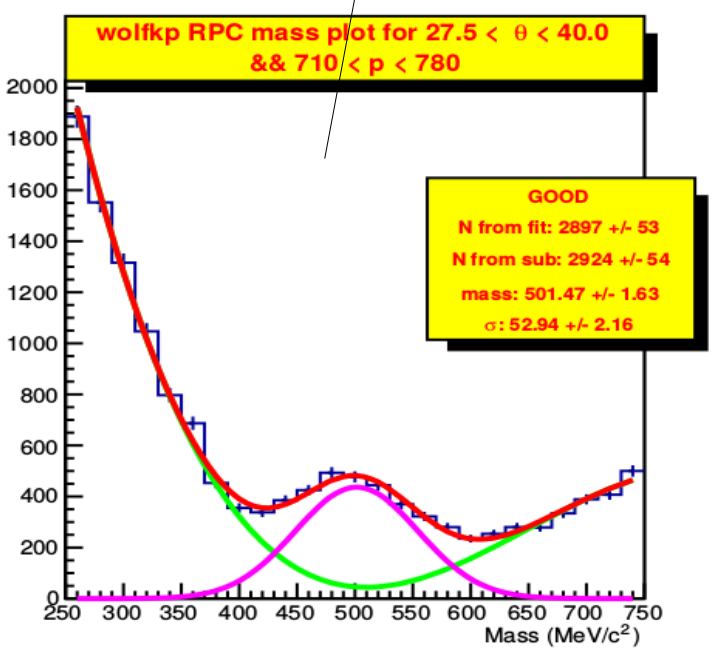
Mass vs P in Wolfram RPC (cor)



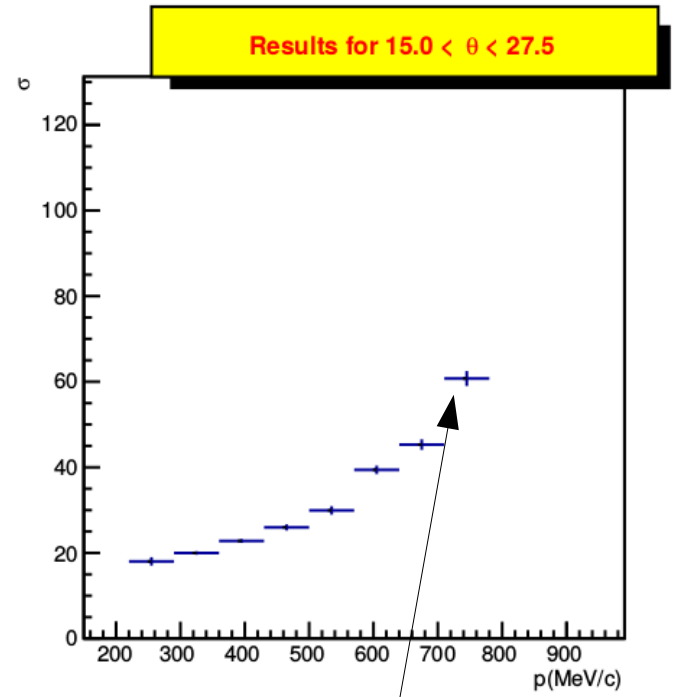


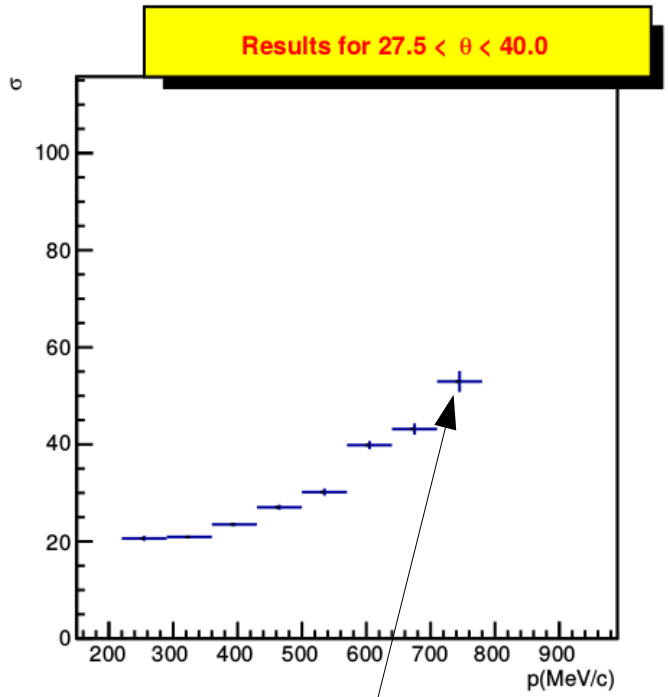


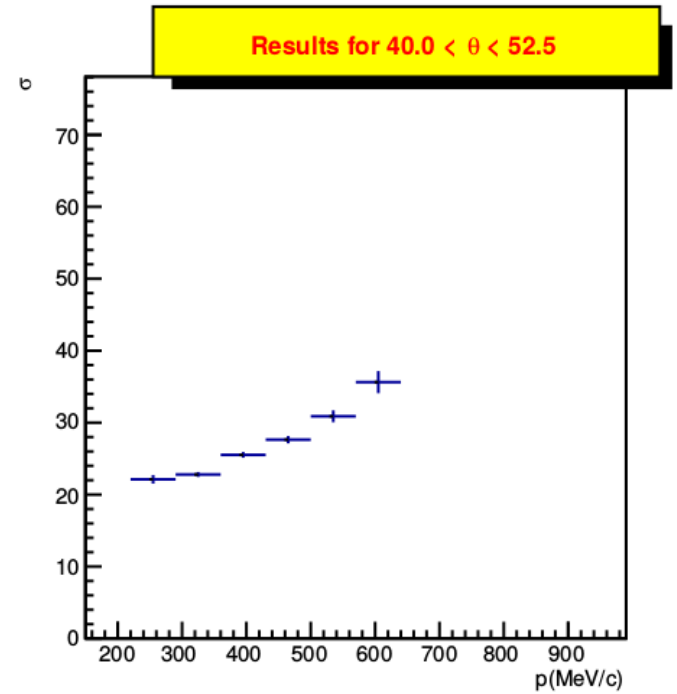


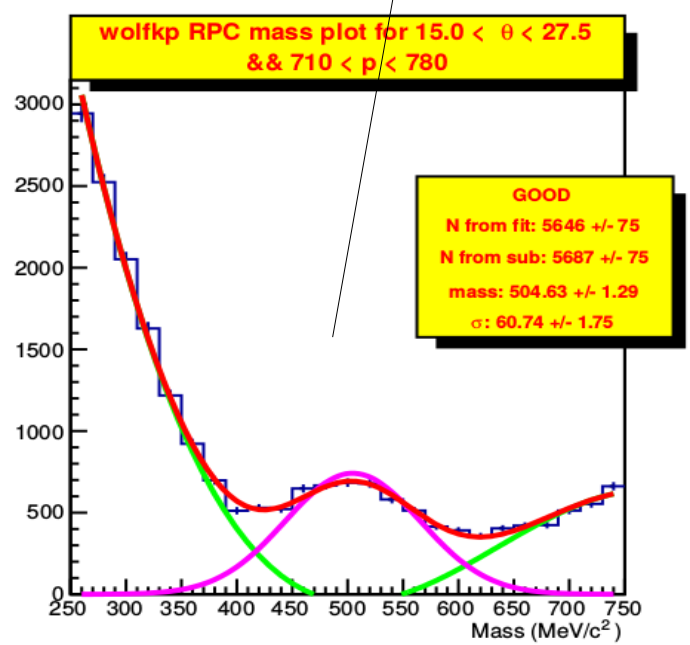


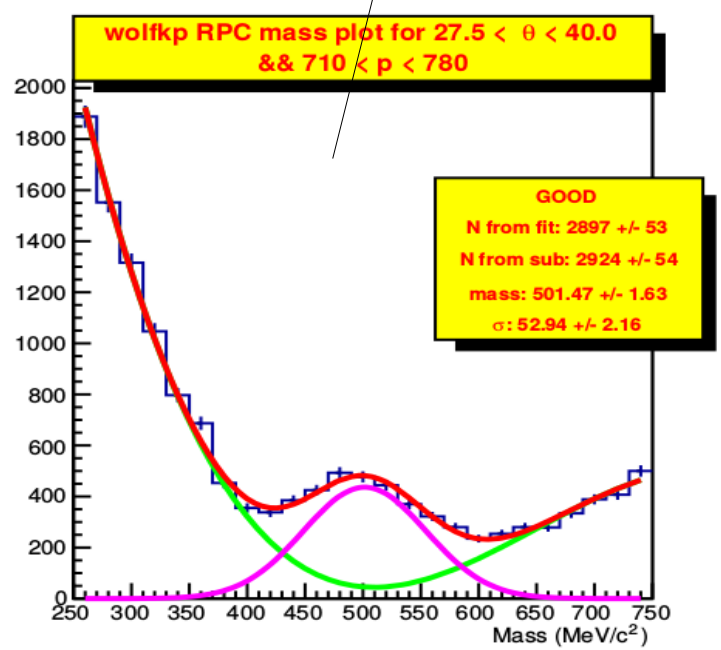
Sigma vs P in Wolfram RPC (cor)



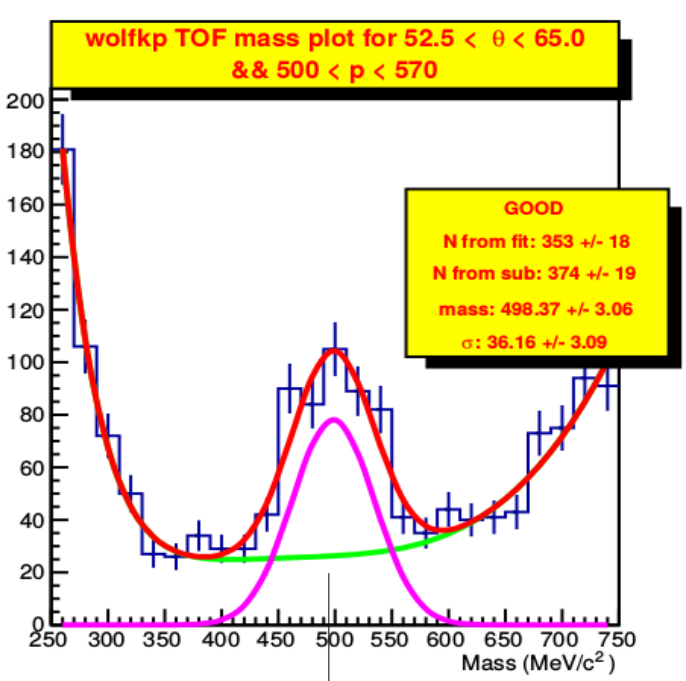


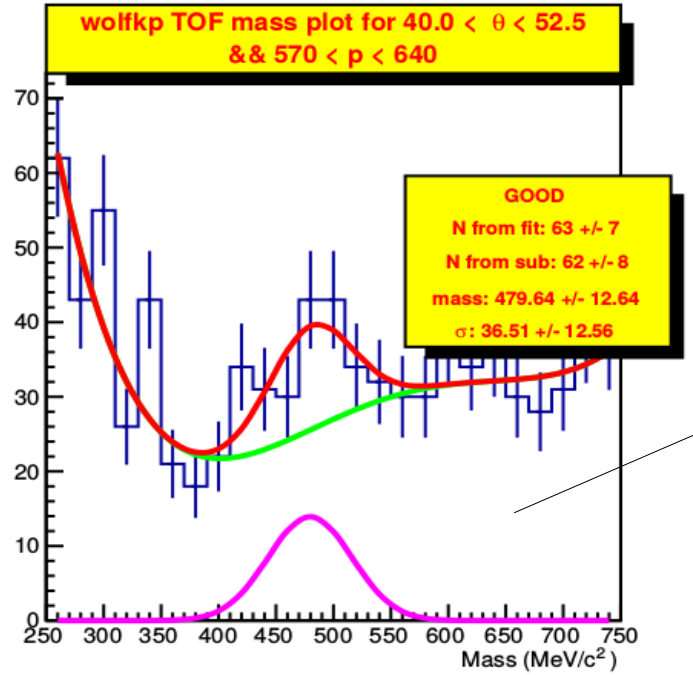


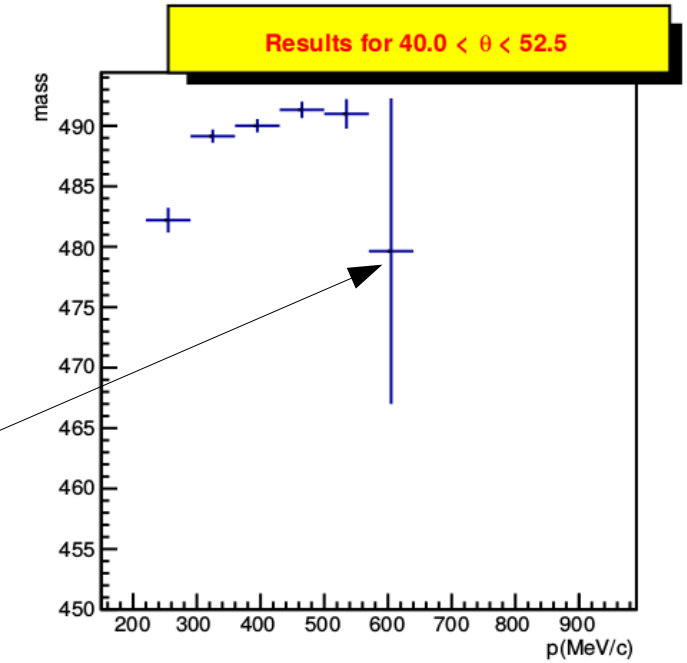


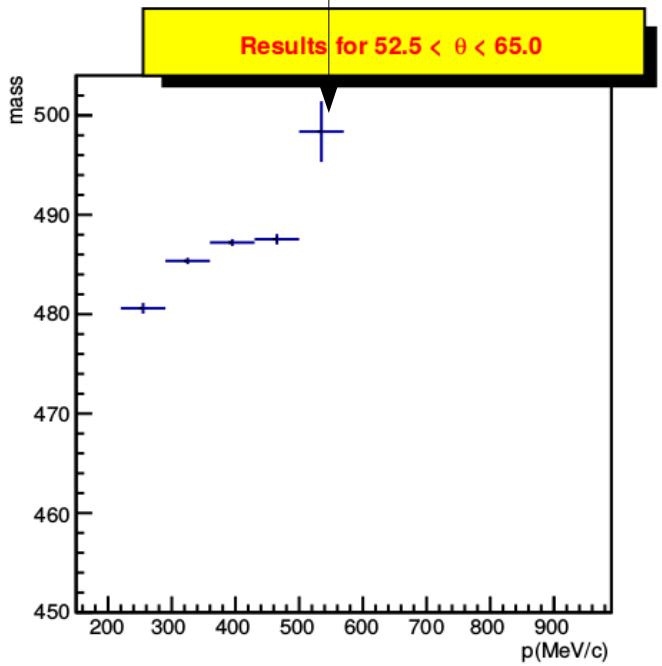


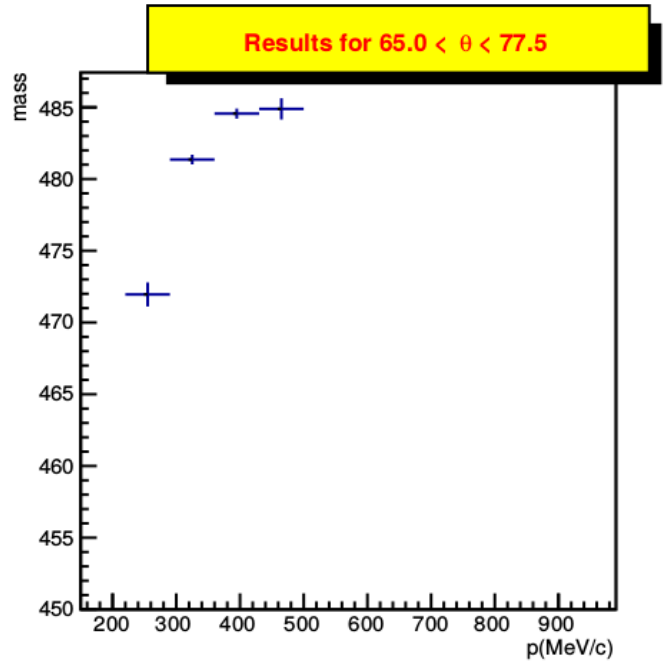
Mass vs P in Wolfram TOF (cor)

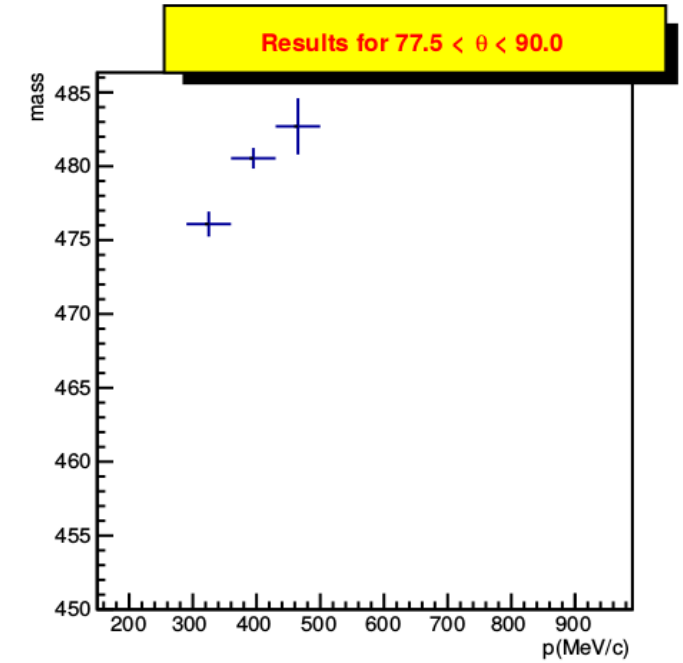




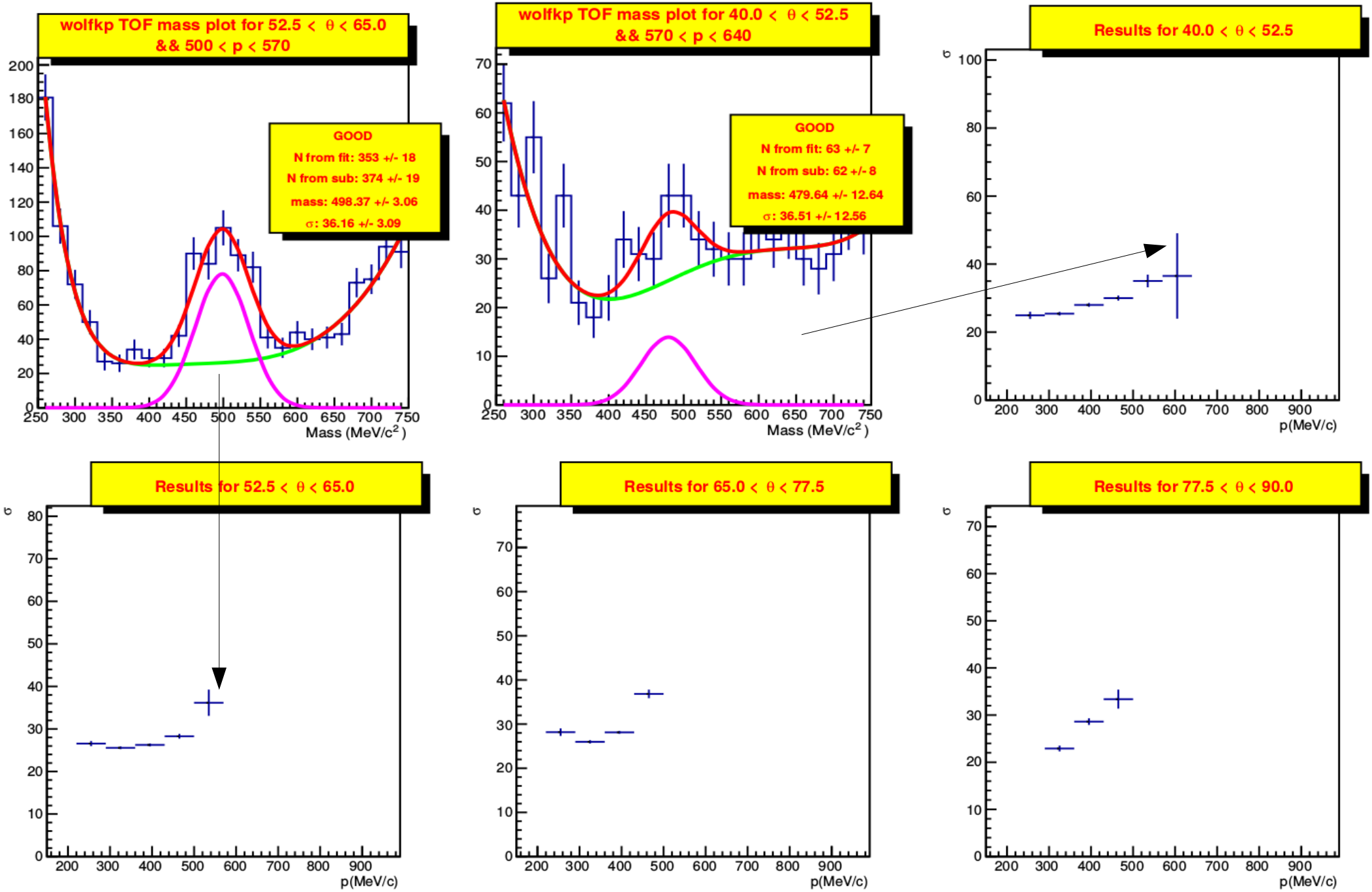








Sigma vs P in Wolfram TOF (cor)



Conclusions

Eloss + B correction doesn' t affect the MvsP trend (still present)

Some fits do not look very good due to strange Background behaviour

Possible alternative:

- Build K mass histogram from fit (MC)
- Use π,K,p histograms to fit (normalized) the mass spectrum