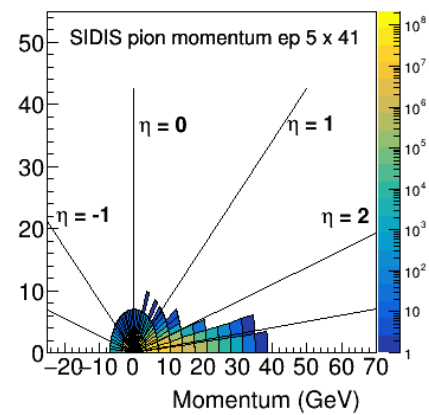
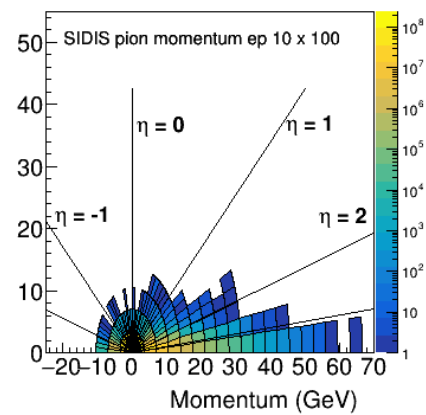
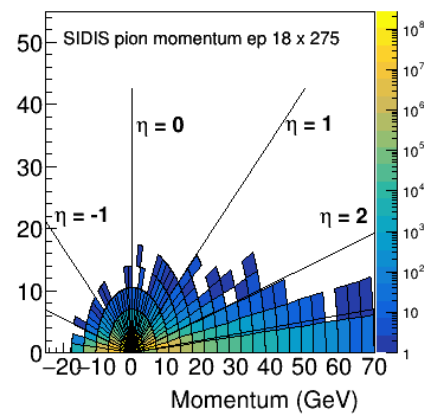
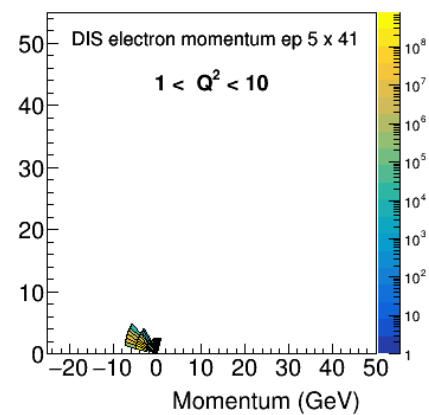
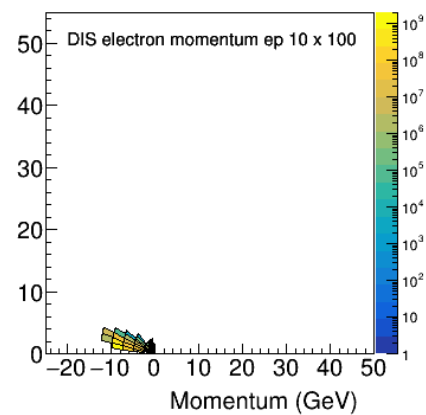
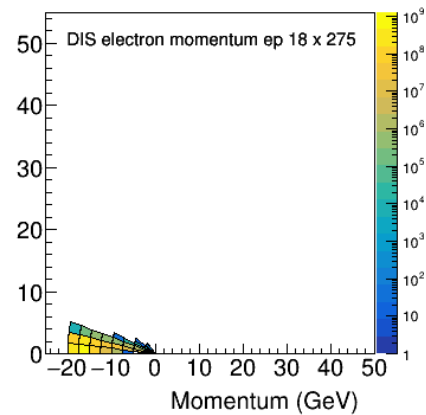
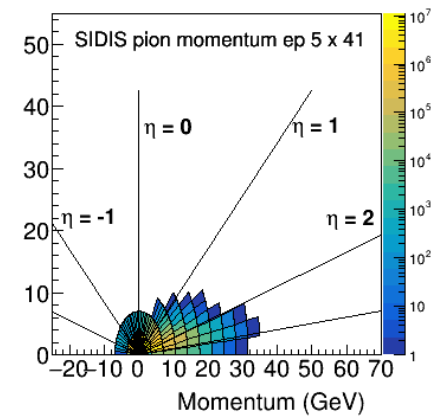
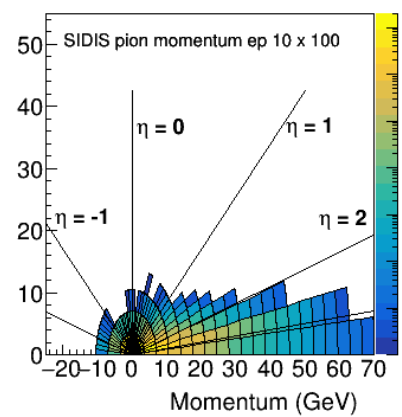
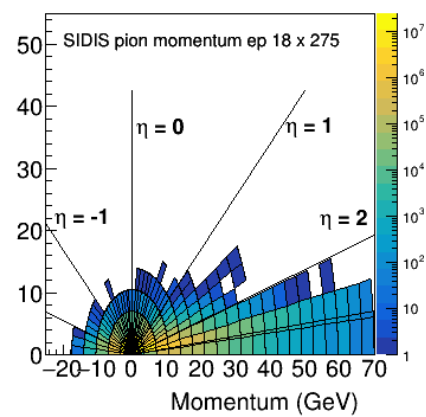
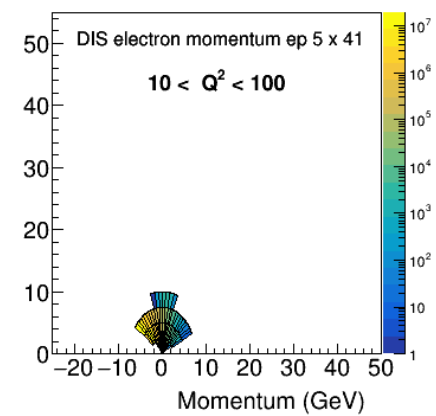
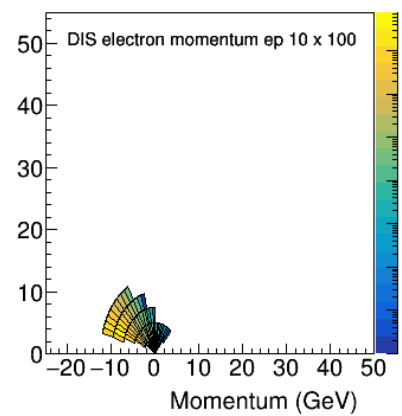
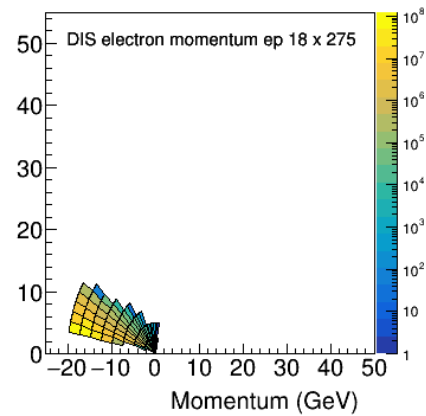
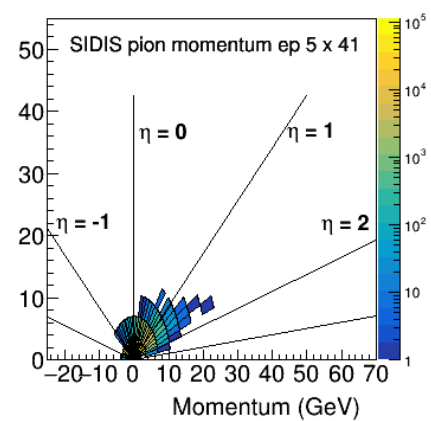
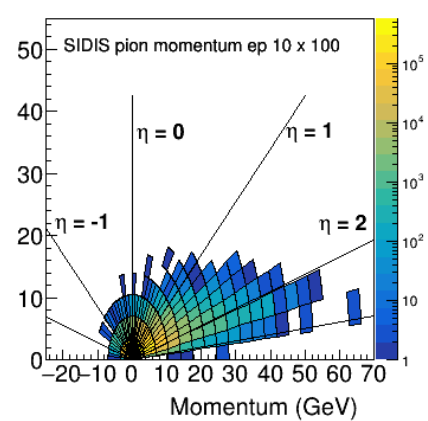
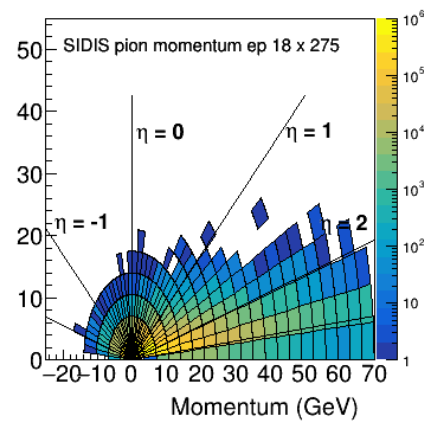
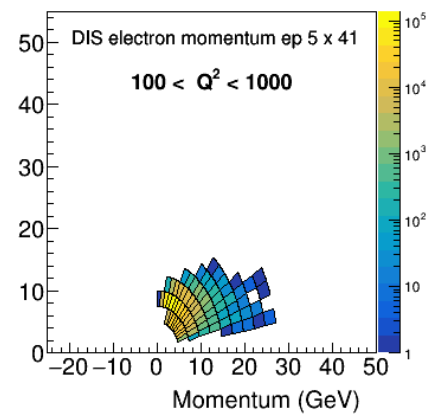
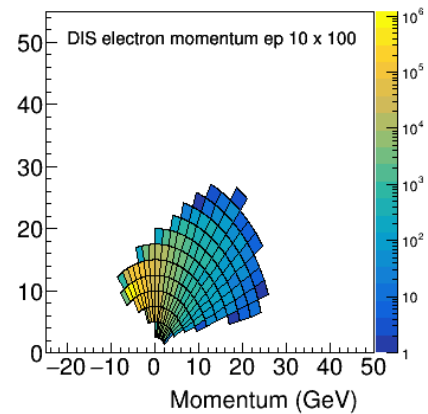
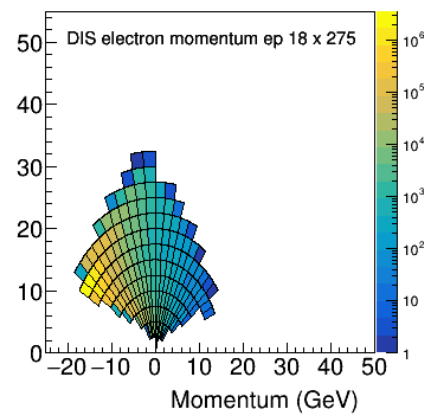


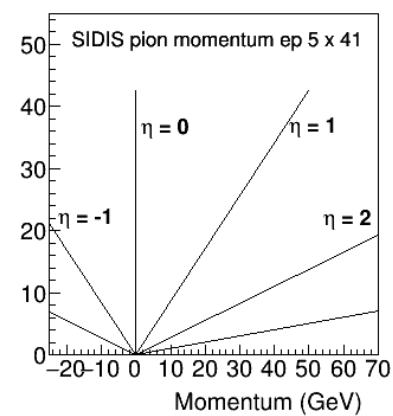
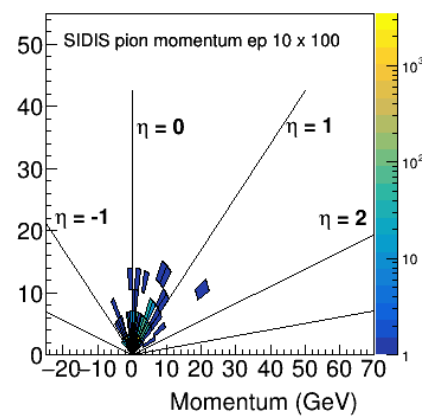
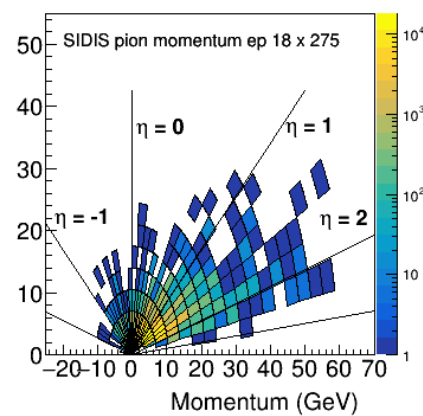
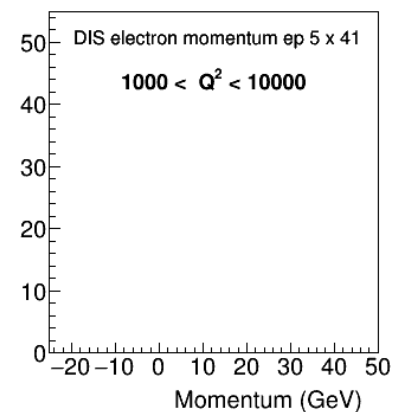
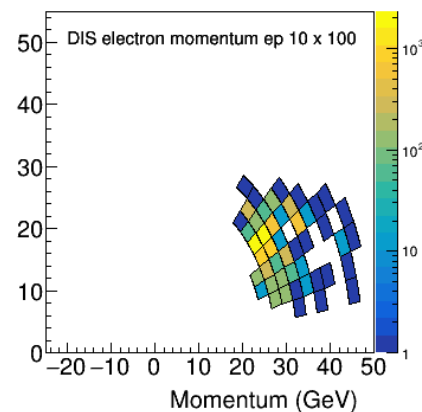
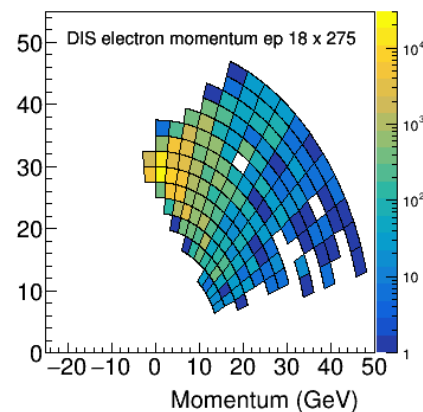
Acceptance studies

Ralf Seidl (RIKEN)









Different PID ranges tested so far

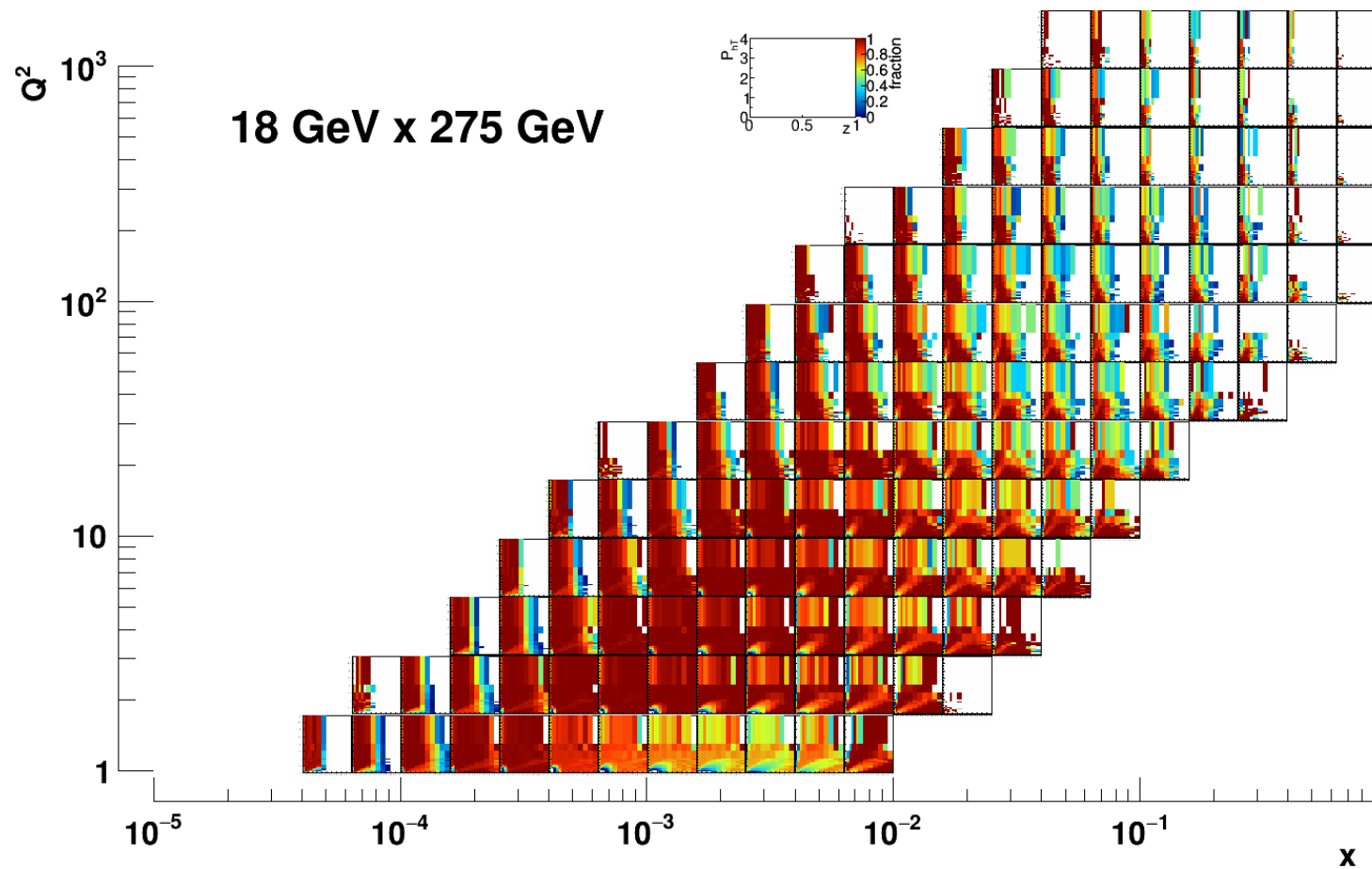
Old	π	K	p
-3.5 - -1.0	0.2 - 5	0.2 - 5	0.2 - 8
-1.0 - 1.0	0.2 - 4	0.2 - 4	0.2 - 4
1.0 - 2.0	0.2 - 50	0.2 - 50	0.2 - 50
2.0 - 3.0	0.5 - 50	1.6 - 50	3.0 - 50
3.0 - 3.5	0.5 - 50	1.6 - 50	3.0 - 50

SIDIS	π	K	p
-3.5 - -1.0	0.2 - 7	0.2 - 7	0.2 - 7
-1.0 - 1.0	0.2 - 8	0.2 - 8	0.2 - 8
1.0 - 2.0	0.2 - 10	0.2 - 10	0.2 - 10
2.0 - 3.0	0.5 - 20	1.6 - 20	3.0 - 20
3.0 - 3.5	0.5 - 45	1.6 - 45	3.0 - 45

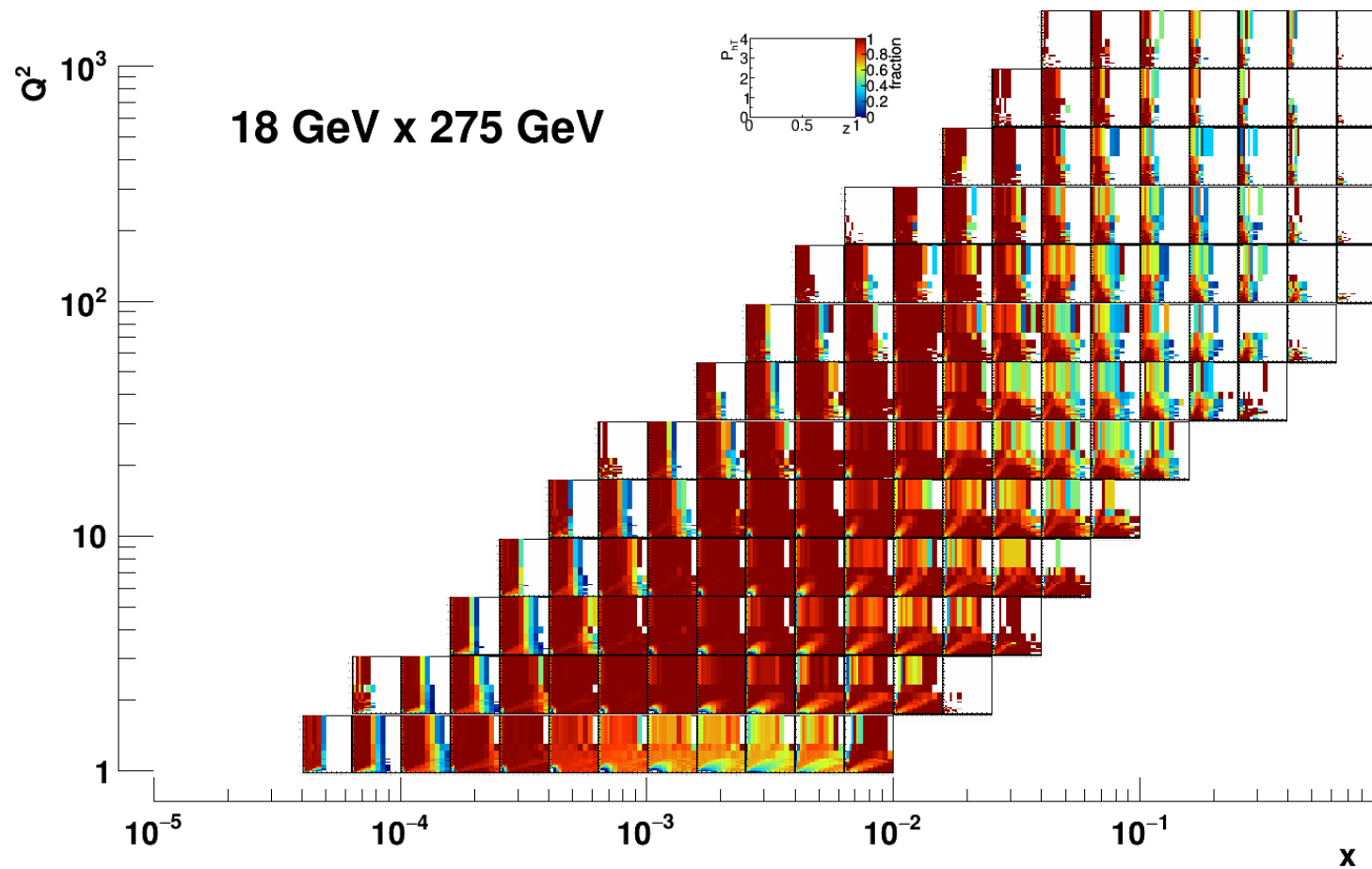
Matrix	π	K	p
-3.5 - -1.0	0.2 - 7	0.2 - 7	0.2 - 7
-1.0 - 1.0	0.2 - 5	0.2 - 5	0.2 - 5
1.0 - 2.0	0.2 - 8	0.2 - 8	0.2 - 8
2.0 - 3.0	0.5 - 20	1.6 - 20	3.0 - 20
3.0 - 3.5	0.5 - 45	1.6 - 45	3.0 - 45

- Compare max momentum requirements for
 - Old (used by Charlotte et al for SIDIS PDF/FF paper)
 - Official Detector Matrix (by DWG/conveners)
 - SIDIS group preference
- Color coding (yellow higher than Matrix, red lower)

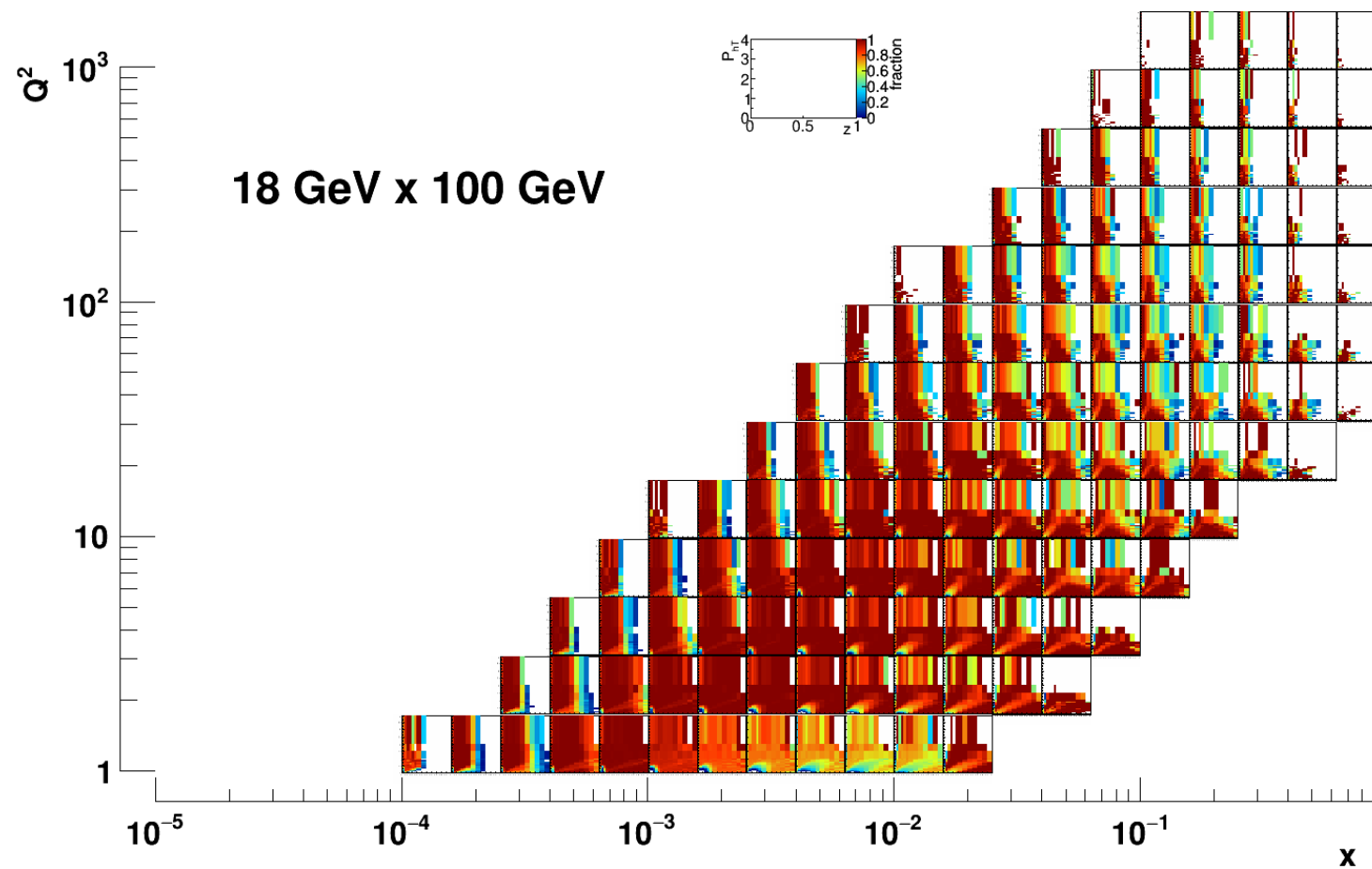
4D ratios (PID/perfect): Matrix



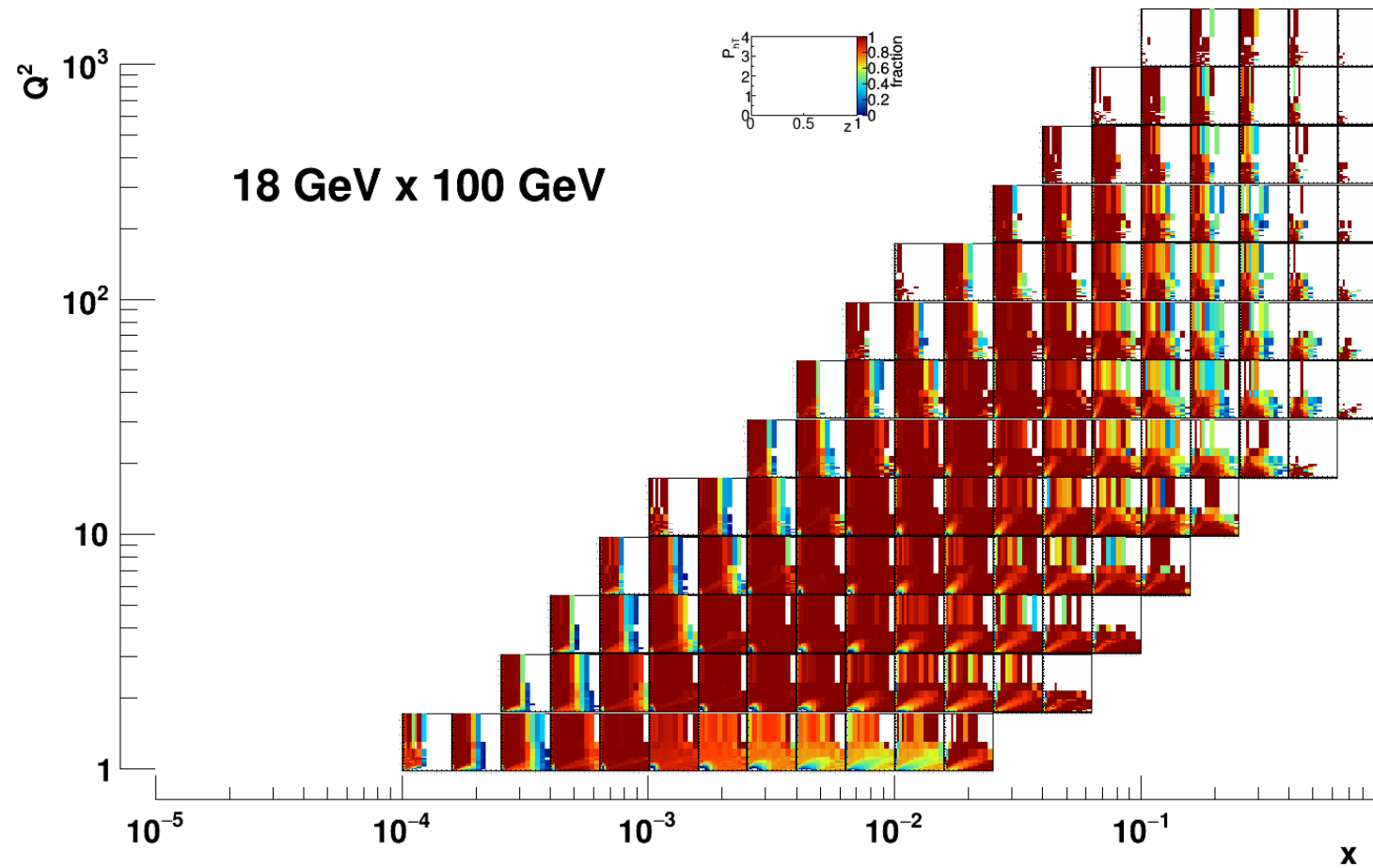
4D ratios (smeared/perfect): SIDIS



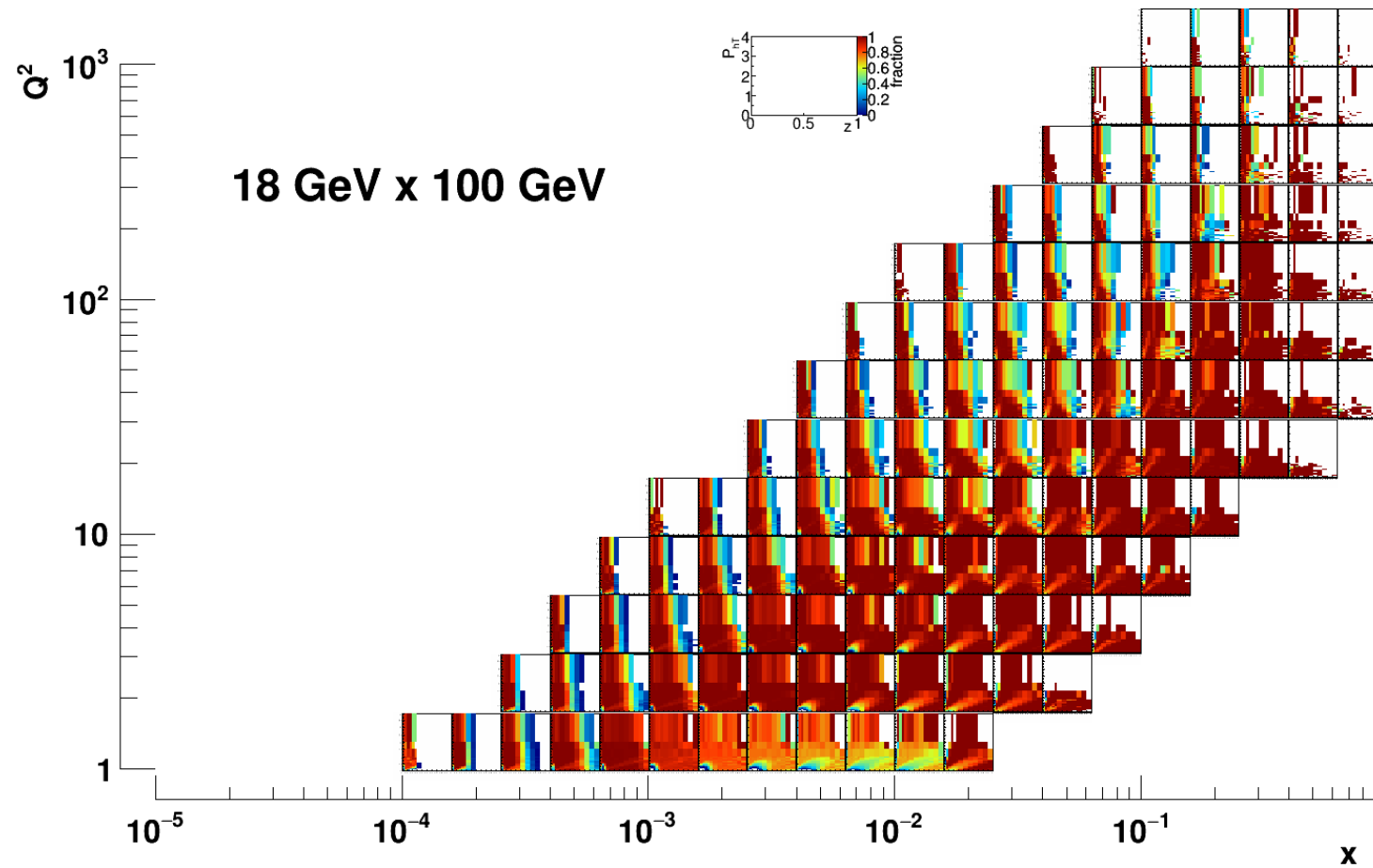
Matrix



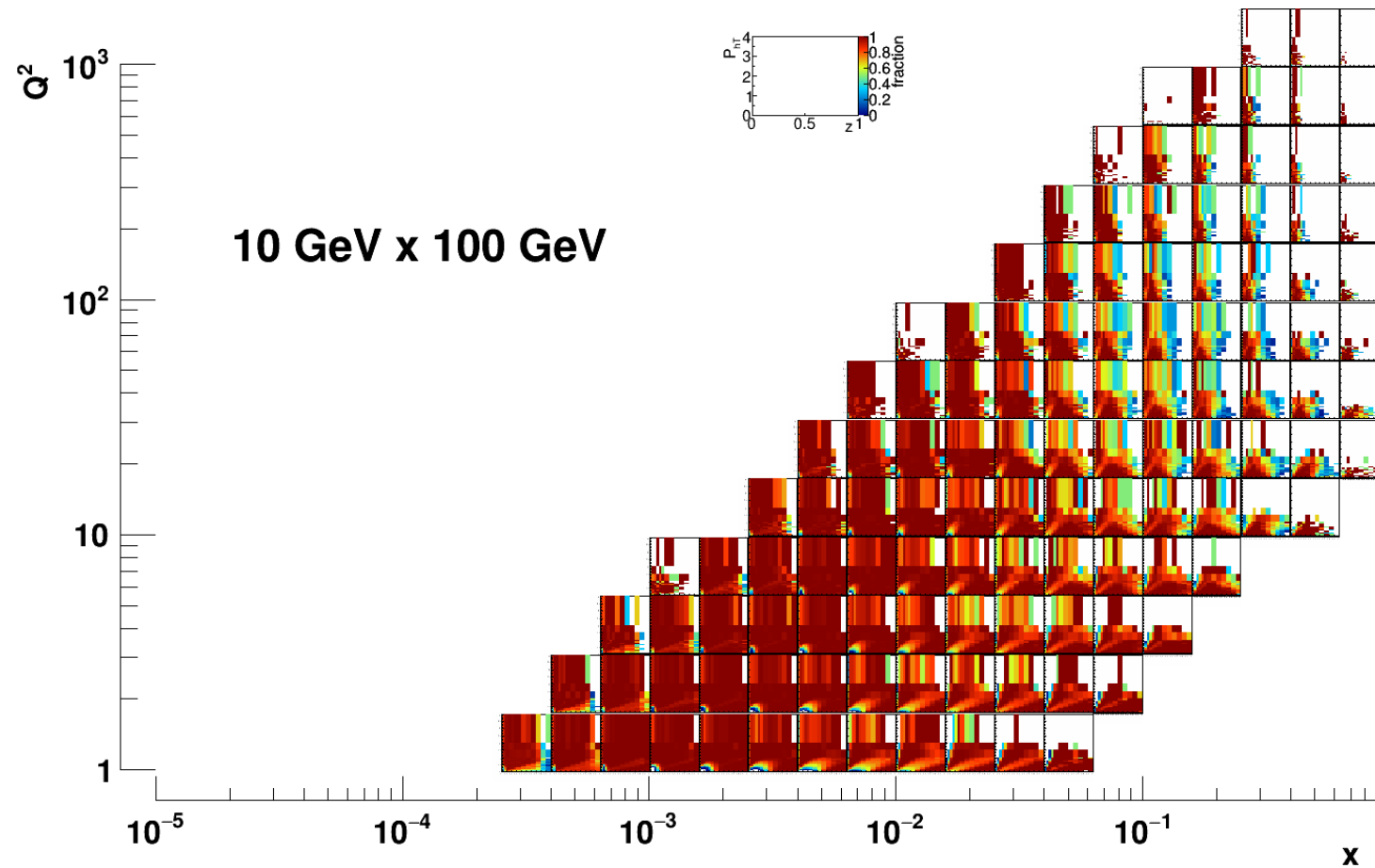
SIDIS



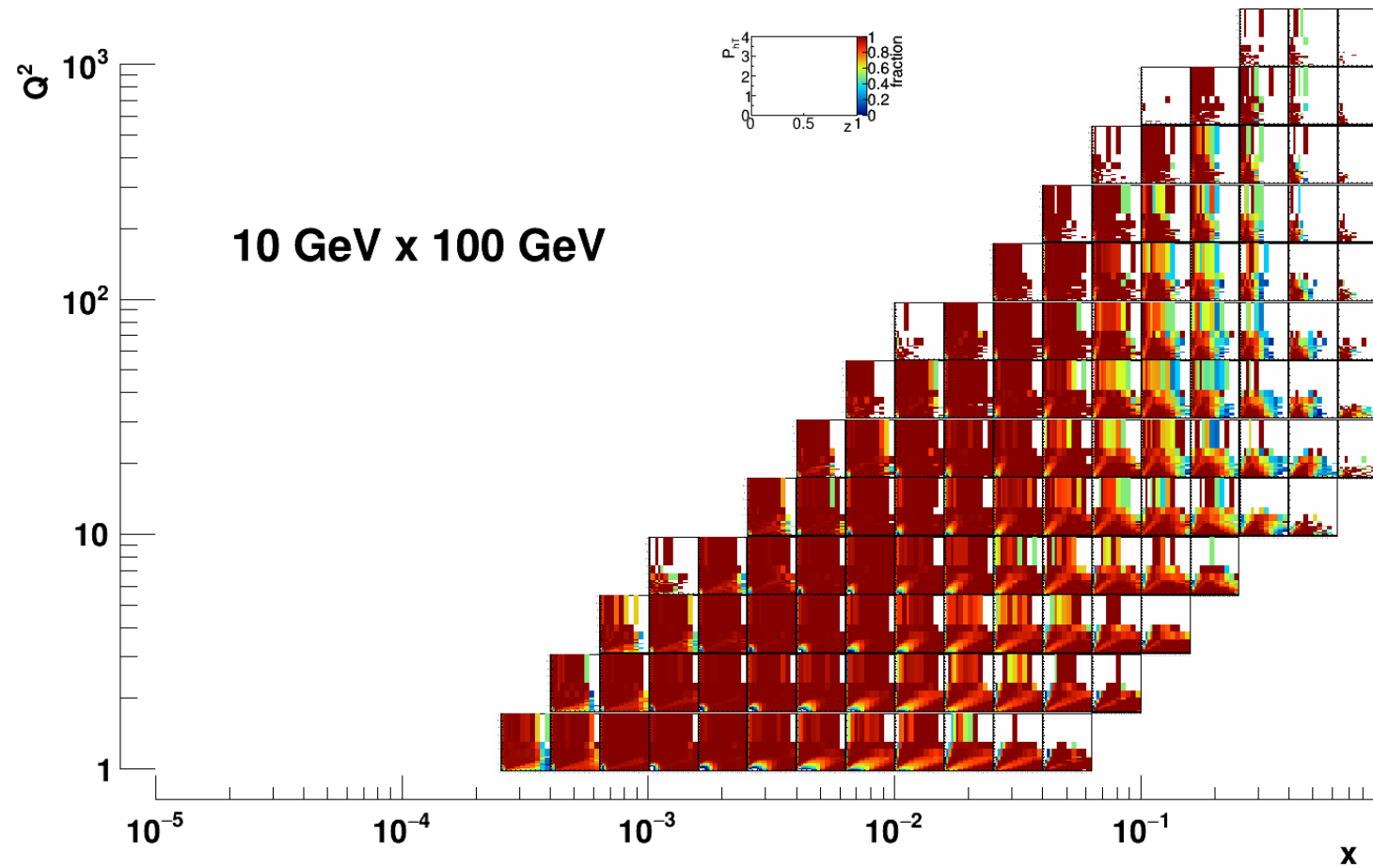
old



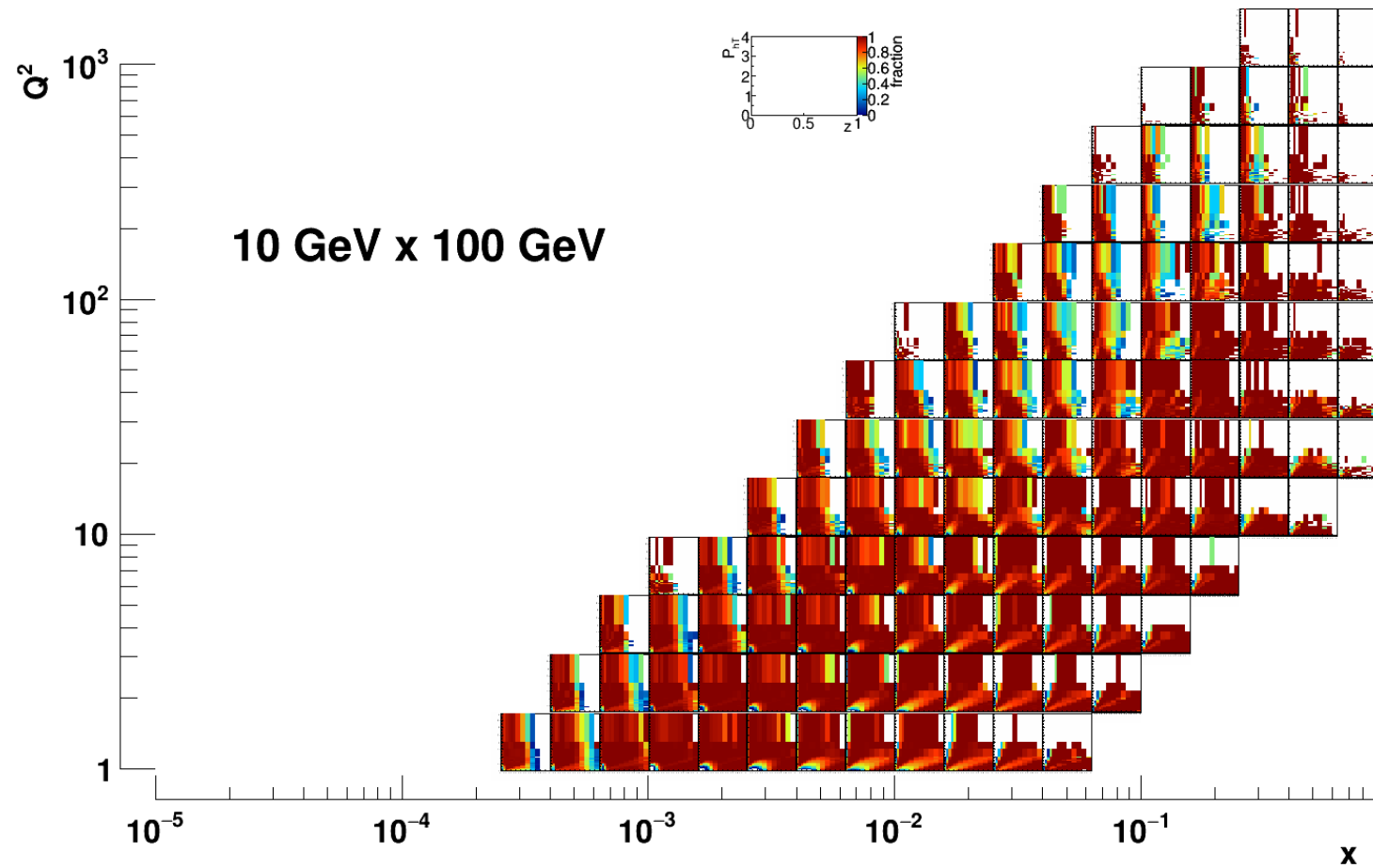
Matrix



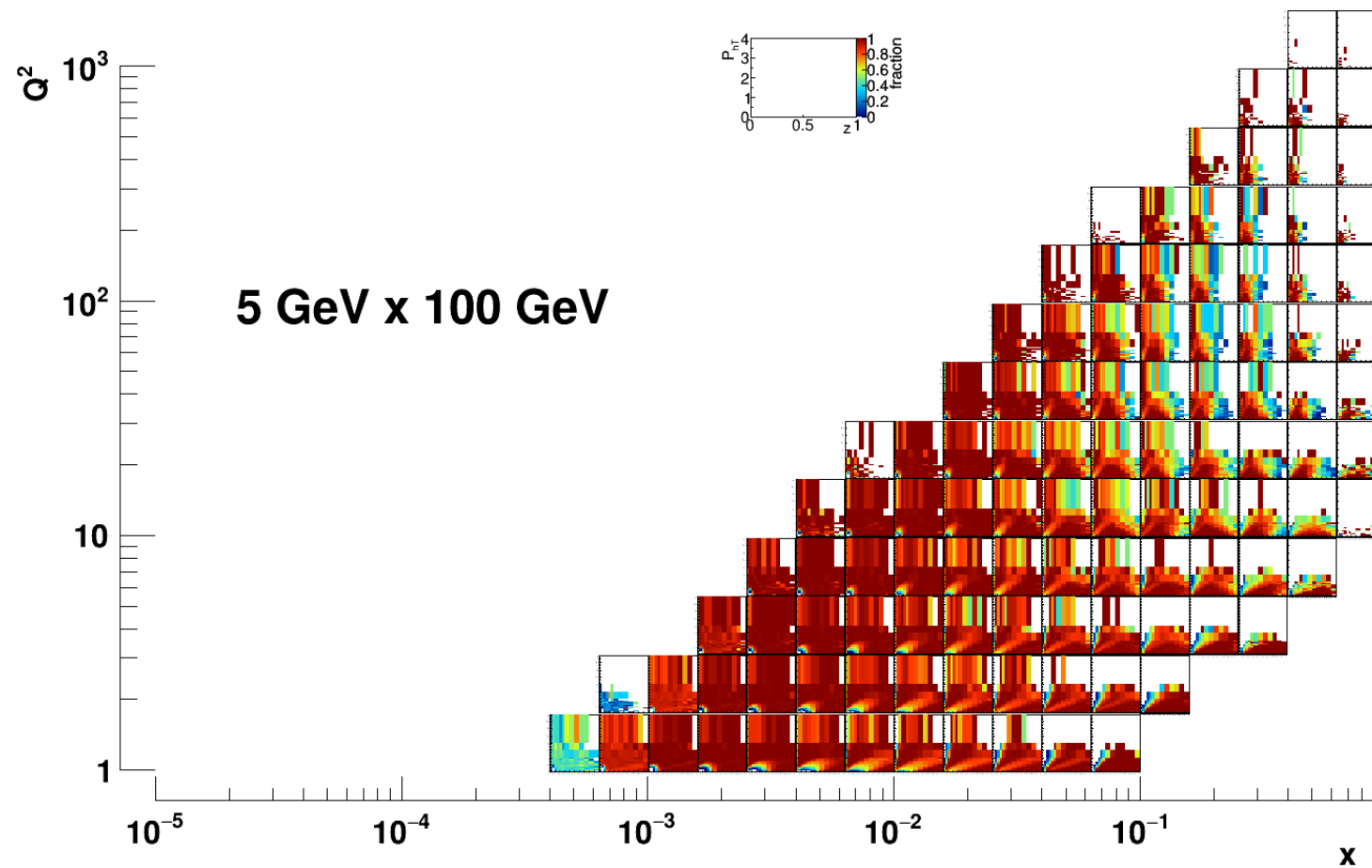
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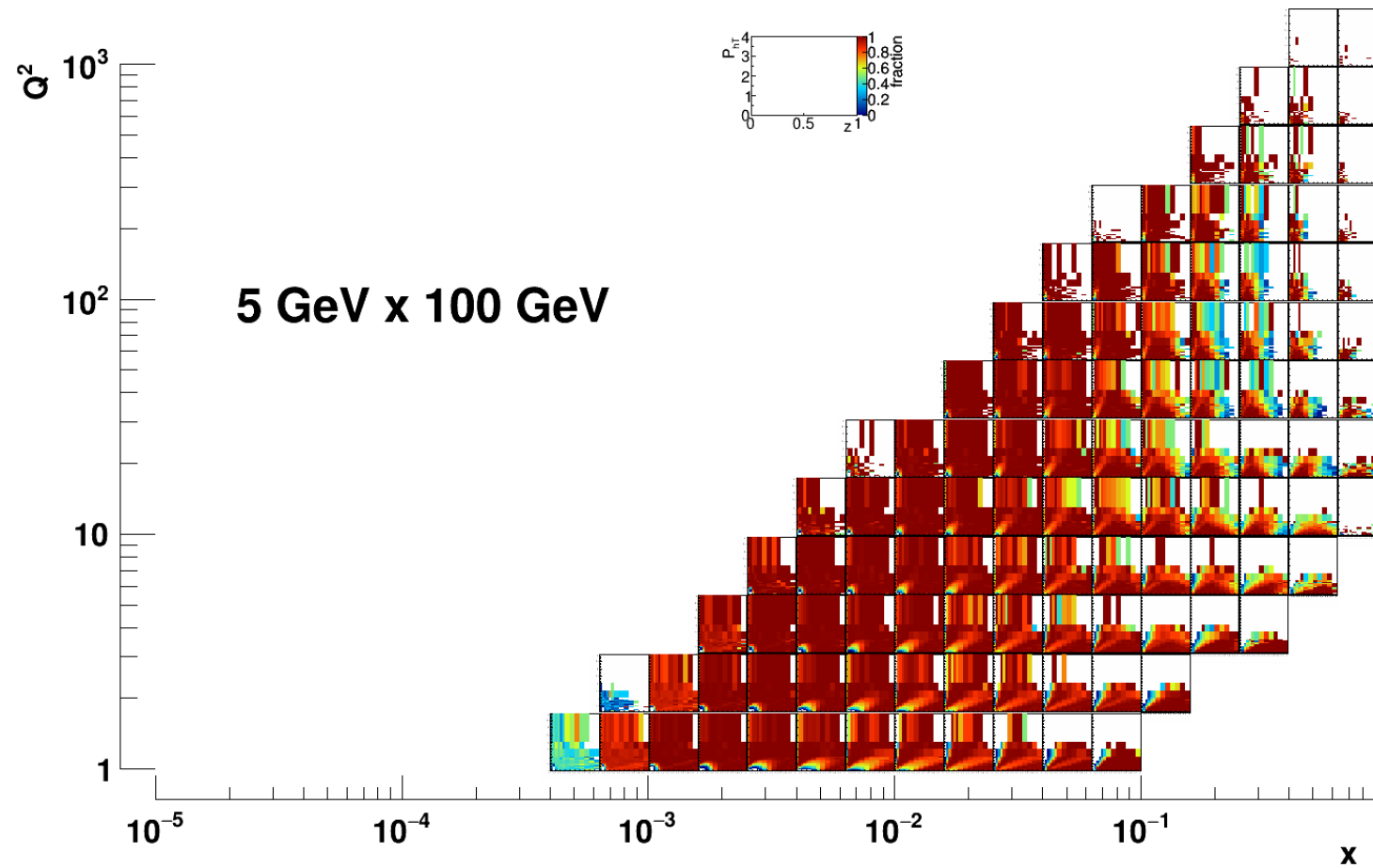
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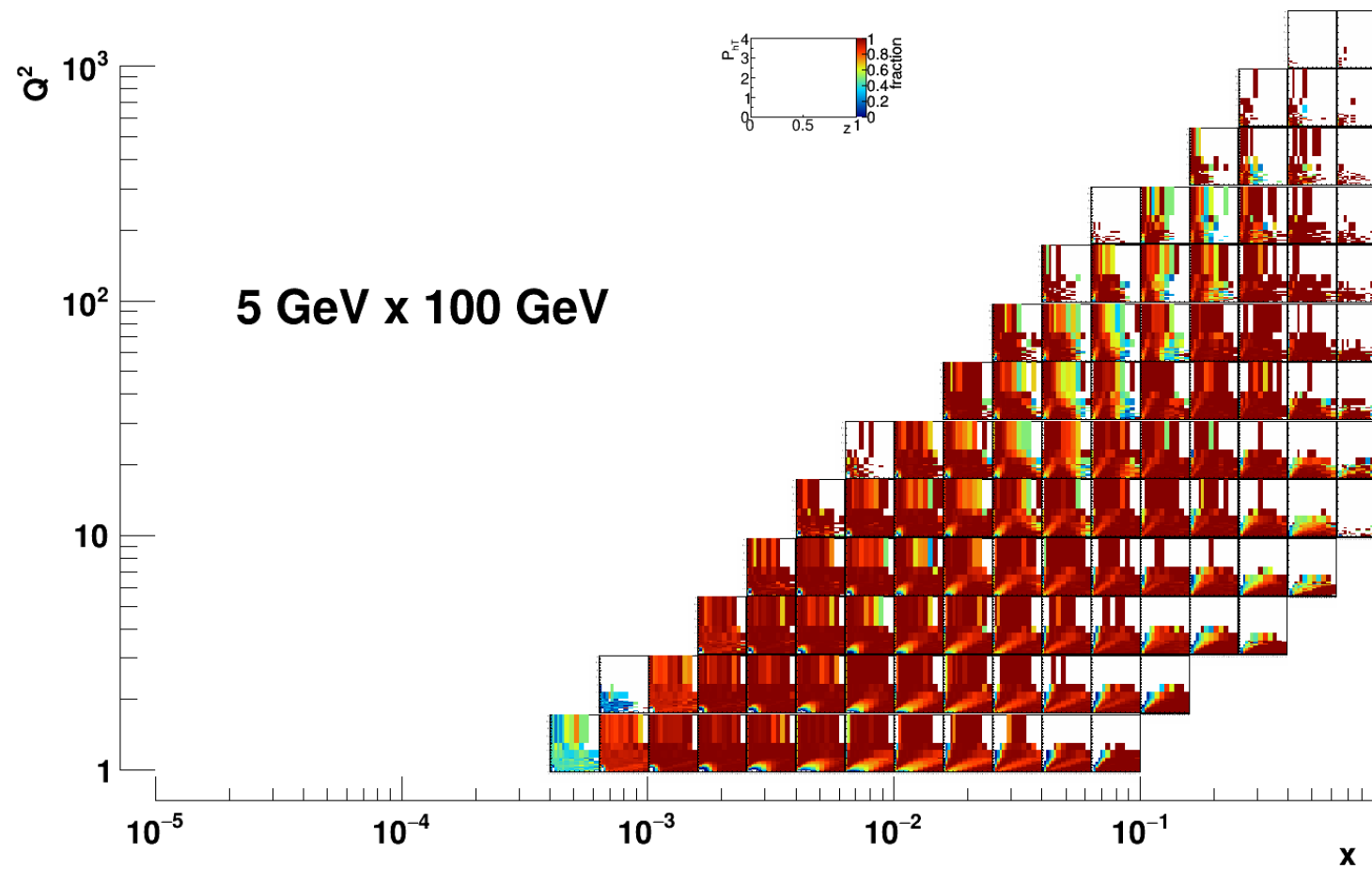
Matrix



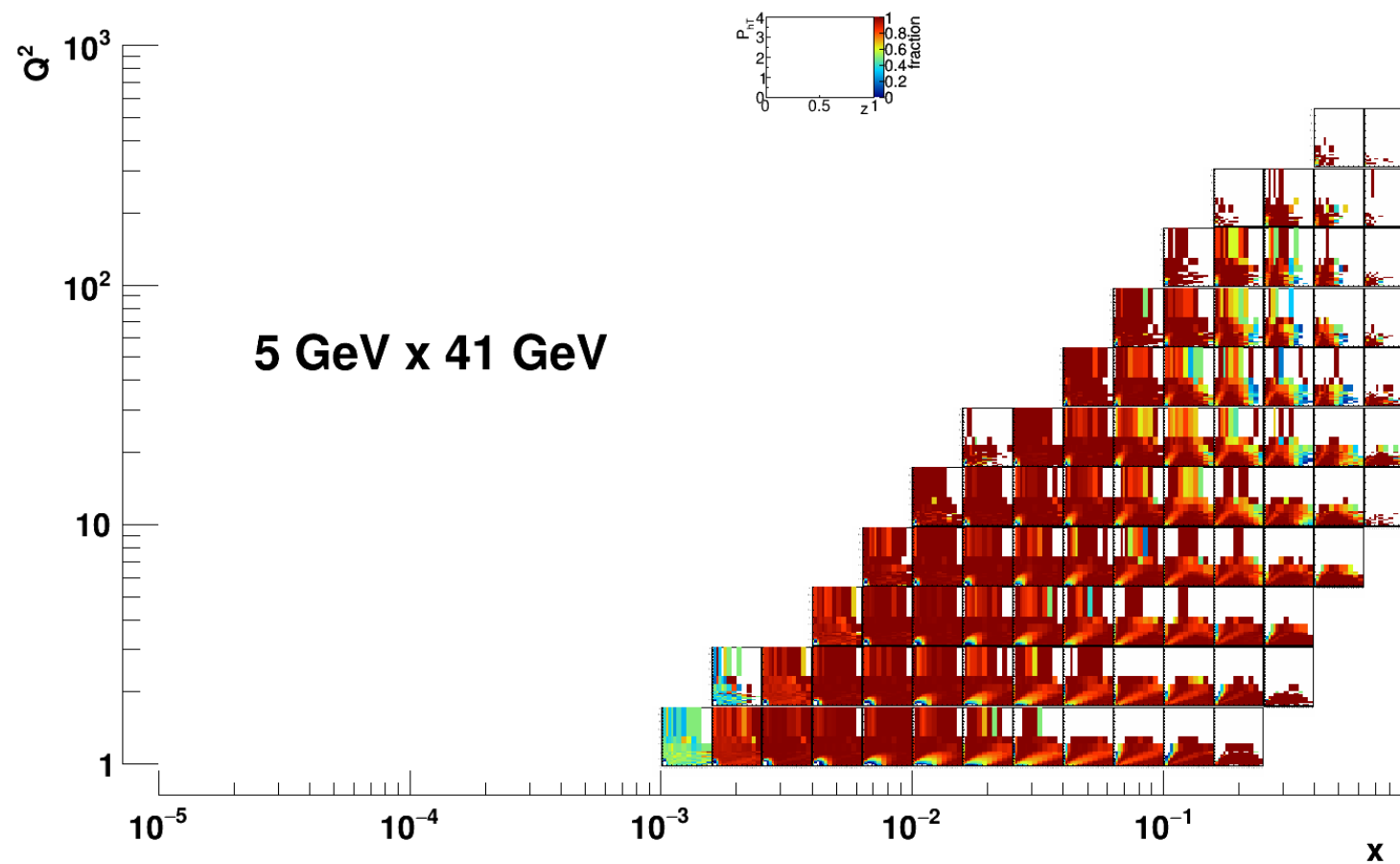
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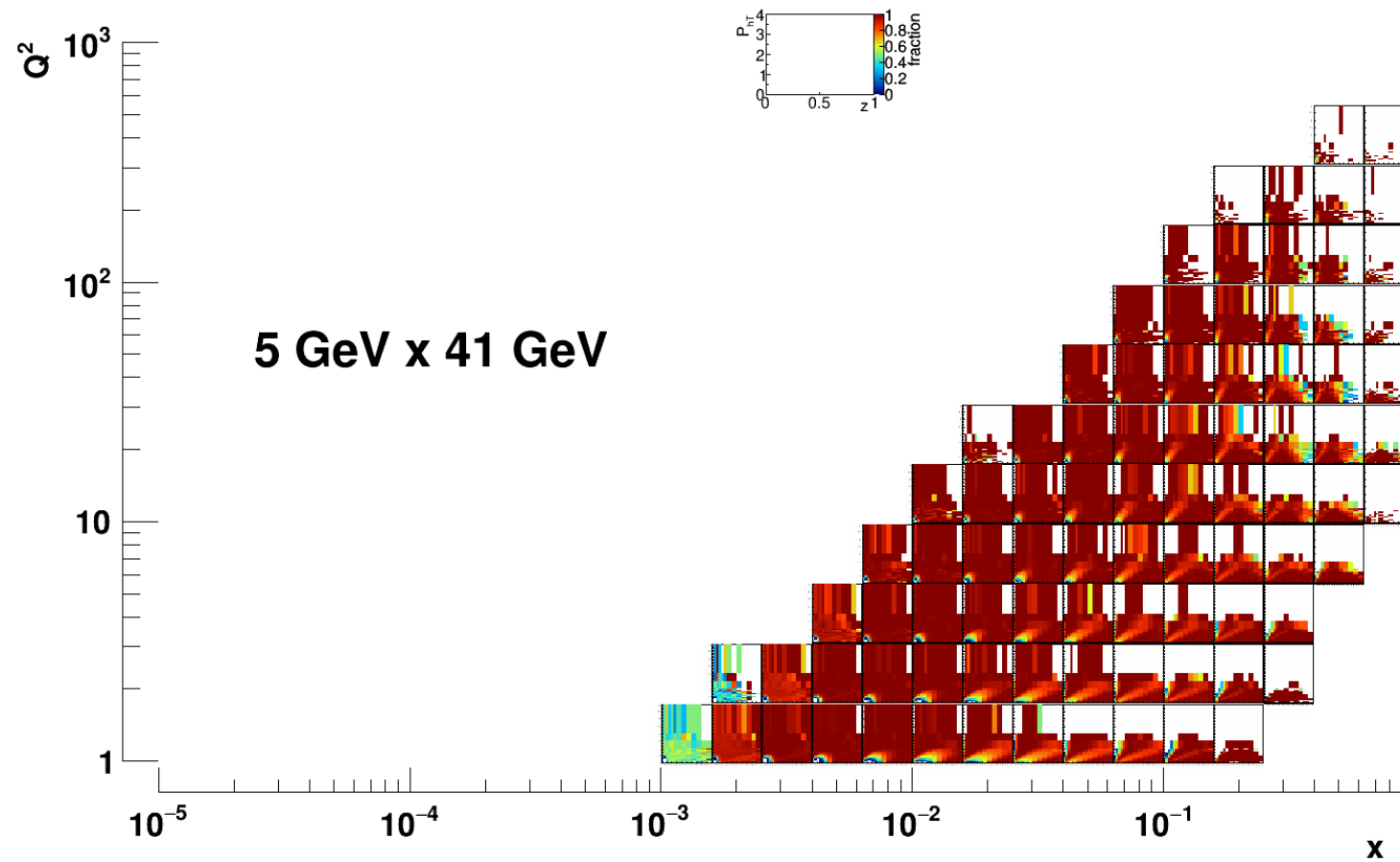
old



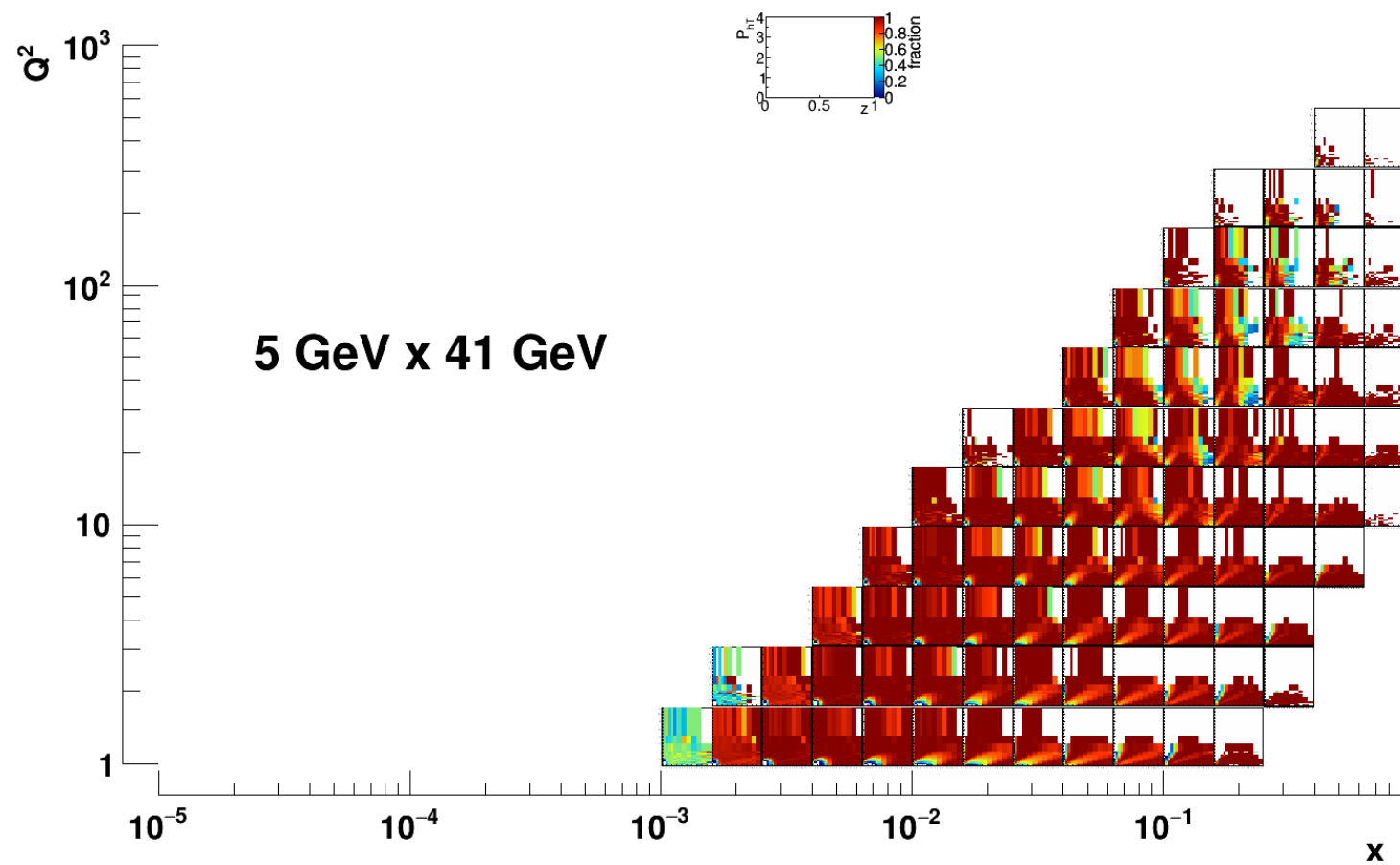
Matrix



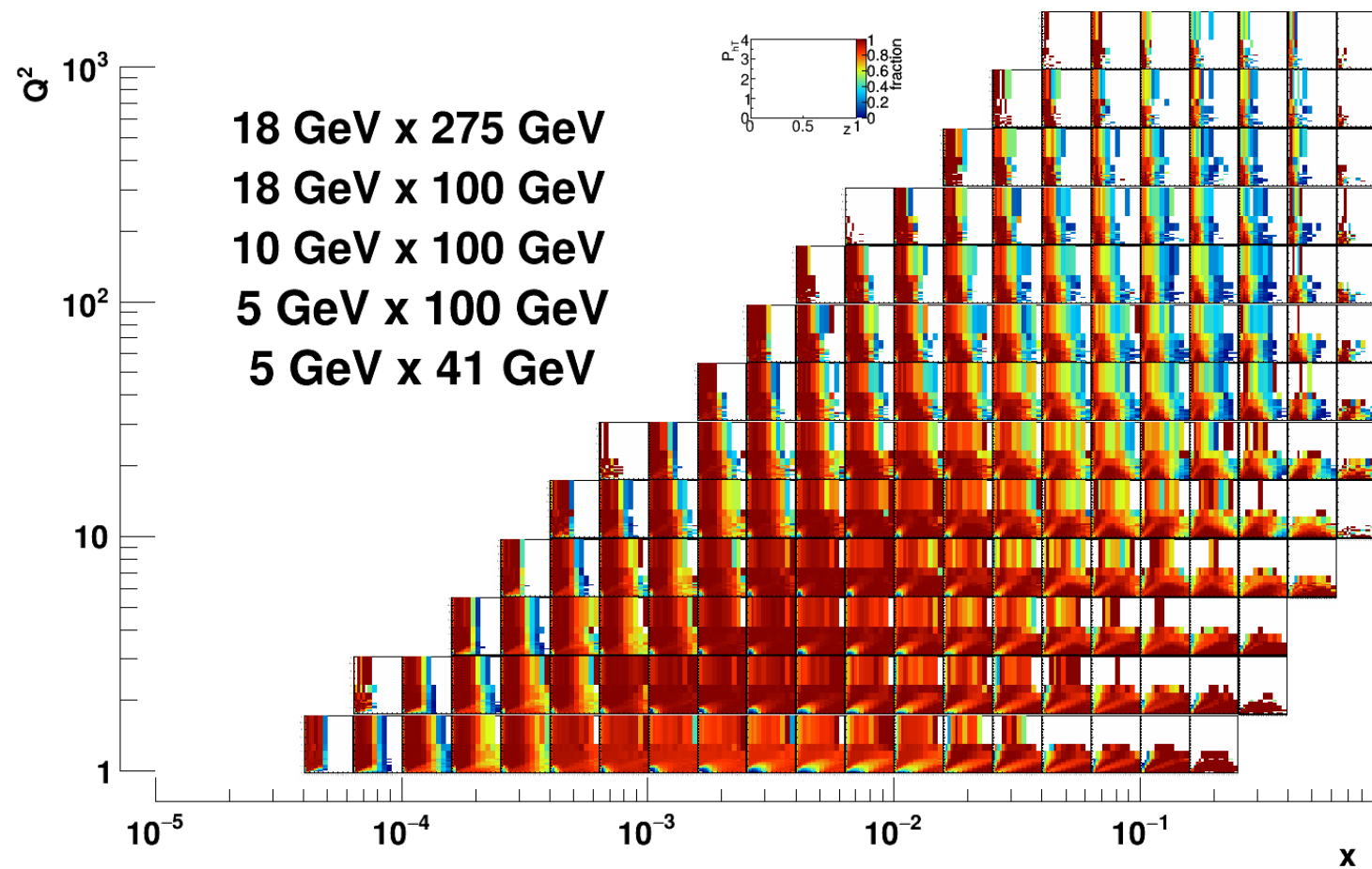
SIDIS



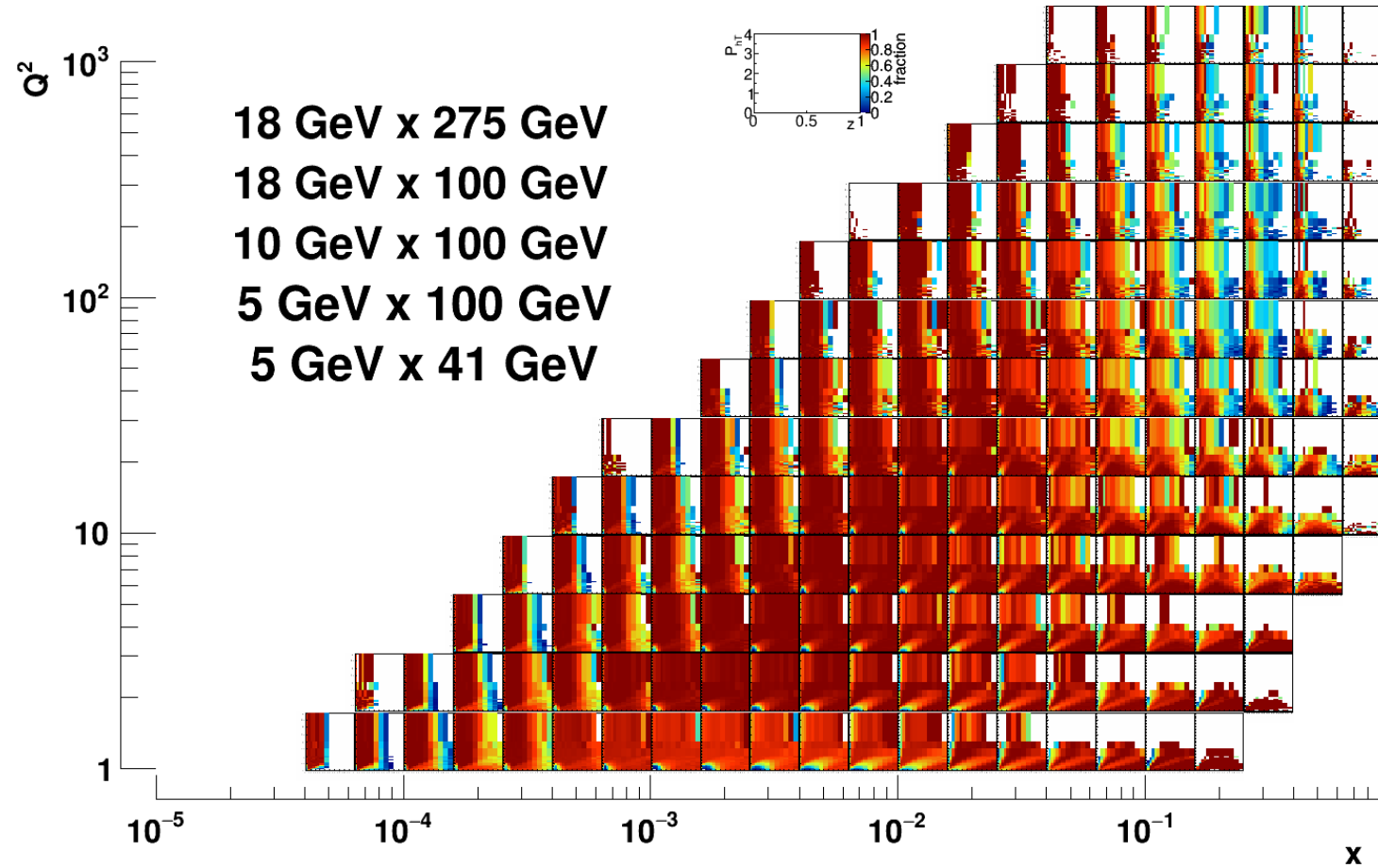
old



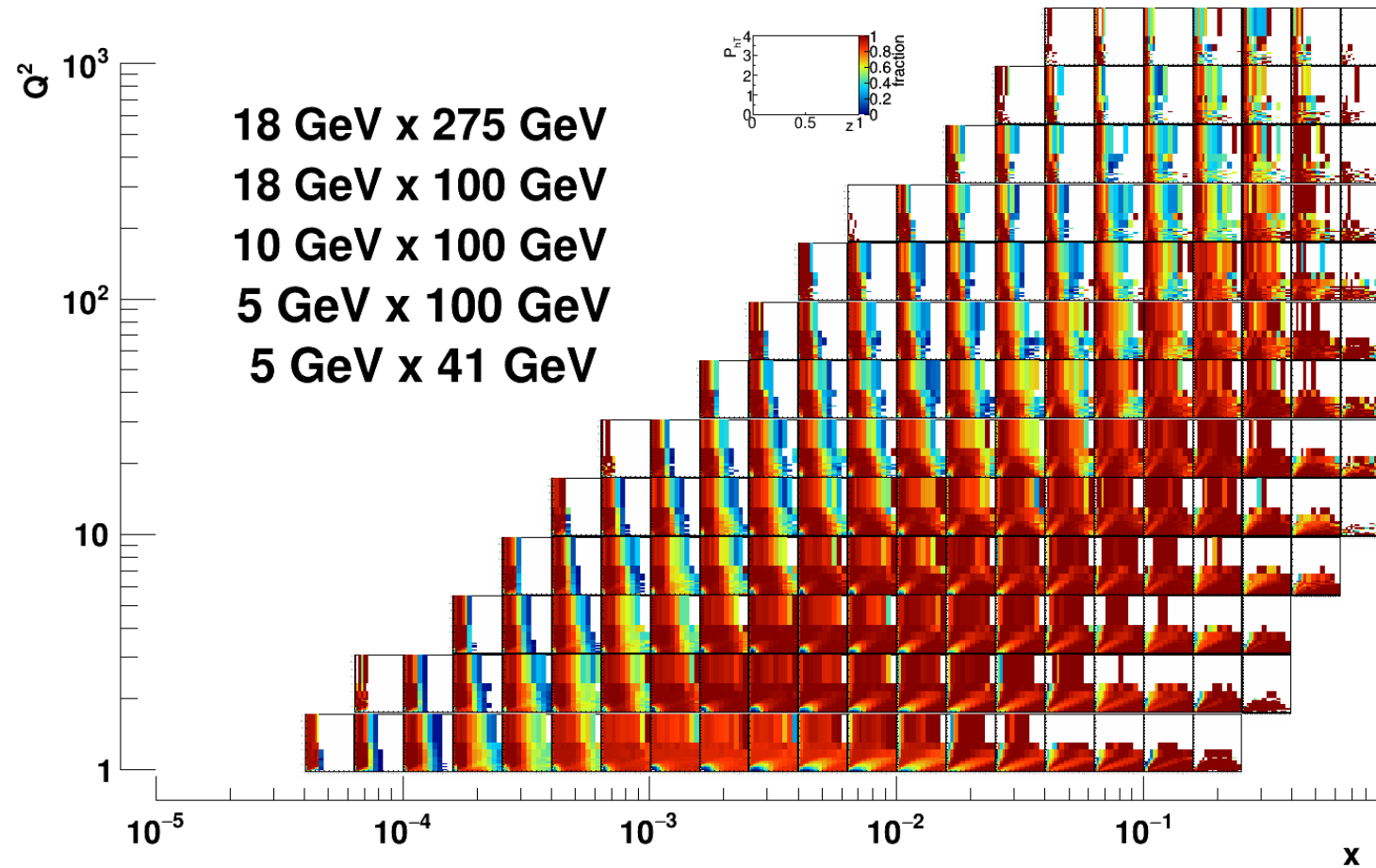
Matrix



SIDIS



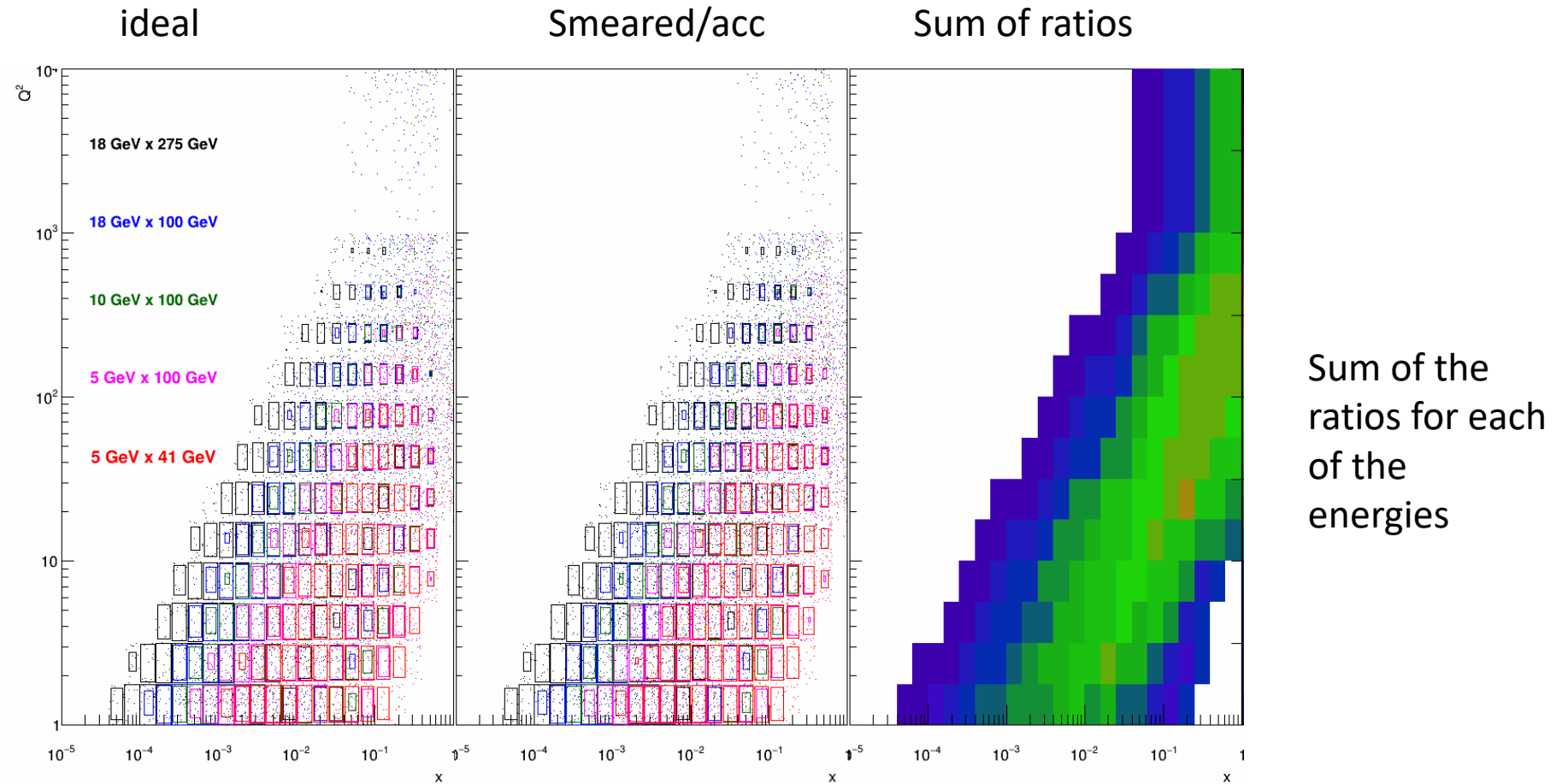
old



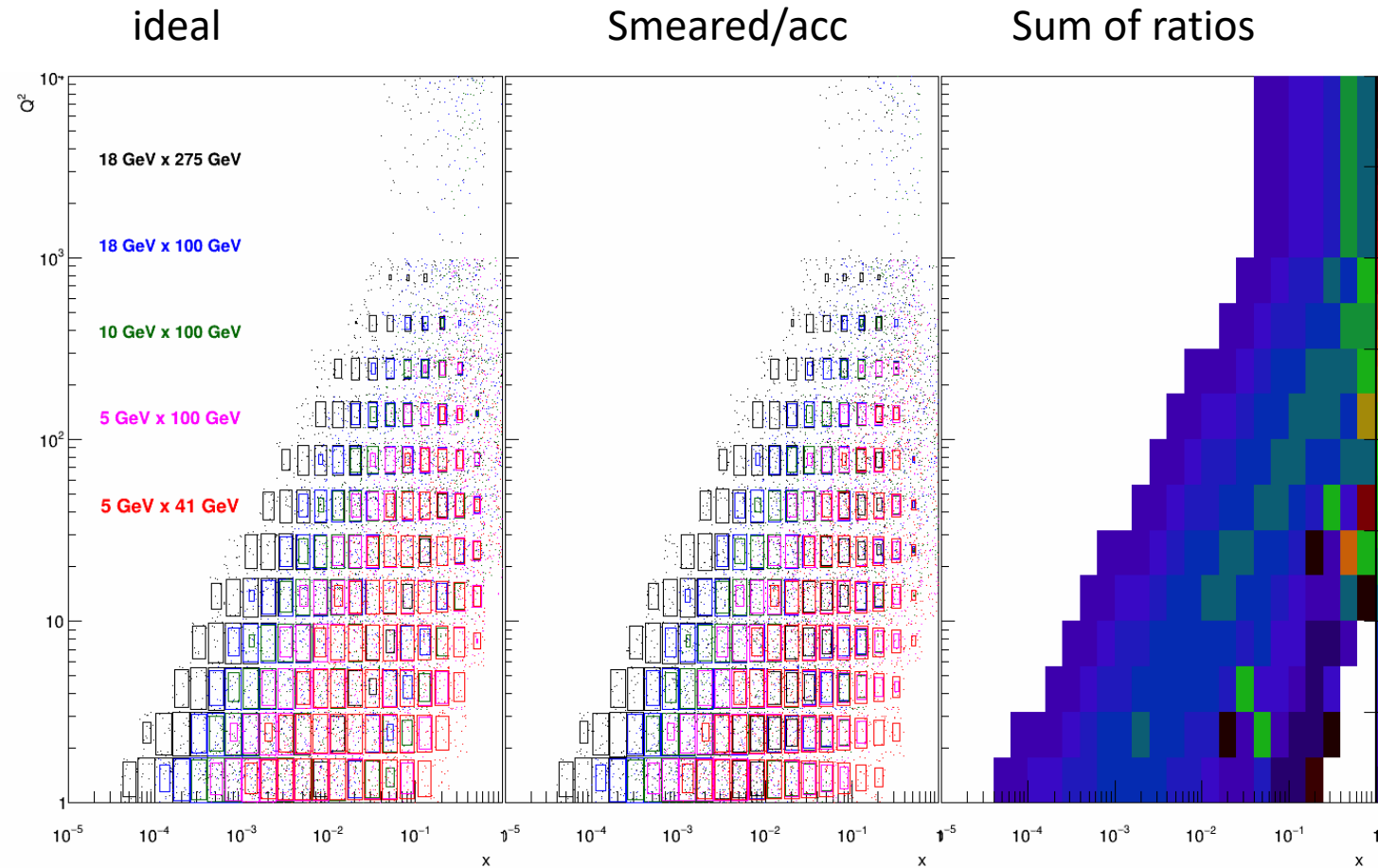
Summary

- SIDIS preferences help at intermediate x , z and Q^2 ranges for all transverse momenta over official detector matrix
- Old setting particularly helpful for larger z , x and Q^2 , but 50 GeV PID acceptance already at rapidities from 2 very unlikely
- Conclusion:
 - higher P_t ranges help – forward ($\eta > 1$) may be even more important as harder to cover by different energies
 - No need to cover more than 8 GeV at central rapidities

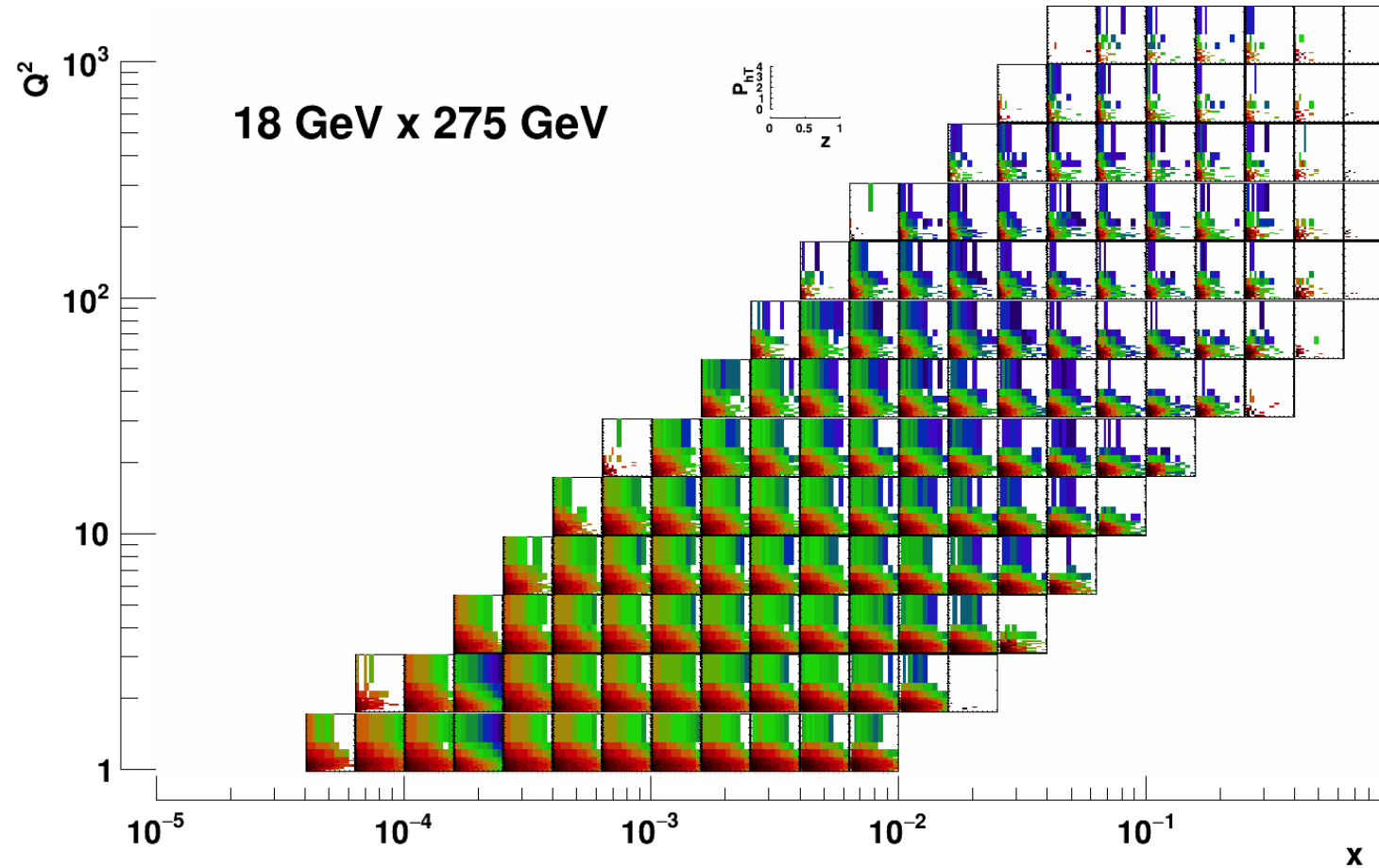
Kinematical acceptances (perfect to 3.5, PID ranges)



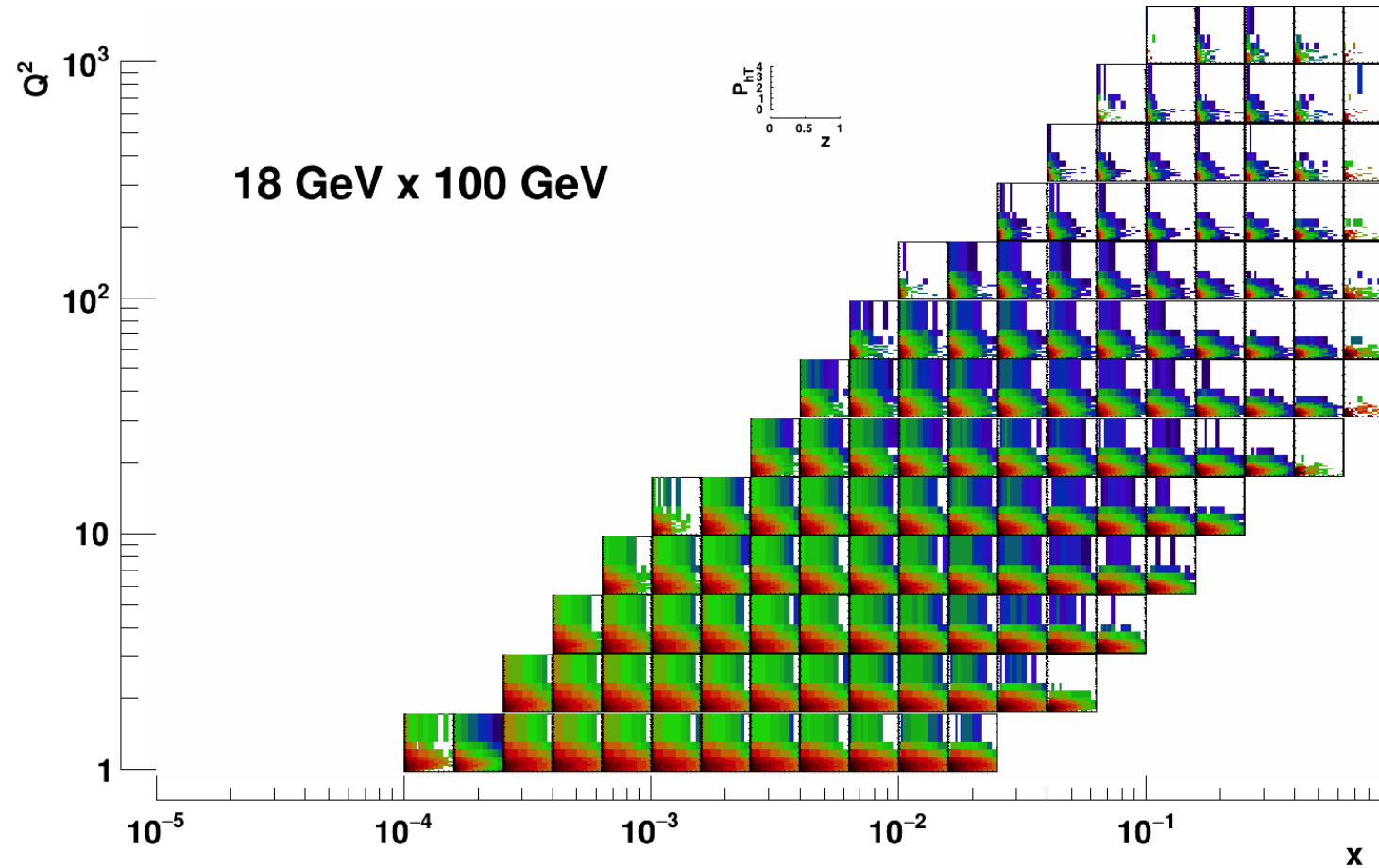
Kinematical acceptance (Handbook)



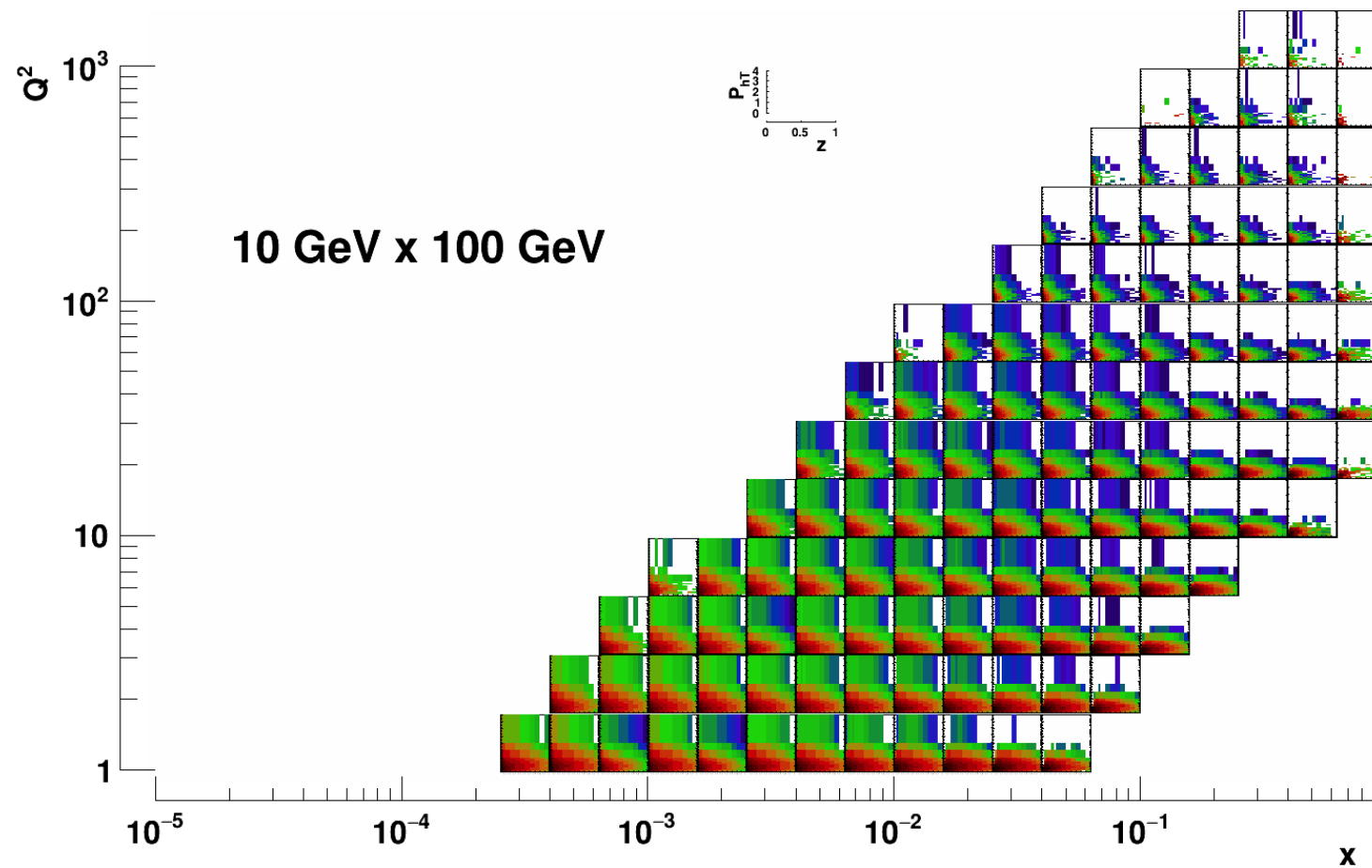
4D distributions



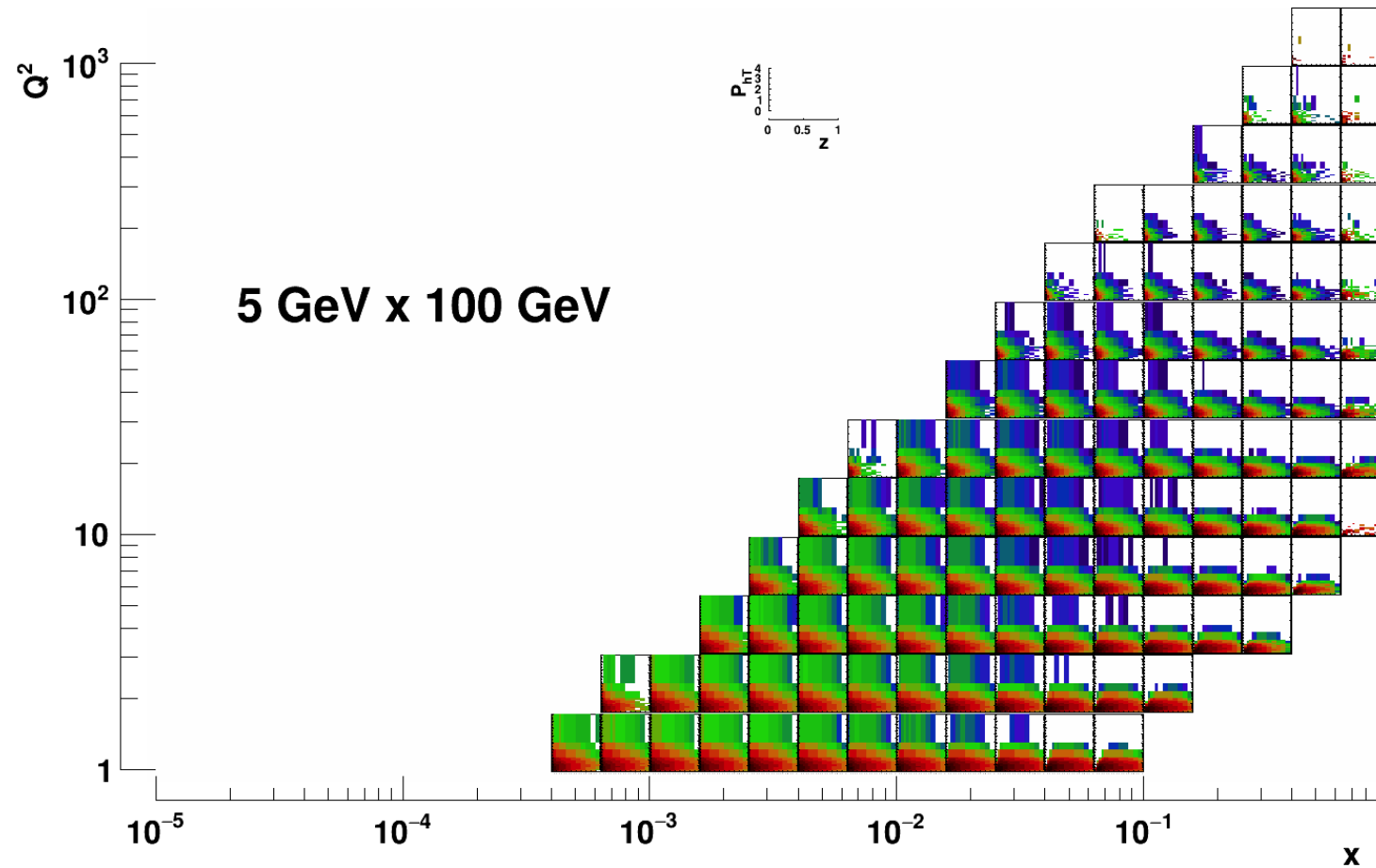
4D distributions



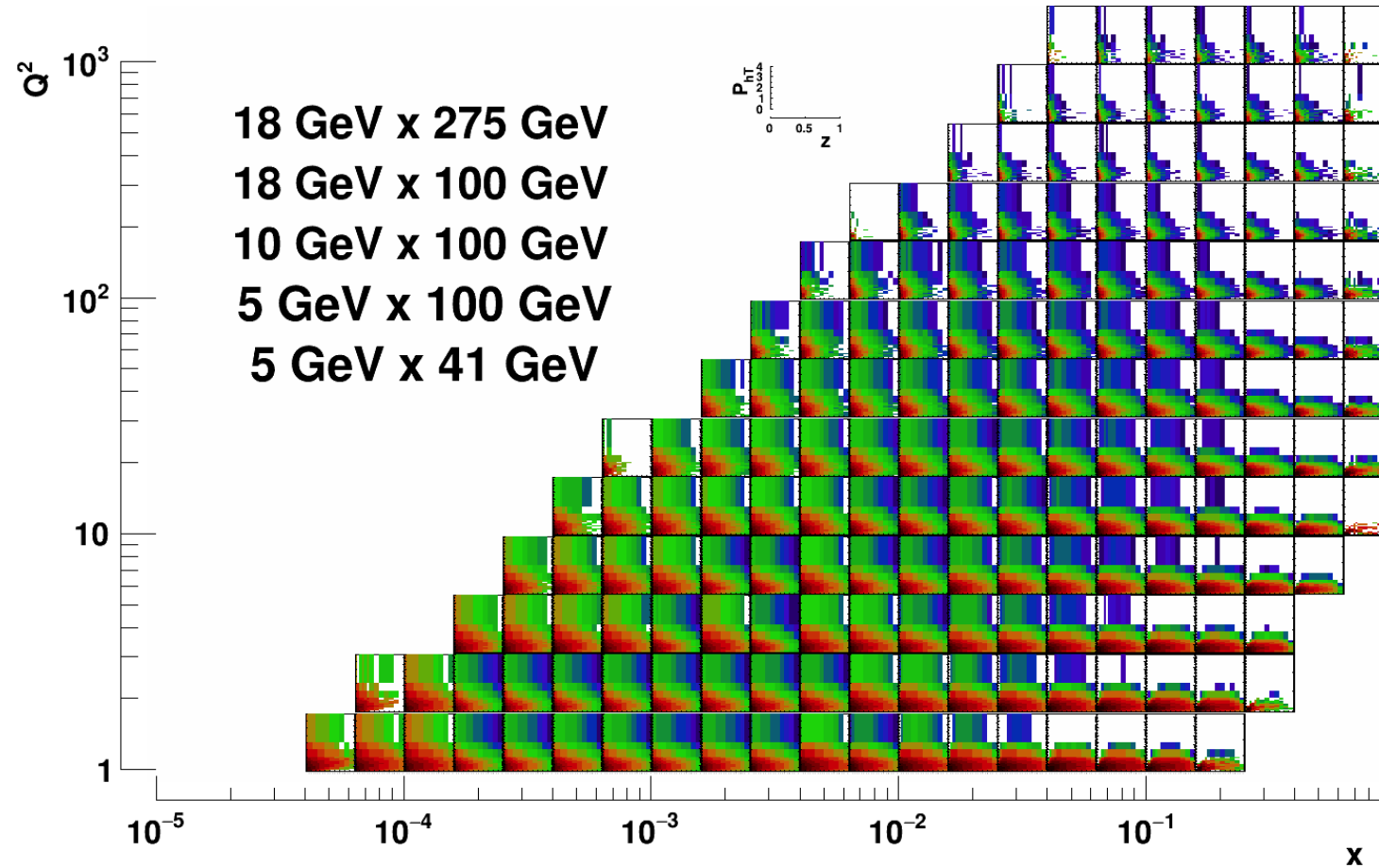
4D distributions



4D distributions



4D distributions



4D distributions (K^-)

