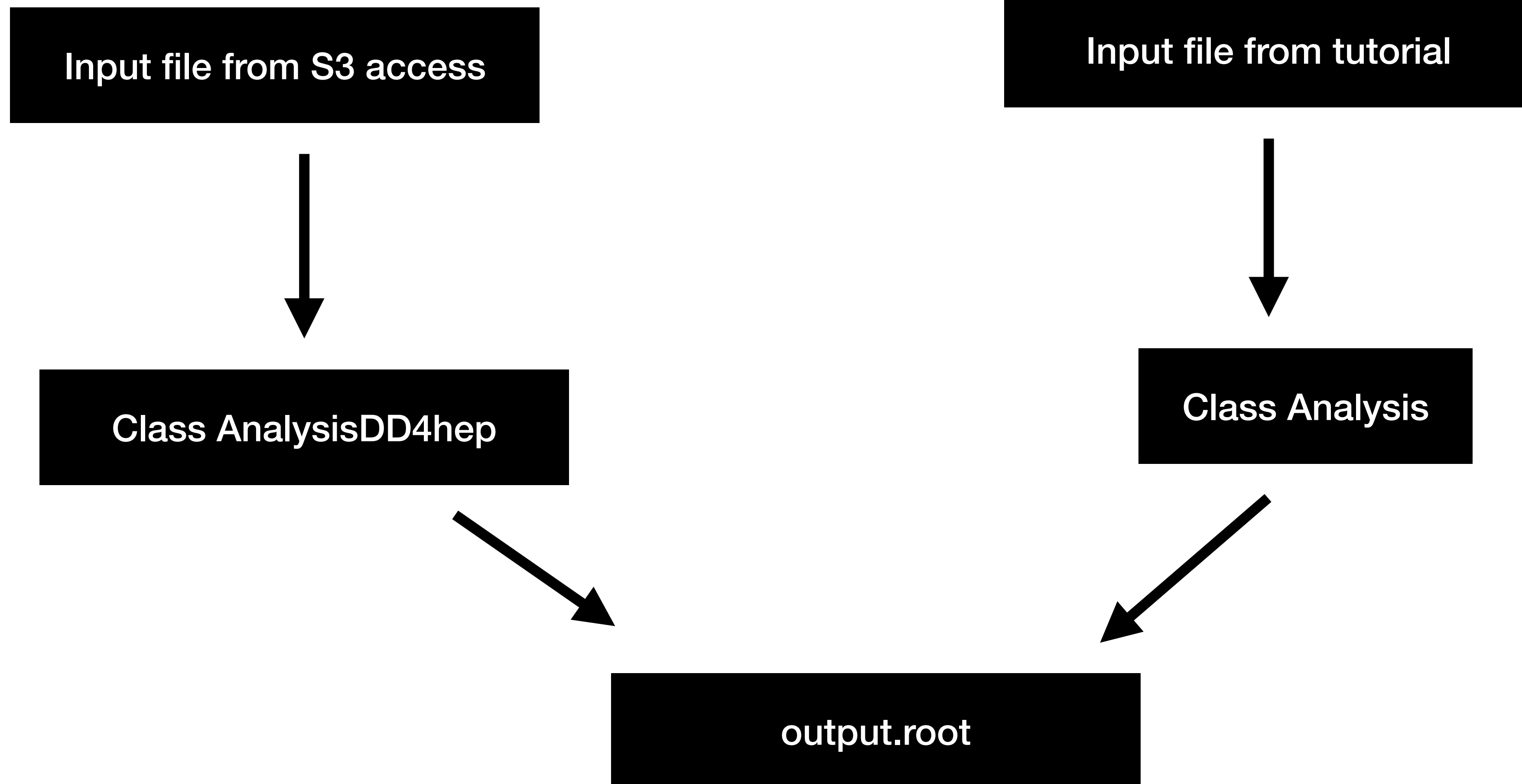


# Testing Resolution in Full simulation

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Vasistha Kochar, IIT Bombay  
Sadhana Dash, IIT Bombay

# Analysis Framework

<https://github.com/c-dilks/largex-eic>

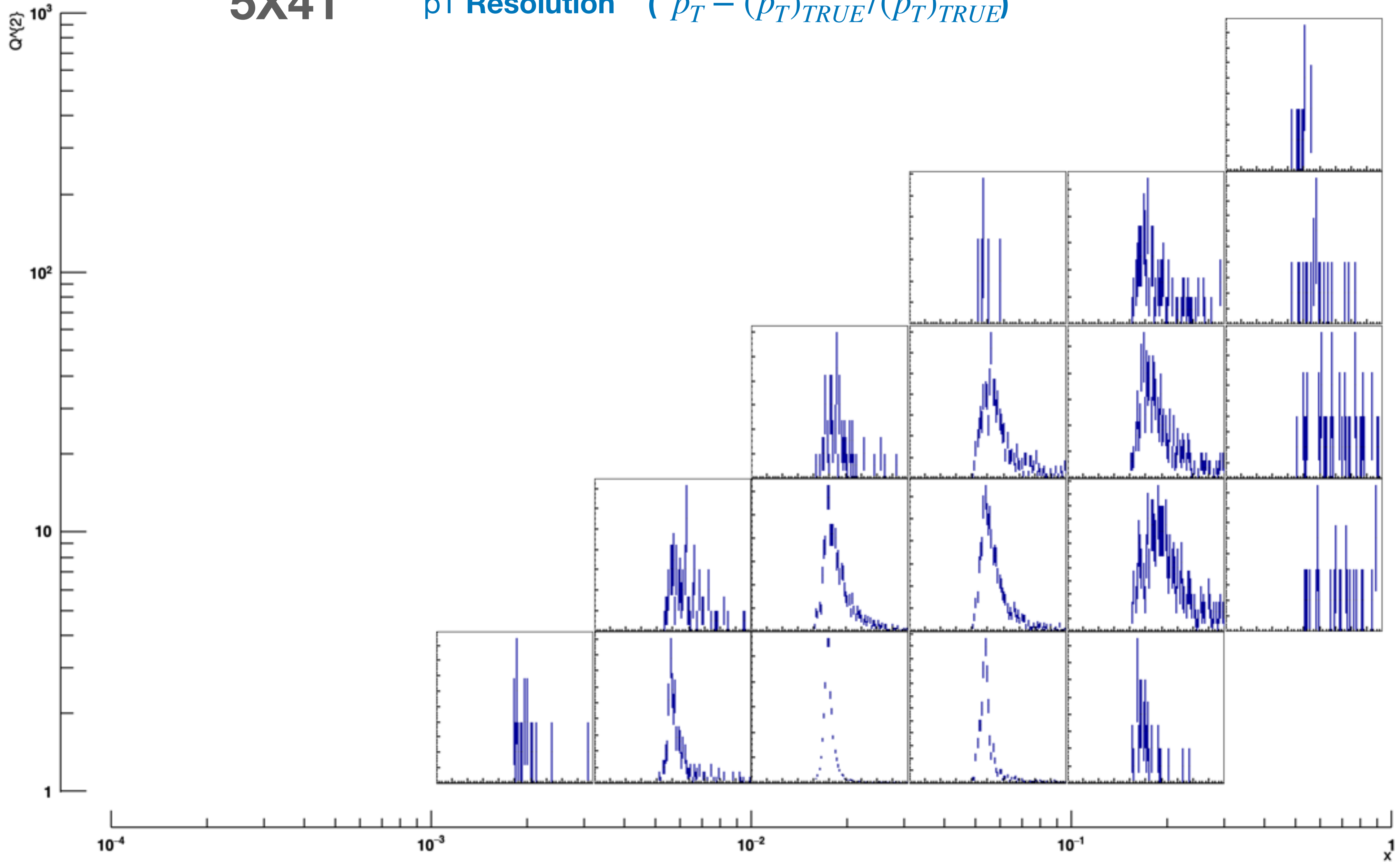


**Full simulation**  
**Qmin=1, all inclusive**

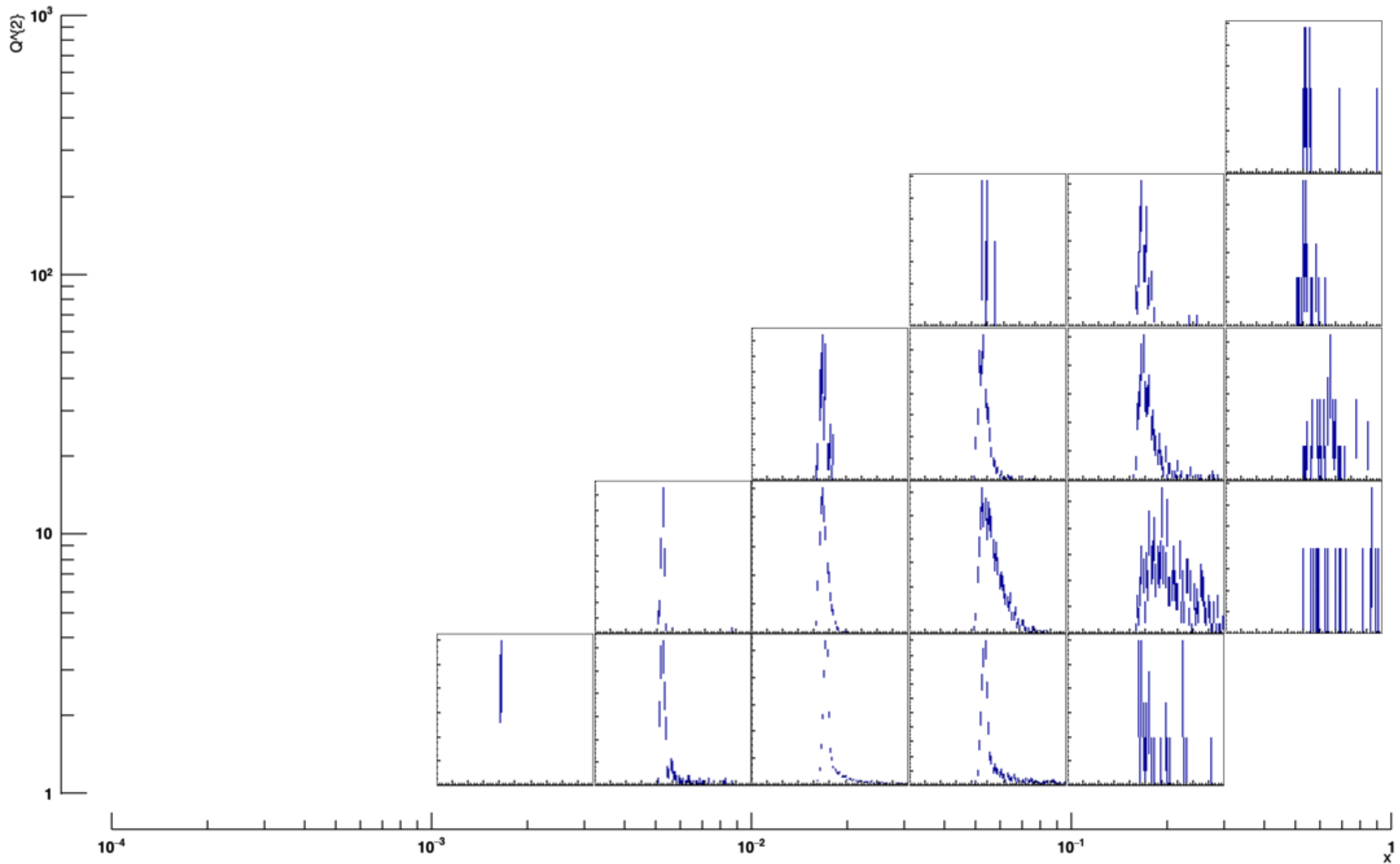
# 5X41

pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$

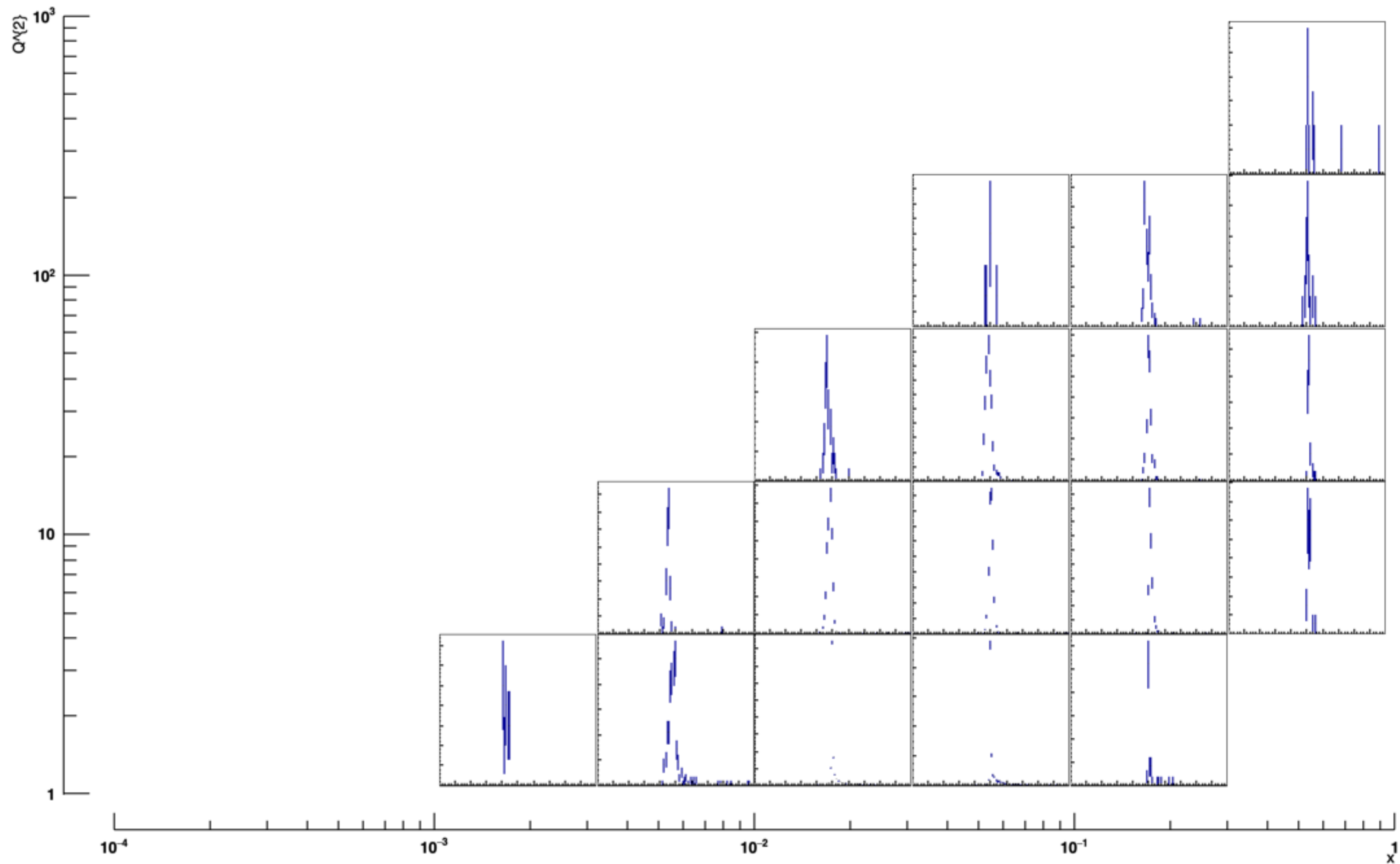
Q\_min = 1, all inclusive



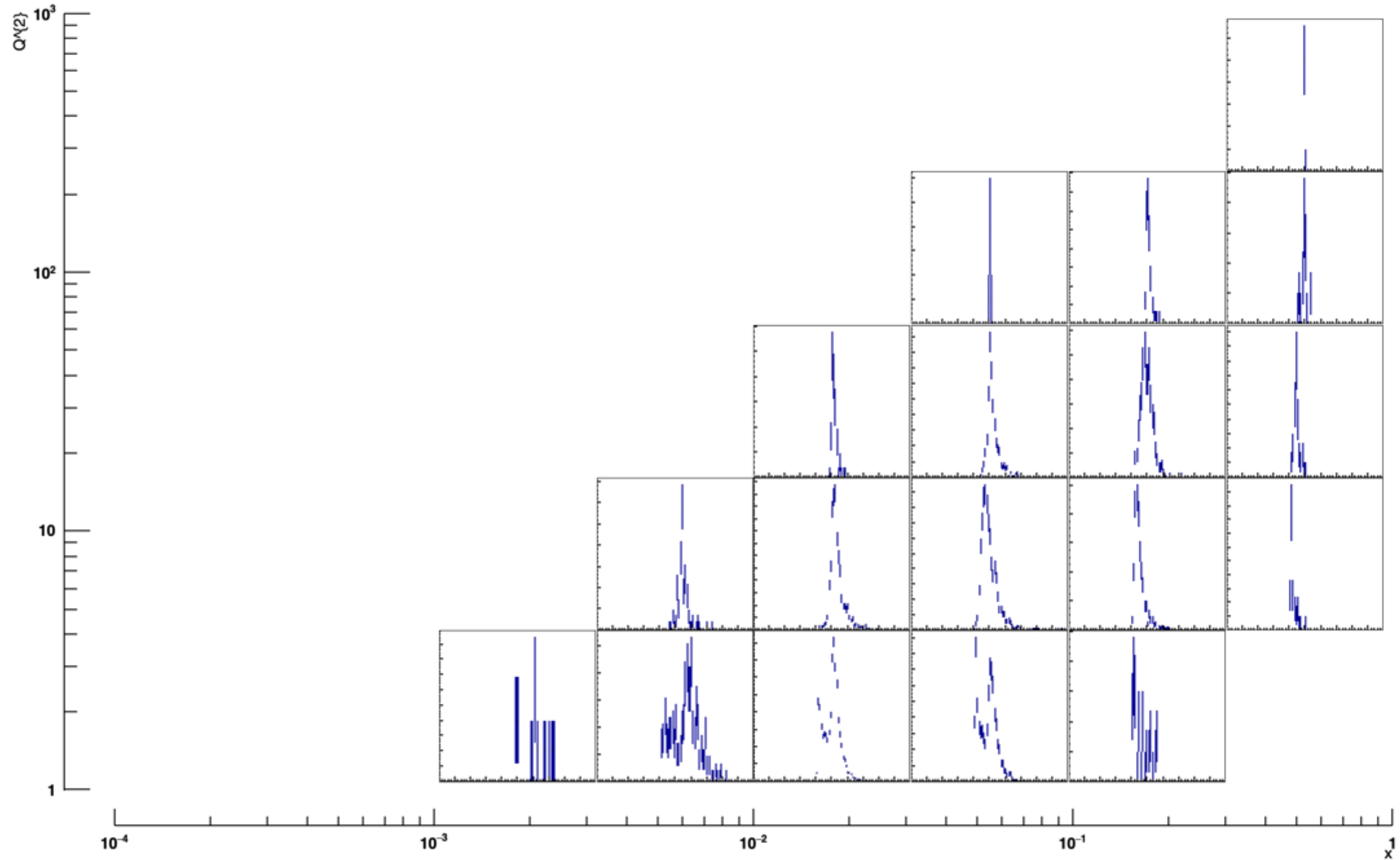
# x-Resolution( $x - x_{TRUE}/x_{TRUE}$ )



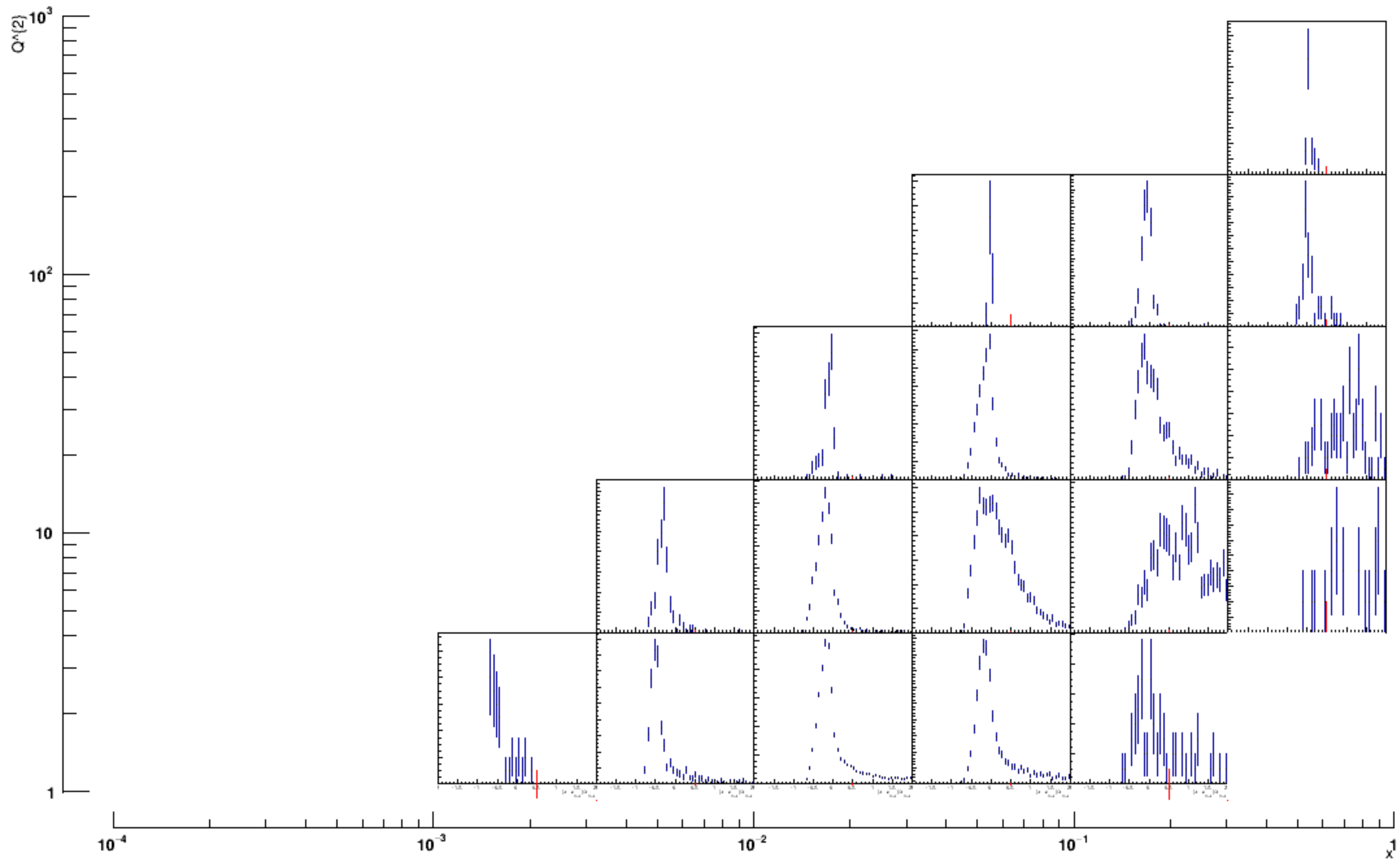
# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )



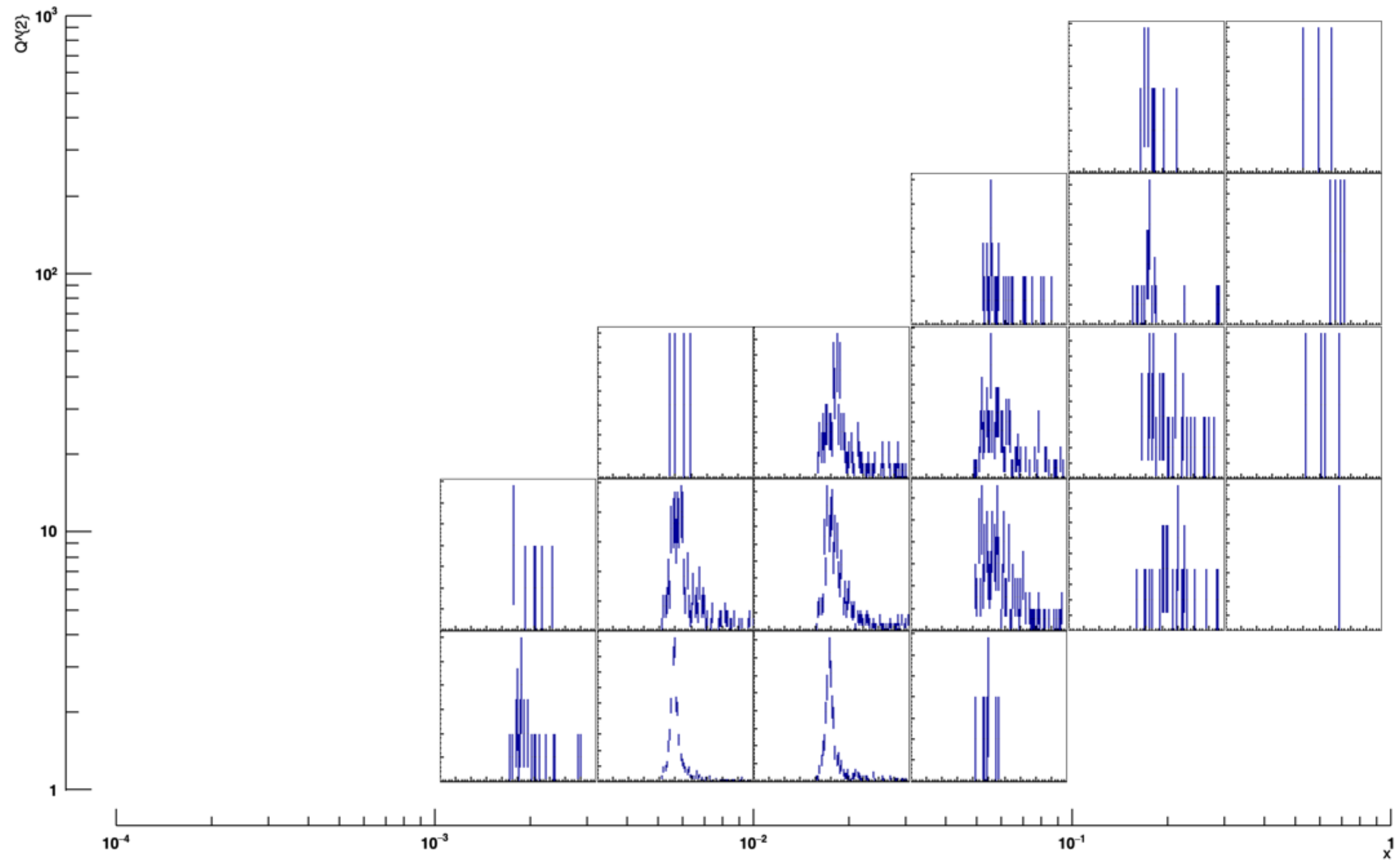
# Z-Resolution( $z - z_{TRUE}/z_{TRUE}$ )





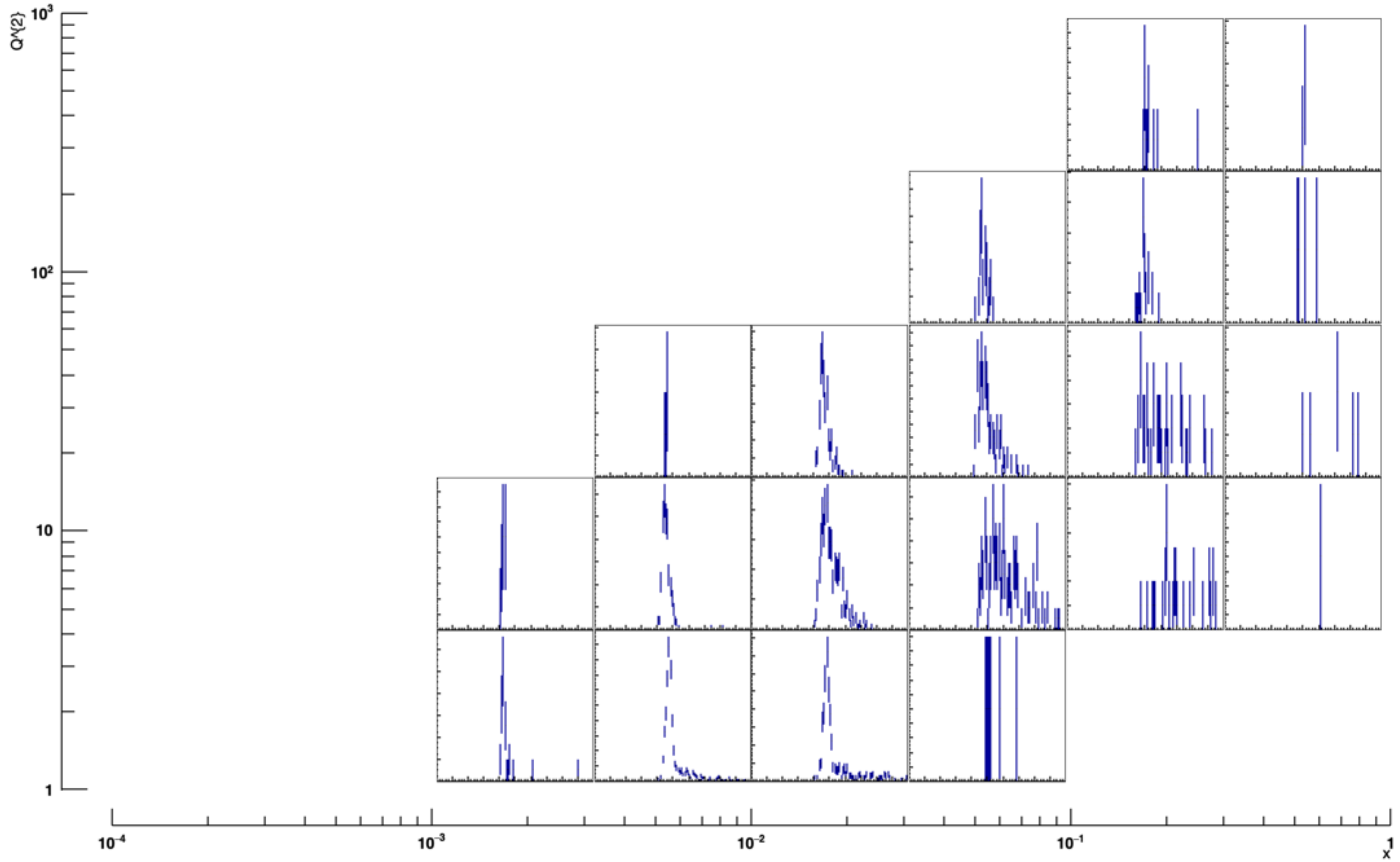
# 5X100

## pT Resolution $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$

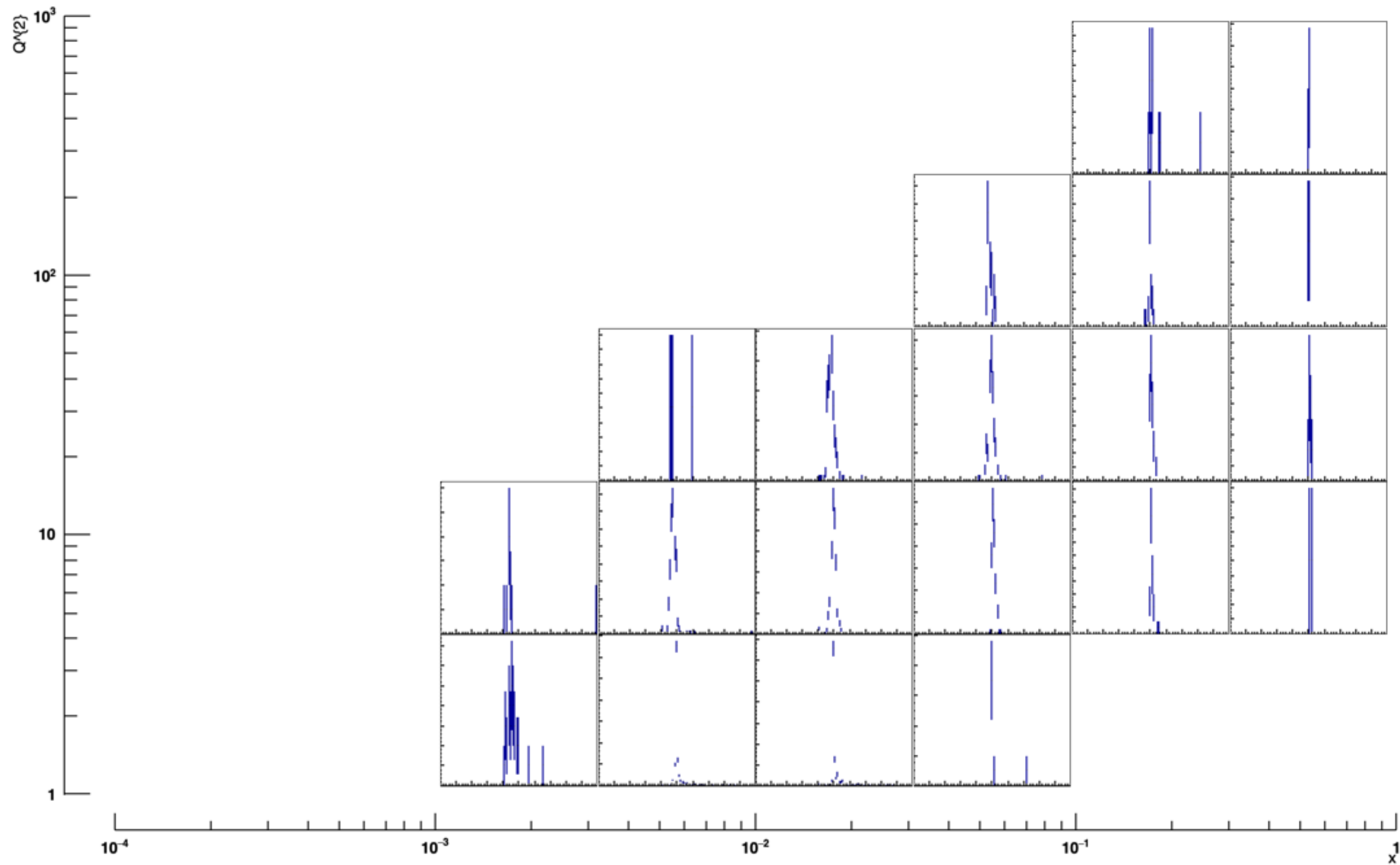


5X100

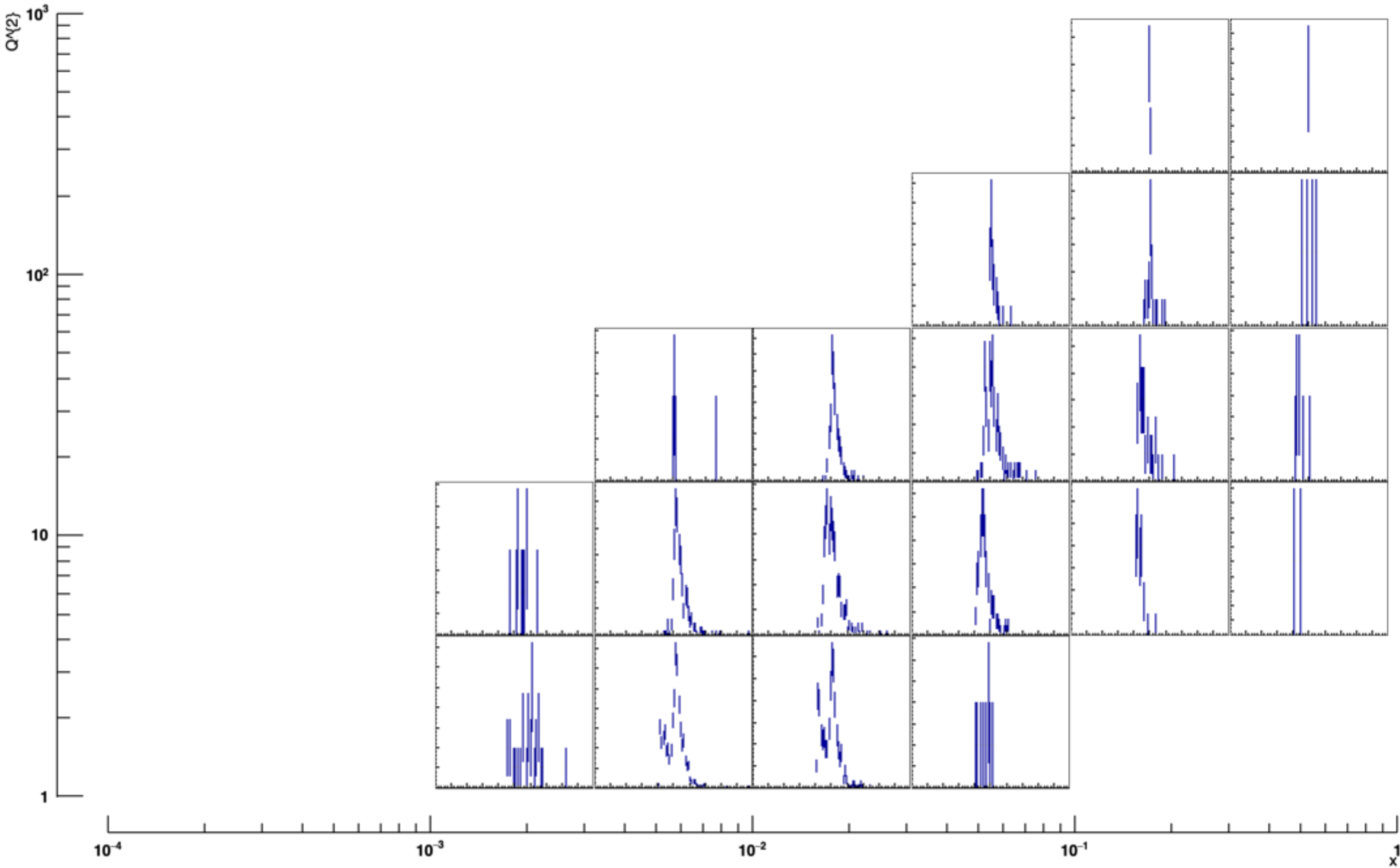
x-Resolution(  $x - x_{TRUE}/x_{TRUE}$  )



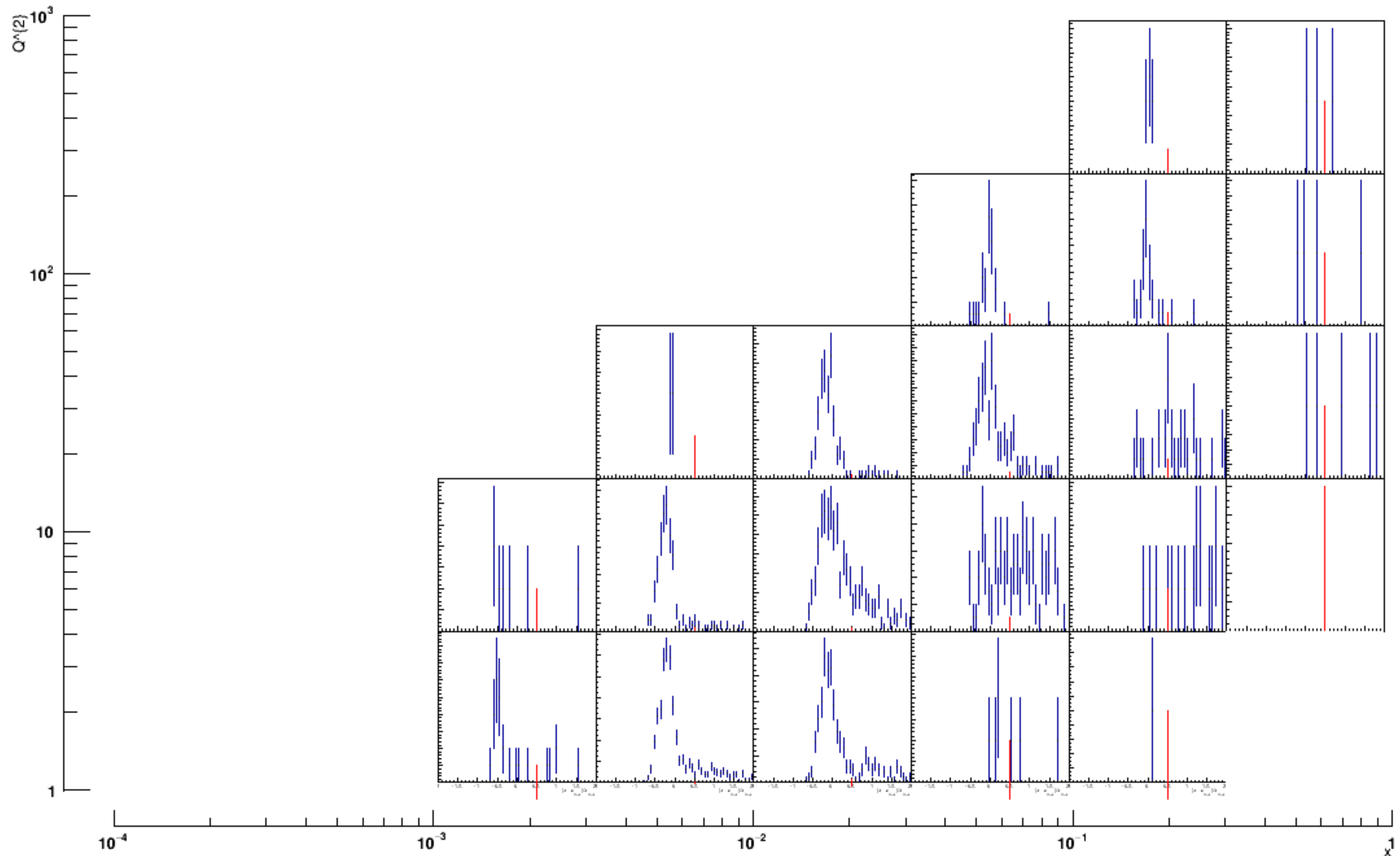
# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )

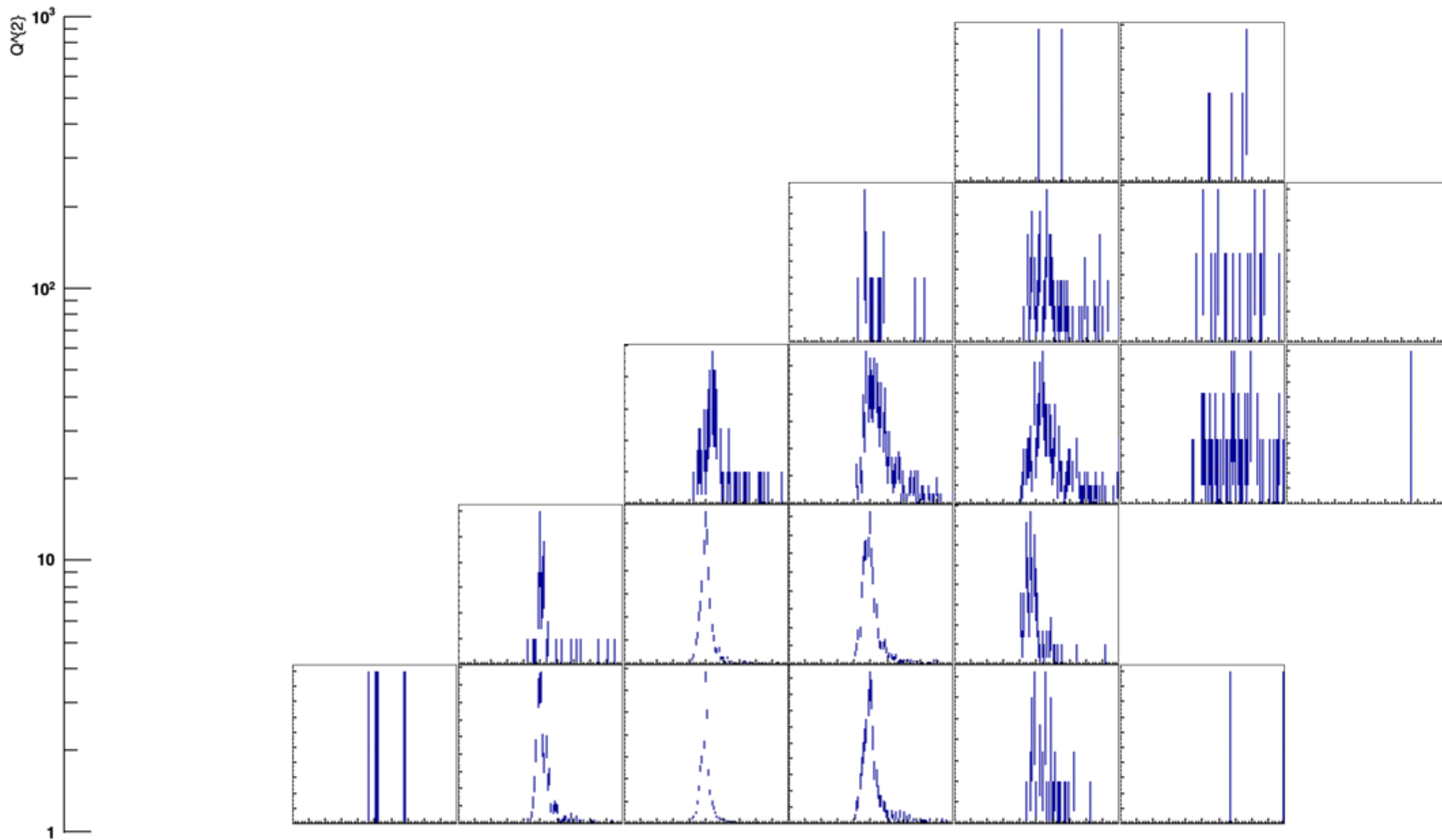


# Z-Resolution( $z - z_{TRUE} / z_{TRUE}$ )

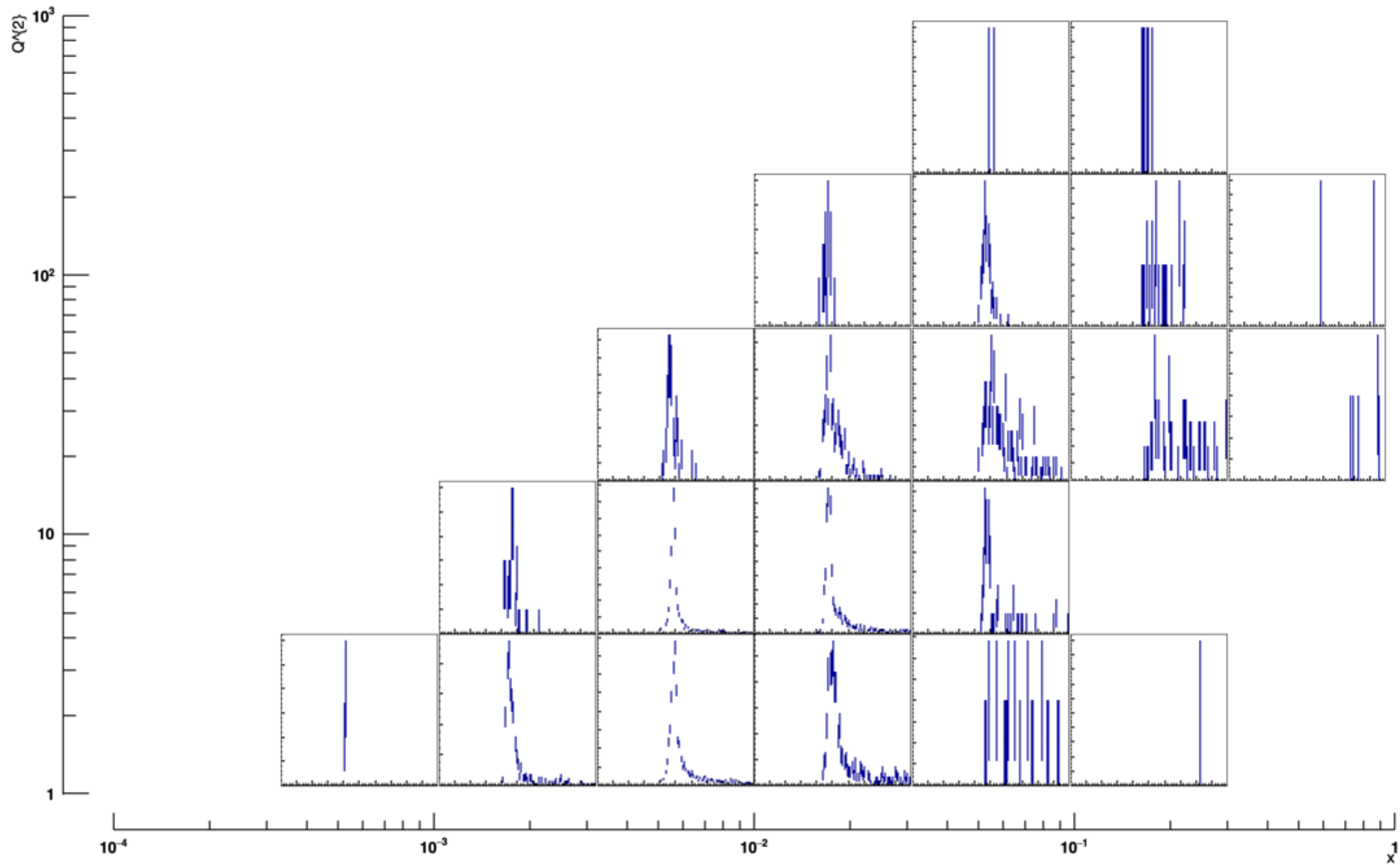


# 10X100

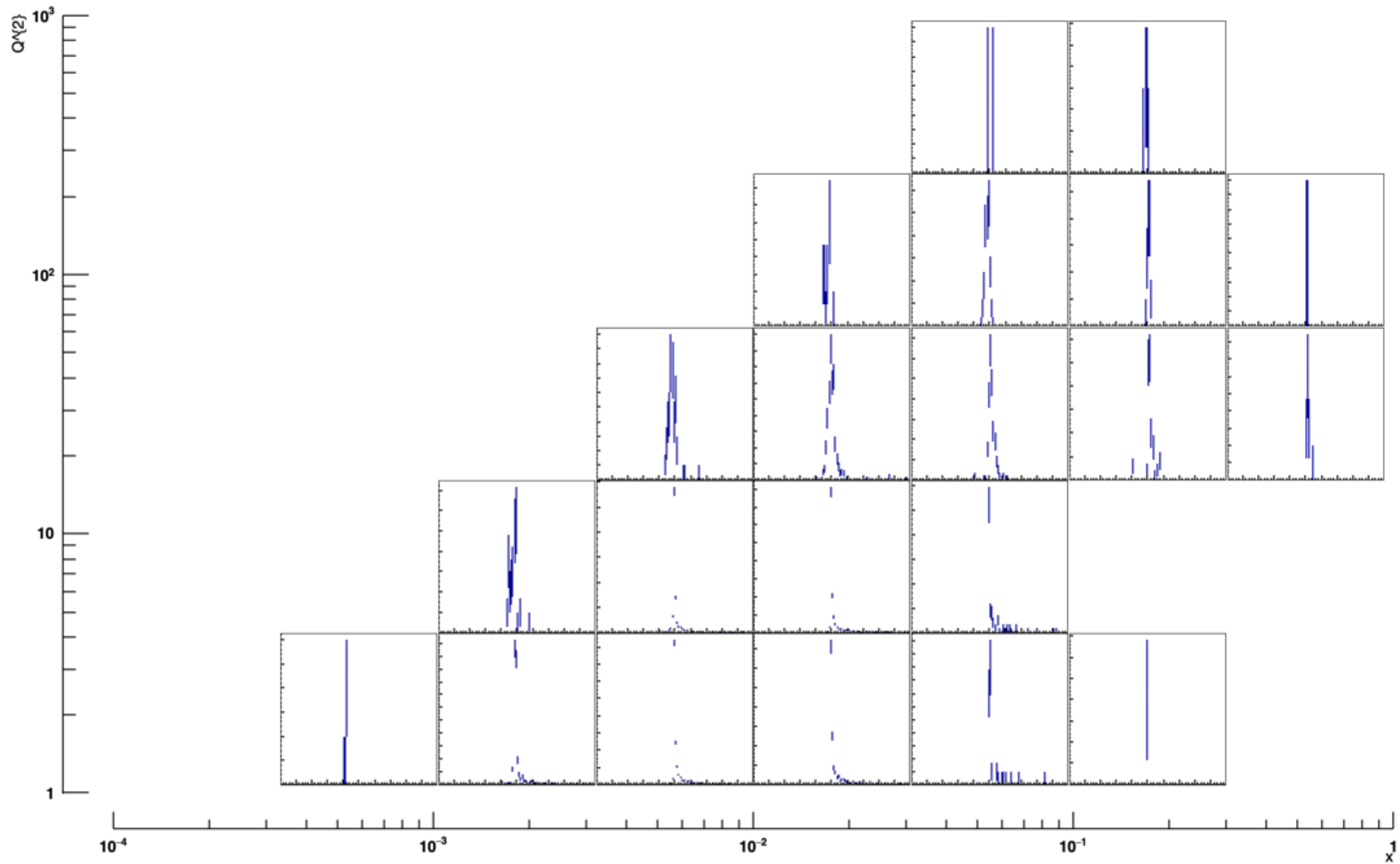
pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$



# 10X100 **x-Resolution**( $x - x_{TRUE}/x_{TRUE}$ )

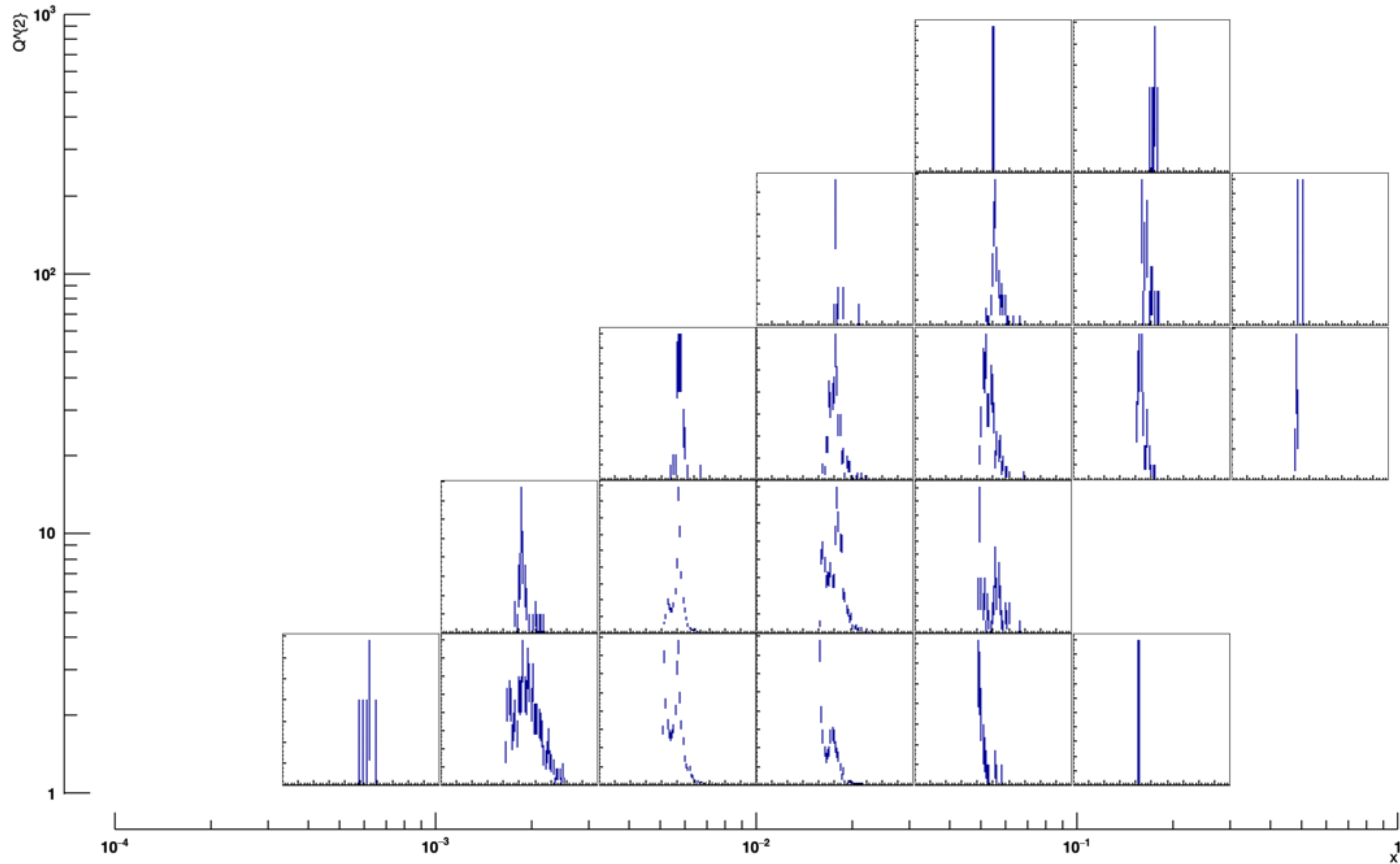


# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )

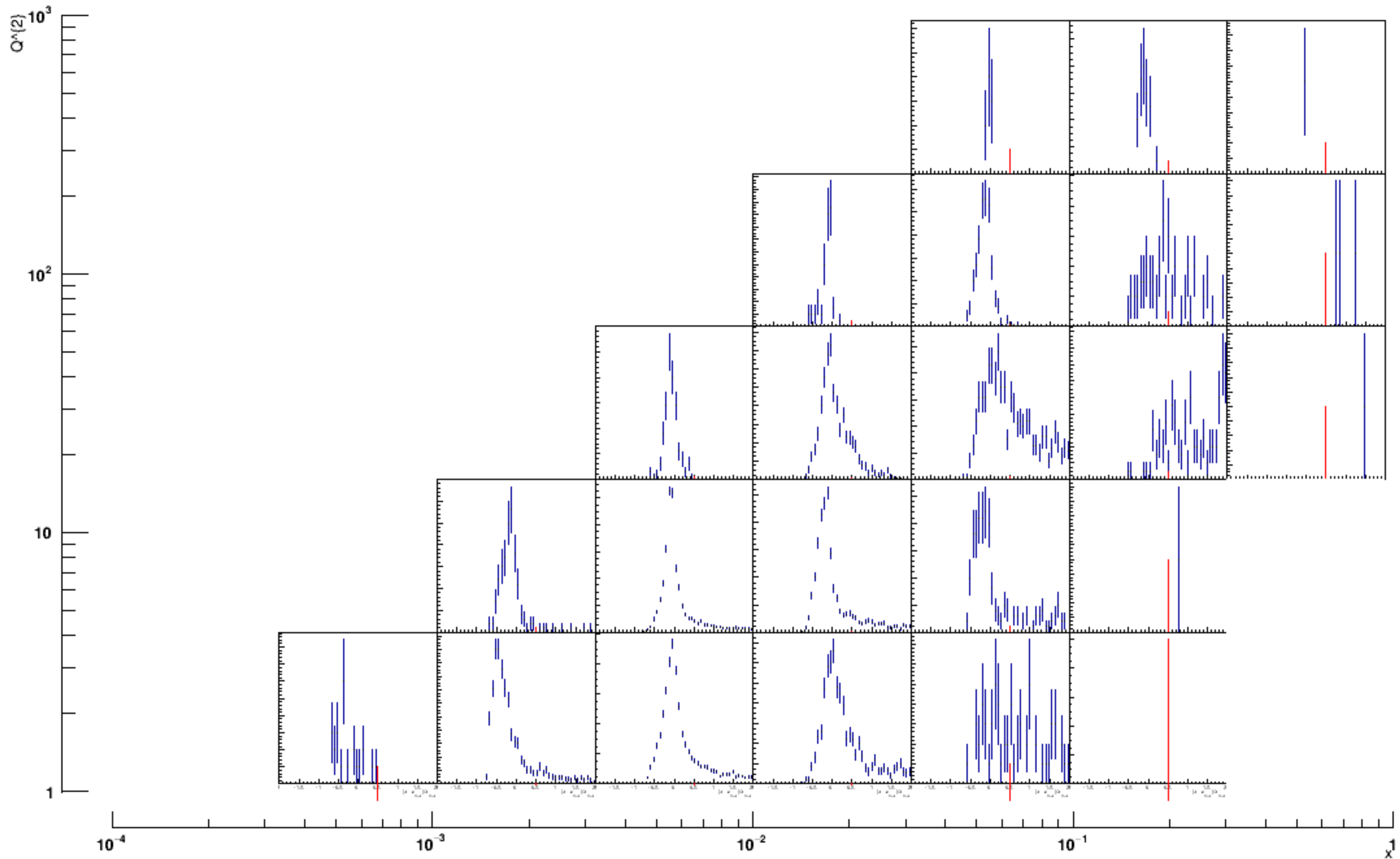




# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )

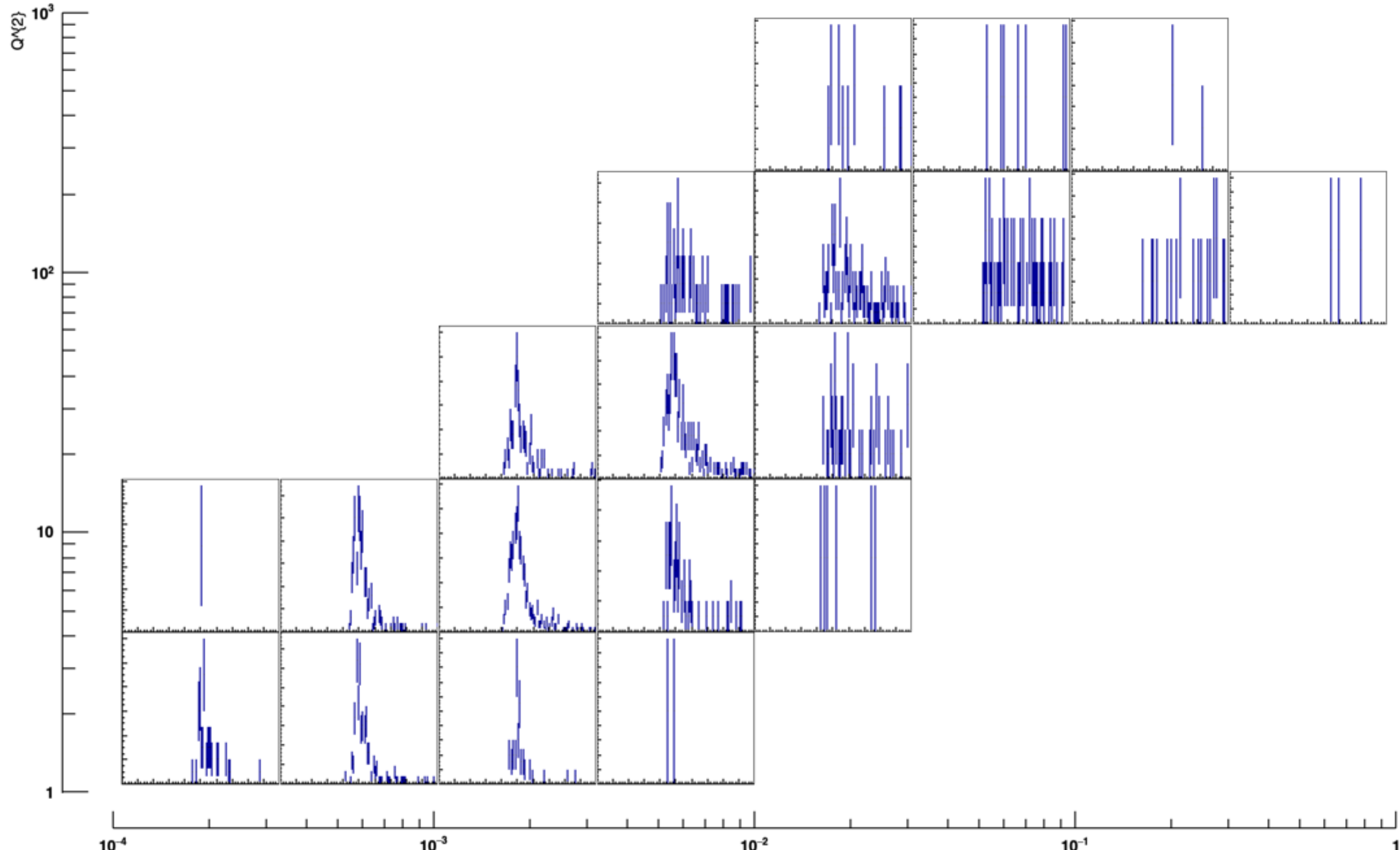


# Z-Resolution( $z - z_{TRUE} / z_{TRUE}$ )



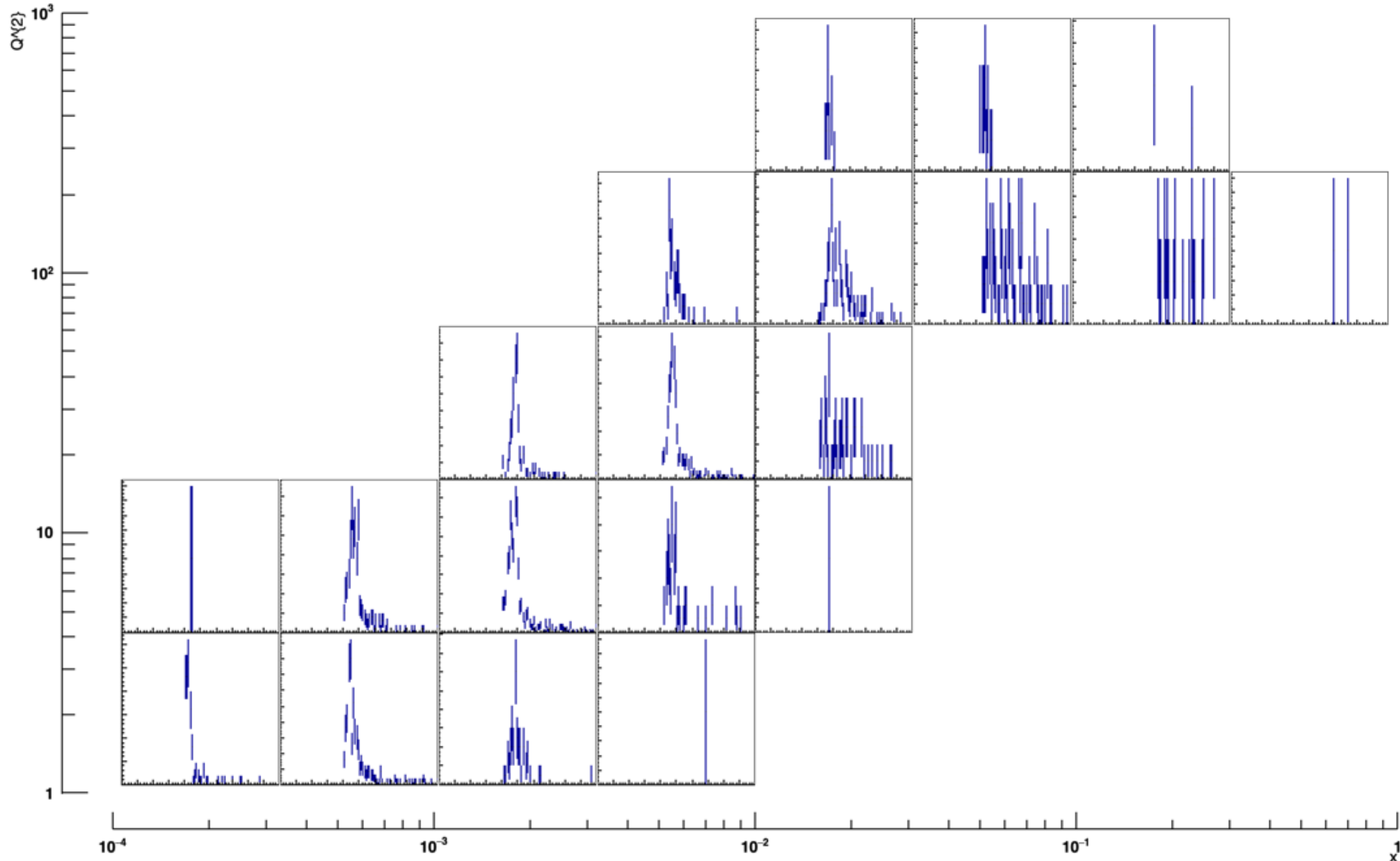
18X275

pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$

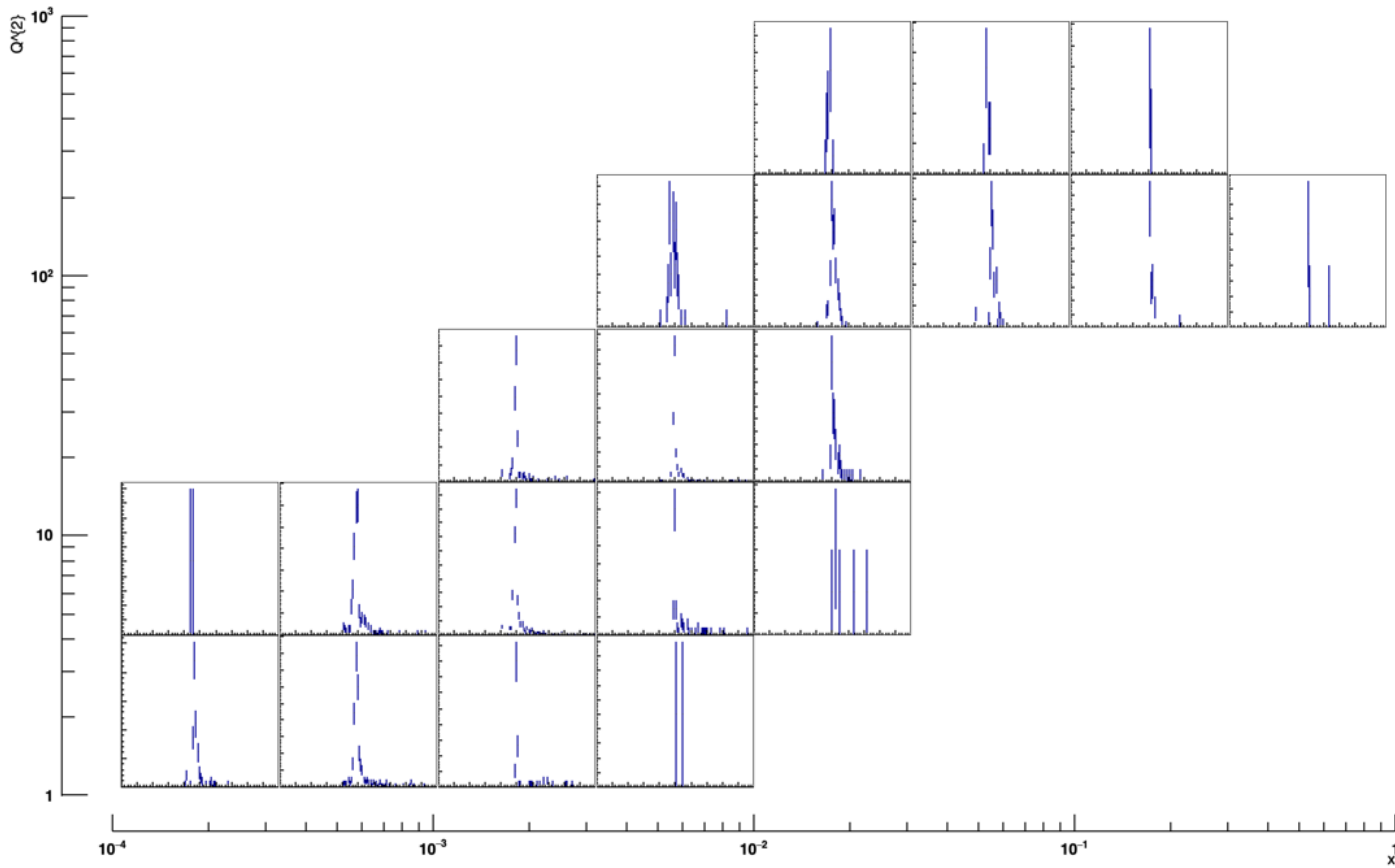


18X275

x-Resolution(  $x - x_{TRUE}/x_{TRUE}$  )

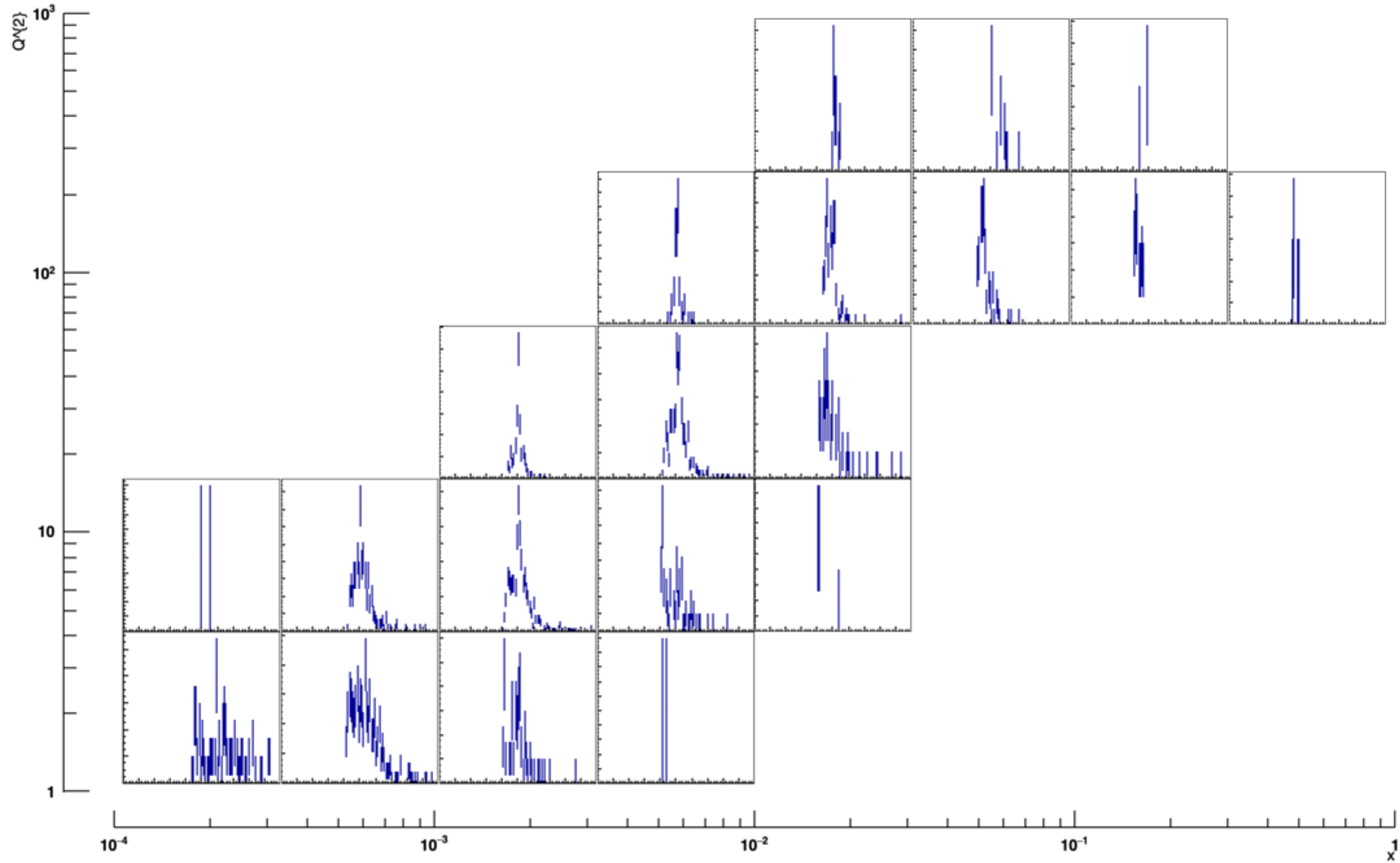


# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



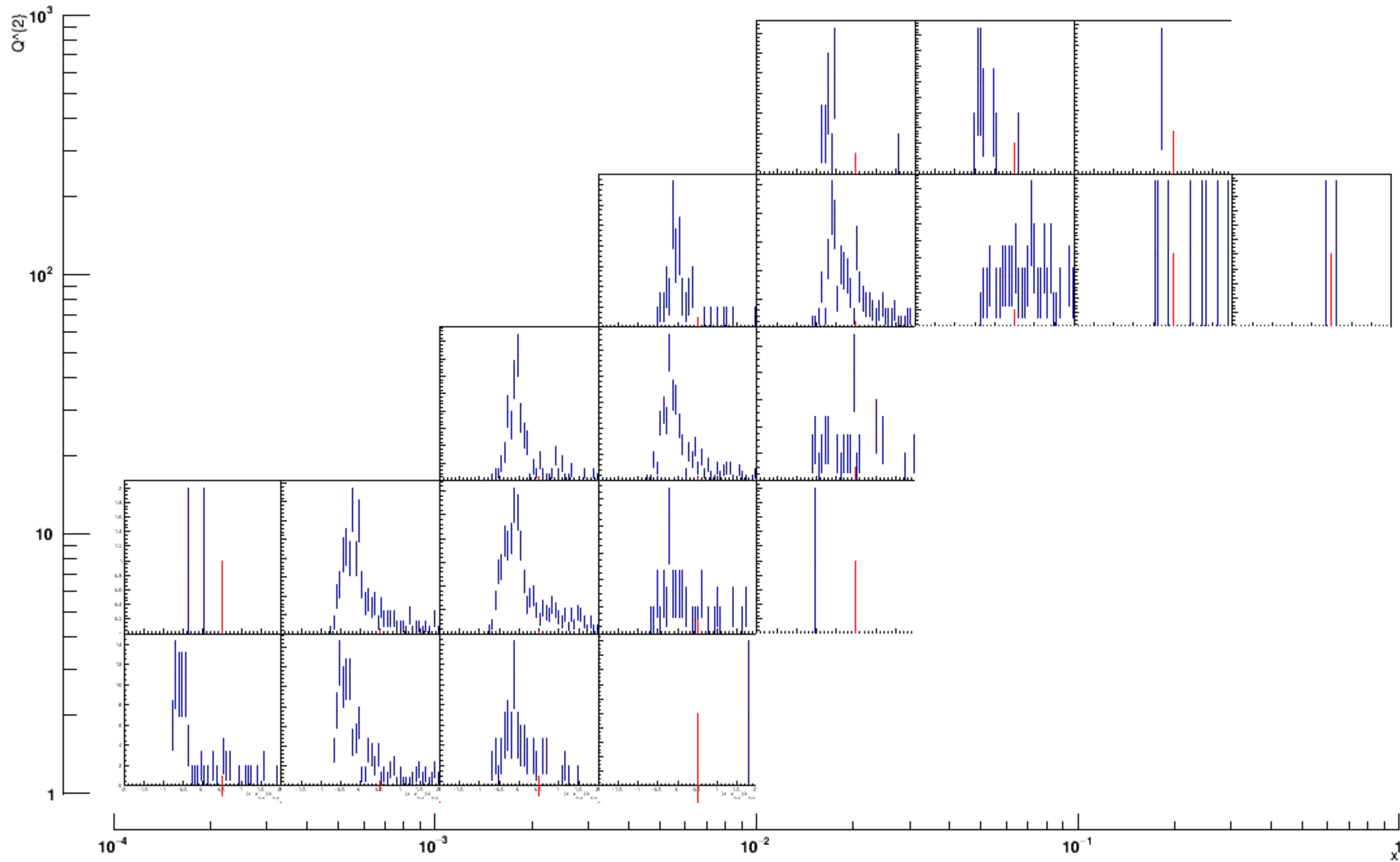
18X275

y-Resolution(  $y - y_{TRUE}/y_{TRUE}$  )



# 18X275

# Z-Resolution( $z - z_{TRUE} / z_{TRUE}$ )

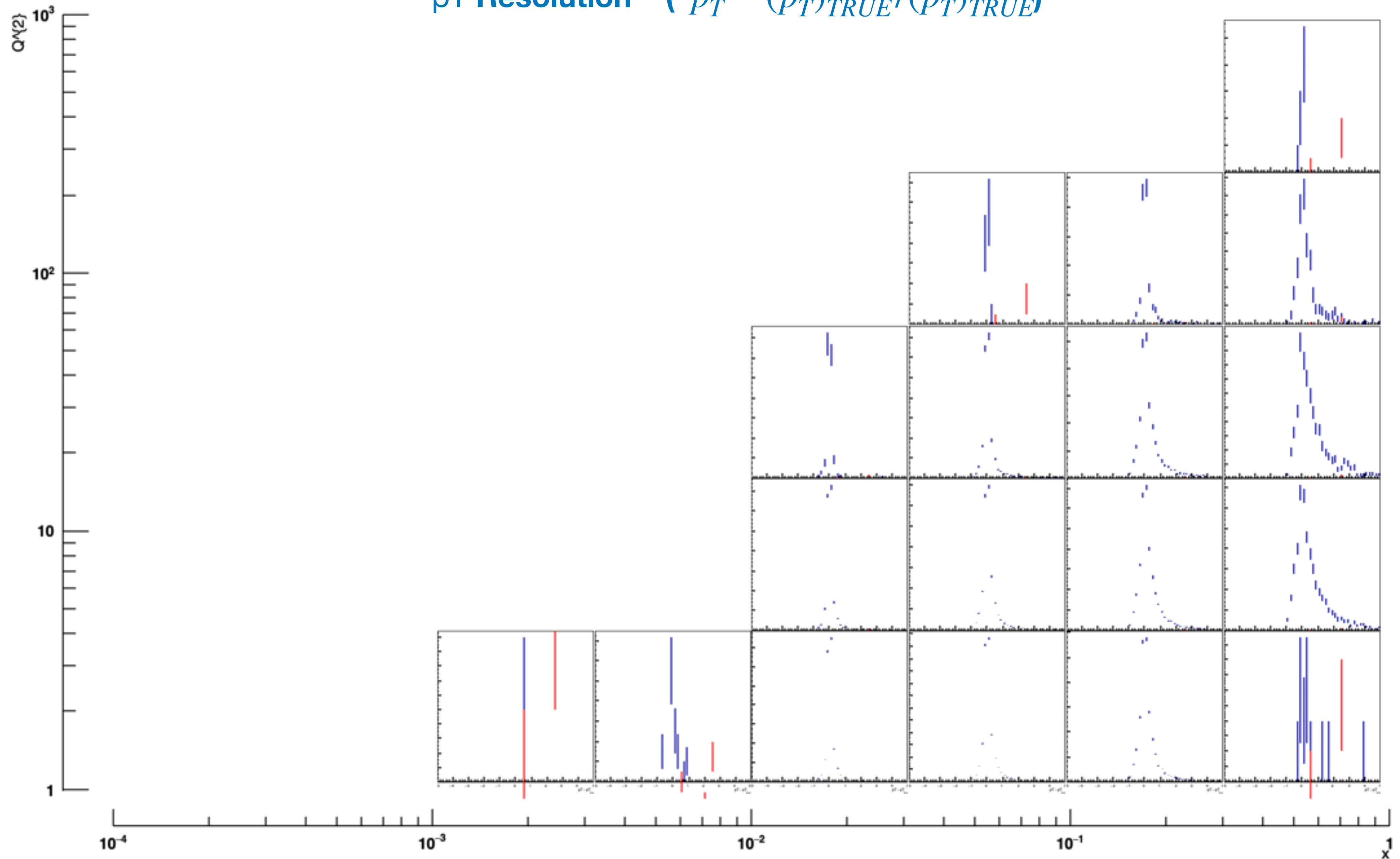


**Fast Simulation**  
**Qmin=1, all inclusive**

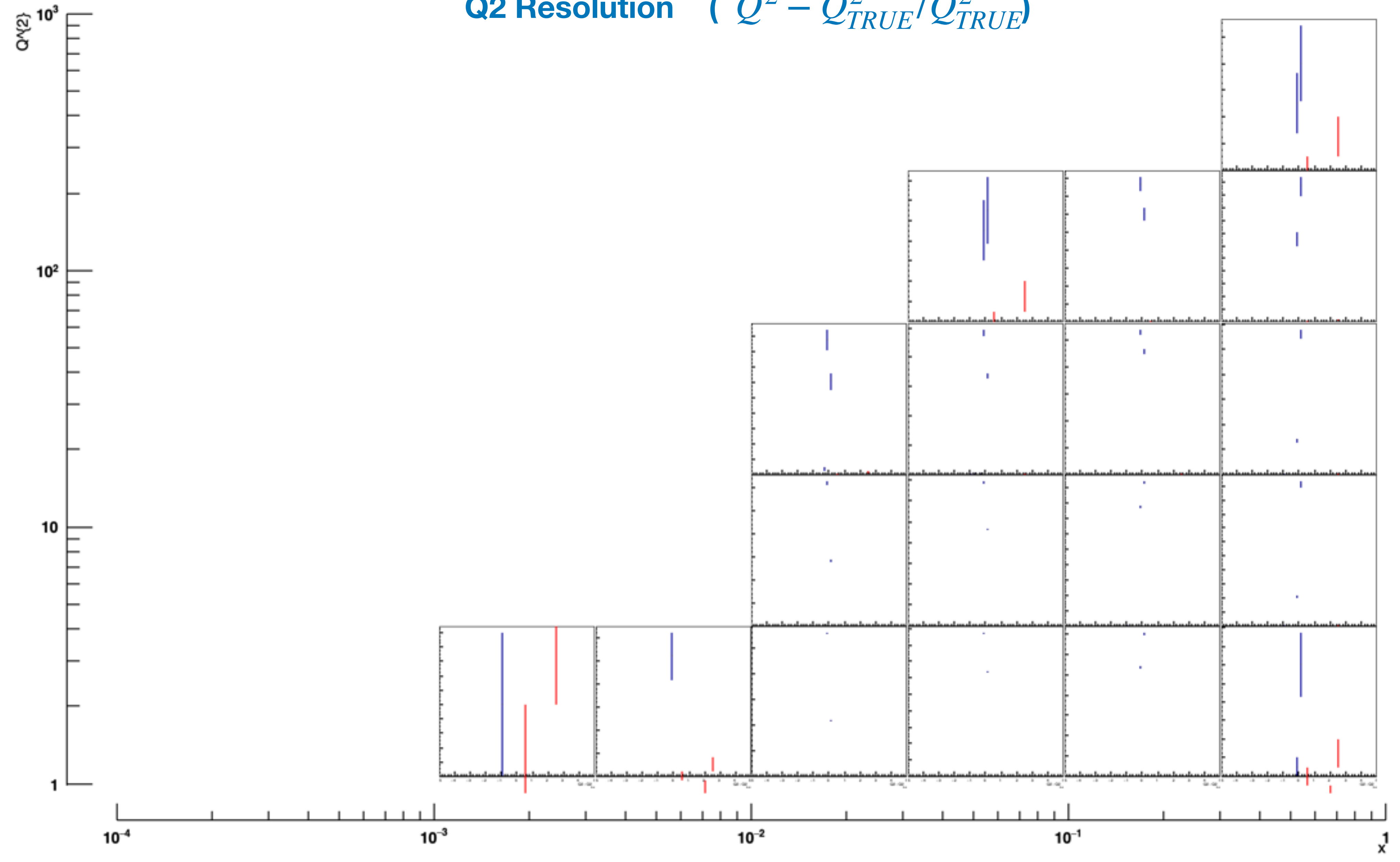


# 5X41

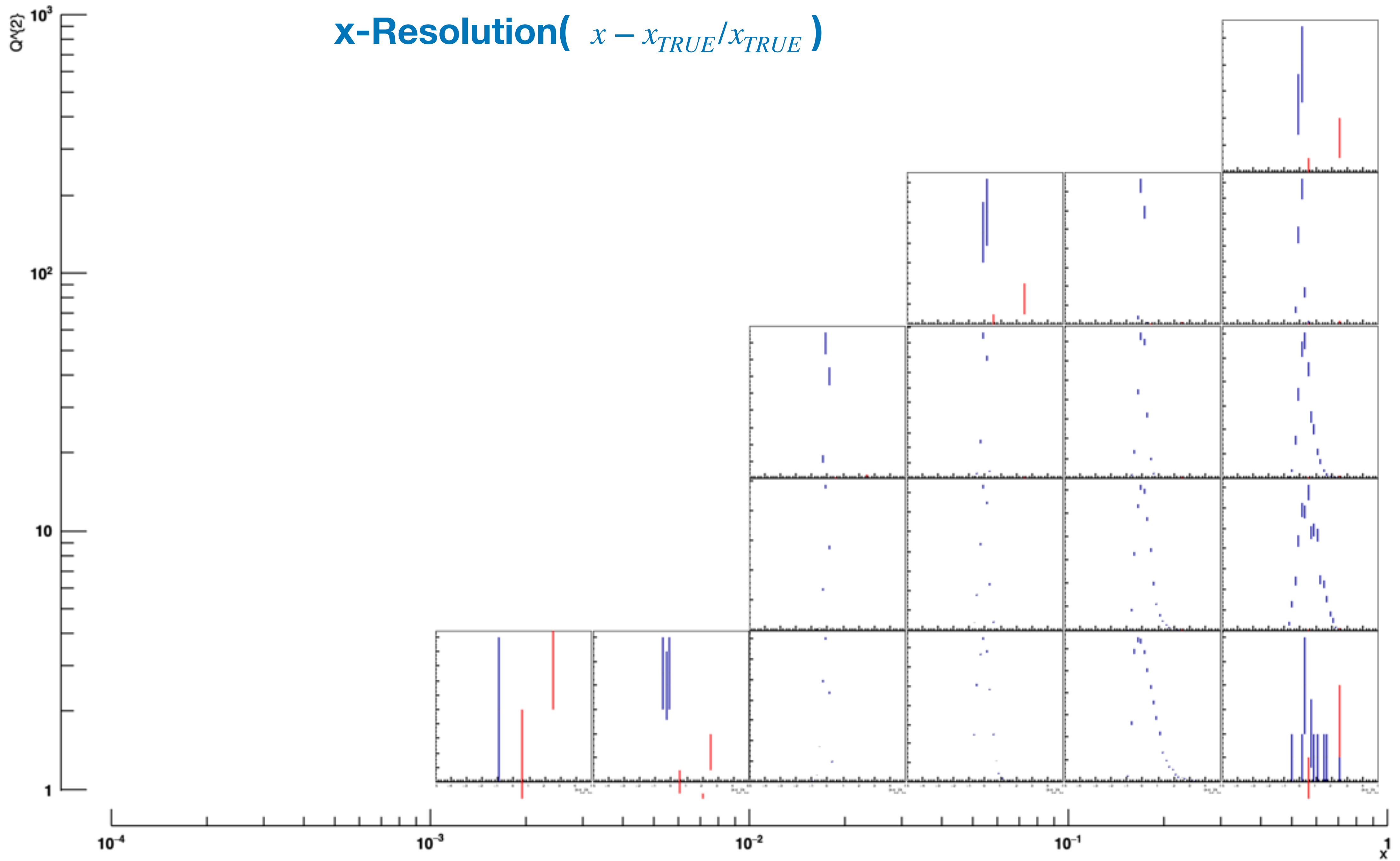
pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$



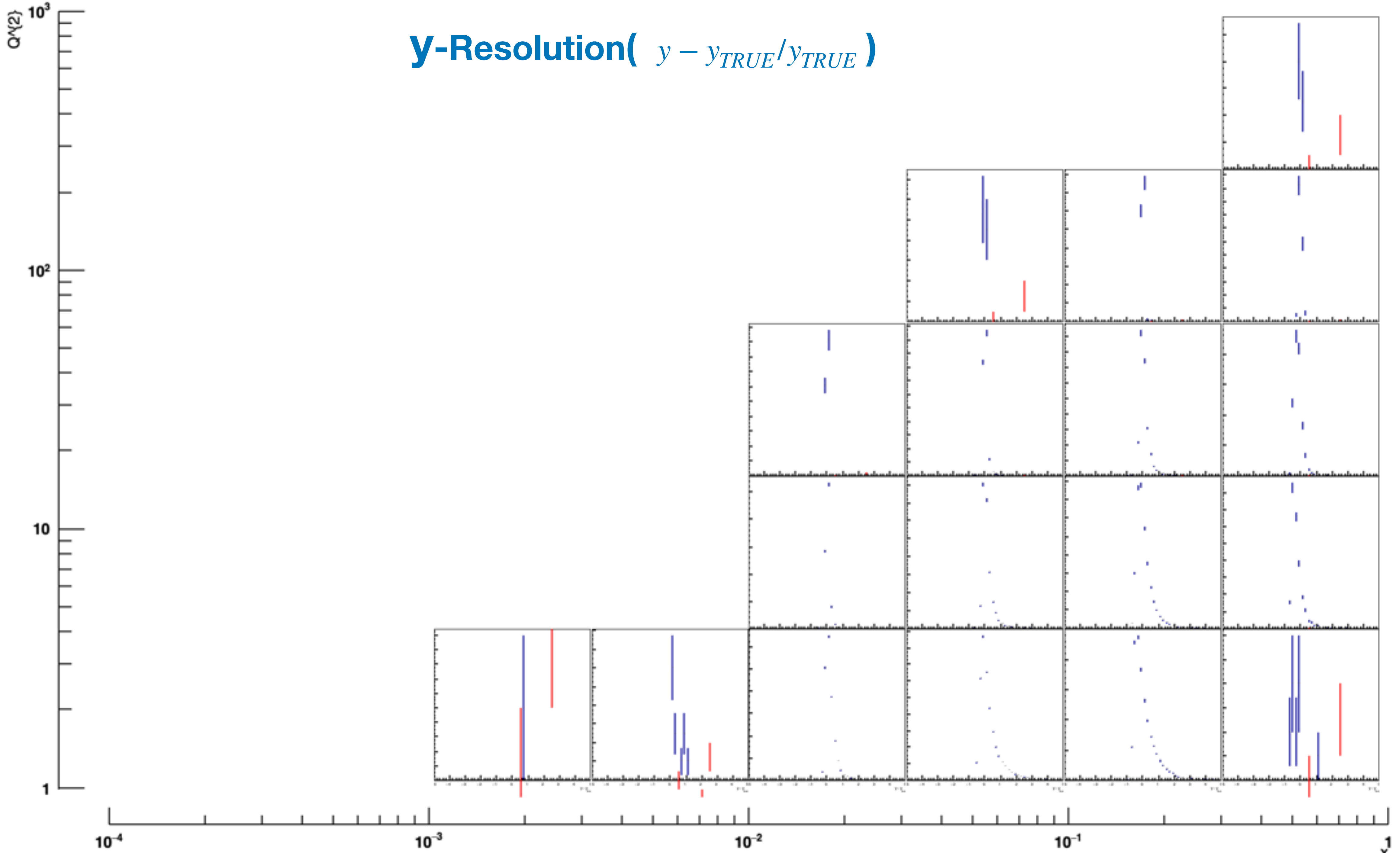
# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



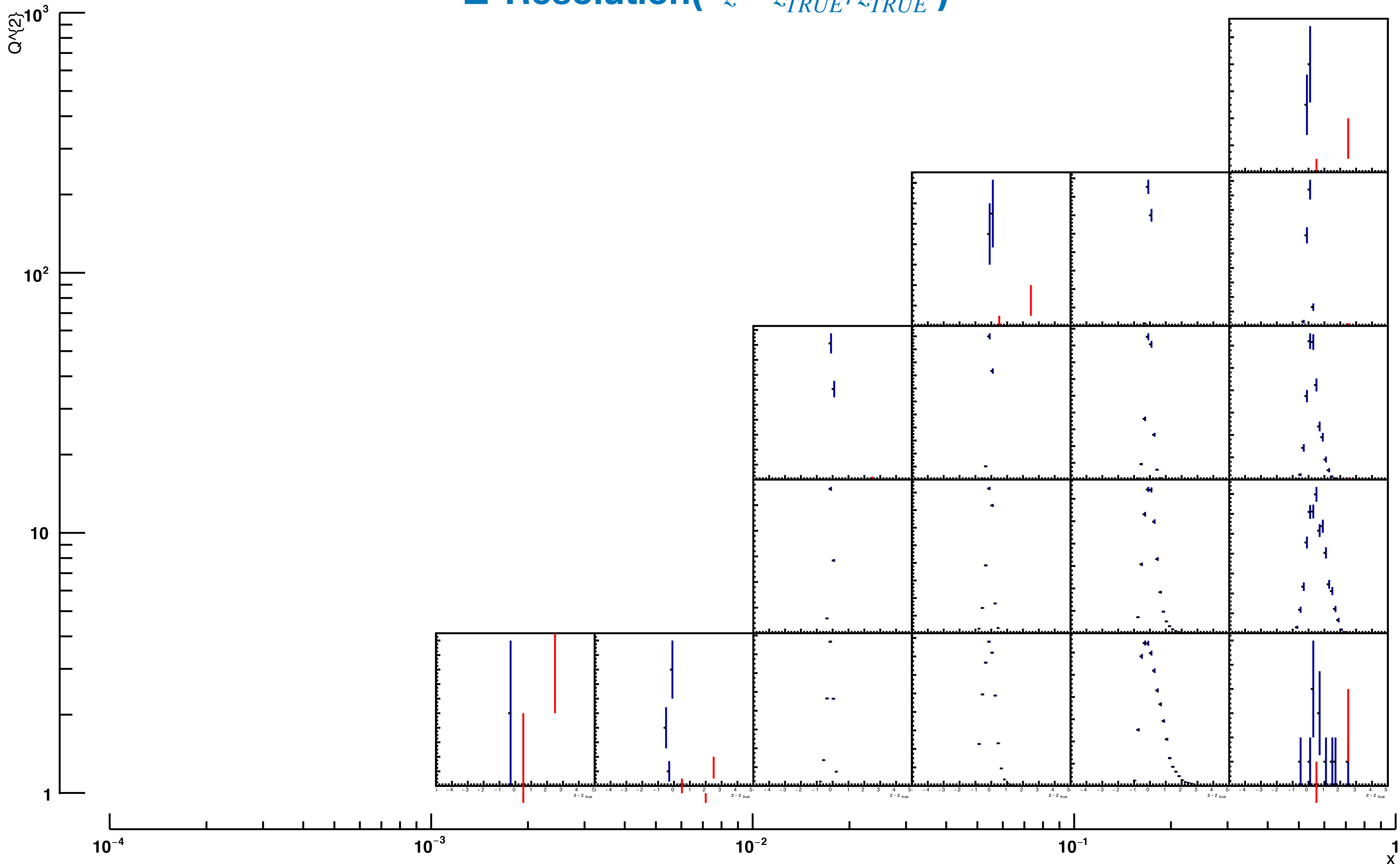
# x-Resolution( $x - x_{TRUE}/x_{TRUE}$ )



# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )

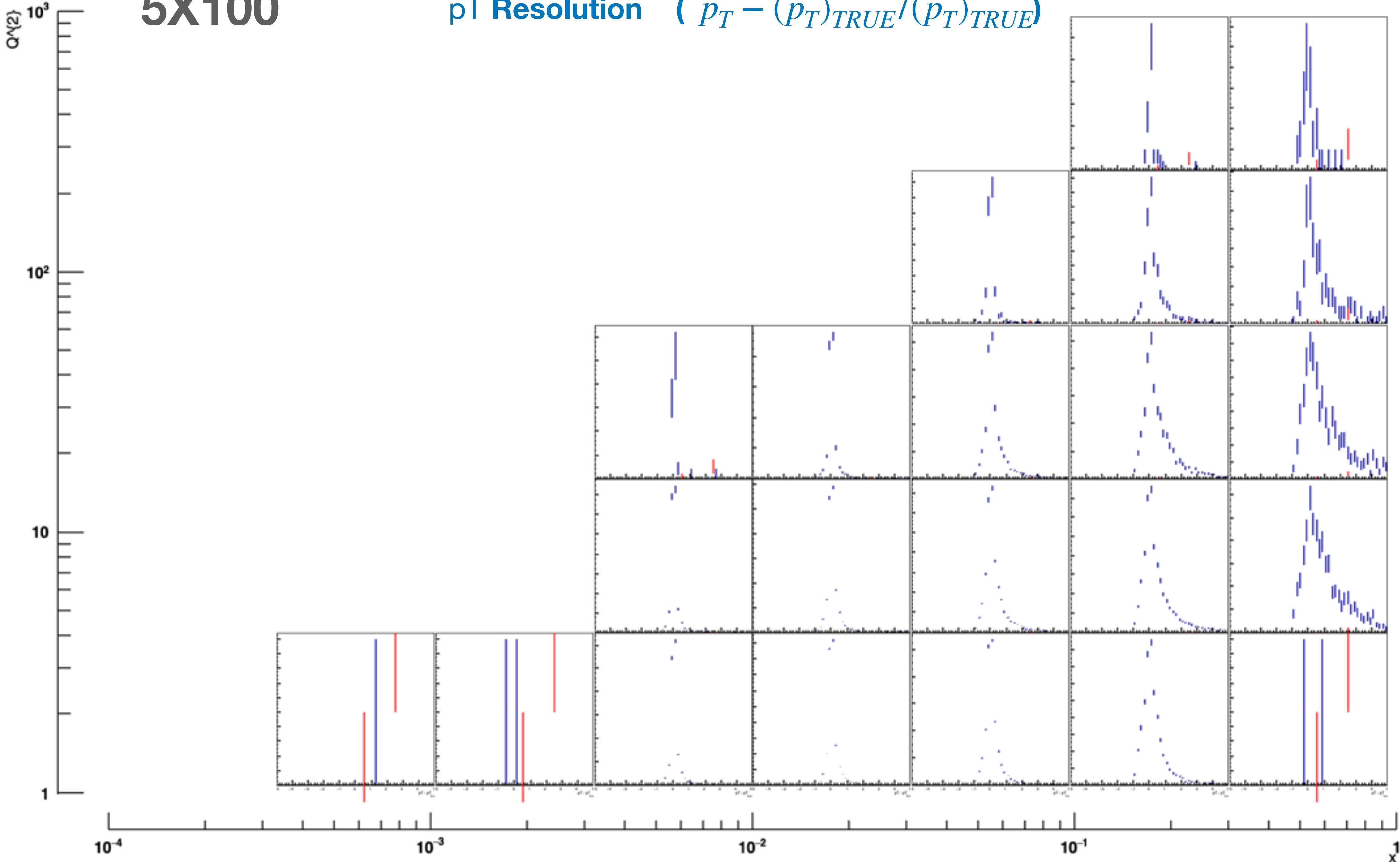


# Z-Resolution( $z - z_{TRUE}/z_{TRUE}$ )

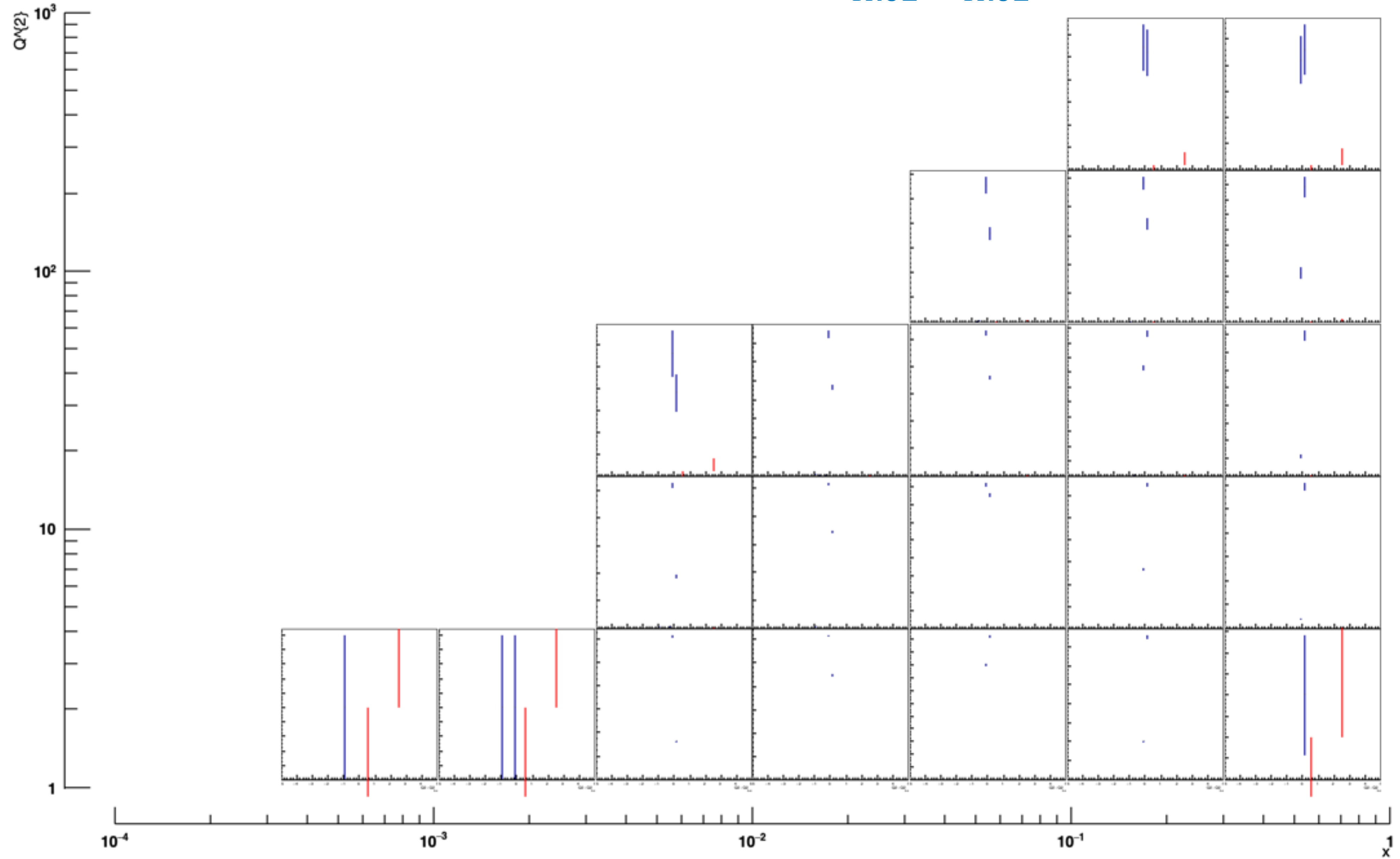


# 5X100

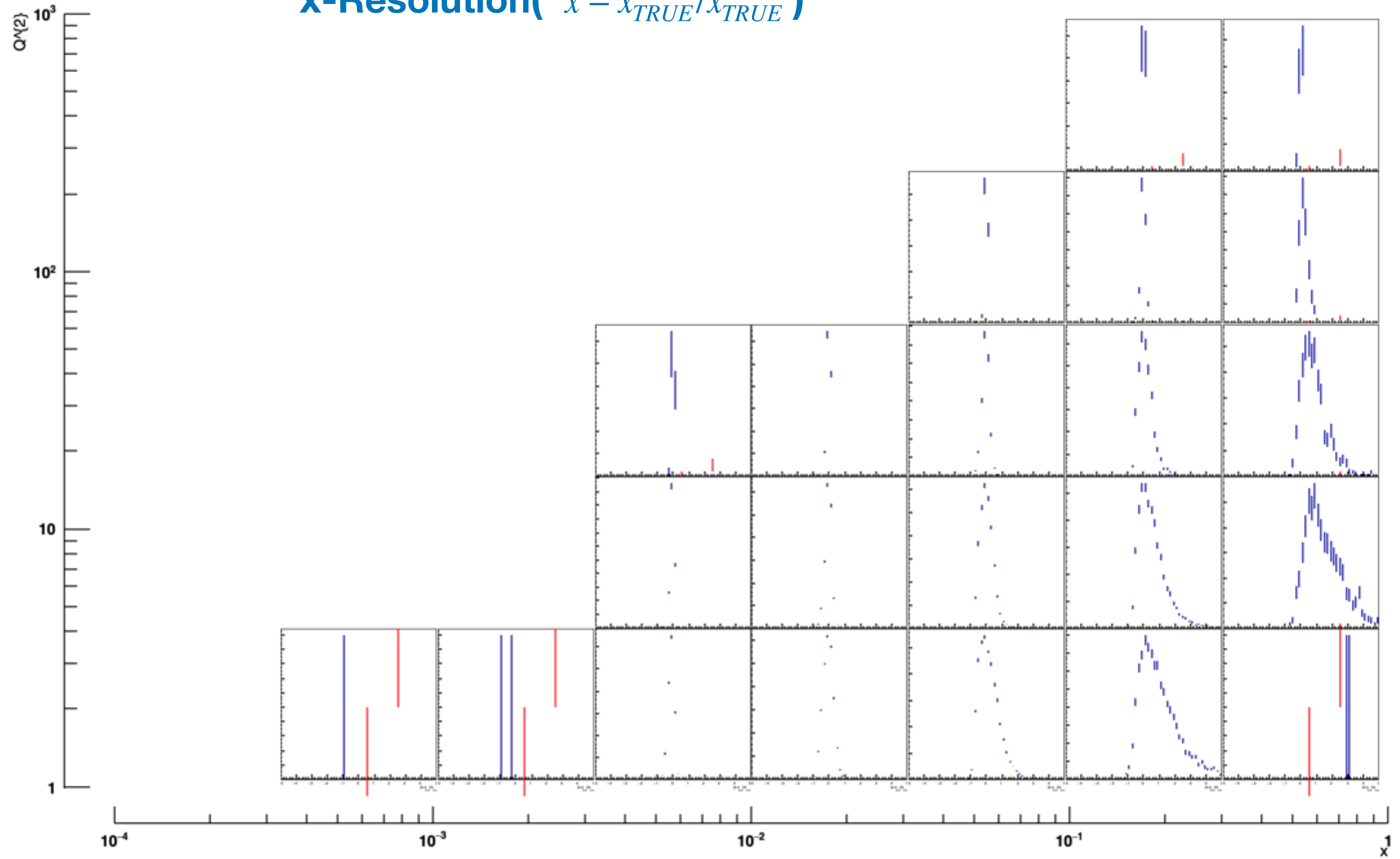
pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$



# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )

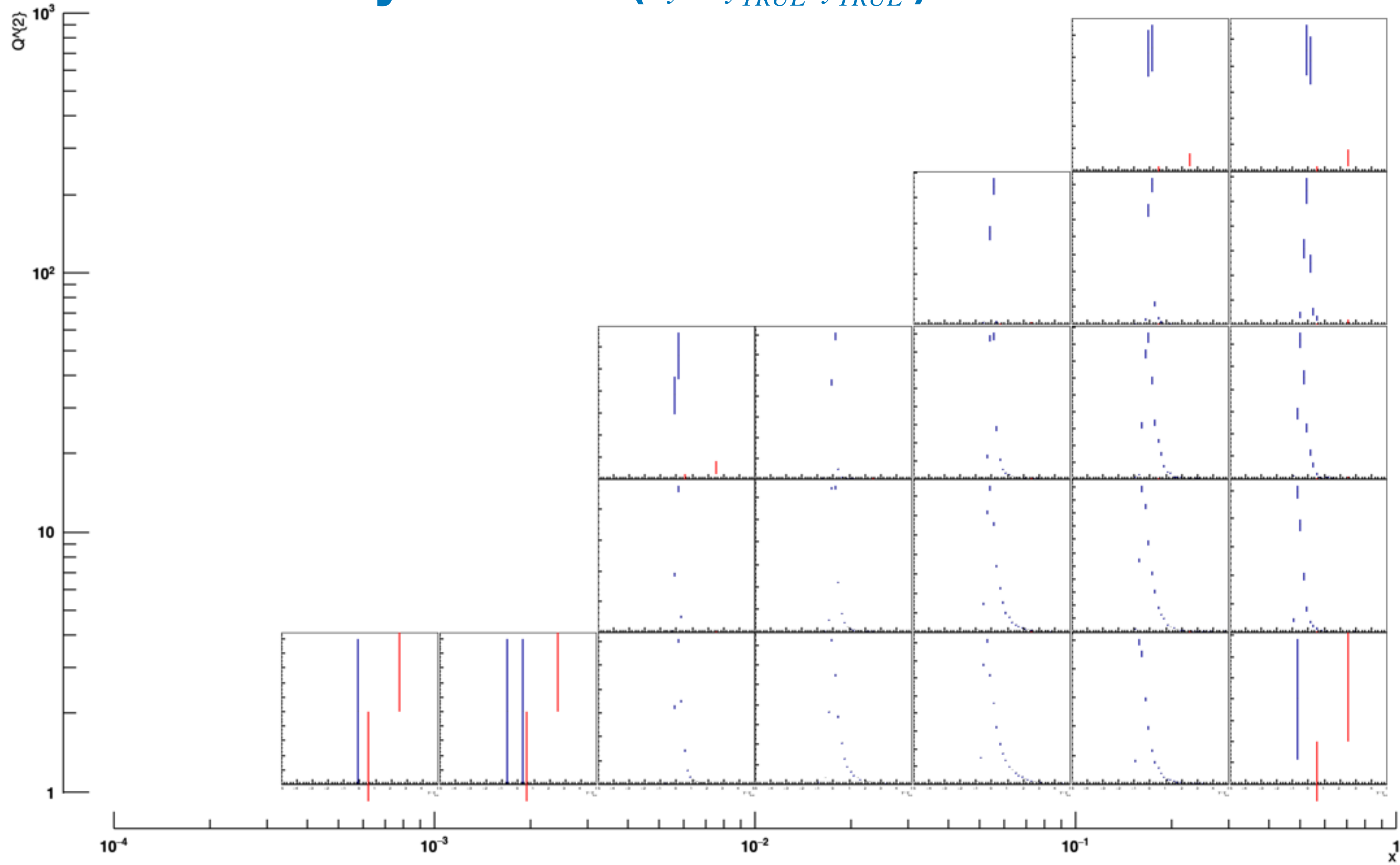


# x-Resolution( $x - x_{TRUE}/x_{TRUE}$ )

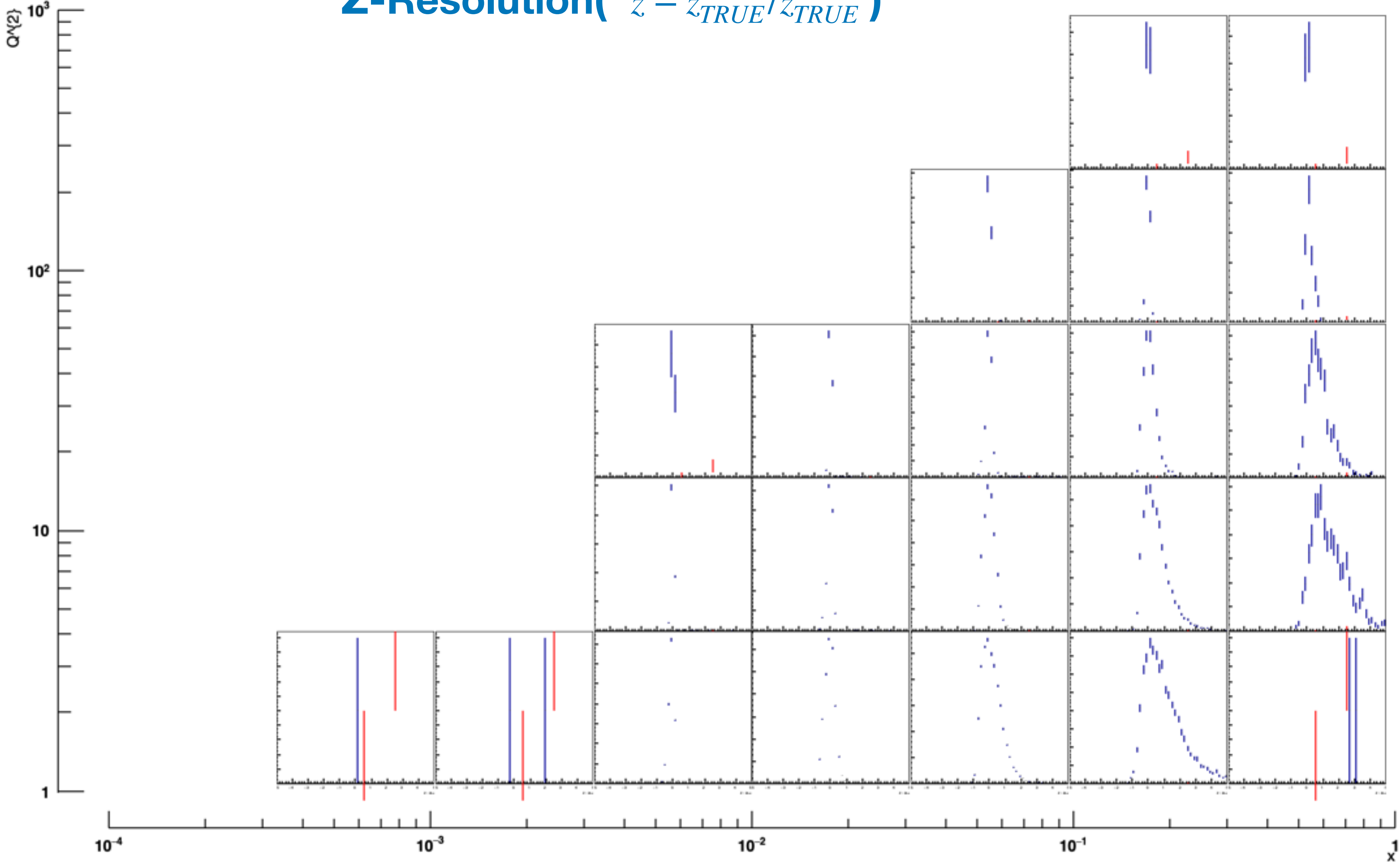




# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )

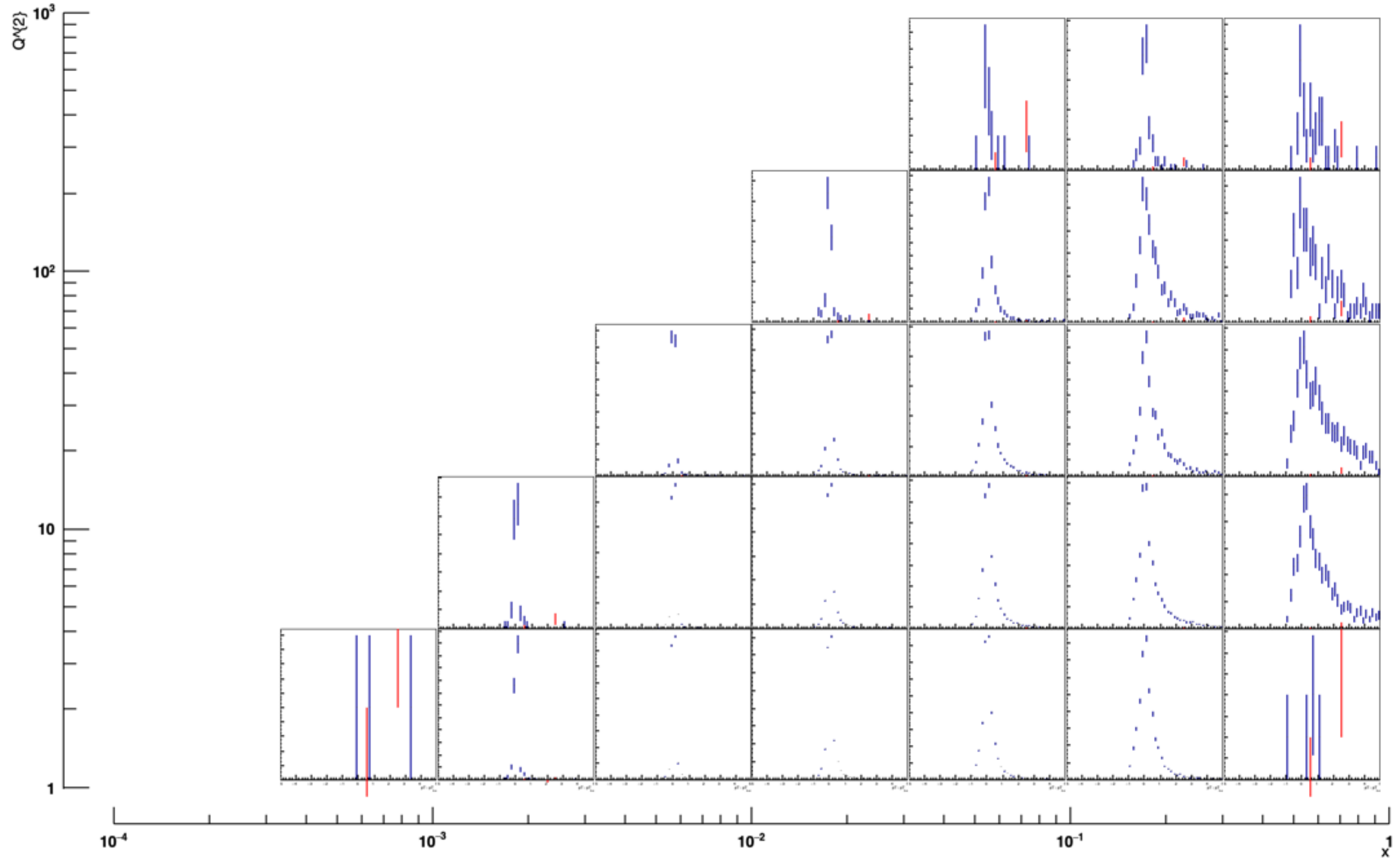


# Z-Resolution( $z - z_{TRUE} / z_{TRUE}$ )

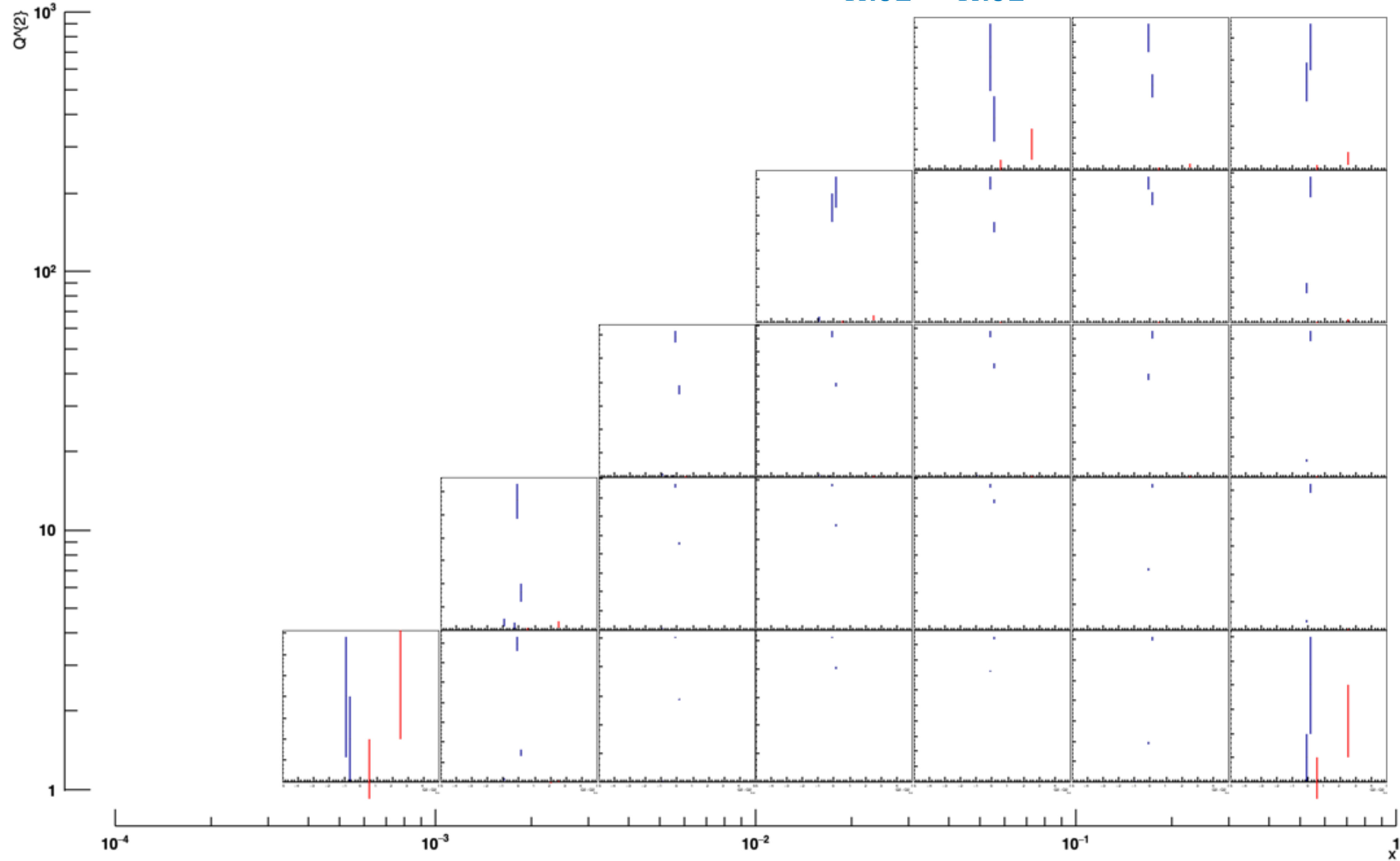


# 10X100

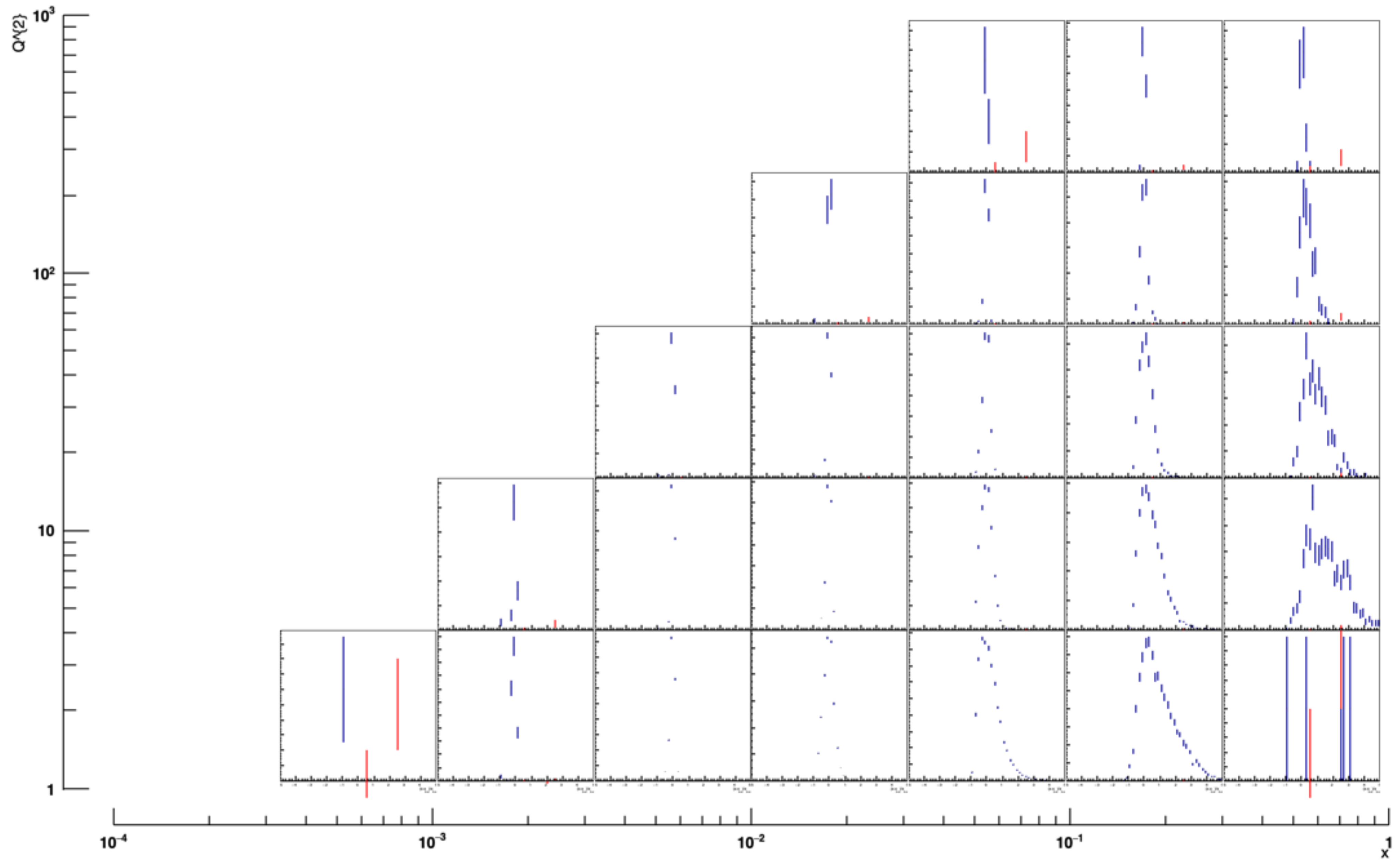
pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$



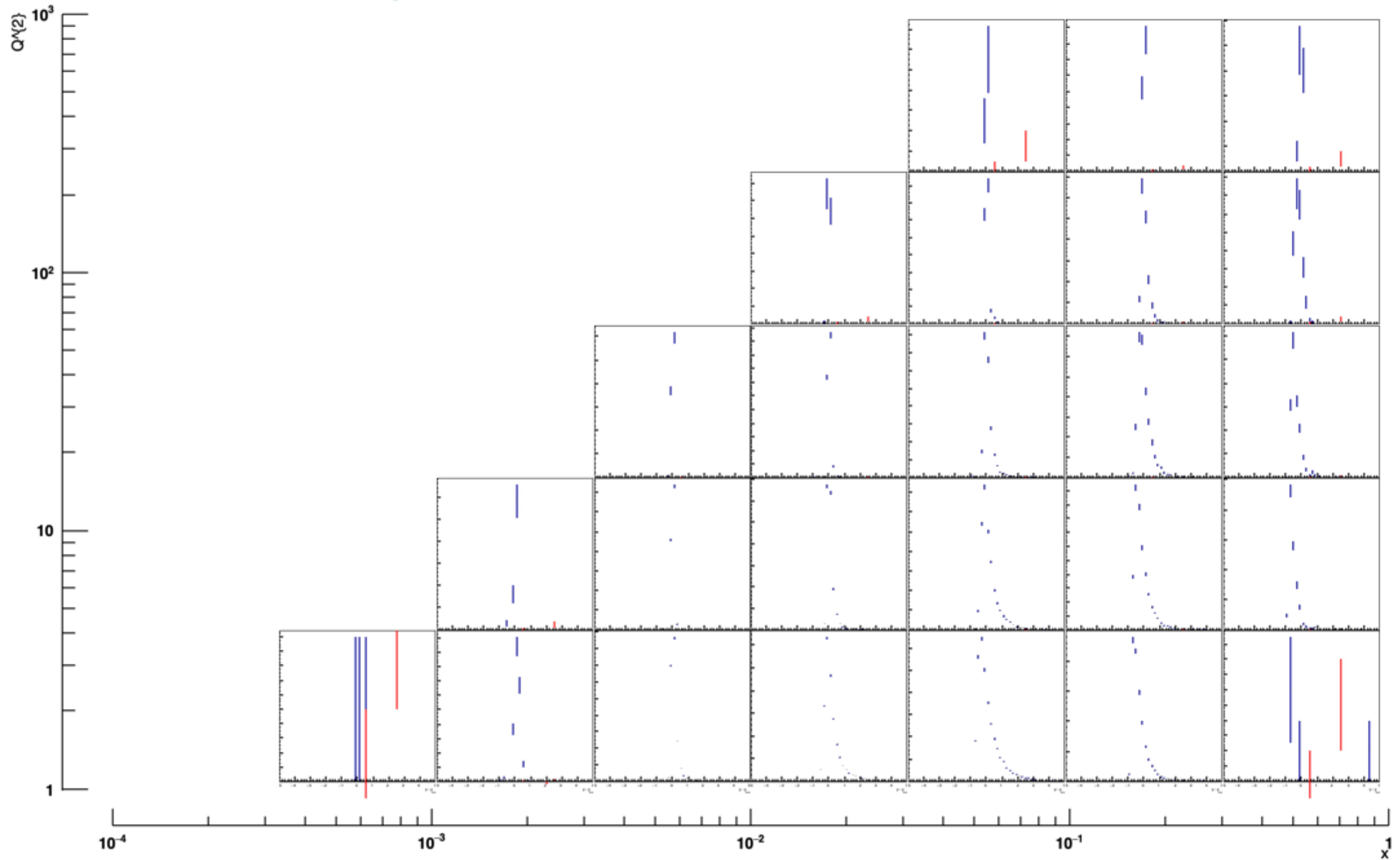
# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



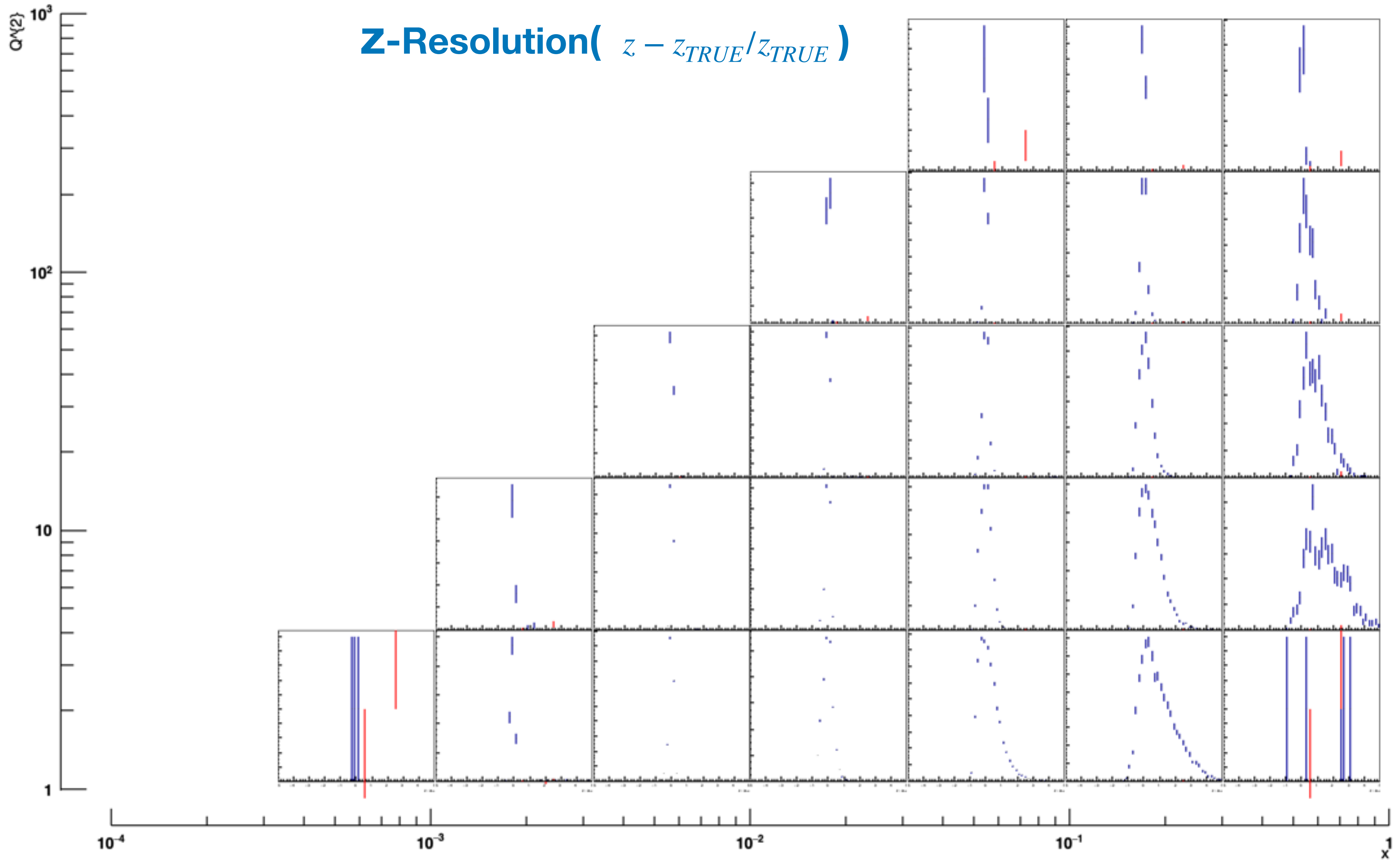
# x-Resolution( $x - x_{TRUE}/x_{TRUE}$ )



# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )

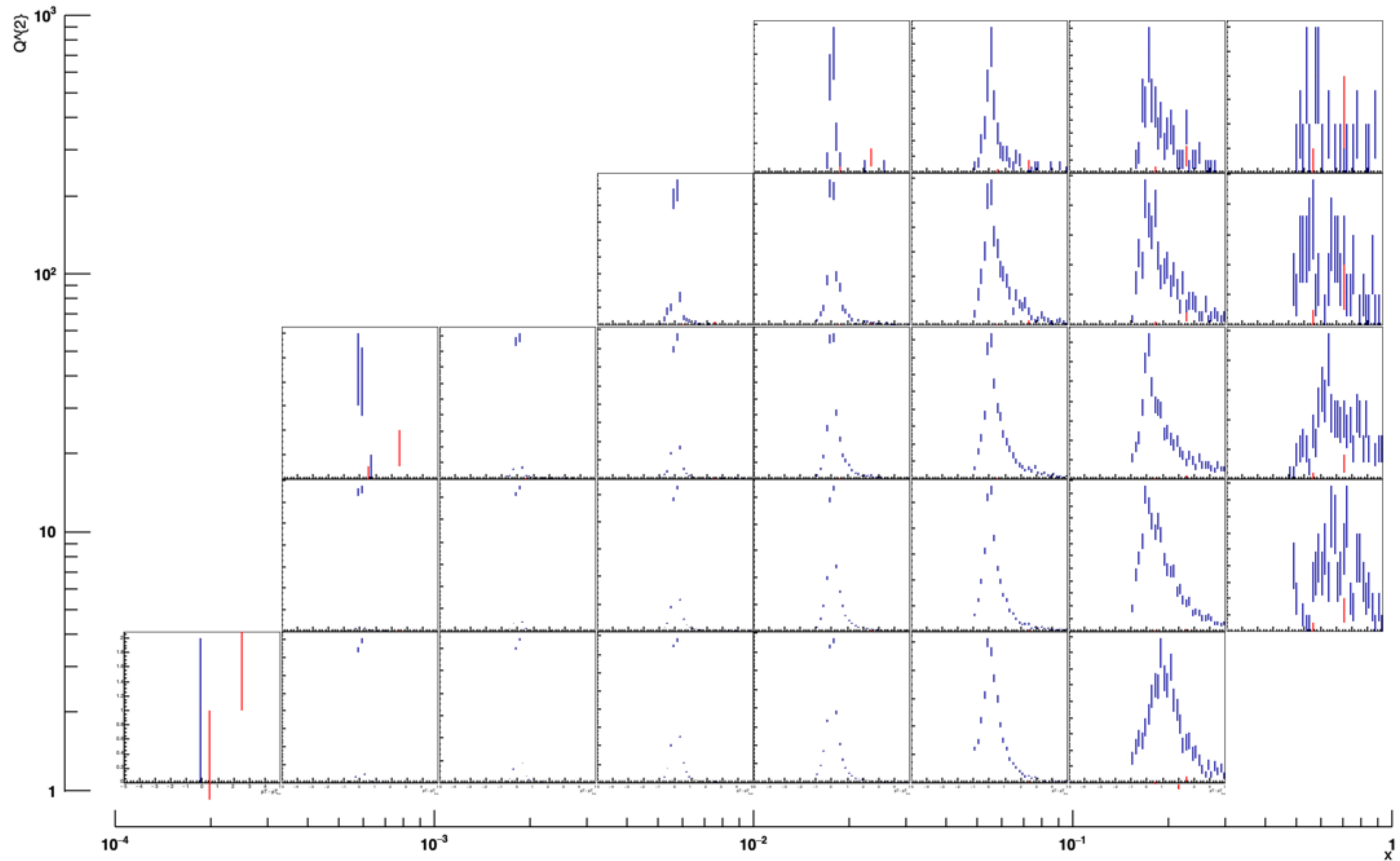


# Z-Resolution( $z - z_{TRUE}/z_{TRUE}$ )



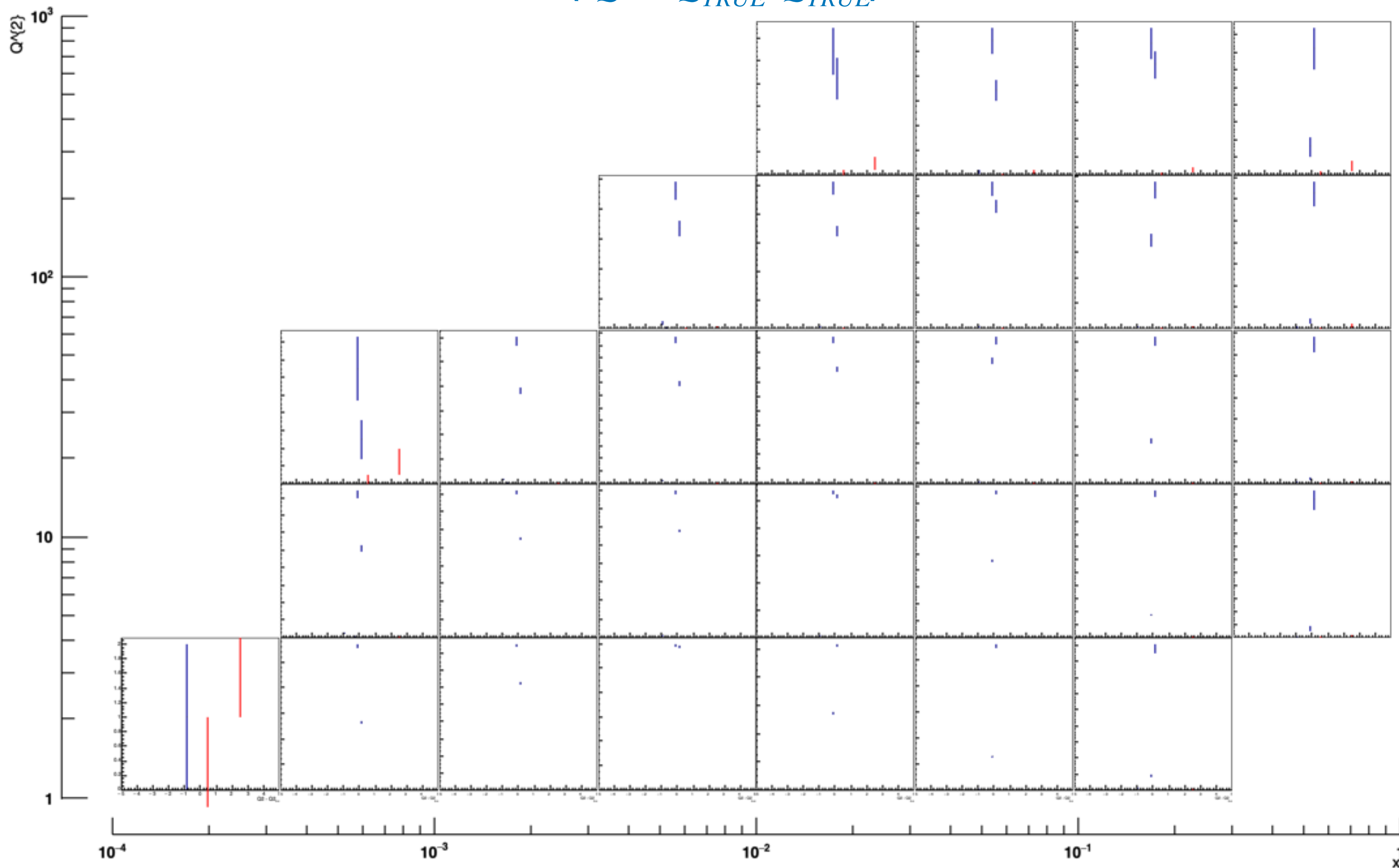
# 18X275

pT Resolution  $(p_T - (p_T)_{TRUE}) / (p_T)_{TRUE}$

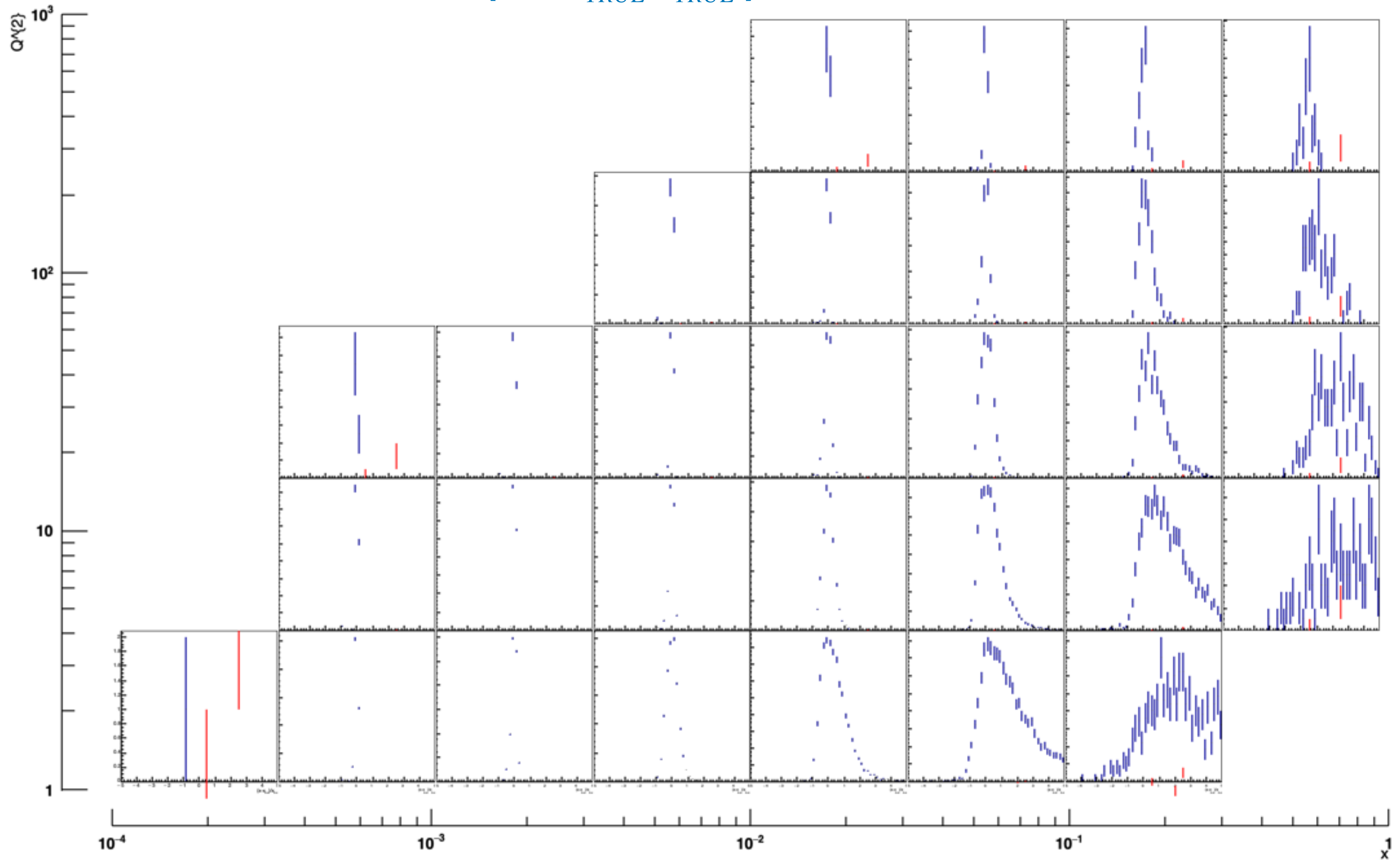




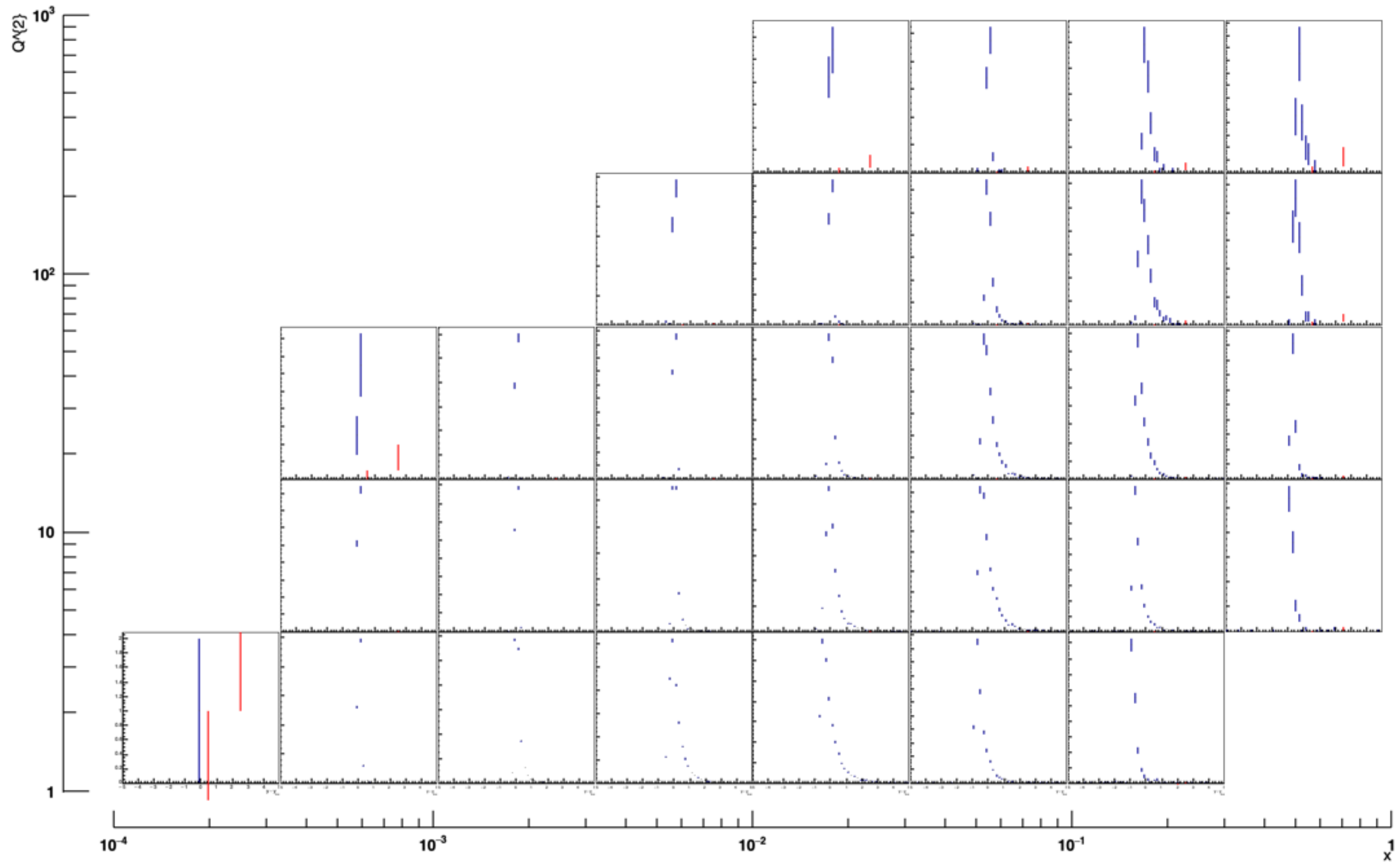
# Q2 Resolution ( $Q^2 - Q_{TRUE}^2 / Q_{TRUE}^2$ )



# x-Resolution( $x - x_{TRUE}/x_{TRUE}$ )



# y-Resolution( $y - y_{TRUE}/y_{TRUE}$ )



# Z-Resolution( $z - z_{TRUE}/z_{TRUE}$ )

