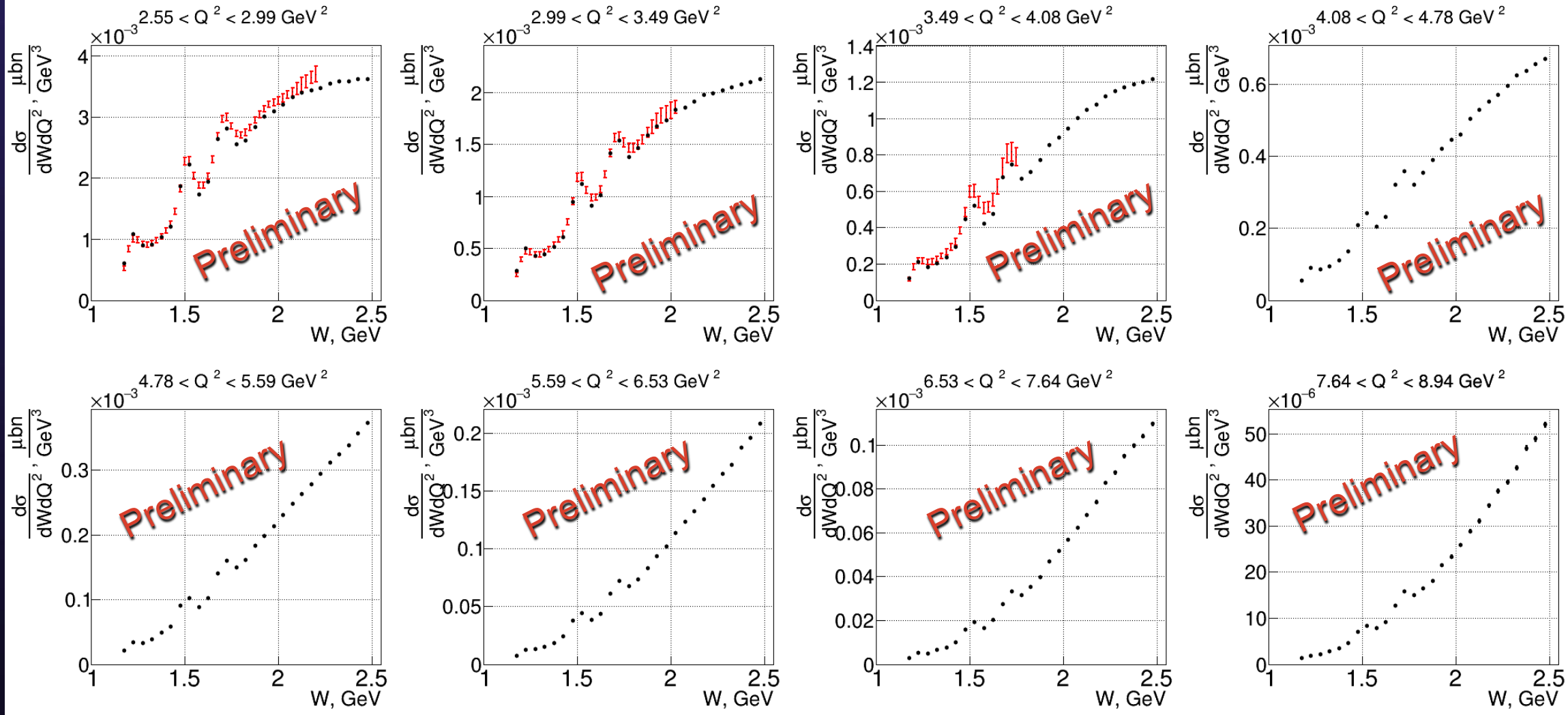
Preliminary Inclusive Cross Sections from the CLAS12

- **Black** - preliminary cross sections
- **Red** – CLAS data (after interpolation into grid of our experiment), Phys. Rev. D67, 092001 (2003)



- The inclusive (e,e'X) cross sections/structure functions will become available from the CLAS12 in the near-term future. The measurements covers the resonance region of $W<2.5$ GeV and the range of $2.5 <Q^2<9.0$ GeV^2

- Almost 4π acceptance of the CLAS12 detector offers a unique opportunity to obtain (e,e'X) cross sections/structure functions within a broad range of W from pion threshold to W=2.5 GeV in any given bin of Q^2. For the first time, (e,e'X) observables will become available within so broad W-coverage at $Q^2>4.0$ GeV^2

- The truncated within the resonance region moments of inclusive structure functions will be obtained by direct integration of the experimental data and will become available in Q^2 range from 2.5 GeV^2 to 9.0 GeV^2

- What are the prospects of using this novel information on Q^2 evolution of the inclusive structure function moments within a broad Q^2-range 2.5-9.0 GeV^2 in order to constrain gluon mass function and to shed light on the role of gluons in the evolution of nucleon PDF at large x within the resonance excitation region ?