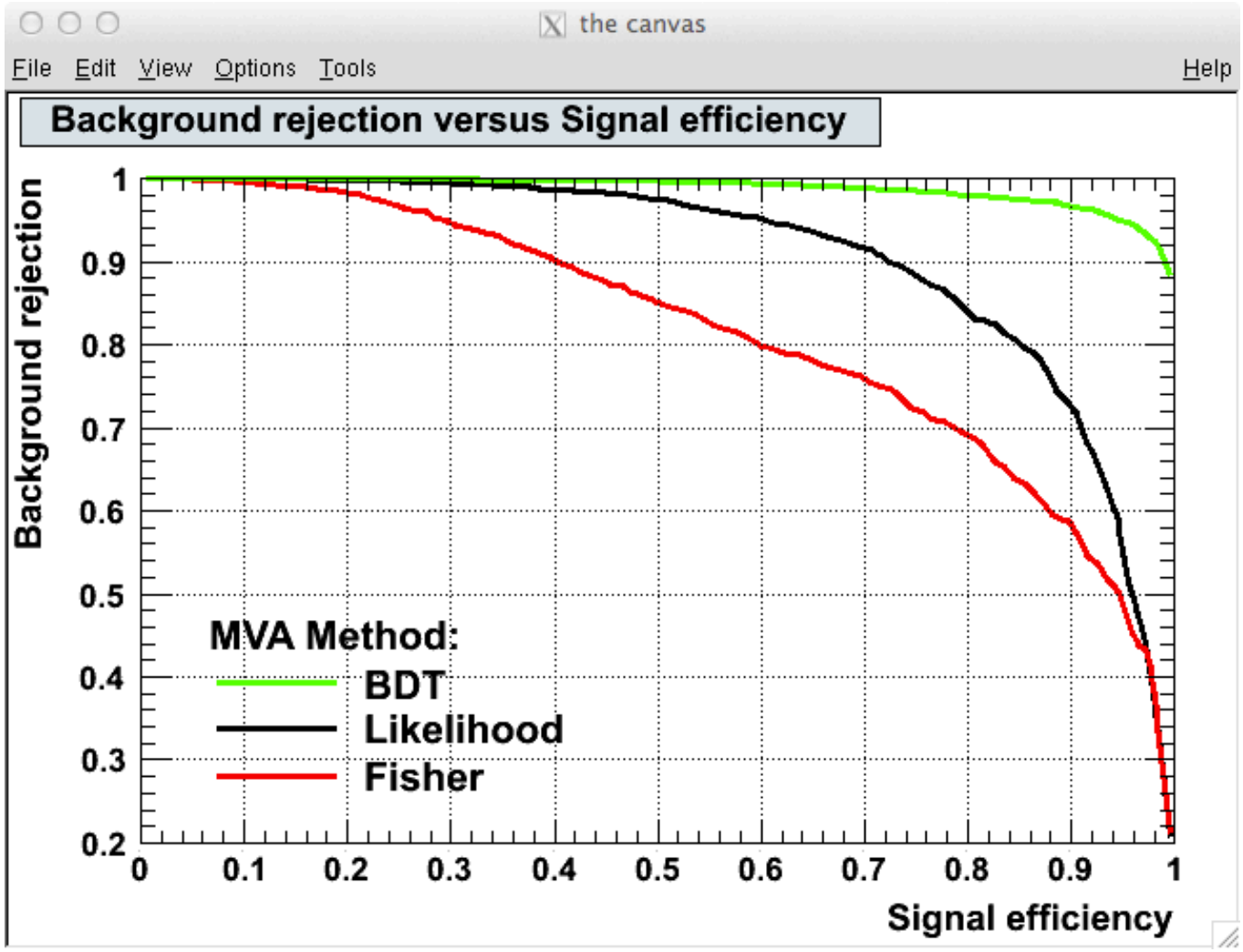
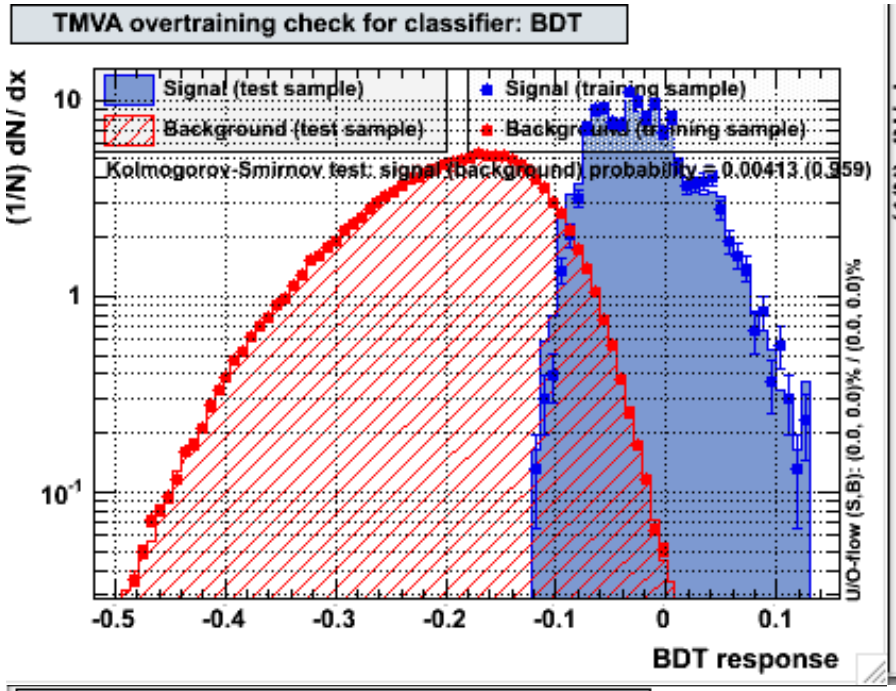
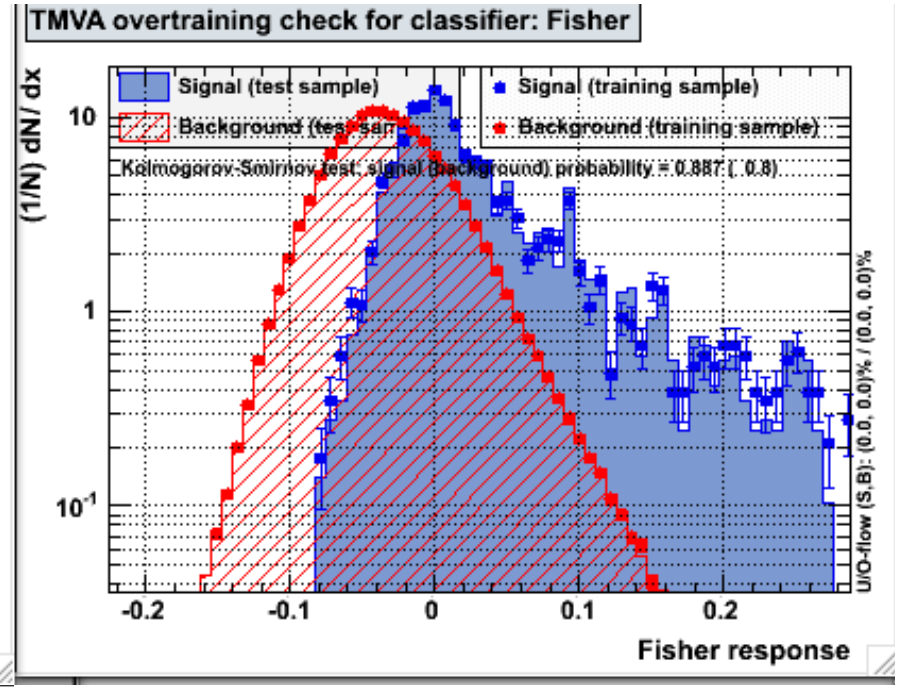
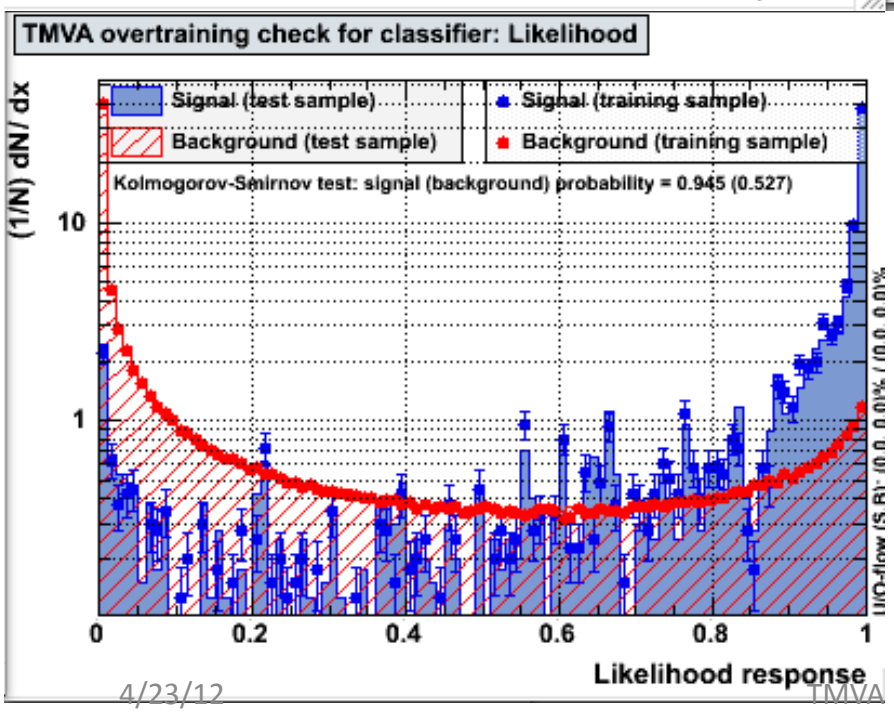
Training ; day 119 ; silicon hits = 3



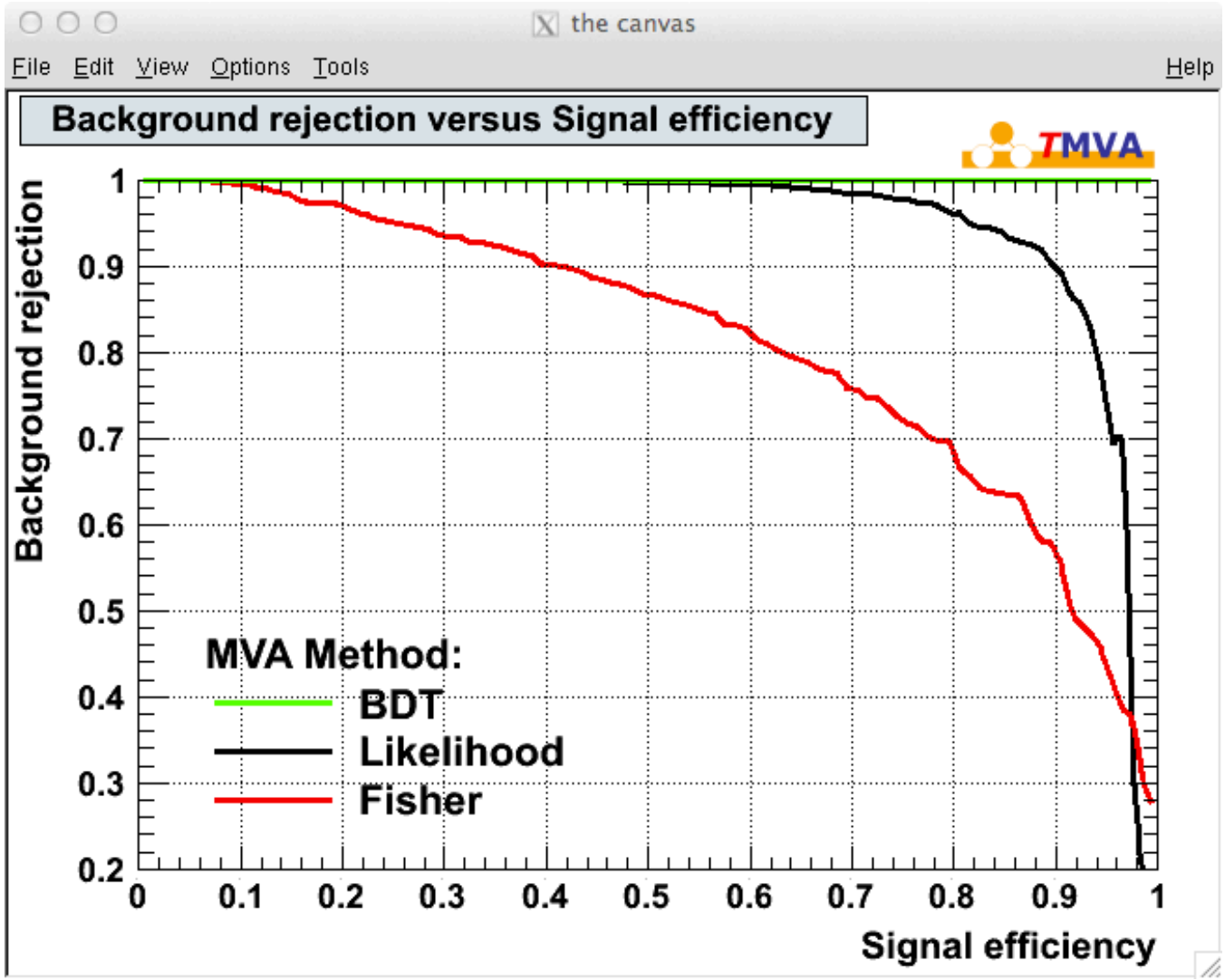


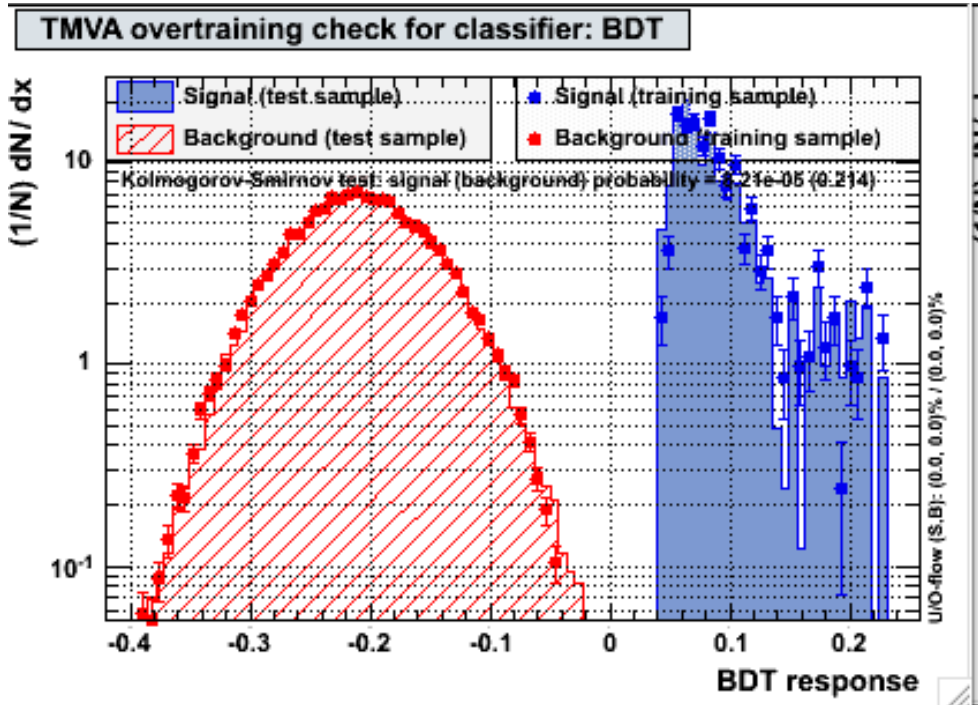


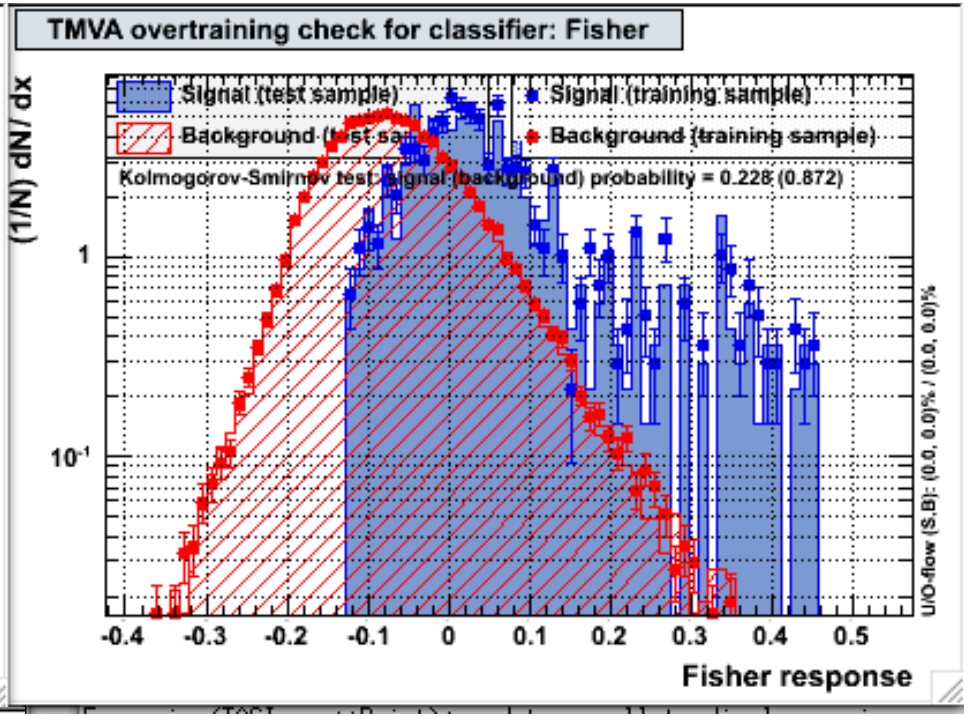


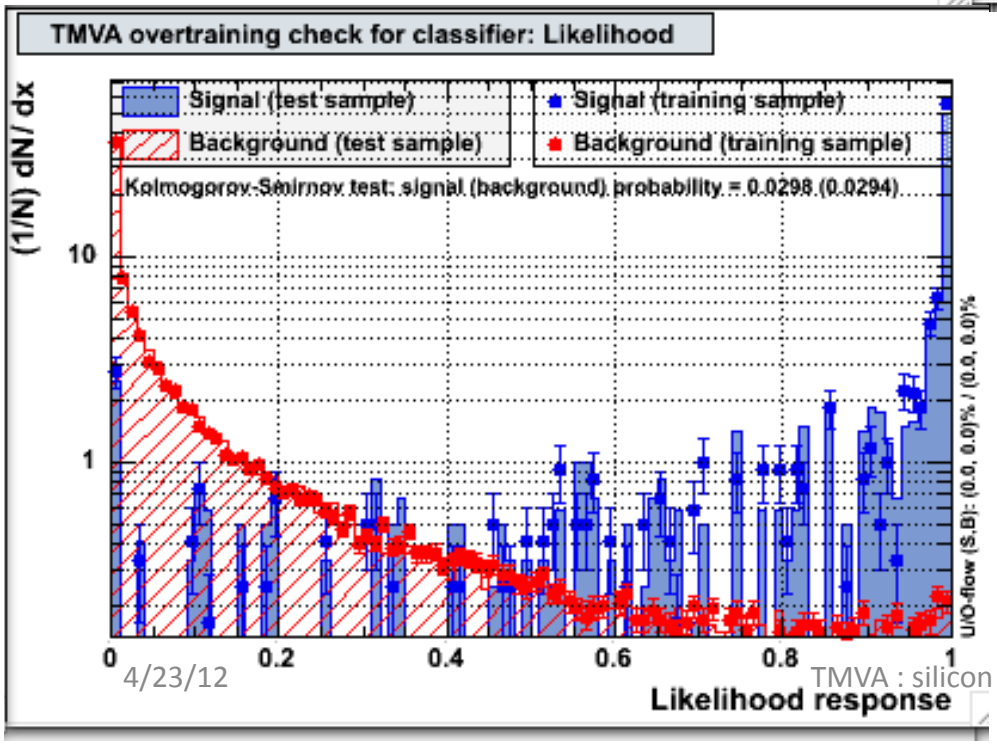
- for “pure signal”, we should cut :
- At 0 for mva BDT
- At ~.15 for mva Fisher
- Not a clear separation for mva likelihood

Training ; day 119 ; silicon hits = 4

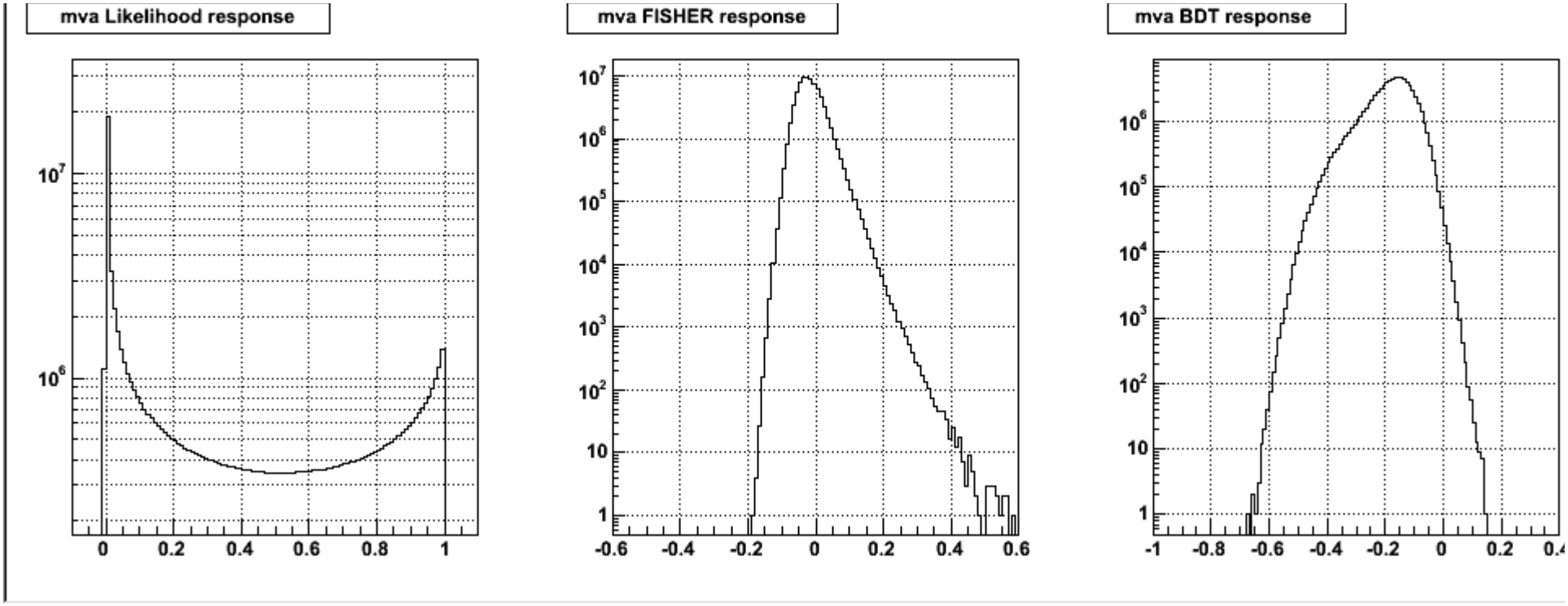



TMVA overtraining check for classifier: BDT
Signal (test sample)
Signal (training sample)
Background (test sample)
Background (training sample)
Kolmogorov-Smirnov test: signal (background) probability = 3.21e-05 (0.214)
(1/N) dN/ dx
BDT response
U/O-flow (S,B): (0.0, 0.0)% / (0.0, 0.0)%

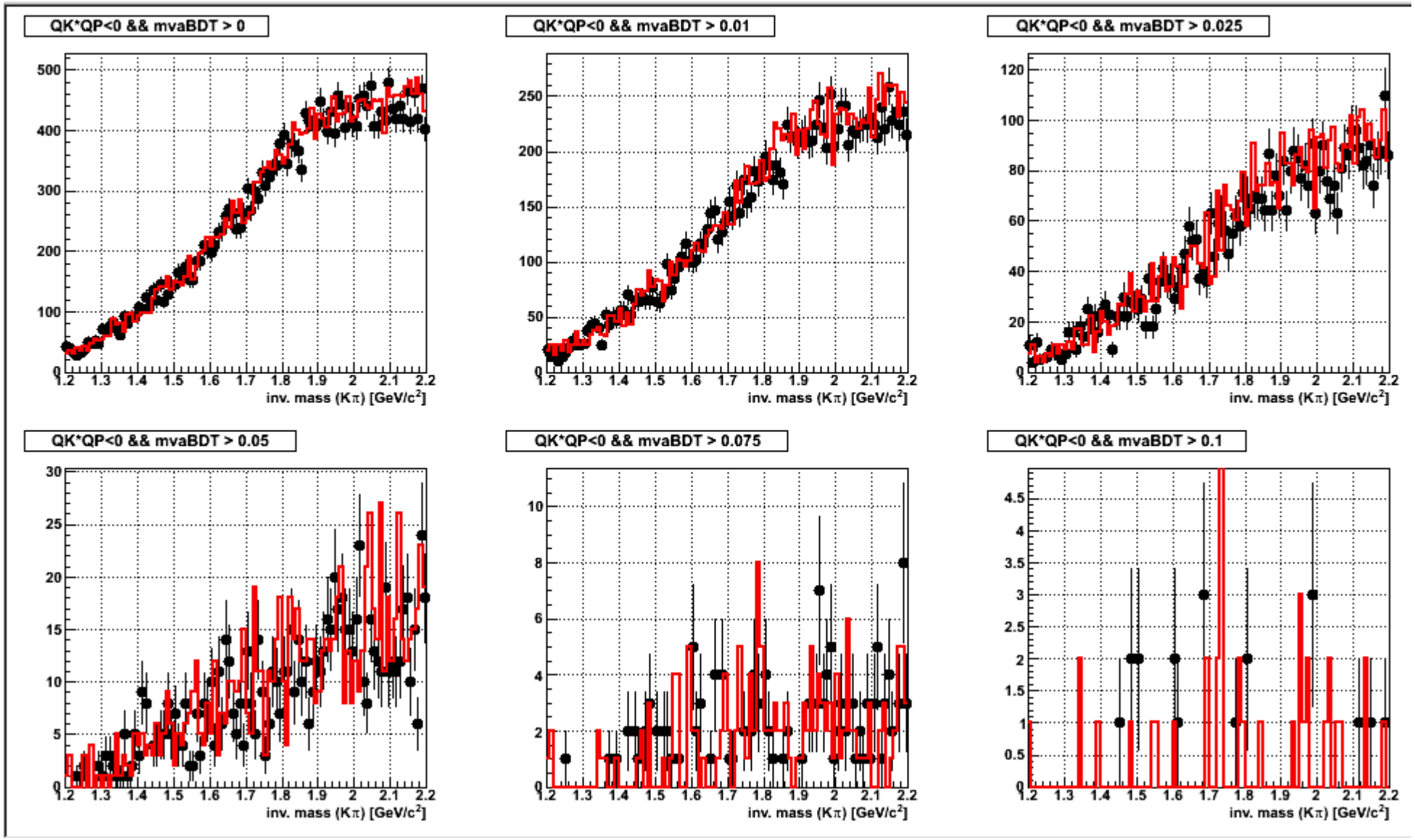

TMVA overtraining check for classifier: Fisher
Signal (test sample)
Signal (training sample)
Background (test sample)
Background (training sample)
Kolmogorov-Smirnov test: signal (background) probability = 0.228 (0.872)
(1/N) dN/ dx
Fisher response
U/O-flow (S,B): (0.0, 0.0)% / (0.0, 0.0)%


TMVA overtraining check for classifier: Likelihood
Signal (test sample)
Signal (training sample)
Background (test sample)
Background (training sample)
Kolmogorov-Smirnov test: signal (background) probability = 0.0298 (0.0294)
(1/N) dN/ dx
Likelihood response
U/O-flow (S,B): (0.0, 0.0)% / (0.0, 0.0)%

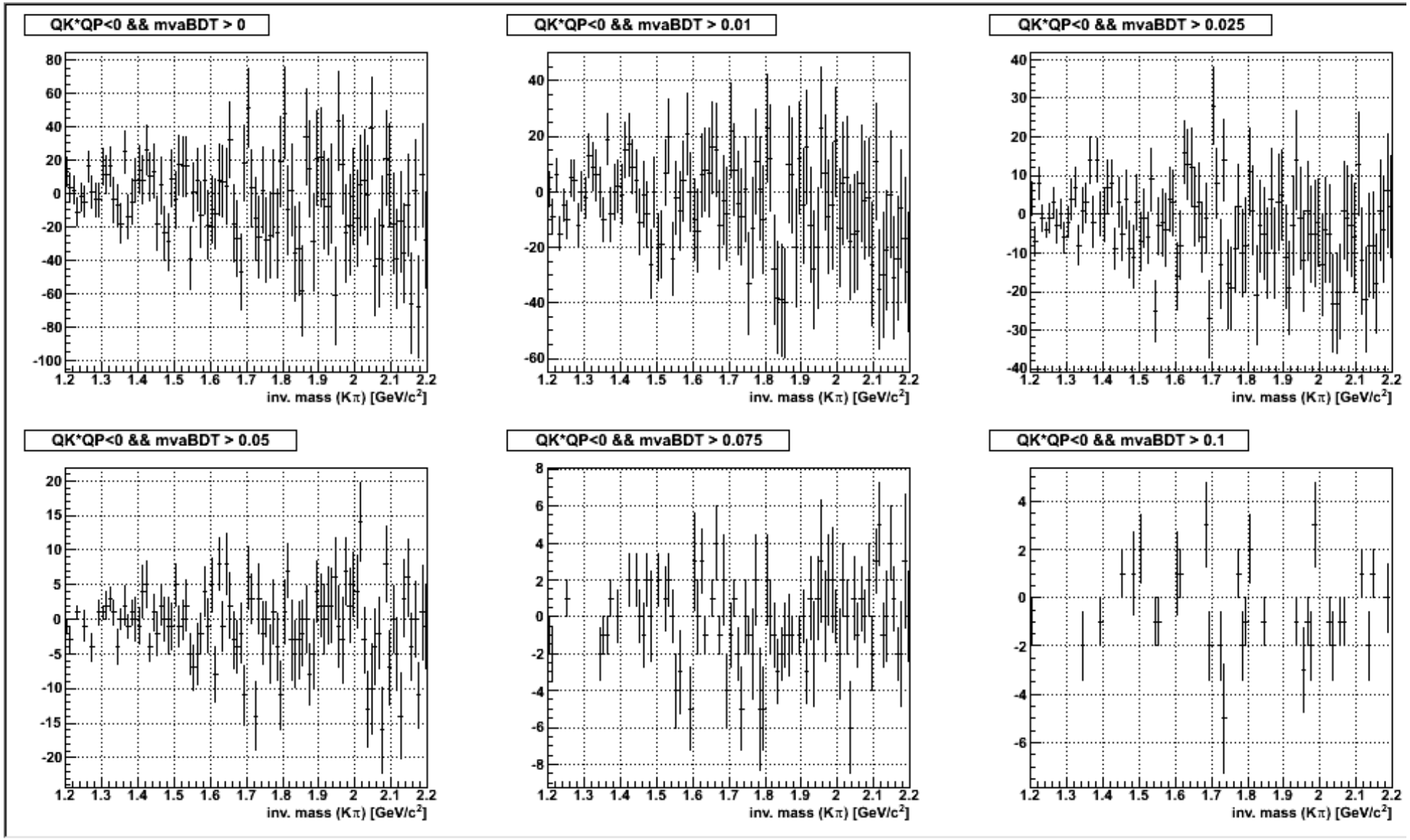
Real data : day111 to day120
silicon hits =3

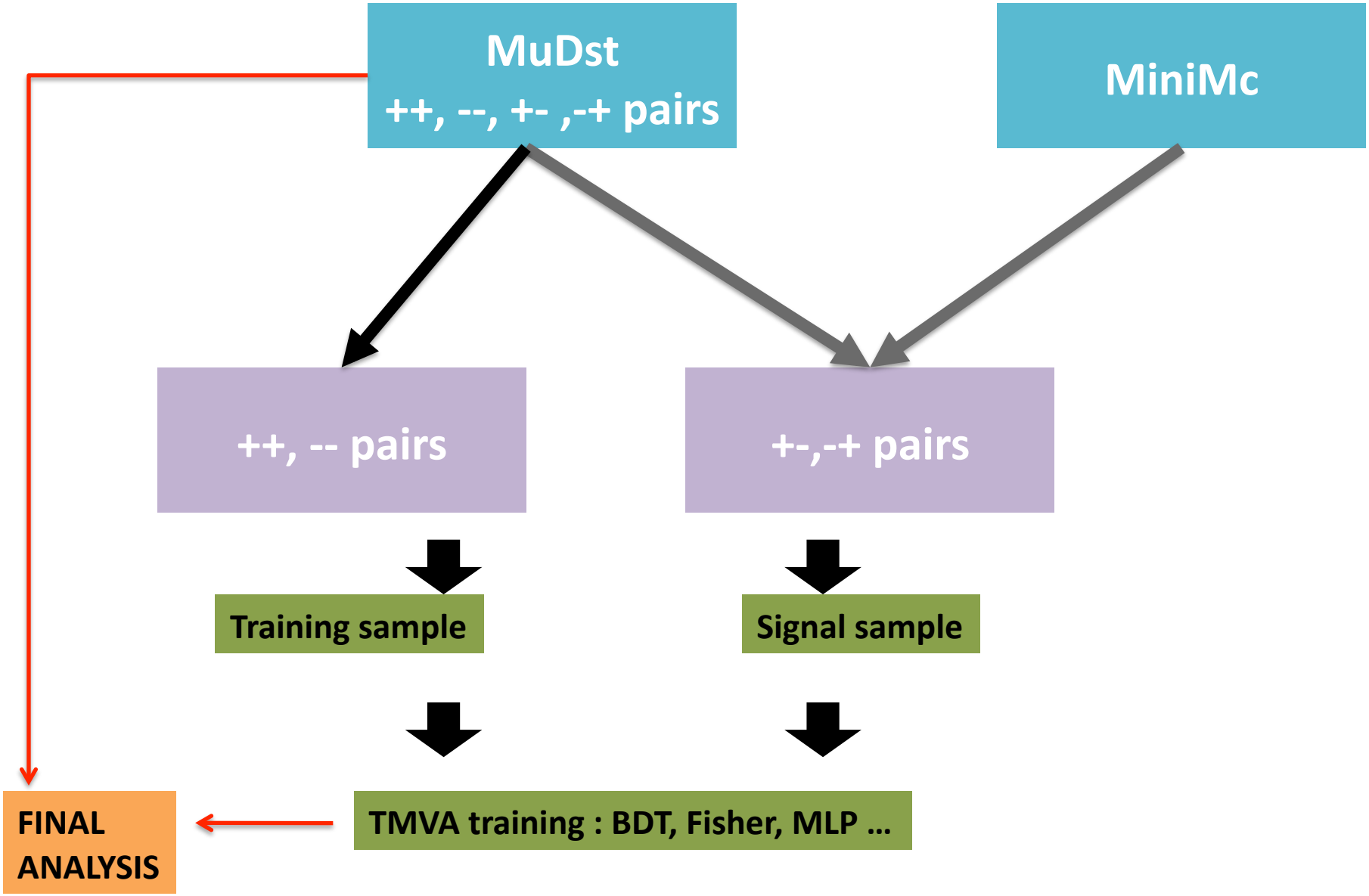


Silicon hits =3 ; increasing mvaBDT value; marker = unlike signs ; red = like signs



Silicon hits =3 ; increasing mvaBDT value ; subtraction unlike sign – like sign




MuDst
++, --, +- ,-+ pairs
MiniMc
++, -- pairs
+-,-+ pairs
Training sample
Signal sample
TMVA training : BDT, Fisher, MLP …
FINAL ANALYSIS