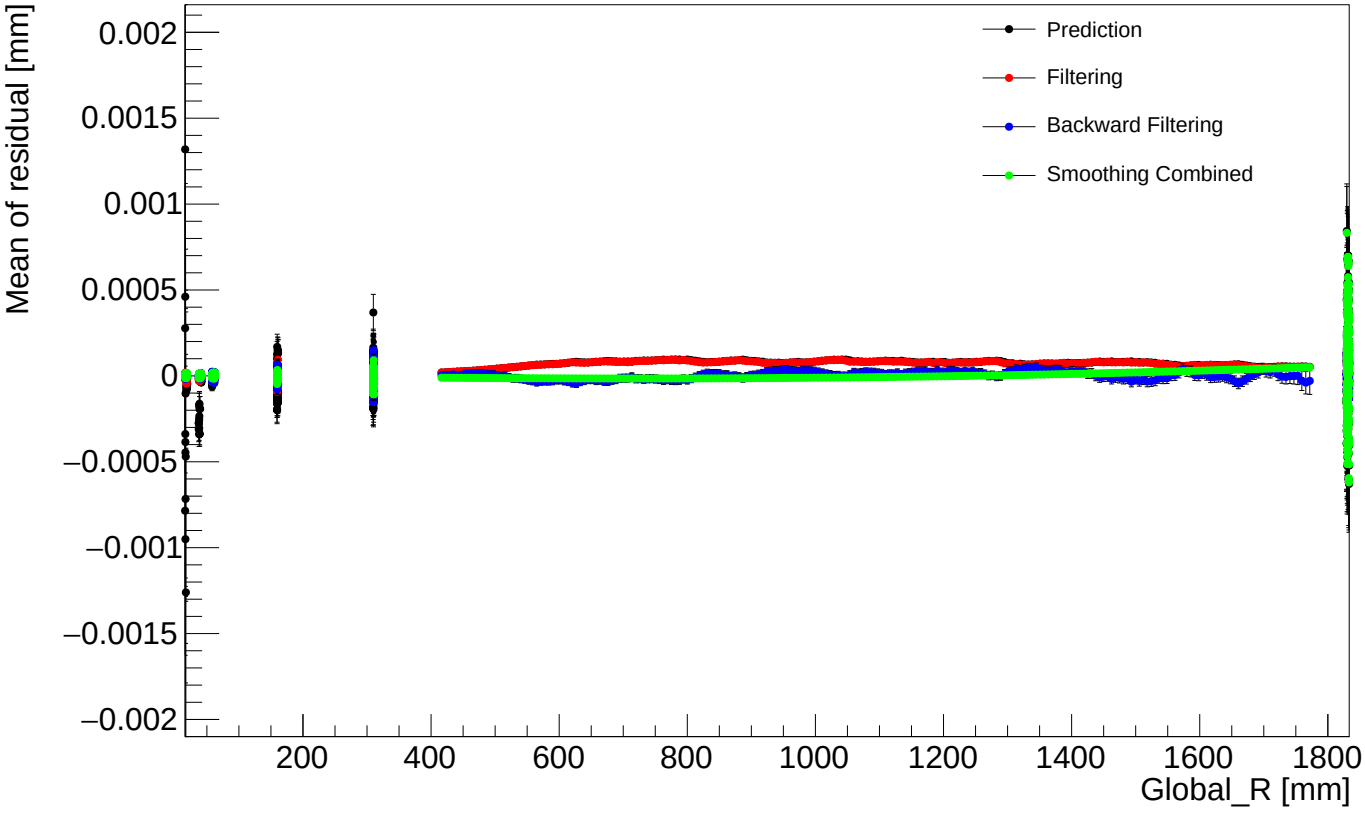
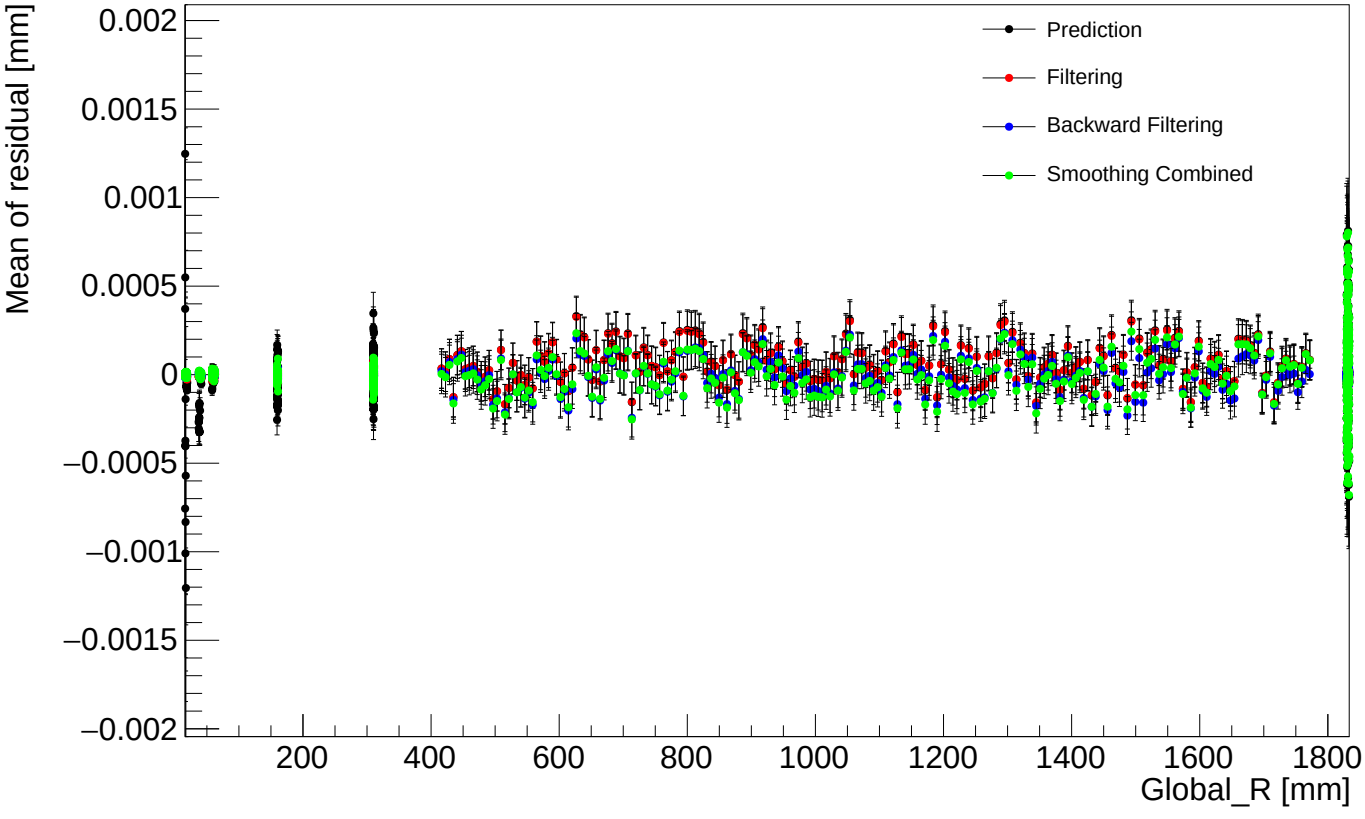
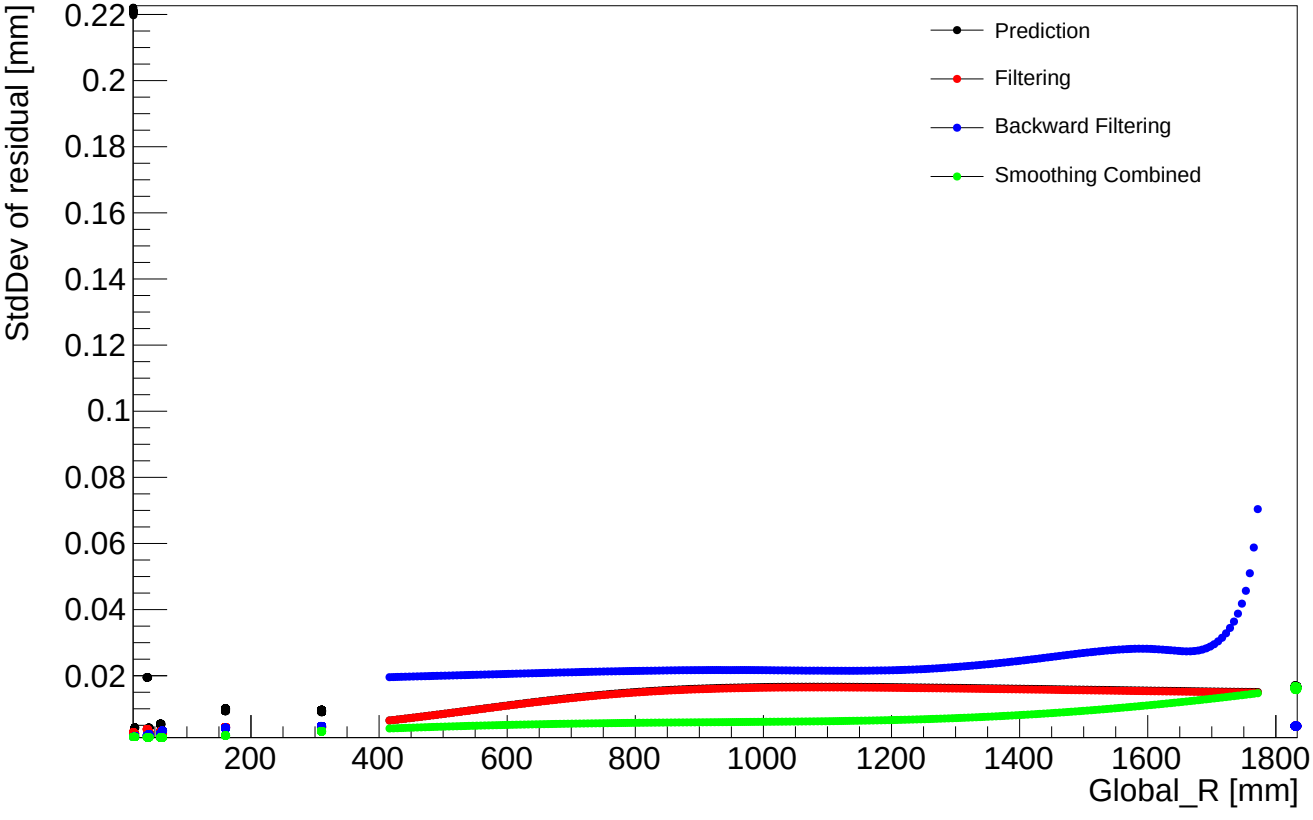
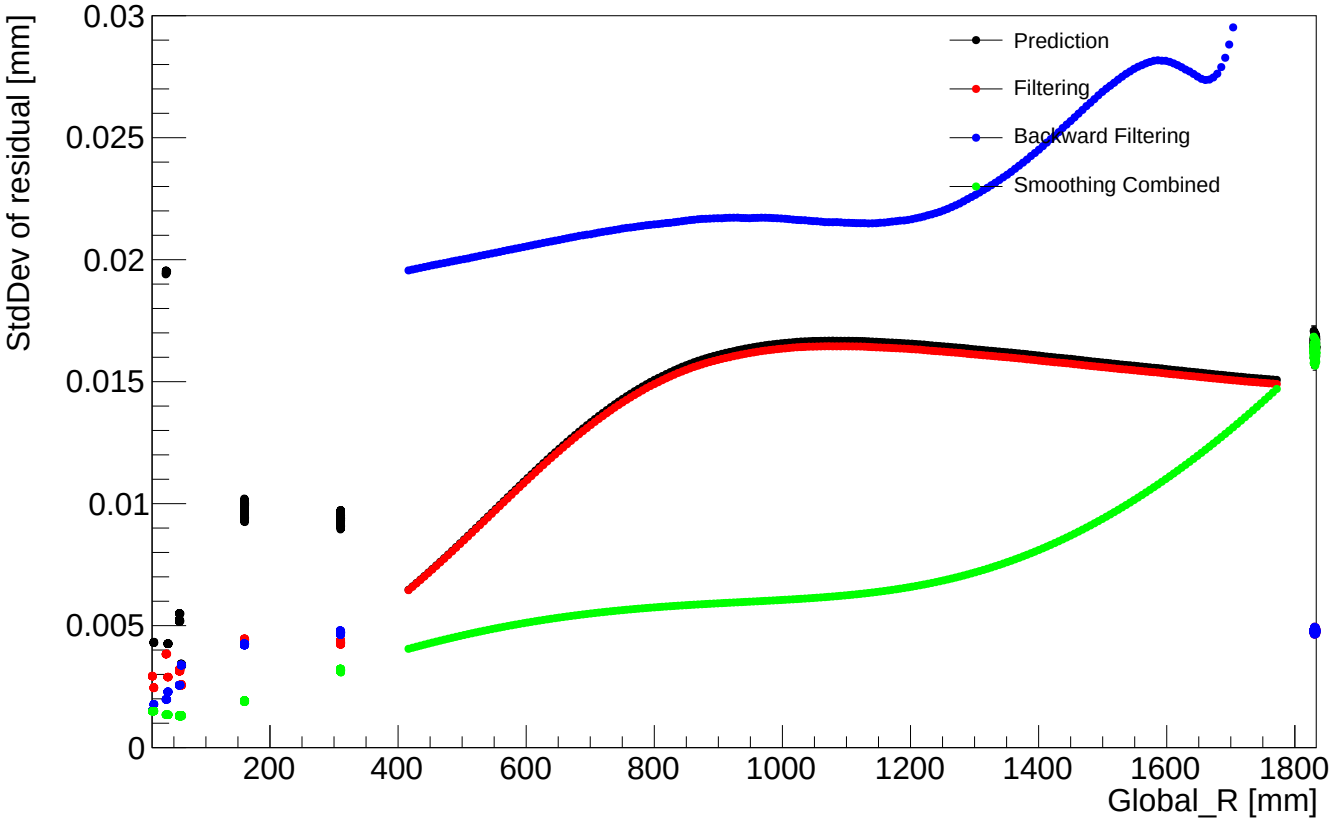
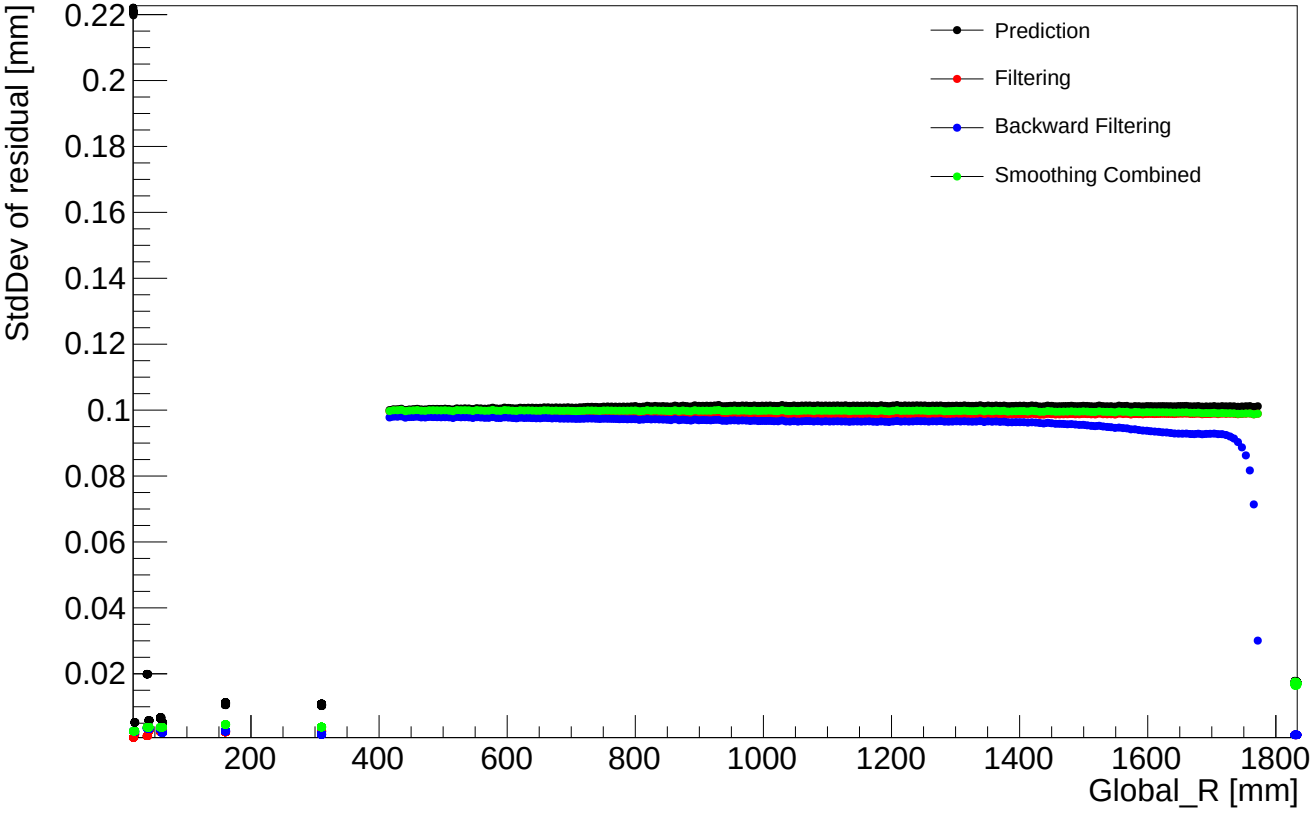
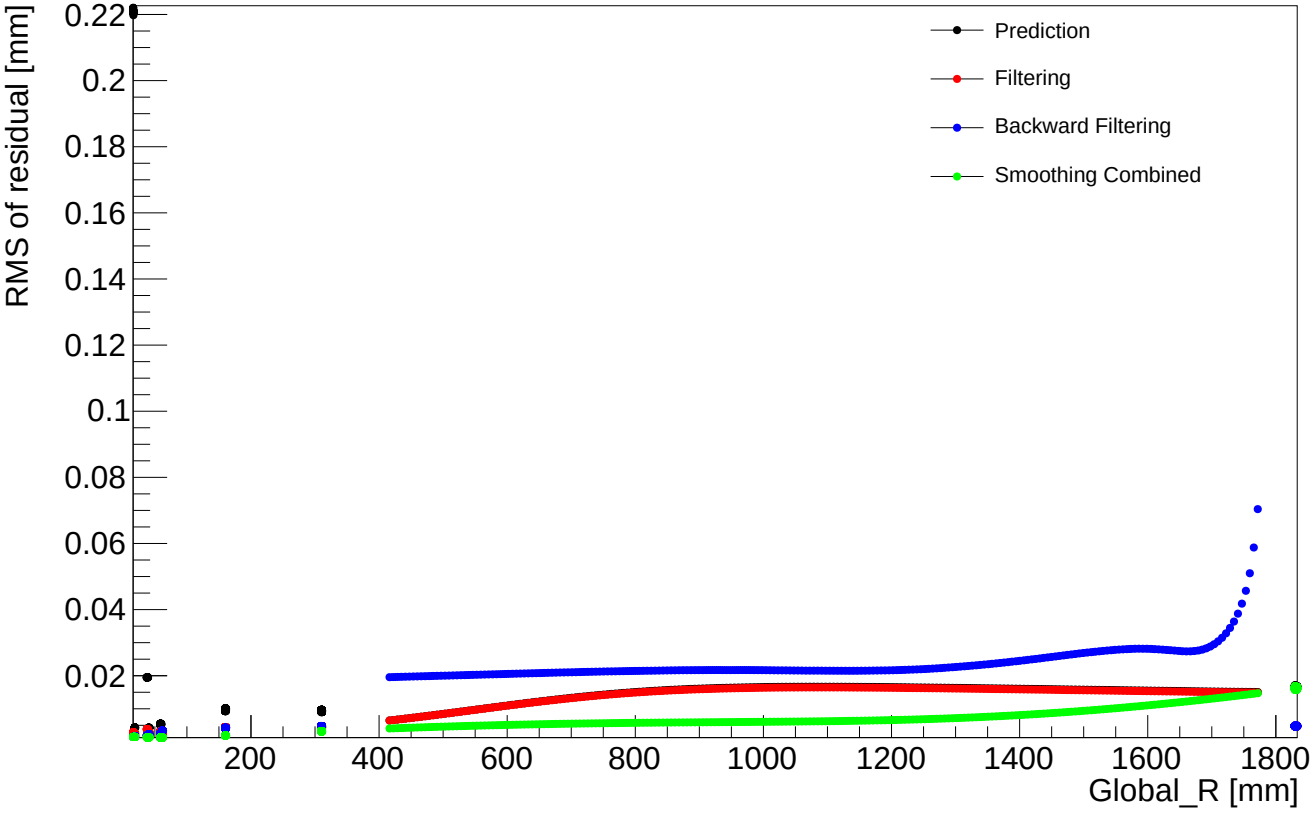

Mean of residual [mm]
0.002
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
−0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

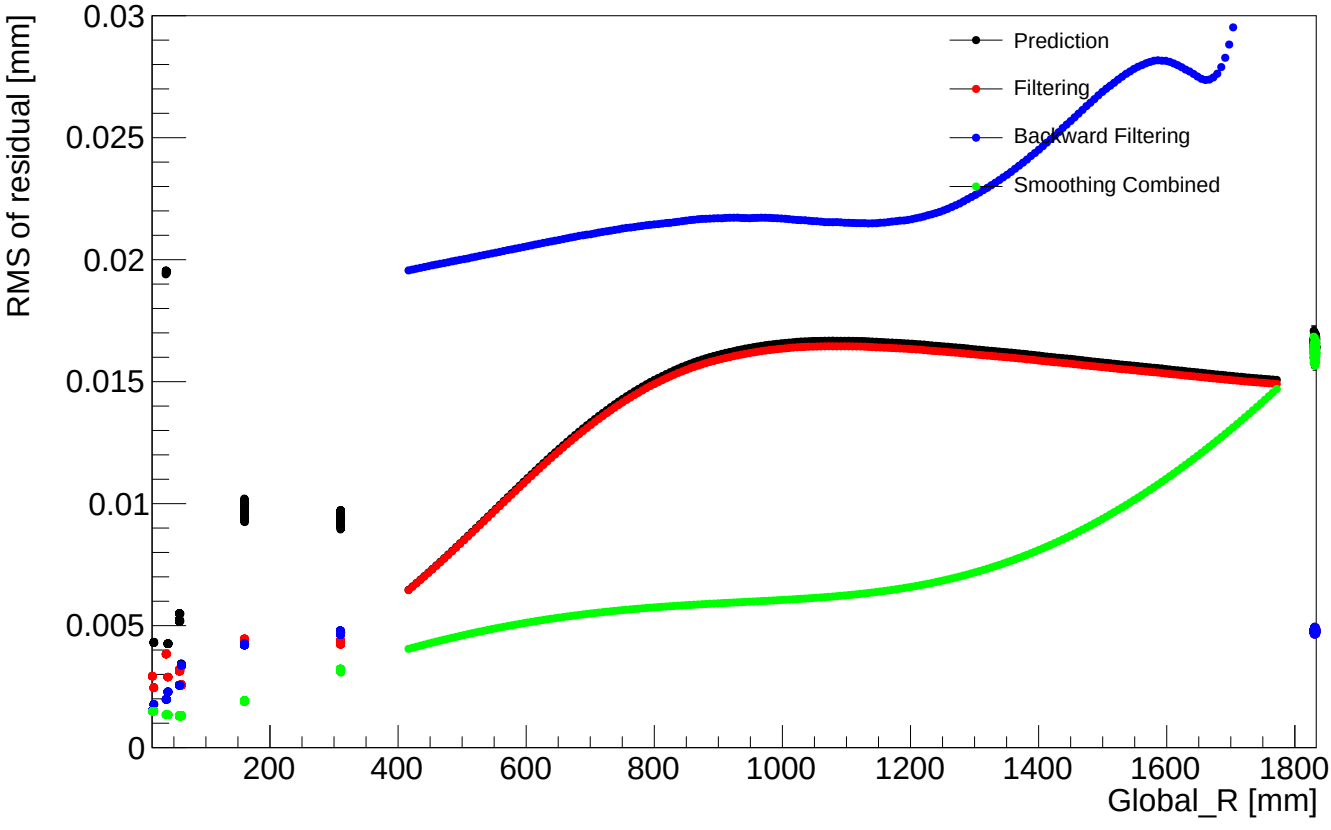

Mean of residual [mm]
0.002
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
−0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

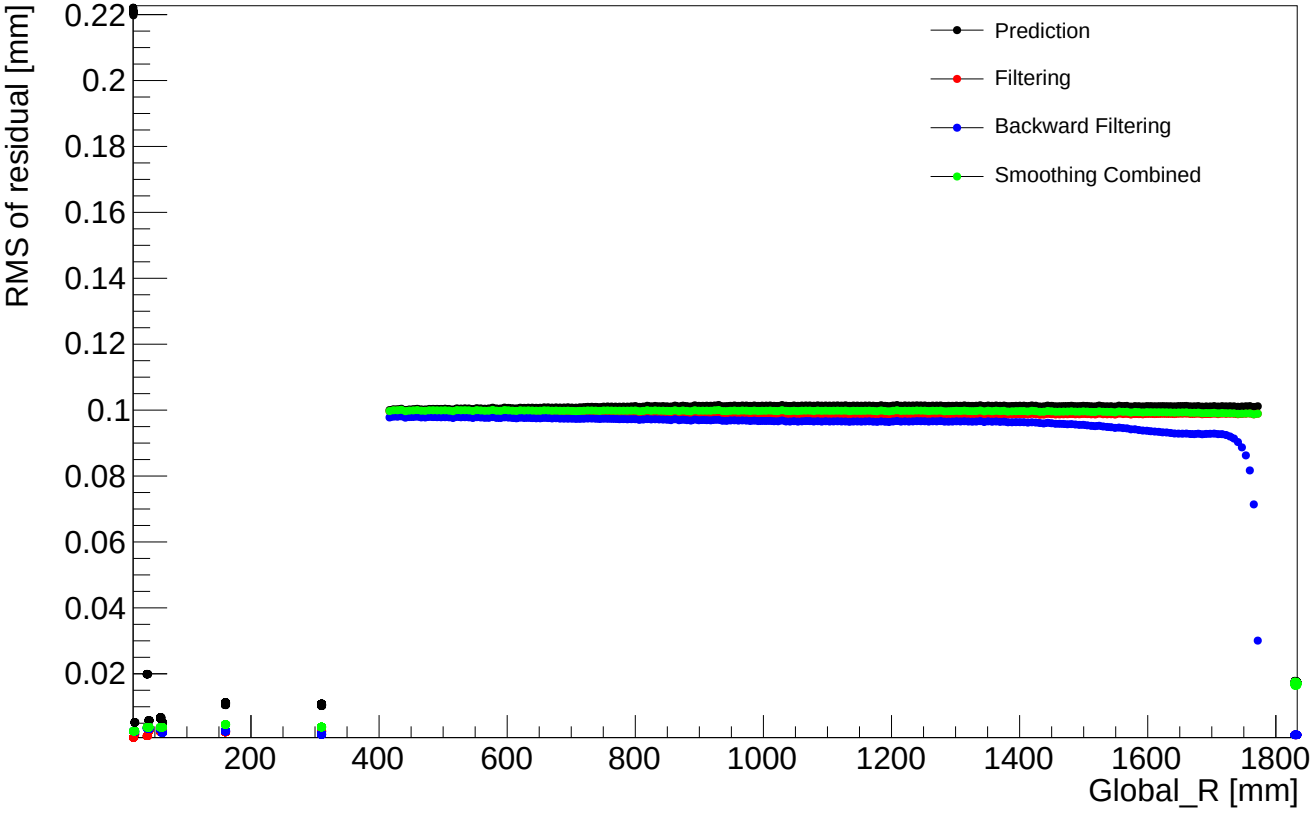

StdDev of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

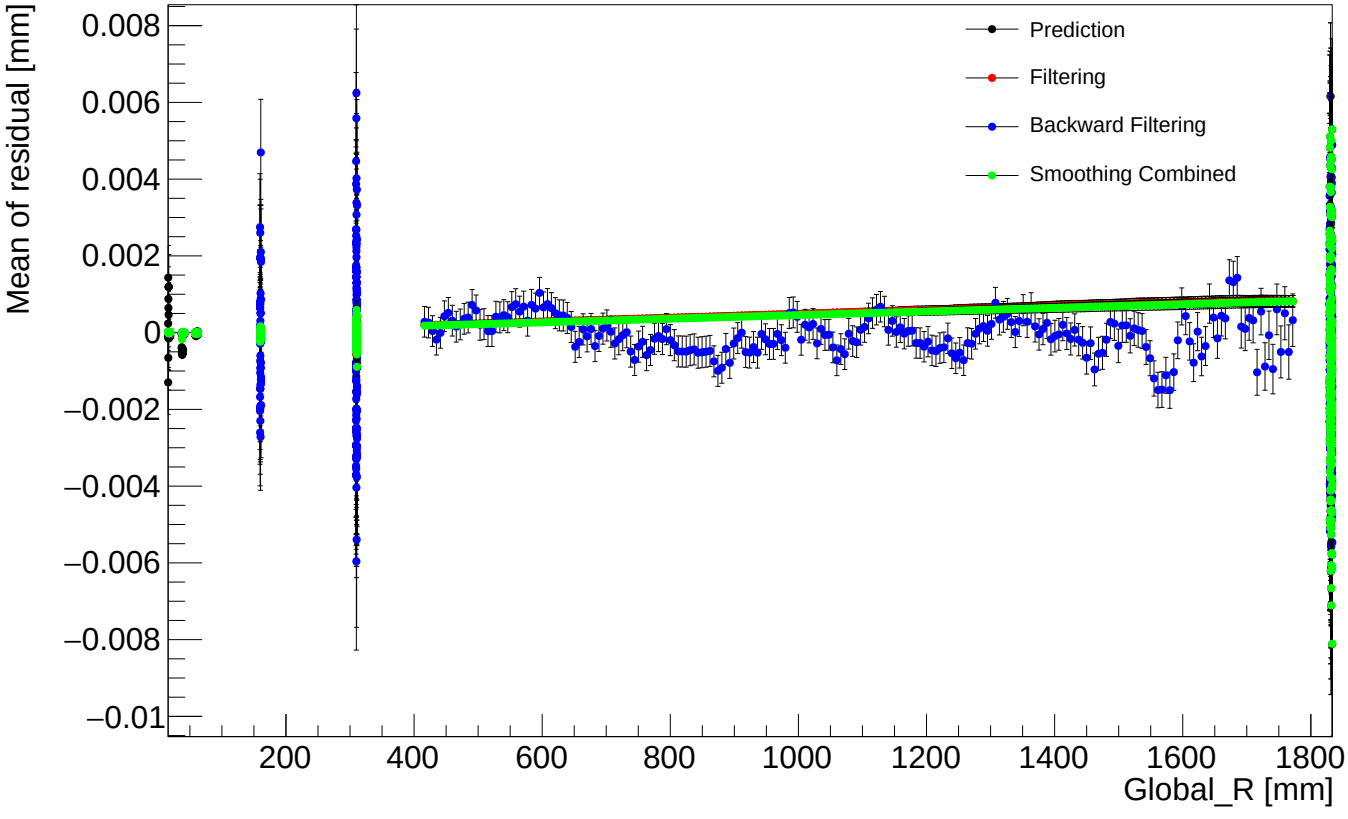

StdDev of residual [mm]
0.03
0.025
0.02
0.015
0.01
0.005
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

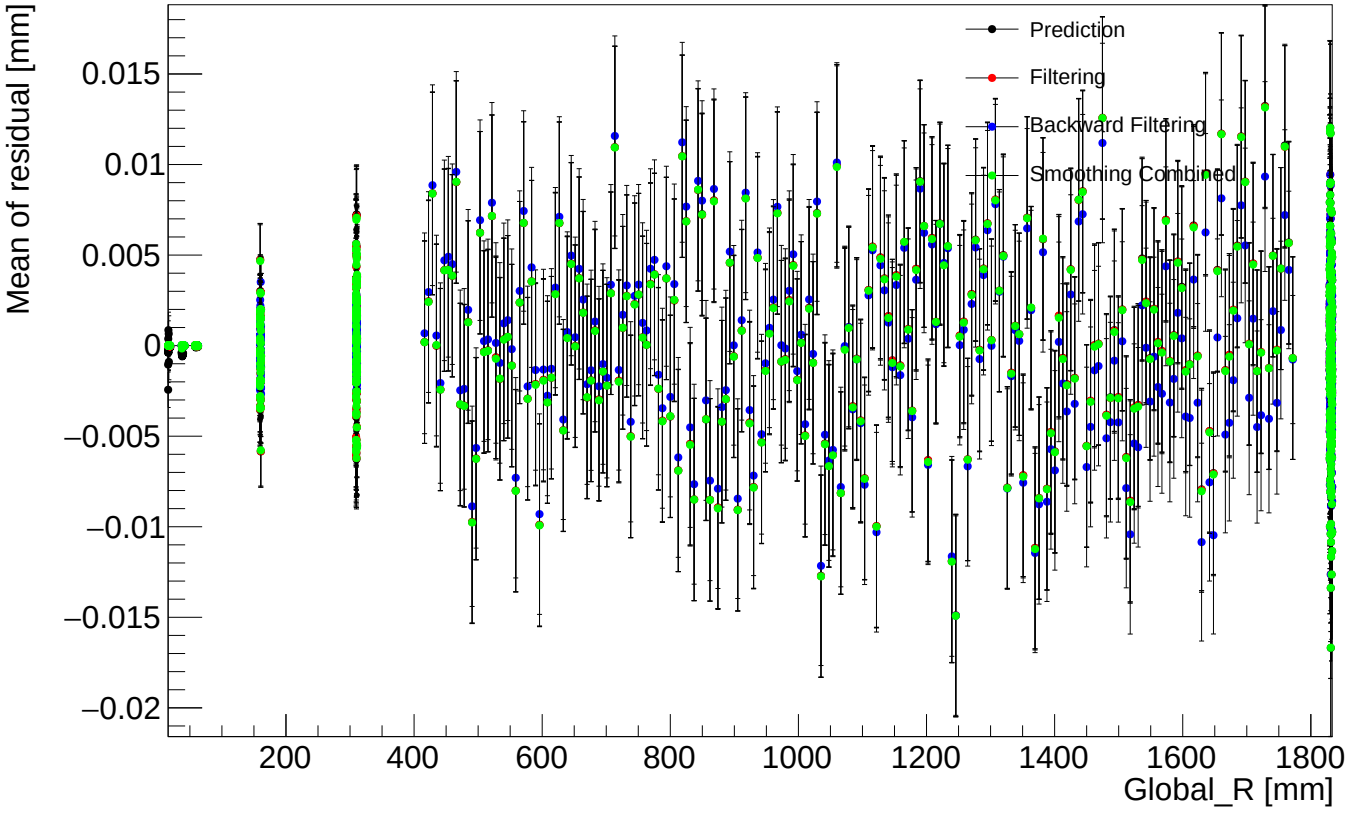

StdDev of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

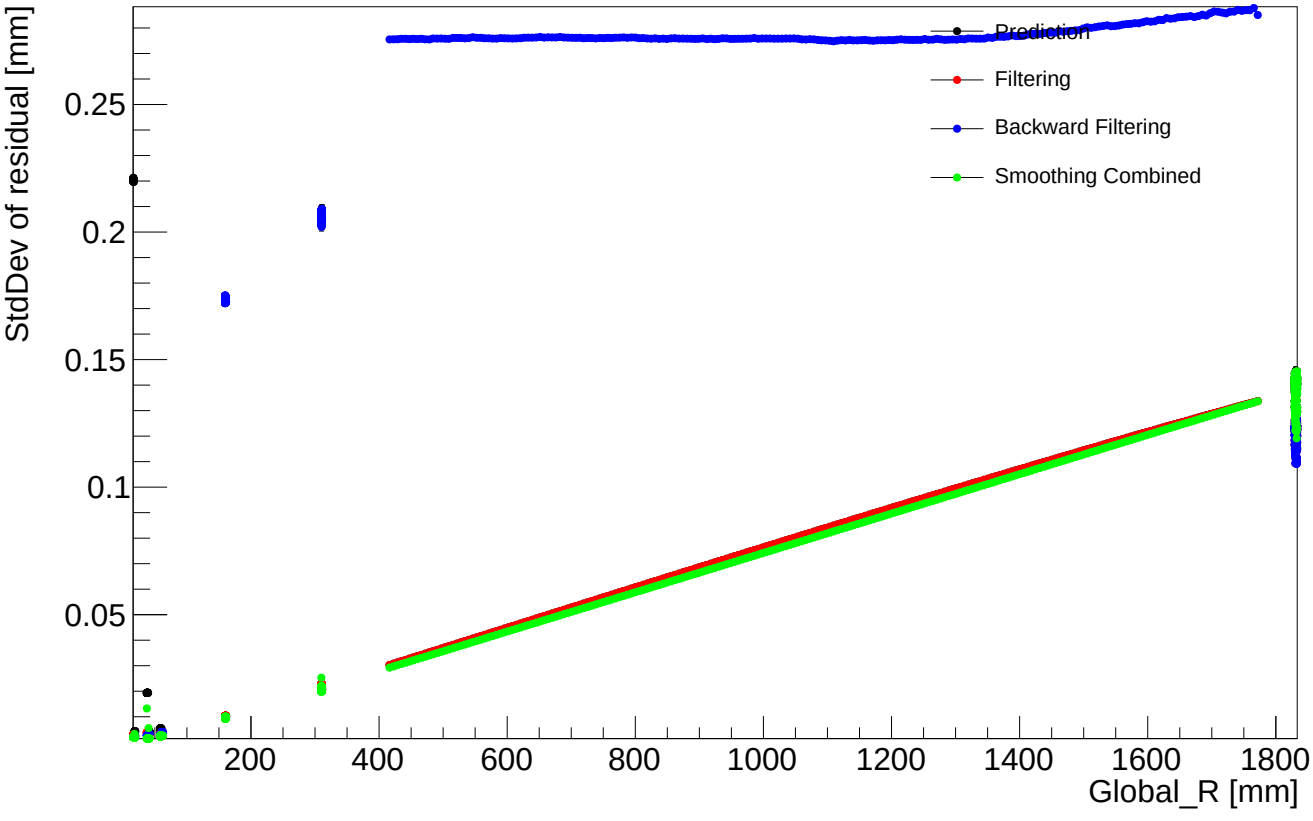

RMS of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

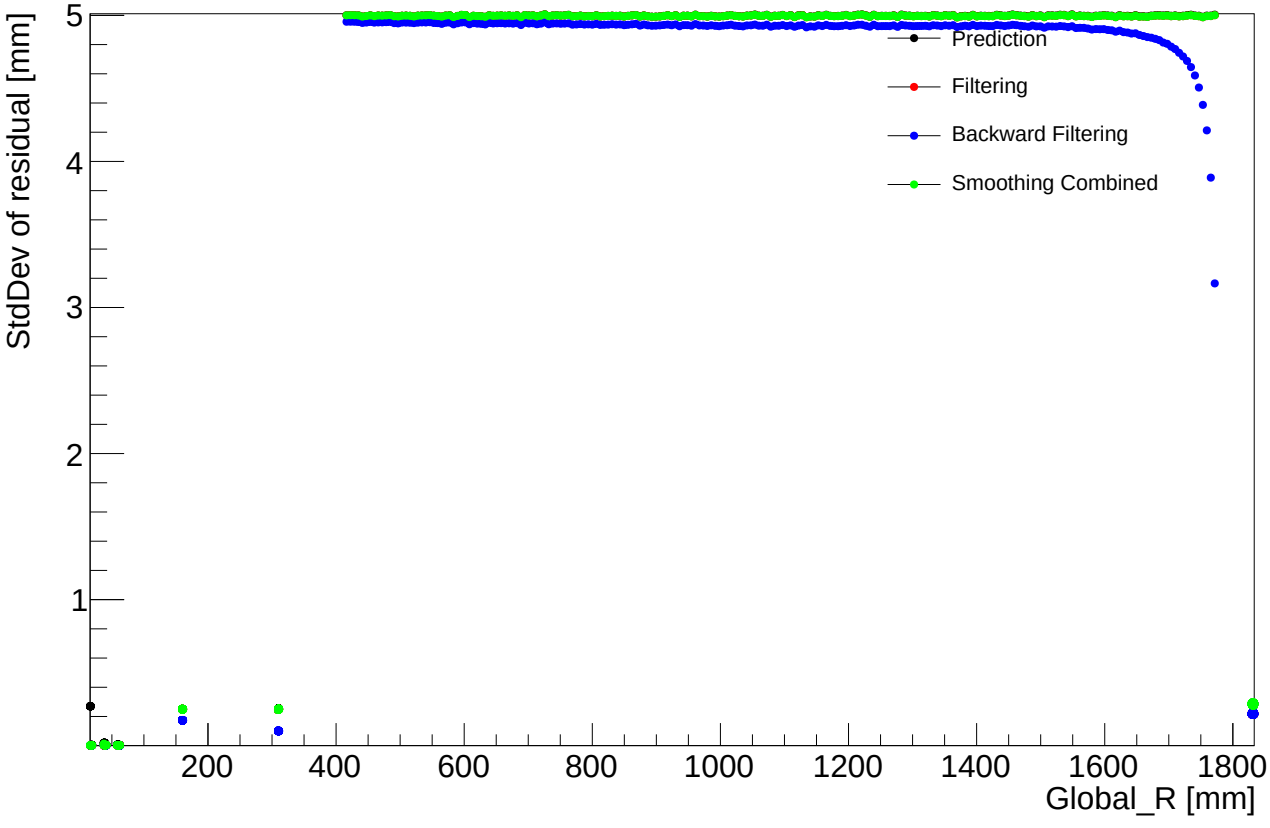

RMS of residual [mm]
0.03
0.025
0.02
0.015
0.01
0.005
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

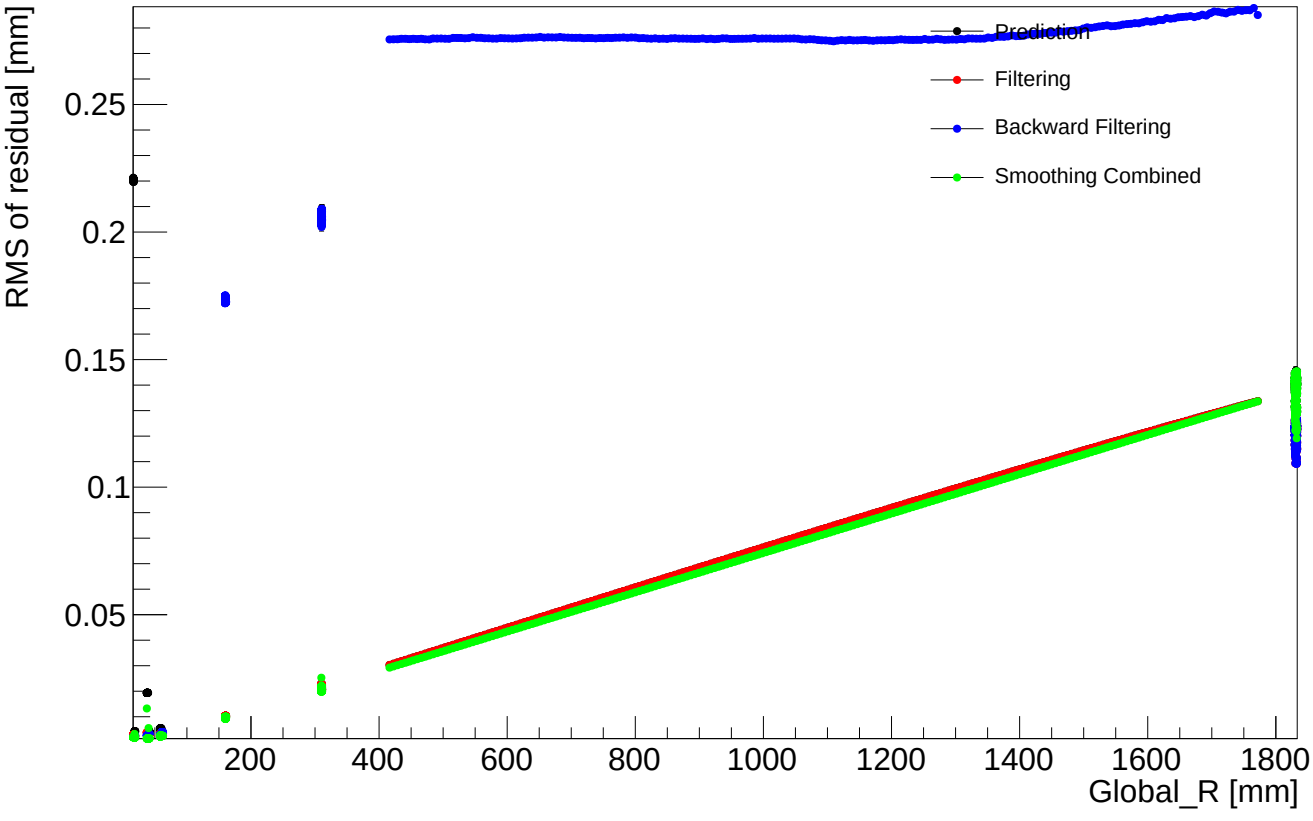

RMS of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

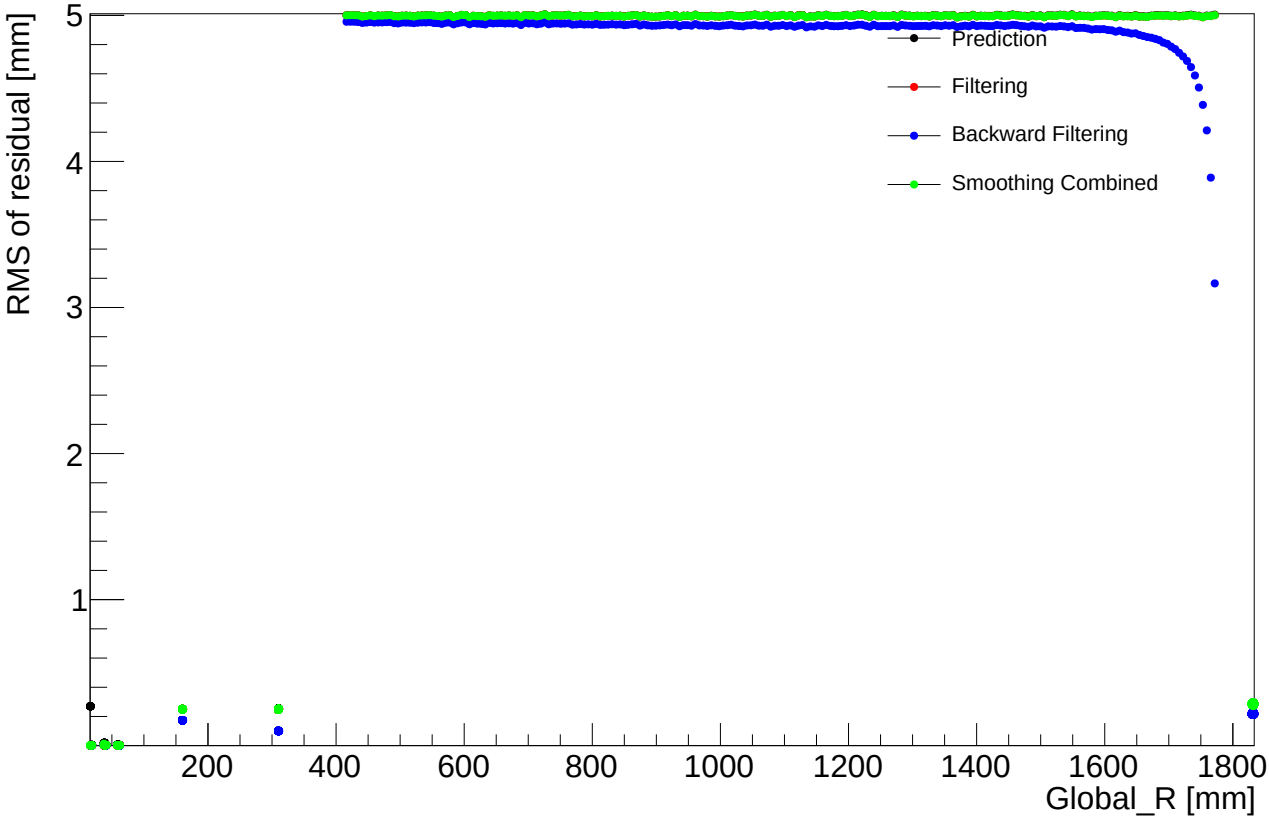

Mean of residual [mm]
0.008
0.006
0.004
0.002
0
−0.002
−0.004
−0.006
−0.008
−0.01
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

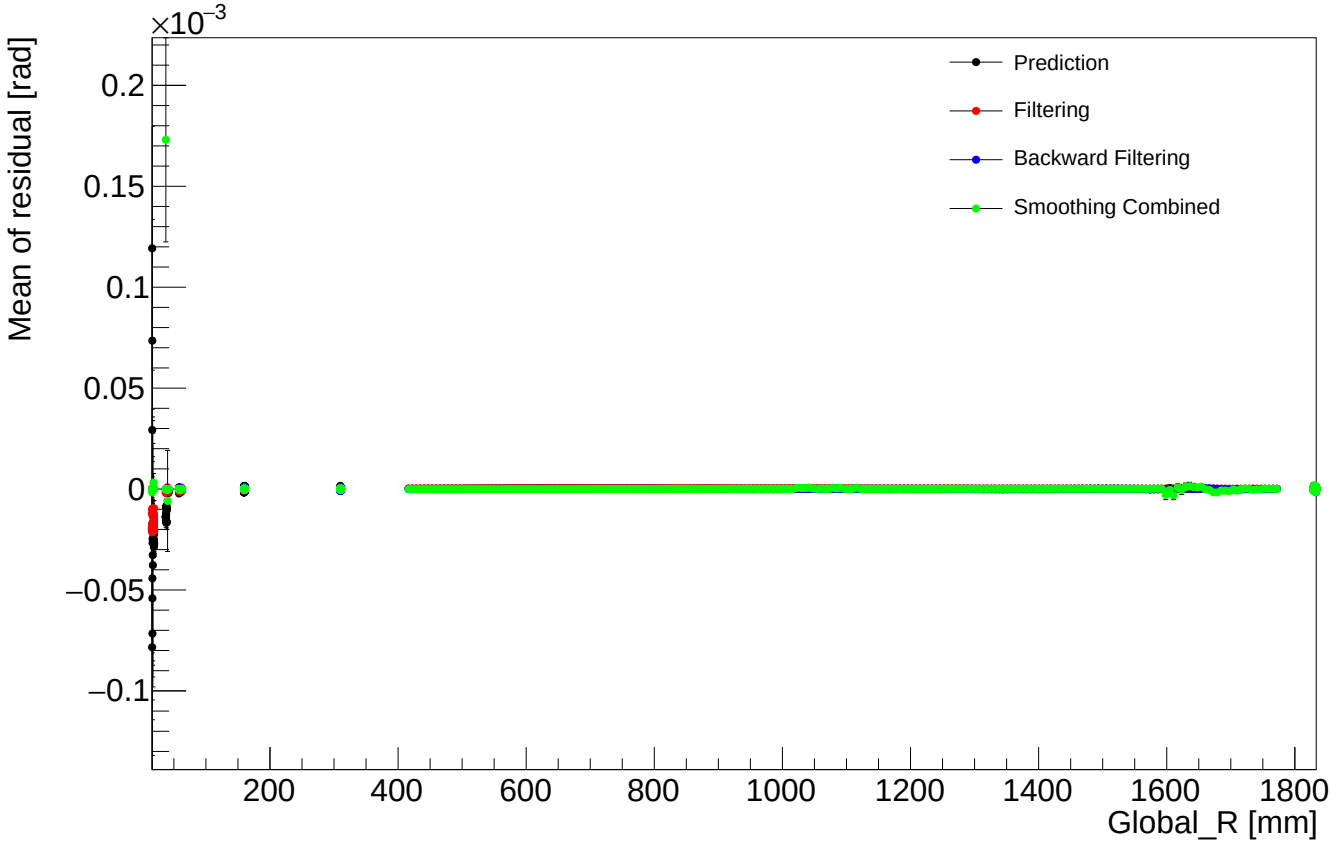

Mean of residual [mm]
0.015
0.01
0.005
0
−0.005
−0.01
−0.015
−0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

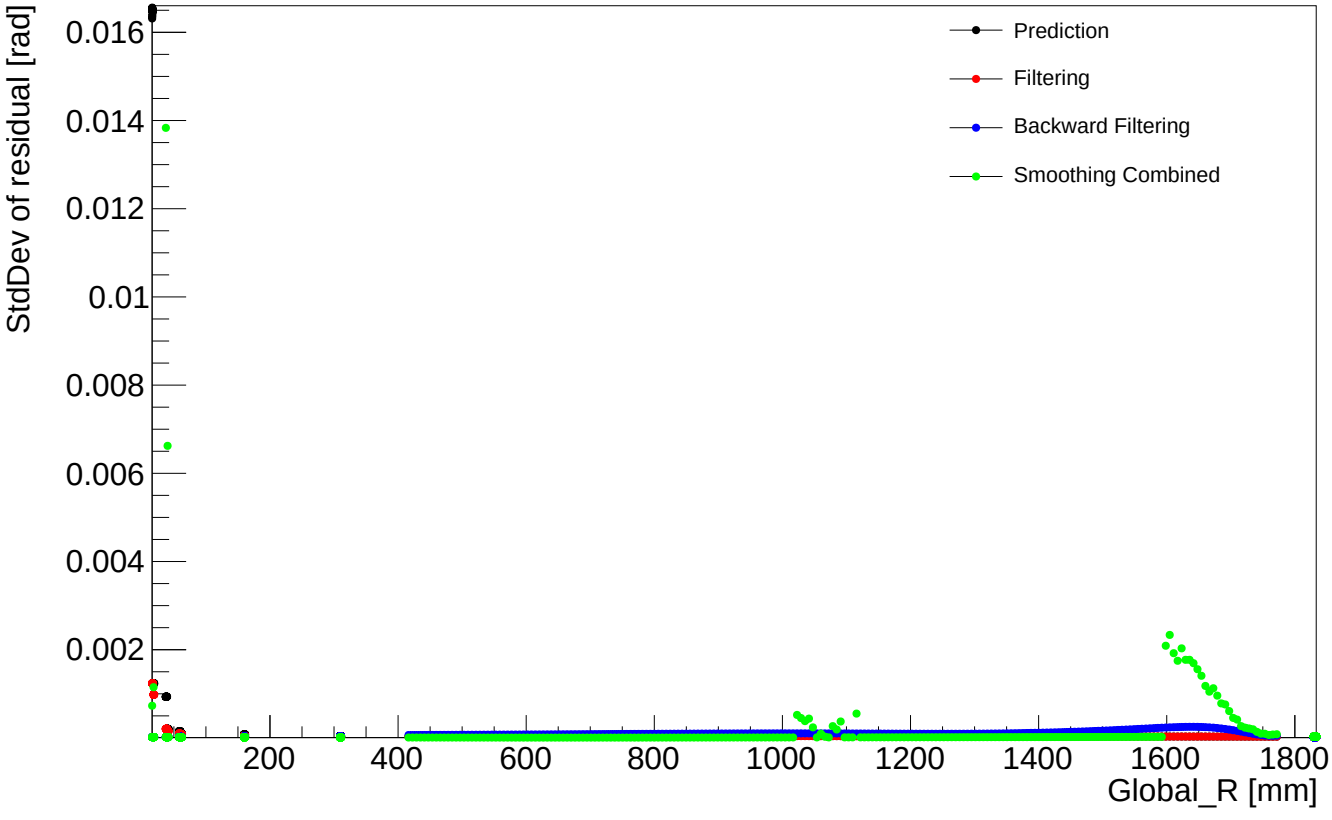

StdDev of residual [mm]
0.25
0.2
0.15
0.1
0.05
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

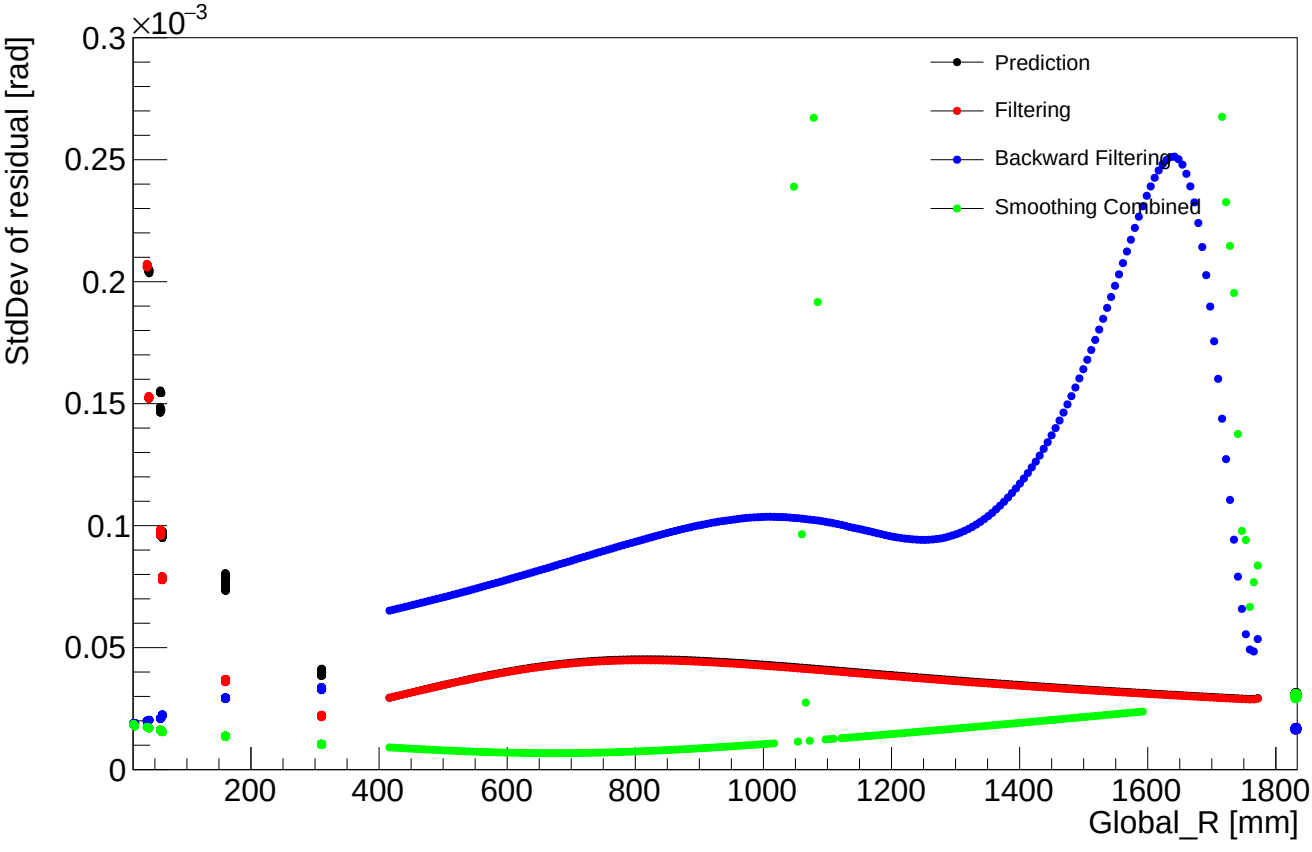

StdDev of residual [mm]
5
4
3
2
1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

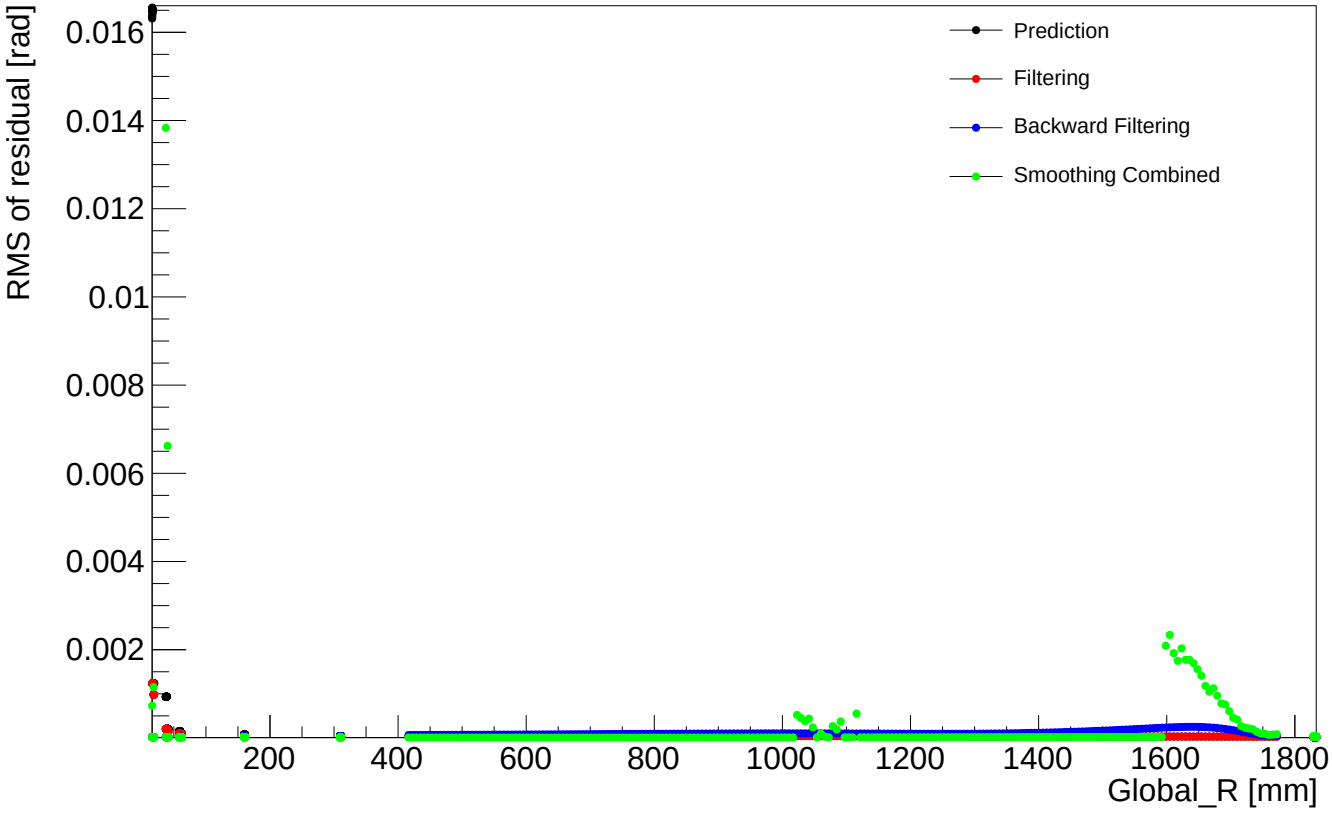

RMS of residual [mm]
0.25
0.2
0.15
0.1
0.05
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

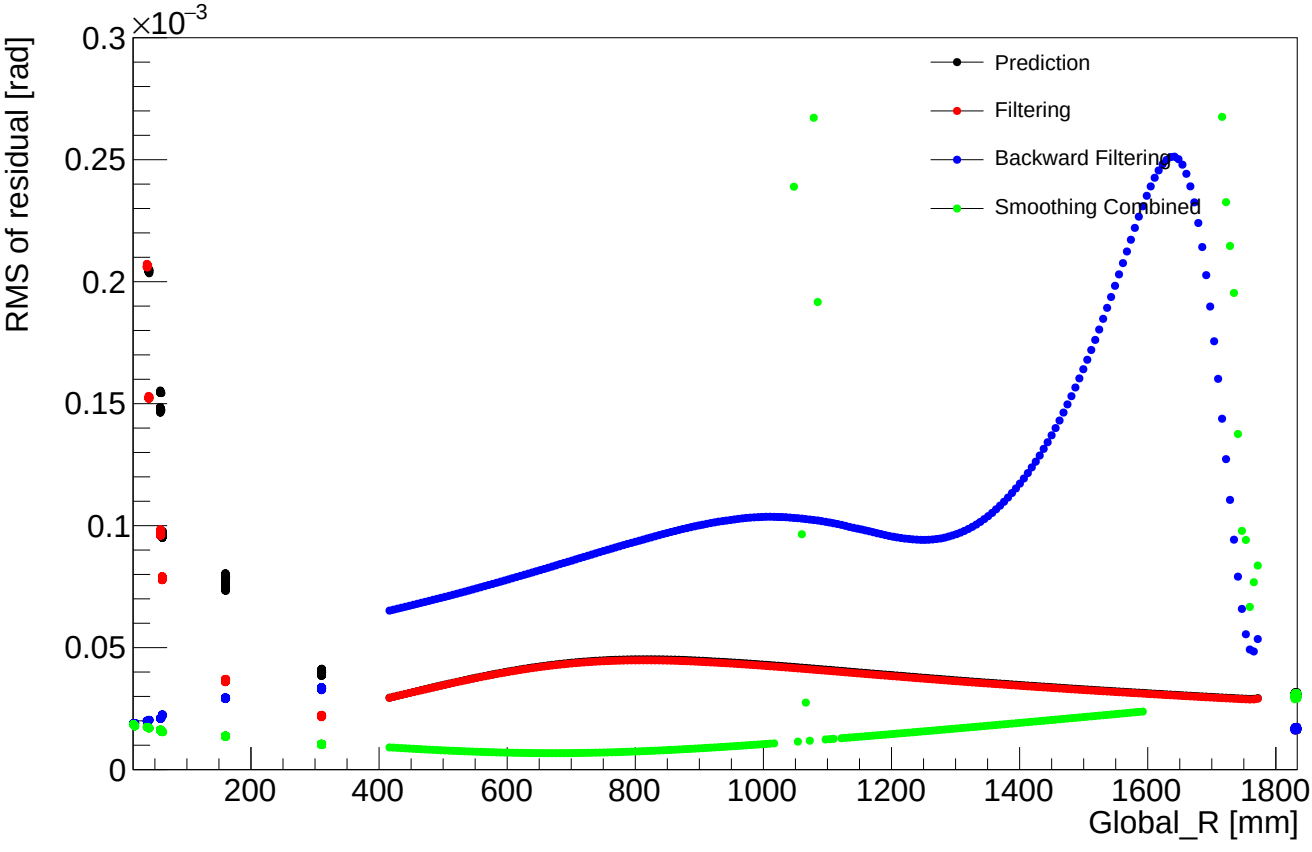

RMS of residual [mm]
5
4
3
2
1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

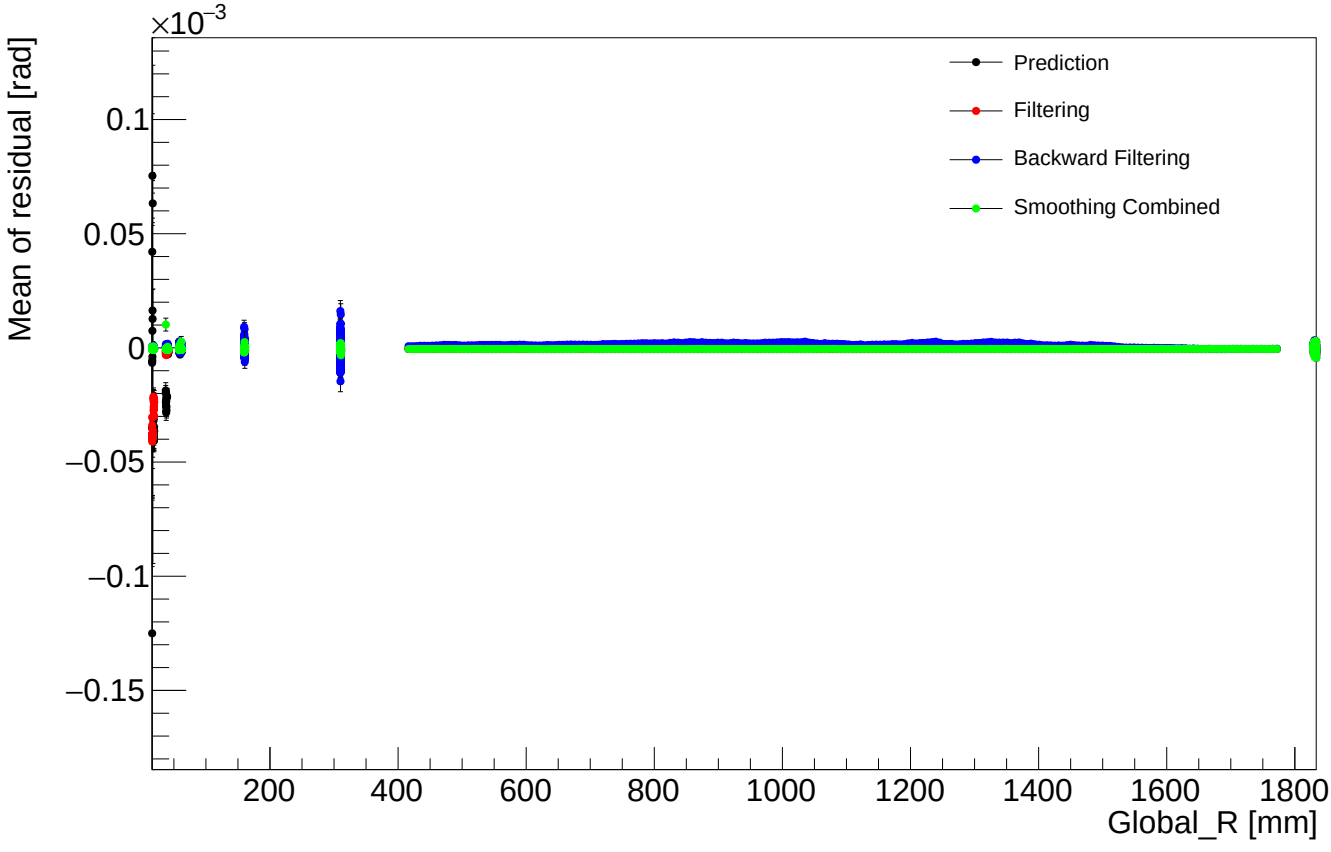

×10^−3
Mean of residual [rad]
0.2
0.15
0.1
0.05
0
−0.05
−0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

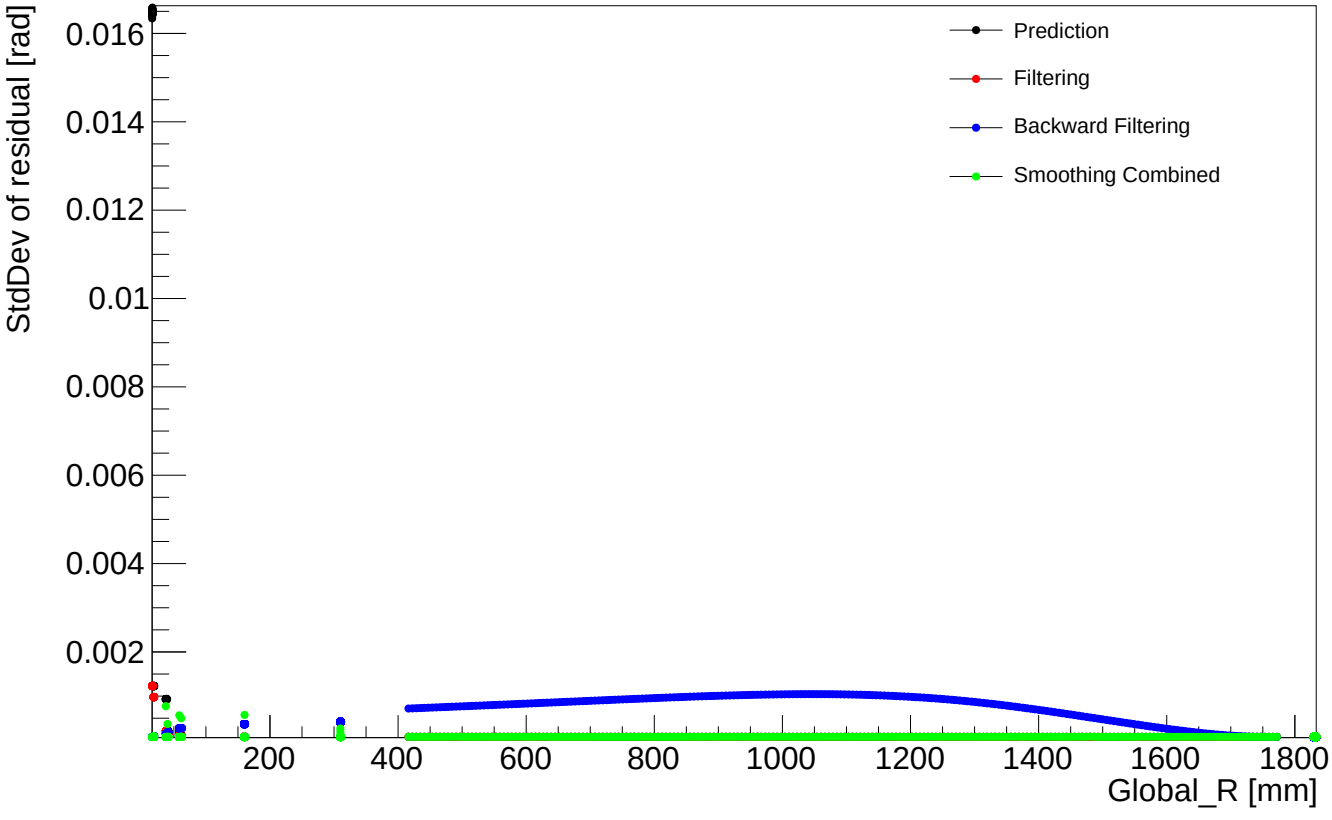

StdDev of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

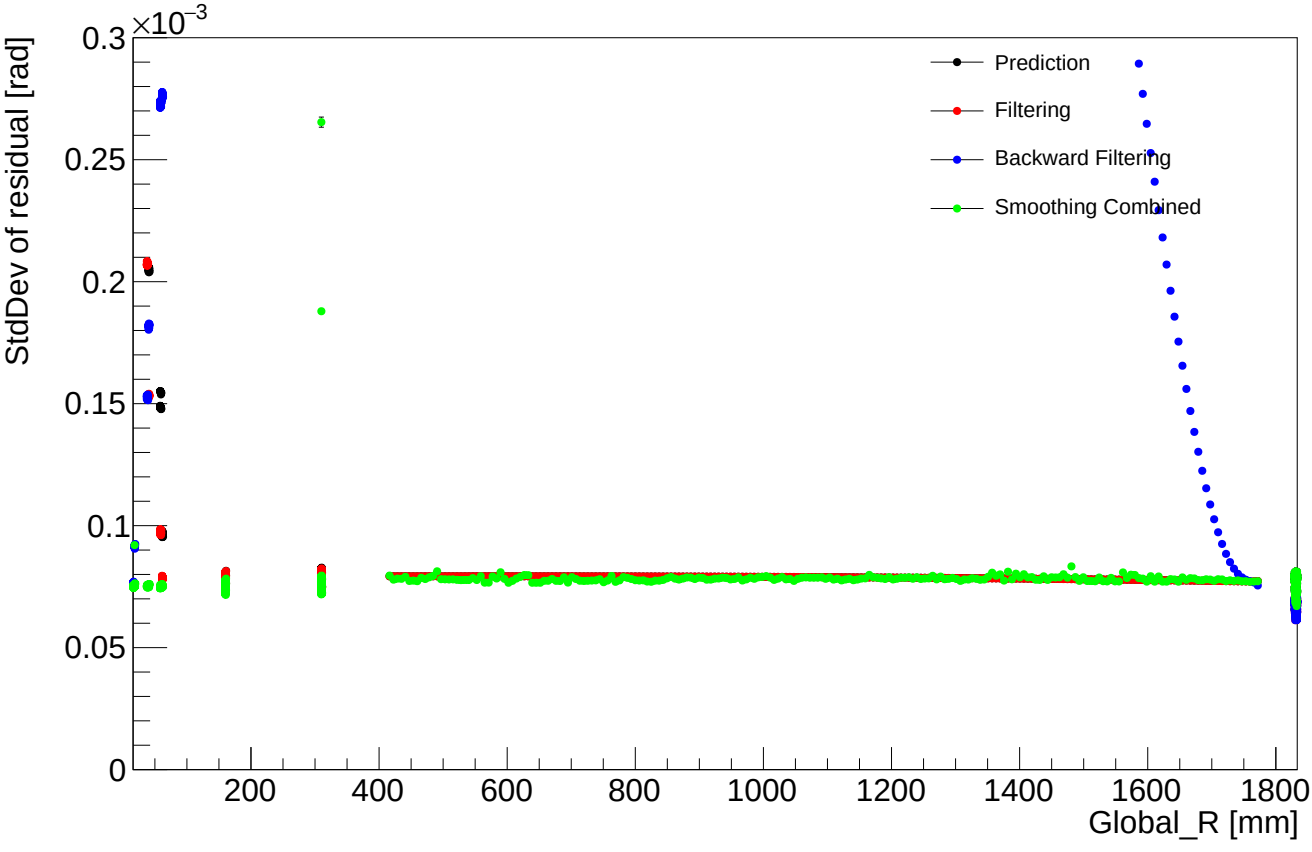

×10^-3
0.3
0.25
0.2
0.15
0.1
0.05
0
StdDev of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

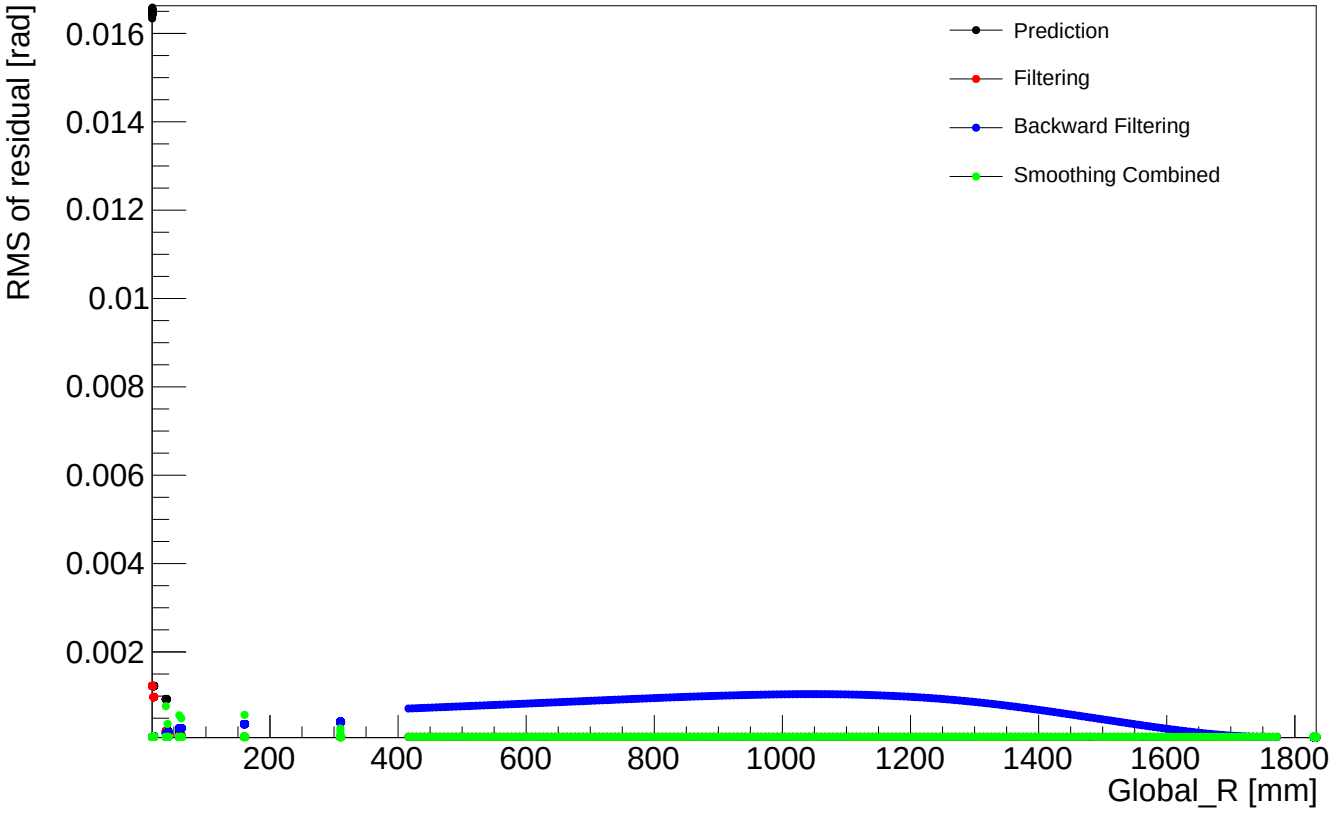

RMS of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

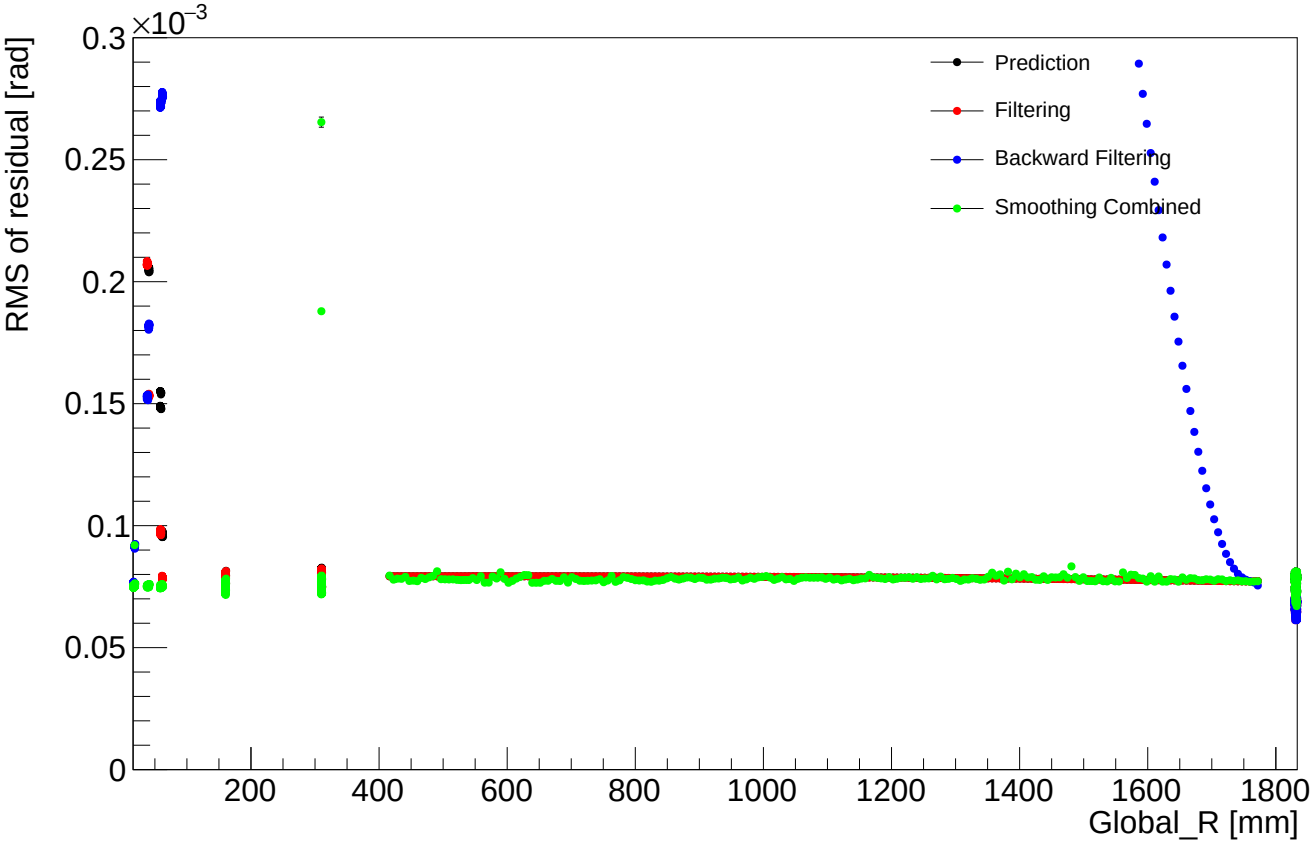

×10^-3
0.3
0.25
0.2
0.15
0.1
0.05
0
RMS of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

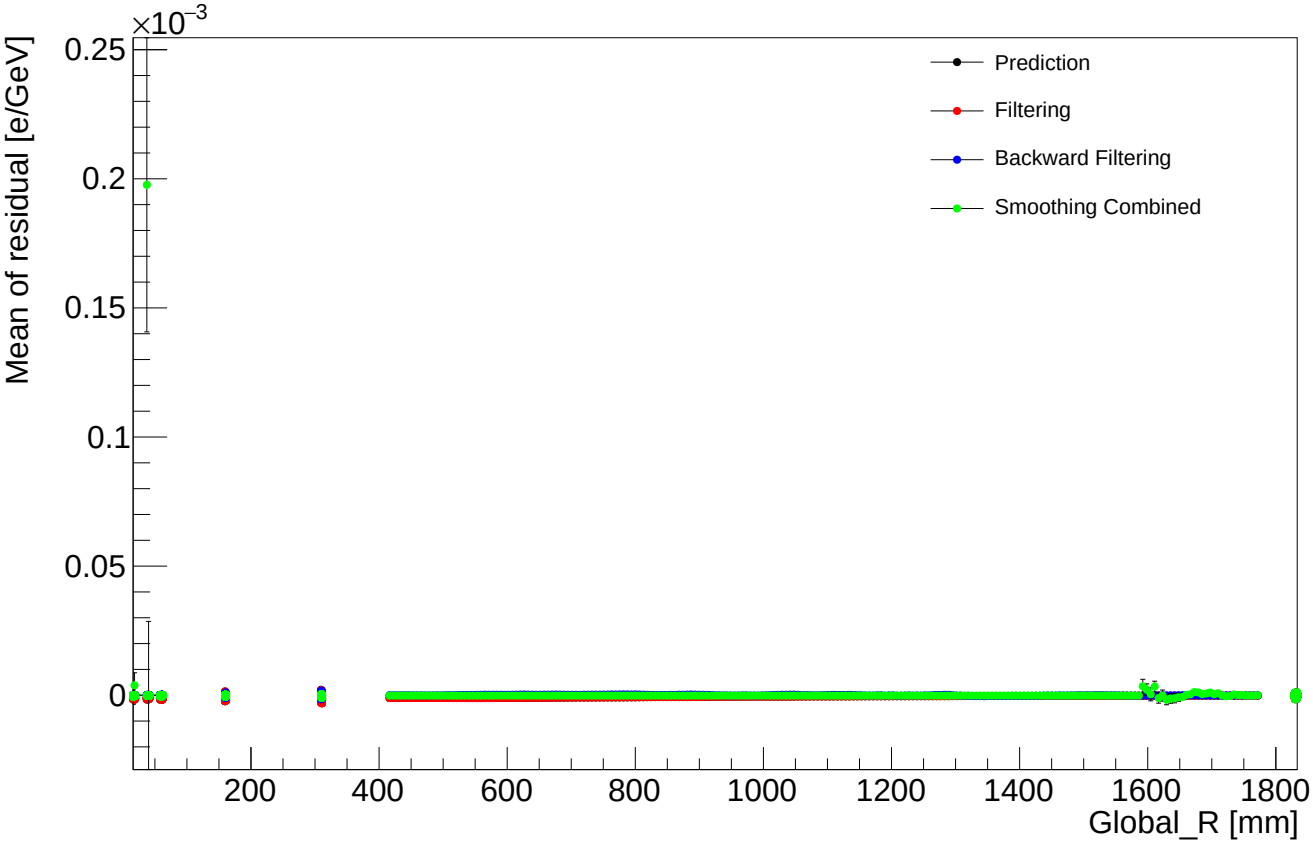

×10^−3
Mean of residual [rad]
0.1
0.05
0
−0.05
−0.1
−0.15
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

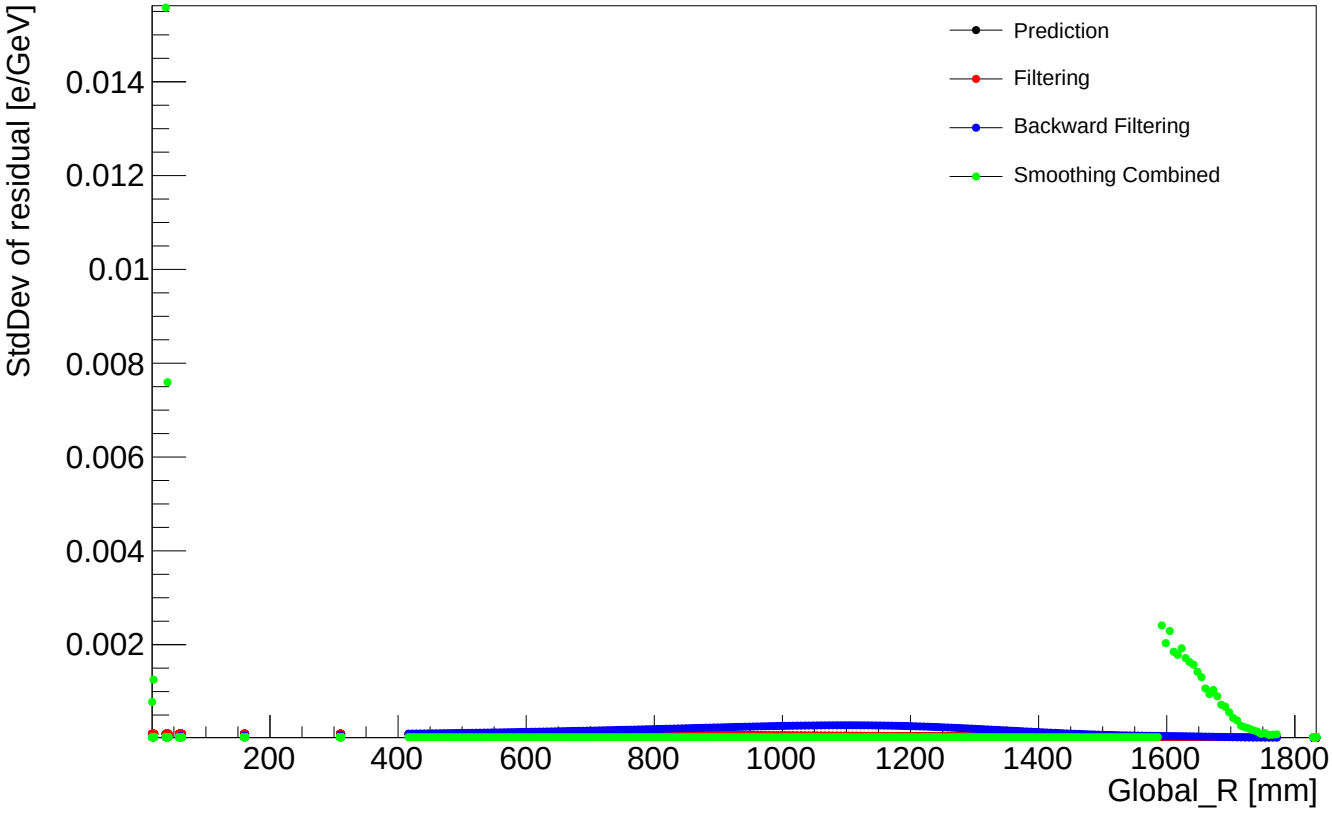

StdDev of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

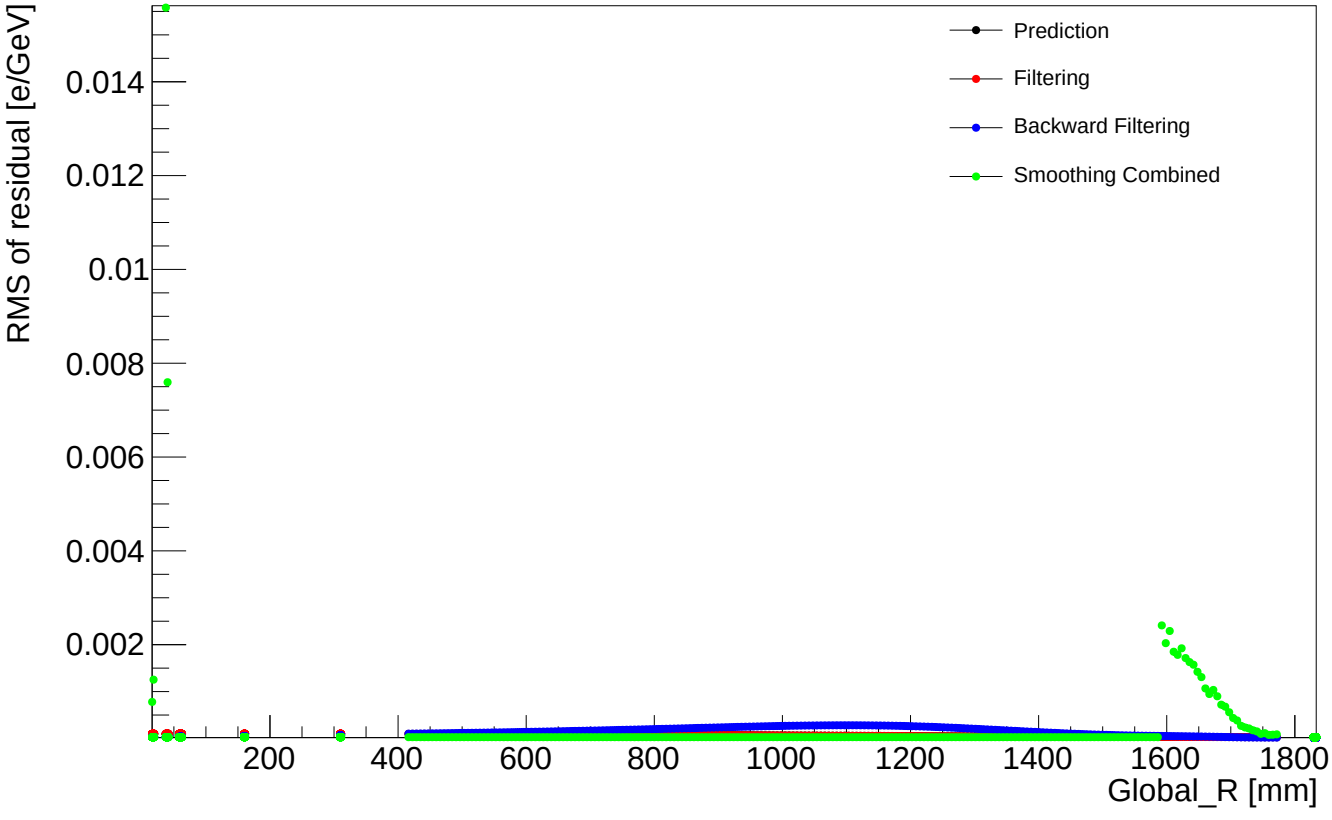

StdDev of residual [rad]
×10^−3
0.3
0.25
0.2
0.15
0.1
0.05
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

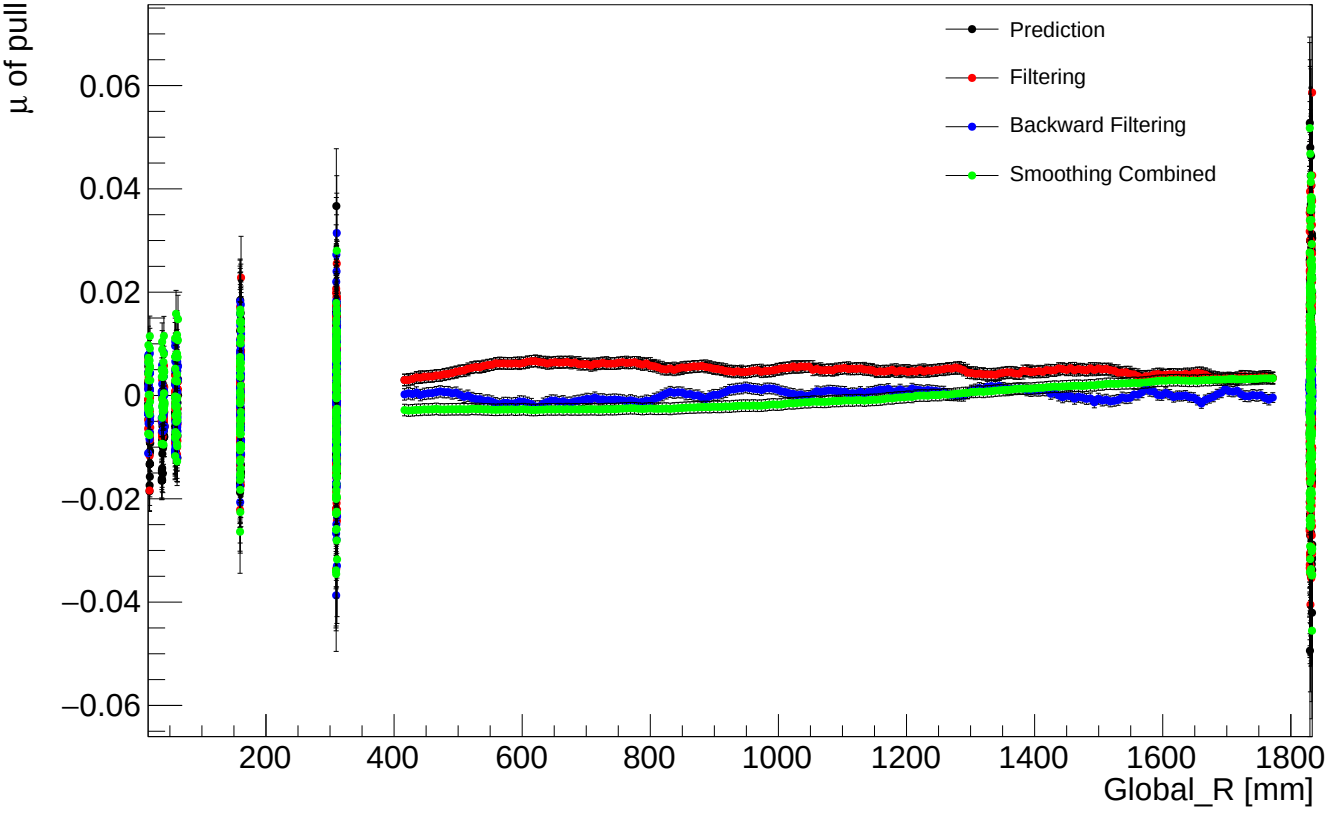

RMS of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

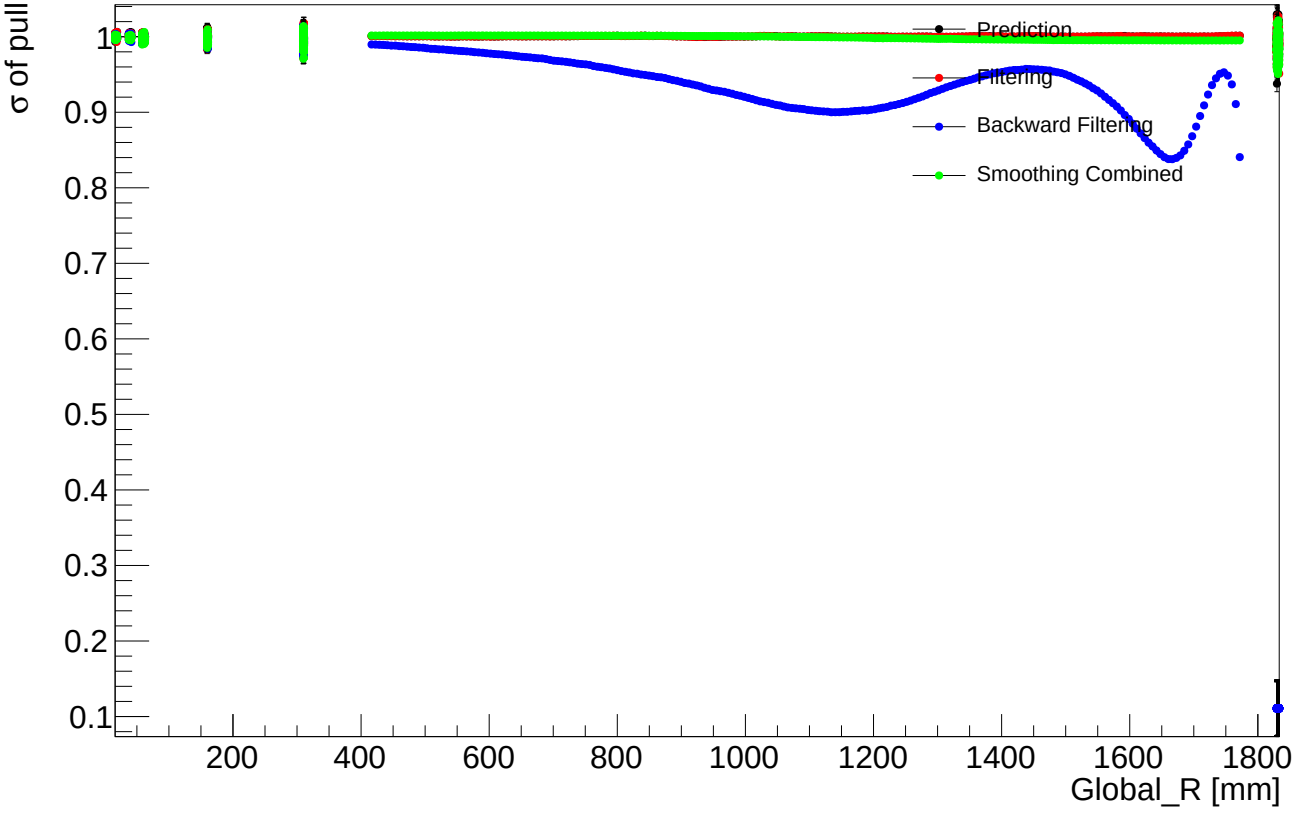

×10^−3
0.3
0.25
0.2
0.15
0.1
0.05
0
RMS of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

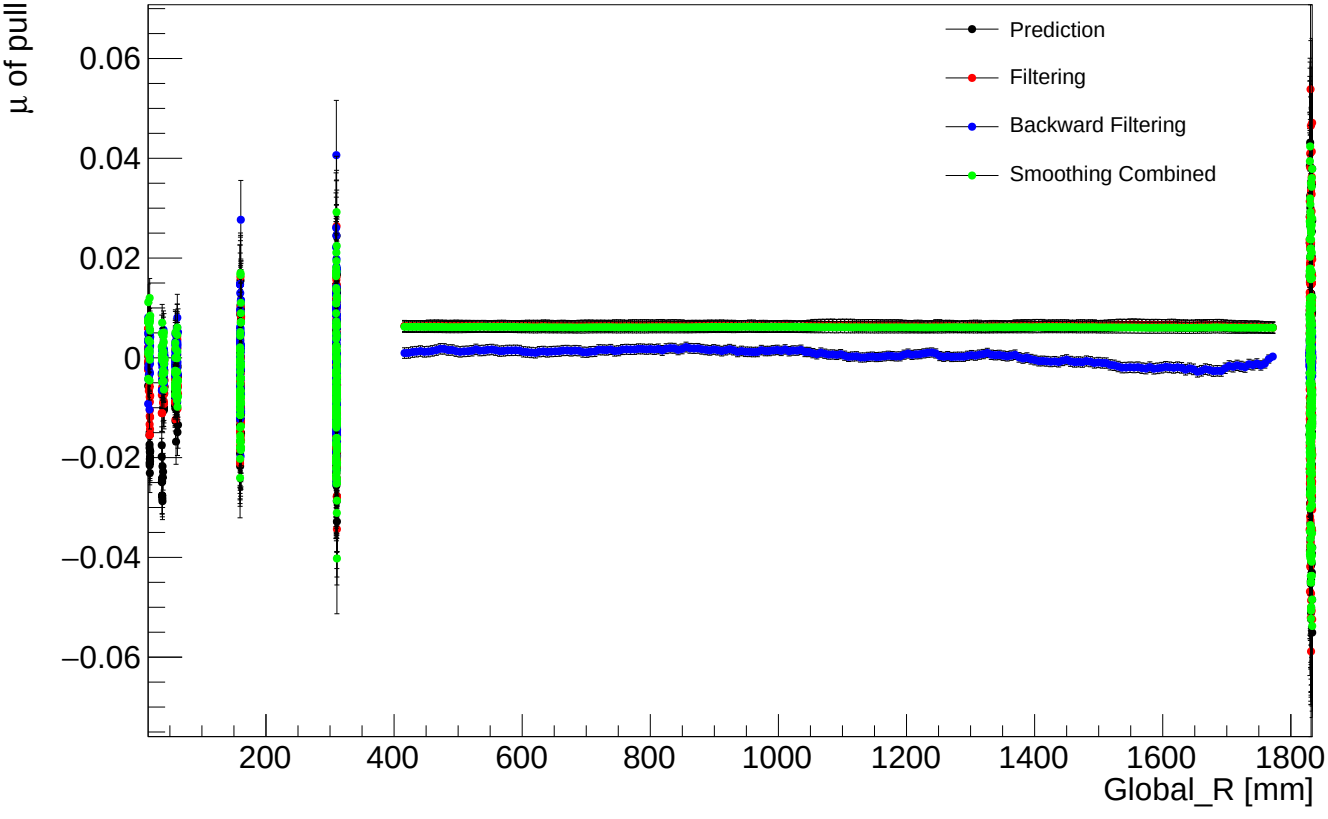

×10^−3
0.25
0.2
0.15
0.1
0.05
0
Mean of residual [e/GeV]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

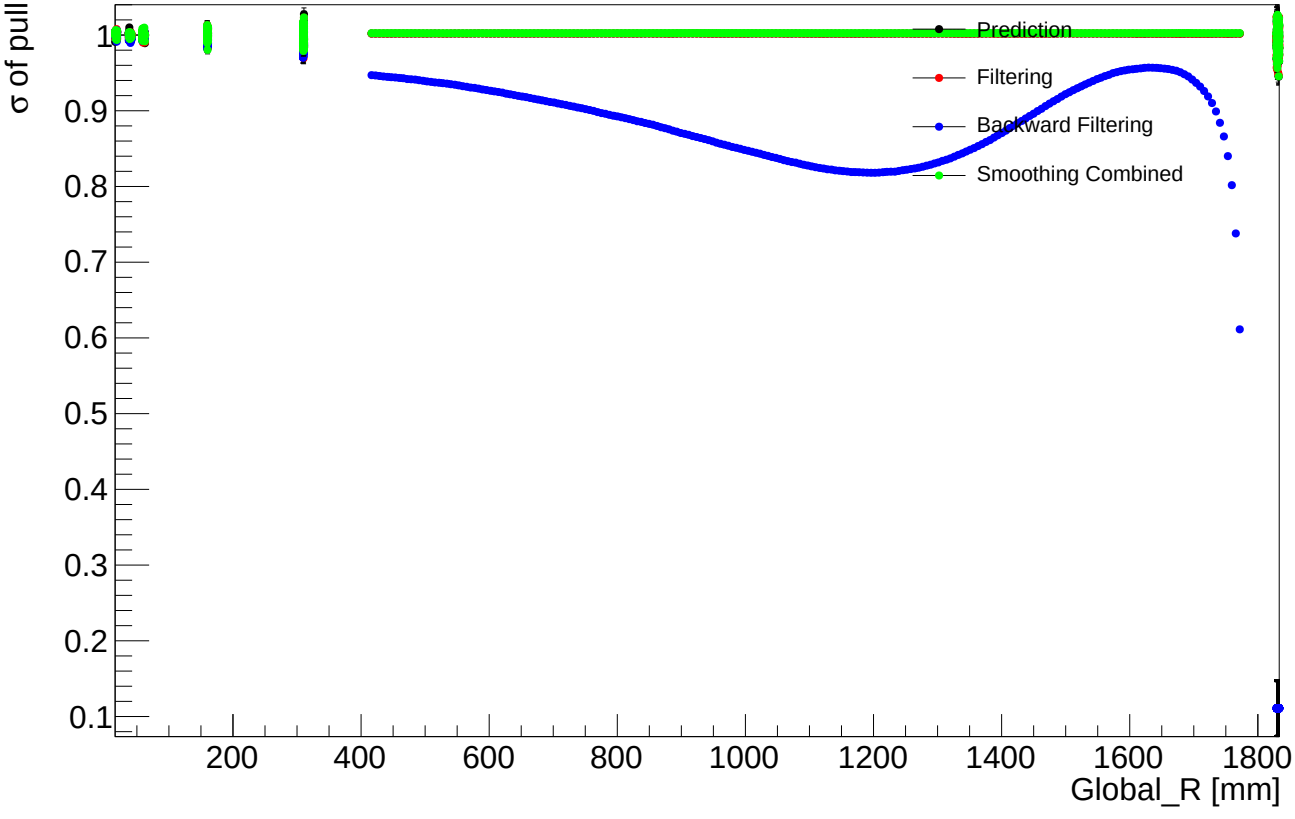

StdDev of residual [e/GeV]
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

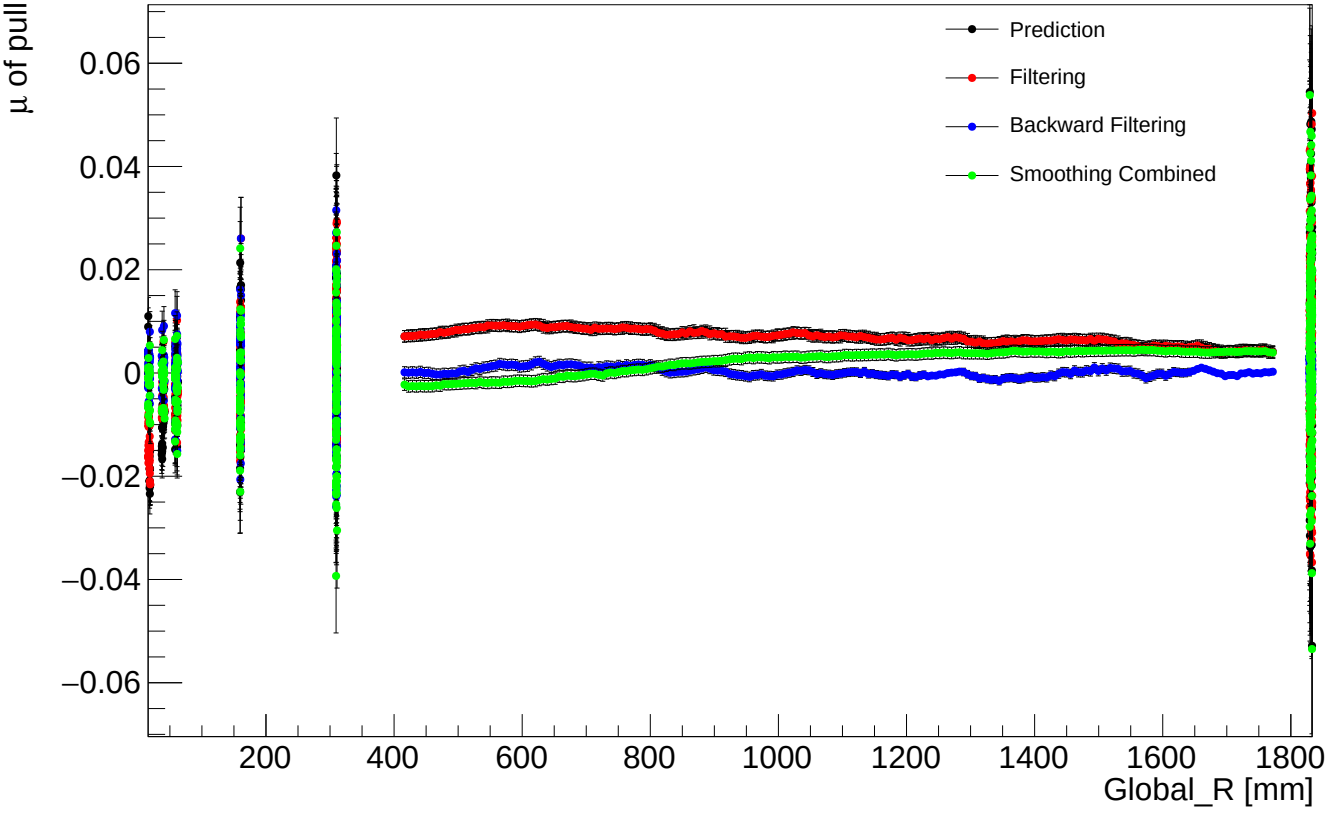

RMS of residual [e/GeV]
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

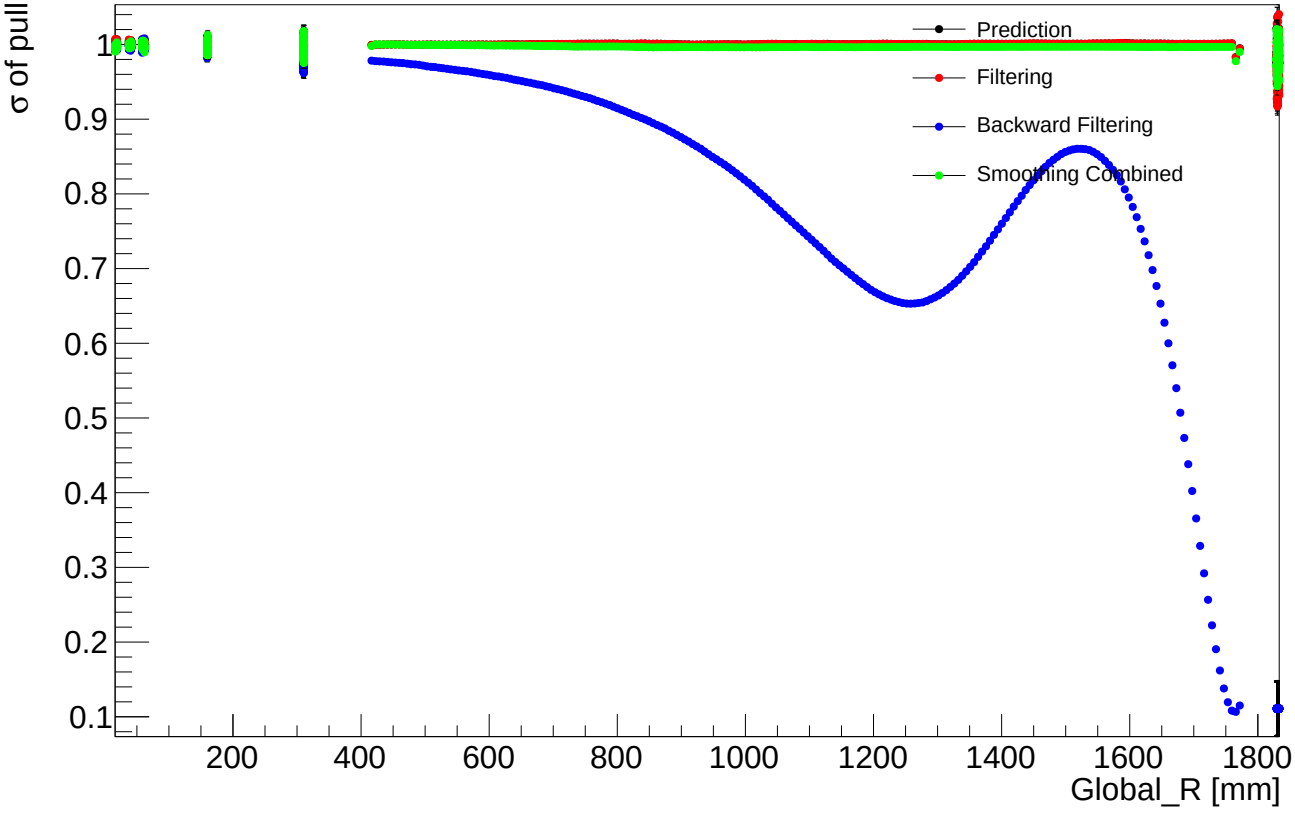

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

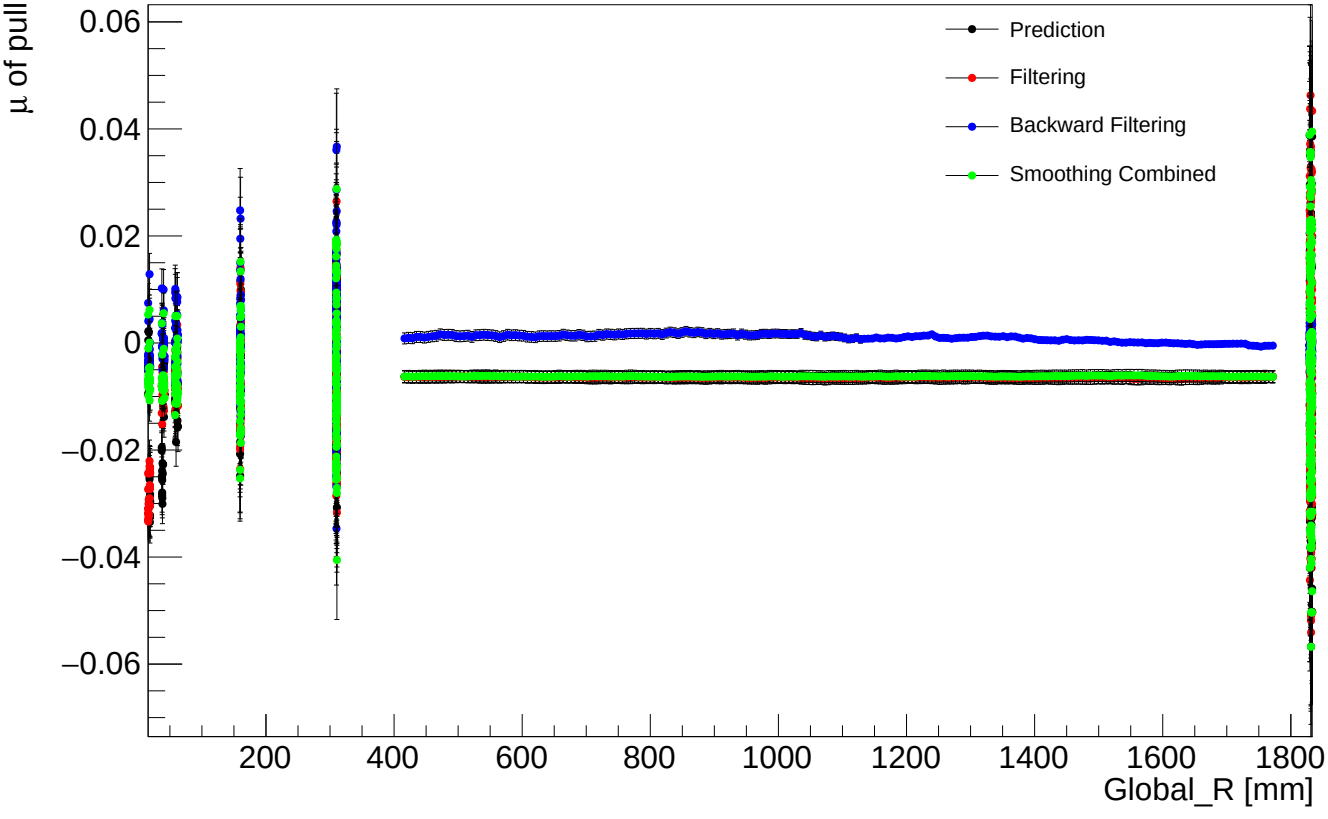

σ of pull
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

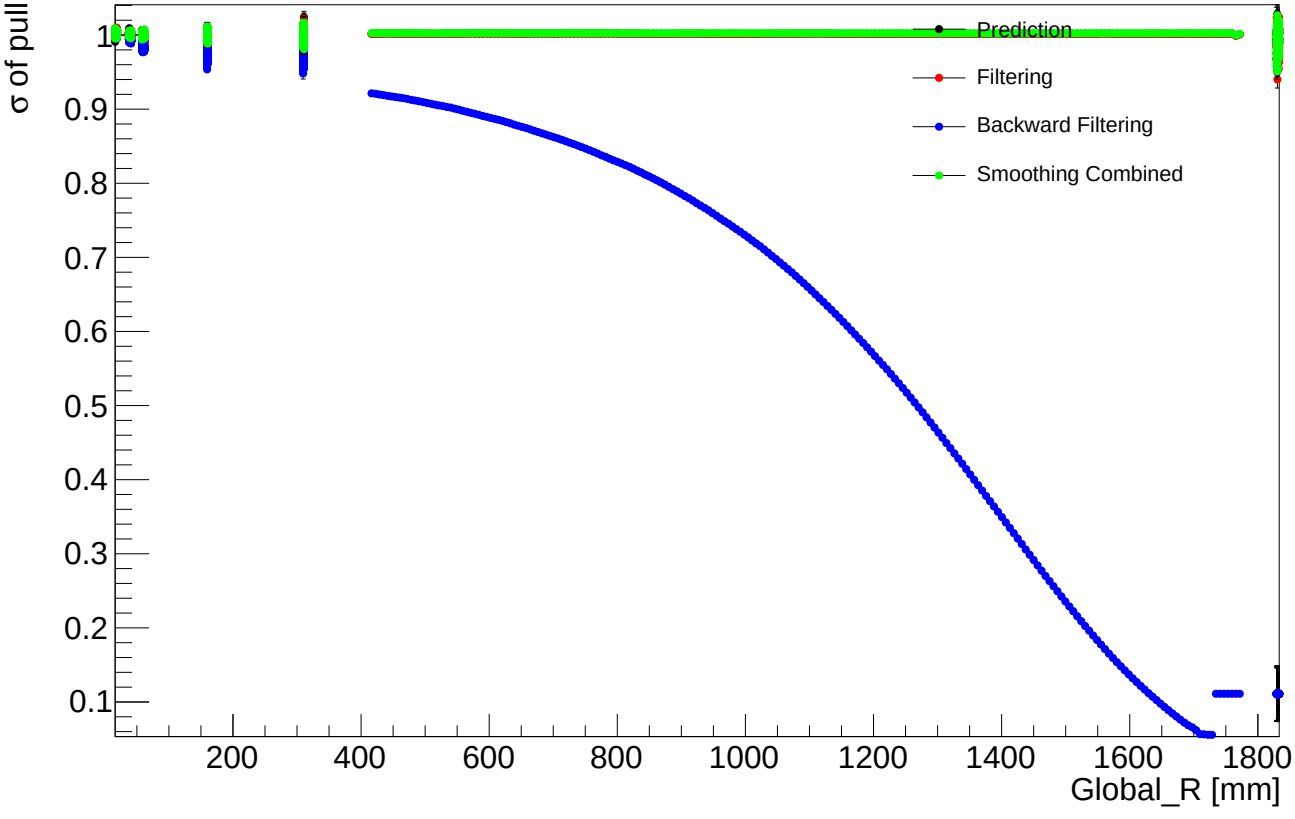

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

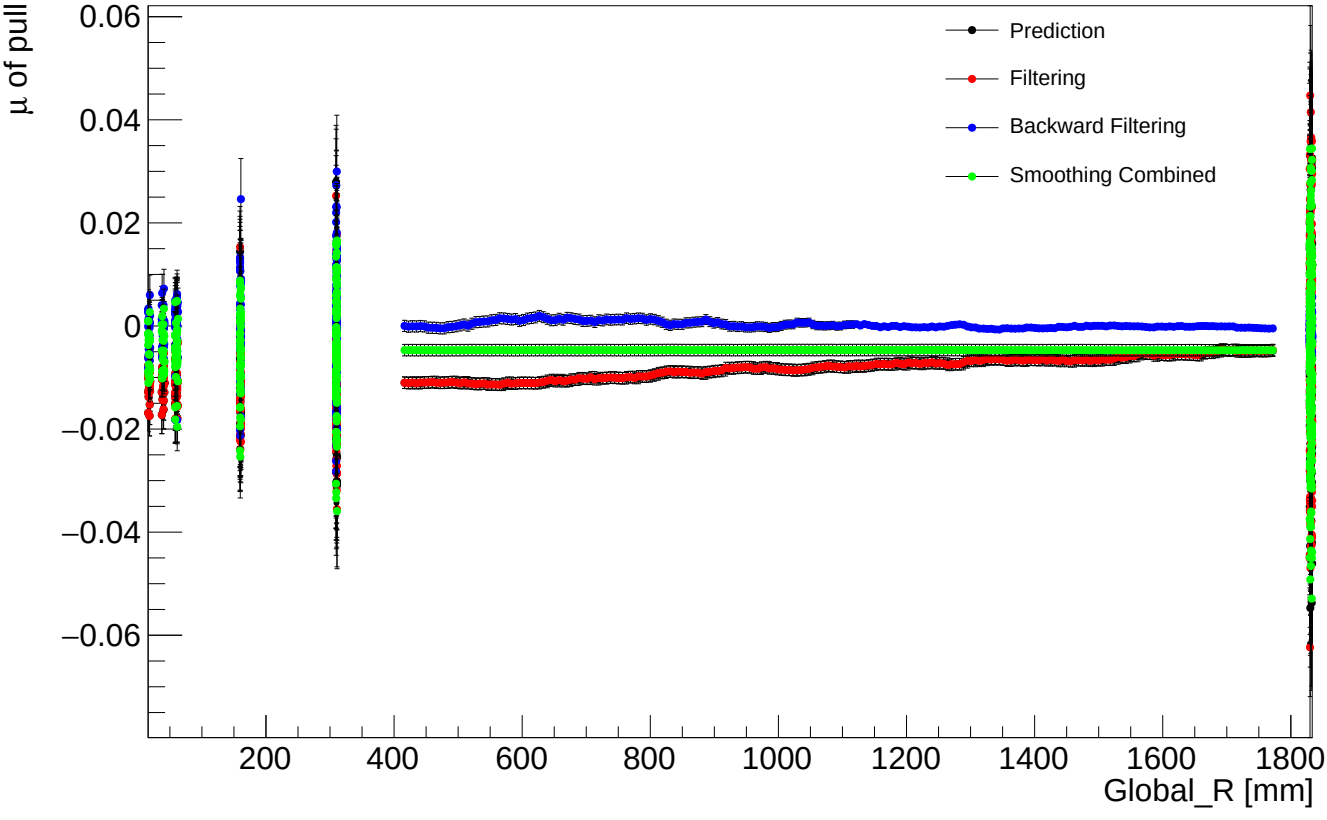

σ of pull
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

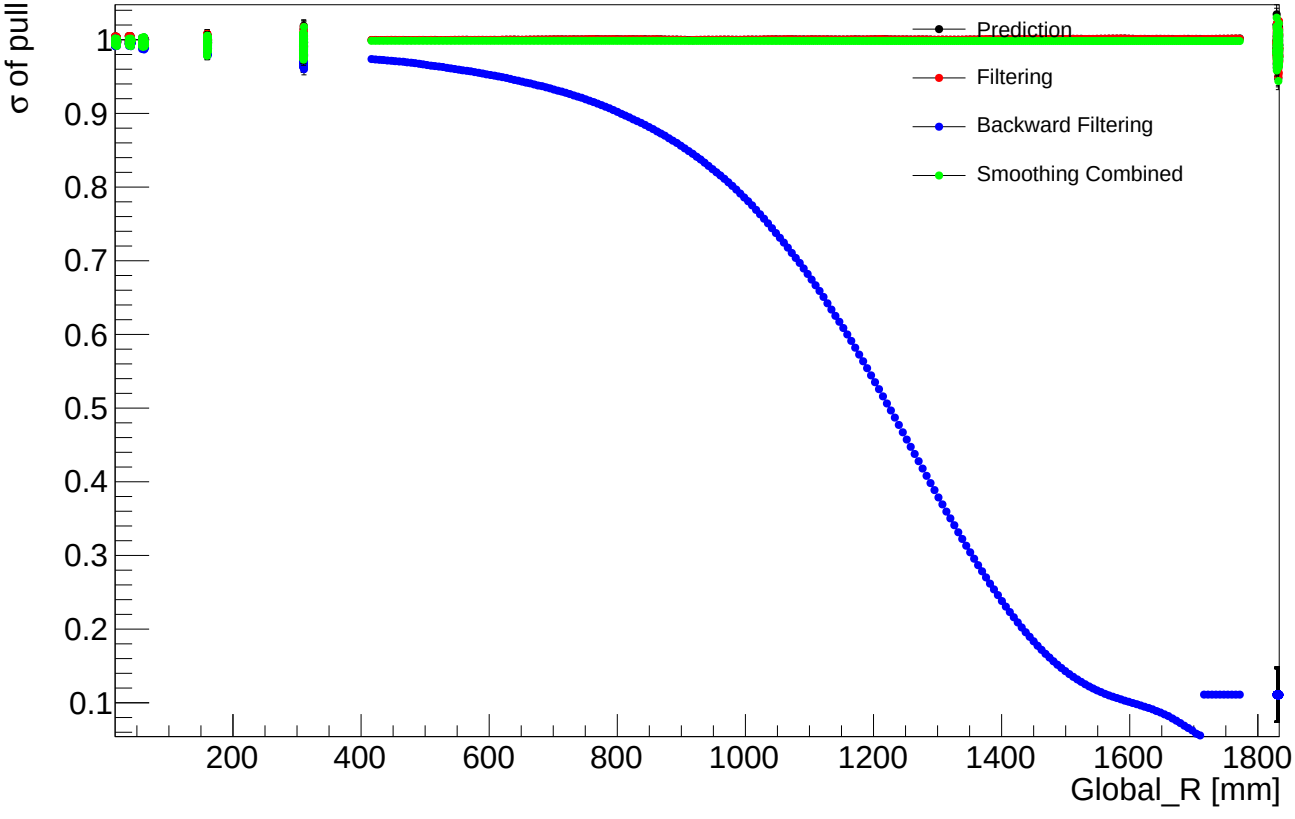

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

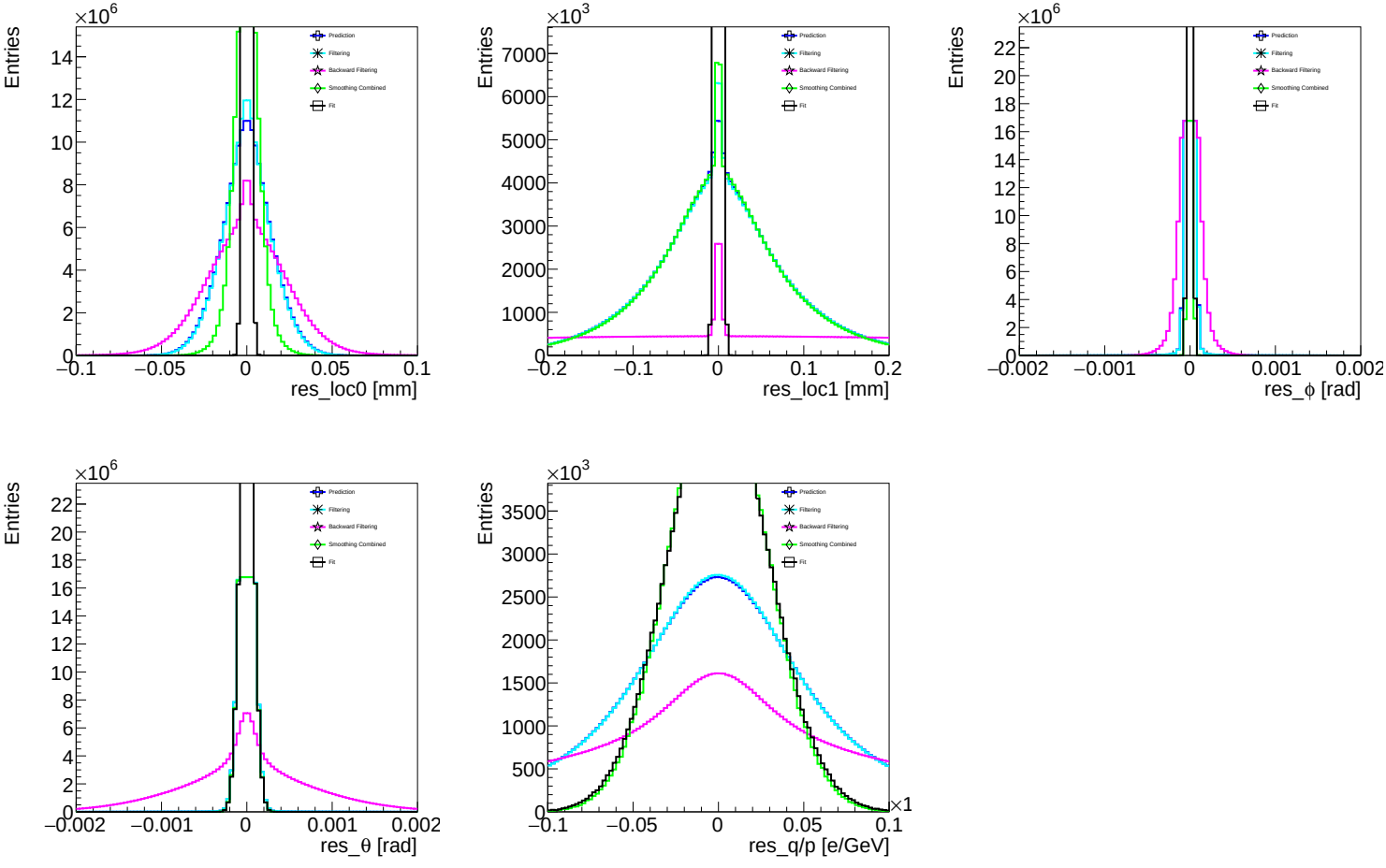

σ of pull
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

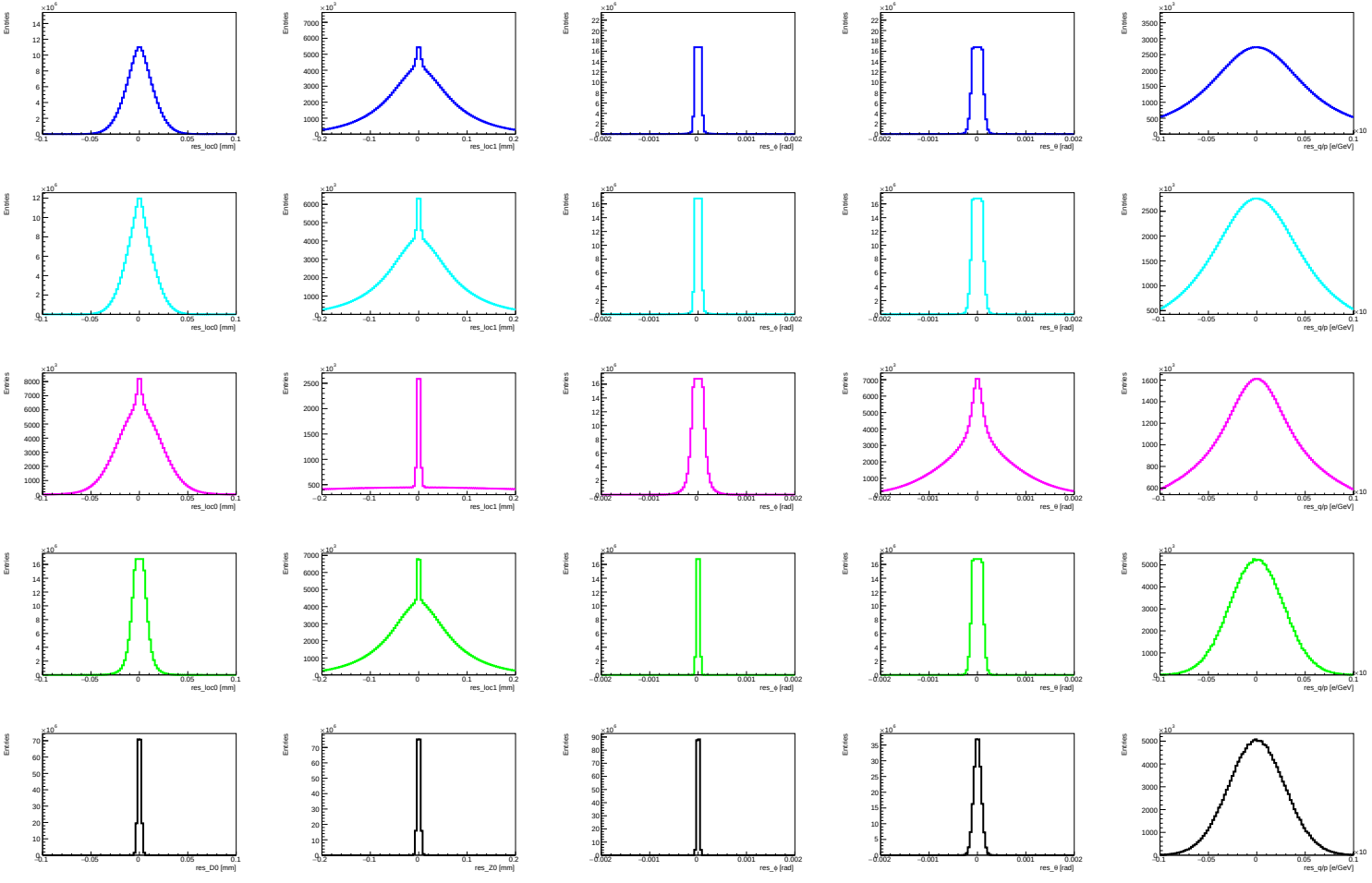

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

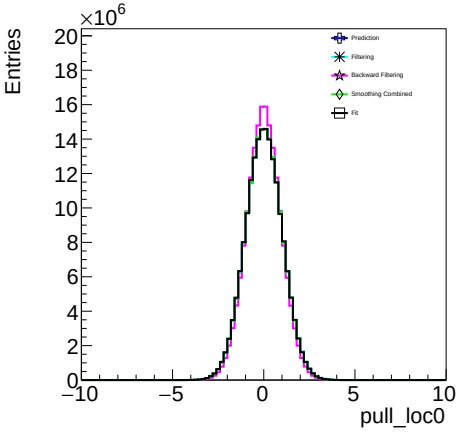

σ of pull
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

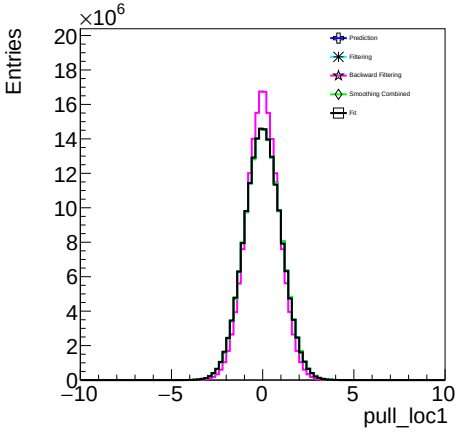

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

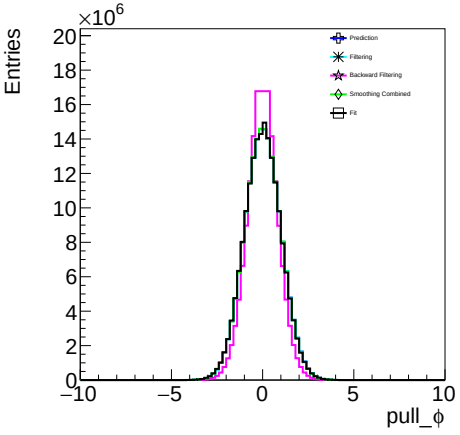

σ of pull
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Backward Filtering
Smoothing Combined

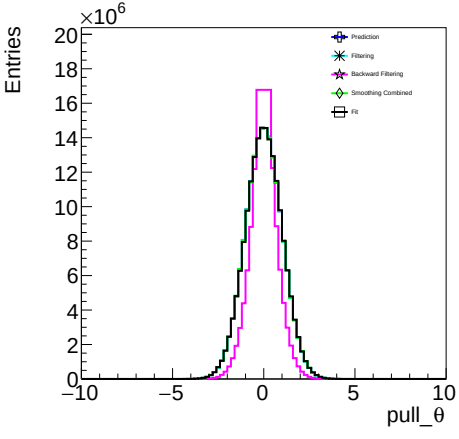

Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
res_loc0 [mm]
×10^3
res_loc1 [mm]
res_ϕ [rad]
res_θ [rad]
res_q/p [e/GeV]
×1

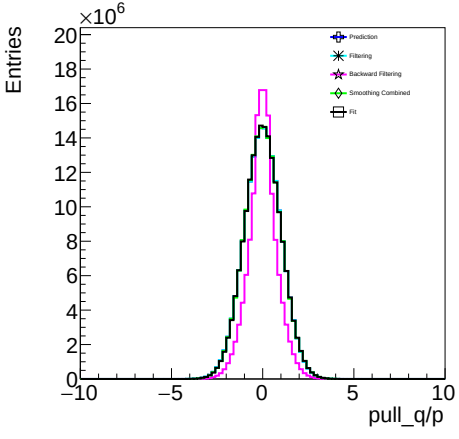

Entries
res_loc0 [mm]
res_loc1 [mm]
res_ϕ [rad]
res_θ [rad]
res_q/p [e/GeV]
res_D0 [mm]
res_Z0 [mm]

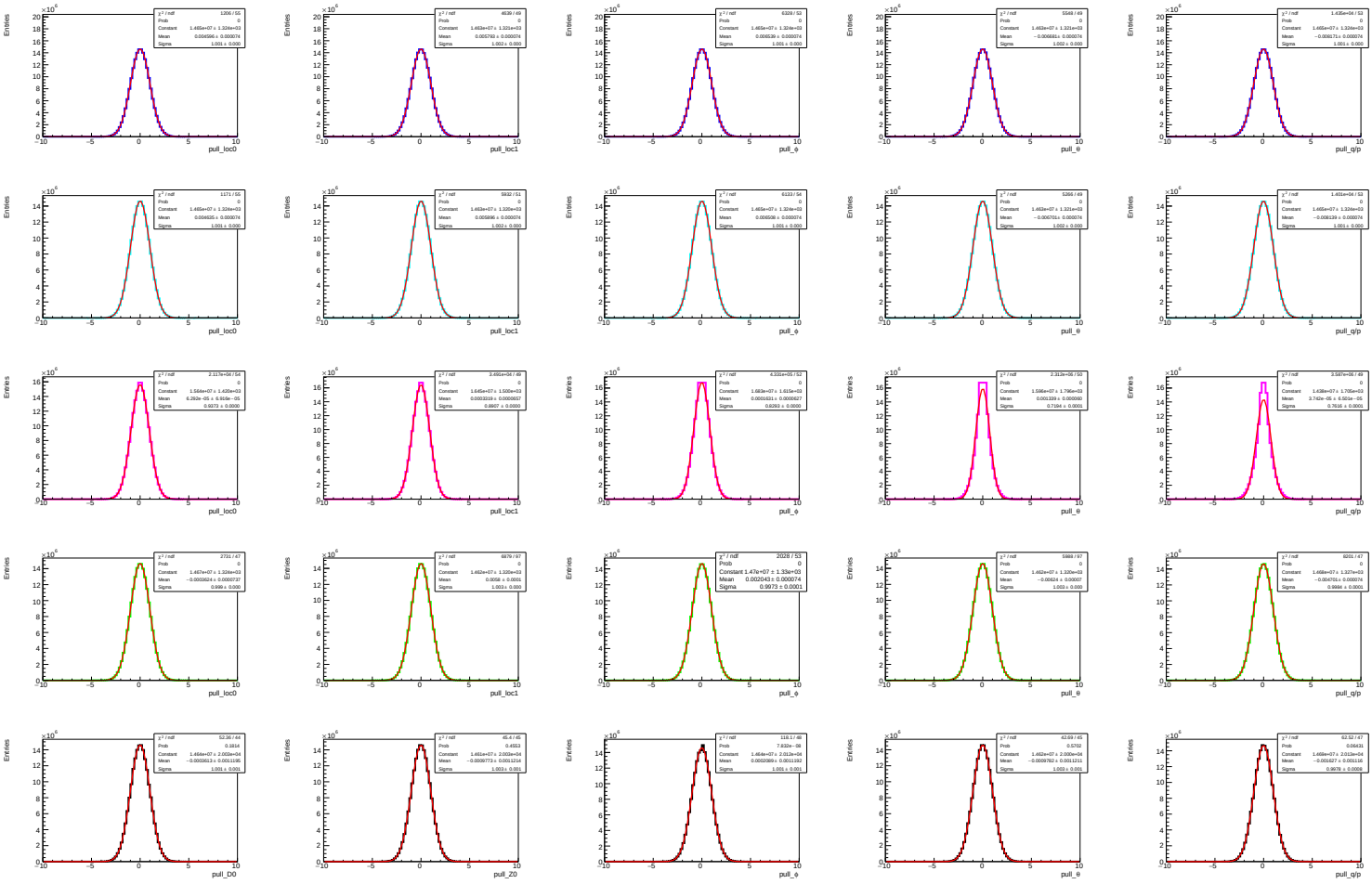

Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
pull_loc0


Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
pull_loc1


Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
pull_ϕ


Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
pull_θ


Entries
×10^6
Prediction
Filtering
Backward Filtering
Smoothing Combined
Fit
pull_q/p


pull_loc0
pull_loc1
pull_ϕ
pull_θ
pull_q/p
pull_D0
pull_Z0
Entries