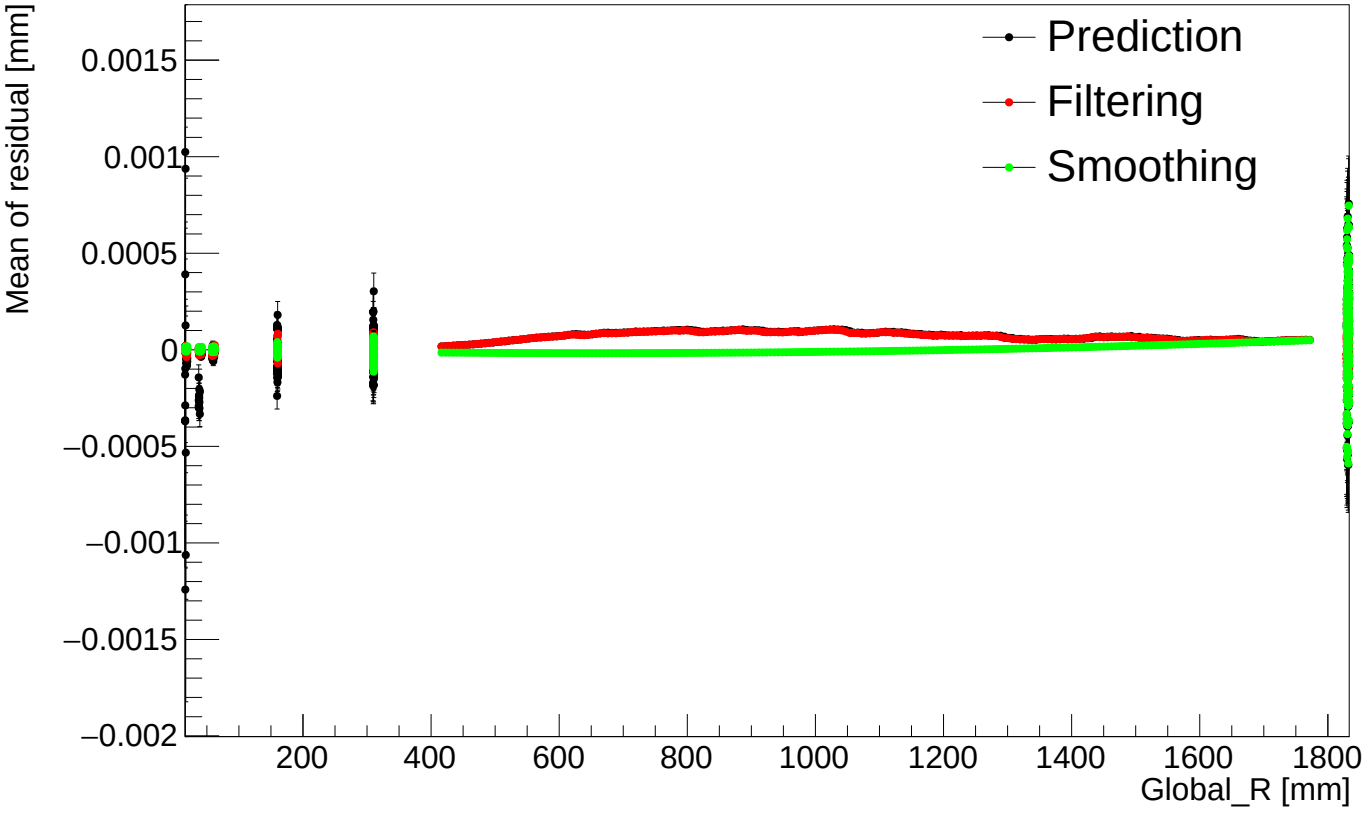
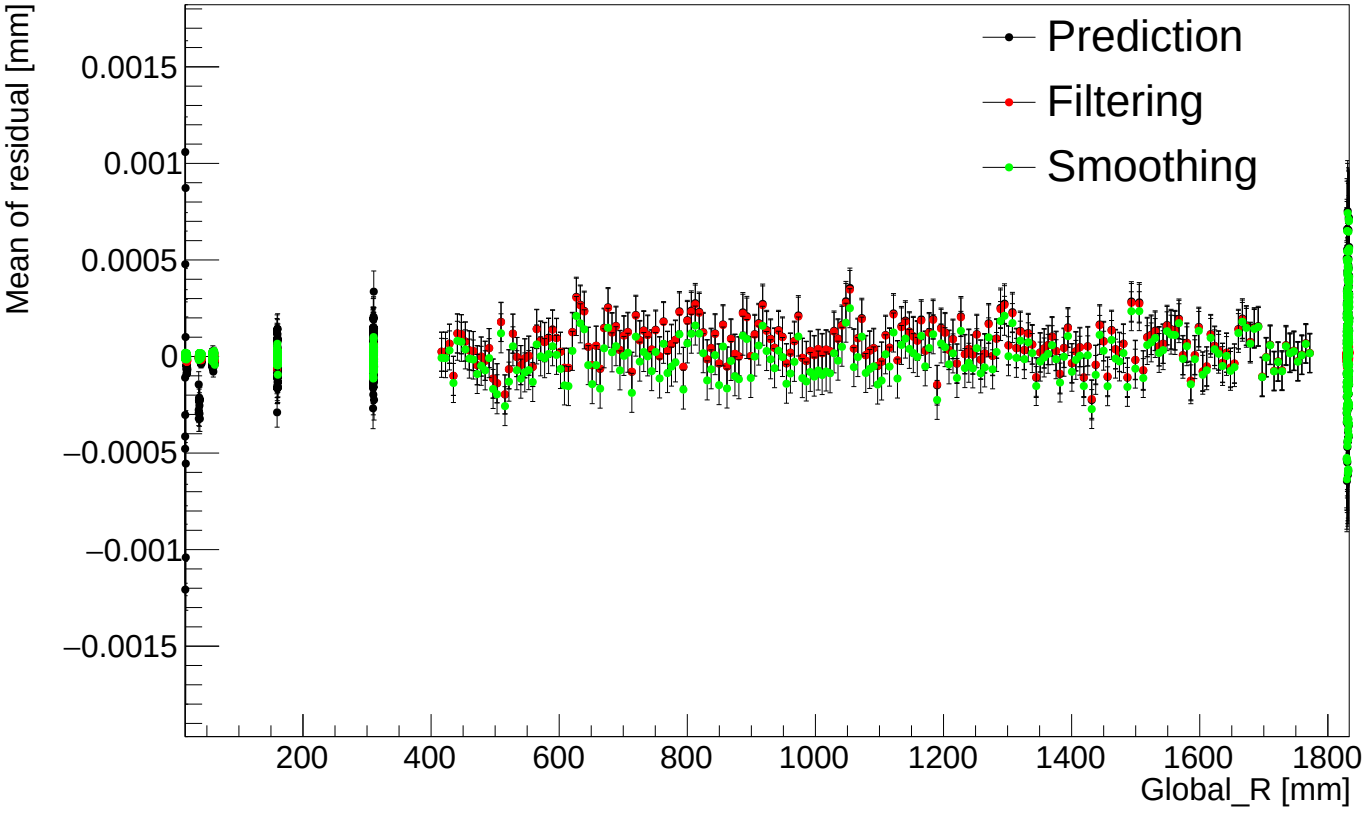
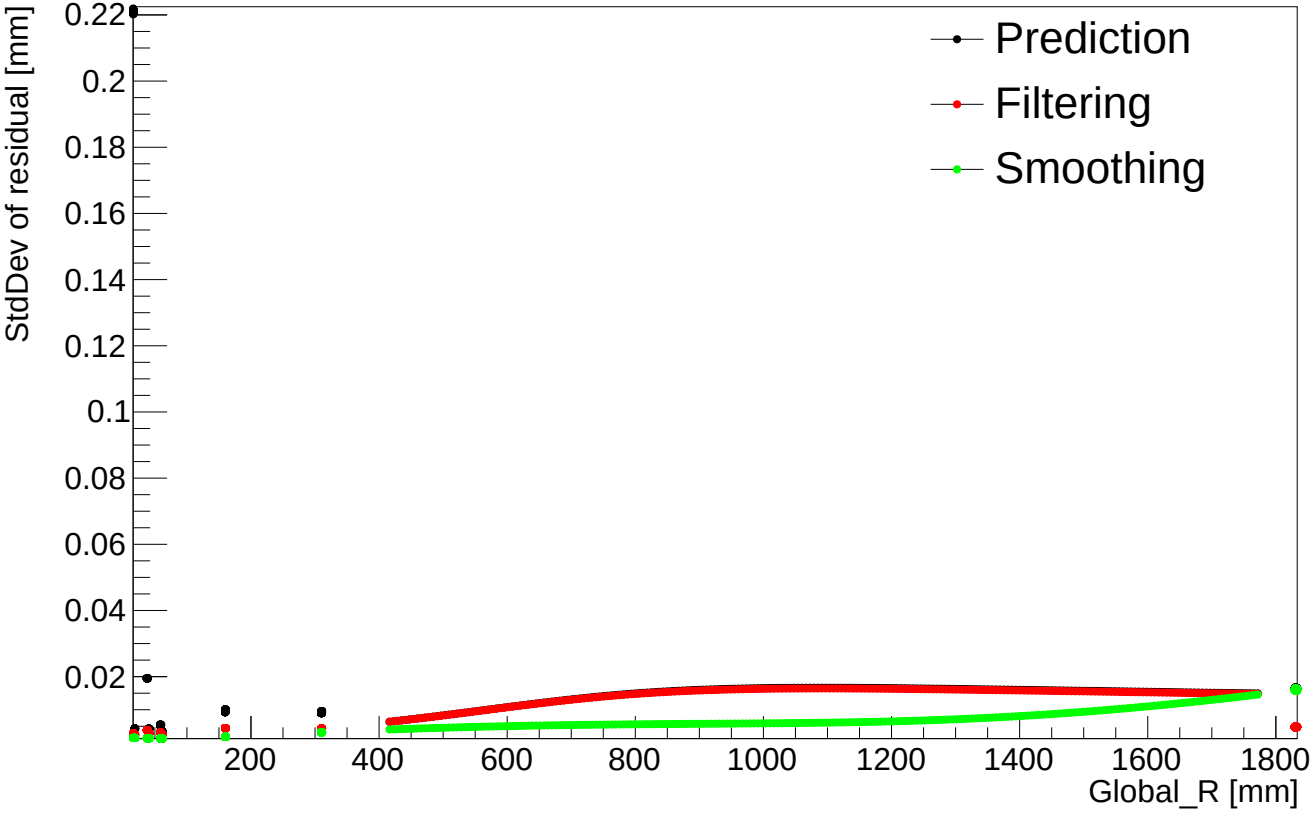
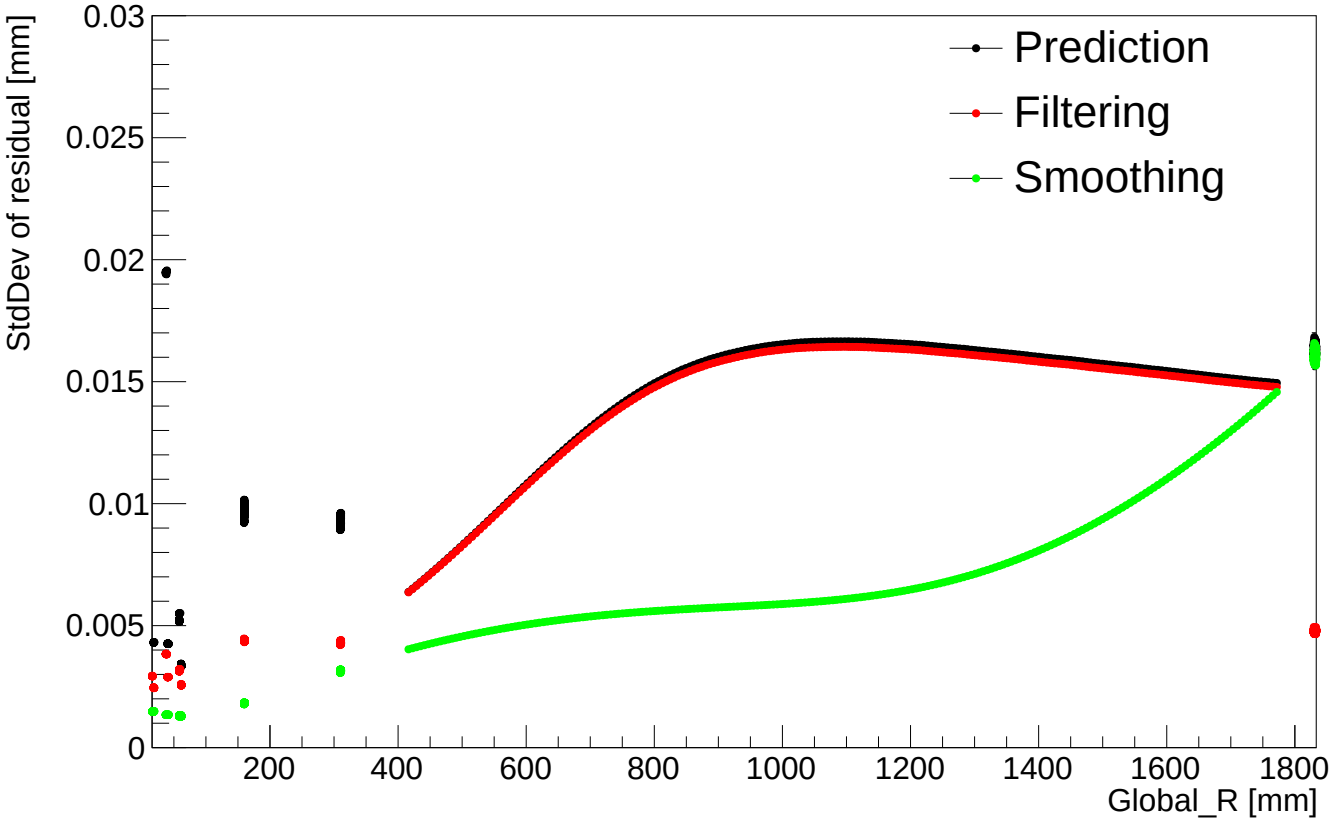
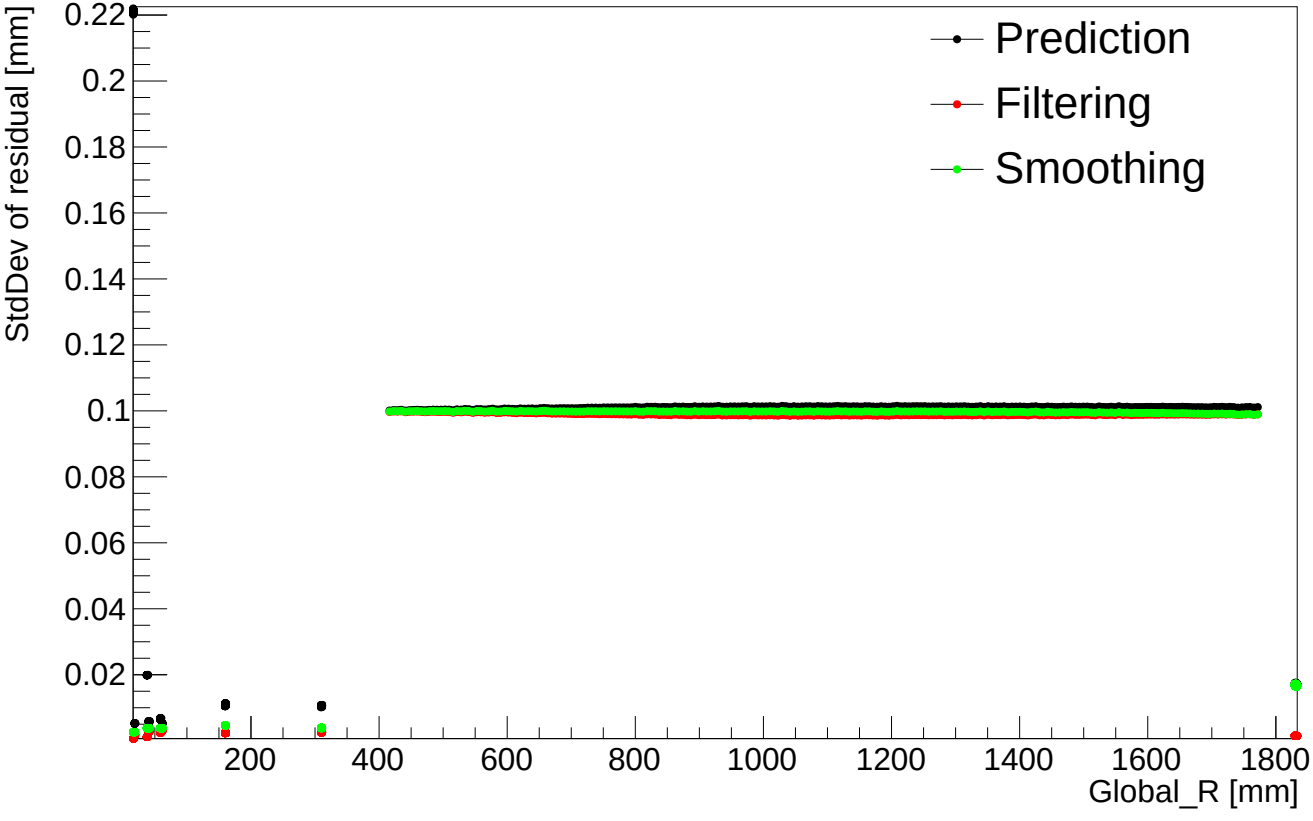
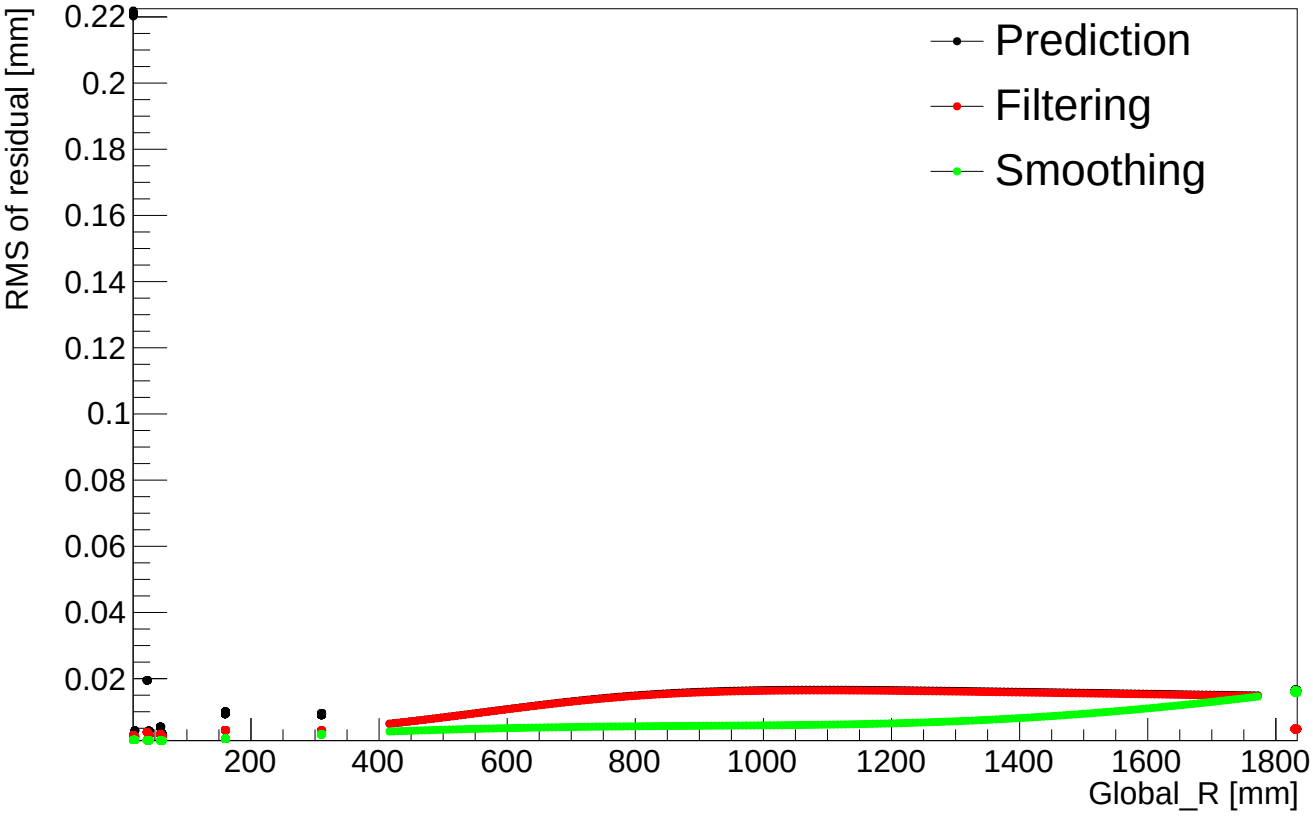

Prediction
Filtering
Smoothing
Mean of residual [mm]
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
−0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

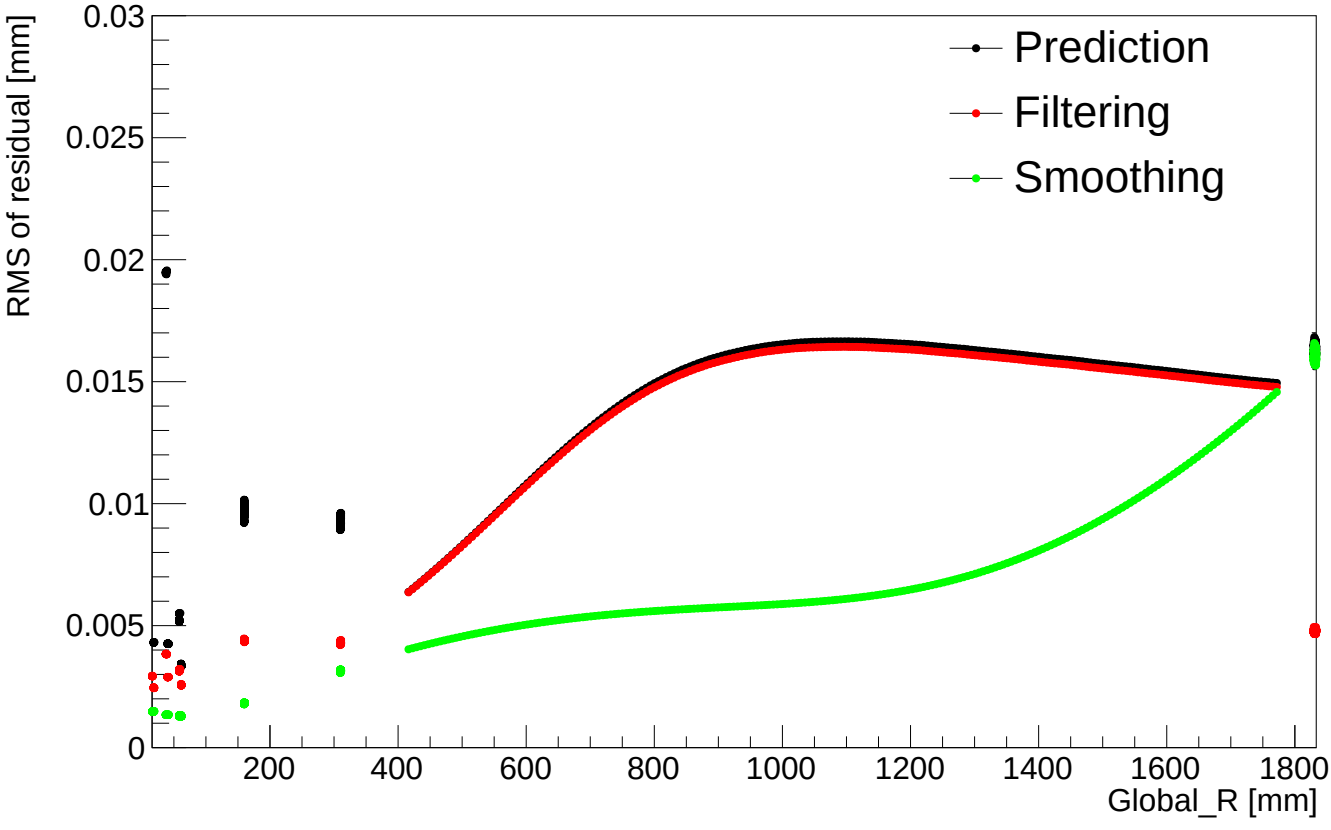

Prediction
Filtering
Smoothing
Mean of residual [mm]
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

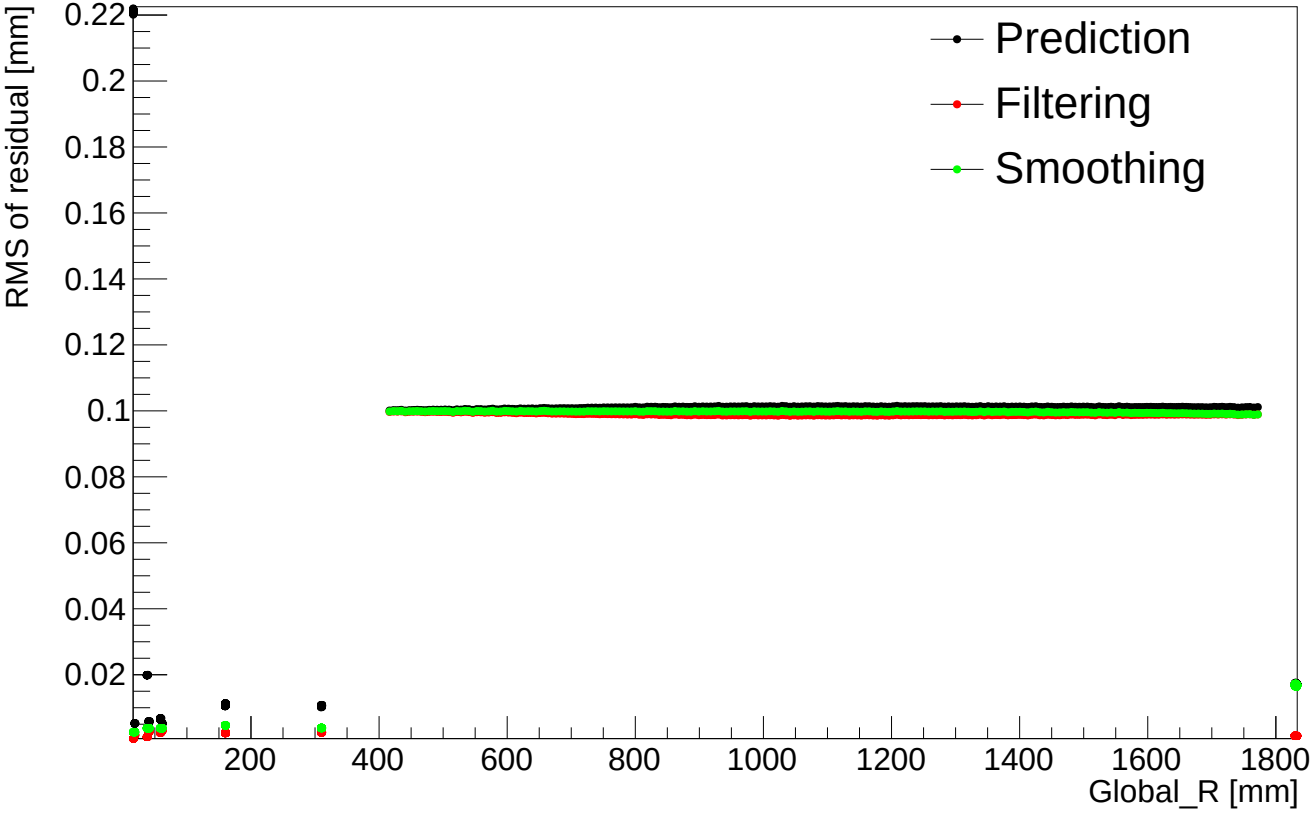

StdDev of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

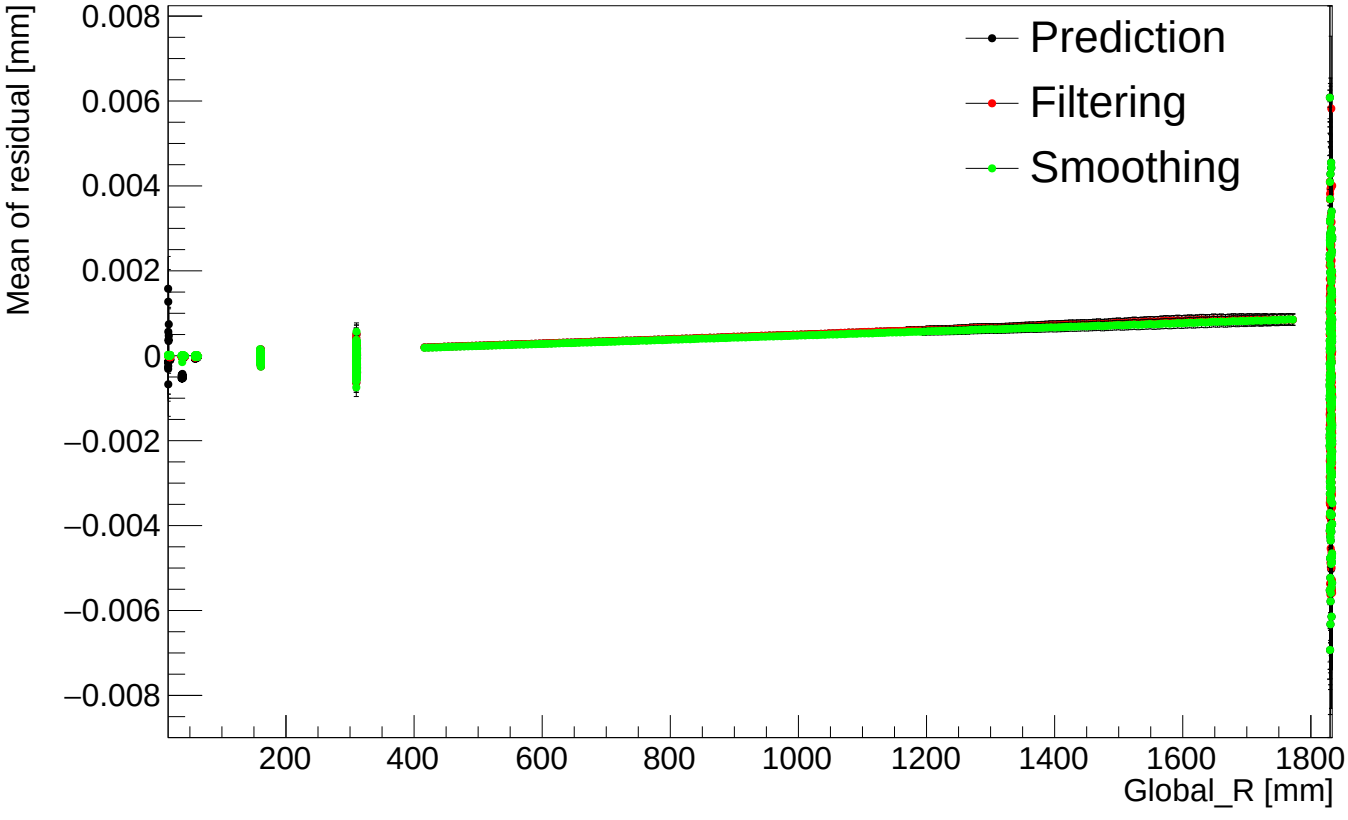

StdDev of residual [mm]
0.03
0.025
0.02
0.015
0.01
0.005
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

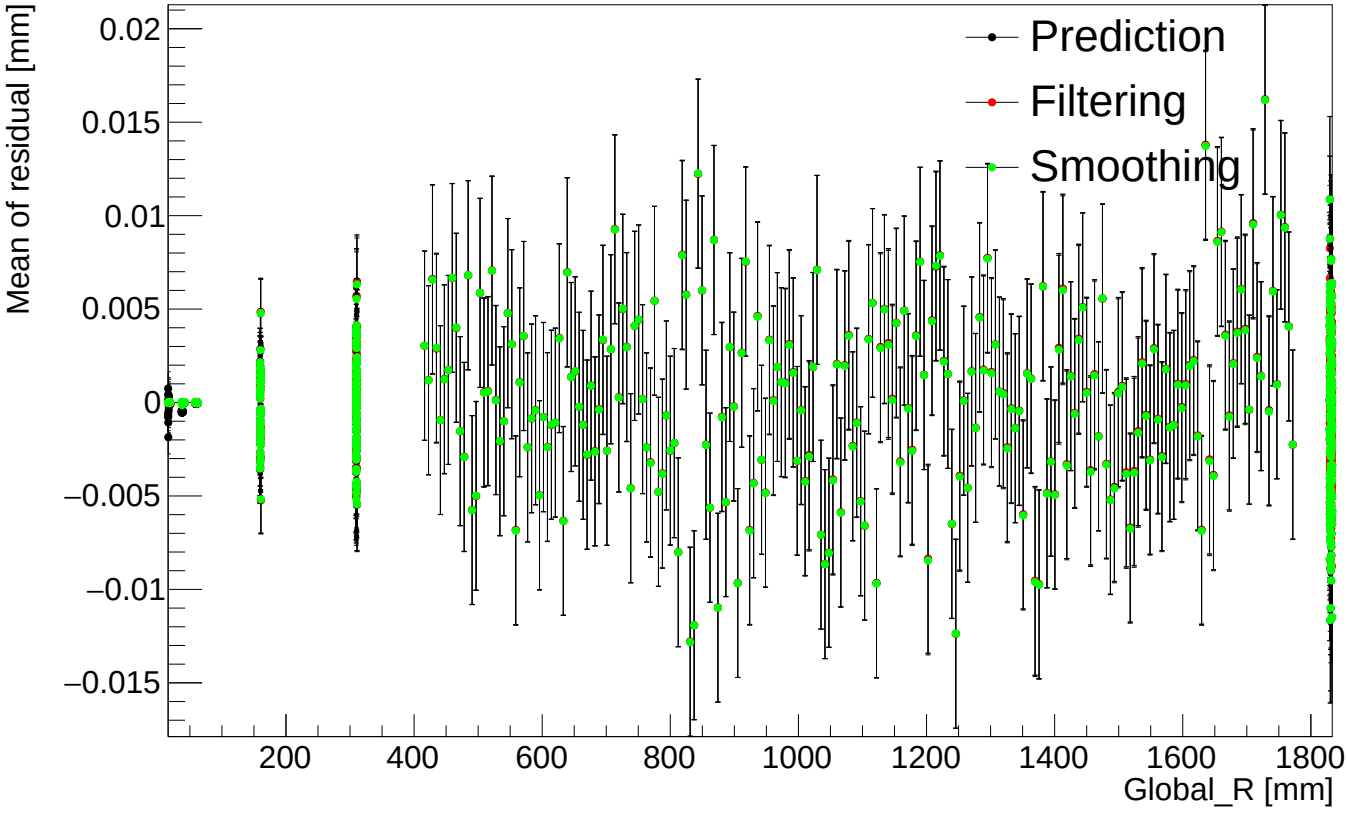

StdDev of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

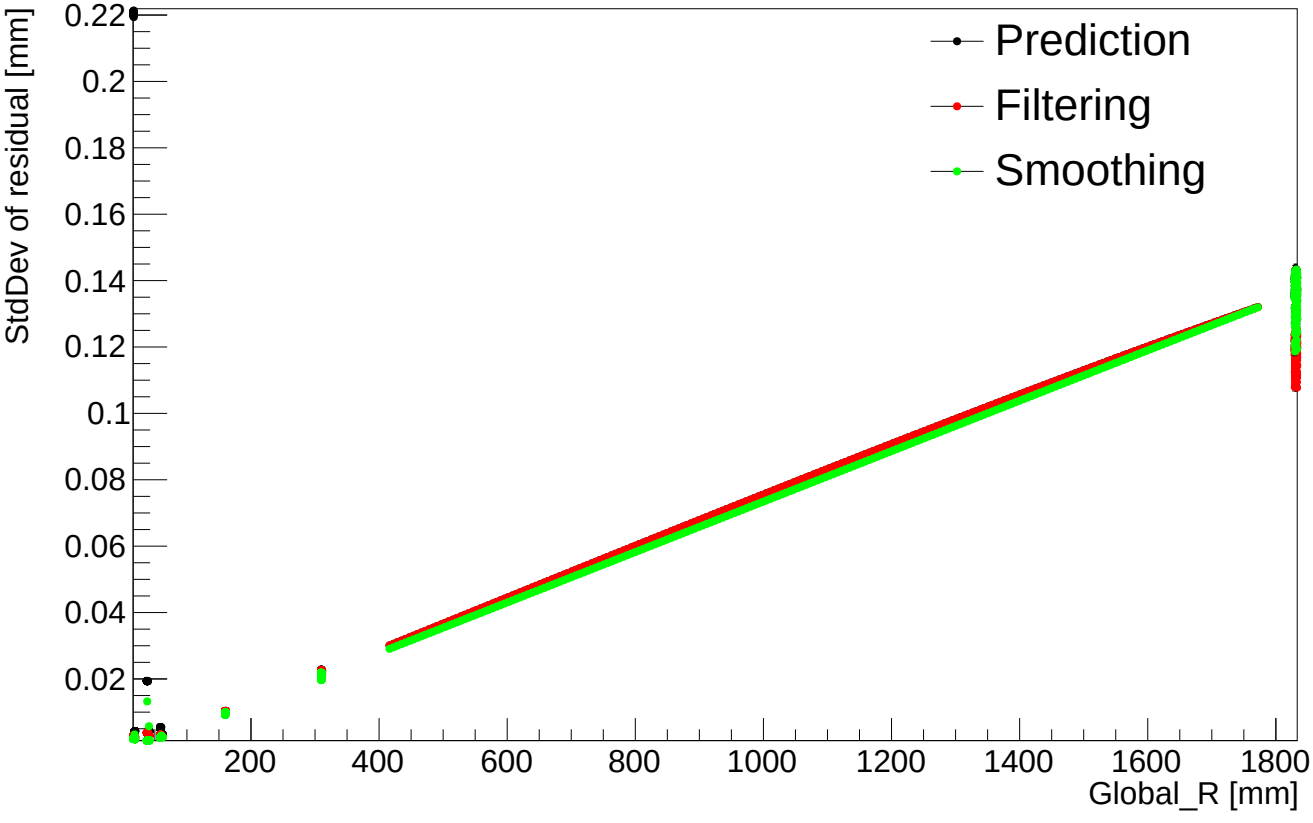

RMS of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

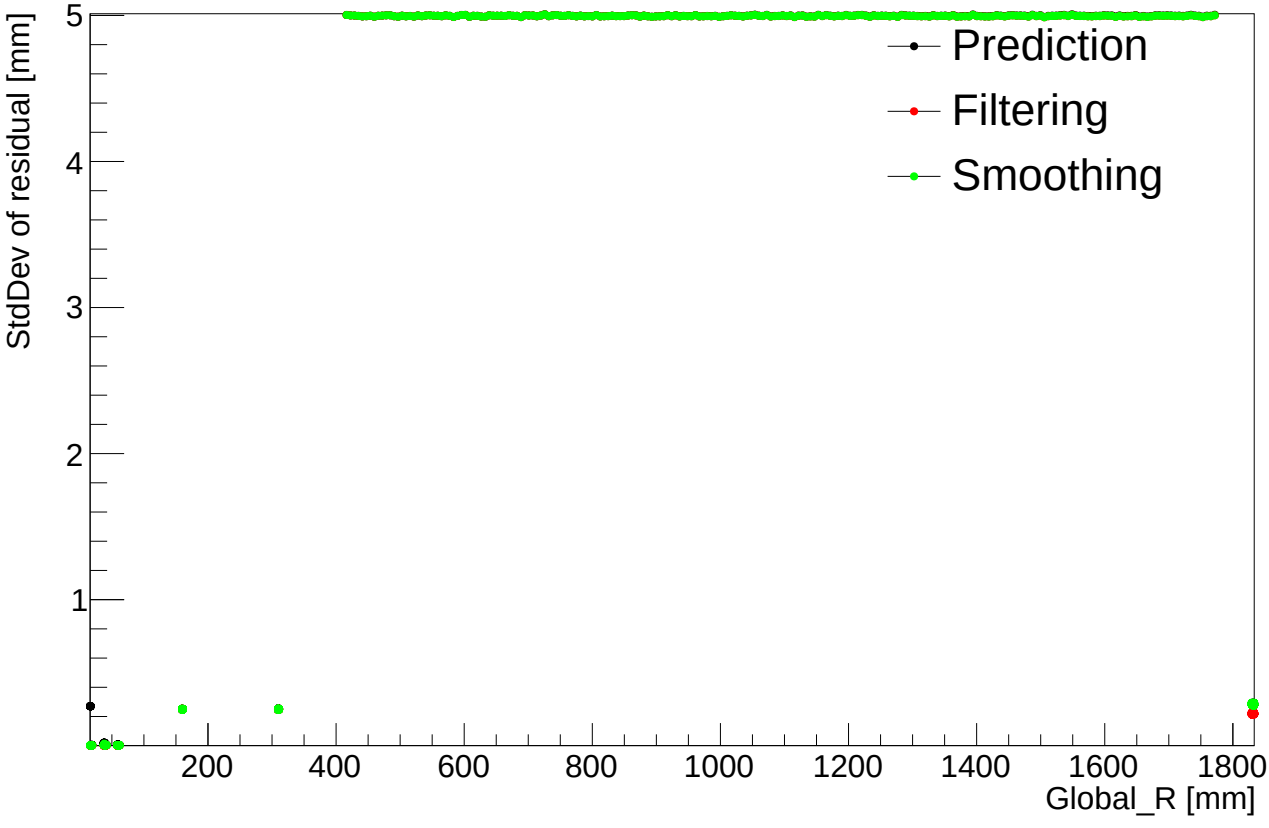

Prediction
Filtering
Smoothing
RMS of residual [mm]
0.03
0.025
0.02
0.015
0.01
0.005
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

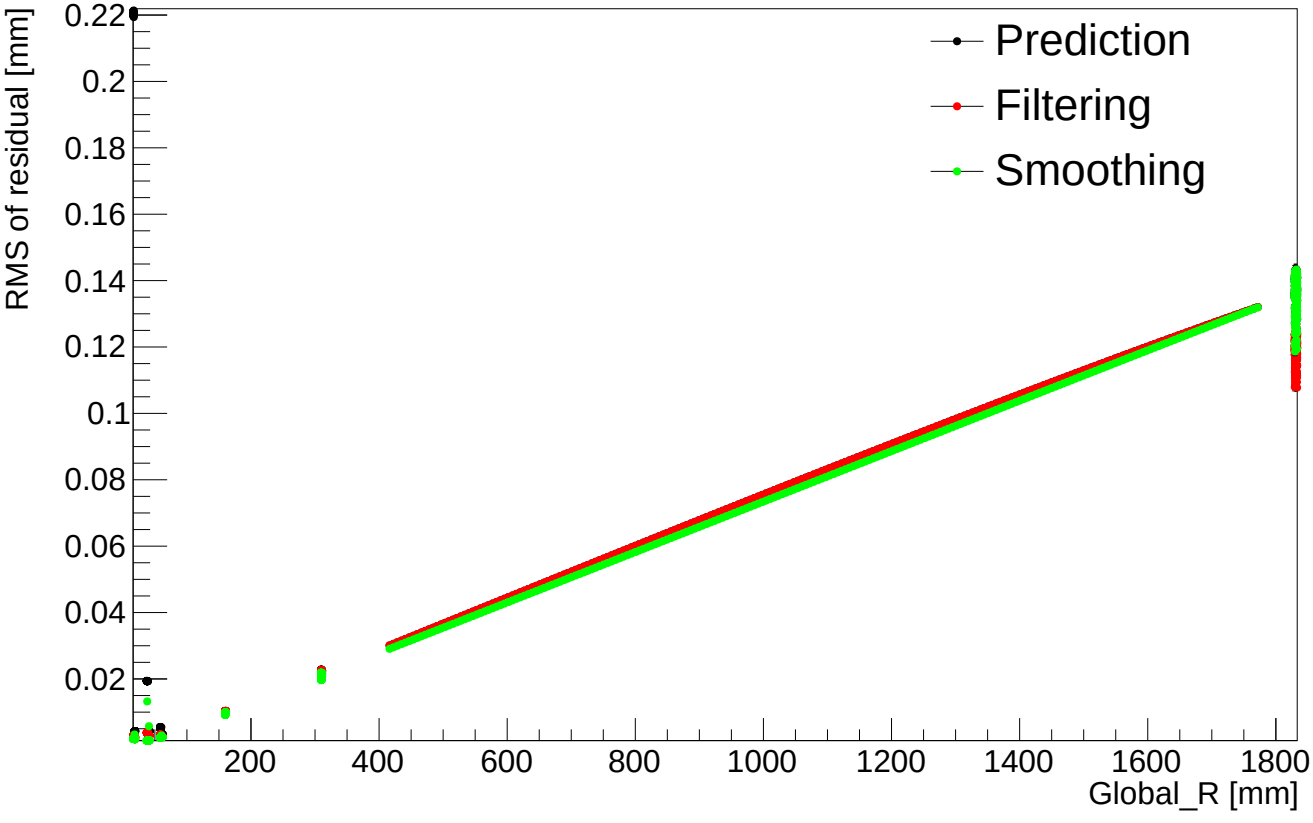

RMS of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

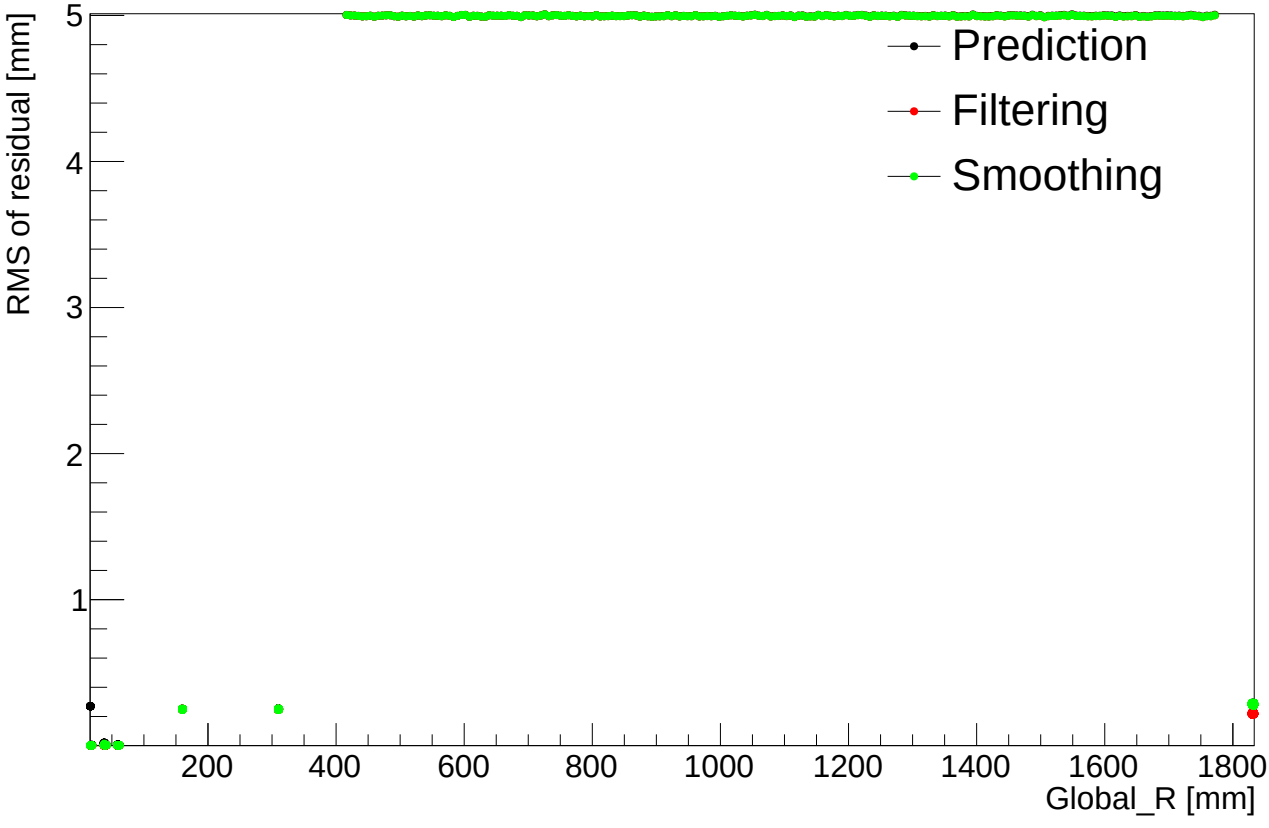

Prediction
Filtering
Smoothing
Mean of residual [mm]
0.008
0.006
0.004
0.002
0
−0.002
−0.004
−0.006
−0.008
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

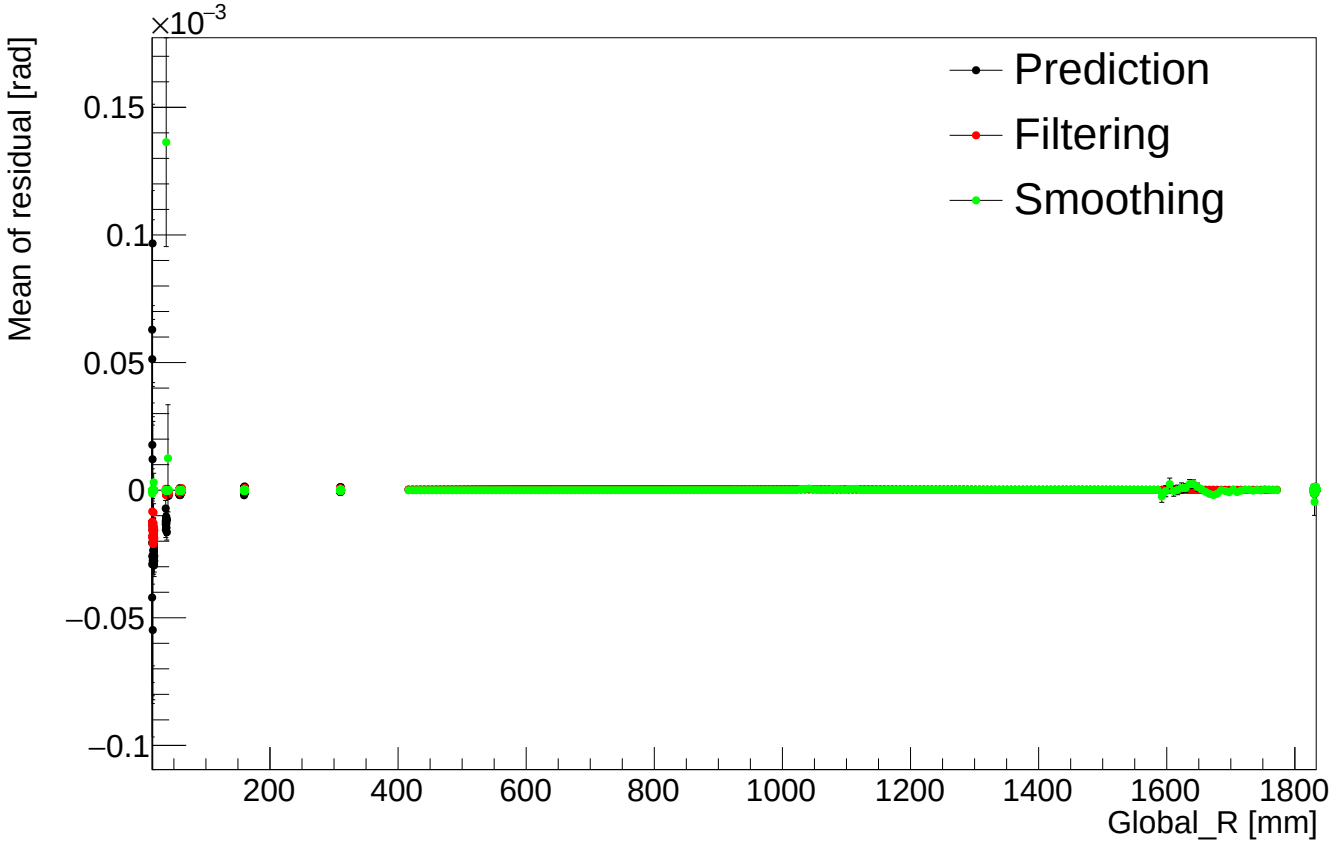

Prediction
Filtering
Smoothing
Mean of residual [mm]
0.02
0.015
0.01
0.005
0
−0.005
−0.01
−0.015
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

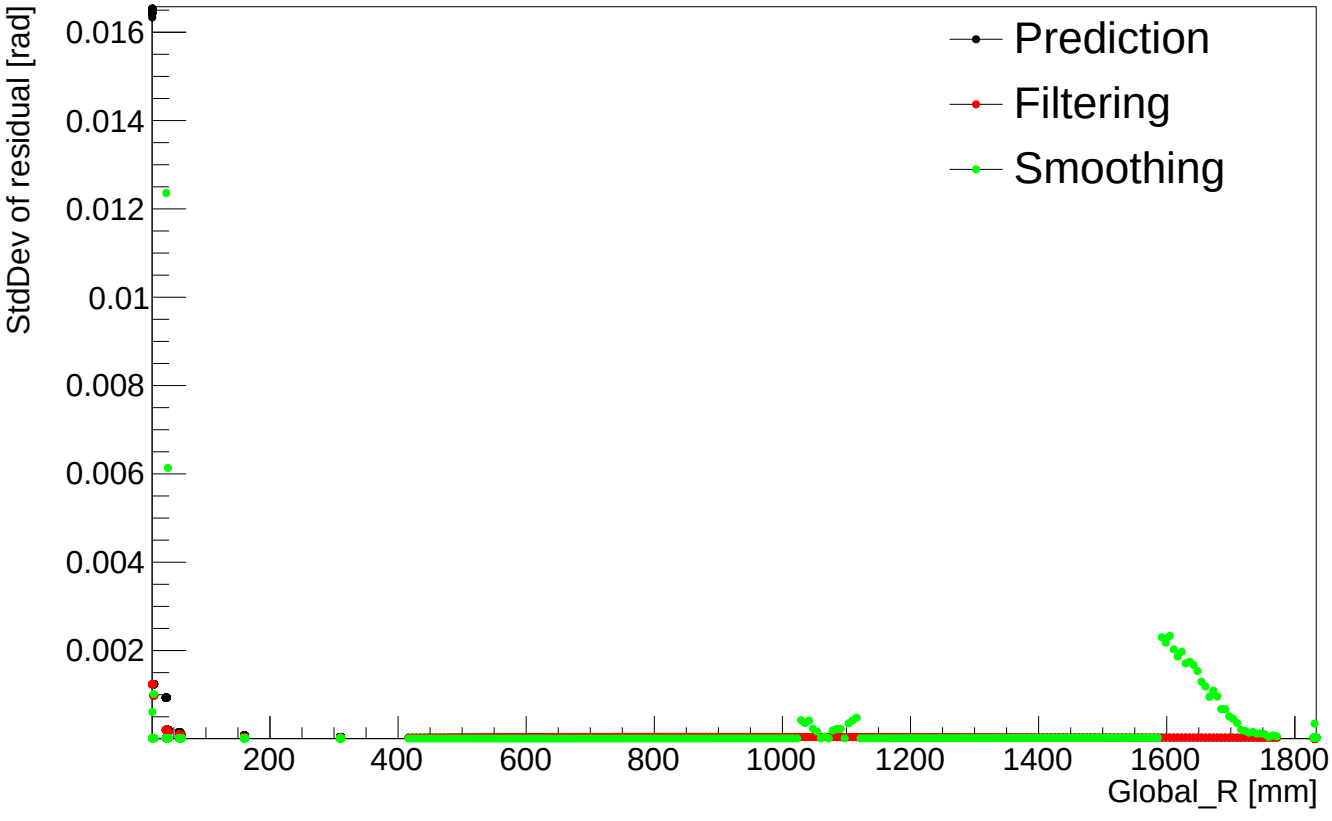

StdDev of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

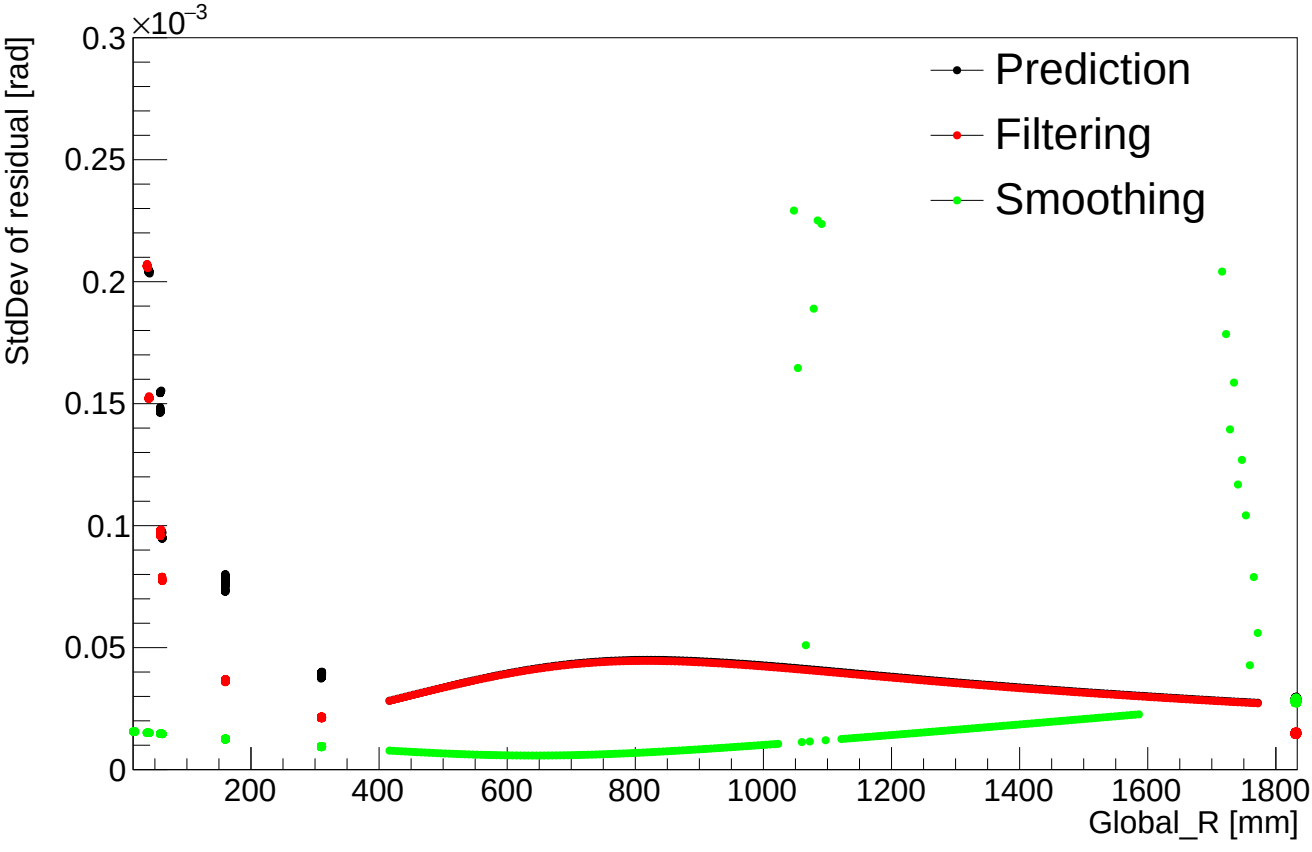

StdDev of residual [mm]
5
4
3
2
1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

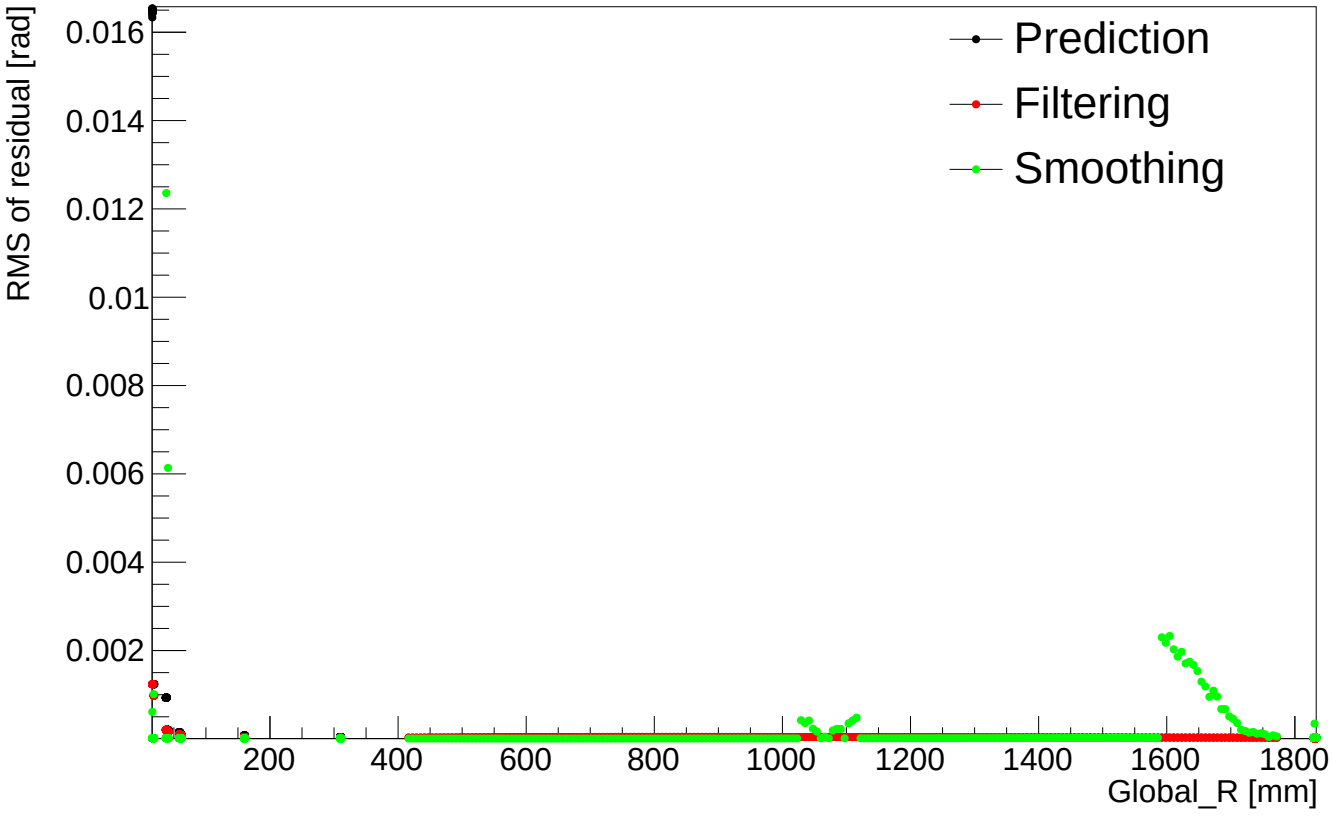

RMS of residual [mm]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

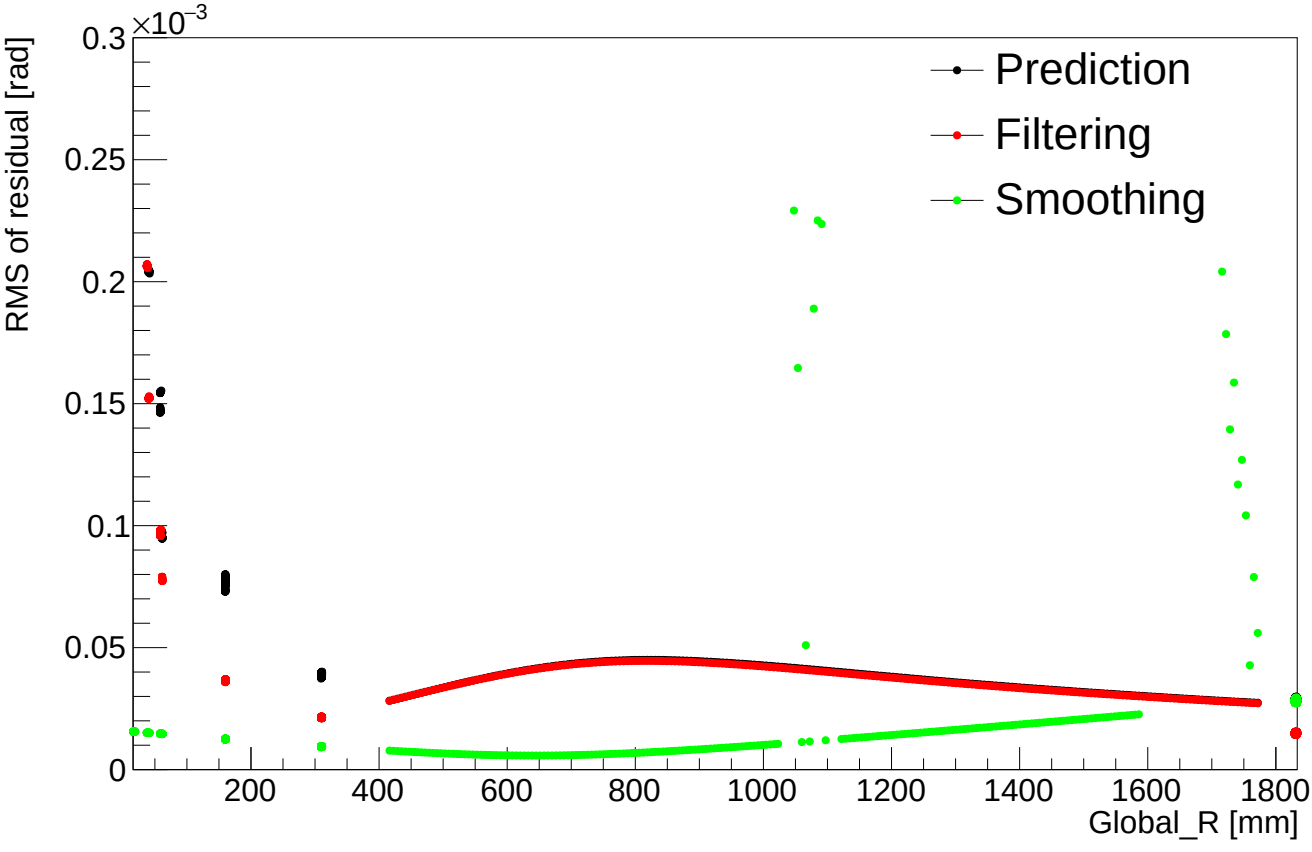

RMS of residual [mm]
5
4
3
2
1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

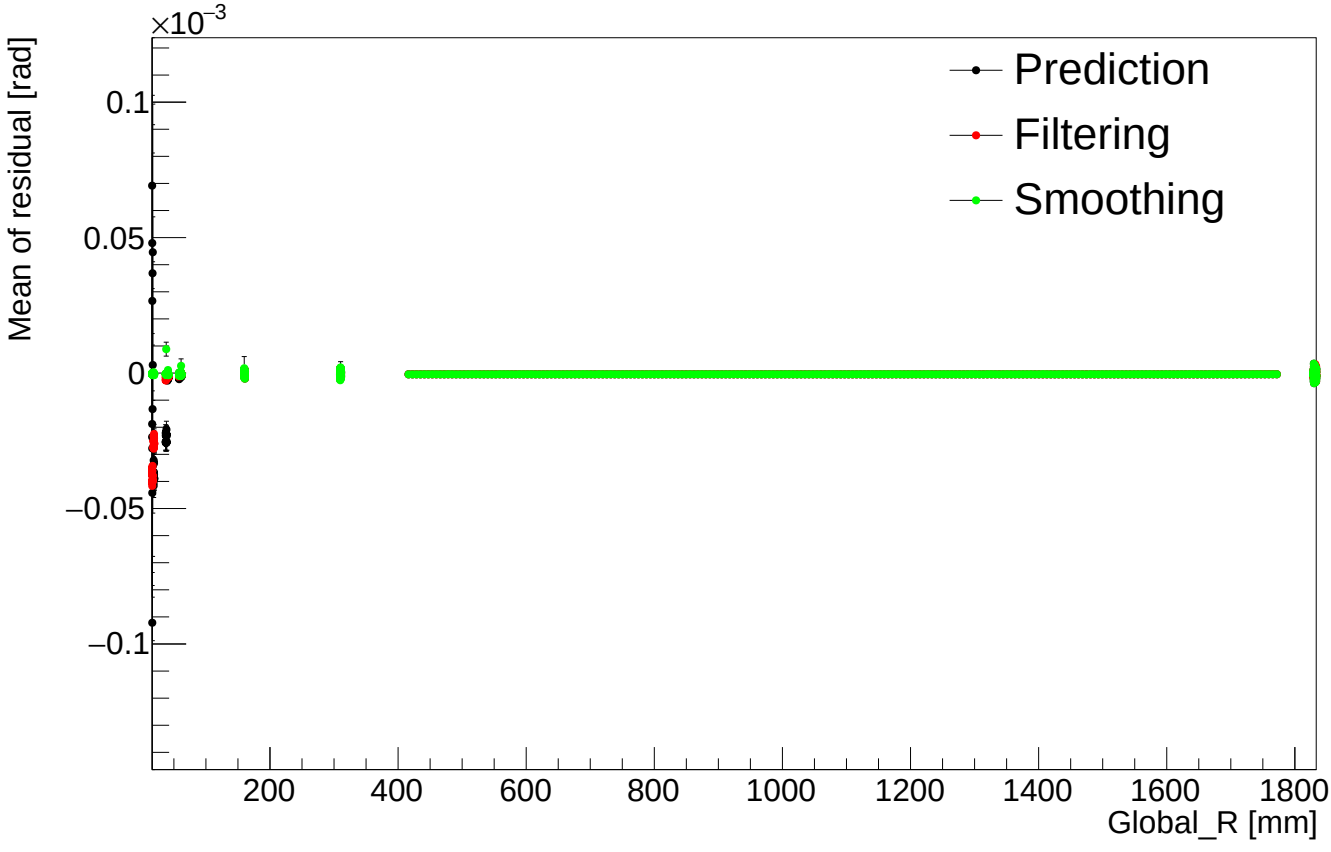

×10^−3
Mean of residual [rad]
0.15
0.1
0.05
0
−0.05
−0.1
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

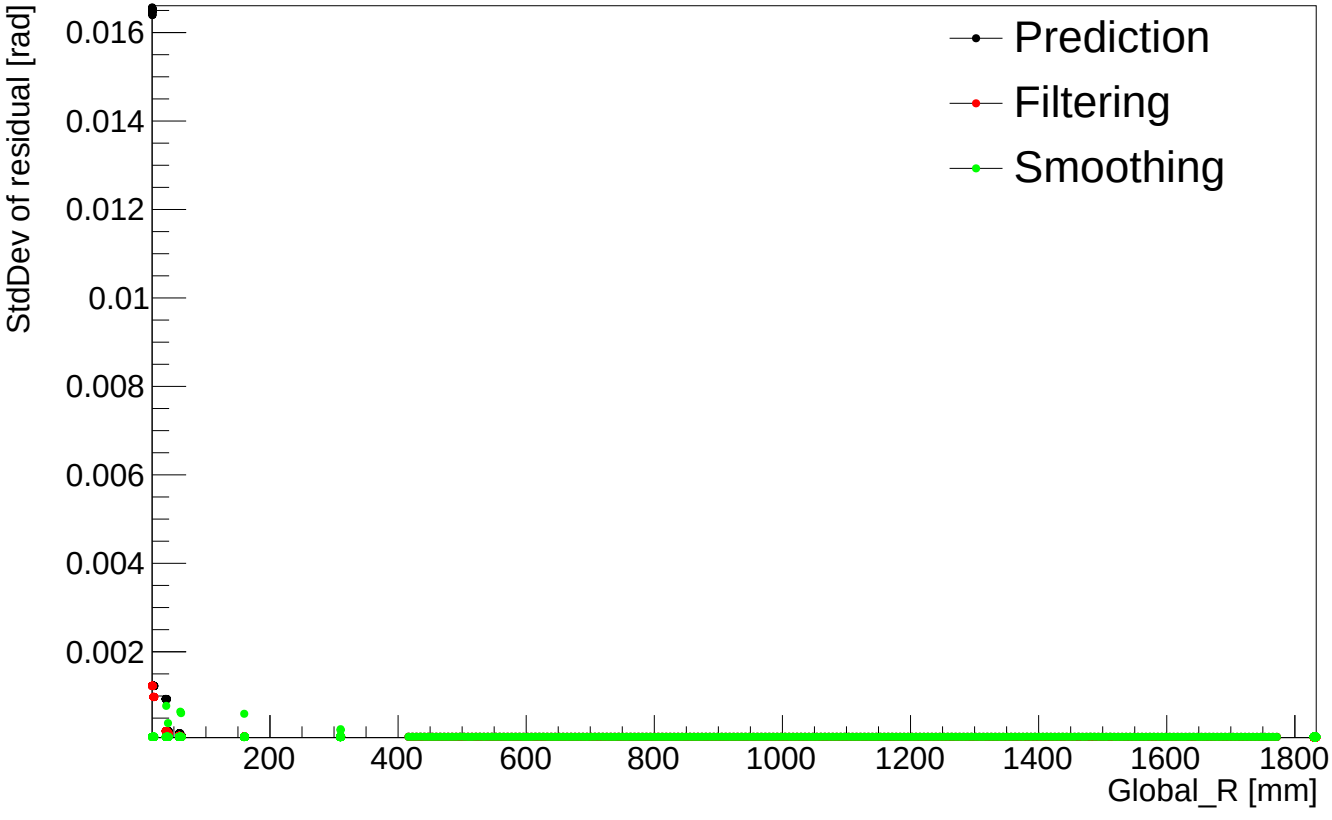

StdDev of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

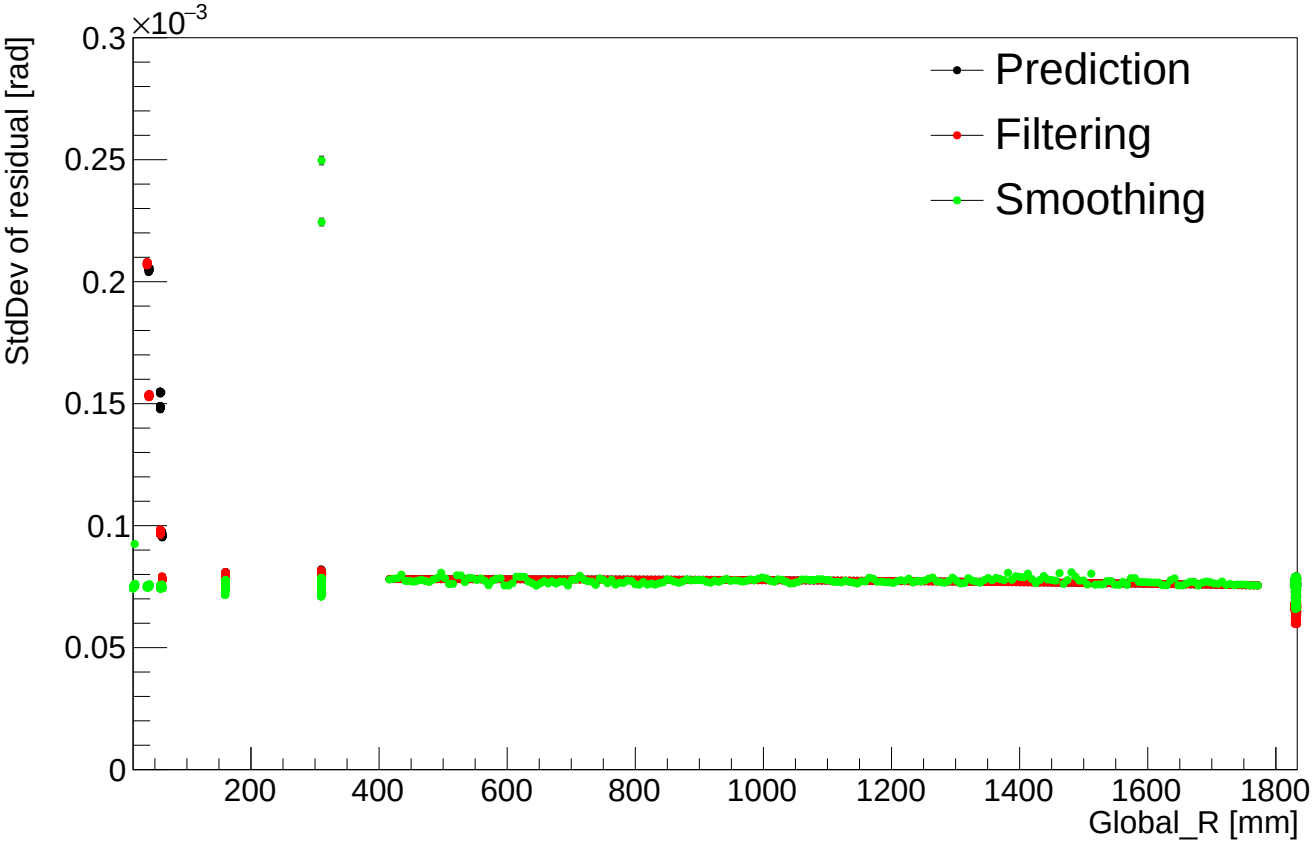

×10⁻³
0.3
0.25
0.2
0.15
0.1
0.05
0
StdDev of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

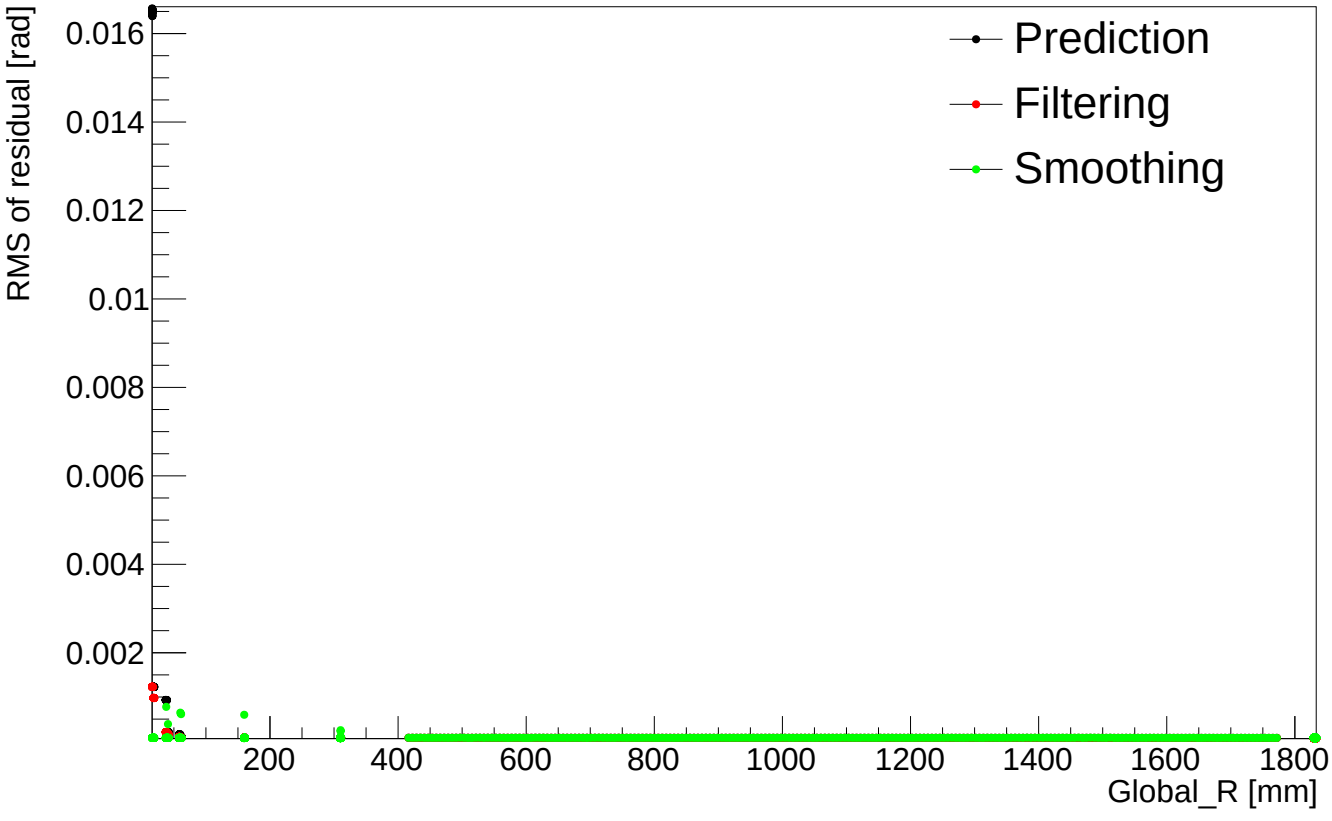

RMS of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

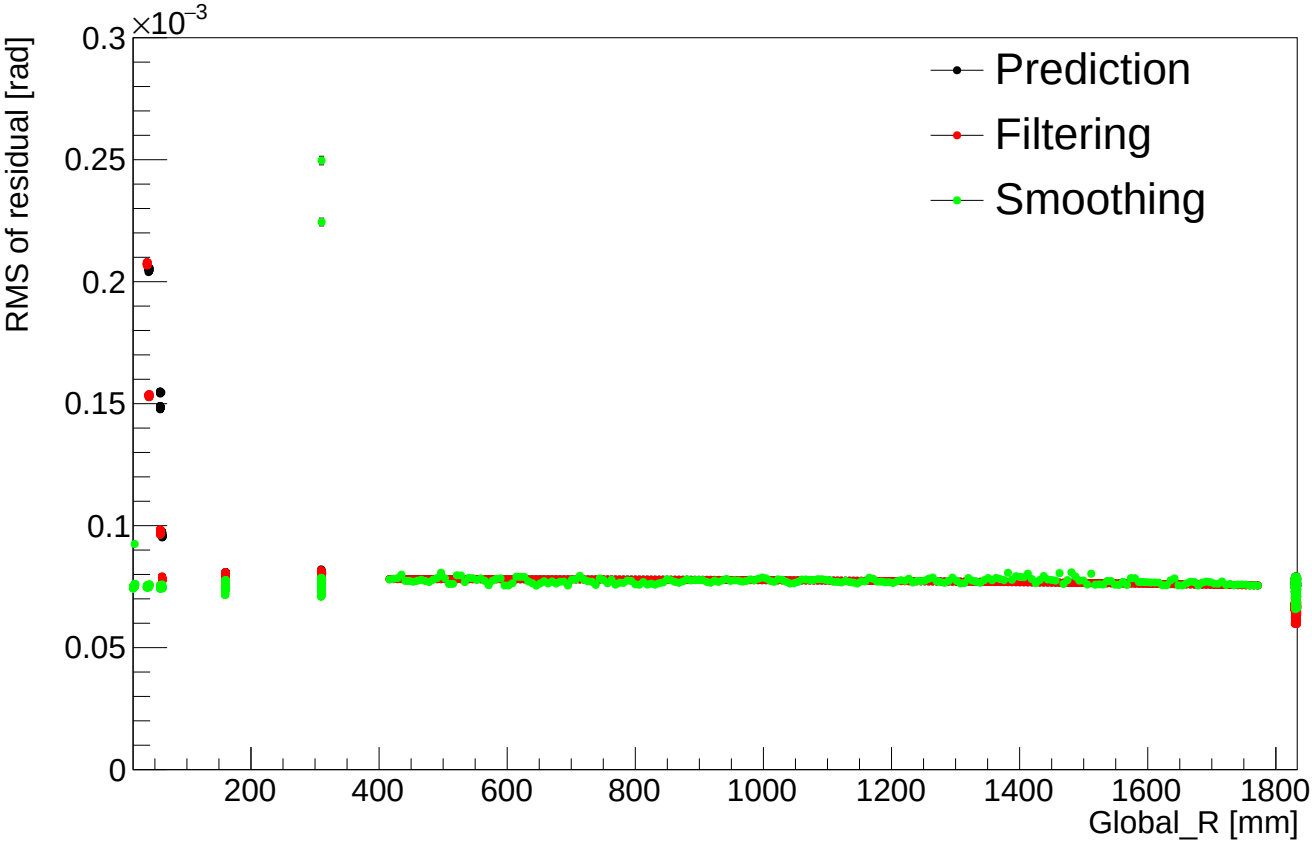

×10⁻³
0.3
0.25
0.2
0.15
0.1
0.05
0
RMS of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

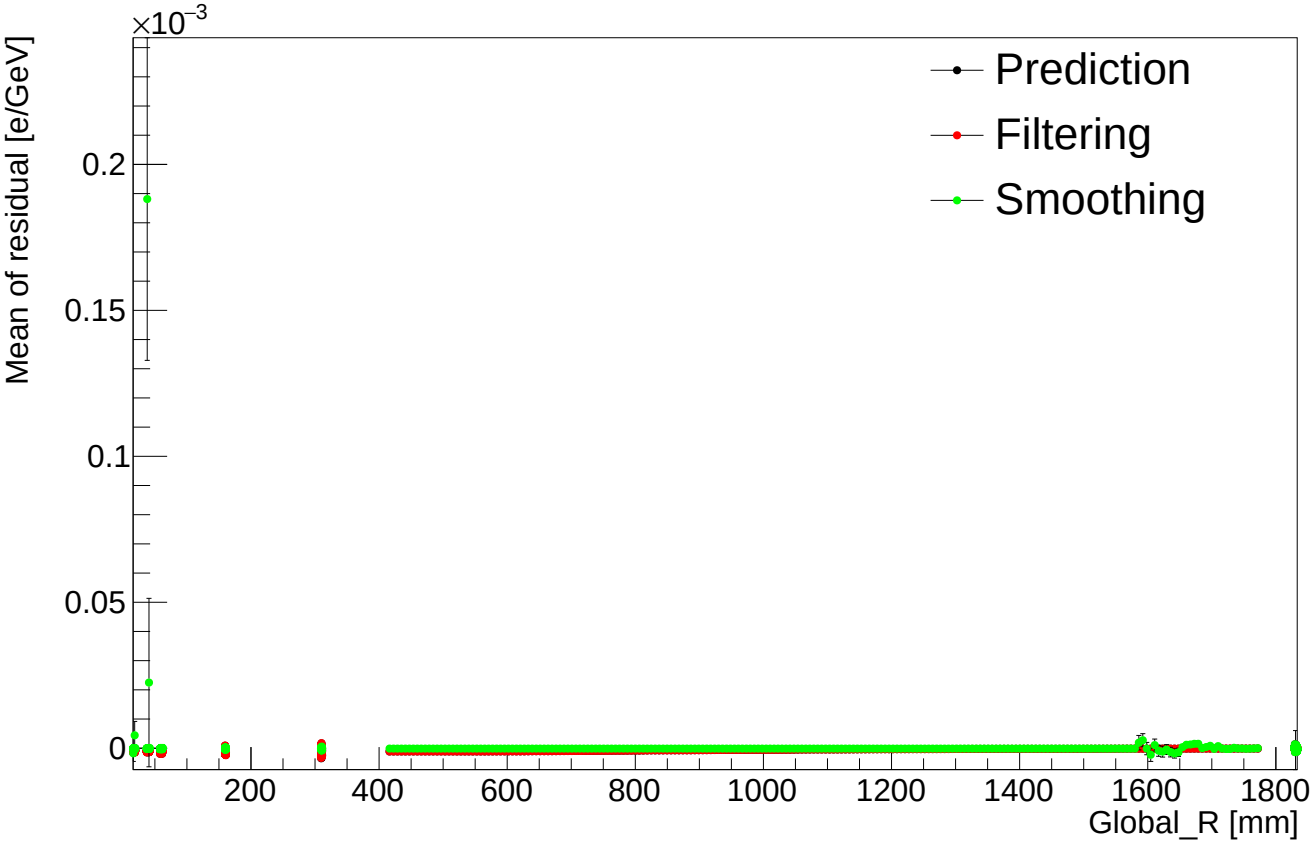

×10^−3
Mean of residual [rad]
0.1
0.05
0
−0.05
−0.1
Prediction
Filtering
Smoothing
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]

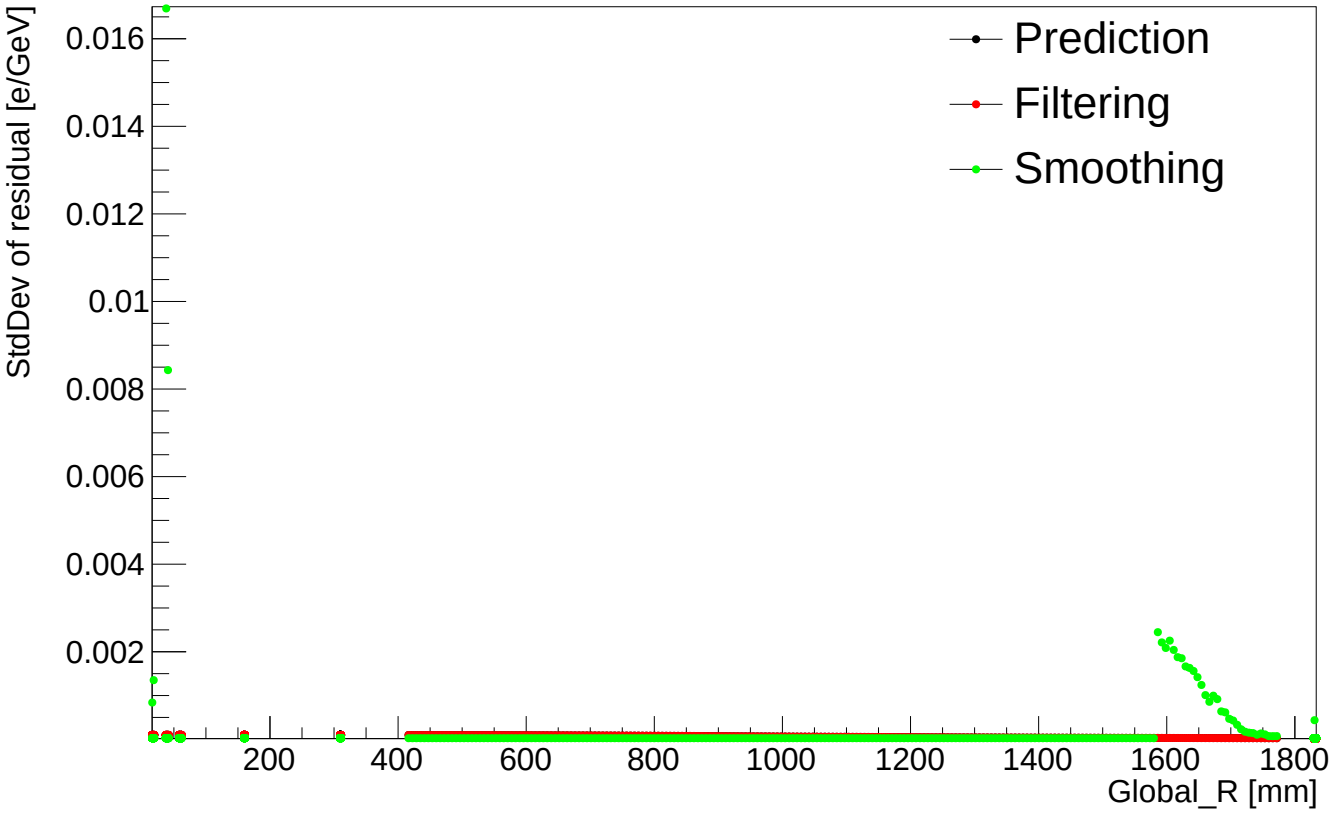

StdDev of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

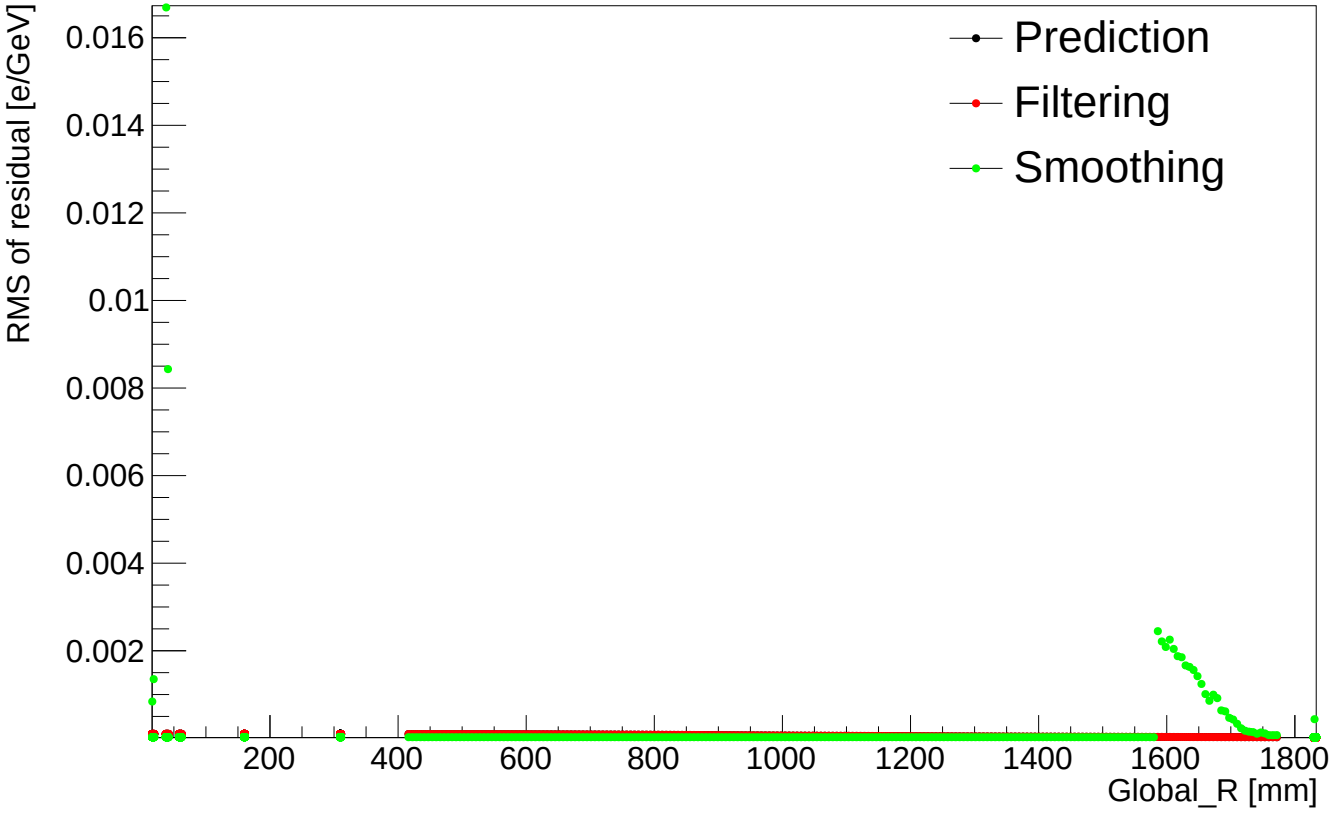

×10⁻³
0.3
0.25
0.2
0.15
0.1
0.05
0
StdDev of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

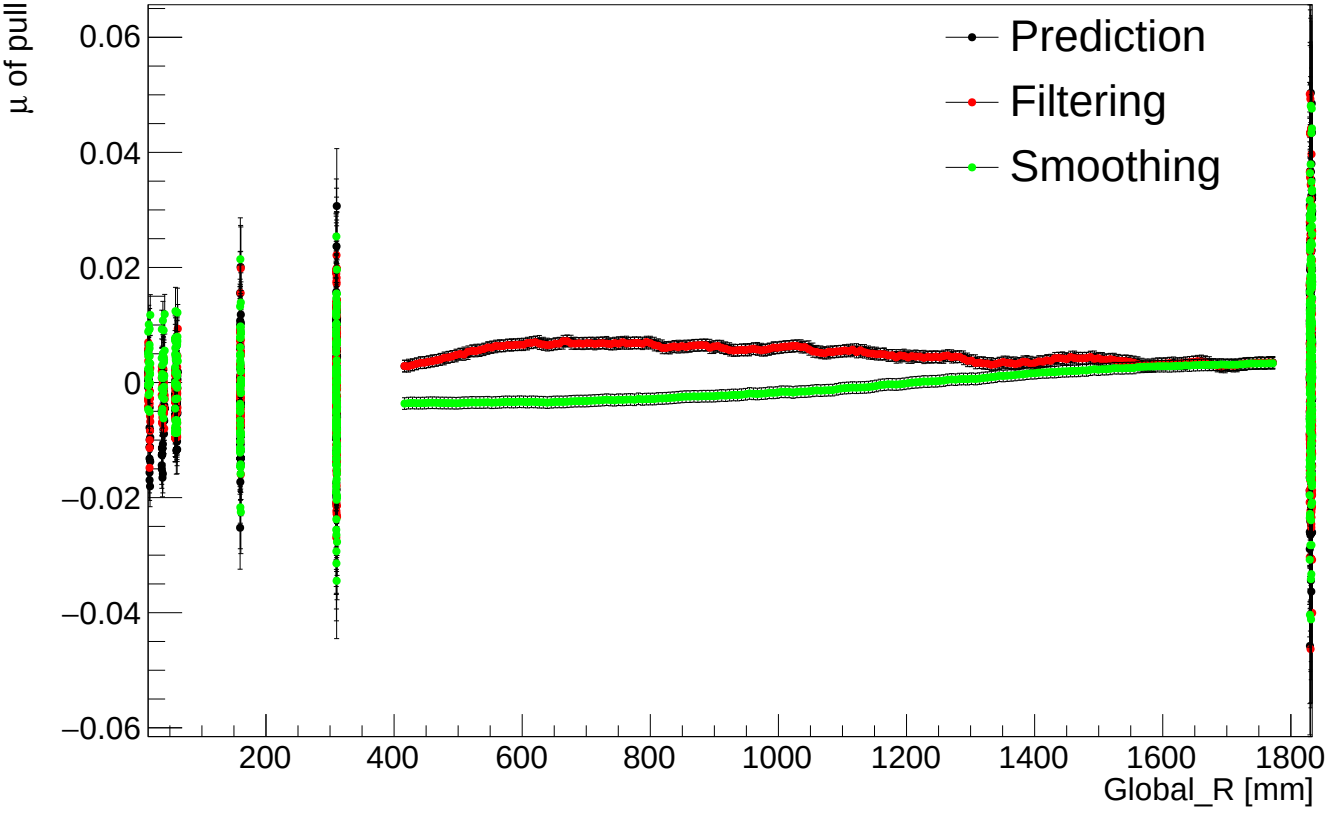

RMS of residual [rad]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

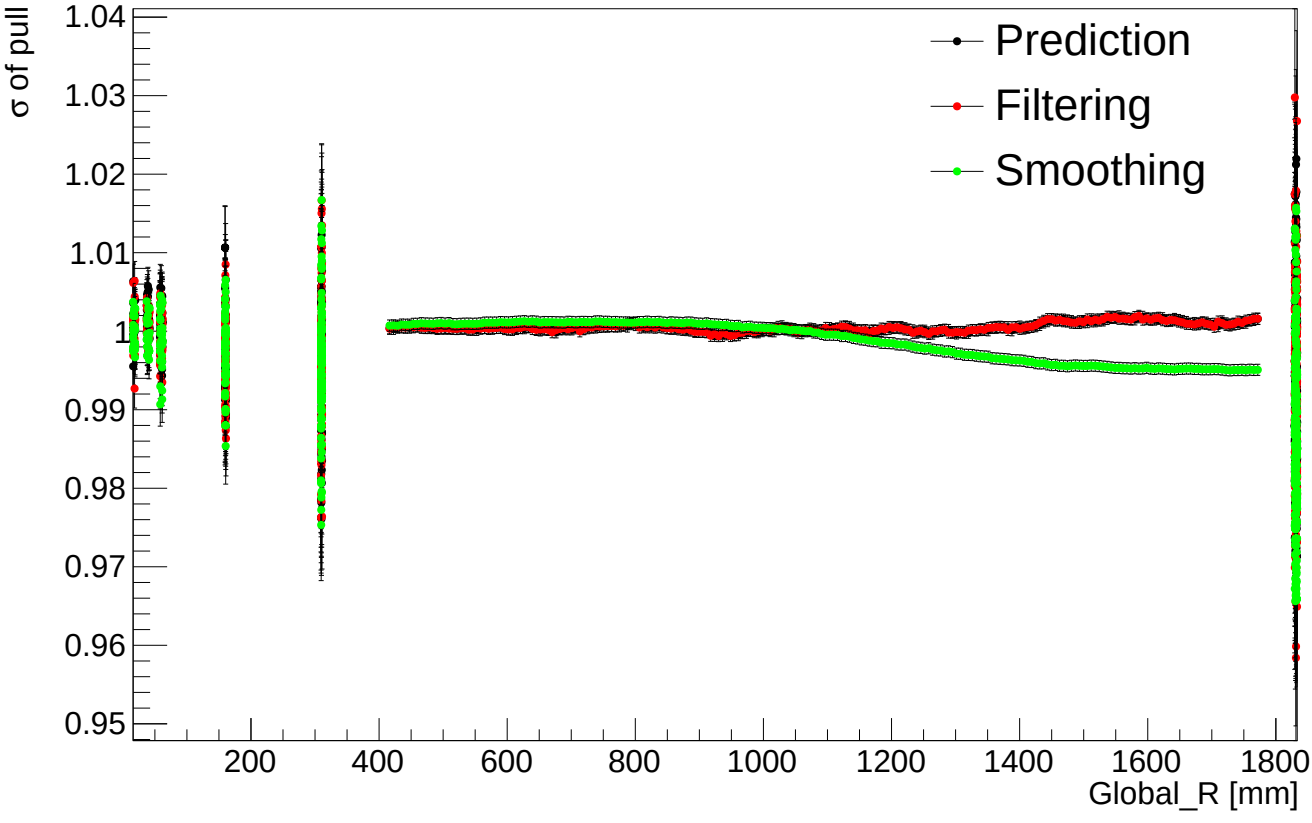

×10⁻³
0.3
0.25
0.2
0.15
0.1
0.05
0
RMS of residual [rad]
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

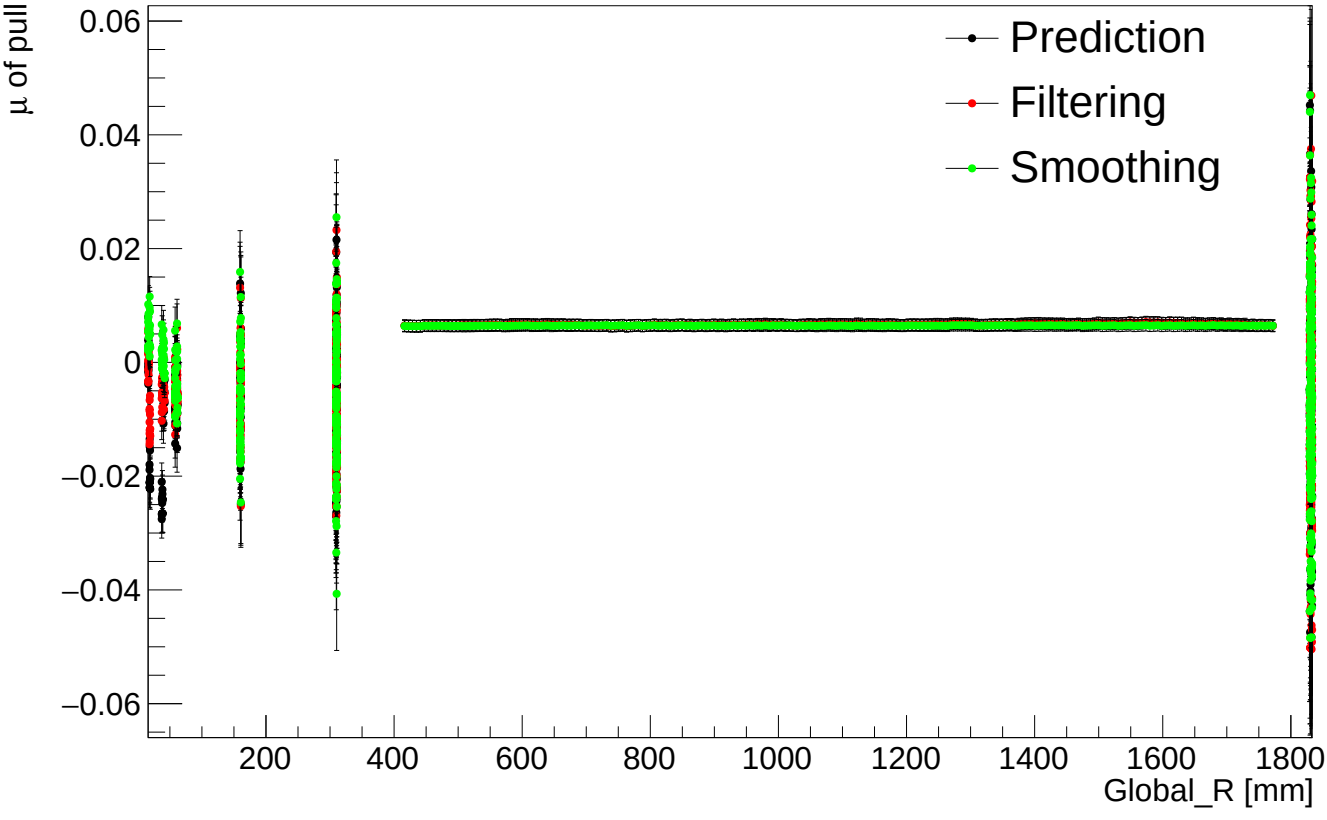

×10^-3
Mean of residual [e/GeV]
0.2
0.15
0.1
0.05
0
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

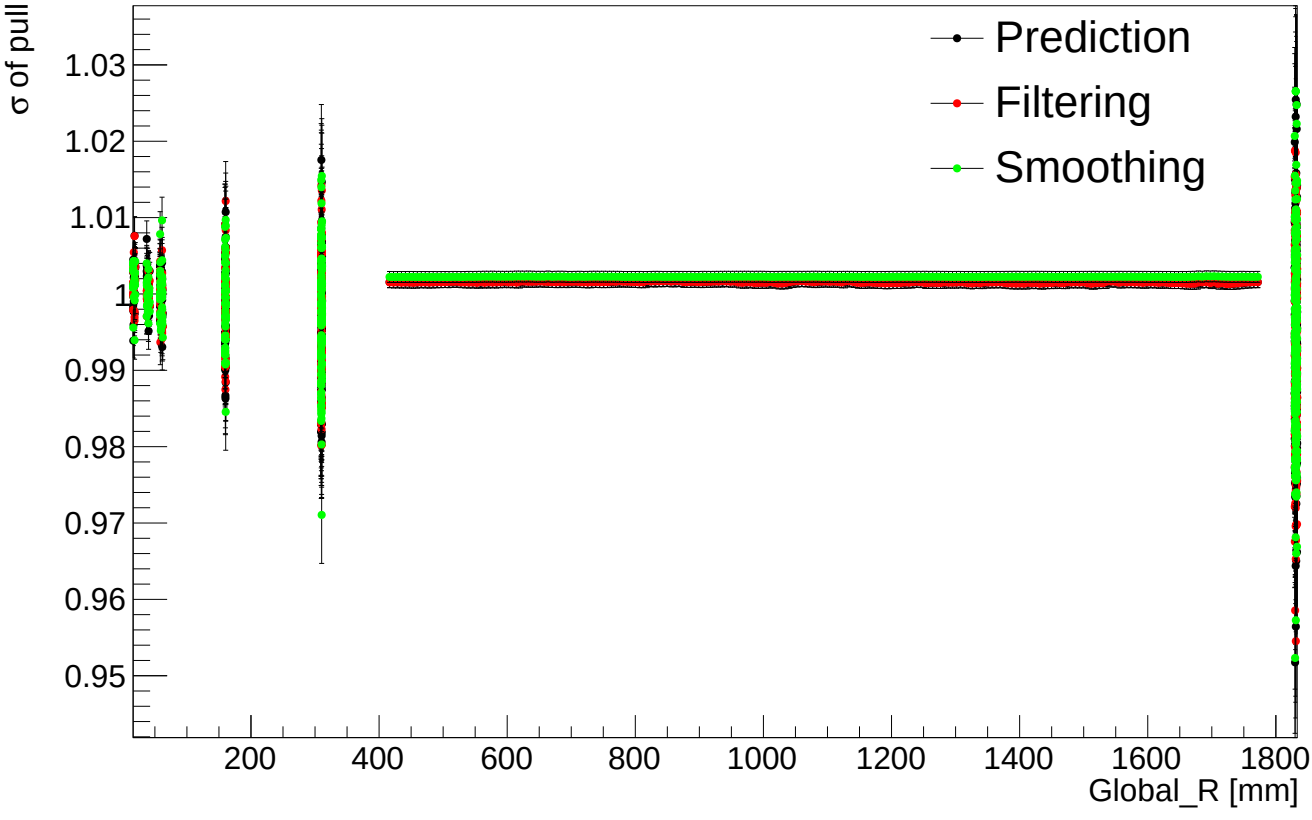

StdDev of residual [e/GeV]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

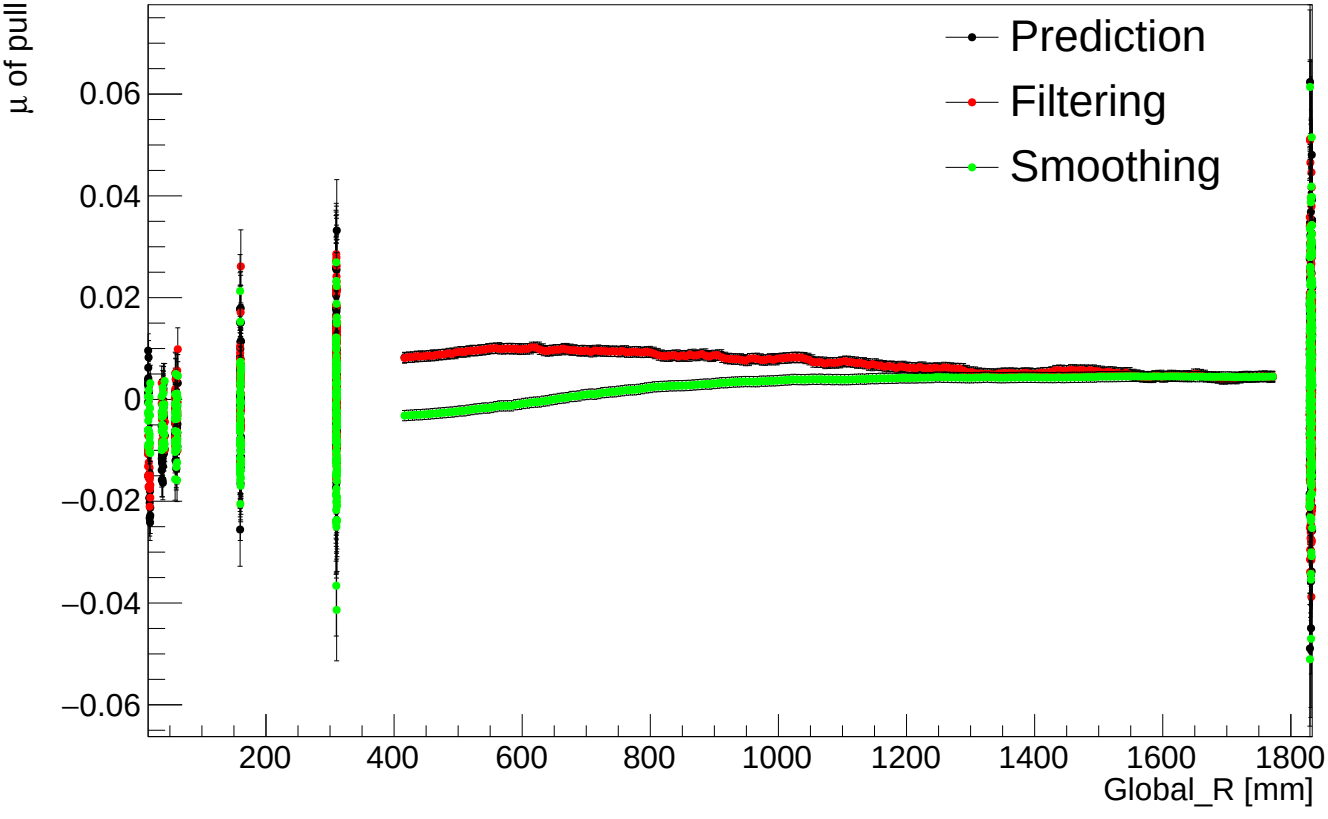

RMS of residual [e/GeV]
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

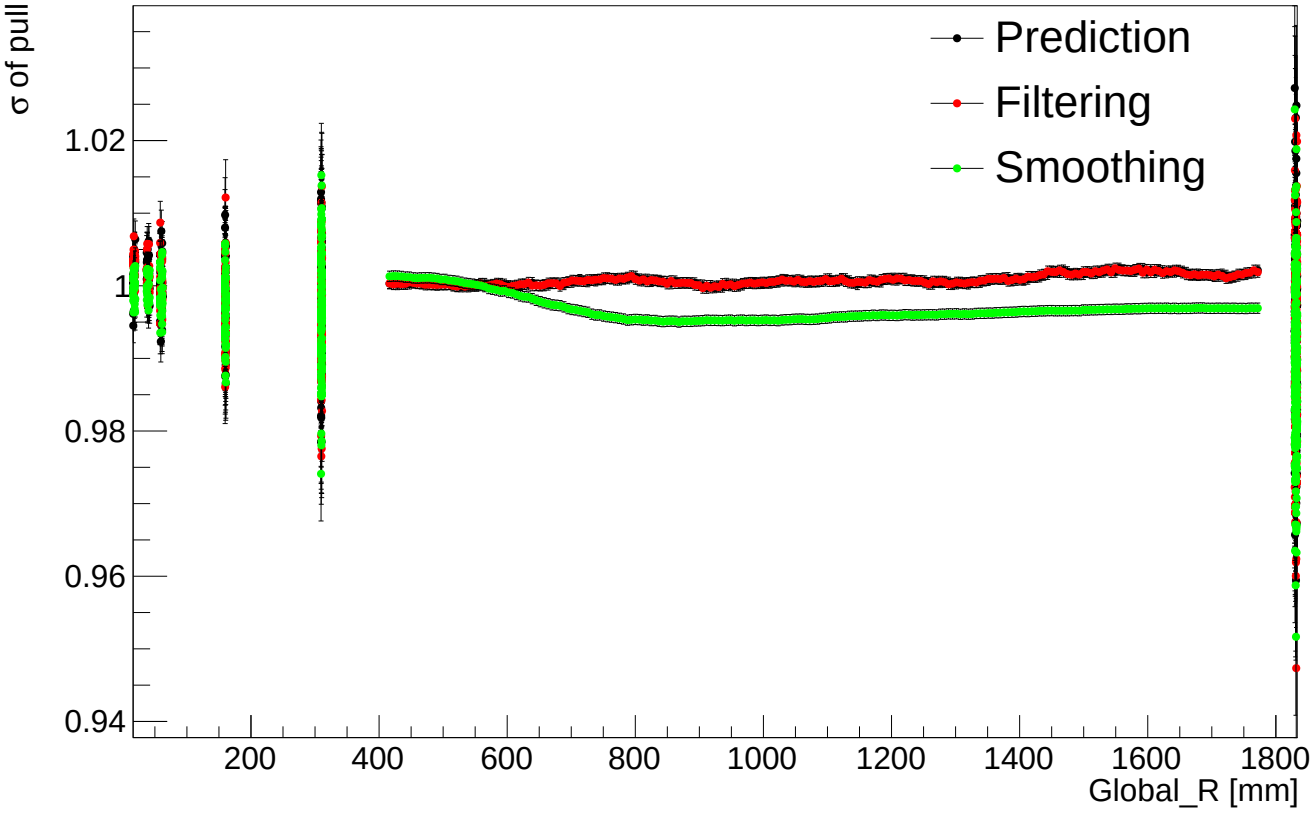

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

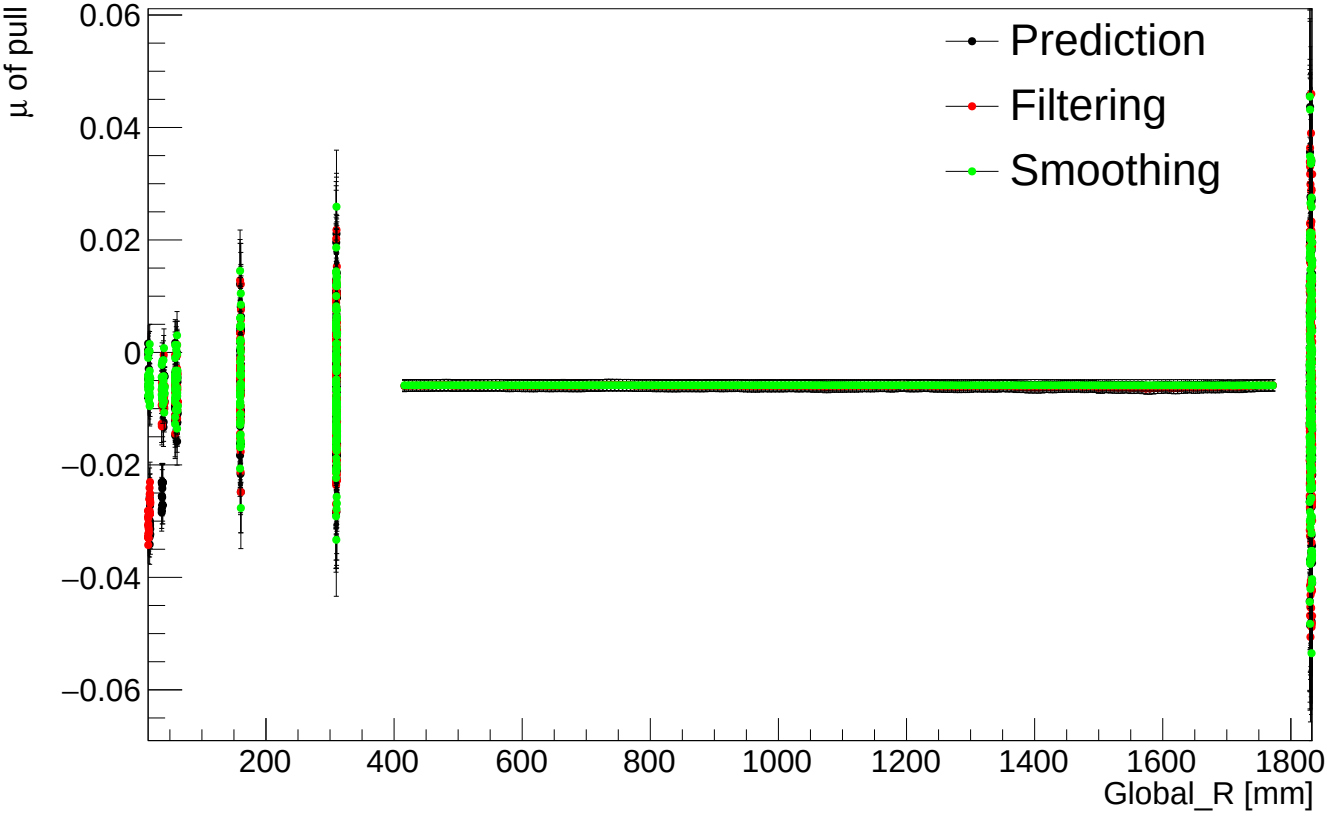

σ of pull
1.04
1.03
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

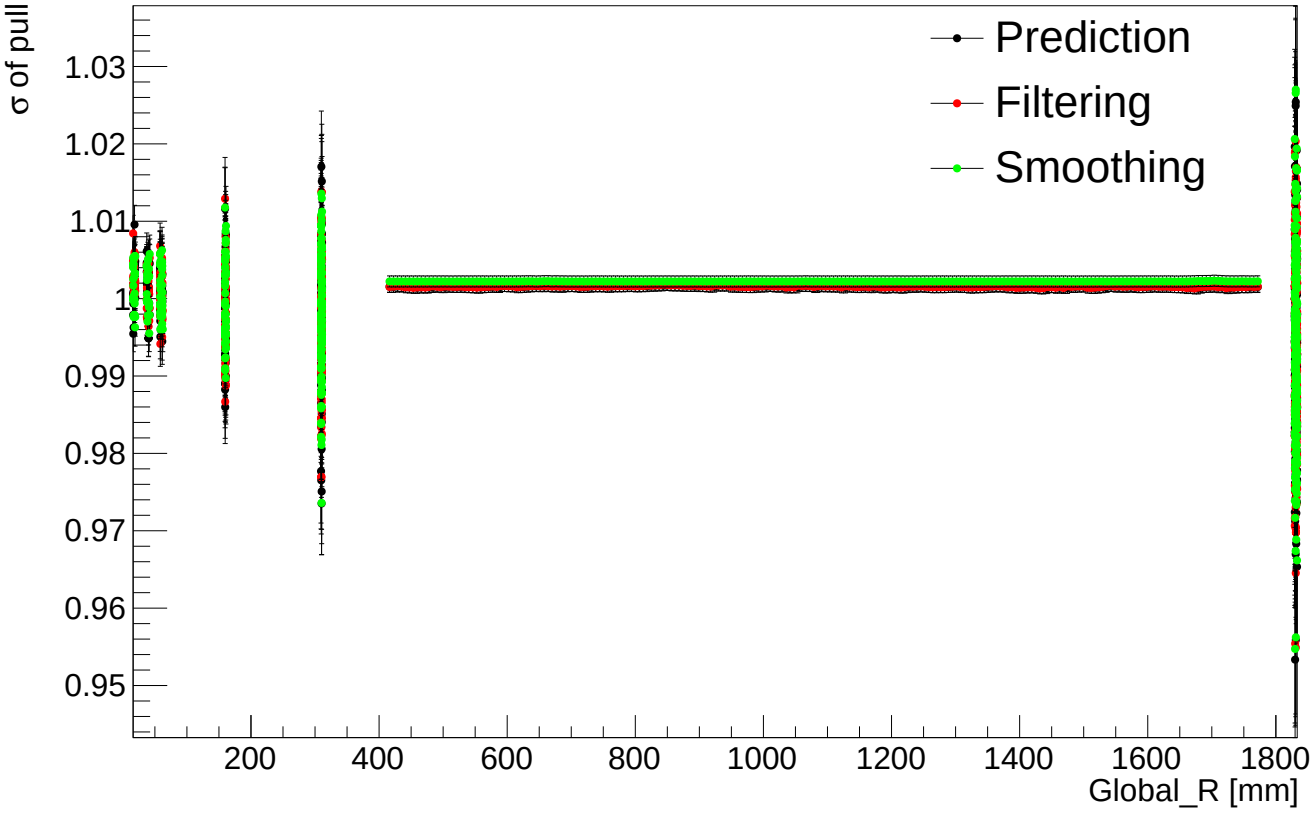

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

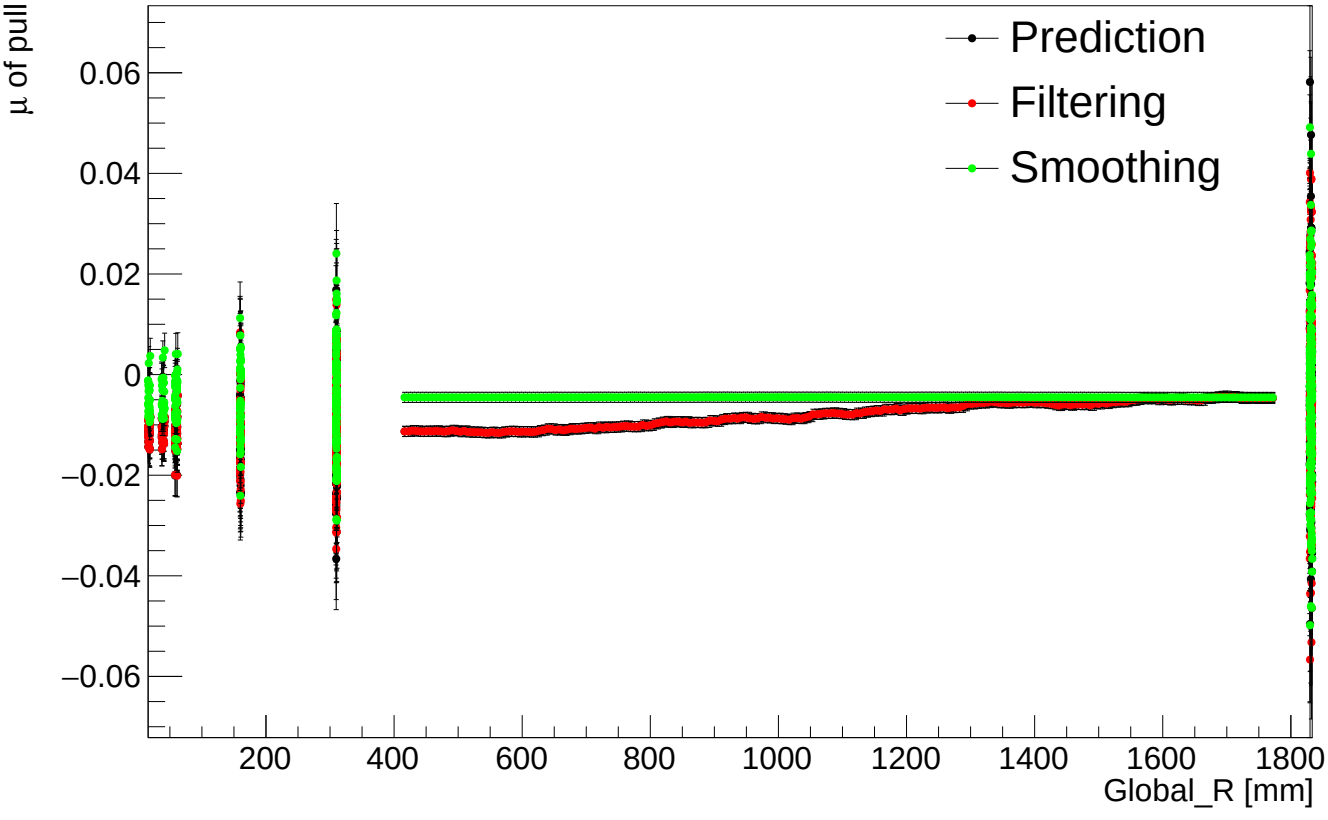

σ of pull
1.03
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

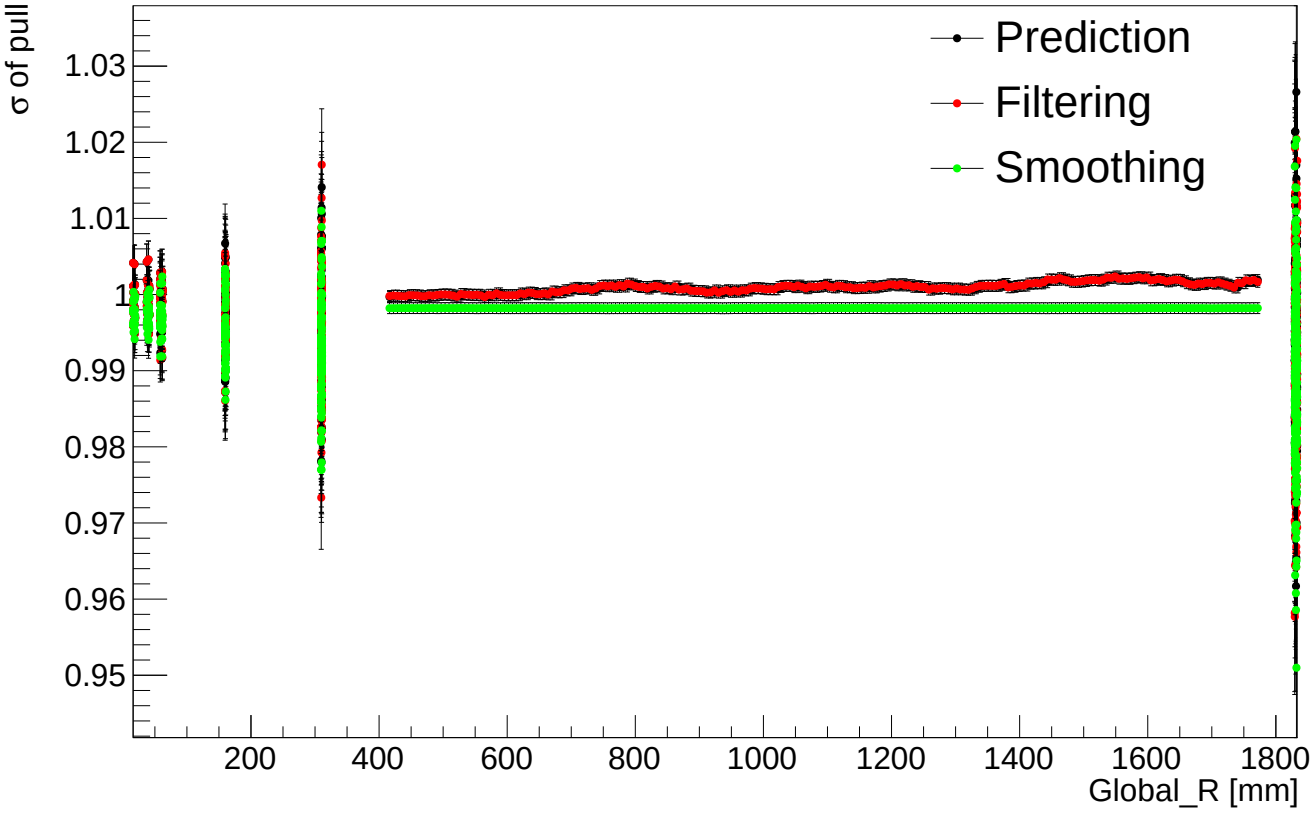

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

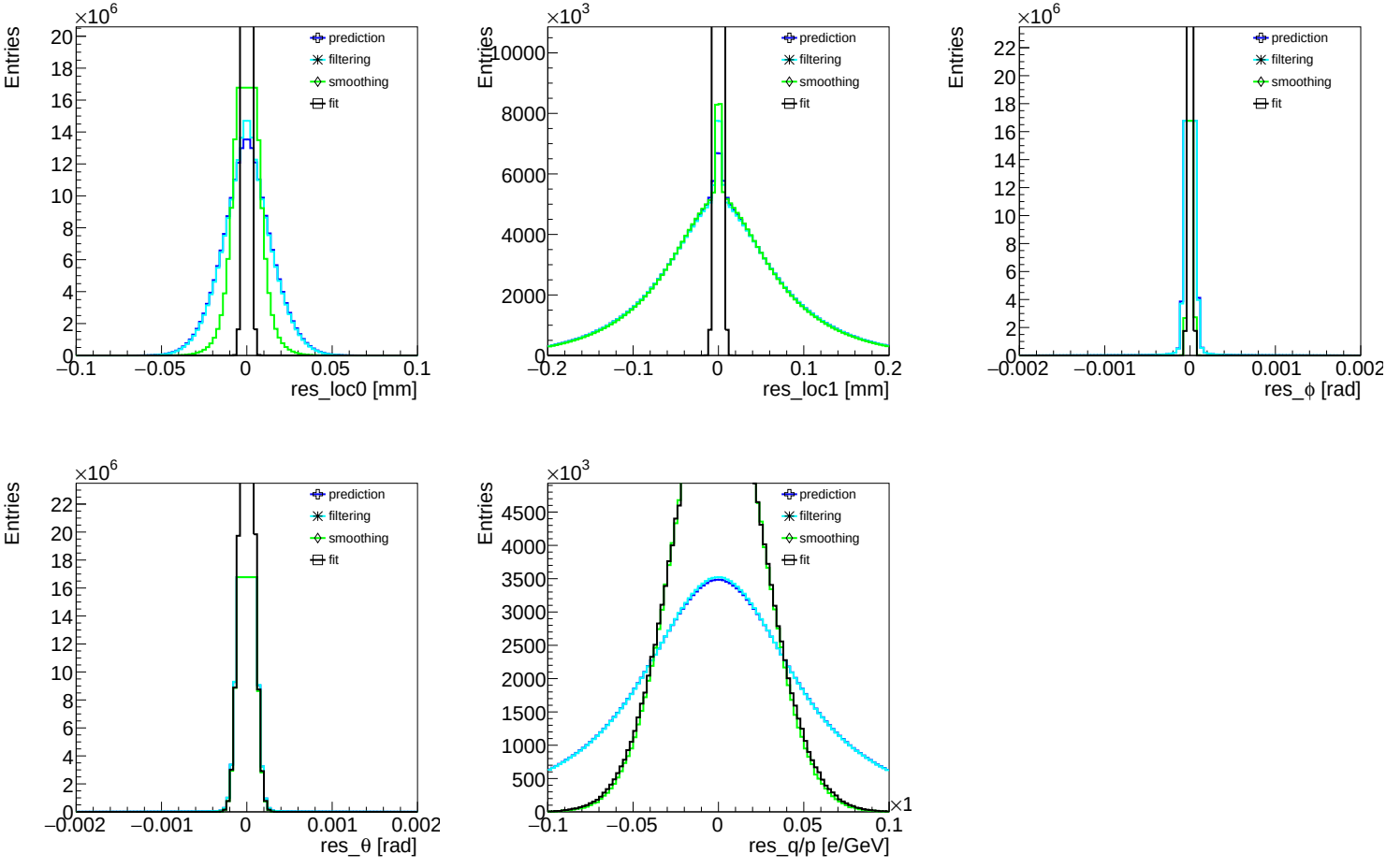

σ of pull
1.02
1
0.98
0.96
0.94
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

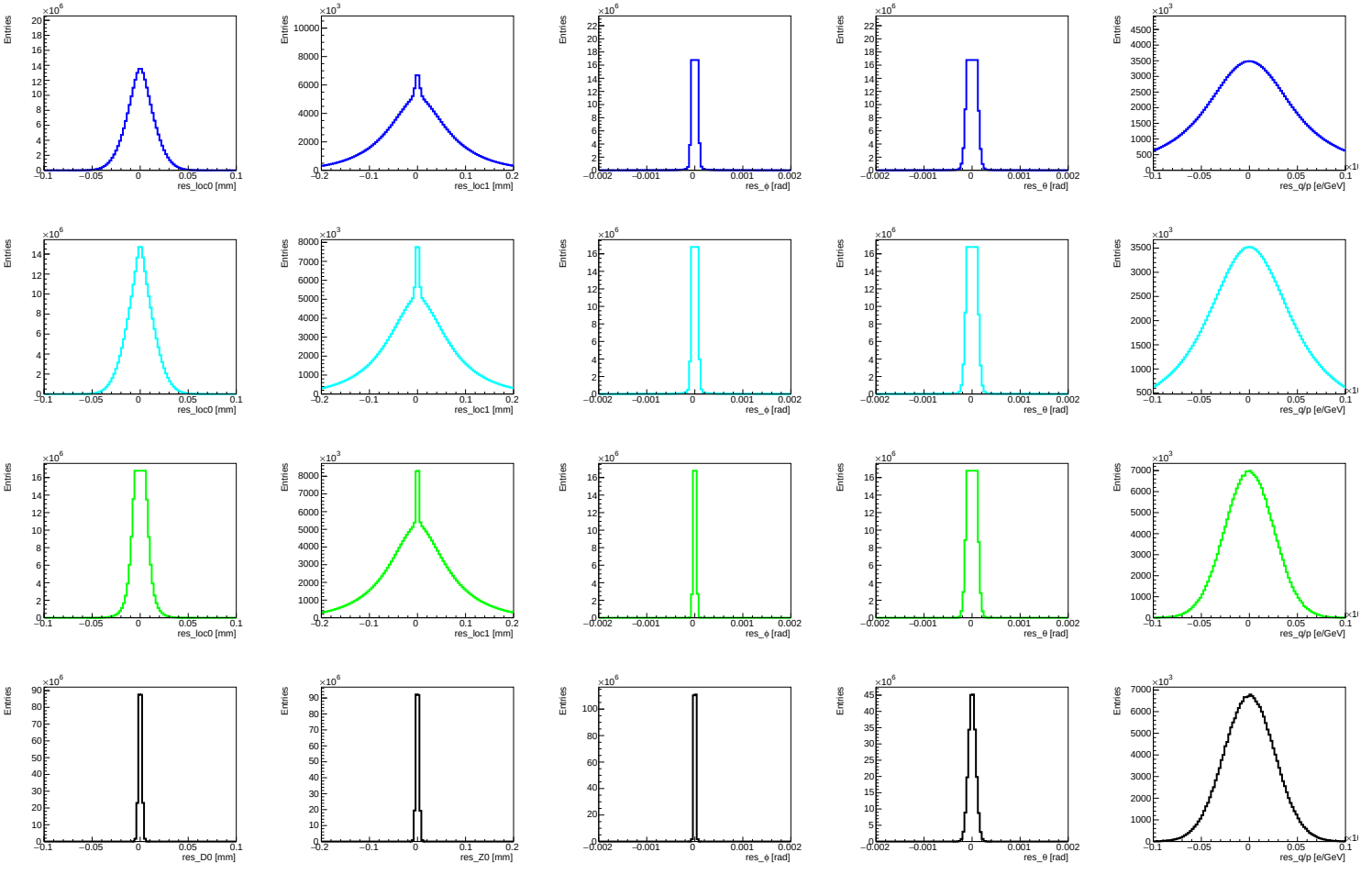

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

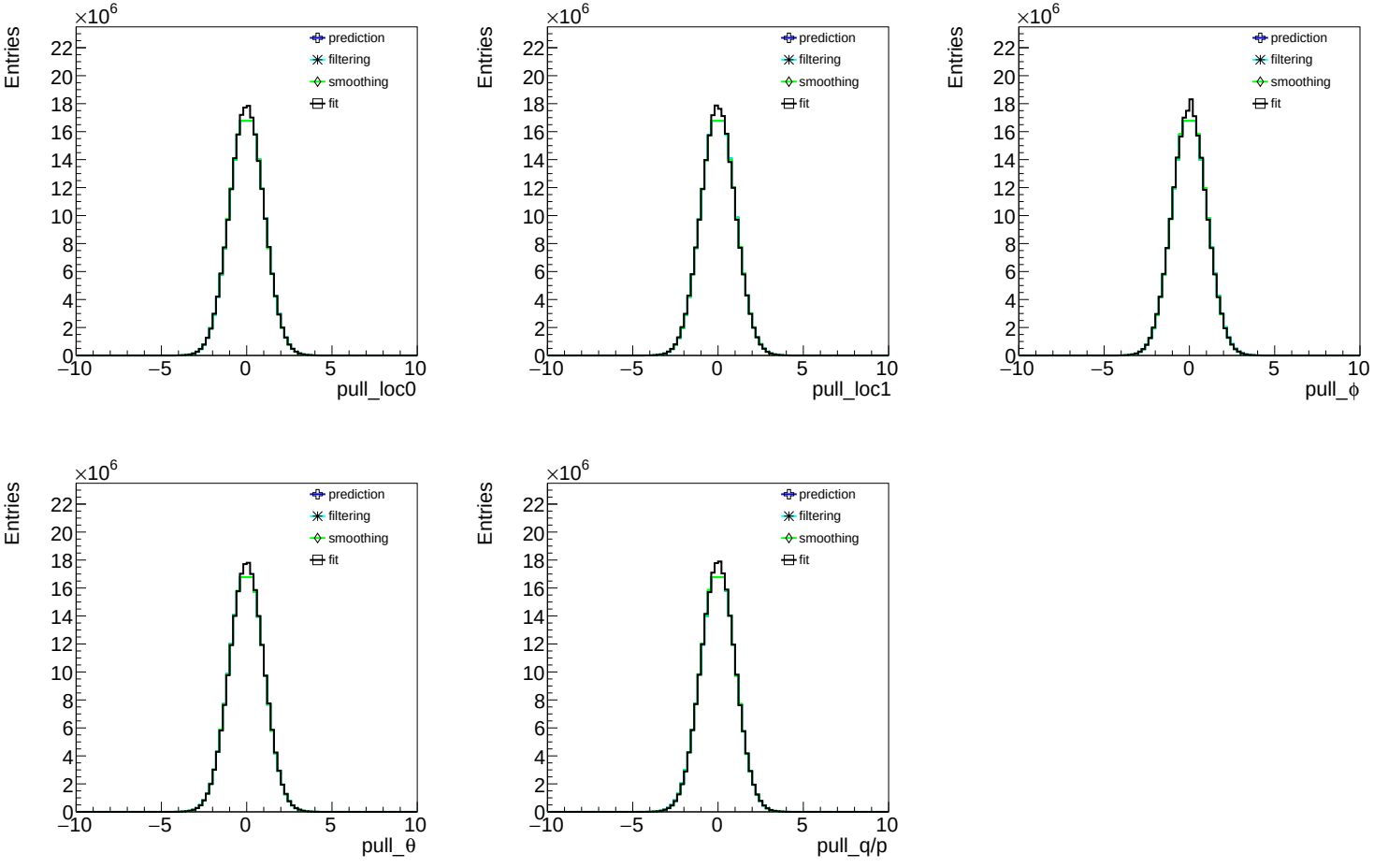

σ of pull
1.03
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing

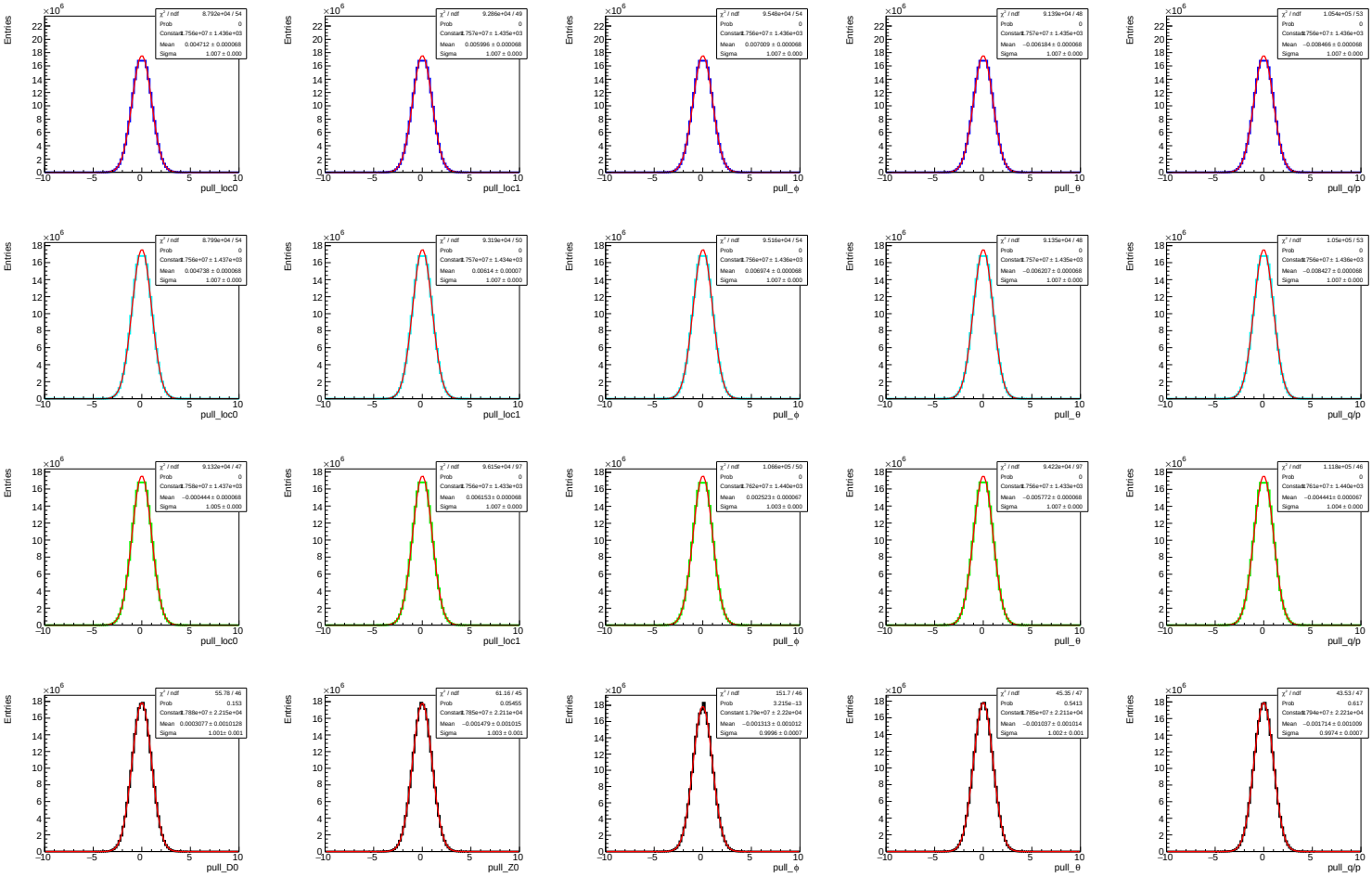

μ of pull
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing


σ of pull
1.03
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
200
400
600
800
1000
1200
1400
1600
1800
Global_R [mm]
Prediction
Filtering
Smoothing


Entries
×10^6
prediction
filtering
smoothing
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
smoothing
fit
pull_loc0
pull_loc1
pull_ϕ
pull_θ
pull_q/p


Entries
pull_loc0
pull_loc1
pull_ϕ
pull_θ
pull_q/p
pull_D0
pull_Z0
χ² / ndf 8.792e+04 / 54
Prob 0
Constant 1.756e+07 ± 1.436e+03
Mean 0.004712 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.286e+04 / 49
Prob 0
Constant 1.757e+07 ± 1.435e+03
Mean 0.005996 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.548e+04 / 54
Prob 0
Constant 1.756e+07 ± 1.436e+03
Mean 0.007009 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.139e+04 / 48
Prob 0
Constant 1.757e+07 ± 1.435e+03
Mean −0.006184 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 1.054e+05 / 53
Prob 0
Constant 1.756e+07 ± 1.436e+03
Mean −0.008466 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 8.799e+04 / 54
Prob 0
Constant 1.756e+07 ± 1.437e+03
Mean 0.004738 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.319e+04 / 50
Prob 0
Constant 1.757e+07 ± 1.434e+03
Mean 0.00614 ± 0.00007
Sigma 1.007 ± 0.000
χ² / ndf 9.516e+04 / 54
Prob 0
Constant 1.756e+07 ± 1.436e+03
Mean 0.006974 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.135e+04 / 48
Prob 0
Constant 1.757e+07 ± 1.435e+03
Mean −0.006207 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 1.05e+05 / 53
Prob 0
Constant 1.756e+07 ± 1.436e+03
Mean −0.008427 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 9.132e+04 / 47
Prob 0
Constant 1.758e+07 ± 1.437e+03
Mean −0.000444 ± 0.000068
Sigma 1.005 ± 0.000
χ² / ndf 9.615e+04 / 97
Prob 0
Constant 1.756e+07 ± 1.433e+03
Mean 0.006153 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 1.066e+05 / 50
Prob 0
Constant 1.762e+07 ± 1.440e+03
Mean 0.002523 ± 0.000067
Sigma 1.003 ± 0.000
χ² / ndf 9.422e+04 / 97
Prob 0
Constant 1.756e+07 ± 1.433e+03
Mean −0.005772 ± 0.000068
Sigma 1.007 ± 0.000
χ² / ndf 1.118e+05 / 46
Prob 0
Constant 1.761e+07 ± 1.440e+03
Mean −0.004441 ± 0.000067
Sigma 1.004 ± 0.000
χ² / ndf 55.78 / 46
Prob 0.153
Constant 1.788e+07 ± 2.215e+04
Mean 0.0003077 ± 0.0010128
Sigma 1.001 ± 0.001
χ² / ndf 61.16 / 45
Prob 0.05455
Constant 1.785e+07 ± 2.211e+04
Mean −0.001479 ± 0.001015
Sigma 1.003 ± 0.001
χ² / ndf 151.7 / 46
Prob 3.215e−13
Constant 1.79e+07 ± 2.22e+04
Mean −0.001313 ± 0.001012
Sigma 0.9996 ± 0.0007
χ² / ndf 45.35 / 47
Prob 0.5413
Constant 1.785e+07 ± 2.211e+04
Mean −0.001037 ± 0.001014
Sigma 1.002 ± 0.001
χ² / ndf 43.53 / 47
Prob 0.617
Constant 1.794e+07 ± 2.223e+04
Mean −0.001714 ± 0.001009
Sigma 0.9974 ± 0.0007