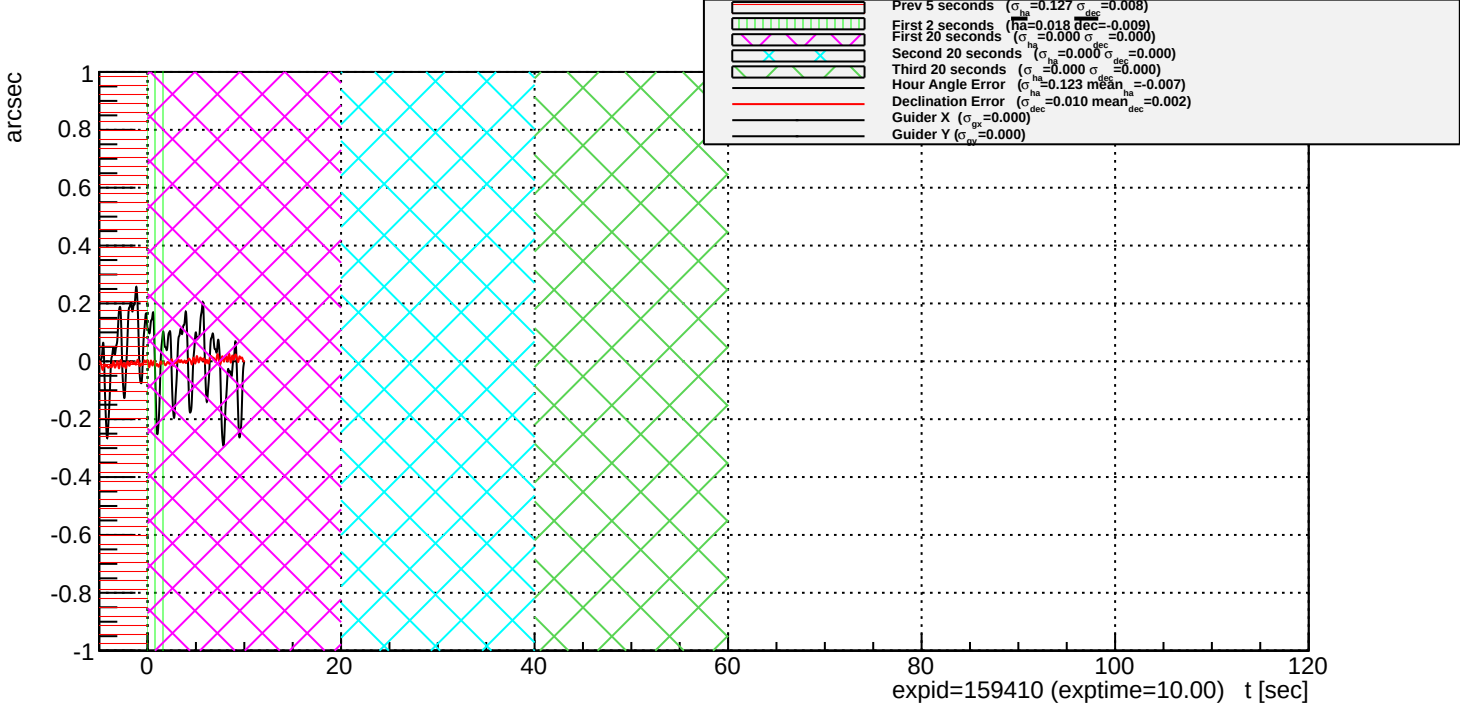
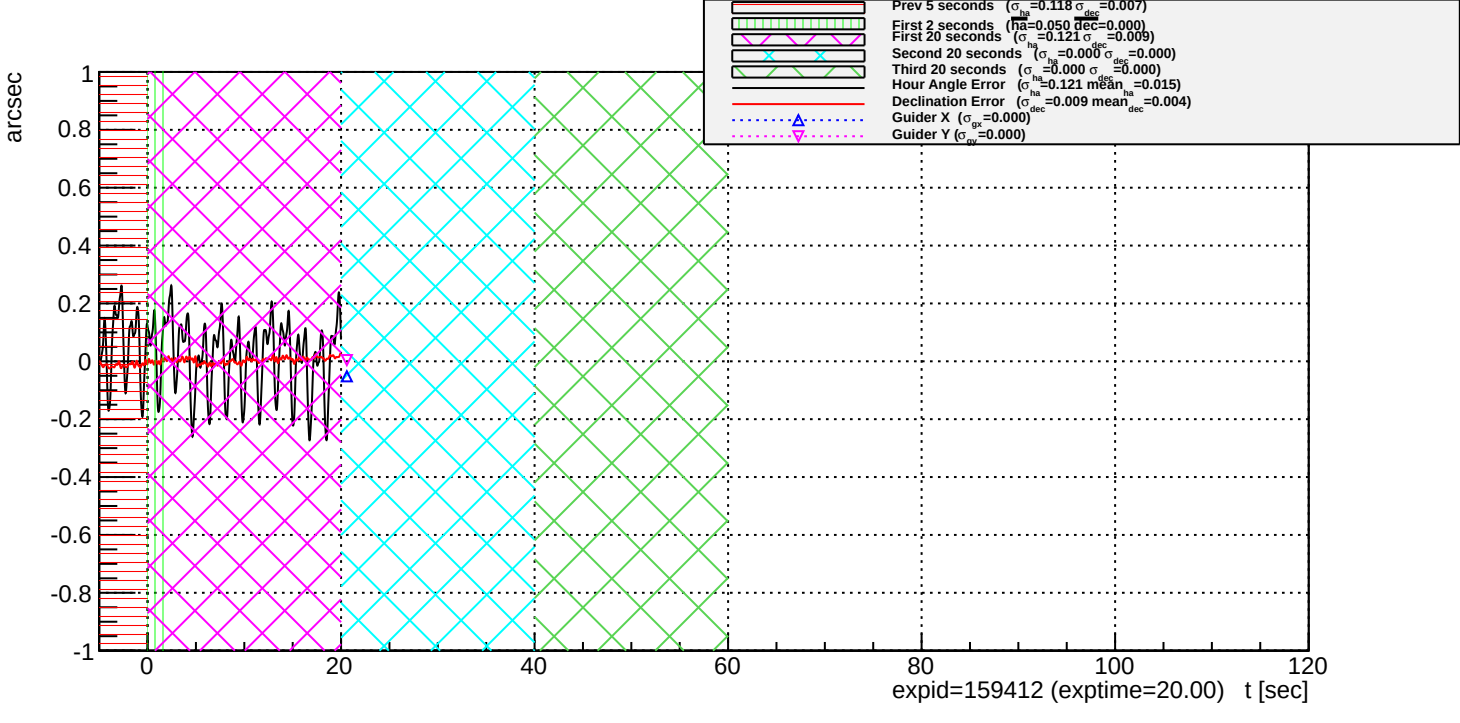
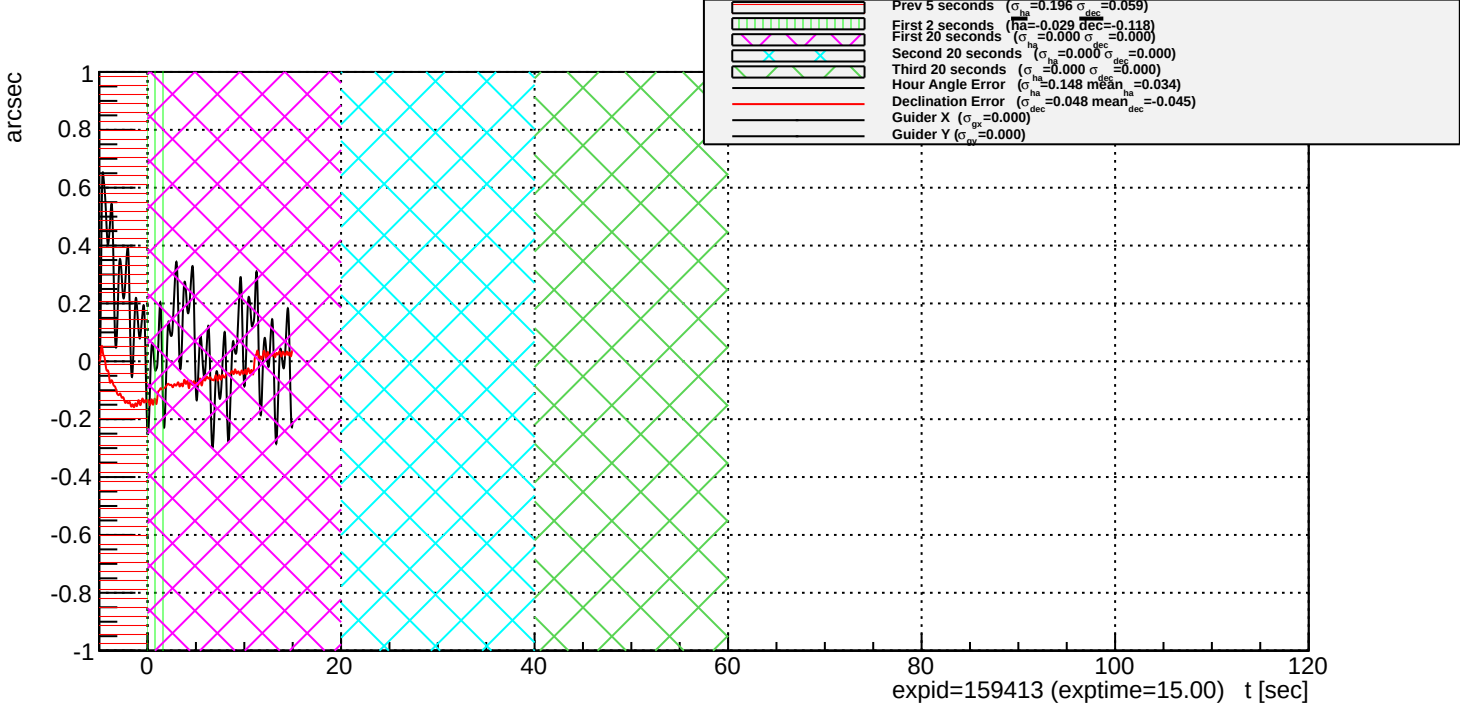
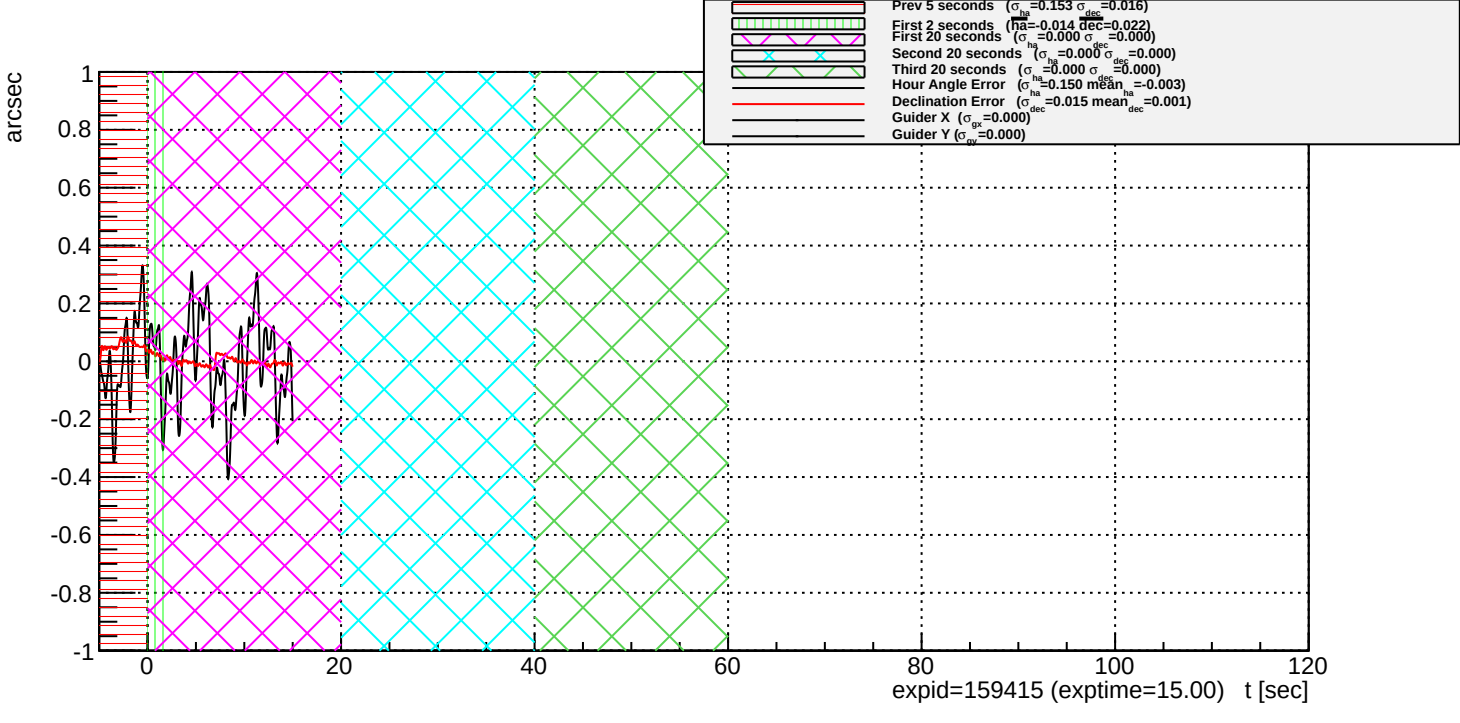
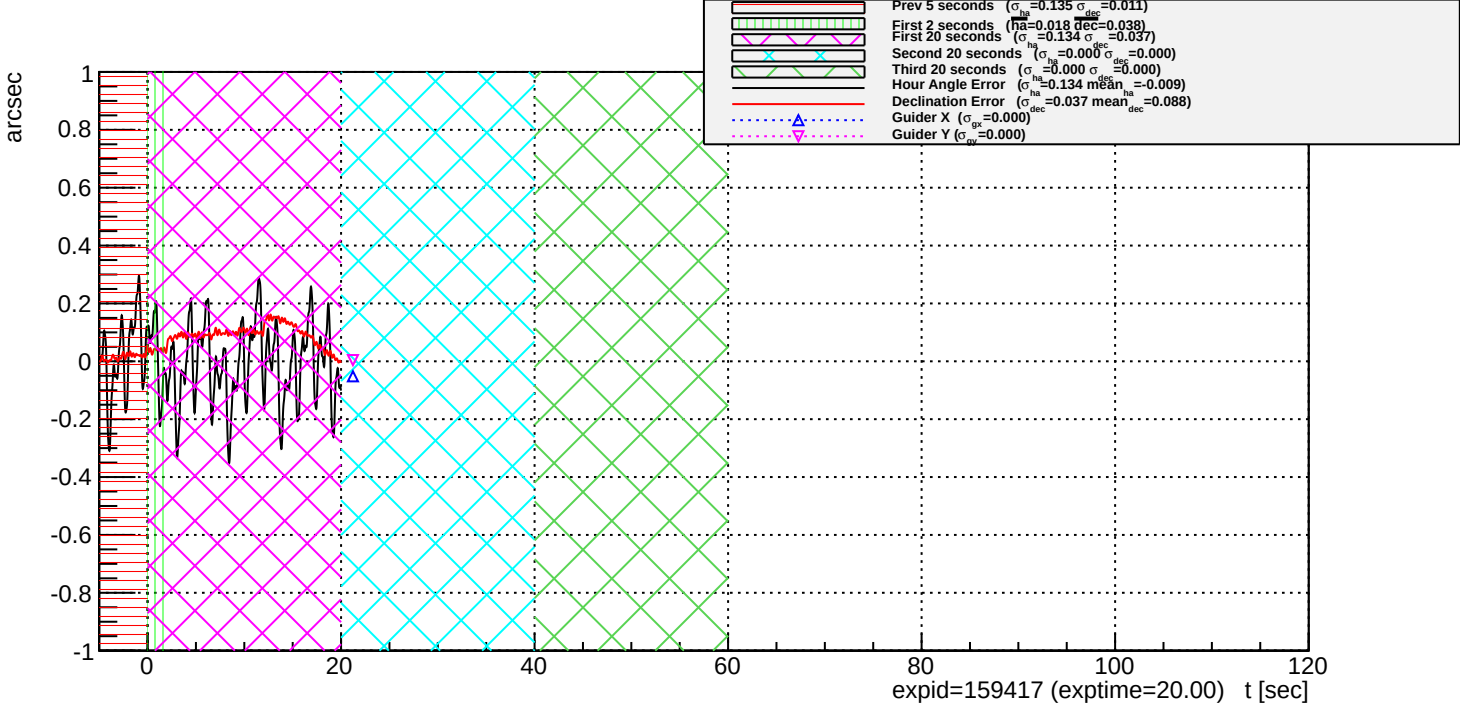
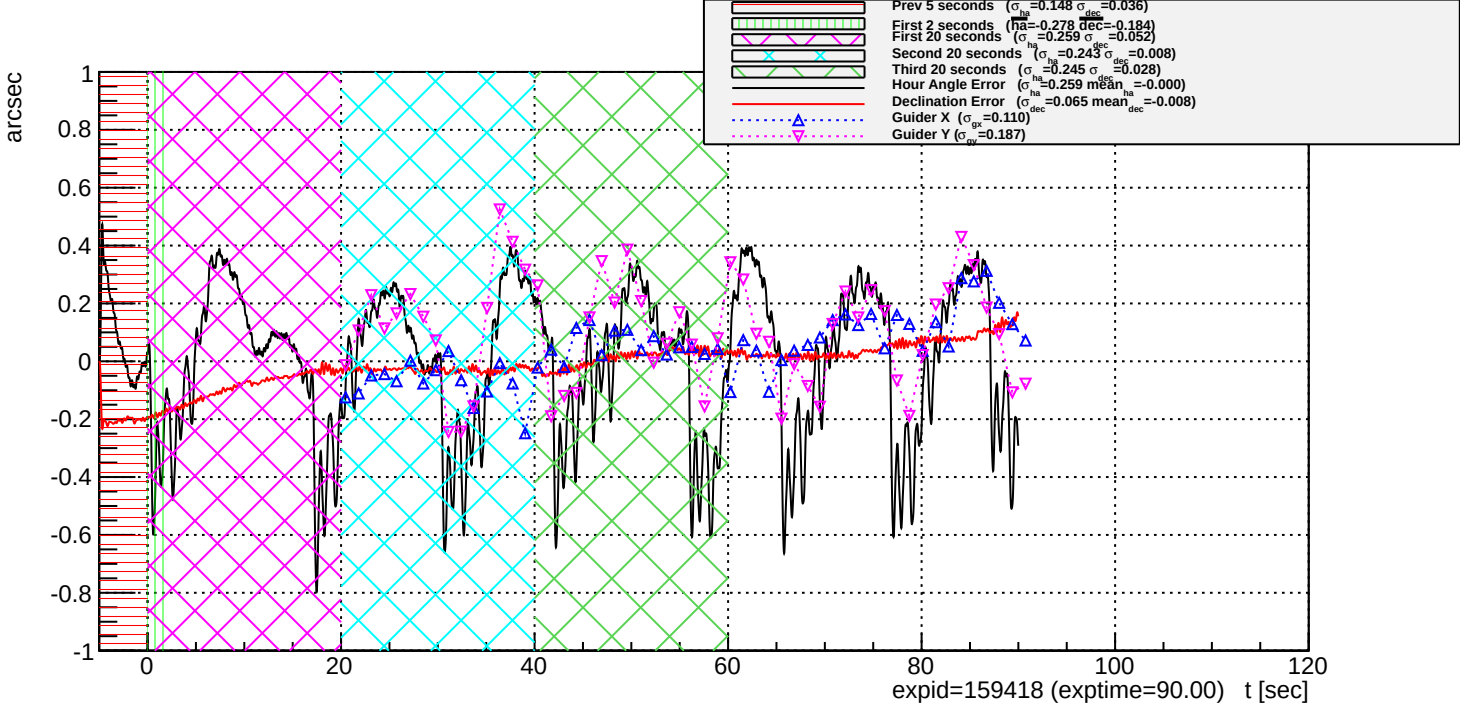

Prev 5 seconds (σ_{ha}=0.127 σ_{dec}=0.008)
First 2 seconds (σ_{ha}=0.018 σ_{dec}=-0.009)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.123 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.010 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159410 (exptime=10.00)
t [sec]

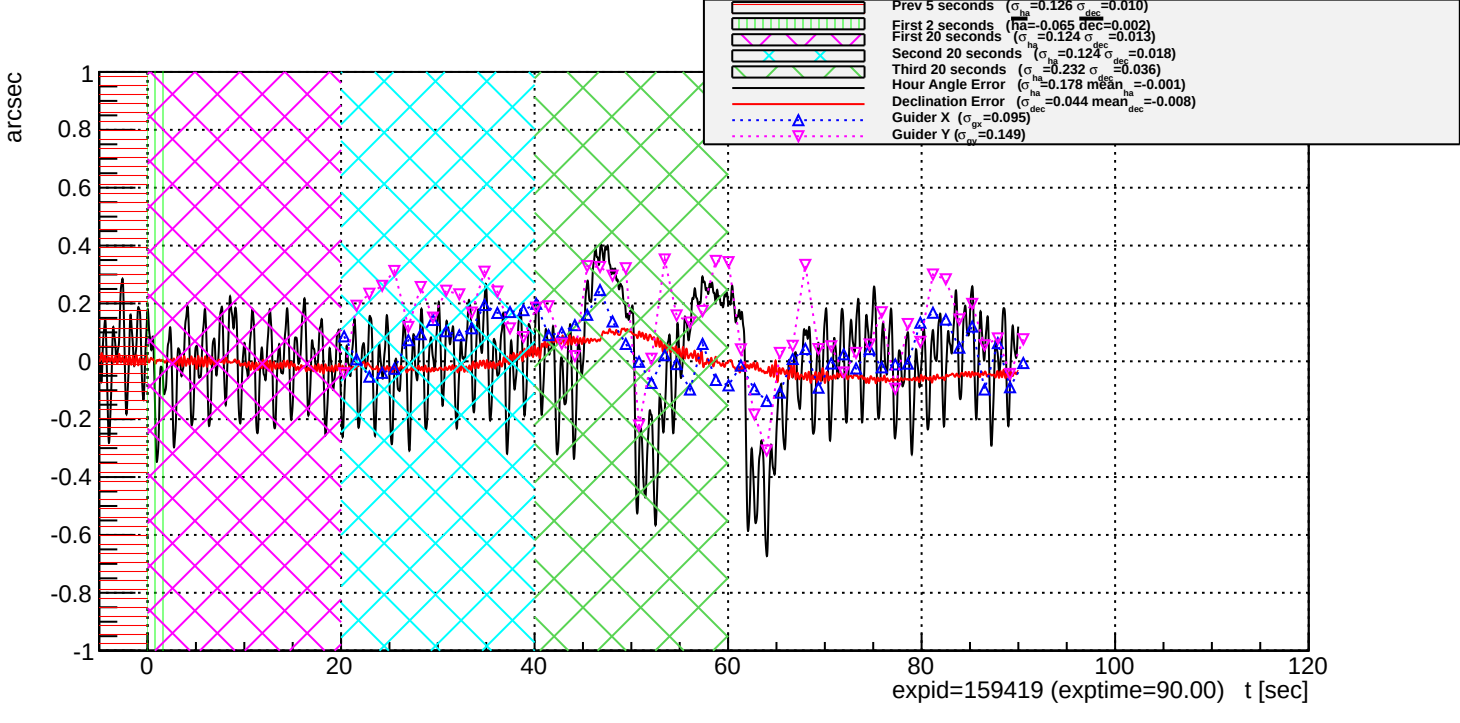

Prev 5 seconds (σ_{ha}=0.118 σ_{dec}=0.007)
First 2 seconds (ha=0.050 dec=0.000)
First 20 seconds (σ_{ha}=0.121 σ_{dec}=0.009)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.121 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.009 $mean_{dec}$=0.004)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159412 (exptime=20.00) t [sec]

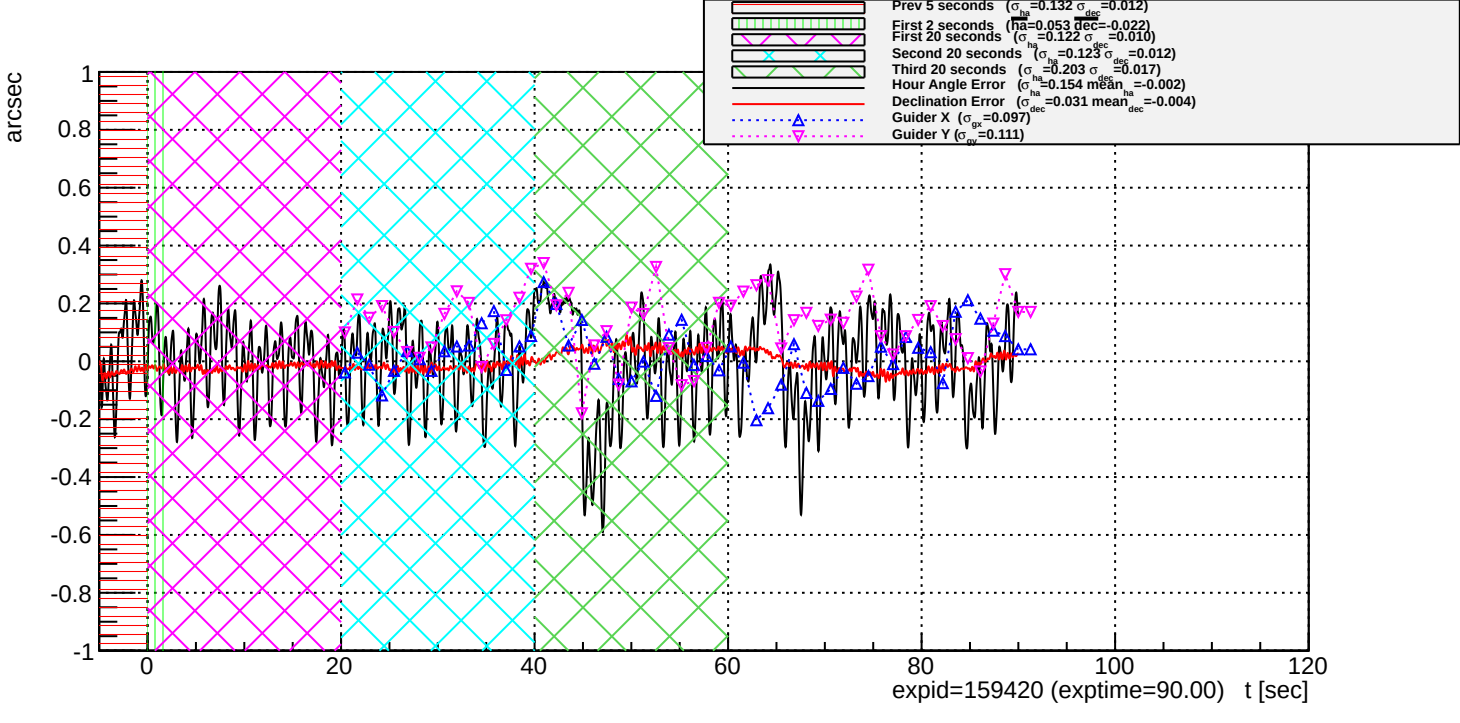

Prev 5 seconds (σ_{ha}=0.196 σ_{dec}=0.059)
First 2 seconds (ha=-0.029 dec=-0.118)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.148 $mean_{ha}$=0.034)
Declination Error (σ_{dec}=0.048 $mean_{dec}$=-0.045)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159413 (exptime=15.00) t [sec]

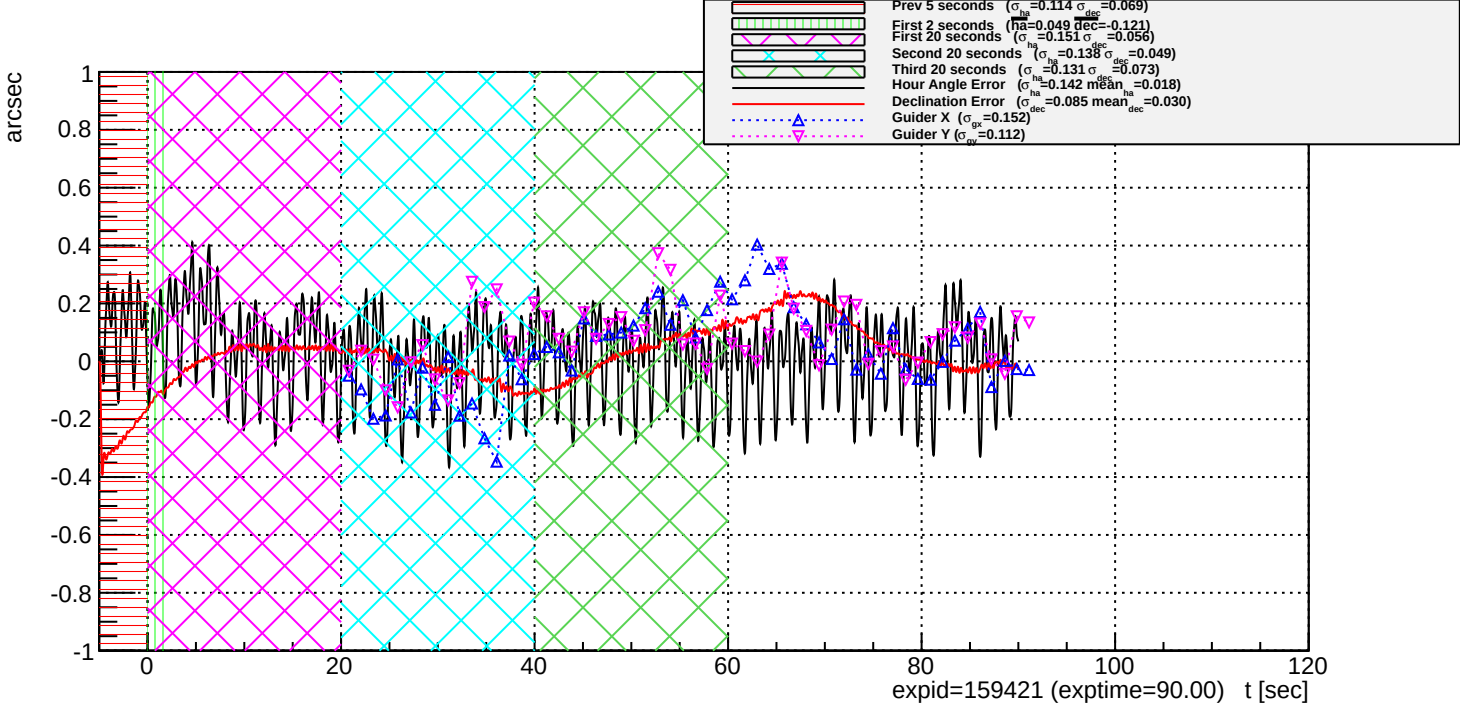

Prev 5 seconds (σ_{ha}=0.153 σ_{dec}=0.016)
First 2 seconds (ha=-0.014 dec=0.022)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.150 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.015 $mean_{dec}$=0.001)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159415 (exptime=15.00) t [sec]

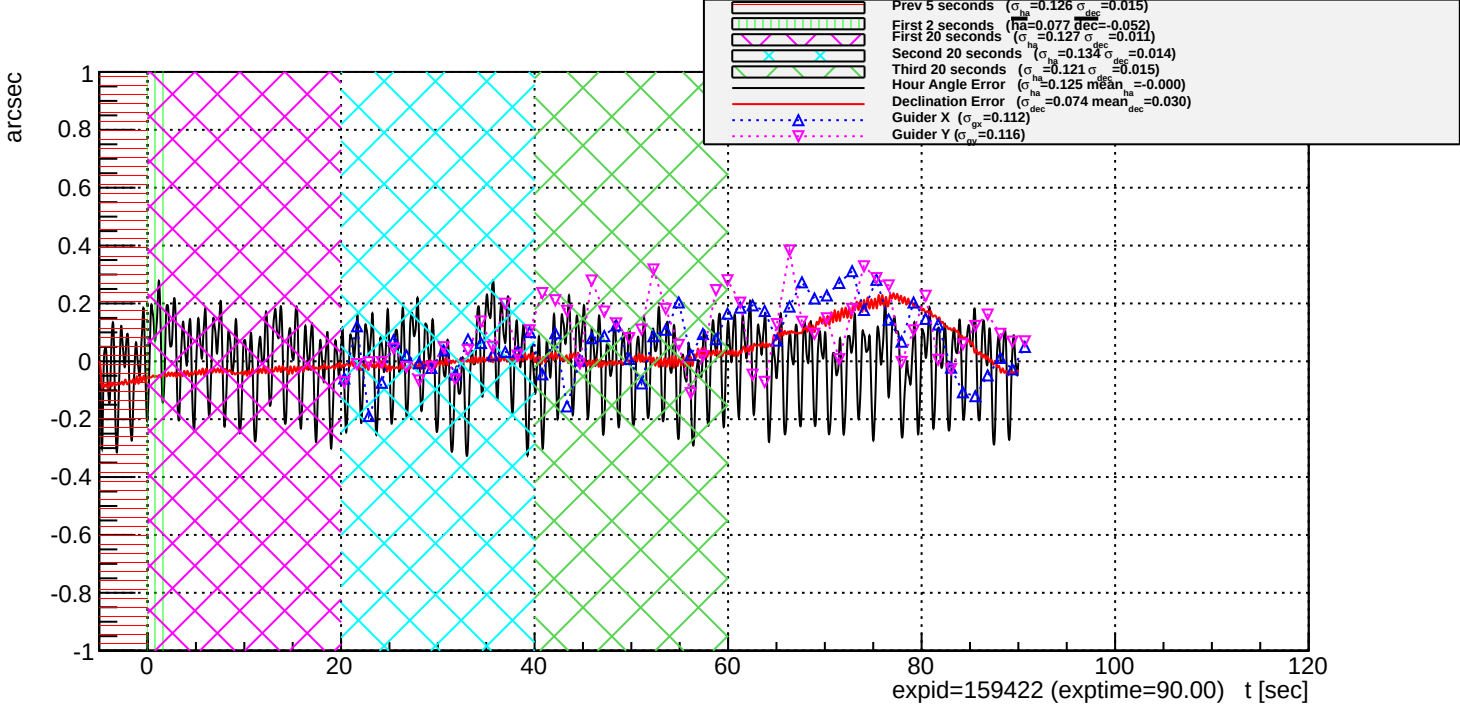

Prev 5 seconds (σ_{ha}=0.135 σ_{dec}=0.011)
First 2 seconds (ha=0.018 dec=0.038)
First 20 seconds (σ_{ha}=0.134 σ_{dec}=0.037)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.134 $mean_{ha}$=-0.009)
Declination Error (σ_{dec}=0.037 $mean_{dec}$=0.088)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159417 (exptime=20.00)
t [sec]

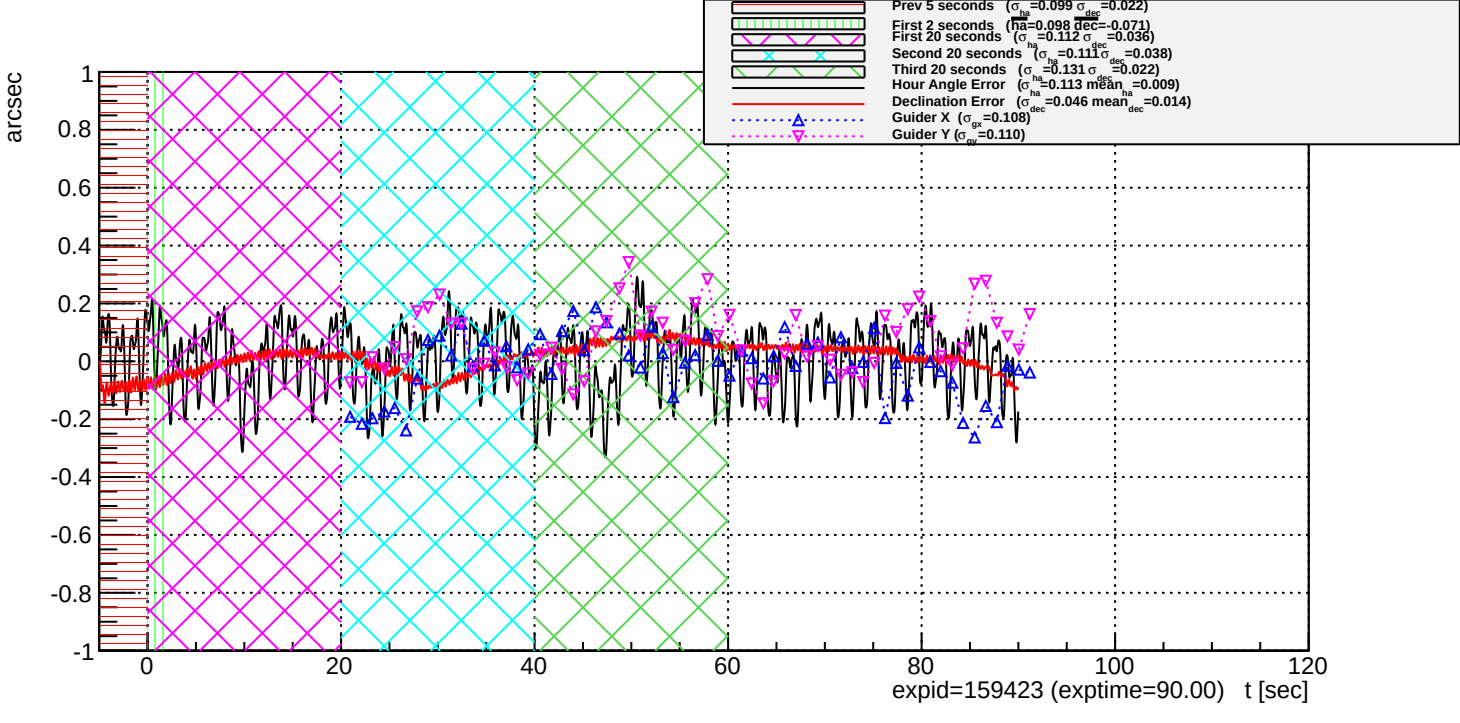

Prev 5 seconds (σ_{ha}=0.148 σ_{dec}=0.036)
First 2 seconds ($\overline{ha}$=-0.278 $\overline{dec}$=-0.184)
First 20 seconds (σ_{ha}=0.259 σ_{dec}=0.052)
Second 20 seconds (σ_{ha}=0.243 σ_{dec}=0.008)
Third 20 seconds (σ_{ha}=0.245 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.259 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.065 $mean_{dec}$=-0.008)
Guider X (σ_{gx}=0.110)
Guider Y (σ_{gy}=0.187)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159418 (exptime=90.00) t [sec]

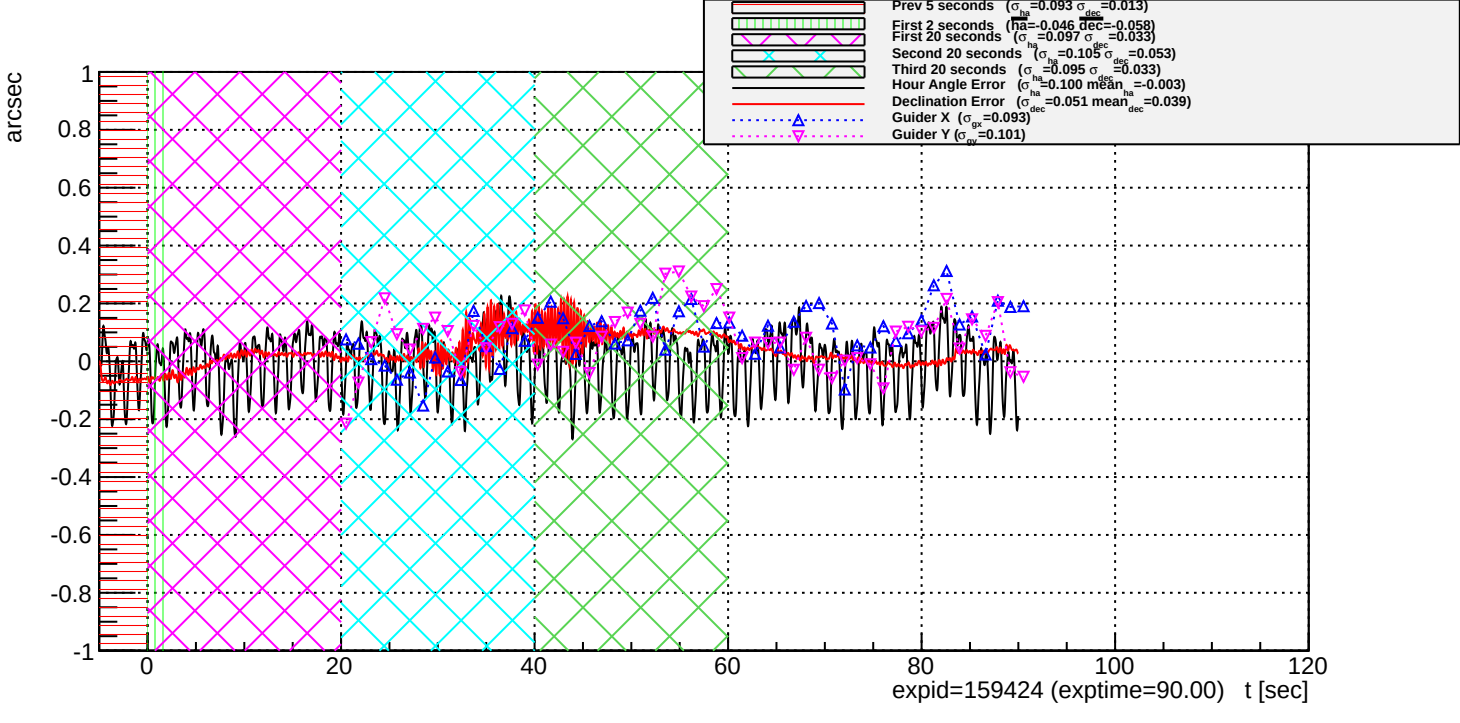

Prev 5 seconds (σ_{ha}=0.126 σ_{dec}=0.010)
First 2 seconds ($\overline{ha}$=-0.065 $\overline{dec}$=0.002)
First 20 seconds (σ_{ha}=0.124 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.124 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.232 σ_{dec}=0.036)
Hour Angle Error (σ_{ha}=0.178 $mean_{ha}$=-0.001)
Declination Error (σ_{dec}=0.044 $mean_{dec}$=-0.008)
Guider X (σ_{gx}=0.095)
Guider Y (σ_{gy}=0.149)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159419 (exptime=90.00) t [sec]

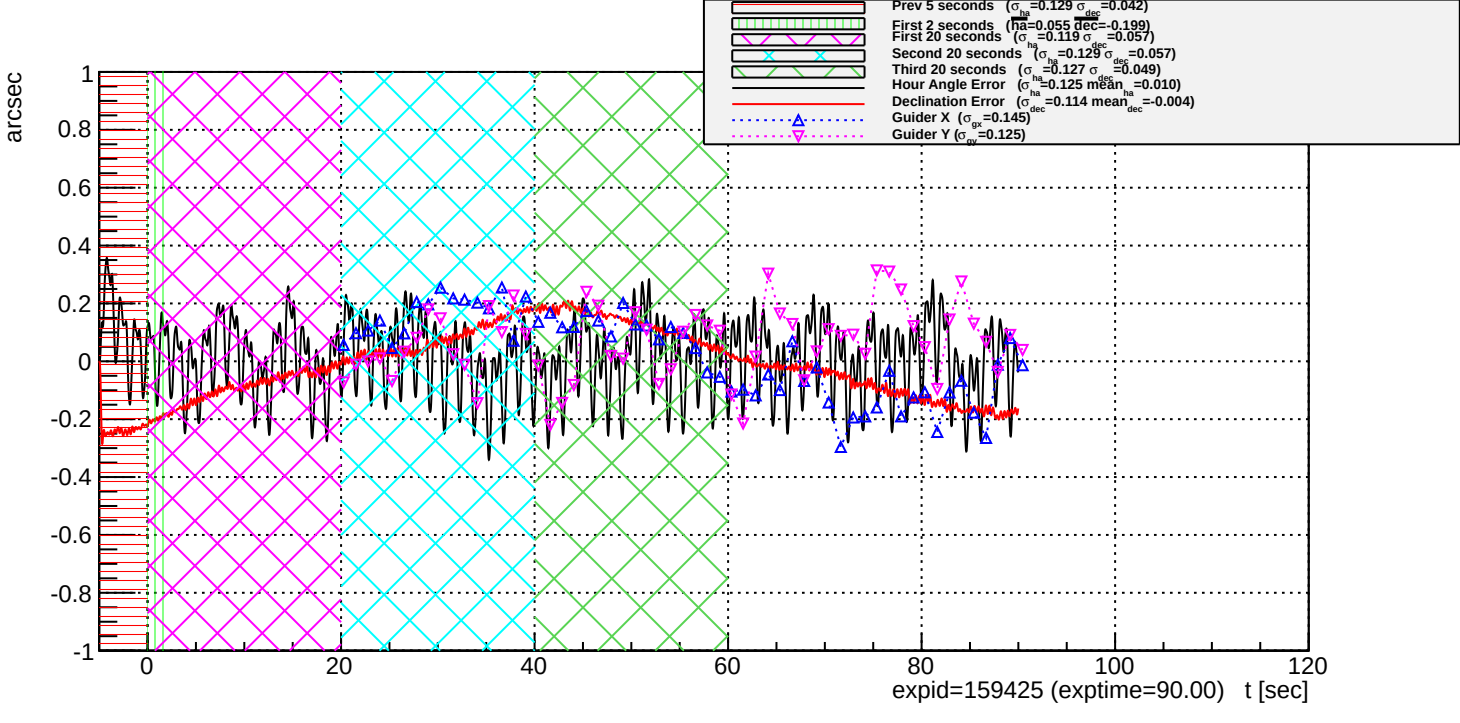

Prev 5 seconds (σ_{ha}=0.132 σ_{dec}=0.012)
First 2 seconds (ha=0.053 dec=-0.022)
First 20 seconds (σ_{ha}=0.122 σ_{dec}=0.010)
Second 20 seconds (σ_{ha}=0.123 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.203 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.154 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.031 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.097)
Guider Y (σ_{gy}=0.111)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159420 (exptime=90.00) t [sec]

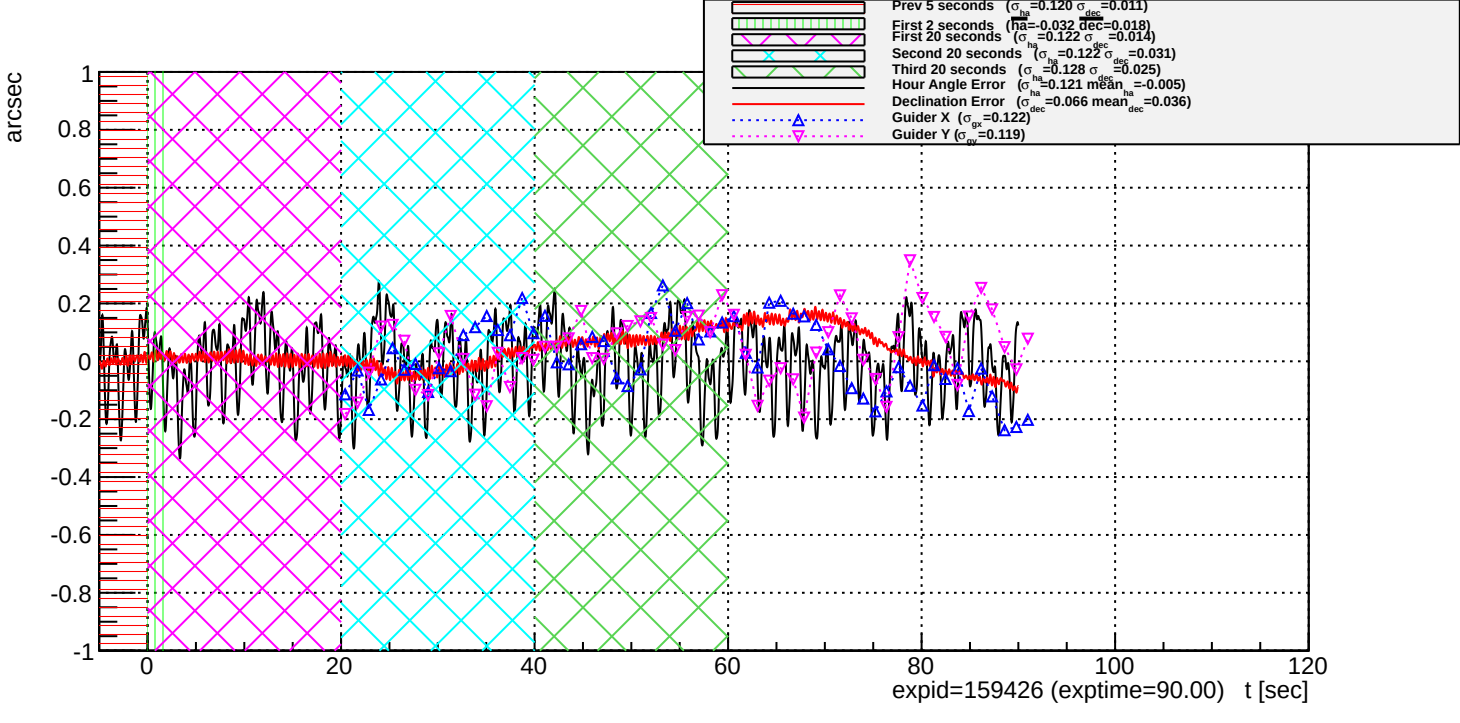

Prev 5 seconds (σ_{ha}=0.114 σ_{dec}=0.069)
First 2 seconds ($\overline{ha}$=0.049 $\overline{dec}$=-0.121)
First 20 seconds (σ_{ha}=0.151 σ_{dec}=0.056)
Second 20 seconds (σ_{ha}=0.138 σ_{dec}=0.049)
Third 20 seconds (σ_{ha}=0.131 σ_{dec}=0.073)
Hour Angle Error (σ_{ha}=0.142 $mean_{ha}$=0.018)
Declination Error (σ_{dec}=0.085 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.152)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159421 (exptime=90.00) t [sec]

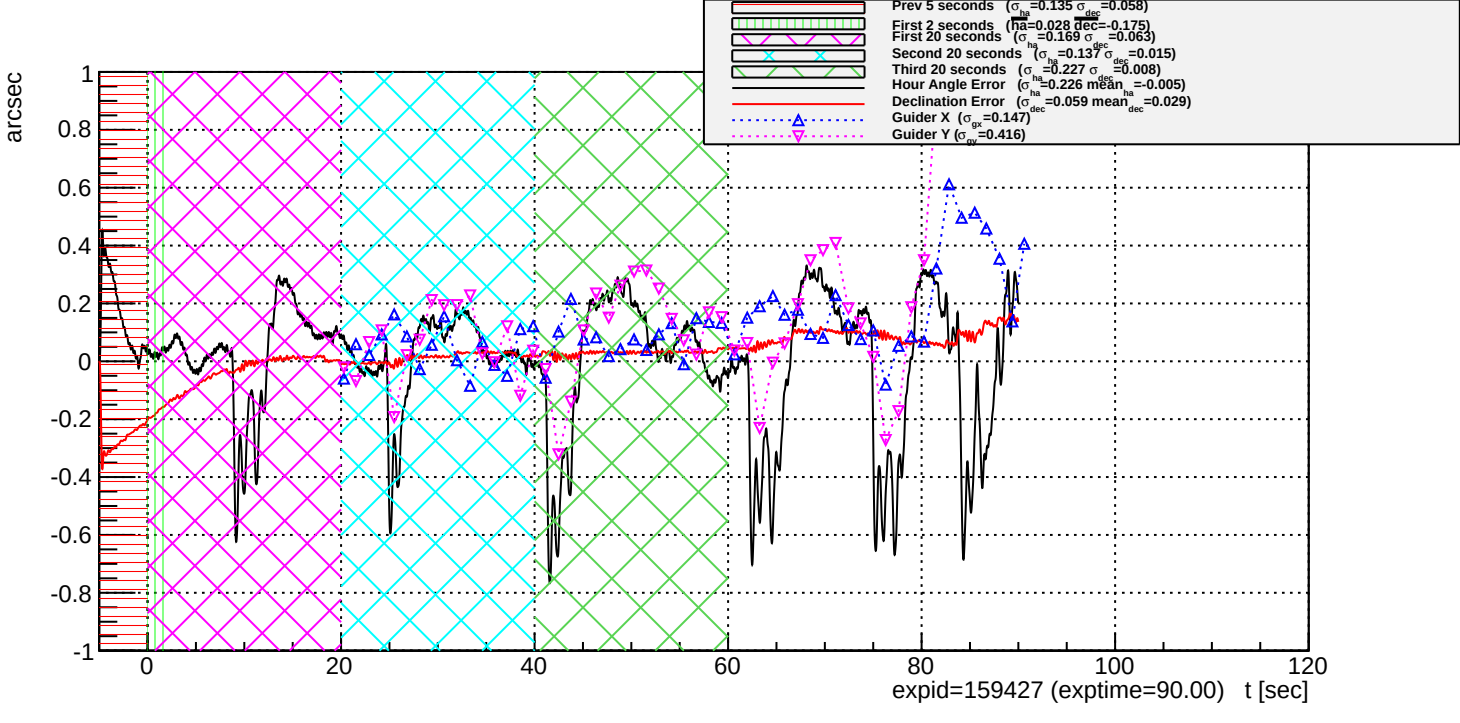

Prev 5 seconds (σ_{ha}=0.126 σ_{dec}=0.015)
First 2 seconds (σ_{ha}=0.077 σ_{dec}=-0.052)
First 20 seconds (σ_{ha}=0.127 σ_{dec}=0.011)
Second 20 seconds (σ_{ha}=0.134 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.121 σ_{dec}=0.015)
Hour Angle Error (σ_{ha}=0.125 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.074 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.116)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159422 (exptime=90.00)
t [sec]

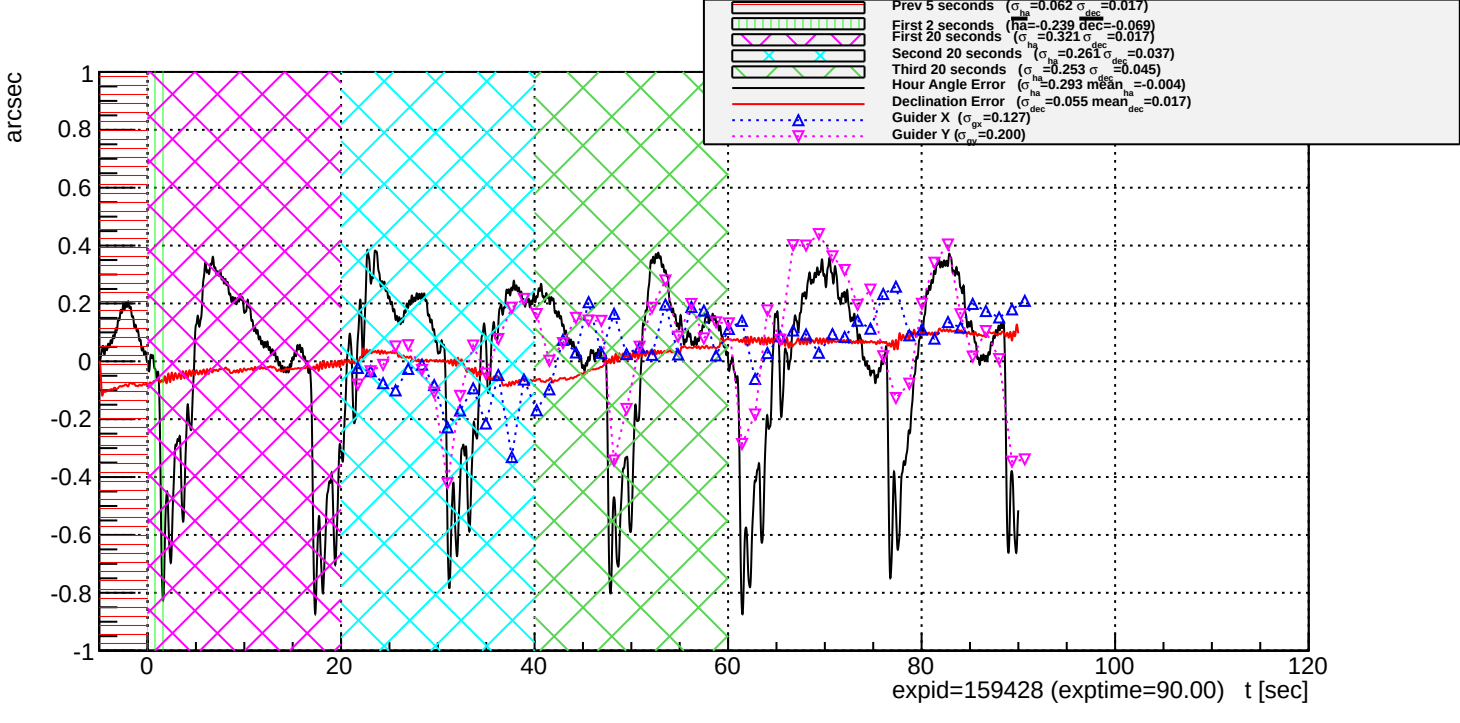

Prev 5 seconds (σ_{ha}=0.099 σ_{dec}=0.022)
First 2 seconds (ha=0.098 dec=-0.071)
First 20 seconds (σ_{ha}=0.112 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.111 σ_{dec}=0.038)
Third 20 seconds (σ_{ha}=0.131 σ_{dec}=0.022)
Hour Angle Error (σ_{ha}=0.113 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.046 $mean_{dec}$=0.014)
Guider X (σ_{gx}=0.108)
Guider Y (σ_{gy}=0.110)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159423 (exptime=90.00) t [sec]

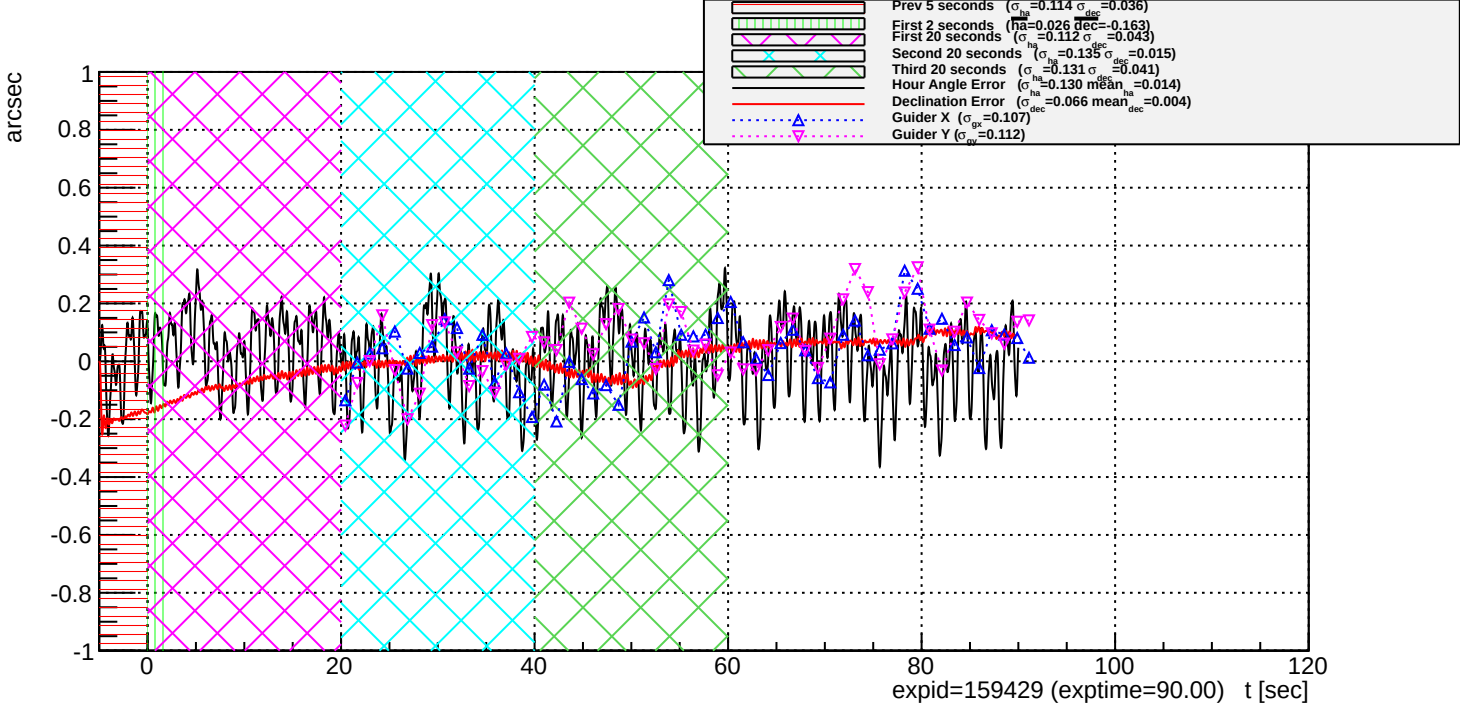

Prev 5 seconds (σ_{ha}=0.093 σ_{dec}=0.013)
First 2 seconds (ha=-0.046 dec=-0.058)
First 20 seconds (σ_{ha}=0.097 σ_{dec}=0.033)
Second 20 seconds (σ_{ha}=0.105 σ_{dec}=0.053)
Third 20 seconds (σ_{ha}=0.095 σ_{dec}=0.033)
Hour Angle Error (σ_{ha}=0.100 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.051 $mean_{dec}$=0.039)
Guider X (σ_{gx}=0.093)
Guider Y (σ_{gy}=0.101)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159424 (exptime=90.00)
t [sec]

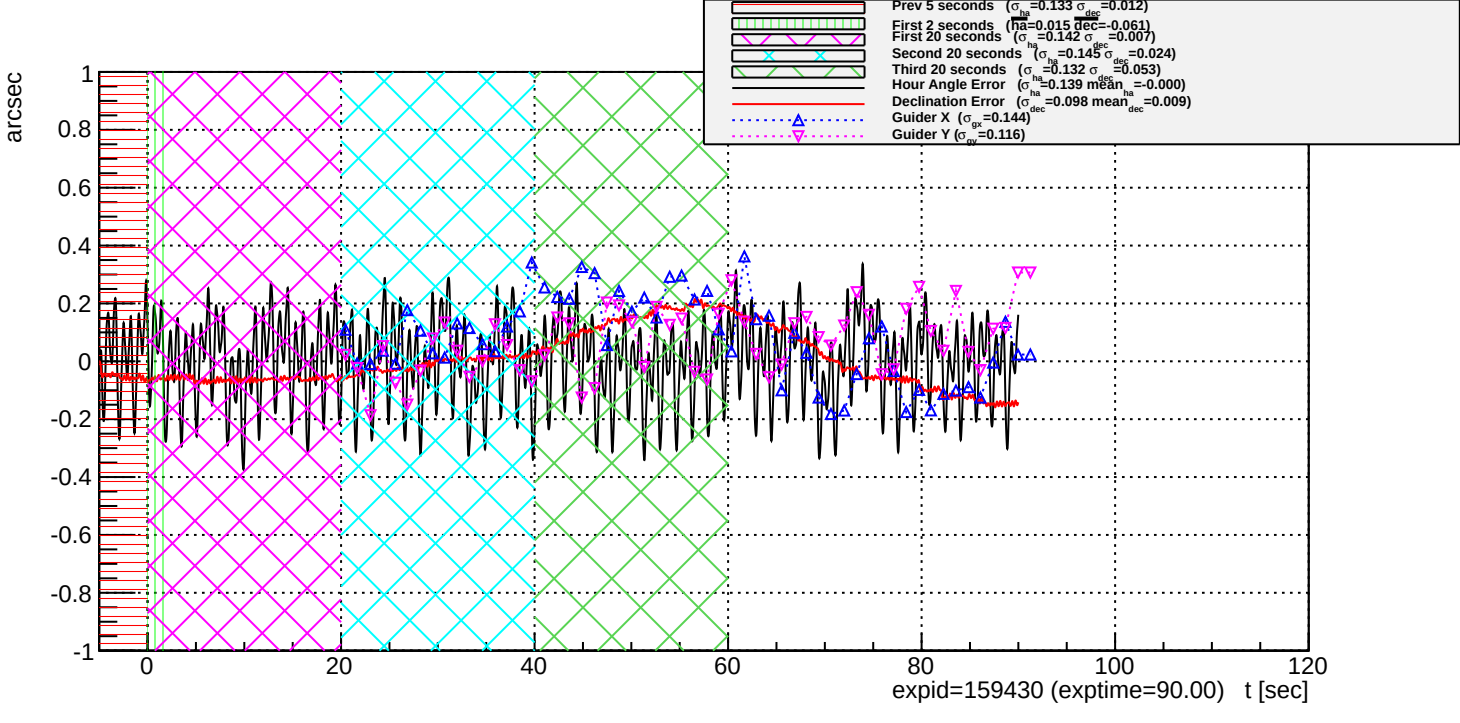

Prev 5 seconds (σ_{ha}=0.129 σ_{dec}=0.042)
First 2 seconds (ha=0.055 dec=-0.199)
First 20 seconds (σ_{ha}=0.119 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.129 σ_{dec}=0.057)
Third 20 seconds (σ_{ha}=0.127 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.125 $mean_{ha}$=0.010)
Declination Error (σ_{dec}=0.114 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.145)
Guider Y (σ_{gy}=0.125)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159425 (exptime=90.00) t [sec]

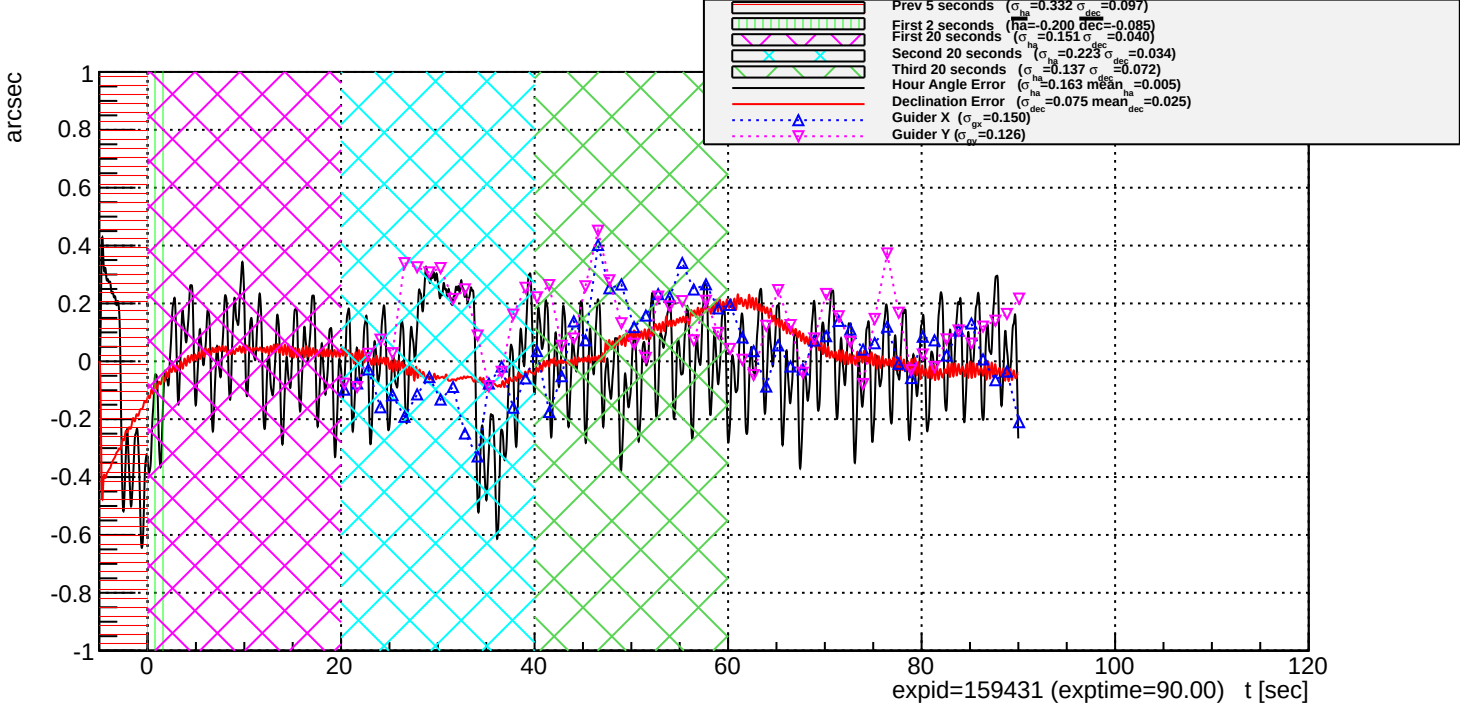

Prev 5 seconds (σ_{ha}=0.120 σ_{dec}=0.011)
First 2 seconds ($\overline{ha}$=-0.032 $\overline{dec}$=0.018)
First 20 seconds (σ_{ha}=0.122 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.122 σ_{dec}=0.031)
Third 20 seconds (σ_{ha}=0.128 σ_{dec}=0.025)
Hour Angle Error (σ_{ha}=0.121 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.066 $mean_{dec}$=0.036)
Guider X (σ_{gx}=0.122)
Guider Y (σ_{gy}=0.119)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159426 (exptime=90.00)
t [sec]

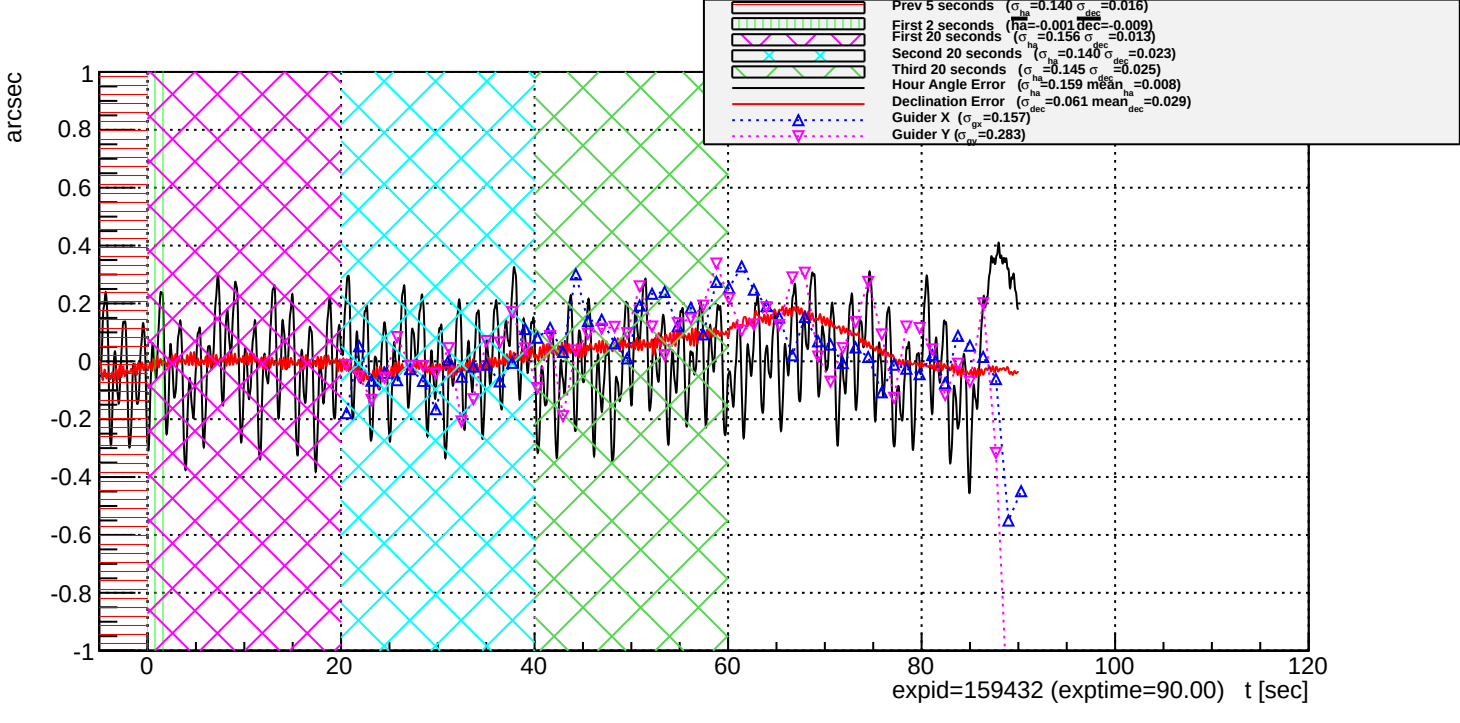

Prev 5 seconds (σ_{ha}=0.135 σ_{dec}=0.058)
First 2 seconds (ha=0.028 dec=-0.175)
First 20 seconds (σ_{ha}=0.169 σ_{dec}=0.063)
Second 20 seconds (σ_{ha}=0.137 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.227 σ_{dec}=0.008)
Hour Angle Error (σ_{ha}=0.226 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.059 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.147)
Guider Y (σ_{gy}=0.416)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159427 (exptime=90.00) t [sec]

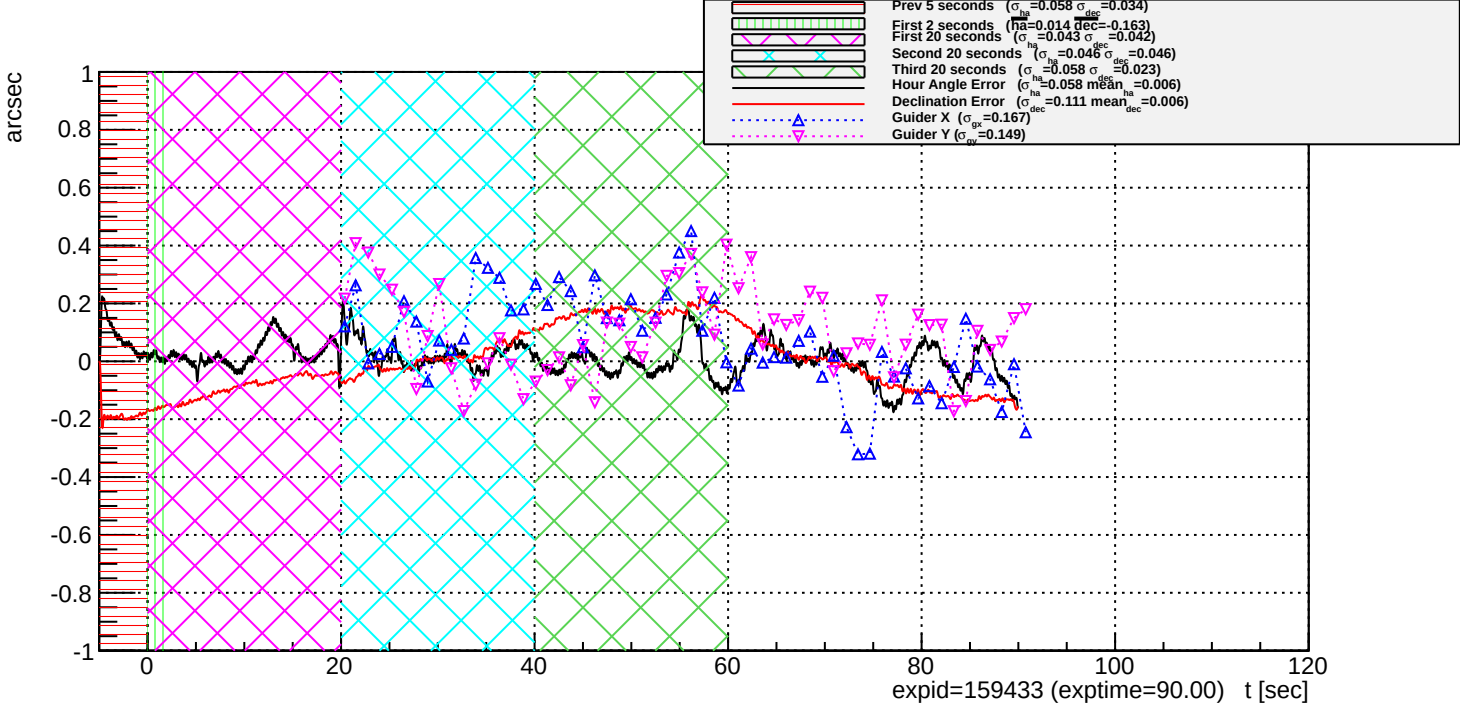

Prev 5 seconds (σ_{ha}=0.062 σ_{dec}=0.017)
First 2 seconds ($\overline{ha}$=-0.239 $\overline{dec}$=-0.069)
First 20 seconds (σ_{ha}=0.321 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.261 σ_{dec}=0.037)
Third 20 seconds (σ_{ha}=0.253 σ_{dec}=0.045)
Hour Angle Error (σ_{ha}=0.293 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.055 $mean_{dec}$=0.017)
Guider X (σ_{gx}=0.127)
Guider Y (σ_{gy}=0.200)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159428 (exptime=90.00) t [sec]

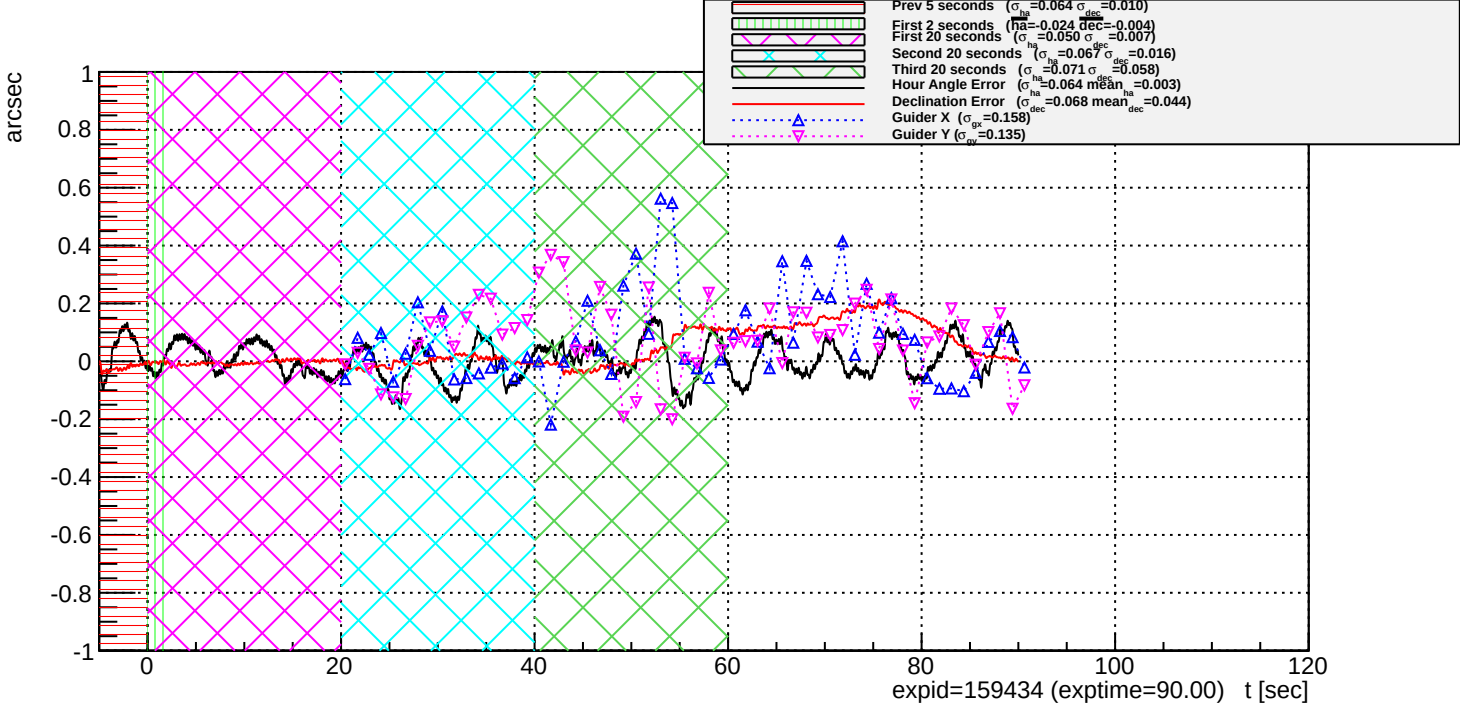

Prev 5 seconds (σ_{ha}=0.114 σ_{dec}=0.036)
First 2 seconds (ha=0.026 dec=-0.163)
First 20 seconds (σ_{ha}=0.112 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.135 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.131 σ_{dec}=0.041)
Hour Angle Error (σ_{ha}=0.130 $mean_{ha}$=0.014)
Declination Error (σ_{dec}=0.066 $mean_{dec}$=0.004)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159429 (exptime=90.00) t [sec]

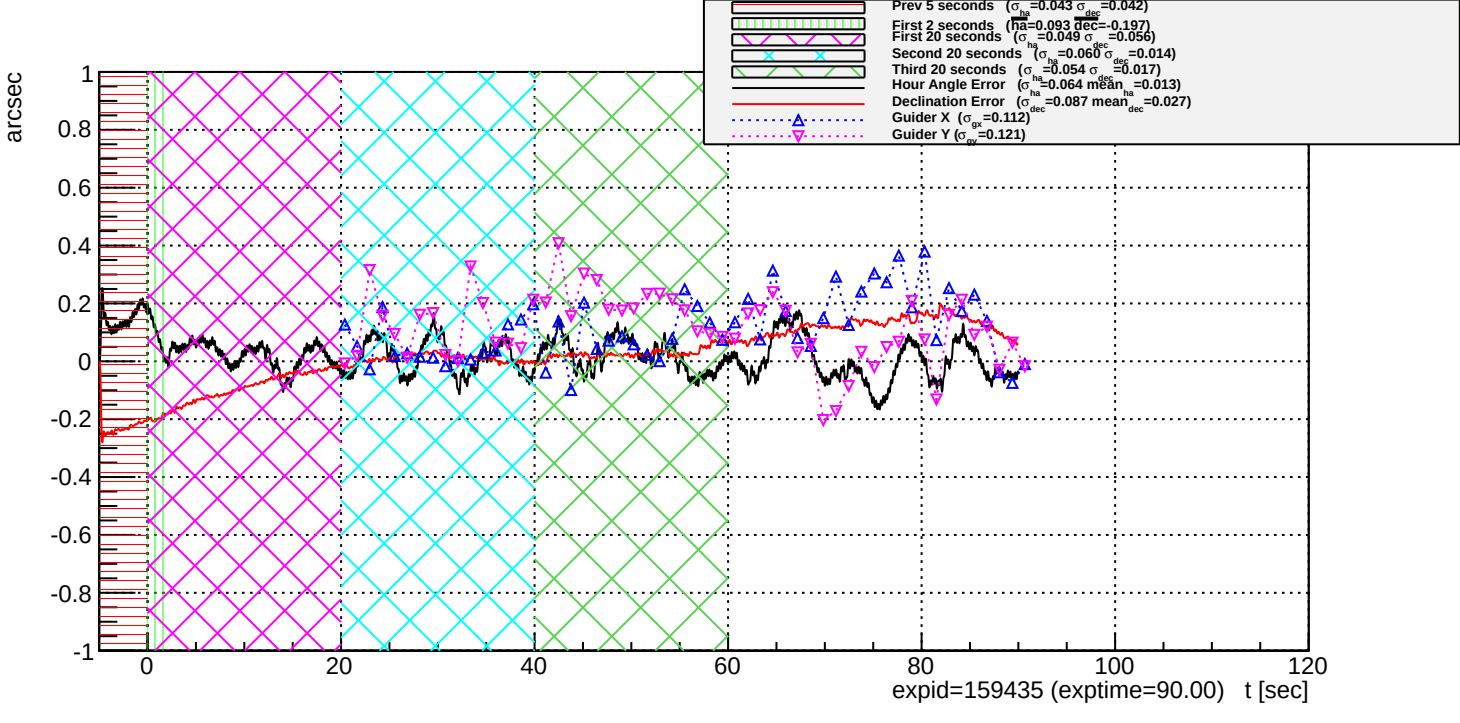

Prev 5 seconds (σ_{ha}=0.133 σ_{dec}=0.012)
First 2 seconds (ha=0.015 dec=-0.061)
First 20 seconds (σ_{ha}=0.142 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.145 σ_{dec}=0.024)
Third 20 seconds (σ_{ha}=0.132 σ_{dec}=0.053)
Hour Angle Error (σ_{ha}=0.139 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.098 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.144)
Guider Y (σ_{gy}=0.116)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159430 (exptime=90.00) t [sec]

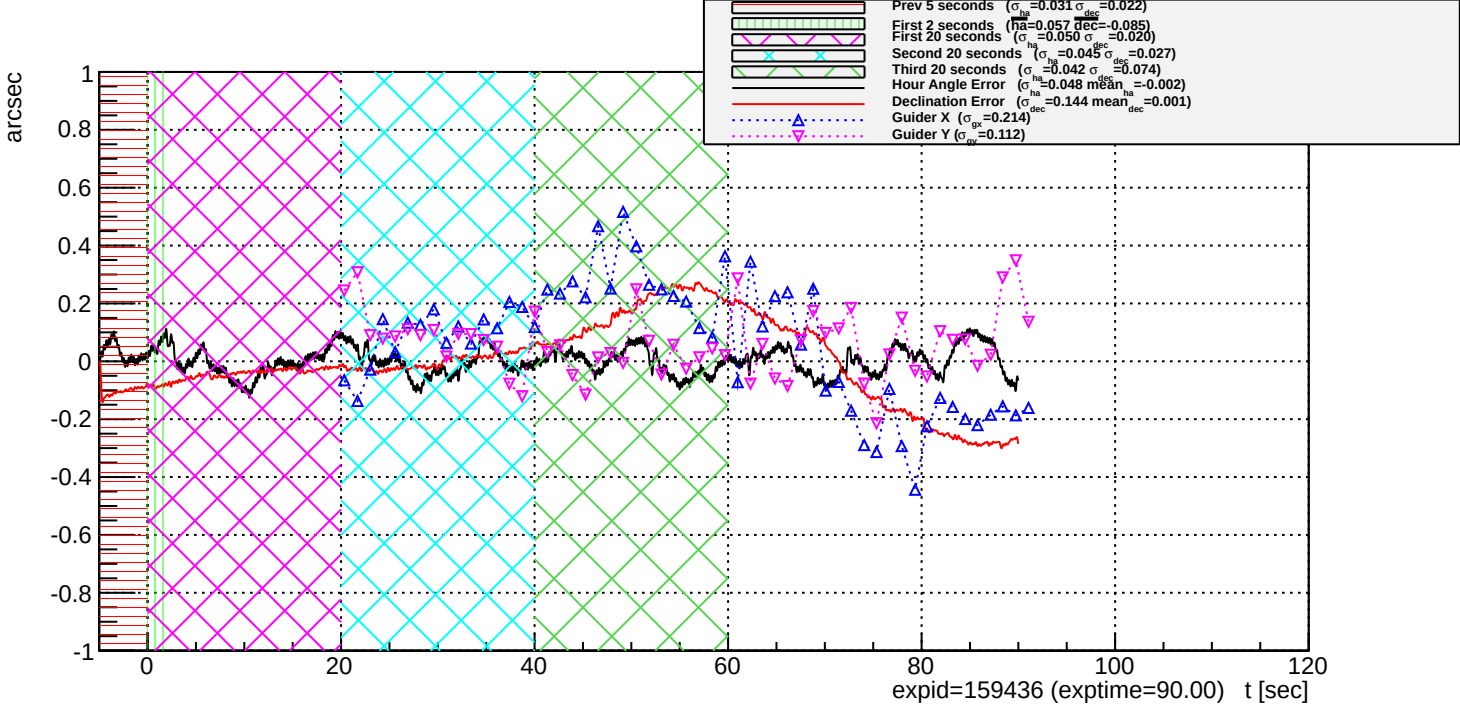

Prev 5 seconds (σ_{ha}=0.332 σ_{dec}=0.097)
First 2 seconds ($\overline{ha}$=-0.200 $\overline{dec}$=-0.085)
First 20 seconds (σ_{ha}=0.151 σ_{dec}=0.040)
Second 20 seconds (σ_{ha}=0.223 σ_{dec}=0.034)
Third 20 seconds (σ_{ha}=0.137 σ_{dec}=0.072)
Hour Angle Error (σ_{ha}=0.163 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.075 $mean_{dec}$=0.025)
Guider X (σ_{gx}=0.150)
Guider Y (σ_{gy}=0.126)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159431 (exptime=90.00) t [sec]

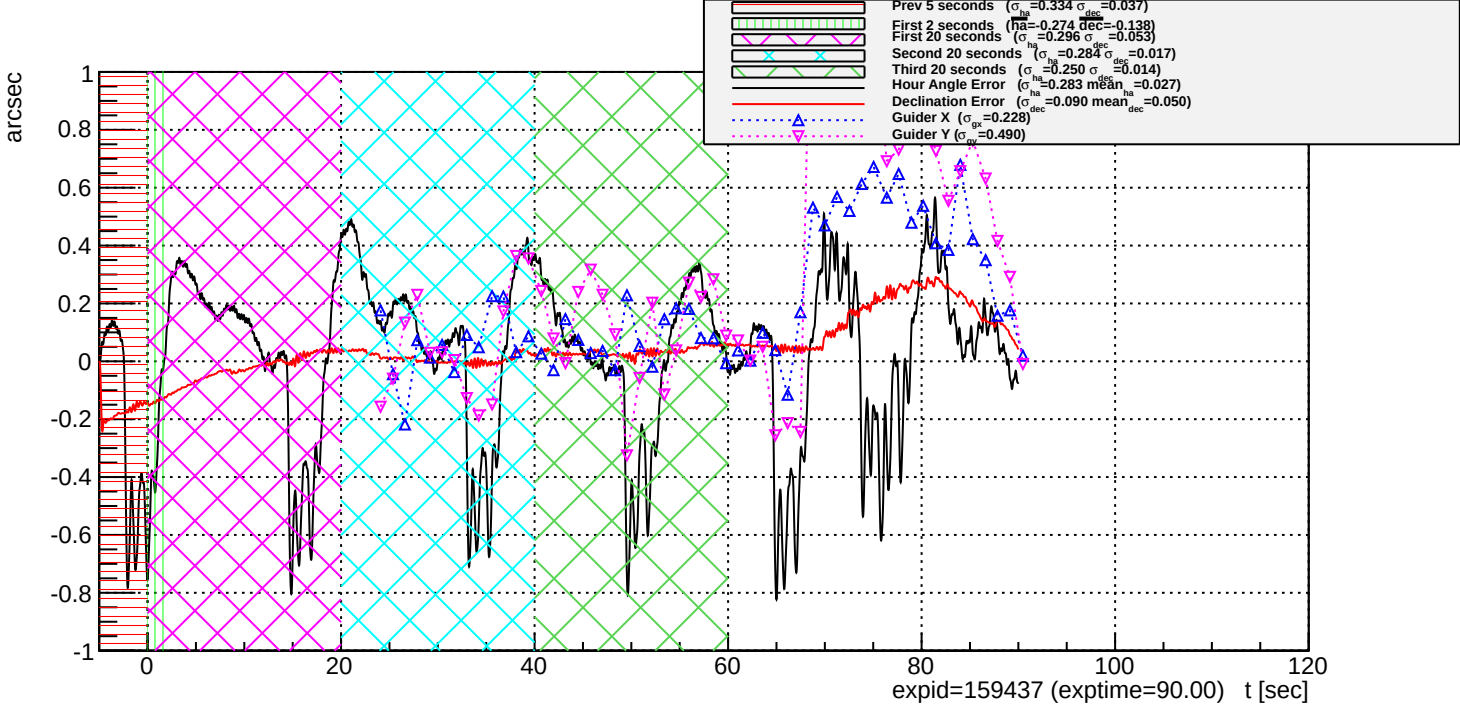

Prev 5 seconds (σ_{ha}=0.140 σ_{dec}=0.016)
First 2 seconds ($\overline{ha}$=-0.001 $\overline{dec}$=-0.009)
First 20 seconds (σ_{ha}=0.156 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.140 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.145 σ_{dec}=0.025)
Hour Angle Error (σ_{ha}=0.159 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.157)
Guider Y (σ_{gy}=0.283)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159432 (exptime=90.00) t [sec]

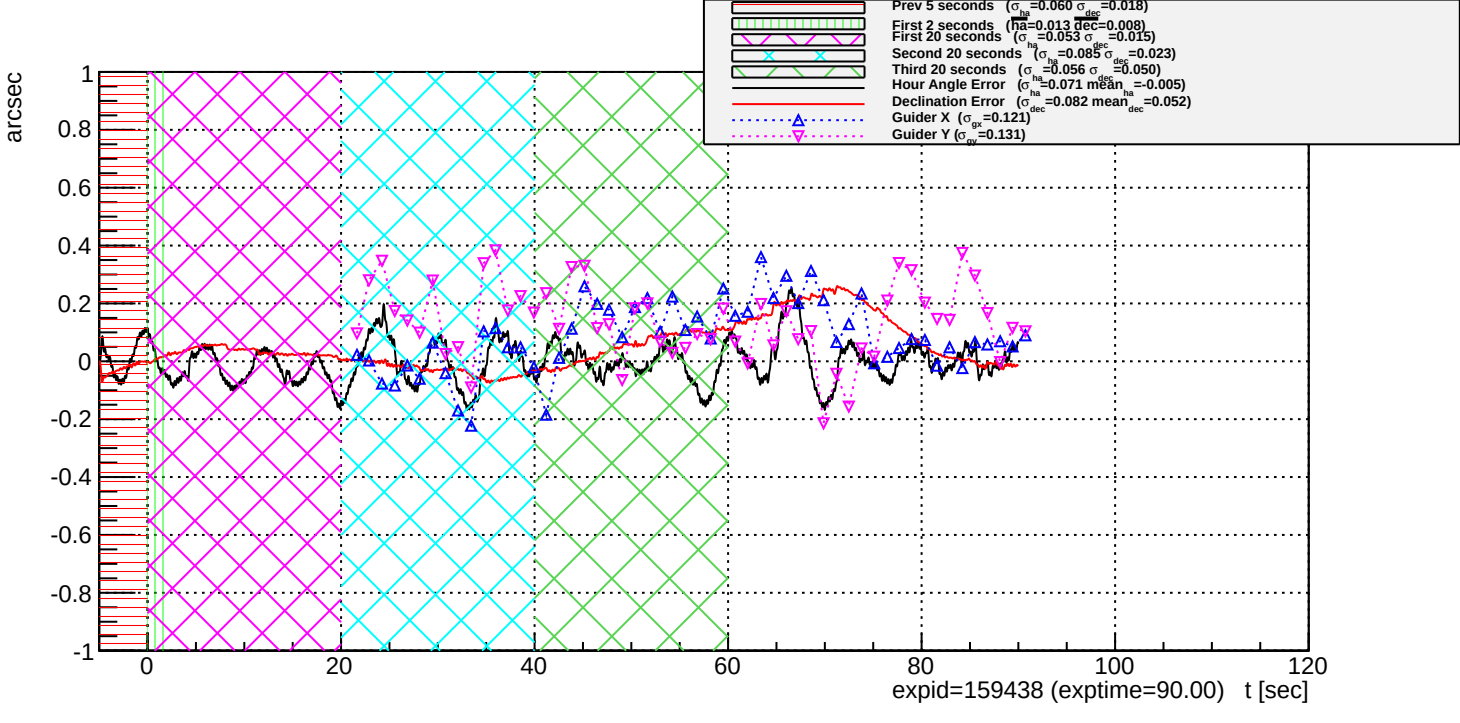

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.034)
First 2 seconds (ha=0.014 dec=-0.163)
First 20 seconds (σ_{ha}=0.043 σ_{dec}=0.042)
Second 20 seconds (σ_{ha}=0.046 σ_{dec}=0.046)
Third 20 seconds (σ_{ha}=0.058 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.058 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.111 $mean_{dec}$=0.006)
Guider X (σ_{gx}=0.167)
Guider Y (σ_{gy}=0.149)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159433 (exptime=90.00) t [sec]

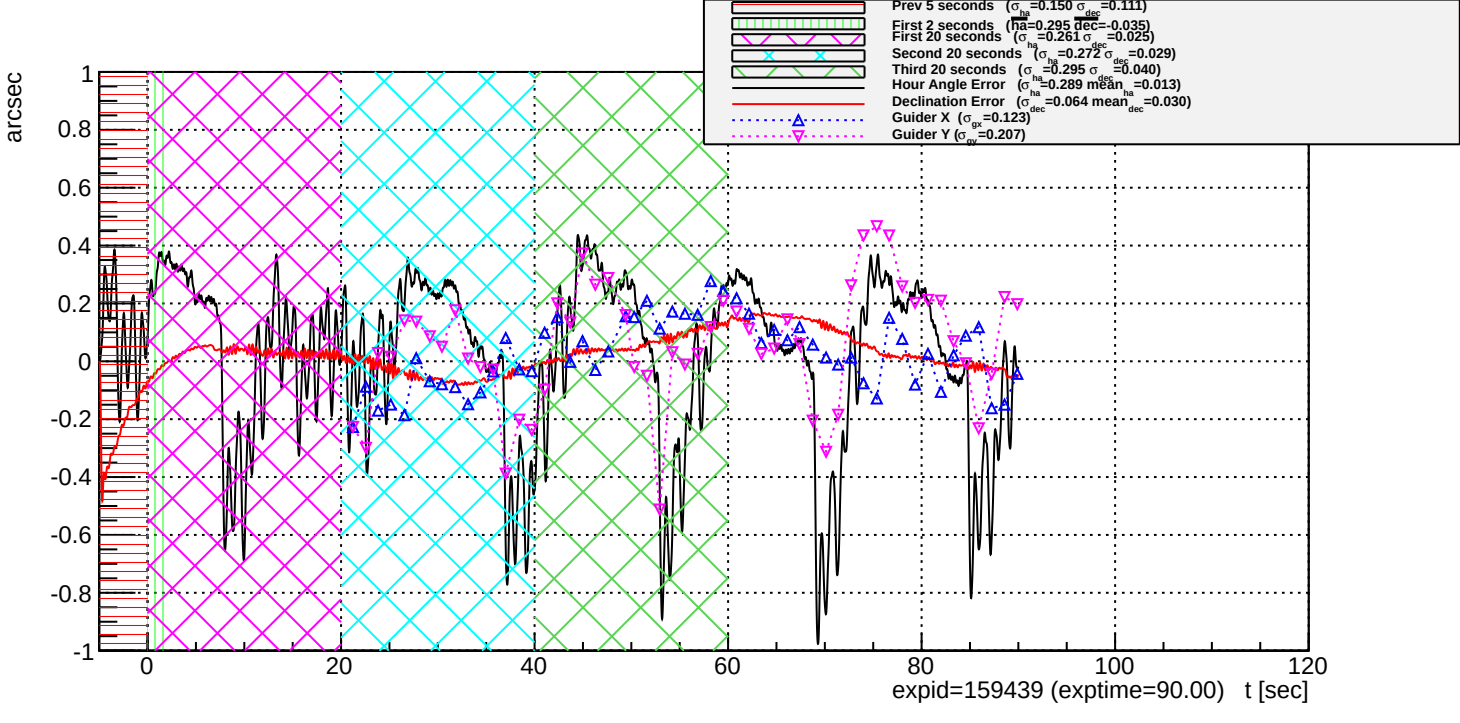

Prev 5 seconds (σ_{ha}=0.064 σ_{dec}=0.010)
First 2 seconds (ha=-0.024 dec=-0.004)
First 20 seconds (σ_{ha}=0.050 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.067 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.071 σ_{dec}=0.058)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.068 $mean_{dec}$=0.044)
Guider X (σ_{gx}=0.158)
Guider Y (σ_{gy}=0.135)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159434 (exptime=90.00) t [sec]

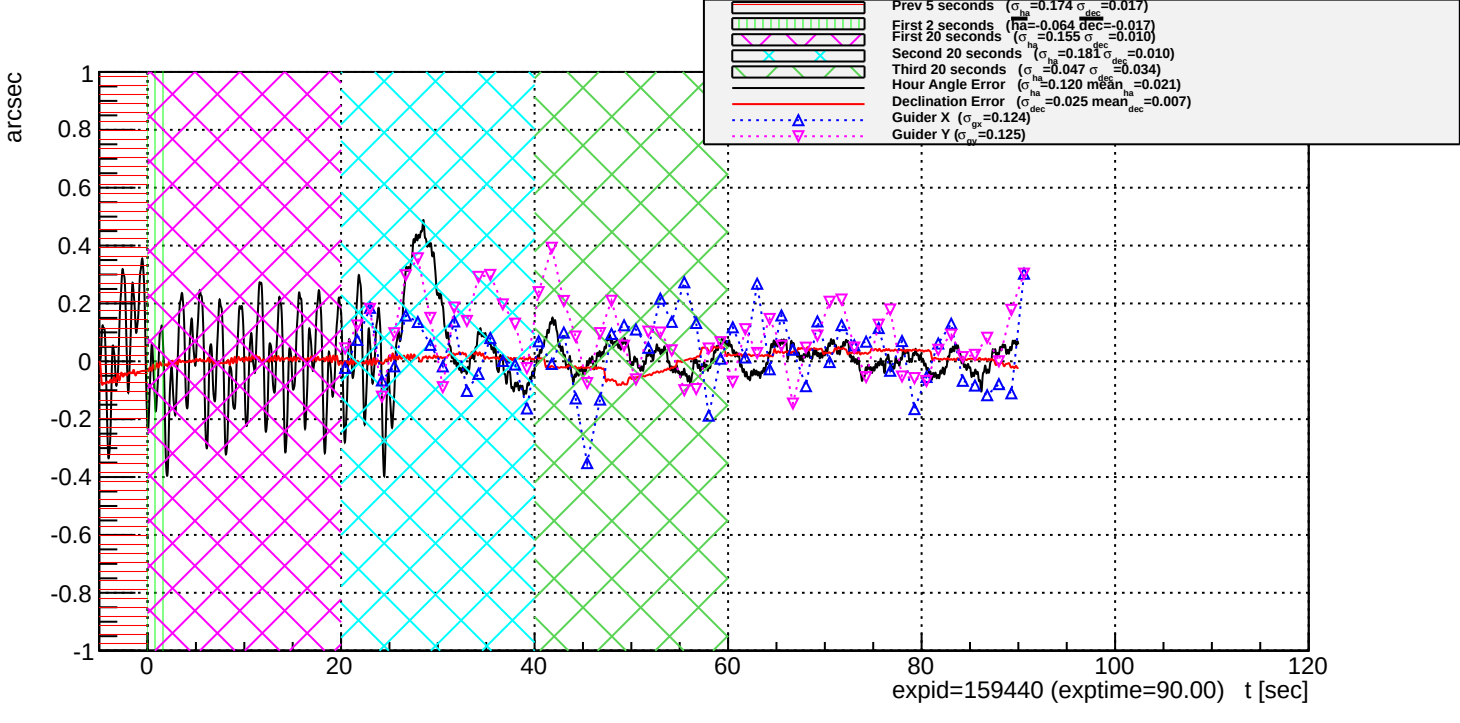

Prev 5 seconds (σ_{ha}=0.043 σ_{dec}=0.042)
First 2 seconds (ha=0.093 dec=-0.197)
First 20 seconds (σ_{ha}=0.049 σ_{dec}=0.056)
Second 20 seconds (σ_{ha}=0.060 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.054 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.087 $mean_{dec}$=0.027)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159435 (exptime=90.00) t [sec]

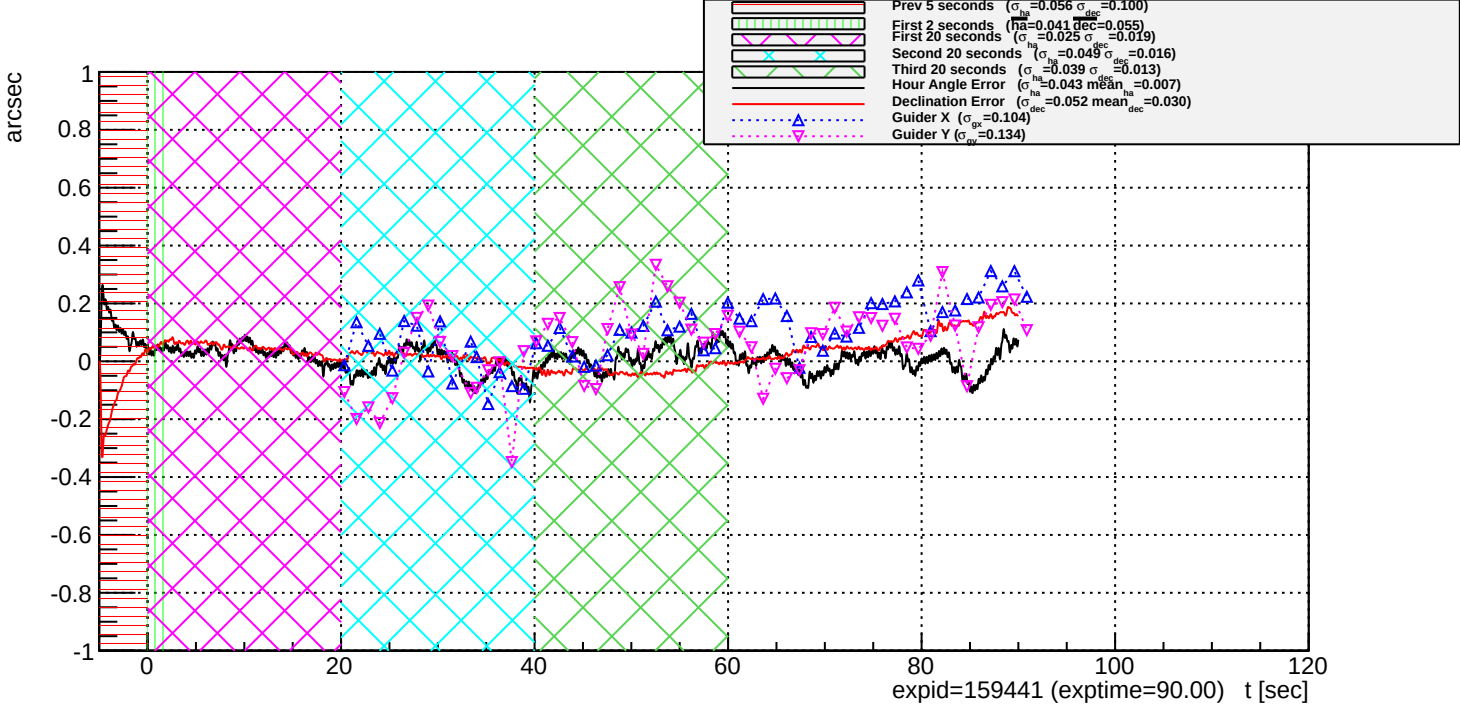

Prev 5 seconds (σ_{ha}=0.031 σ_{dec}=0.022)
First 2 seconds (σ_{ha}=0.057 σ_{dec}=-0.085)
First 20 seconds (σ_{ha}=0.050 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.045 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.042 σ_{dec}=0.074)
Hour Angle Error (σ_{ha}=0.048 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.144 $mean_{dec}$=0.001)
Guider X (σ_{gx}=0.214)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159436 (exptime=90.00) t [sec]

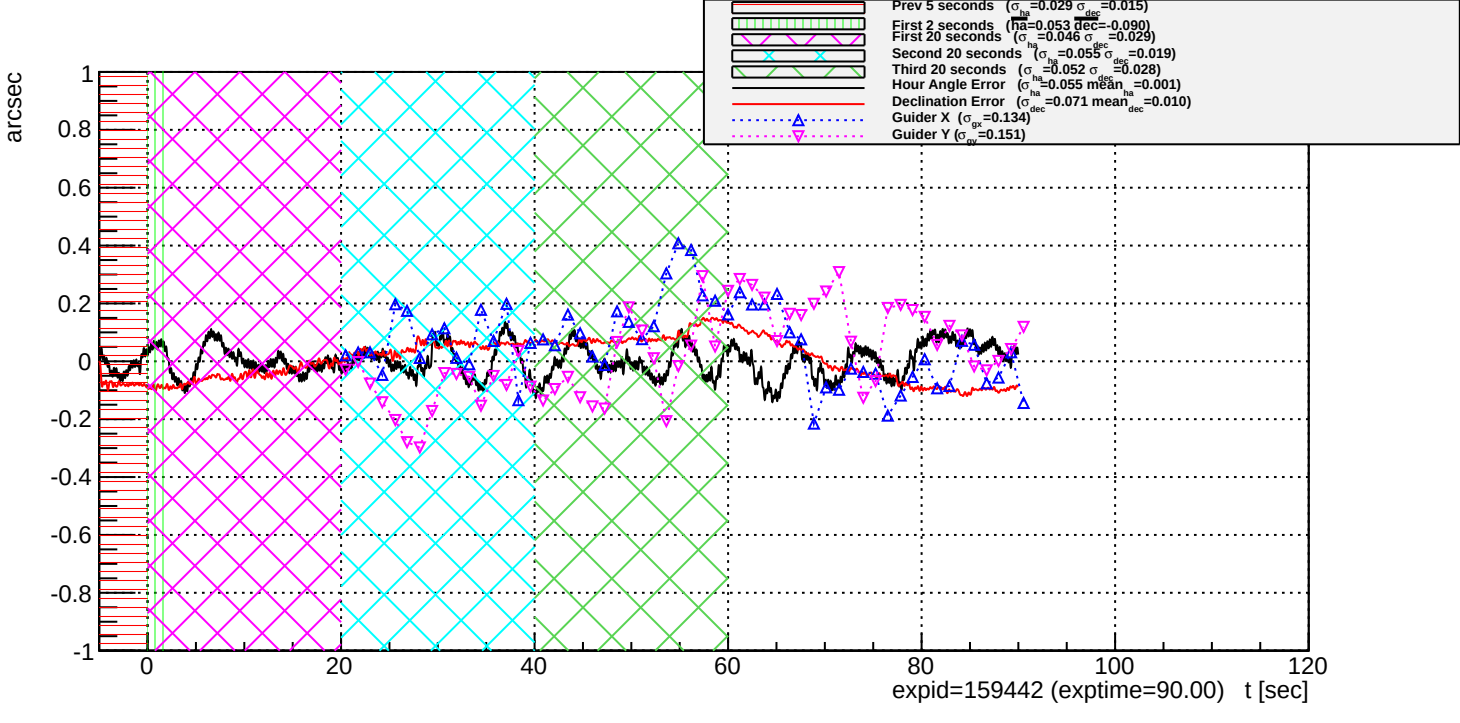

Prev 5 seconds (σ_{ha}=0.334 σ_{dec}=0.037)
First 2 seconds ($\overline{ha}$=-0.274 $\overline{dec}$=-0.138)
First 20 seconds (σ_{ha}=0.296 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.284 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.250 σ_{dec}=0.014)
Hour Angle Error (σ_{ha}=0.283 $mean_{ha}$=0.027)
Declination Error (σ_{dec}=0.090 $mean_{dec}$=0.050)
Guider X (σ_{gx}=0.228)
Guider Y (σ_{gy}=0.490)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159437 (exptime=90.00) t [sec]

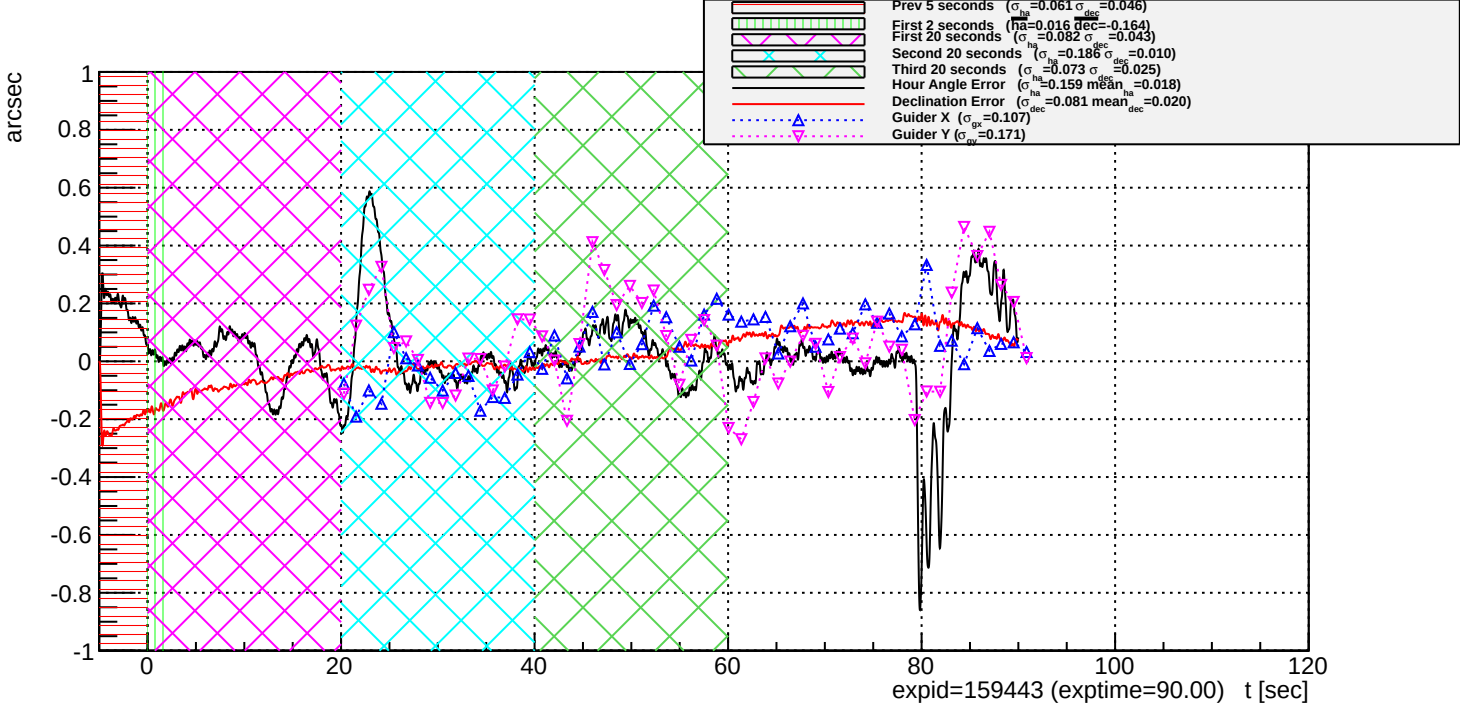

Prev 5 seconds (σ_{ha}=0.060 σ_{dec}=0.018)
First 2 seconds (ha=0.013 dec=0.008)
First 20 seconds (σ_{ha}=0.053 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.085 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.050)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.082 $mean_{dec}$=0.052)
Guider X (σ_{gx}=0.121)
Guider Y (σ_{gy}=0.131)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159438 (exptime=90.00) t [sec]

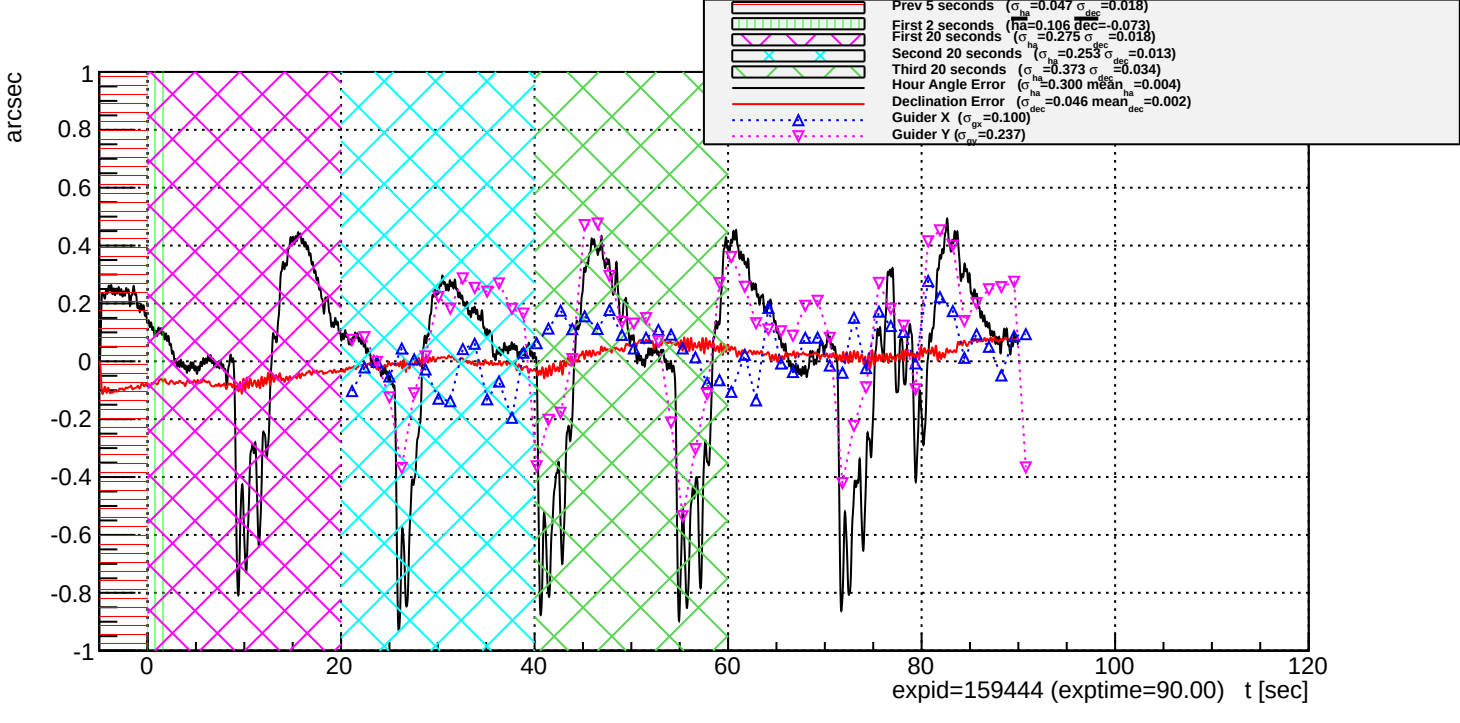

Prev 5 seconds (σ_{ha}=0.150 σ_{dec}=0.111)
First 2 seconds (ha=0.295 dec=-0.035)
First 20 seconds (σ_{ha}=0.261 σ_{dec}=0.025)
Second 20 seconds (σ_{ha}=0.272 σ_{dec}=0.029)
Third 20 seconds (σ_{ha}=0.295 σ_{dec}=0.040)
Hour Angle Error (σ_{ha}=0.289 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.064 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.207)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159439 (exptime=90.00) t [sec]

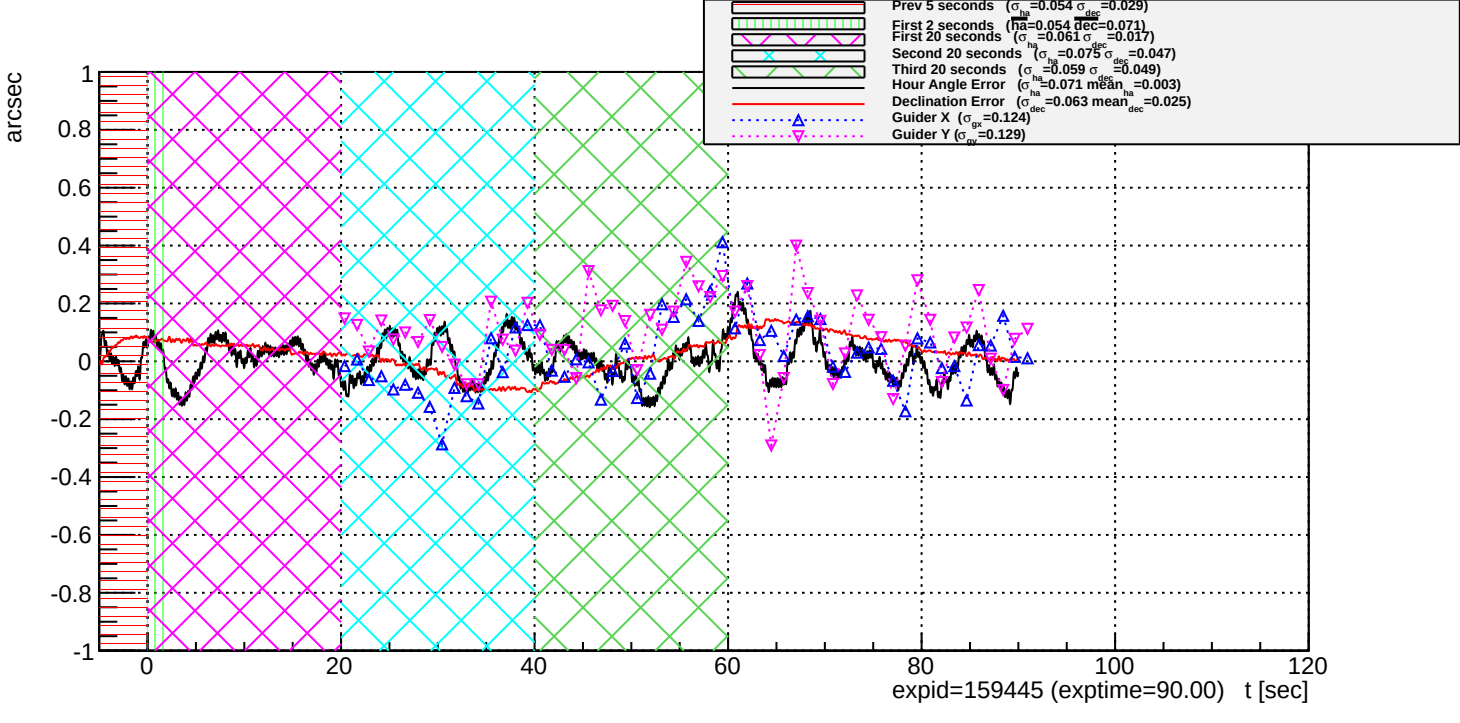

Prev 5 seconds (σ_{ha}=0.174 σ_{dec}=0.017)
First 2 seconds (ha=-0.064 dec=-0.017)
First 20 seconds (σ_{ha}=0.155 σ_{dec}=0.010)
Second 20 seconds (σ_{ha}=0.181 σ_{dec}=0.010)
Third 20 seconds (σ_{ha}=0.047 σ_{dec}=0.034)
Hour Angle Error (σ_{ha}=0.120 $mean_{ha}$=0.021)
Declination Error (σ_{dec}=0.025 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.124)
Guider Y (σ_{gy}=0.125)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159440 (exptime=90.00) t [sec]

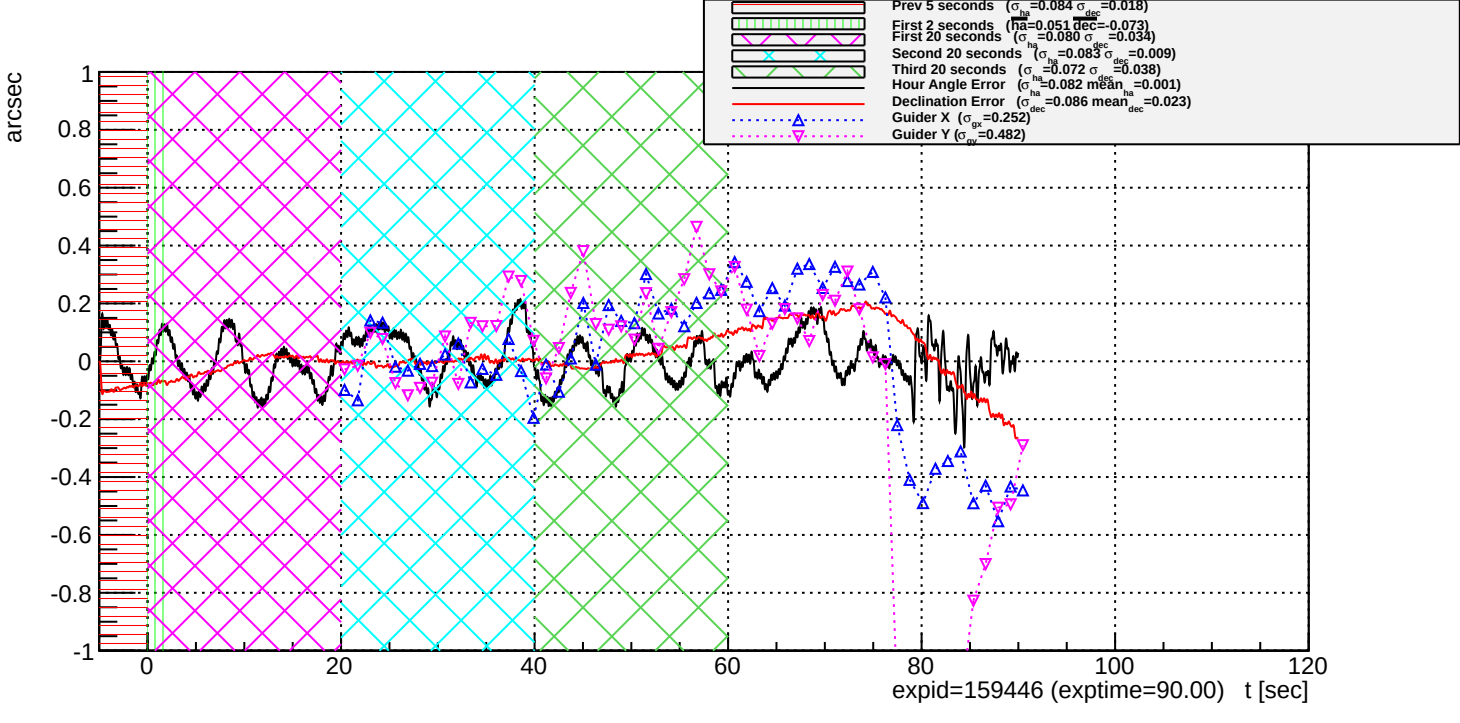

Prev 5 seconds (σ_{ha}=0.056 σ_{dec}=0.100)
First 2 seconds (ha=0.041 dec=0.055)
First 20 seconds (σ_{ha}=0.025 σ_{dec}=0.019)
Second 20 seconds (σ_{ha}=0.049 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.039 σ_{dec}=0.013)
Hour Angle Error (σ_{ha}=0.043 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.052 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.104)
Guider Y (σ_{gy}=0.134)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159441 (exptime=90.00) t [sec]

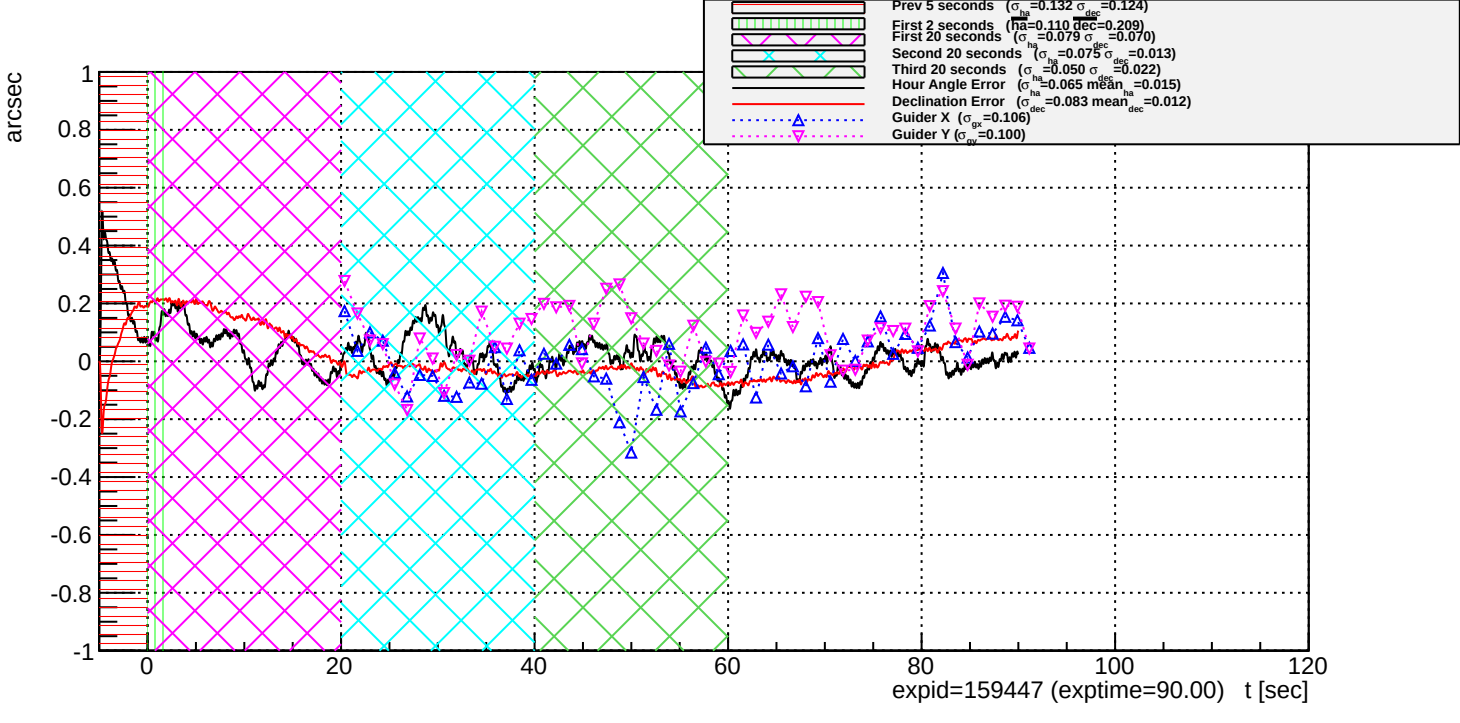

Prev 5 seconds (σ_{ha}=0.029 σ_{dec}=0.015)
First 2 seconds (ha=0.053 dec=-0.090)
First 20 seconds (σ_{ha}=0.046 σ_{dec}=0.029)
Second 20 seconds (σ_{ha}=0.055 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.052 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.055 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.071 $mean_{dec}$=0.010)
Guider X (σ_{gx}=0.134)
Guider Y (σ_{gy}=0.151)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159442 (exptime=90.00) t [sec]

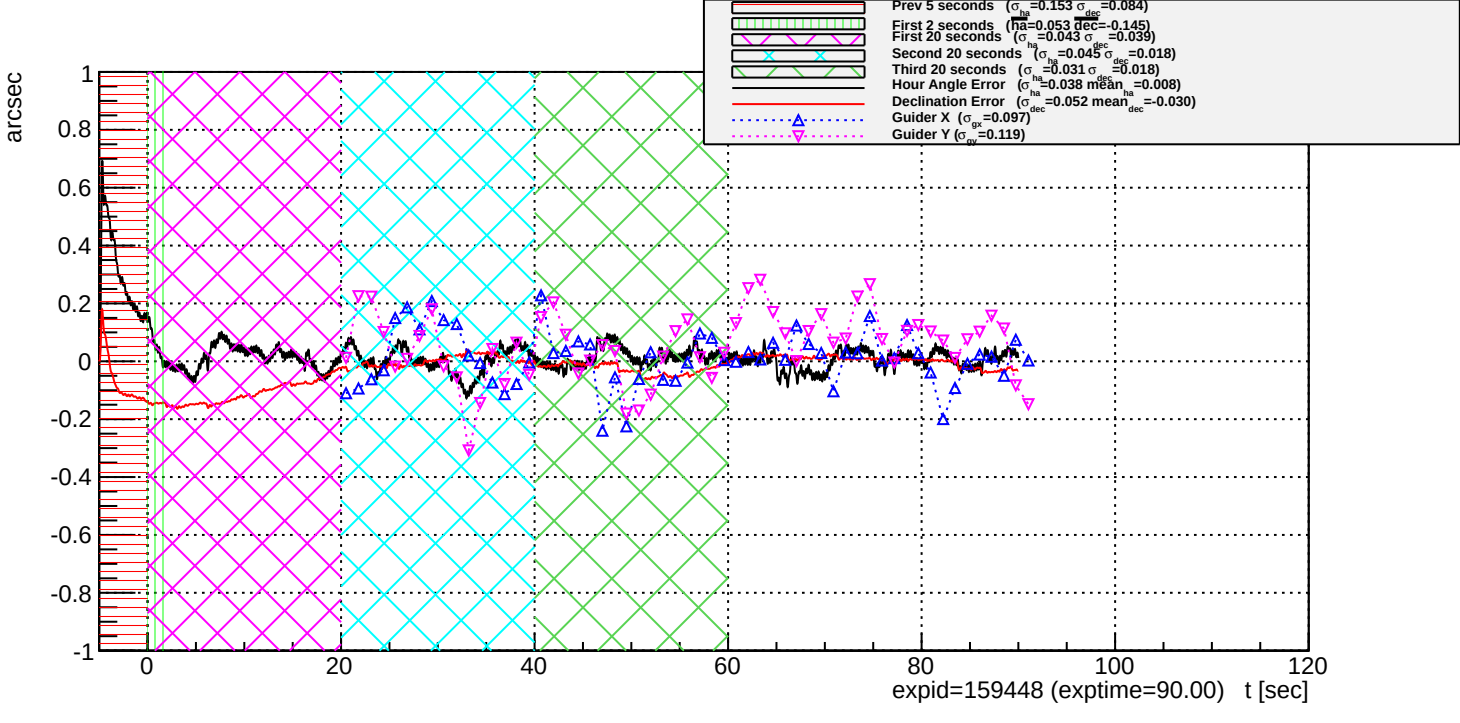

Prev 5 seconds (σ_{ha}=0.061 σ_{dec}=0.046)
First 2 seconds ($\overline{ha}$=0.016 $\overline{dec}$=-0.164)
First 20 seconds (σ_{ha}=0.082 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.186 σ_{dec}=0.010)
Third 20 seconds (σ_{ha}=0.073 σ_{dec}=0.025)
Hour Angle Error (σ_{ha}=0.159 $mean_{ha}$=0.018)
Declination Error (σ_{dec}=0.081 $mean_{dec}$=0.020)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.171)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159443 (exptime=90.00) t [sec]

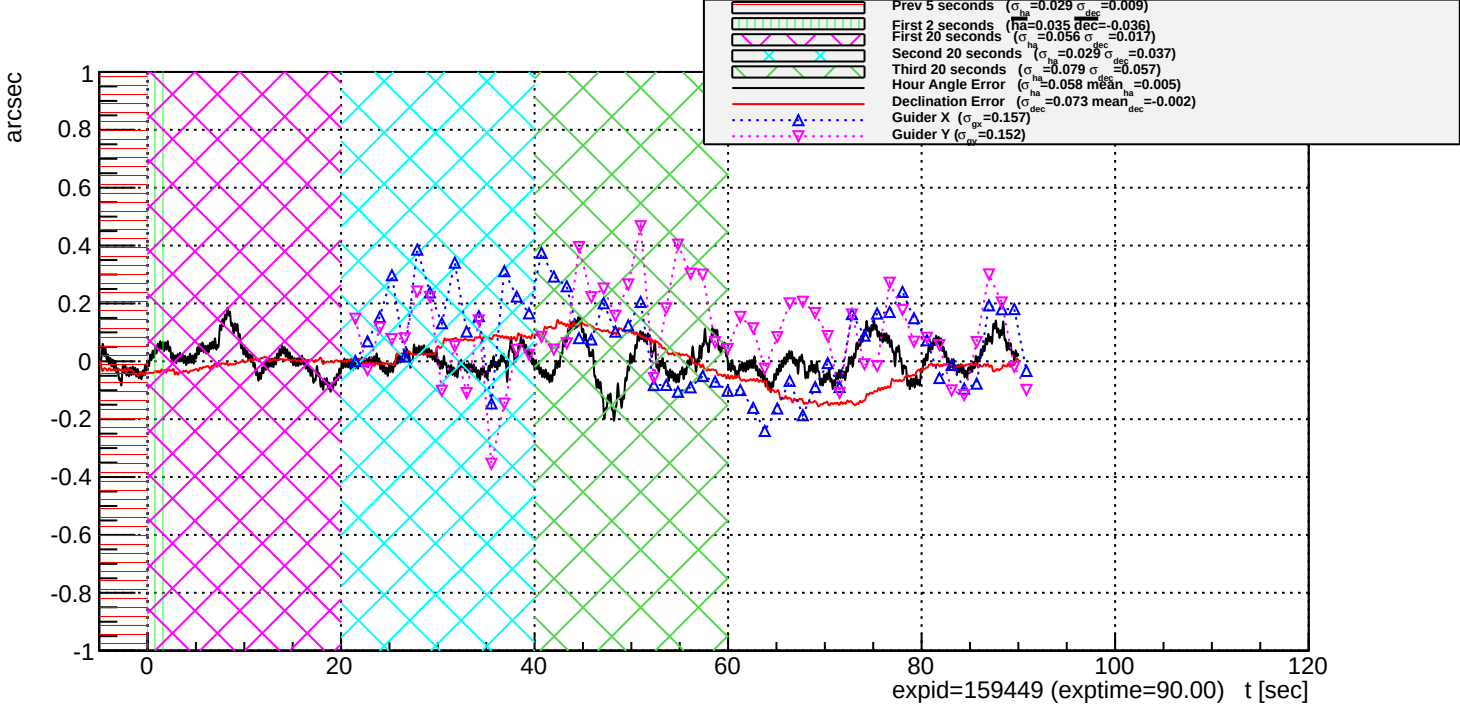

Prev 5 seconds (σ_{ha}=0.047 σ_{dec}=0.018)
First 2 seconds (ha=0.106 dec=-0.073)
First 20 seconds (σ_{ha}=0.275 σ_{dec}=0.018)
Second 20 seconds (σ_{ha}=0.253 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.373 σ_{dec}=0.034)
Hour Angle Error (σ_{ha}=0.300 $mean_{ha}$=0.004)
Declination Error (σ_{dec}=0.046 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.100)
Guider Y (σ_{gy}=0.237)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159444 (exptime=90.00) t [sec]

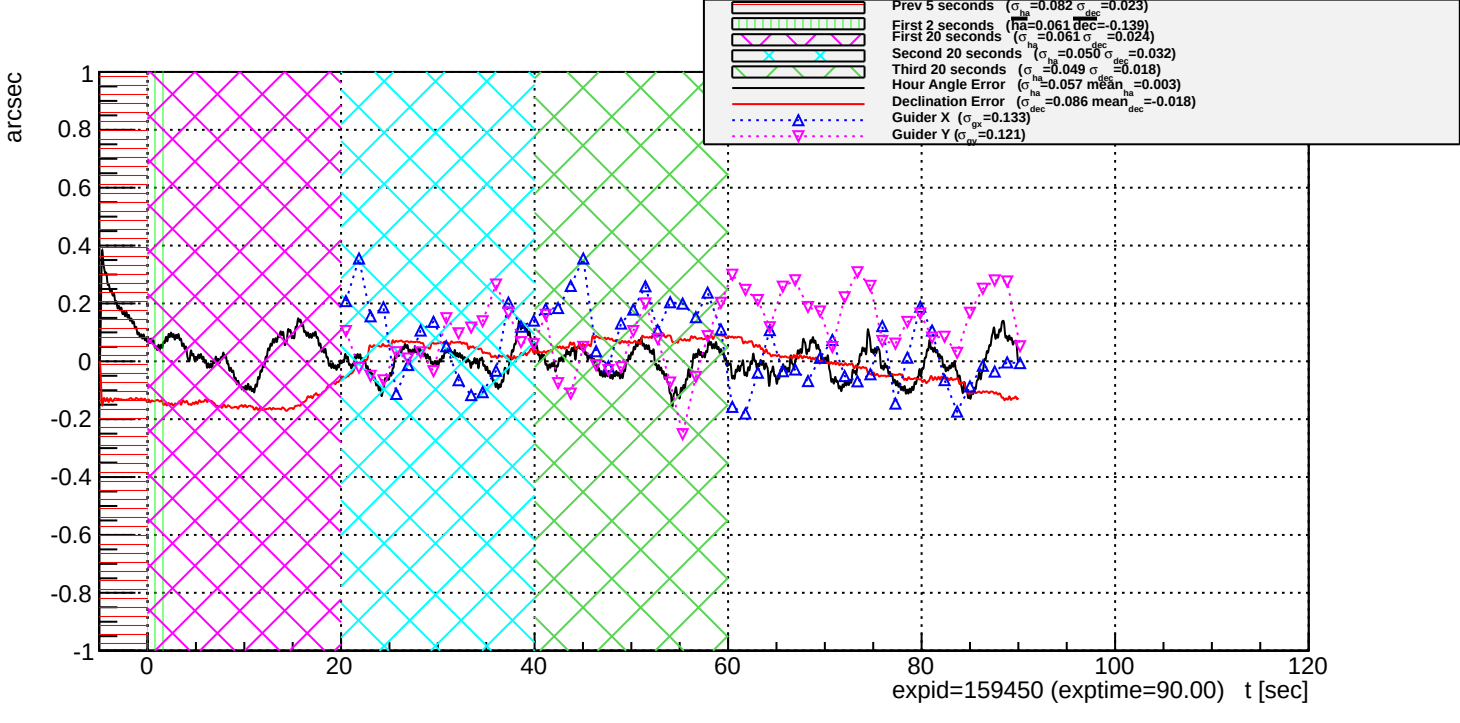

Prev 5 seconds (σ_{ha}=0.054 σ_{dec}=0.029)
First 2 seconds (ha=0.054 dec=0.071)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.047)
Third 20 seconds (σ_{ha}=0.059 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.063 $mean_{dec}$=0.025)
Guider X (σ_{gx}=0.124)
Guider Y (σ_{gy}=0.129)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159445 (exptime=90.00)
t [sec]

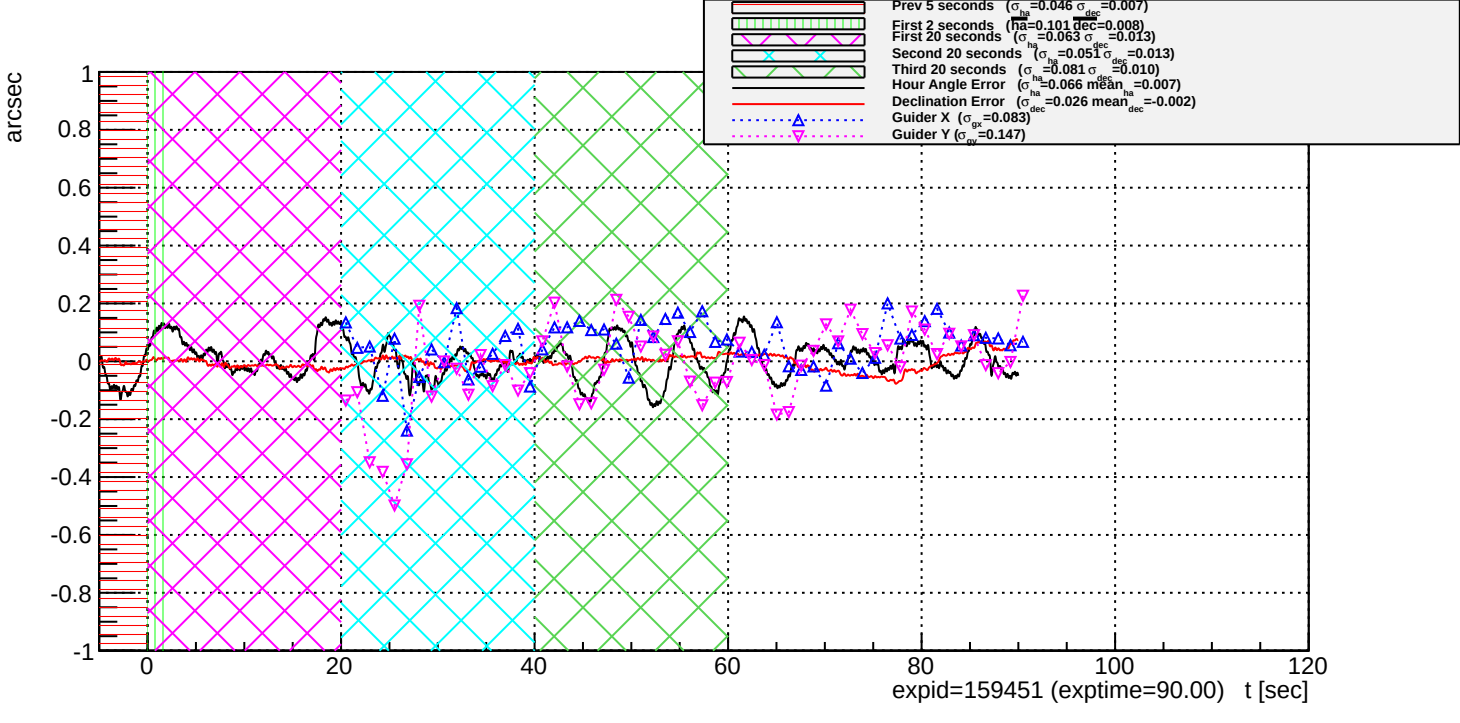

Prev 5 seconds (σ_{ha}=0.084 σ_{dec}=0.018)
First 2 seconds ($\overline{ha}$=0.051 $\overline{dec}$=-0.073)
First 20 seconds (σ_{ha}=0.080 σ_{dec}=0.034)
Second 20 seconds (σ_{ha}=0.083 σ_{dec}=0.009)
Third 20 seconds (σ_{ha}=0.072 σ_{dec}=0.038)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.086 $mean_{dec}$=0.023)
Guider X (σ_{gx}=0.252)
Guider Y (σ_{gy}=0.482)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159446 (exptime=90.00) t [sec]

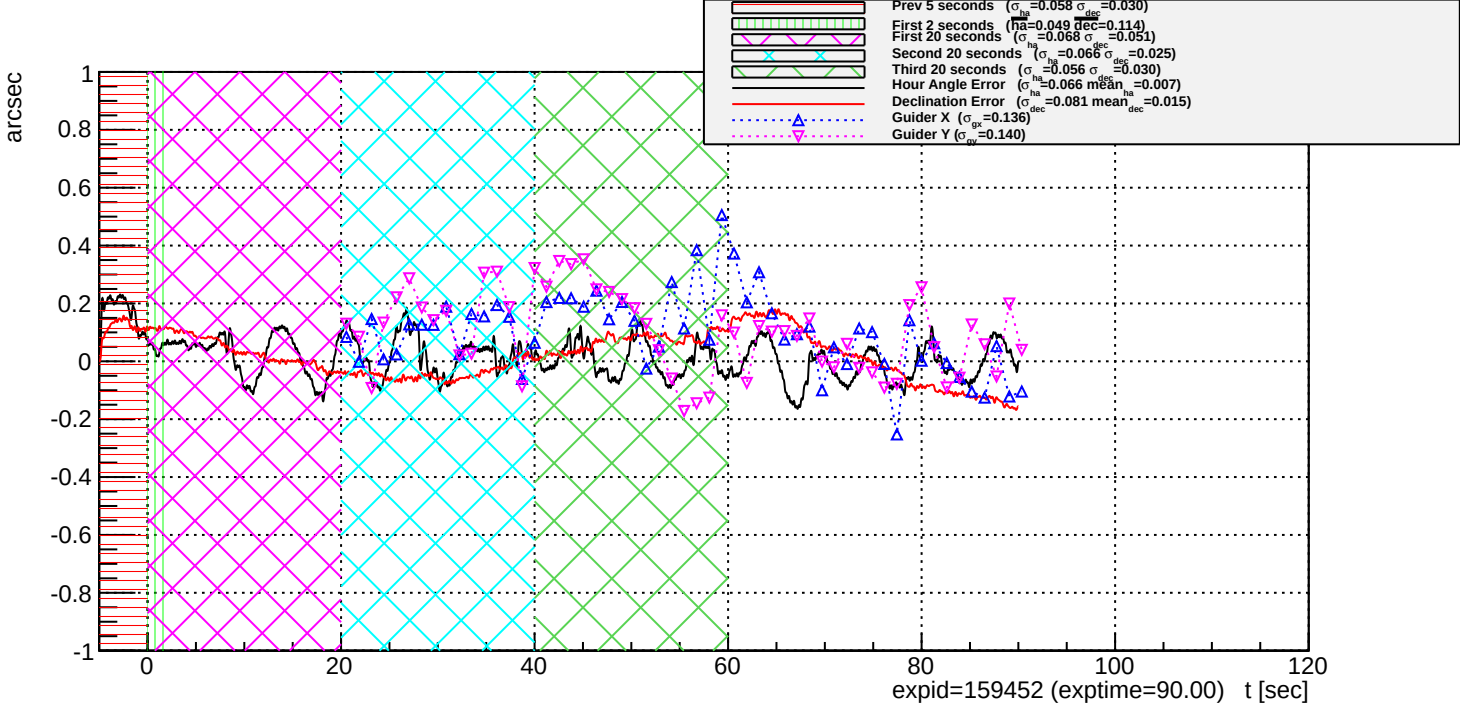

Prev 5 seconds (σ_{ha}=0.132 σ_{dec}=0.124)
First 2 seconds (ha=0.110 dec=0.209)
First 20 seconds (σ_{ha}=0.079 σ_{dec}=0.070)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.050 σ_{dec}=0.022)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.083 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.106)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159447 (exptime=90.00) t [sec]

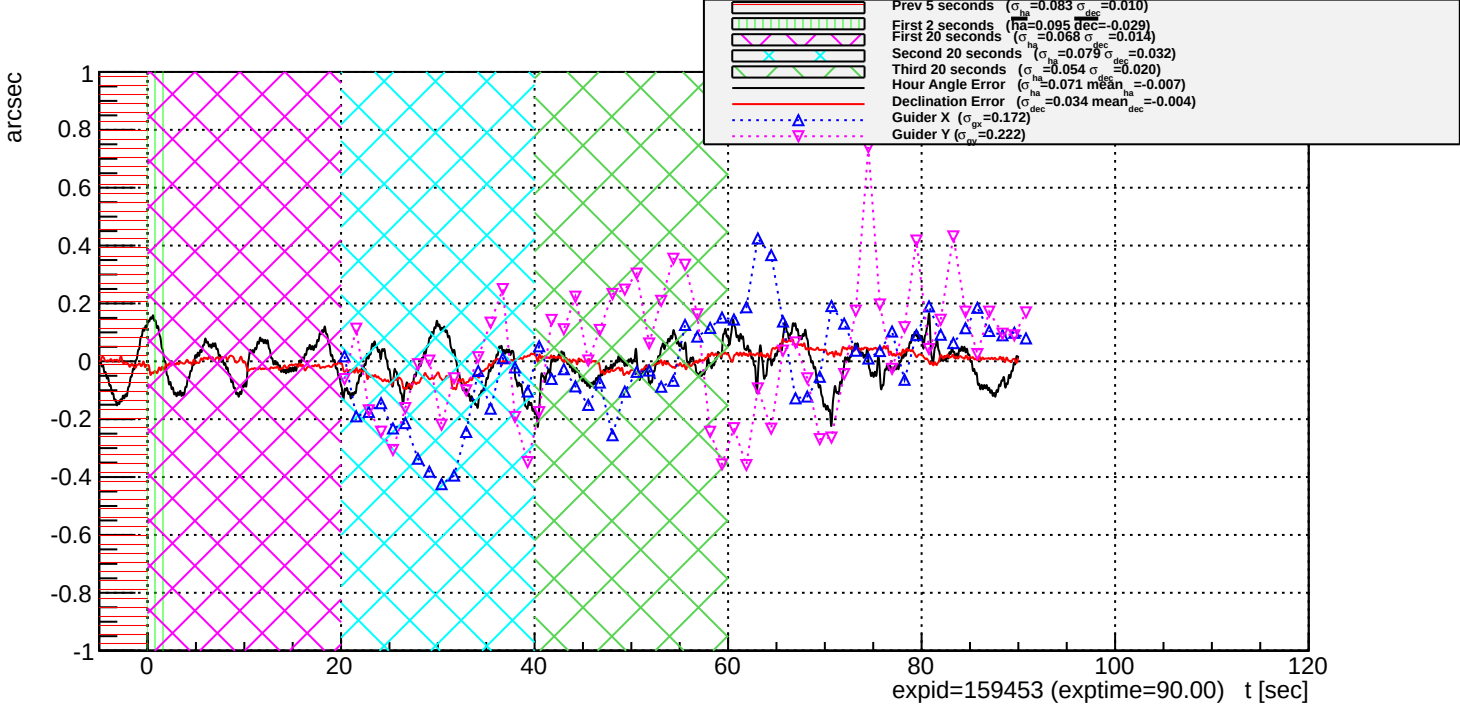

Prev 5 seconds (σ_{ha}=0.153 σ_{dec}=0.084)
First 2 seconds (ha=0.053 dec=-0.145)
First 20 seconds (σ_{ha}=0.043 σ_{dec}=0.039)
Second 20 seconds (σ_{ha}=0.045 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.031 σ_{dec}=0.018)
Hour Angle Error (σ_{ha}=0.038 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.052 $mean_{dec}$=-0.030)
Guider X (σ_{gx}=0.097)
Guider Y (σ_{gy}=0.119)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159448 (exptime=90.00) t [sec]

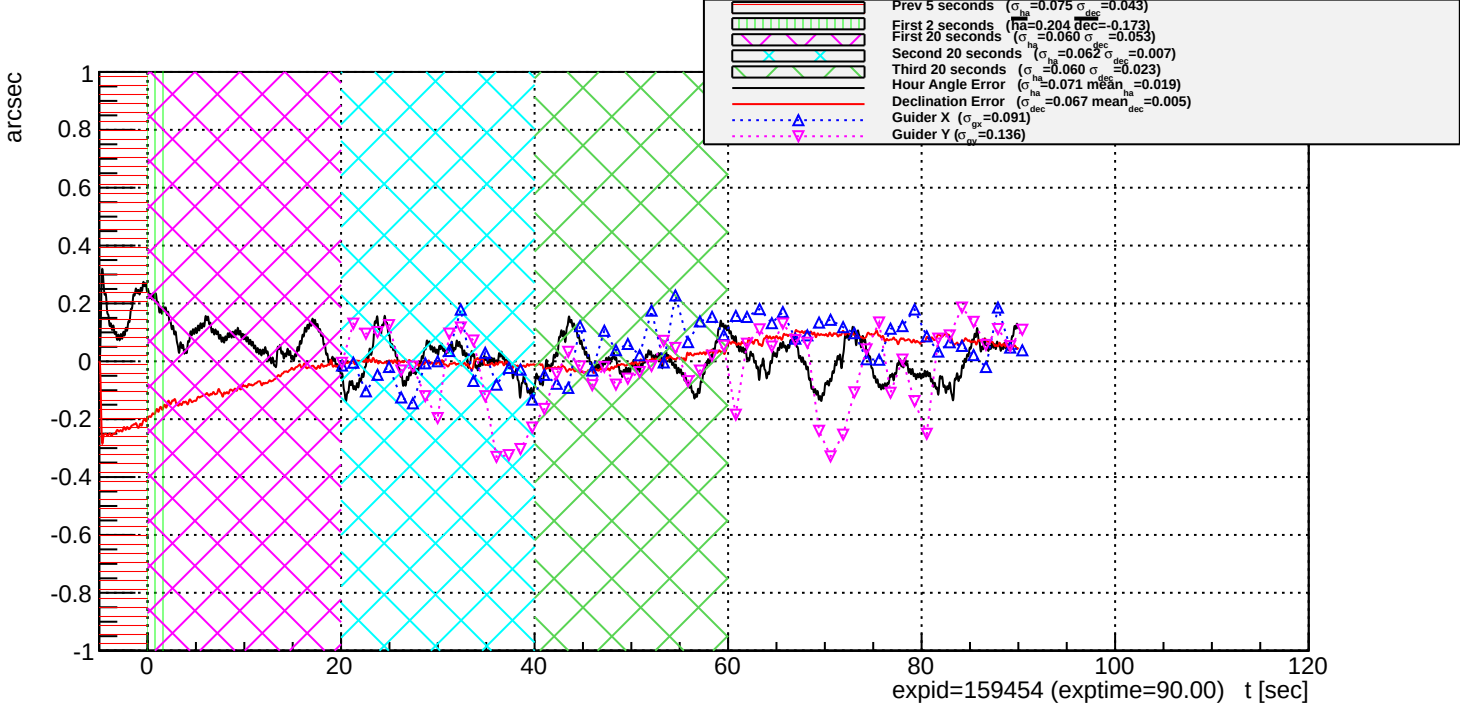

Prev 5 seconds (σ_{ha}=0.029 σ_{dec}=0.009)
First 2 seconds (ha=0.035 dec=-0.036)
First 20 seconds (σ_{ha}=0.056 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.029 σ_{dec}=0.037)
Third 20 seconds (σ_{ha}=0.079 σ_{dec}=0.057)
Hour Angle Error (σ_{ha}=0.058 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.073 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.157)
Guider Y (σ_{gy}=0.152)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159449 (exptime=90.00) t [sec]

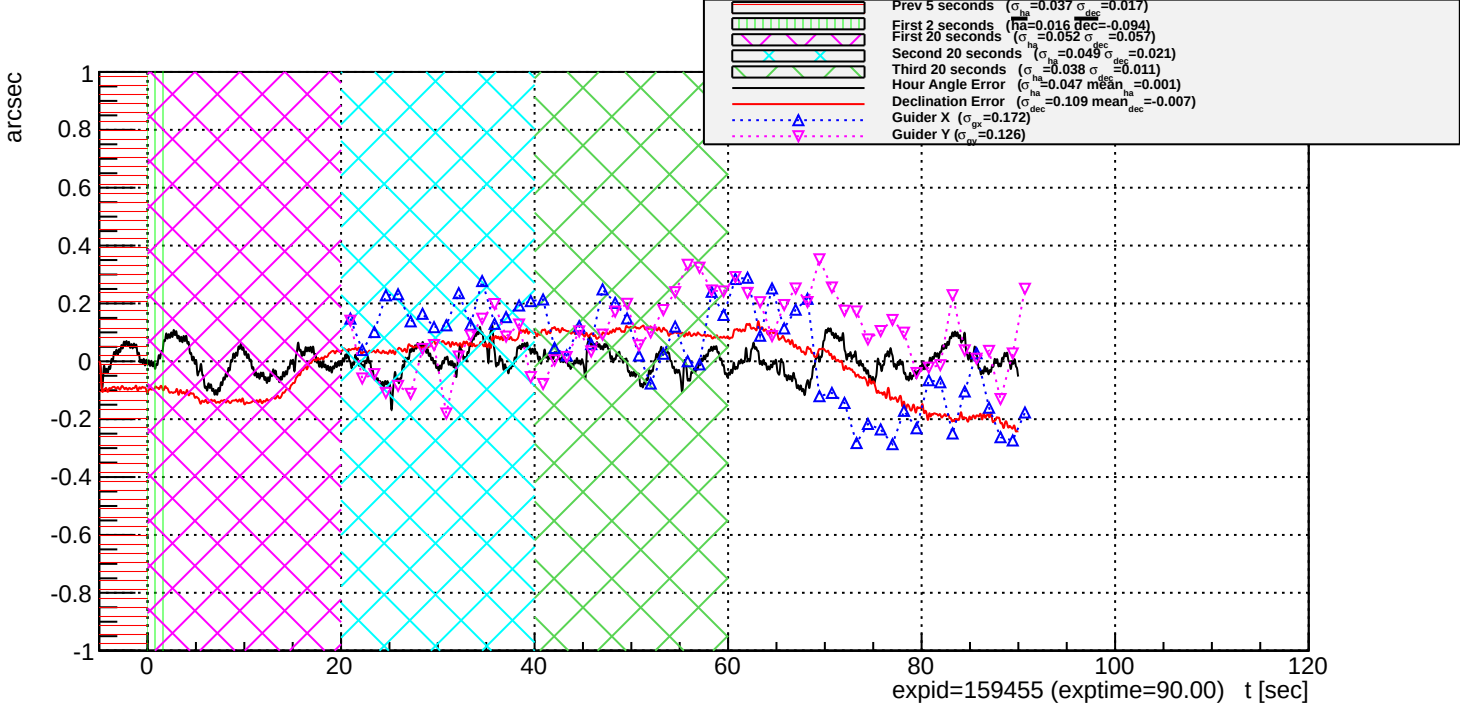

Prev 5 seconds (σ_{ha}=0.082 σ_{dec}=0.023)
First 2 seconds (ha=0.061 dec=-0.139)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.024)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.049 σ_{dec}=0.018)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.086 $mean_{dec}$=-0.018)
Guider X (σ_{gx}=0.133)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159450 (exptime=90.00) t [sec]

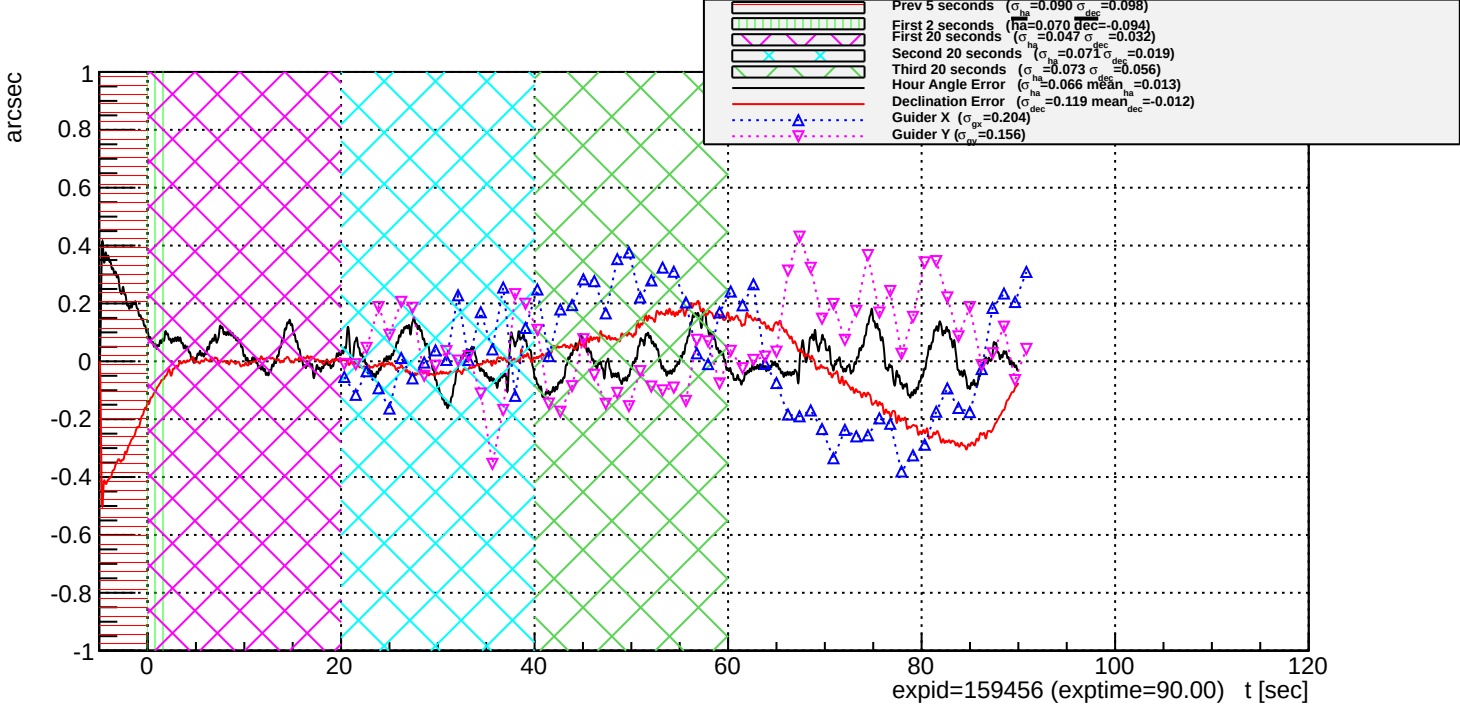

Prev 5 seconds (σ_{ha}=0.046 σ_{dec}=0.007)
First 2 seconds (ha=0.101 dec=0.008)
First 20 seconds (σ_{ha}=0.063 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.051 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.081 σ_{dec}=0.010)
Hour Angle Error (σ_{ha}=0.066 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.026 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.083)
Guider Y (σ_{gy}=0.147)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159451 (exptime=90.00) t [sec]

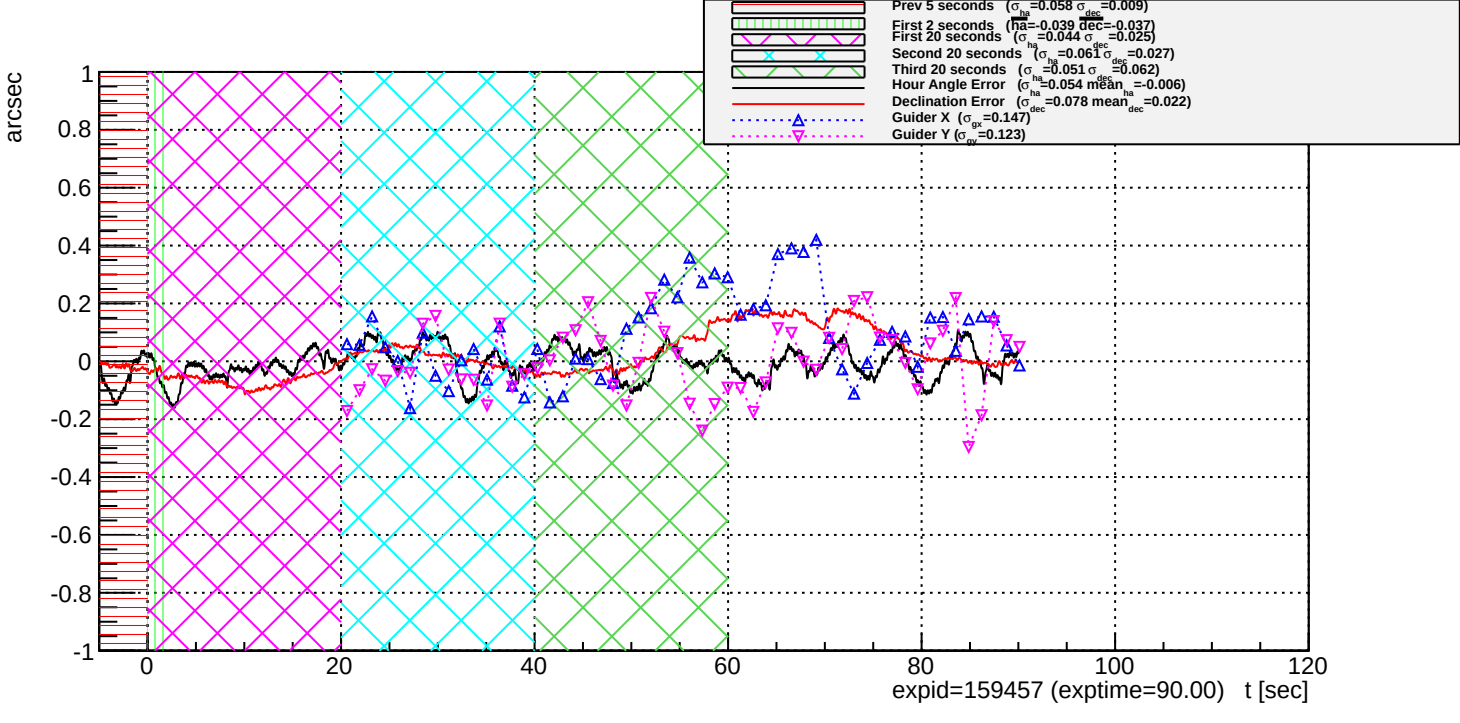

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.030)
First 2 seconds (ha=0.049 dec=0.114)
First 20 seconds (σ_{ha}=0.068 σ_{dec}=0.051)
Second 20 seconds (σ_{ha}=0.066 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.066 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.081 $mean_{dec}$=0.015)
Guider X (σ_{gx}=0.136)
Guider Y (σ_{gy}=0.140)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159452 (exptime=90.00) t [sec]

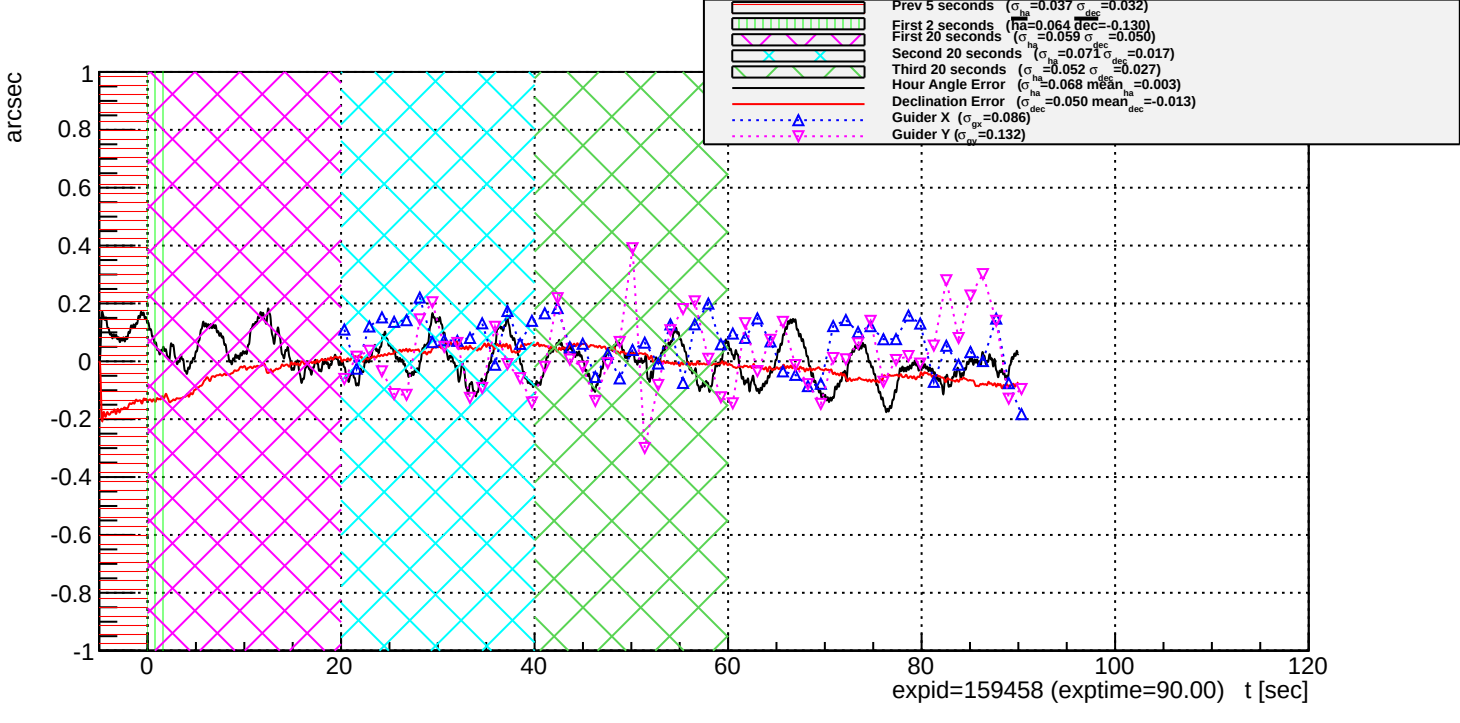

Prev 5 seconds (σ_{ha}=0.083 σ_{dec}=0.010)
First 2 seconds (ha=0.095 dec=-0.029)
First 20 seconds (σ_{ha}=0.068 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.079 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.054 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.034 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.172)
Guider Y (σ_{gy}=0.222)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159453 (exptime=90.00) t [sec]

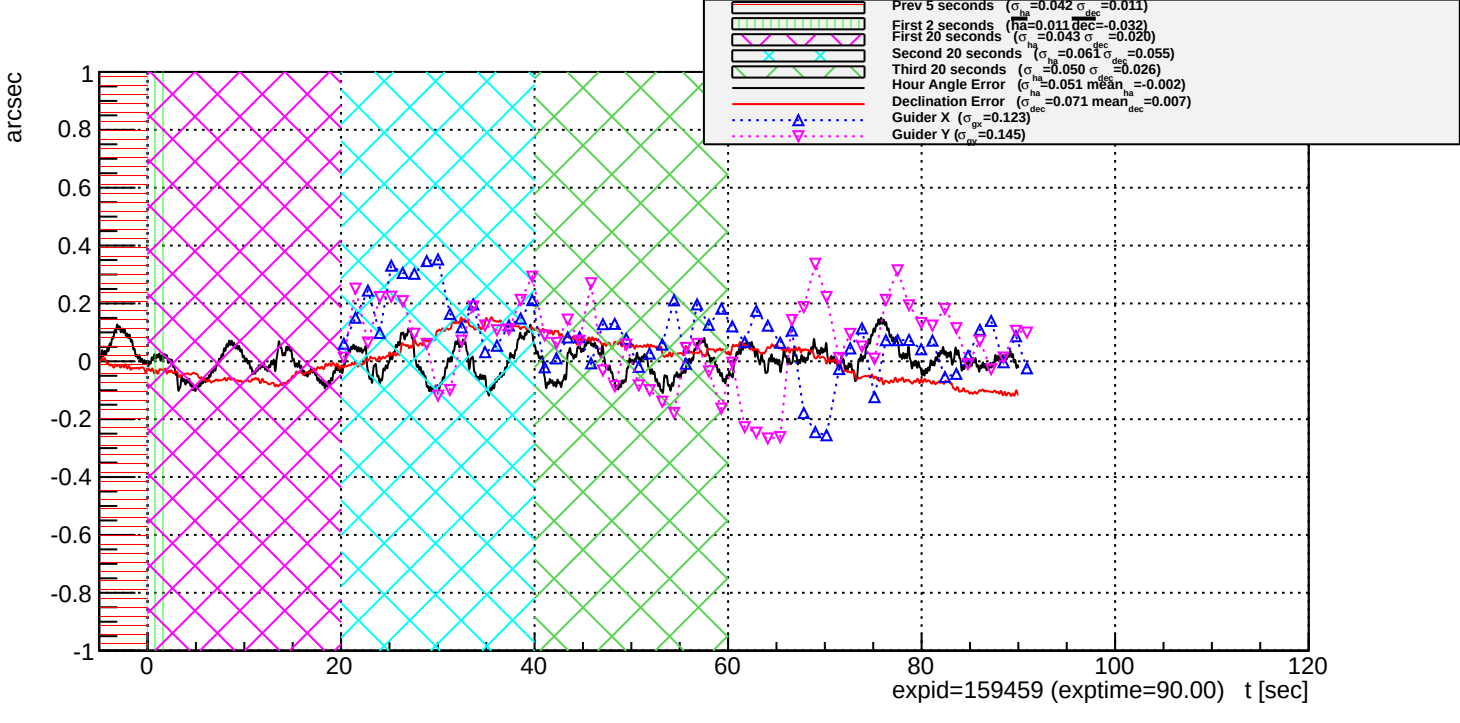

Prev 5 seconds (σ_{ha}=0.075 σ_{dec}=0.043)
First 2 seconds (ha=0.204 dec=-0.173)
First 20 seconds (σ_{ha}=0.060 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.062 σ_{dec}=0.007)
Third 20 seconds (σ_{ha}=0.060 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=0.019)
Declination Error (σ_{dec}=0.067 $mean_{dec}$=0.005)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.136)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159454 (exptime=90.00) t [sec]

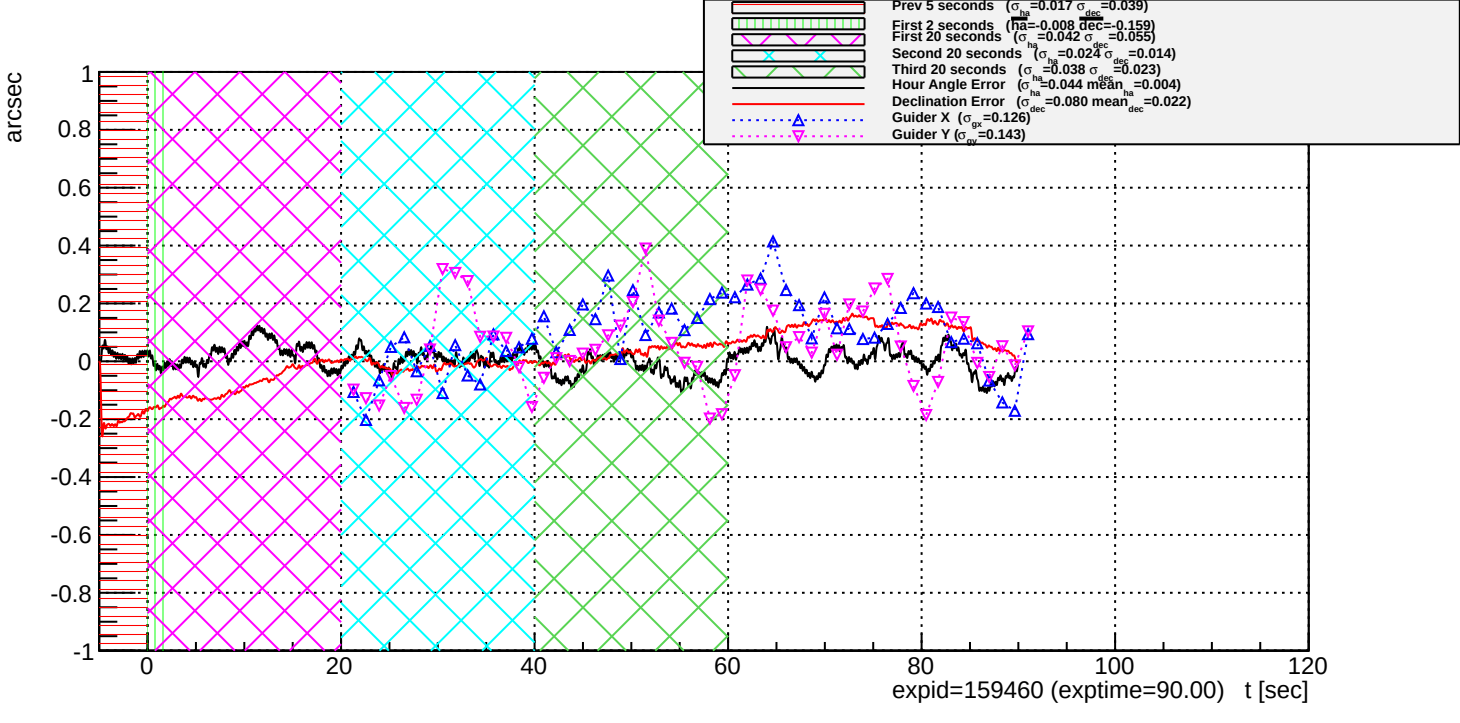

Prev 5 seconds (σ_{ha}=0.037 σ_{dec}=0.017)
First 2 seconds (ha=0.016 dec=-0.094)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.049 σ_{dec}=0.021)
Third 20 seconds (σ_{ha}=0.038 σ_{dec}=0.011)
Hour Angle Error (σ_{ha}=0.047 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.109 $mean_{dec}$=-0.007)
Guider X (σ_{gx}=0.172)
Guider Y (σ_{gy}=0.126)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159455 (exptime=90.00) t [sec]

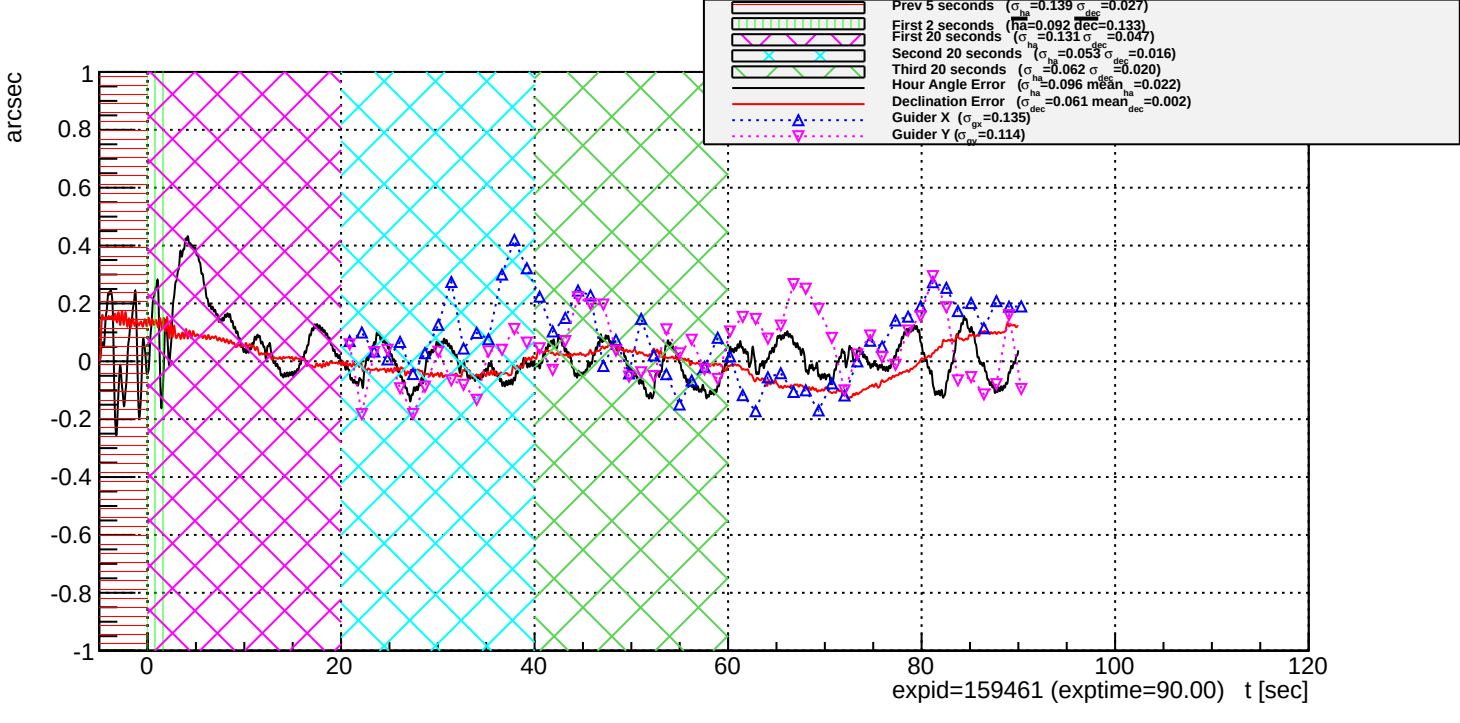

Prev 5 seconds (σ_{ha}=0.090 σ_{dec}=0.098)
First 2 seconds (ha=0.070 dec=-0.094)
First 20 seconds (σ_{ha}=0.047 σ_{dec}=0.032)
Second 20 seconds (σ_{ha}=0.071 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.073 σ_{dec}=0.056)
Hour Angle Error (σ_{ha}=0.066 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.119 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.204)
Guider Y (σ_{gy}=0.156)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159456 (exptime=90.00) t [sec]

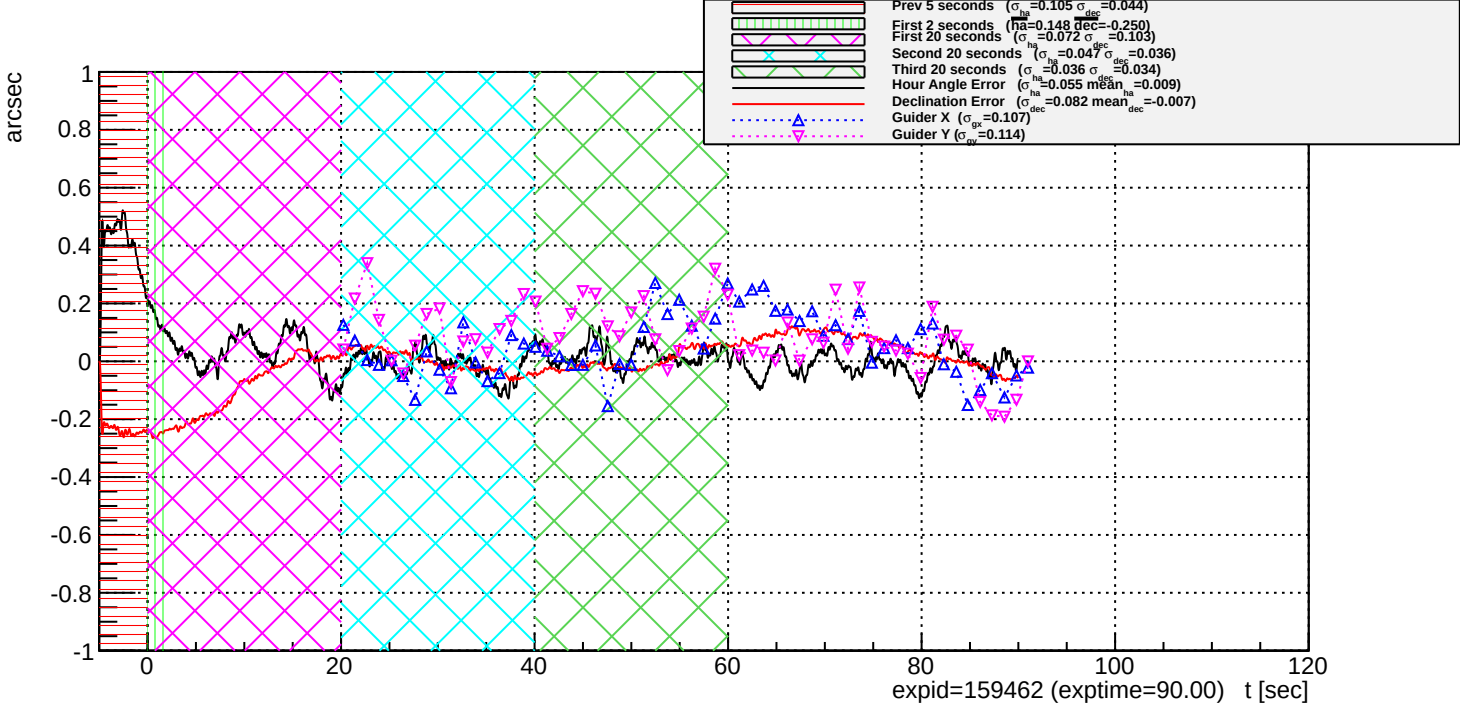

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.009)
First 2 seconds ($\overline{ha}$=-0.039 $\overline{dec}$=-0.037)
First 20 seconds (σ_{ha}=0.044 σ_{dec}=0.025)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.051 σ_{dec}=0.062)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=-0.006)
Declination Error (σ_{dec}=0.078 $mean_{dec}$=0.022)
Guider X (σ_{gx}=0.147)
Guider Y (σ_{gy}=0.123)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159457 (exptime=90.00) t [sec]

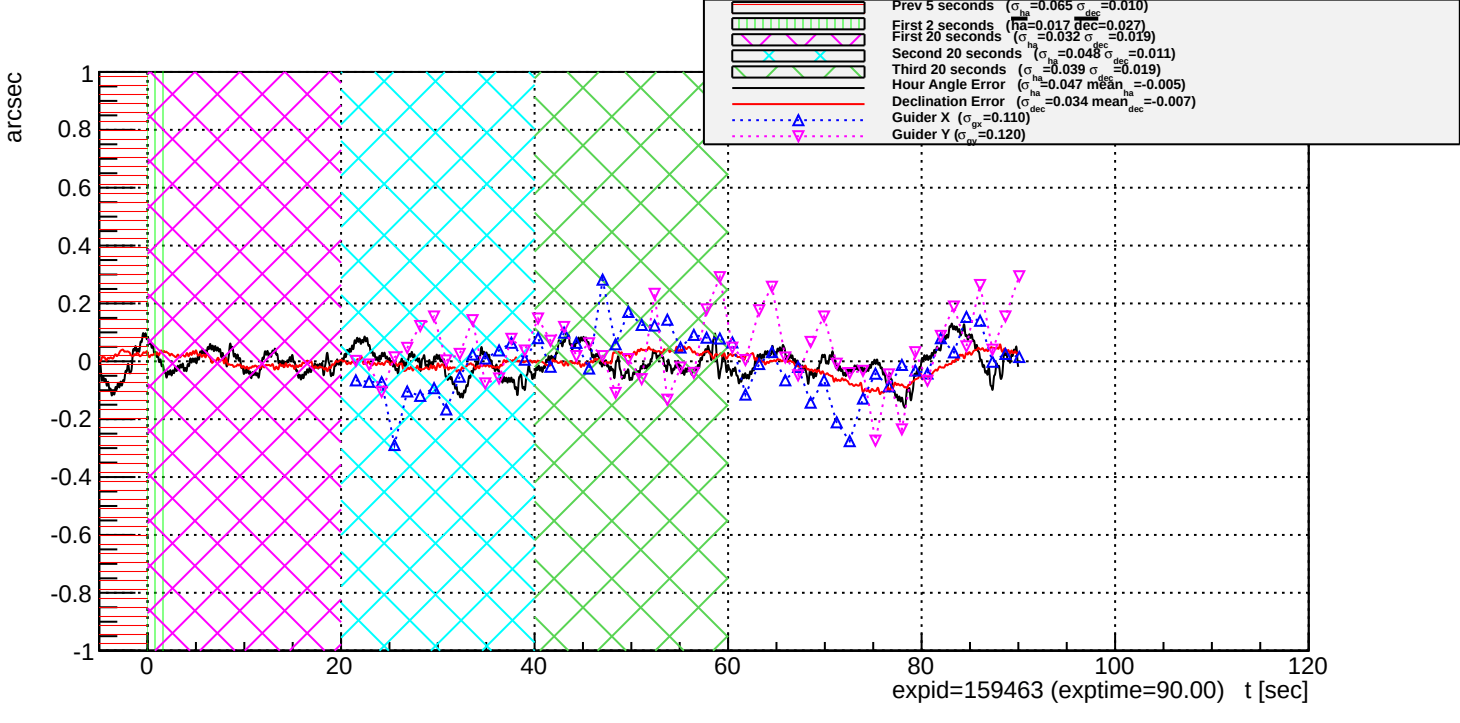

Prev 5 seconds (σ_{ha}=0.037 σ_{dec}=0.032)
First 2 seconds (ha=0.064 dec=-0.130)
First 20 seconds (σ_{ha}=0.059 σ_{dec}=0.050)
Second 20 seconds (σ_{ha}=0.071 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.052 σ_{dec}=0.027)
Hour Angle Error (σ_{ha}=0.068 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.050 $mean_{dec}$=-0.013)
Guider X (σ_{gx}=0.086)
Guider Y (σ_{gy}=0.132)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159458 (exptime=90.00) t [sec]

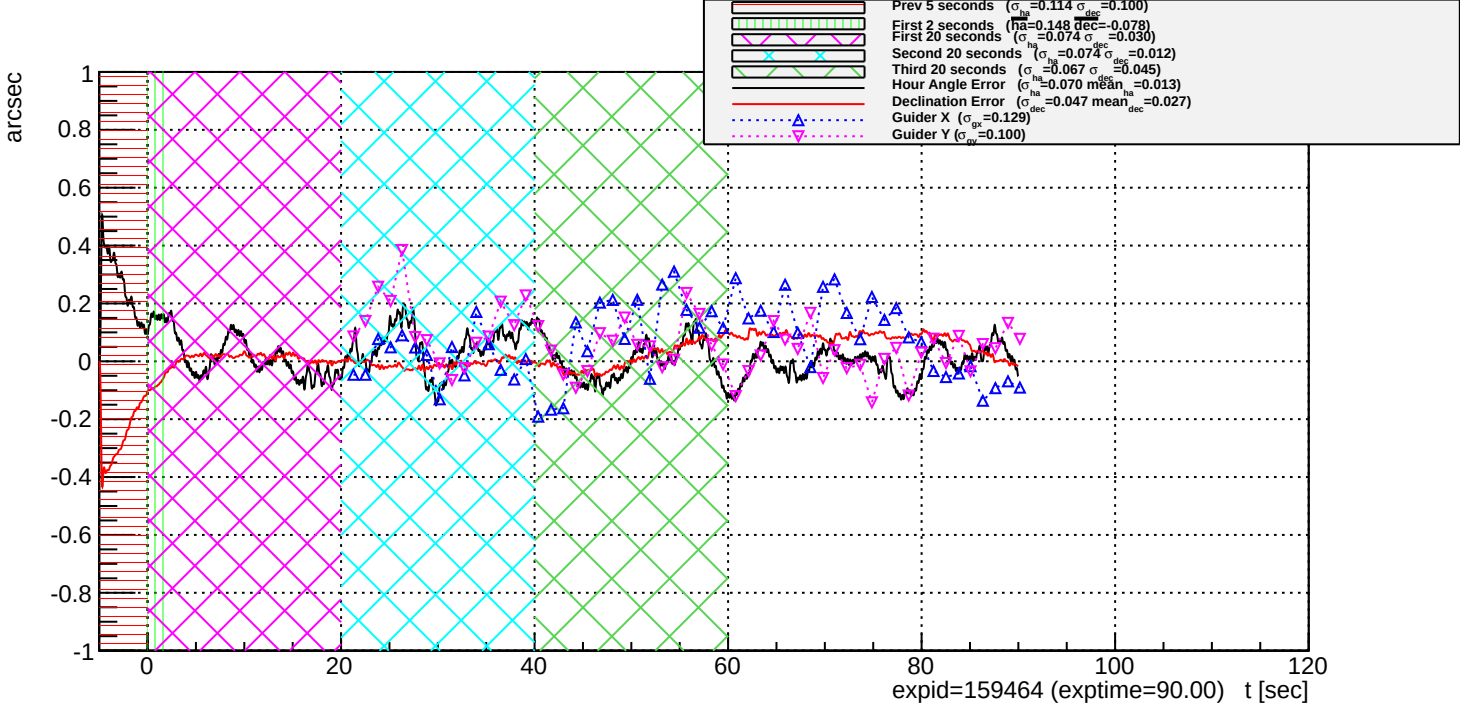

Prev 5 seconds (σ_{ha}=0.042 σ_{dec}=0.011)
First 2 seconds ($\overline{ha}$=0.011 $\overline{dec}$=-0.032)
First 20 seconds (σ_{ha}=0.043 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.055)
Third 20 seconds (σ_{ha}=0.050 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.051 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.071 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.145)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159459 (exptime=90.00) t [sec]

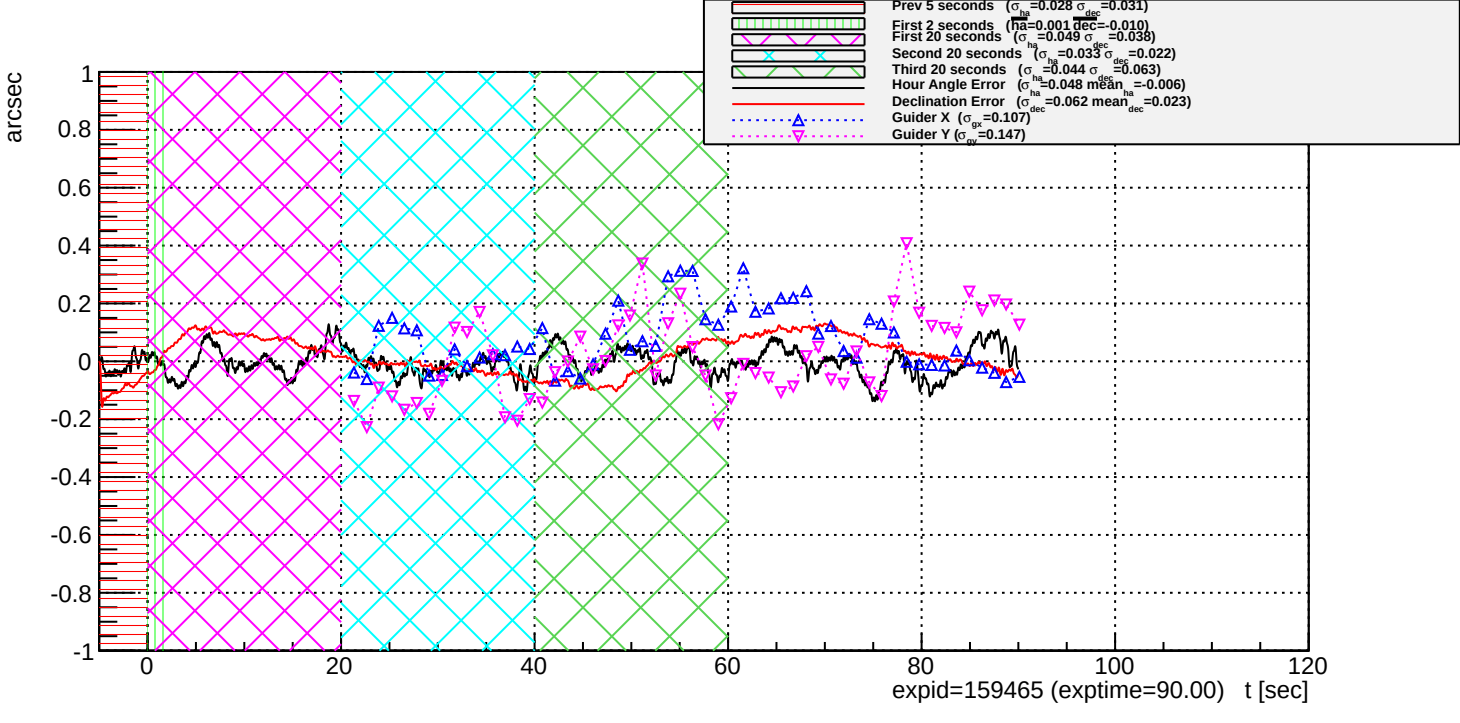

Prev 5 seconds (σ_{ha}=0.017 σ_{dec}=0.039)
First 2 seconds ($\overline{ha}$=-0.008 $\overline{dec}$=-0.159)
First 20 seconds (σ_{ha}=0.042 σ_{dec}=0.055)
Second 20 seconds (σ_{ha}=0.024 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.038 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.044 $mean_{ha}$=0.004)
Declination Error (σ_{dec}=0.080 $mean_{dec}$=0.022)
Guider X (σ_{gx}=0.126)
Guider Y (σ_{gy}=0.143)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159460 (exptime=90.00) t [sec]

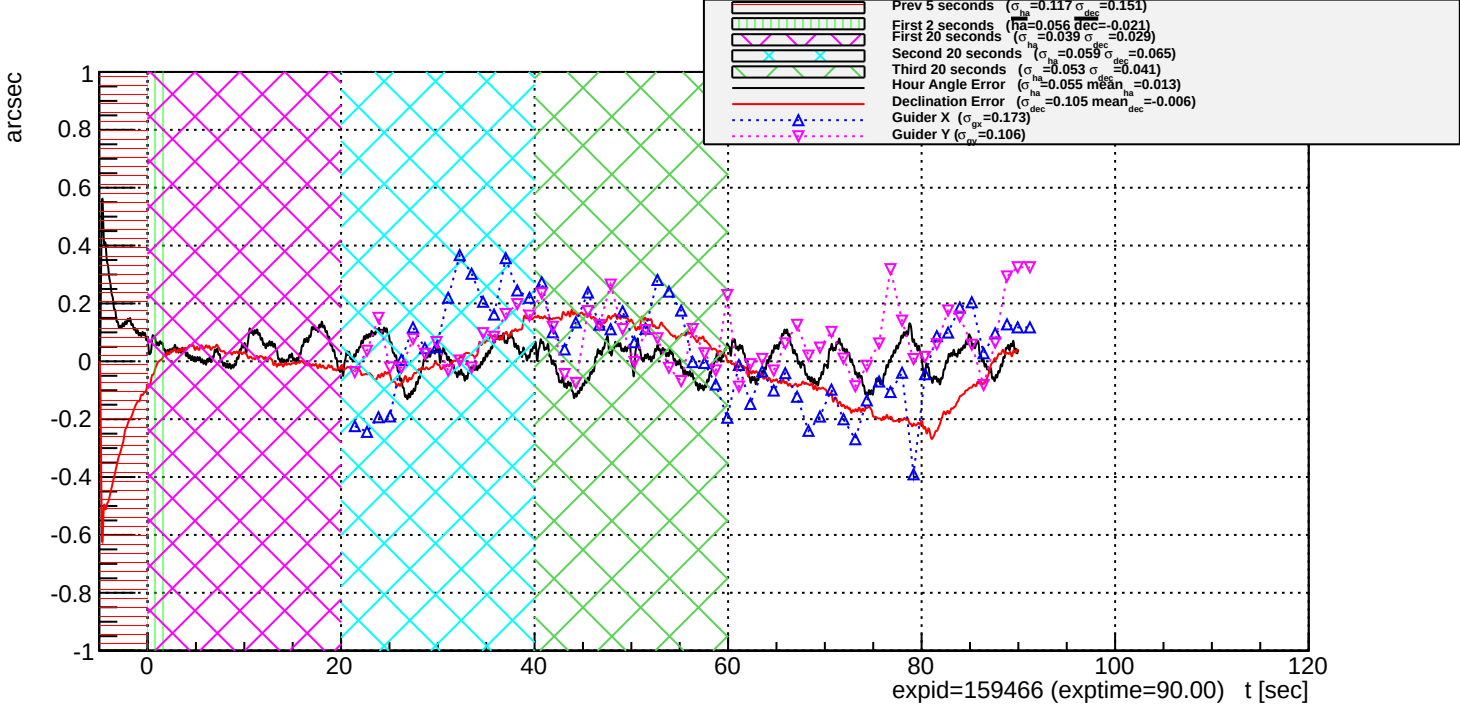

Prev 5 seconds (σ_{ha}=0.139 σ_{dec}=0.027)
First 2 seconds (ha=0.092 dec=0.133)
First 20 seconds (σ_{ha}=0.131 σ_{dec}=0.047)
Second 20 seconds (σ_{ha}=0.053 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.062 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.096 $mean_{ha}$=0.022)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.135)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159461 (exptime=90.00) t [sec]

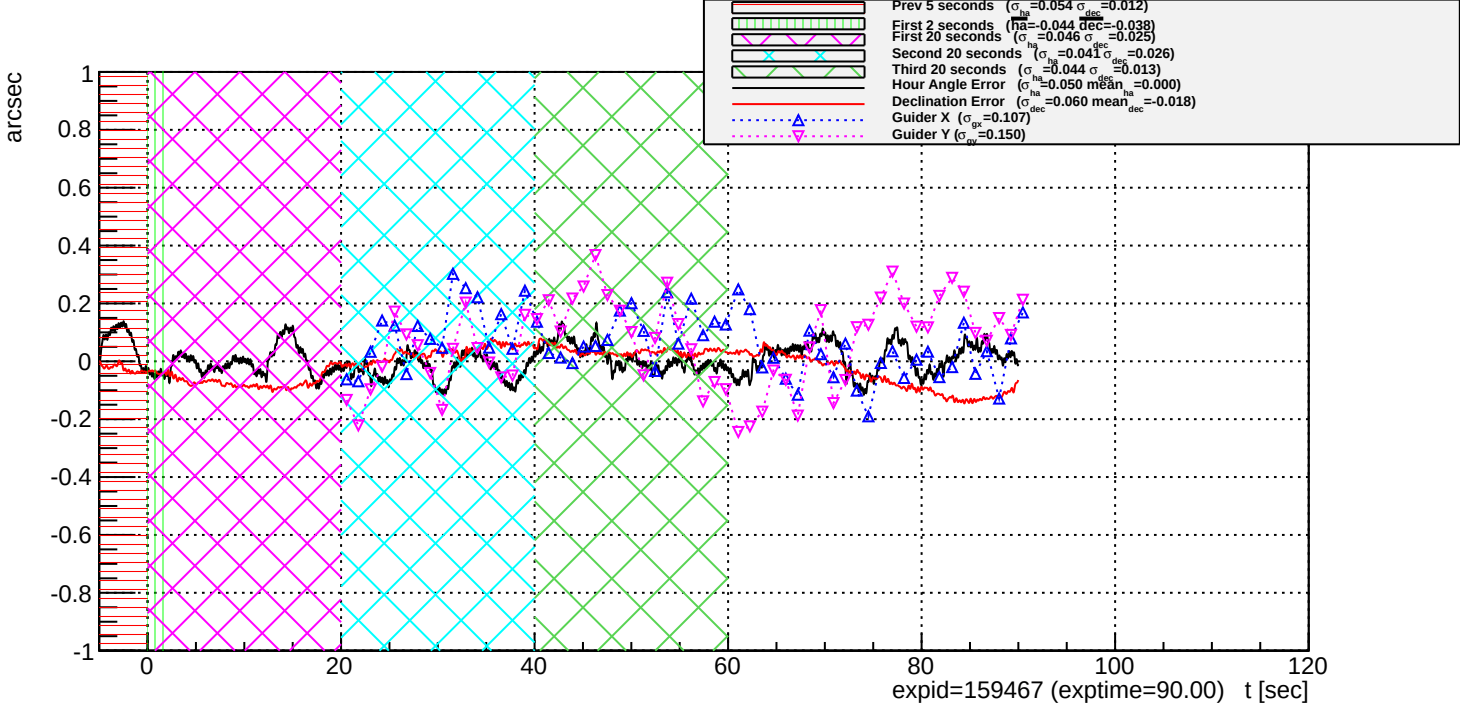

Prev 5 seconds (σ_{ha}=0.105 σ_{dec}=0.044)
First 2 seconds (ha=0.148 dec=-0.250)
First 20 seconds (σ_{ha}=0.072 σ_{dec}=0.103)
Second 20 seconds (σ_{ha}=0.047 σ_{dec}=0.036)
Third 20 seconds (σ_{ha}=0.036 σ_{dec}=0.034)
Hour Angle Error (σ_{ha}=0.055 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.082 $mean_{dec}$=-0.007)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159462 (exptime=90.00) t [sec]

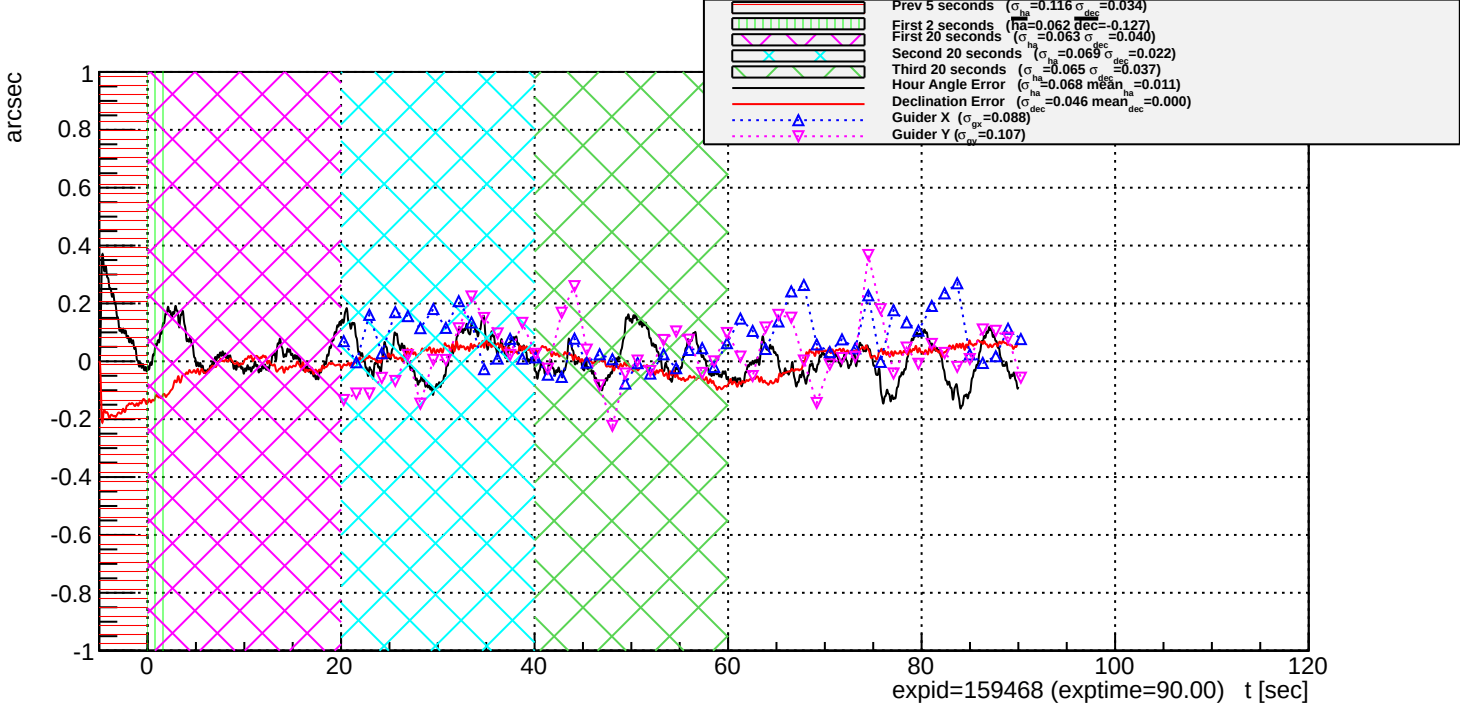

Prev 5 seconds (σ_{ha}=0.065 σ_{dec}=0.010)
First 2 seconds (ha=0.017 dec=0.027)
First 20 seconds (σ_{ha}=0.032 σ_{dec}=0.019)
Second 20 seconds (σ_{ha}=0.048 σ_{dec}=0.011)
Third 20 seconds (σ_{ha}=0.039 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.047 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.034 $mean_{dec}$=-0.007)
Guider X (σ_{gx}=0.110)
Guider Y (σ_{gy}=0.120)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159463 (exptime=90.00)
t [sec]

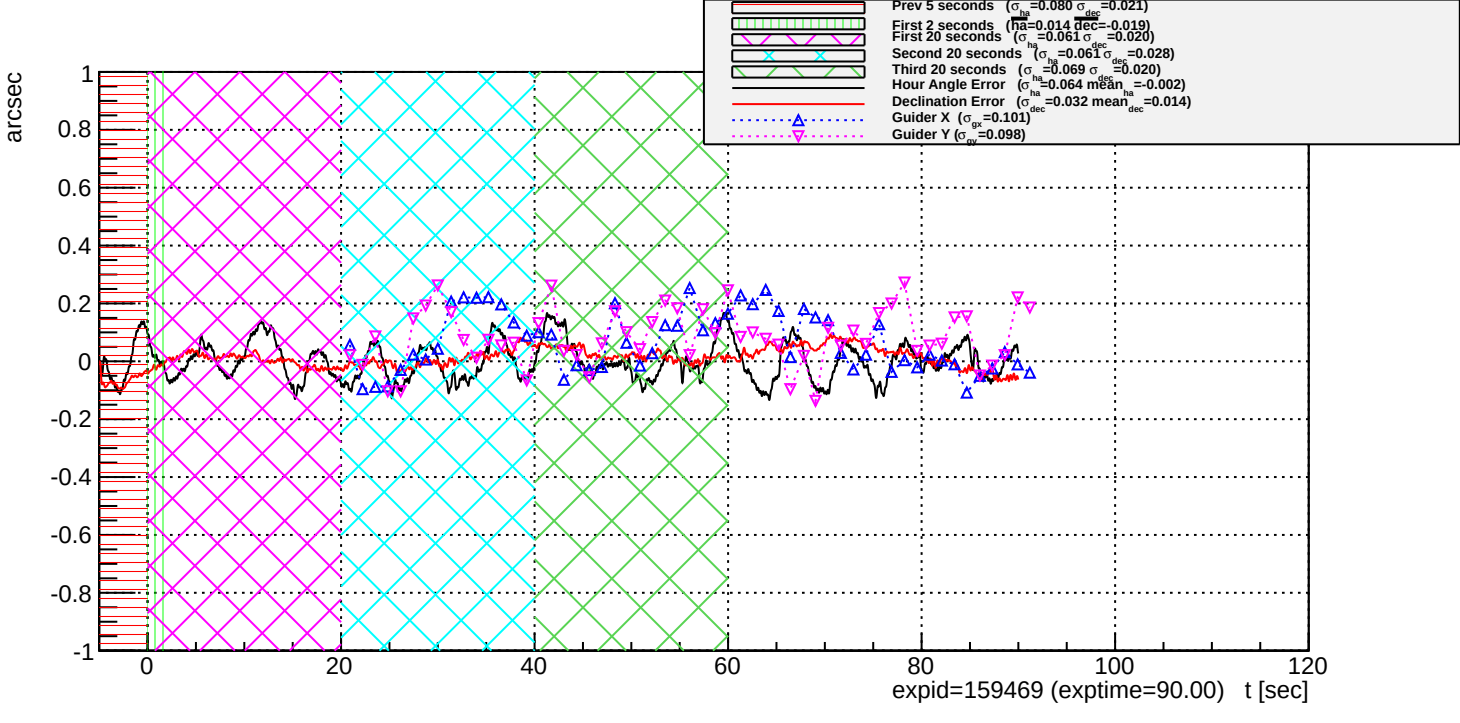

Prev 5 seconds (σ_{ha}=0.114 σ_{dec}=0.100)
First 2 seconds (ha=0.148 dec=-0.078)
First 20 seconds (σ_{ha}=0.074 σ_{dec}=0.030)
Second 20 seconds (σ_{ha}=0.074 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.067 σ_{dec}=0.045)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.047 $mean_{dec}$=0.027)
Guider X (σ_{gx}=0.129)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159464 (exptime=90.00) t [sec]

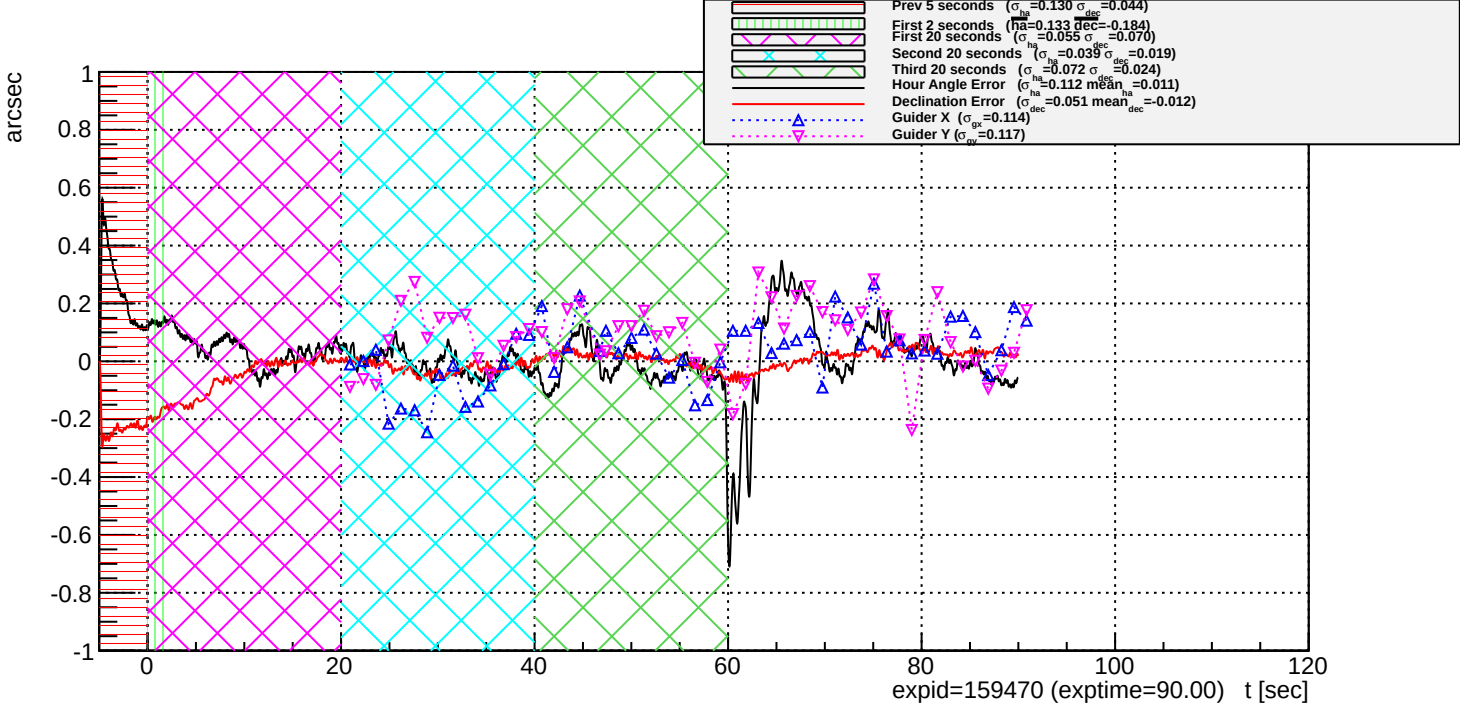

Prev 5 seconds (σ_{ha}=0.028 σ_{dec}=0.031)
First 2 seconds (ha=0.001 dec=-0.010)
First 20 seconds (σ_{ha}=0.049 σ_{dec}=0.038)
Second 20 seconds (σ_{ha}=0.033 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.044 σ_{dec}=0.063)
Hour Angle Error (σ_{ha}=0.048 $mean_{ha}$=-0.006)
Declination Error (σ_{dec}=0.062 $mean_{dec}$=0.023)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.147)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159465 (exptime=90.00) t [sec]

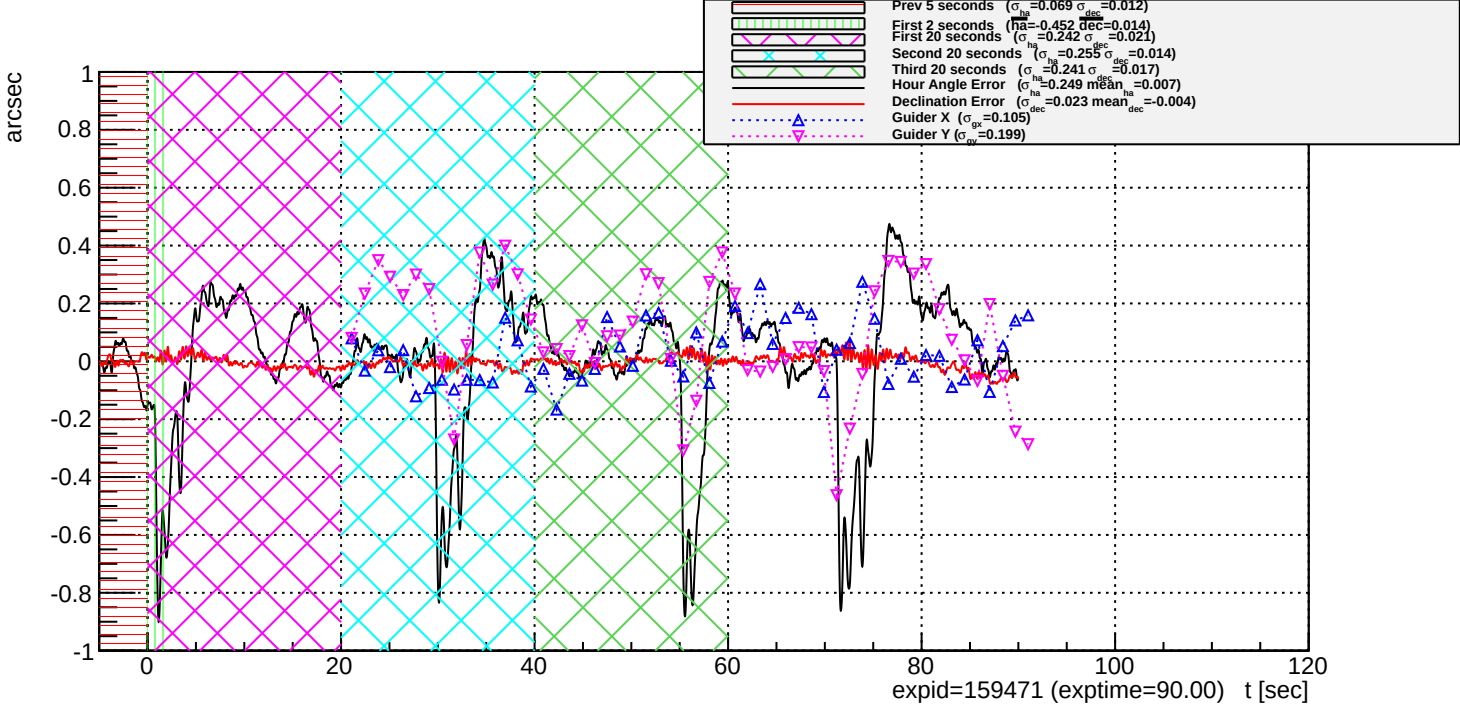

Prev 5 seconds (σ_{ha}=0.117 σ_{dec}=0.151)
First 2 seconds (ha=0.056 dec=-0.021)
First 20 seconds (σ_{ha}=0.039 σ_{dec}=0.029)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.065)
Third 20 seconds (σ_{ha}=0.053 σ_{dec}=0.041)
Hour Angle Error (σ_{ha}=0.055 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.105 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.173)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159466 (exptime=90.00) t [sec]

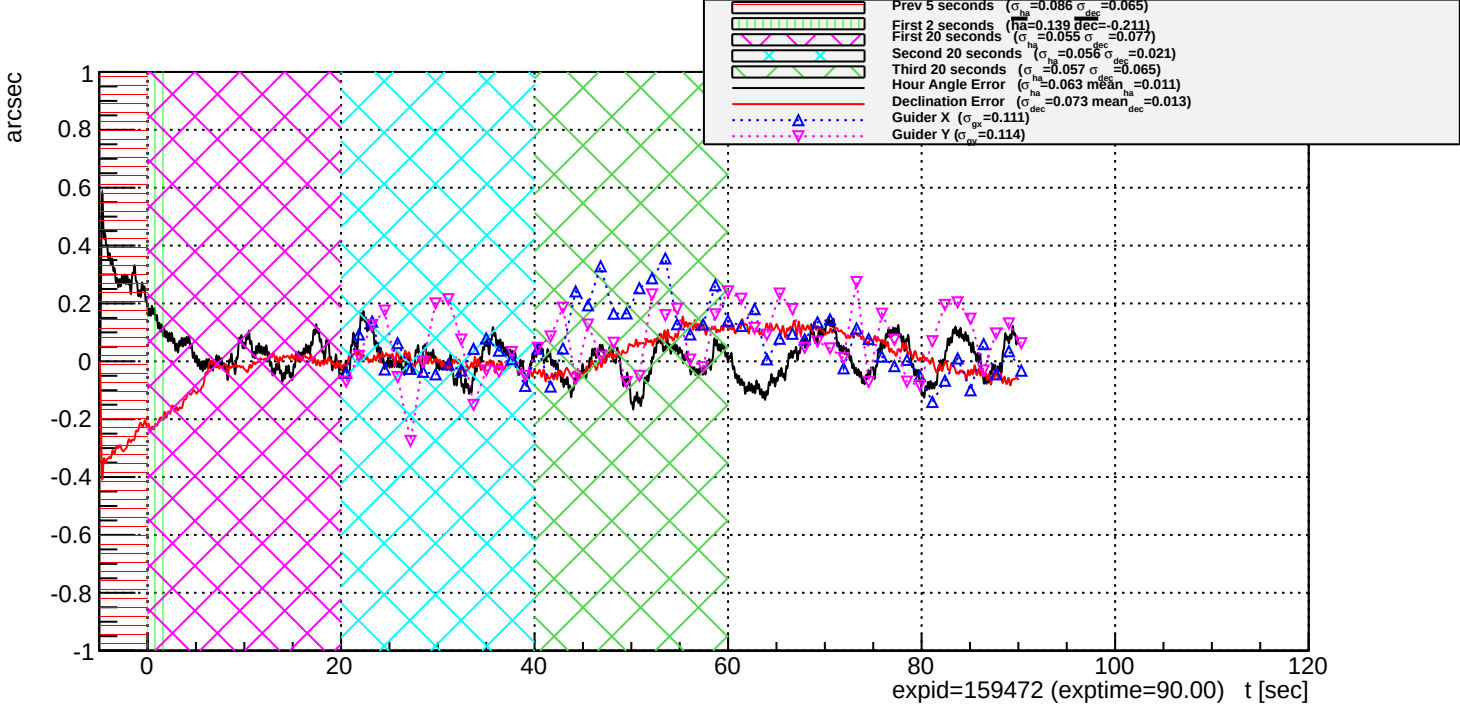

Prev 5 seconds (σ_{ha}=0.054 σ_{dec}=0.012)
First 2 seconds (ha=-0.044 dec=-0.038)
First 20 seconds (σ_{ha}=0.046 σ_{dec}=0.025)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.026)
Third 20 seconds (σ_{ha}=0.044 σ_{dec}=0.013)
Hour Angle Error (σ_{ha}=0.050 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.060 $mean_{dec}$=-0.018)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.150)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159467 (exptime=90.00) t [sec]

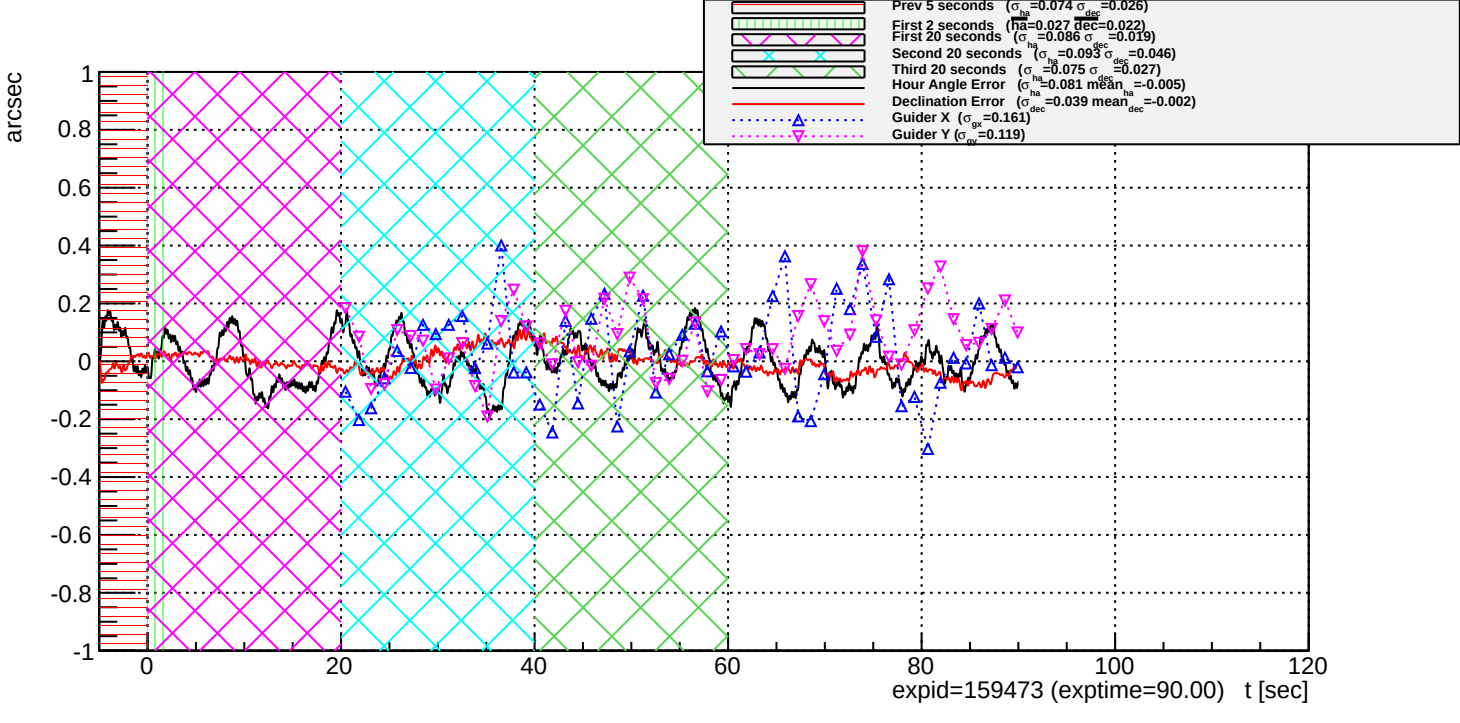

Prev 5 seconds (σ_{ha}=0.116 σ_{dec}=0.034)
First 2 seconds (σ_{ha}=0.062 σ_{dec}=-0.127)
First 20 seconds (σ_{ha}=0.063 σ_{dec}=0.040)
Second 20 seconds (σ_{ha}=0.069 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.065 σ_{dec}=0.037)
Hour Angle Error (σ_{ha}=0.068 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.046 $mean_{dec}$=0.000)
Guider X (σ_{gx}=0.088)
Guider Y (σ_{gy}=0.107)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159468 (exptime=90.00)
t [sec]

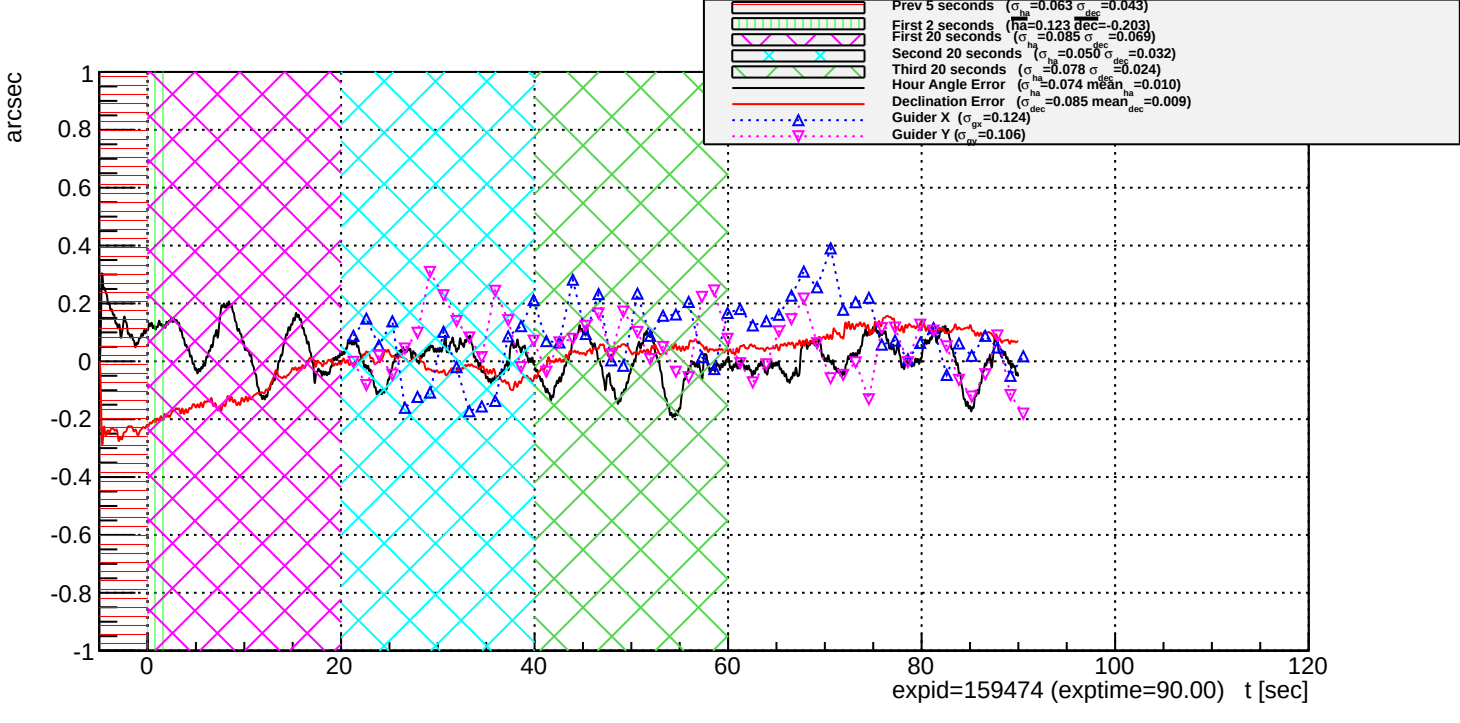

Prev 5 seconds (σ_{ha}=0.080 σ_{dec}=0.021)
First 2 seconds ($\overline{ha}$=0.014 $\overline{dec}$=-0.019)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.069 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.032 $mean_{dec}$=0.014)
Guider X (σ_{gx}=0.101)
Guider Y (σ_{gy}=0.098)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159469 (exptime=90.00) t [sec]

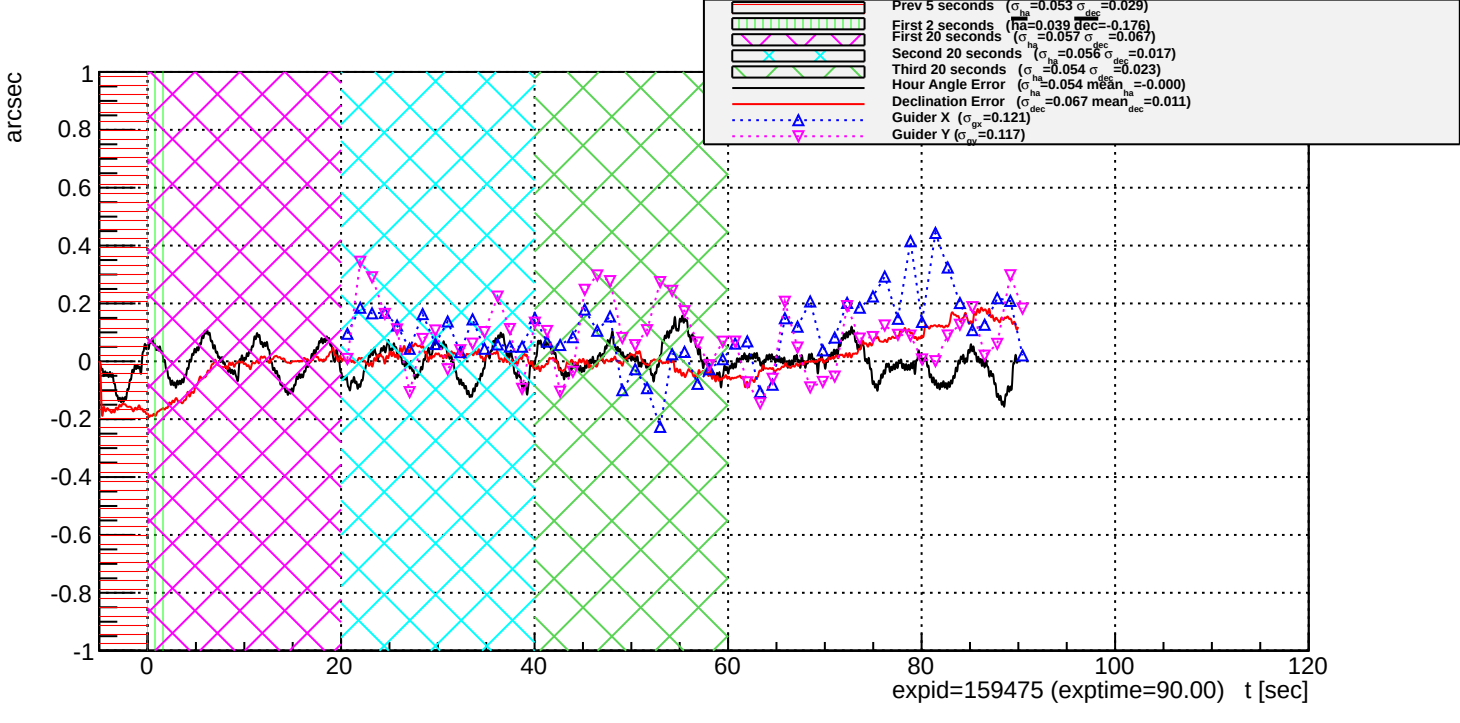

Prev 5 seconds (σ_{ha}=0.130 σ_{dec}=0.044)
First 2 seconds (σ_{ha}=0.133 σ_{dec}=-0.184)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.070)
Second 20 seconds (σ_{ha}=0.039 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.072 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.112 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.051 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.114)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159470 (exptime=90.00) t [sec]

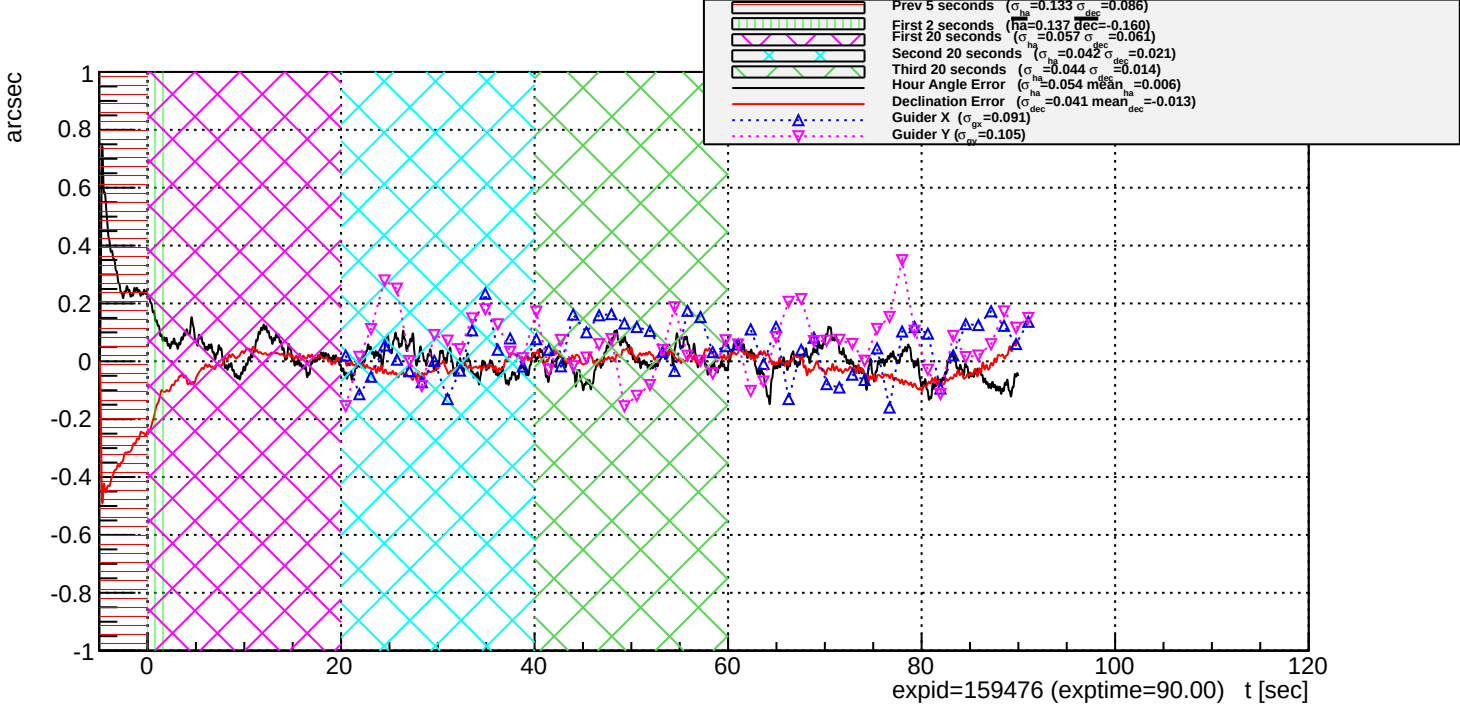

Prev 5 seconds (σ_{ha}=0.069 σ_{dec}=0.012)
First 2 seconds ($mean_{ha}$=-0.452 $mean_{dec}$=0.014)
First 20 seconds (σ_{ha}=0.242 σ_{dec}=0.021)
Second 20 seconds (σ_{ha}=0.255 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.241 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.249 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.023 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.105)
Guider Y (σ_{gy}=0.199)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159471 (exptime=90.00) t [sec]

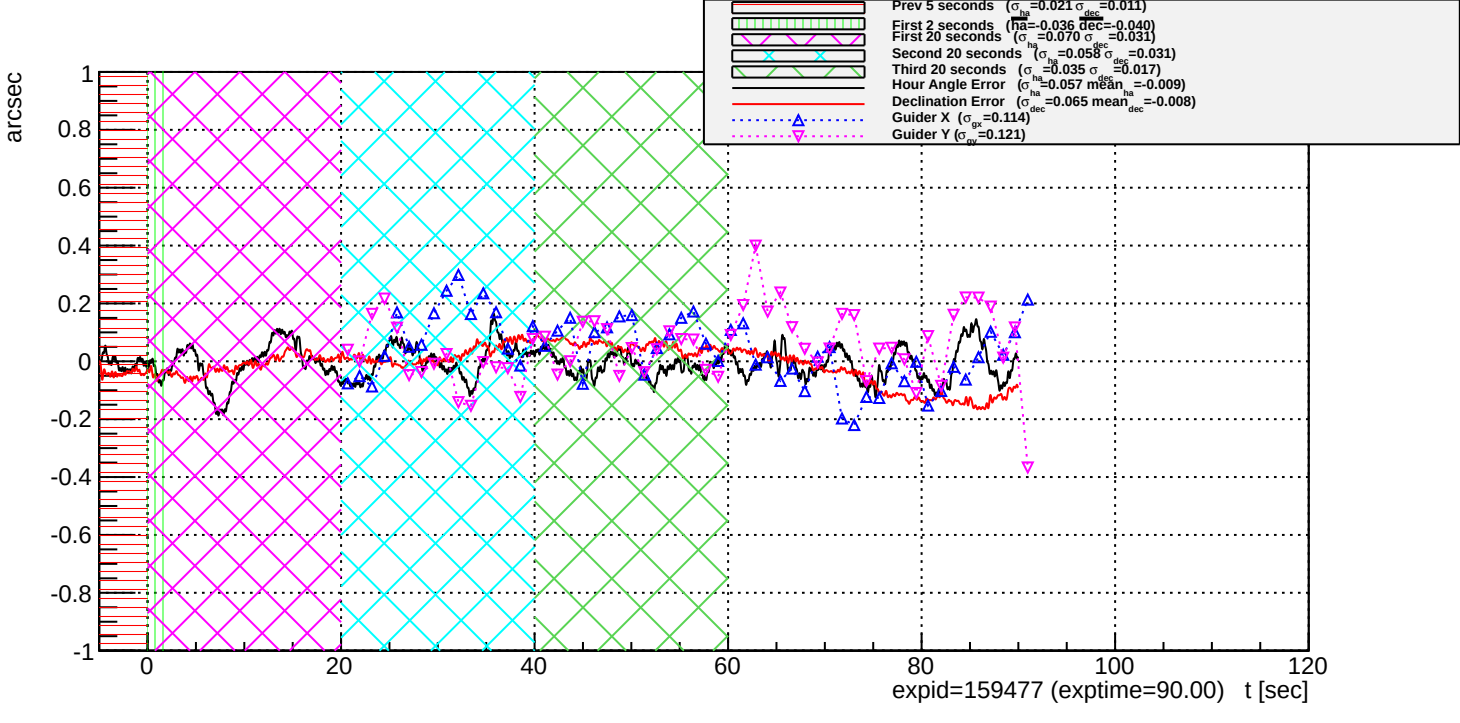

Prev 5 seconds (σ_{ha}=0.086 σ_{dec}=0.065)
First 2 seconds (ha=0.139 dec=-0.211)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.077)
Second 20 seconds (σ_{ha}=0.056 σ_{dec}=0.021)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.065)
Hour Angle Error (σ_{ha}=0.063 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.073 $mean_{dec}$=0.013)
Guider X (σ_{gx}=0.111)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159472 (exptime=90.00) t [sec]

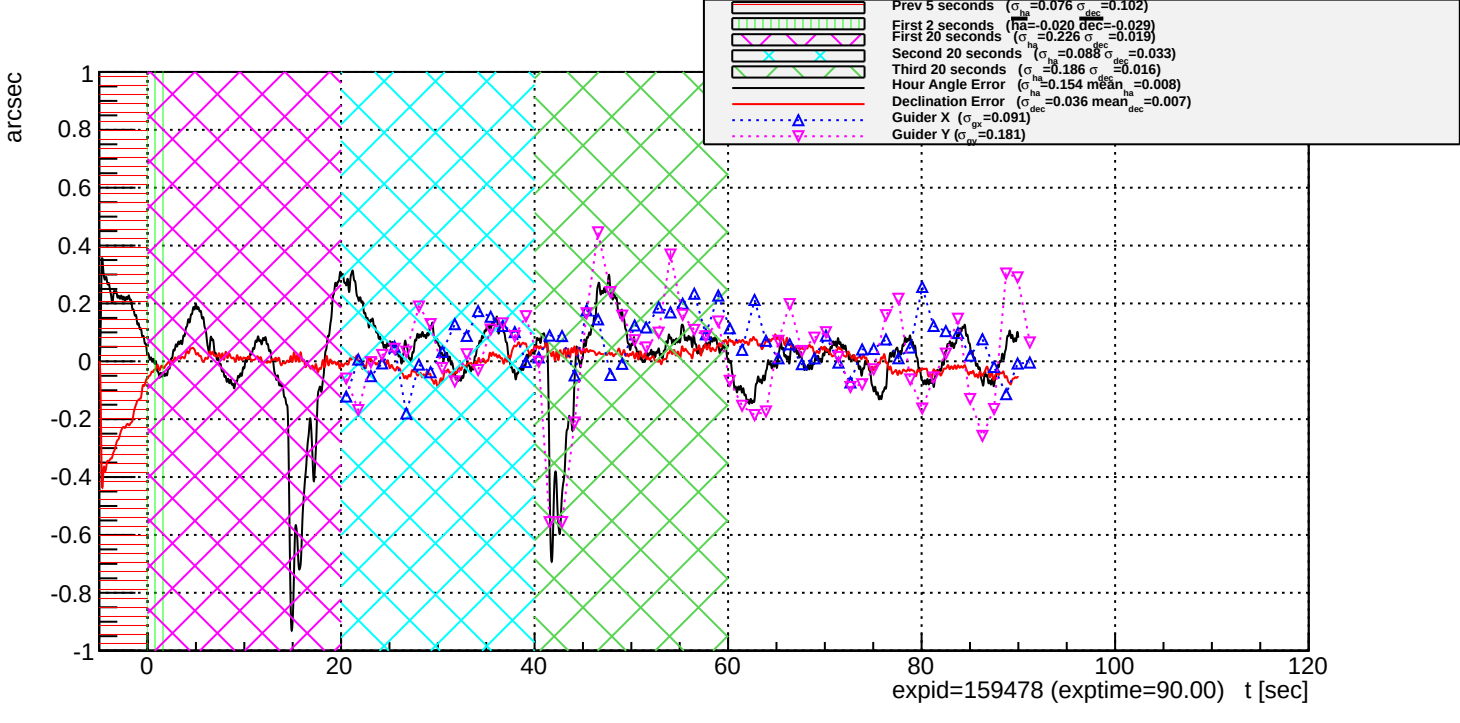

Prev 5 seconds (σ_{ha}=0.074 σ_{dec}=0.026)
First 2 seconds (ha=0.027 dec=0.022)
First 20 seconds (σ_{ha}=0.086 σ_{dec}=0.019)
Second 20 seconds (σ_{ha}=0.093 σ_{dec}=0.046)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.027)
Hour Angle Error (σ_{ha}=0.081 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.039 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.161)
Guider Y (σ_{gy}=0.119)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159473 (exptime=90.00) t [sec]

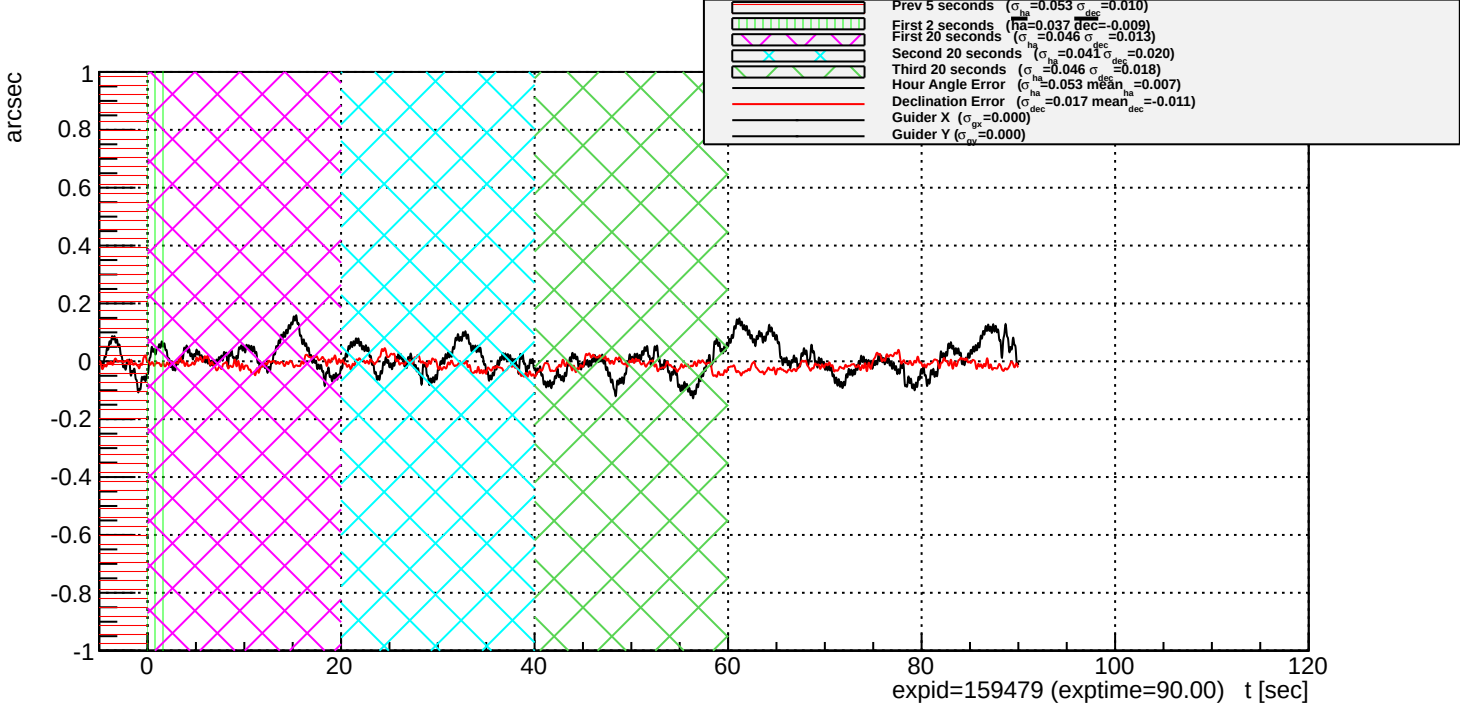

Prev 5 seconds (σ_{ha}=0.063 σ_{dec}=0.043)
First 2 seconds (ha=0.123 dec=-0.203)
First 20 seconds (σ_{ha}=0.085 σ_{dec}=0.069)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.078 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.074 $mean_{ha}$=0.010)
Declination Error (σ_{dec}=0.085 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.124)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159474 (exptime=90.00) t [sec]

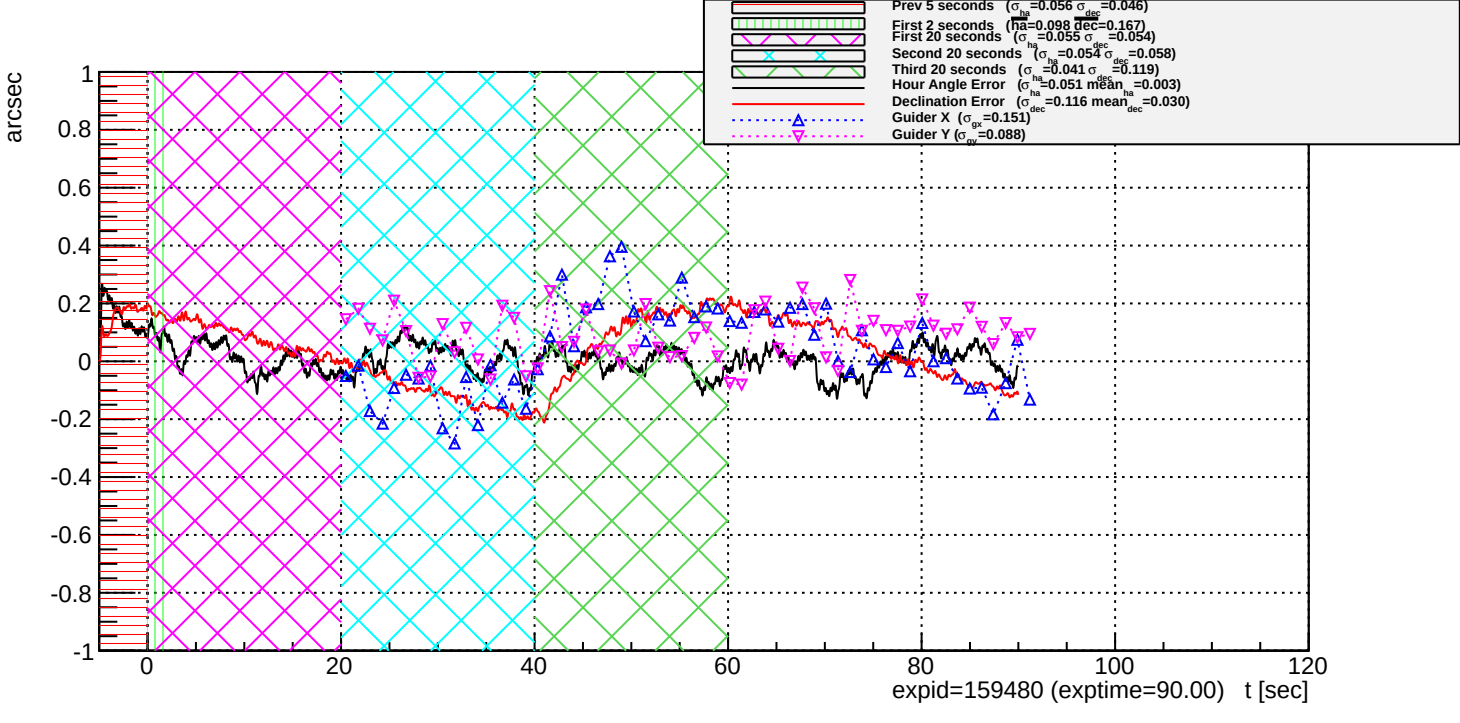

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.029)
First 2 seconds (ha=0.039 dec=-0.176)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.067)
Second 20 seconds (σ_{ha}=0.056 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.054 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.067 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.121)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159475 (exptime=90.00) t [sec]

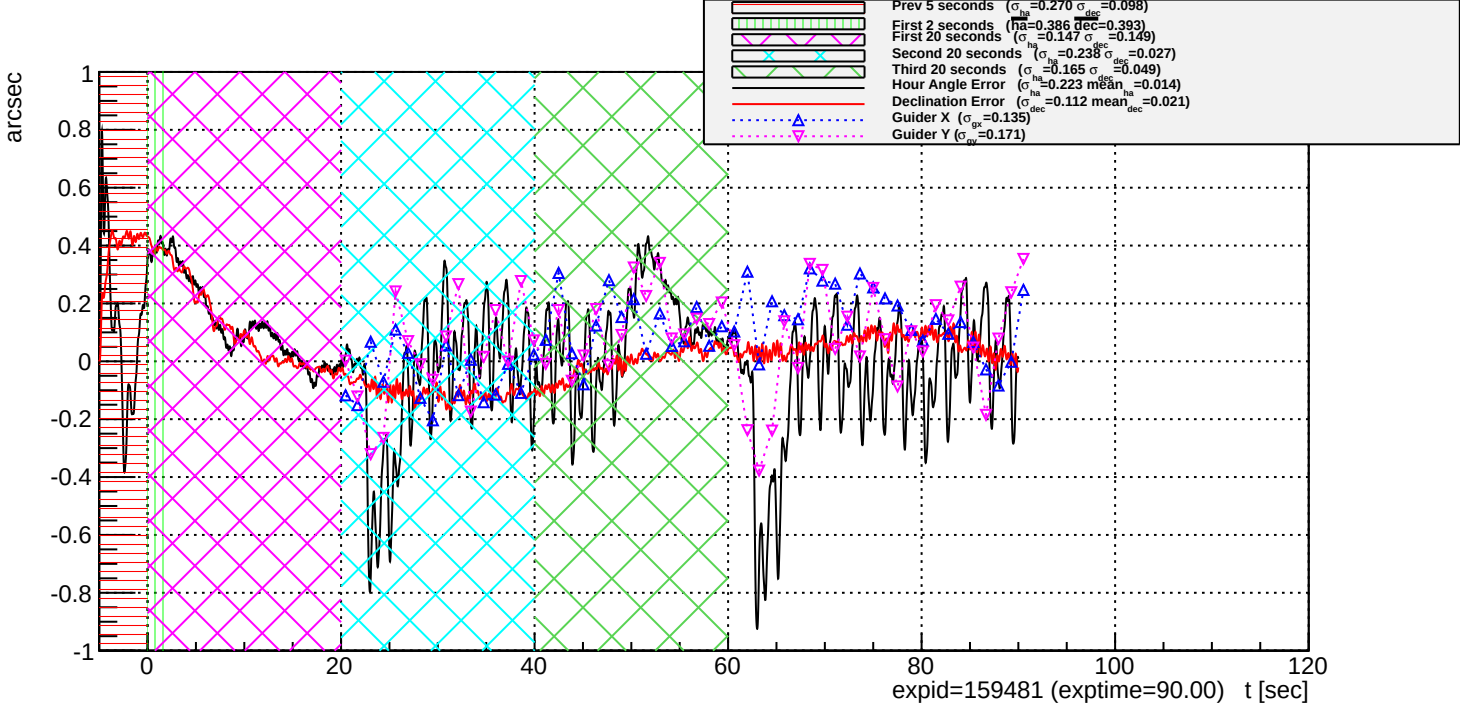

Prev 5 seconds (σ_{ha}=0.133 σ_{dec}=0.086)
First 2 seconds (ha=0.137 dec=-0.160)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.061)
Second 20 seconds (σ_{ha}=0.042 σ_{dec}=0.021)
Third 20 seconds (σ_{ha}=0.044 σ_{dec}=0.014)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.041 $mean_{dec}$=-0.013)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.105)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159476 (exptime=90.00) t [sec]

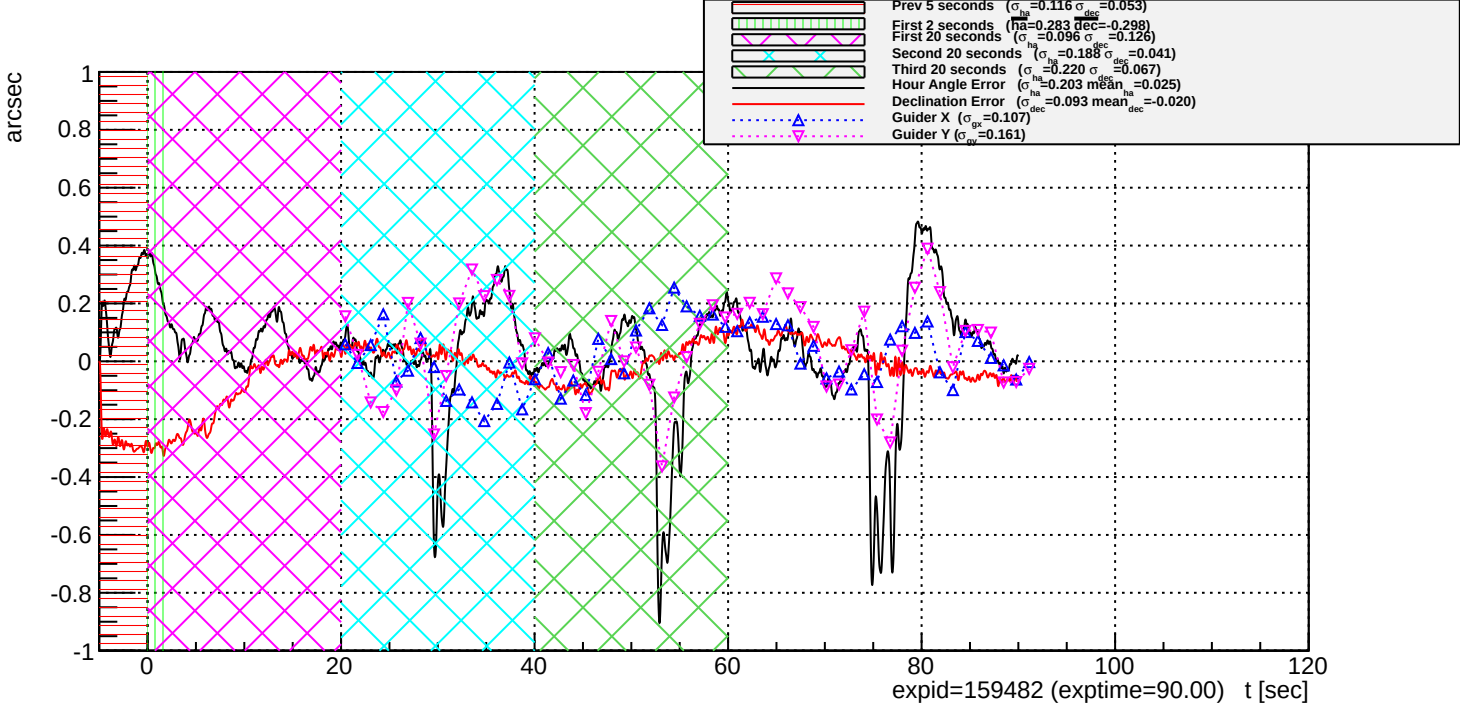

Prev 5 seconds (σ_{ha}=0.021 σ_{dec}=0.011)
First 2 seconds (ha=-0.036 dec=-0.040)
First 20 seconds (σ_{ha}=0.070 σ_{dec}=0.031)
Second 20 seconds (σ_{ha}=0.058 σ_{dec}=0.031)
Third 20 seconds (σ_{ha}=0.035 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=-0.009)
Declination Error (σ_{dec}=0.065 $mean_{dec}$=-0.008)
Guider X (σ_{gx}=0.114)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159477 (exptime=90.00)
t [sec]

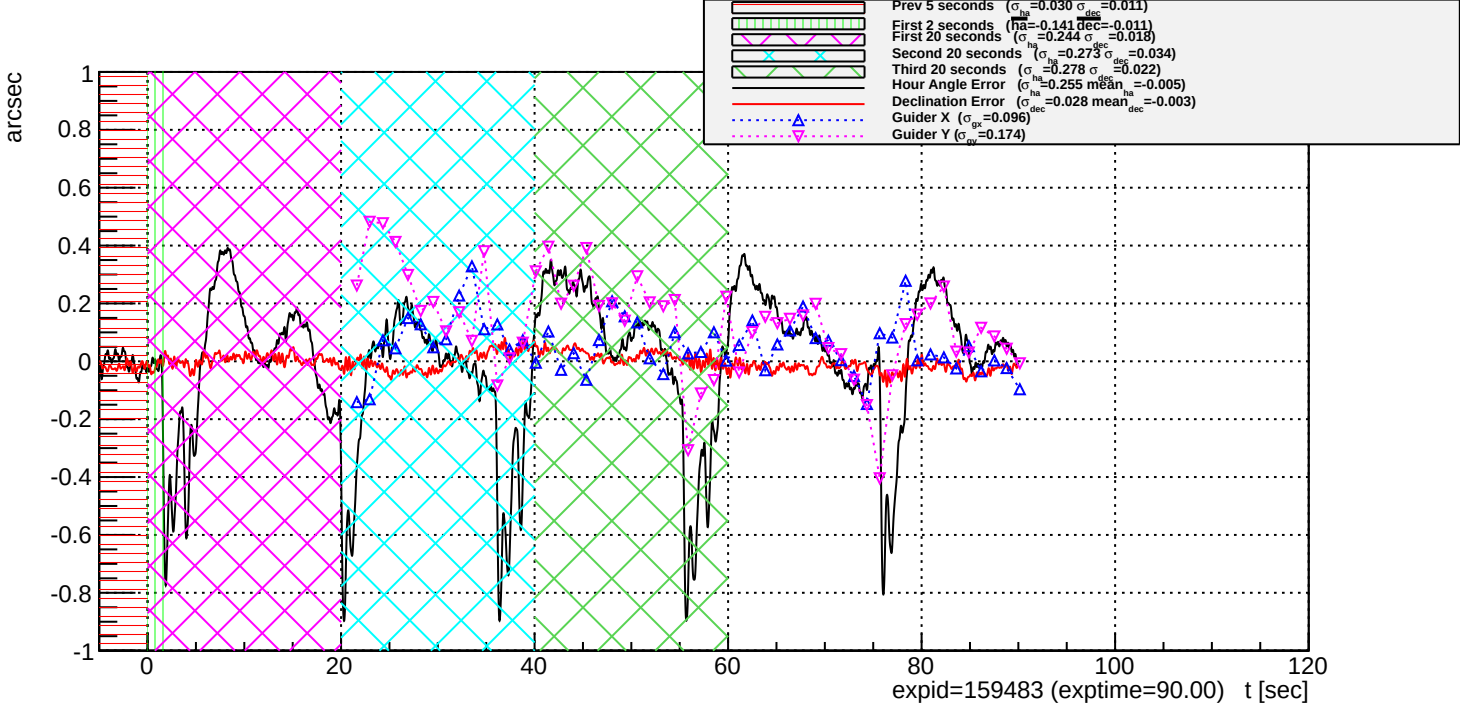

Prev 5 seconds (σ_{ha}=0.076 σ_{dec}=0.102)
First 2 seconds (μ_{ha}=-0.020 μ_{dec}=-0.029)
First 20 seconds (σ_{ha}=0.226 σ_{dec}=0.019)
Second 20 seconds (σ_{ha}=0.088 σ_{dec}=0.033)
Third 20 seconds (σ_{ha}=0.186 σ_{dec}=0.016)
Hour Angle Error (σ_{ha}=0.154 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.036 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.181)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159478 (exptime=90.00)
t [sec]

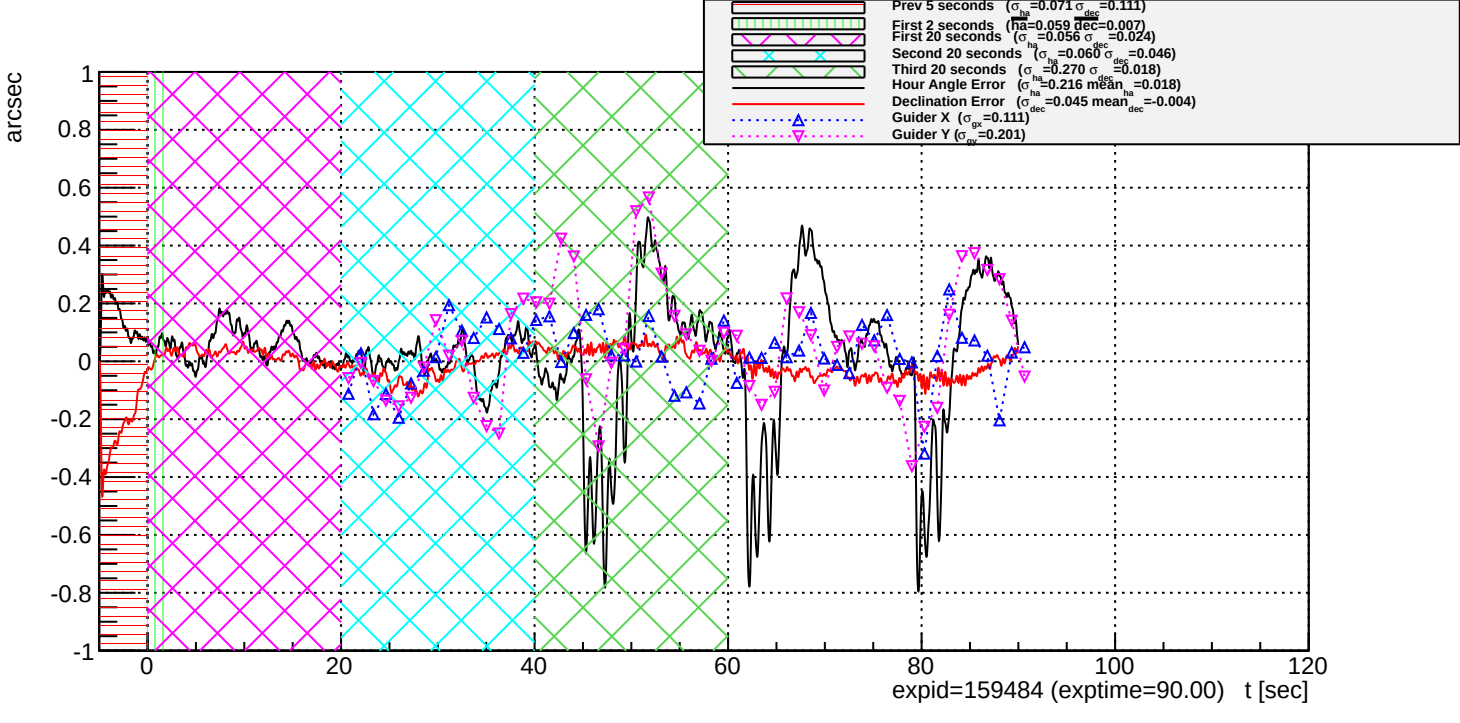

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.010)
First 2 seconds (ha=0.037 dec=-0.009)
First 20 seconds (σ_{ha}=0.046 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.046 σ_{dec}=0.018)
Hour Angle Error (σ_{ha}=0.053 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.017 $mean_{dec}$=-0.011)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159479 (exptime=90.00)
t [sec]

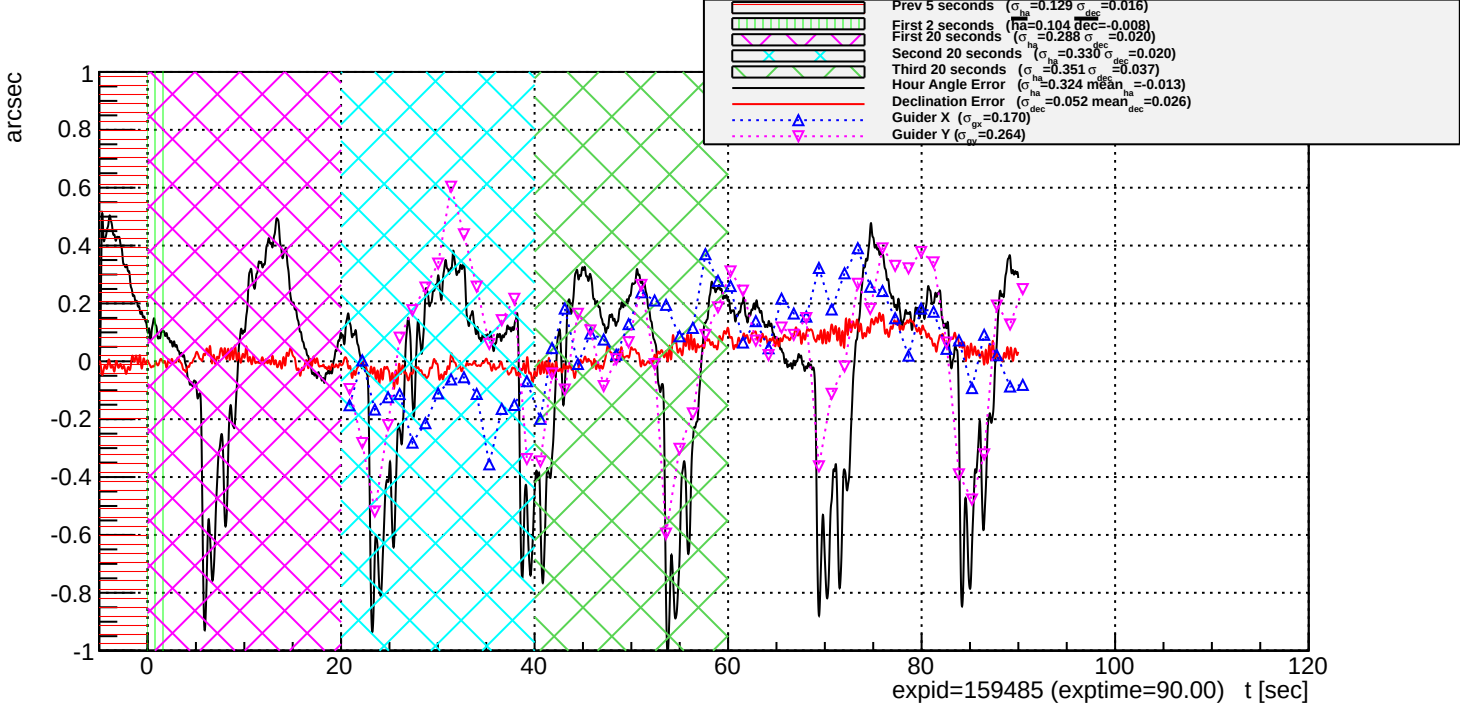

Prev 5 seconds (σ_{ha}=0.056 σ_{dec}=0.046)
First 2 seconds (ha=0.098 dec=0.167)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.054)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.058)
Third 20 seconds (σ_{ha}=0.041 σ_{dec}=0.119)
Hour Angle Error (σ_{ha}=0.051 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.116 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.151)
Guider Y (σ_{gy}=0.088)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159480 (exptime=90.00) t [sec]

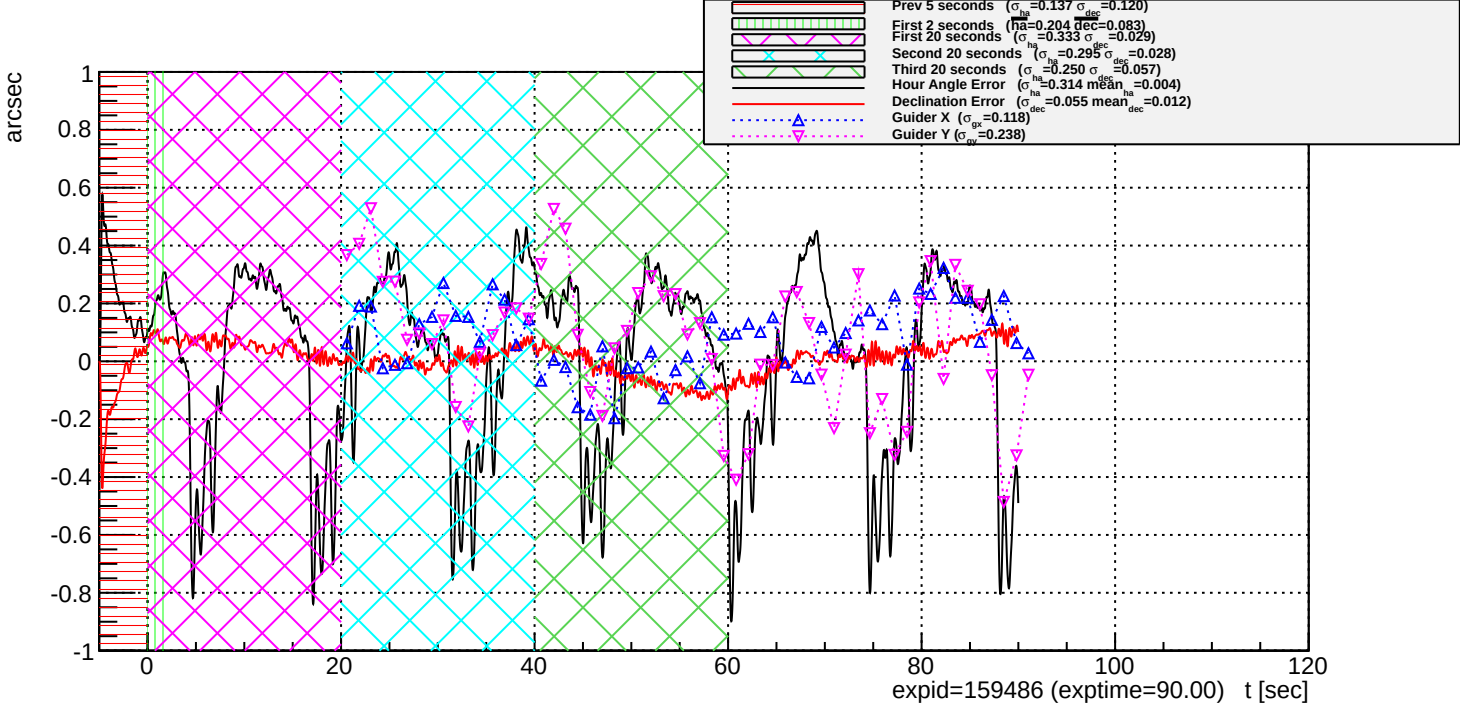

Prev 5 seconds (σ_{ha}=0.270 σ_{dec}=0.098)
First 2 seconds (ha=0.386 dec=0.393)
First 20 seconds (σ_{ha}=0.147 σ_{dec}=0.149)
Second 20 seconds (σ_{ha}=0.238 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.165 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.223 $mean_{ha}$=0.014)
Declination Error (σ_{dec}=0.112 $mean_{dec}$=0.021)
Guider X (σ_{gx}=0.135)
Guider Y (σ_{gy}=0.171)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159481 (exptime=90.00) t [sec]

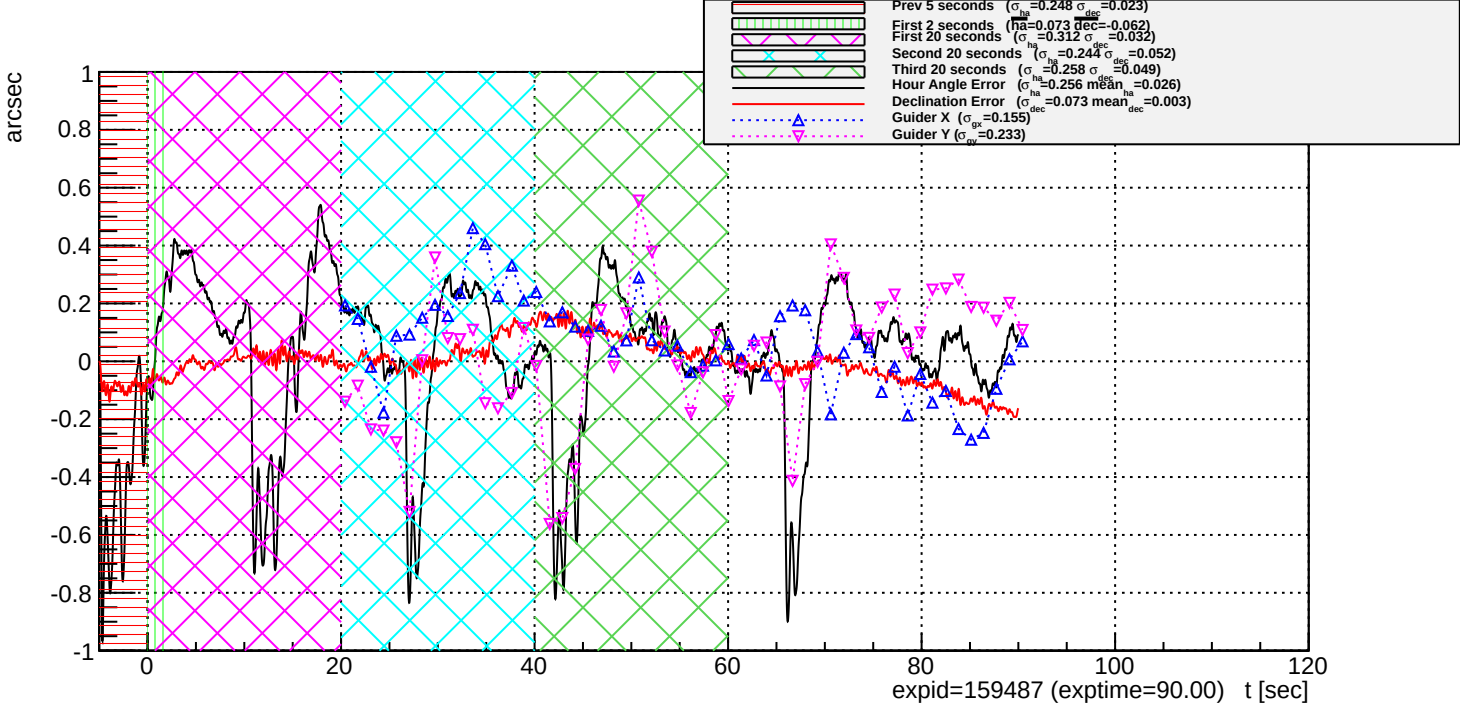

Prev 5 seconds (σ_{ha}=0.116 σ_{dec}=0.053)
First 2 seconds ($\overline{ha}$=0.283 $\overline{dec}$=-0.298)
First 20 seconds (σ_{ha}=0.096 σ_{dec}=0.126)
Second 20 seconds (σ_{ha}=0.188 σ_{dec}=0.041)
Third 20 seconds (σ_{ha}=0.220 σ_{dec}=0.067)
Hour Angle Error (σ_{ha}=0.203 $mean_{ha}$=0.025)
Declination Error (σ_{dec}=0.093 $mean_{dec}$=-0.020)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.161)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159482 (exptime=90.00) t [sec]

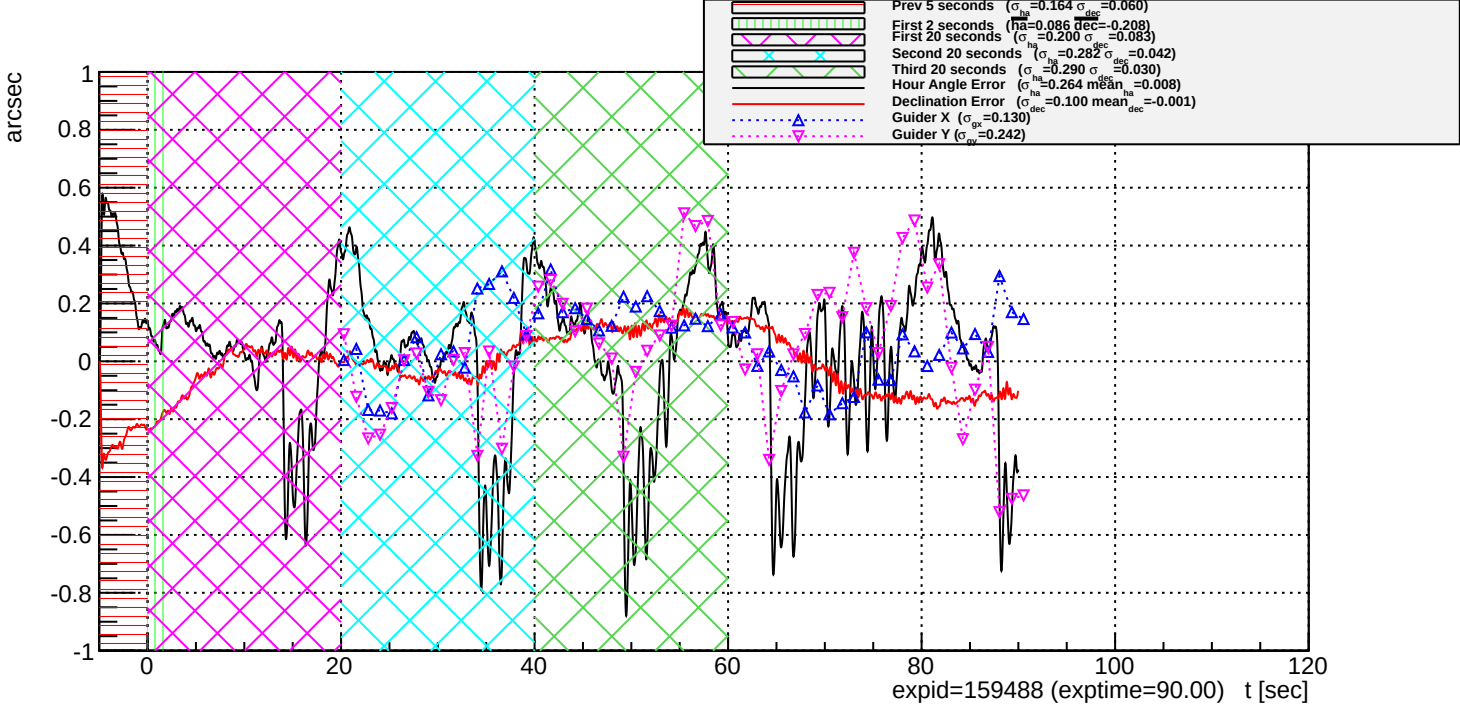

Prev 5 seconds (σ_{ha}=0.030 σ_{dec}=0.011)
First 2 seconds ($\overline{ha}$=-0.141 $\overline{dec}$=-0.011)
First 20 seconds (σ_{ha}=0.244 σ_{dec}=0.018)
Second 20 seconds (σ_{ha}=0.273 σ_{dec}=0.034)
Third 20 seconds (σ_{ha}=0.278 σ_{dec}=0.022)
Hour Angle Error (σ_{ha}=0.255 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.028 $mean_{dec}$=-0.003)
Guider X (σ_{gx}=0.096)
Guider Y (σ_{gy}=0.174)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159483 (exptime=90.00) t [sec]

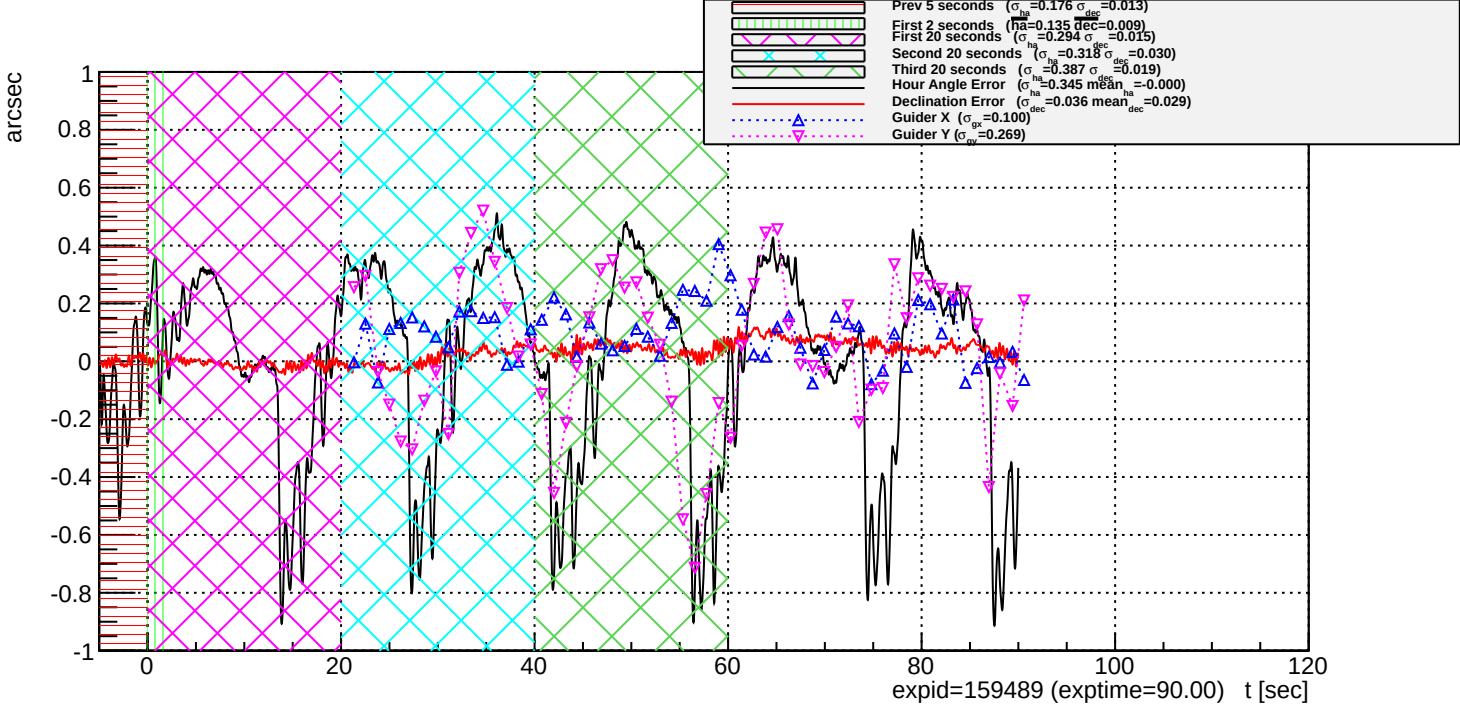

Prev 5 seconds (σ_{ha}=0.071 σ_{dec}=0.111)
First 2 seconds (σ_{ha}=0.059 σ_{dec}=0.007)
First 20 seconds (σ_{ha}=0.056 σ_{dec}=0.024)
Second 20 seconds (σ_{ha}=0.060 σ_{dec}=0.046)
Third 20 seconds (σ_{ha}=0.270 σ_{dec}=0.018)
Hour Angle Error (σ_{ha}=0.216 $mean_{ha}$=0.018)
Declination Error (σ_{dec}=0.045 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.111)
Guider Y (σ_{gy}=0.201)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159484 (exptime=90.00) t [sec]

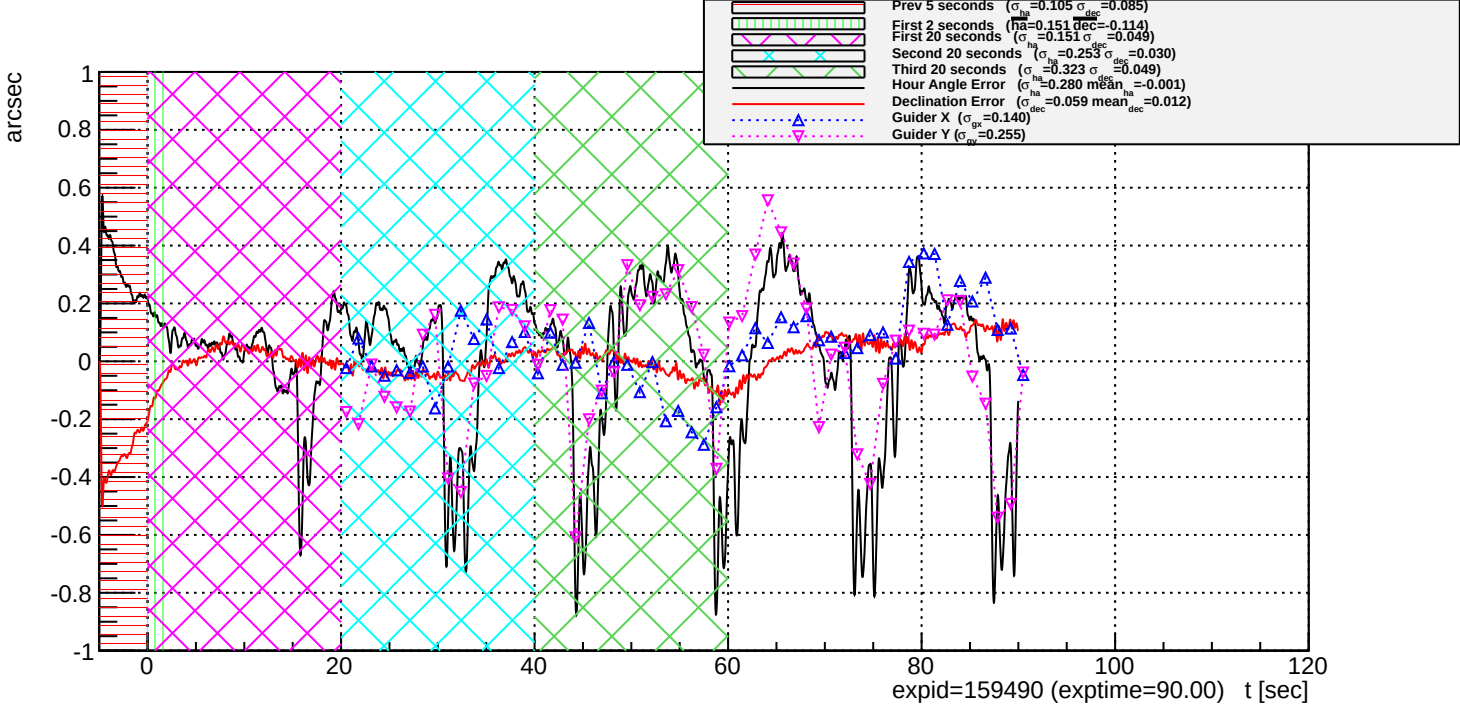

Prev 5 seconds (σ_{ha}=0.129 σ_{dec}=0.016)
First 2 seconds (ha=0.104 dec=-0.008)
First 20 seconds (σ_{ha}=0.288 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.330 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.351 σ_{dec}=0.037)
Hour Angle Error (σ_{ha}=0.324 $mean_{ha}$=-0.013)
Declination Error (σ_{dec}=0.052 $mean_{dec}$=0.026)
Guider X (σ_{gx}=0.170)
Guider Y (σ_{gy}=0.264)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159485 (exptime=90.00) t [sec]

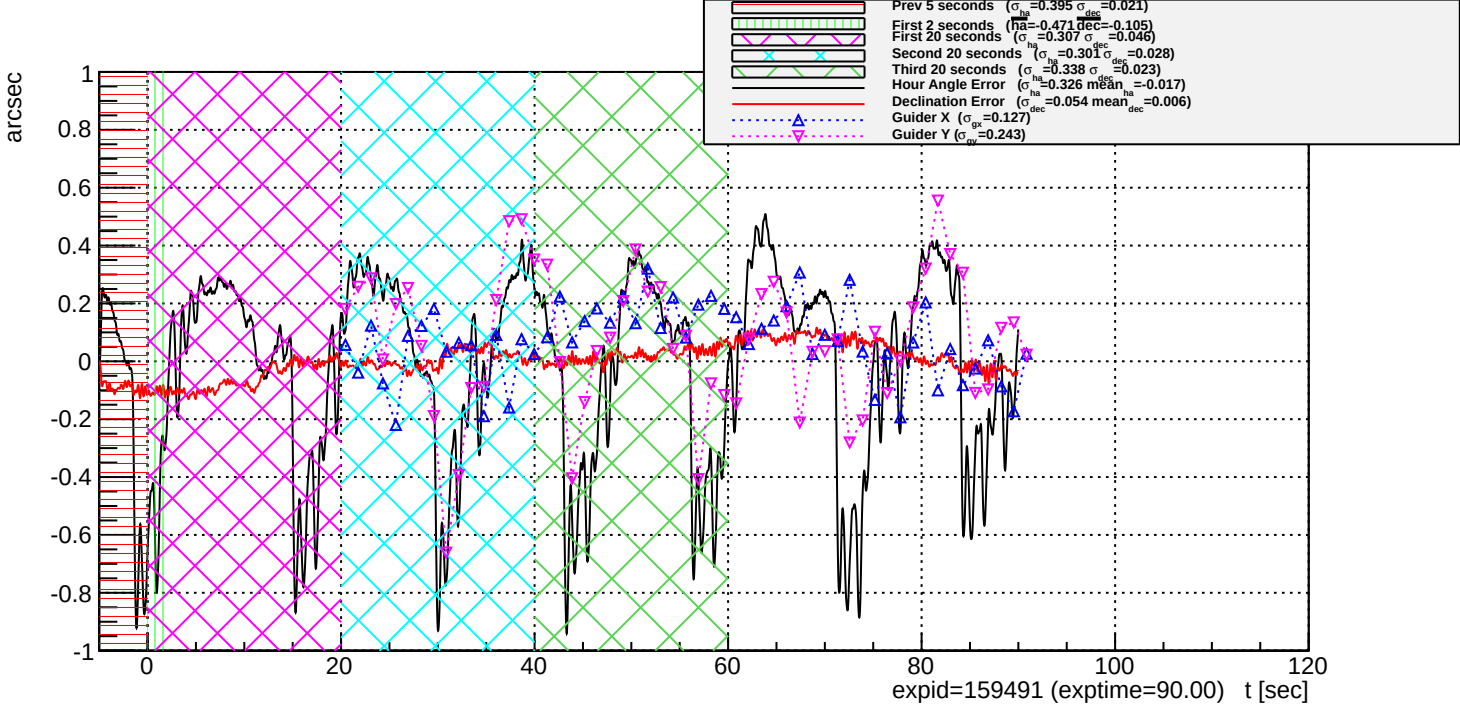

Prev 5 seconds (σ_{ha}=0.137 σ_{dec}=0.120)
First 2 seconds (ha=0.204 dec=0.083)
First 20 seconds (σ_{ha}=0.333 σ_{dec}=0.029)
Second 20 seconds (σ_{ha}=0.295 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.250 σ_{dec}=0.057)
Hour Angle Error (σ_{ha}=0.314 $mean_{ha}$=0.004)
Declination Error (σ_{dec}=0.055 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.118)
Guider Y (σ_{gy}=0.238)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159486 (exptime=90.00) t [sec]

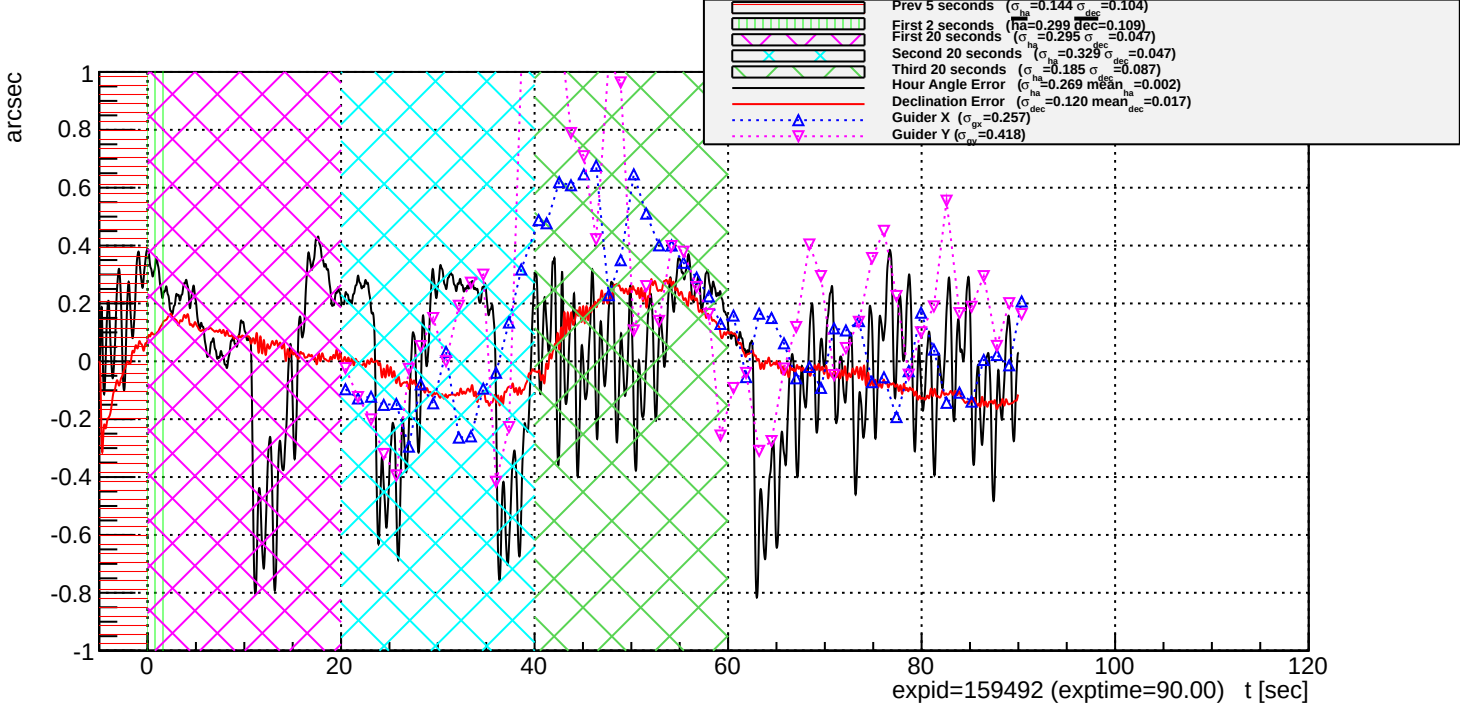

Prev 5 seconds (σ_{ha}=0.248 σ_{dec}=0.023)
First 2 seconds (σ_{ha}=0.073 σ_{dec}=-0.062)
First 20 seconds (σ_{ha}=0.312 σ_{dec}=0.032)
Second 20 seconds (σ_{ha}=0.244 σ_{dec}=0.052)
Third 20 seconds (σ_{ha}=0.258 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.256 $mean_{ha}$=0.026)
Declination Error (σ_{dec}=0.073 $mean_{dec}$=0.003)
Guider X (σ_{gx}=0.155)
Guider Y (σ_{gy}=0.233)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159487 (exptime=90.00)
t [sec]

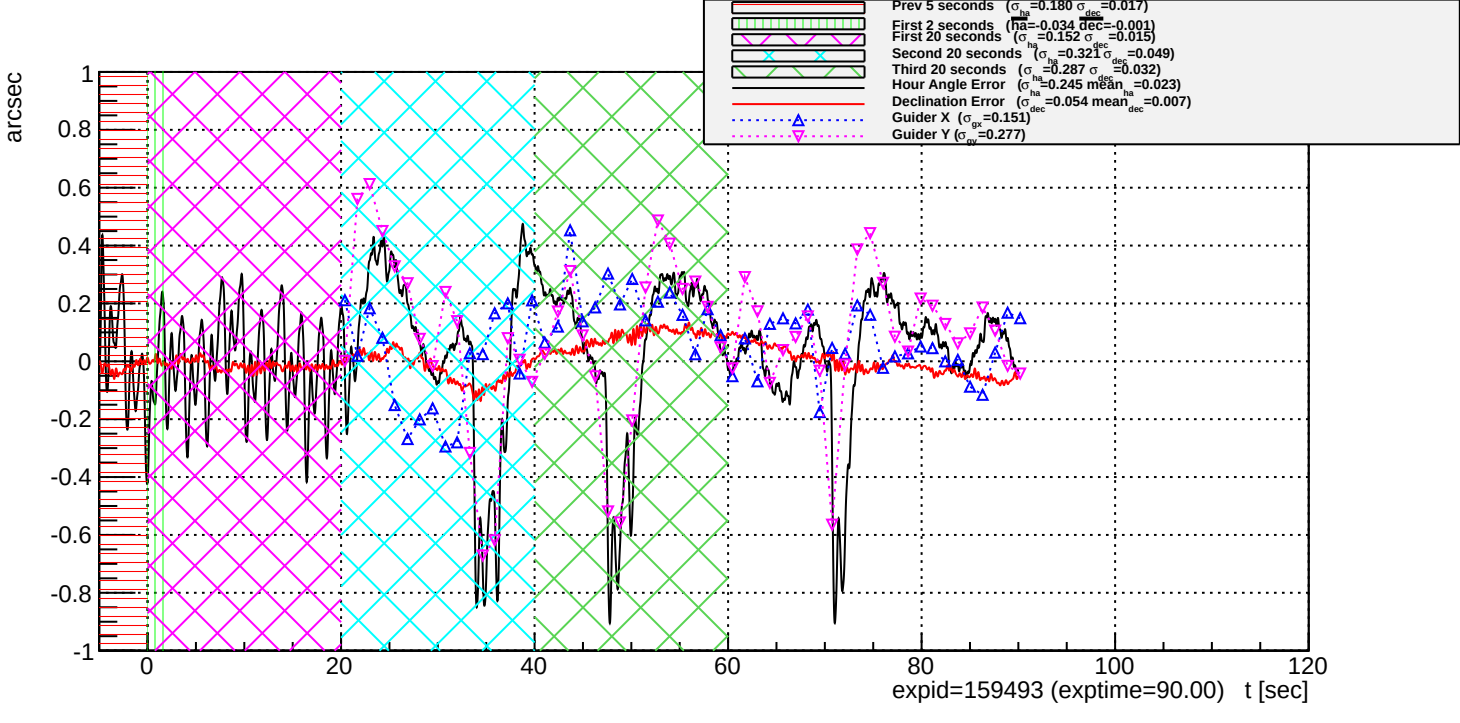

Prev 5 seconds (σ_{ha}=0.164 σ_{dec}=0.060)
First 2 seconds (ha=0.086 dec=-0.208)
First 20 seconds (σ_{ha}=0.200 σ_{dec}=0.083)
Second 20 seconds (σ_{ha}=0.282 σ_{dec}=0.042)
Third 20 seconds (σ_{ha}=0.290 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.264 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.100 $mean_{dec}$=-0.001)
Guider X (σ_{gx}=0.130)
Guider Y (σ_{gy}=0.242)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159488 (exptime=90.00) t [sec]

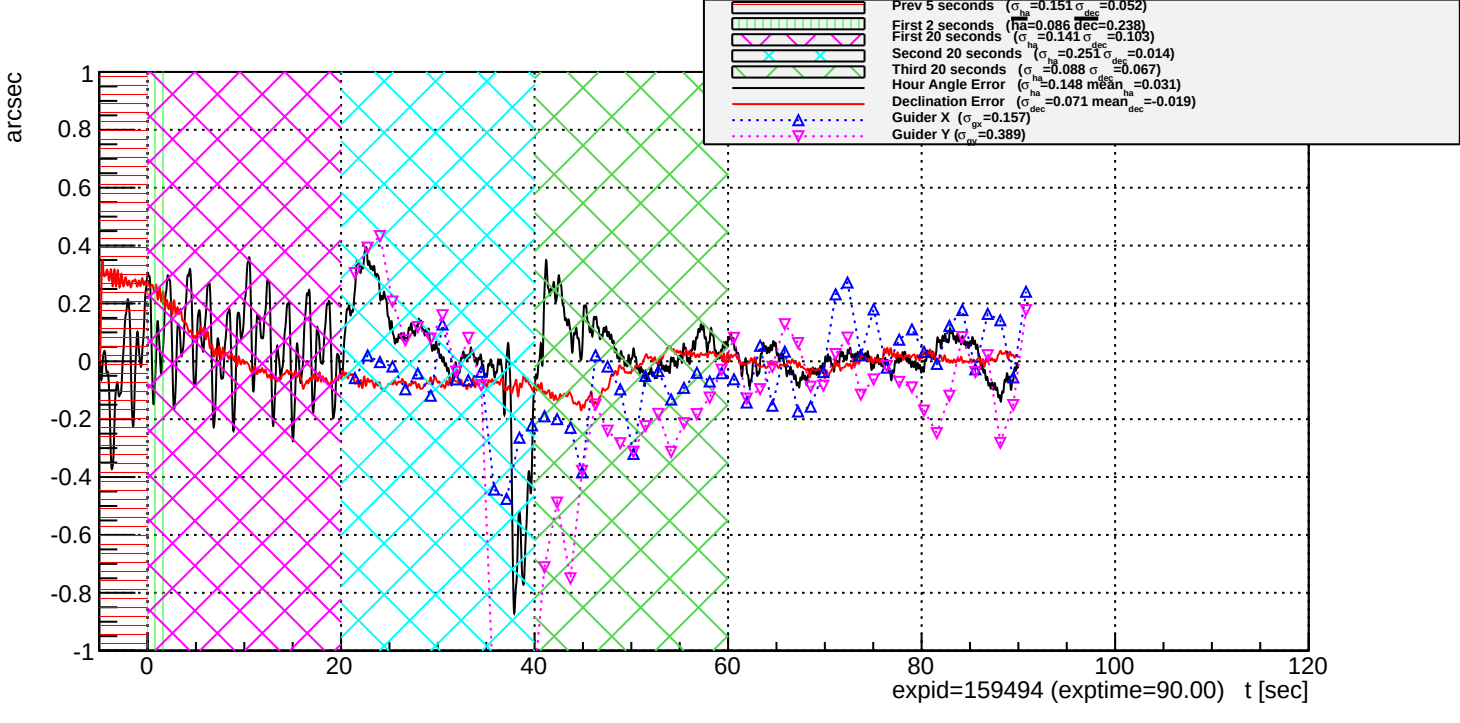

Prev 5 seconds (σ_{ha}=0.176 σ_{dec}=0.013)
First 2 seconds (ha=0.135 dec=0.009)
First 20 seconds (σ_{ha}=0.294 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.318 σ_{dec}=0.030)
Third 20 seconds (σ_{ha}=0.387 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.345 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.036 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.100)
Guider Y (σ_{gy}=0.269)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159489 (exptime=90.00) t [sec]

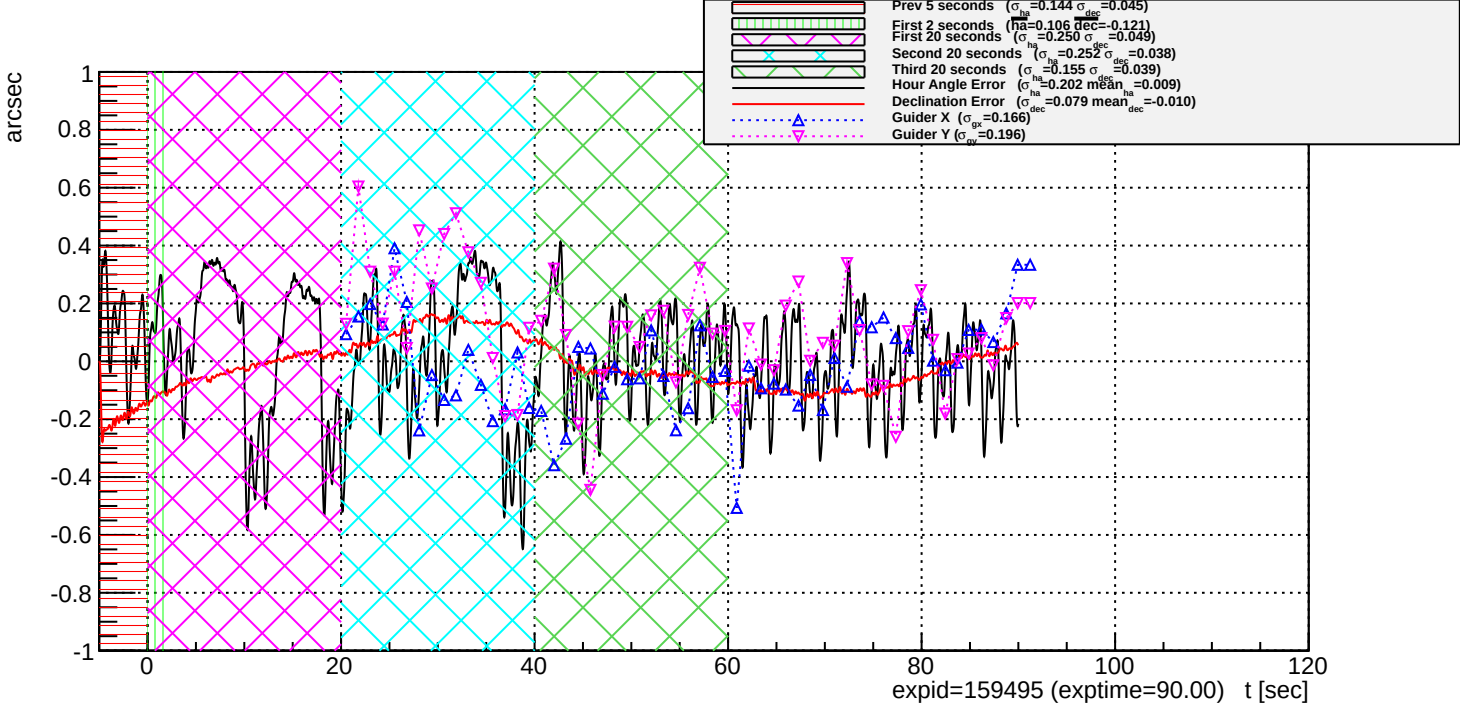

Prev 5 seconds (σ_{ha}=0.105 σ_{dec}=0.085)
First 2 seconds ($\overline{ha}$=0.151 $\overline{dec}$=-0.114)
First 20 seconds (σ_{ha}=0.151 σ_{dec}=0.049)
Second 20 seconds (σ_{ha}=0.253 σ_{dec}=0.030)
Third 20 seconds (σ_{ha}=0.323 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.280 $mean_{ha}$=-0.001)
Declination Error (σ_{dec}=0.059 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.140)
Guider Y (σ_{gy}=0.255)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159490 (exptime=90.00) t [sec]

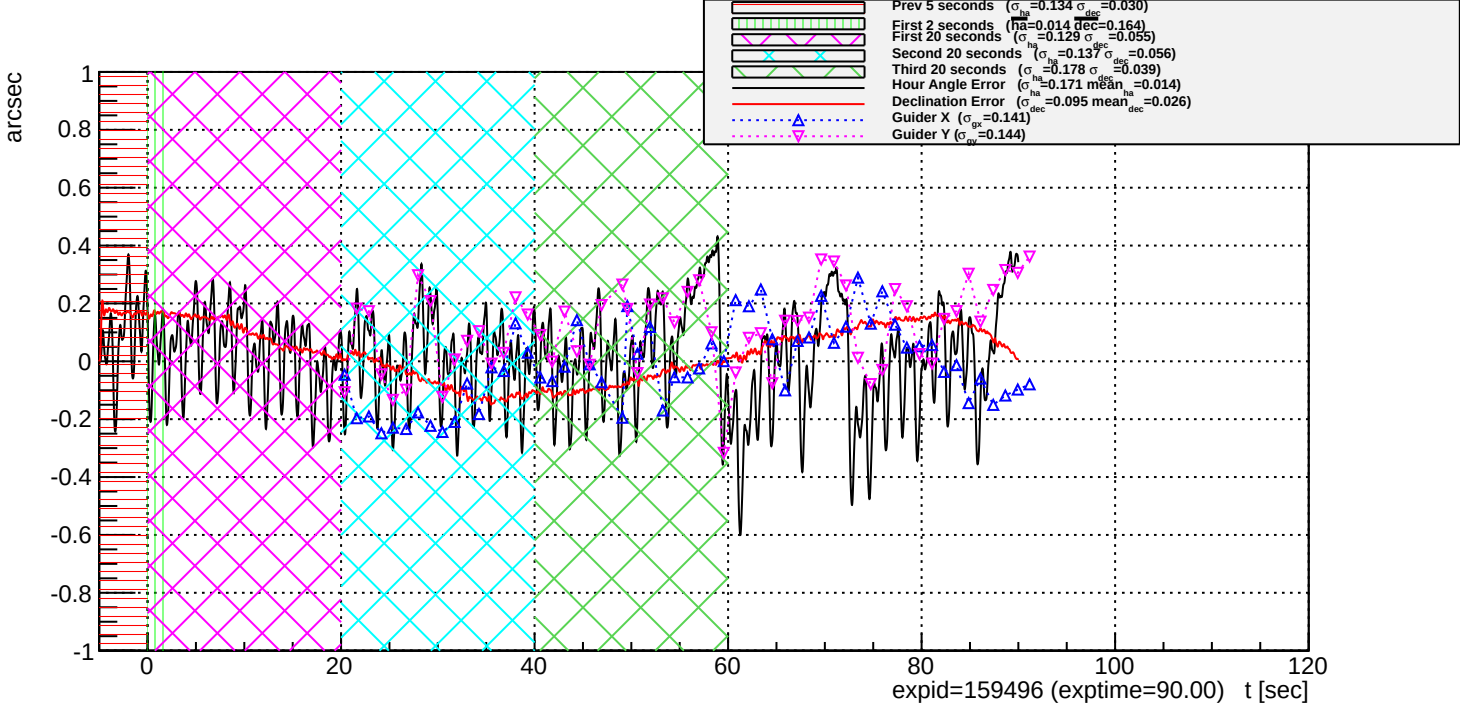

Prev 5 seconds (σ_{ha}=0.395 σ_{dec}=0.021)
First 2 seconds ($\overline{ha}$=-0.471 $\overline{dec}$=-0.105)
First 20 seconds (σ_{ha}=0.307 σ_{dec}=0.046)
Second 20 seconds (σ_{ha}=0.301 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.338 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.326 $mean_{ha}$=-0.017)
Declination Error (σ_{dec}=0.054 $mean_{dec}$=0.006)
Guider X (σ_{gx}=0.127)
Guider Y (σ_{gy}=0.243)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159491 (exptime=90.00) t [sec]

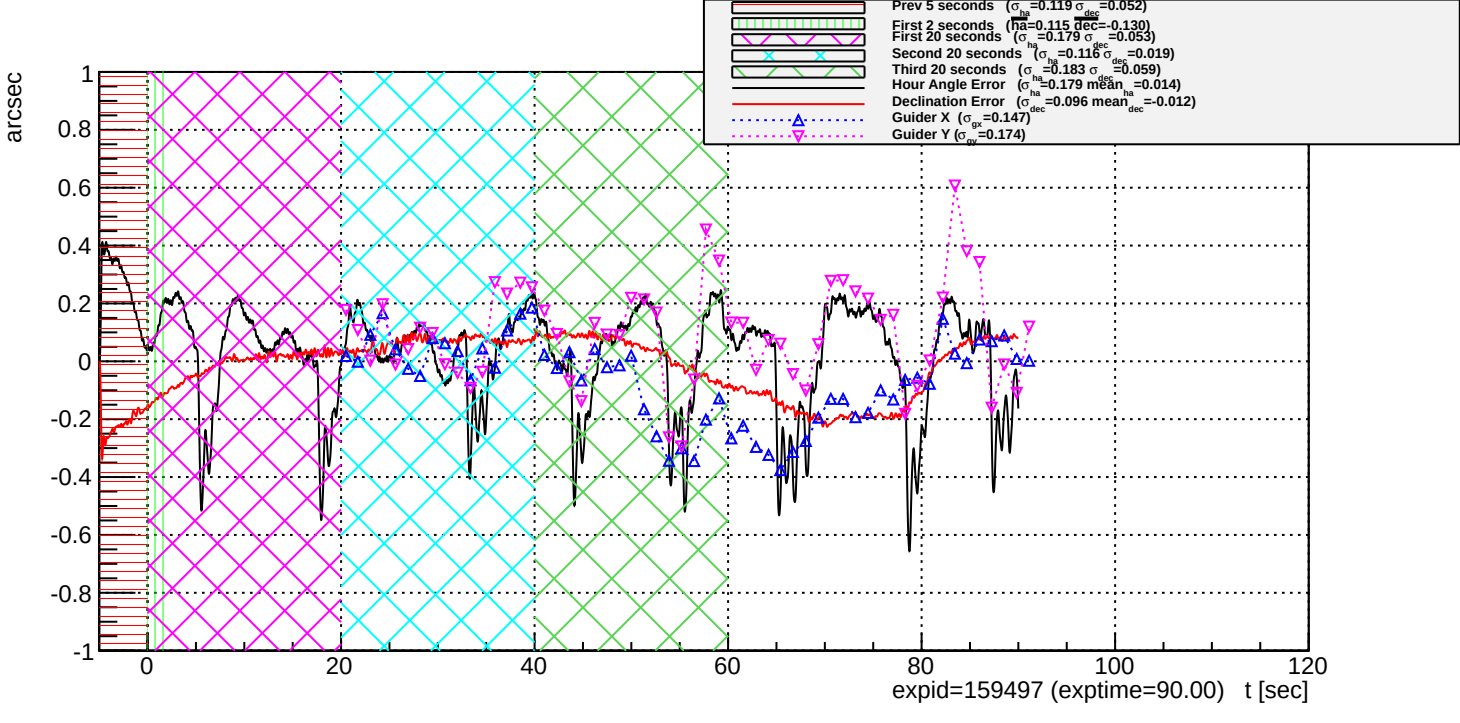

Prev 5 seconds (σ_{ha}=0.144 σ_{dec}=0.104)
First 2 seconds (ha=0.299 dec=0.109)
First 20 seconds (σ_{ha}=0.295 σ_{dec}=0.047)
Second 20 seconds (σ_{ha}=0.329 σ_{dec}=0.047)
Third 20 seconds (σ_{ha}=0.185 σ_{dec}=0.087)
Hour Angle Error (σ_{ha}=0.269 $mean_{ha}$=0.002)
Declination Error (σ_{dec}=0.120 $mean_{dec}$=0.017)
Guider X (σ_{gx}=0.257)
Guider Y (σ_{gy}=0.418)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159492 (exptime=90.00)
t [sec]

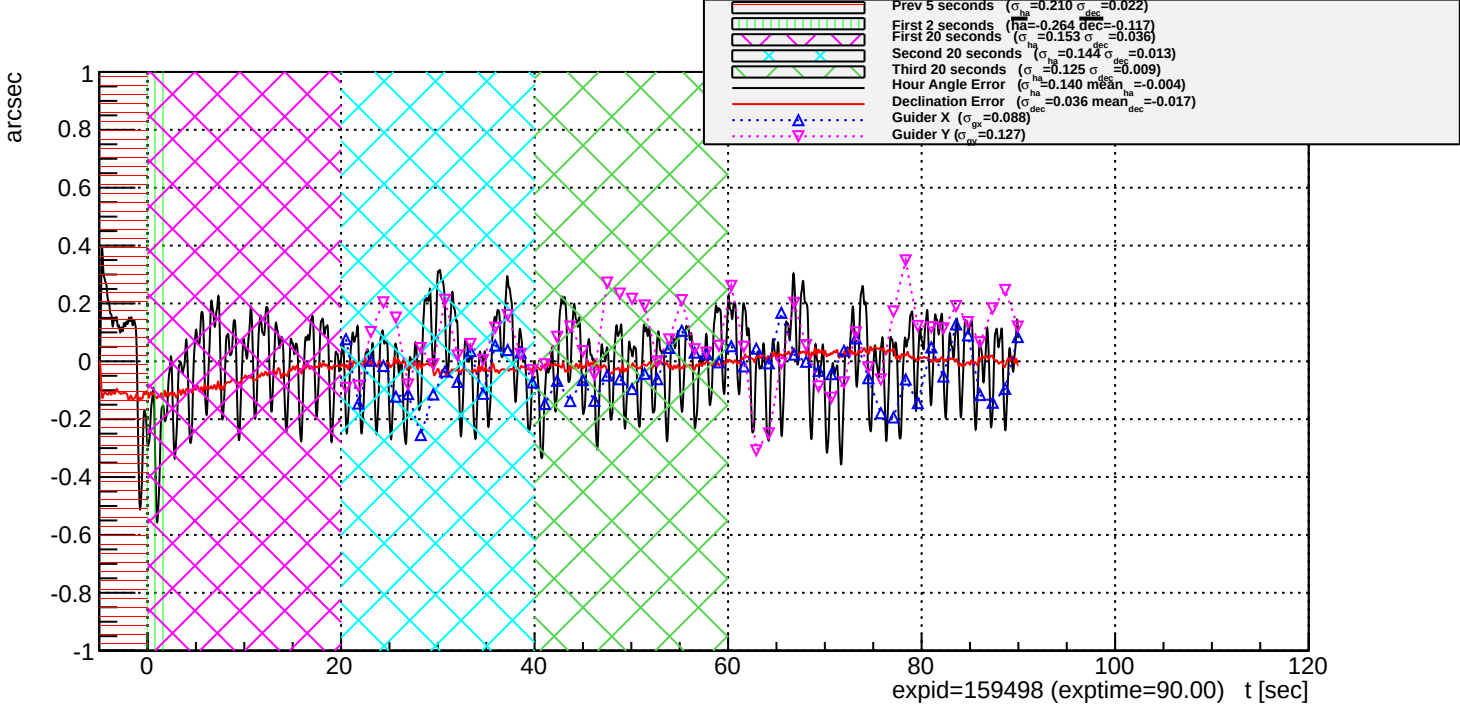

Prev 5 seconds (σ_{ha}=0.180 σ_{dec}=0.017)
First 2 seconds ($\overline{ha}$=-0.034 $\overline{dec}$=-0.001)
First 20 seconds (σ_{ha}=0.152 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.321 σ_{dec}=0.049)
Third 20 seconds (σ_{ha}=0.287 σ_{dec}=0.032)
Hour Angle Error (σ_{ha}=0.245 $mean_{ha}$=0.023)
Declination Error (σ_{dec}=0.054 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.151)
Guider Y (σ_{gy}=0.277)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159493 (exptime=90.00) t [sec]

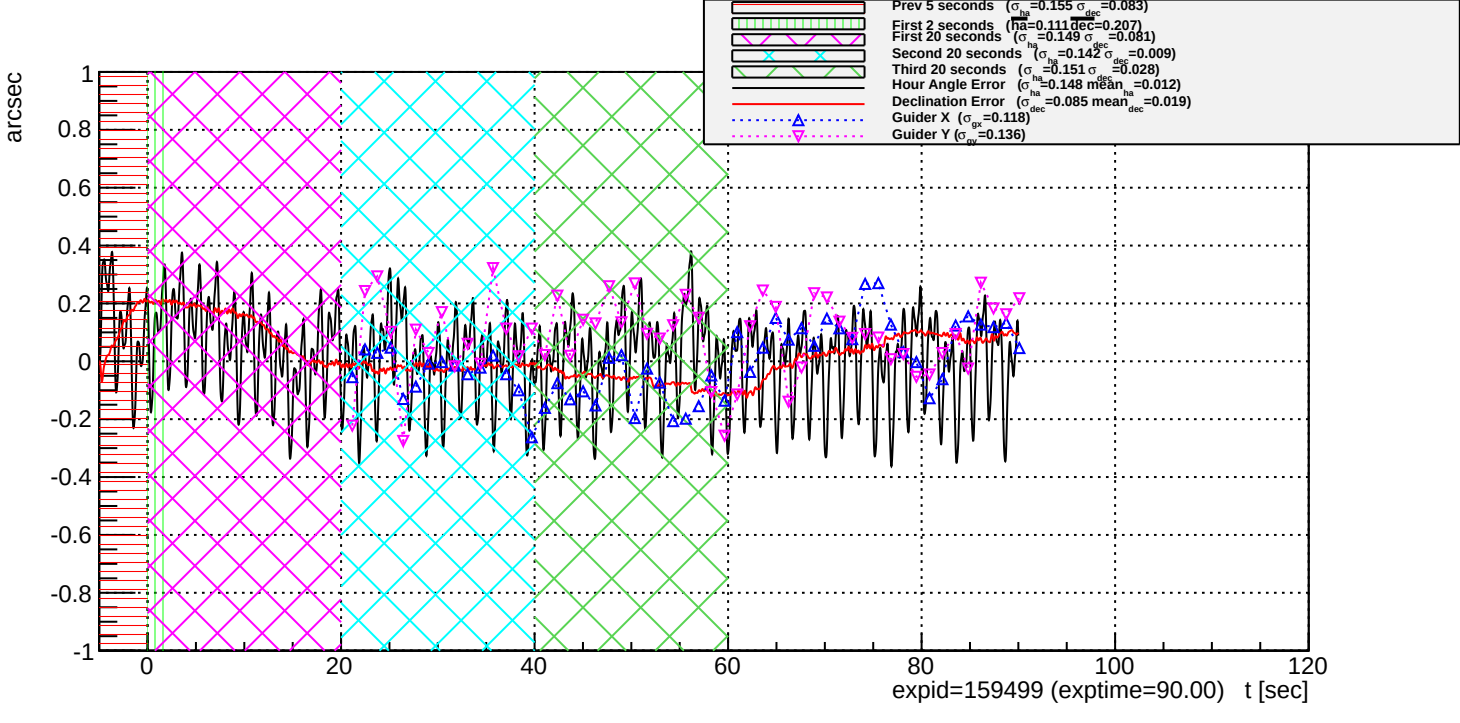

Prev 5 seconds (σ_{ha}=0.151 σ_{dec}=0.052)
First 2 seconds (σ_{ha}=0.086 σ_{dec}=0.238)
First 20 seconds (σ_{ha}=0.141 σ_{dec}=0.103)
Second 20 seconds (σ_{ha}=0.251 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.088 σ_{dec}=0.067)
Hour Angle Error (σ_{ha}=0.148 $mean_{ha}$=0.031)
Declination Error (σ_{dec}=0.071 $mean_{dec}$=-0.019)
Guider X (σ_{gx}=0.157)
Guider Y (σ_{gy}=0.389)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159494 (exptime=90.00)
t [sec]

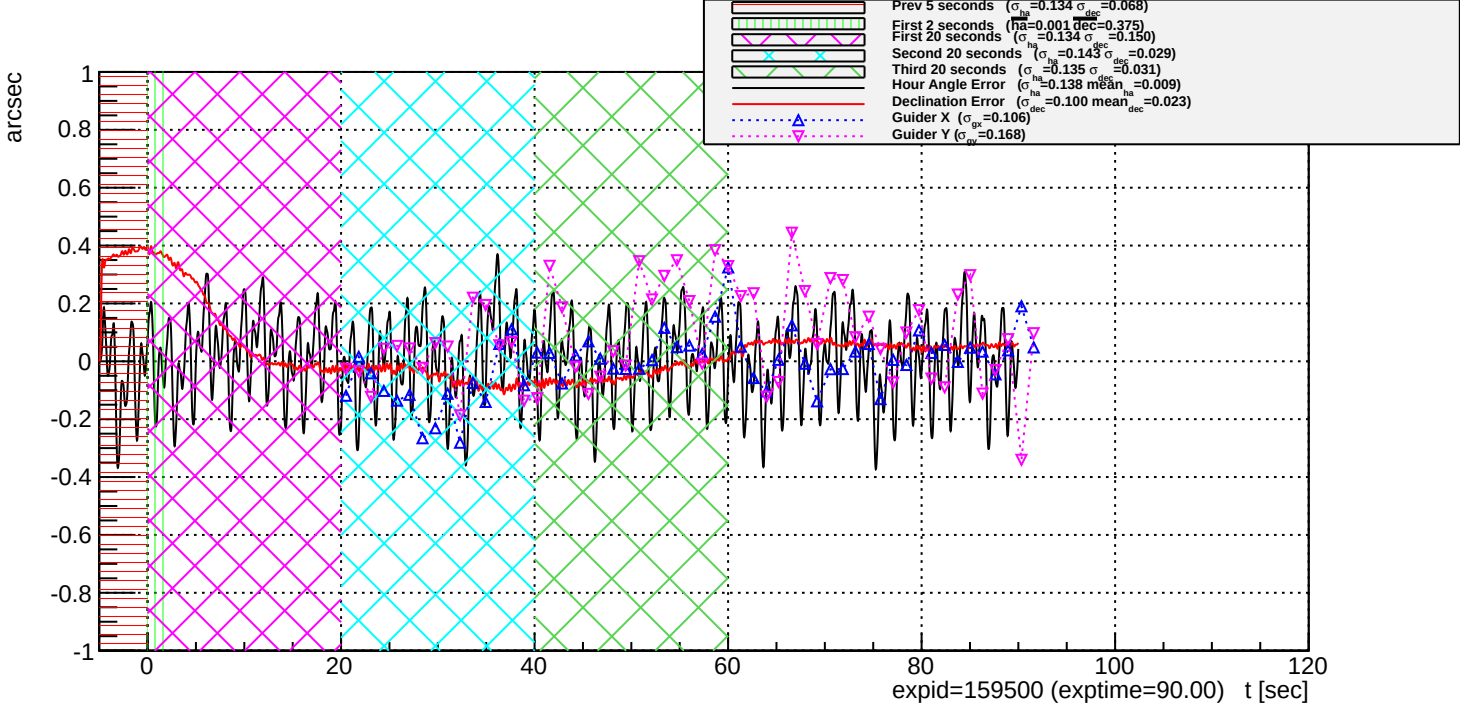

Prev 5 seconds (σ_{ha}=0.144 σ_{dec}=0.045)
First 2 seconds (ha=0.106 dec=-0.121)
First 20 seconds (σ_{ha}=0.250 σ_{dec}=0.049)
Second 20 seconds (σ_{ha}=0.252 σ_{dec}=0.038)
Third 20 seconds (σ_{ha}=0.155 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.202 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.079 $mean_{dec}$=-0.010)
Guider X (σ_{gx}=0.166)
Guider Y (σ_{gy}=0.196)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159495 (exptime=90.00) t [sec]

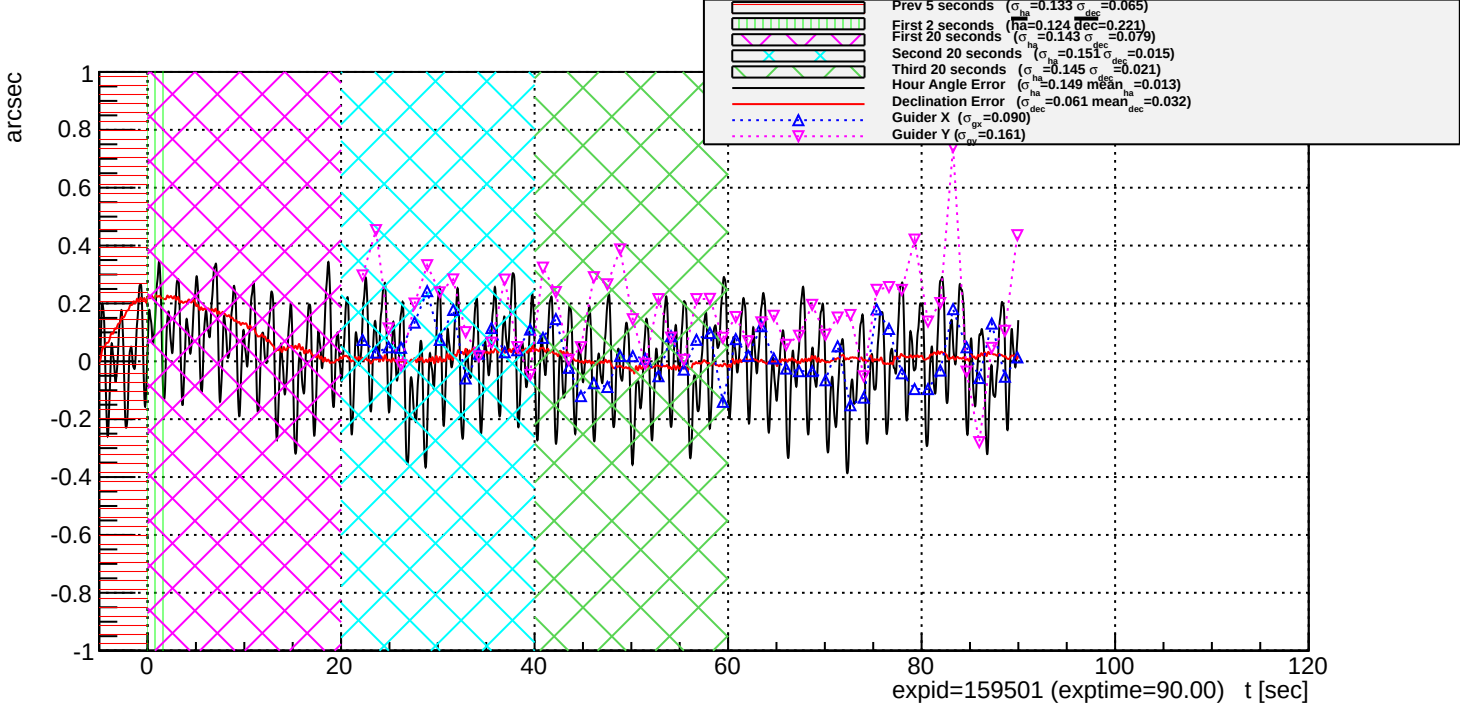

Prev 5 seconds (σ_{ha}=0.134 σ_{dec}=0.030)
First 2 seconds (ha=0.014 dec=0.164)
First 20 seconds (σ_{ha}=0.129 σ_{dec}=0.055)
Second 20 seconds (σ_{ha}=0.137 σ_{dec}=0.056)
Third 20 seconds (σ_{ha}=0.178 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.171 $mean_{ha}$=0.014)
Declination Error (σ_{dec}=0.095 $mean_{dec}$=0.026)
Guider X (σ_{gx}=0.141)
Guider Y (σ_{gy}=0.144)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159496 (exptime=90.00) t [sec]

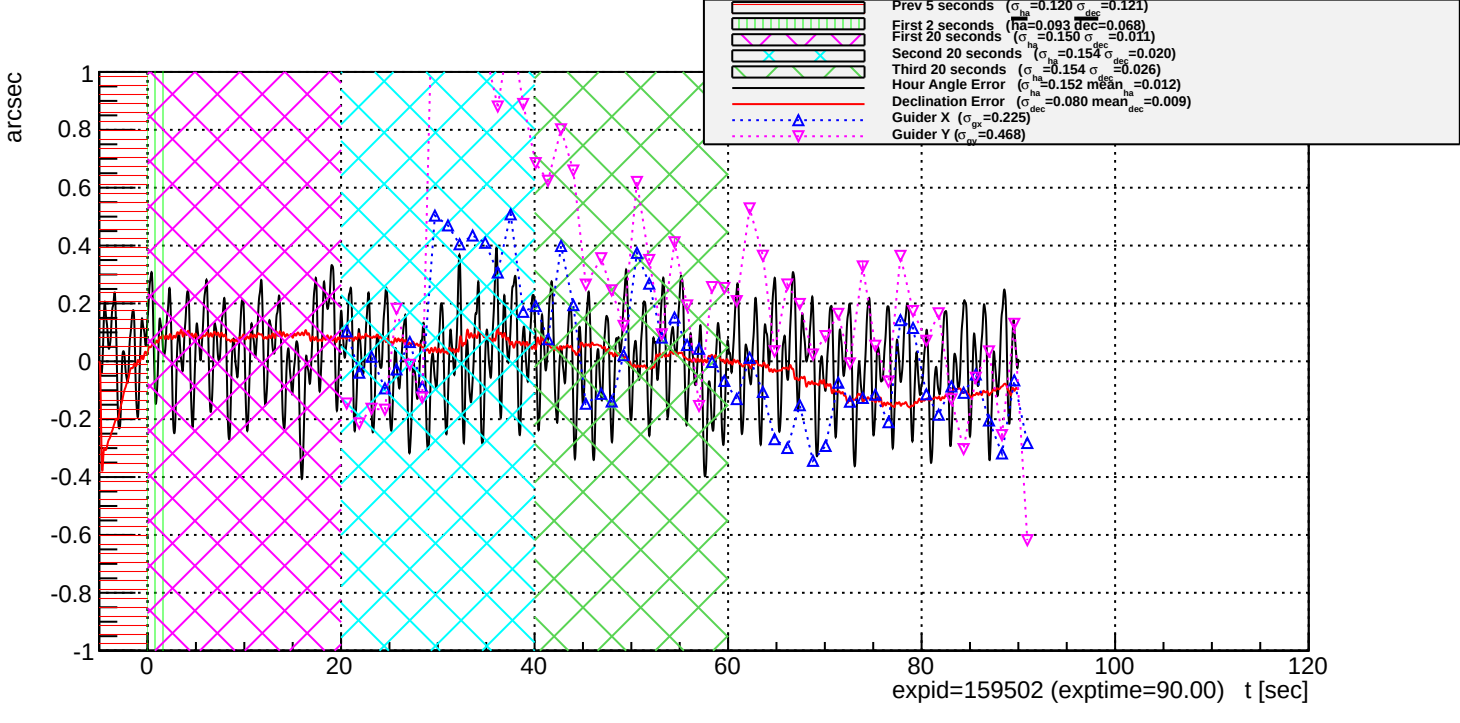

Prev 5 seconds (σ_{ha}=0.119 σ_{dec}=0.052)
First 2 seconds (σ_{ha}=0.115 σ_{dec}=-0.130)
First 20 seconds (σ_{ha}=0.179 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.118 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.183 σ_{dec}=0.059)
Hour Angle Error (σ_{ha}=0.179 $mean_{ha}$=0.014)
Declination Error (σ_{dec}=0.096 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.147)
Guider Y (σ_{gy}=0.174)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159497 (exptime=90.00) t [sec]

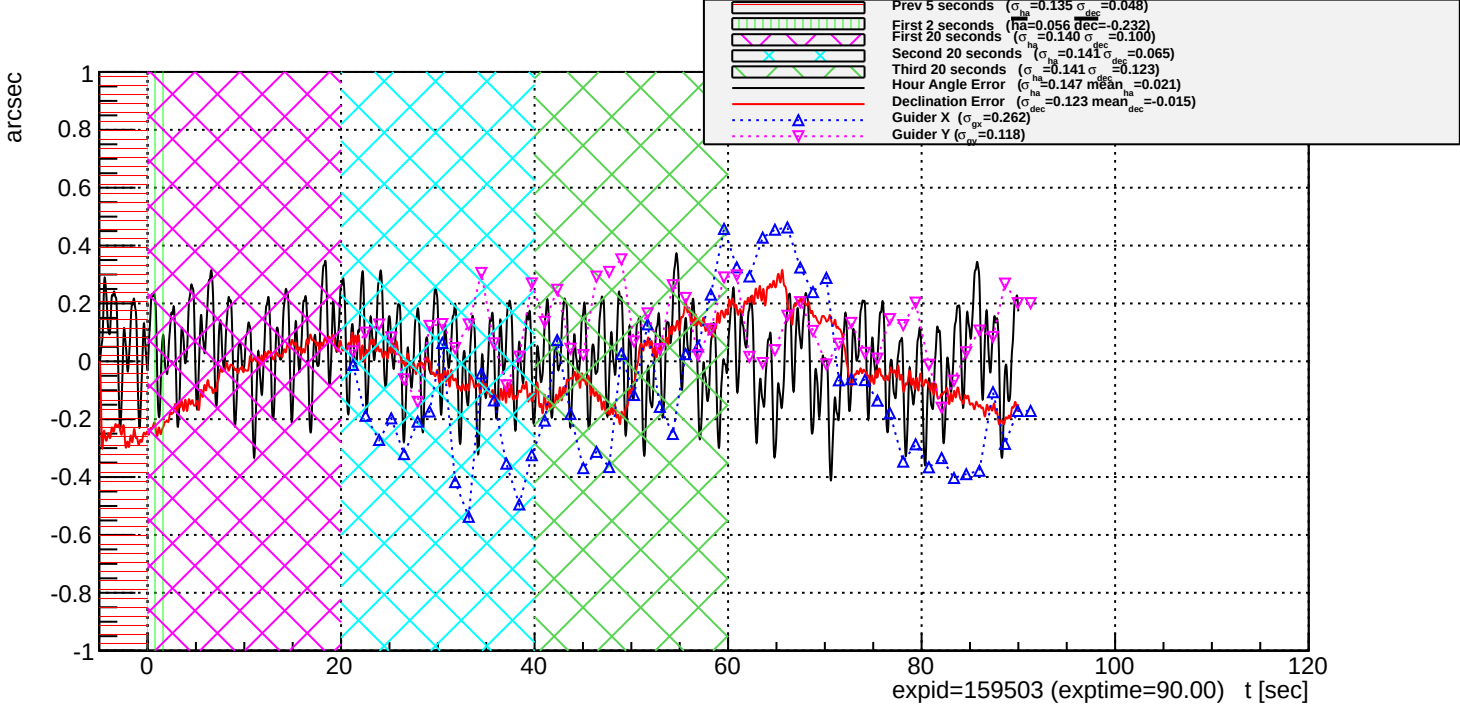

Prev 5 seconds (σ_{ha}=0.210 σ_{dec}=0.022)
First 2 seconds (ha=-0.264 dec=-0.117)
First 20 seconds (σ_{ha}=0.153 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.144 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.125 σ_{dec}=0.009)
Hour Angle Error (σ_{ha}=0.140 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.036 $mean_{dec}$=-0.017)
Guider X (σ_{gx}=0.088)
Guider Y (σ_{gy}=0.127)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159498 (exptime=90.00) t [sec]

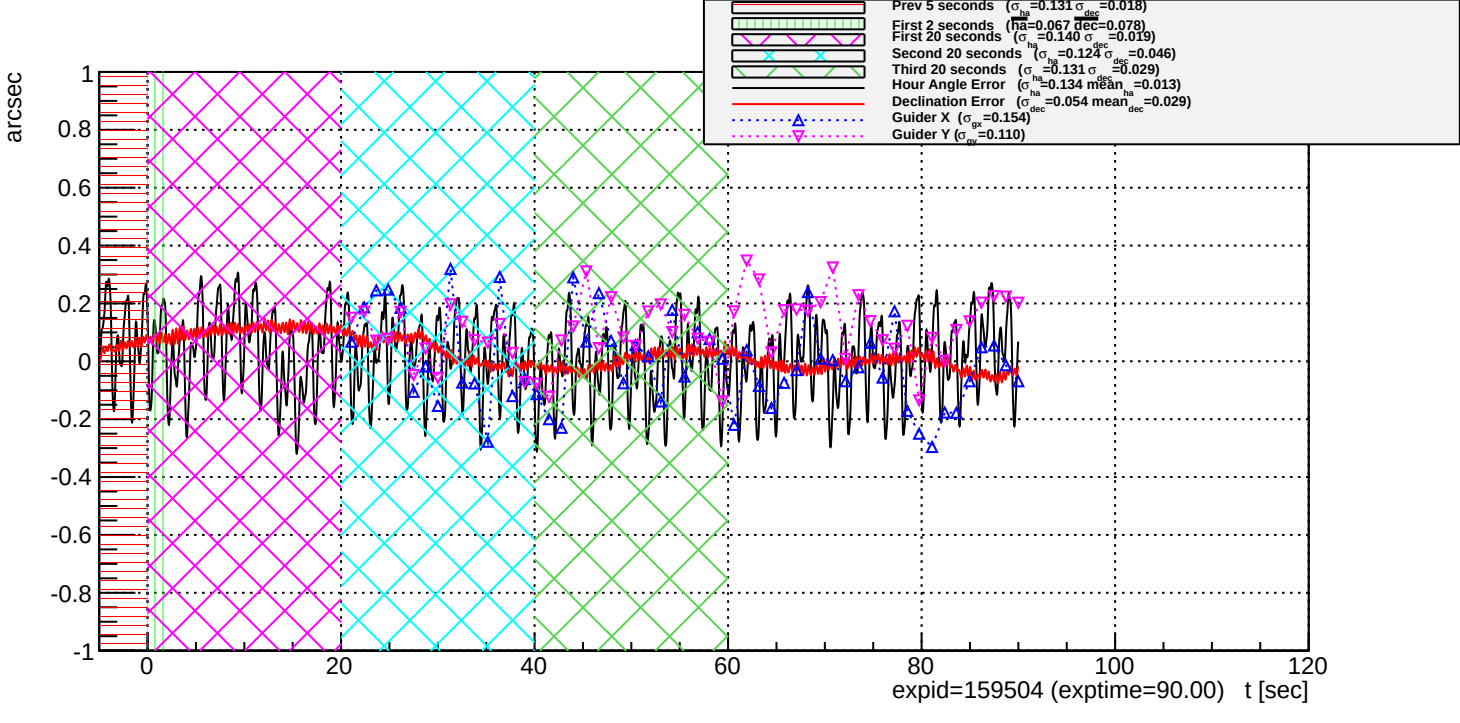

Prev 5 seconds (σ_{ha}=0.155 σ_{dec}=0.083)
First 2 seconds (σ_{ha}=0.111 σ_{dec}=0.207)
First 20 seconds (σ_{ha}=0.149 σ_{dec}=0.081)
Second 20 seconds (σ_{ha}=0.142 σ_{dec}=0.009)
Third 20 seconds (σ_{ha}=0.151 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.148 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.085 $mean_{dec}$=0.019)
Guider X (σ_{gx}=0.118)
Guider Y (σ_{gy}=0.136)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159499 (exptime=90.00) t [sec]

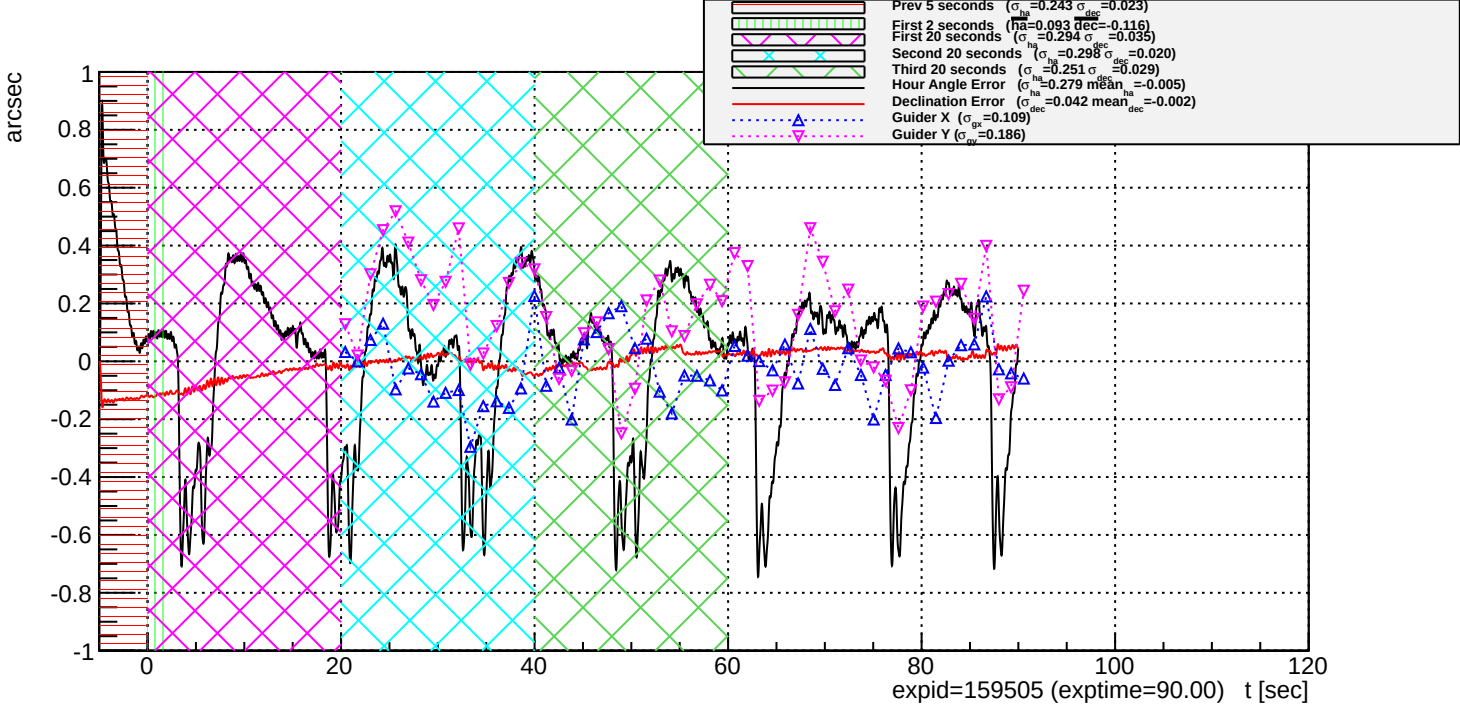

Prev 5 seconds (σ_{ha}=0.134 σ_{dec}=0.068)
First 2 seconds (σ_{ha}=0.001 σ_{dec}=0.375)
First 20 seconds (σ_{ha}=0.134 σ_{dec}=0.150)
Second 20 seconds (σ_{ha}=0.143 σ_{dec}=0.029)
Third 20 seconds (σ_{ha}=0.135 σ_{dec}=0.031)
Hour Angle Error (σ_{ha}=0.138 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.100 $mean_{dec}$=0.023)
Guider X (σ_{gx}=0.106)
Guider Y (σ_{gy}=0.168)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159500 (exptime=90.00)
t [sec]

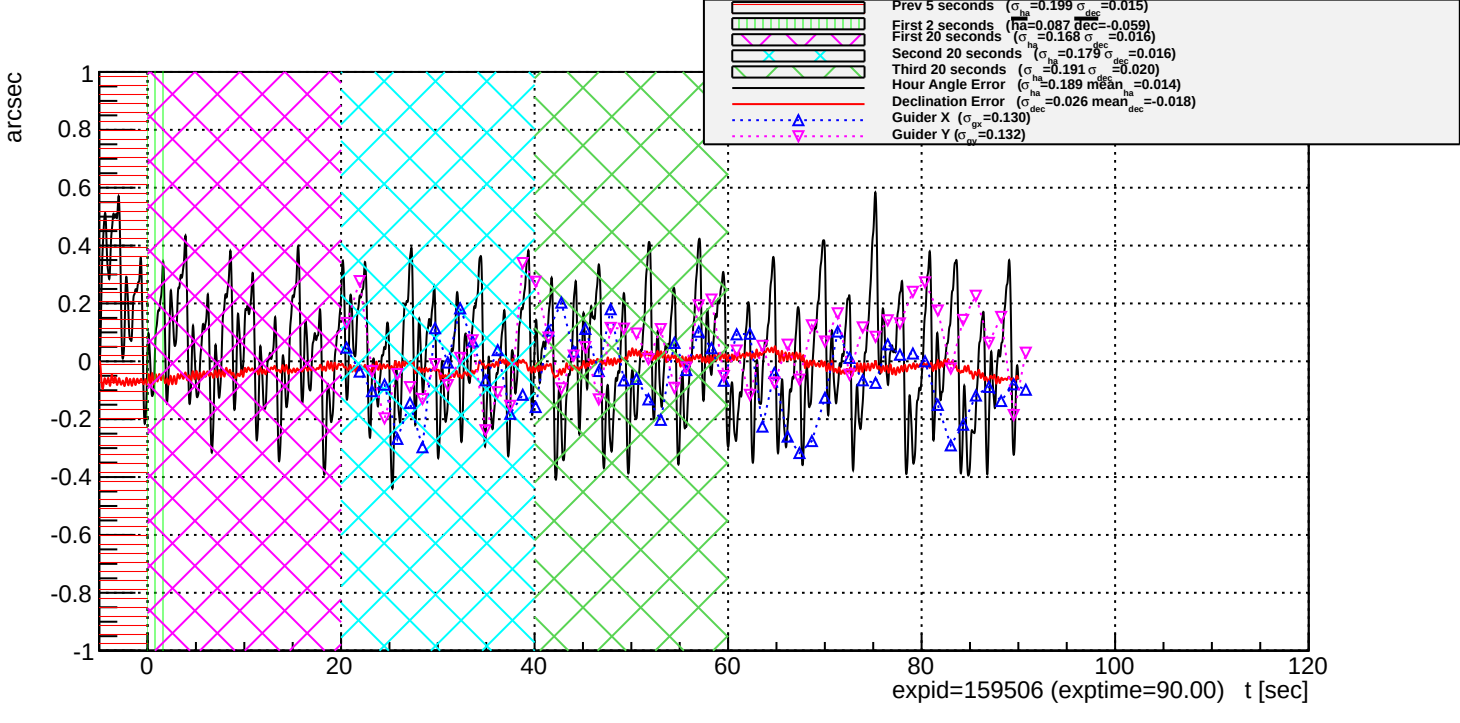

Prev 5 seconds (σ_{ha}=0.133 σ_{dec}=0.065)
First 2 seconds (ha=0.124 dec=0.221)
First 20 seconds (σ_{ha}=0.143 σ_{dec}=0.079)
Second 20 seconds (σ_{ha}=0.151 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.145 σ_{dec}=0.021)
Hour Angle Error (σ_{ha}=0.149 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.032)
Guider X (σ_{gx}=0.090)
Guider Y (σ_{gy}=0.161)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159501 (exptime=90.00) t [sec]

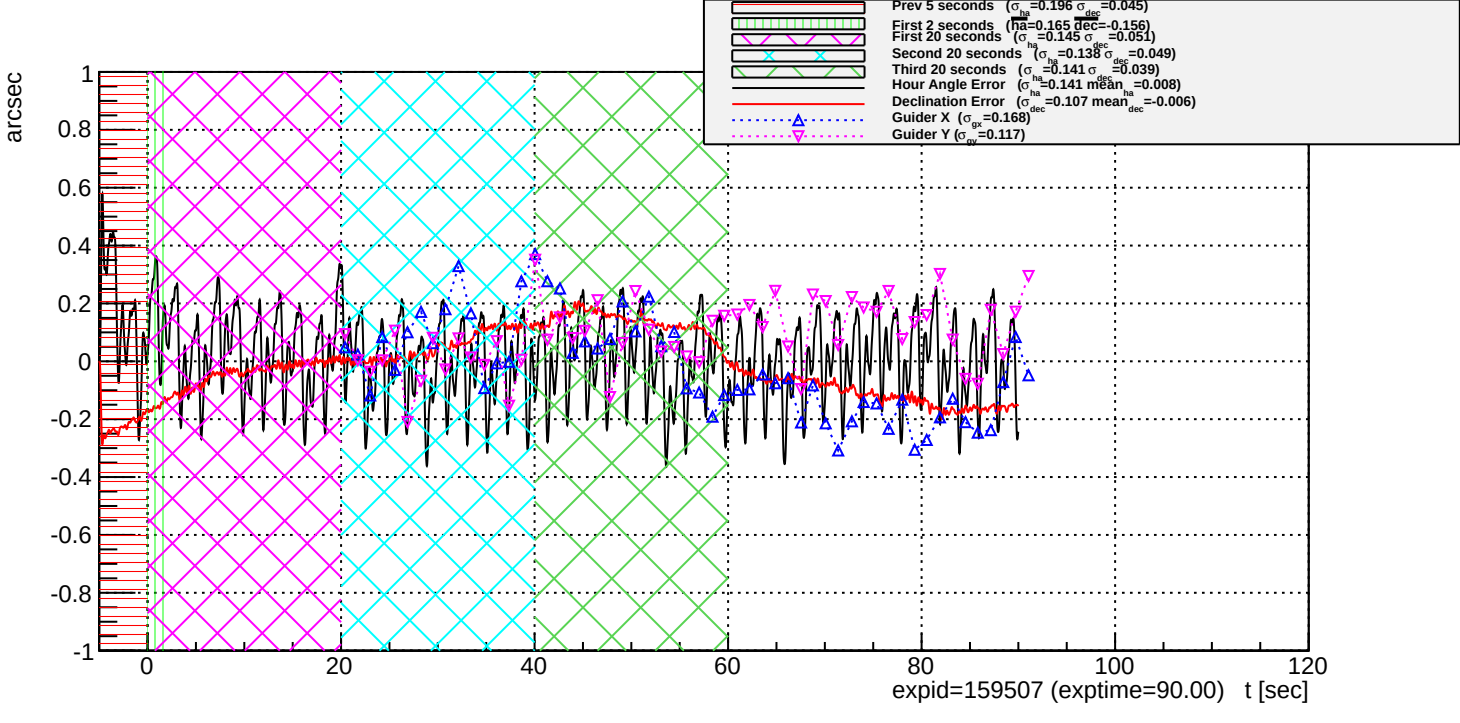

Prev 5 seconds (σ_{ha}=0.120 σ_{dec}=0.121)
First 2 seconds (ha=0.093 dec=0.068)
First 20 seconds (σ_{ha}=0.150 σ_{dec}=0.011)
Second 20 seconds (σ_{ha}=0.154 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.154 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.152 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.080 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.225)
Guider Y (σ_{gy}=0.468)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159502 (exptime=90.00) t [sec]

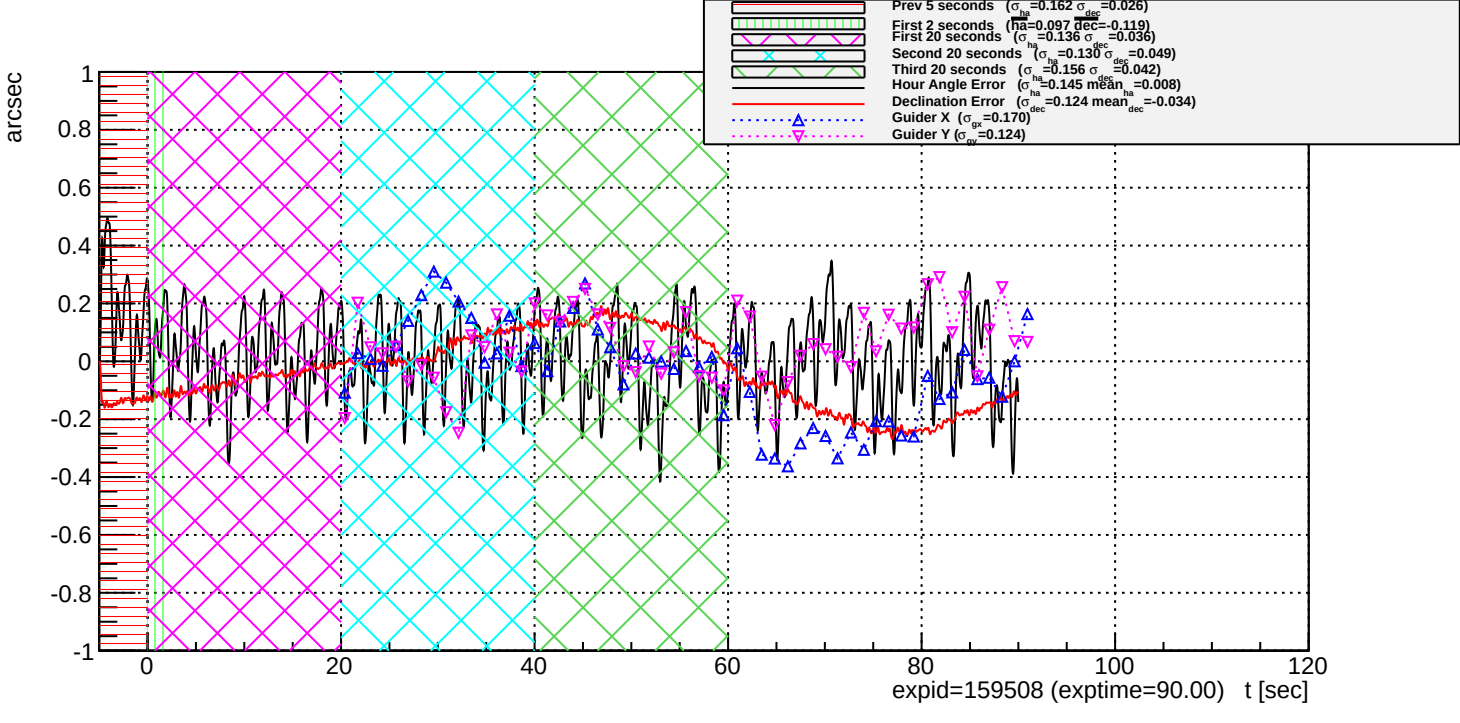

Prev 5 seconds (σ_{ha}=0.135 σ_{dec}=0.048)
First 2 seconds (ha=0.056 dec=-0.232)
First 20 seconds (σ_{ha}=0.140 σ_{dec}=0.100)
Second 20 seconds (σ_{ha}=0.141 σ_{dec}=0.065)
Third 20 seconds (σ_{ha}=0.141 σ_{dec}=0.123)
Hour Angle Error (σ_{ha}=0.147 $mean_{ha}$=0.021)
Declination Error (σ_{dec}=0.123 $mean_{dec}$=-0.015)
Guider X (σ_{gx}=0.262)
Guider Y (σ_{gy}=0.118)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159503 (exptime=90.00) t [sec]

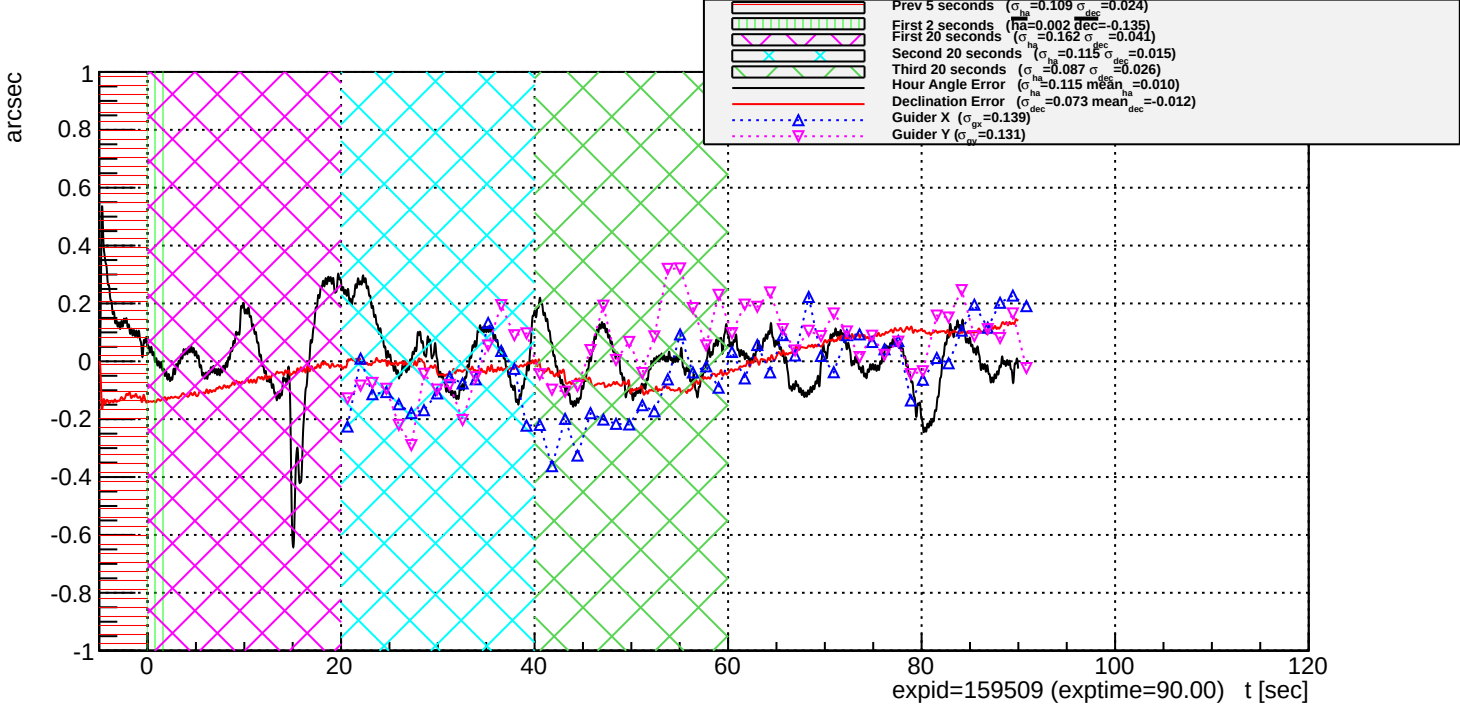

Prev 5 seconds (σ_{ha}=0.131 σ_{dec}=0.018)
First 2 seconds (ha=0.067 dec=0.078)
First 20 seconds (σ_{ha}=0.140 σ_{dec}=0.019)
Second 20 seconds (σ_{ha}=0.124 σ_{dec}=0.046)
Third 20 seconds (σ_{ha}=0.131 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.134 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.054 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.154)
Guider Y (σ_{gy}=0.110)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159504 (exptime=90.00) t [sec]

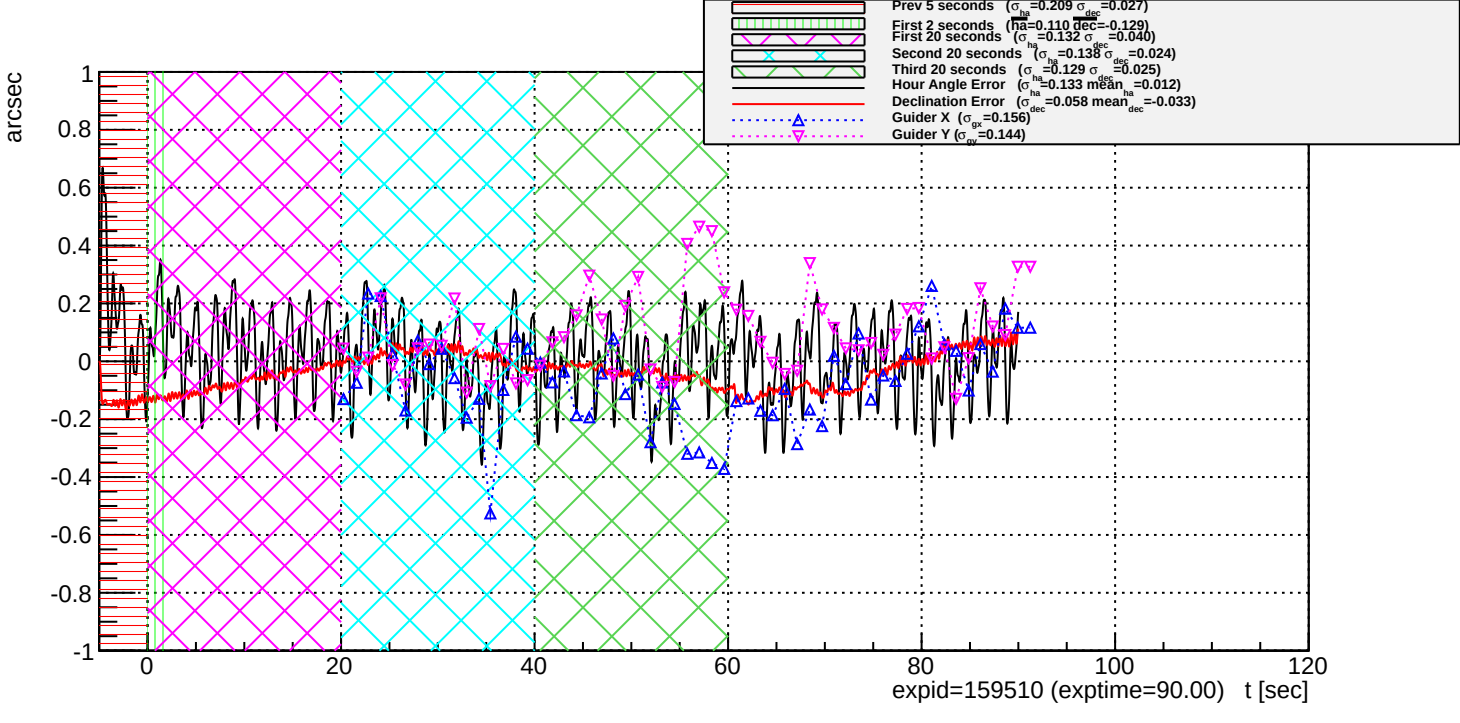

Prev 5 seconds (σ_{ha}=0.243 σ_{dec}=0.023)
First 2 seconds (ha=0.093 dec=-0.116)
First 20 seconds (σ_{ha}=0.294 σ_{dec}=0.035)
Second 20 seconds (σ_{ha}=0.298 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.251 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.279 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.042 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.109)
Guider Y (σ_{gy}=0.186)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159505 (exptime=90.00) t [sec]

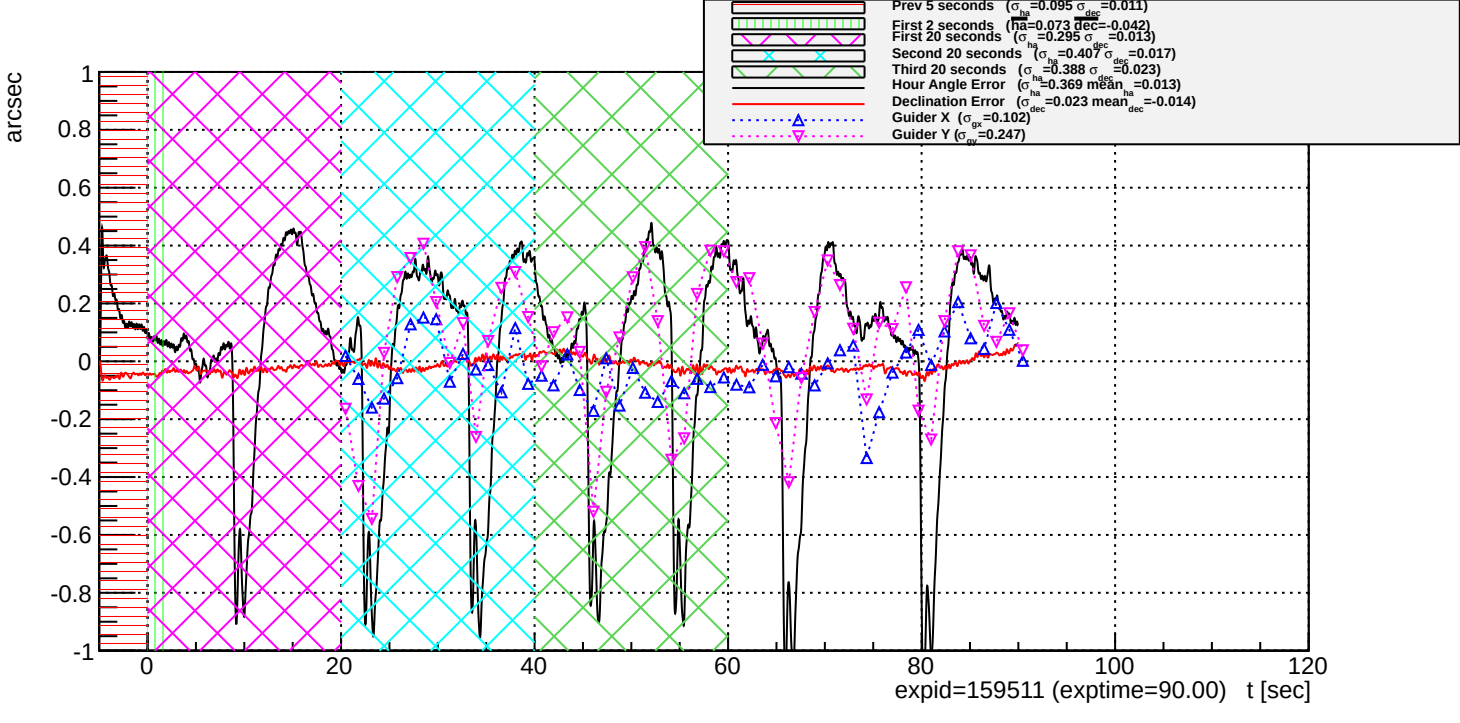

Prev 5 seconds (σ_{ha}=0.199 σ_{dec}=0.015)
First 2 seconds (σ_{ha}=0.087 σ_{dec}=-0.059)
First 20 seconds (σ_{ha}=0.168 σ_{dec}=0.016)
Second 20 seconds (σ_{ha}=0.179 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.191 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.189 $mean_{ha}$=-0.014)
Declination Error (σ_{dec}=0.026 $mean_{dec}$=-0.018)
Guider X (σ_{gx}=0.130)
Guider Y (σ_{gy}=0.132)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159506 (exptime=90.00) t [sec]

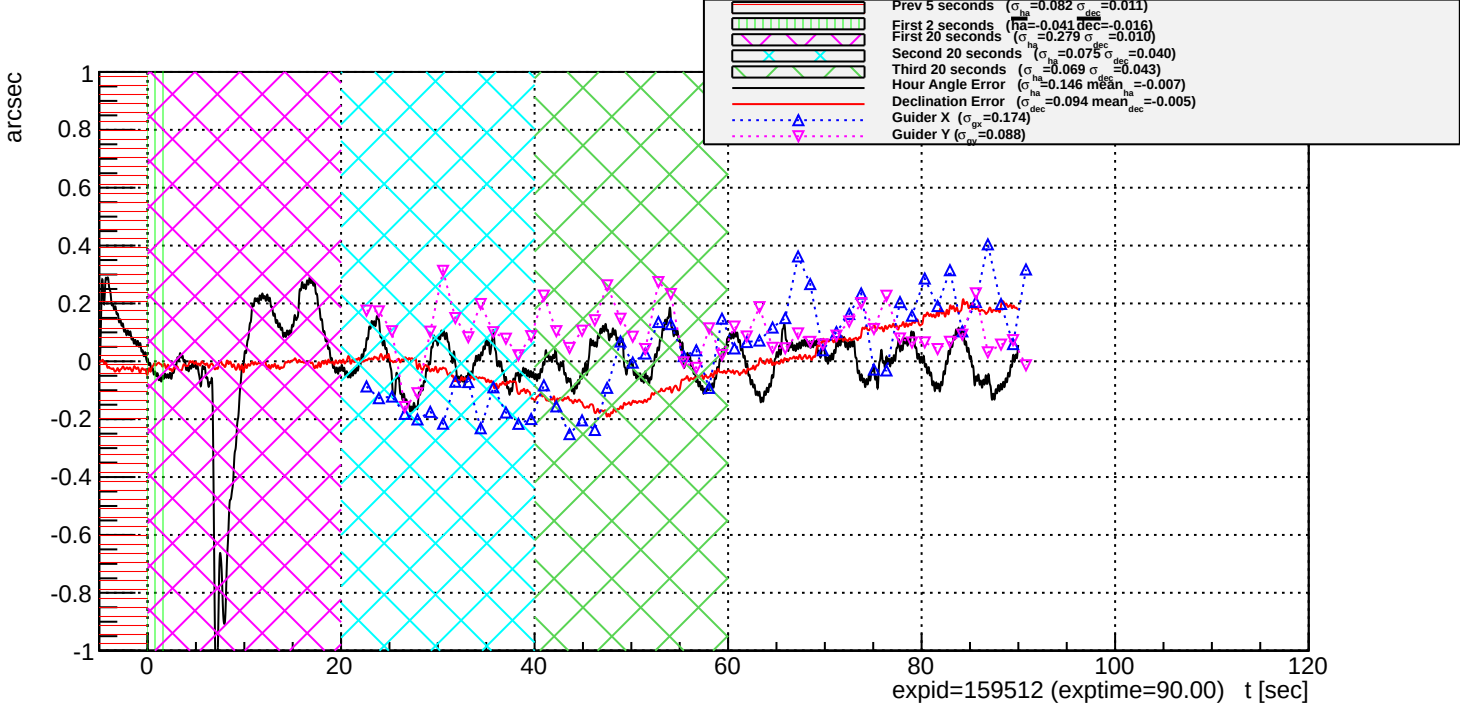

Prev 5 seconds (σ_{ha}=0.196 σ_{dec}=0.045)
First 2 seconds (ha=0.165 dec=-0.156)
First 20 seconds (σ_{ha}=0.145 σ_{dec}=0.051)
Second 20 seconds (σ_{ha}=0.138 σ_{dec}=0.049)
Third 20 seconds (σ_{ha}=0.141 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.141 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.107 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.168)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159507 (exptime=90.00) t [sec]

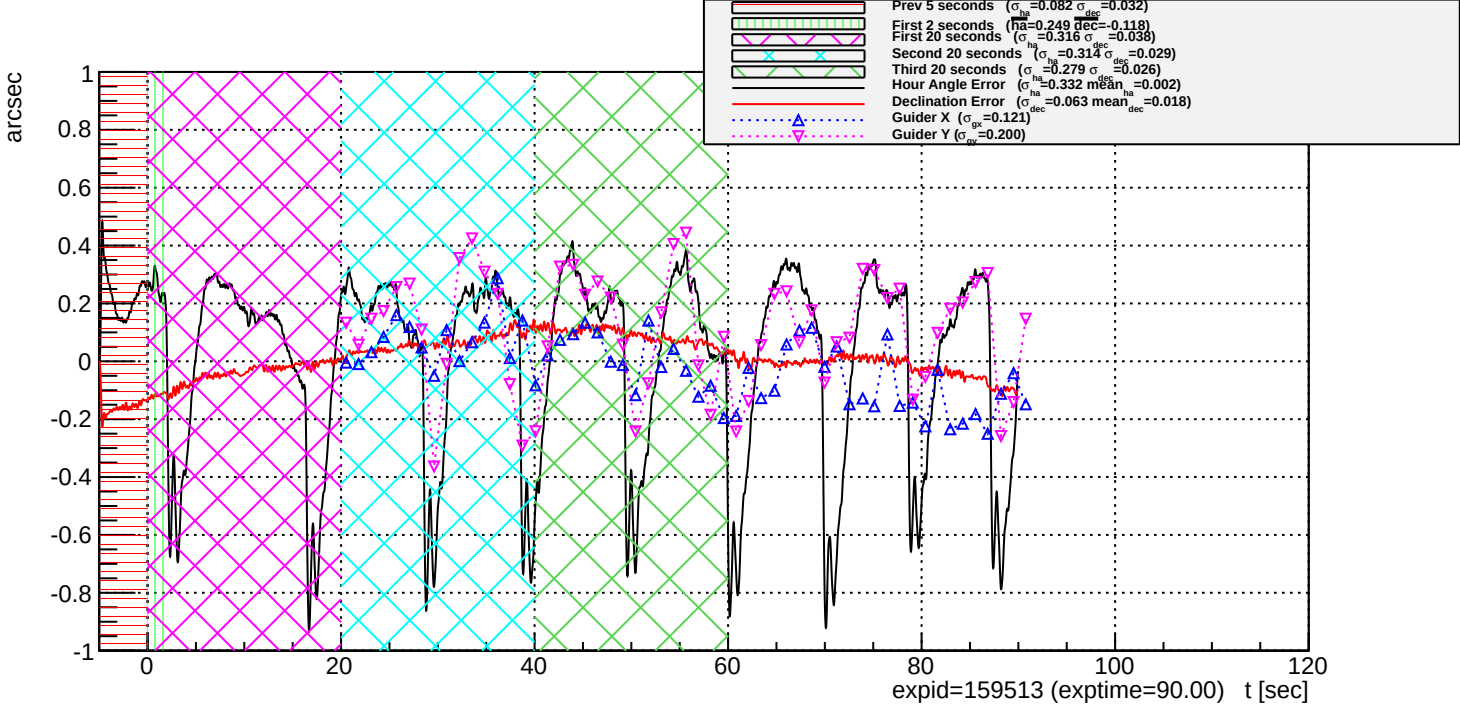

Prev 5 seconds (σ_{ha}=0.162 σ_{dec}=0.026)
First 2 seconds (ha=0.097 dec=-0.119)
First 20 seconds (σ_{ha}=0.136 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.130 σ_{dec}=0.049)
Third 20 seconds (σ_{ha}=0.156 σ_{dec}=0.042)
Hour Angle Error (σ_{ha}=0.145 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.124 $mean_{dec}$=-0.034)
Guider X (σ_{gx}=0.170)
Guider Y (σ_{gy}=0.124)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159508 (exptime=90.00) t [sec]

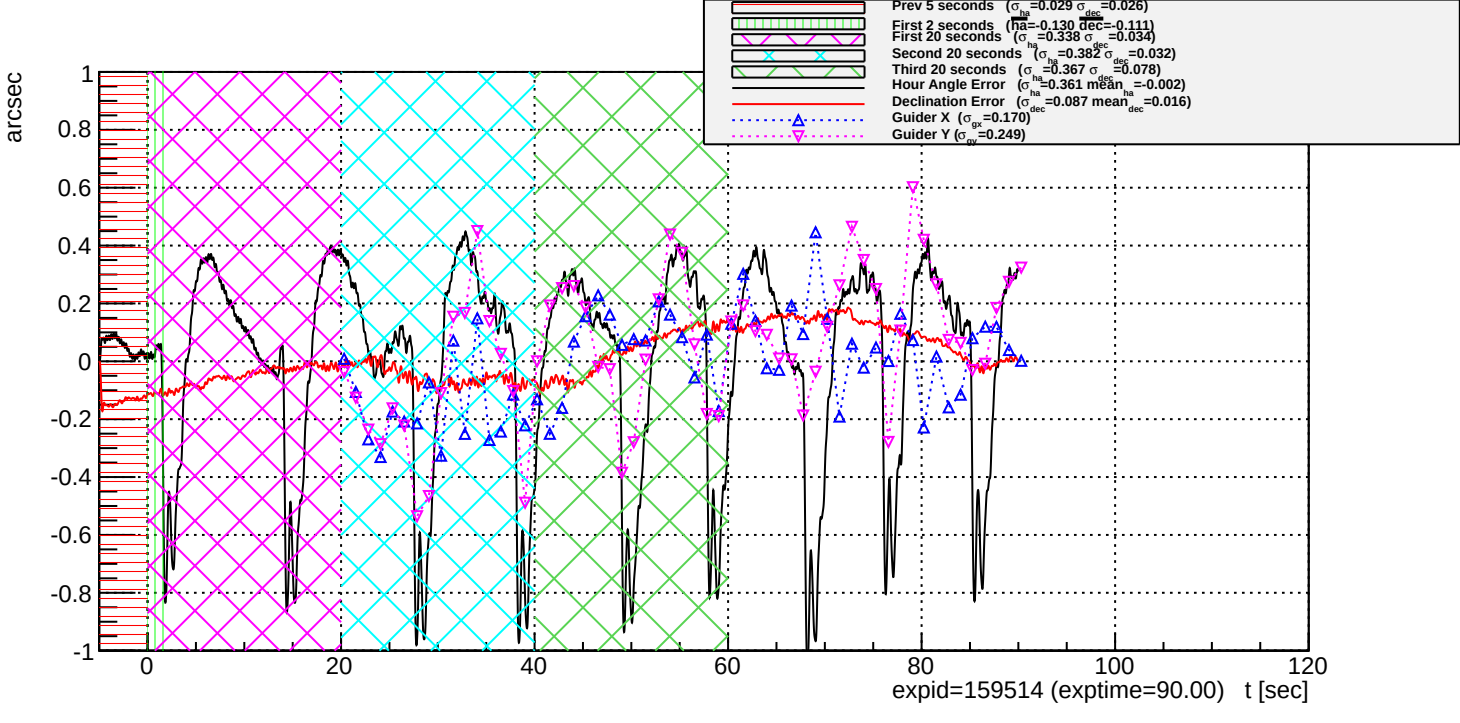

Prev 5 seconds (σ_{ha}=0.109 σ_{dec}=0.024)
First 2 seconds (ha=0.002 dec=-0.135)
First 20 seconds (σ_{ha}=0.162 σ_{dec}=0.041)
Second 20 seconds (σ_{ha}=0.115 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.087 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.115 $mean_{ha}$=0.010)
Declination Error (σ_{dec}=0.073 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.139)
Guider Y (σ_{gy}=0.131)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159509 (exptime=90.00) t [sec]

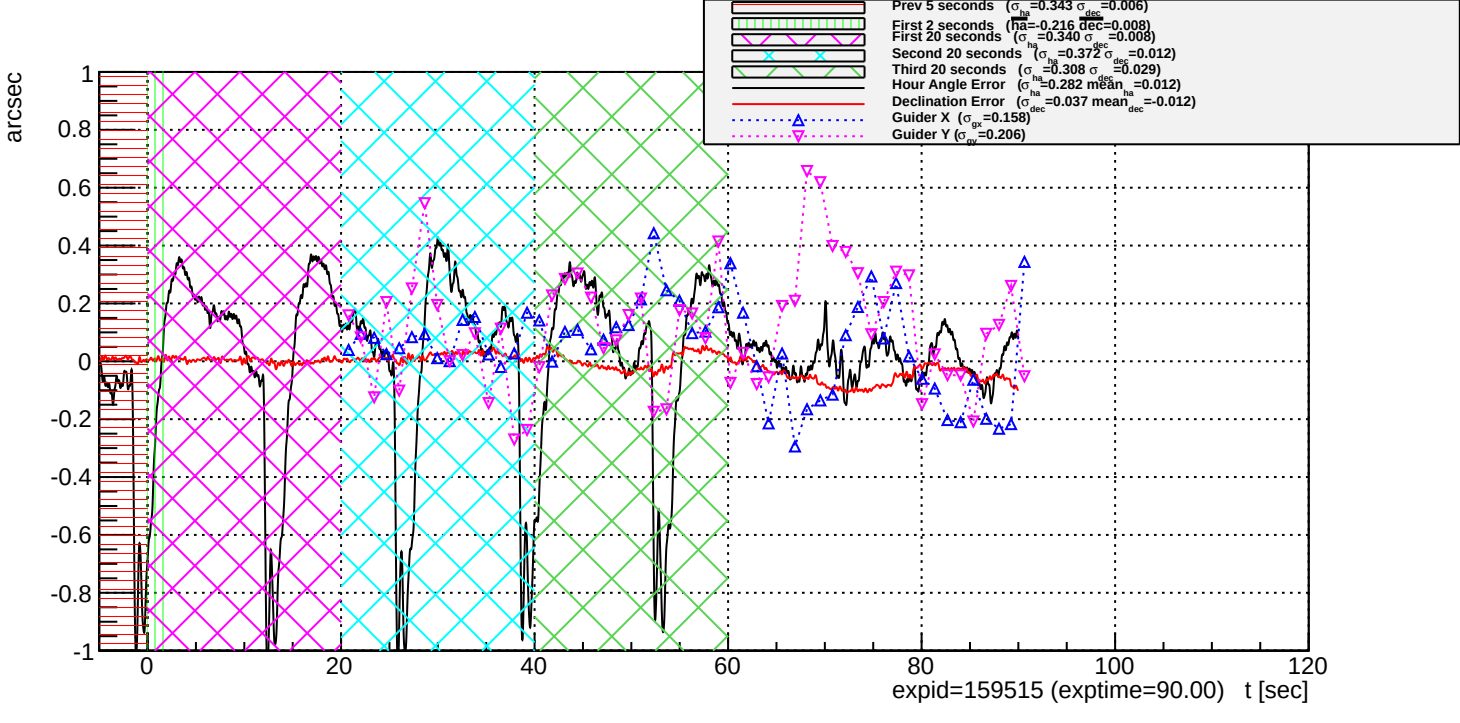

Prev 5 seconds (σ_{ha}=0.209 σ_{dec}=0.027)
First 2 seconds (ha=0.110 dec=-0.129)
First 20 seconds (σ_{ha}=0.132 σ_{dec}=0.040)
Second 20 seconds (σ_{ha}=0.138 σ_{dec}=0.024)
Third 20 seconds (σ_{ha}=0.129 σ_{dec}=0.025)
Hour Angle Error (σ_{ha}=0.133 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.058 $mean_{dec}$=-0.033)
Guider X (σ_{gx}=0.156)
Guider Y (σ_{gy}=0.144)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159510 (exptime=90.00) t [sec]

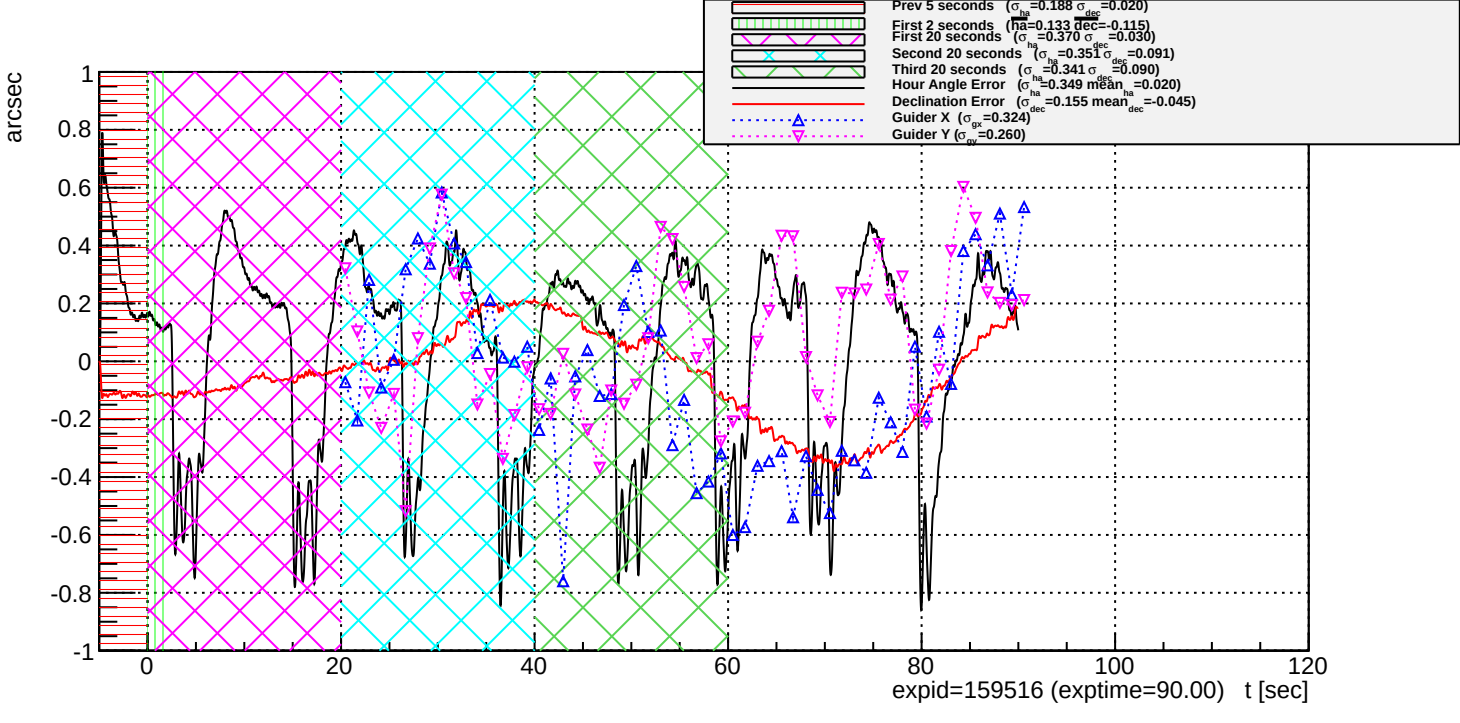

Prev 5 seconds (σ_{ha}=0.095 σ_{dec}=0.011)
First 2 seconds (ha=0.073 dec=-0.042)
First 20 seconds (σ_{ha}=0.295 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.407 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.388 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.369 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.023 $mean_{dec}$=-0.014)
Guider X (σ_{gx}=0.102)
Guider Y (σ_{gy}=0.247)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159511 (exptime=90.00) t [sec]

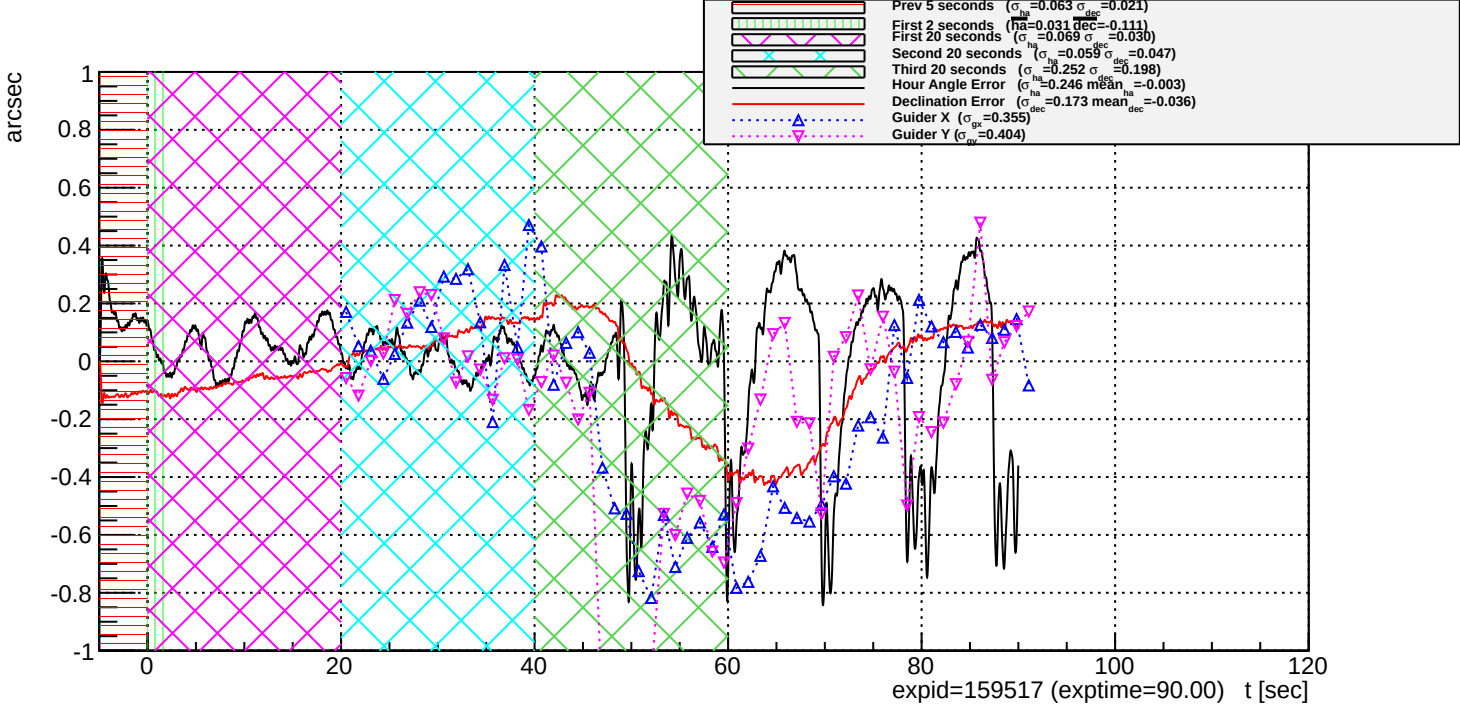

Prev 5 seconds (σ_{ha}=0.082 σ_{dec}=0.011)
First 2 seconds ($\overline{ha}$=-0.041 $\overline{dec}$=-0.016)
First 20 seconds (σ_{ha}=0.279 σ_{dec}=0.010)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.040)
Third 20 seconds (σ_{ha}=0.069 σ_{dec}=0.043)
Hour Angle Error (σ_{ha}=0.146 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.094 $mean_{dec}$=-0.005)
Guider X (σ_{gx}=0.174)
Guider Y (σ_{gy}=0.088)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159512 (exptime=90.00) t [sec]

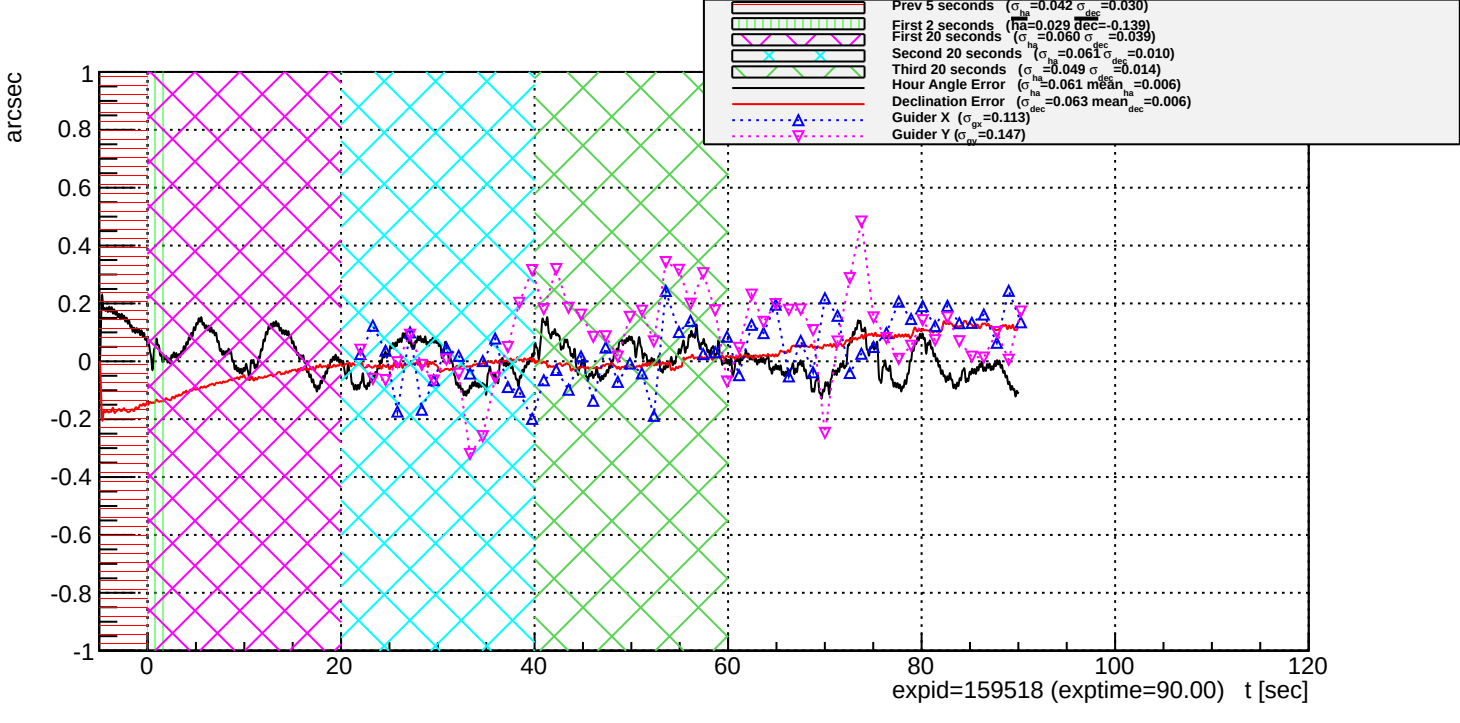

Prev 5 seconds (σ_{ha}=0.082 σ_{dec}=0.032)
First 2 seconds ($\overline{ha}$=0.249 $\overline{dec}$=-0.118)
First 20 seconds (σ_{ha}=0.316 σ_{dec}=0.038)
Second 20 seconds (σ_{ha}=0.314 σ_{dec}=0.029)
Third 20 seconds (σ_{ha}=0.279 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.332 $mean_{ha}$=0.002)
Declination Error (σ_{dec}=0.063 $mean_{dec}$=0.018)
Guider X (σ_{gx}=0.121)
Guider Y (σ_{gy}=0.200)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159513 (exptime=90.00) t [sec]

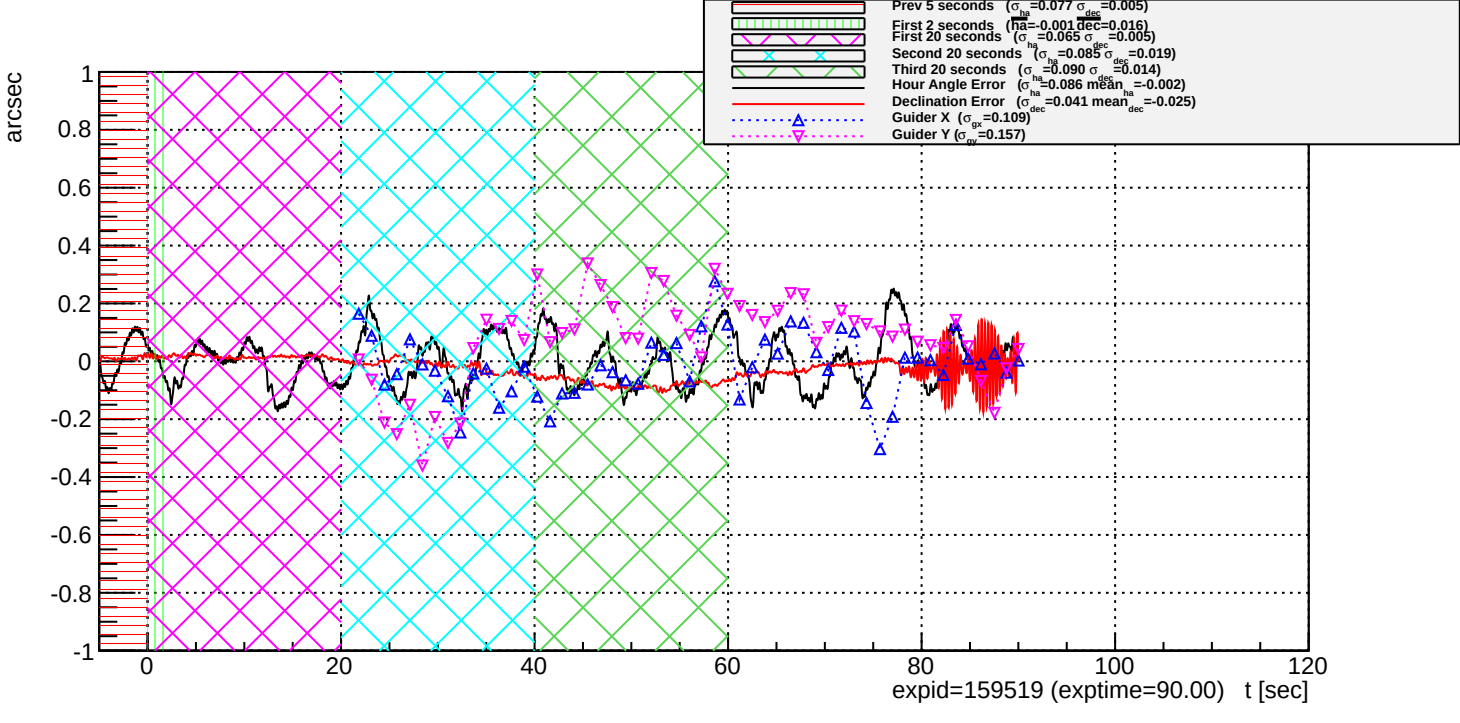

Prev 5 seconds (σ_{ha}=0.029 σ_{dec}=0.026)
First 2 seconds (ha=-0.130 dec=-0.111)
First 20 seconds (σ_{ha}=0.338 σ_{dec}=0.034)
Second 20 seconds (σ_{ha}=0.382 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.367 σ_{dec}=0.078)
Hour Angle Error (σ_{ha}=0.361 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.087 $mean_{dec}$=0.016)
Guider X (σ_{gx}=0.170)
Guider Y (σ_{gy}=0.249)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159514 (exptime=90.00) t [sec]

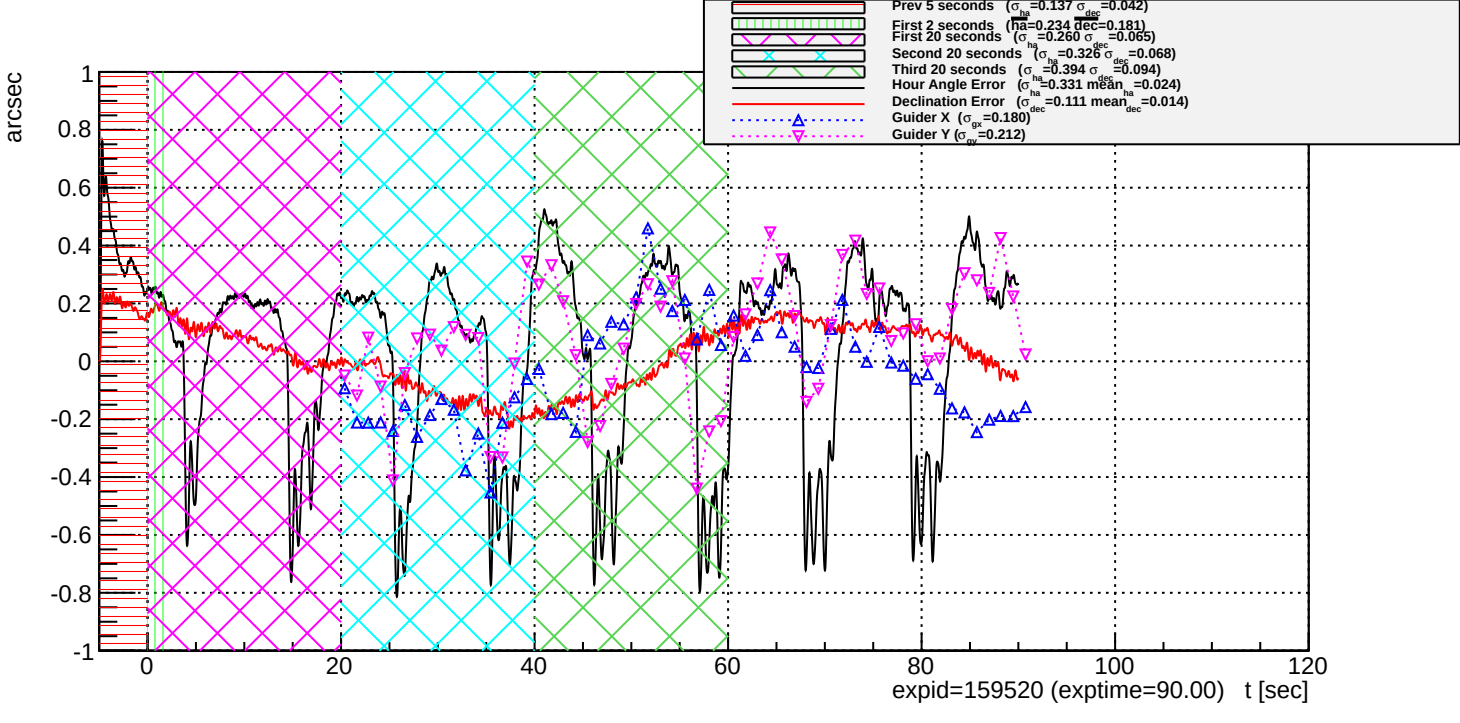

Prev 5 seconds (σ_{ha}=0.343 σ_{dec}=0.006)
First 2 seconds ($\overline{ha}$=-0.216 $\overline{dec}$=0.008)
First 20 seconds (σ_{ha}=0.340 σ_{dec}=0.008)
Second 20 seconds (σ_{ha}=0.372 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.308 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.282 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.037 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.158)
Guider Y (σ_{gy}=0.206)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159515 (exptime=90.00) t [sec]

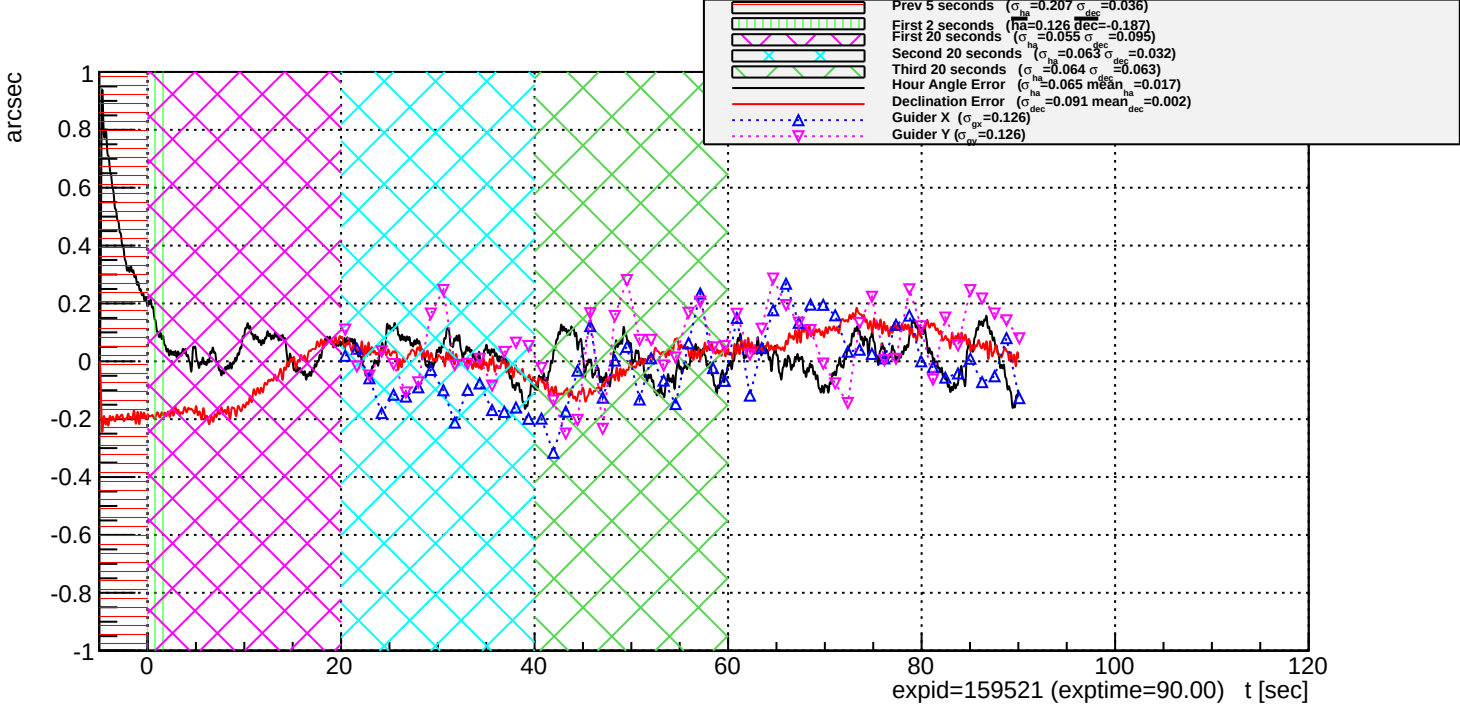

Prev 5 seconds (σ_{ha}=0.188 σ_{dec}=0.020)
First 2 seconds (ha=0.133 dec=-0.115)
First 20 seconds (σ_{ha}=0.370 σ_{dec}=0.030)
Second 20 seconds (σ_{ha}=0.351 σ_{dec}=0.091)
Third 20 seconds (σ_{ha}=0.341 σ_{dec}=0.090)
Hour Angle Error (σ_{ha}=0.349 $mean_{ha}$=0.020)
Declination Error (σ_{dec}=0.155 $mean_{dec}$=-0.045)
Guider X (σ_{gx}=0.324)
Guider Y (σ_{gy}=0.260)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159516 (exptime=90.00) t [sec]

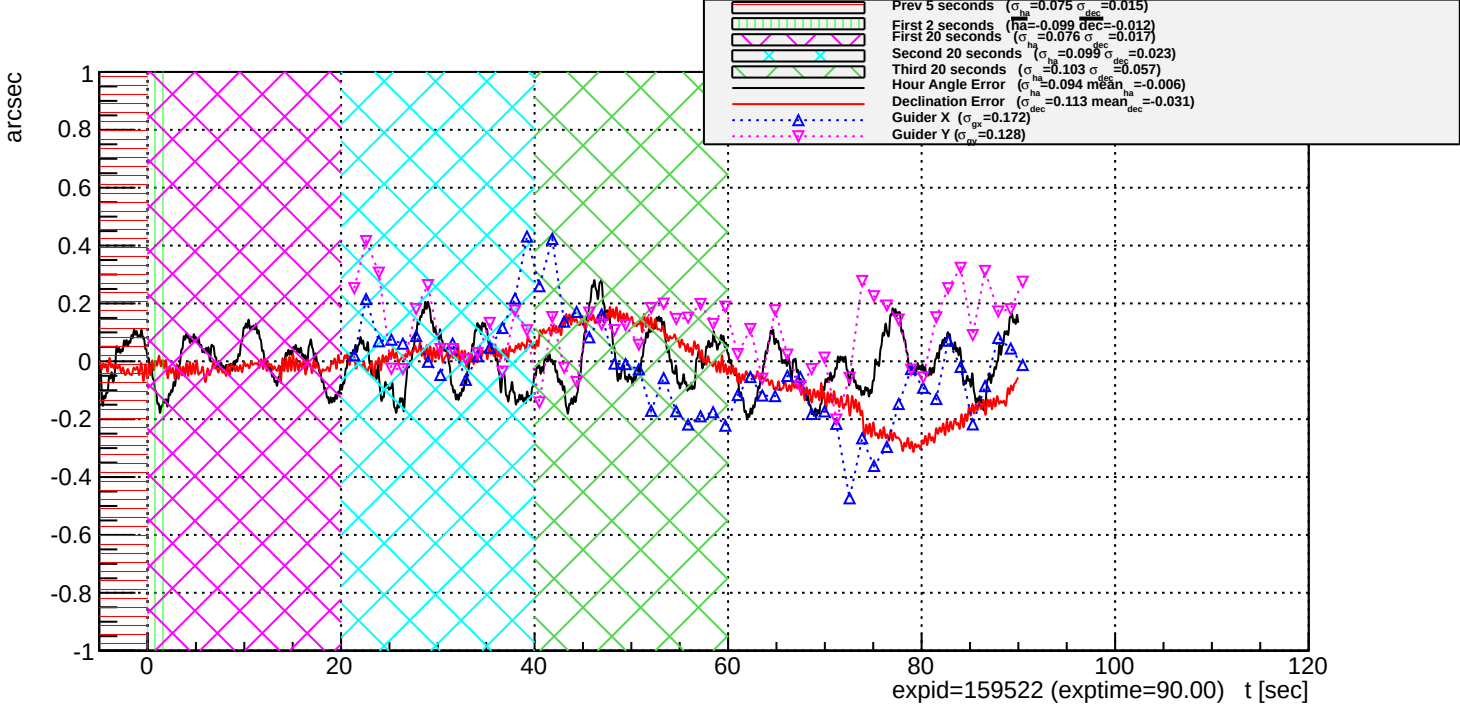

Prev 5 seconds (σ_{ha}=0.063 σ_{dec}=0.021)
First 2 seconds ($\overline{ha}$=0.031 $\overline{dec}$=-0.111)
First 20 seconds (σ_{ha}=0.069 σ_{dec}=0.030)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.047)
Third 20 seconds (σ_{ha}=0.252 σ_{dec}=0.198)
Hour Angle Error (σ_{ha}=0.246 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.173 $mean_{dec}$=-0.036)
Guider X (σ_{gx}=0.355)
Guider Y (σ_{gy}=0.404)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159517 (exptime=90.00) t [sec]

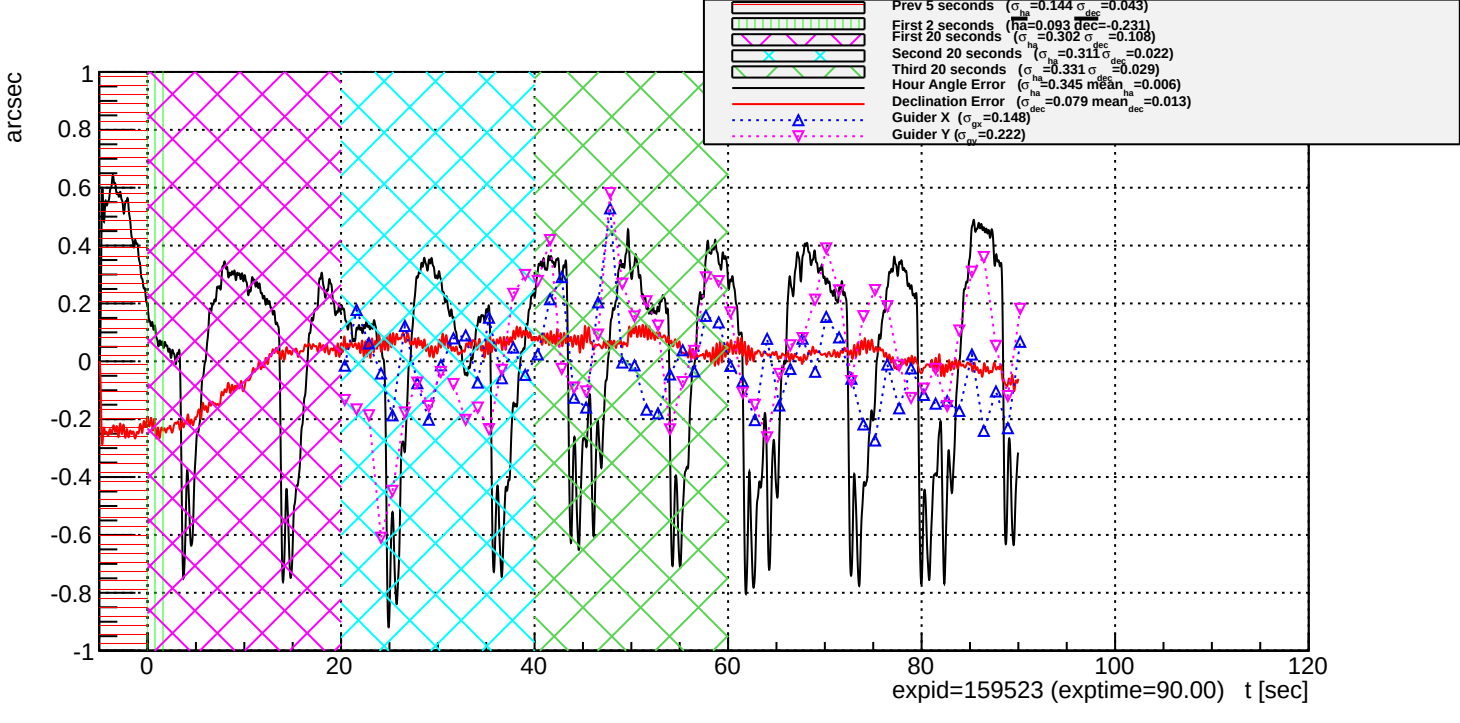

Prev 5 seconds (σ_{ha}=0.042 σ_{dec}=0.030)
First 2 seconds (ha=0.029 dec=-0.139)
First 20 seconds (σ_{ha}=0.060 σ_{dec}=0.039)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.010)
Third 20 seconds (σ_{ha}=0.049 σ_{dec}=0.014)
Hour Angle Error (σ_{ha}=0.061 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.063 $mean_{dec}$=0.006)
Guider X (σ_{gx}=0.113)
Guider Y (σ_{gy}=0.147)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159518 (exptime=90.00) t [sec]

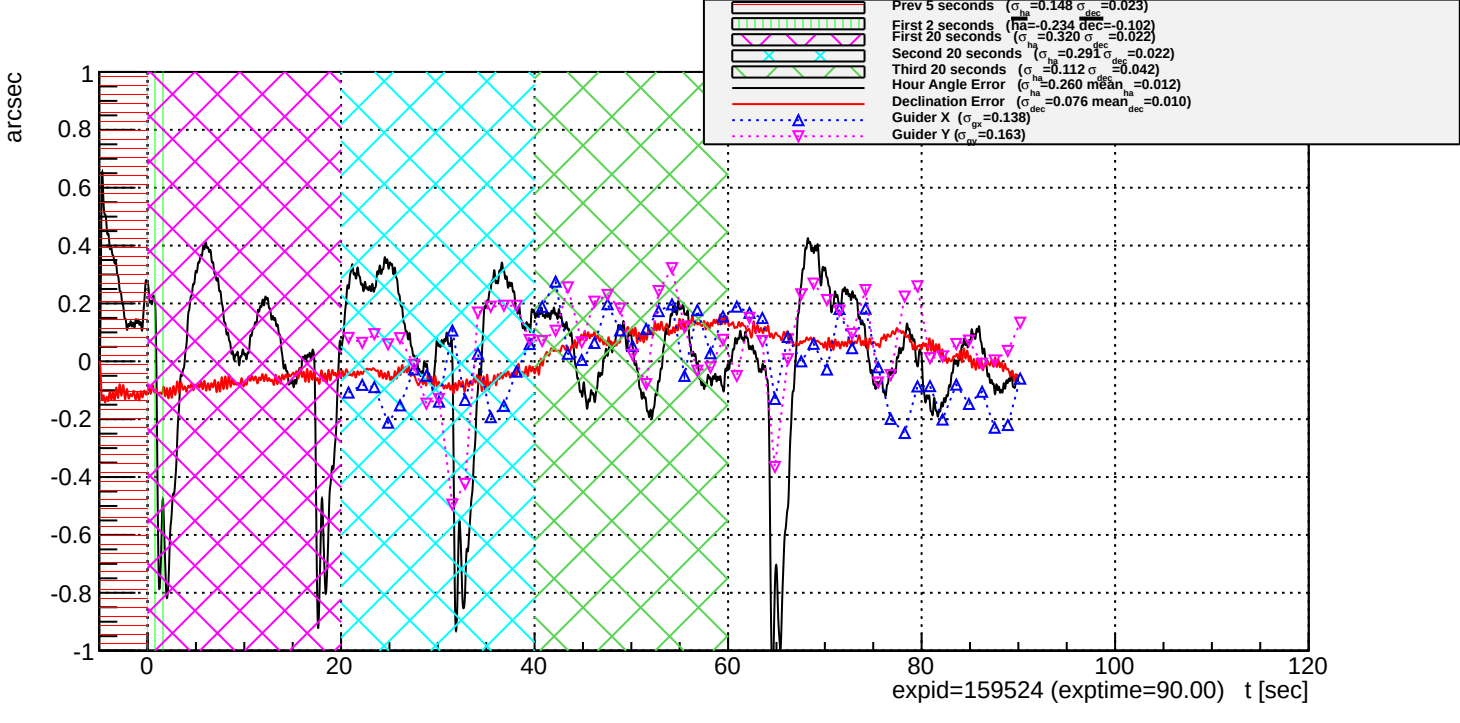

Prev 5 seconds (σ_{ha}=0.077 σ_{dec}=0.005)
First 2 seconds (mean_{ha}=-0.001 mean_{dec}=0.016)
First 20 seconds (σ_{ha}=0.065 σ_{dec}=0.005)
Second 20 seconds (σ_{ha}=0.085 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.090 σ_{dec}=0.014)
Hour Angle Error (σ_{ha}=0.086 mean_{ha}=-0.002)
Declination Error (σ_{dec}=0.041 mean_{dec}=-0.025)
Guider X (σ_{gx}=0.109)
Guider Y (σ_{gy}=0.157)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159519 (exptime=90.00)
t [sec]

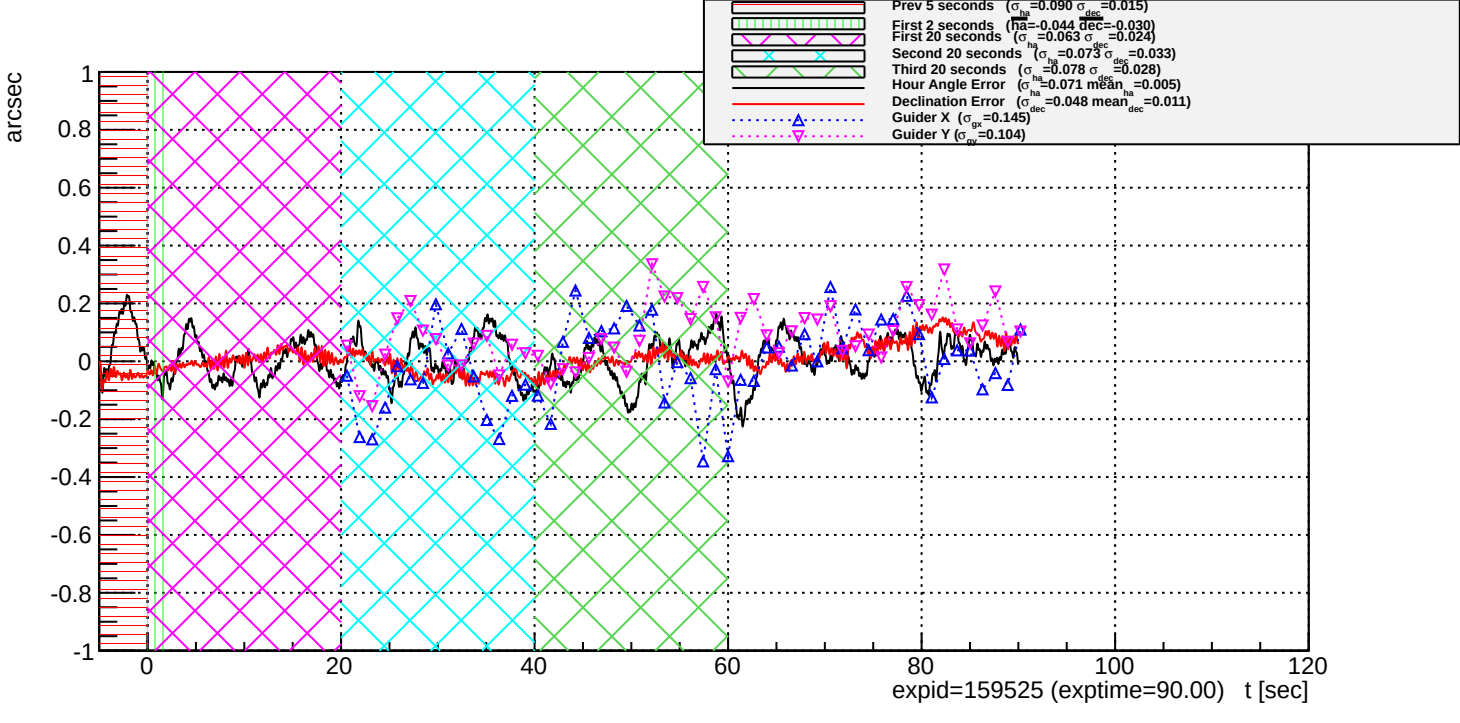

Prev 5 seconds (σ_{ha}=0.137 σ_{dec}=0.042)
First 2 seconds (σ_{ha}=0.234 σ_{dec}=0.181)
First 20 seconds (σ_{ha}=0.260 σ_{dec}=0.065)
Second 20 seconds (σ_{ha}=0.326 σ_{dec}=0.068)
Third 20 seconds (σ_{ha}=0.394 σ_{dec}=0.094)
Hour Angle Error (σ_{ha}=0.331 $mean_{ha}$=0.024)
Declination Error (σ_{dec}=0.111 $mean_{dec}$=0.014)
Guider X (σ_{gx}=0.180)
Guider Y (σ_{gy}=0.212)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159520 (exptime=90.00) t [sec]

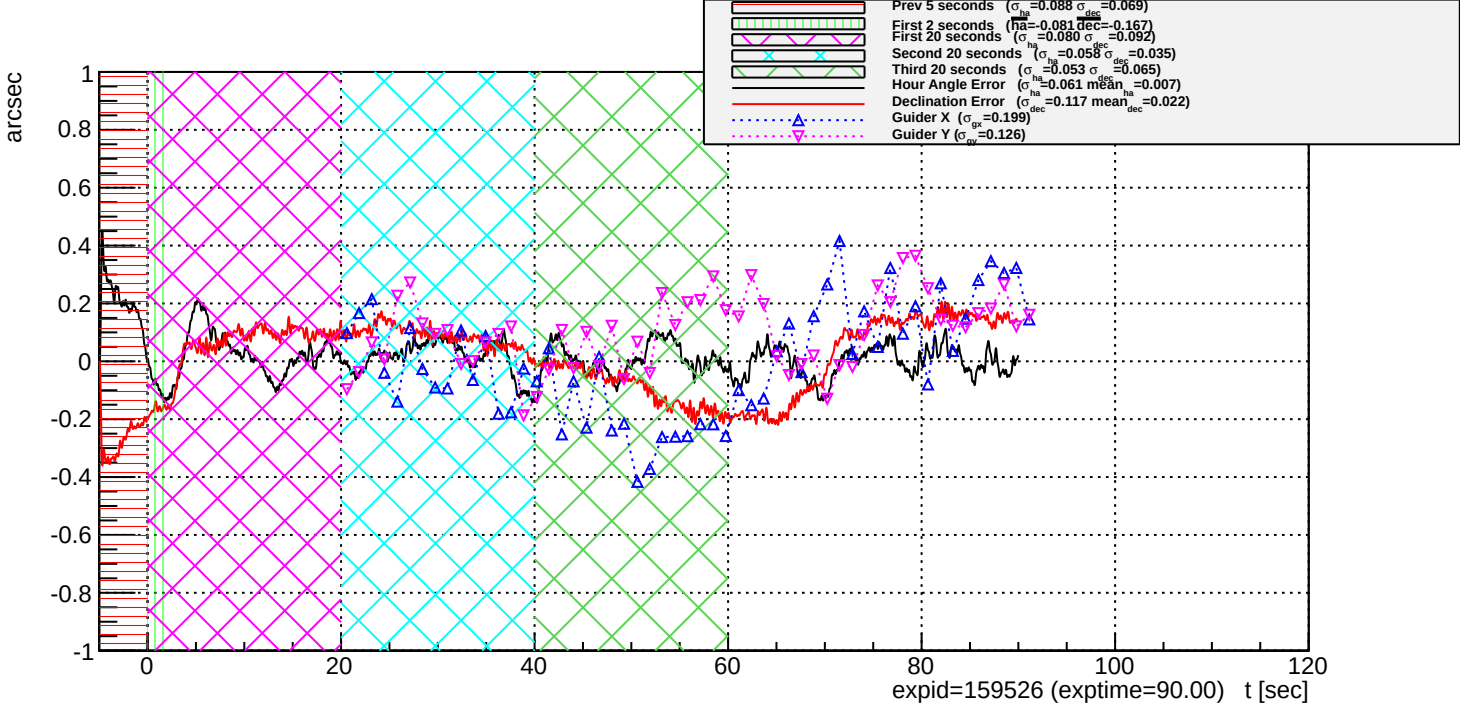

Prev 5 seconds (σ_{ha}=0.207 σ_{dec}=0.036)
First 2 seconds (ha=0.126 dec=-0.187)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.095)
Second 20 seconds (σ_{ha}=0.063 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.064 σ_{dec}=0.063)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=0.017)
Declination Error (σ_{dec}=0.091 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.126)
Guider Y (σ_{gy}=0.126)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159521 (exptime=90.00) t [sec]

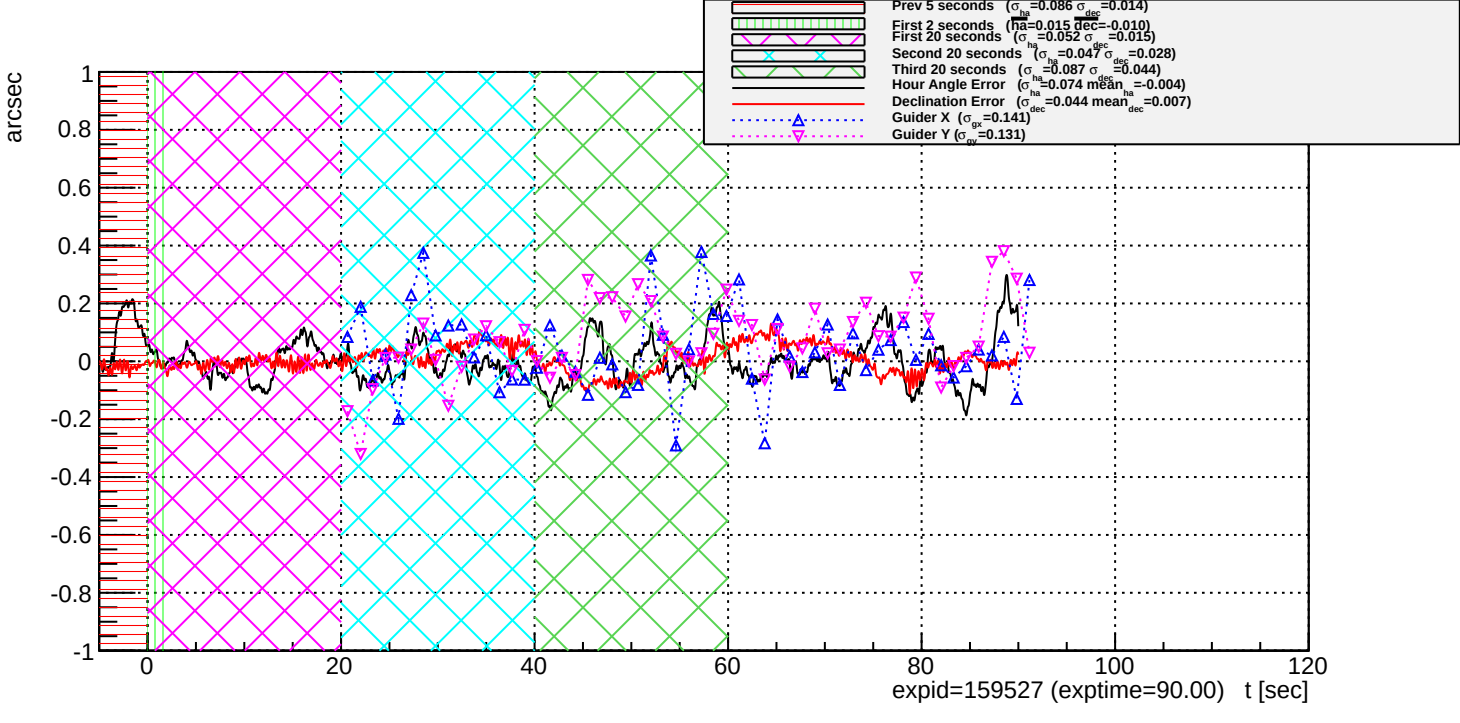

Prev 5 seconds (σ_{ha}=0.075 σ_{dec}=0.015)
First 2 seconds (μ_{ha}=-0.099 μ_{dec}=-0.012)
First 20 seconds (σ_{ha}=0.076 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.099 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.103 σ_{dec}=0.057)
Hour Angle Error (σ_{ha}=0.094 $mean_{ha}$=-0.006)
Declination Error (σ_{dec}=0.113 $mean_{dec}$=-0.031)
Guider X (σ_{gx}=0.172)
Guider Y (σ_{gy}=0.128)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159522 (exptime=90.00) t [sec]

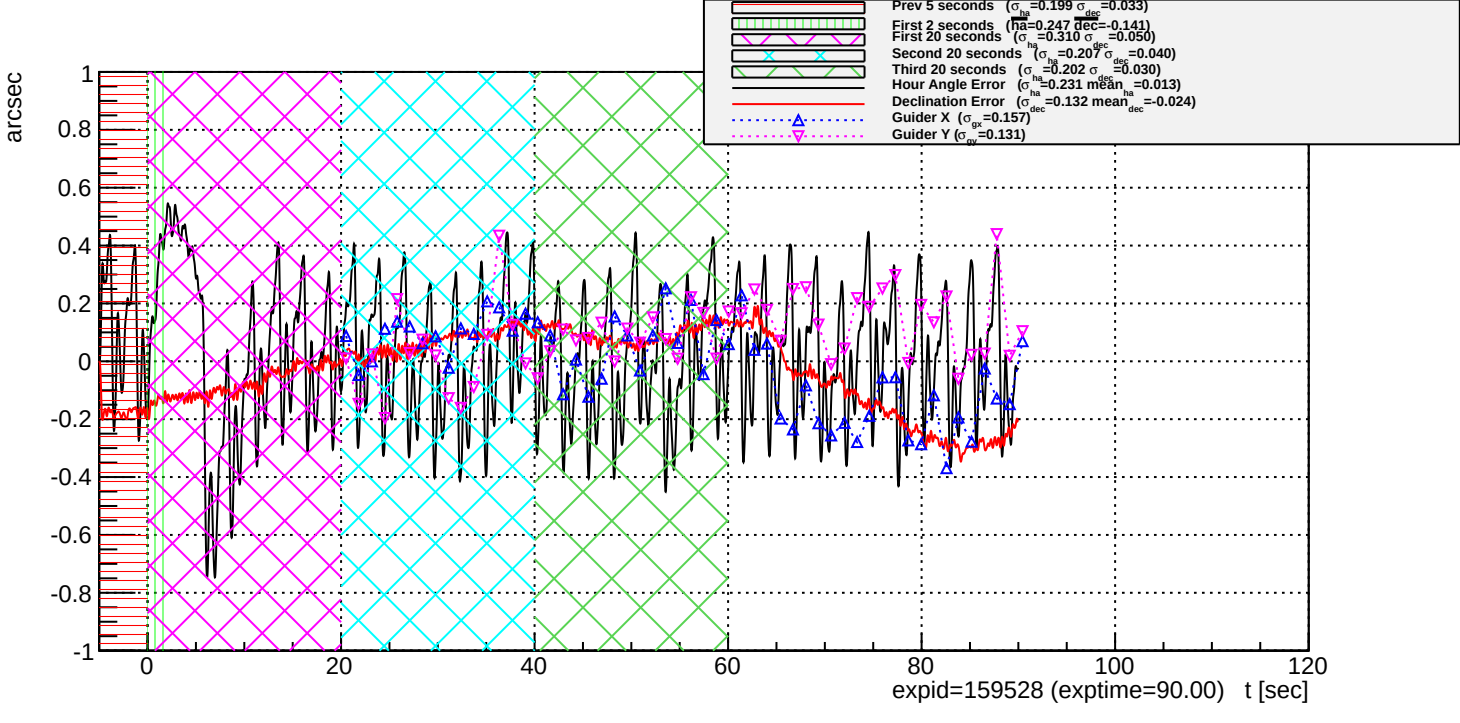

Prev 5 seconds (σ_{ha}=0.144 σ_{dec}=0.043)
First 2 seconds ($\overline{ha}$=0.093 $\overline{dec}$=-0.231)
First 20 seconds (σ_{ha}=0.302 σ_{dec}=0.108)
Second 20 seconds (σ_{ha}=0.311 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.331 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.345 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.079 $mean_{dec}$=0.013)
Guider X (σ_{gx}=0.148)
Guider Y (σ_{gy}=0.222)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159523 (exptime=90.00) t [sec]

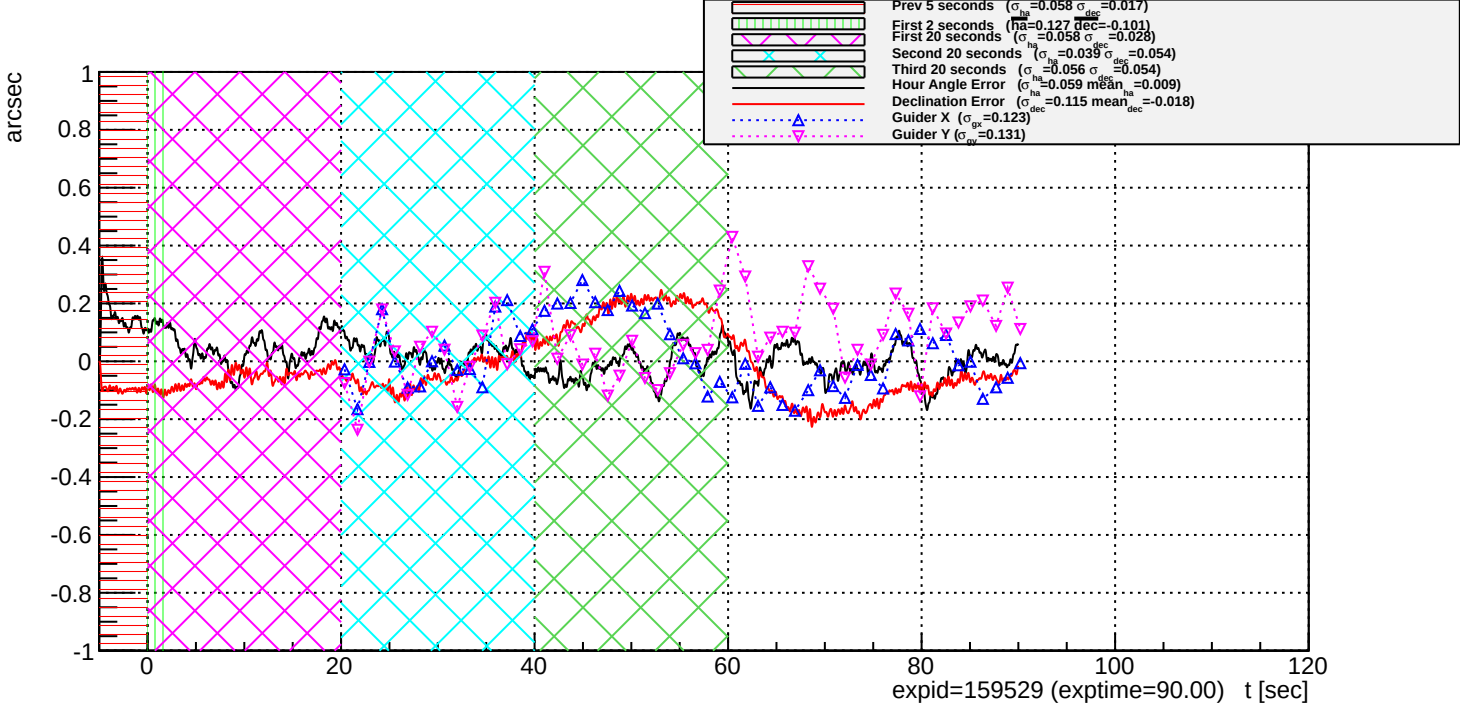

Prev 5 seconds (σ_{ha}=0.148 σ_{dec}=0.023)
First 2 seconds (ha=-0.234 dec=-0.102)
First 20 seconds (σ_{ha}=0.320 σ_{dec}=0.022)
Second 20 seconds (σ_{ha}=0.291 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.112 σ_{dec}=0.042)
Hour Angle Error (σ_{ha}=0.260 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.076 $mean_{dec}$=0.010)
Guider X (σ_{gx}=0.138)
Guider Y (σ_{gy}=0.163)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159524 (exptime=90.00) t [sec]

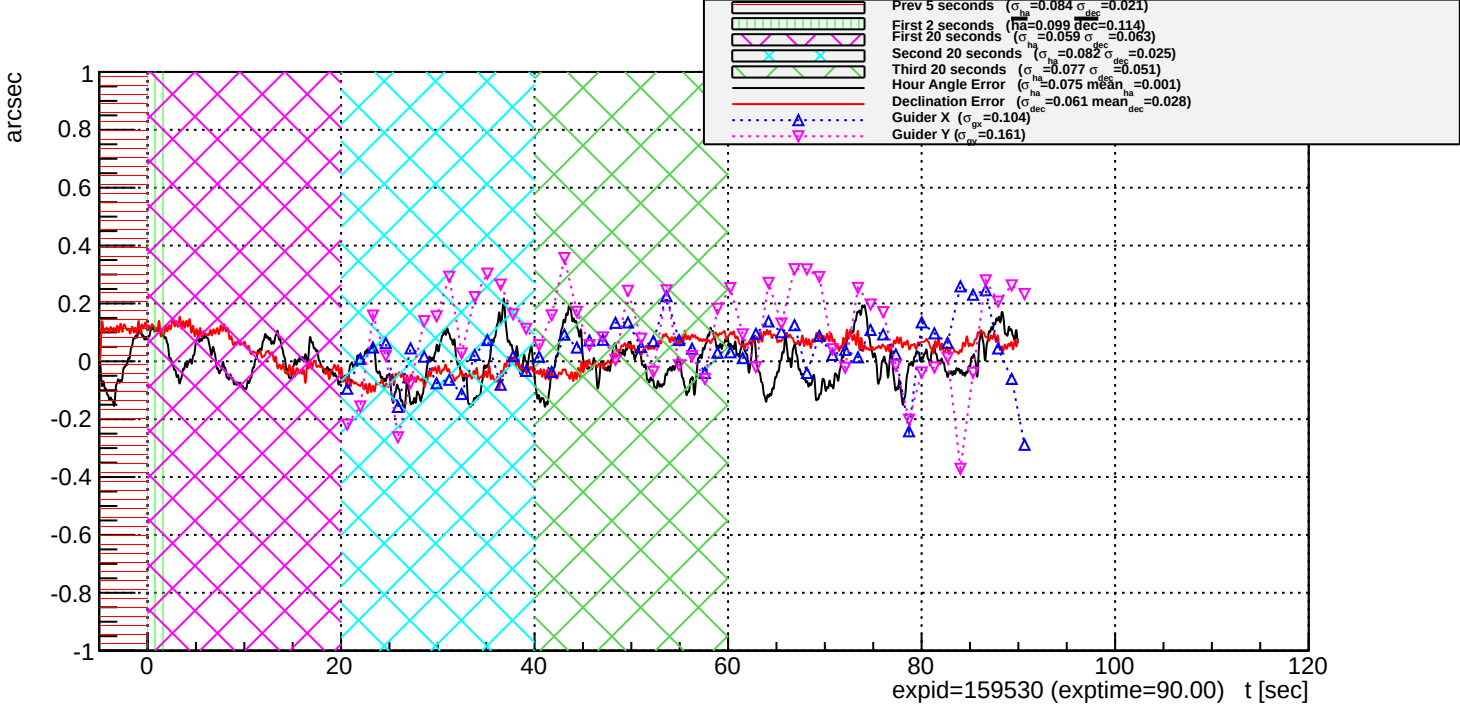

Prev 5 seconds (σ_{ha}=0.090 σ_{dec}=0.015)
First 2 seconds (ha=-0.044 dec=-0.030)
First 20 seconds (σ_{ha}=0.063 σ_{dec}=0.024)
Second 20 seconds (σ_{ha}=0.073 σ_{dec}=0.033)
Third 20 seconds (σ_{ha}=0.078 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.048 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.145)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159525 (exptime=90.00) t [sec]

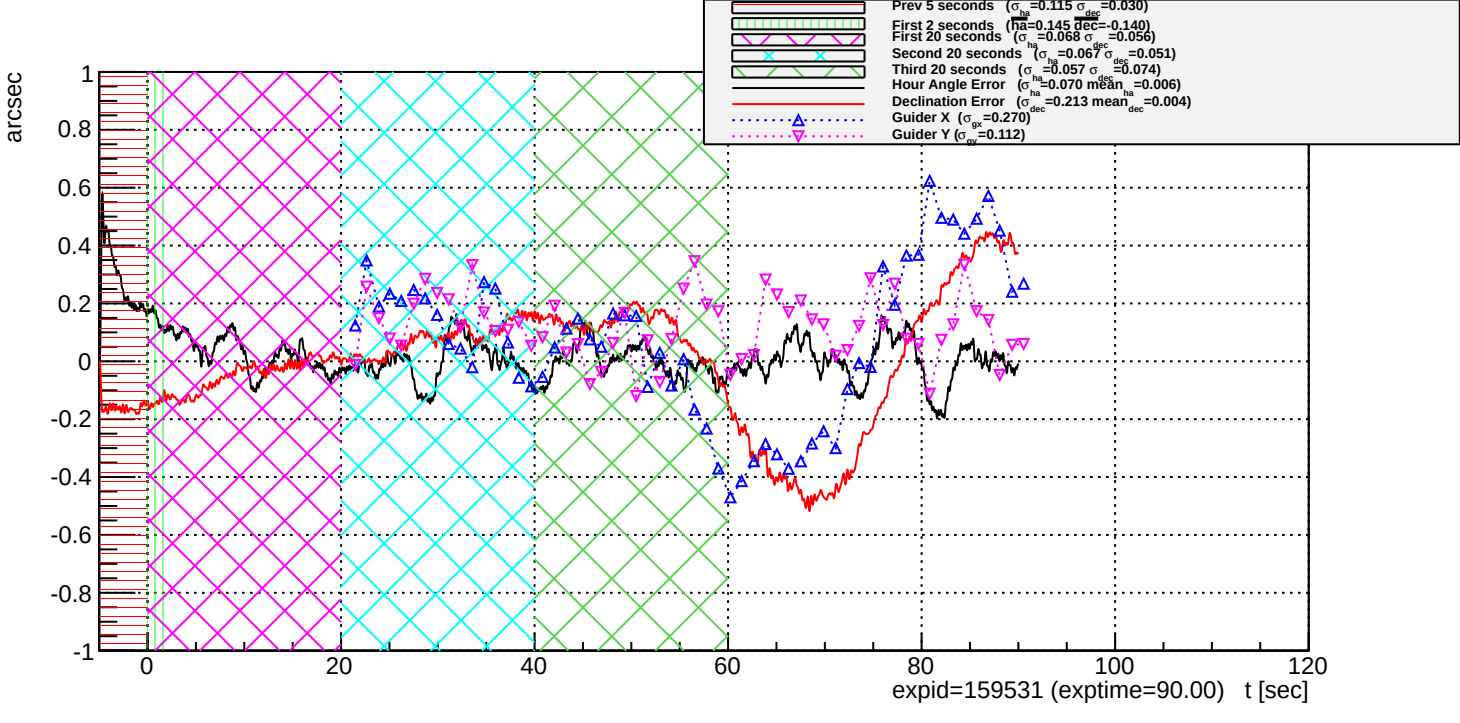

Prev 5 seconds (σ_{ha}=0.088 σ_{dec}=0.069)
First 2 seconds (ha=-0.081 dec=-0.167)
First 20 seconds (σ_{ha}=0.080 σ_{dec}=0.092)
Second 20 seconds (σ_{ha}=0.058 σ_{dec}=0.035)
Third 20 seconds (σ_{ha}=0.053 σ_{dec}=0.065)
Hour Angle Error (σ_{ha}=0.061 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.117 $mean_{dec}$=0.022)
Guider X (σ_{gx}=0.199)
Guider Y (σ_{gy}=0.126)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159526 (exptime=90.00) t [sec]

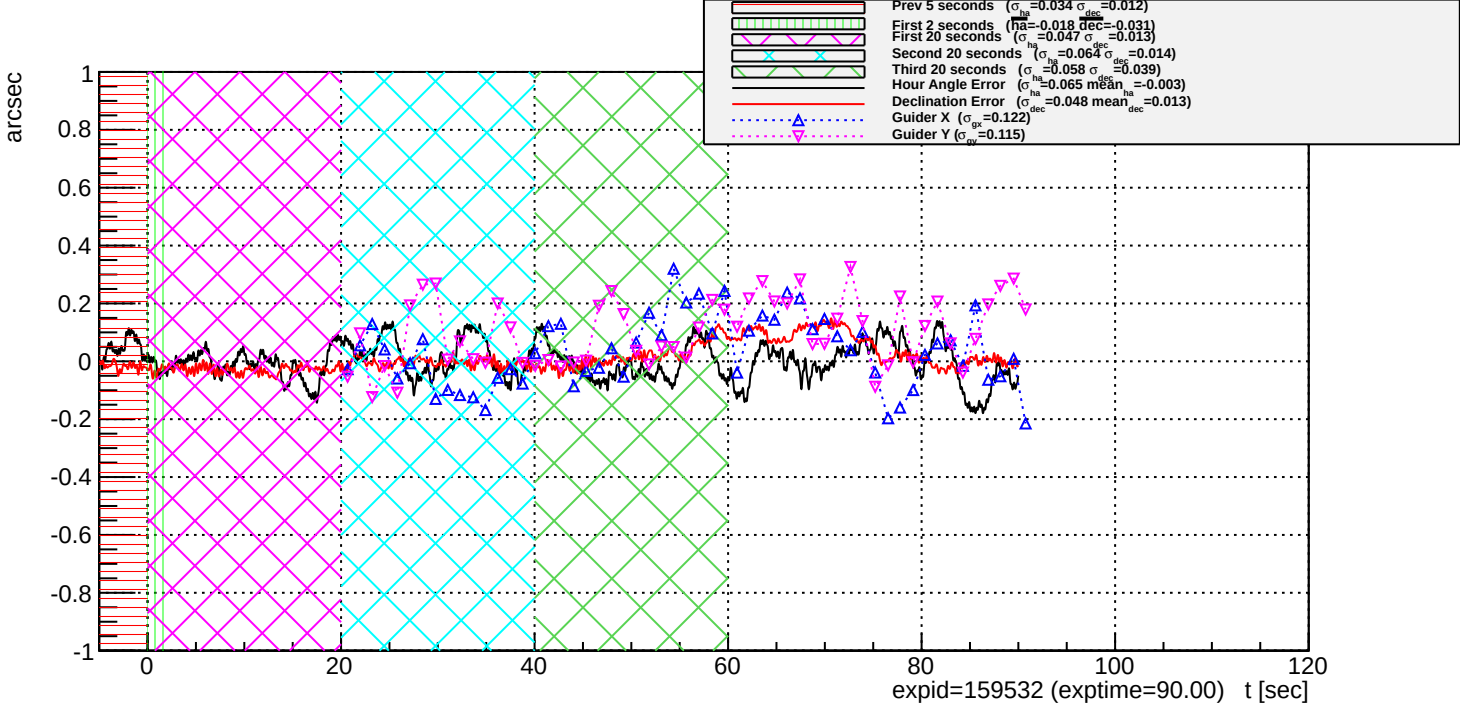

Prev 5 seconds (σ_{ha}=0.086 σ_{dec}=0.014)
First 2 seconds (ha=0.015 dec=-0.010)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.047 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.087 σ_{dec}=0.044)
Hour Angle Error (σ_{ha}=0.074 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.044 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.141)
Guider Y (σ_{gy}=0.131)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159527 (exptime=90.00) t [sec]

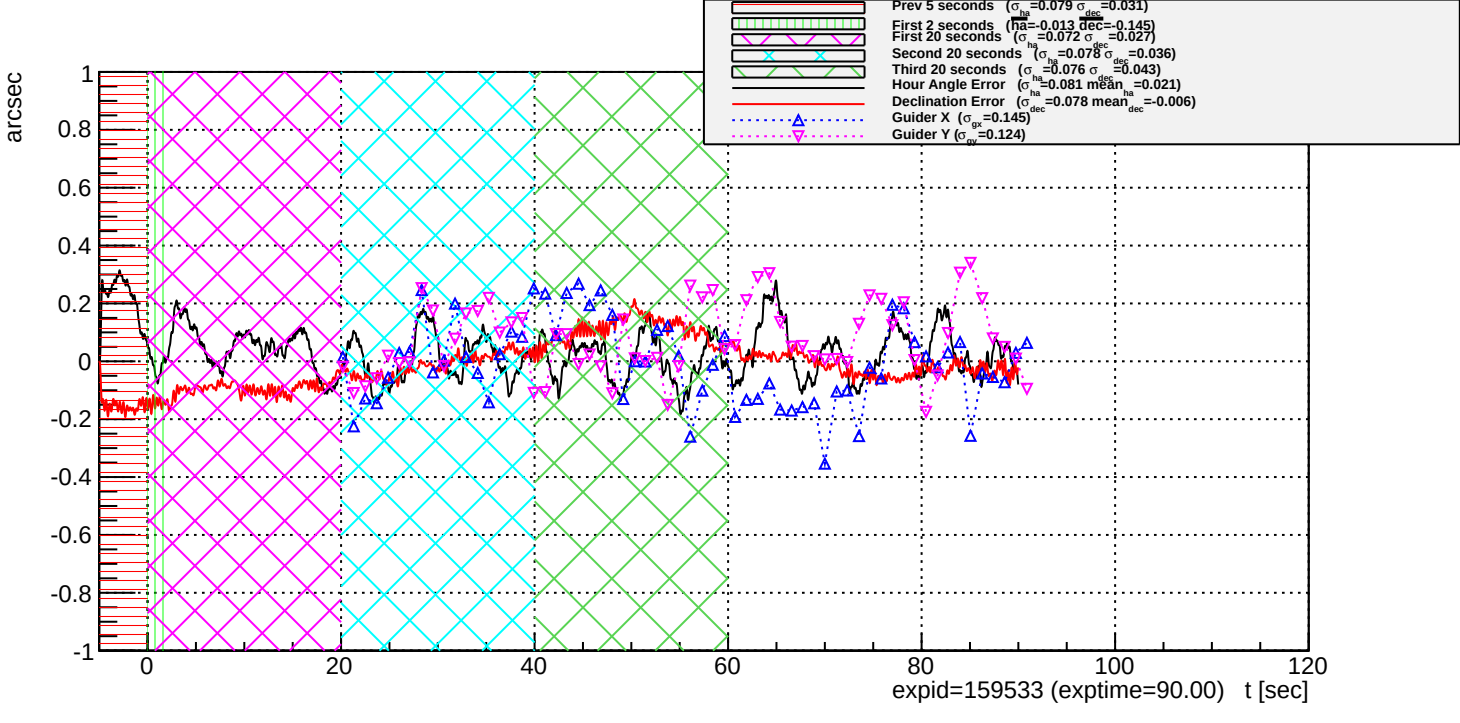

Prev 5 seconds (σ_{ha}=0.199 σ_{dec}=0.033)
First 2 seconds (ha=0.247 dec=-0.141)
First 20 seconds (σ_{ha}=0.310 σ_{dec}=0.050)
Second 20 seconds (σ_{ha}=0.207 σ_{dec}=0.040)
Third 20 seconds (σ_{ha}=0.202 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.231 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.132 $mean_{dec}$=-0.024)
Guider X (σ_{gx}=0.157)
Guider Y (σ_{gy}=0.131)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159528 (exptime=90.00) t [sec]

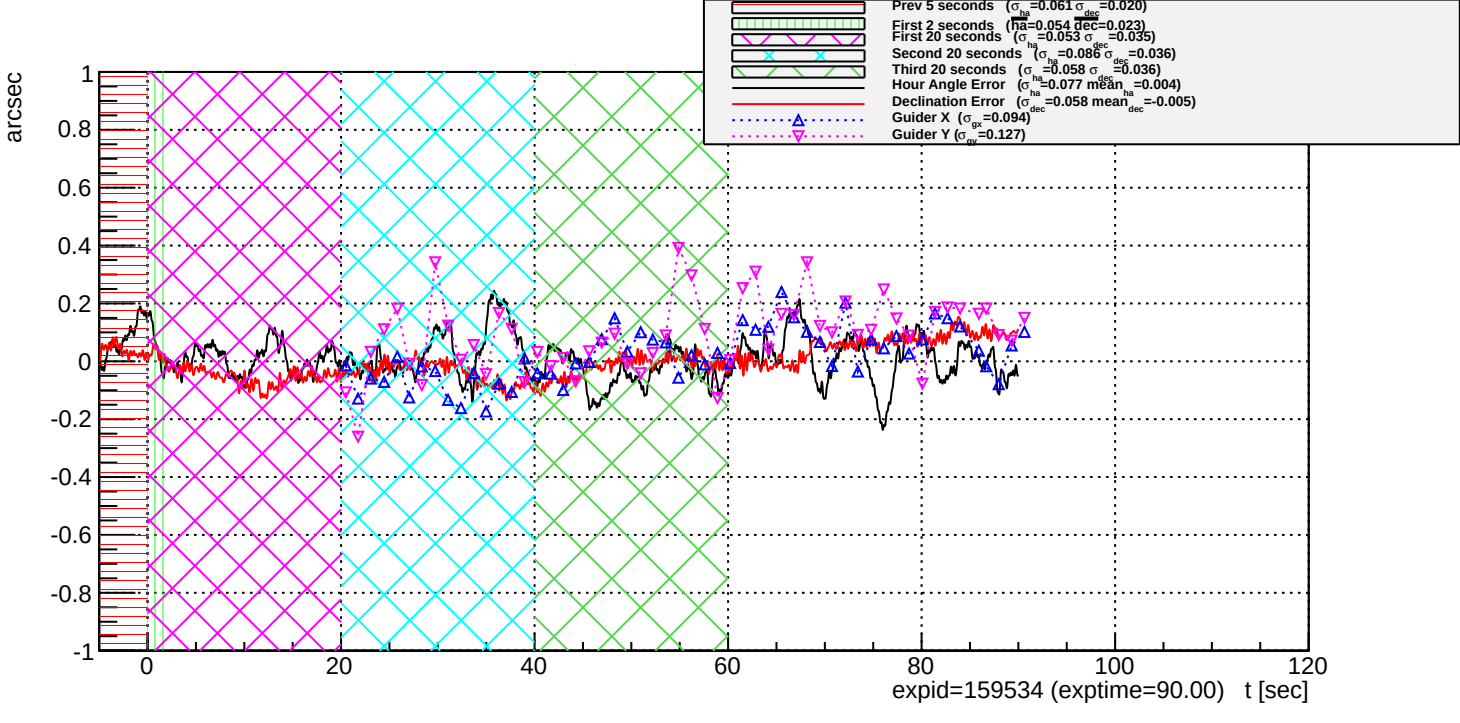

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.017)
First 2 seconds (ha=0.127 dec=-0.101)
First 20 seconds (σ_{ha}=0.058 σ_{dec}=0.028)
Second 20 seconds (σ_{ha}=0.039 σ_{dec}=0.054)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.054)
Hour Angle Error (σ_{ha}=0.059 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.115 $mean_{dec}$=-0.018)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.131)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159529 (exptime=90.00) t [sec]

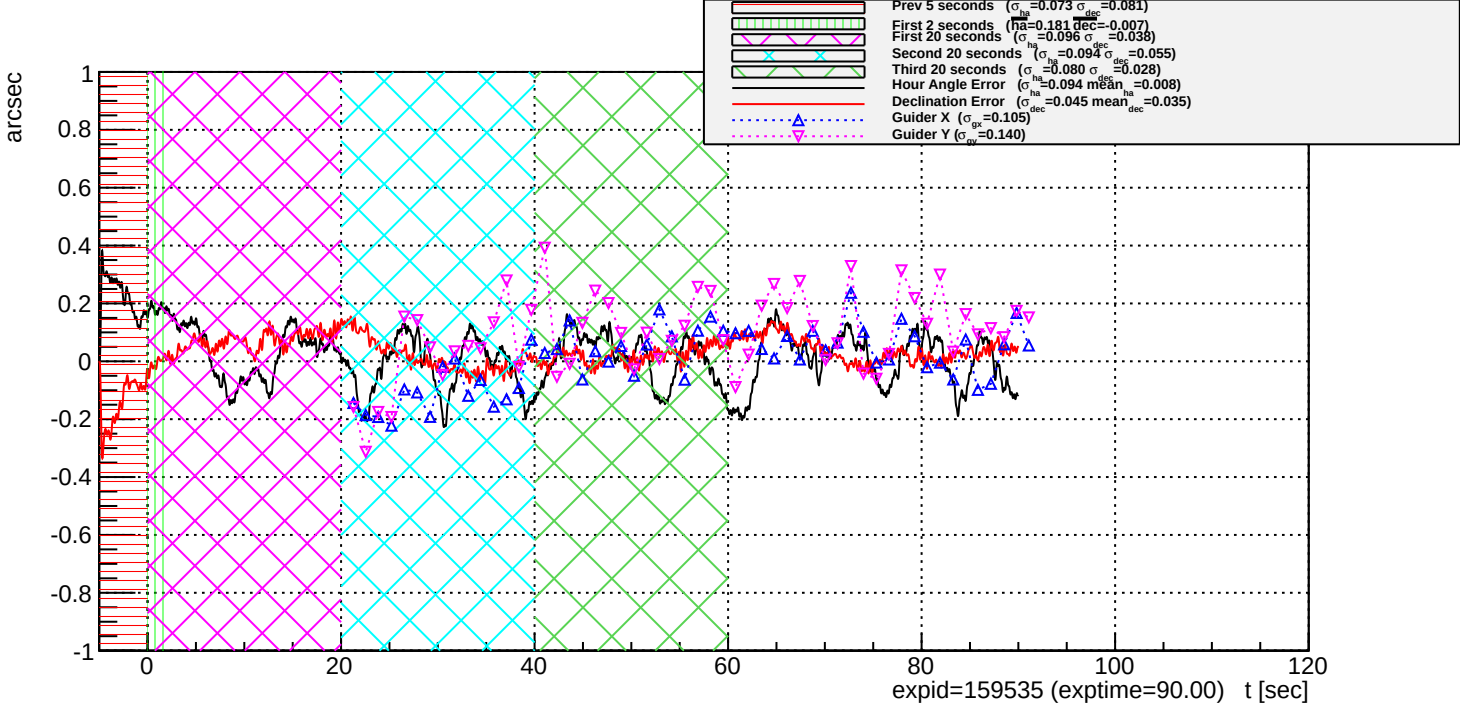

Prev 5 seconds (σ_{ha}=0.084 σ_{dec}=0.021)
First 2 seconds (σ_{ha}=0.099 σ_{dec}=0.114)
First 20 seconds (σ_{ha}=0.059 σ_{dec}=0.063)
Second 20 seconds (σ_{ha}=0.082 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.077 σ_{dec}=0.051)
Hour Angle Error (σ_{ha}=0.075 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.028)
Guider X (σ_{gx}=0.104)
Guider Y (σ_{gy}=0.161)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159530 (exptime=90.00) t [sec]

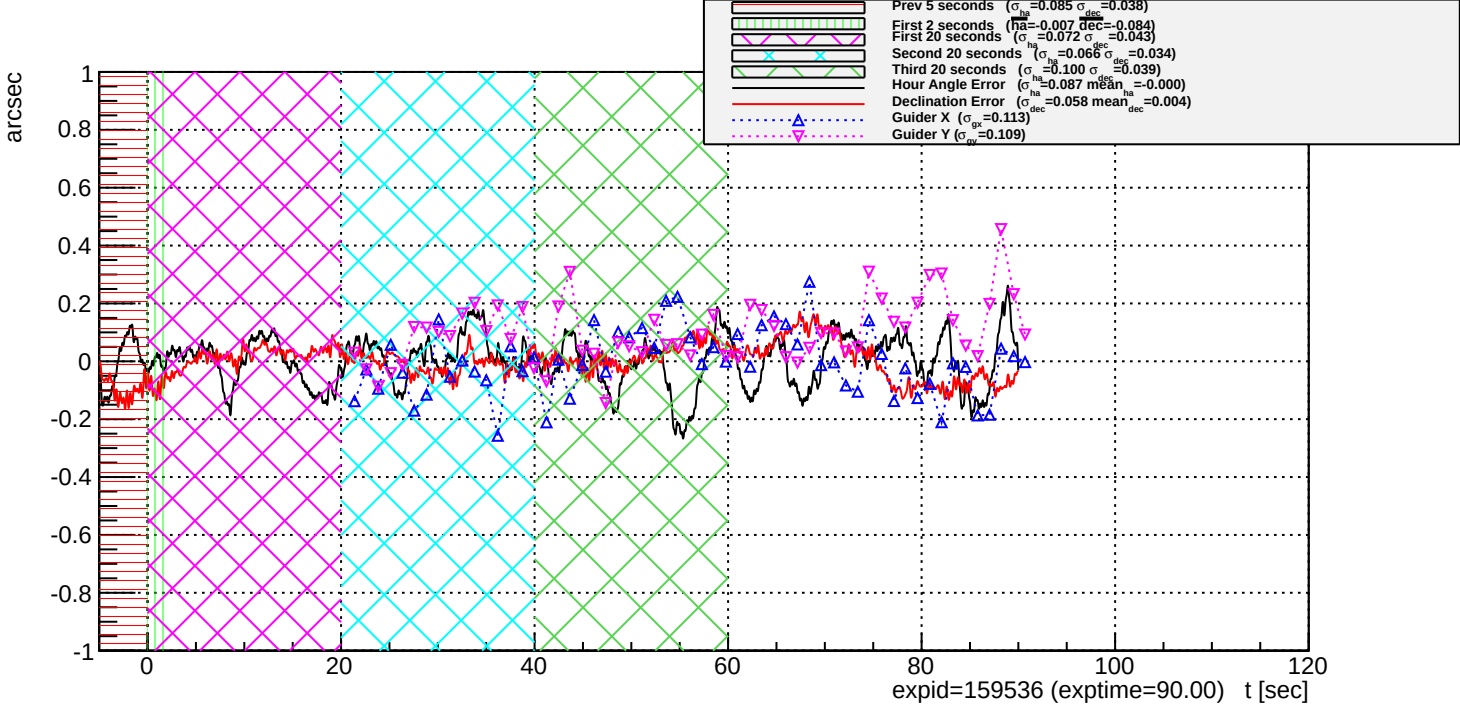

Prev 5 seconds (σ_{ha}=0.115 σ_{dec}=0.030)
First 2 seconds (ha=0.145 dec=-0.140)
First 20 seconds (σ_{ha}=0.068 σ_{dec}=0.056)
Second 20 seconds (σ_{ha}=0.067 σ_{dec}=0.051)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.074)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.213 $mean_{dec}$=0.004)
Guider X (σ_{gx}=0.270)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159531 (exptime=90.00) t [sec]

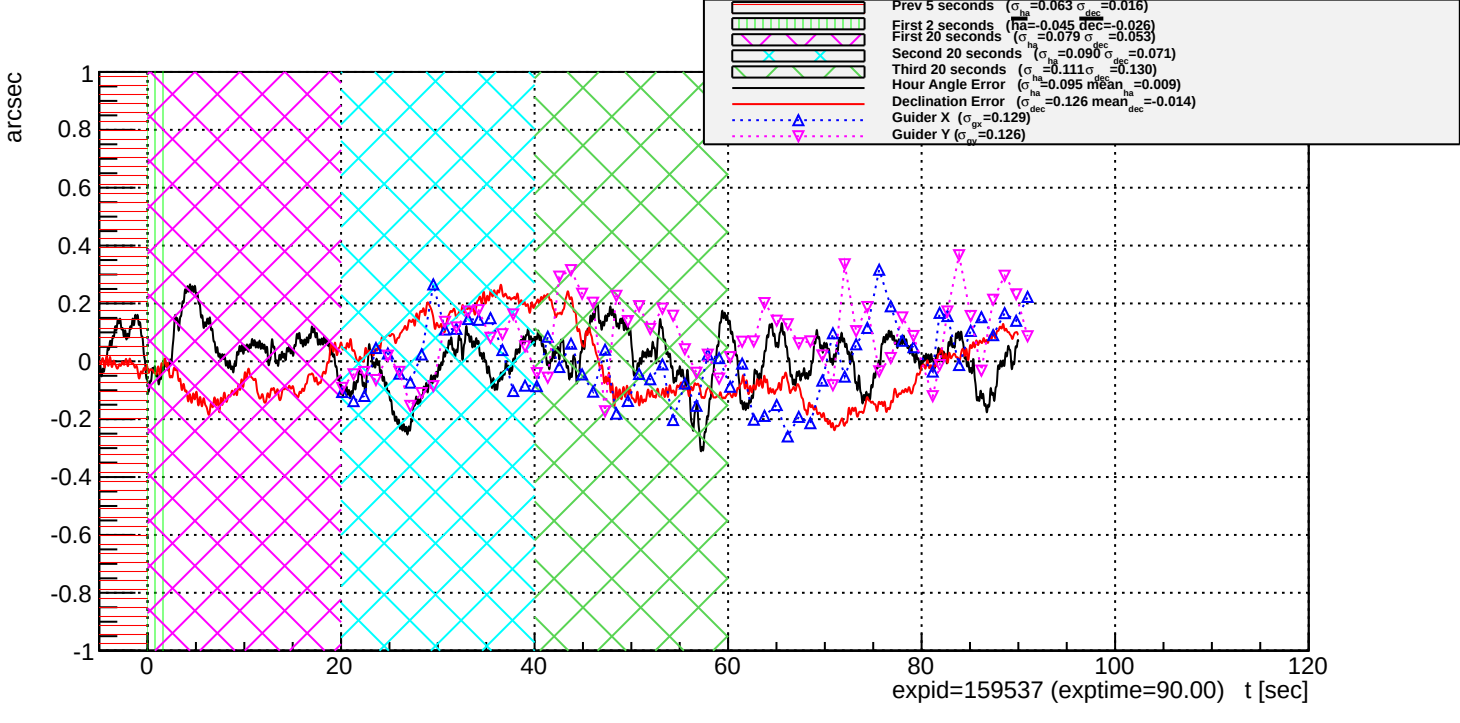

Prev 5 seconds (σ_{ha}=0.034 σ_{dec}=0.012)
First 2 seconds (ha=-0.018 dec=-0.031)
First 20 seconds (σ_{ha}=0.047 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.064 σ_{dec}=0.014)
Third 20 seconds (σ_{ha}=0.058 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.048 $mean_{dec}$=0.013)
Guider X (σ_{gx}=0.122)
Guider Y (σ_{gy}=0.115)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159532 (exptime=90.00) t [sec]

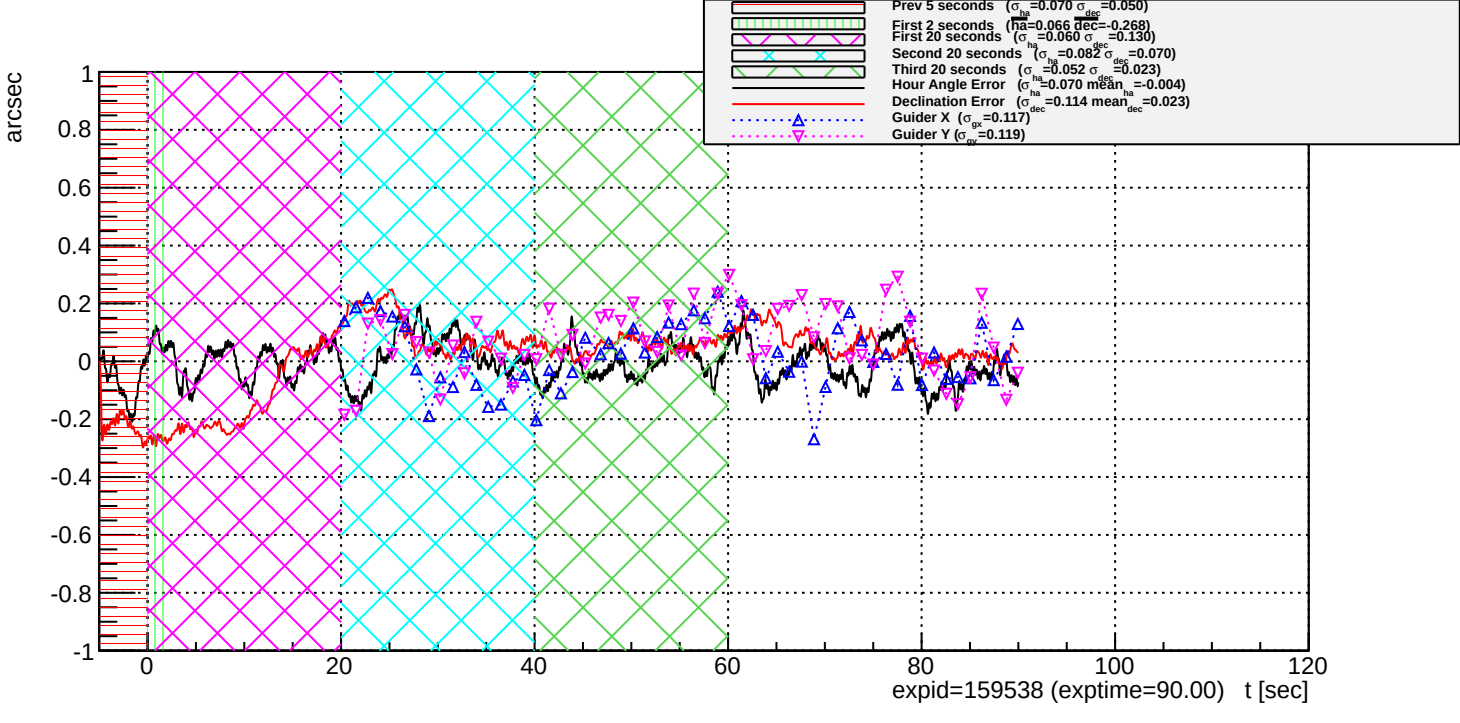

Prev 5 seconds (σ_{ha}=0.079 σ_{dec}=0.031)
First 2 seconds (ha=-0.013 dec=-0.145)
First 20 seconds (σ_{ha}=0.072 σ_{dec}=0.027)
Second 20 seconds (σ_{ha}=0.078 σ_{dec}=0.036)
Third 20 seconds (σ_{ha}=0.076 σ_{dec}=0.043)
Hour Angle Error (σ_{ha}=0.081 $mean_{ha}$=0.021)
Declination Error (σ_{dec}=0.078 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.145)
Guider Y (σ_{gy}=0.124)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159533 (exptime=90.00) t [sec]

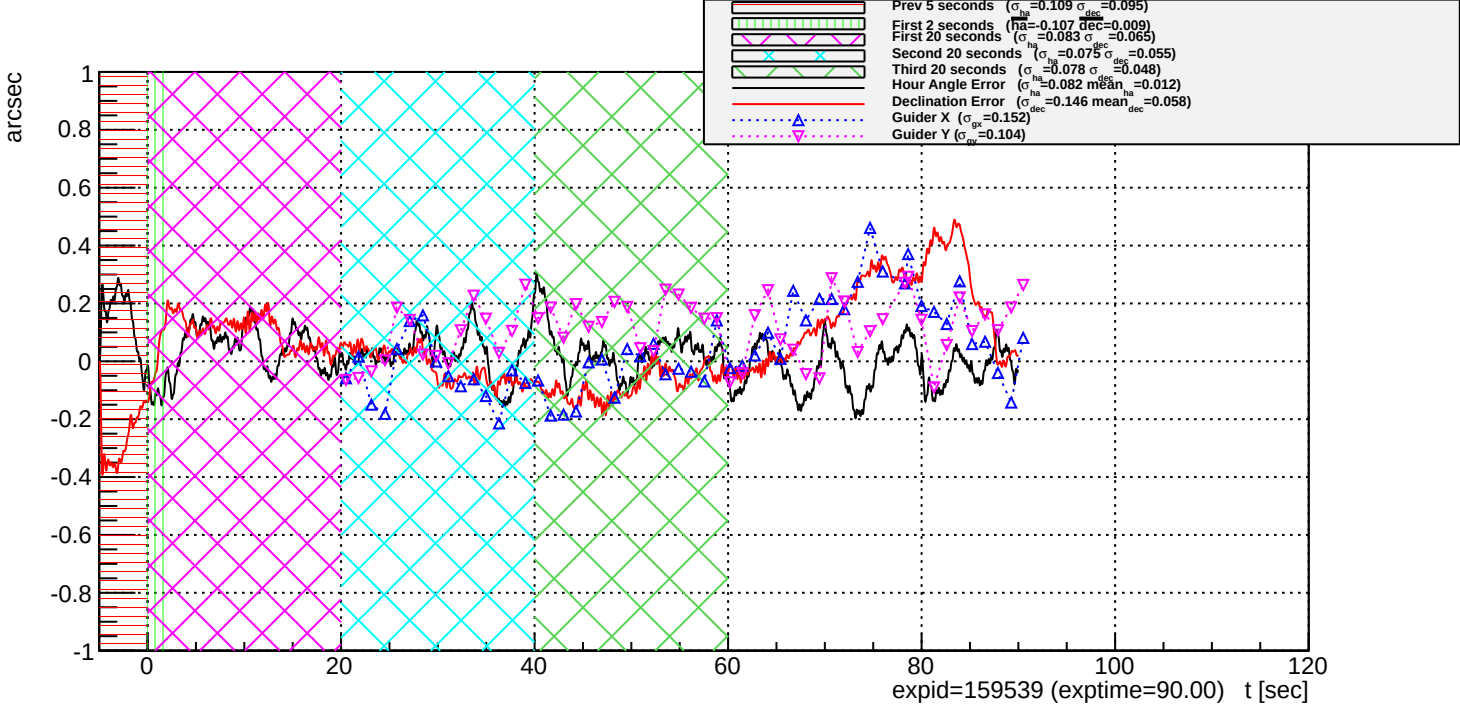

Prev 5 seconds (σ_{ha}=0.061 σ_{dec}=0.020)
First 2 seconds (ha=0.054 dec=0.023)
First 20 seconds (σ_{ha}=0.053 σ_{dec}=0.035)
Second 20 seconds (σ_{ha}=0.088 σ_{dec}=0.036)
Third 20 seconds (σ_{ha}=0.058 σ_{dec}=0.036)
Hour Angle Error (σ_{ha}=0.077 $mean_{ha}$=0.004)
Declination Error (σ_{dec}=0.058 $mean_{dec}$=-0.005)
Guider X (σ_{gx}=0.094)
Guider Y (σ_{gy}=0.127)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159534 (exptime=90.00) t [sec]

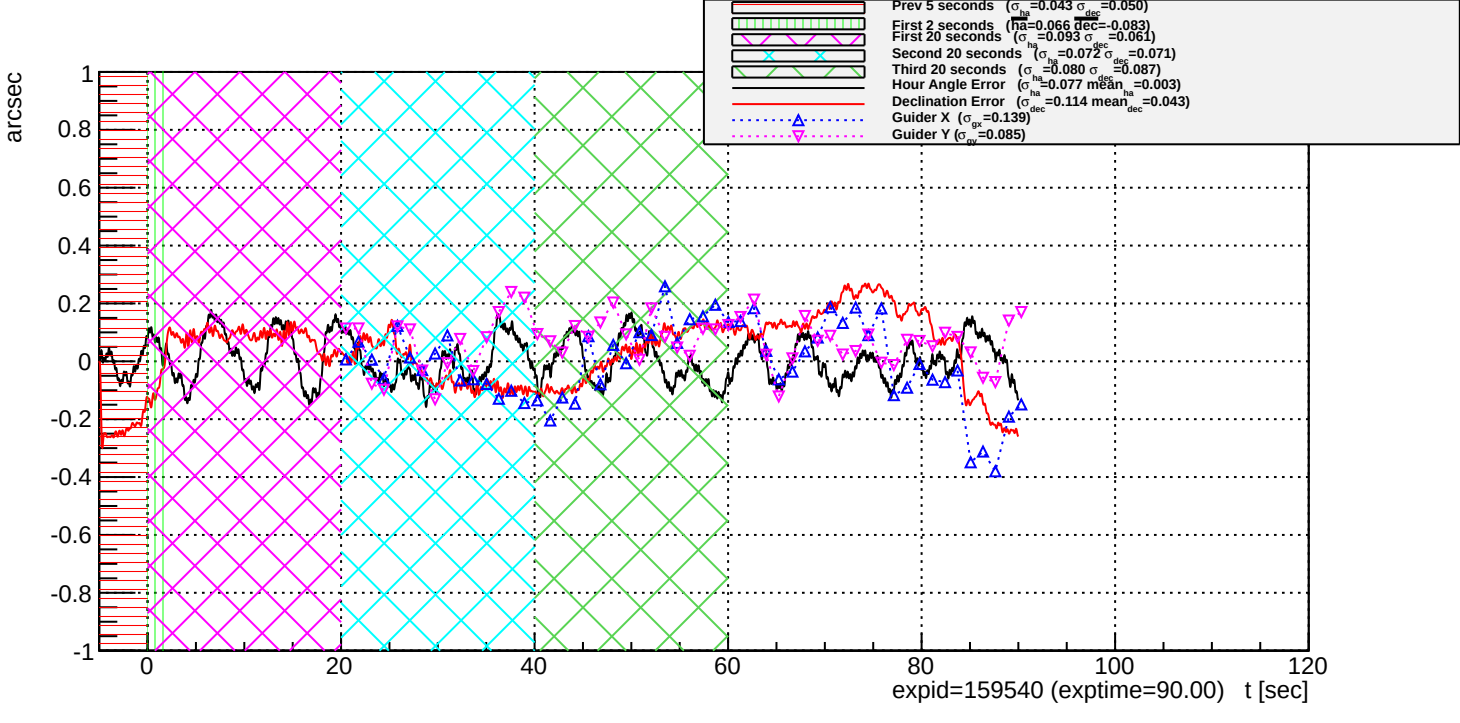

Prev 5 seconds (σ_{ha}=0.073 σ_{dec}=0.081)
First 2 seconds (ha=0.181 dec=-0.007)
First 20 seconds (σ_{ha}=0.096 σ_{dec}=0.038)
Second 20 seconds (σ_{ha}=0.094 σ_{dec}=0.055)
Third 20 seconds (σ_{ha}=0.080 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.094 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.045 $mean_{dec}$=0.035)
Guider X (σ_{gx}=0.105)
Guider Y (σ_{gy}=0.140)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159535 (exptime=90.00) t [sec]

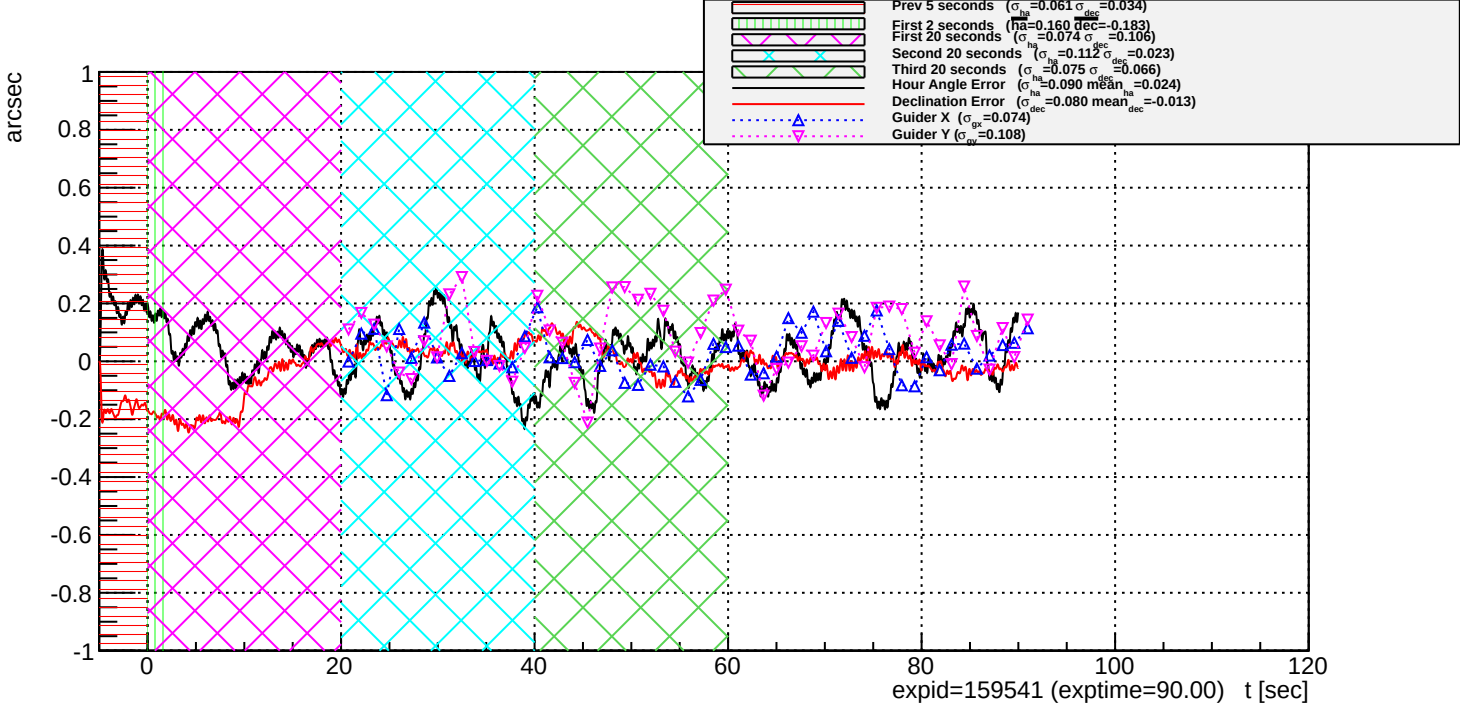

Prev 5 seconds (σ_{ha}=0.085 σ_{dec}=0.038)
First 2 seconds (mean_{ha}=-0.007 mean_{dec}=-0.084)
First 20 seconds (σ_{ha}=0.072 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.066 σ_{dec}=0.034)
Third 20 seconds (σ_{ha}=0.100 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.087 mean_{ha}=-0.000)
Declination Error (σ_{dec}=0.058 mean_{dec}=0.004)
Guider X (σ_{gx}=0.113)
Guider Y (σ_{gy}=0.109)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159536 (exptime=90.00)
t [sec]

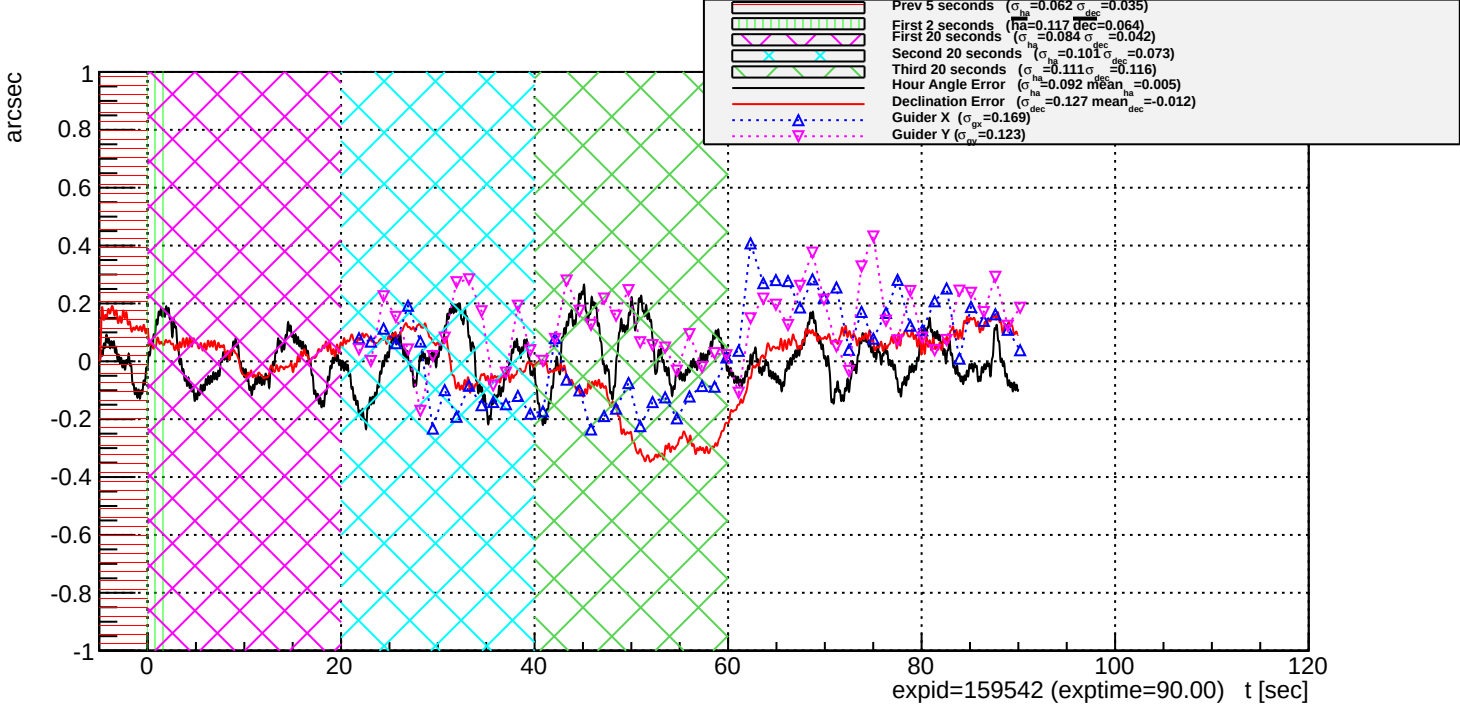

Prev 5 seconds (σ_{ha}=0.063 σ_{dec}=0.016)
First 2 seconds (ha=-0.045 dec=-0.026)
First 20 seconds (σ_{ha}=0.079 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.090 σ_{dec}=0.071)
Third 20 seconds (σ_{ha}=0.111 σ_{dec}=0.130)
Hour Angle Error (σ_{ha}=0.095 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.126 $mean_{dec}$=-0.014)
Guider X (σ_{gx}=0.129)
Guider Y (σ_{gy}=0.126)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159537 (exptime=90.00) t [sec]

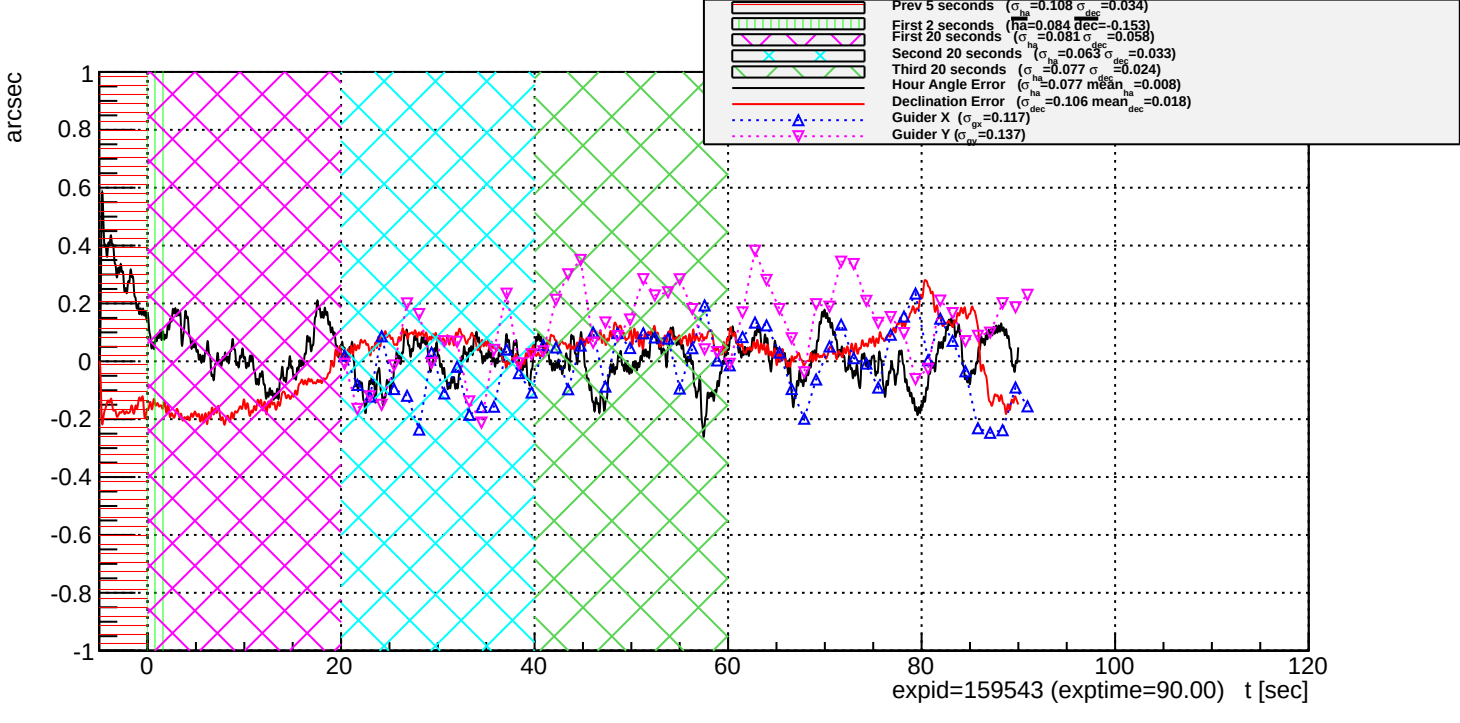

Prev 5 seconds (σ_{ha}=0.070 σ_{dec}=0.050)
First 2 seconds (ha=0.066 dec=-0.268)
First 20 seconds (σ_{ha}=0.060 σ_{dec}=0.130)
Second 20 seconds (σ_{ha}=0.082 σ_{dec}=0.070)
Third 20 seconds (σ_{ha}=0.052 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.114 $mean_{dec}$=0.023)
Guider X (σ_{gx}=0.117)
Guider Y (σ_{gy}=0.119)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159538 (exptime=90.00) t [sec]

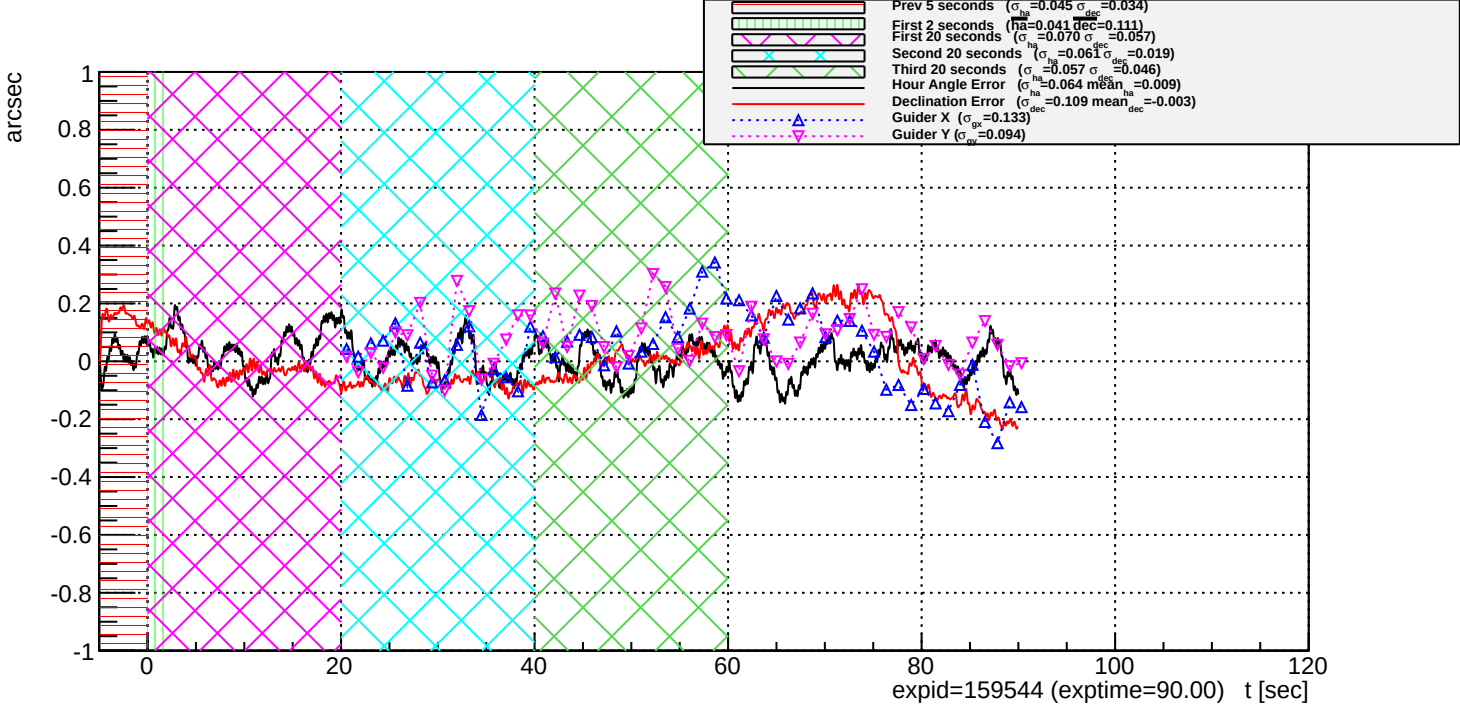

Prev 5 seconds (σ_{ha}=0.109 σ_{dec}=0.095)
First 2 seconds (σ_{ha}=0.107 σ_{dec}=0.009)
First 20 seconds (σ_{ha}=0.083 σ_{dec}=0.065)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.055)
Third 20 seconds (σ_{ha}=0.078 σ_{dec}=0.048)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.146 $mean_{dec}$=0.058)
Guider X (σ_{gx}=0.152)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159539 (exptime=90.00)
t [sec]

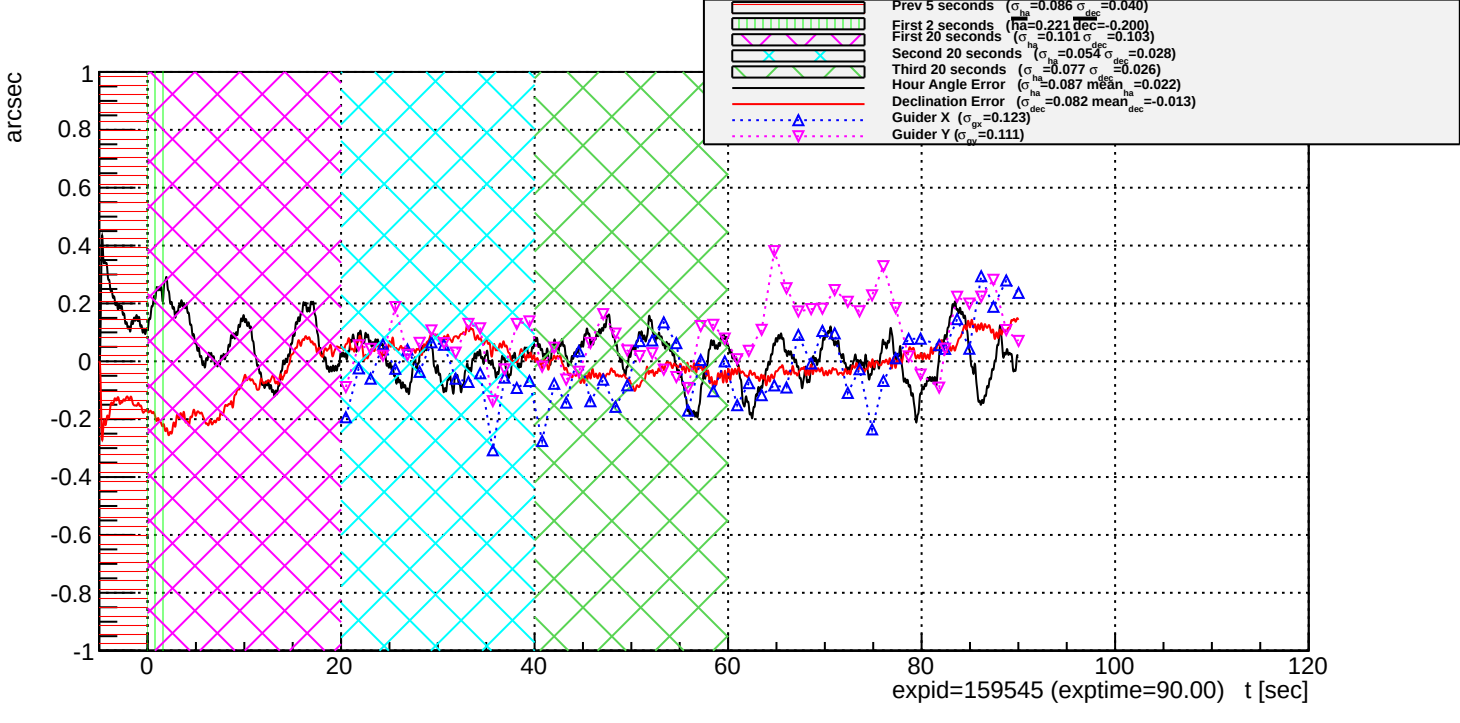

Prev 5 seconds (σ_{ha}=0.043 σ_{dec}=0.050)
First 2 seconds (ha=0.066 dec=-0.083)
First 20 seconds (σ_{ha}=0.093 σ_{dec}=0.061)
Second 20 seconds (σ_{ha}=0.072 σ_{dec}=0.071)
Third 20 seconds (σ_{ha}=0.080 σ_{dec}=0.087)
Hour Angle Error (σ_{ha}=0.077 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.114 $mean_{dec}$=0.043)
Guider X (σ_{gx}=0.139)
Guider Y (σ_{gy}=0.085)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159540 (exptime=90.00) t [sec]

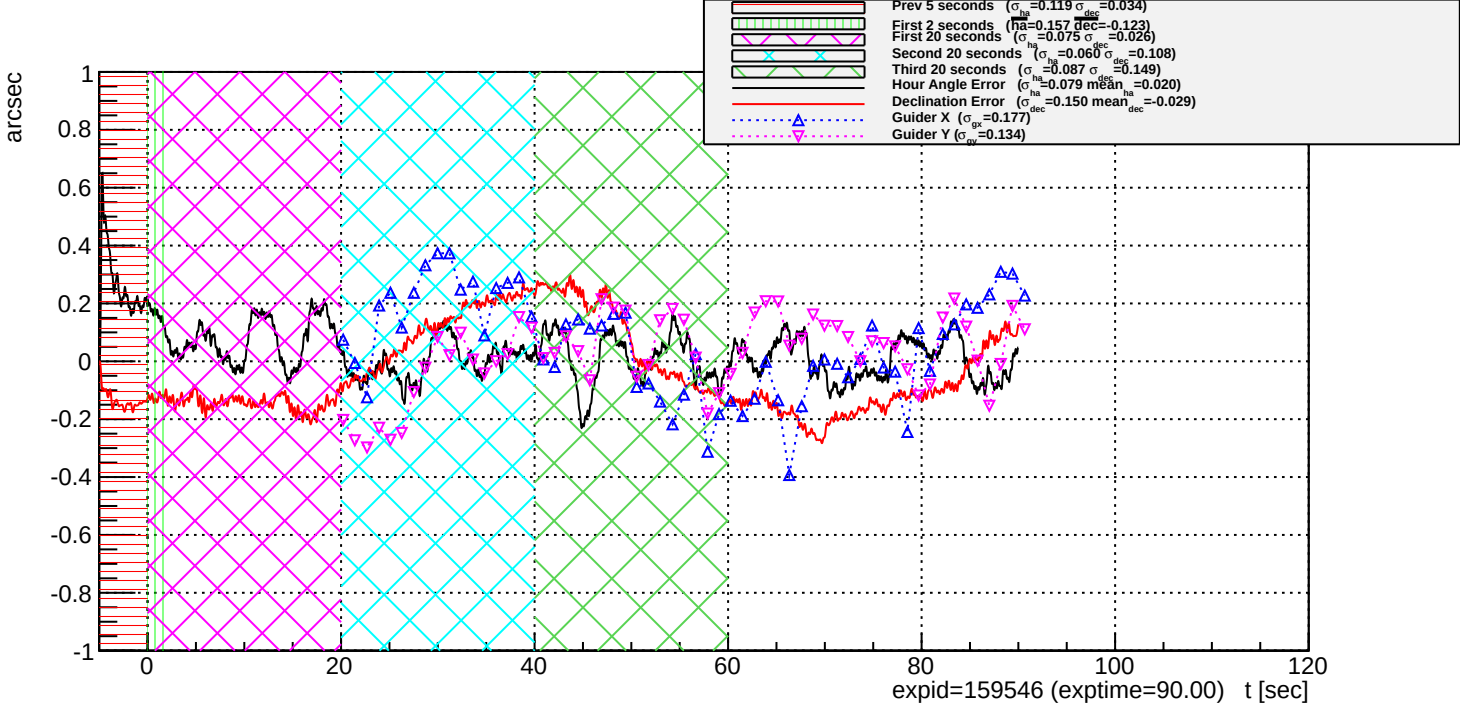

Prev 5 seconds (σ_{ha}=0.061 σ_{dec}=0.034)
First 2 seconds (ha=0.160 dec=-0.183)
First 20 seconds (σ_{ha}=0.074 σ_{dec}=0.106)
Second 20 seconds (σ_{ha}=0.112 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.066)
Hour Angle Error (σ_{ha}=0.090 $mean_{ha}$=0.024)
Declination Error (σ_{dec}=0.080 $mean_{dec}$=-0.013)
Guider X (σ_{gx}=0.074)
Guider Y (σ_{gy}=0.108)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159541 (exptime=90.00) t [sec]

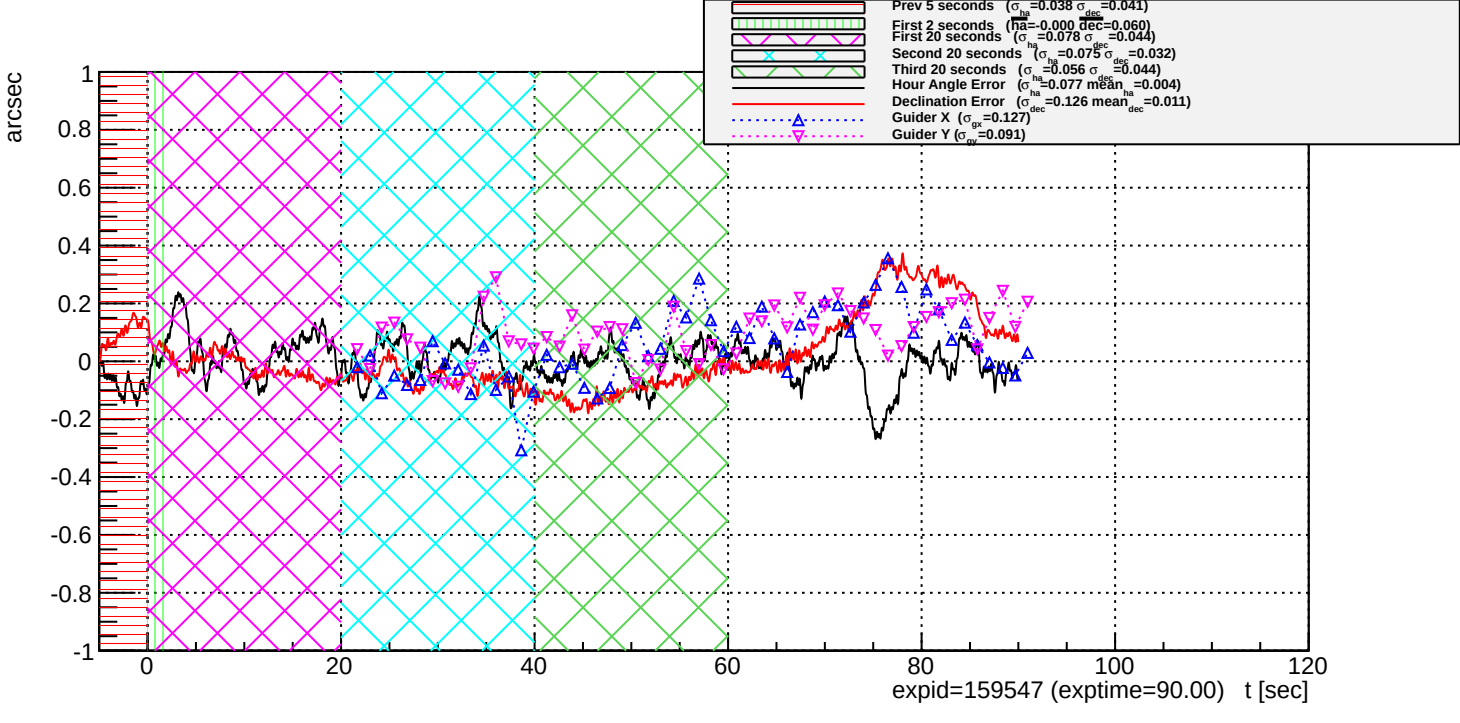

Prev 5 seconds (σ_{ha}=0.062 σ_{dec}=0.035)
First 2 seconds (ha=0.117 dec=0.064)
First 20 seconds (σ_{ha}=0.084 σ_{dec}=0.042)
Second 20 seconds (σ_{ha}=0.101 σ_{dec}=0.073)
Third 20 seconds (σ_{ha}=0.111 σ_{dec}=0.116)
Hour Angle Error (σ_{ha}=0.092 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.127 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.169)
Guider Y (σ_{gy}=0.123)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159542 (exptime=90.00) t [sec]

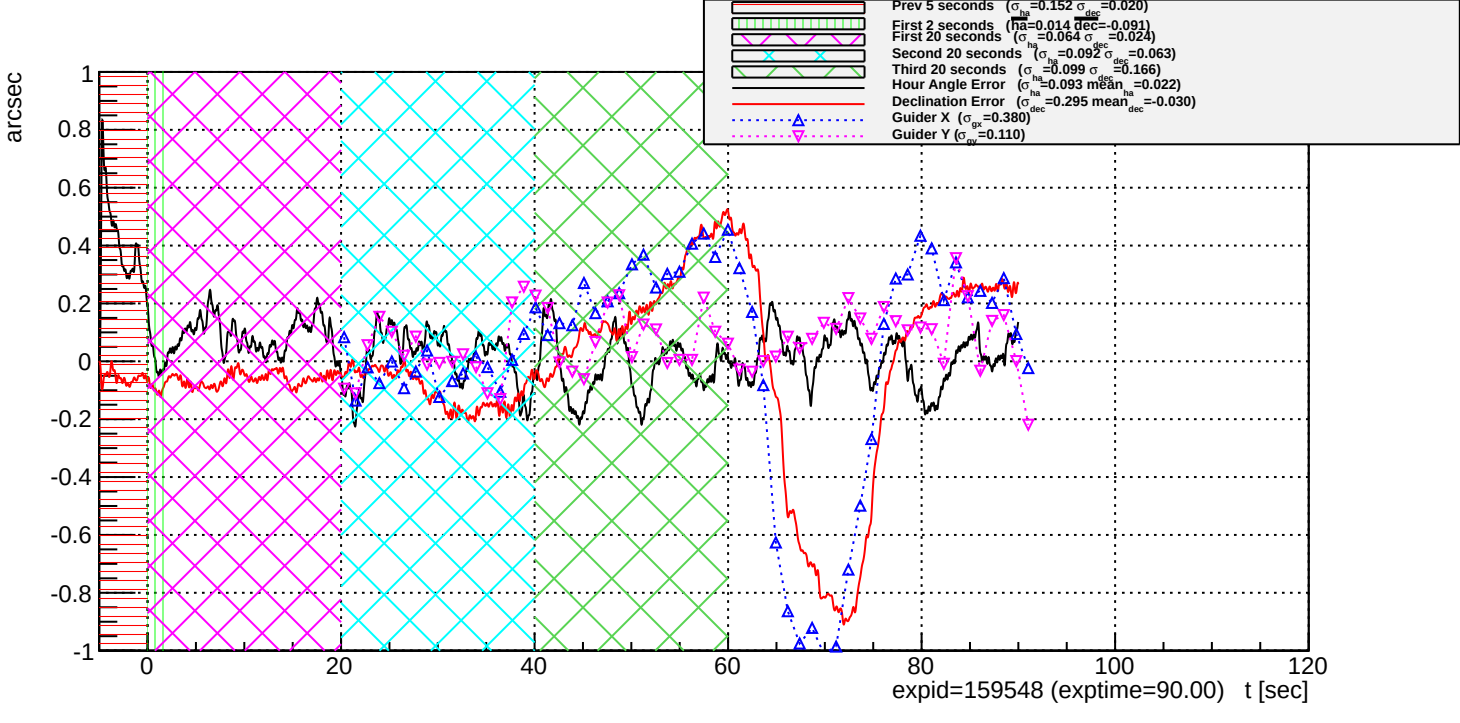

Prev 5 seconds (σ_{ha}=0.108 σ_{dec}=0.034)
First 2 seconds (ha=0.084 dec=-0.153)
First 20 seconds (σ_{ha}=0.081 σ_{dec}=0.058)
Second 20 seconds (σ_{ha}=0.063 σ_{dec}=0.033)
Third 20 seconds (σ_{ha}=0.077 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.077 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.106 $mean_{dec}$=0.018)
Guider X (σ_{gx}=0.117)
Guider Y (σ_{gy}=0.137)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159543 (exptime=90.00)
t [sec]

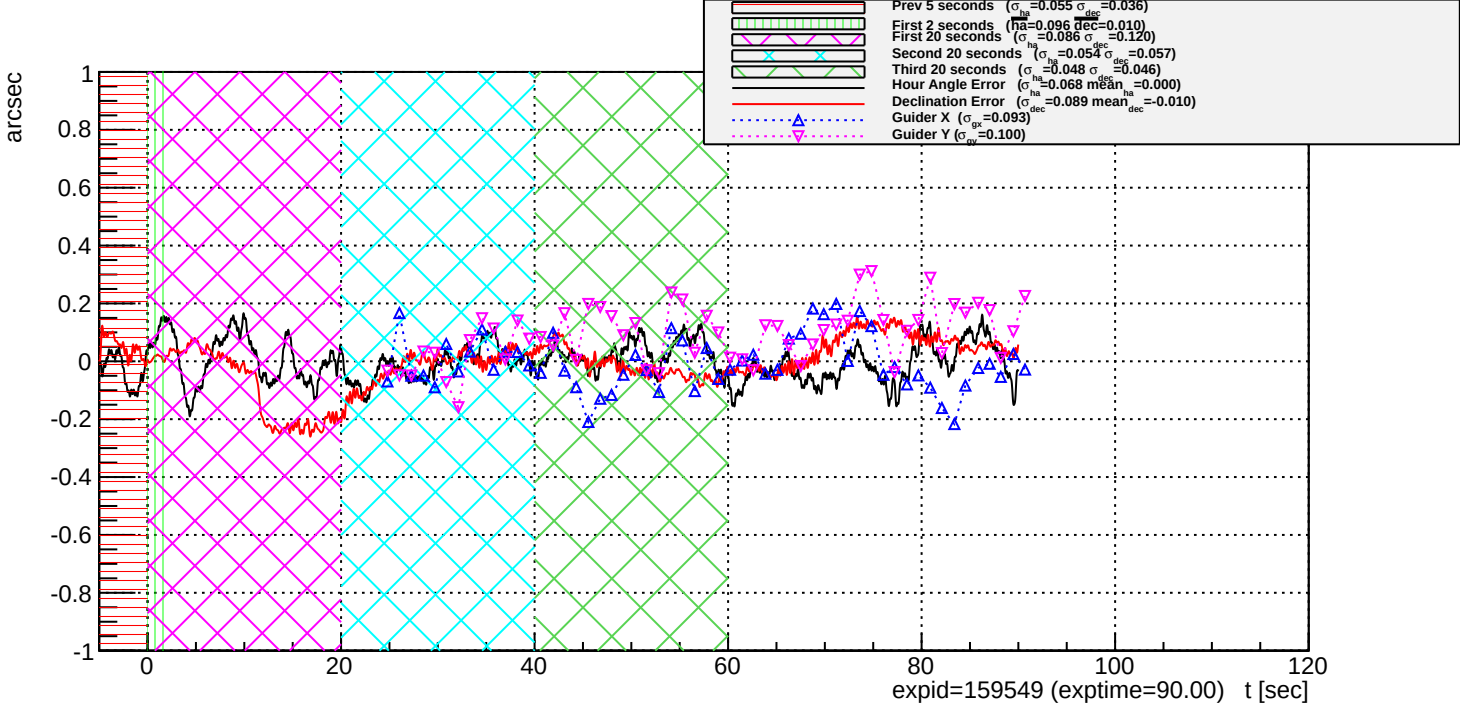

Prev 5 seconds (σ_{ha}=0.045 σ_{dec}=0.034)
First 2 seconds (σ_{ha}=0.041 σ_{dec}=0.111)
First 20 seconds (σ_{ha}=0.070 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.046)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.109 $mean_{dec}$=-0.003)
Guider X (σ_{gx}=0.133)
Guider Y (σ_{gy}=0.094)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159544 (exptime=90.00) t [sec]

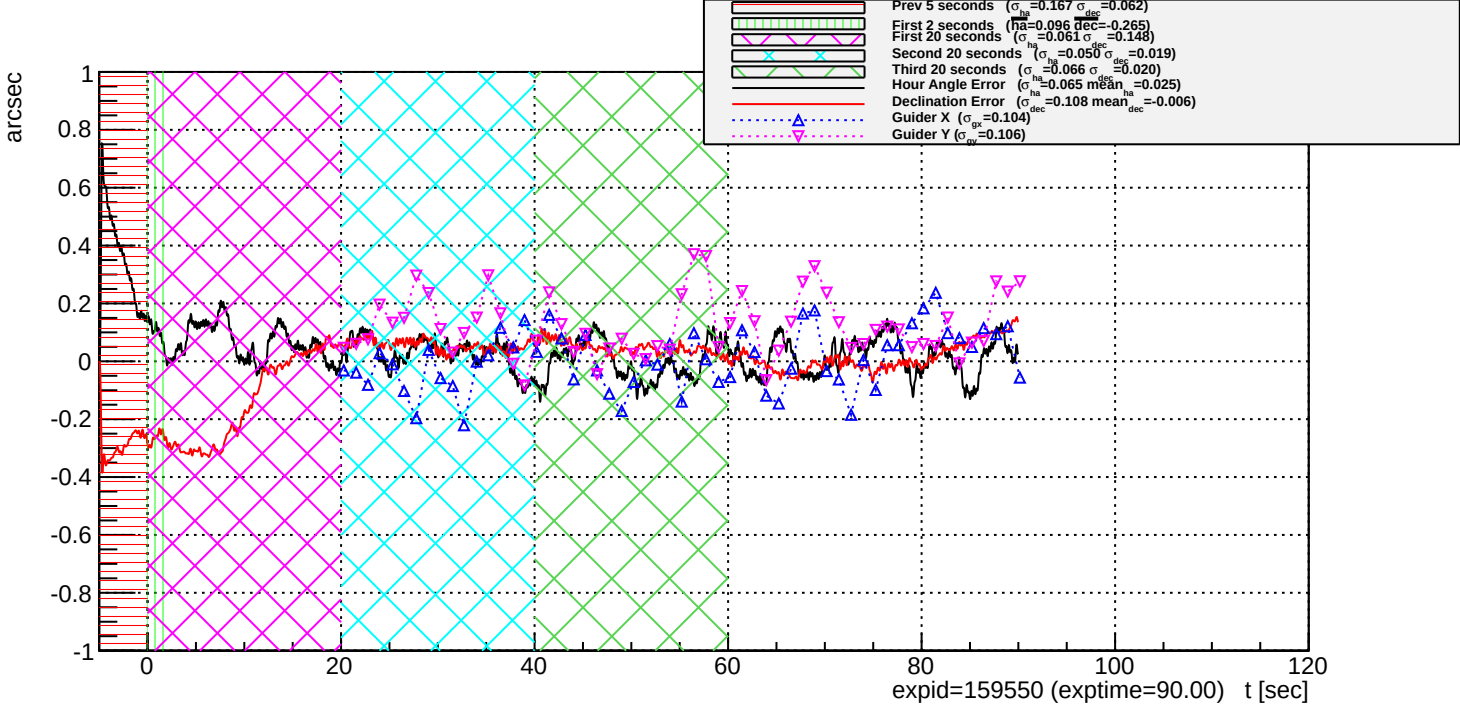

Prev 5 seconds (σ_{ha}=0.086 σ_{dec}=0.040)
First 2 seconds (ha=0.221 dec=-0.200)
First 20 seconds (σ_{ha}=0.101 σ_{dec}=0.103)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.077 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.087 $mean_{ha}$=0.022)
Declination Error (σ_{dec}=0.082 $mean_{dec}$=-0.013)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.111)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159545 (exptime=90.00) t [sec]

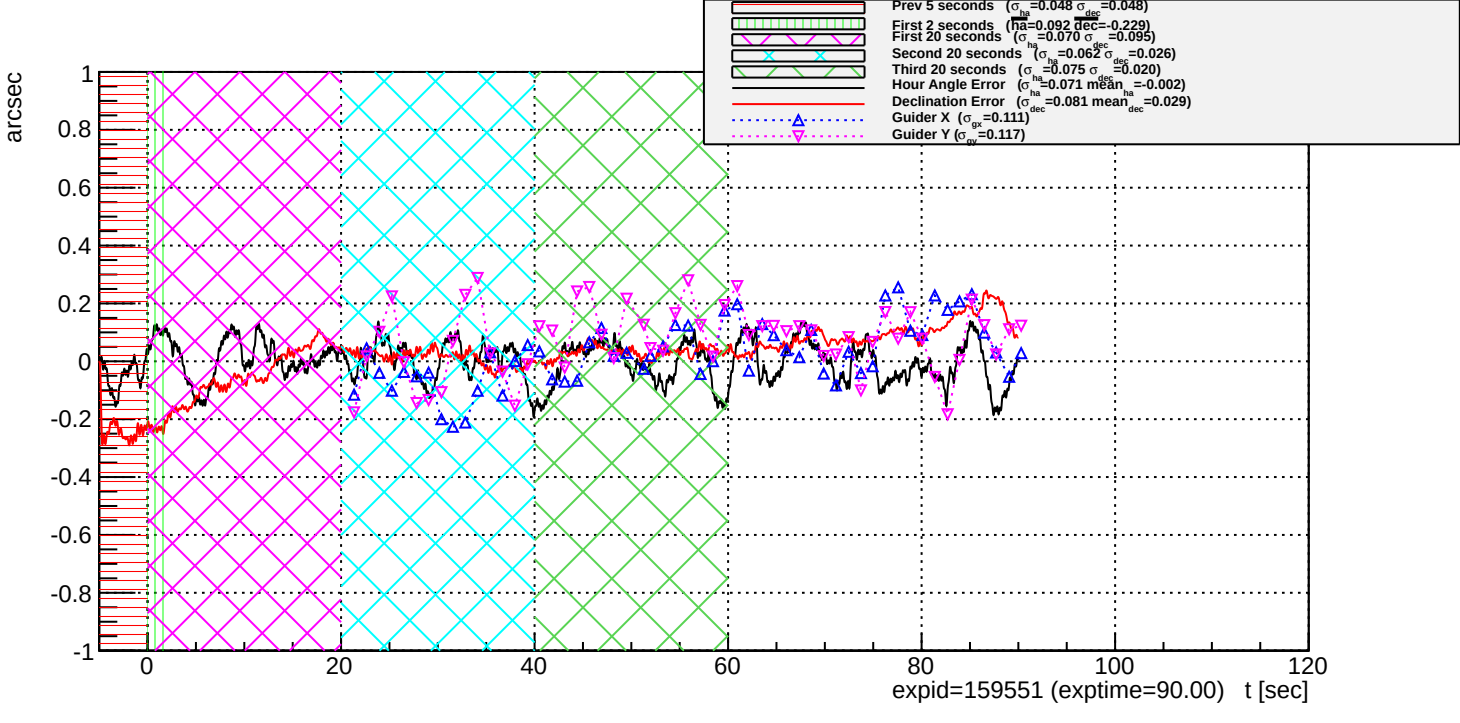

Prev 5 seconds (σ_{ha}=0.119 σ_{dec}=0.034)
First 2 seconds (σ_{ha}=0.157 σ_{dec}=-0.123)
First 20 seconds (σ_{ha}=0.075 σ_{dec}=0.026)
Second 20 seconds (σ_{ha}=0.060 σ_{dec}=0.108)
Third 20 seconds (σ_{ha}=0.087 σ_{dec}=0.149)
Hour Angle Error (σ_{ha}=0.079 $mean_{ha}$=0.020)
Declination Error (σ_{dec}=0.150 $mean_{dec}$=-0.029)
Guider X (σ_{gx}=0.177)
Guider Y (σ_{gy}=0.134)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159546 (exptime=90.00) t [sec]

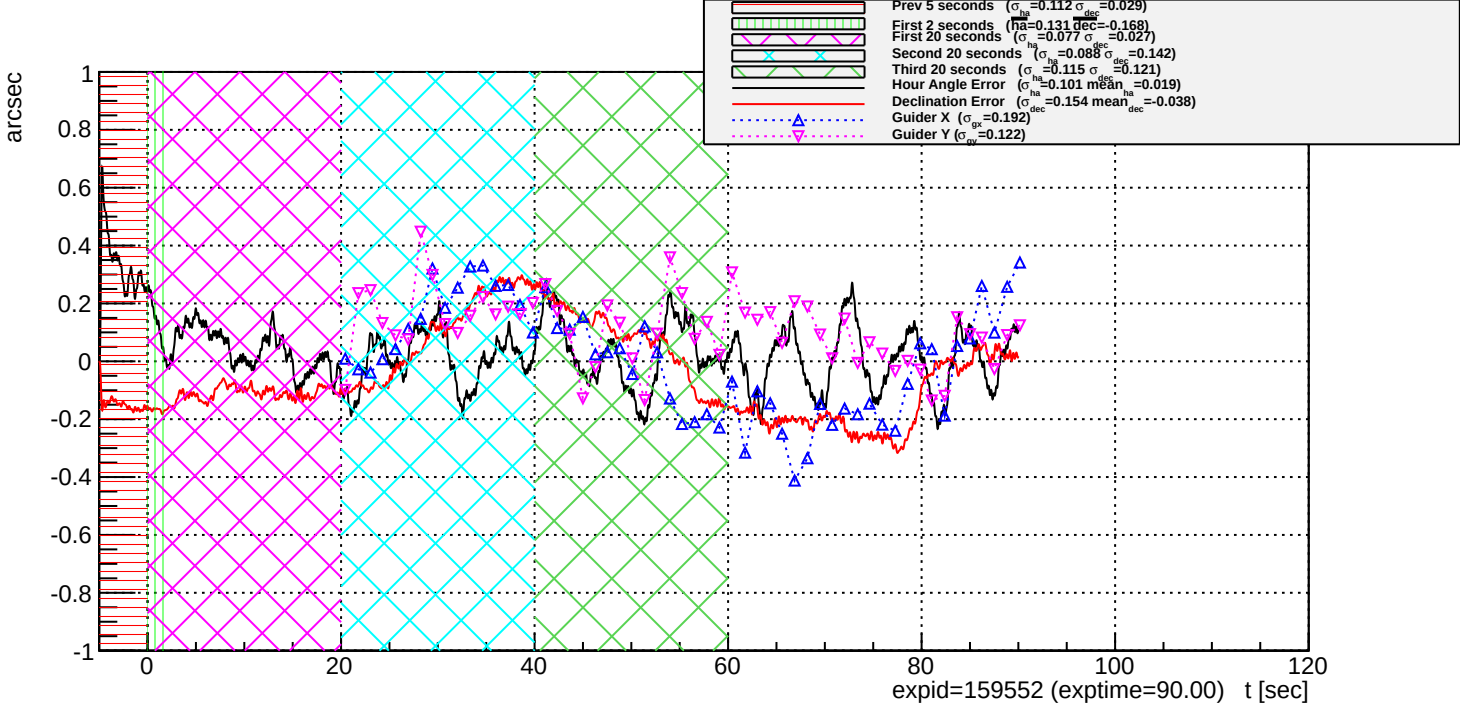

Prev 5 seconds (σ_{ha}=0.038 σ_{dec}=0.041)
First 2 seconds ($\overline{ha}$=-0.000 $\overline{dec}$=0.060)
First 20 seconds (σ_{ha}=0.078 σ_{dec}=0.044)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.044)
Hour Angle Error (σ_{ha}=0.077 $mean_{ha}$=0.004)
Declination Error (σ_{dec}=0.126 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.127)
Guider Y (σ_{gy}=0.091)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159547 (exptime=90.00)
t [sec]

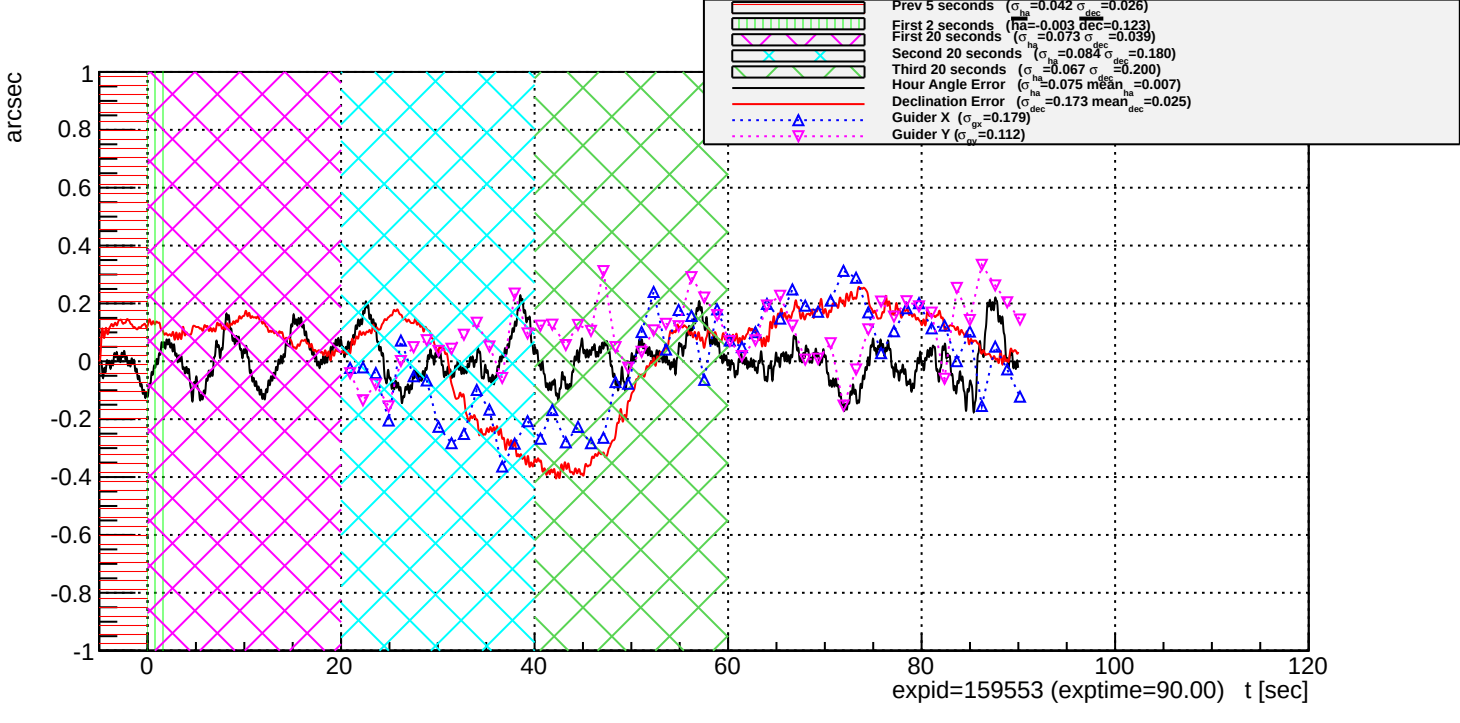

Prev 5 seconds (σ_{ha}=0.152 σ_{dec}=0.020)
First 2 seconds (σ_{ha}=0.014 σ_{dec}=-0.091)
First 20 seconds (σ_{ha}=0.064 σ_{dec}=0.024)
Second 20 seconds (σ_{ha}=0.092 σ_{dec}=0.063)
Third 20 seconds (σ_{ha}=0.099 σ_{dec}=0.166)
Hour Angle Error (σ_{ha}=0.093 $mean_{ha}$=0.022)
Declination Error (σ_{dec}=0.295 $mean_{dec}$=-0.030)
Guider X (σ_{gx}=0.380)
Guider Y (σ_{gy}=0.110)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159548 (exptime=90.00) t [sec]

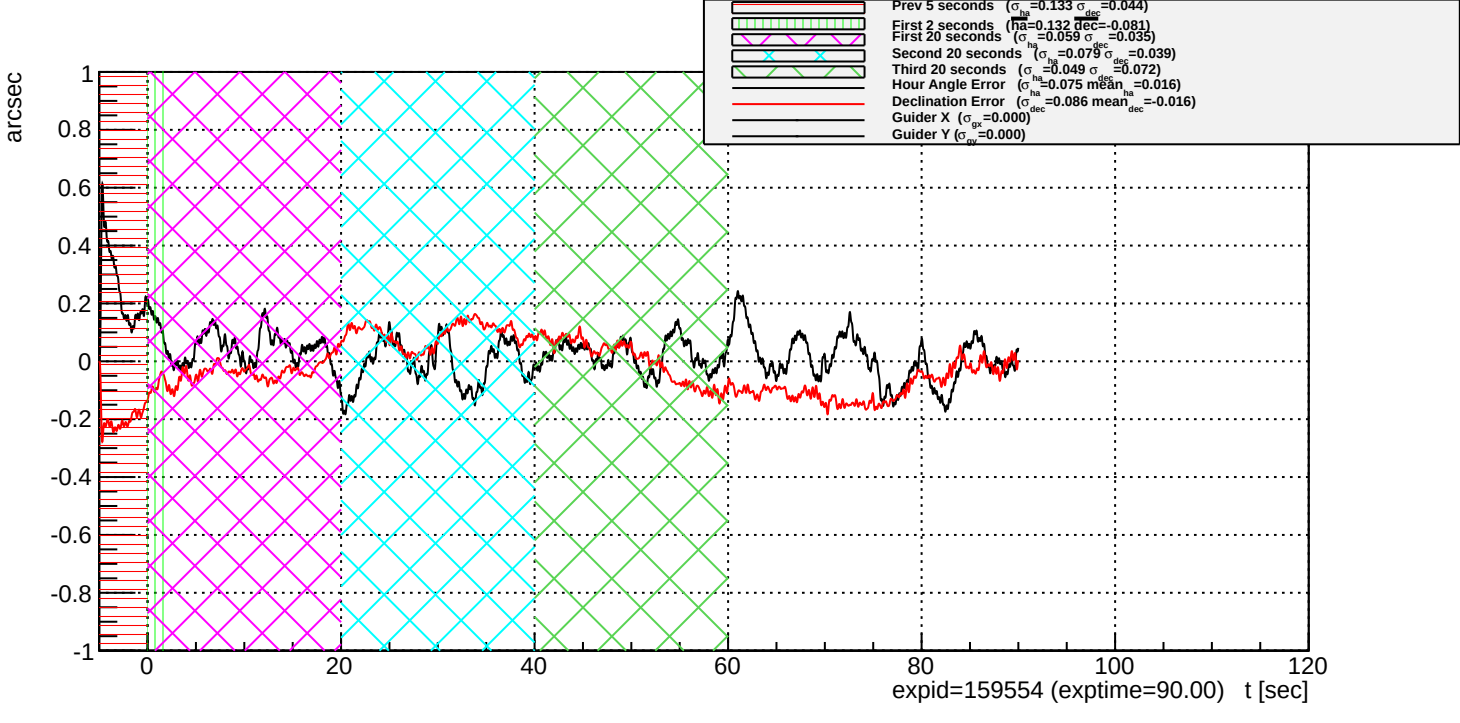

Prev 5 seconds (σ_{ha}=0.055 σ_{dec}=0.036)
First 2 seconds (σ_{ha}=0.096 σ_{dec}=0.010)
First 20 seconds (σ_{ha}=0.086 σ_{dec}=0.120)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.057)
Third 20 seconds (σ_{ha}=0.048 σ_{dec}=0.046)
Hour Angle Error (σ_{ha}=0.068 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.089 $mean_{dec}$=-0.010)
Guider X (σ_{gx}=0.093)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159549 (exptime=90.00)
t [sec]

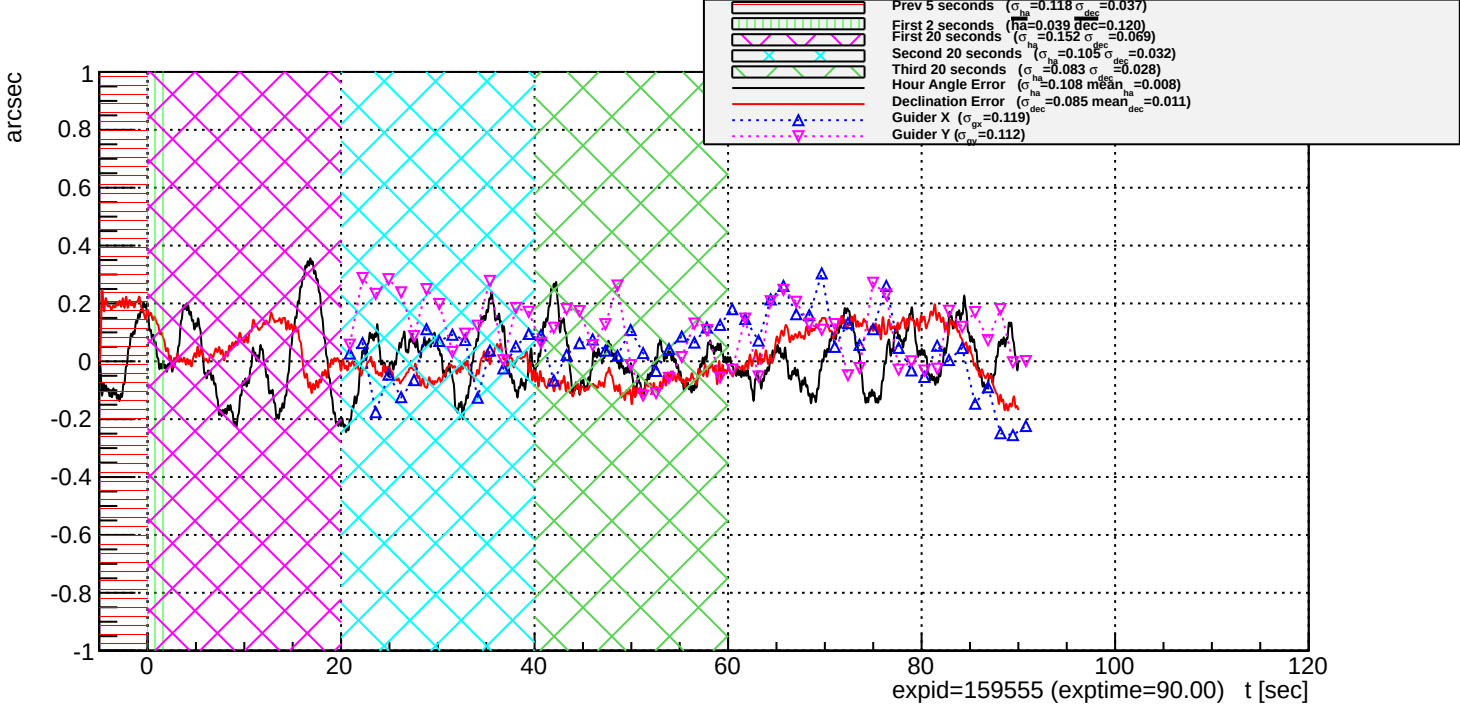

Prev 5 seconds (σ_{ha}=0.167 σ_{dec}=0.062)
First 2 seconds ($\overline{ha}$=0.096 $\overline{dec}$=-0.265)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.148)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.066 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=0.025)
Declination Error (σ_{dec}=0.108 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.104)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159550 (exptime=90.00)
t [sec]

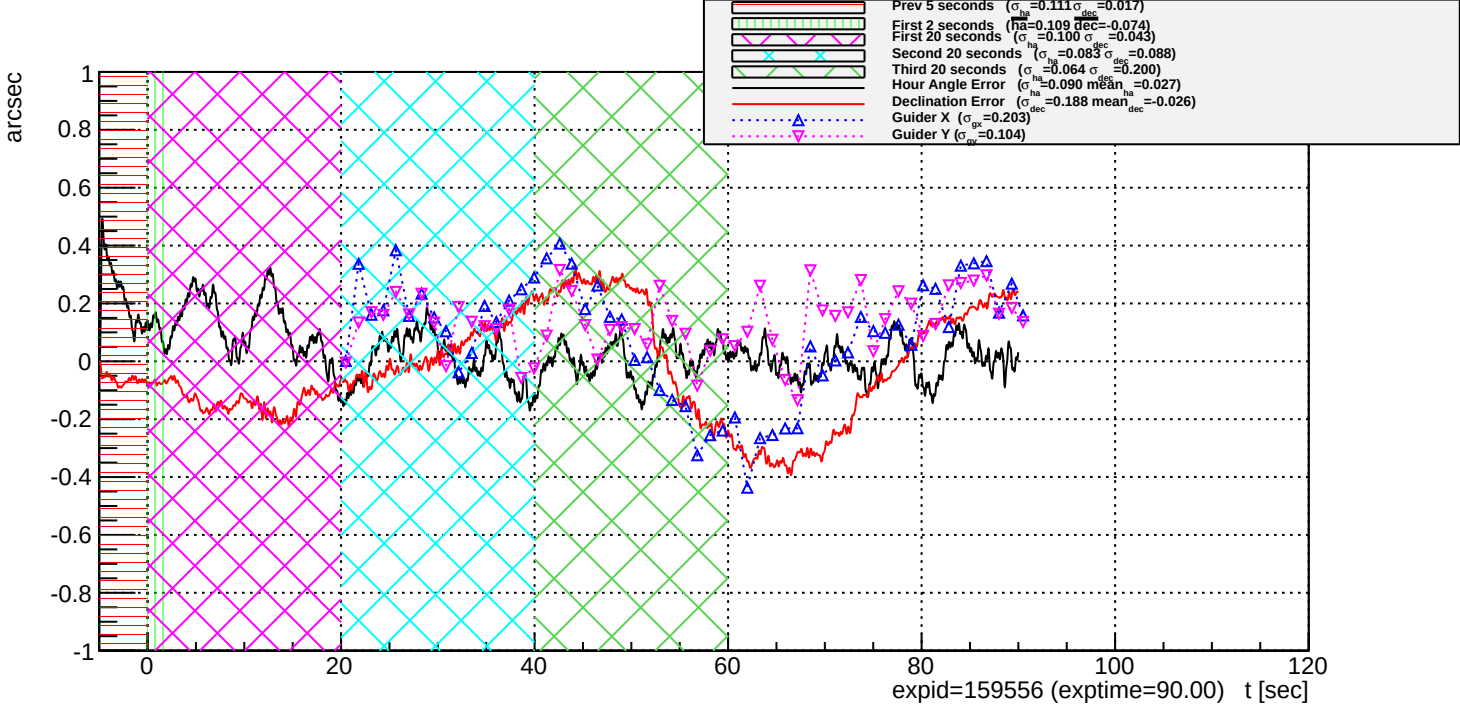

Prev 5 seconds (σ_{ha}=0.048 σ_{dec}=0.048)
First 2 seconds (ha=0.092 dec=-0.229)
First 20 seconds (σ_{ha}=0.070 σ_{dec}=0.095)
Second 20 seconds (σ_{ha}=0.062 σ_{dec}=0.026)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.071 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.081 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.111)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159551 (exptime=90.00) t [sec]

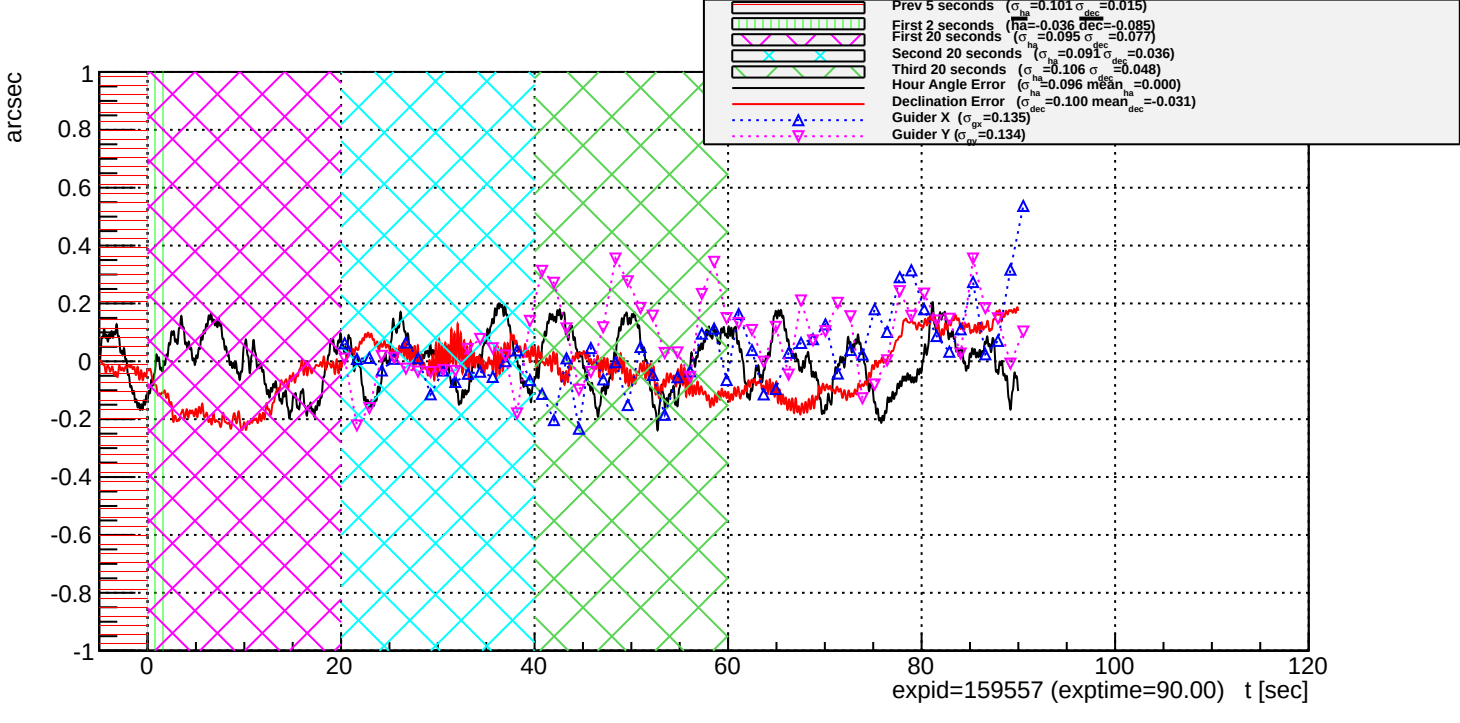

Prev 5 seconds (σ_{ha}=0.112 σ_{dec}=0.029)
First 2 seconds (ha=0.131 dec=-0.168)
First 20 seconds (σ_{ha}=0.077 σ_{dec}=0.027)
Second 20 seconds (σ_{ha}=0.088 σ_{dec}=0.142)
Third 20 seconds (σ_{ha}=0.115 σ_{dec}=0.121)
Hour Angle Error (σ_{ha}=0.101 $mean_{ha}$=0.019)
Declination Error (σ_{dec}=0.154 $mean_{dec}$=-0.038)
Guider X (σ_{gx}=0.192)
Guider Y (σ_{gy}=0.122)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159552 (exptime=90.00) t [sec]

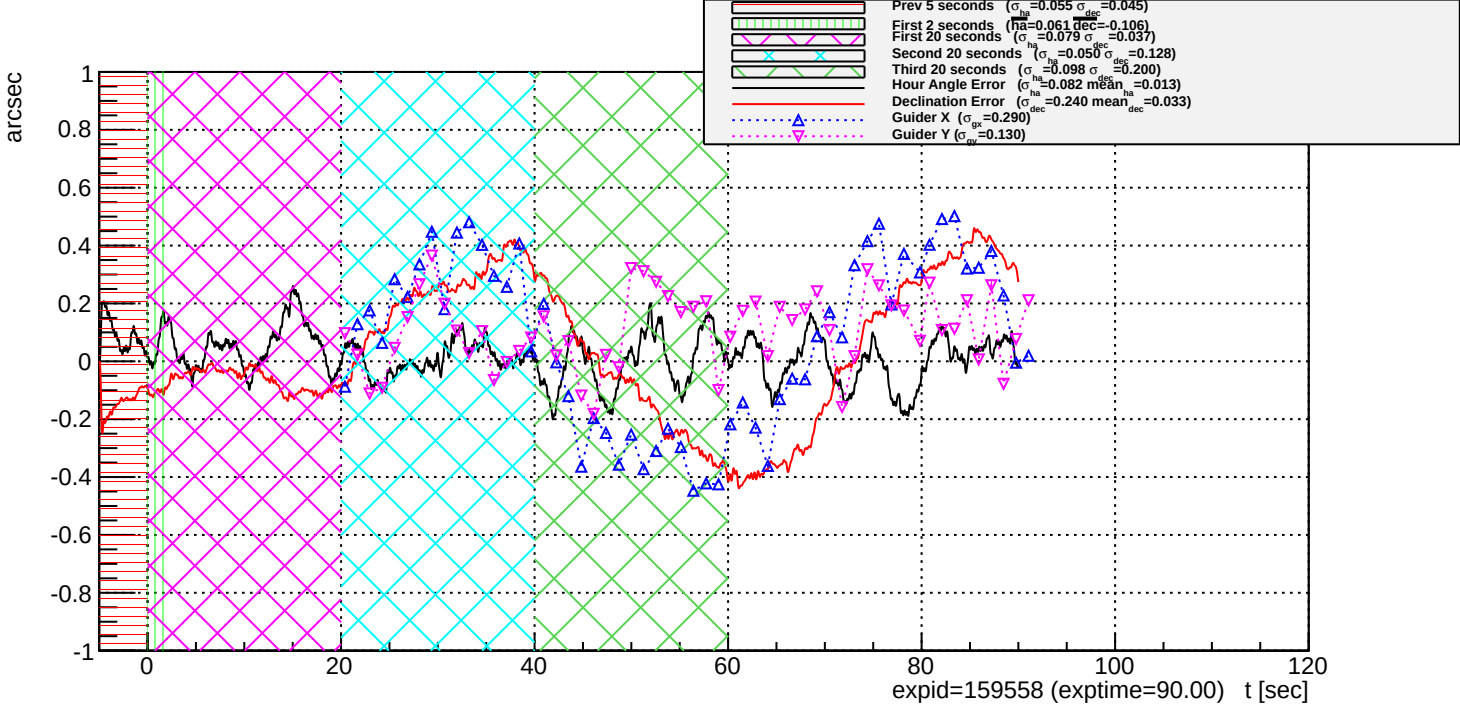

Prev 5 seconds (σ_{ha}=0.042 σ_{dec}=0.026)
First 2 seconds ($\overline{ha}$=-0.003 $\overline{dec}$=0.123)
First 20 seconds (σ_{ha}=0.073 σ_{dec}=0.039)
Second 20 seconds (σ_{ha}=0.084 σ_{dec}=0.180)
Third 20 seconds (σ_{ha}=0.067 σ_{dec}=0.200)
Hour Angle Error (σ_{ha}=0.075 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.173 $mean_{dec}$=0.025)
Guider X (σ_{gx}=0.179)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159553 (exptime=90.00) t [sec]

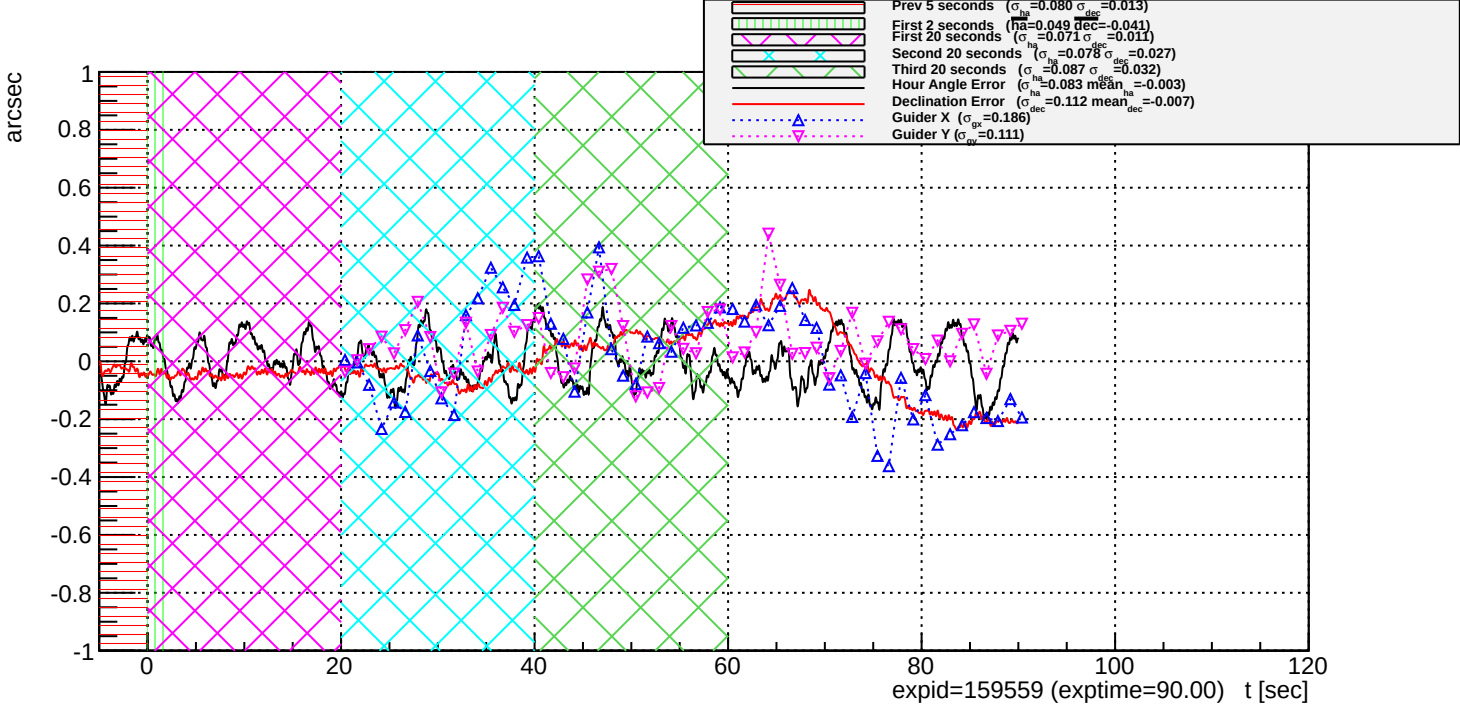

Prev 5 seconds (σ_{ha}=0.133 σ_{dec}=0.044)
First 2 seconds (ha=0.132 dec=-0.081)
First 20 seconds (σ_{ha}=0.059 σ_{dec}=0.035)
Second 20 seconds (σ_{ha}=0.079 σ_{dec}=0.039)
Third 20 seconds (σ_{ha}=0.049 σ_{dec}=0.072)
Hour Angle Error (σ_{ha}=0.075 $mean_{ha}$=0.016)
Declination Error (σ_{dec}=0.086 $mean_{dec}$=-0.016)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159554 (exptime=90.00) t [sec]

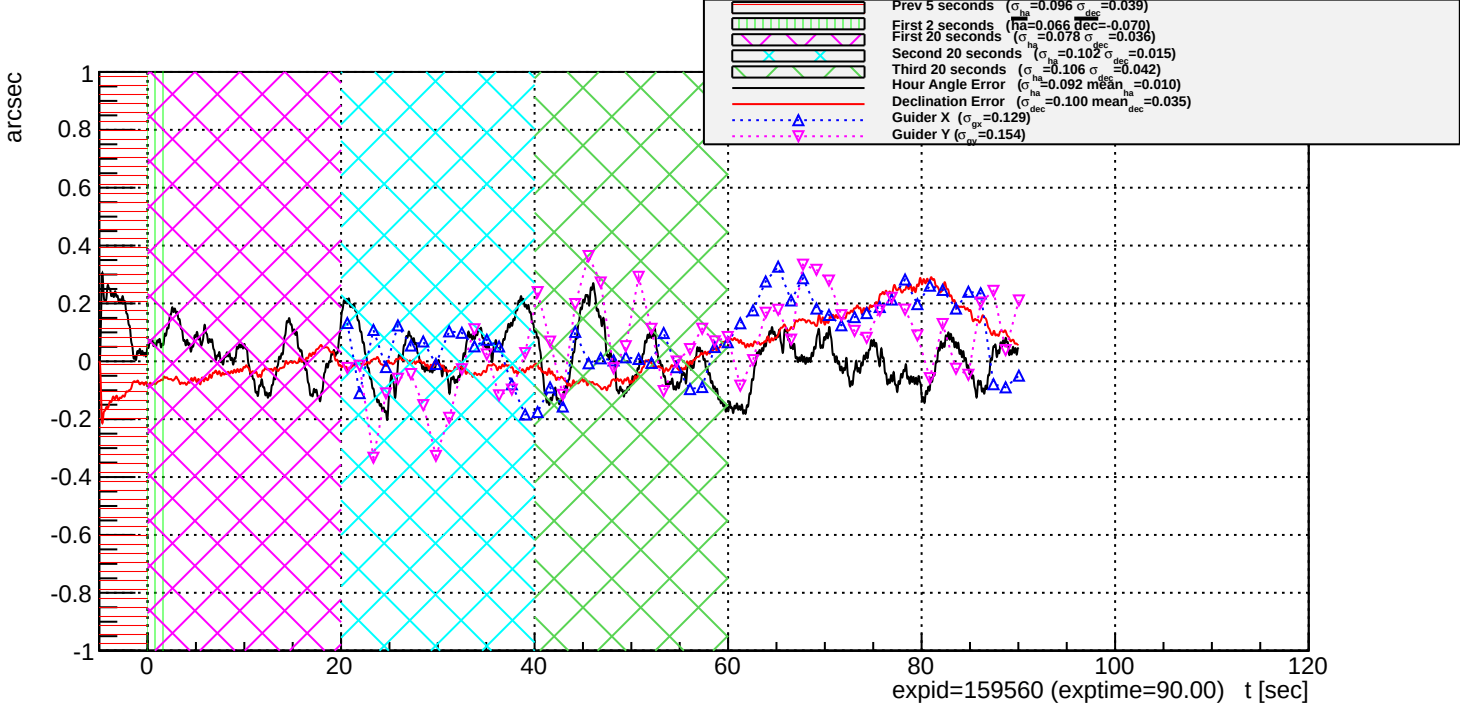

Prev 5 seconds (σ_{ha}=0.118 σ_{dec}=0.037)
First 2 seconds (σ_{ha}=0.039 σ_{dec}=0.120)
First 20 seconds (σ_{ha}=0.152 σ_{dec}=0.069)
Second 20 seconds (σ_{ha}=0.105 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.083 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.108 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.085 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.119)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159555 (exptime=90.00) t [sec]

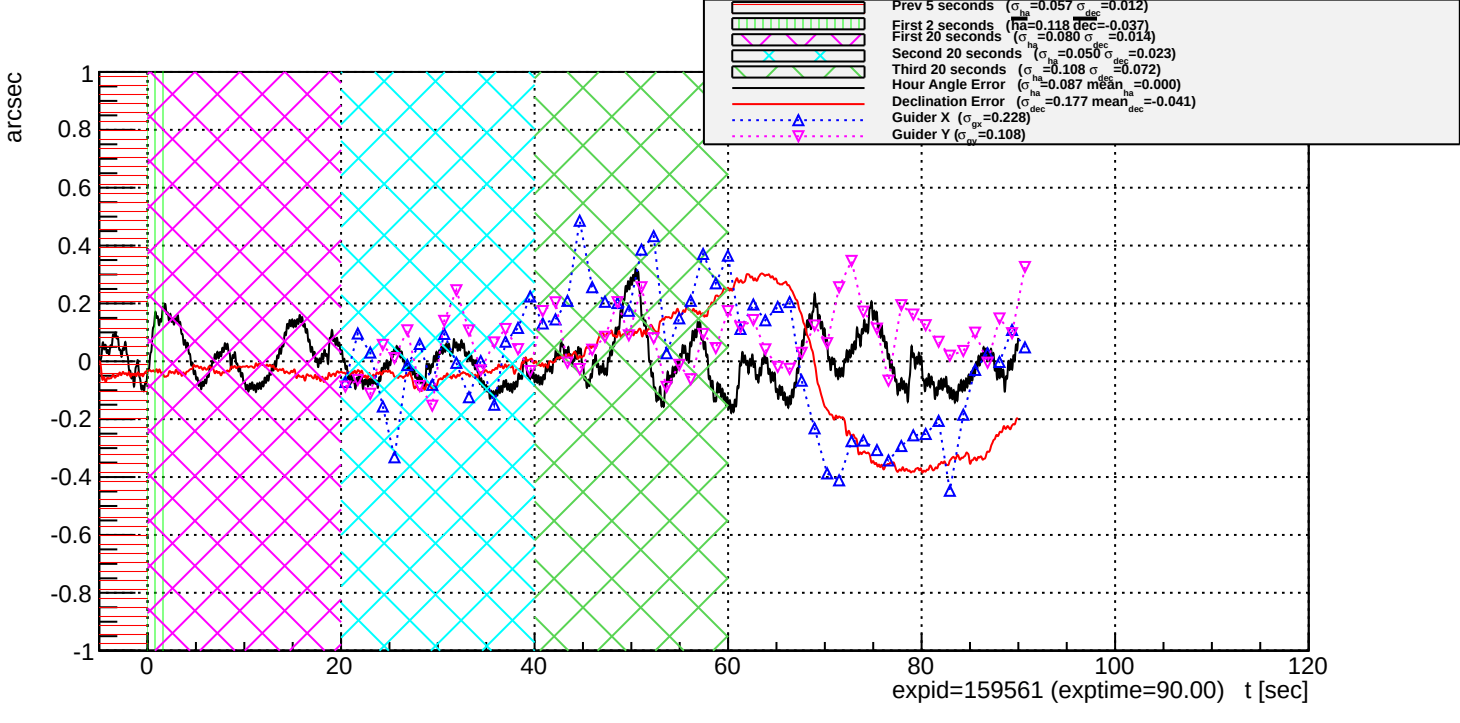

Prev 5 seconds (σ_{ha}=0.111 σ_{dec}=0.017)
First 2 seconds (ha=0.109 dec=-0.074)
First 20 seconds (σ_{ha}=0.100 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.083 σ_{dec}=0.088)
Third 20 seconds (σ_{ha}=0.064 σ_{dec}=0.200)
Hour Angle Error (σ_{ha}=0.090 $mean_{ha}$=0.027)
Declination Error (σ_{dec}=0.188 $mean_{dec}$=-0.026)
Guider X (σ_{gx}=0.203)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159556 (exptime=90.00) t [sec]

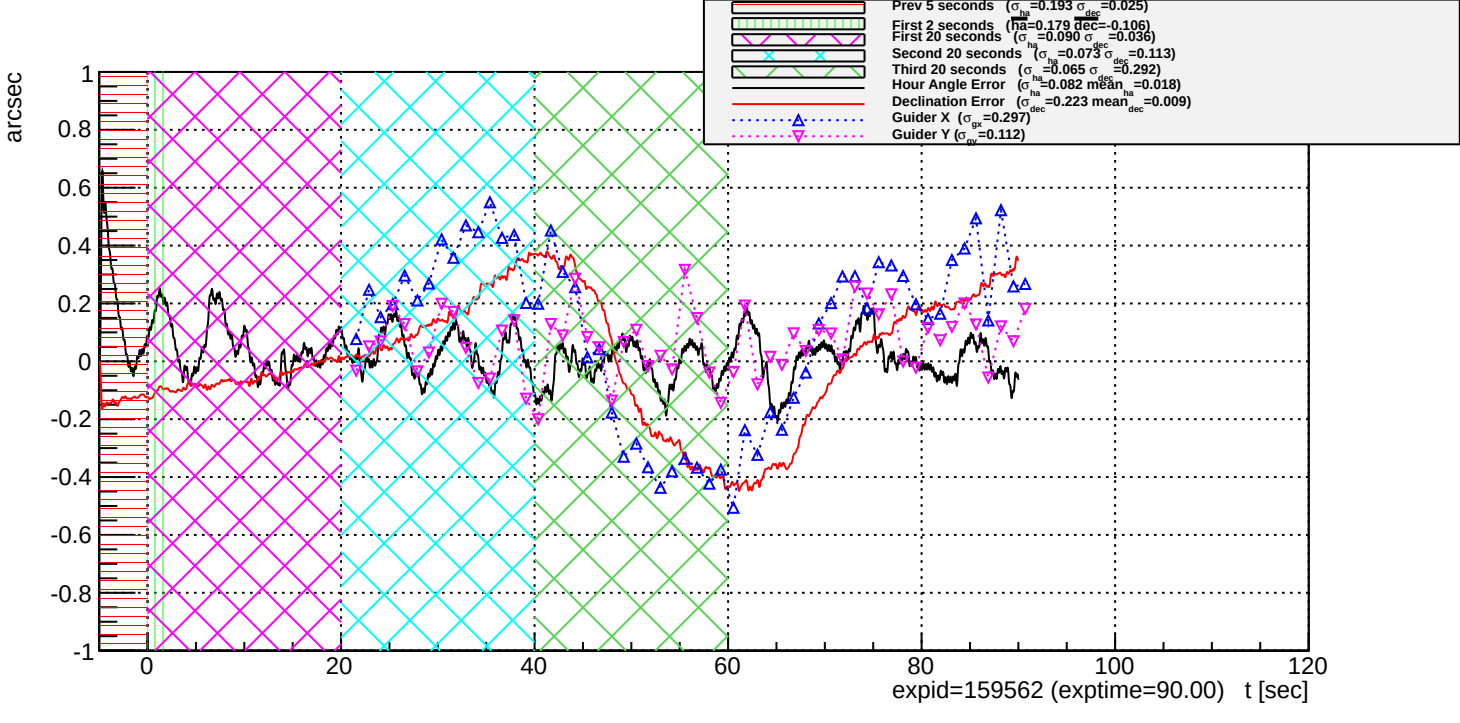

Prev 5 seconds (σ_{ha}=0.101 σ_{dec}=0.015)
First 2 seconds (ha=-0.036 dec=-0.085)
First 20 seconds (σ_{ha}=0.095 σ_{dec}=0.077)
Second 20 seconds (σ_{ha}=0.091 σ_{dec}=0.036)
Third 20 seconds (σ_{ha}=0.106 σ_{dec}=0.048)
Hour Angle Error (σ_{ha}=0.096 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.100 $mean_{dec}$=-0.031)
Guider X (σ_{gx}=0.135)
Guider Y (σ_{gy}=0.134)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159557 (exptime=90.00) t [sec]

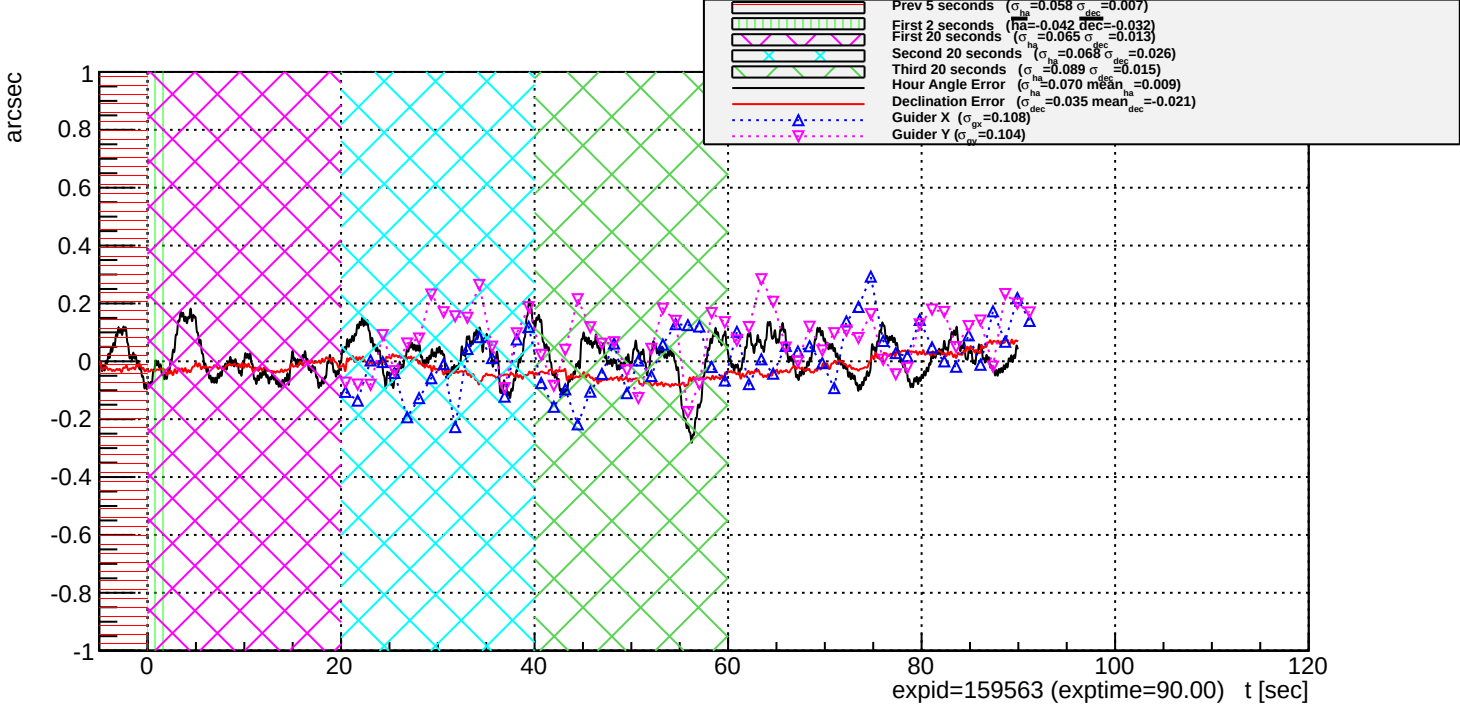

Prev 5 seconds (σ_{ha}=0.055 σ_{dec}=0.045)
First 2 seconds (σ_{ha}=0.061 σ_{dec}=0.106)
First 20 seconds (σ_{ha}=0.079 σ_{dec}=0.037)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.128)
Third 20 seconds (σ_{ha}=0.098 σ_{dec}=0.200)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.240 $mean_{dec}$=0.033)
Guider X (σ_{gx}=0.290)
Guider Y (σ_{gy}=0.130)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159558 (exptime=90.00) t [sec]

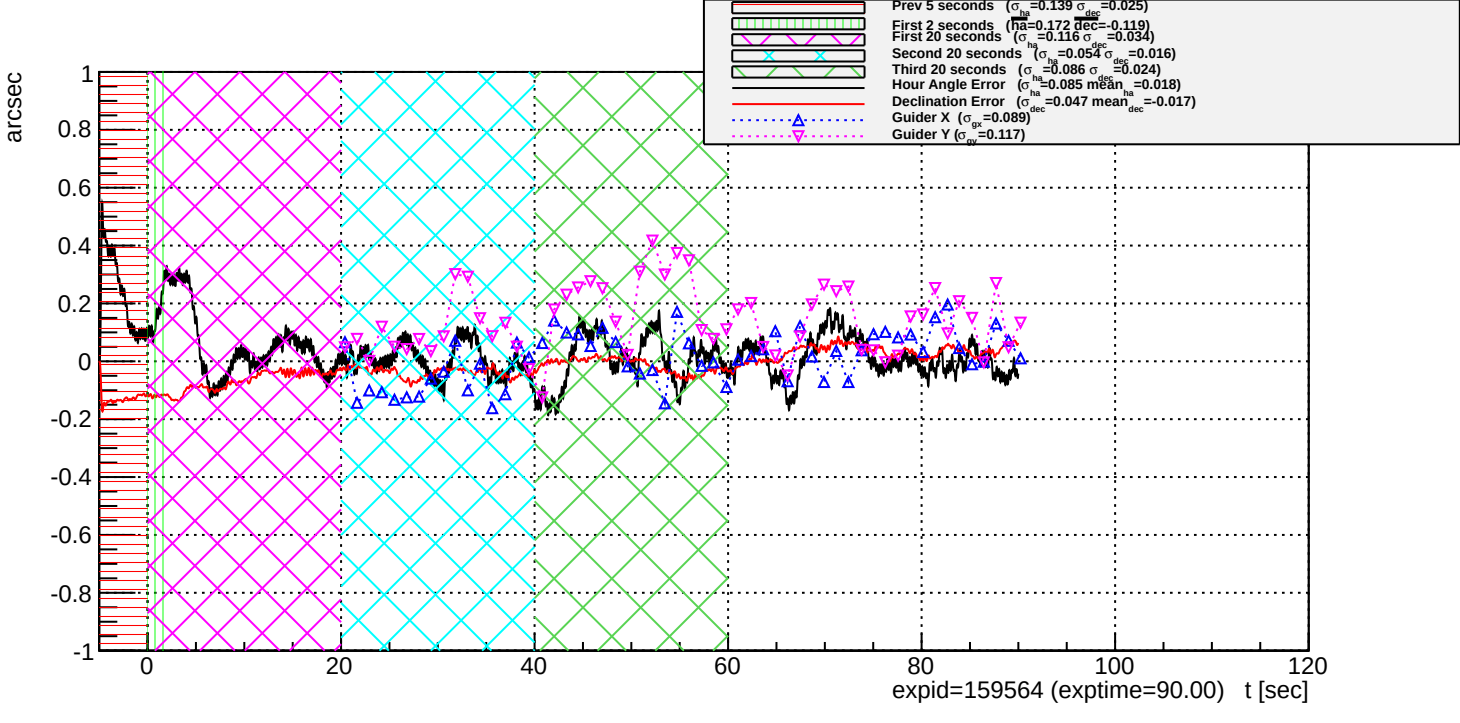

Prev 5 seconds (σ_{ha}=0.080 σ_{dec}=0.013)
First 2 seconds (ha=0.049 dec=-0.041)
First 20 seconds (σ_{ha}=0.071 σ_{dec}=0.011)
Second 20 seconds (σ_{ha}=0.078 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.087 σ_{dec}=0.032)
Hour Angle Error (σ_{ha}=0.083 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.112 $mean_{dec}$=-0.007)
Guider X (σ_{gx}=0.186)
Guider Y (σ_{gy}=0.111)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159559 (exptime=90.00) t [sec]

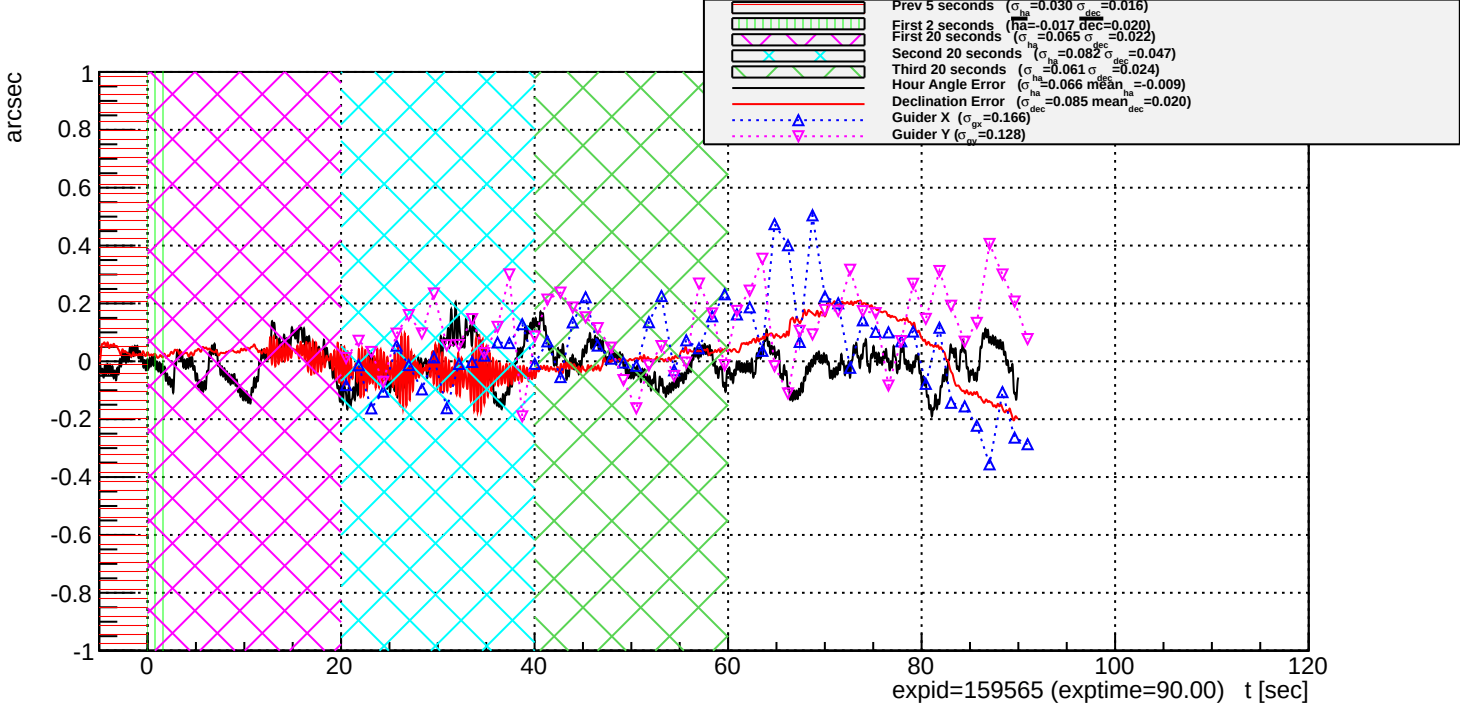

Prev 5 seconds (σ_{ha}=0.096 σ_{dec}=0.039)
First 2 seconds (ha=0.066 dec=-0.070)
First 20 seconds (σ_{ha}=0.078 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.102 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.106 σ_{dec}=0.042)
Hour Angle Error (σ_{ha}=0.092 $mean_{ha}$=0.010)
Declination Error (σ_{dec}=0.100 $mean_{dec}$=0.035)
Guider X (σ_{gx}=0.129)
Guider Y (σ_{gy}=0.154)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159560 (exptime=90.00)
t [sec]

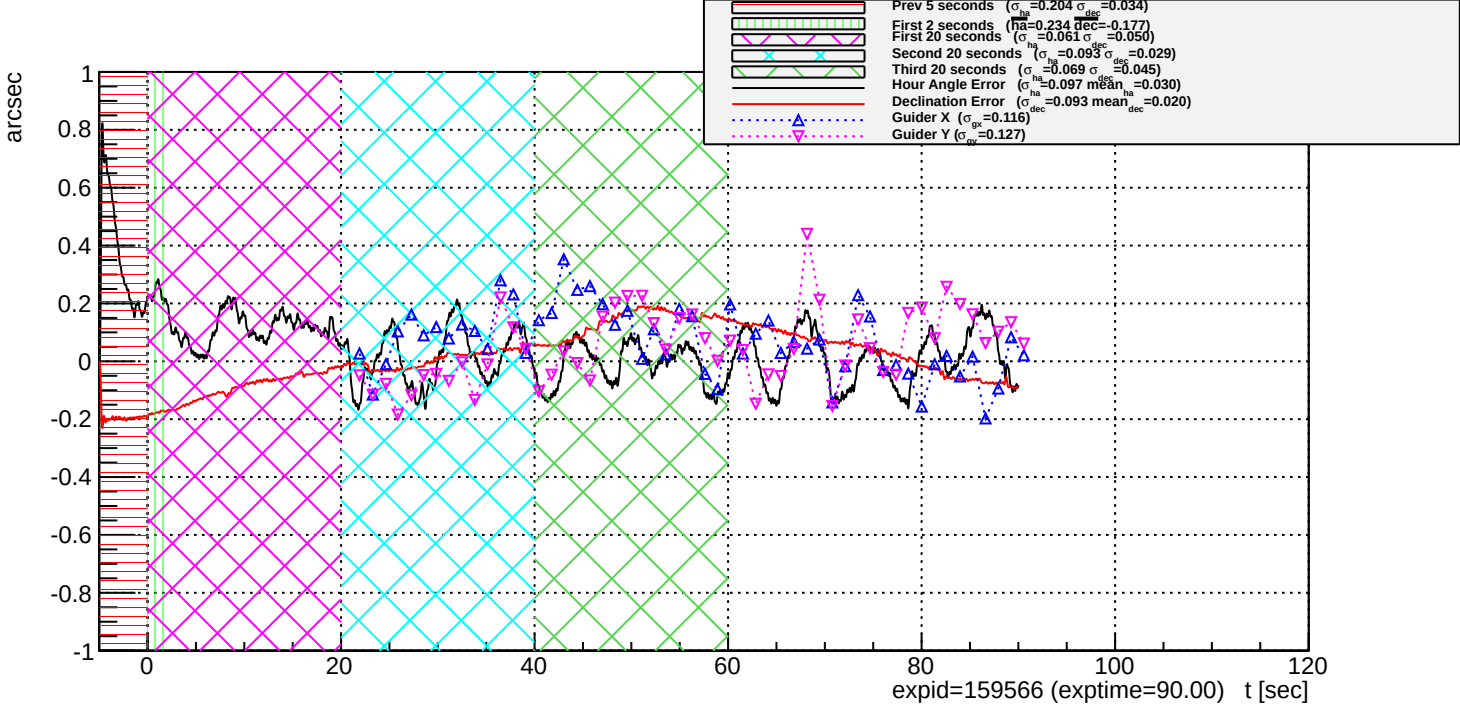

Prev 5 seconds (σ_{ha}=0.057 σ_{dec}=0.012)
First 2 seconds (ha=0.118 dec=-0.037)
First 20 seconds (σ_{ha}=0.080 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.108 σ_{dec}=0.072)
Hour Angle Error (σ_{ha}=0.087 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.177 $mean_{dec}$=-0.041)
Guider X (σ_{gx}=0.228)
Guider Y (σ_{gy}=0.108)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159561 (exptime=90.00) t [sec]

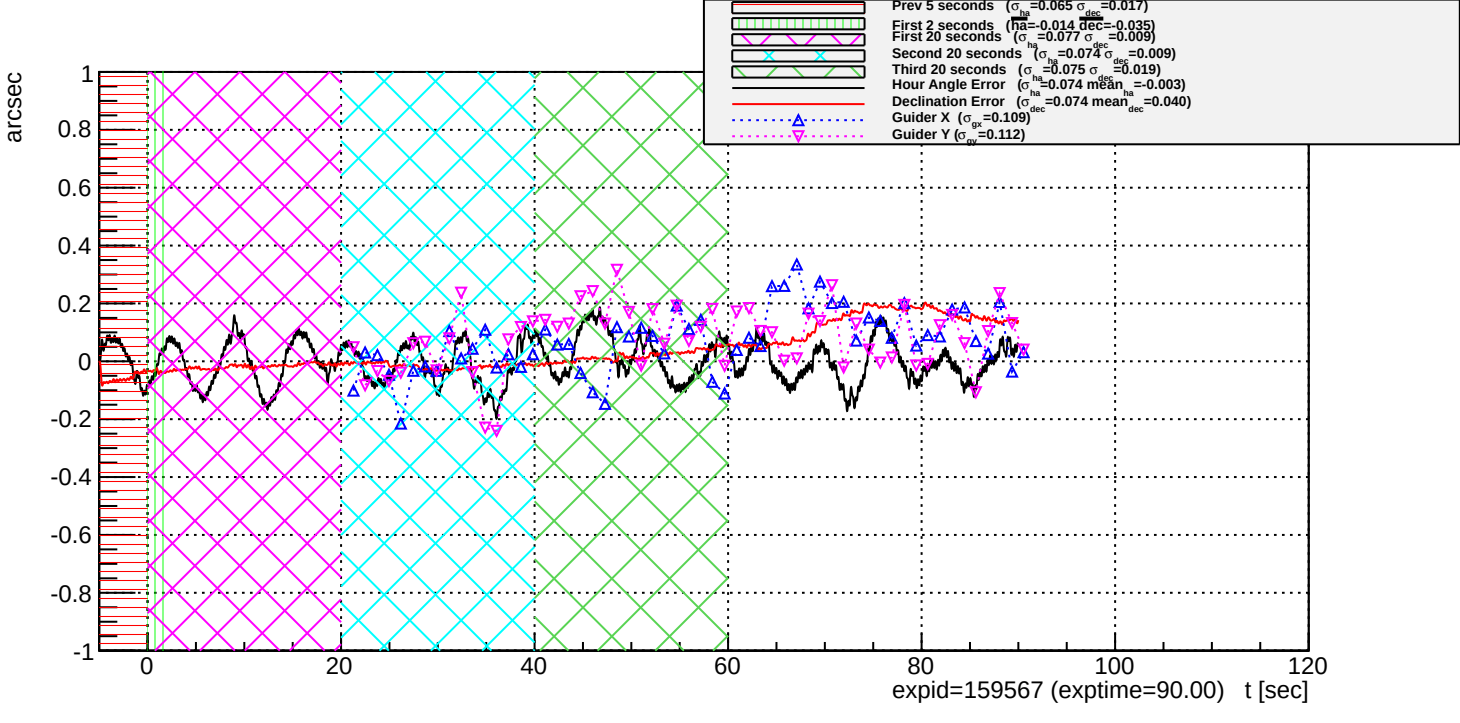

Prev 5 seconds (σ_{ha}=0.193 σ_{dec}=0.025)
First 2 seconds (ha=0.179 dec=-0.106)
First 20 seconds (σ_{ha}=0.090 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.073 σ_{dec}=0.113)
Third 20 seconds (σ_{ha}=0.065 σ_{dec}=0.292)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.018)
Declination Error (σ_{dec}=0.223 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.297)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159562 (exptime=90.00) t [sec]

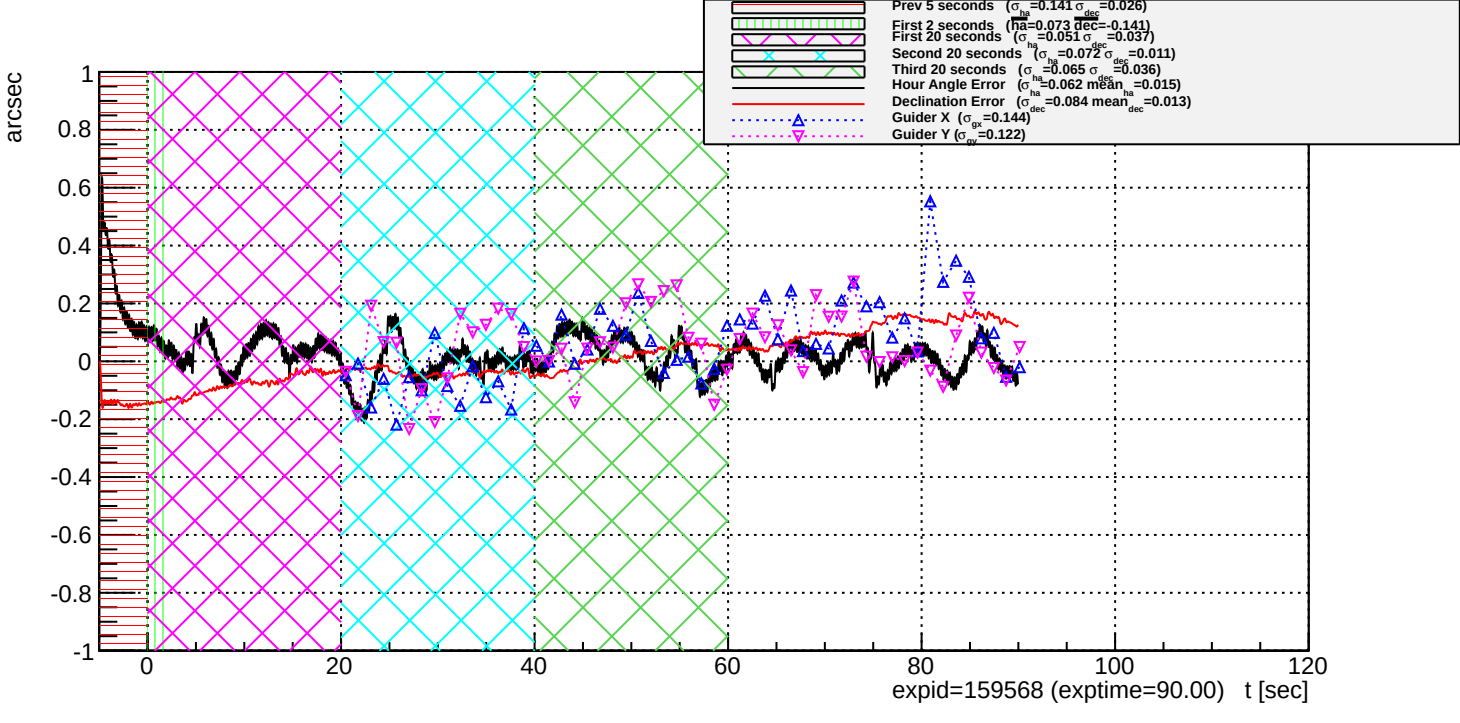

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.007)
First 2 seconds (ha=-0.042 dec=-0.032)
First 20 seconds (σ_{ha}=0.065 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.068 σ_{dec}=0.026)
Third 20 seconds (σ_{ha}=0.089 σ_{dec}=0.015)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.035 $mean_{dec}$=-0.021)
Guider X (σ_{gx}=0.108)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159563 (exptime=90.00) t [sec]

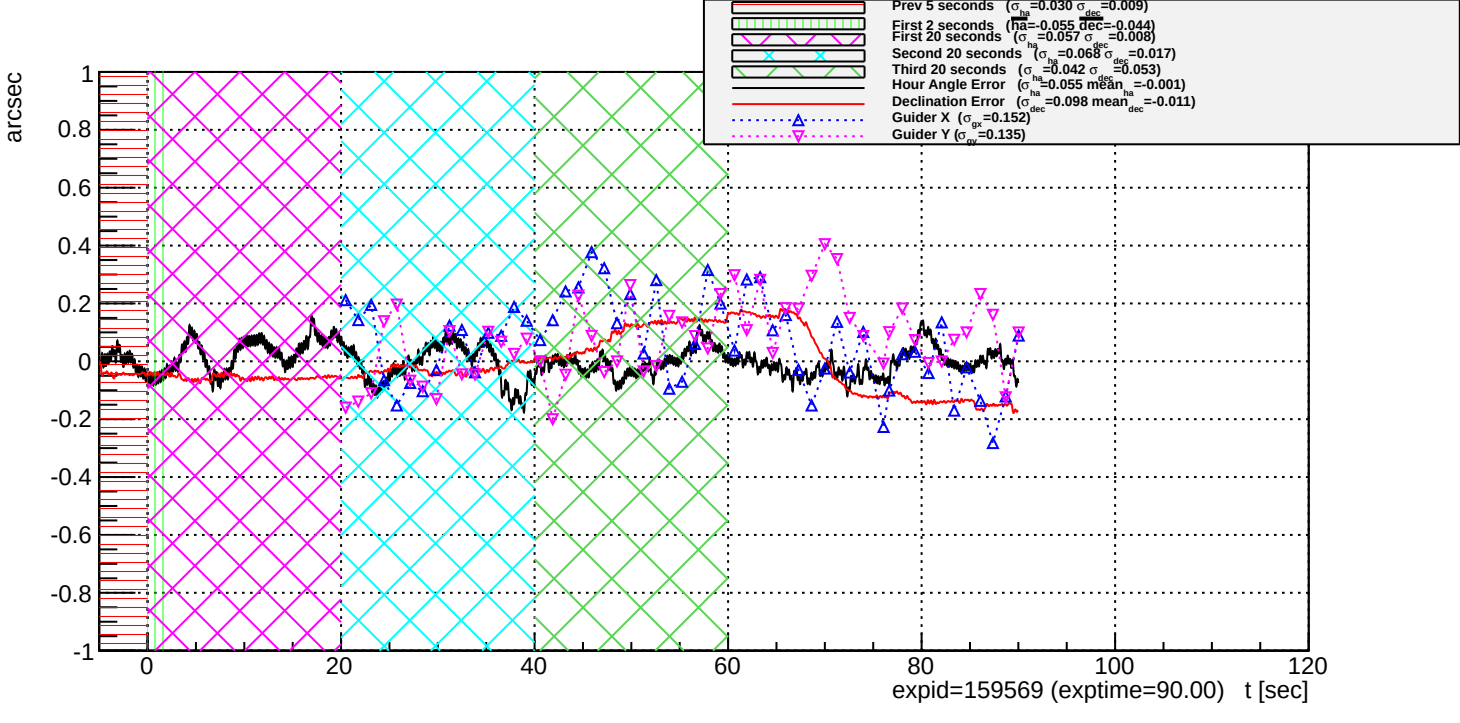

Prev 5 seconds (σ_{ha}=0.139 σ_{dec}=0.025)
First 2 seconds (ha=0.172 dec=-0.119)
First 20 seconds (σ_{ha}=0.116 σ_{dec}=0.034)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.086 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.085 $mean_{ha}$=0.018)
Declination Error (σ_{dec}=0.047 $mean_{dec}$=-0.017)
Guider X (σ_{gx}=0.089)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159564 (exptime=90.00) t [sec]

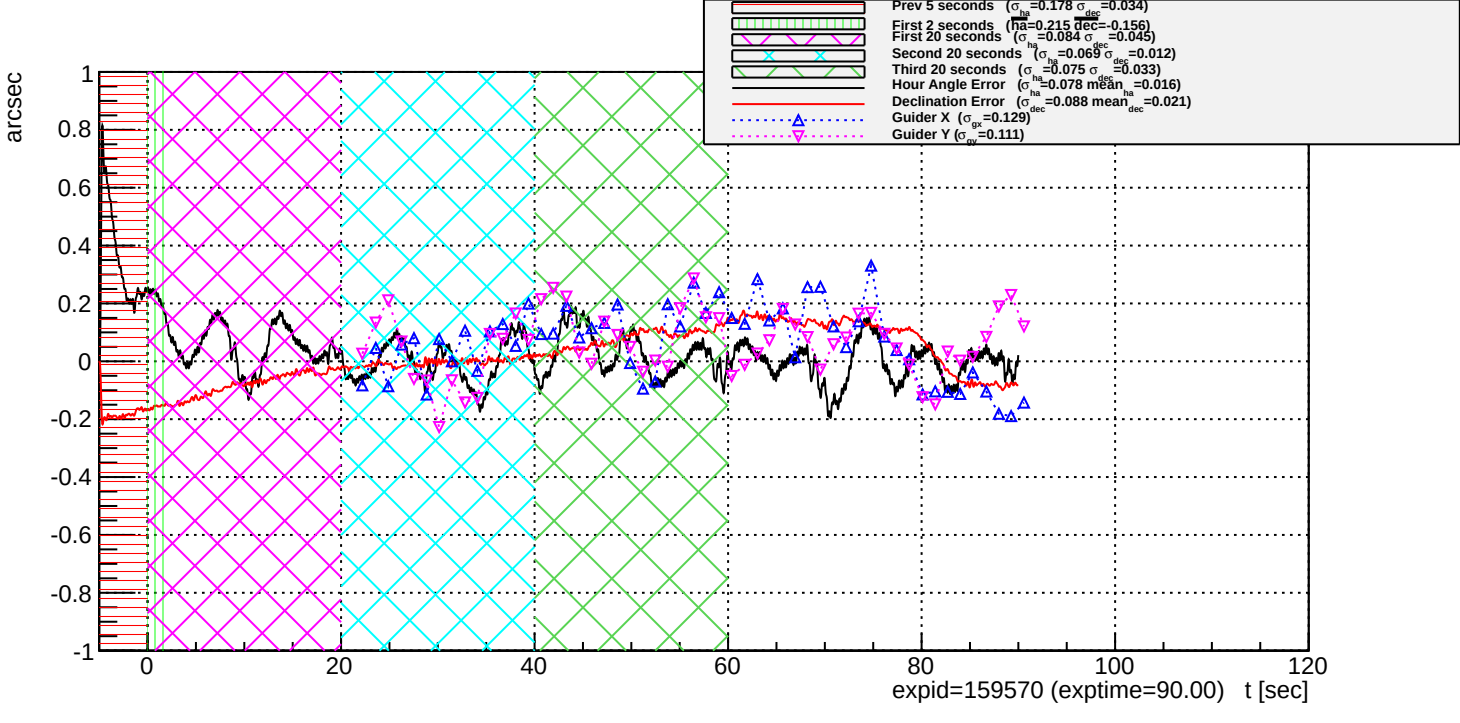

Prev 5 seconds (σ_{ha}=0.030 σ_{dec}=0.016)
First 2 seconds ($\overline{ha}$=-0.017 $\overline{dec}$=0.020)
First 20 seconds (σ_{ha}=0.065 σ_{dec}=0.022)
Second 20 seconds (σ_{ha}=0.082 σ_{dec}=0.047)
Third 20 seconds (σ_{ha}=0.061 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.066 $mean_{ha}$=-0.009)
Declination Error (σ_{dec}=0.085 $mean_{dec}$=0.020)
Guider X (σ_{gx}=0.166)
Guider Y (σ_{gy}=0.128)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159565 (exptime=90.00) t [sec]

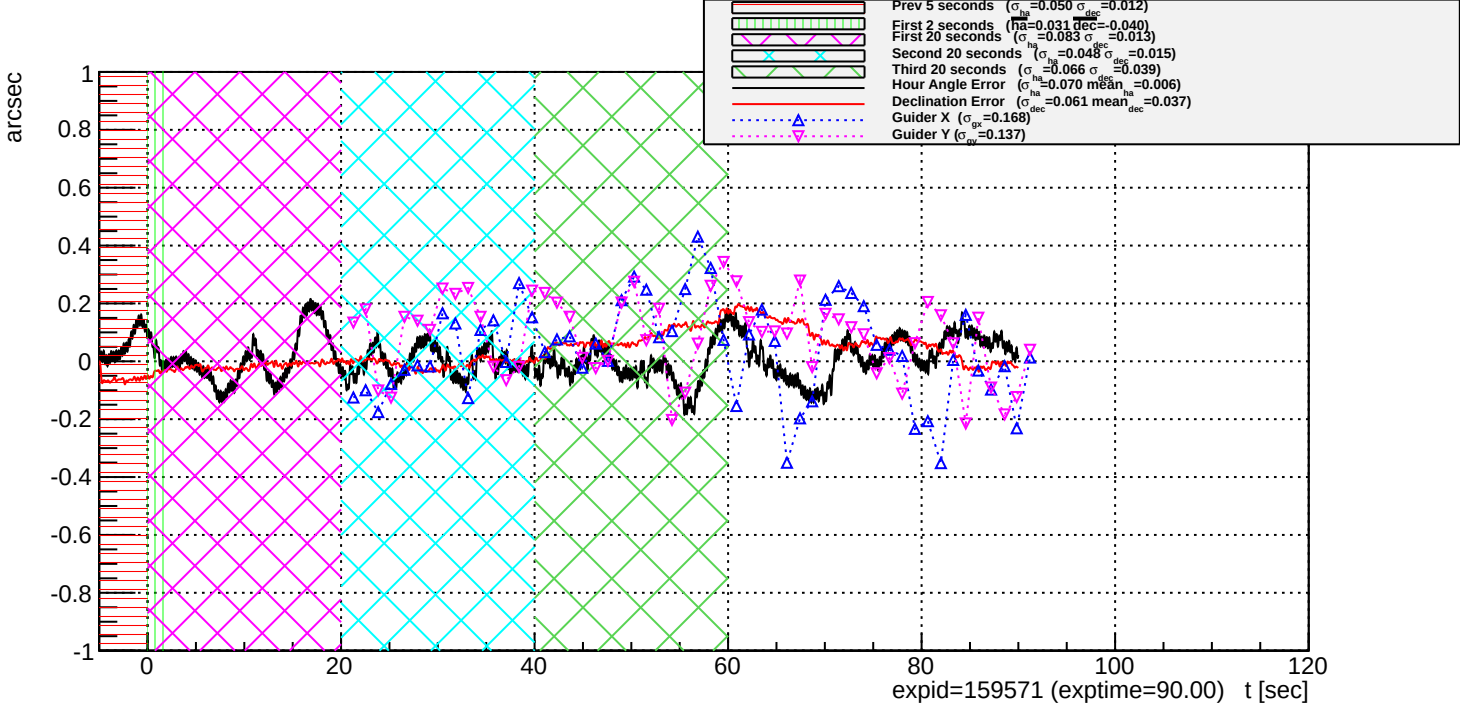

Prev 5 seconds (σ_{ha}=0.204 σ_{dec}=0.034)
First 2 seconds ($\overline{ha}$=0.234 $\overline{dec}$=-0.177)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.050)
Second 20 seconds (σ_{ha}=0.093 σ_{dec}=0.029)
Third 20 seconds (σ_{ha}=0.069 σ_{dec}=0.045)
Hour Angle Error (σ_{ha}=0.097 $mean_{ha}$=0.030)
Declination Error (σ_{dec}=0.093 $mean_{dec}$=0.020)
Guider X (σ_{gx}=0.116)
Guider Y (σ_{gy}=0.127)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159566 (exptime=90.00) t [sec]

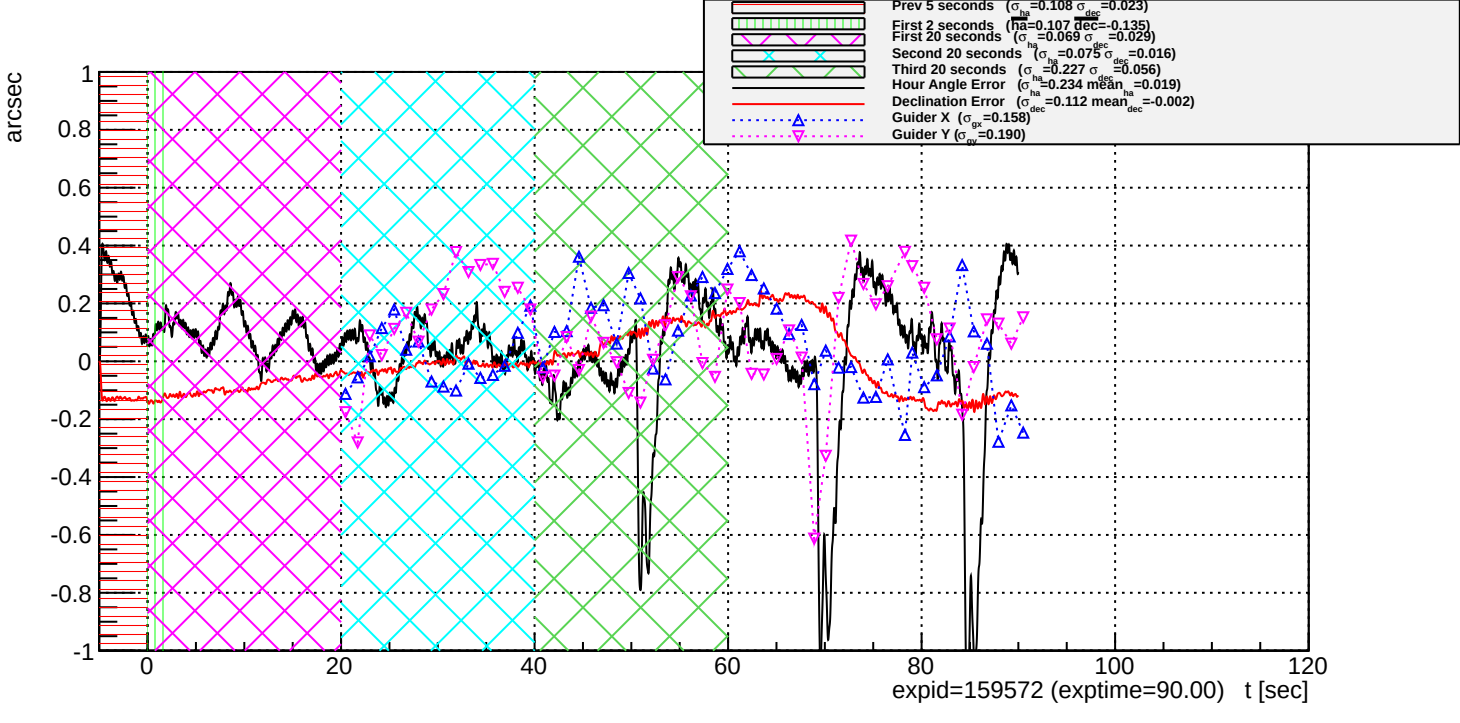

Prev 5 seconds (σ_{ha}=0.065 σ_{dec}=0.017)
First 2 seconds (ha=-0.014 dec=-0.035)
First 20 seconds (σ_{ha}=0.077 σ_{dec}=0.009)
Second 20 seconds (σ_{ha}=0.074 σ_{dec}=0.009)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.074 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.074 $mean_{dec}$=0.040)
Guider X (σ_{gx}=0.109)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159567 (exptime=90.00) t [sec]

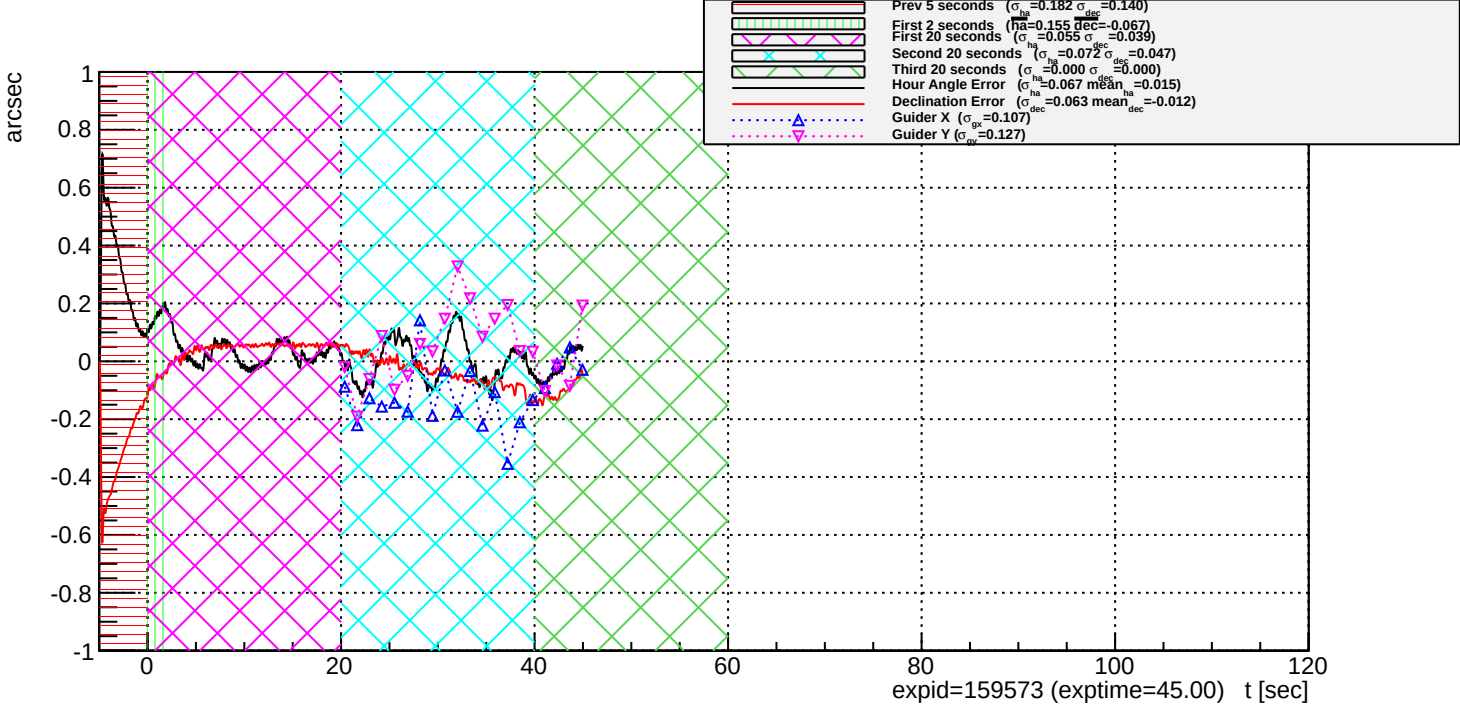

Prev 5 seconds (σ_{ha}=0.141 σ_{dec}=0.026)
First 2 seconds ($\overline{ha}$=0.073 $\overline{dec}$=-0.141)
First 20 seconds (σ_{ha}=0.051 σ_{dec}=0.037)
Second 20 seconds (σ_{ha}=0.072 σ_{dec}=0.011)
Third 20 seconds (σ_{ha}=0.065 σ_{dec}=0.036)
Hour Angle Error (σ_{ha}=0.062 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.084 $mean_{dec}$=0.013)
Guider X (σ_{gx}=0.144)
Guider Y (σ_{gy}=0.122)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159568 (exptime=90.00) t [sec]

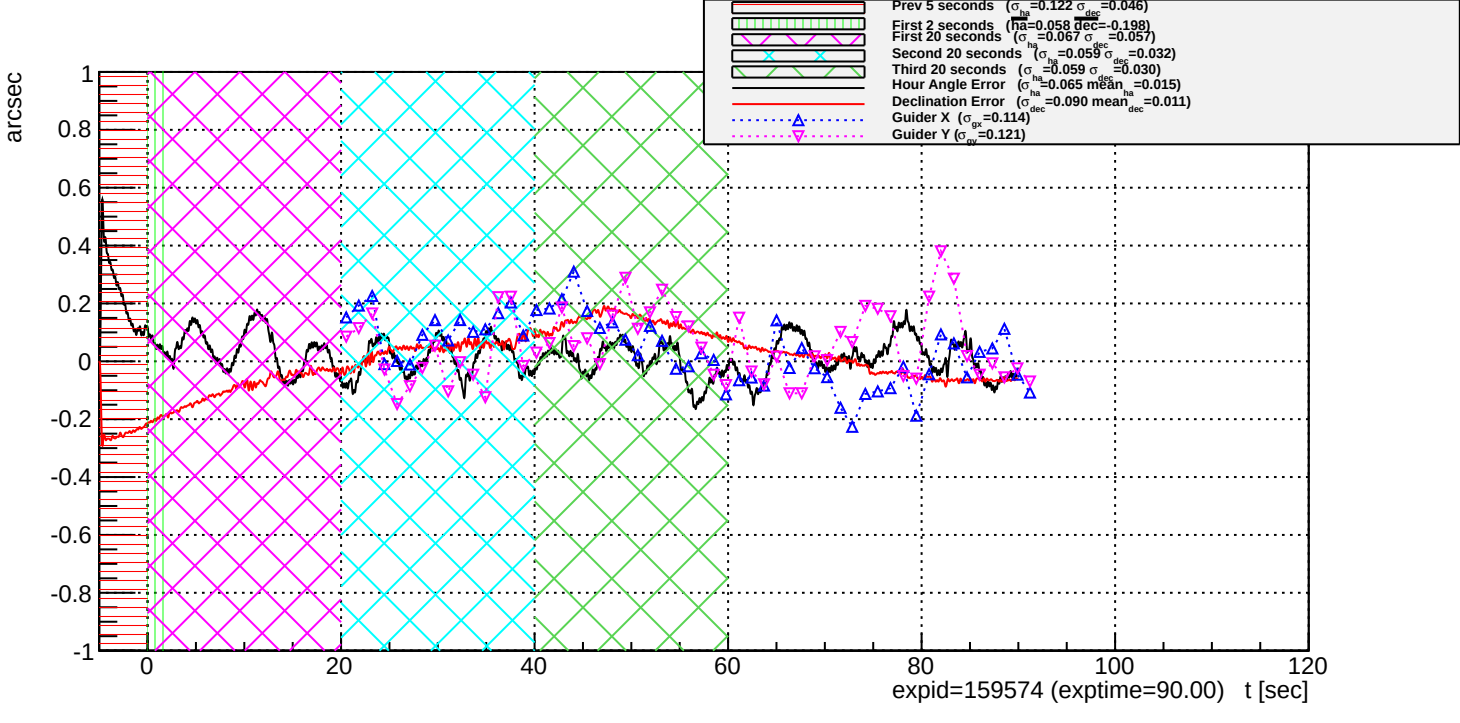

Prev 5 seconds (σ_{ha}=0.030 σ_{dec}=0.009)
First 2 seconds (mean_{ha}=-0.055 mean_{dec}=-0.044)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.008)
Second 20 seconds (σ_{ha}=0.068 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.042 σ_{dec}=0.053)
Hour Angle Error (σ_{ha}=0.055 mean_{ha}=-0.001)
Declination Error (σ_{dec}=0.098 mean_{dec}=-0.011)
Guider X (σ_{gx}=0.152)
Guider Y (σ_{gy}=0.135)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159569 (exptime=90.00)
t [sec]

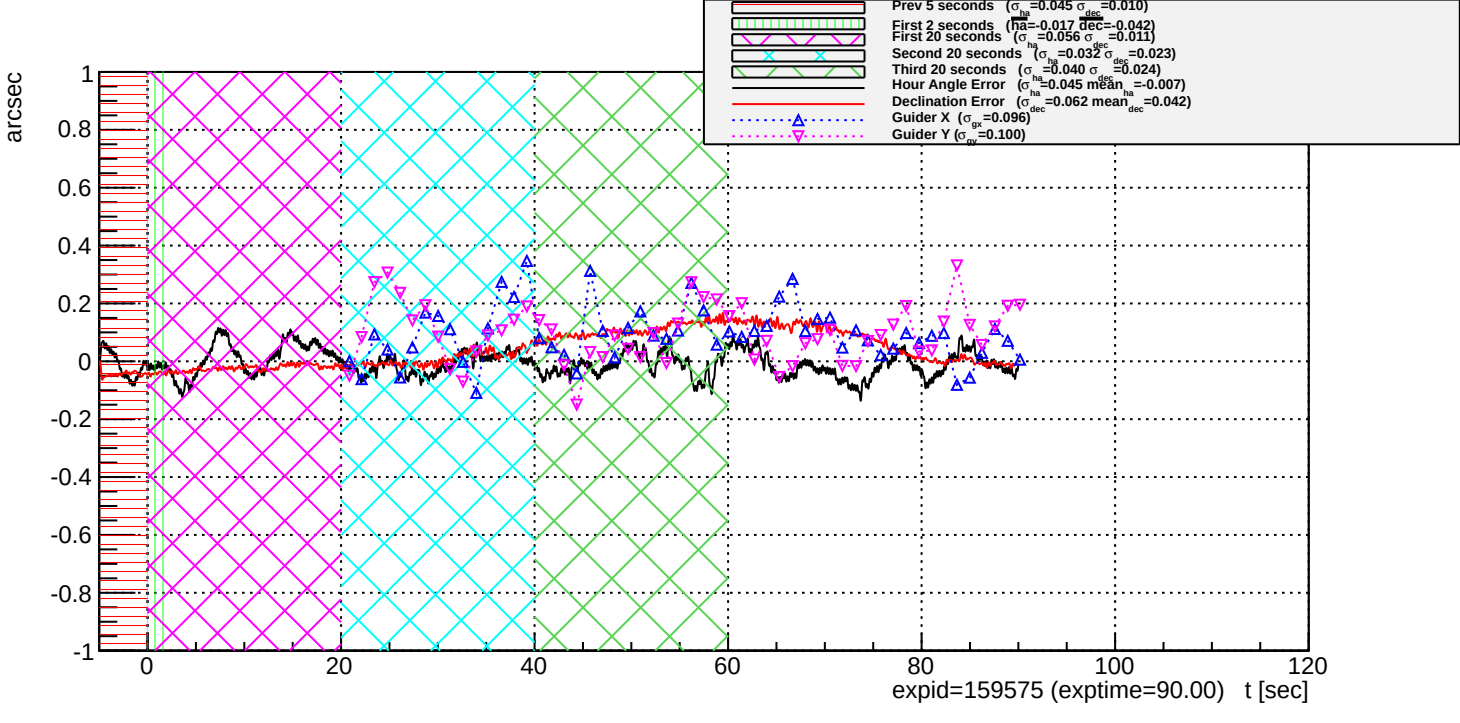

Prev 5 seconds (σ_{ha}=0.178 σ_{dec}=0.034)
First 2 seconds (ha=0.215 dec=-0.156)
First 20 seconds (σ_{ha}=0.084 σ_{dec}=0.045)
Second 20 seconds (σ_{ha}=0.069 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.033)
Hour Angle Error (σ_{ha}=0.078 $mean_{ha}$=0.016)
Declination Error (σ_{dec}=0.088 $mean_{dec}$=0.021)
Guider X (σ_{gx}=0.129)
Guider Y (σ_{gy}=0.111)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159570 (exptime=90.00) t [sec]

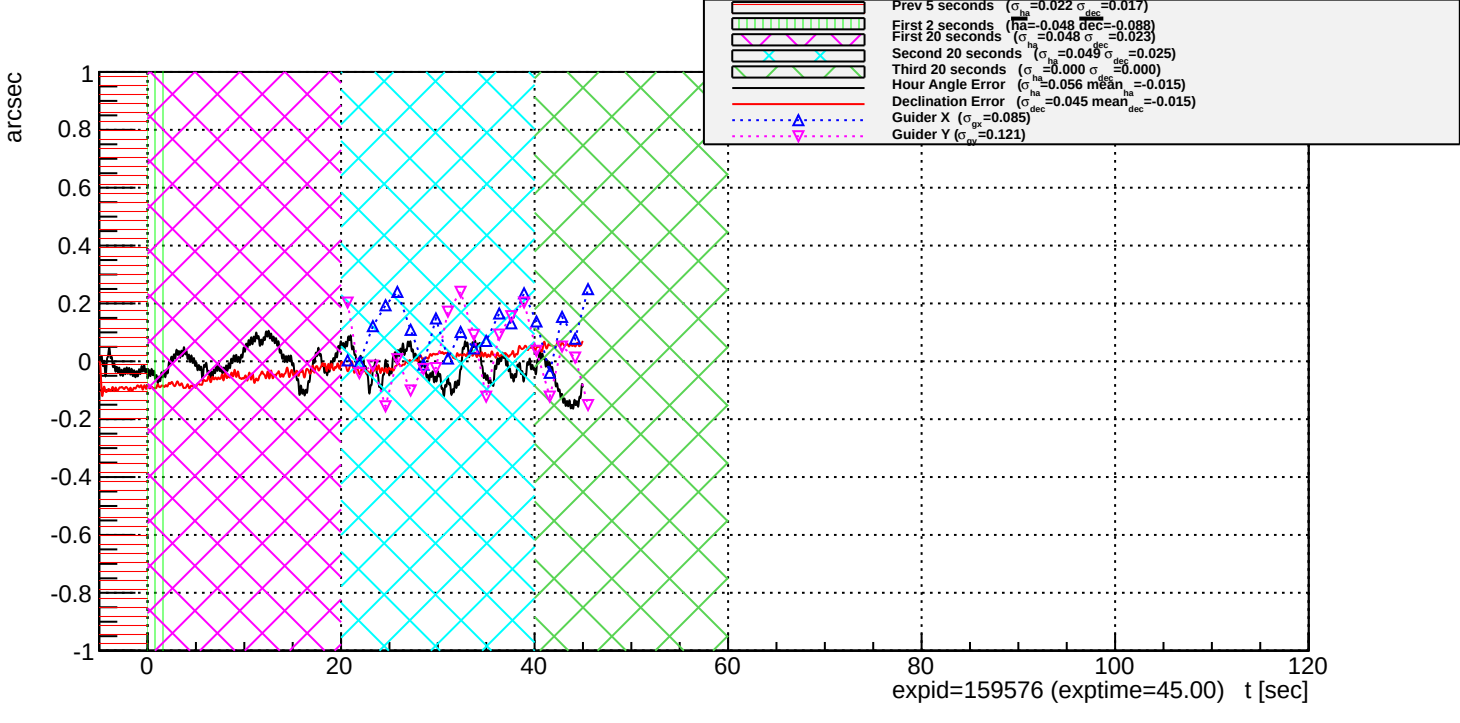

Prev 5 seconds (σ_{ha}=0.050 σ_{dec}=0.012)
First 2 seconds (ha=0.031 dec=-0.040)
First 20 seconds (σ_{ha}=0.083 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.048 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.066 σ_{dec}=0.039)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.037)
Guider X (σ_{gx}=0.168)
Guider Y (σ_{gy}=0.137)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159571 (exptime=90.00) t [sec]

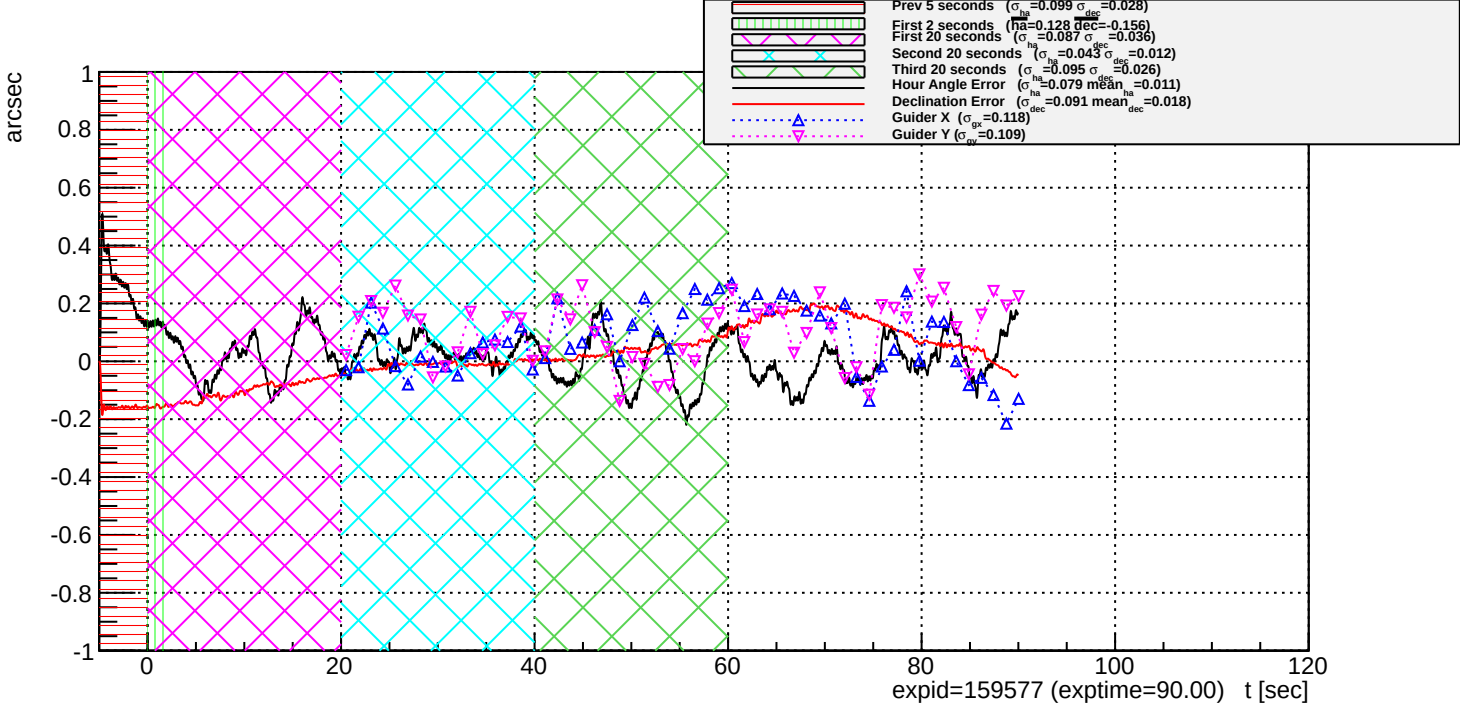

Prev 5 seconds (σ_{ha}=0.108 σ_{dec}=0.023)
First 2 seconds (μ_{ha}=0.107 μ_{dec}=-0.135)
First 20 seconds (σ_{ha}=0.069 σ_{dec}=0.029)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.227 σ_{dec}=0.056)
Hour Angle Error (σ_{ha}=0.234 $mean_{ha}$=0.019)
Declination Error (σ_{dec}=0.112 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.158)
Guider Y (σ_{gy}=0.190)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159572 (exptime=90.00) t [sec]

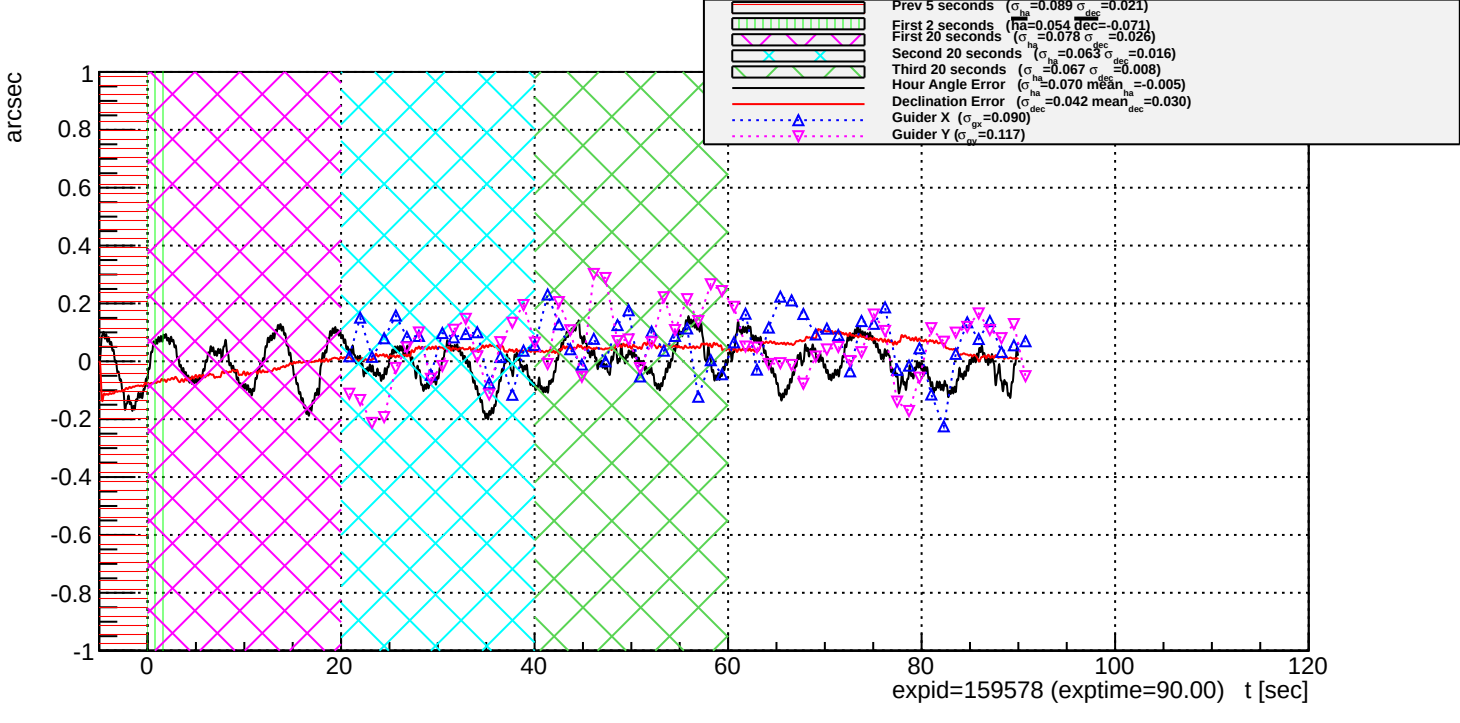

Prev 5 seconds (σ_{ha}=0.182 σ_{dec}=0.140)
First 2 seconds (ha=0.155 dec=-0.067)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.039)
Second 20 seconds (σ_{ha}=0.072 σ_{dec}=0.047)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.067 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.063 $mean_{dec}$=-0.012)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.127)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159573 (exptime=45.00) t [sec]

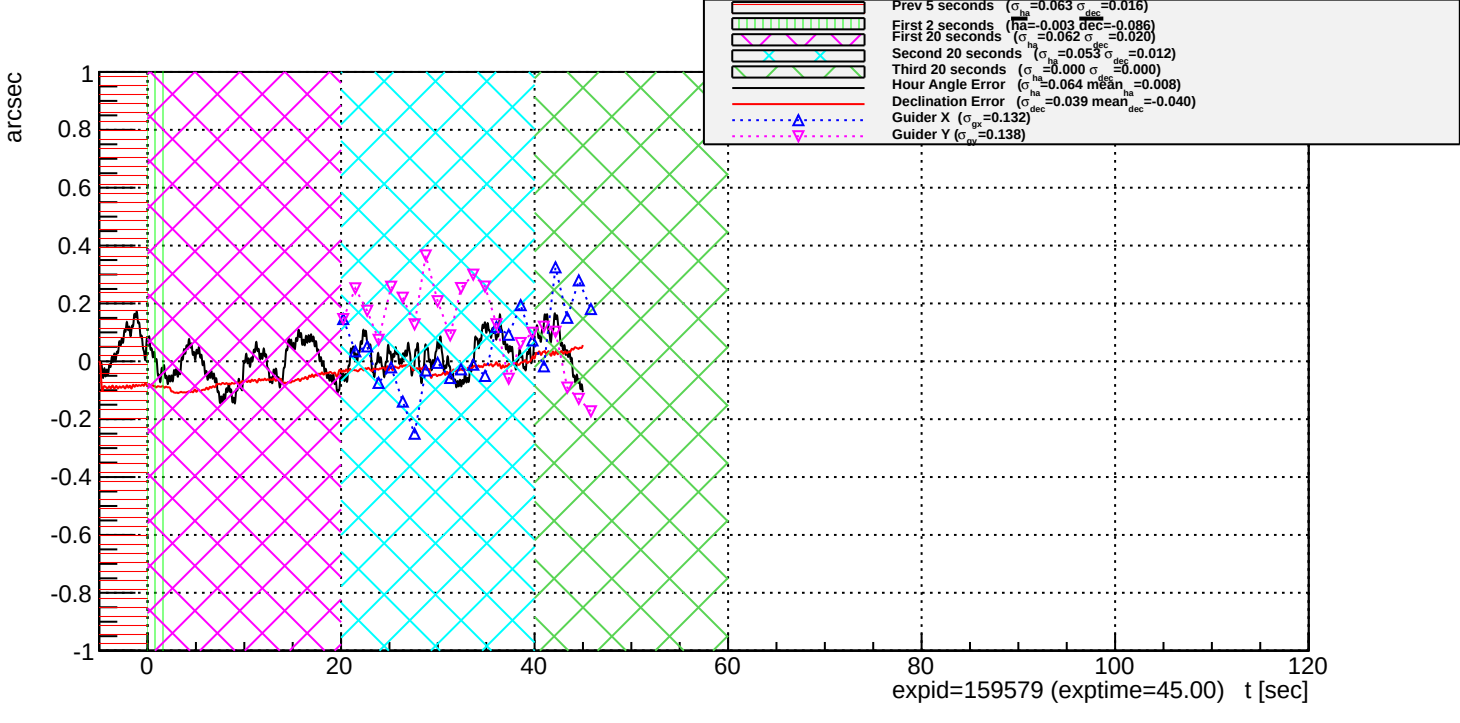

Prev 5 seconds (σ_{ha}=0.122 σ_{dec}=0.046)
First 2 seconds (ha=0.058 dec=-0.198)
First 20 seconds (σ_{ha}=0.067 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.059 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.090 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.114)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159574 (exptime=90.00)
t [sec]

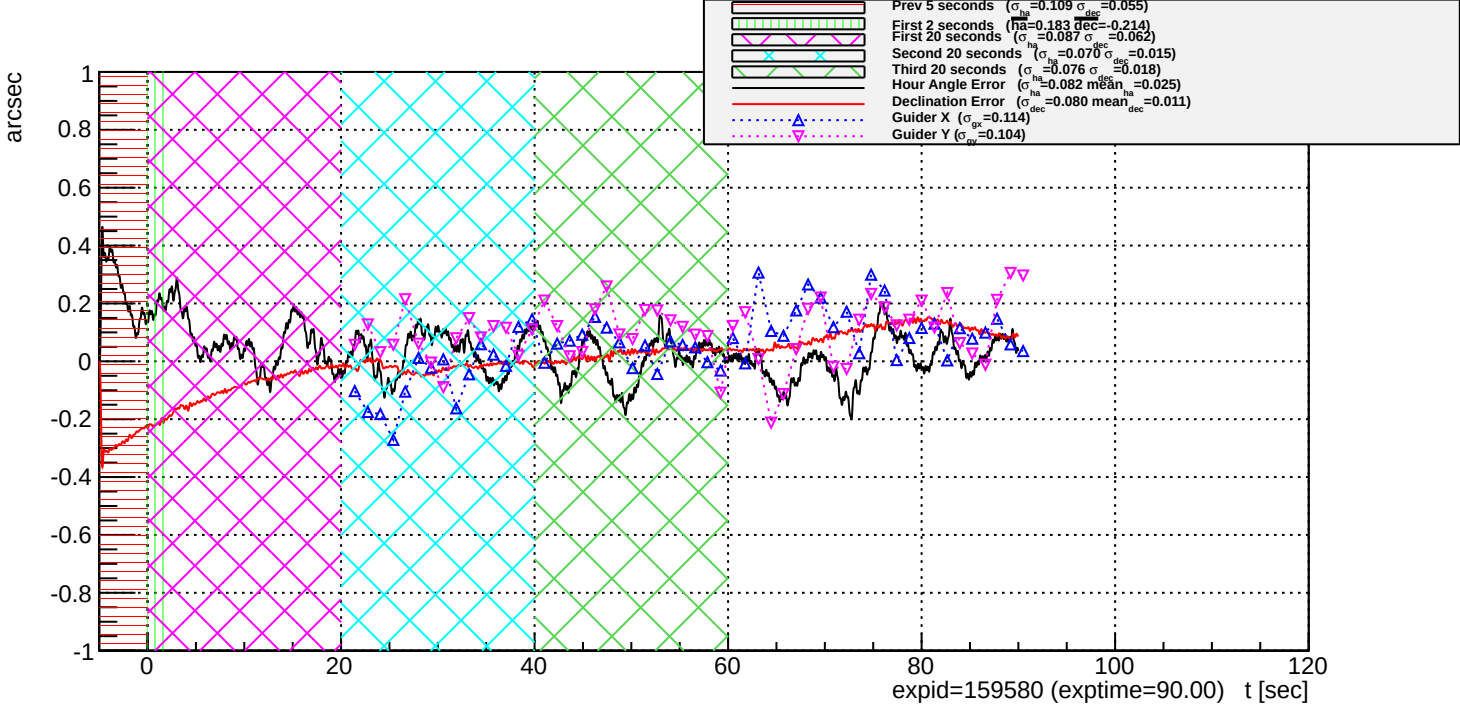

Prev 5 seconds (σ_{ha}=0.045 σ_{dec}=0.010)
First 2 seconds (ha=-0.017 dec=-0.042)
First 20 seconds (σ_{ha}=0.056 σ_{dec}=0.011)
Second 20 seconds (σ_{ha}=0.032 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.040 σ_{dec}=0.024)
Hour Angle Error (σ_{ha}=0.045 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.062 $mean_{dec}$=0.042)
Guider X (σ_{gx}=0.096)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159575 (exptime=90.00) t [sec]

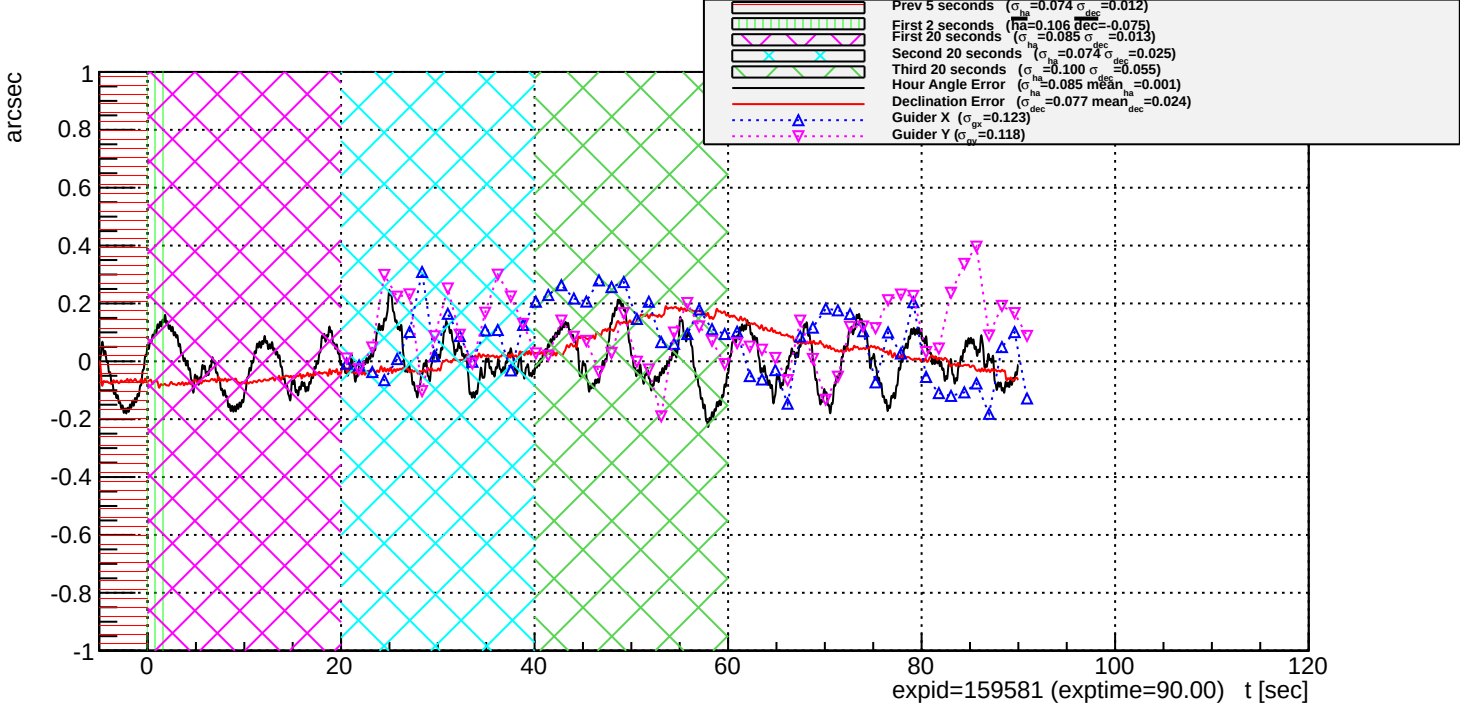

Prev 5 seconds (σ_{ha}=0.022 σ_{dec}=0.017)
First 2 seconds (ha=-0.048 dec=-0.088)
First 20 seconds (σ_{ha}=0.048 σ_{dec}=0.023)
Second 20 seconds (σ_{ha}=0.049 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.056 $mean_{ha}$=-0.015)
Declination Error (σ_{dec}=0.045 $mean_{dec}$=-0.015)
Guider X (σ_{gx}=0.085)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159576 (exptime=45.00) t [sec]

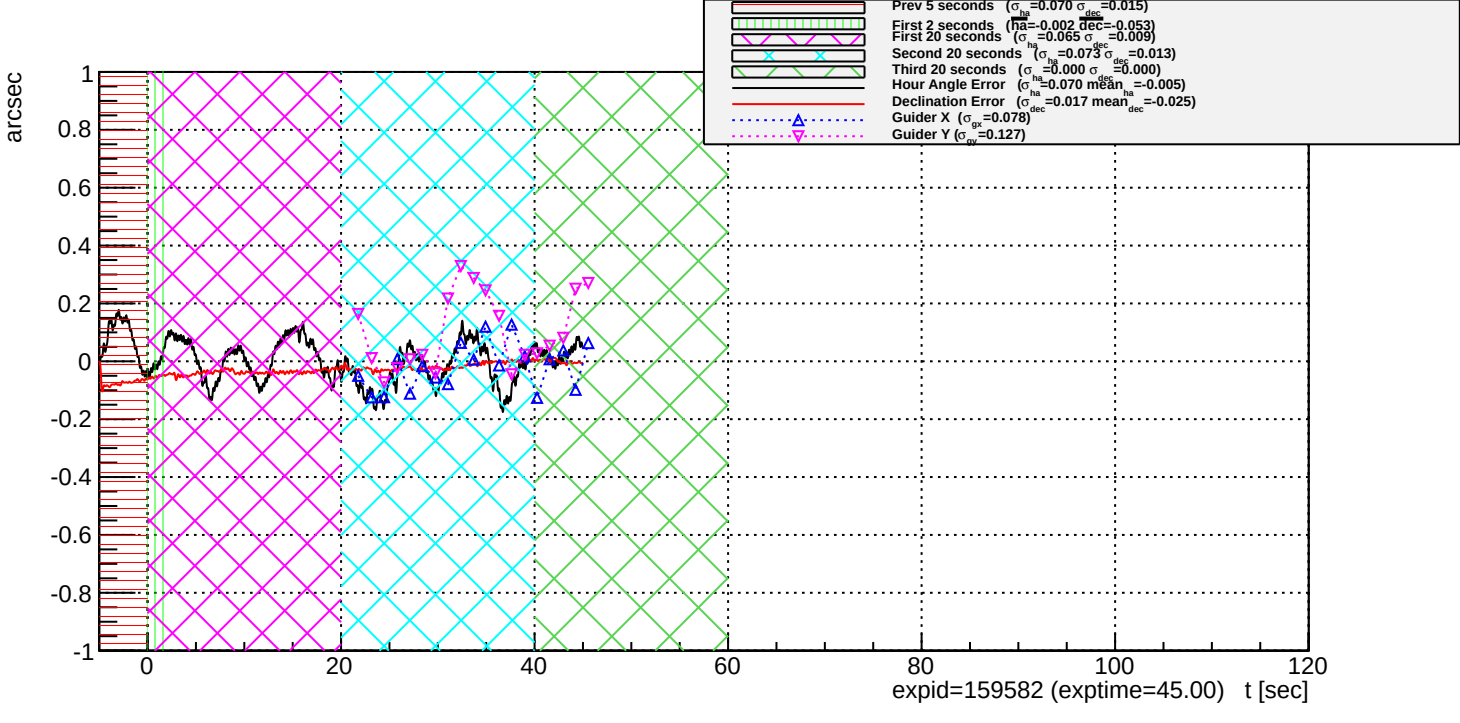

Prev 5 seconds (σ_{ha}=0.099 σ_{dec}=0.028)
First 2 seconds (ha=0.128 dec=-0.156)
First 20 seconds (σ_{ha}=0.087 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.043 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.095 σ_{dec}=0.026)
Hour Angle Error (σ_{ha}=0.079 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.091 $mean_{dec}$=0.018)
Guider X (σ_{gx}=0.118)
Guider Y (σ_{gy}=0.109)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159577 (exptime=90.00) t [sec]

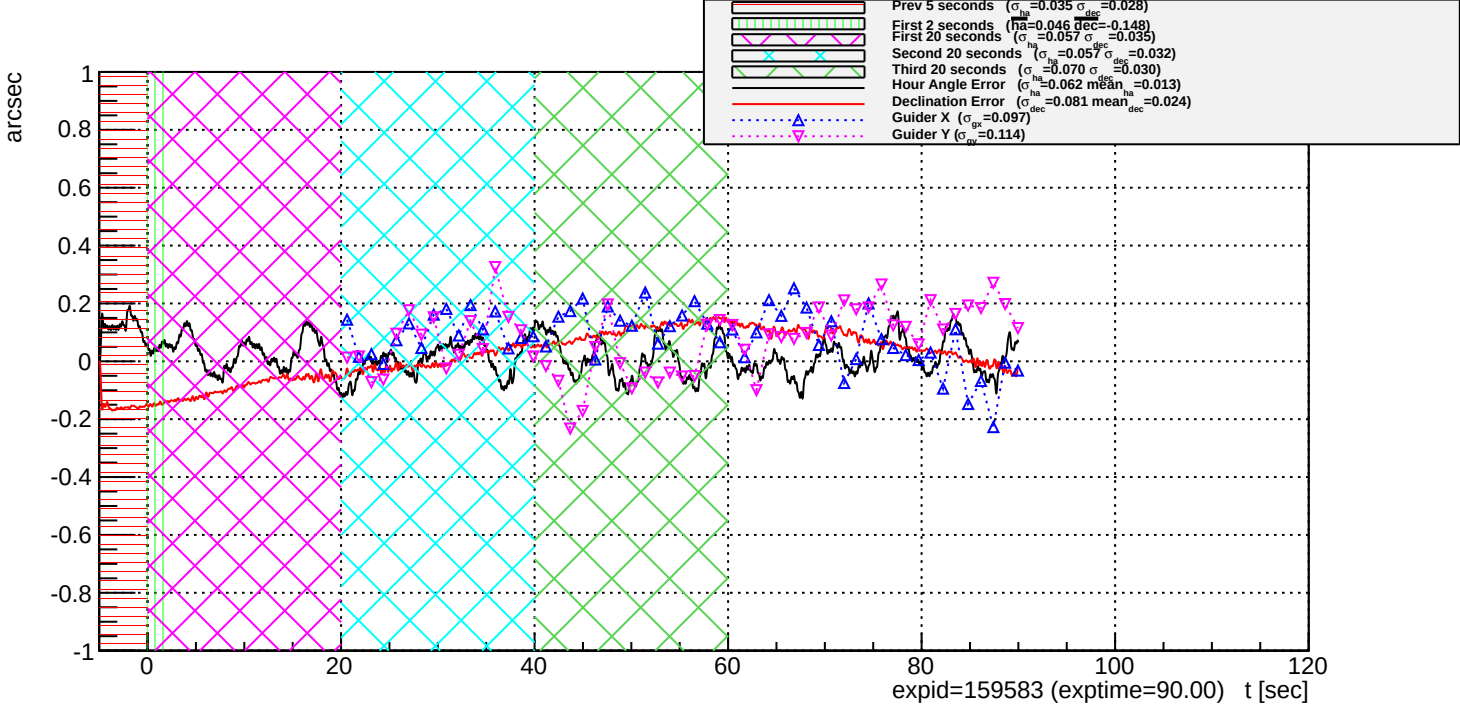

Prev 5 seconds (σ_{ha}=0.089 σ_{dec}=0.021)
First 2 seconds (ha=0.054 dec=-0.071)
First 20 seconds (σ_{ha}=0.078 σ_{dec}=0.026)
Second 20 seconds (σ_{ha}=0.063 σ_{dec}=0.016)
Third 20 seconds (σ_{ha}=0.067 σ_{dec}=0.008)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.042 $mean_{dec}$=0.030)
Guider X (σ_{gx}=0.090)
Guider Y (σ_{gy}=0.117)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159578 (exptime=90.00) t [sec]

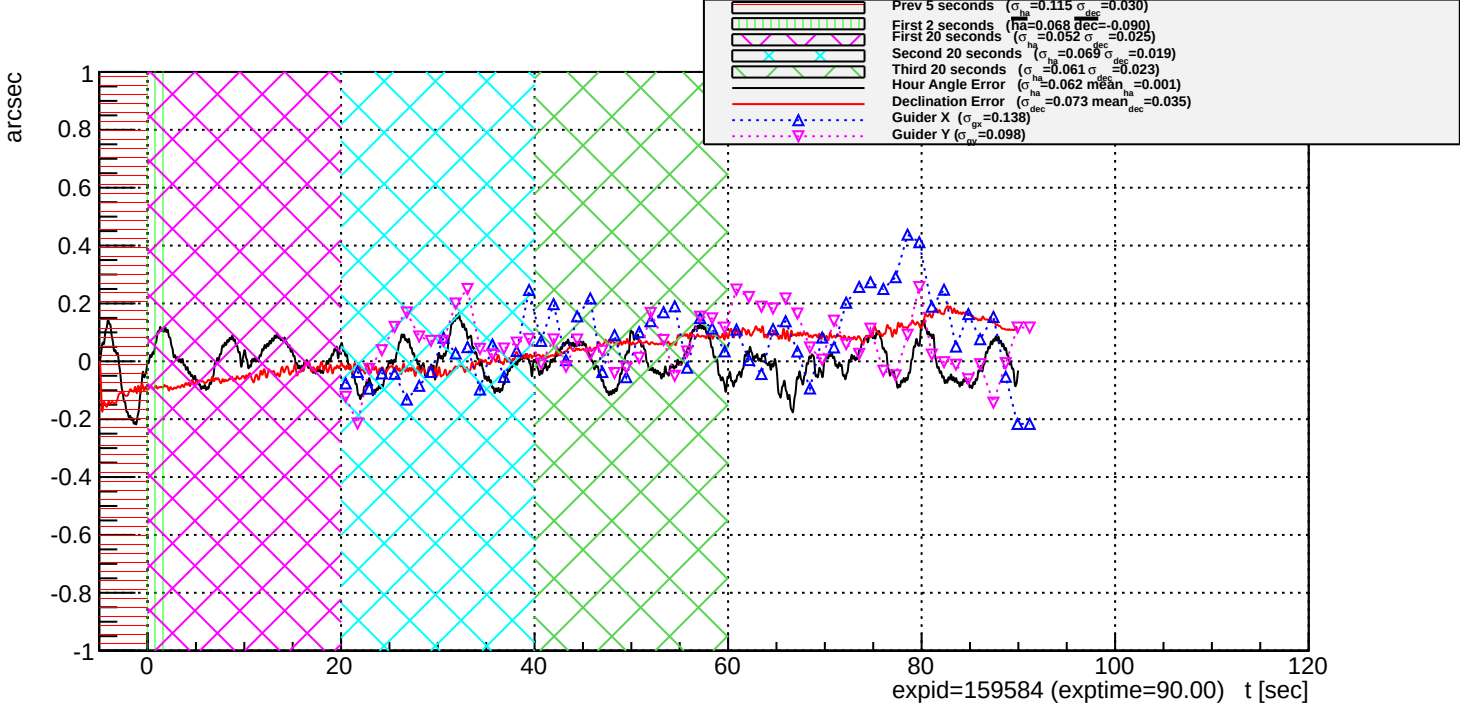

Prev 5 seconds (σ_{ha}=0.063 σ_{dec}=0.016)
First 2 seconds (mean_{ha}=-0.003 mean_{dec}=-0.086)
First 20 seconds (σ_{ha}=0.062 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.053 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.064 mean_{ha}=0.008)
Declination Error (σ_{dec}=0.039 mean_{dec}=-0.040)
Guider X (σ_{gx}=0.132)
Guider Y (σ_{gy}=0.138)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159579 (exptime=45.00) t [sec]

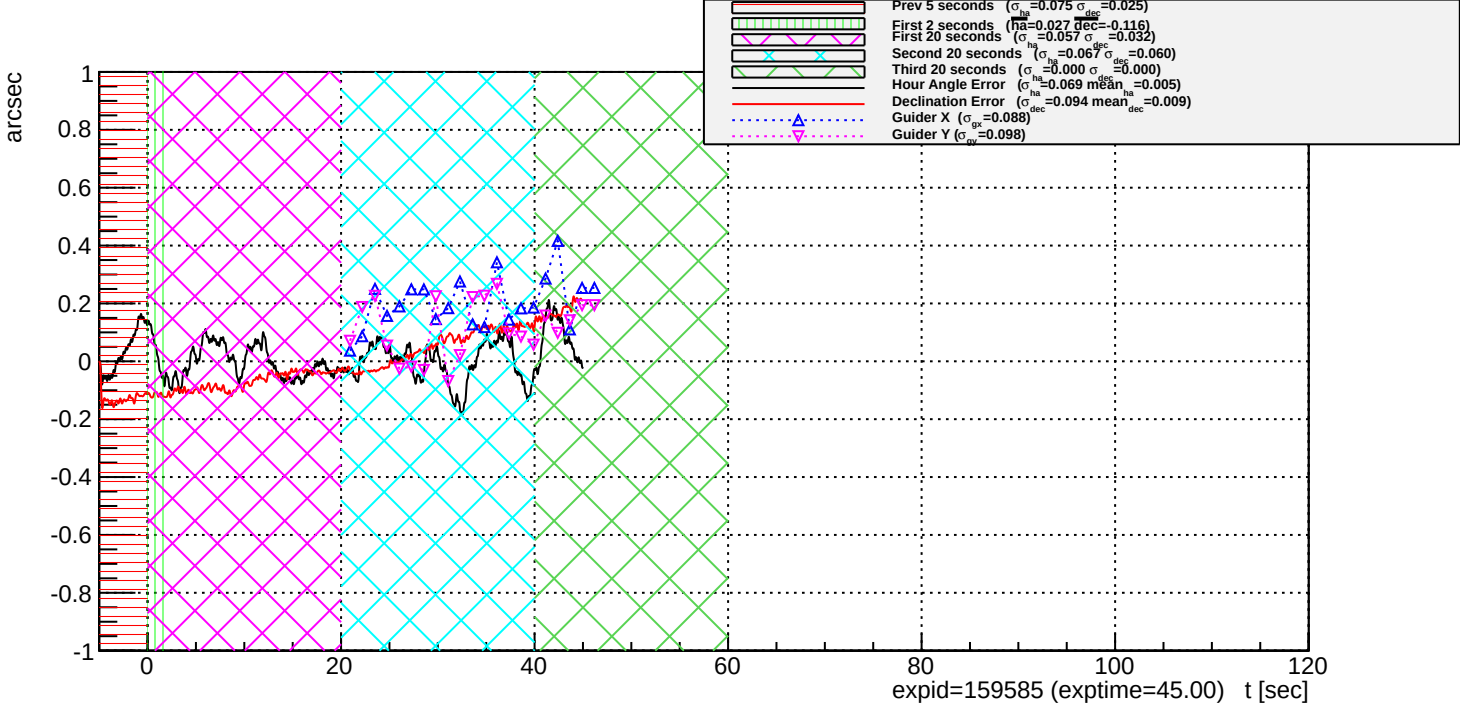

Prev 5 seconds (σ_{ha}=0.109 σ_{dec}=0.055)
First 2 seconds (ha=0.183 dec=-0.214)
First 20 seconds (σ_{ha}=0.087 σ_{dec}=0.062)
Second 20 seconds (σ_{ha}=0.070 σ_{dec}=0.015)
Third 20 seconds (σ_{ha}=0.076 σ_{dec}=0.018)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.025)
Declination Error (σ_{dec}=0.080 $mean_{dec}$=0.011)
Guider X (σ_{gx}=0.114)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159580 (exptime=90.00) t [sec]

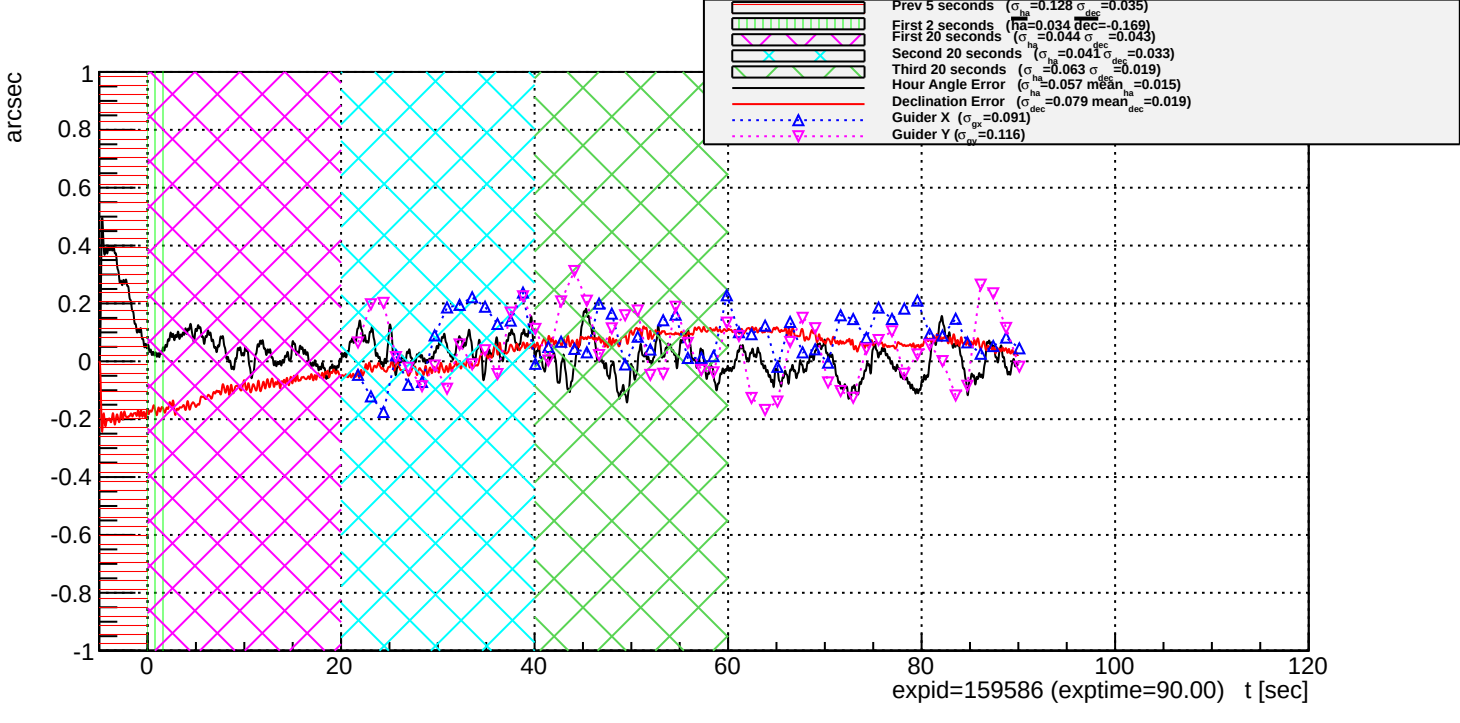

Prev 5 seconds (σ_{ha}=0.074 σ_{dec}=0.012)
First 2 seconds (ha=0.106 dec=-0.075)
First 20 seconds (σ_{ha}=0.085 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.074 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.100 σ_{dec}=0.055)
Hour Angle Error (σ_{ha}=0.085 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.077 $mean_{dec}$=0.024)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.118)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159581 (exptime=90.00) t [sec]

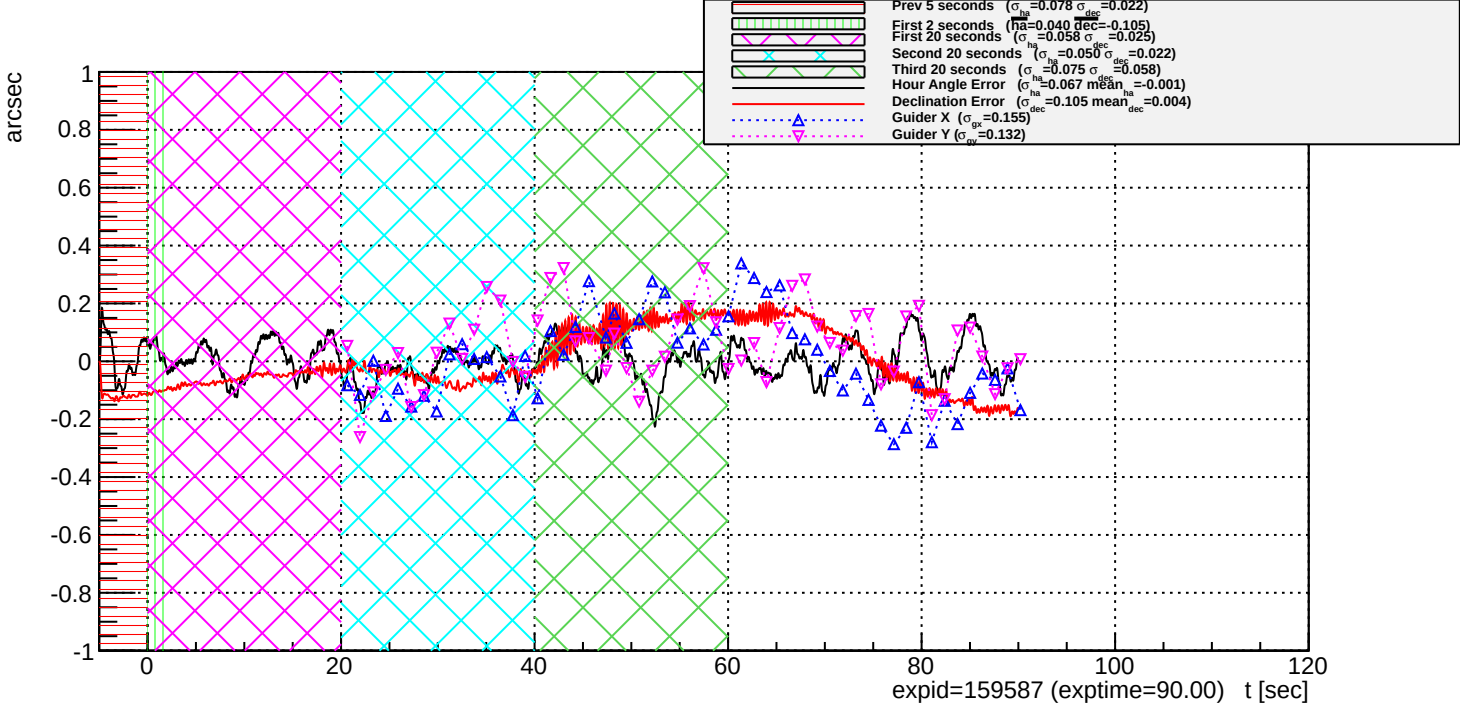

Prev 5 seconds (σ_{ha}=0.070 σ_{dec}=0.015)
First 2 seconds ($\overline{ha}$=-0.002 $\overline{dec}$=-0.053)
First 20 seconds (σ_{ha}=0.065 σ_{dec}=0.009)
Second 20 seconds (σ_{ha}=0.073 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.017 $mean_{dec}$=-0.025)
Guider X (σ_{gx}=0.078)
Guider Y (σ_{gy}=0.127)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159582 (exptime=45.00) t [sec]

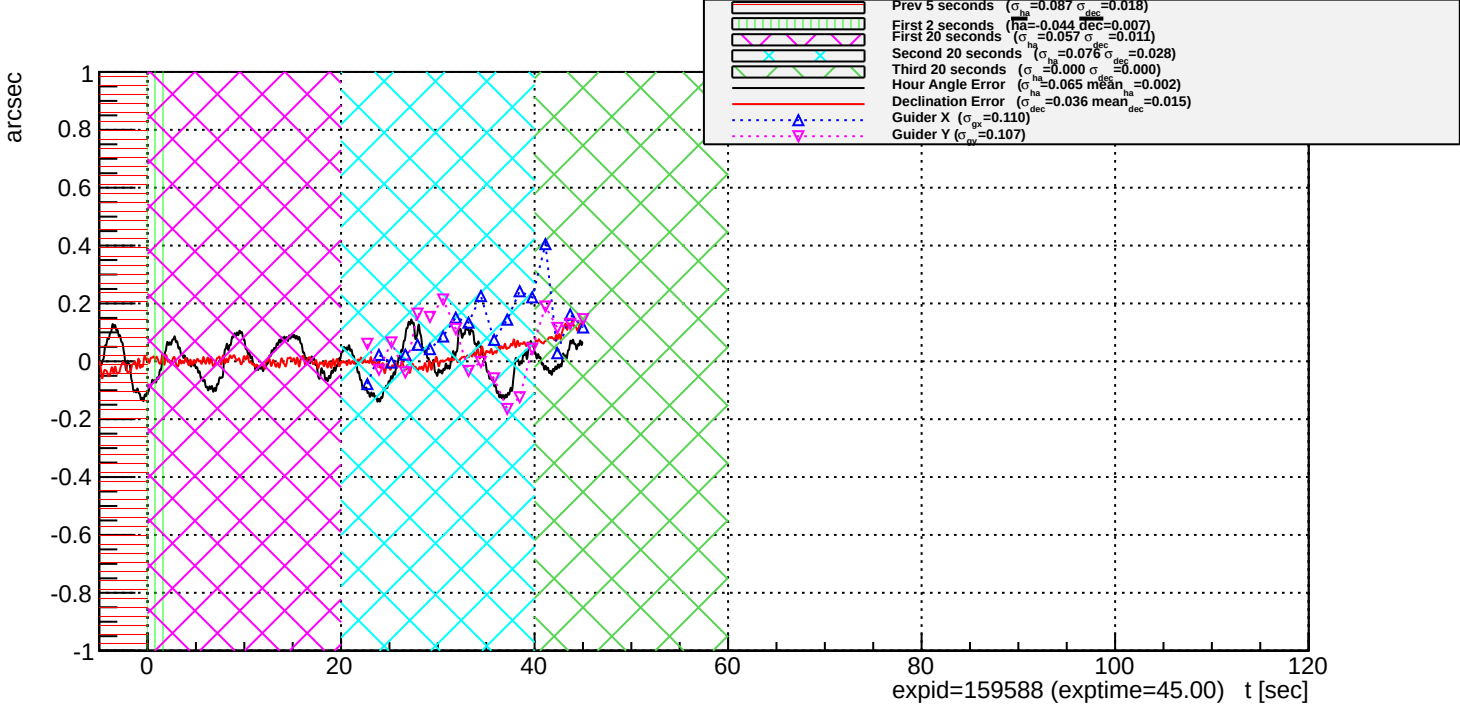

Prev 5 seconds (σ_{ha}=0.035 σ_{dec}=0.028)
First 2 seconds (ha=0.046 dec=-0.148)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.035)
Second 20 seconds (σ_{ha}=0.057 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.070 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.062 $mean_{ha}$=0.013)
Declination Error (σ_{dec}=0.081 $mean_{dec}$=0.024)
Guider X (σ_{gx}=0.097)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159583 (exptime=90.00) t [sec]

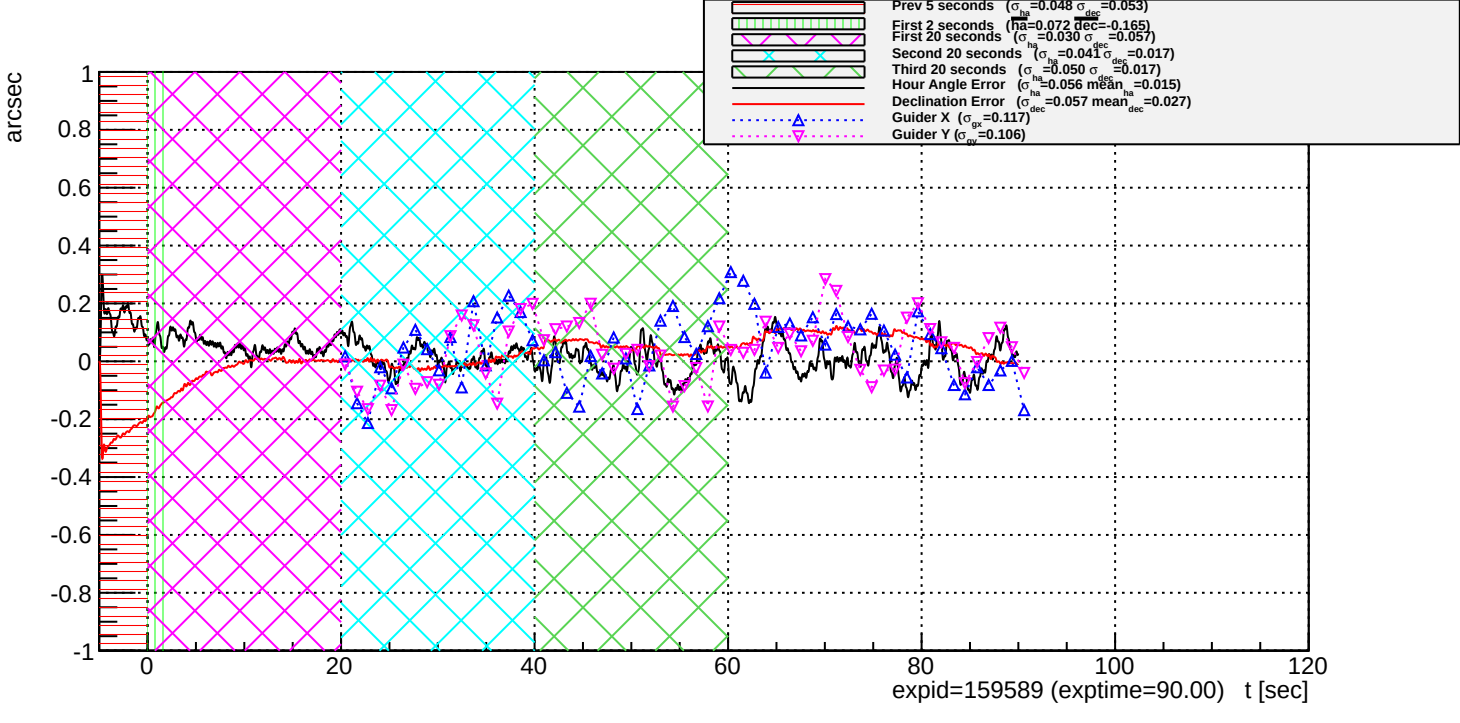

Prev 5 seconds (σ_{ha}=0.115 σ_{dec}=0.030)
First 2 seconds (ha=0.068 dec=-0.090)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.025)
Second 20 seconds (σ_{ha}=0.069 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.061 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.062 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.073 $mean_{dec}$=0.035)
Guider X (σ_{gx}=0.138)
Guider Y (σ_{gy}=0.098)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159584 (exptime=90.00)
t [sec]

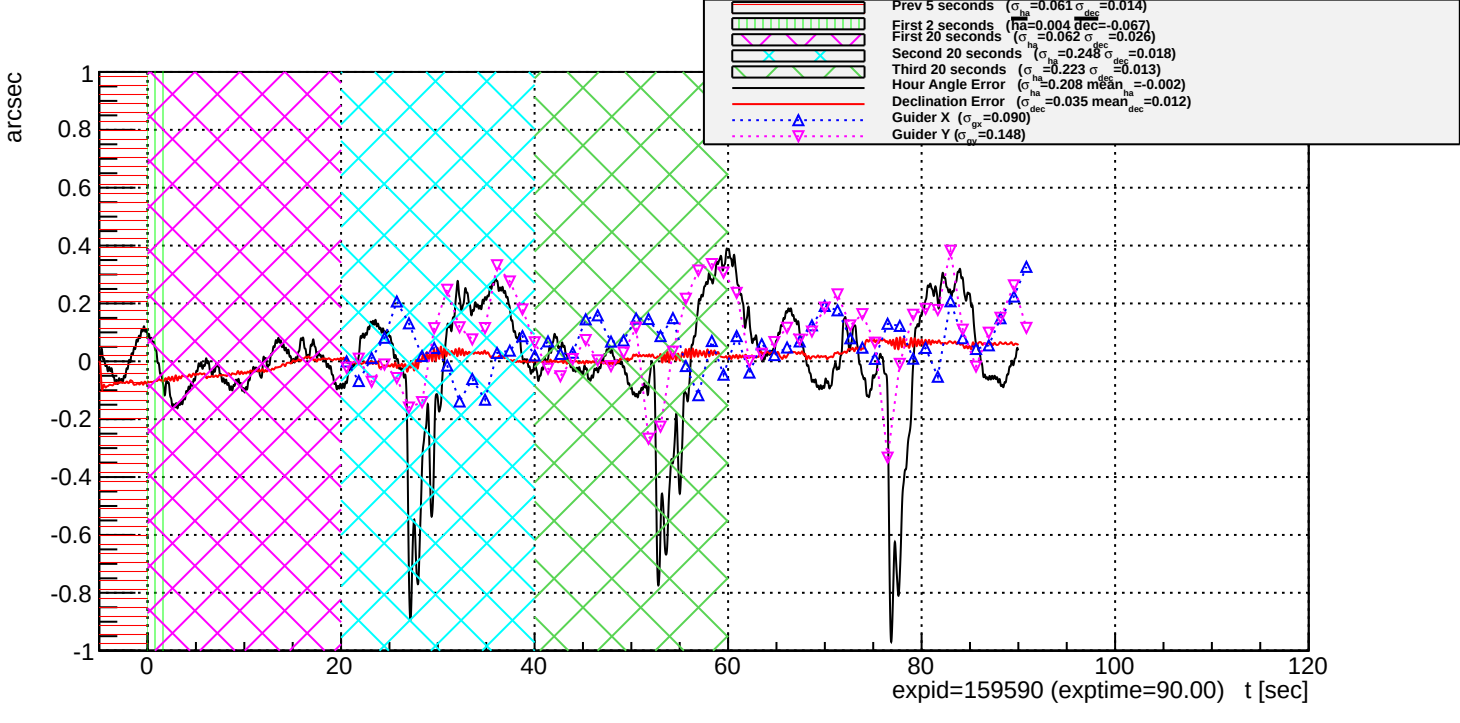

Prev 5 seconds (σ_{ha}=0.075 σ_{dec}=0.025)
First 2 seconds (ha=0.027 dec=-0.116)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.032)
Second 20 seconds (σ_{ha}=0.067 σ_{dec}=0.060)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.069 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.094 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.088)
Guider Y (σ_{gy}=0.098)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159585 (exptime=45.00) t [sec]

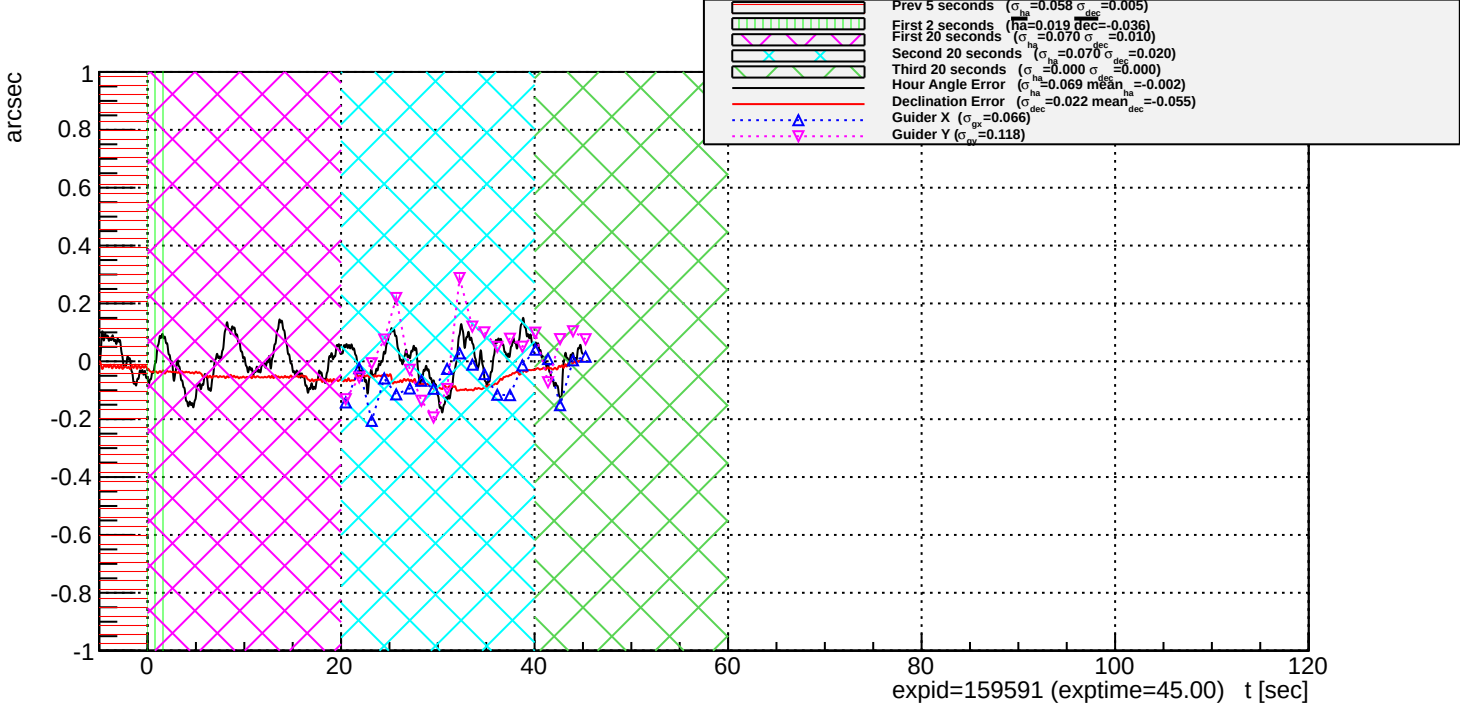

Prev 5 seconds (σ_{ha}=0.128 σ_{dec}=0.035)
First 2 seconds (ha=0.034 dec=-0.169)
First 20 seconds (σ_{ha}=0.044 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.033)
Third 20 seconds (σ_{ha}=0.063 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.079 $mean_{dec}$=0.019)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.116)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159586 (exptime=90.00) t [sec]

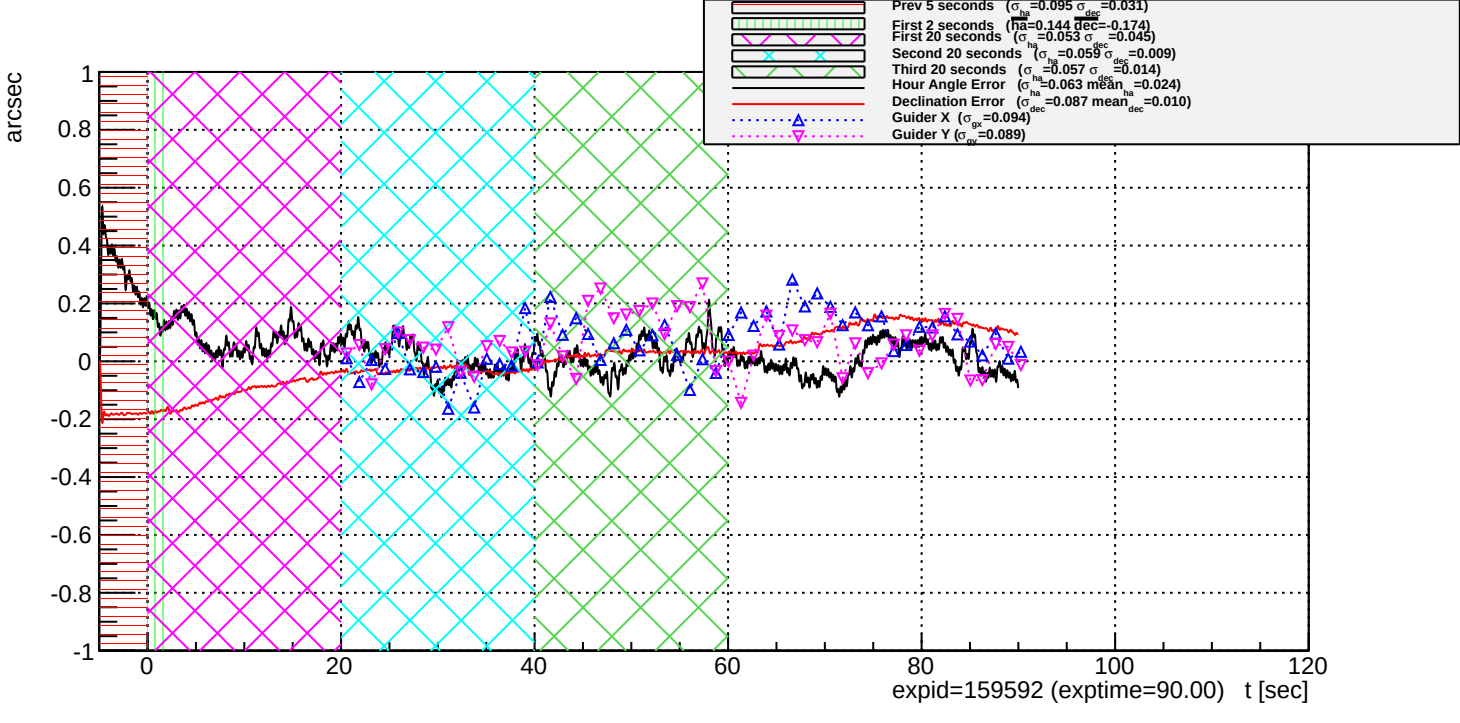

Prev 5 seconds (σ_{ha}=0.078 σ_{dec}=0.022)
First 2 seconds (ha=0.040 dec=-0.105)
First 20 seconds (σ_{ha}=0.058 σ_{dec}=0.025)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.058)
Hour Angle Error (σ_{ha}=0.067 $mean_{ha}$=-0.001)
Declination Error (σ_{dec}=0.105 $mean_{dec}$=0.004)
Guider X (σ_{gx}=0.155)
Guider Y (σ_{gy}=0.132)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159587 (exptime=90.00) t [sec]

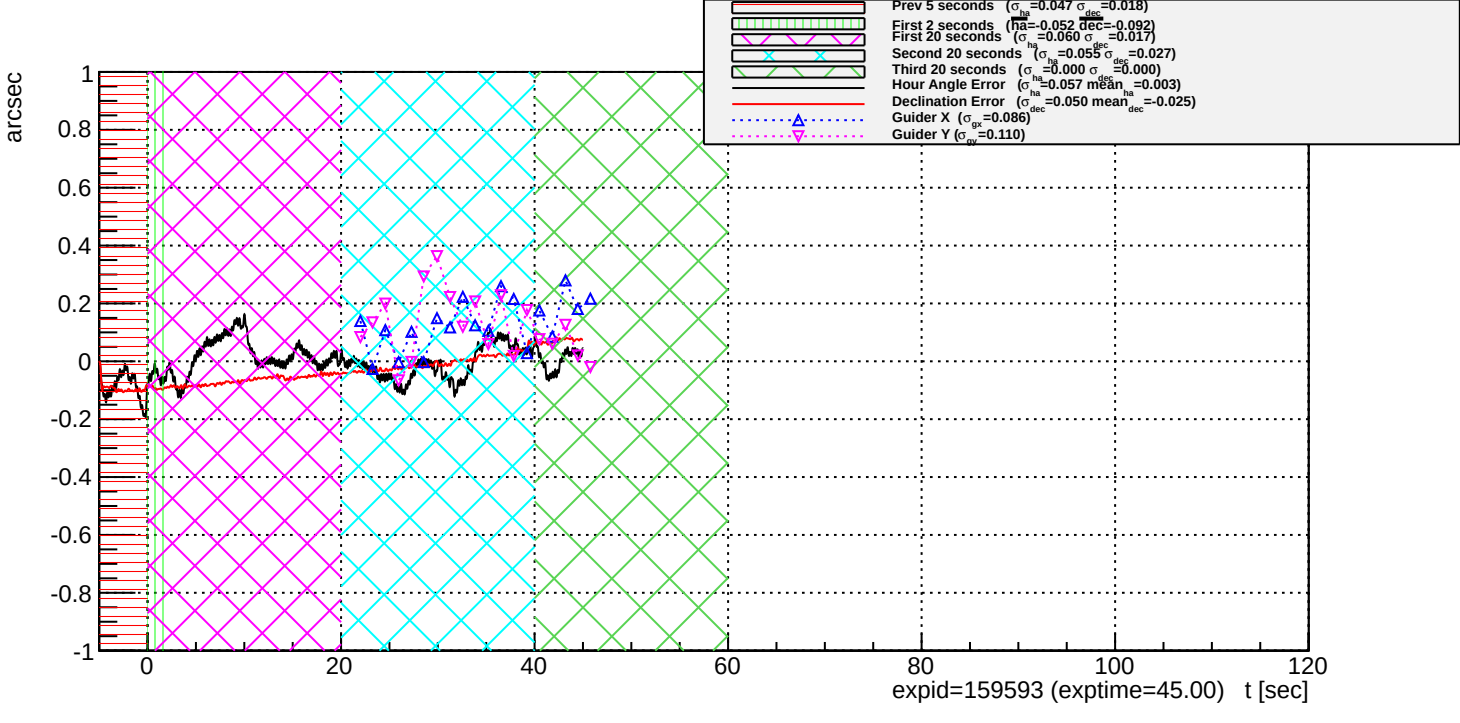

Prev 5 seconds (σ_{ha}=0.087 σ_{dec}=0.018)
First 2 seconds (ha=-0.044 dec=0.007)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.011)
Second 20 seconds (σ_{ha}=0.076 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=0.002)
Declination Error (σ_{dec}=0.036 $mean_{dec}$=0.015)
Guider X (σ_{gx}=0.110)
Guider Y (σ_{gy}=0.107)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159588 (exptime=45.00) t [sec]

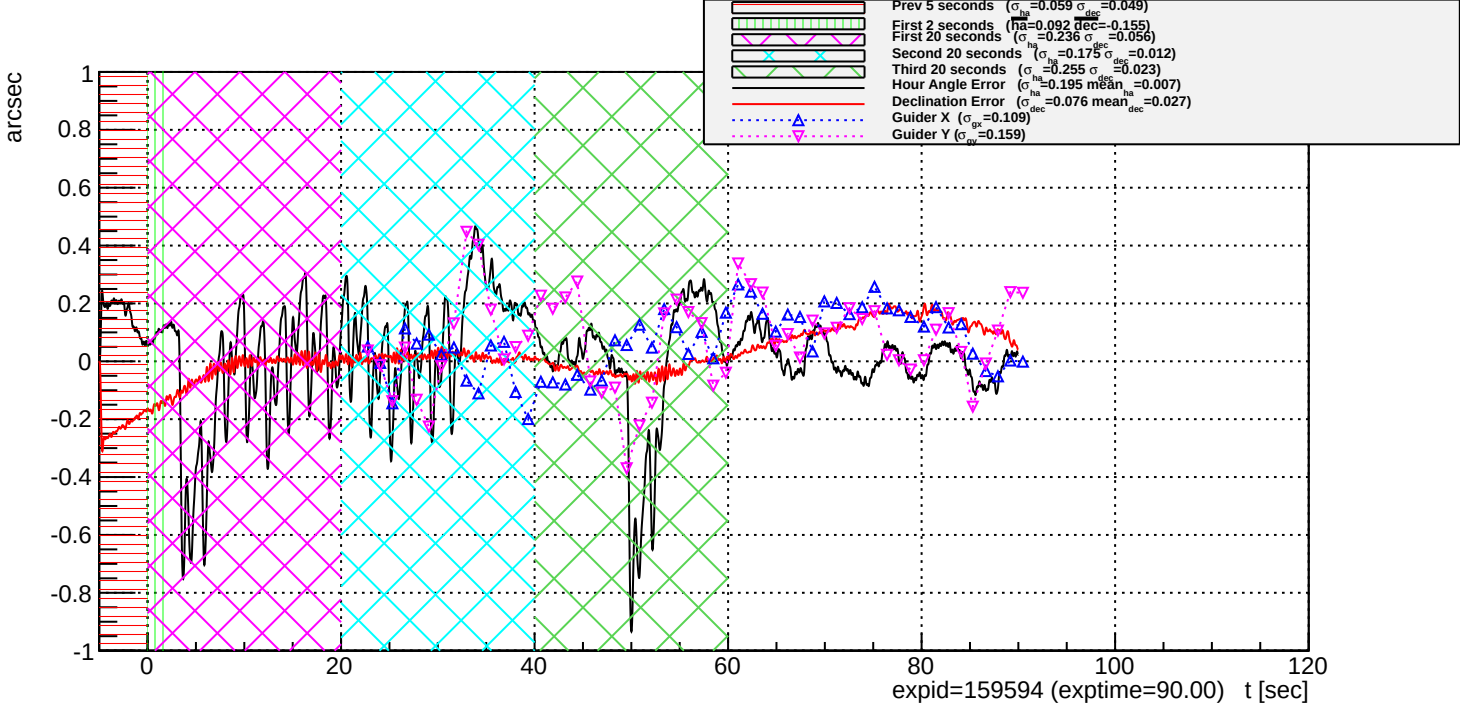

Prev 5 seconds (σ_{ha}=0.048 σ_{dec}=0.053)
First 2 seconds (ha=0.072 dec=-0.165)
First 20 seconds (σ_{ha}=0.030 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.050 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.056 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.057 $mean_{dec}$=0.027)
Guider X (σ_{gx}=0.117)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159589 (exptime=90.00) t [sec]

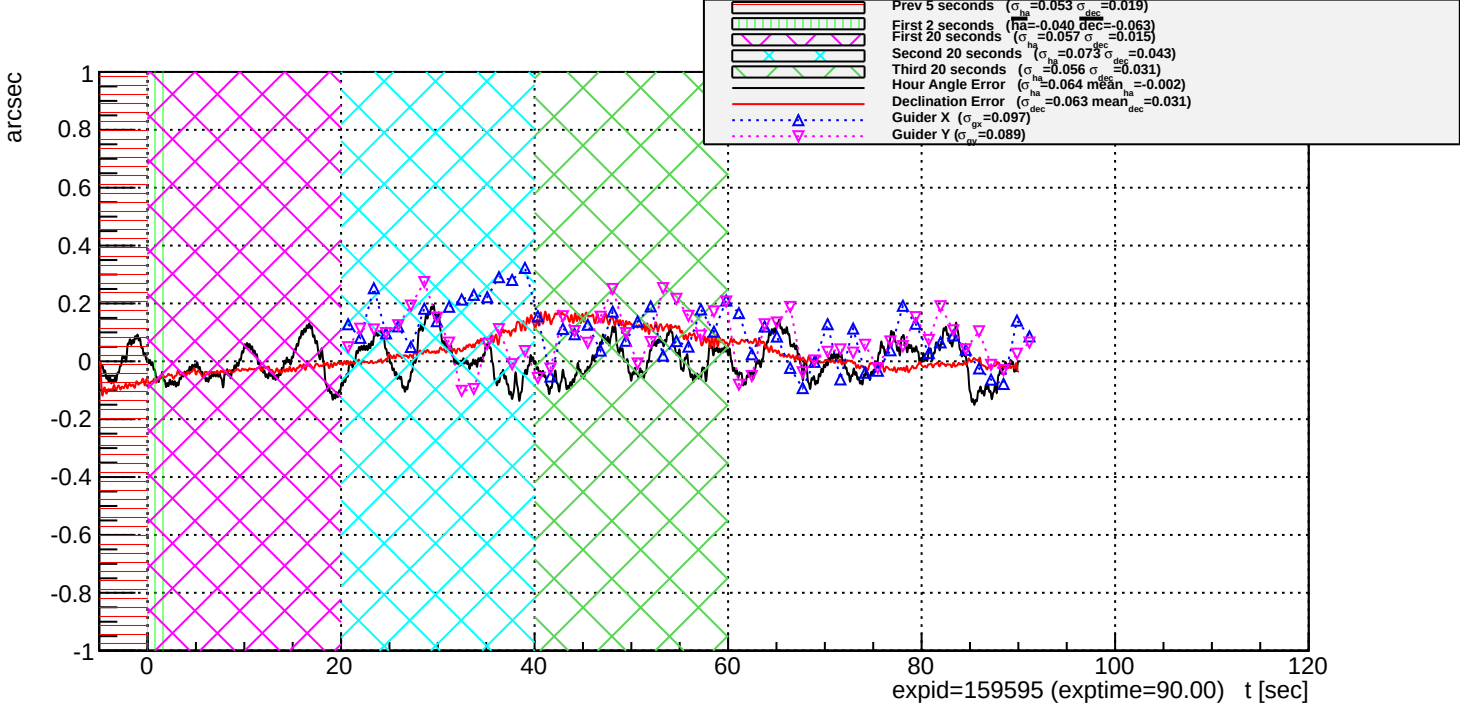

Prev 5 seconds (σ_{ha}=0.061 σ_{dec}=0.014)
First 2 seconds ($\overline{ha}$=0.004 $\overline{dec}$=-0.067)
First 20 seconds (σ_{ha}=0.062 σ_{dec}=0.026)
Second 20 seconds (σ_{ha}=0.248 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.223 σ_{dec}=0.013)
Hour Angle Error (σ_{ha}=0.208 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.035 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.090)
Guider Y (σ_{gy}=0.148)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159590 (exptime=90.00) t [sec]

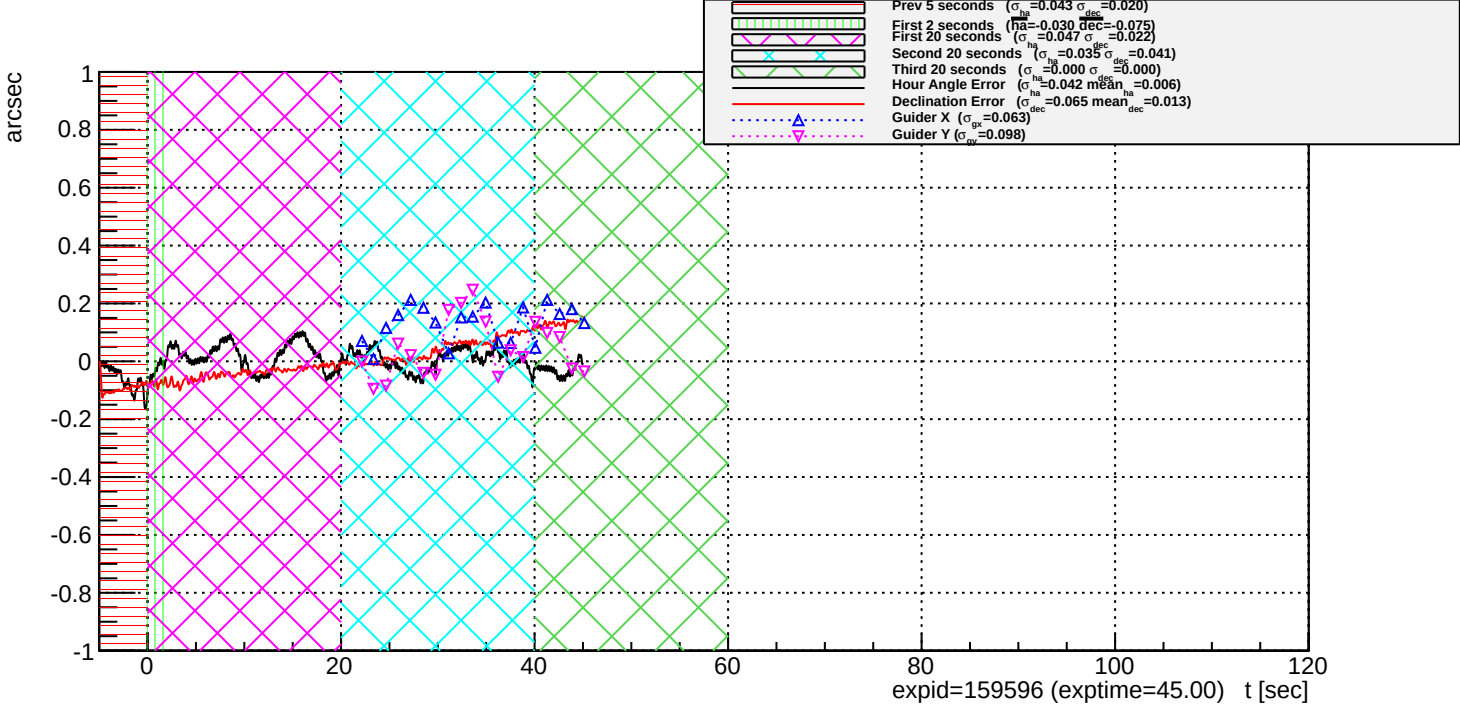

Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.005)
First 2 seconds (σ_{ha}=0.019 σ_{dec}=-0.036)
First 20 seconds (σ_{ha}=0.070 σ_{dec}=0.010)
Second 20 seconds (σ_{ha}=0.070 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.069 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.022 $mean_{dec}$=-0.055)
Guider X (σ_{gx}=0.066)
Guider Y (σ_{gy}=0.118)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159591 (exptime=45.00) t [sec]

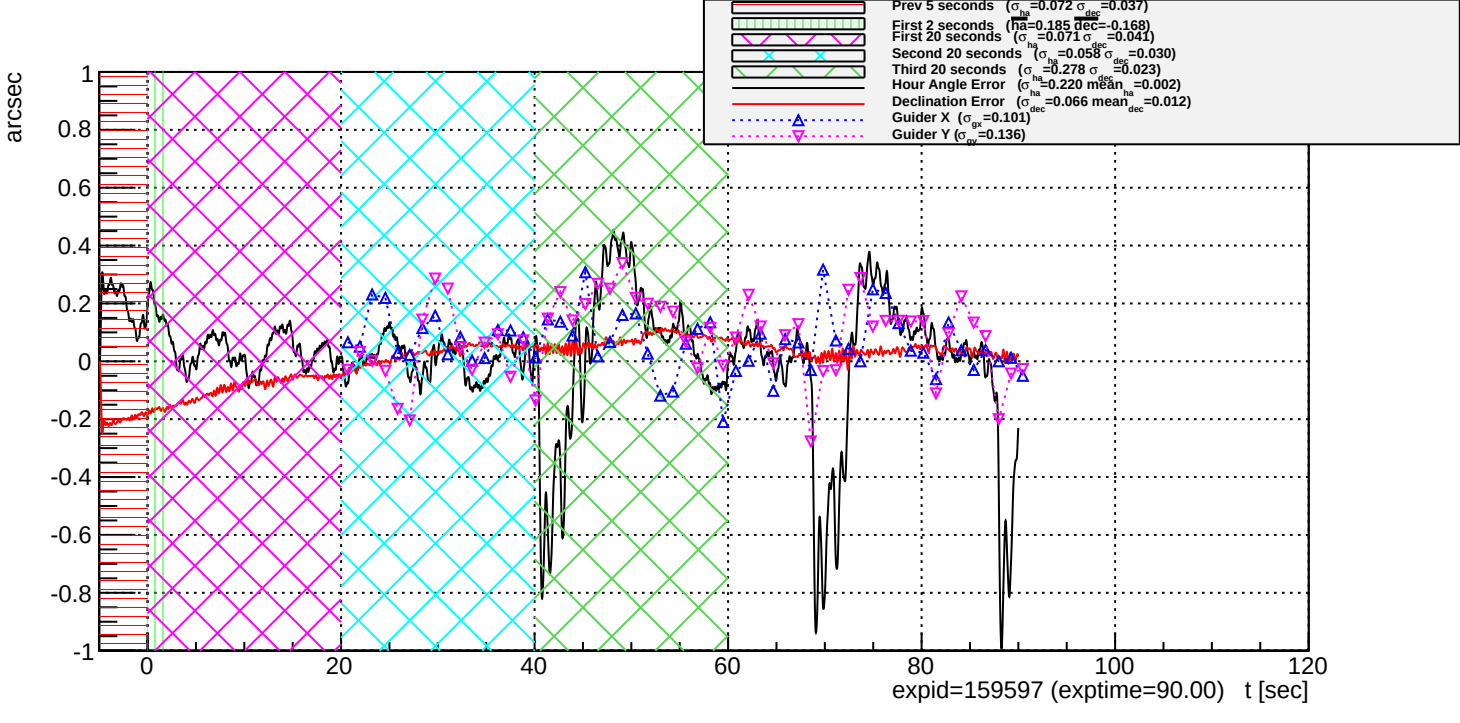

Prev 5 seconds (σ_{ha}=0.095 σ_{dec}=0.031)
First 2 seconds (ha=0.144 dec=-0.174)
First 20 seconds (σ_{ha}=0.053 σ_{dec}=0.045)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.009)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.014)
Hour Angle Error (σ_{ha}=0.063 $mean_{ha}$=0.024)
Declination Error (σ_{dec}=0.087 $mean_{dec}$=0.010)
Guider X (σ_{gx}=0.094)
Guider Y (σ_{gy}=0.089)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159592 (exptime=90.00) t [sec]

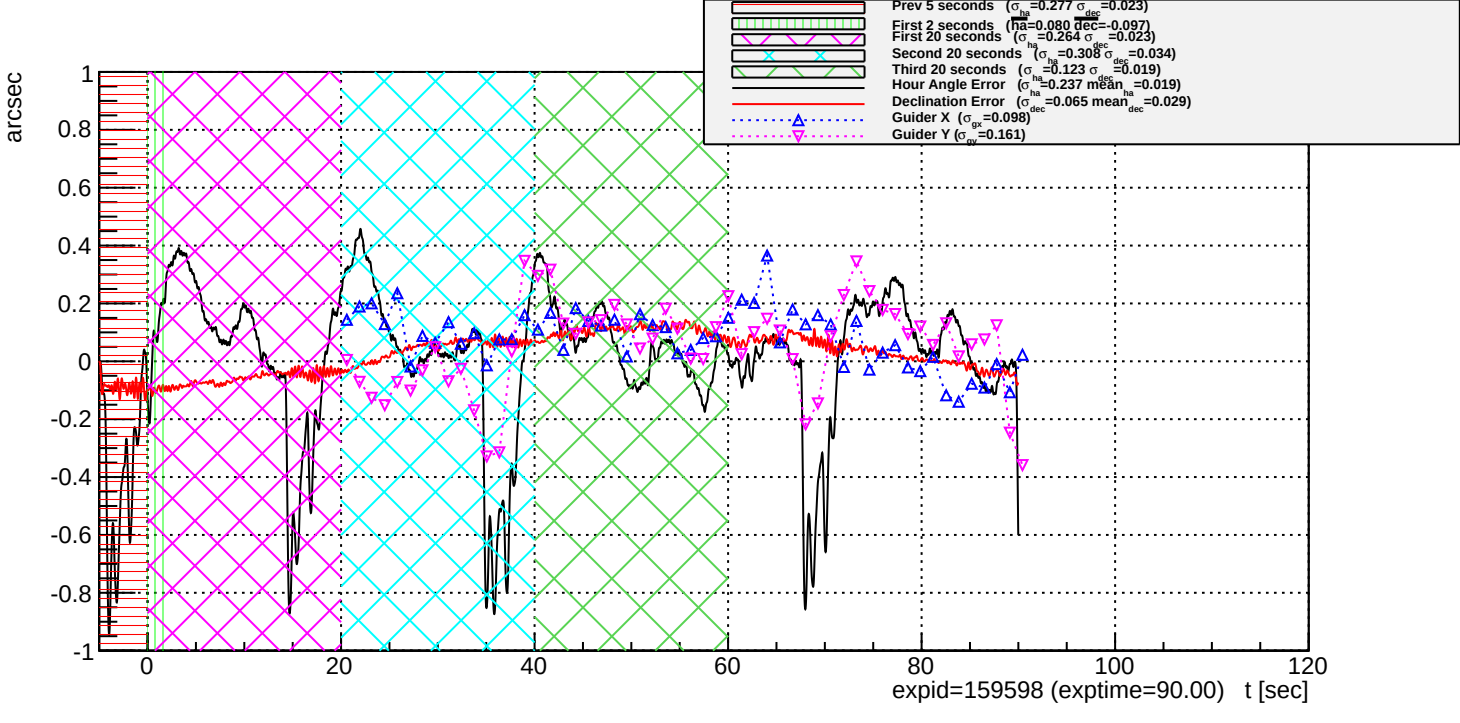

Prev 5 seconds (σ_{ha}=0.047 σ_{dec}=0.018)
First 2 seconds (ha=-0.052 dec=-0.092)
First 20 seconds (σ_{ha}=0.060 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.055 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=0.003)
Declination Error (σ_{dec}=0.050 $mean_{dec}$=-0.025)
Guider X (σ_{gx}=0.086)
Guider Y (σ_{gy}=0.110)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159593 (exptime=45.00) t [sec]

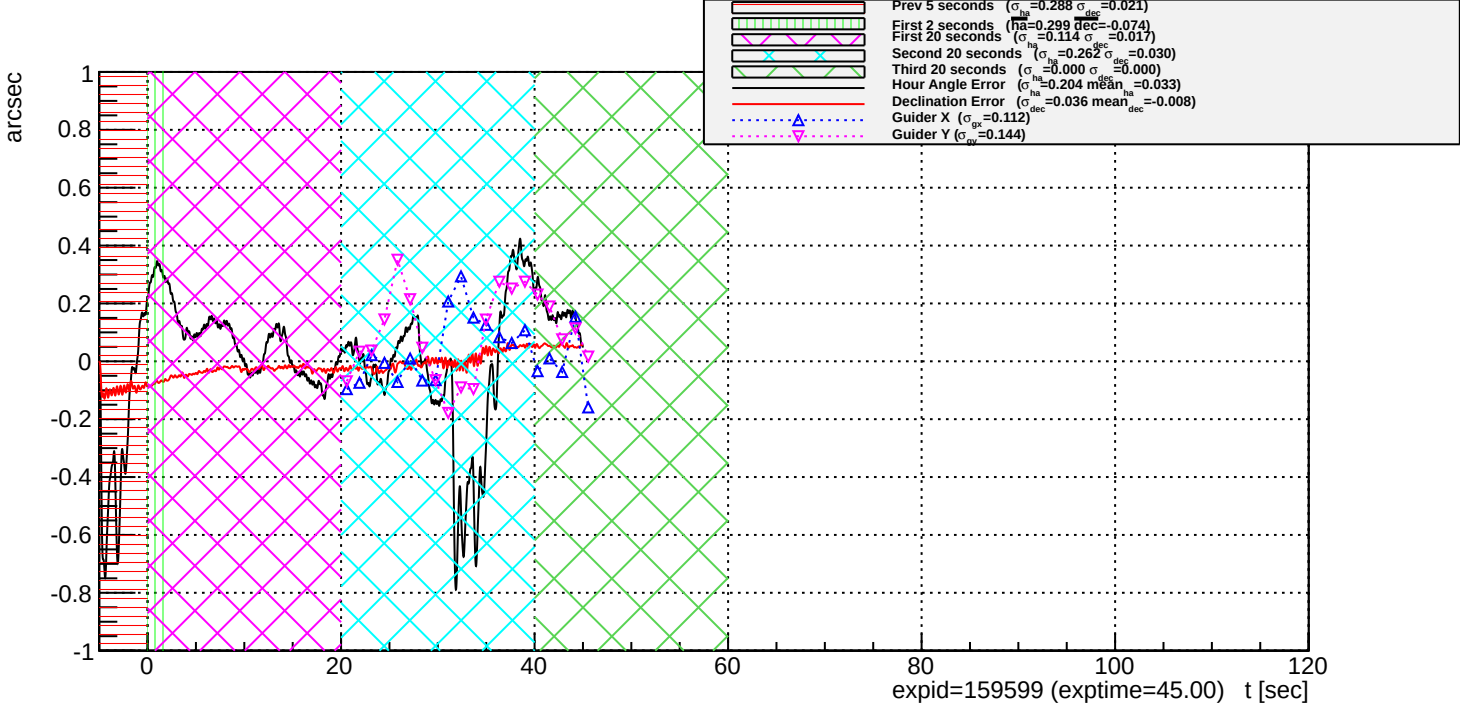

Prev 5 seconds (σ_{ha}=0.059 σ_{dec}=0.049)
First 2 seconds (ha=0.092 dec=-0.155)
First 20 seconds (σ_{ha}=0.236 σ_{dec}=0.056)
Second 20 seconds (σ_{ha}=0.175 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.255 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.195 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.076 $mean_{dec}$=0.027)
Guider X (σ_{gx}=0.109)
Guider Y (σ_{gy}=0.159)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159594 (exptime=90.00) t [sec]

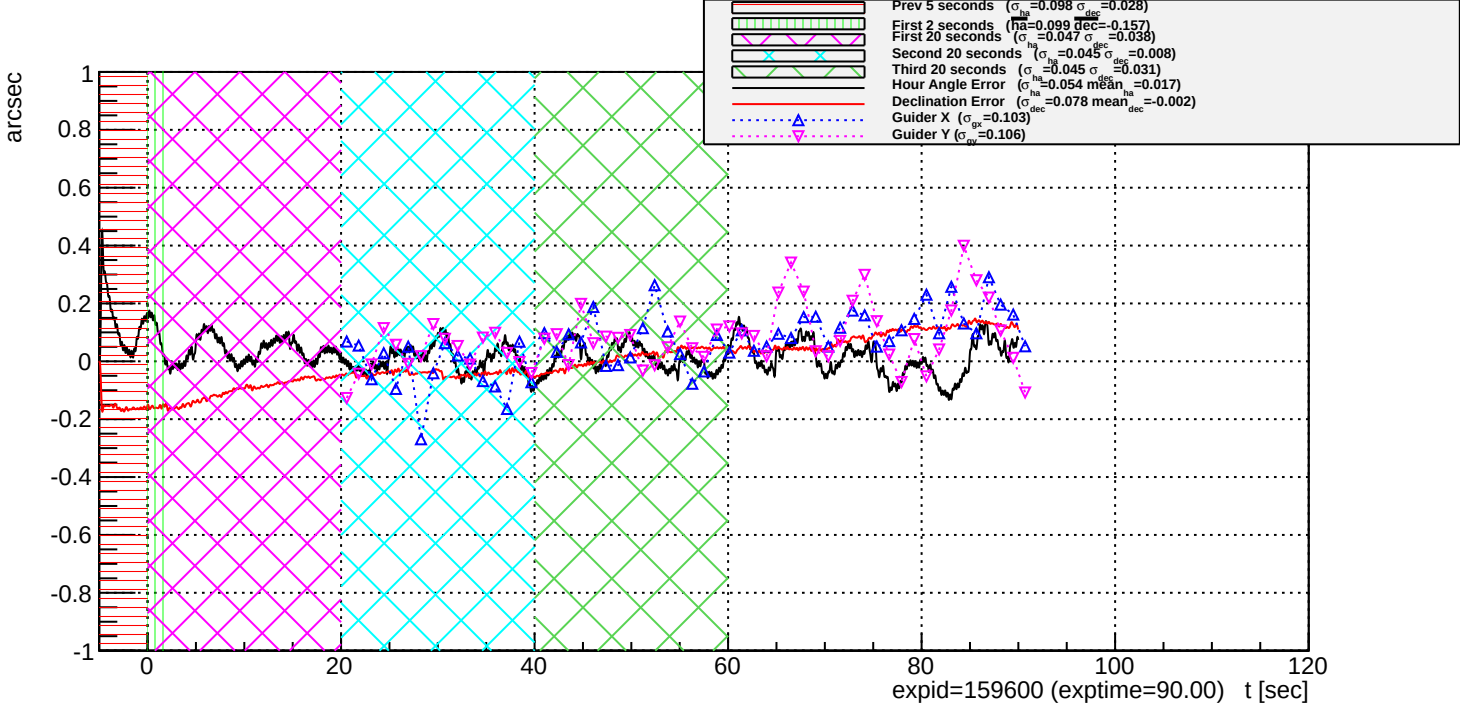

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.019)
First 2 seconds (μ_{ha}=-0.040 μ_{dec}=-0.063)
First 20 seconds (σ_{ha}=0.057 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.073 σ_{dec}=0.043)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.031)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.063 $mean_{dec}$=0.031)
Guider X (σ_{gx}=0.097)
Guider Y (σ_{gy}=0.089)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159595 (exptime=90.00) t [sec]

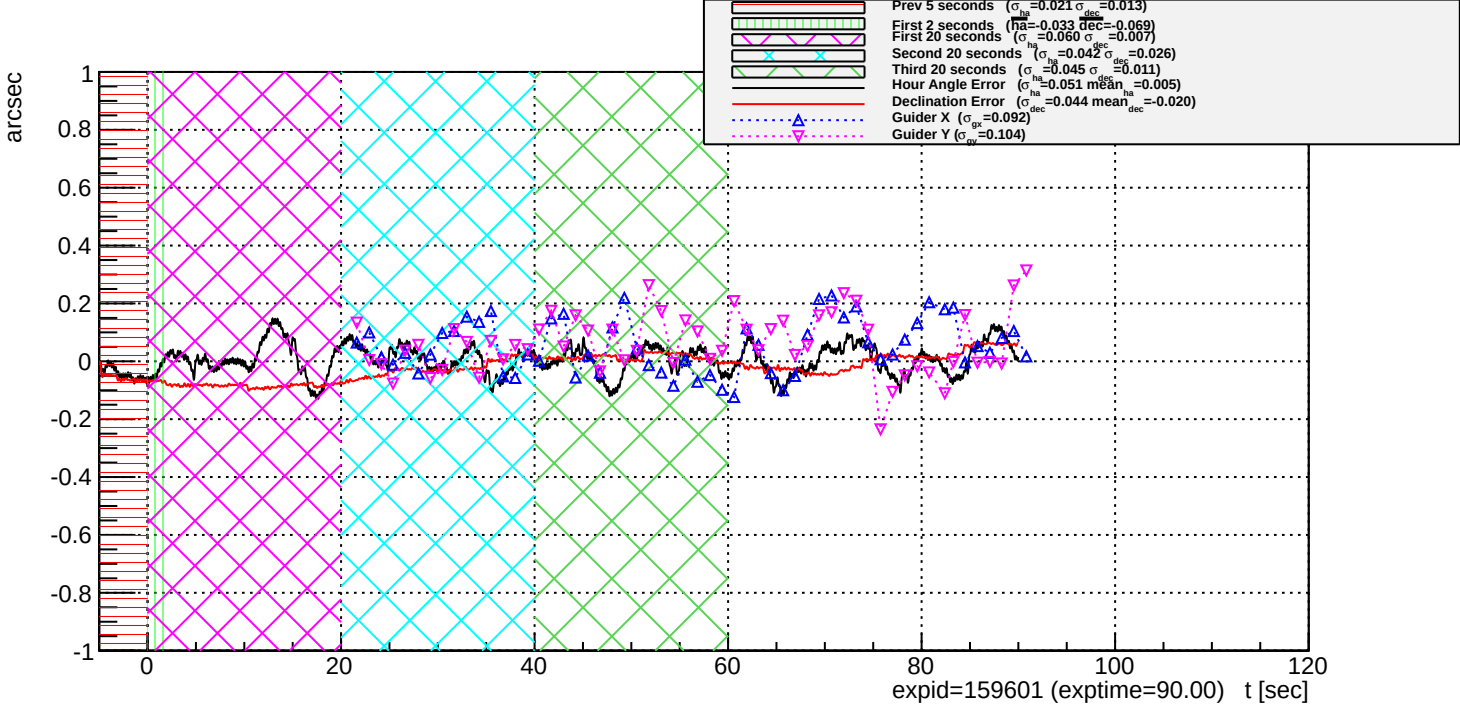

Prev 5 seconds (σ_{ha}=0.043 σ_{dec}=0.020)
First 2 seconds (ha=-0.030 dec=-0.075)
First 20 seconds (σ_{ha}=0.047 σ_{dec}=0.022)
Second 20 seconds (σ_{ha}=0.035 σ_{dec}=0.041)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.042 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.065 $mean_{dec}$=0.013)
Guider X (σ_{gx}=0.063)
Guider Y (σ_{gy}=0.098)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159596 (exptime=45.00) t [sec]

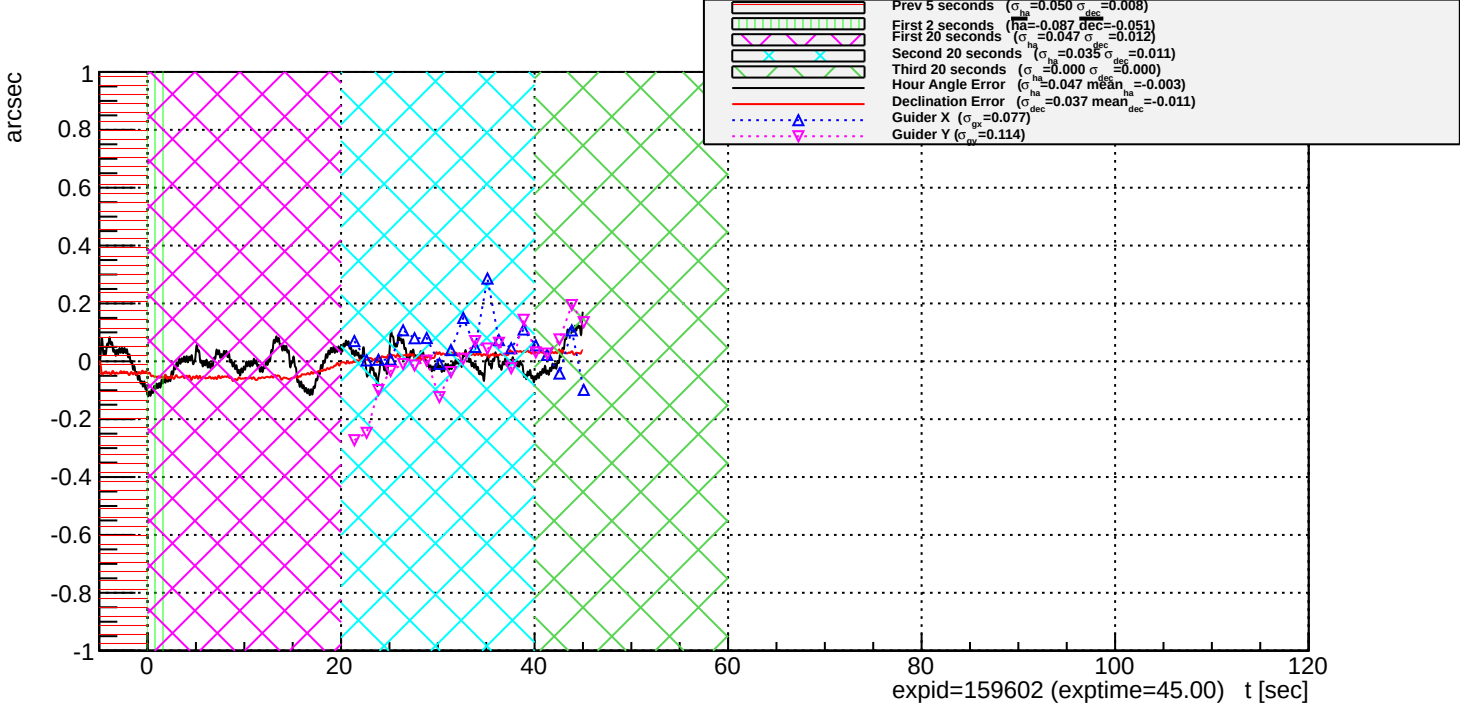

Prev 5 seconds (σ_{ha}=0.072 σ_{dec}=0.037)
First 2 seconds (ha=0.185 dec=-0.168)
First 20 seconds (σ_{ha}=0.071 σ_{dec}=0.041)
Second 20 seconds (σ_{ha}=0.058 σ_{dec}=0.030)
Third 20 seconds (σ_{ha}=0.278 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.220 $mean_{ha}$=0.002)
Declination Error (σ_{dec}=0.066 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.101)
Guider Y (σ_{gy}=0.136)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159597 (exptime=90.00) t [sec]

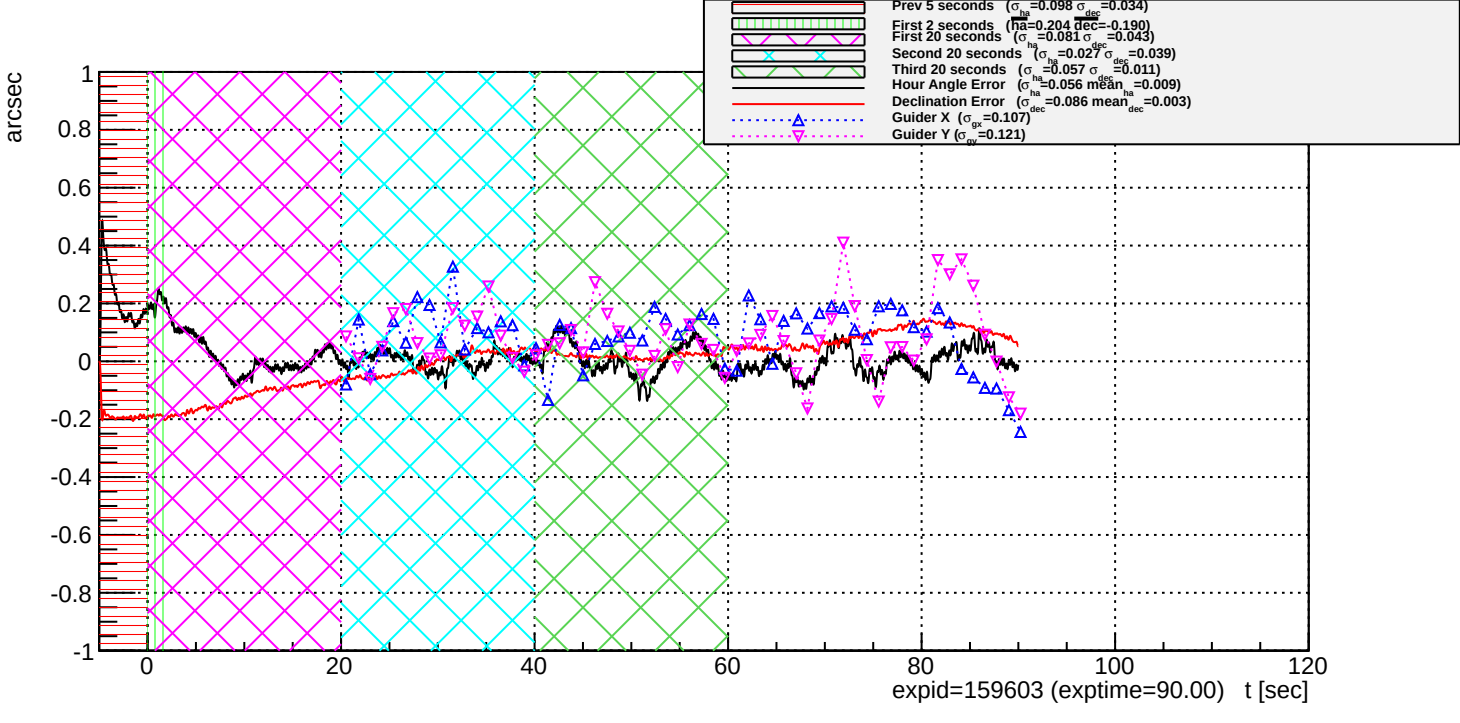

Prev 5 seconds (σ_{ha}=0.277 σ_{dec}=0.023)
First 2 seconds (ha=0.080 dec=-0.097)
First 20 seconds (σ_{ha}=0.264 σ_{dec}=0.023)
Second 20 seconds (σ_{ha}=0.308 σ_{dec}=0.034)
Third 20 seconds (σ_{ha}=0.123 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.237 $mean_{ha}$=0.019)
Declination Error (σ_{dec}=0.065 $mean_{dec}$=0.029)
Guider X (σ_{gx}=0.098)
Guider Y (σ_{gy}=0.161)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159598 (exptime=90.00) t [sec]

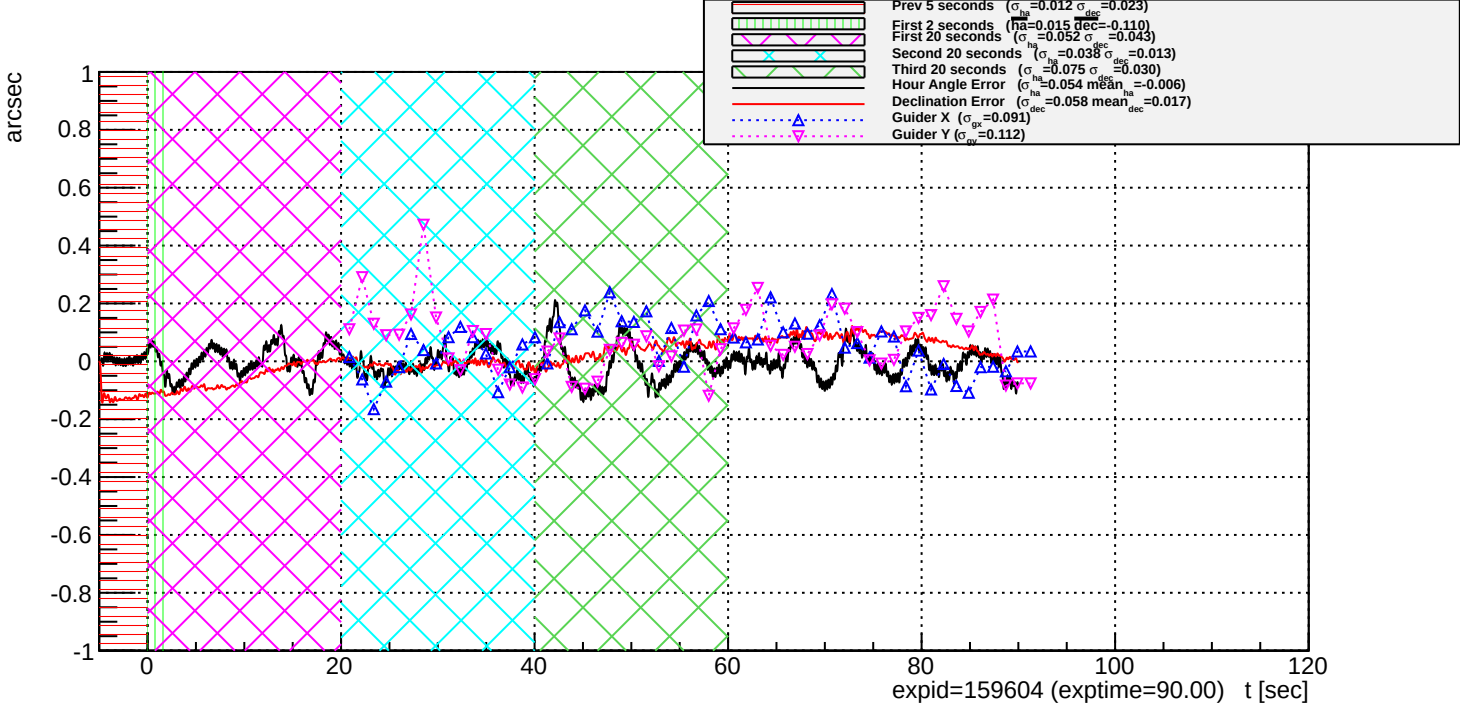

Prev 5 seconds (σ_{ha}=0.288 σ_{dec}=0.021)
First 2 seconds (ha=0.299 dec=-0.074)
First 20 seconds (σ_{ha}=0.114 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.262 σ_{dec}=0.030)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.204 $mean_{ha}$=0.033)
Declination Error (σ_{dec}=0.036 $mean_{dec}$=-0.008)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.144)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159599 (exptime=45.00) t [sec]

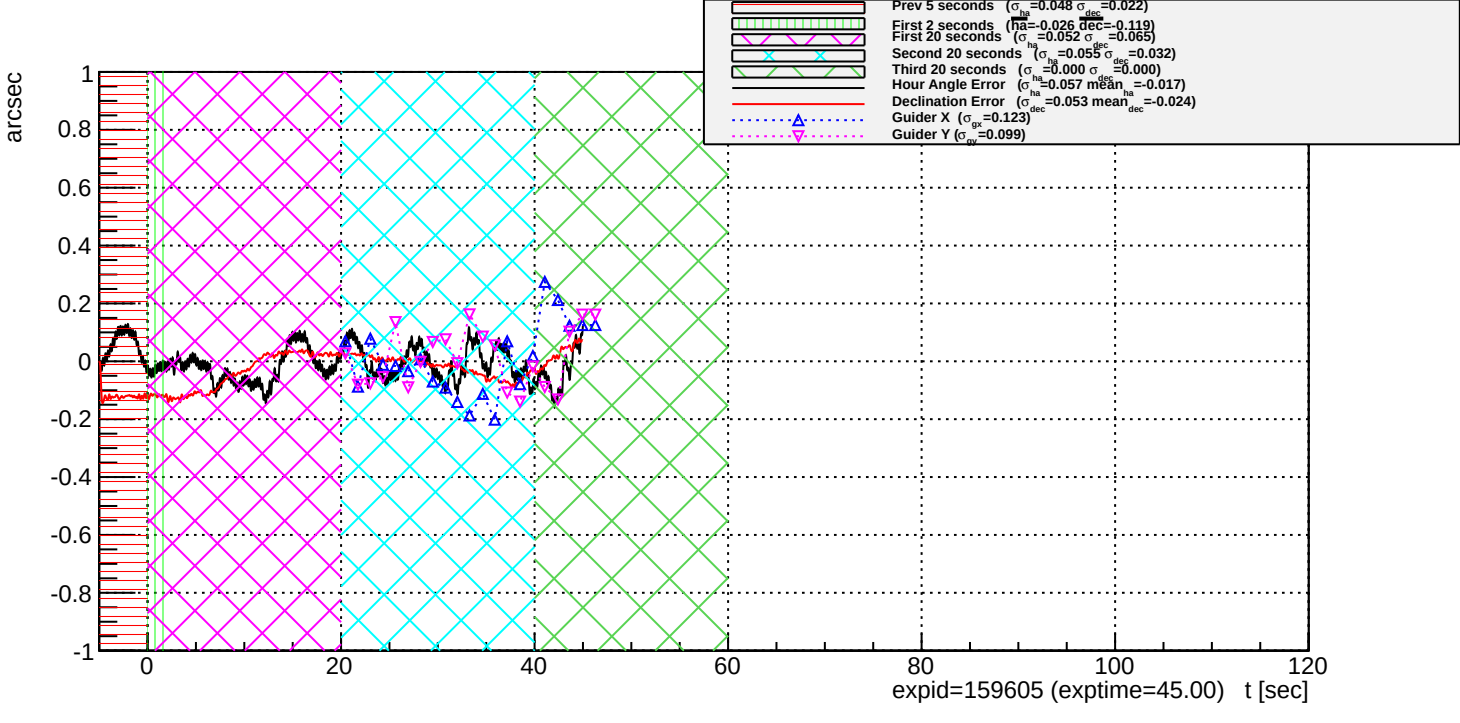

Prev 5 seconds (σ_{ha}=0.098 σ_{dec}=0.028)
First 2 seconds (ha=0.099 dec=-0.157)
First 20 seconds (σ_{ha}=0.047 σ_{dec}=0.038)
Second 20 seconds (σ_{ha}=0.045 σ_{dec}=0.008)
Third 20 seconds (σ_{ha}=0.045 σ_{dec}=0.031)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=0.017)
Declination Error (σ_{dec}=0.078 $mean_{dec}$=-0.002)
Guider X (σ_{gx}=0.103)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159600 (exptime=90.00) t [sec]

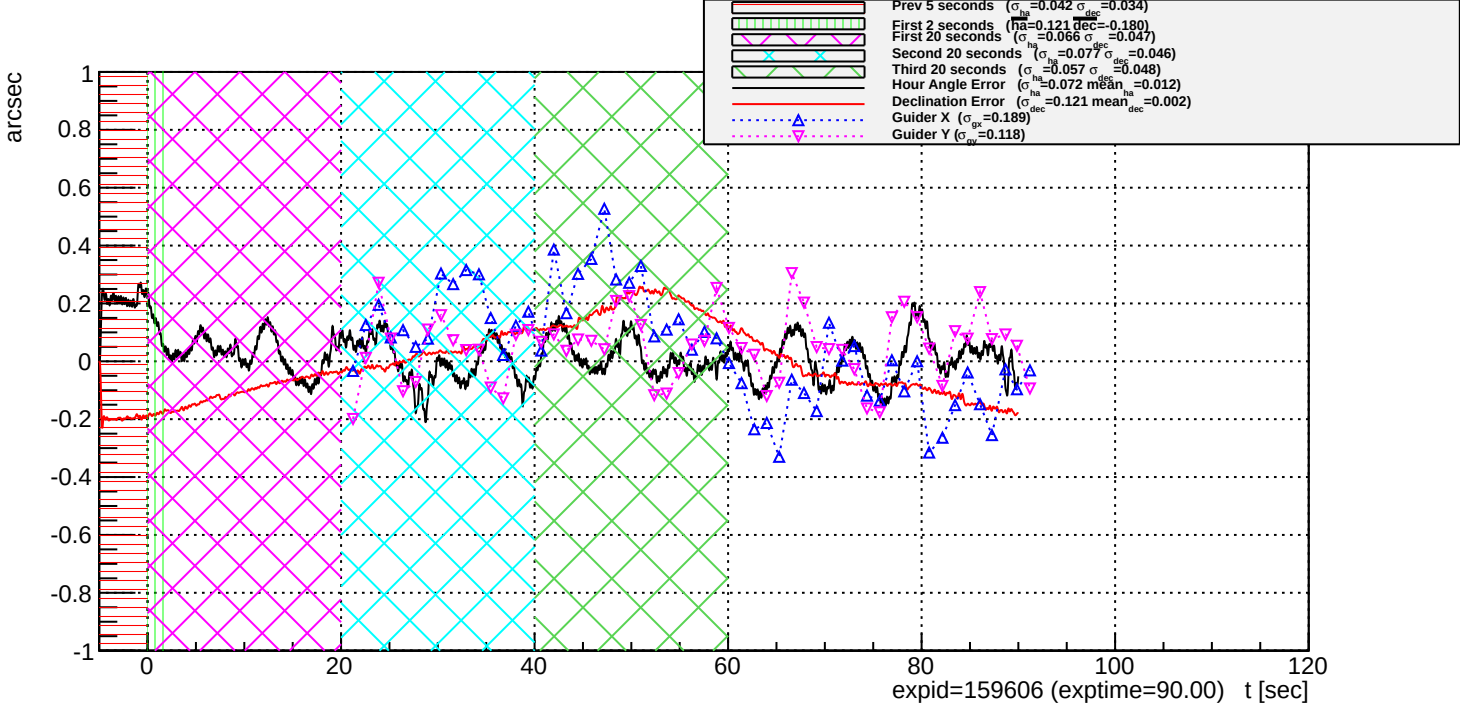

Prev 5 seconds (σ_{ha}=0.021 σ_{dec}=0.013)
First 2 seconds ($\overline{ha}$=-0.033 $\overline{dec}$=-0.069)
First 20 seconds (σ_{ha}=0.060 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.042 σ_{dec}=0.026)
Third 20 seconds (σ_{ha}=0.045 σ_{dec}=0.011)
Hour Angle Error (σ_{ha}=0.051 $mean_{ha}$=0.005)
Declination Error (σ_{dec}=0.044 $mean_{dec}$=-0.020)
Guider X (σ_{gx}=0.092)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159601 (exptime=90.00) t [sec]

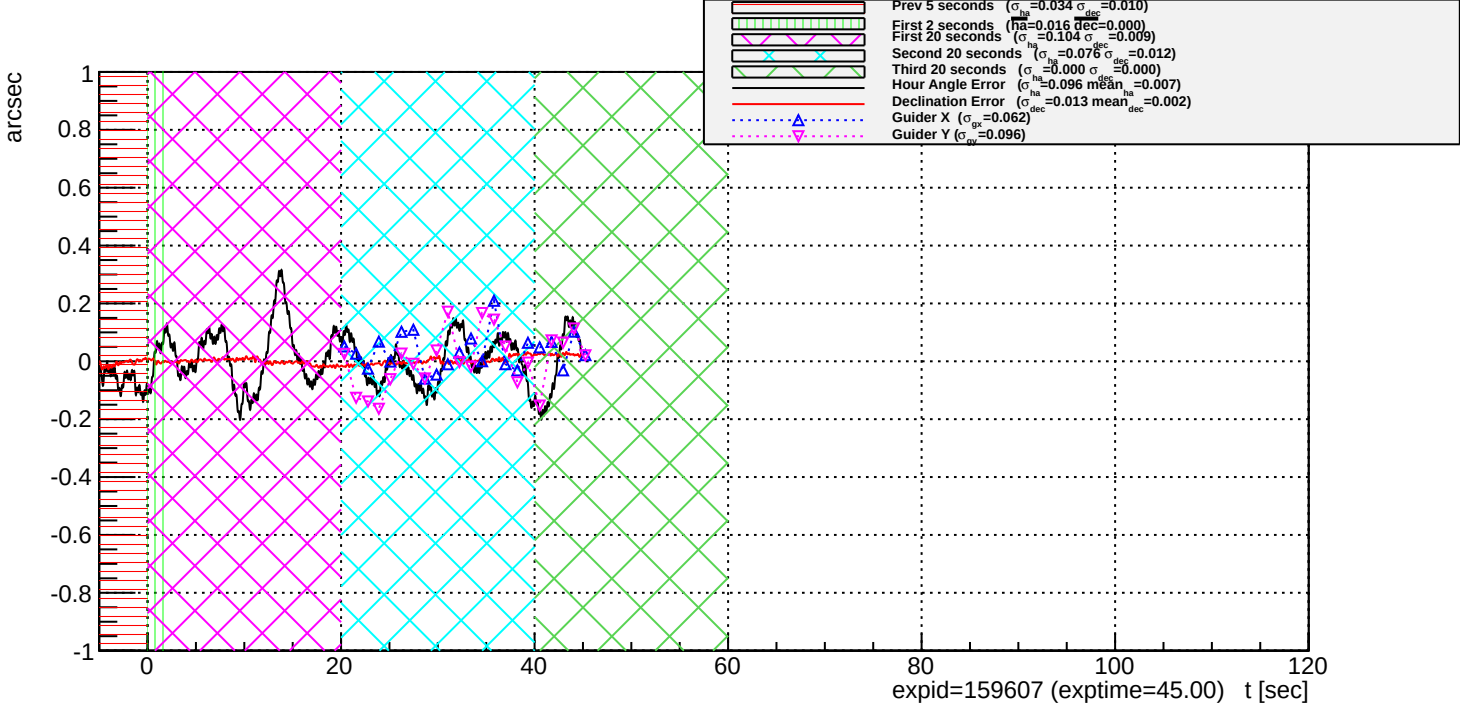

Prev 5 seconds (σ_{ha}=0.050 σ_{dec}=0.008)
First 2 seconds (mean_{ha}=-0.087 mean_{dec}=-0.051)
First 20 seconds (σ_{ha}=0.047 σ_{dec}=0.012)
Second 20 seconds (σ_{ha}=0.035 σ_{dec}=0.011)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.047 mean_{ha}=-0.003)
Declination Error (σ_{dec}=0.037 mean_{dec}=-0.011)
Guider X (σ_{gx}=0.077)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159602 (exptime=45.00) t [sec]

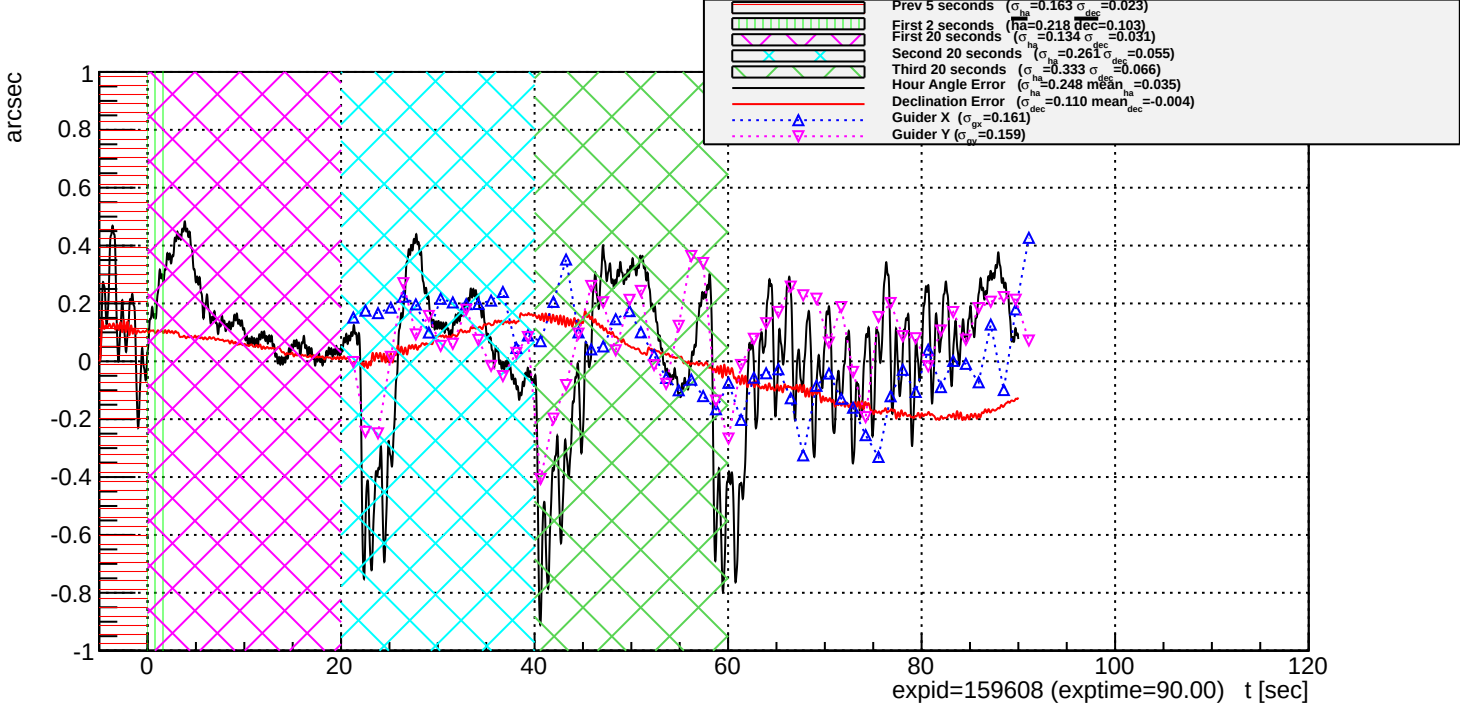

Prev 5 seconds (σ_{ha}=0.098 σ_{dec}=0.034)
First 2 seconds (ha=0.204 dec=-0.190)
First 20 seconds (σ_{ha}=0.081 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.027 σ_{dec}=0.039)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.011)
Hour Angle Error (σ_{ha}=0.056 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.086 $mean_{dec}$=0.003)
Guider X (σ_{gx}=0.107)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159603 (exptime=90.00) t [sec]

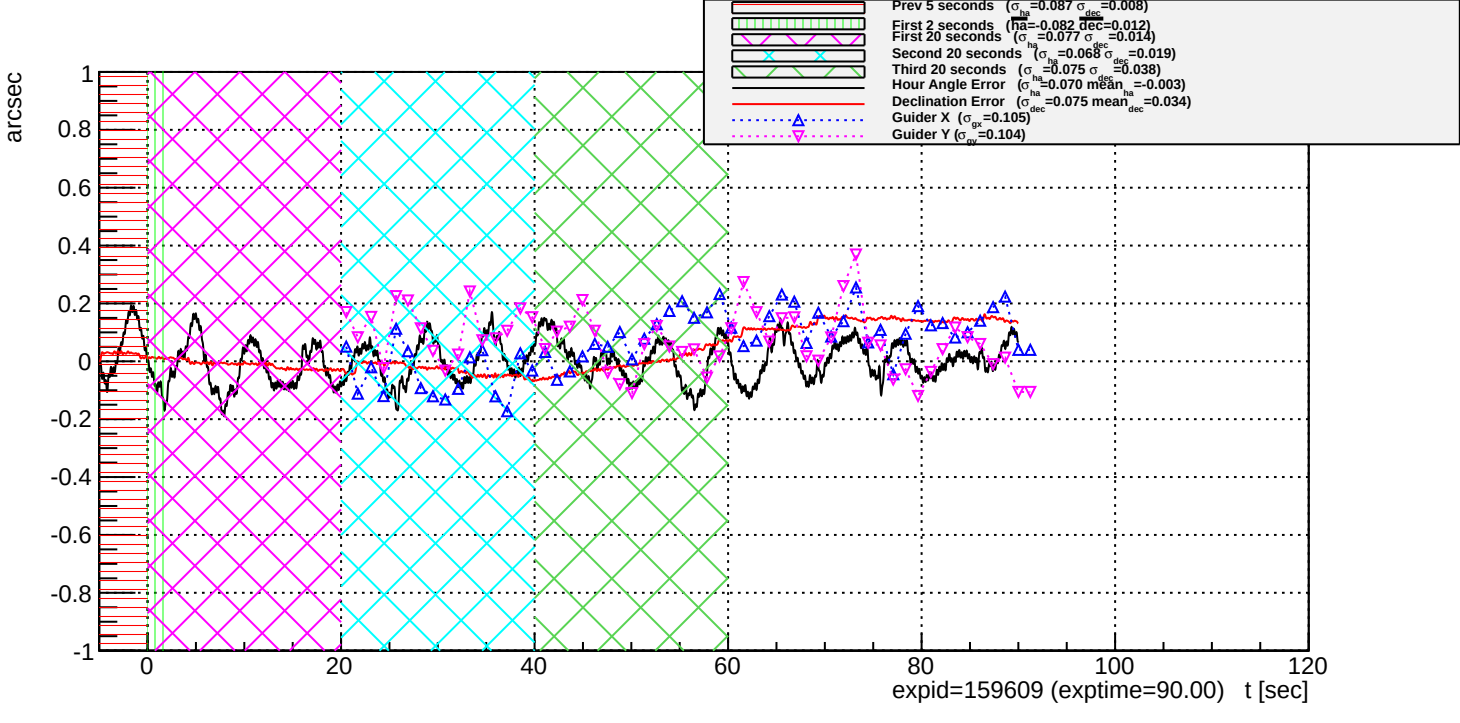

Prev 5 seconds (σ_{ha}=0.012 σ_{dec}=0.023)
First 2 seconds (σ_{ha}=0.015 σ_{dec}=-0.110)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.043)
Second 20 seconds (σ_{ha}=0.038 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=-0.006)
Declination Error (σ_{dec}=0.058 $mean_{dec}$=0.017)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.112)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159604 (exptime=90.00) t [sec]

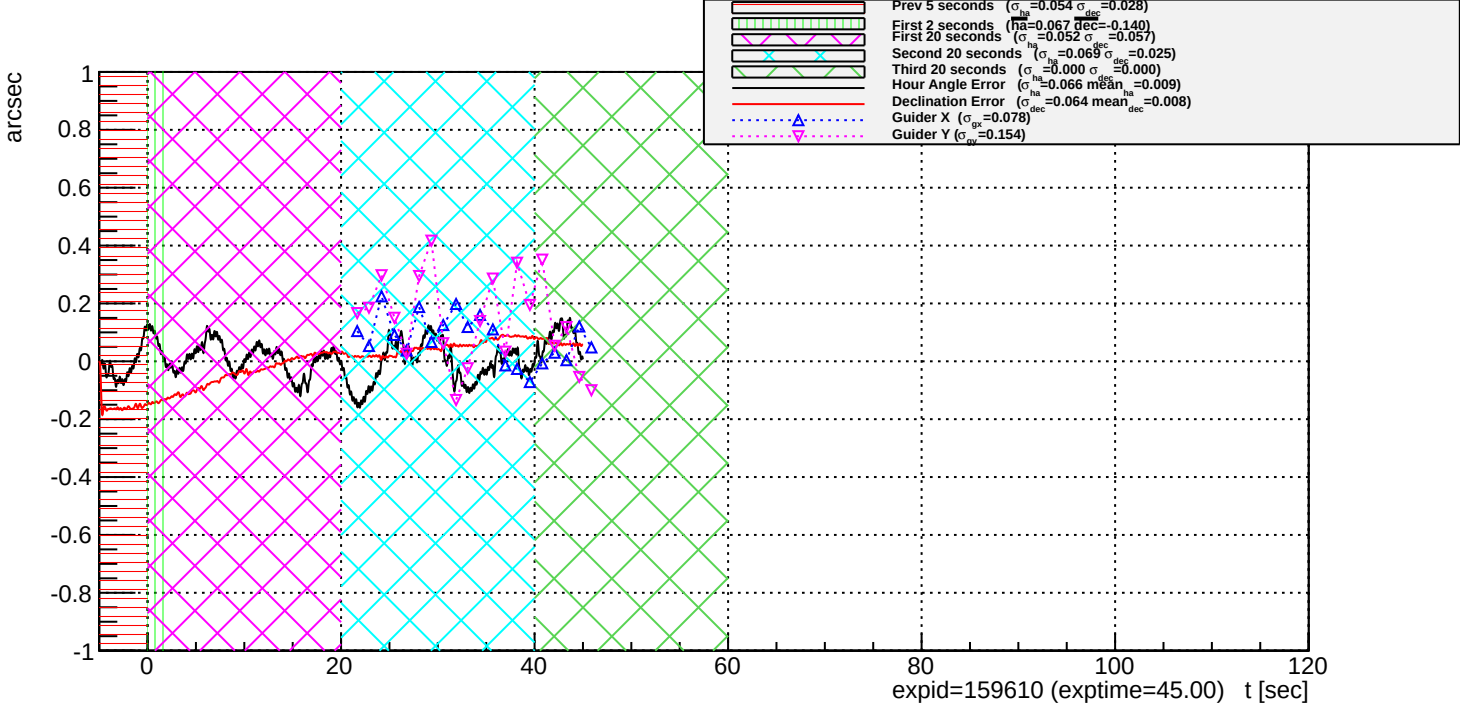

Prev 5 seconds (σ_{ha}=0.048 σ_{dec}=0.022)
First 2 seconds (ha=-0.026 dec=-0.119)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.065)
Second 20 seconds (σ_{ha}=0.055 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=-0.017)
Declination Error (σ_{dec}=0.053 $mean_{dec}$=-0.024)
Guider X (σ_{gx}=0.123)
Guider Y (σ_{gy}=0.099)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159605 (exptime=45.00) t [sec]

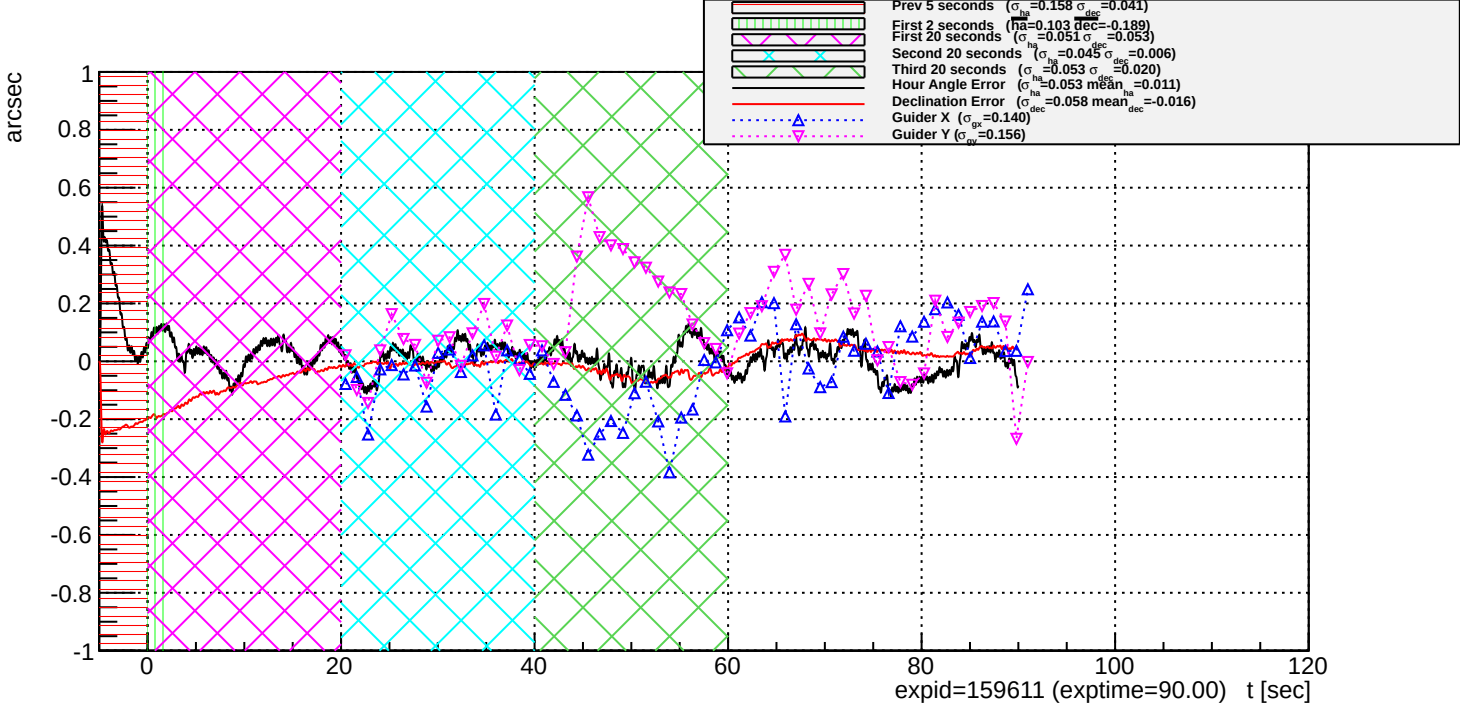

Prev 5 seconds (σ_{ha}=0.042 σ_{dec}=0.034)
First 2 seconds (σ_{ha}=0.121 σ_{dec}=0.180)
First 20 seconds (σ_{ha}=0.066 σ_{dec}=0.047)
Second 20 seconds (σ_{ha}=0.077 σ_{dec}=0.046)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.048)
Hour Angle Error (σ_{ha}=0.072 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.121 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.189)
Guider Y (σ_{gy}=0.118)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159606 (exptime=90.00) t [sec]

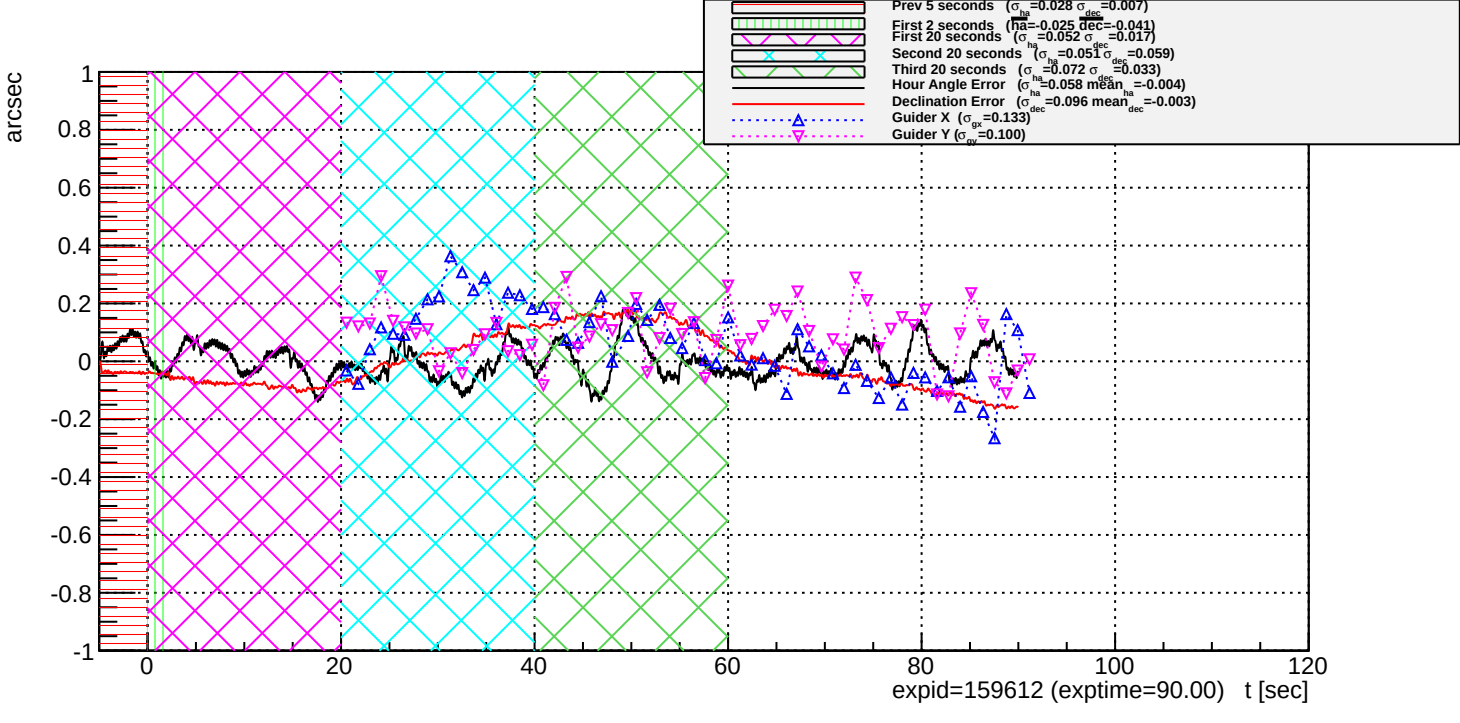

Prev 5 seconds (σ_{ha}=0.034 σ_{dec}=0.010)
First 2 seconds (ha=0.016 dec=0.000)
First 20 seconds (σ_{ha}=0.104 σ_{dec}=0.009)
Second 20 seconds (σ_{ha}=0.076 σ_{dec}=0.012)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.096 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.013 $mean_{dec}$=0.002)
Guider X (σ_{gx}=0.062)
Guider Y (σ_{gy}=0.096)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159607 (exptime=45.00) t [sec]

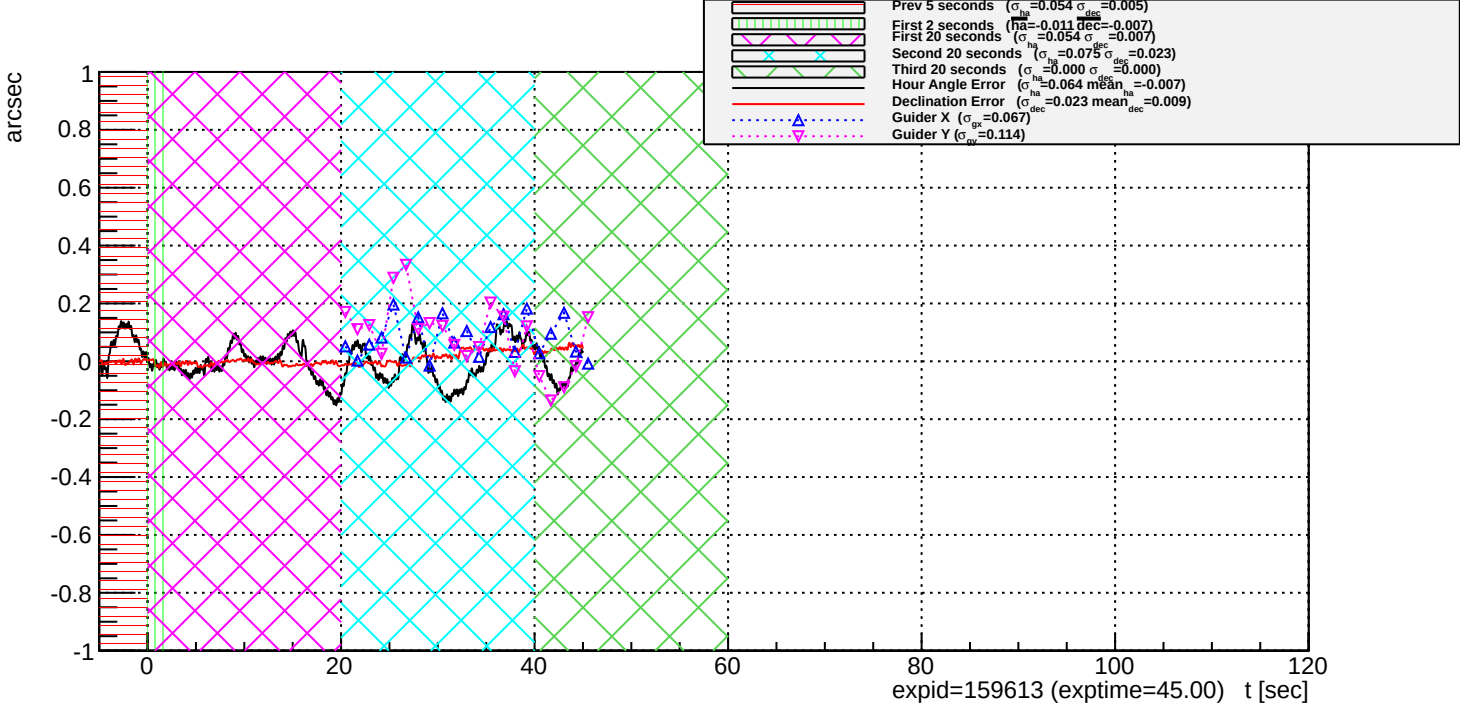

Prev 5 seconds (σ_{ha}=0.163 σ_{dec}=0.023)
First 2 seconds (ha=0.218 dec=0.103)
First 20 seconds (σ_{ha}=0.134 σ_{dec}=0.031)
Second 20 seconds (σ_{ha}=0.261 σ_{dec}=0.055)
Third 20 seconds (σ_{ha}=0.333 σ_{dec}=0.066)
Hour Angle Error (σ_{ha}=0.248 $mean_{ha}$=0.035)
Declination Error (σ_{dec}=0.110 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.161)
Guider Y (σ_{gy}=0.159)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159608 (exptime=90.00) t [sec]

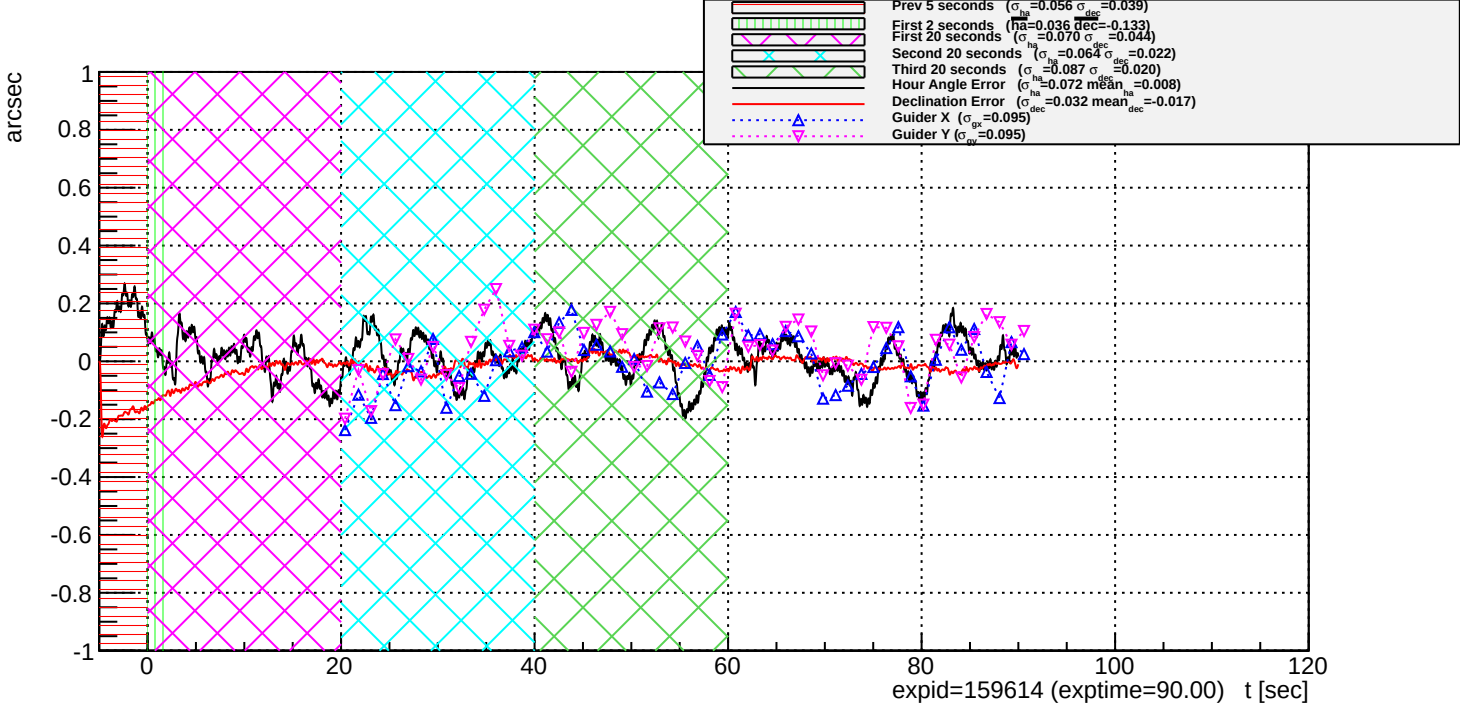

Prev 5 seconds (σ_{ha}=0.087 σ_{dec}=0.008)
First 2 seconds (ha=-0.082 dec=0.012)
First 20 seconds (σ_{ha}=0.077 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.068 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.075 σ_{dec}=0.038)
Hour Angle Error (σ_{ha}=0.070 $mean_{ha}$=-0.003)
Declination Error (σ_{dec}=0.075 $mean_{dec}$=0.034)
Guider X (σ_{gx}=0.105)
Guider Y (σ_{gy}=0.104)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159609 (exptime=90.00)
t [sec]

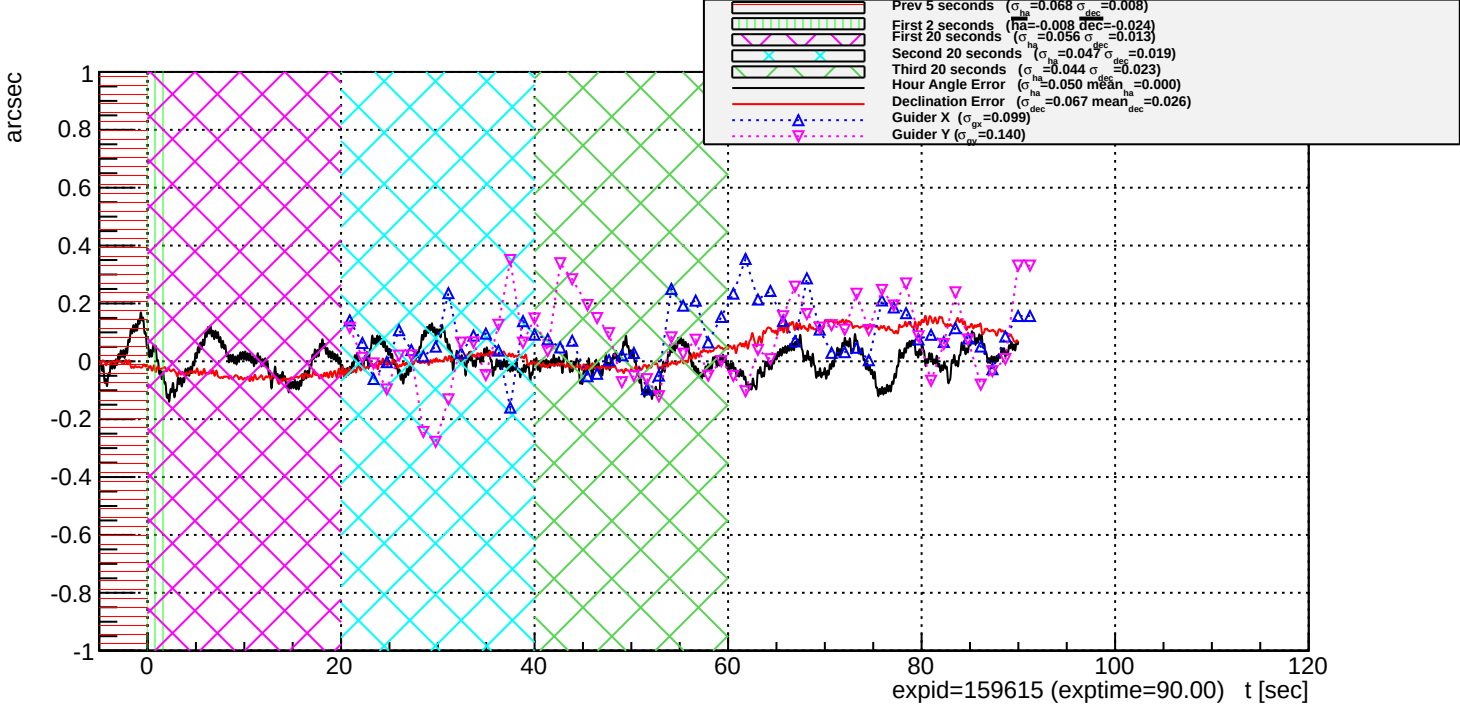

Prev 5 seconds (σ_{ha}=0.054 σ_{dec}=0.028)
First 2 seconds (σ_{ha}=0.067 σ_{dec}=-0.140)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.069 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.066 $mean_{ha}$=0.009)
Declination Error (σ_{dec}=0.064 $mean_{dec}$=0.008)
Guider X (σ_{gx}=0.078)
Guider Y (σ_{gy}=0.154)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159610 (exptime=45.00) t [sec]

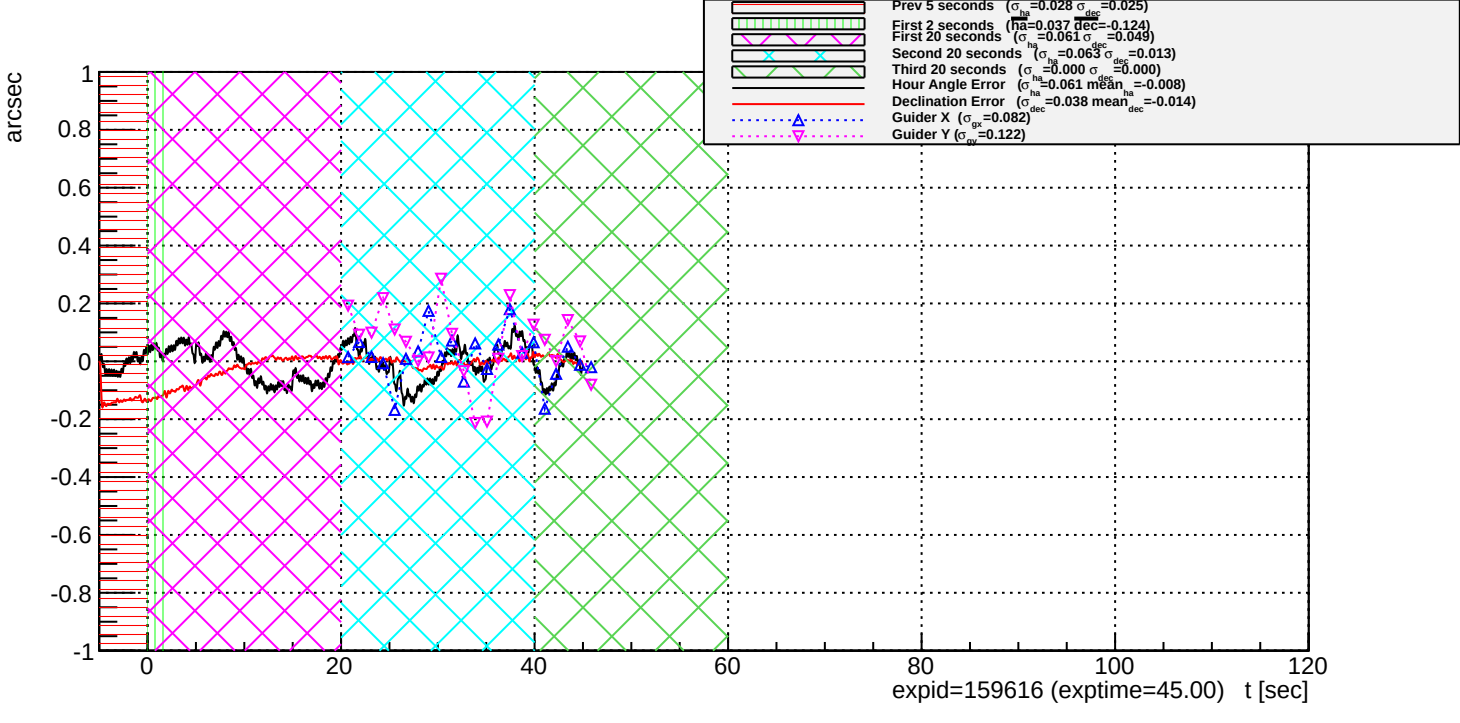

Prev 5 seconds (σ_{ha}=0.158 σ_{dec}=0.041)
First 2 seconds (ha=0.103 dec=-0.189)
First 20 seconds (σ_{ha}=0.051 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.045 σ_{dec}=0.006)
Third 20 seconds (σ_{ha}=0.053 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.053 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.058 $mean_{dec}$=-0.016)
Guider X (σ_{gx}=0.140)
Guider Y (σ_{gy}=0.156)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159611 (exptime=90.00) t [sec]

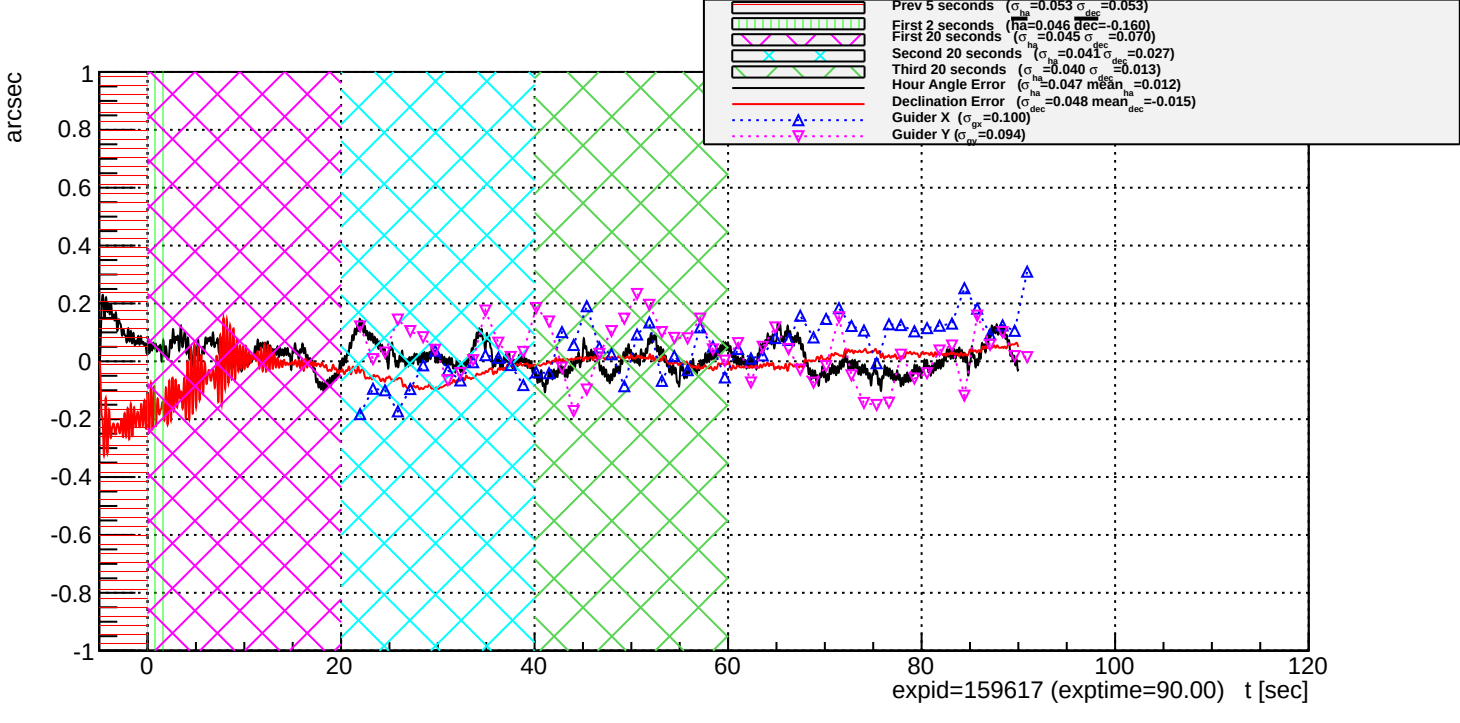

Prev 5 seconds (σ_{ha}=0.028 σ_{dec}=0.007)
First 2 seconds (ha=-0.025 dec=-0.041)
First 20 seconds (σ_{ha}=0.052 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.051 σ_{dec}=0.059)
Third 20 seconds (σ_{ha}=0.072 σ_{dec}=0.033)
Hour Angle Error (σ_{ha}=0.058 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.096 $mean_{dec}$=-0.003)
Guider X (σ_{gx}=0.133)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159612 (exptime=90.00) t [sec]

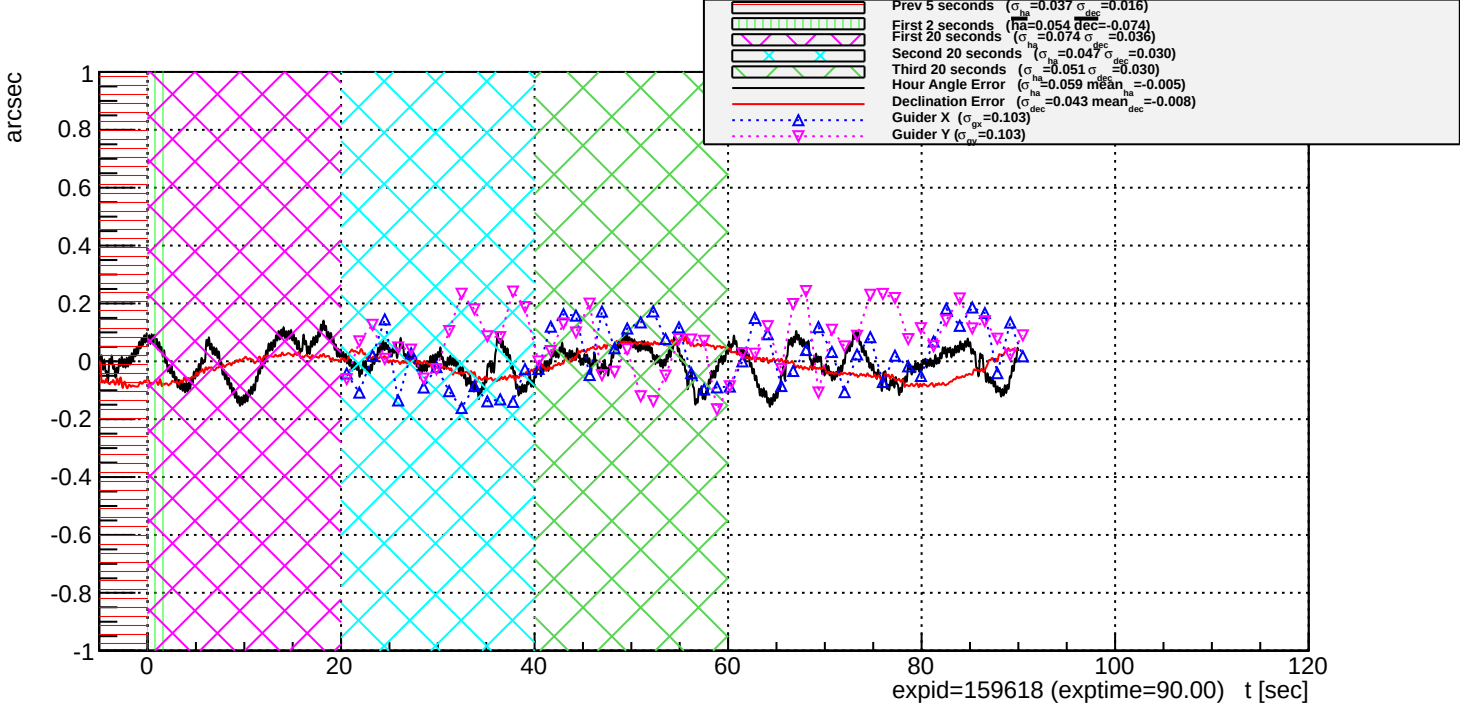

Prev 5 seconds (σ_{ha}=0.054 σ_{dec}=0.005)
First 2 seconds ($\overline{ha}$=-0.011 $\overline{dec}$=-0.007)
First 20 seconds (σ_{ha}=0.054 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.023)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.023 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.067)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159613 (exptime=45.00) t [sec]

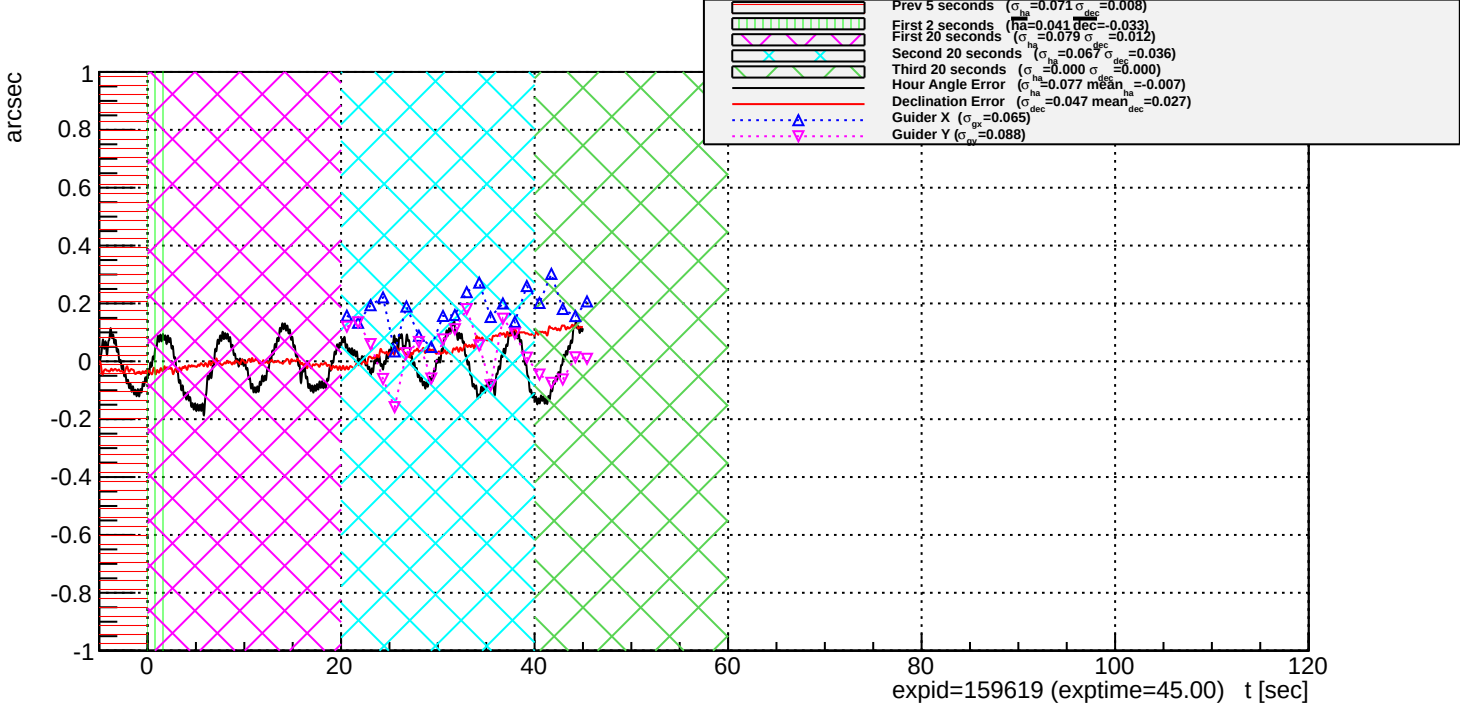

Prev 5 seconds (σ_{ha}=0.056 σ_{dec}=0.039)
First 2 seconds (ha=0.036 dec=-0.133)
First 20 seconds (σ_{ha}=0.070 σ_{dec}=0.044)
Second 20 seconds (σ_{ha}=0.064 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.087 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.072 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.032 $mean_{dec}$=-0.017)
Guider X (σ_{gx}=0.095)
Guider Y (σ_{gy}=0.095)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159614 (exptime=90.00) t [sec]

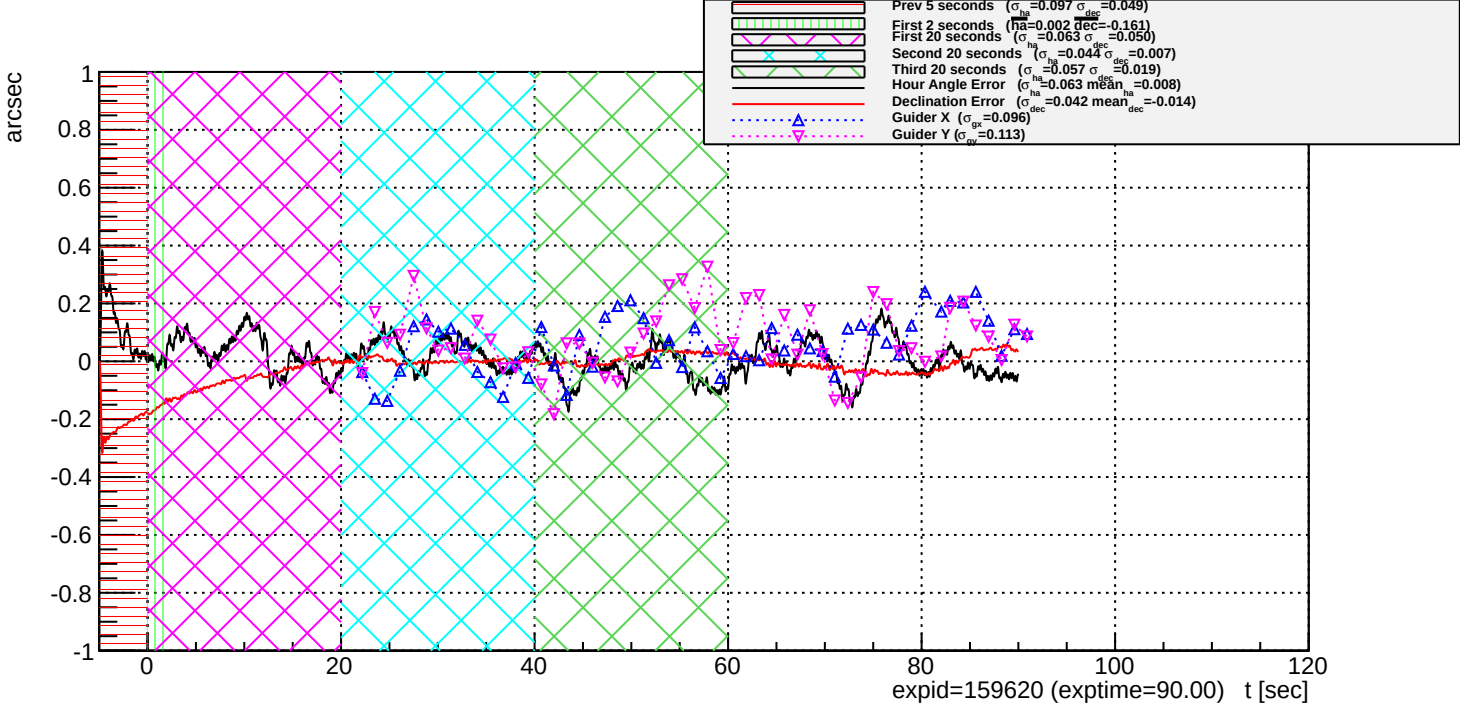

Prev 5 seconds (σ_{ha}=0.068 σ_{dec}=0.008)
First 2 seconds (ha=-0.008 dec=-0.024)
First 20 seconds (σ_{ha}=0.056 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.047 σ_{dec}=0.019)
Third 20 seconds (σ_{ha}=0.044 σ_{dec}=0.023)
Hour Angle Error (σ_{ha}=0.050 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.067 $mean_{dec}$=0.026)
Guider X (σ_{gx}=0.099)
Guider Y (σ_{gy}=0.140)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159615 (exptime=90.00) t [sec]

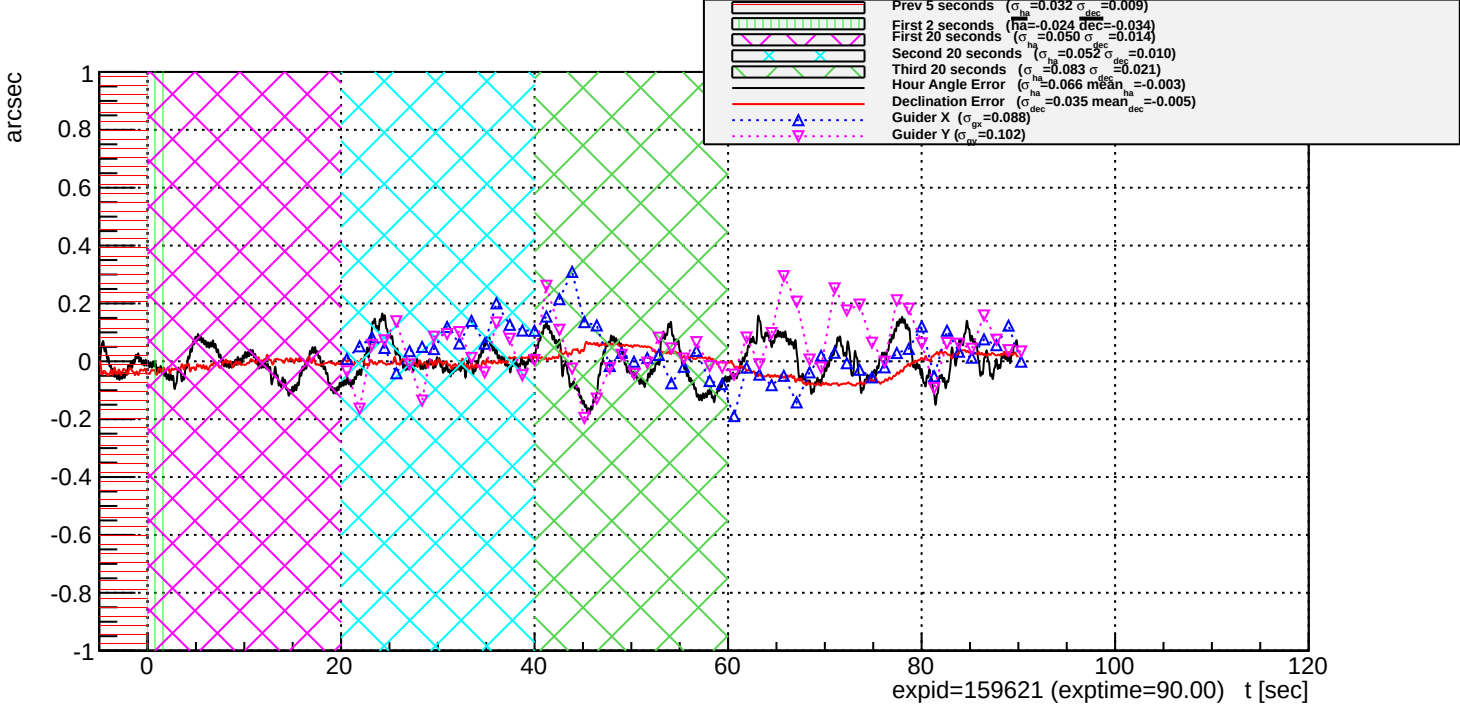

Prev 5 seconds (σ_{ha}=0.028 σ_{dec}=0.025)
First 2 seconds (σ_{ha}=0.037 σ_{dec}=-0.124)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.049)
Second 20 seconds (σ_{ha}=0.063 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.061 $mean_{ha}$=-0.008)
Declination Error (σ_{dec}=0.038 $mean_{dec}$=-0.014)
Guider X (σ_{gx}=0.082)
Guider Y (σ_{gy}=0.122)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159616 (exptime=45.00) t [sec]

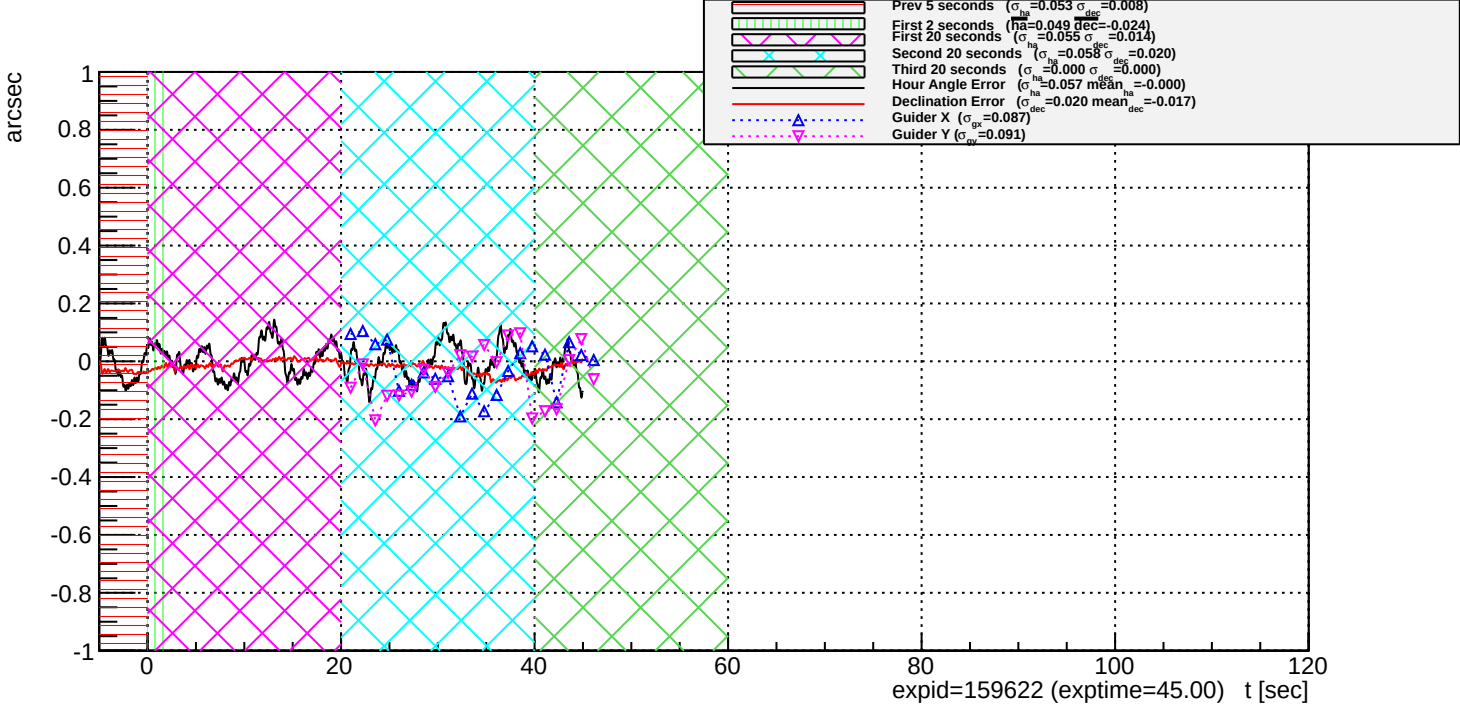

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.053)
First 2 seconds (ha=0.046 dec=-0.160)
First 20 seconds (σ_{ha}=0.045 σ_{dec}=0.070)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.027)
Third 20 seconds (σ_{ha}=0.040 σ_{dec}=0.013)
Hour Angle Error (σ_{ha}=0.047 $mean_{ha}$=0.012)
Declination Error (σ_{dec}=0.048 $mean_{dec}$=-0.015)
Guider X (σ_{gx}=0.100)
Guider Y (σ_{gy}=0.094)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159617 (exptime=90.00) t [sec]

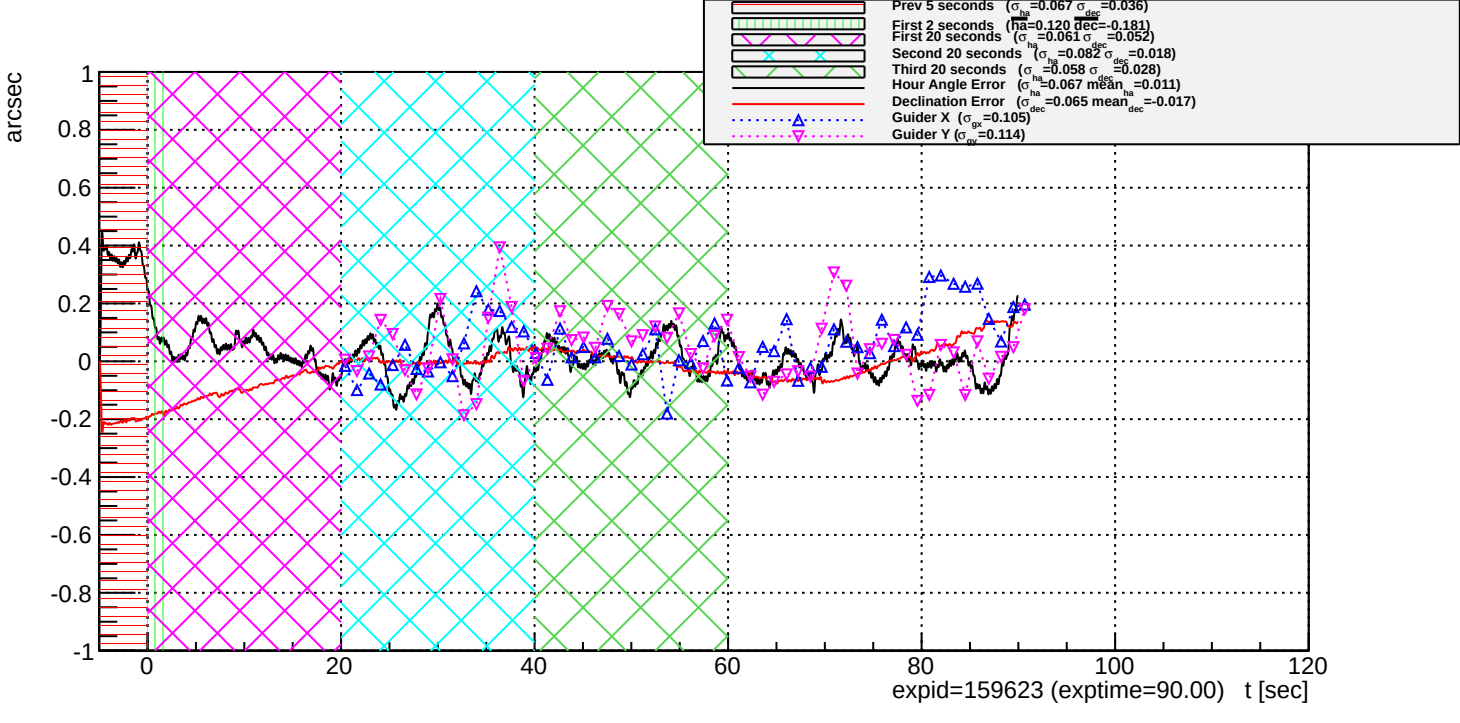

Prev 5 seconds (σ_{ha}=0.037 σ_{dec}=0.016)
First 2 seconds (ha=0.054 dec=-0.074)
First 20 seconds (σ_{ha}=0.074 σ_{dec}=0.036)
Second 20 seconds (σ_{ha}=0.047 σ_{dec}=0.030)
Third 20 seconds (σ_{ha}=0.051 σ_{dec}=0.030)
Hour Angle Error (σ_{ha}=0.059 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.043 $mean_{dec}$=-0.008)
Guider X (σ_{gx}=0.103)
Guider Y (σ_{gy}=0.103)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159618 (exptime=90.00) t [sec]

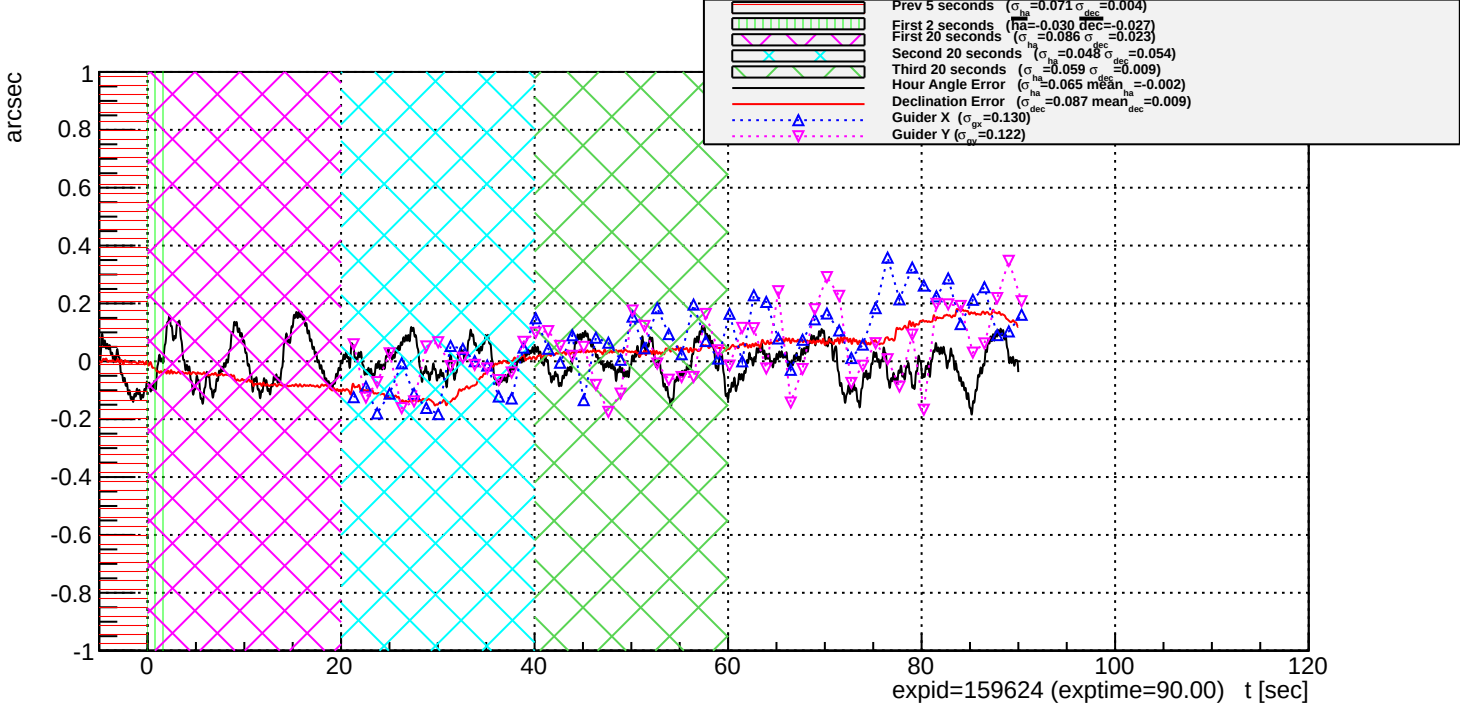

Prev 5 seconds (σ_{ha}=0.071 σ_{dec}=0.008)
First 2 seconds (ha=0.041 dec=-0.033)
First 20 seconds (σ_{ha}=0.079 σ_{dec}=0.012)
Second 20 seconds (σ_{ha}=0.067 σ_{dec}=0.036)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.077 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.047 $mean_{dec}$=0.027)
Guider X (σ_{gx}=0.065)
Guider Y (σ_{gy}=0.088)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159619 (exptime=45.00) t [sec]

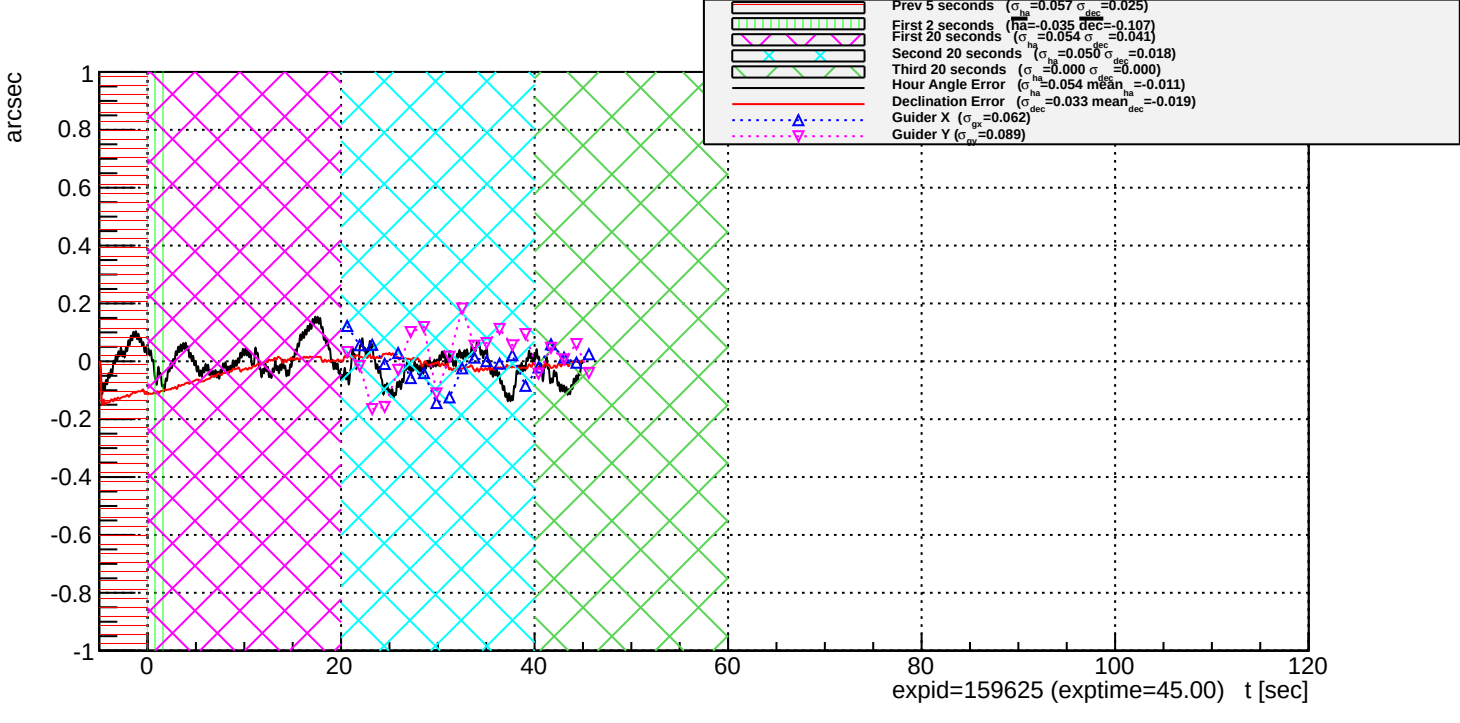

Prev 5 seconds (σ_{ha}=0.097 σ_{dec}=0.049)
First 2 seconds (σ_{ha}=0.002 σ_{dec}=-0.161)
First 20 seconds (σ_{ha}=0.063 σ_{dec}=0.050)
Second 20 seconds (σ_{ha}=0.044 σ_{dec}=0.007)
Third 20 seconds (σ_{ha}=0.057 σ_{dec}=0.019)
Hour Angle Error (σ_{ha}=0.063 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.042 $mean_{dec}$=-0.014)
Guider X (σ_{gx}=0.096)
Guider Y (σ_{gy}=0.113)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159620 (exptime=90.00) t [sec]

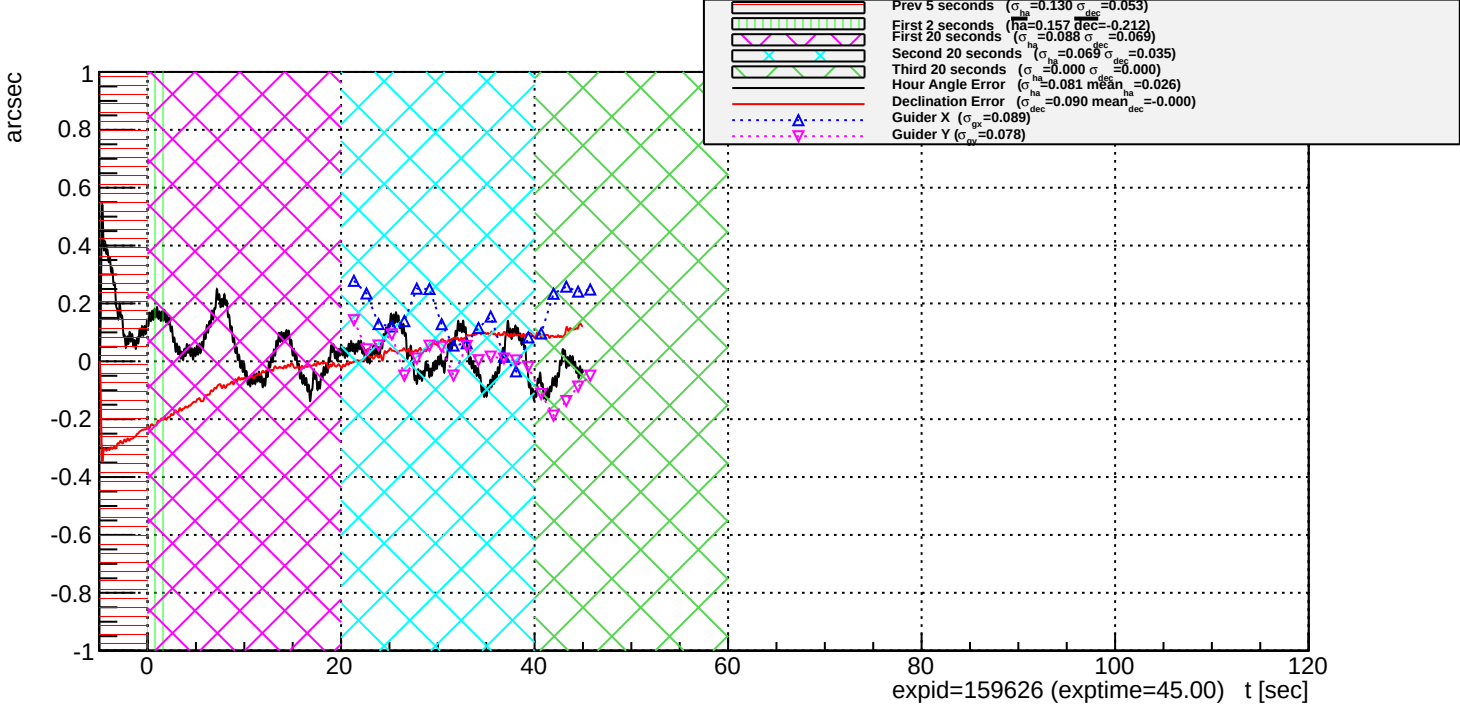

Prev 5 seconds (σ_{ha}=0.032 σ_{dec}=0.009)
First 2 seconds (mean_{ha}=-0.024 mean_{dec}=-0.034)
First 20 seconds (σ_{ha}=0.050 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.052 σ_{dec}=0.010)
Third 20 seconds (σ_{ha}=0.083 σ_{dec}=0.021)
Hour Angle Error (σ_{ha}=0.066 mean_{ha}=-0.003)
Declination Error (σ_{dec}=0.035 mean_{dec}=-0.005)
Guider X (σ_{gx}=0.088)
Guider Y (σ_{gy}=0.102)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159621 (exptime=90.00)
t [sec]

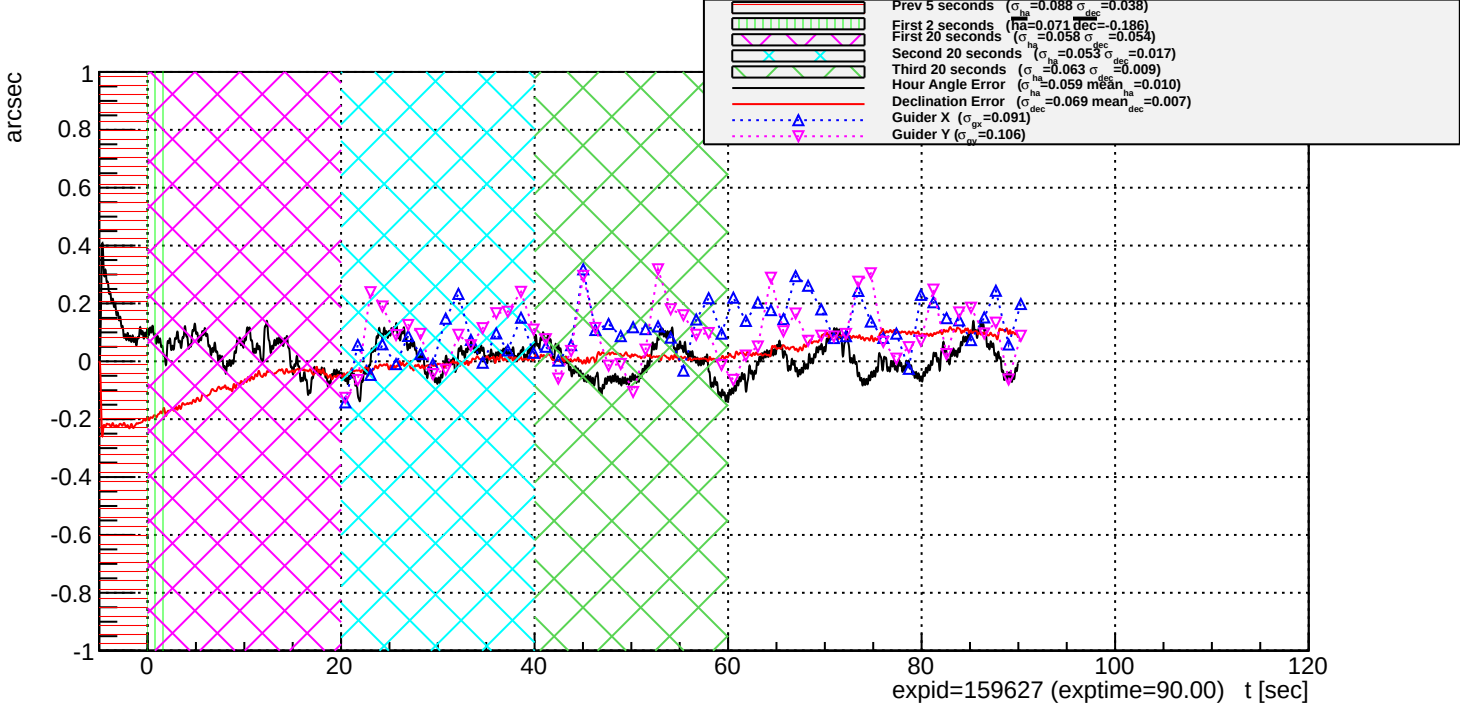

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.008)
First 2 seconds (ha=0.049 dec=-0.024)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.014)
Second 20 seconds (σ_{ha}=0.058 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.020 $mean_{dec}$=-0.017)
Guider X (σ_{gx}=0.087)
Guider Y (σ_{gy}=0.091)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159622 (exptime=45.00) t [sec]

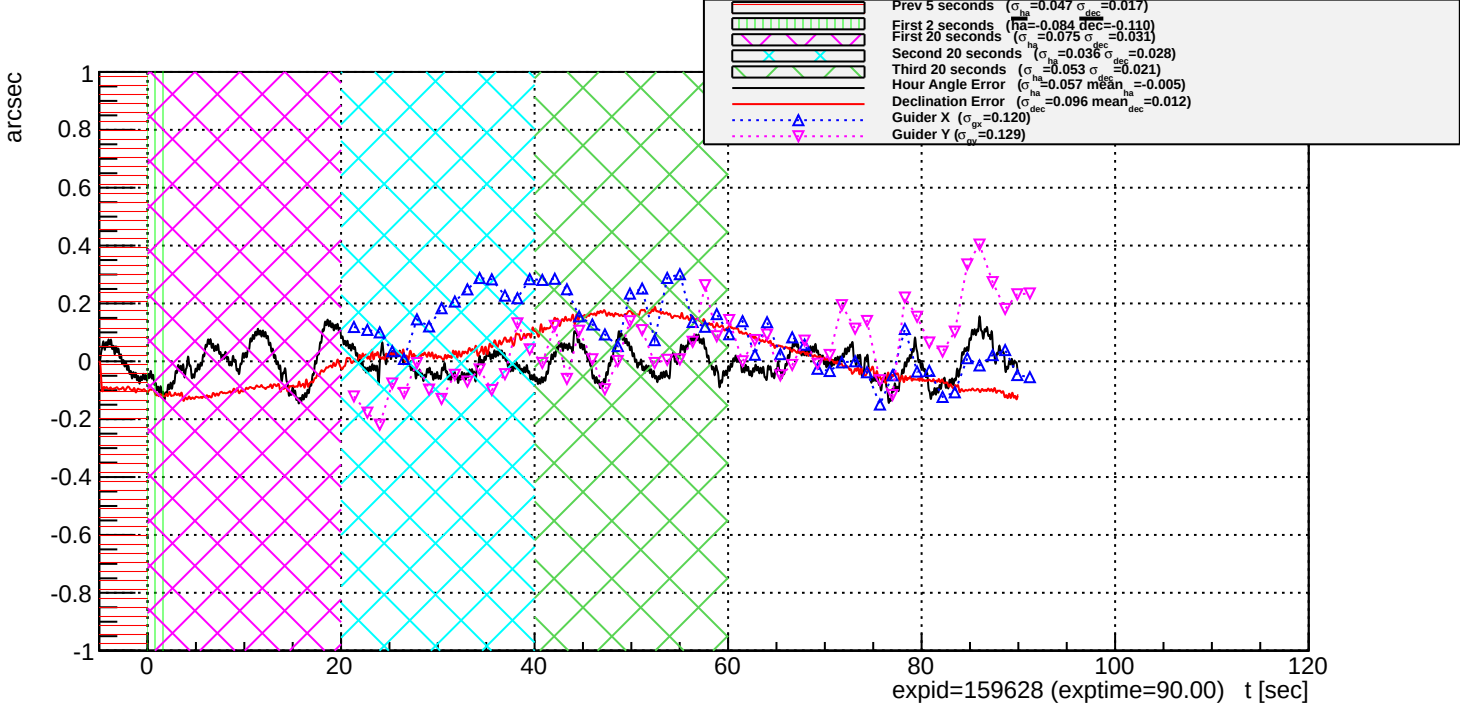

Prev 5 seconds (σ_{ha}=0.067 σ_{dec}=0.036)
First 2 seconds ($\overline{ha}$=0.120 $\overline{dec}$=-0.181)
First 20 seconds (σ_{ha}=0.061 σ_{dec}=0.052)
Second 20 seconds (σ_{ha}=0.082 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.058 σ_{dec}=0.028)
Hour Angle Error (σ_{ha}=0.067 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.065 $mean_{dec}$=-0.017)
Guider X (σ_{gx}=0.105)
Guider Y (σ_{gy}=0.114)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159623 (exptime=90.00) t [sec]

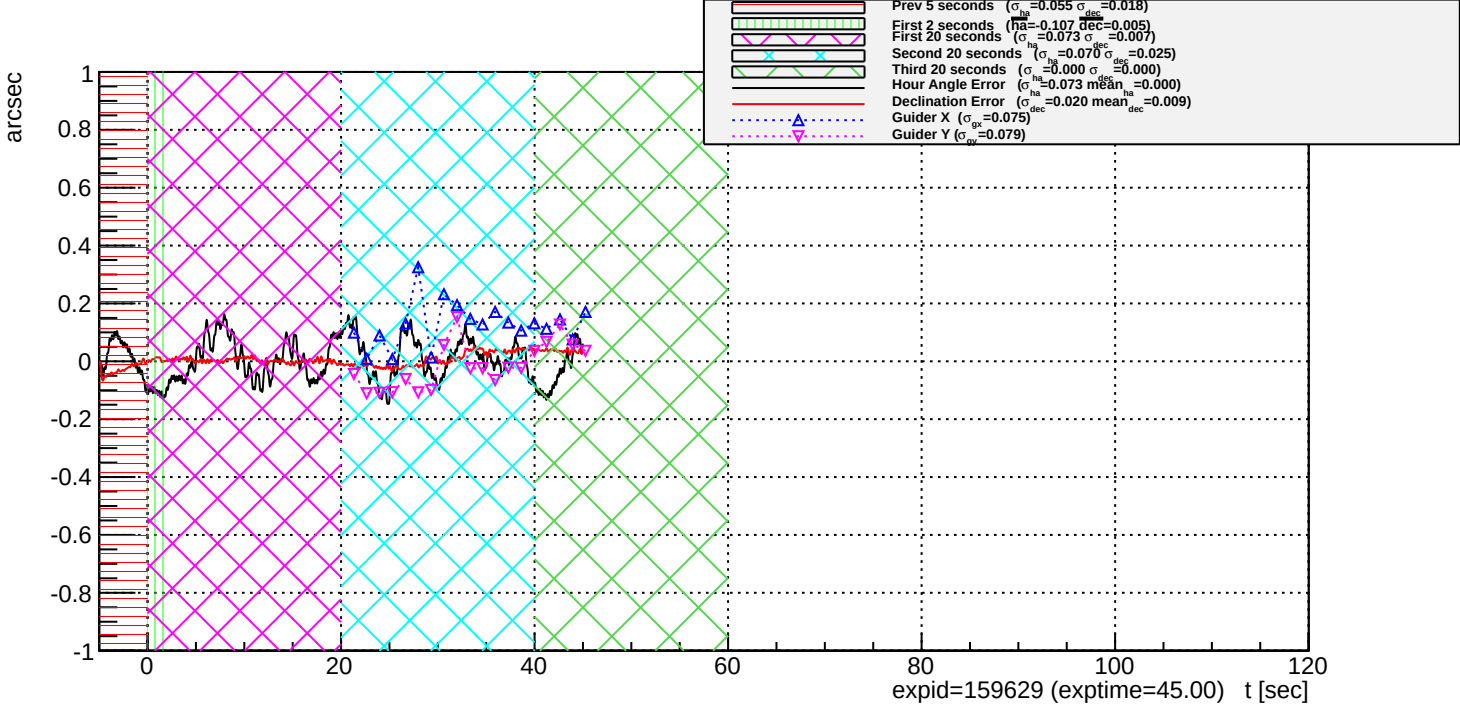

Prev 5 seconds (σ_{ha}=0.071 σ_{dec}=0.004)
First 2 seconds ($\overline{ha}$=-0.030 $\overline{dec}$=-0.027)
First 20 seconds (σ_{ha}=0.086 σ_{dec}=0.023)
Second 20 seconds (σ_{ha}=0.048 σ_{dec}=0.054)
Third 20 seconds (σ_{ha}=0.059 σ_{dec}=0.009)
Hour Angle Error (σ_{ha}=0.065 $mean_{ha}$=-0.002)
Declination Error (σ_{dec}=0.087 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.130)
Guider Y (σ_{gy}=0.122)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159624 (exptime=90.00) t [sec]

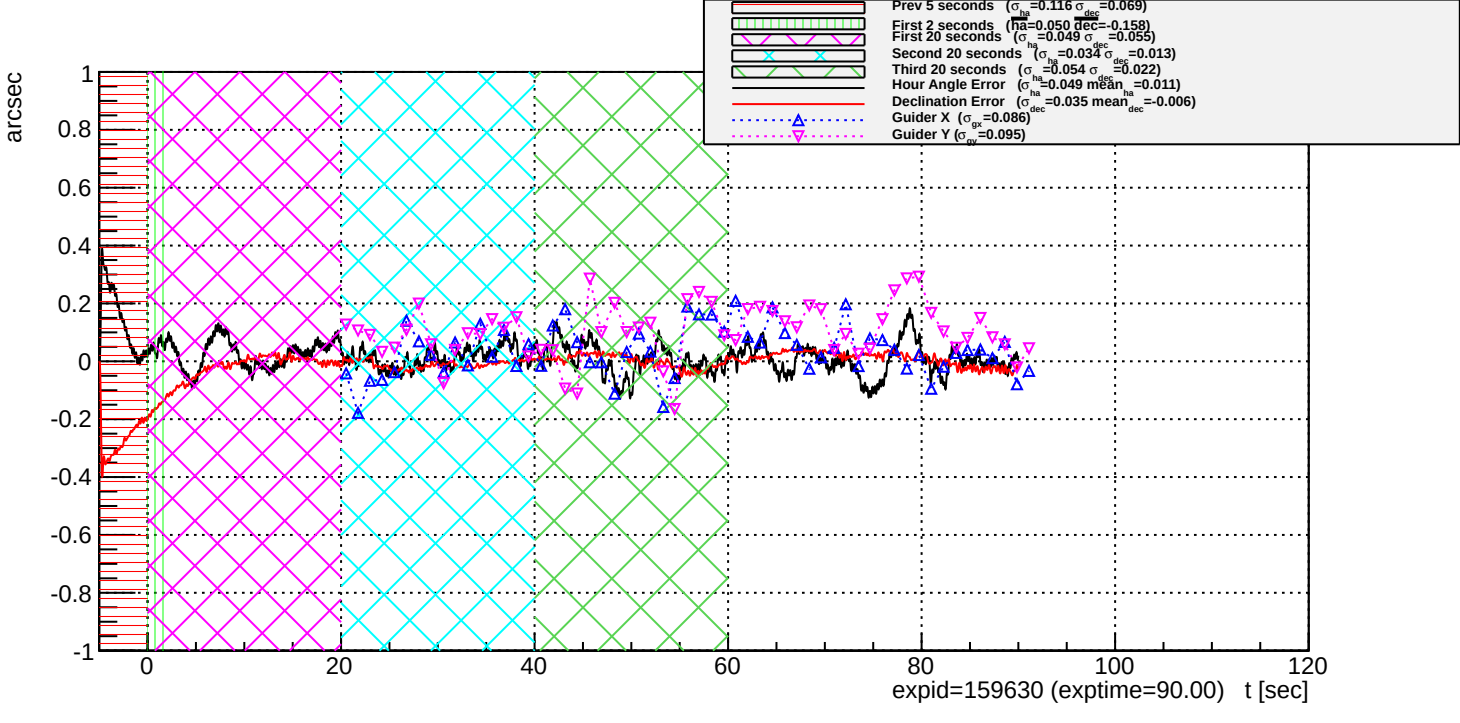

Prev 5 seconds (σ_{ha}=0.057 σ_{dec}=0.025)
First 2 seconds (mean_{ha}=-0.035 mean_{dec}=-0.107)
First 20 seconds (σ_{ha}=0.054 σ_{dec}=0.041)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.054 mean_{ha}=-0.011)
Declination Error (σ_{dec}=0.033 mean_{dec}=-0.019)
Guider X (σ_{gx}=0.062)
Guider Y (σ_{gy}=0.089)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159625 (exptime=45.00)
t [sec]

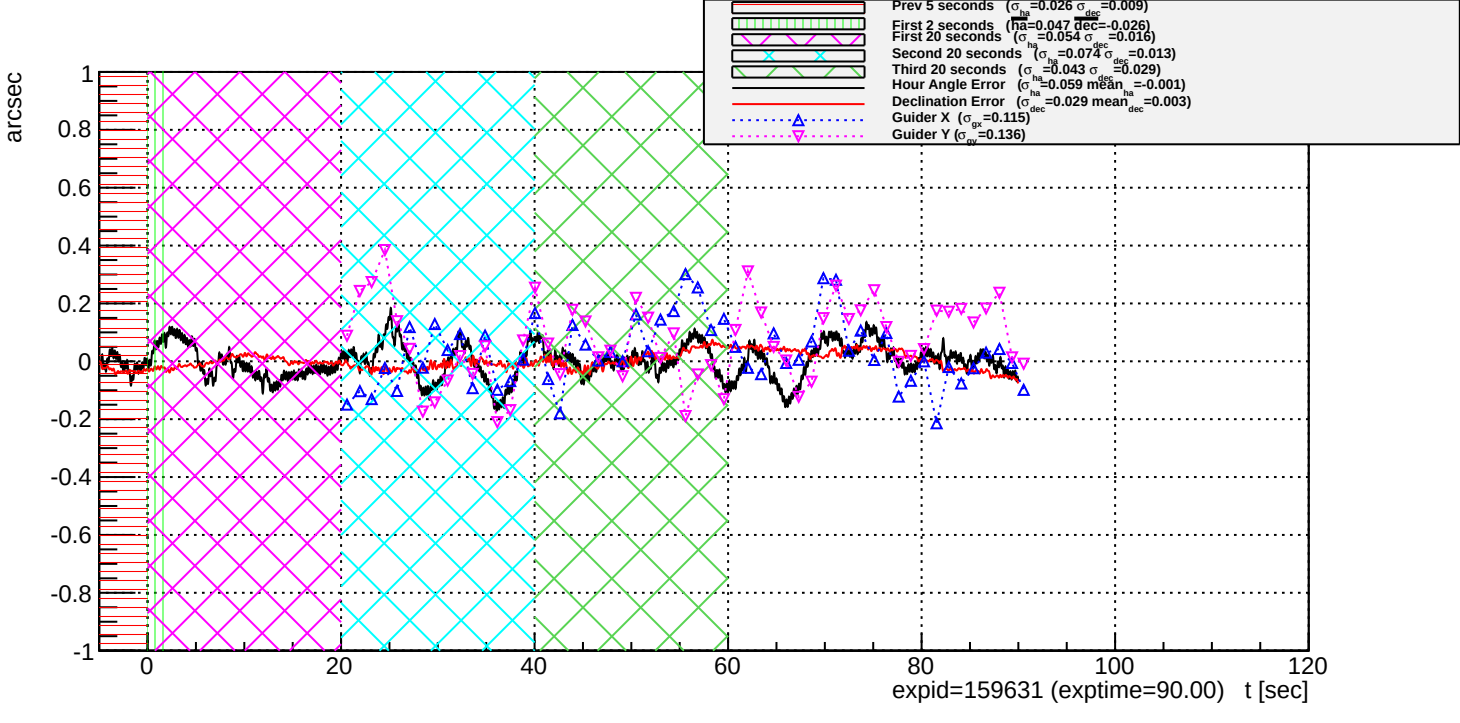

Prev 5 seconds (σ_{ha}=0.130 σ_{dec}=0.053)
First 2 seconds (ha=0.157 dec=-0.212)
First 20 seconds (σ_{ha}=0.088 σ_{dec}=0.069)
Second 20 seconds (σ_{ha}=0.069 σ_{dec}=0.035)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.081 $mean_{ha}$=0.026)
Declination Error (σ_{dec}=0.090 $mean_{dec}$=-0.000)
Guider X (σ_{gx}=0.089)
Guider Y (σ_{gy}=0.078)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159626 (exptime=45.00) t [sec]

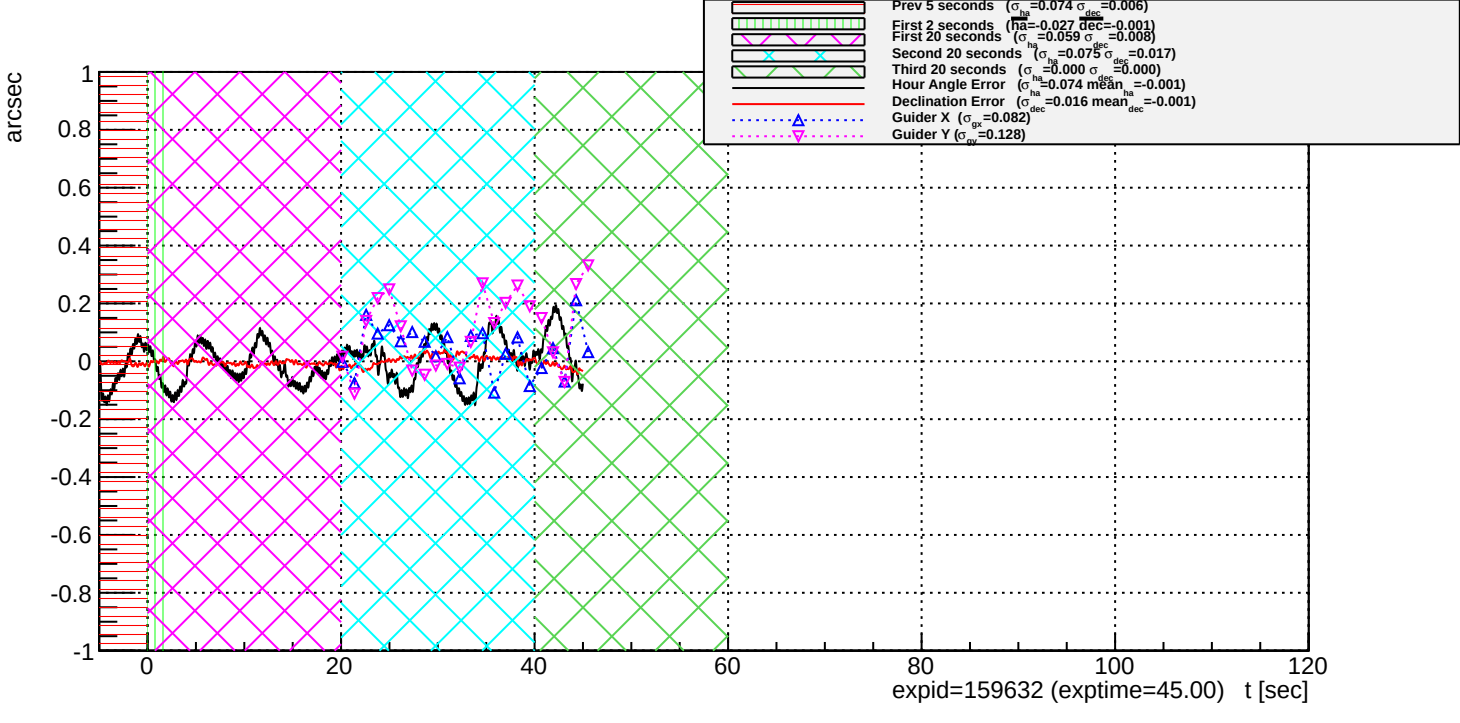

Prev 5 seconds (σ_{ha}=0.088 σ_{dec}=0.038)
First 2 seconds ($\overline{ha}$=0.071 $\overline{dec}$=-0.186)
First 20 seconds (σ_{ha}=0.058 σ_{dec}=0.054)
Second 20 seconds (σ_{ha}=0.053 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.063 σ_{dec}=0.009)
Hour Angle Error (σ_{ha}=0.059 $mean_{ha}$=0.010)
Declination Error (σ_{dec}=0.069 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.091)
Guider Y (σ_{gy}=0.106)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159627 (exptime=90.00) t [sec]

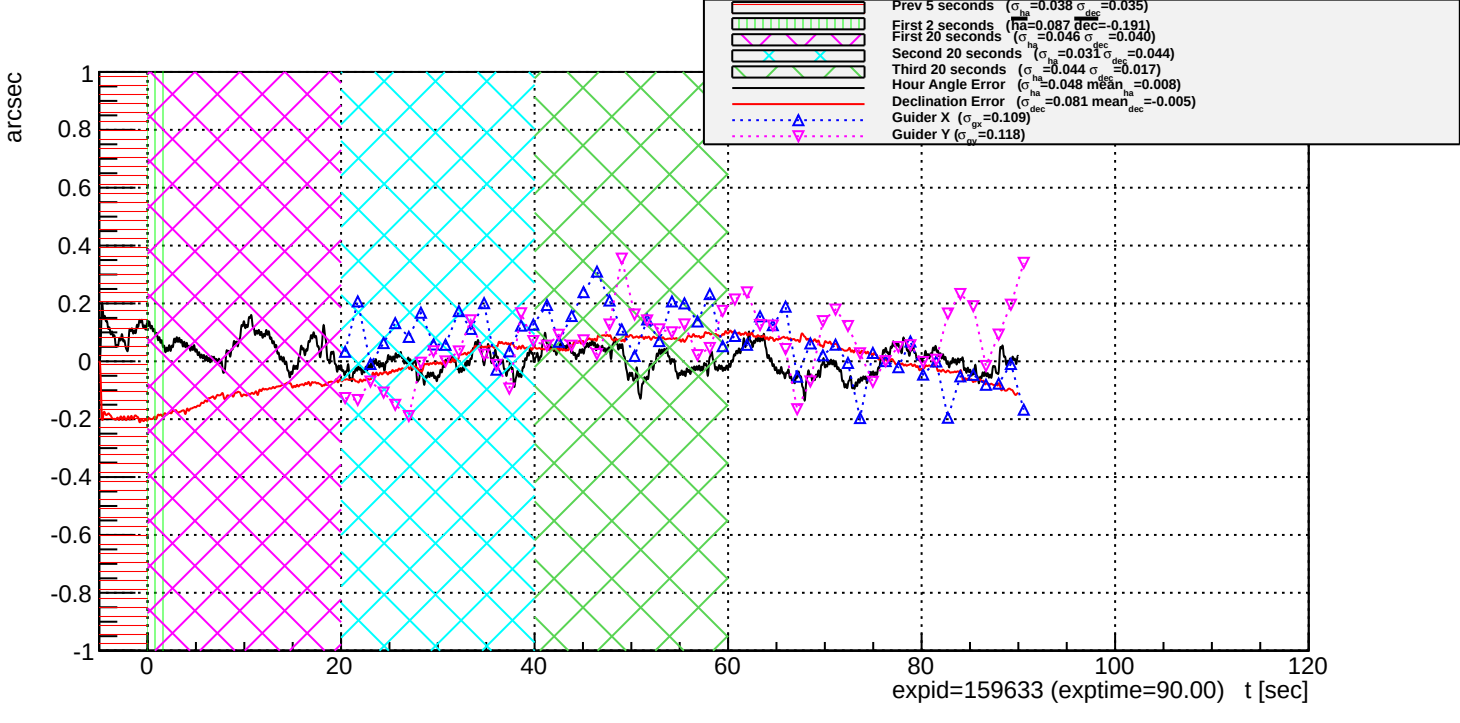

Prev 5 seconds (σ_{ha}=0.047 σ_{dec}=0.017)
First 2 seconds (ha=-0.084 dec=-0.110)
First 20 seconds (σ_{ha}=0.075 σ_{dec}=0.031)
Second 20 seconds (σ_{ha}=0.036 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.053 σ_{dec}=0.021)
Hour Angle Error (σ_{ha}=0.057 $mean_{ha}$=-0.005)
Declination Error (σ_{dec}=0.096 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.120)
Guider Y (σ_{gy}=0.129)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159628 (exptime=90.00) t [sec]

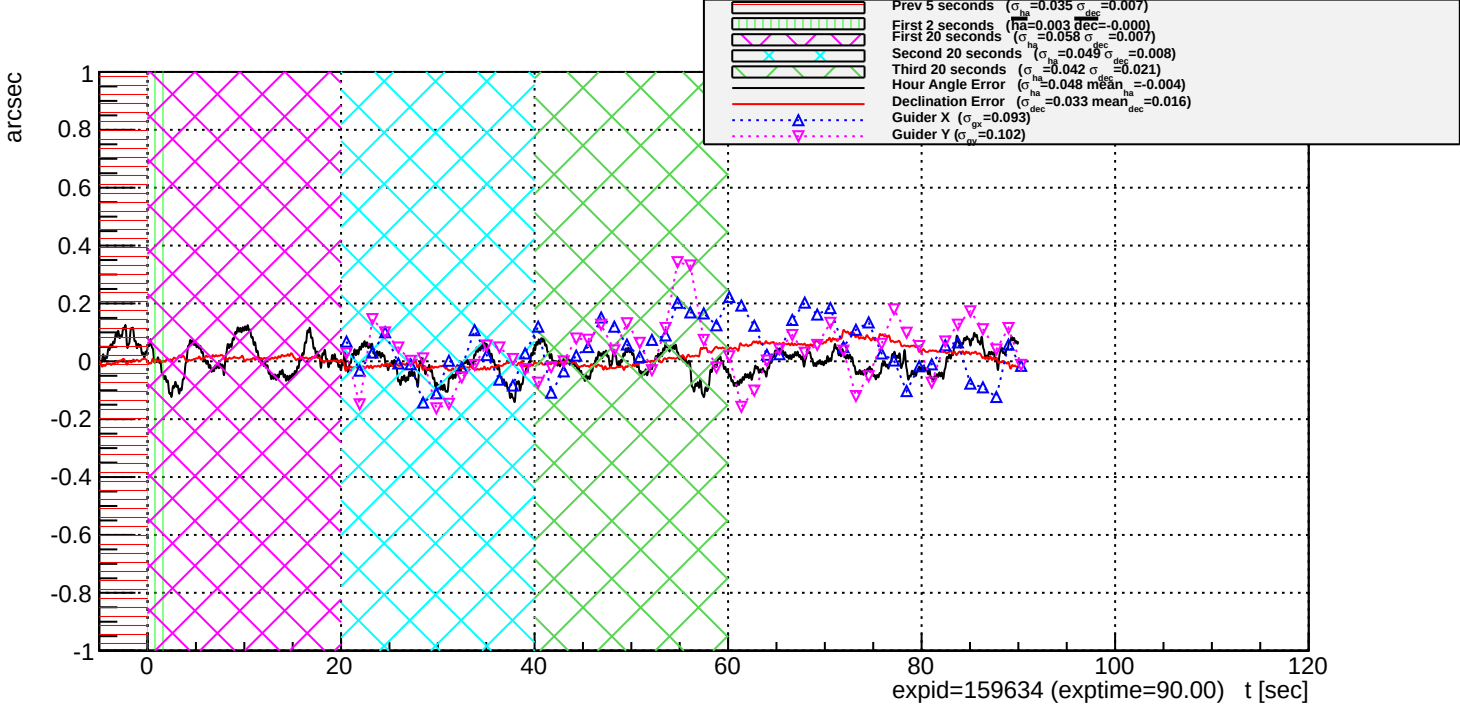

Prev 5 seconds (σ_{ha}=0.055 σ_{dec}=0.018)
First 2 seconds (σ_{ha}=0.107 σ_{dec}=0.005)
First 20 seconds (σ_{ha}=0.073 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.070 σ_{dec}=0.025)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.073 $mean_{ha}$=0.000)
Declination Error (σ_{dec}=0.020 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.075)
Guider Y (σ_{gy}=0.079)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159629 (exptime=45.00) t [sec]

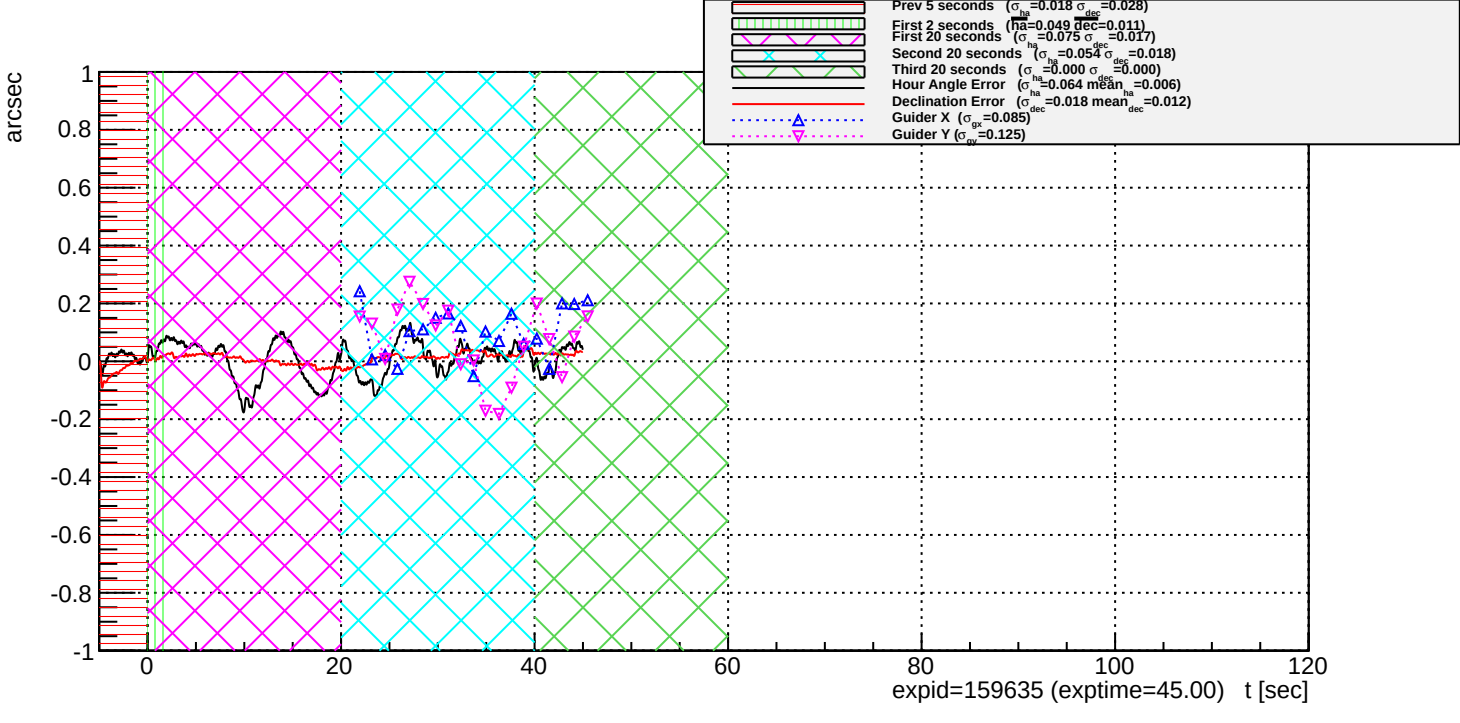

Prev 5 seconds (σ_{ha}=0.116 σ_{dec}=0.069)
First 2 seconds (σ_{ha}=0.050 σ_{dec}=-0.158)
First 20 seconds (σ_{ha}=0.049 σ_{dec}=0.055)
Second 20 seconds (σ_{ha}=0.034 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.054 σ_{dec}=0.022)
Hour Angle Error (σ_{ha}=0.049 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.035 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.086)
Guider Y (σ_{gy}=0.095)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159630 (exptime=90.00) t [sec]

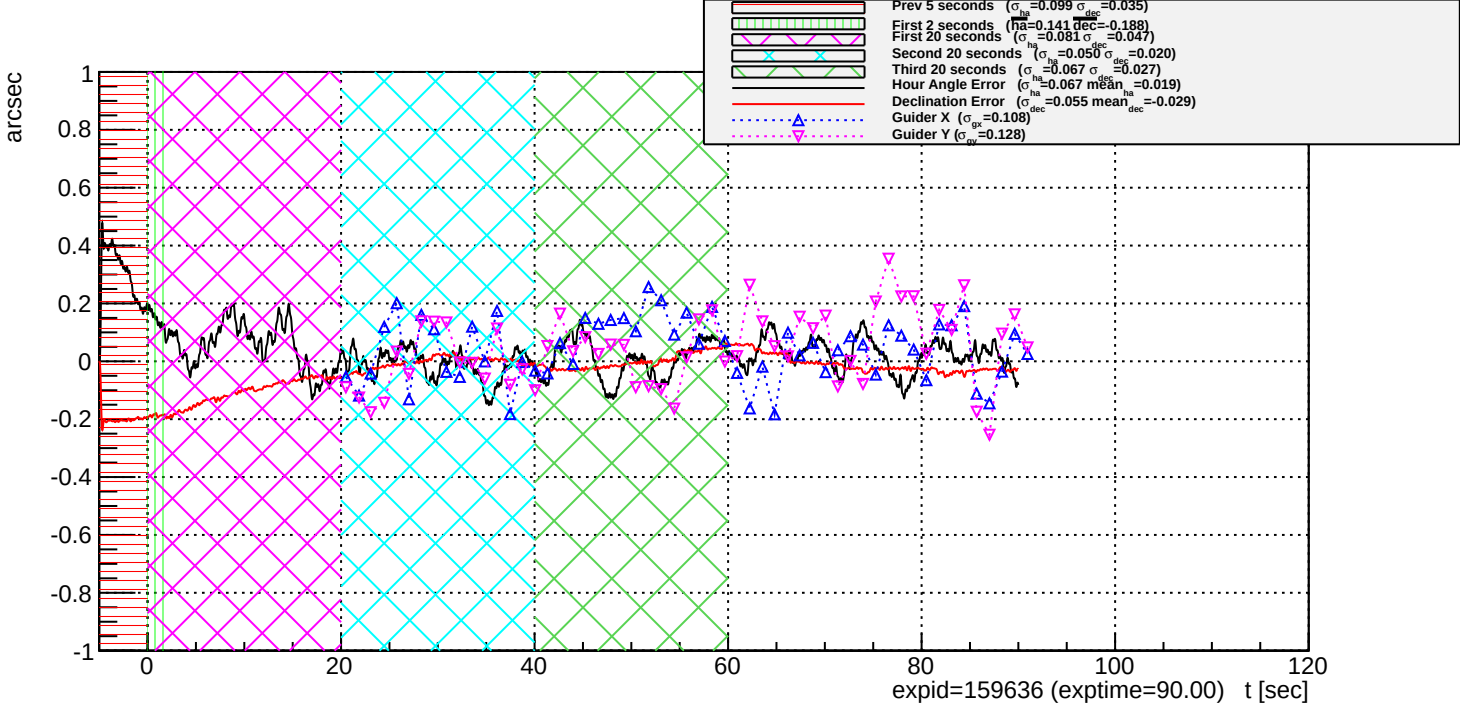

Prev 5 seconds (σ_{ha}=0.026 σ_{dec}=0.009)
First 2 seconds (ha=0.047 dec=-0.026)
First 20 seconds (σ_{ha}=0.054 σ_{dec}=0.016)
Second 20 seconds (σ_{ha}=0.074 σ_{dec}=0.013)
Third 20 seconds (σ_{ha}=0.043 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.059 $mean_{ha}$=-0.001)
Declination Error (σ_{dec}=0.029 $mean_{dec}$=0.003)
Guider X (σ_{gx}=0.115)
Guider Y (σ_{gy}=0.136)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159631 (exptime=90.00) t [sec]

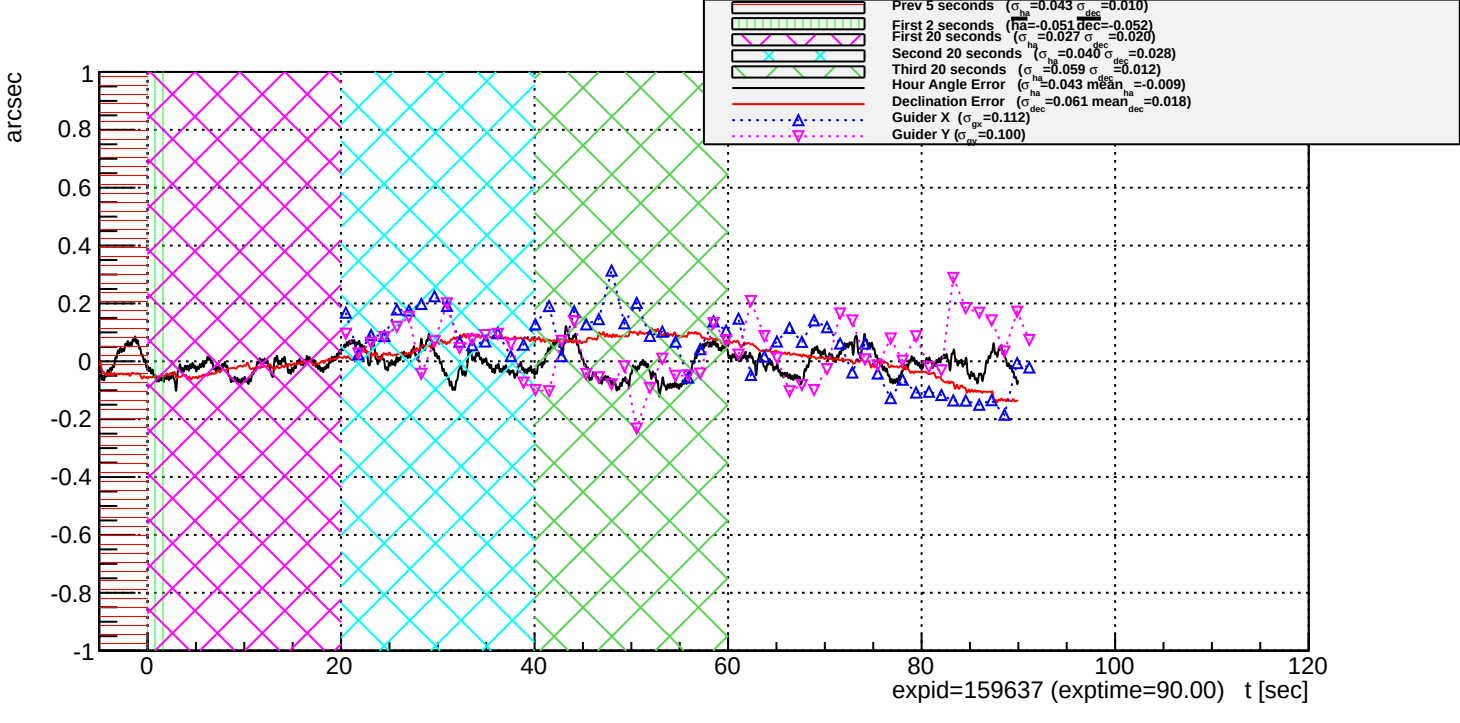

Prev 5 seconds (σ_{ha}=0.074 σ_{dec}=0.006)
First 2 seconds (ha=-0.027 dec=-0.001)
First 20 seconds (σ_{ha}=0.059 σ_{dec}=0.008)
Second 20 seconds (σ_{ha}=0.075 σ_{dec}=0.017)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.074 $mean_{ha}$=-0.001)
Declination Error (σ_{dec}=0.016 $mean_{dec}$=-0.001)
Guider X (σ_{gx}=0.082)
Guider Y (σ_{gy}=0.128)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159632 (exptime=45.00) t [sec]

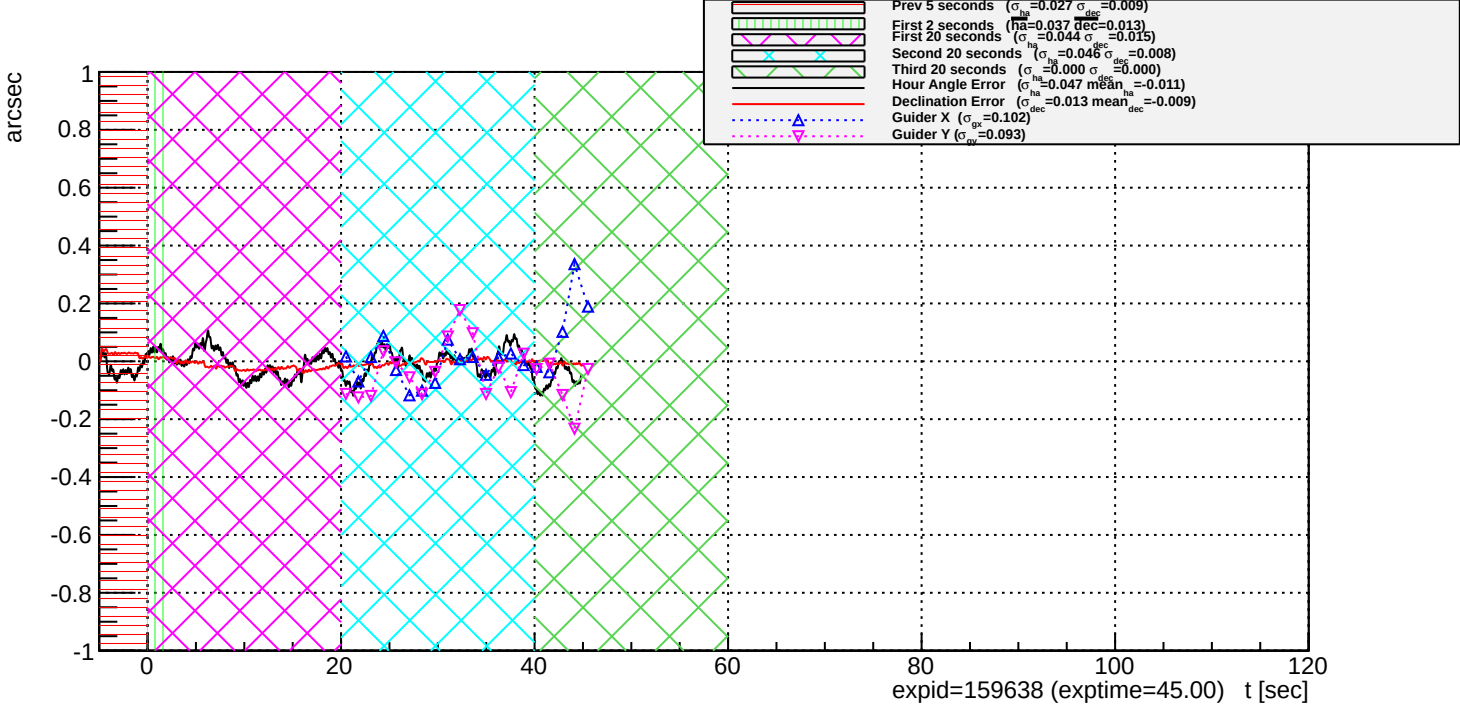

Prev 5 seconds (σ_{ha}=0.038 σ_{dec}=0.035)
First 2 seconds (ha=0.087 dec=-0.191)
First 20 seconds (σ_{ha}=0.046 σ_{dec}=0.040)
Second 20 seconds (σ_{ha}=0.031 σ_{dec}=0.044)
Third 20 seconds (σ_{ha}=0.044 σ_{dec}=0.017)
Hour Angle Error (σ_{ha}=0.048 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.081 $mean_{dec}$=-0.005)
Guider X (σ_{gx}=0.109)
Guider Y (σ_{gy}=0.118)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159633 (exptime=90.00)
t [sec]

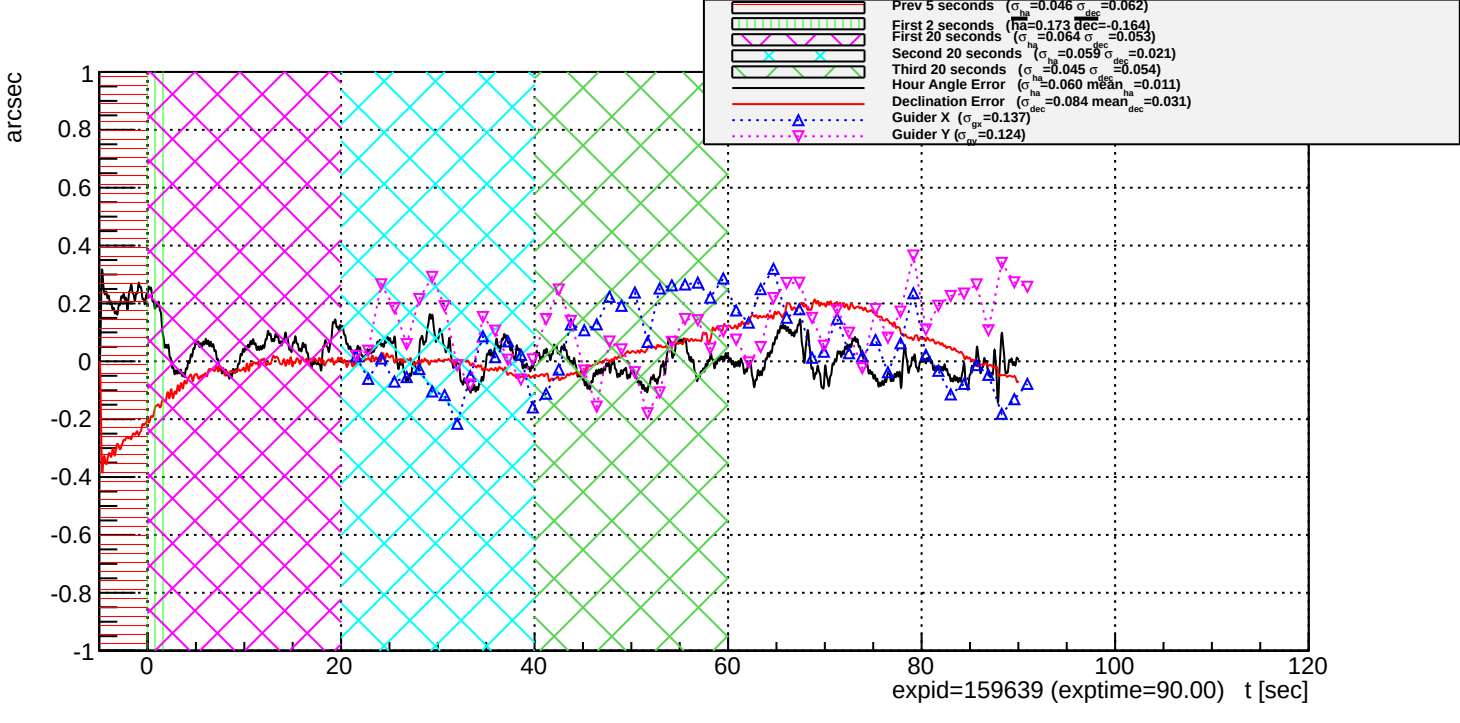

Prev 5 seconds (σ_{ha}=0.035 σ_{dec}=0.007)
First 2 seconds (σ_{ha}=0.003 σ_{dec}=-0.000)
First 20 seconds (σ_{ha}=0.058 σ_{dec}=0.007)
Second 20 seconds (σ_{ha}=0.049 σ_{dec}=0.008)
Third 20 seconds (σ_{ha}=0.042 σ_{dec}=0.021)
Hour Angle Error (σ_{ha}=0.048 $mean_{ha}$=-0.004)
Declination Error (σ_{dec}=0.033 $mean_{dec}$=0.016)
Guider X (σ_{gx}=0.093)
Guider Y (σ_{gy}=0.102)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159634 (exptime=90.00) t [sec]

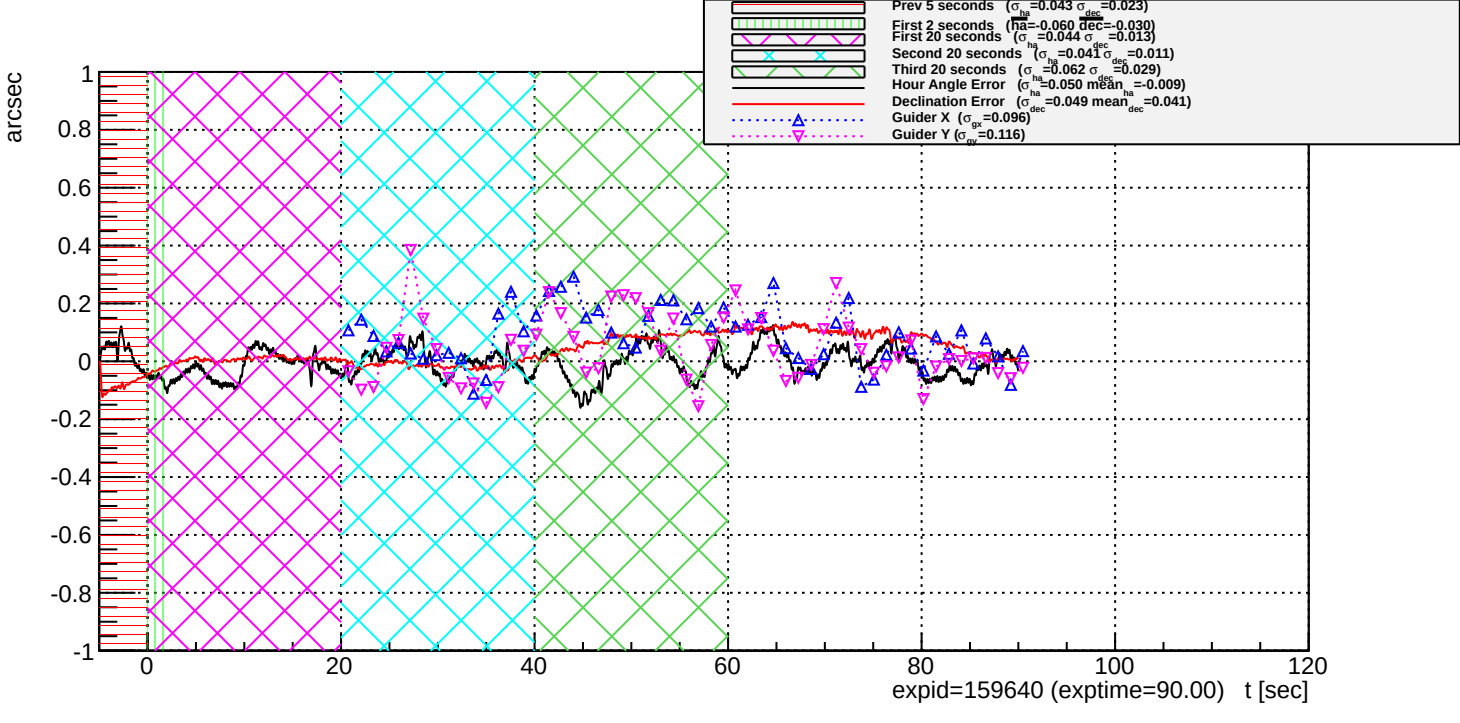

Prev 5 seconds (σ_{ha}=0.018 σ_{dec}=0.028)
First 2 seconds (ha=0.049 dec=0.011)
First 20 seconds (σ_{ha}=0.075 σ_{dec}=0.017)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.018)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.064 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.018 $mean_{dec}$=0.012)
Guider X (σ_{gx}=0.085)
Guider Y (σ_{gy}=0.125)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159635 (exptime=45.00) t [sec]

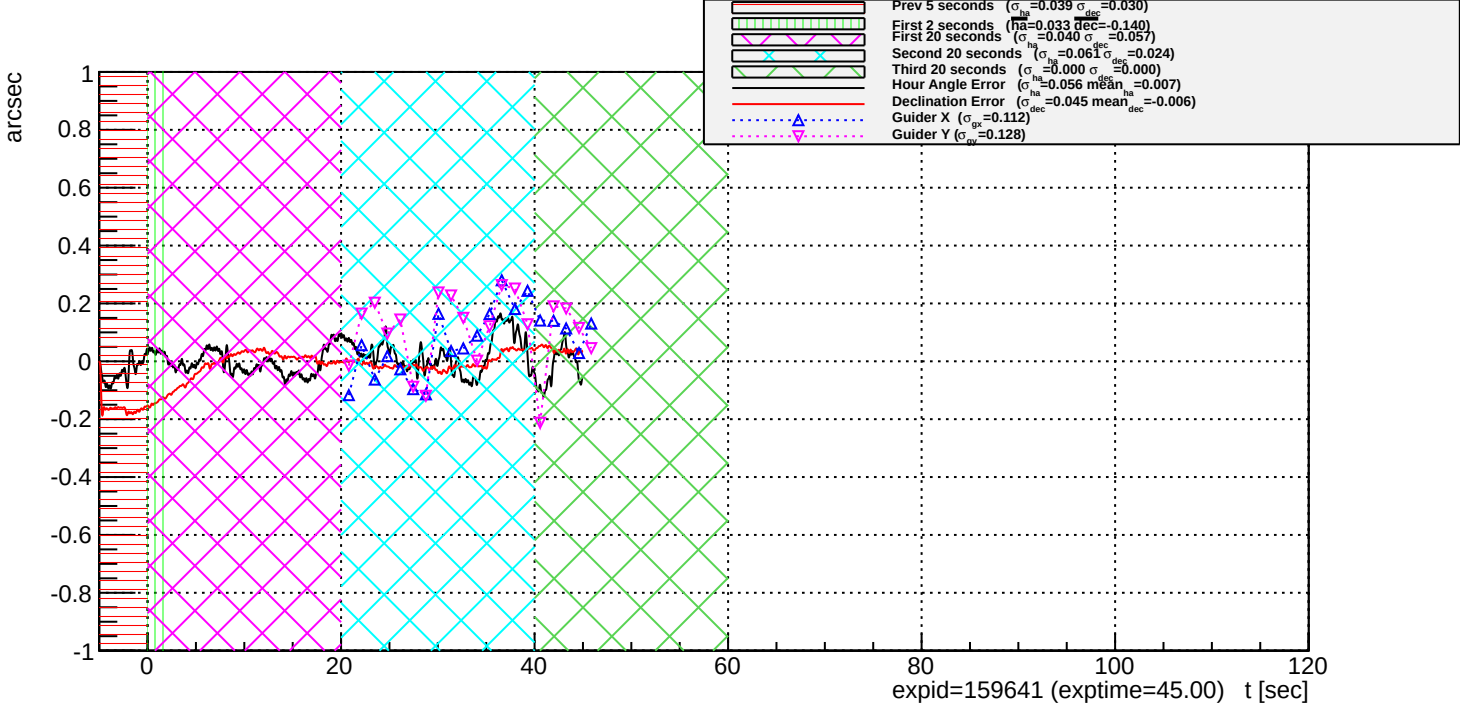

Prev 5 seconds (σ_{ha}=0.099 σ_{dec}=0.035)
First 2 seconds (ha=0.141 dec=-0.188)
First 20 seconds (σ_{ha}=0.081 σ_{dec}=0.047)
Second 20 seconds (σ_{ha}=0.050 σ_{dec}=0.020)
Third 20 seconds (σ_{ha}=0.067 σ_{dec}=0.027)
Hour Angle Error (σ_{ha}=0.067 $mean_{ha}$=0.019)
Declination Error (σ_{dec}=0.055 $mean_{dec}$=-0.029)
Guider X (σ_{gx}=0.108)
Guider Y (σ_{gy}=0.128)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159636 (exptime=90.00) t [sec]

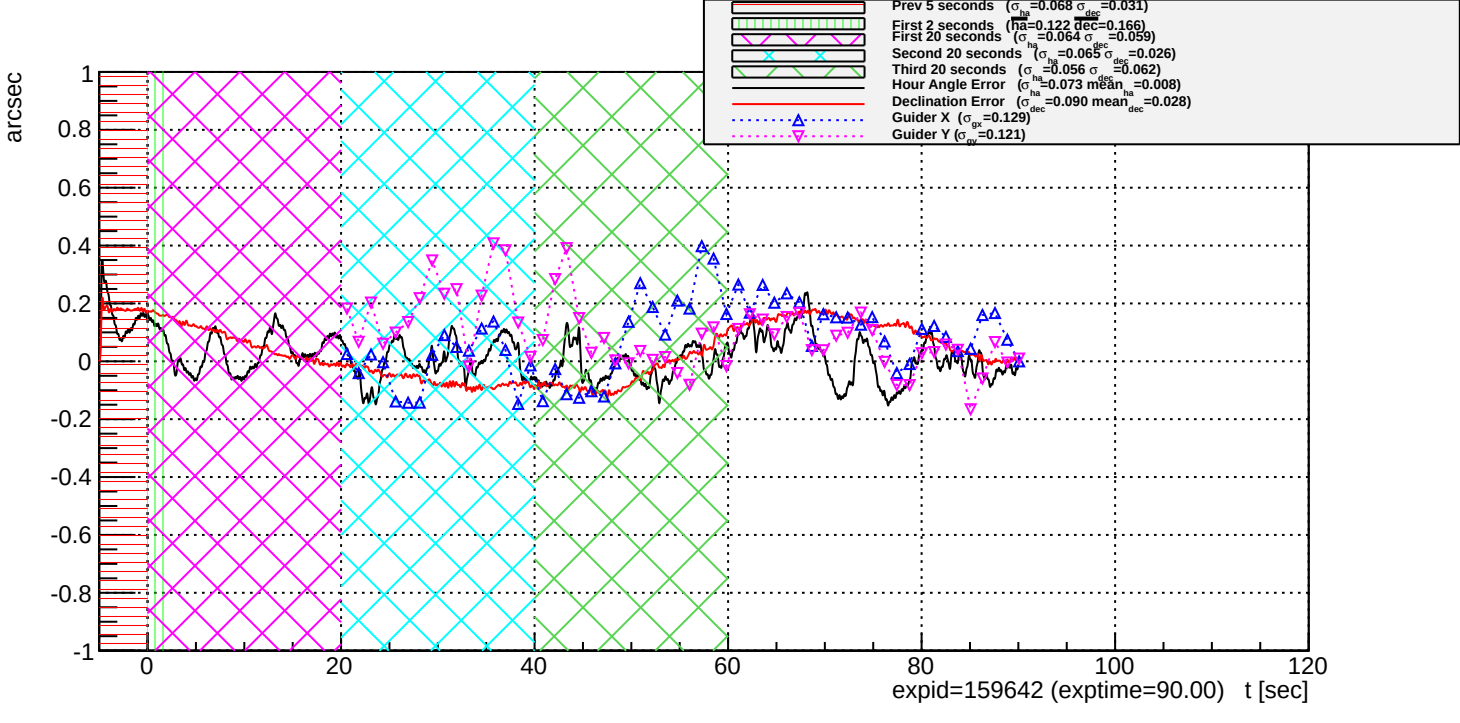

Prev 5 seconds (σ_{ha}=0.043 σ_{dec}=0.010)
First 2 seconds ($\overline{ha}$=-0.051 $\overline{dec}$=-0.052)
First 20 seconds (σ_{ha}=0.027 σ_{dec}=0.020)
Second 20 seconds (σ_{ha}=0.040 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.059 σ_{dec}=0.012)
Hour Angle Error (σ_{ha}=0.043 $mean_{ha}$=-0.009)
Declination Error (σ_{dec}=0.061 $mean_{dec}$=0.018)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.100)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159637 (exptime=90.00) t [sec]

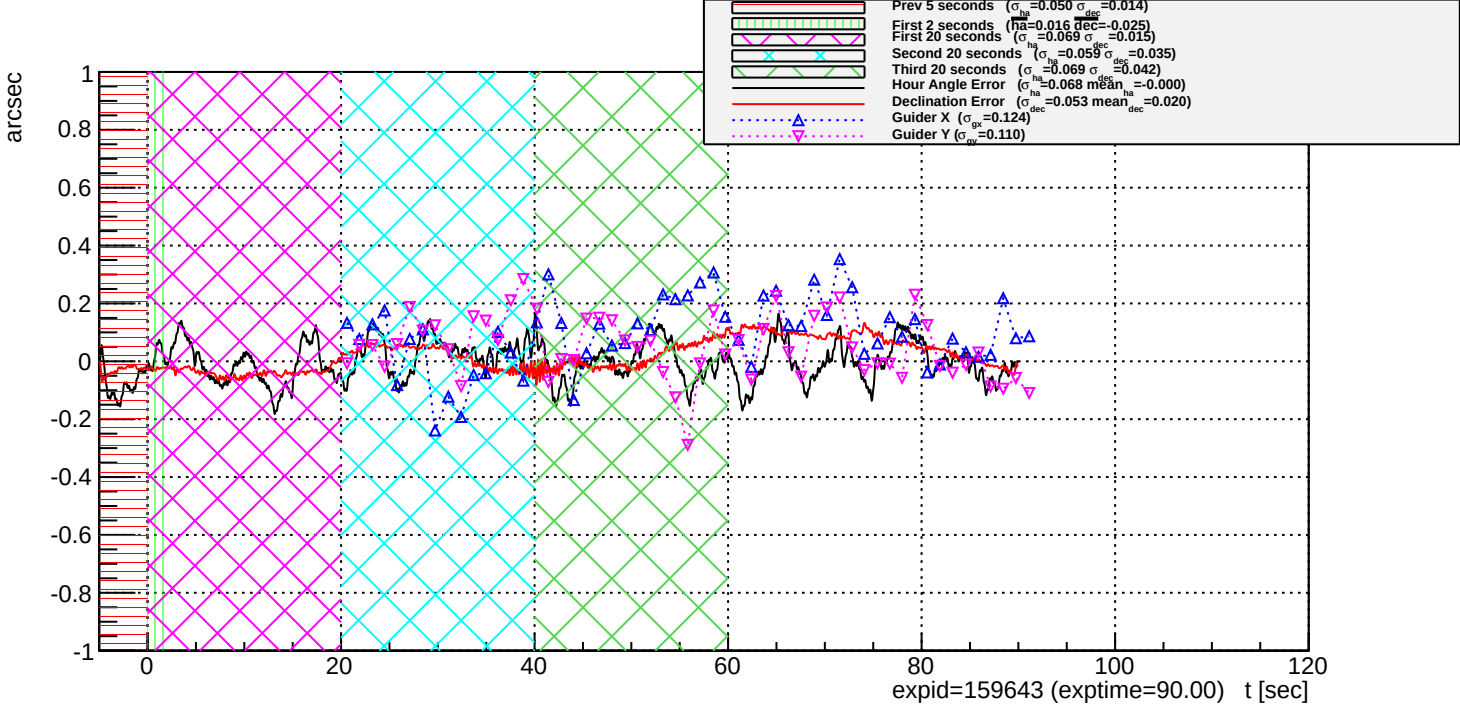

Prev 5 seconds (σ_{ha}=0.027 σ_{dec}=0.009)
First 2 seconds (ha=0.037 dec=0.013)
First 20 seconds (σ_{ha}=0.044 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.046 σ_{dec}=0.008)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.047 $mean_{ha}$=-0.011)
Declination Error (σ_{dec}=0.013 $mean_{dec}$=-0.009)
Guider X (σ_{gx}=0.102)
Guider Y (σ_{gy}=0.093)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159638 (exptime=45.00) t [sec]

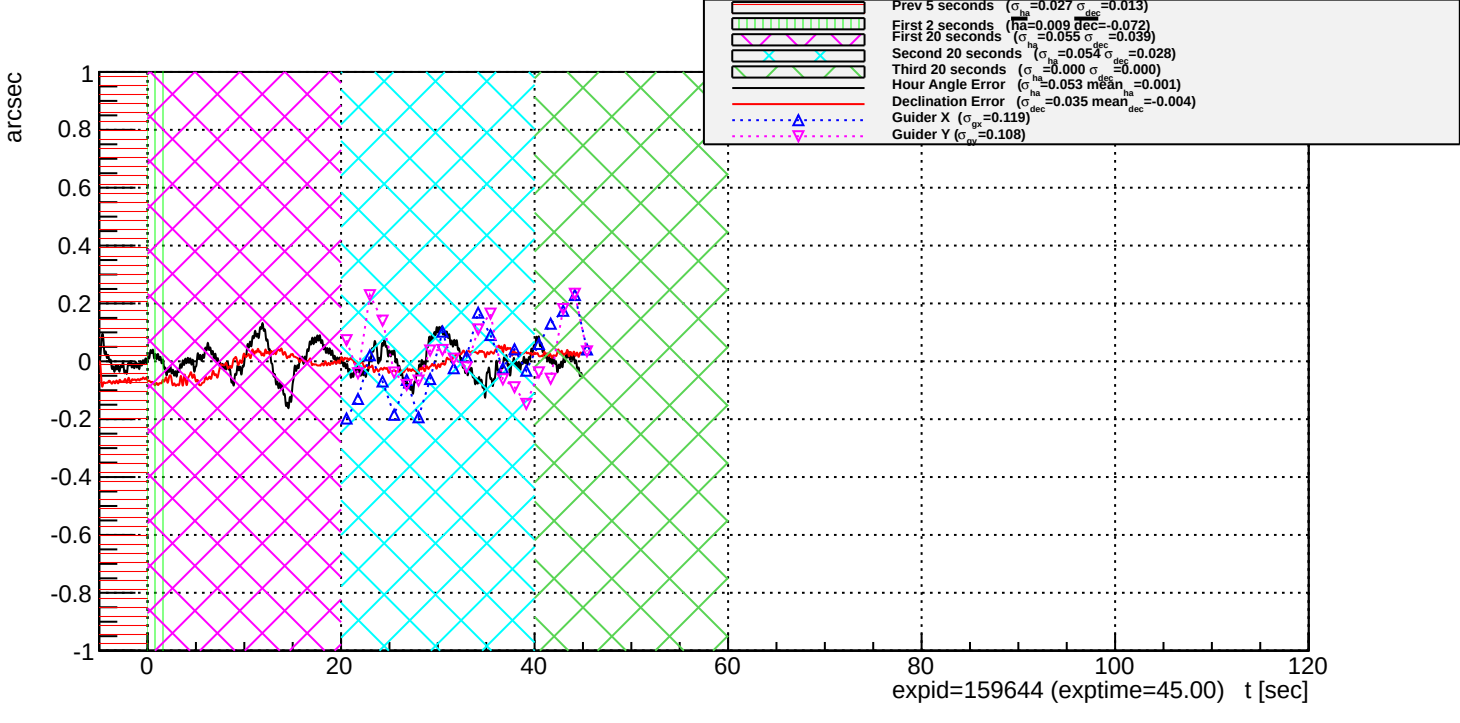

Prev 5 seconds (σ_{ha}=0.046 σ_{dec}=0.062)
First 2 seconds (ha=0.173 dec=-0.164)
First 20 seconds (σ_{ha}=0.064 σ_{dec}=0.053)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.021)
Third 20 seconds (σ_{ha}=0.045 σ_{dec}=0.054)
Hour Angle Error (σ_{ha}=0.060 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.084 $mean_{dec}$=0.031)
Guider X (σ_{gx}=0.137)
Guider Y (σ_{gy}=0.124)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159639 (exptime=90.00) t [sec]

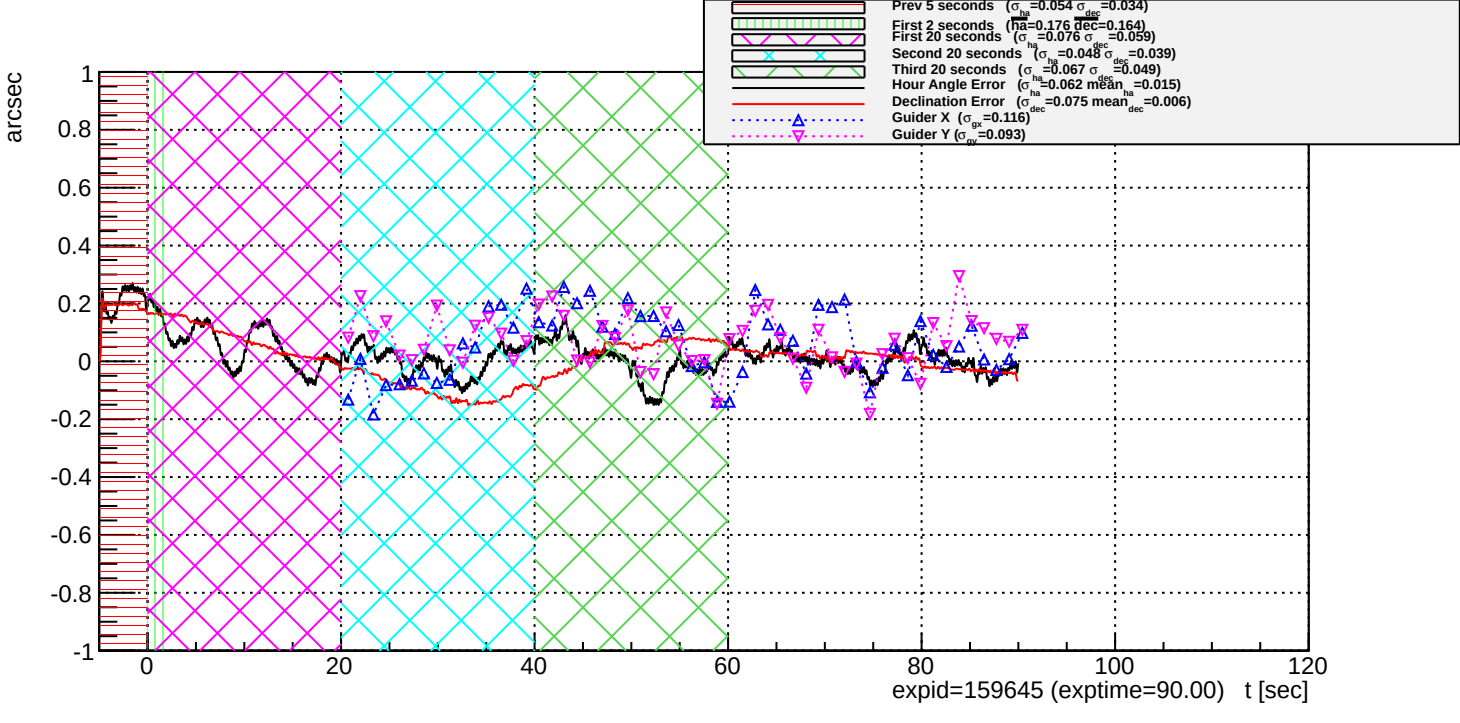

Prev 5 seconds (σ_{ha}=0.043 σ_{dec}=0.023)
First 2 seconds ($\overline{ha}$=-0.060 $\overline{dec}$=-0.030)
First 20 seconds (σ_{ha}=0.044 σ_{dec}=0.013)
Second 20 seconds (σ_{ha}=0.041 σ_{dec}=0.011)
Third 20 seconds (σ_{ha}=0.062 σ_{dec}=0.029)
Hour Angle Error (σ_{ha}=0.050 $mean_{ha}$=-0.009)
Declination Error (σ_{dec}=0.049 $mean_{dec}$=0.041)
Guider X (σ_{gx}=0.096)
Guider Y (σ_{gy}=0.116)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159640 (exptime=90.00) t [sec]

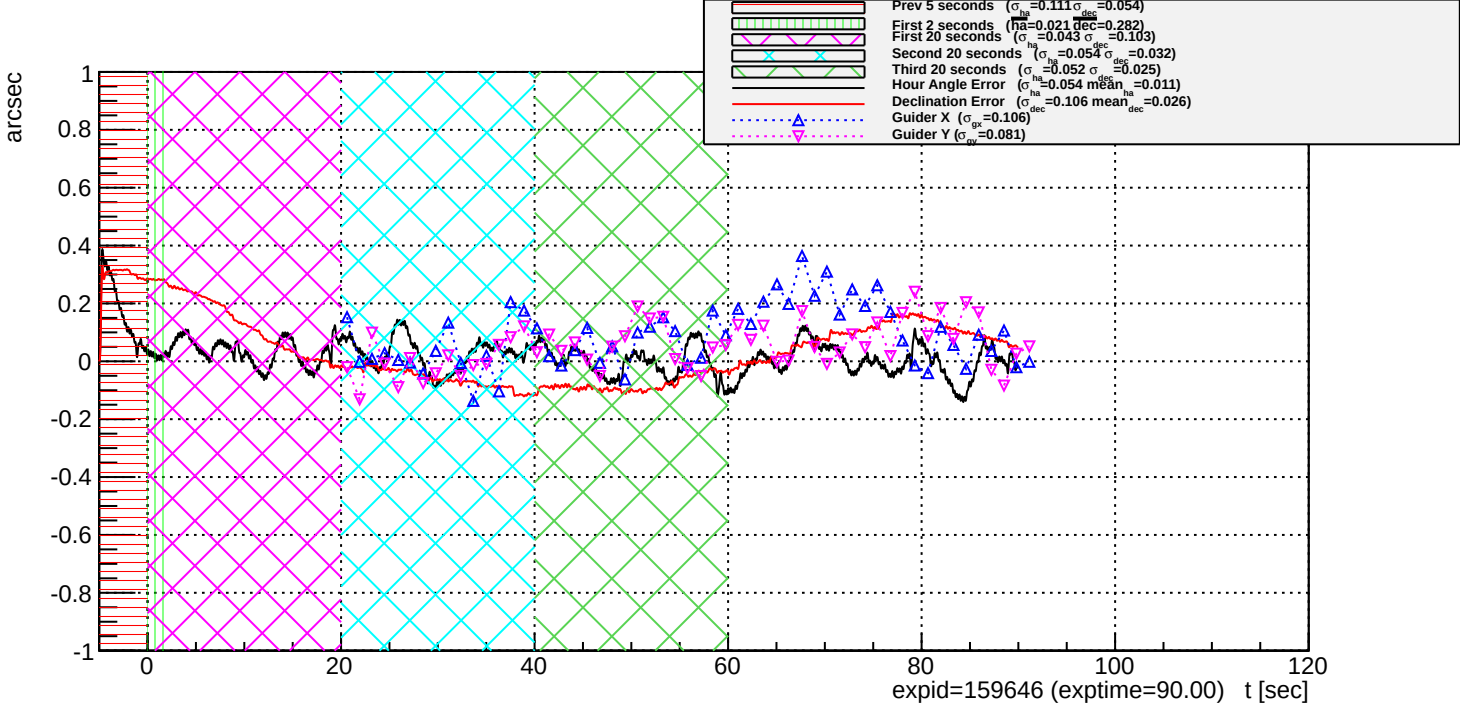

Prev 5 seconds (σ_{ha}=0.039 σ_{dec}=0.030)
First 2 seconds (ha=0.033 dec=-0.140)
First 20 seconds (σ_{ha}=0.040 σ_{dec}=0.057)
Second 20 seconds (σ_{ha}=0.061 σ_{dec}=0.024)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.056 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.045 $mean_{dec}$=-0.006)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.128)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159641 (exptime=45.00) t [sec]

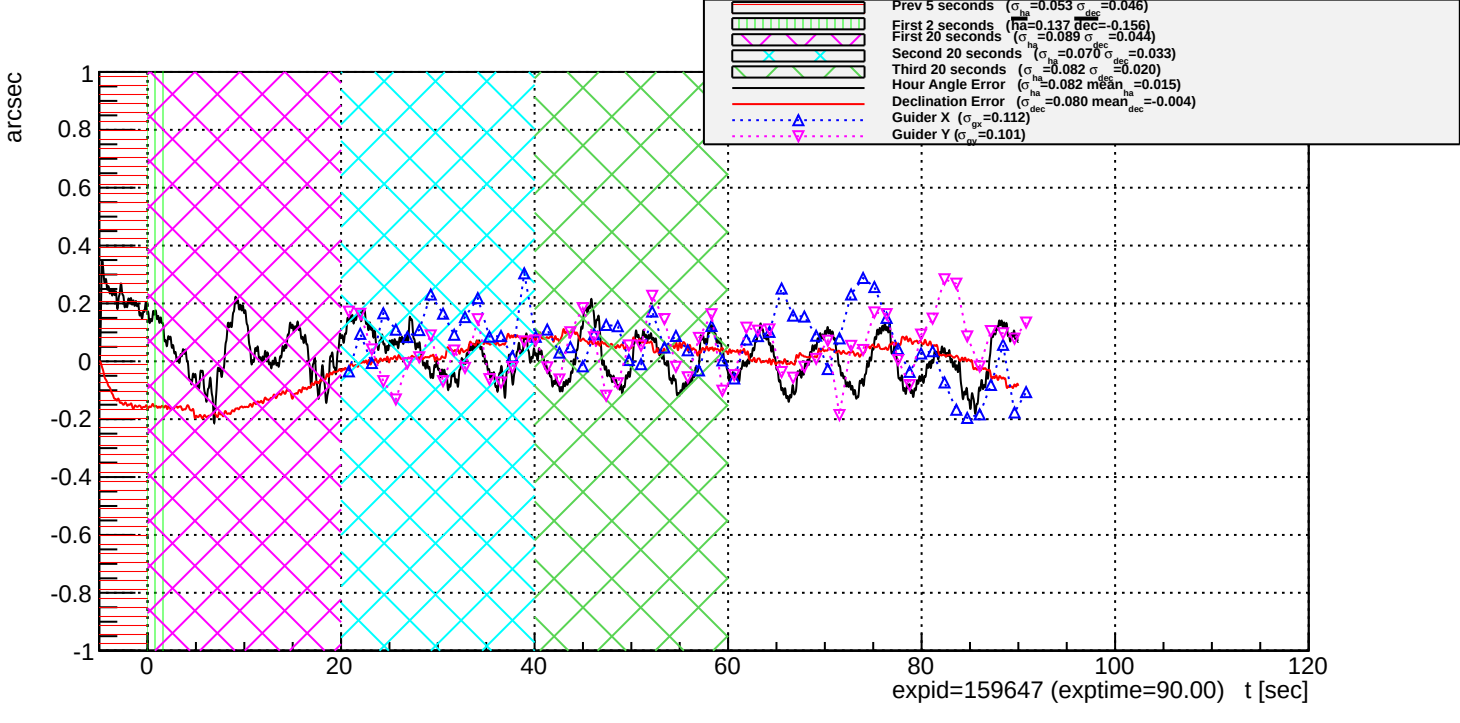

Prev 5 seconds (σ_{ha}=0.068 σ_{dec}=0.031)
First 2 seconds (ha=0.122 dec=0.166)
First 20 seconds (σ_{ha}=0.064 σ_{dec}=0.059)
Second 20 seconds (σ_{ha}=0.065 σ_{dec}=0.026)
Third 20 seconds (σ_{ha}=0.056 σ_{dec}=0.062)
Hour Angle Error (σ_{ha}=0.073 $mean_{ha}$=0.008)
Declination Error (σ_{dec}=0.090 $mean_{dec}$=0.028)
Guider X (σ_{gx}=0.129)
Guider Y (σ_{gy}=0.121)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159642 (exptime=90.00) t [sec]

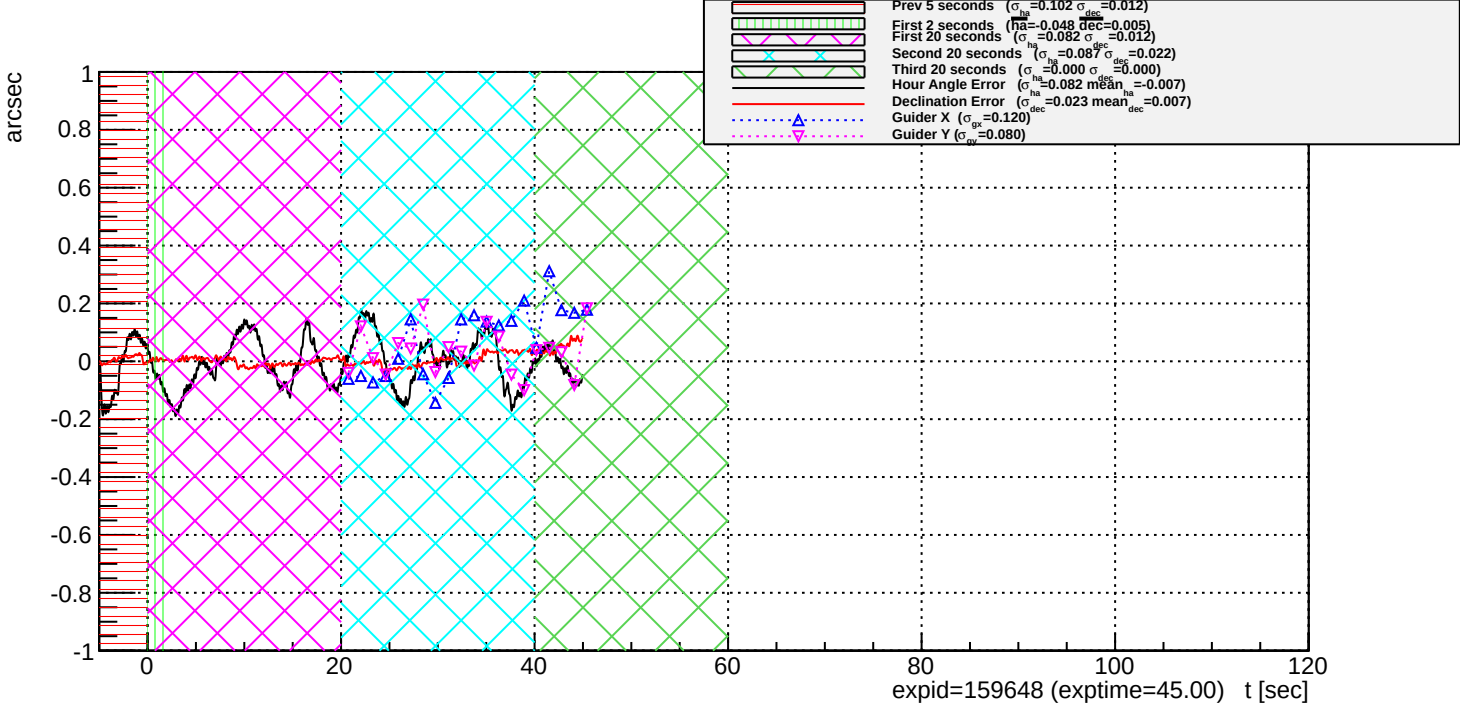

Prev 5 seconds (σ_{ha}=0.050 σ_{dec}=0.014)
First 2 seconds (ha=0.016 dec=-0.025)
First 20 seconds (σ_{ha}=0.069 σ_{dec}=0.015)
Second 20 seconds (σ_{ha}=0.059 σ_{dec}=0.035)
Third 20 seconds (σ_{ha}=0.069 σ_{dec}=0.042)
Hour Angle Error (σ_{ha}=0.068 $mean_{ha}$=-0.000)
Declination Error (σ_{dec}=0.053 $mean_{dec}$=0.020)
Guider X (σ_{gx}=0.124)
Guider Y (σ_{gy}=0.110)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159643 (exptime=90.00)
t [sec]

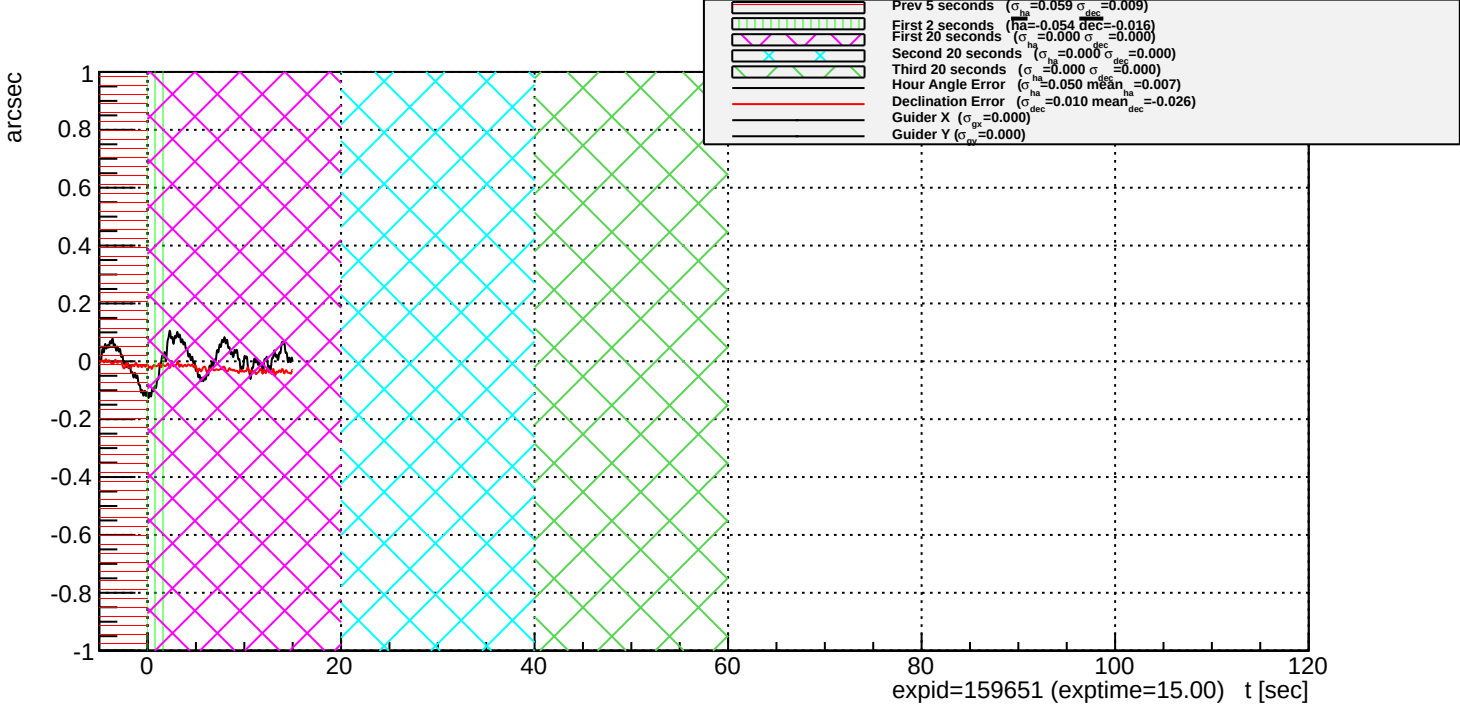

Prev 5 seconds (σ_{ha}=0.027 σ_{dec}=0.013)
First 2 seconds (ha=0.009 dec=-0.072)
First 20 seconds (σ_{ha}=0.055 σ_{dec}=0.039)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.028)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.053 $mean_{ha}$=0.001)
Declination Error (σ_{dec}=0.035 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.119)
Guider Y (σ_{gy}=0.108)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159644 (exptime=45.00) t [sec]

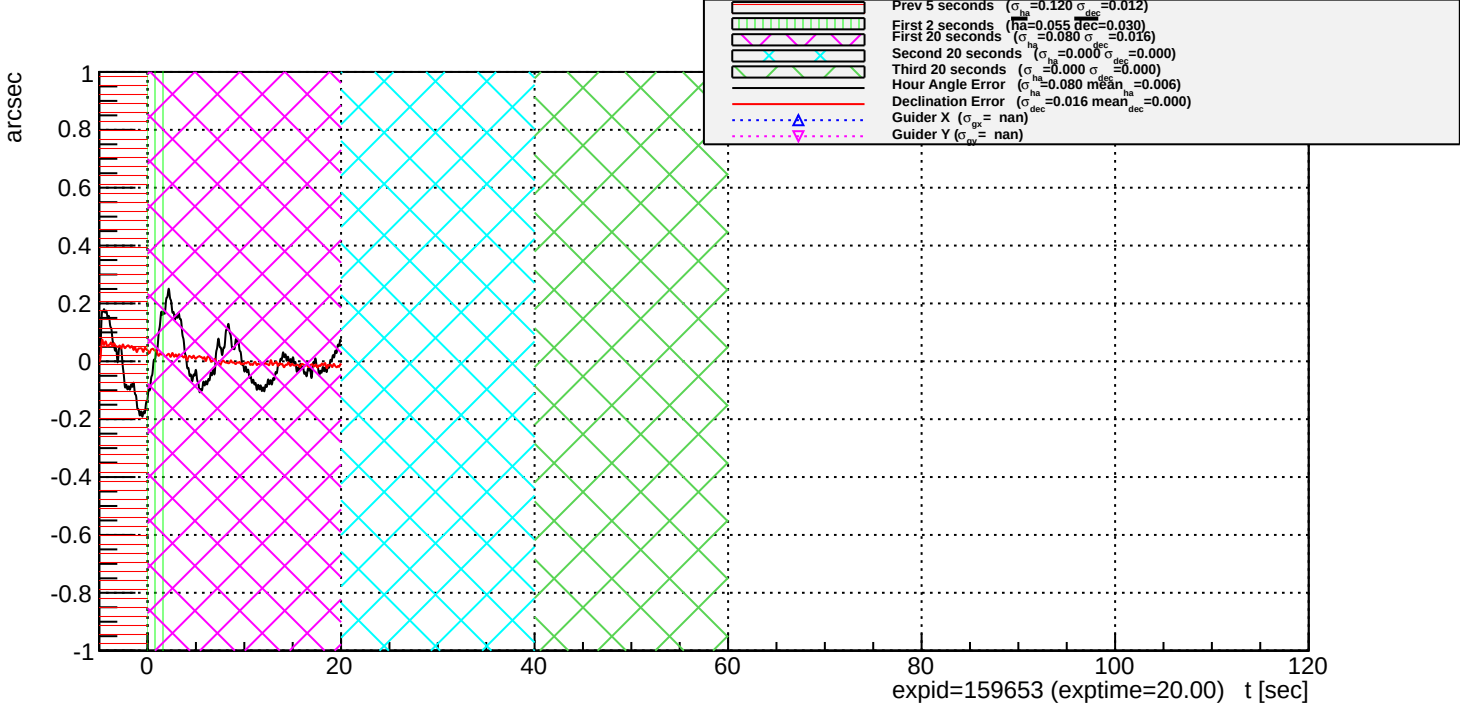

Prev 5 seconds (σ_{ha}=0.054 σ_{dec}=0.034)
First 2 seconds (ha=0.176 dec=0.164)
First 20 seconds (σ_{ha}=0.076 σ_{dec}=0.059)
Second 20 seconds (σ_{ha}=0.048 σ_{dec}=0.039)
Third 20 seconds (σ_{ha}=0.067 σ_{dec}=0.049)
Hour Angle Error (σ_{ha}=0.062 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.075 $mean_{dec}$=0.006)
Guider X (σ_{gx}=0.116)
Guider Y (σ_{gy}=0.093)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159645 (exptime=90.00) t [sec]

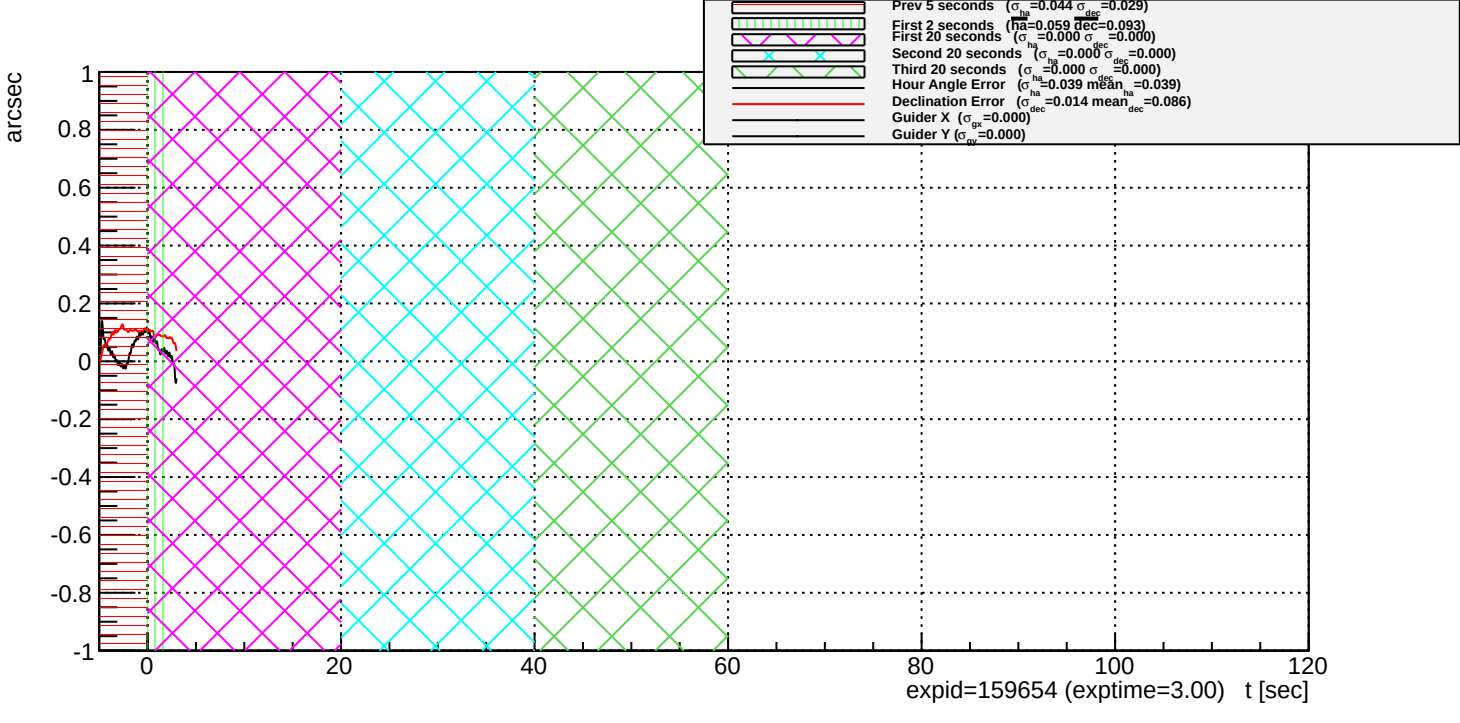

Prev 5 seconds (σ_{ha}=0.111 σ_{dec}=0.054)
First 2 seconds (ha=0.021 dec=0.282)
First 20 seconds (σ_{ha}=0.043 σ_{dec}=0.103)
Second 20 seconds (σ_{ha}=0.054 σ_{dec}=0.032)
Third 20 seconds (σ_{ha}=0.052 σ_{dec}=0.025)
Hour Angle Error (σ_{ha}=0.054 $mean_{ha}$=0.011)
Declination Error (σ_{dec}=0.106 $mean_{dec}$=0.026)
Guider X (σ_{gx}=0.106)
Guider Y (σ_{gy}=0.081)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159646 (exptime=90.00) t [sec]

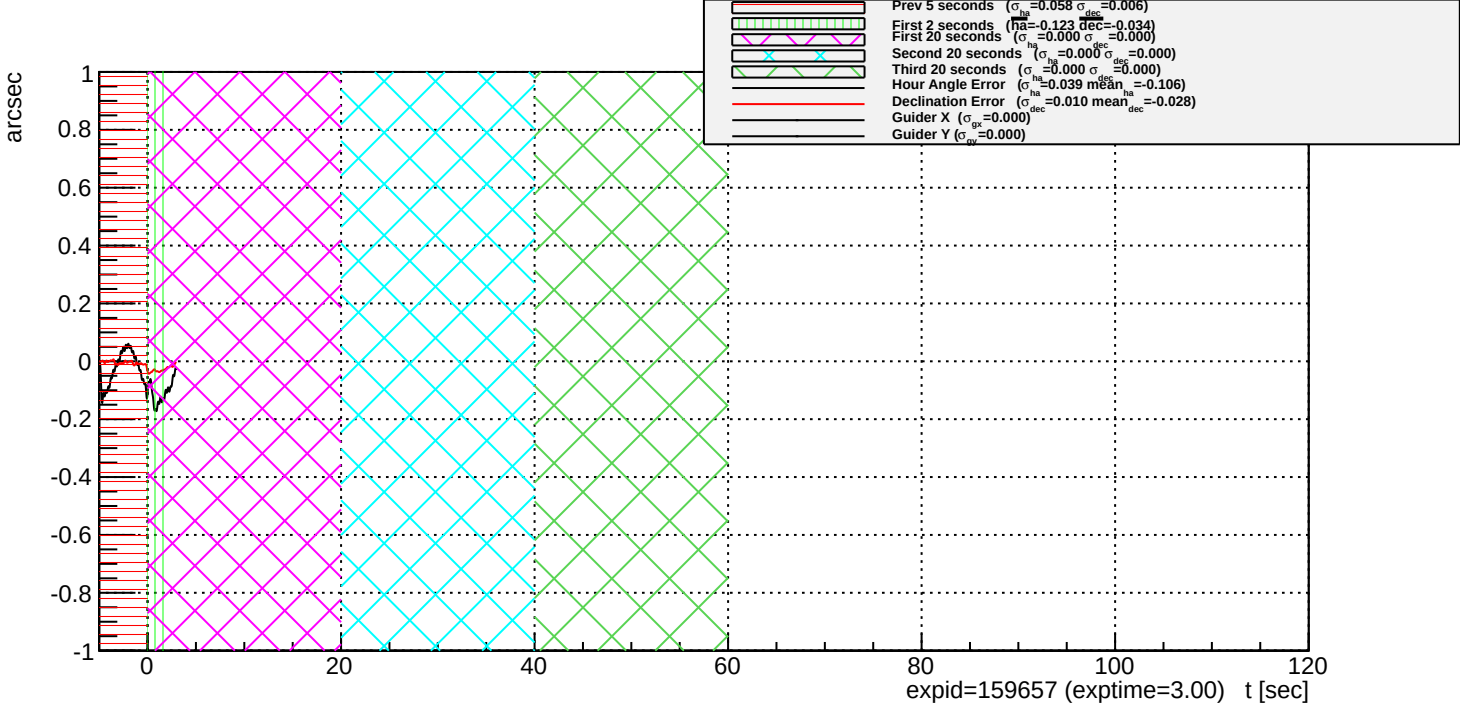

Prev 5 seconds (σ_{ha}=0.053 σ_{dec}=0.046)
First 2 seconds (ha=0.137 dec=-0.156)
First 20 seconds (σ_{ha}=0.089 σ_{dec}=0.044)
Second 20 seconds (σ_{ha}=0.070 σ_{dec}=0.033)
Third 20 seconds (σ_{ha}=0.082 σ_{dec}=0.020)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.080 $mean_{dec}$=-0.004)
Guider X (σ_{gx}=0.112)
Guider Y (σ_{gy}=0.101)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159647 (exptime=90.00) t [sec]

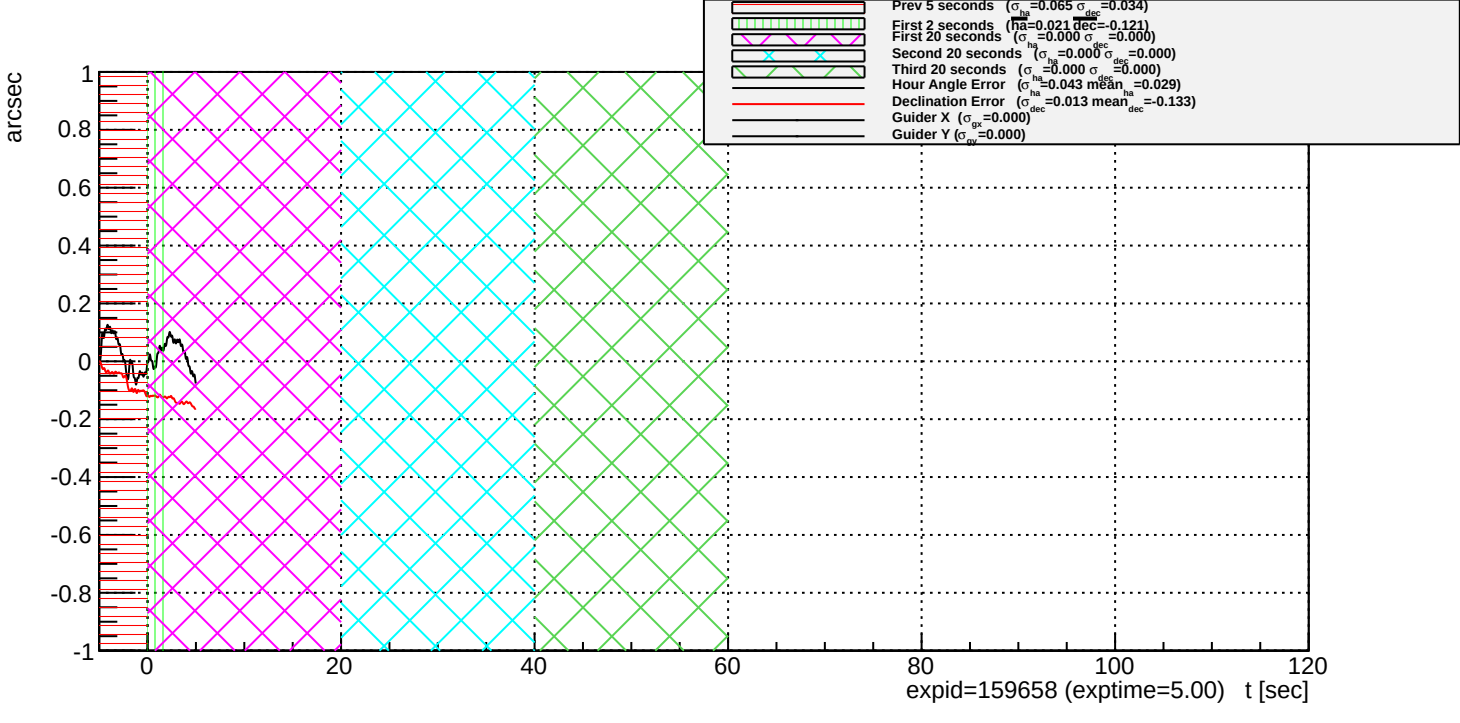

Prev 5 seconds (σ_{ha}=0.102 σ_{dec}=0.012)
First 2 seconds (ha=-0.048 dec=0.005)
First 20 seconds (σ_{ha}=0.082 σ_{dec}=0.012)
Second 20 seconds (σ_{ha}=0.087 σ_{dec}=0.022)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.082 $mean_{ha}$=-0.007)
Declination Error (σ_{dec}=0.023 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.120)
Guider Y (σ_{gy}=0.080)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159648 (exptime=45.00) t [sec]

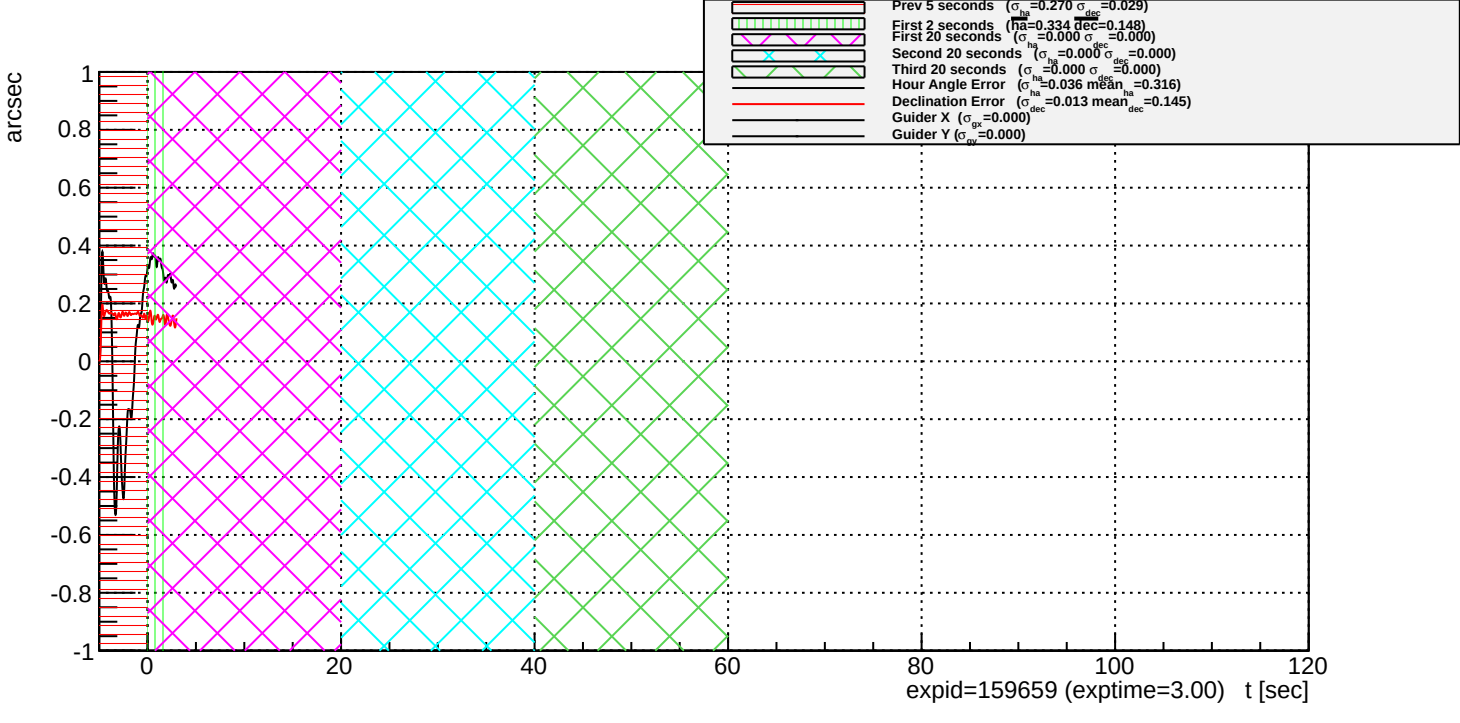

Prev 5 seconds (σ_{ha}=0.059 σ_{dec}=0.009)
First 2 seconds (σ_{ha}=-0.054 σ_{dec}=-0.016)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.050 $mean_{ha}$=0.007)
Declination Error (σ_{dec}=0.010 $mean_{dec}$=-0.026)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159651 (exptime=15.00) t [sec]

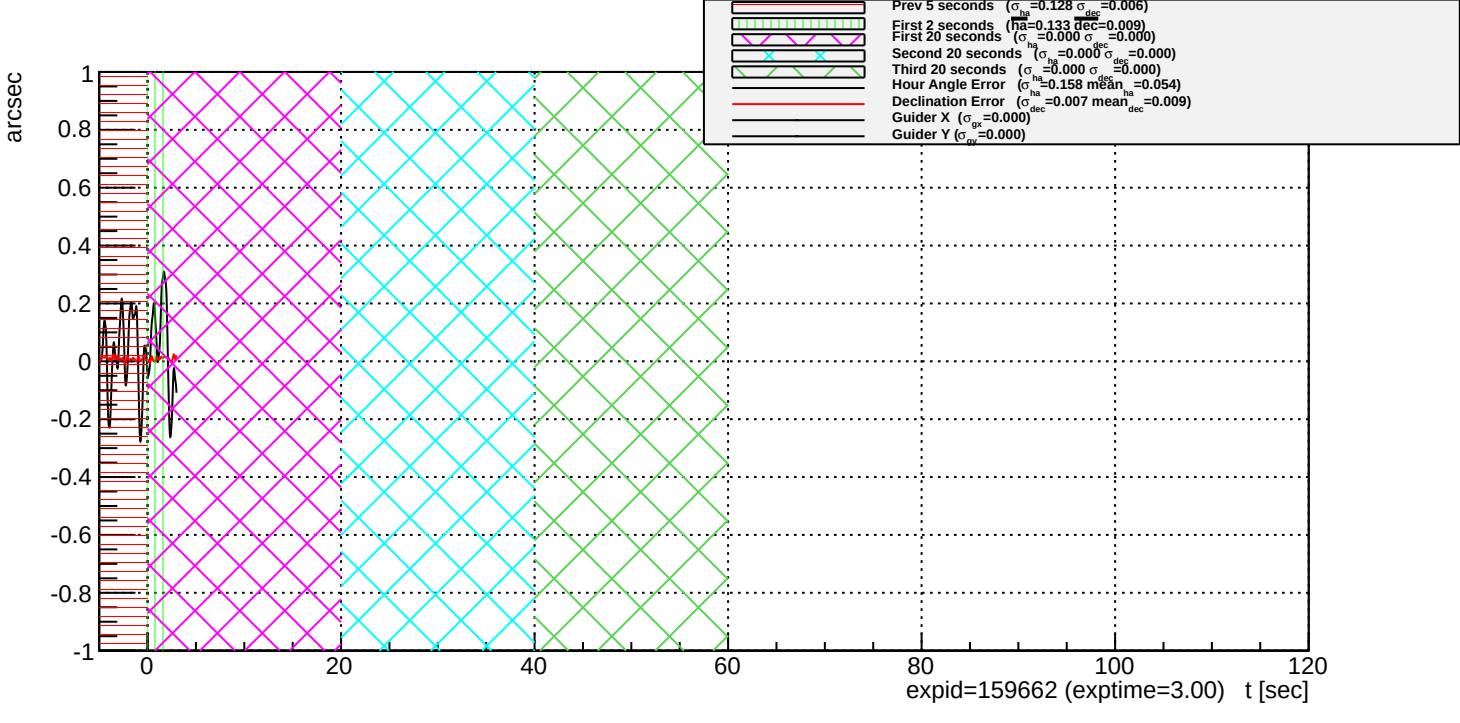

Prev 5 seconds (σ_{ha}=0.120 σ_{dec}=0.012)
First 2 seconds (ha=0.055 dec=0.030)
First 20 seconds (σ_{ha}=0.080 σ_{dec}=0.016)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.080 $mean_{ha}$=0.006)
Declination Error (σ_{dec}=0.016 $mean_{dec}$=0.000)
Guider X (σ_{gx}= nan)
Guider Y (σ_{gy}= nan)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159653 (exptime=20.00) t [sec]

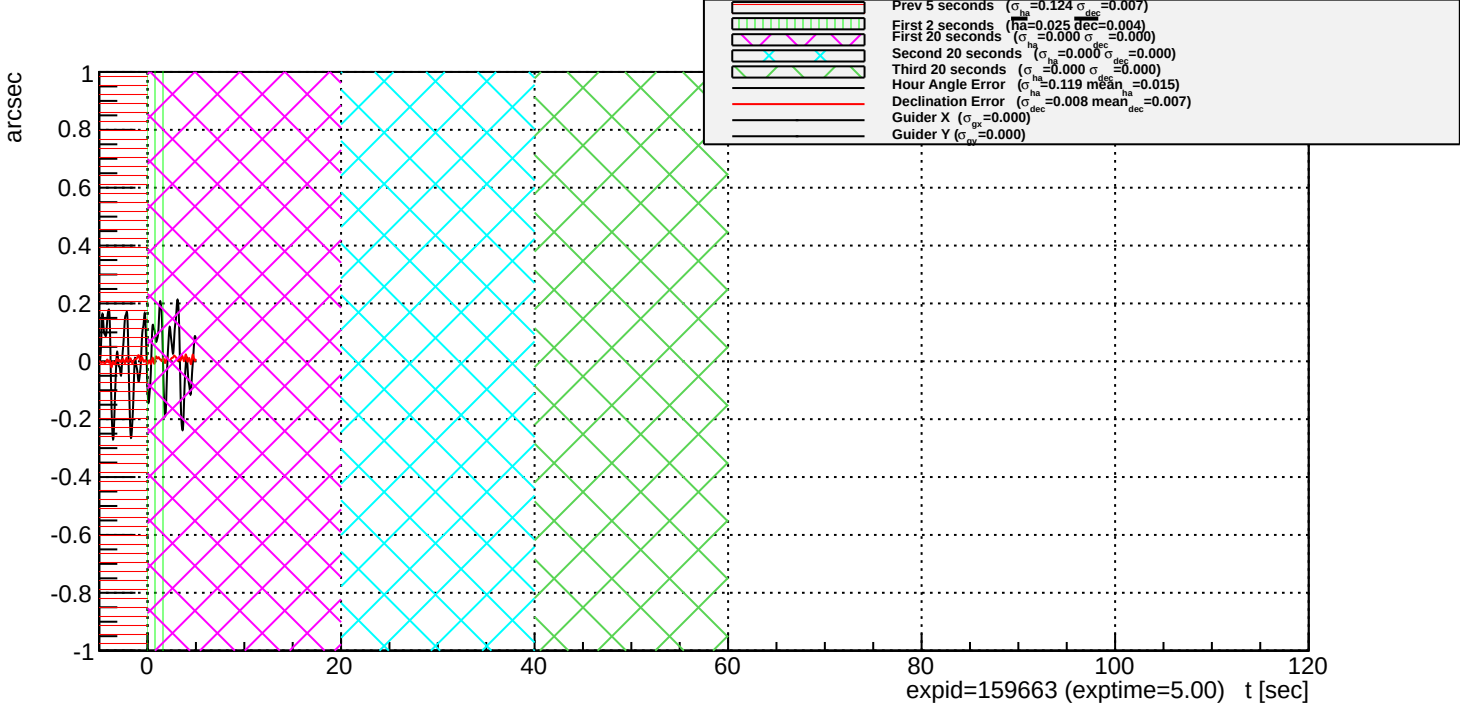

Prev 5 seconds (σ_{ha}=0.044 σ_{dec}=0.029)
First 2 seconds (ha=0.059 dec=0.093)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.039 $mean_{ha}$=0.039)
Declination Error (σ_{dec}=0.014 $mean_{dec}$=0.086)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159654 (exptime=3.00)
t [sec]


Prev 5 seconds (σ_{ha}=0.058 σ_{dec}=0.006)
First 2 seconds (ha=-0.123 dec=-0.034)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.039 $mean_{ha}$=-0.106)
Declination Error (σ_{dec}=0.010 $mean_{dec}$=-0.028)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159657 (exptime=3.00) t [sec]


Prev 5 seconds (σ_{ha}=0.065 σ_{dec}=0.034)
First 2 seconds (ha=0.021 dec=-0.121)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.043 $mean_{ha}$=0.029)
Declination Error (σ_{dec}=0.013 $mean_{dec}$=-0.133)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159658 (exptime=5.00)
t [sec]


Prev 5 seconds (σ_{ha}=0.270 σ_{dec}=0.029)
First 2 seconds (ha=0.334 dec=0.148)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.036 $mean_{ha}$=0.316)
Declination Error (σ_{dec}=0.013 $mean_{dec}$=0.145)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159659 (exptime=3.00)
t [sec]


Prev 5 seconds (σ_{ha}=0.128 σ_{dec}=0.006)
First 2 seconds (ha=0.133 dec=0.009)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.158 $mean_{ha}$=0.054)
Declination Error (σ_{dec}=0.007 $mean_{dec}$=0.009)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159662 (exptime=3.00)
t [sec]


Prev 5 seconds (σ_{ha}=0.124 σ_{dec}=0.007)
First 2 seconds (ha=0.025 dec=0.004)
First 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Second 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Third 20 seconds (σ_{ha}=0.000 σ_{dec}=0.000)
Hour Angle Error (σ_{ha}=0.119 $mean_{ha}$=0.015)
Declination Error (σ_{dec}=0.008 $mean_{dec}$=0.007)
Guider X (σ_{gx}=0.000)
Guider Y (σ_{gy}=0.000)
arcsec
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
0
20
40
60
80
100
120
expid=159663 (exptime=5.00) t [sec]