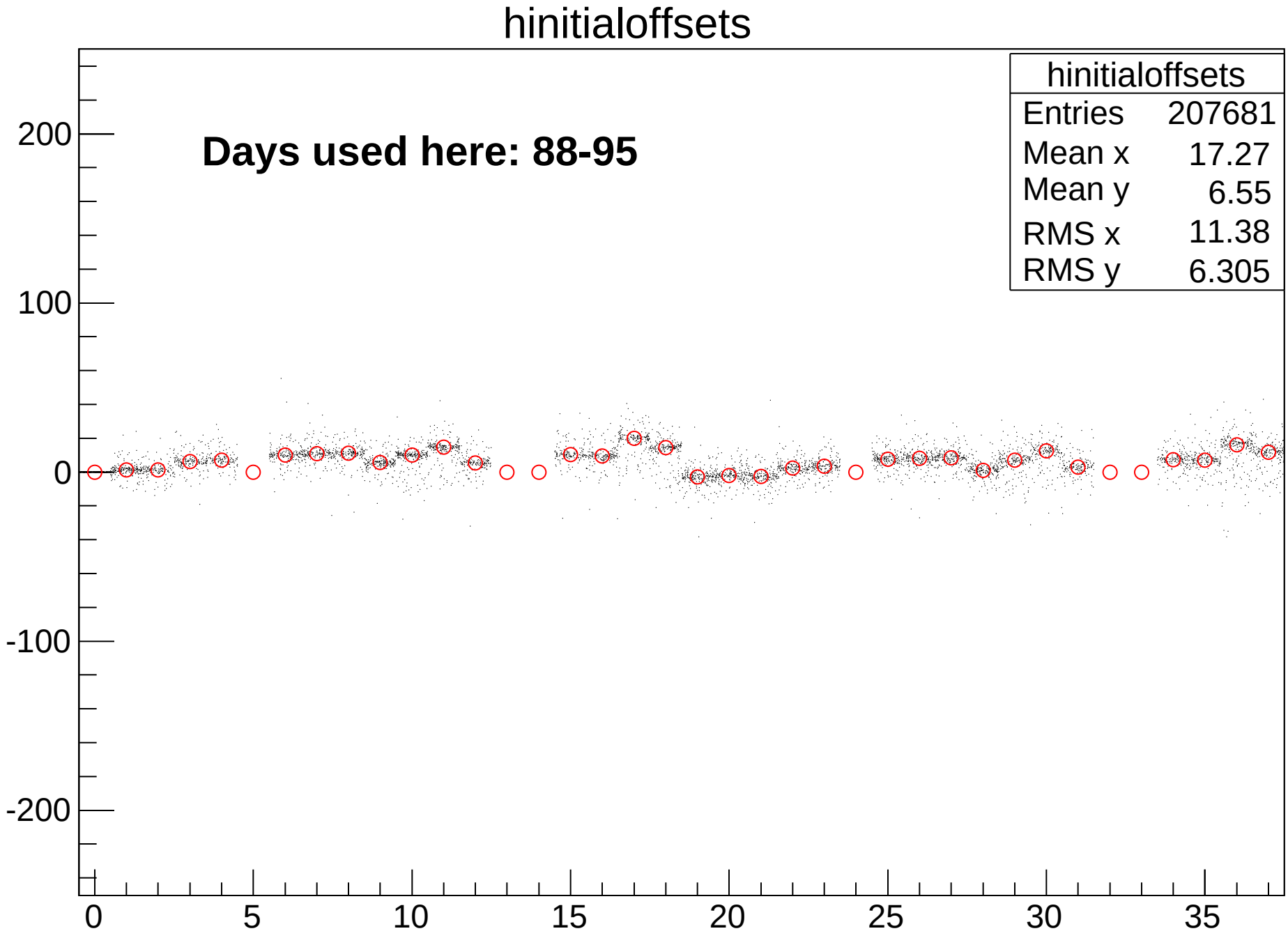
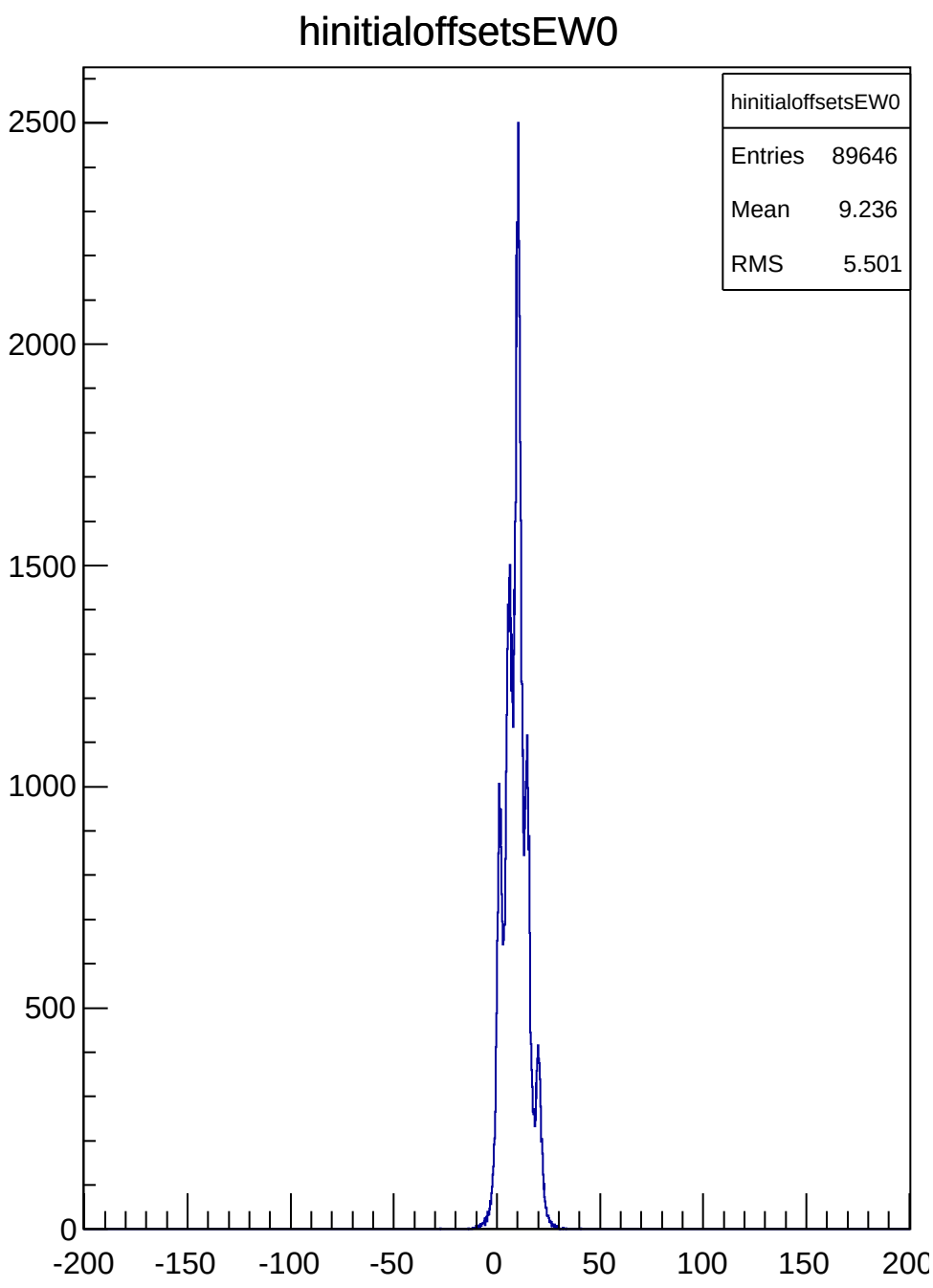
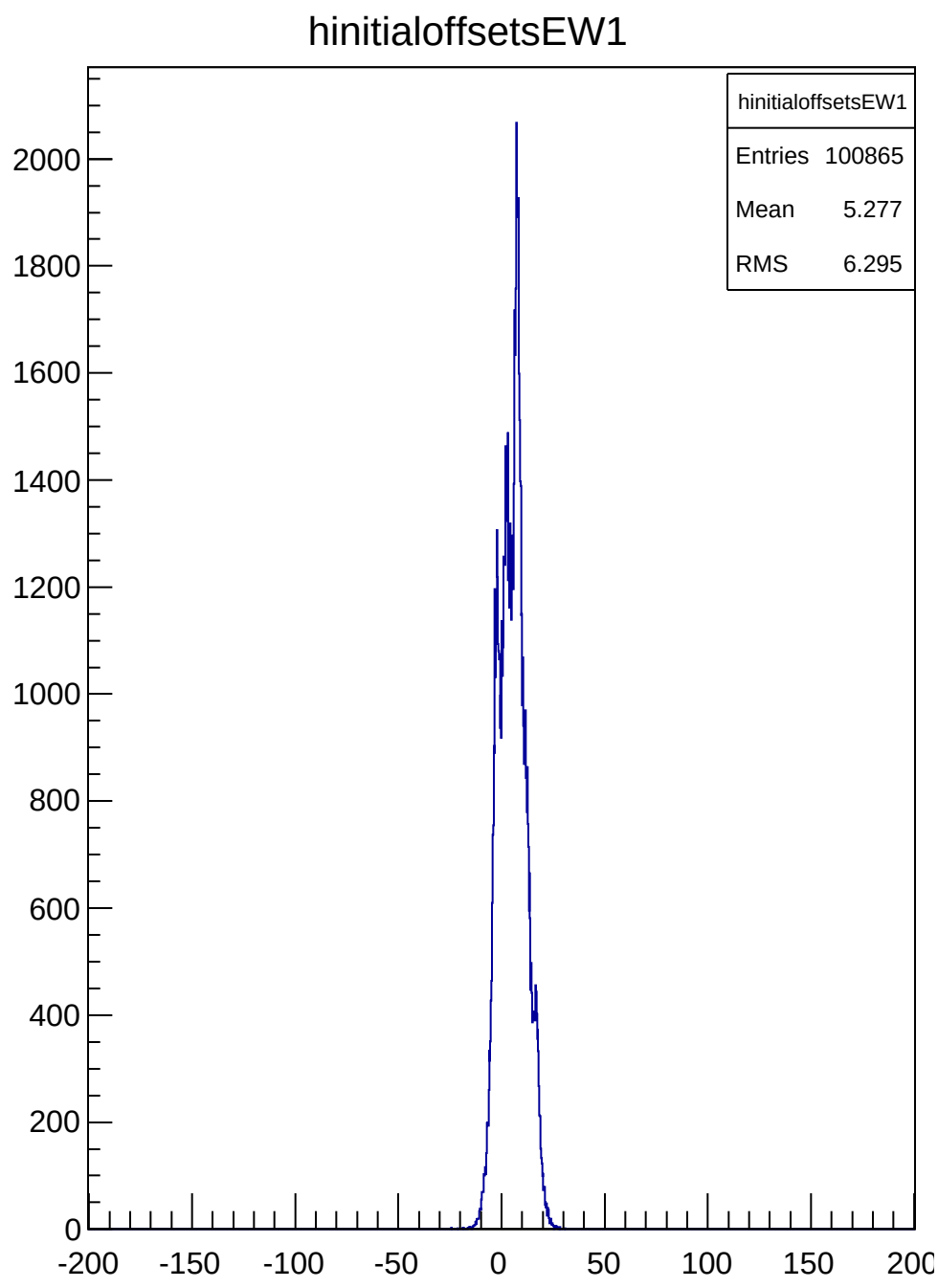
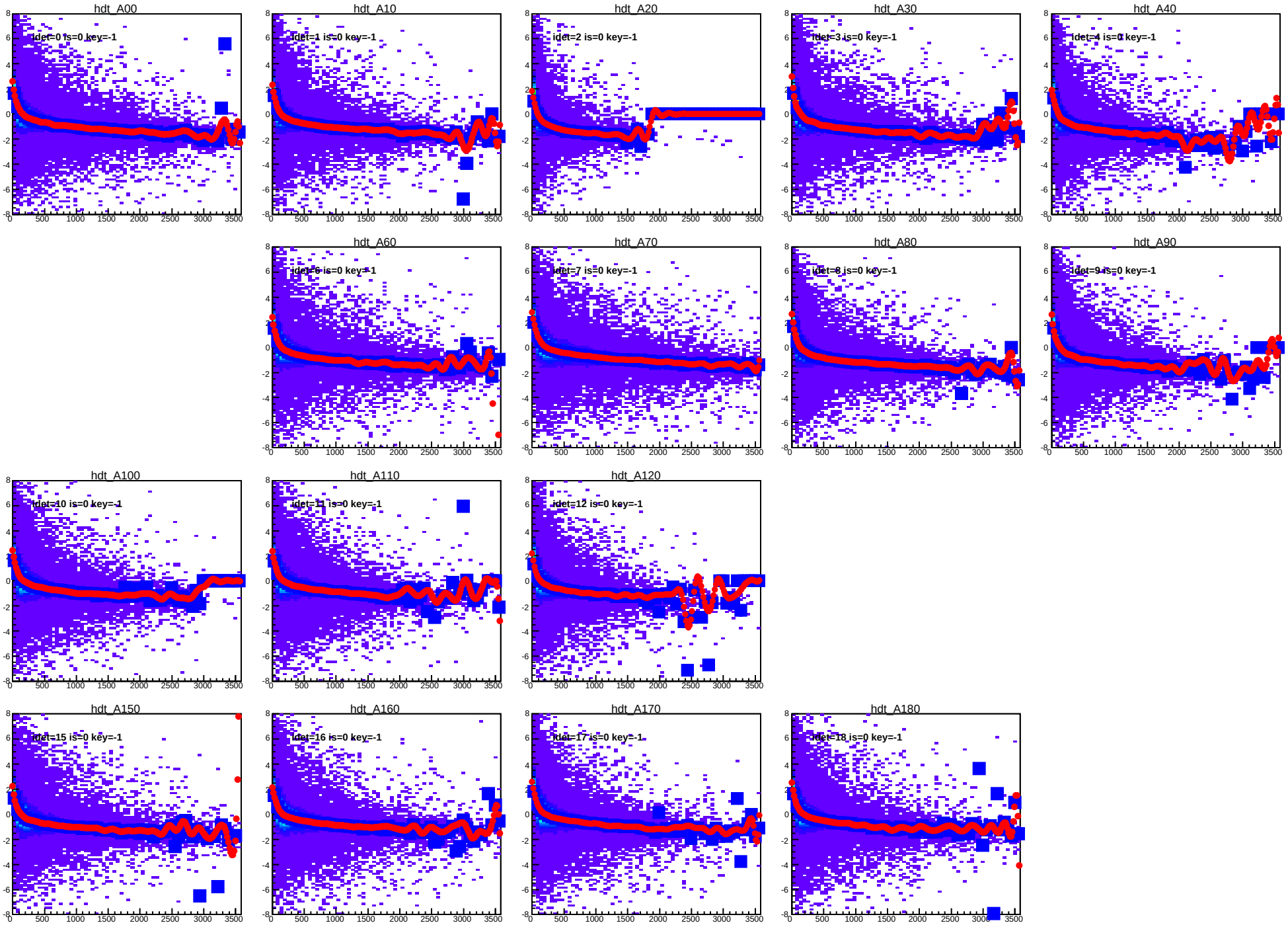
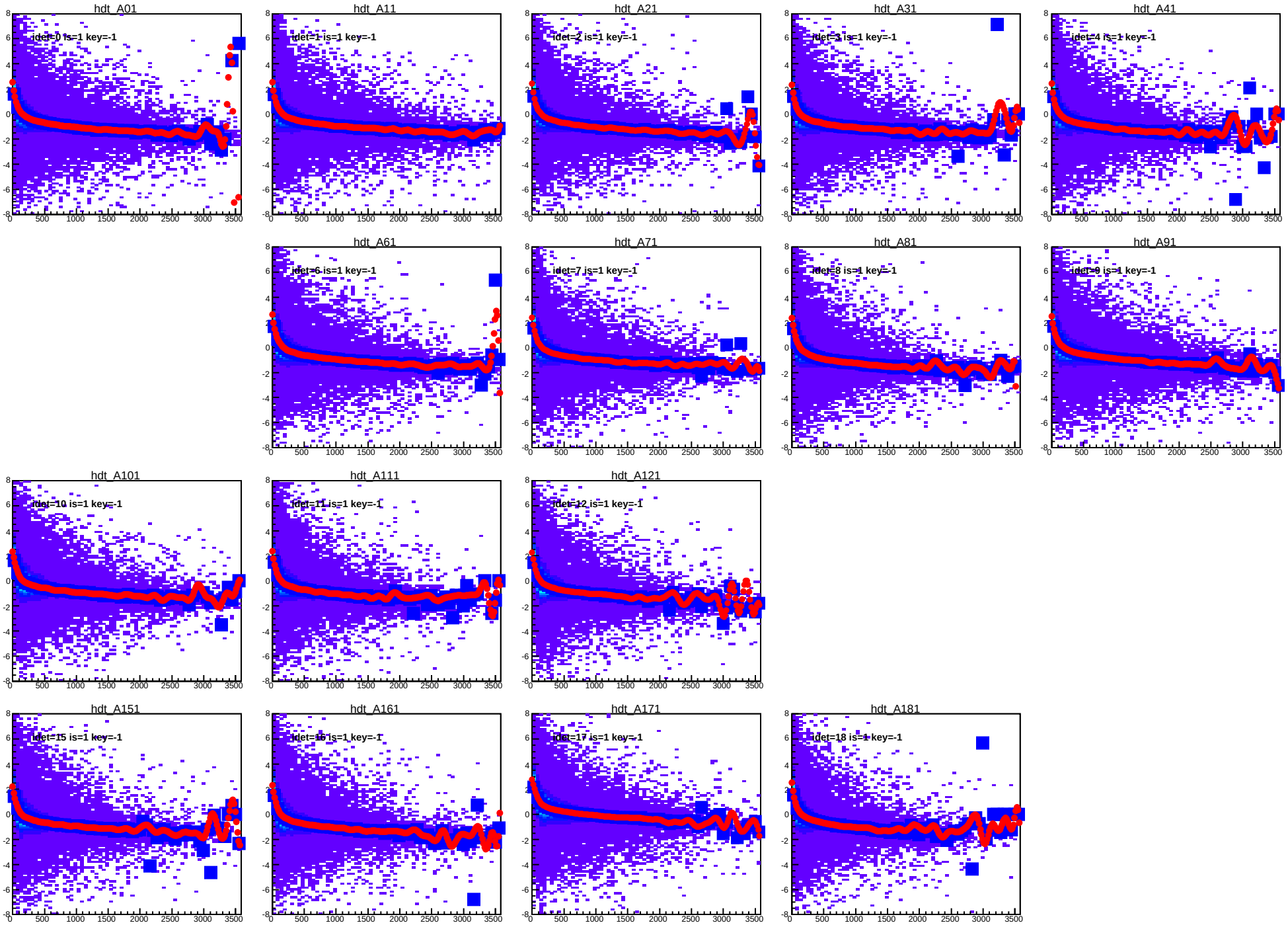
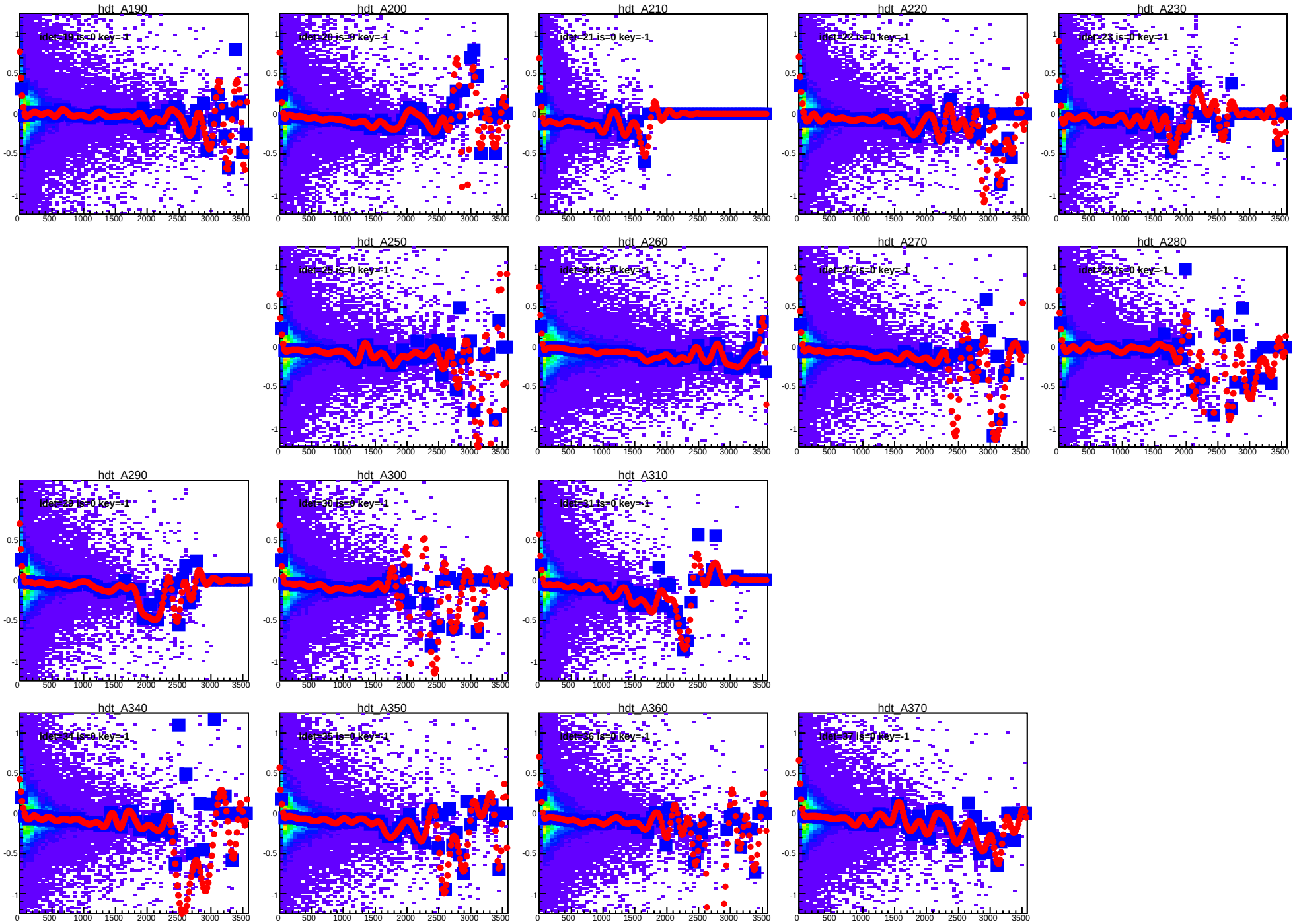

hinitialoffsets
Days used here: 88-95
hinitialoffsets
Entries 207681
Mean x 17.27
Mean y 6.55
RMS x 11.38
RMS y 6.305
200
100
0
-100
-200
0
5
10
15
20
25
30
35

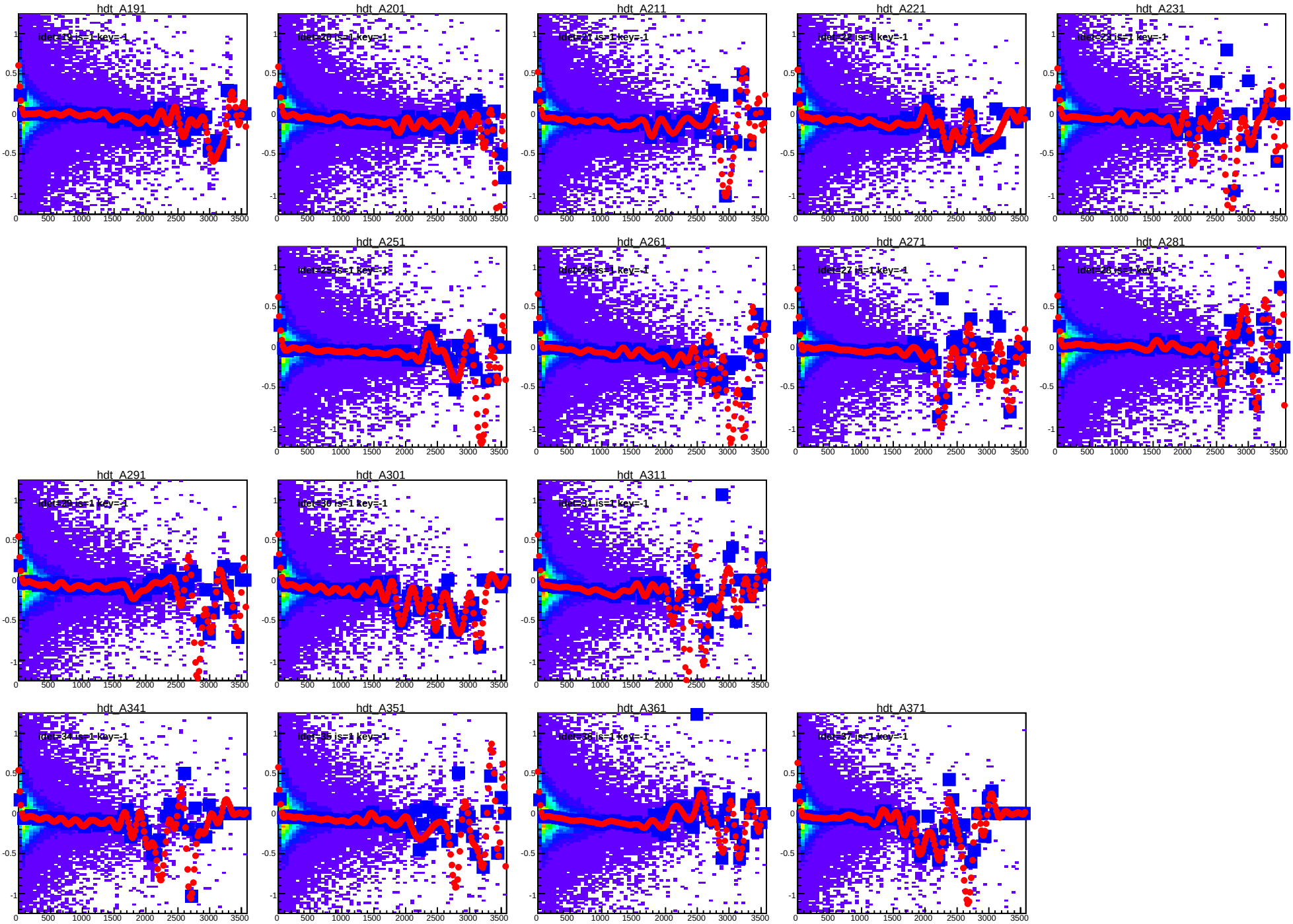

hinitialoffsetsEW0
hinitialoffsetsEW0
Entries 89646
Mean 9.236
RMS 5.501
2500
2000
1500
1000
500
0
-200
-150
-100
-50
0
50
100
150
200

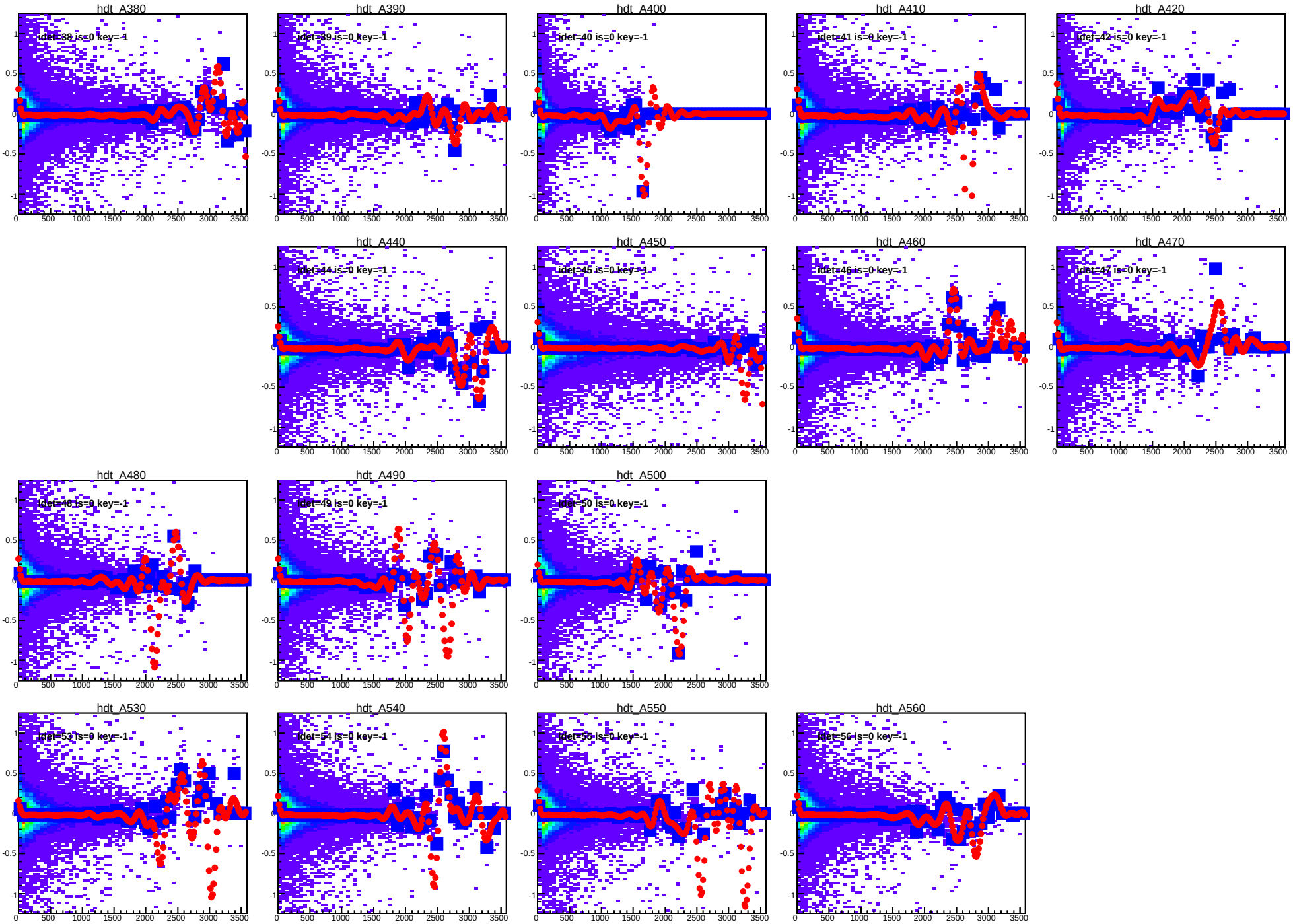

hinitialoffsetsEW1
hinitialoffsetsEW1
Entries 100865
Mean 5.277
RMS 6.295
2000
1800
1600
1400
1200
1000
800
600
400
200
0
-200
-150
-100
-50
0
50
100
150
200


hdt_A00
idet=0 is=0 key=-1
hdt_A10
idet=1 is=0 key=-1
hdt_A20
idet=2 is=0 key=-1
hdt_A30
idet=3 is=0 key=-1
hdt_A40
idet=4 is=0 key=-1
hdt_A60
idet=6 is=0 key=-1
hdt_A70
idet=7 is=0 key=-1
hdt_A80
idet=8 is=0 key=-1
hdt_A90
idet=9 is=0 key=-1
hdt_A100
idet=10 is=0 key=-1
hdt_A110
idet=11 is=0 key=-1
hdt_A120
idet=12 is=0 key=-1
hdt_A150
idet=15 is=0 key=-1
hdt_A160
idet=16 is=0 key=-1
hdt_A170
idet=17 is=0 key=-1
hdt_A180
idet=18 is=0 key=-1


hdt_A01
idet=0 is=1 key=-1
hdt_A11
idet=1 is=1 key=-1
hdt_A21
idet=2 is=1 key=-1
hdt_A31
idet=3 is=1 key=-1
hdt_A41
idet=4 is=1 key=-1
hdt_A61
idet=6 is=1 key=-1
hdt_A71
idet=7 is=1 key=-1
hdt_A81
idet=8 is=1 key=-1
hdt_A91
idet=9 is=1 key=-1
hdt_A101
idet=10 is=1 key=-1
hdt_A111
idet=11 is=1 key=-1
hdt_A121
idet=12 is=1 key=-1
hdt_A151
idet=15 is=1 key=-1
hdt_A161
idet=16 is=1 key=-1
hdt_A171
idet=17 is=1 key=-1
hdt_A181
idet=18 is=1 key=-1


hdt_A190
idet=19 is=0 key=-1
hdt_A200
idet=20 is=0 key=-1
hdt_A210
idet=21 is=0 key=-1
hdt_A220
idet=22 is=0 key=-1
hdt_A230
idet=23 is=0 key=-1
hdt_A250
idet=25 is=0 key=-1
hdt_A260
idet=26 is=0 key=-1
hdt_A270
idet=27 is=0 key=-1
hdt_A280
idet=28 is=0 key=-1
hdt_A290
idet=29 is=0 key=-1
hdt_A300
idet=30 is=0 key=-1
hdt_A310
idet=31 is=0 key=-1
hdt_A340
idet=34 is=0 key=-1
hdt_A350
idet=35 is=0 key=-1
hdt_A360
idet=36 is=0 key=-1
hdt_A370
idet=37 is=0 key=-1


hdt_A191
idet=19 is=1 key=-1
hdt_A201
idet=20 is=1 key=-1
hdt_A211
idet=21 is=1 key=-1
hdt_A221
idet=22 is=1 key=-1
hdt_A231
idet=23 is=1 key=-1
hdt_A251
idet=25 is=1 key=-1
hdt_A261
idet=26 is=1 key=-1
hdt_A271
idet=27 is=1 key=-1
hdt_A281
idet=28 is=1 key=-1
hdt_A291
idet=29 is=1 key=-1
hdt_A301
idet=30 is=1 key=-1
hdt_A311
idet=31 is=1 key=-1
hdt_A341
idet=34 is=1 key=-1
hdt_A351
idet=35 is=1 key=-1
hdt_A361
idet=36 is=1 key=-1
hdt_A371
idet=37 is=1 key=-1


hdt_A380
idet=38 is=0 key=-1
hdt_A390
idet=39 is=0 key=-1
hdt_A400
idet=40 is=0 key=-1
hdt_A410
idet=41 is=0 key=-1
hdt_A420
idet=42 is=0 key=-1
hdt_A440
idet=44 is=0 key=-1
hdt_A450
idet=45 is=0 key=-1
hdt_A460
idet=46 is=0 key=-1
hdt_A470
idet=47 is=0 key=-1
hdt_A480
idet=48 is=0 key=-1
hdt_A490
idet=49 is=0 key=-1
hdt_A500
idet=50 is=0 key=-1
hdt_A530
idet=53 is=0 key=-1
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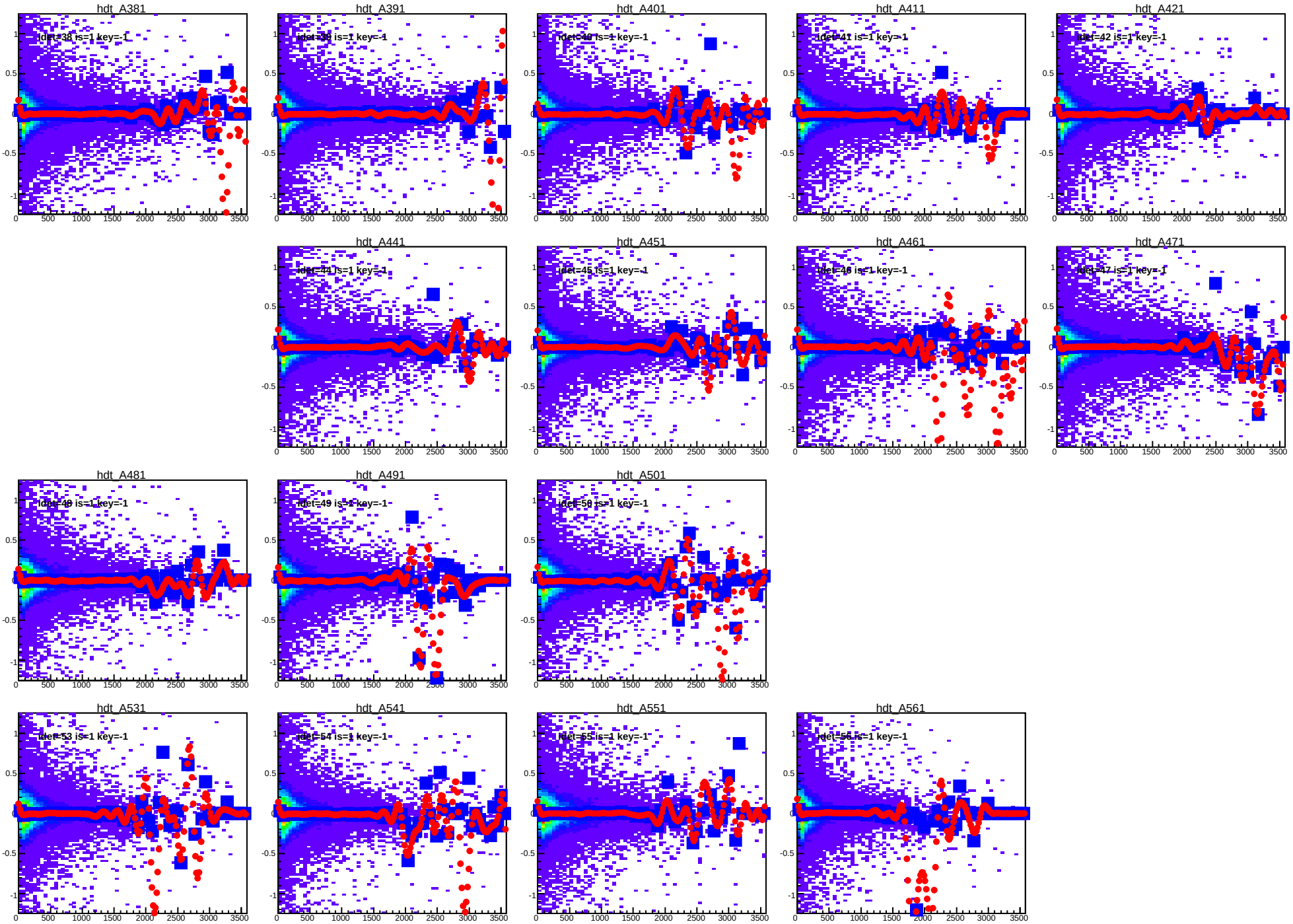
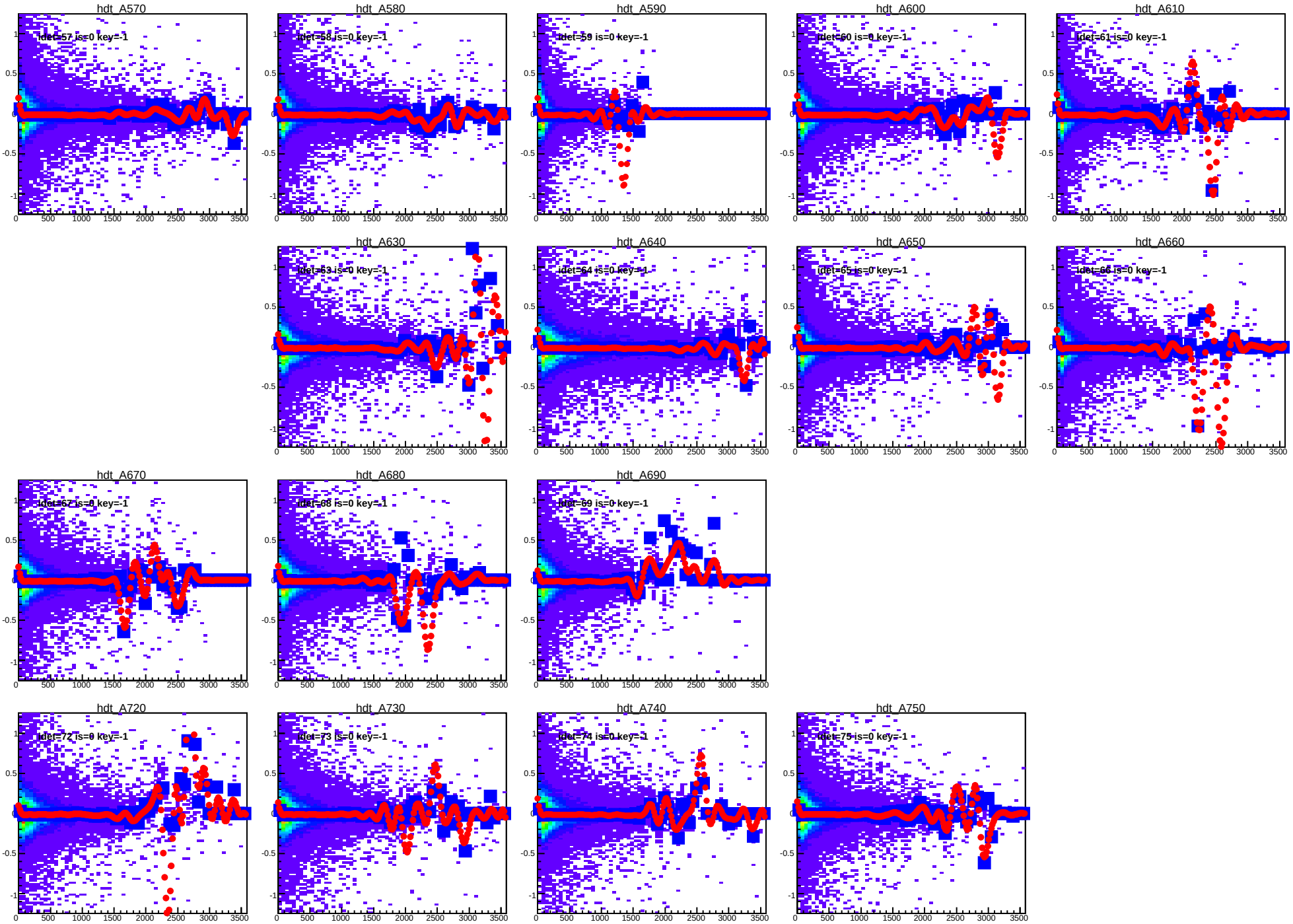
hdt_A560
idet=56 is=0 key=-1


hdt_A381
idet=38 is=1 key=-1
hdt_A391
idet=39 is=1 key=-1
hdt_A401
idet=40 is=1 key=-1
hdt_A411
idet=41 is=1 key=-1
hdt_A421
idet=42 is=1 key=-1
hdt_A441
idet=44 is=1 key=-1
hdt_A451
idet=45 is=1 key=-1
hdt_A461
idet=46 is=1 key=-1
hdt_A471
idet=47 is=1 key=-1
hdt_A481
idet=48 is=1 key=-1
hdt_A491
idet=49 is=1 key=-1
hdt_A501
idet=50 is=1 key=-1
hdt_A531
idet=53 is=1 key=-1
hdt_A541
idet=54 is=1 key=-1
hdt_A551
idet=55 is=1 key=-1
hdt_A561
idet=56 is=1 key=-1


hdt_A570
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hdt_A580
idet=58 is=0 key=-1
hdt_A590
idet=59 is=0 key=-1
hdt_A600
idet=60 is=0 key=-1
hdt_A610
idet=61 is=0 key=-1
hdt_A630
idet=63 is=0 key=-1
hdt_A640
idet=64 is=0 key=-1
hdt_A650
idet=65 is=0 key=-1
hdt_A660
idet=66 is=0 key=-1
hdt_A670
idet=67 is=0 key=-1
hdt_A680
idet=68 is=0 key=-1
hdt_A690
idet=69 is=0 key=-1
hdt_A720
idet=72 is=0 key=-1
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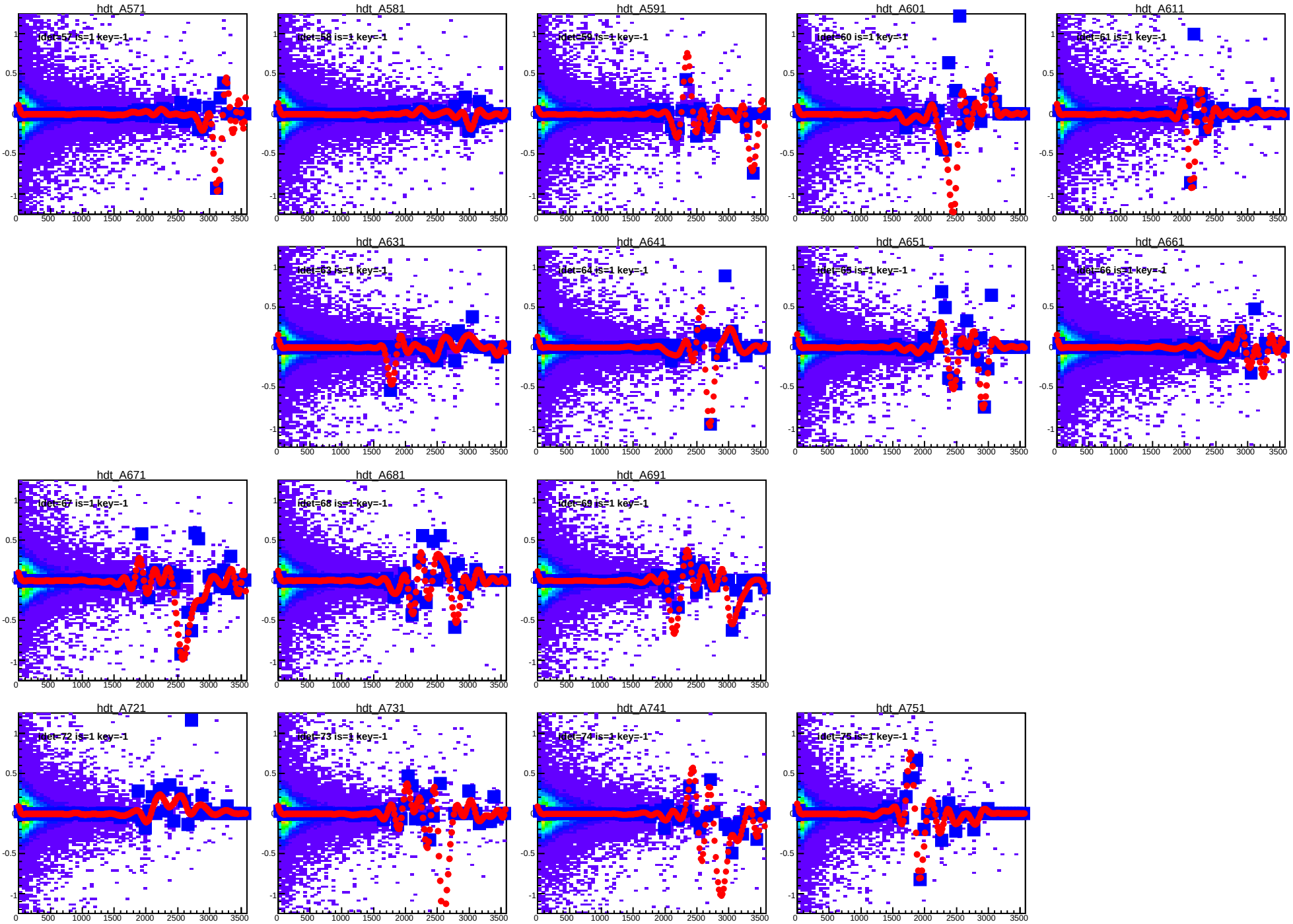
idet=73 is=0 key=-1
hdt_A740
idet=74 is=0 key=-1
hdt_A750
idet=75 is=0 key=-1


hdt_A571
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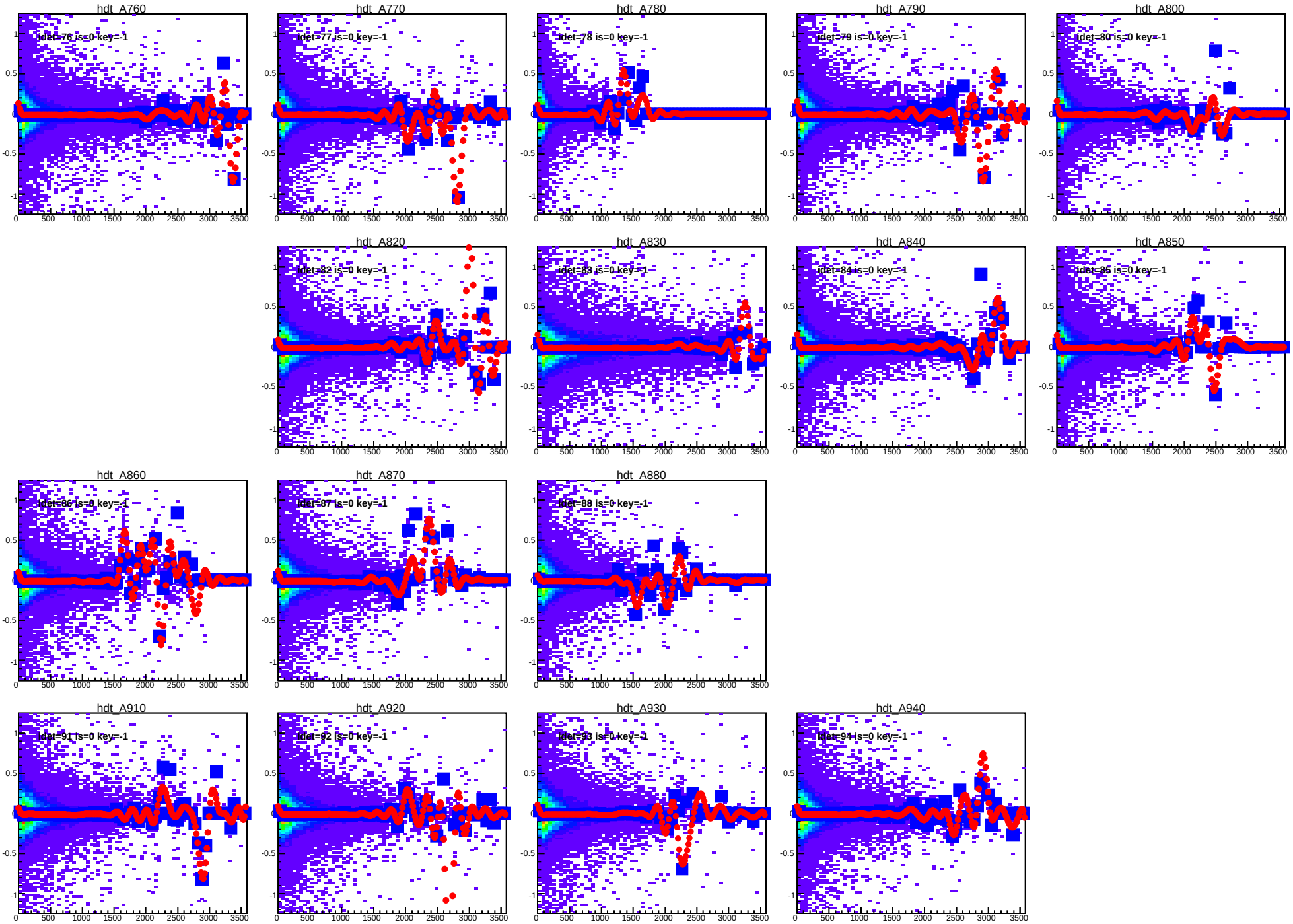
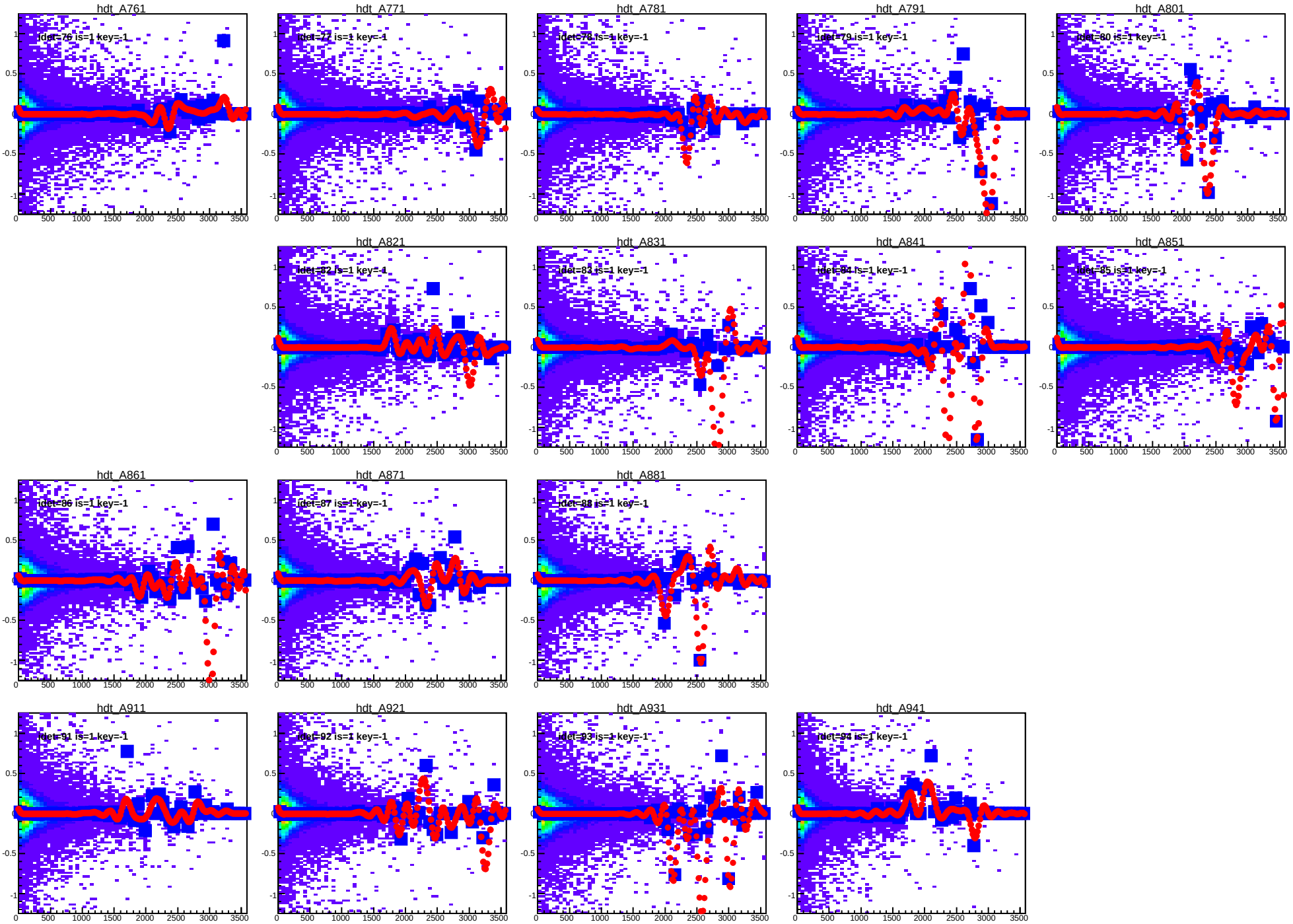
hdt_A581
idet=58 is=1 key=-1
hdt_A591
idet=59 is=1 key=-1
hdt_A601
idet=60 is=1 key=-1
hdt_A611
idet=61 is=1 key=-1
hdt_A631
idet=63 is=1 key=-1
hdt_A641
idet=64 is=1 key=-1
hdt_A651
idet=65 is=1 key=-1
hdt_A661
idet=66 is=1 key=-1
hdt_A671
idet=67 is=1 key=-1
hdt_A681
idet=68 is=1 key=-1
hdt_A691
idet=69 is=1 key=-1
hdt_A721
idet=72 is=1 key=-1
hdt_A731
idet=73 is=1 key=-1
hdt_A741
idet=74 is=1 key=-1
hdt_A751
idet=75 is=1 key=-1


hdt_A760
idet=76 is=0 key=-1
hdt_A770
idet=77 is=0 key=-1
hdt_A780
idet=78 is=0 key=-1
hdt_A790
idet=79 is=0 key=-1
hdt_A800
idet=80 is=0 key=-1
hdt_A820
idet=82 is=0 key=-1
hdt_A830
idet=83 is=0 key=-1
hdt_A840
idet=84 is=0 key=-1
hdt_A850
idet=85 is=0 key=-1
hdt_A860
idet=86 is=0 key=-1
hdt_A870
idet=87 is=0 key=-1
hdt_A880
idet=88 is=0 key=-1
hdt_A910
idet=91 is=0 key=-1
hdt_A920
idet=92 is=0 key=-1
hdt_A930
idet=93 is=0 key=-1
hdt_A940
idet=94 is=0 key=-1


hdt_A761
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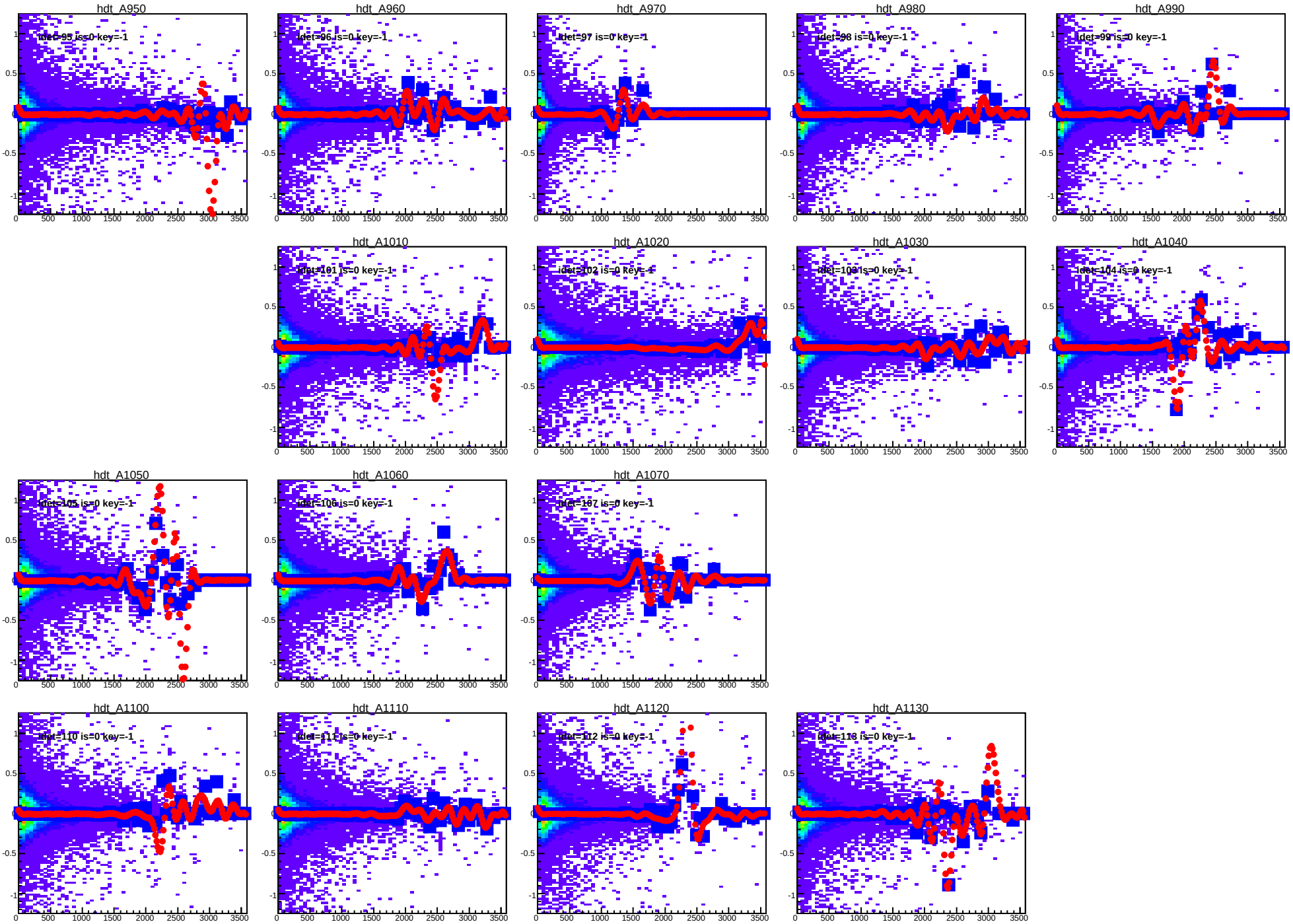
hdt_A771
idet=77 is=1 key=-1
hdt_A781
idet=78 is=1 key=-1
hdt_A791
idet=79 is=1 key=-1
hdt_A801
idet=80 is=1 key=-1
hdt_A821
idet=82 is=1 key=-1
hdt_A831
idet=83 is=1 key=-1
hdt_A841
idet=84 is=1 key=-1
hdt_A851
idet=85 is=1 key=-1
hdt_A861
idet=86 is=1 key=-1
hdt_A871
idet=87 is=1 key=-1
hdt_A881
idet=88 is=1 key=-1
hdt_A911
idet=91 is=1 key=-1
hdt_A921
idet=92 is=1 key=-1
hdt_A931
idet=93 is=1 key=-1
hdt_A941
idet=94 is=1 key=-1


hdt_A950
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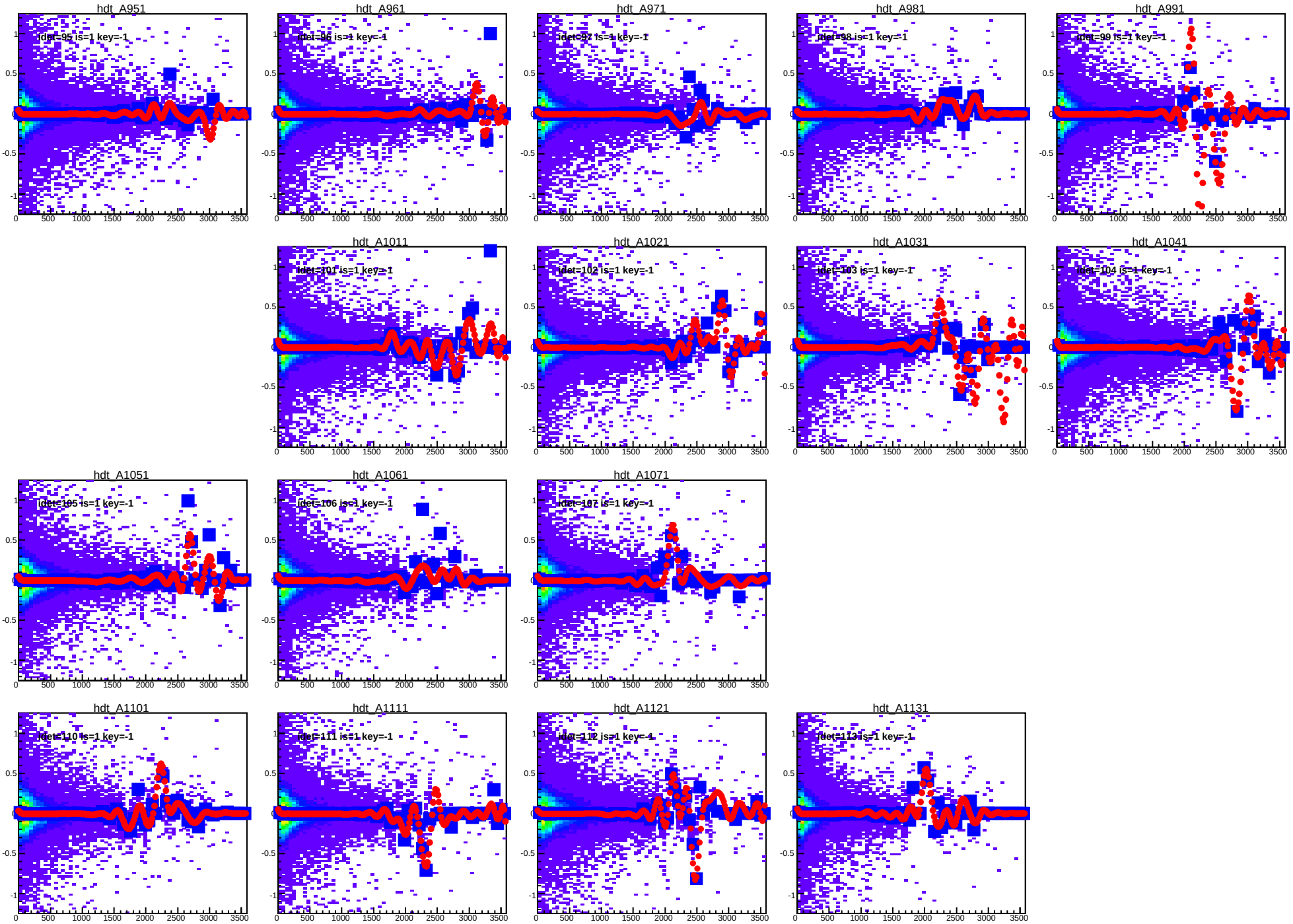
hdt_A960
idet=96 is=0 key=-1
hdt_A970
idet=97 is=0 key=-1
hdt_A980
idet=98 is=0 key=-1
hdt_A990
idet=99 is=0 key=-1
hdt_A1010
idet=101 is=0 key=-1
hdt_A1020
idet=102 is=0 key=-1
hdt_A1030
idet=103 is=0 key=-1
hdt_A1040
idet=104 is=0 key=-1
hdt_A1050
idet=105 is=0 key=-1
hdt_A1060
idet=106 is=0 key=-1
hdt_A1070
idet=107 is=0 key=-1
hdt_A1100
idet=110 is=0 key=-1
hdt_A1110
idet=111 is=0 key=-1
hdt_A1120
idet=112 is=0 key=-1
hdt_A1130
idet=113 is=0 key=-1


hdt_A951
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hdt_A961
idet=96 is=1 key=-1
hdt_A971
idet=97 is=1 key=-1
hdt_A981
idet=98 is=1 key=-1
hdt_A991
idet=99 is=1 key=-1
hdt_A1011
idet=101 is=1 key=-1
hdt_A1021
idet=102 is=1 key=-1
hdt_A1031
idet=103 is=1 key=-1
hdt_A1041
idet=104 is=1 key=-1
hdt_A1051
idet=105 is=1 key=-1
hdt_A1061
idet=106 is=1 key=-1
hdt_A1071
idet=107 is=1 key=-1
hdt_A1101
idet=110 is=1 key=-1
hdt_A1111
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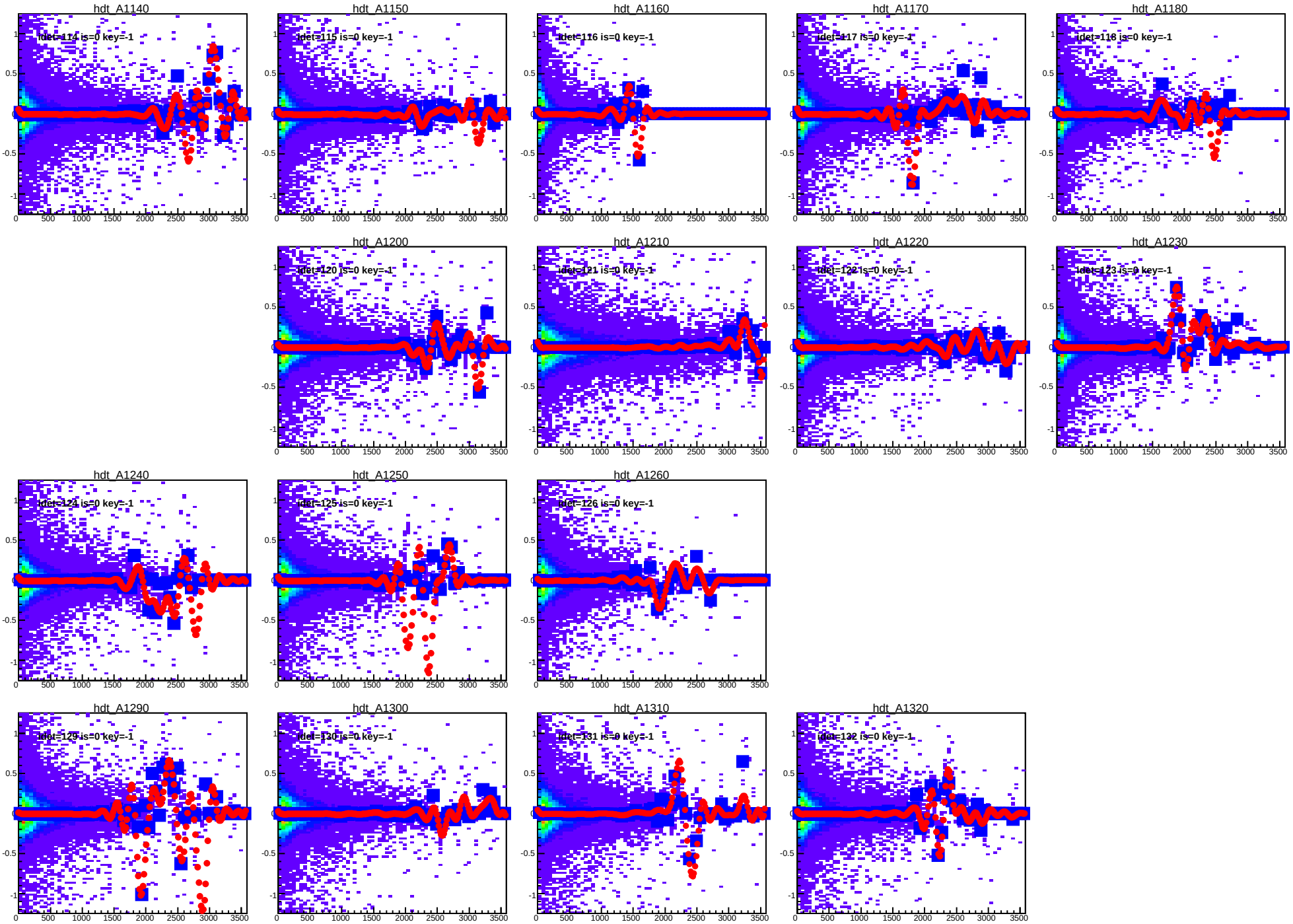
hdt_A1121
idet=112 is=1 key=-1
hdt_A1131
idet=113 is=1 key=-1


hdt_A1140
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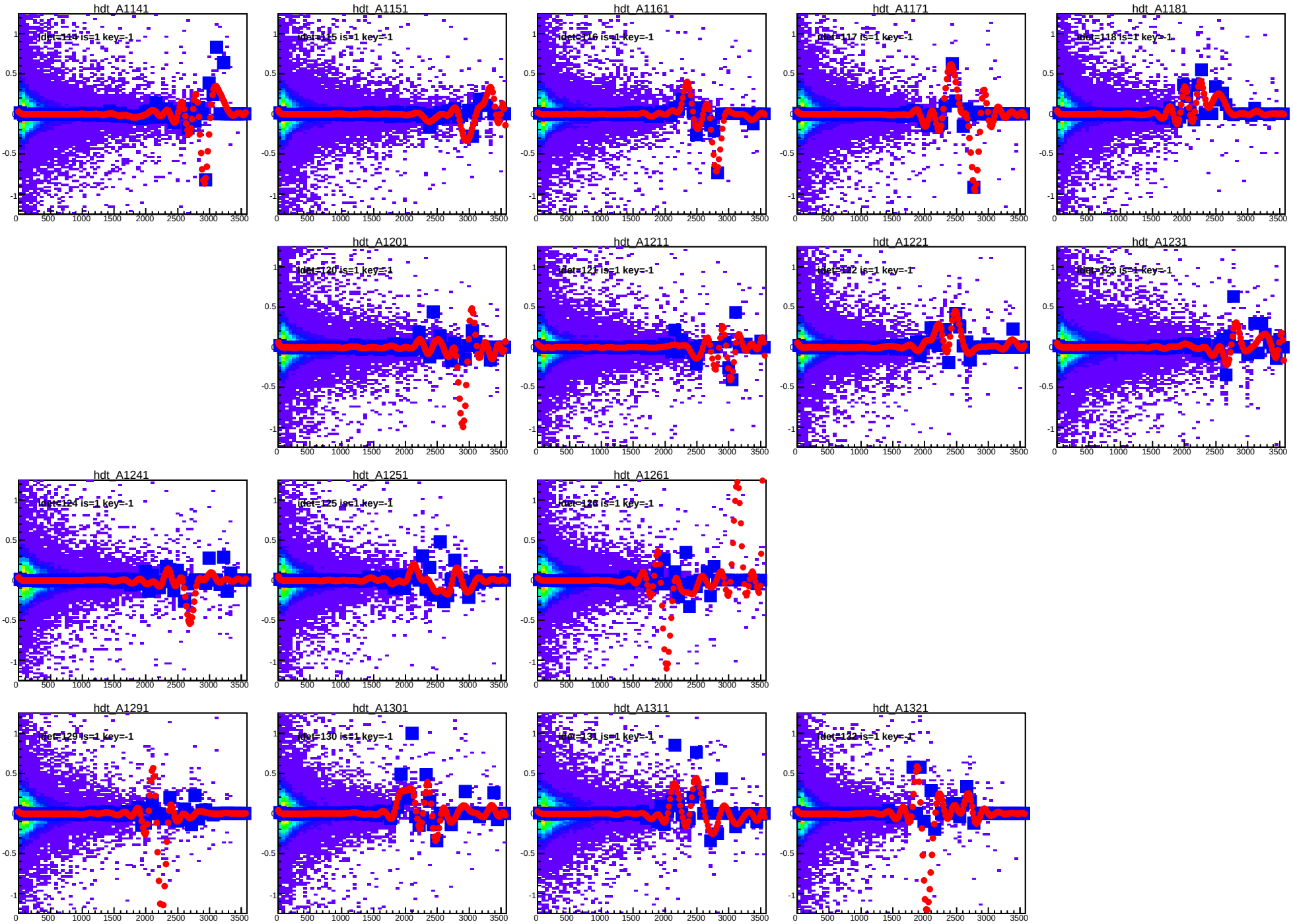
hdt_A1150
idet=115 is=0 key=-1
hdt_A1160
idet=116 is=0 key=-1
hdt_A1170
idet=117 is=0 key=-1
hdt_A1180
idet=118 is=0 key=-1
hdt_A1200
idet=120 is=0 key=-1
hdt_A1210
idet=121 is=0 key=-1
hdt_A1220
idet=122 is=0 key=-1
hdt_A1230
idet=123 is=0 key=-1
hdt_A1240
idet=124 is=0 key=-1
hdt_A1250
idet=125 is=0 key=-1
hdt_A1260
idet=126 is=0 key=-1
hdt_A1290
idet=129 is=0 key=-1
hdt_A1300
idet=130 is=0 key=-1
hdt_A1310
idet=131 is=0 key=-1
hdt_A1320
idet=132 is=0 key=-1


hdt_A1141
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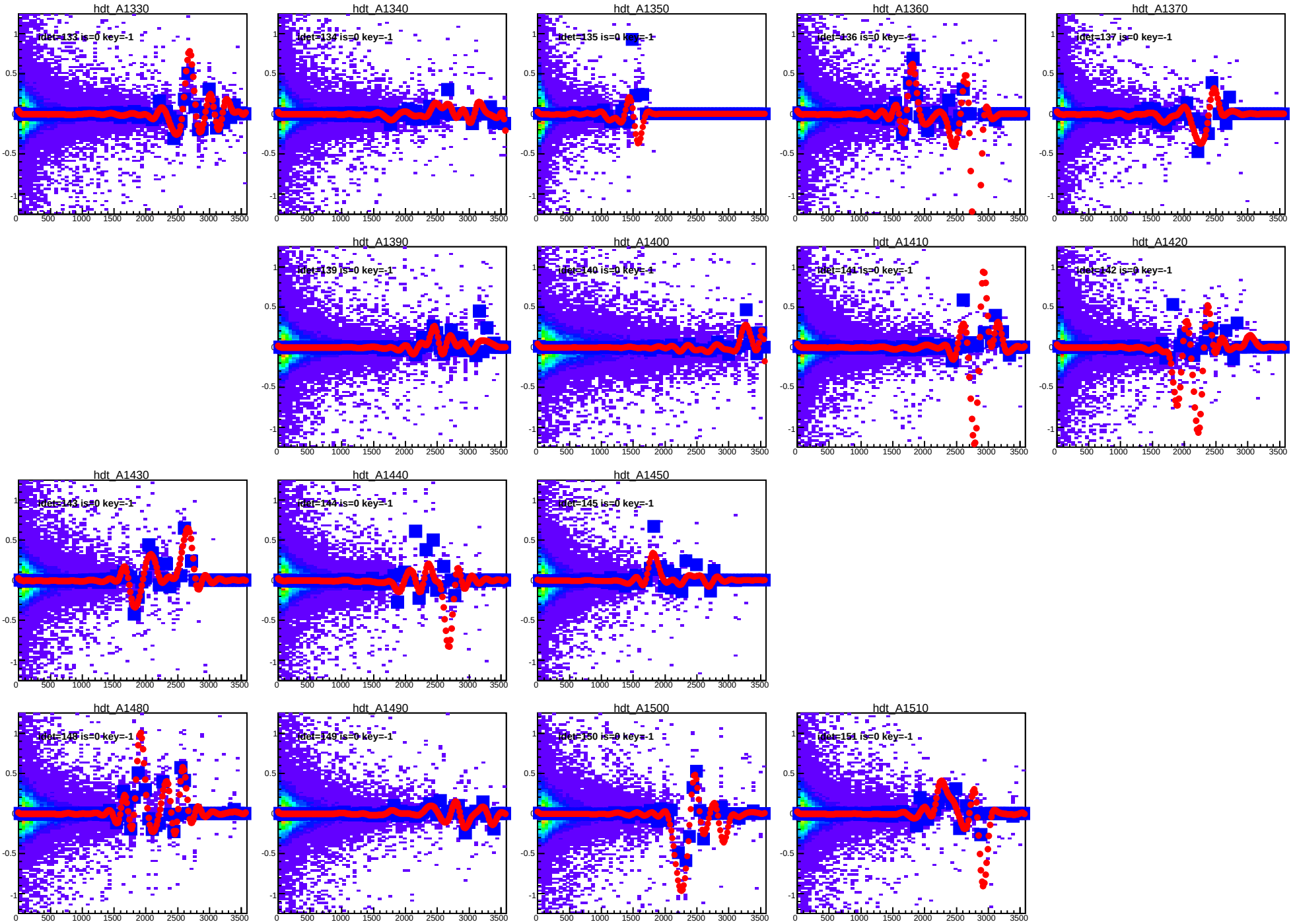
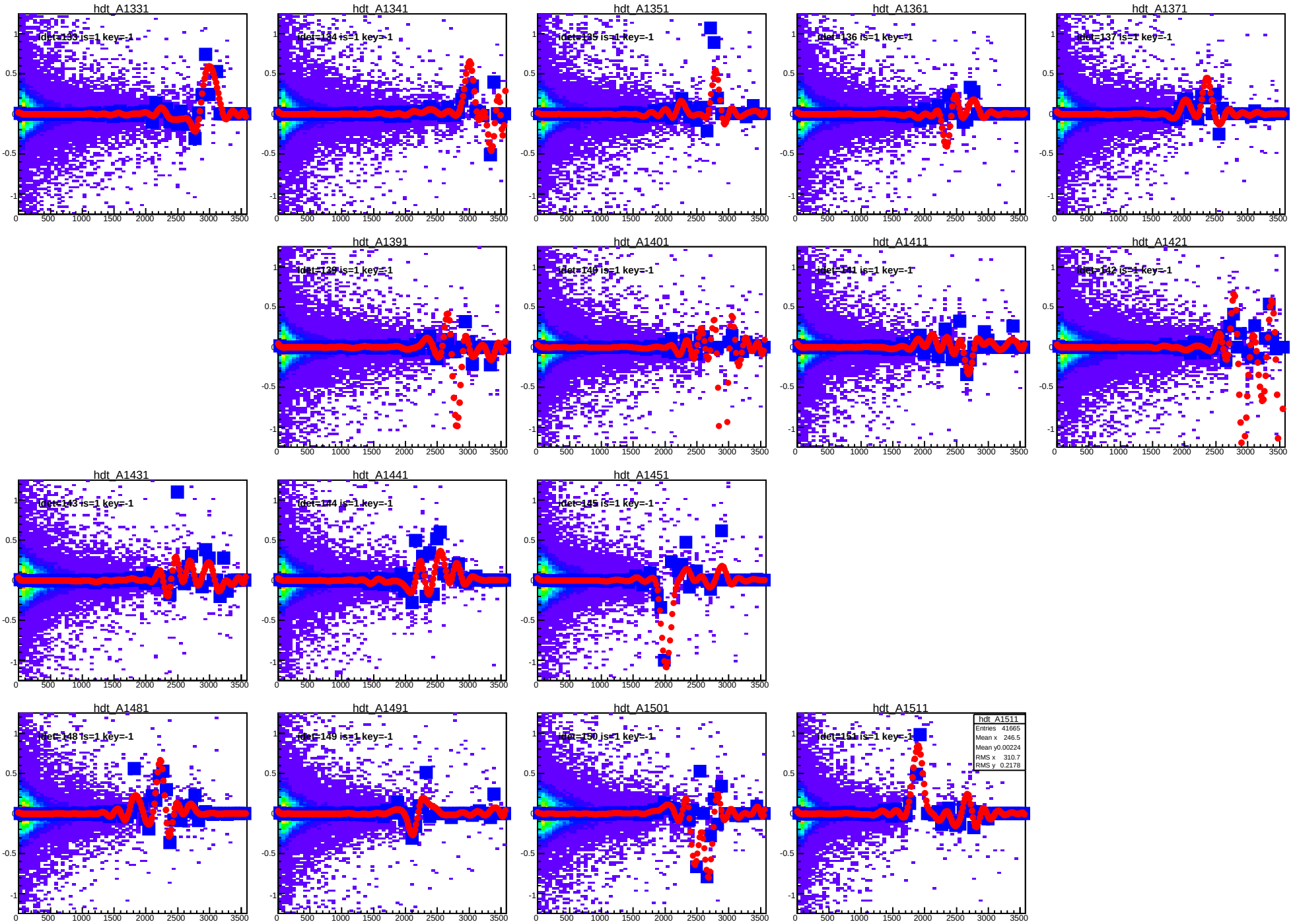
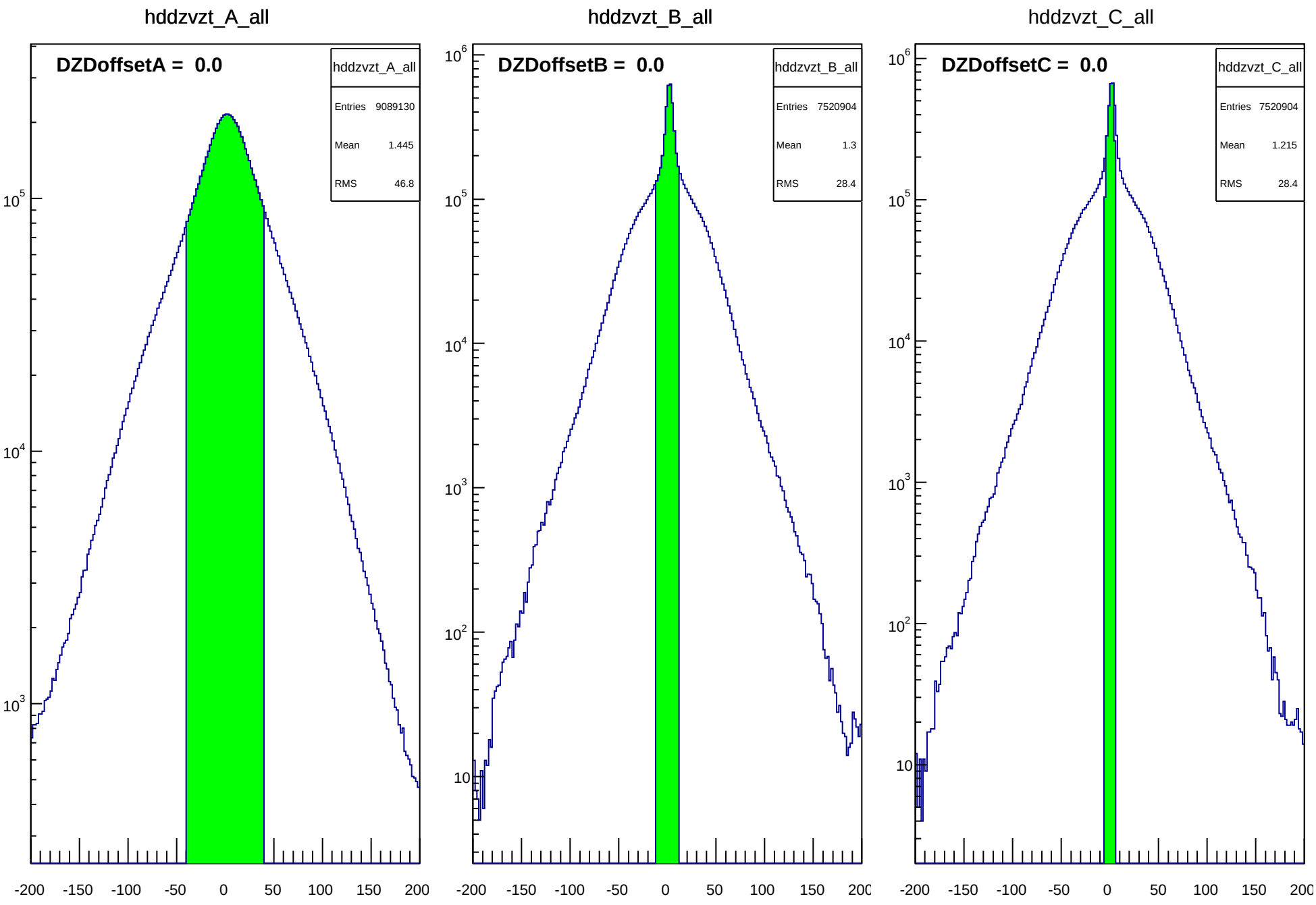
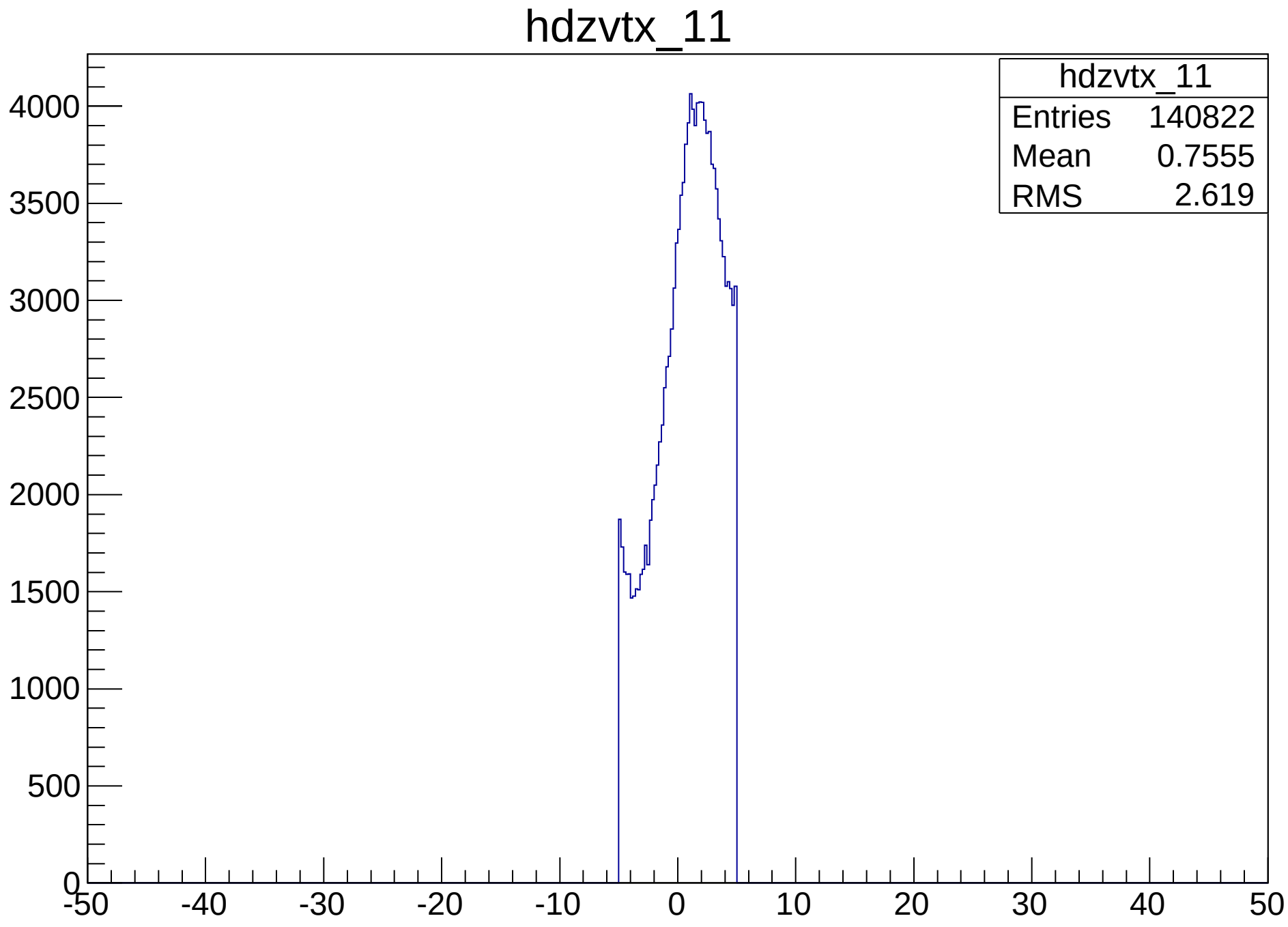
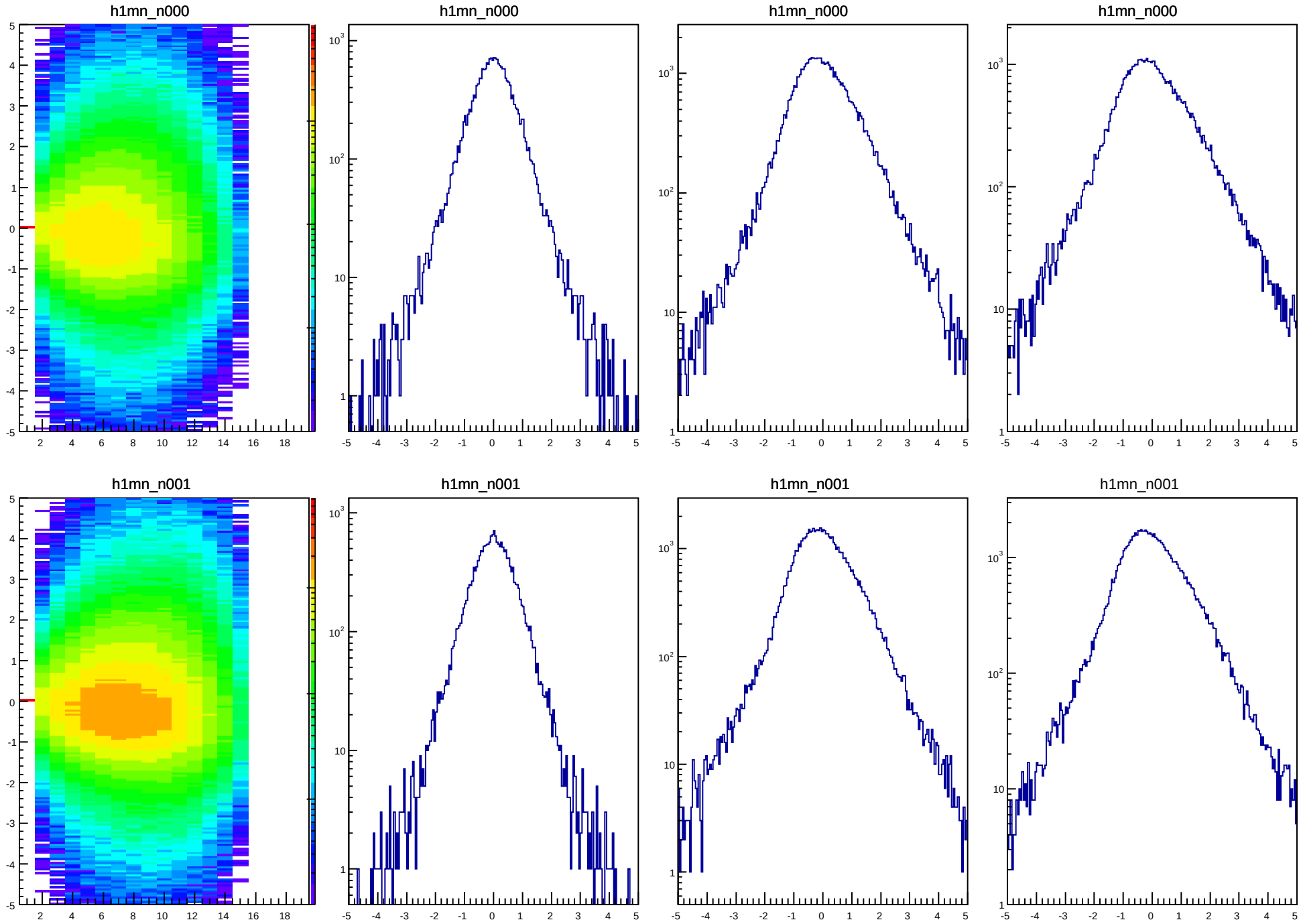
hdt_A1151
idet=115 is=1 key=-1
hdt_A1161
idet=116 is=1 key=-1
hdt_A1171
idet=117 is=1 key=-1
hdt_A1181
idet=118 is=1 key=-1
hdt_A1201
idet=120 is=1 key=-1
hdt_A1211
idet=121 is=1 key=-1
hdt_A1221
idet=122 is=1 key=-1
hdt_A1231
idet=123 is=1 key=-1
hdt_A1241
idet=124 is=1 key=-1
hdt_A1251
idet=125 is=1 key=-1
hdt_A1261
idet=126 is=1 key=-1
hdt_A1291
idet=129 is=1 key=-1
hdt_A1301
idet=130 is=1 key=-1
hdt_A1311
idet=131 is=1 key=-1
hdt_A1321
idet=132 is=1 key=-1

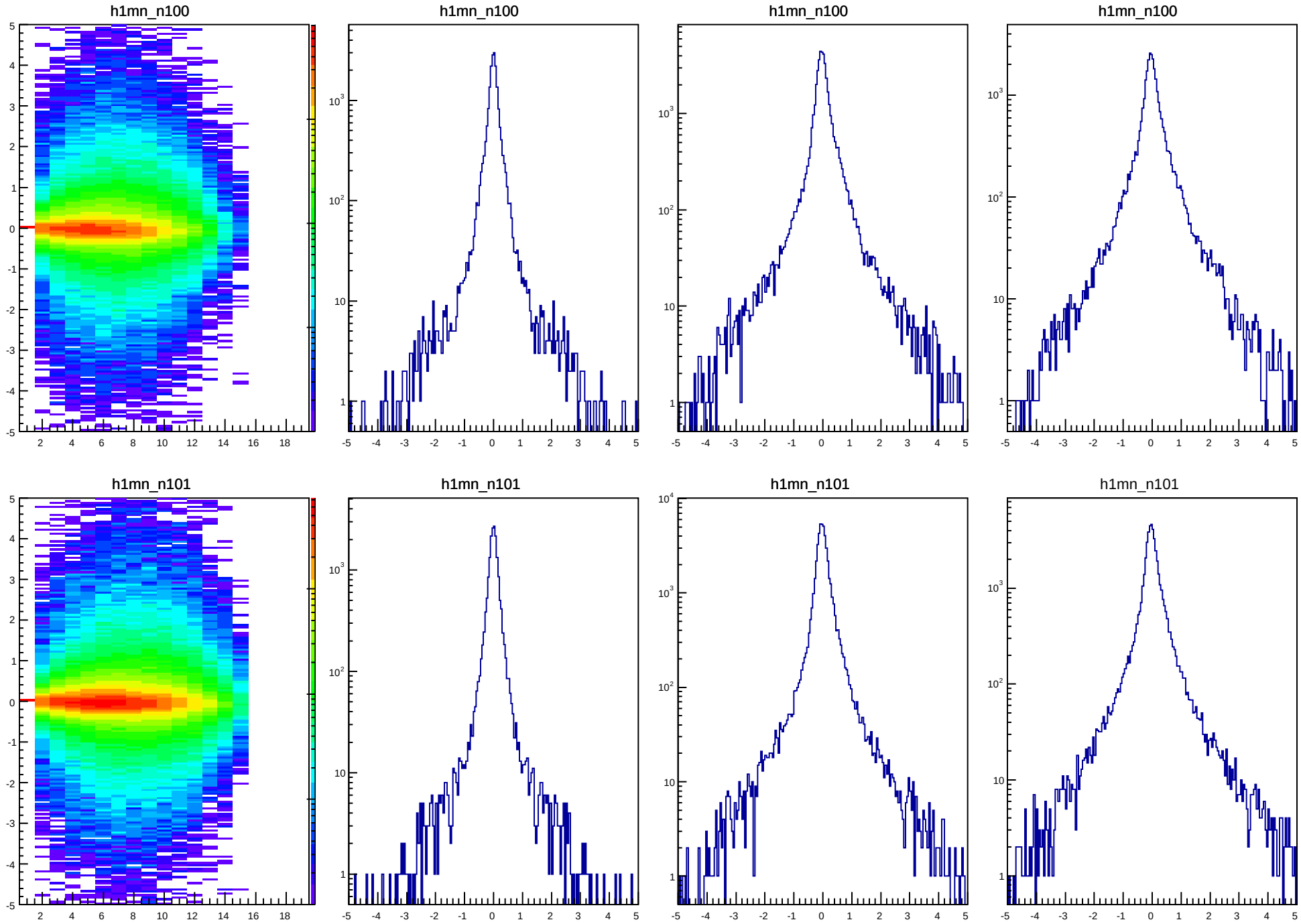

hdt_A1330
idet=133 is=0 key=-1
hdt_A1340
idet=134 is=0 key=-1
hdt_A1350
idet=135 is=0 key=-1
hdt_A1360
idet=136 is=0 key=-1
hdt_A1370
idet=137 is=0 key=-1
hdt_A1390
idet=139 is=0 key=-1
hdt_A1400
idet=140 is=0 key=-1
hdt_A1410
idet=141 is=0 key=-1
hdt_A1420
idet=142 is=0 key=-1
hdt_A1430
idet=143 is=0 key=-1
hdt_A1440
idet=144 is=0 key=-1
hdt_A1450
idet=145 is=0 key=-1
hdt_A1480
idet=148 is=0 key=-1
hdt_A1490
idet=149 is=0 key=-1
hdt_A1500
idet=150 is=0 key=-1
hdt_A1510
idet=151 is=0 key=-1

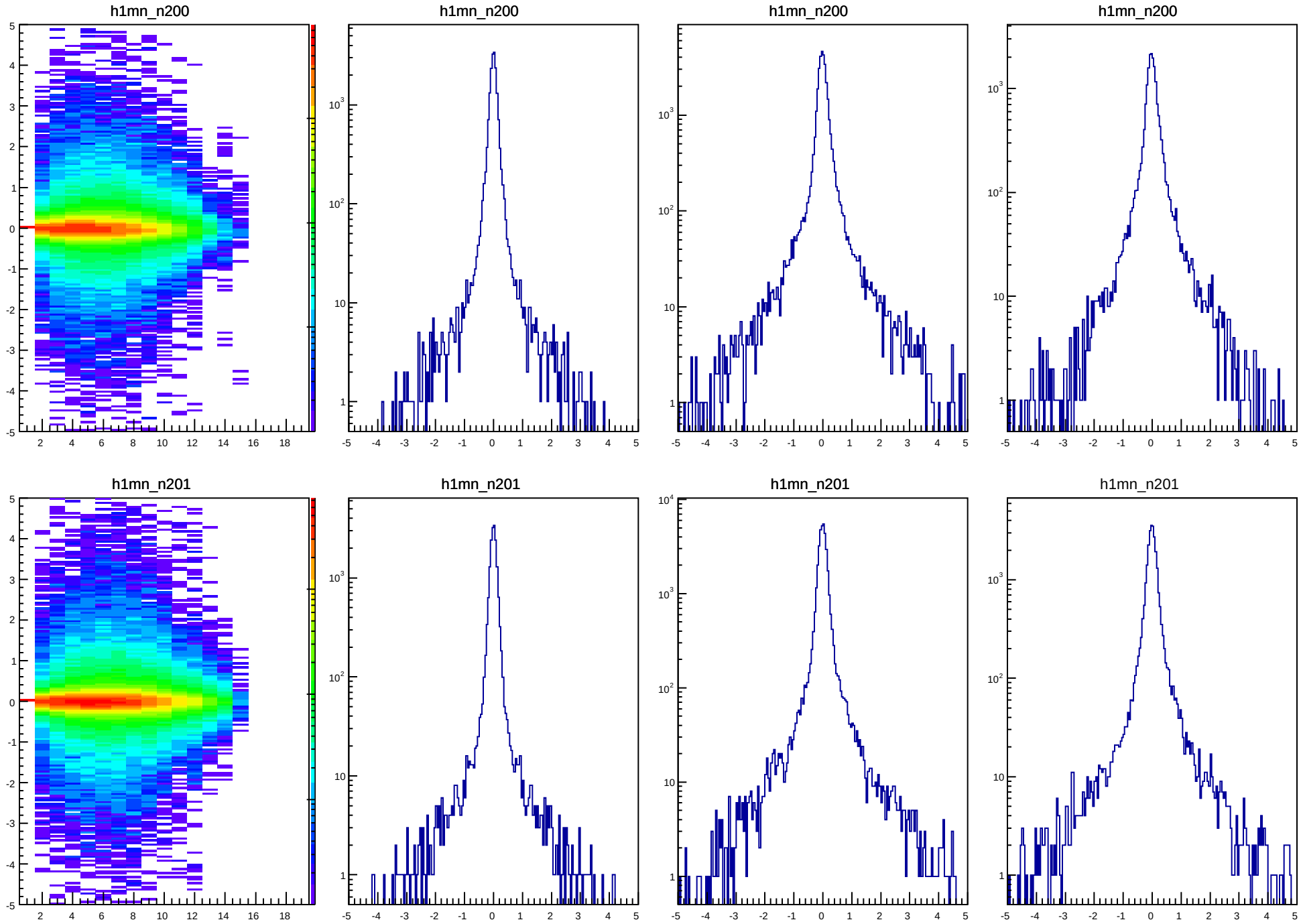

hdt_A1331
idet=133 is=1 key=-1
hdt_A1341
idet=134 is=1 key=-1
hdt_A1351
idet=135 is=1 key=-1
hdt_A1361
idet=136 is=1 key=-1
hdt_A1371
idet=137 is=1 key=-1
hdt_A1391
idet=139 is=1 key=-1
hdt_A1401
idet=140 is=1 key=-1
hdt_A1411
idet=141 is=1 key=-1
hdt_A1421
idet=142 is=1 key=-1
hdt_A1431
idet=143 is=1 key=-1
hdt_A1441
idet=144 is=1 key=-1
hdt_A1451
idet=145 is=1 key=-1
hdt_A1481
idet=148 is=1 key=-1
hdt_A1491
idet=149 is=1 key=-1
hdt_A1501
idet=150 is=1 key=-1
hdt_A1511
idet=151 is=1 key=-1
hdt_A1511
Entries 41665
Mean x 246.5
Mean y 0.00224
RMS x 310.7
RMS y 0.2178

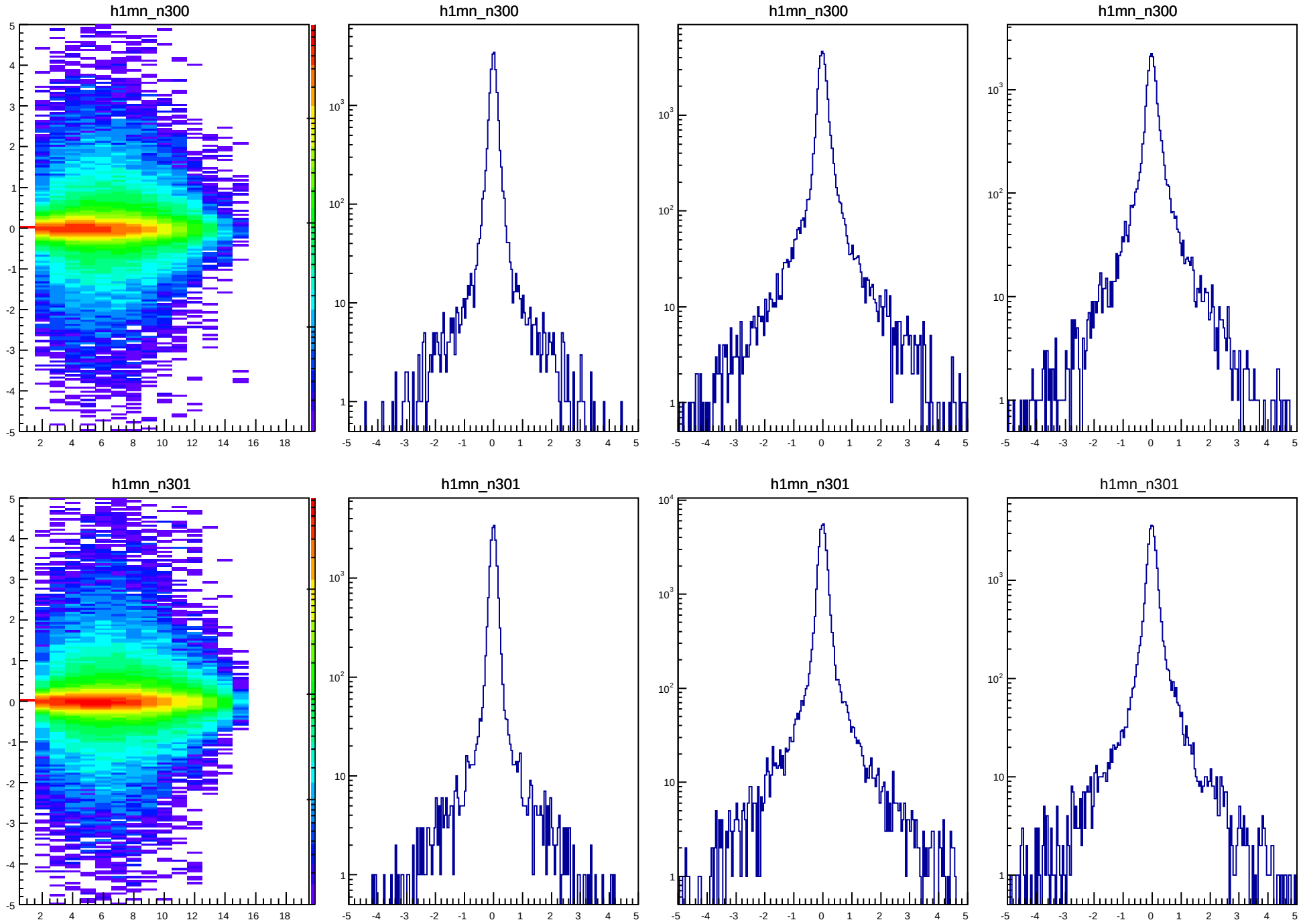

hddzvzt_A_all
DZDoffsetA = 0.0
hddzvzt_A_all
Entries 9089130
Mean 1.445
RMS 46.8
hddzvzt_B_all
DZDoffsetB = 0.0
hddzvzt_B_all
Entries 7520904
Mean 1.3
RMS 28.4
hddzvzt_C_all
DZDoffsetC = 0.0
hddzvzt_C_all
Entries 7520904
Mean 1.215
RMS 28.4

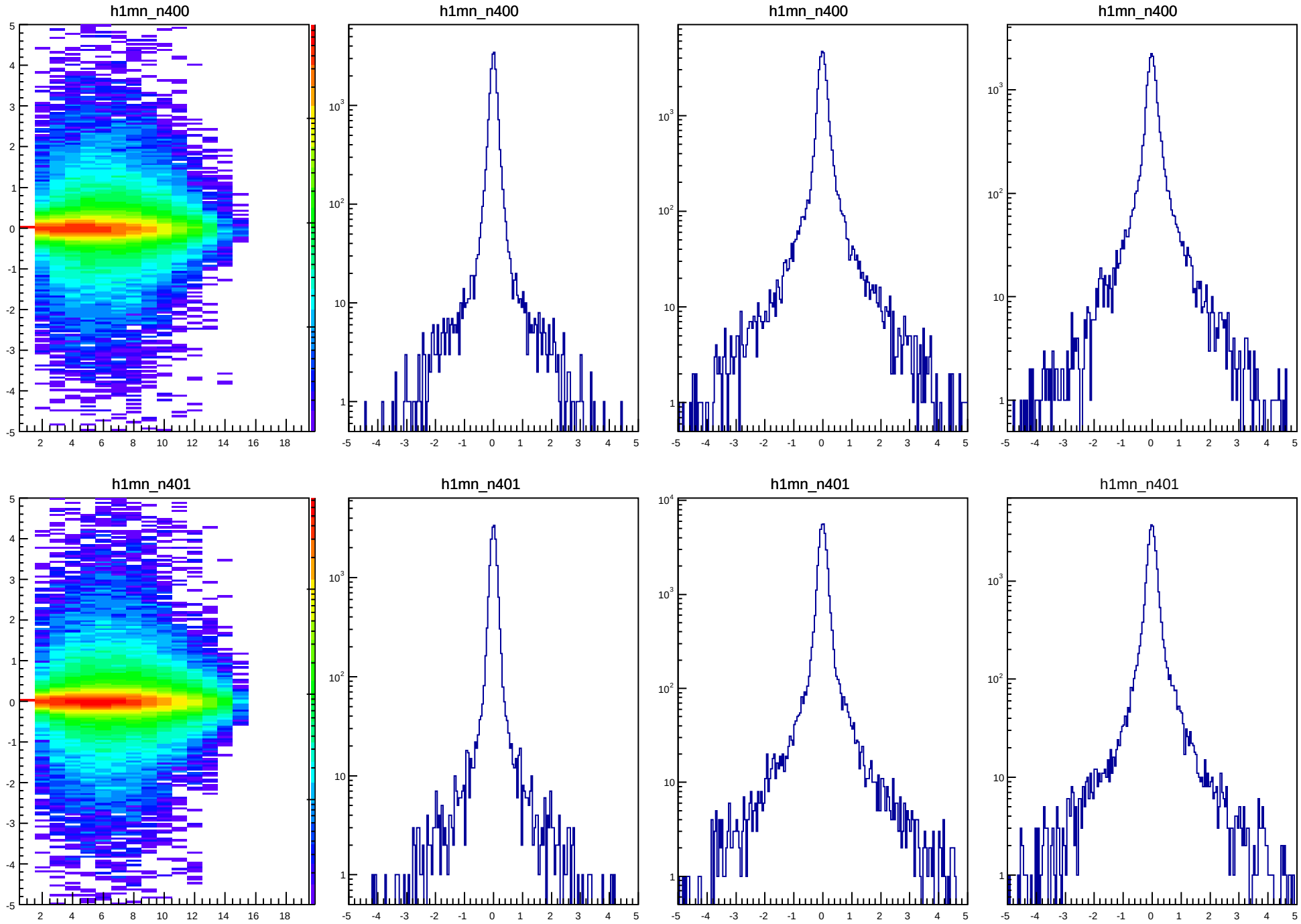

hdzvtx_11
hdzvtx_11
Entries 140822
Mean 0.7555
RMS 2.619
4000
3500
3000
2500
2000
1500
1000
500
0
-50
-40
-30
-20
-10
0
10
20
30
40
50

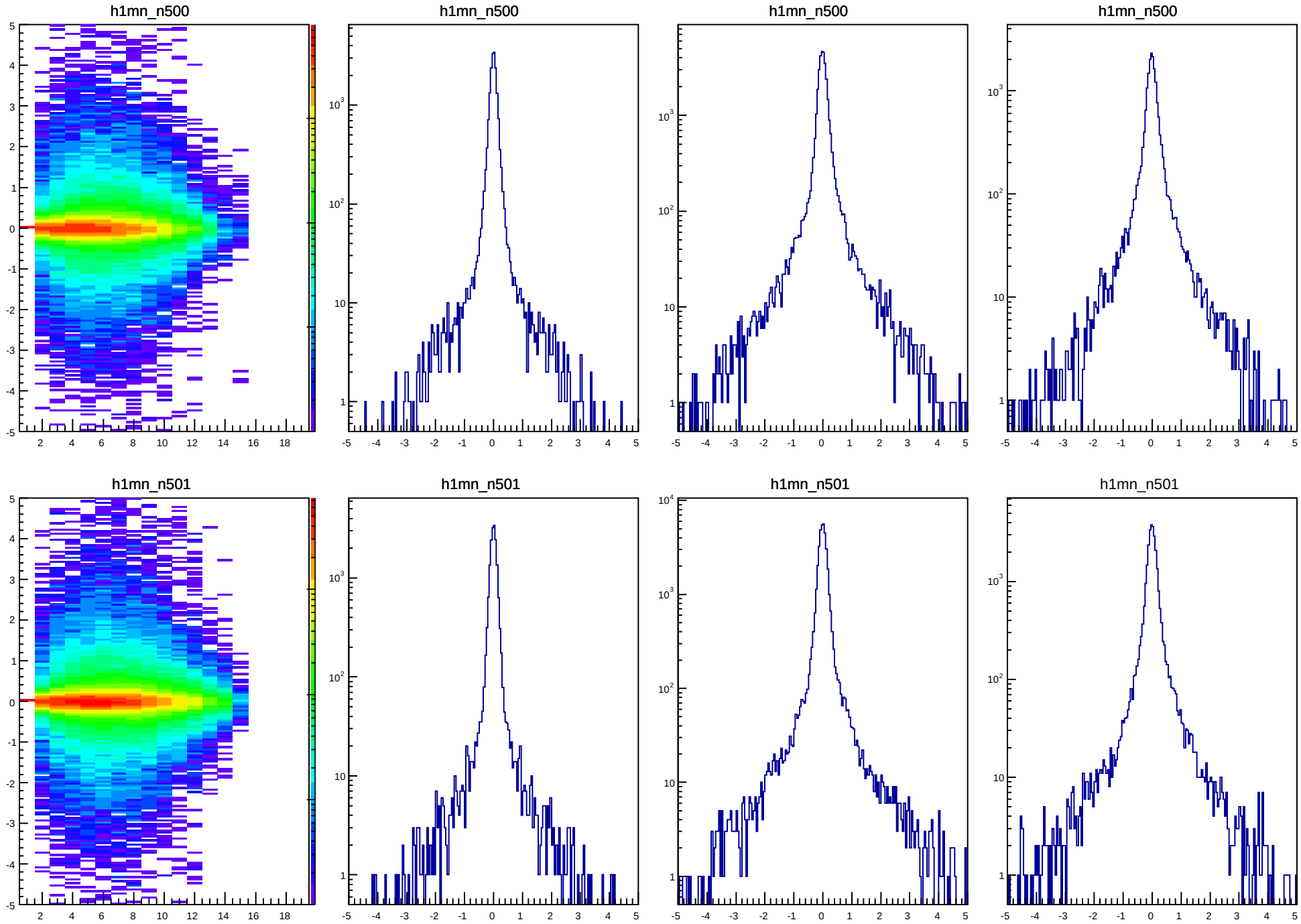

h1mn_n000
h1mn_n000
h1mn_n000
h1mn_n000
h1mn_n001
h1mn_n001
h1mn_n001
h1mn_n001

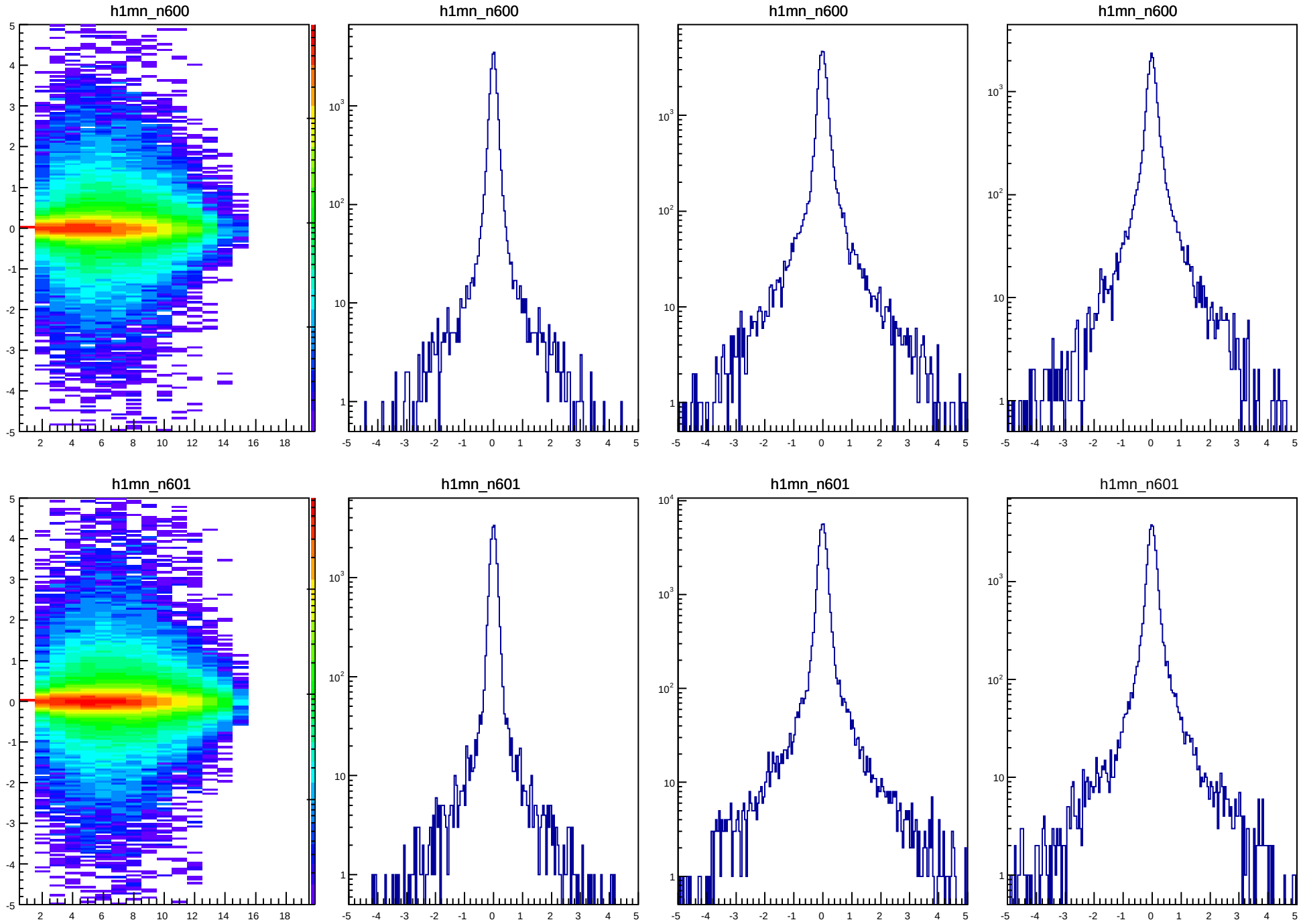

h1mn_n100
h1mn_n100
h1mn_n100
h1mn_n100
h1mn_n101
h1mn_n101
h1mn_n101
h1mn_n101

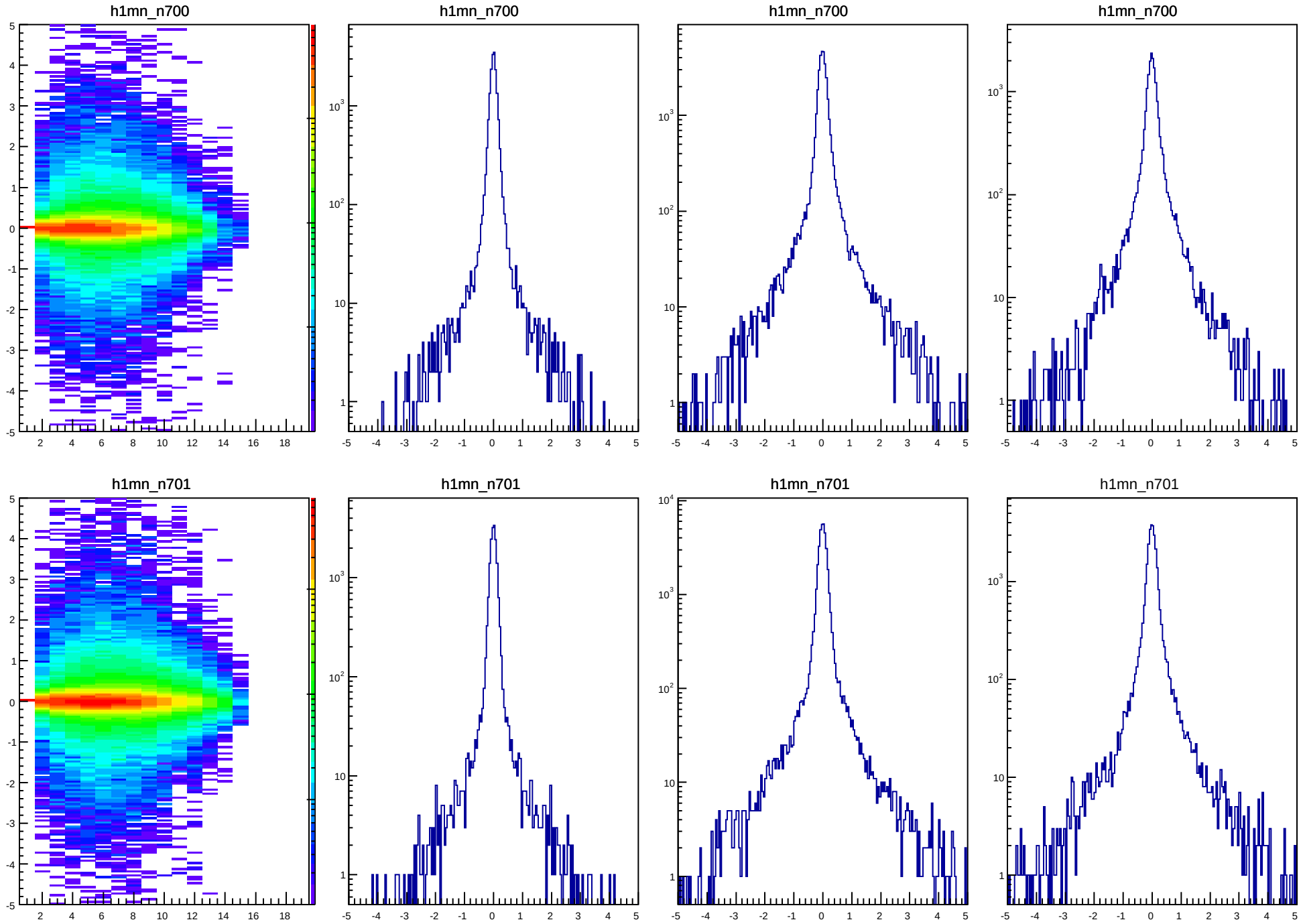

h1mn_n200
h1mn_n200
h1mn_n200
h1mn_n200
h1mn_n201
h1mn_n201
h1mn_n201
h1mn_n201

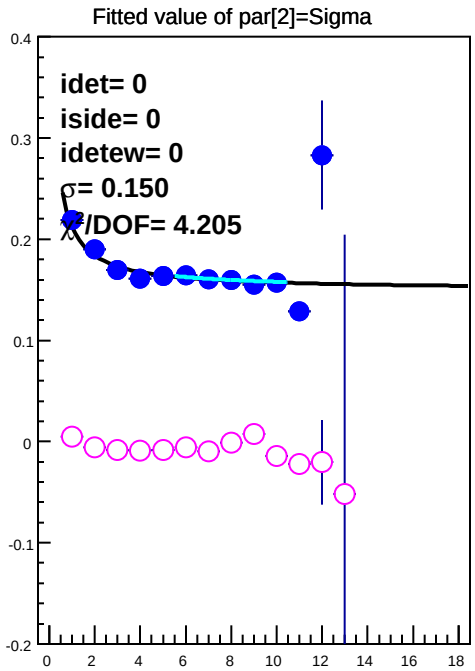

h1mn_n300
h1mn_n300
h1mn_n300
h1mn_n300
h1mn_n301
h1mn_n301
h1mn_n301
h1mn_n301

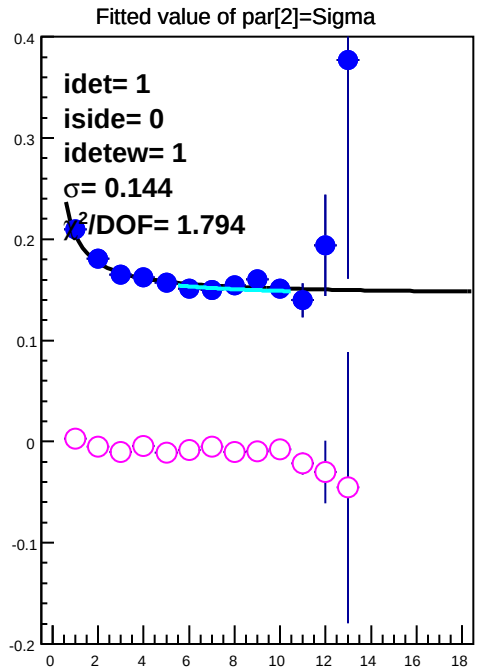

h1mn_n400
h1mn_n400
h1mn_n400
h1mn_n400
h1mn_n401
h1mn_n401
h1mn_n401
h1mn_n401

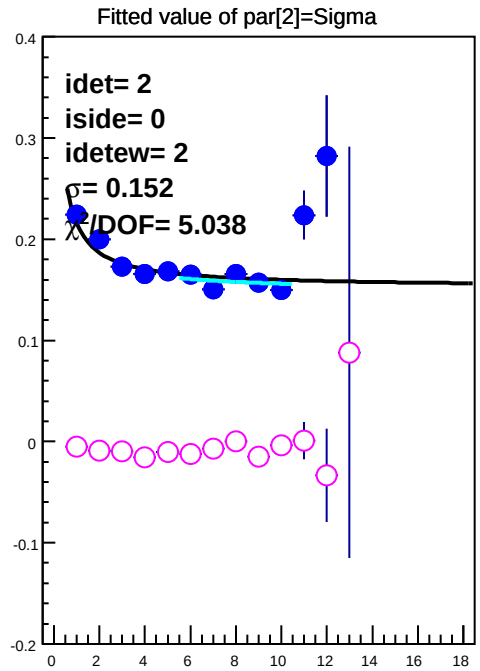

h1mn_n500
h1mn_n500
h1mn_n500
h1mn_n500
h1mn_n501
h1mn_n501
h1mn_n501
h1mn_n501

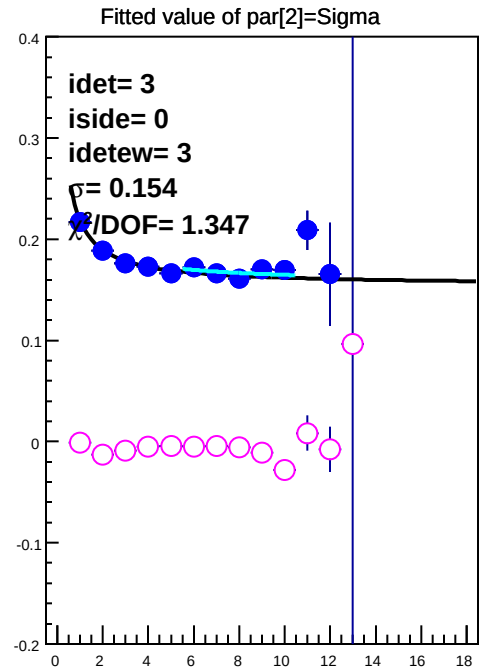

h1mn_n600
h1mn_n600
h1mn_n600
h1mn_n600
h1mn_n601
h1mn_n601
h1mn_n601
h1mn_n601

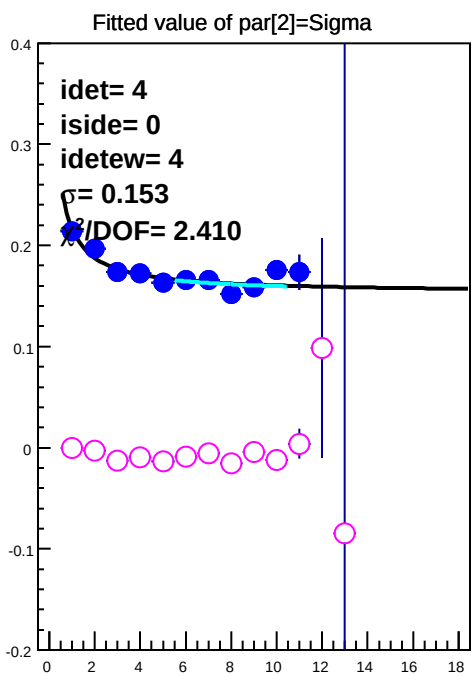

h1mn_n700
h1mn_n700
h1mn_n700
h1mn_n700
h1mn_n701
h1mn_n701
h1mn_n701
h1mn_n701

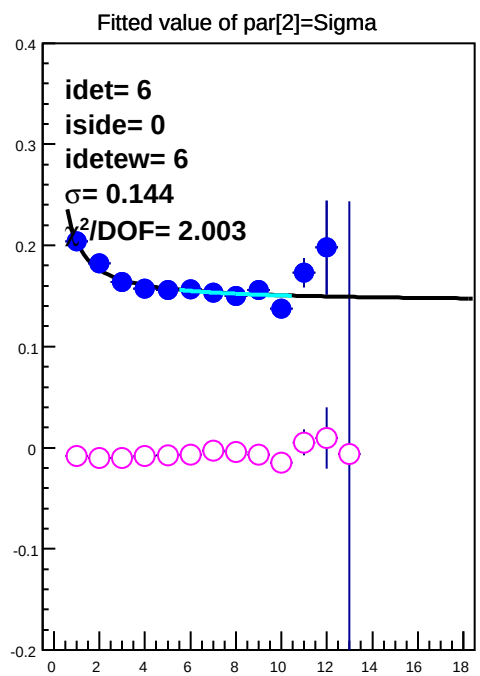

Fitted value of par[2]=Sigma
idet= 0
iside= 0
idetew= 0
σ= 0.150
χ²/DOF= 4.205

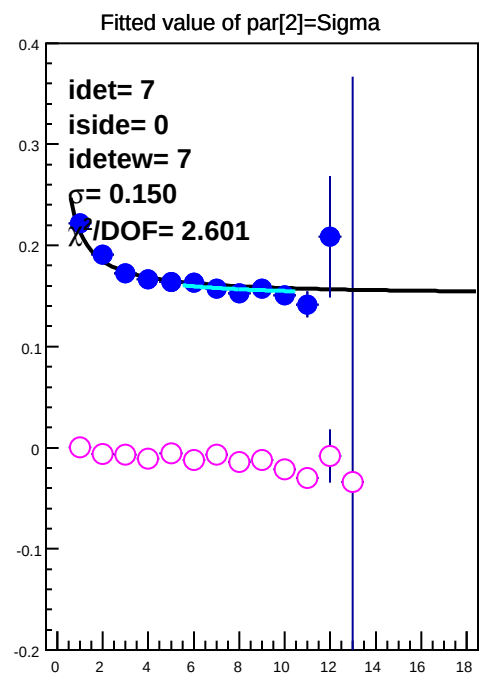

Fitted value of par[2]=Sigma
idet= 1
iside= 0
idetew= 1
σ= 0.144
χ²/DOF= 1.794

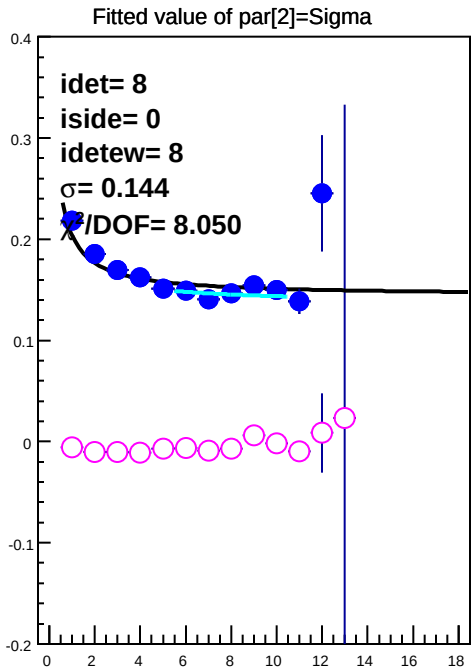

Fitted value of par[2]=Sigma
idet= 2
iside= 0
idetew= 2
σ= 0.152
χ²/DOF= 5.038

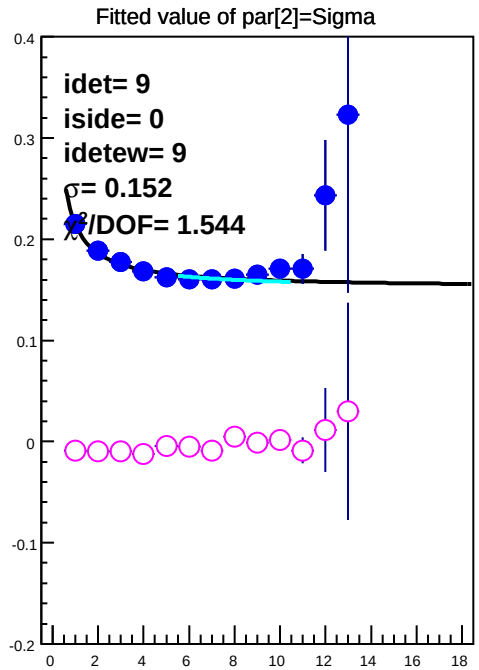

Fitted value of par[2]=Sigma
idet= 3
iside= 0
idetew= 3
σ= 0.154
χ²/DOF= 1.347

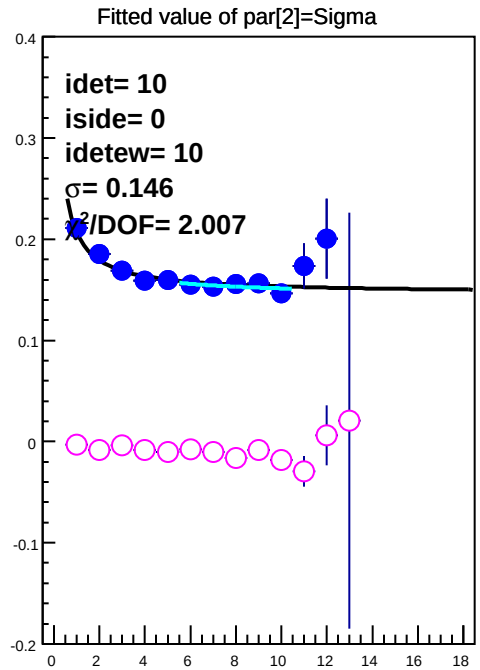

Fitted value of par[2]=Sigma
idet= 4
iside= 0
idetew= 4
σ= 0.153
χ²/DOF= 2.410

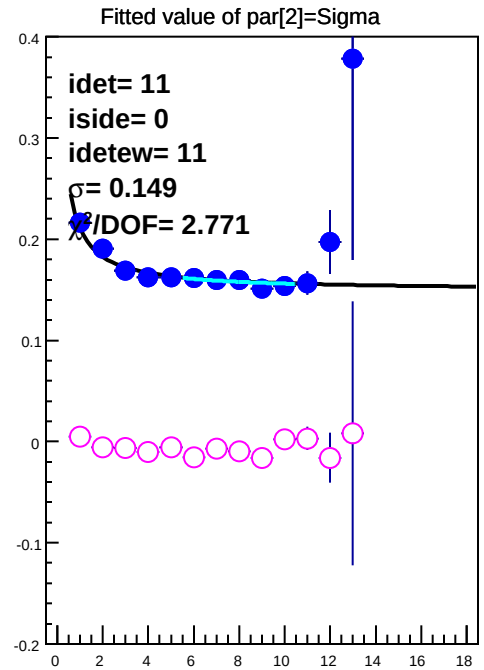

Fitted value of par[2]=Sigma
idet= 6
iside= 0
idetew= 6
σ= 0.144
χ²/DOF= 2.003

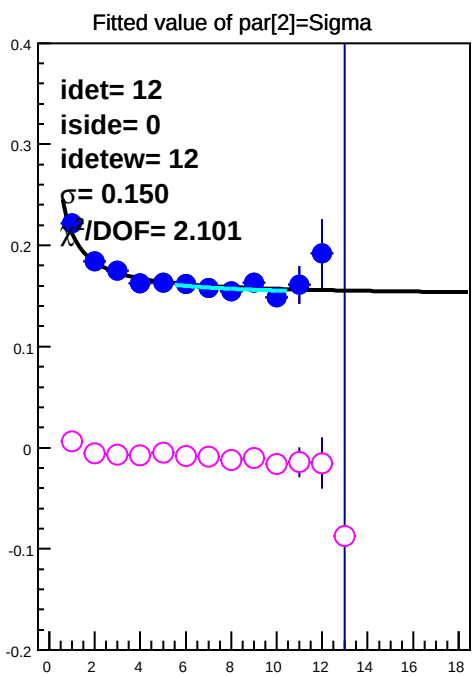

Fitted value of par[2]=Sigma
idet= 7
iside= 0
idetew= 7
σ= 0.150
χ²/DOF= 2.601

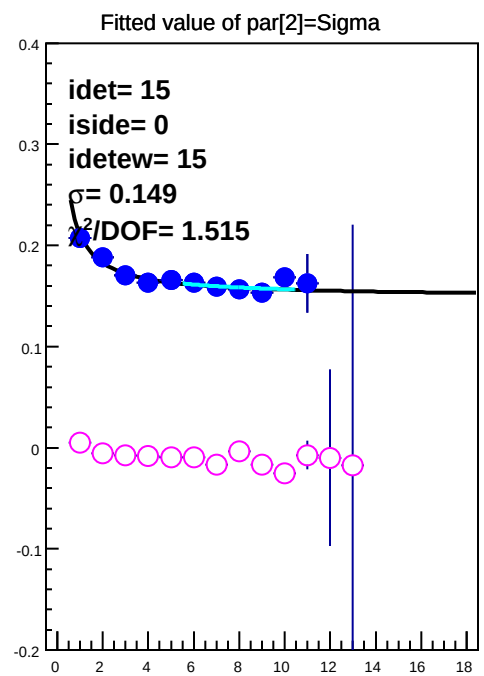

Fitted value of par[2]=Sigma
idet= 8
iside= 0
idetew= 8
σ= 0.144
χ²/DOF= 8.050

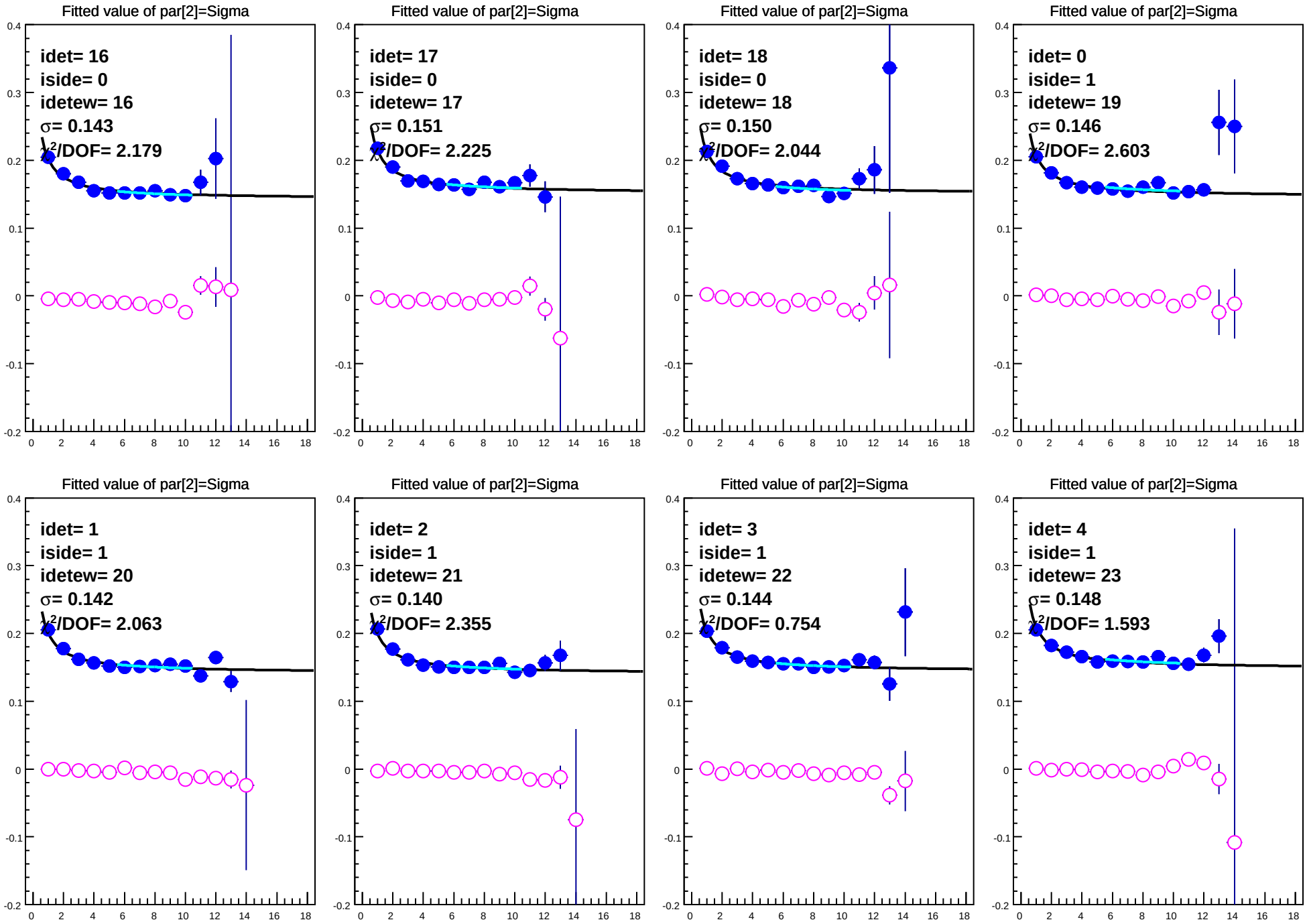

Fitted value of par[2]=Sigma
idet= 9
iside= 0
idetew= 9
σ= 0.152
χ²/DOF= 1.544

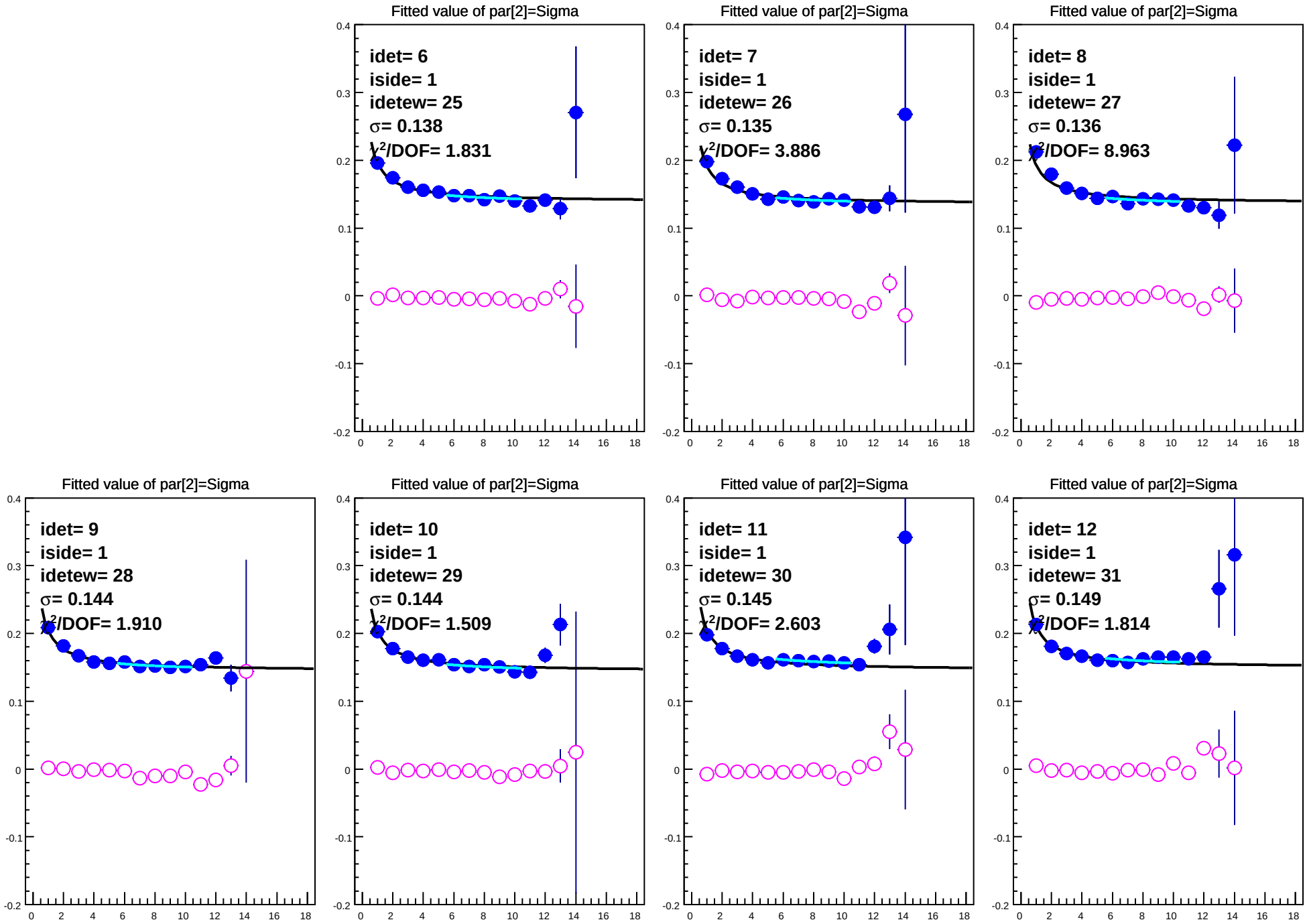

Fitted value of par[2]=Sigma
idet= 10
iside= 0
idetew= 10
σ= 0.146
χ²/DOF= 2.007

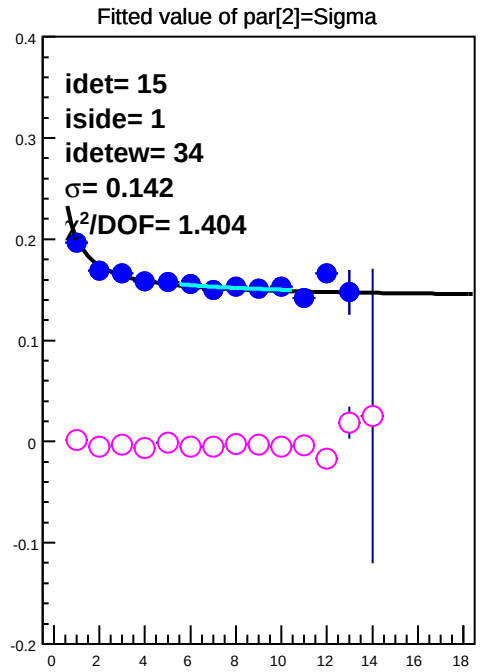

Fitted value of par[2]=Sigma
idet= 11
iside= 0
idetew= 11
σ= 0.149
χ²/DOF= 2.771

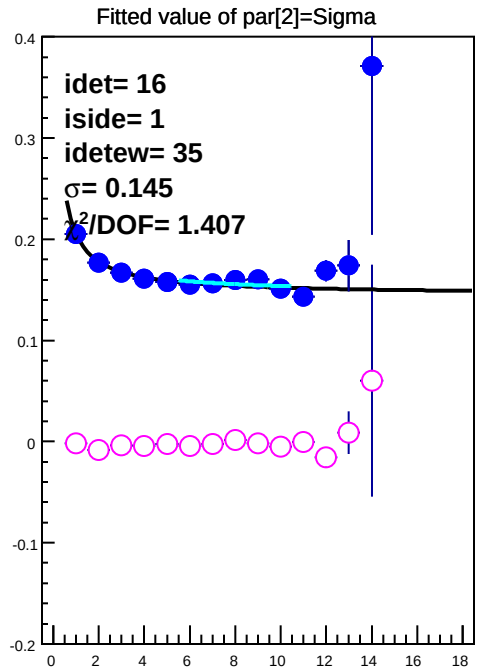

Fitted value of par[2]=Sigma
idet= 12
iside= 0
idetew= 12
σ= 0.150
χ²/DOF= 2.101

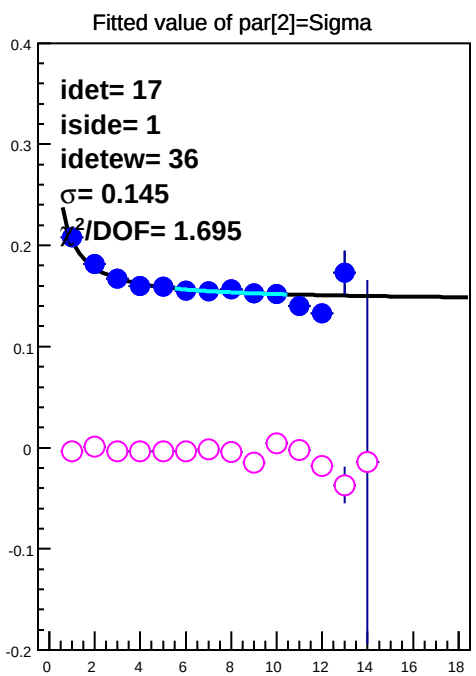

Fitted value of par[2]=Sigma
idet= 15
iside= 0
idetew= 15
σ= 0.149
χ²/DOF= 1.515

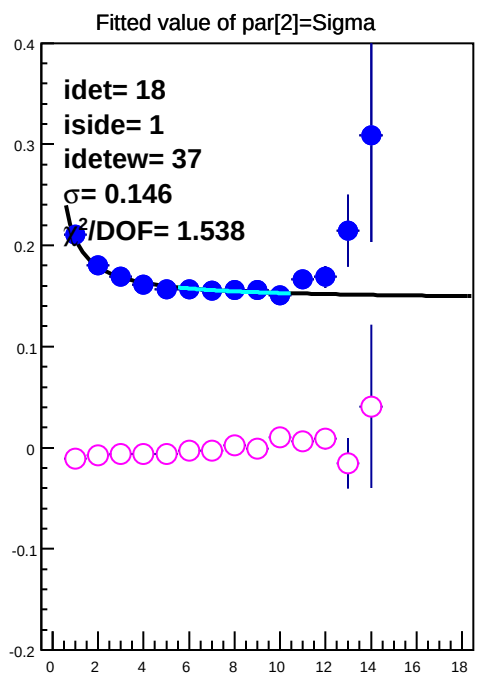

Fitted value of par[2]=Sigma
idet= 16
iside= 0
idetew= 16
σ= 0.143
χ²/DOF= 2.179
Fitted value of par[2]=Sigma
idet= 17
iside= 0
idetew= 17
σ= 0.151
χ²/DOF= 2.225
Fitted value of par[2]=Sigma
idet= 18
iside= 0
idetew= 18
σ= 0.150
χ²/DOF= 2.044
Fitted value of par[2]=Sigma
idet= 0
iside= 1
idetew= 19
σ= 0.146
χ²/DOF= 2.603
Fitted value of par[2]=Sigma
idet= 1
iside= 1
idetew= 20
σ= 0.142
χ²/DOF= 2.063
Fitted value of par[2]=Sigma
idet= 2
iside= 1
idetew= 21
σ= 0.140
χ²/DOF= 2.355
Fitted value of par[2]=Sigma
idet= 3
iside= 1
idetew= 22
σ= 0.144
χ²/DOF= 0.754
Fitted value of par[2]=Sigma
idet= 4
iside= 1
idetew= 23
σ= 0.148
χ²/DOF= 1.593

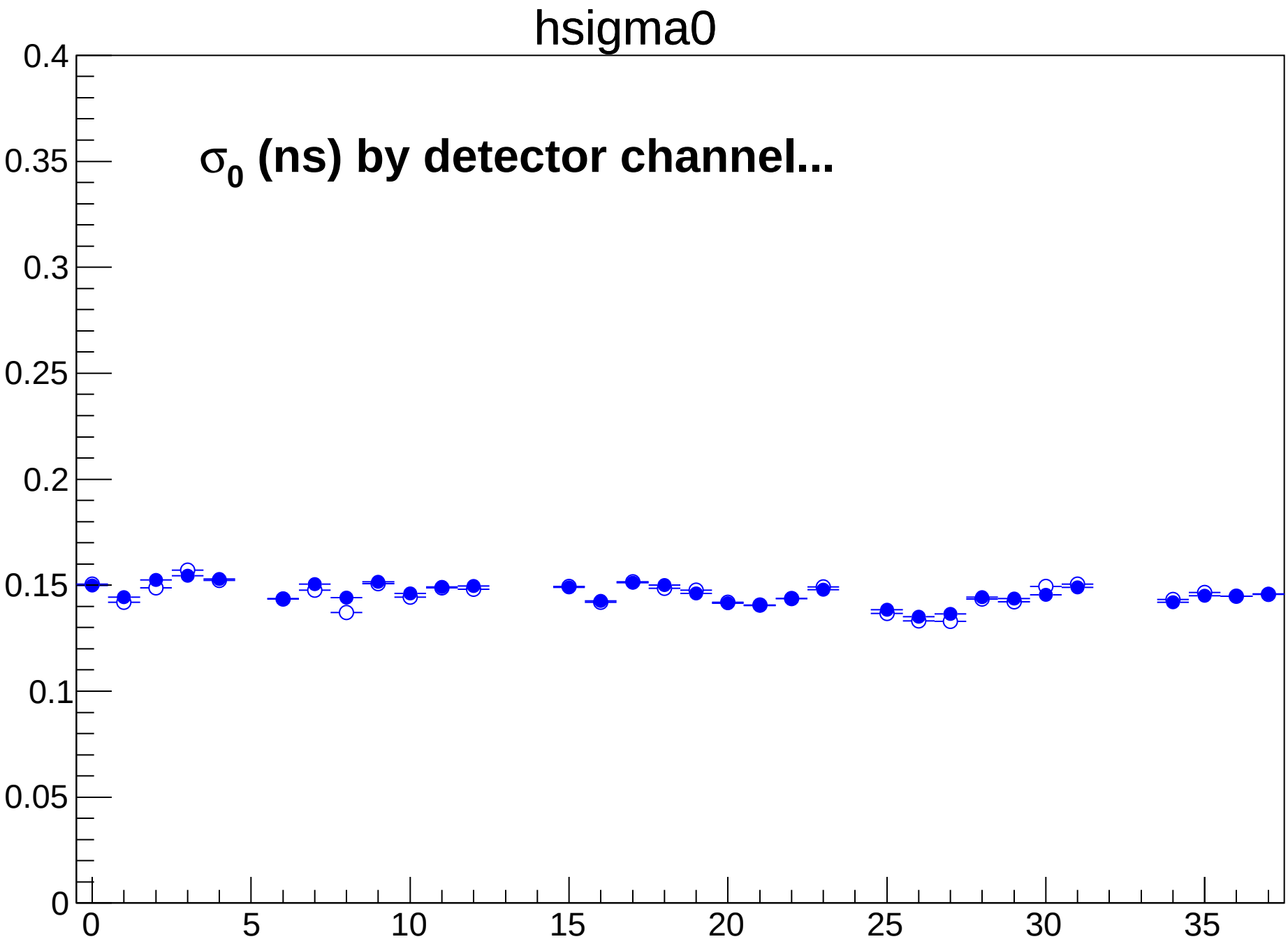

Fitted value of par[2]=Sigma
idet= 6
iside= 1
idetew= 25
σ= 0.138
χ²/DOF= 1.831
Fitted value of par[2]=Sigma
idet= 7
iside= 1
idetew= 26
σ= 0.135
χ²/DOF= 3.886
Fitted value of par[2]=Sigma
idet= 8
iside= 1
idetew= 27
σ= 0.136
χ²/DOF= 8.963
Fitted value of par[2]=Sigma
idet= 9
iside= 1
idetew= 28
σ= 0.144
χ²/DOF= 1.910
Fitted value of par[2]=Sigma
idet= 10
iside= 1
idetew= 29
σ= 0.144
χ²/DOF= 1.509
Fitted value of par[2]=Sigma
idet= 11
iside= 1
idetew= 30
σ= 0.145
χ²/DOF= 2.603
Fitted value of par[2]=Sigma
idet= 12
iside= 1
idetew= 31
σ= 0.149
χ²/DOF= 1.814

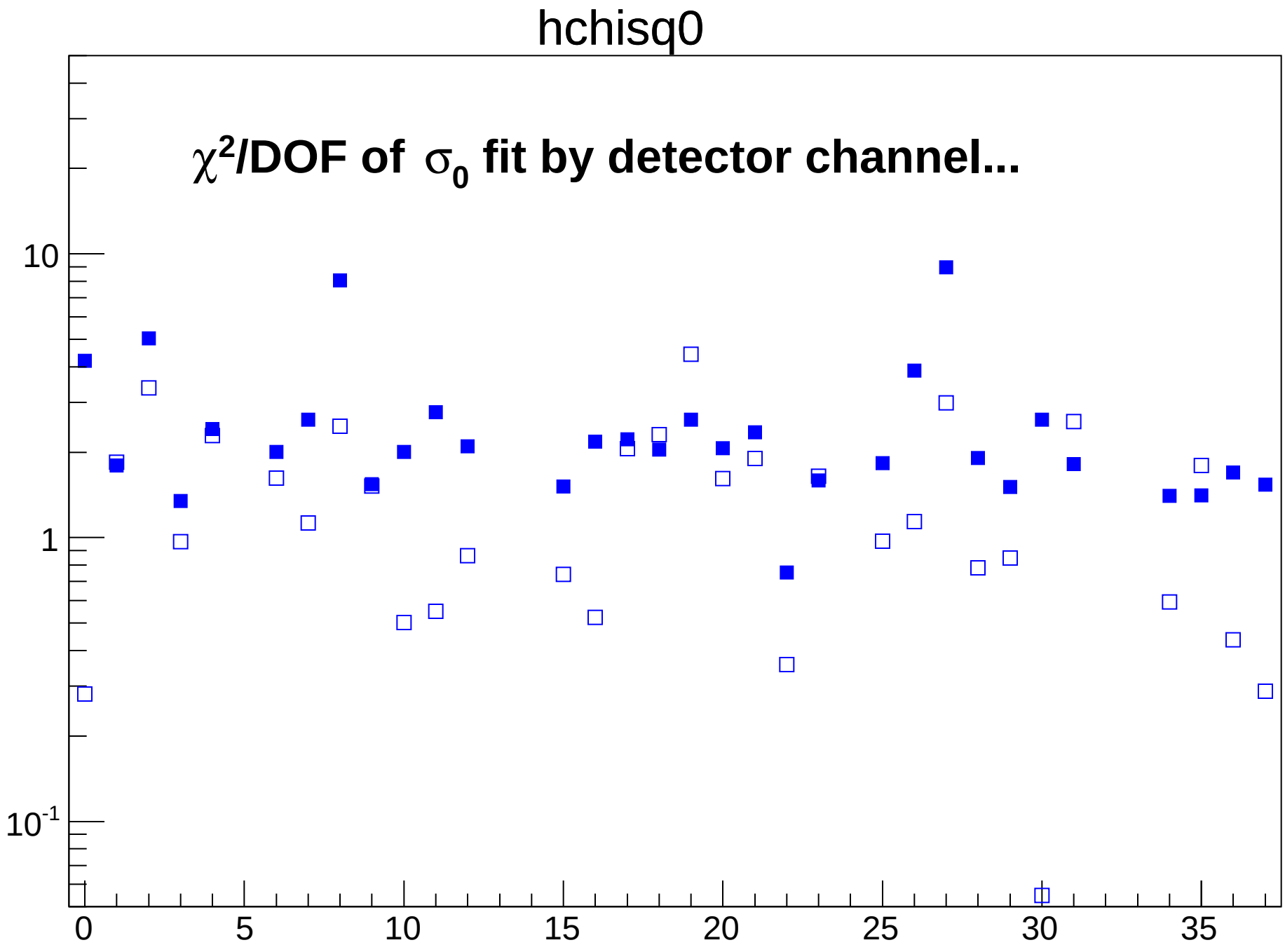

Fitted value of par[2]=Sigma
idet= 15
iside= 1
idetew= 34
σ= 0.142
χ2/DOF= 1.404

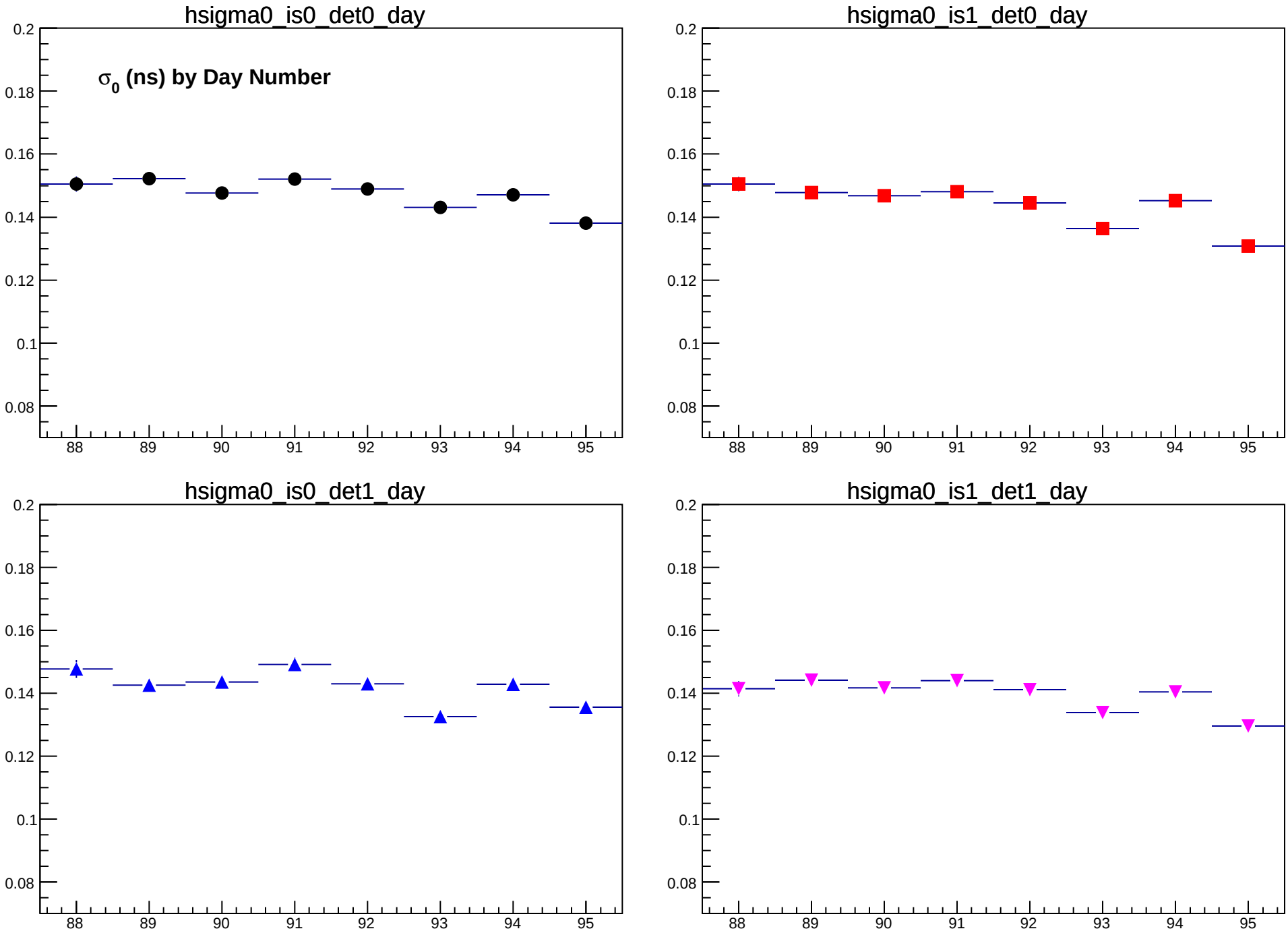

Fitted value of par[2]=Sigma
idet= 16
iside= 1
idetew= 35
σ= 0.145
χ2/DOF= 1.407

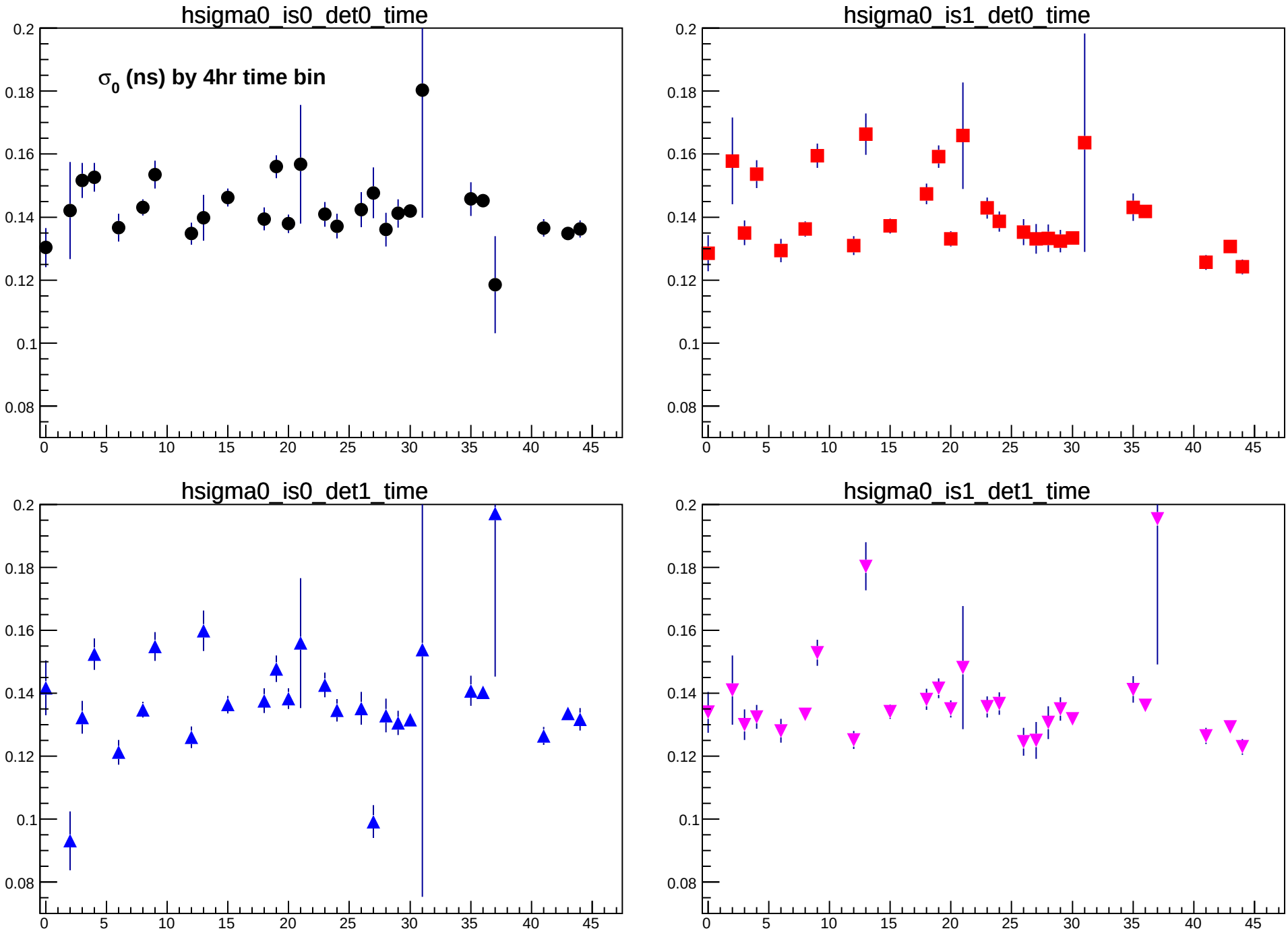

Fitted value of par[2]=Sigma
idet= 17
iside= 1
idetew= 36
σ= 0.145
χ2/DOF= 1.695

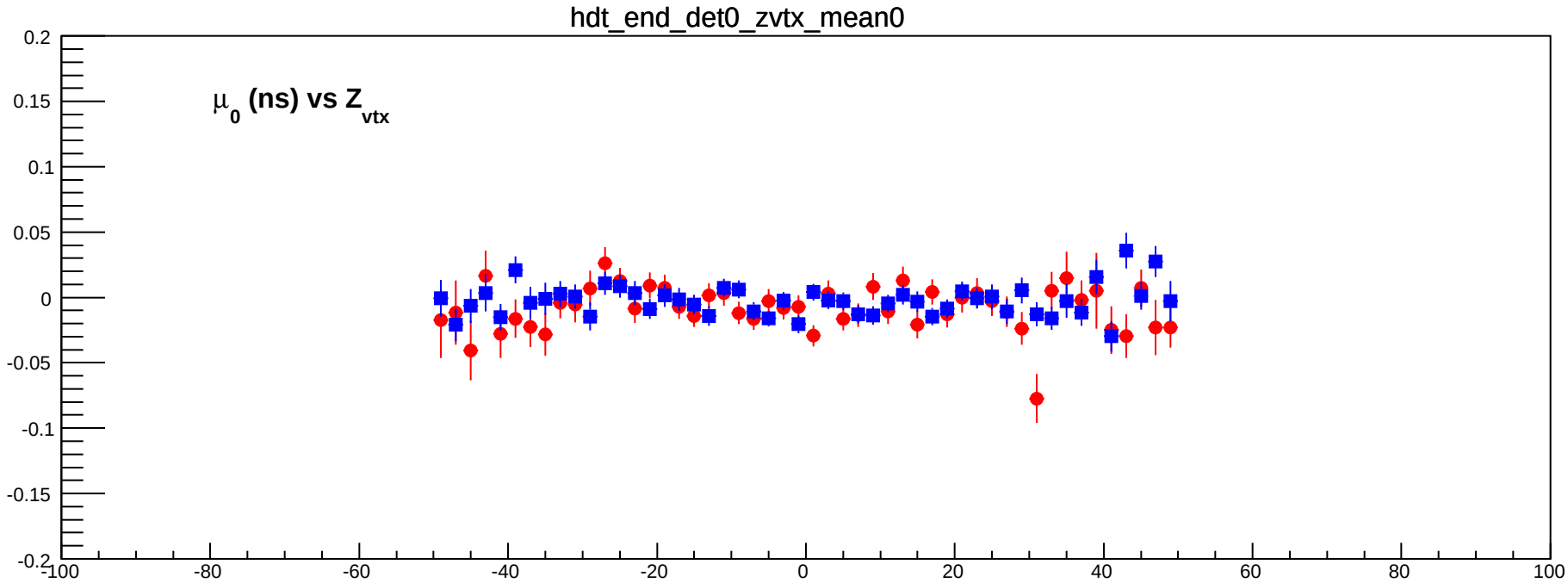

Fitted value of par[2]=Sigma
idet= 18
iside= 1
idetew= 37
σ= 0.146
χ2/DOF= 1.538

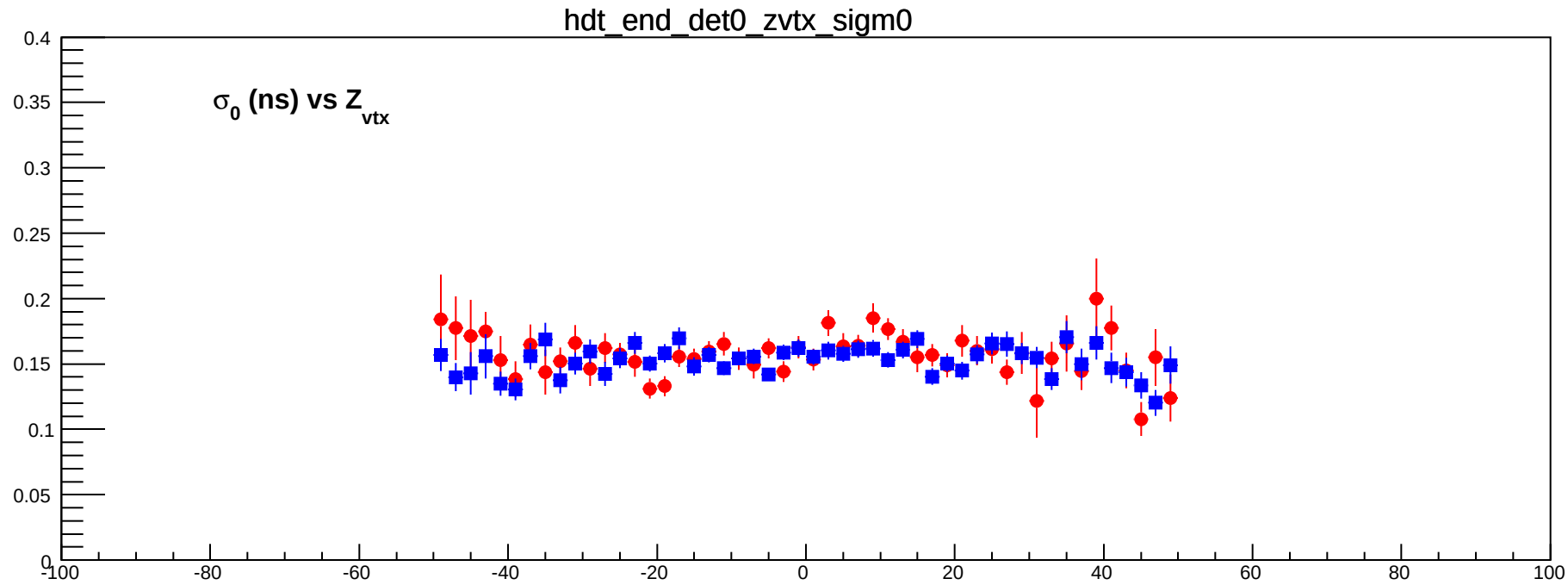

hsigma0
σ_0 (ns) by detector channel...
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
5
10
15
20
25
30
35

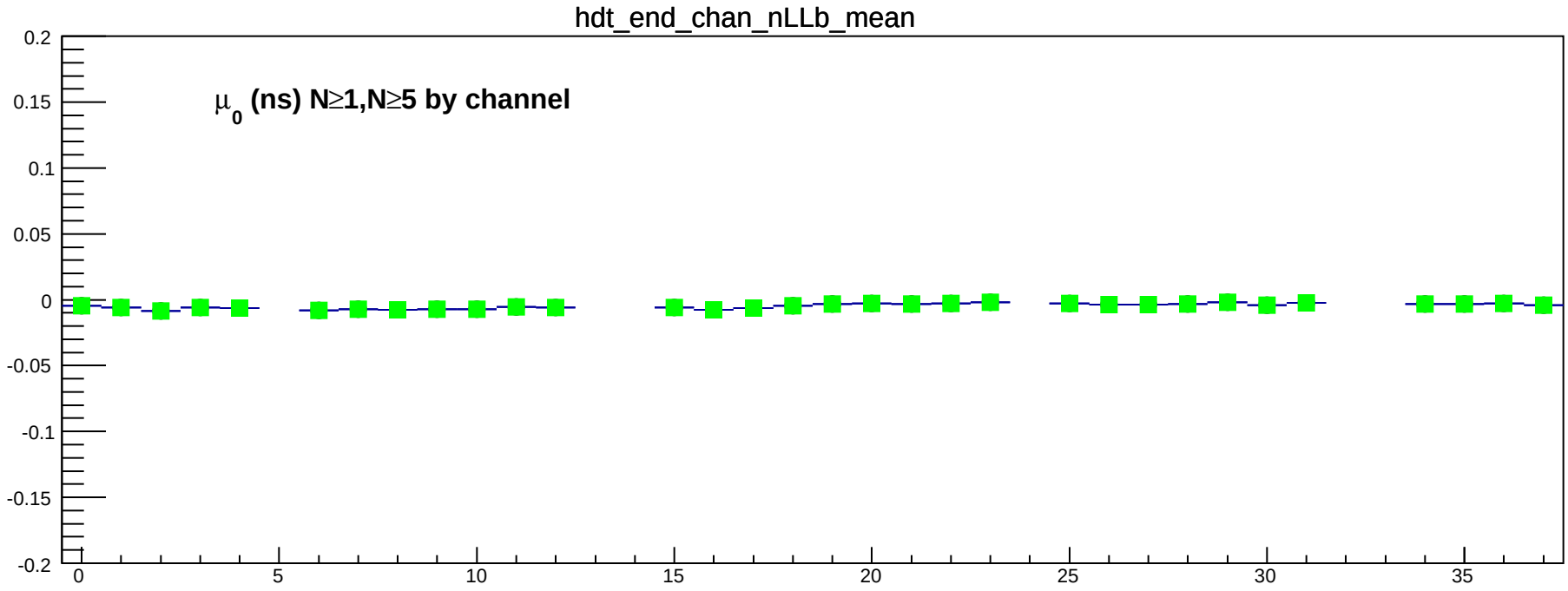

hchisq0
χ²/DOF of σ₀ fit by detector channel...
10
1
10⁻¹
0
5
10
15
20
25
30
35

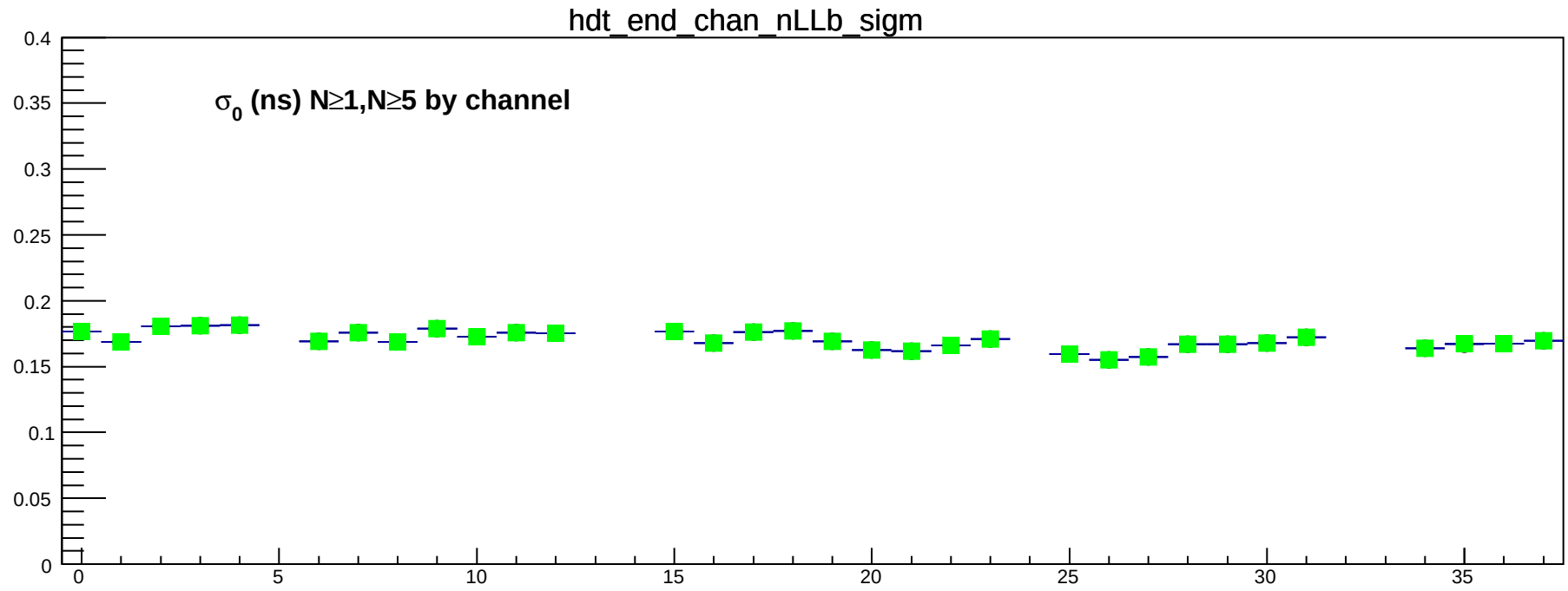

hsigma0_is0_det0_day
σ0 (ns) by Day Number
hsigma0_is1_det0_day
hsigma0_is0_det1_day
hsigma0_is1_det1_day
0.2
0.18
0.16
0.14
0.12
0.1
0.08
88
89
90
91
92
93
94
95

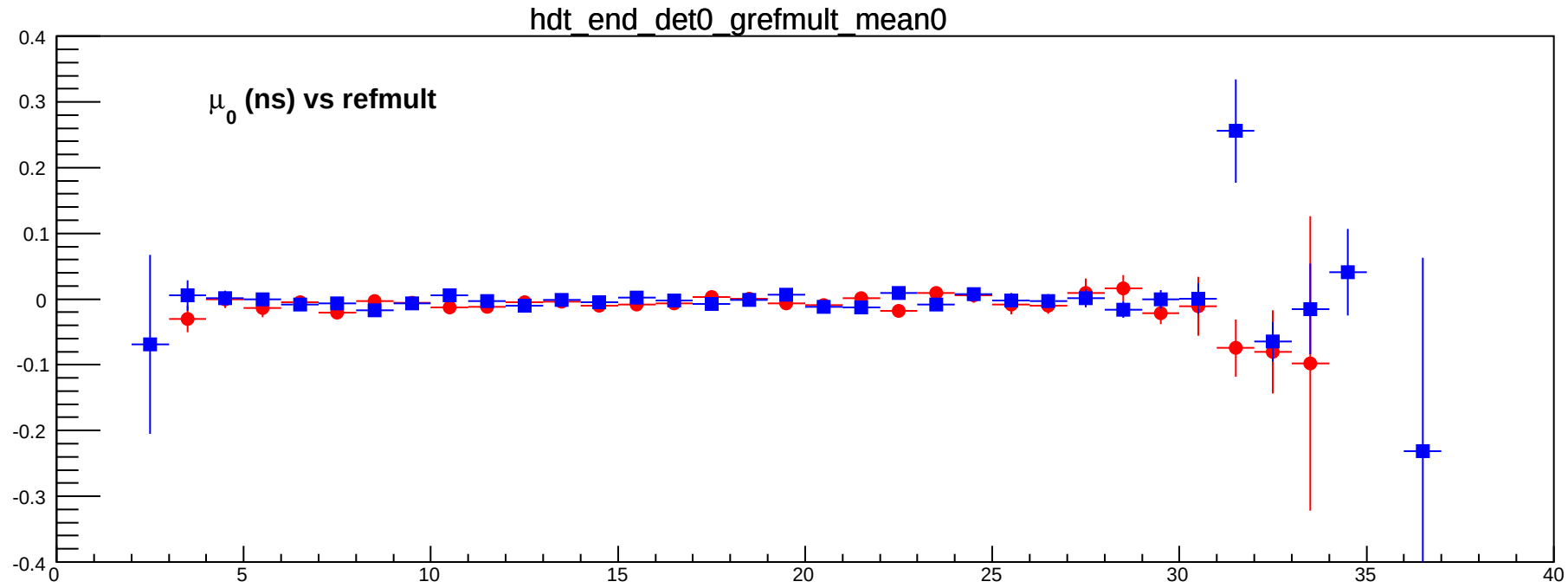

hsigma0_is0_det0_time
σ0 (ns) by 4hr time bin
hsigma0_is1_det0_time
hsigma0_is0_det1_time
hsigma0_is1_det1_time
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0
5
10
15
20
25
30
35
40
45

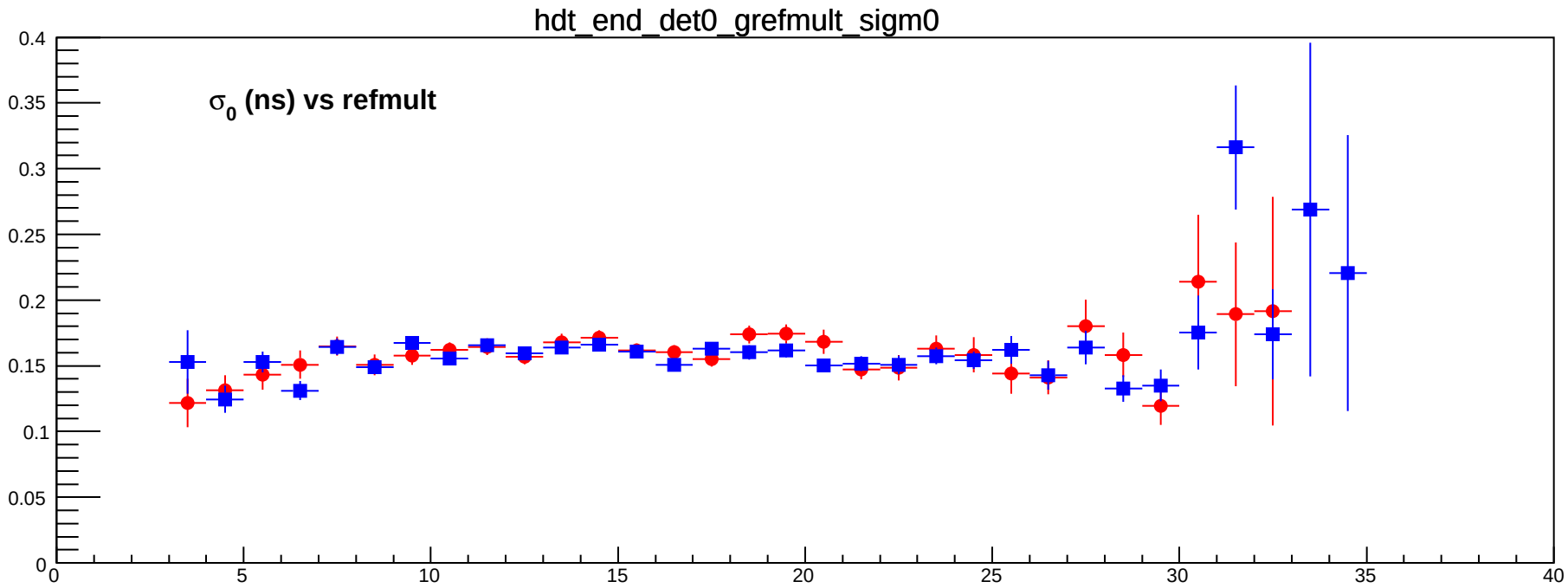

hdt_end_det0_zvtx_mean0
μ0 (ns) vs Zvtx
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
-100
-80
-60
-40
-20
0
20
40
60
80
100


hdt_end_det0_zvtx_sigm0
σ0 (ns) vs Zvtx
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-100
-80
-60
-40
-20
0
20
40
60
80
100


hdt_end_chan_nLLb_mean
μ0 (ns) N≥1,N≥5 by channel
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
0
5
10
15
20
25
30
35


hdt_end_chan_nLLb_sigm
σ0 (ns) N≥1,N≥5 by channel
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
5
10
15
20
25
30
35


hdt_end_det0_grefmult_mean0
μ0 (ns) vs refmult
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
0
5
10
15
20
25
30
35
40


hdt_end_det0_grefmult_sigm0
σ0 (ns) vs refmult
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
5
10
15
20
25
30
35
40