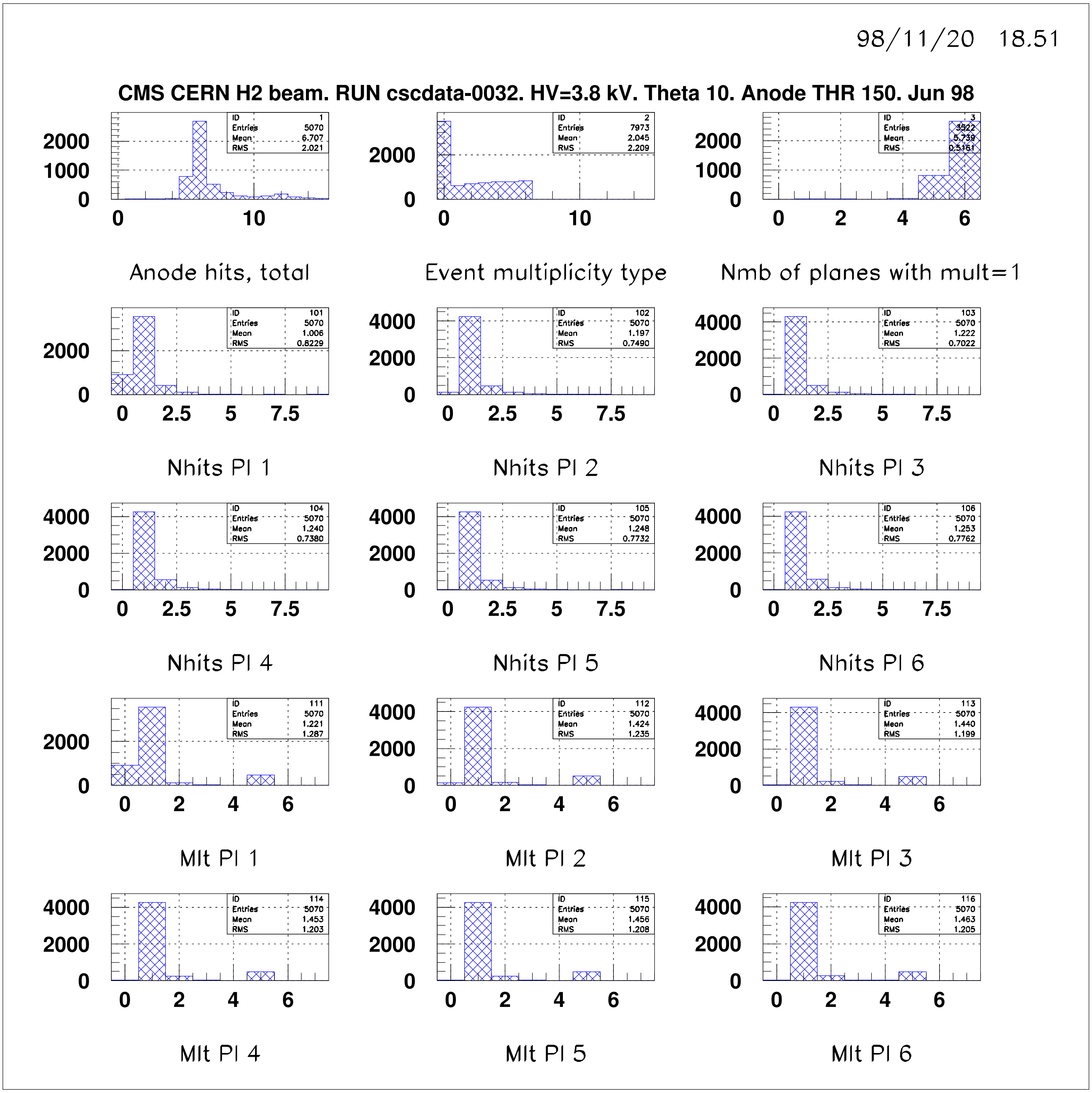
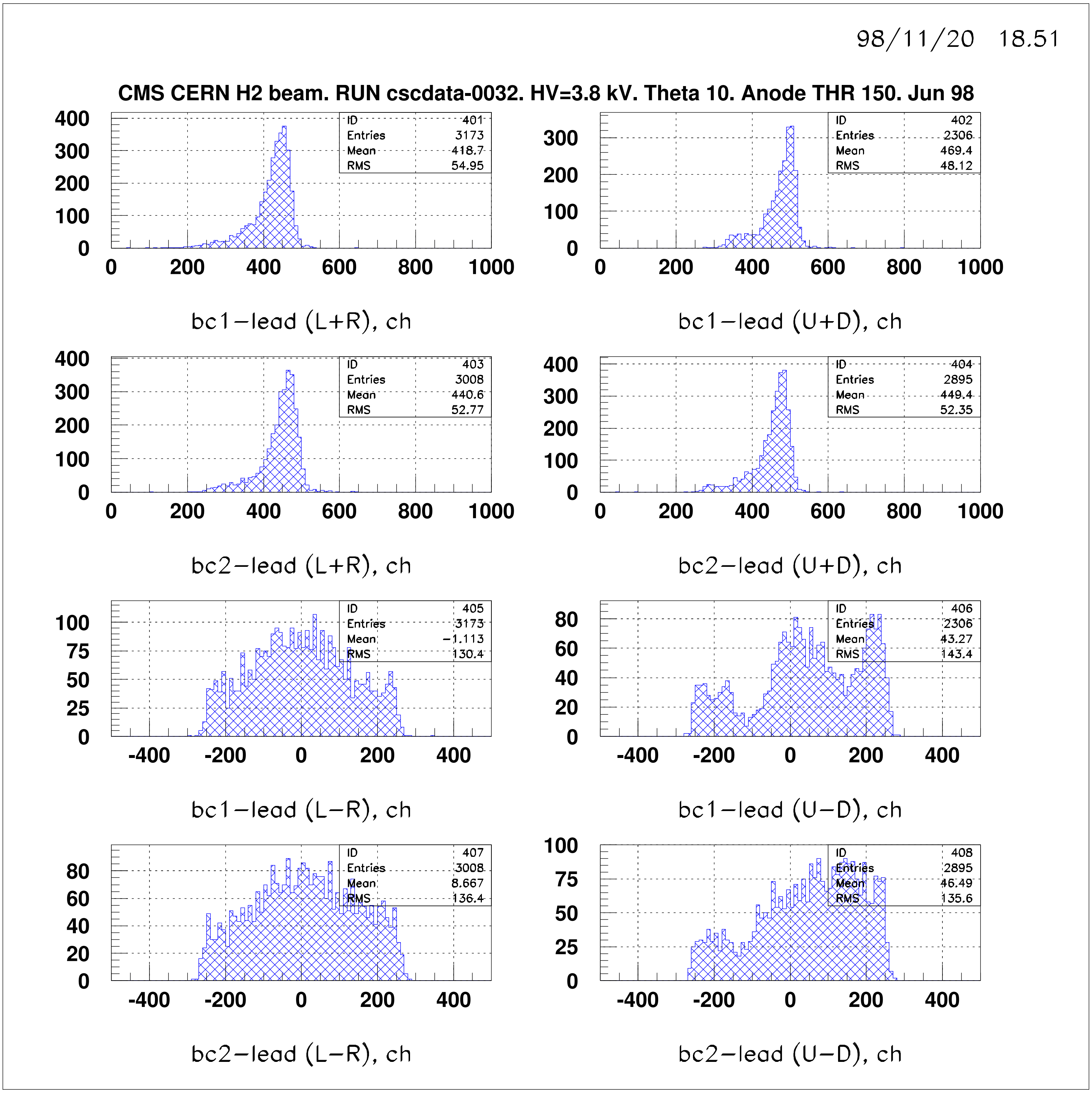
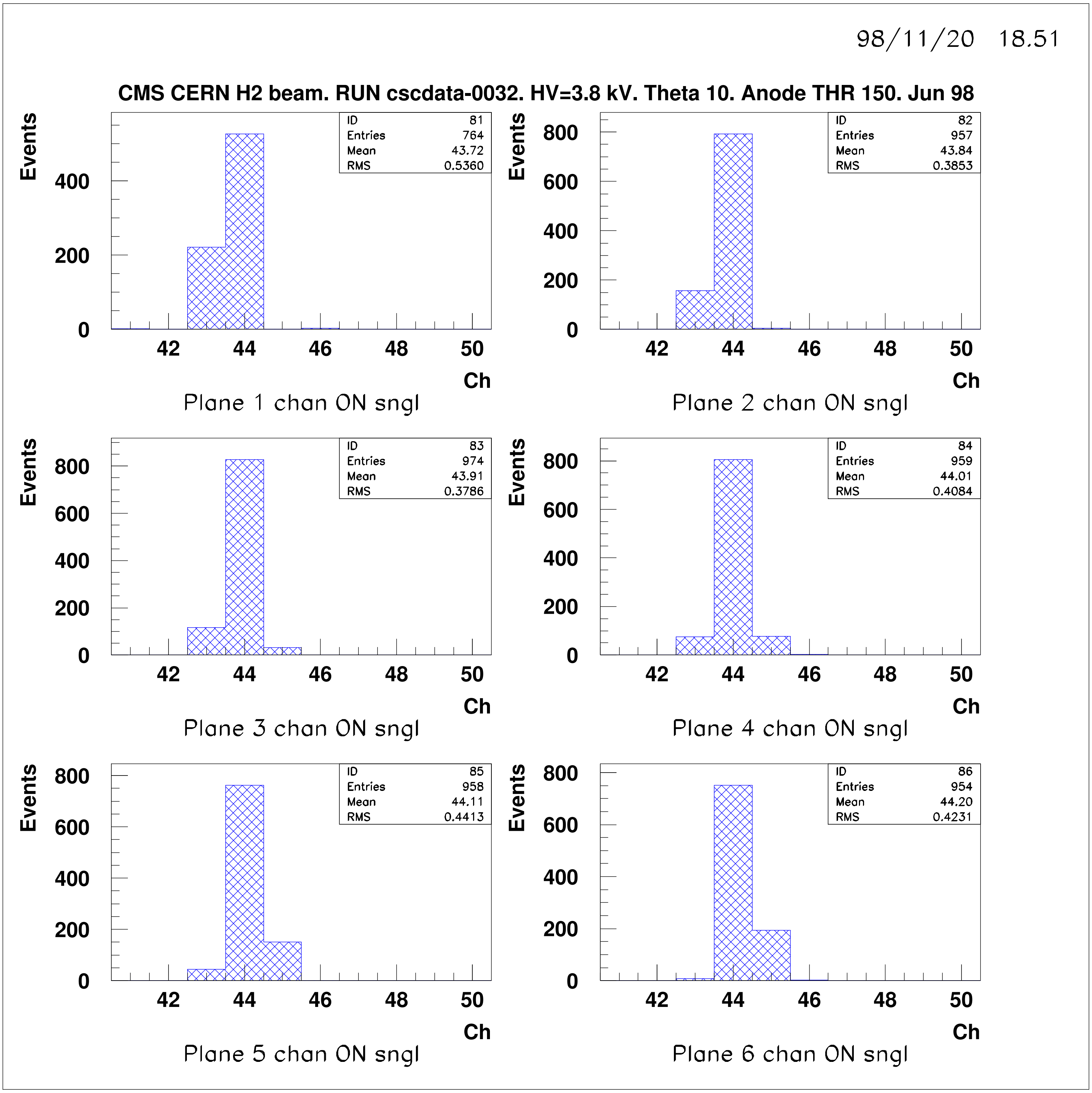
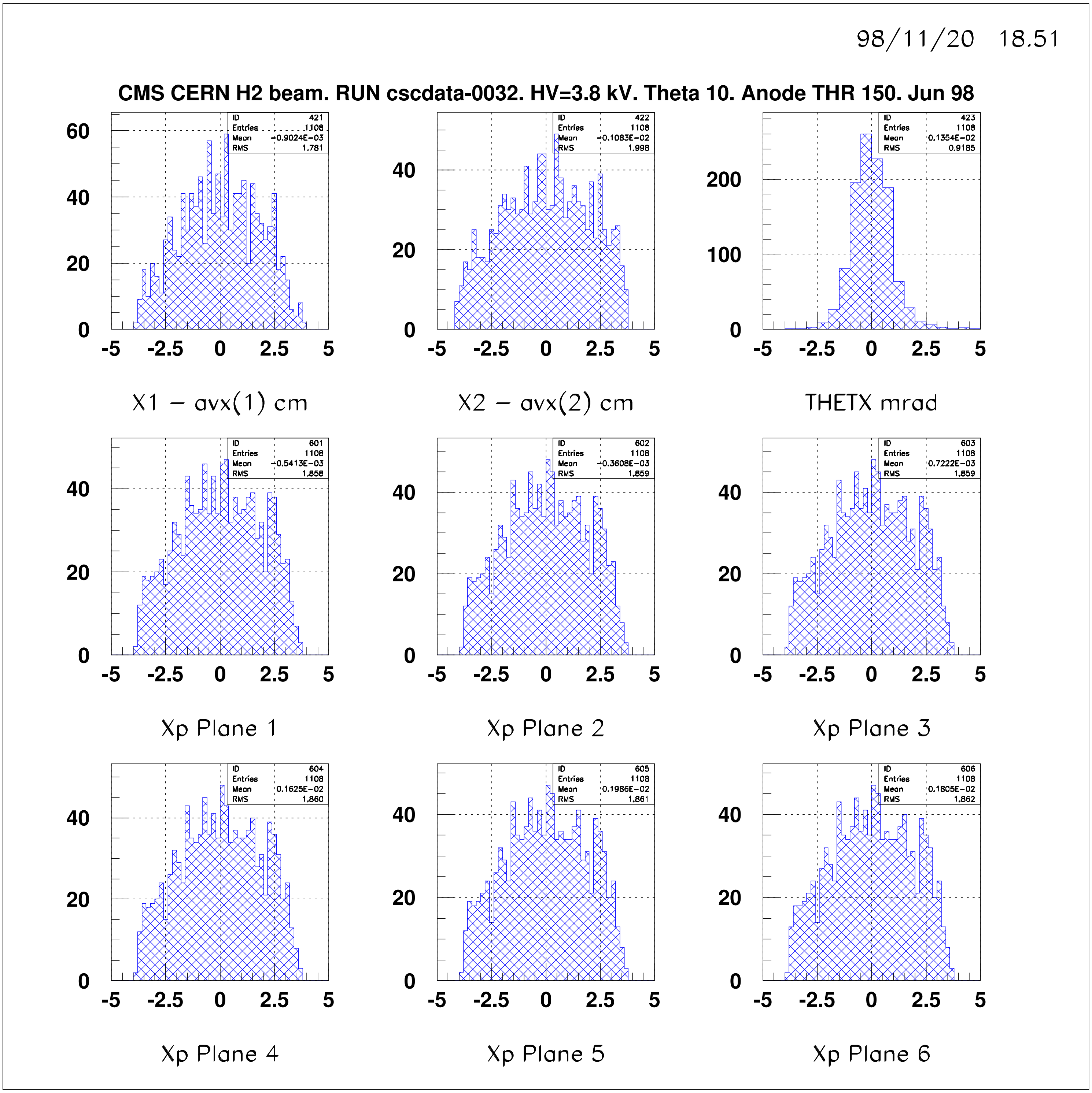
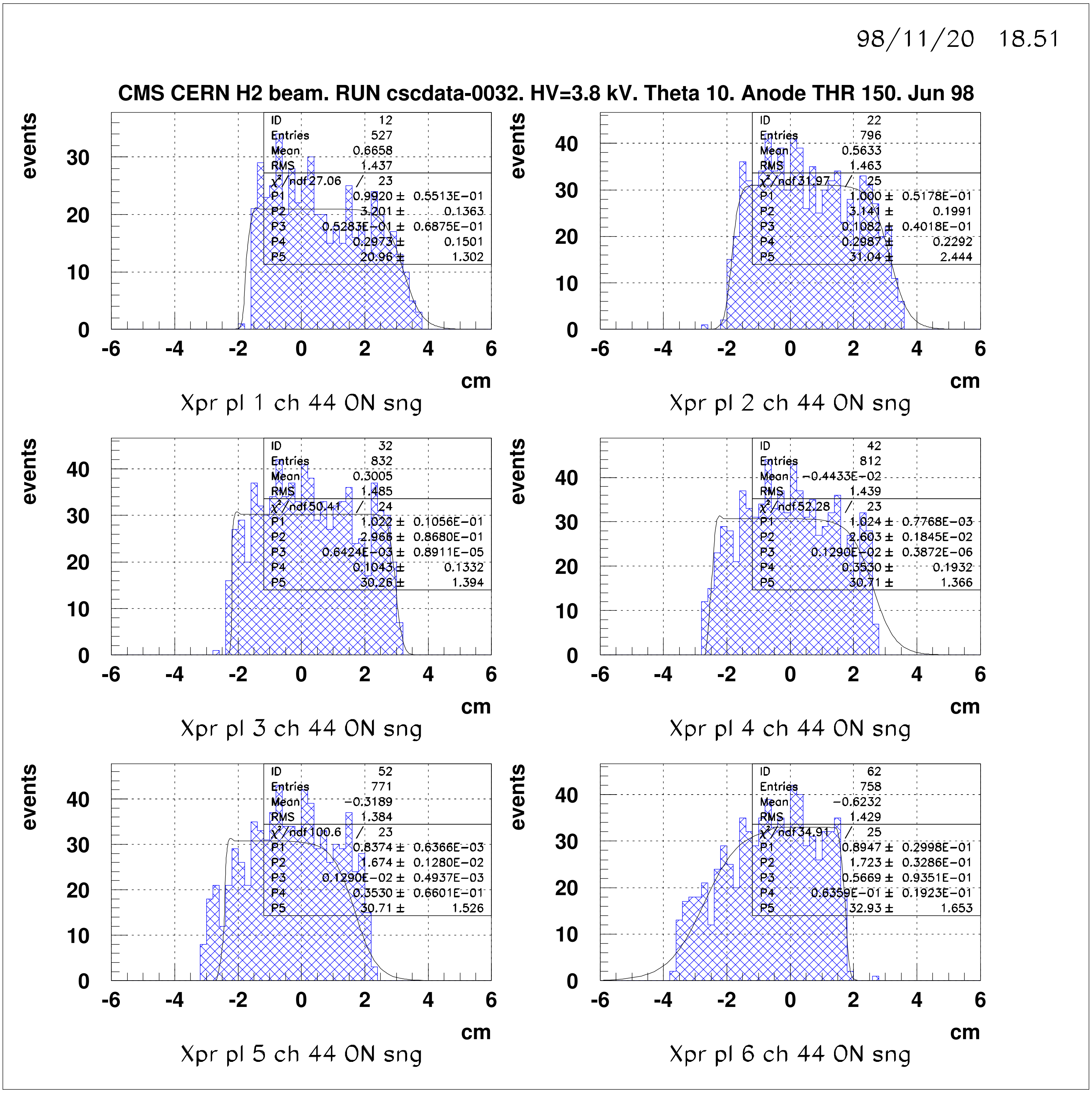

98/11/20 18.51
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 1 Entries 5070 Mean 6.707 RMS 2.021
Anode hits, total
ID 2 Entries 7973 Mean 2.045 RMS 2.209
Event multiplicity type
ID 3 Entries 3522 Mean 5.739 RMS 0.5161
Nmb of planes with mult=1
ID 101 Entries 5070 Mean 1.006 RMS 0.8229
Nhits Pl 1
ID 102 Entries 5070 Mean 1.197 RMS 0.7490
Nhits Pl 2
ID 103 Entries 5070 Mean 1.222 RMS 0.7022
Nhits Pl 3
ID 104 Entries 5070 Mean 1.240 RMS 0.7380
Nhits Pl 4
ID 105 Entries 5070 Mean 1.248 RMS 0.7732
Nhits Pl 5
ID 106 Entries 5070 Mean 1.253 RMS 0.7762
Nhits Pl 6
ID 111 Entries 5070 Mean 1.221 RMS 1.287
Mlt Pl 1
ID 112 Entries 5070 Mean 1.424 RMS 1.235
Mlt Pl 2
ID 113 Entries 5070 Mean 1.440 RMS 1.199
Mlt Pl 3
ID 114 Entries 5070 Mean 1.453 RMS 1.203
Mlt Pl 4
ID 115 Entries 5070 Mean 1.456 RMS 1.208
Mlt Pl 5
ID 116 Entries 5070 Mean 1.463 RMS 1.205
Mlt Pl 6

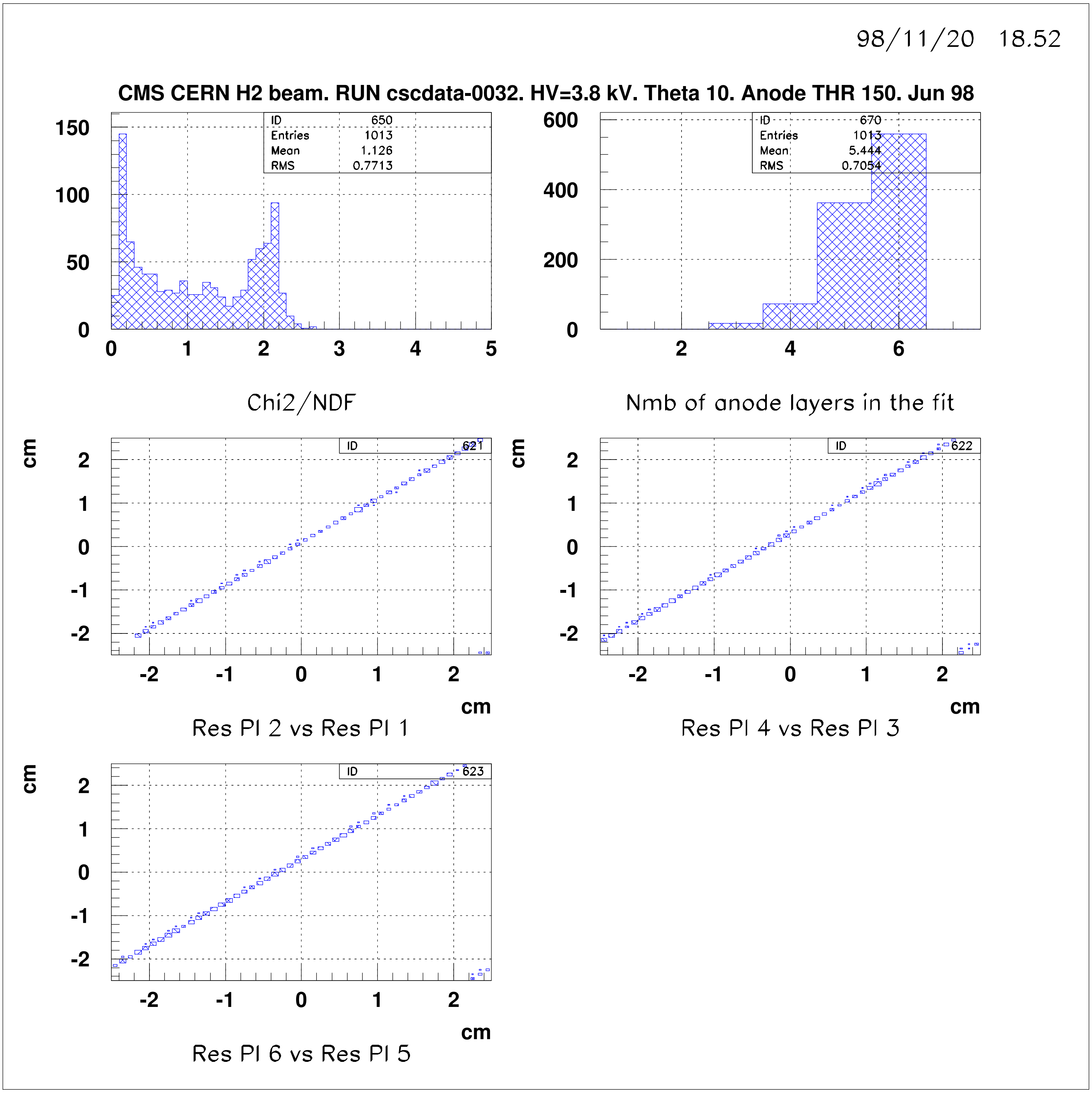

98/11/20 18.51
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 401
Entries 3173
Mean 418.7
RMS 54.95
bc1−lead (L+R), ch
ID 402
Entries 2306
Mean 469.4
RMS 48.12
bc1−lead (U+D), ch
ID 403
Entries 3008
Mean 440.6
RMS 52.77
bc2−lead (L+R), ch
ID 404
Entries 2895
Mean 449.4
RMS 52.35
bc2−lead (U+D), ch
ID 405
Entries 3173
Mean −1.113
RMS 130.4
bc1−lead (L−R), ch
ID 406
Entries 2306
Mean 43.27
RMS 143.4
bc1−lead (U−D), ch
ID 407
Entries 3008
Mean 8.667
RMS 136.4
bc2−lead (L−R), ch
ID 408
Entries 2895
Mean 46.49
RMS 135.6
bc2−lead (U−D), ch


98/11/20 18.51
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 81
Entries 764
Mean 43.72
RMS 0.5360
Events
Ch
Plane 1 chan ON sngl
ID 82
Entries 957
Mean 43.84
RMS 0.3853
Plane 2 chan ON sngl
ID 83
Entries 974
Mean 43.91
RMS 0.3786
Plane 3 chan ON sngl
ID 84
Entries 959
Mean 44.01
RMS 0.4084
Plane 4 chan ON sngl
ID 85
Entries 958
Mean 44.11
RMS 0.4413
Plane 5 chan ON sngl
ID 86
Entries 954
Mean 44.20
RMS 0.4231
Plane 6 chan ON sngl

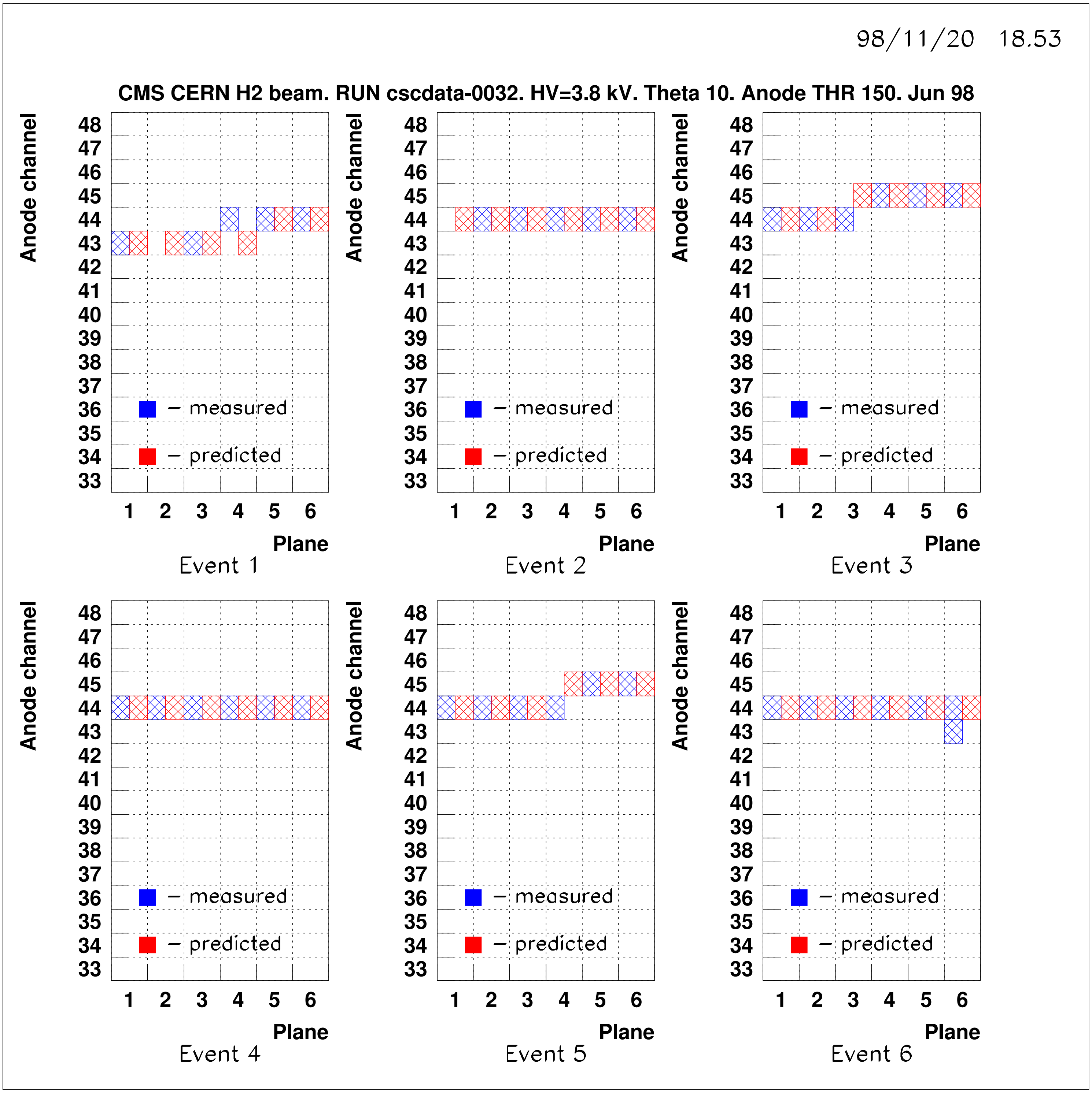


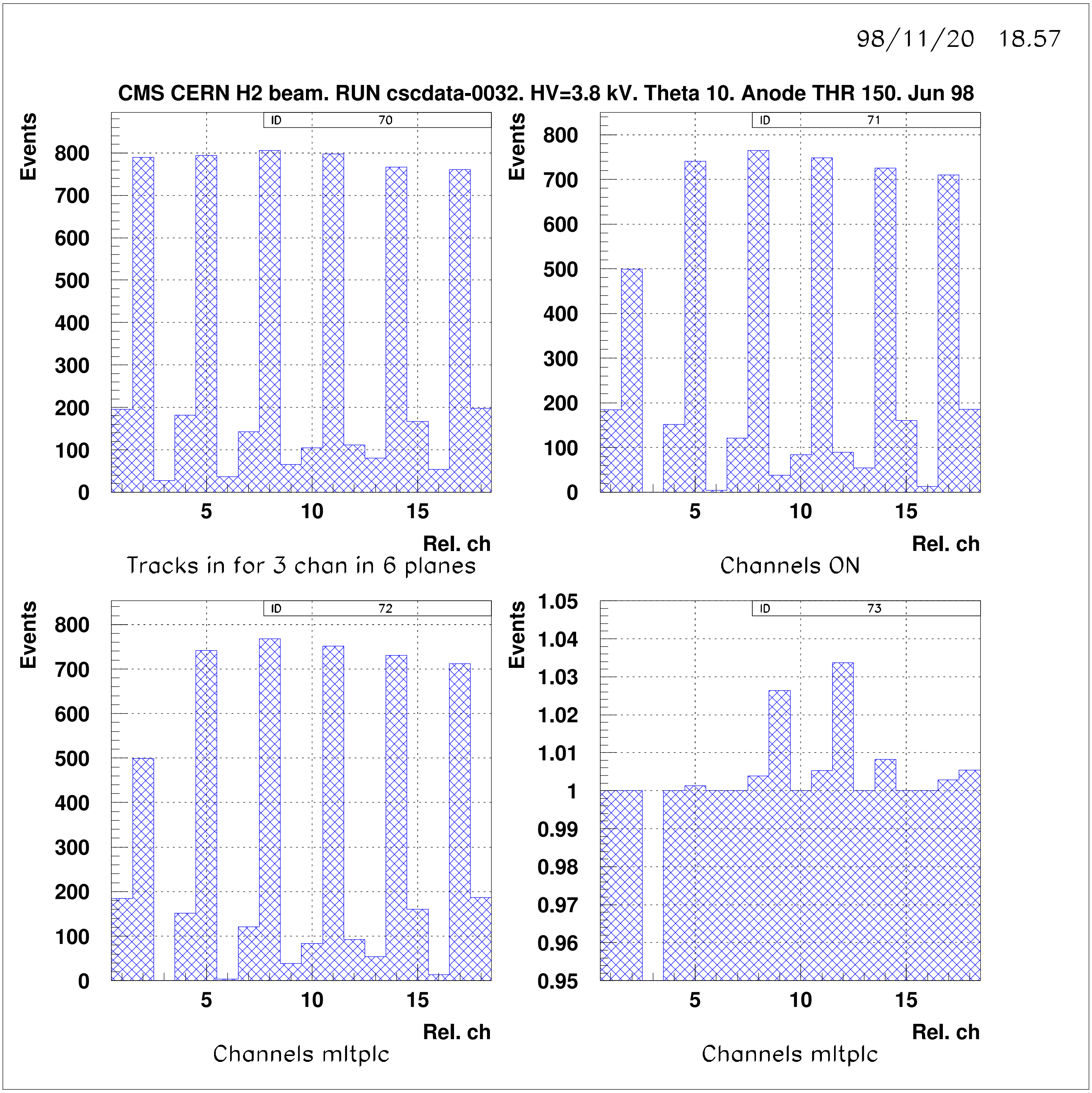
98/11/20 18.51
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 421 Entries 1108 Mean -0.9024E-03 RMS 1.781
X1 – avx(1) cm
ID 422 Entries 1108 Mean -0.1083E-02 RMS 1.998
X2 – avx(2) cm
ID 423 Entries 1108 Mean 0.1354E-02 RMS 0.9185
THETX mrad
ID 601 Entries 1108 Mean -0.5413E-03 RMS 1.858
Xp Plane 1
ID 602 Entries 1108 Mean -0.3608E-03 RMS 1.859
Xp Plane 2
ID 603 Entries 1108 Mean 0.7222E-03 RMS 1.859
Xp Plane 3
ID 604 Entries 1108 Mean 0.1625E-02 RMS 1.860
Xp Plane 4
ID 605 Entries 1108 Mean 0.1986E-02 RMS 1.861
Xp Plane 5
ID 606 Entries 1108 Mean 0.1805E-02 RMS 1.862
Xp Plane 6

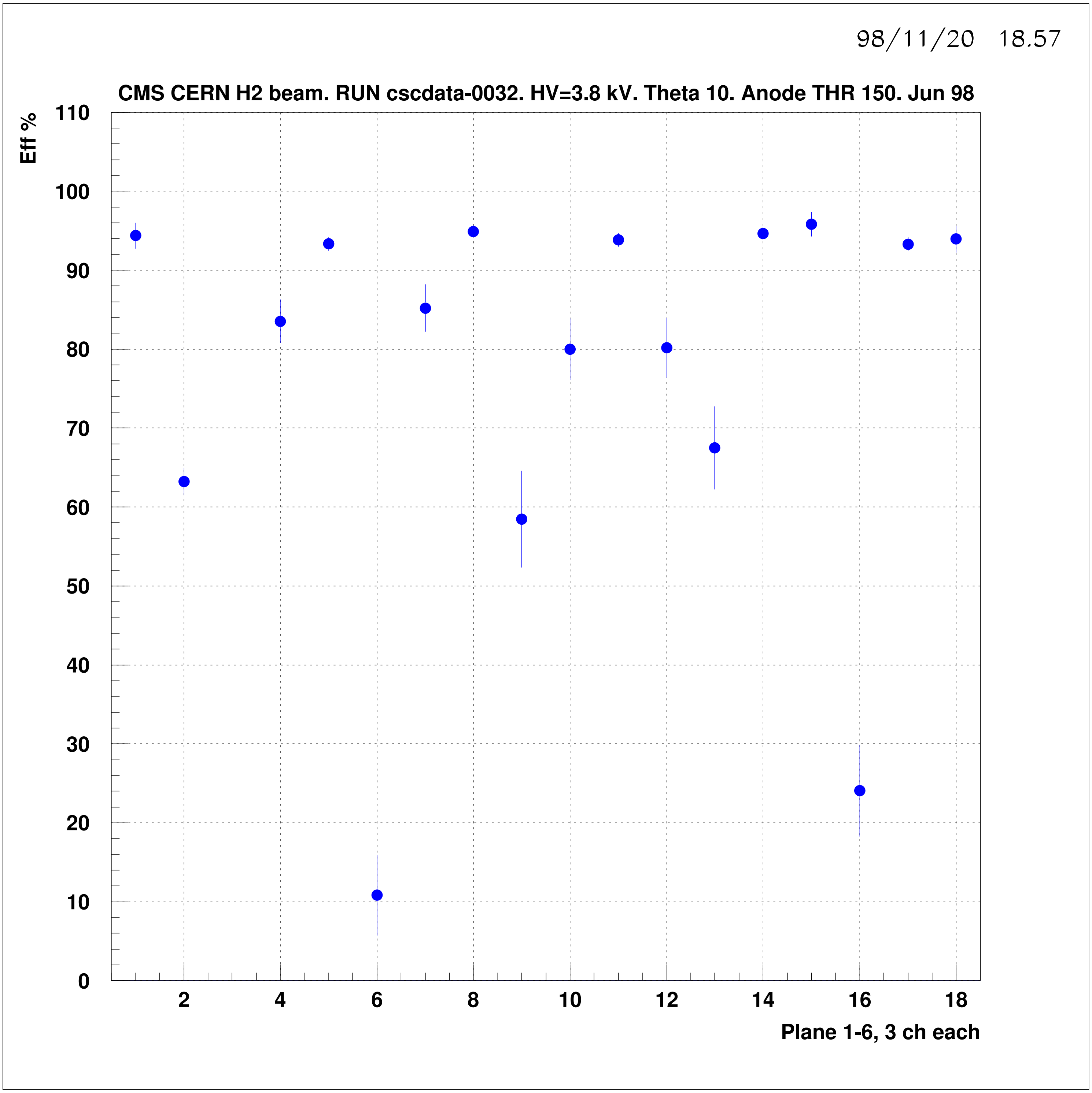

98/11/20 18.51
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
Xpr pl 1 ch 44 ON sng
Xpr pl 2 ch 44 ON sng
Xpr pl 3 ch 44 ON sng
Xpr pl 4 ch 44 ON sng
Xpr pl 5 ch 44 ON sng
Xpr pl 6 ch 44 ON sng
events
cm



98/11/20 18.52
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 650
Entries 1013
Mean 1.126
RMS 0.7713
Chi2/NDF
ID 670
Entries 1013
Mean 5.444
RMS 0.7054
Nmb of anode layers in the fit
ID 621
cm
cm
Res Pl 2 vs Res Pl 1
ID 622
cm
cm
Res Pl 4 vs Res Pl 3
ID 623
cm
cm
Res Pl 6 vs Res Pl 5

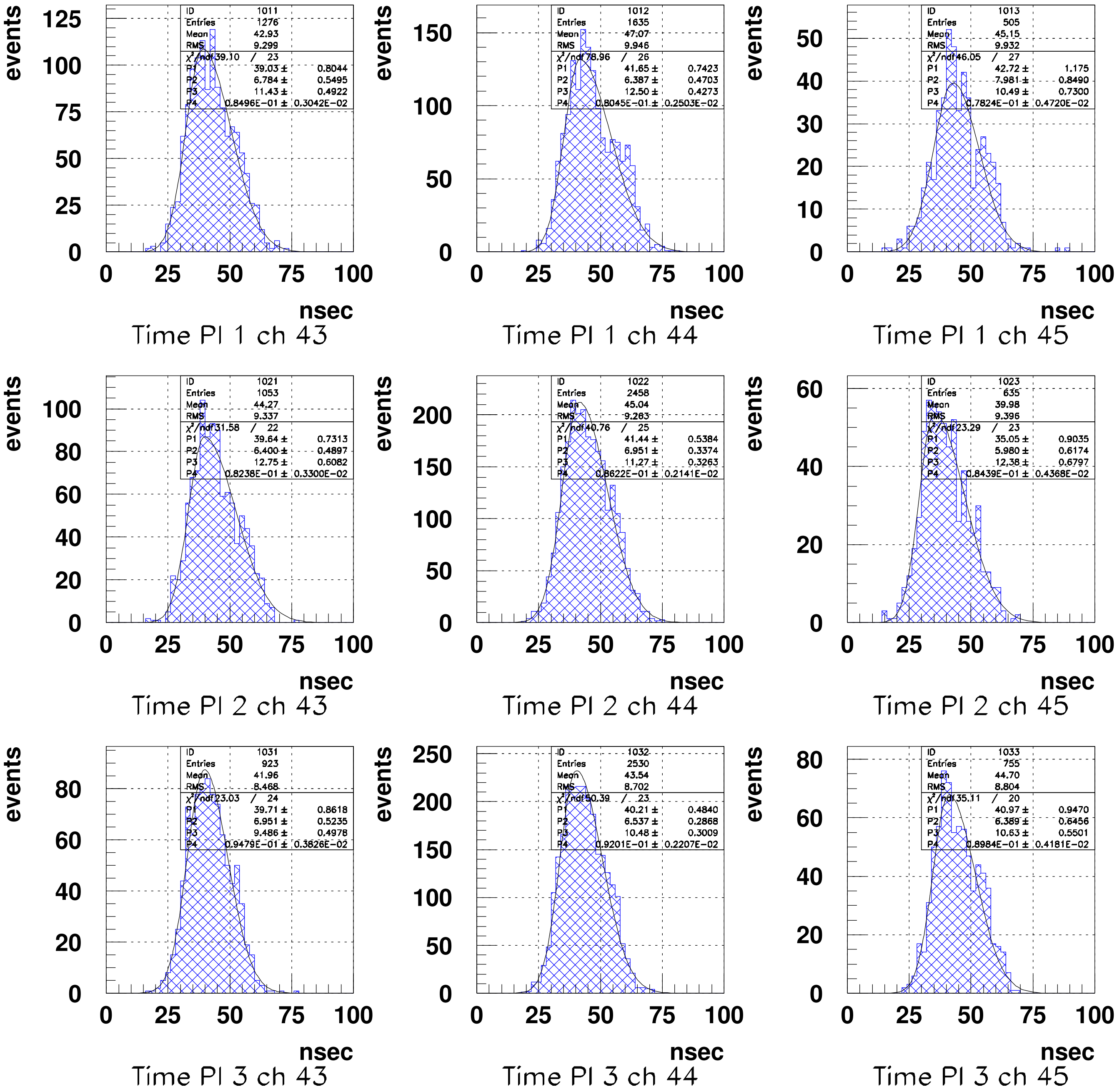

98/11/20 18.53
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
Anode channel
Plane
– measured
– predicted
Event 1
Event 2
Event 3
Event 4
Event 5
Event 6

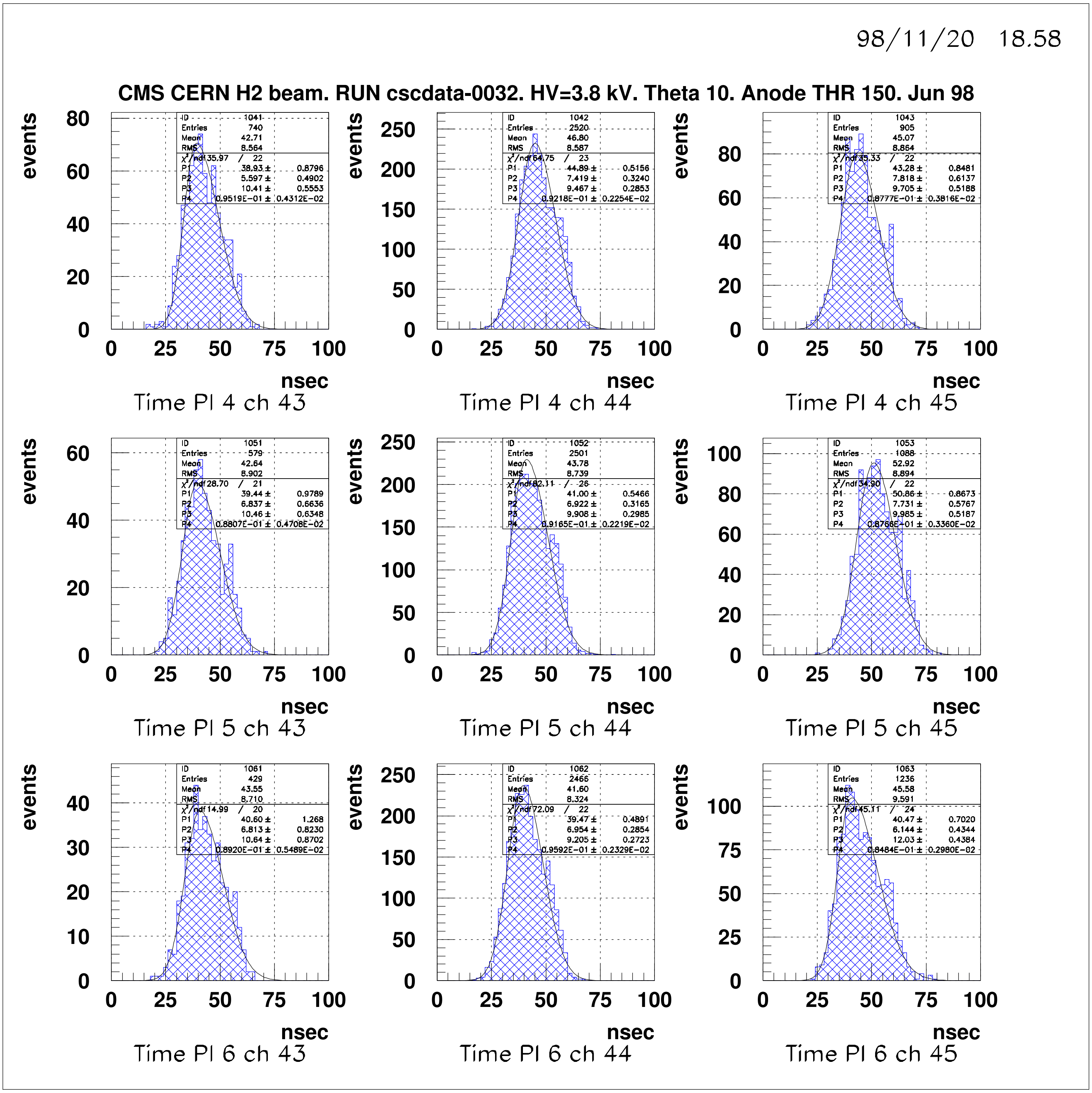

98/11/20 18.57
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 70
Events
Rel. ch
Tracks in for 3 chan in 6 planes
ID 71
Events
Rel. ch
Channels ON
ID 72
Events
Rel. ch
Channels mltplc
ID 73
Events
Rel. ch
Channels mltplc

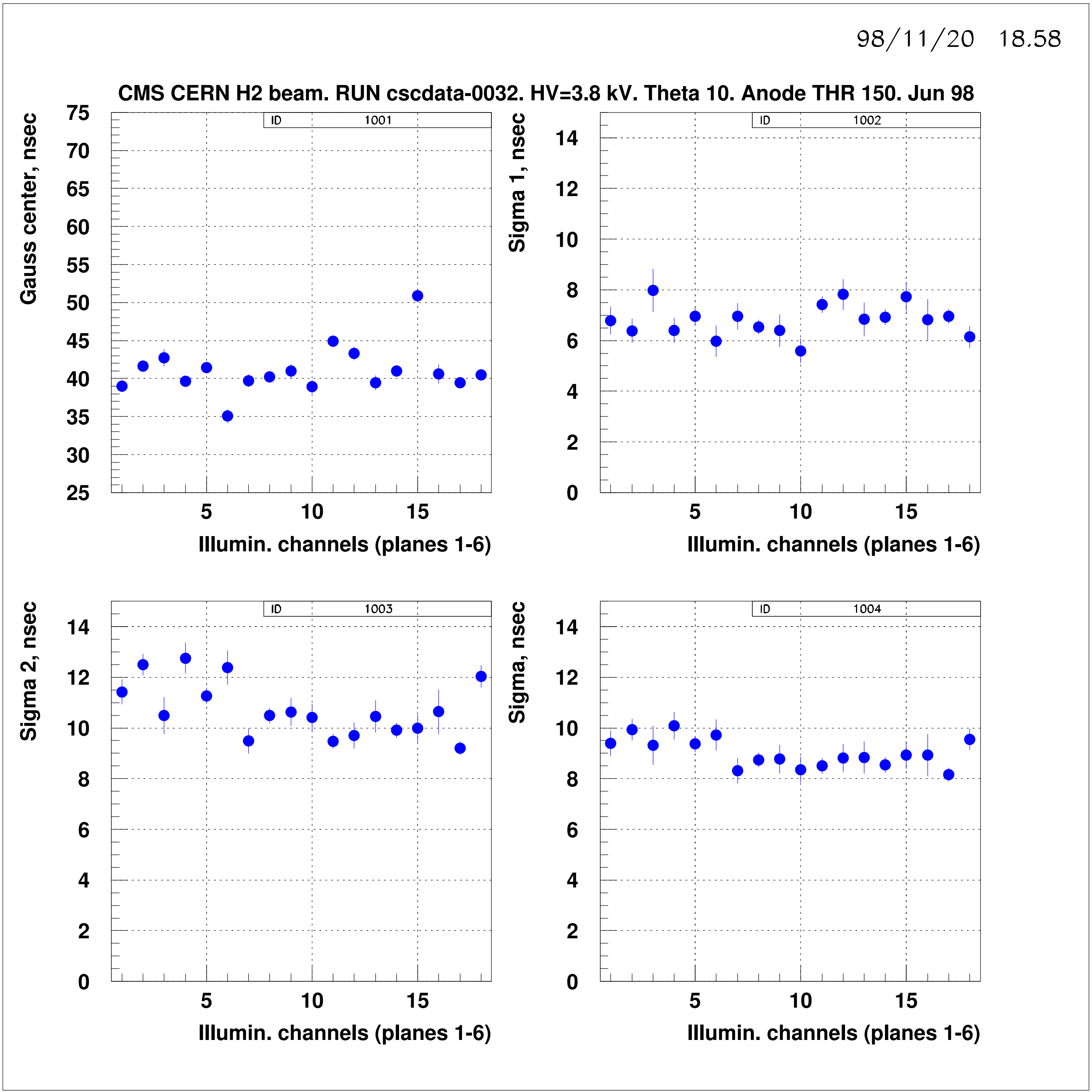

98/11/20 18.57
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
Eff %
110
100
90
80
70
60
50
40
30
20
10
0
2
4
6
8
10
12
14
16
18
Plane 1-6, 3 ch each

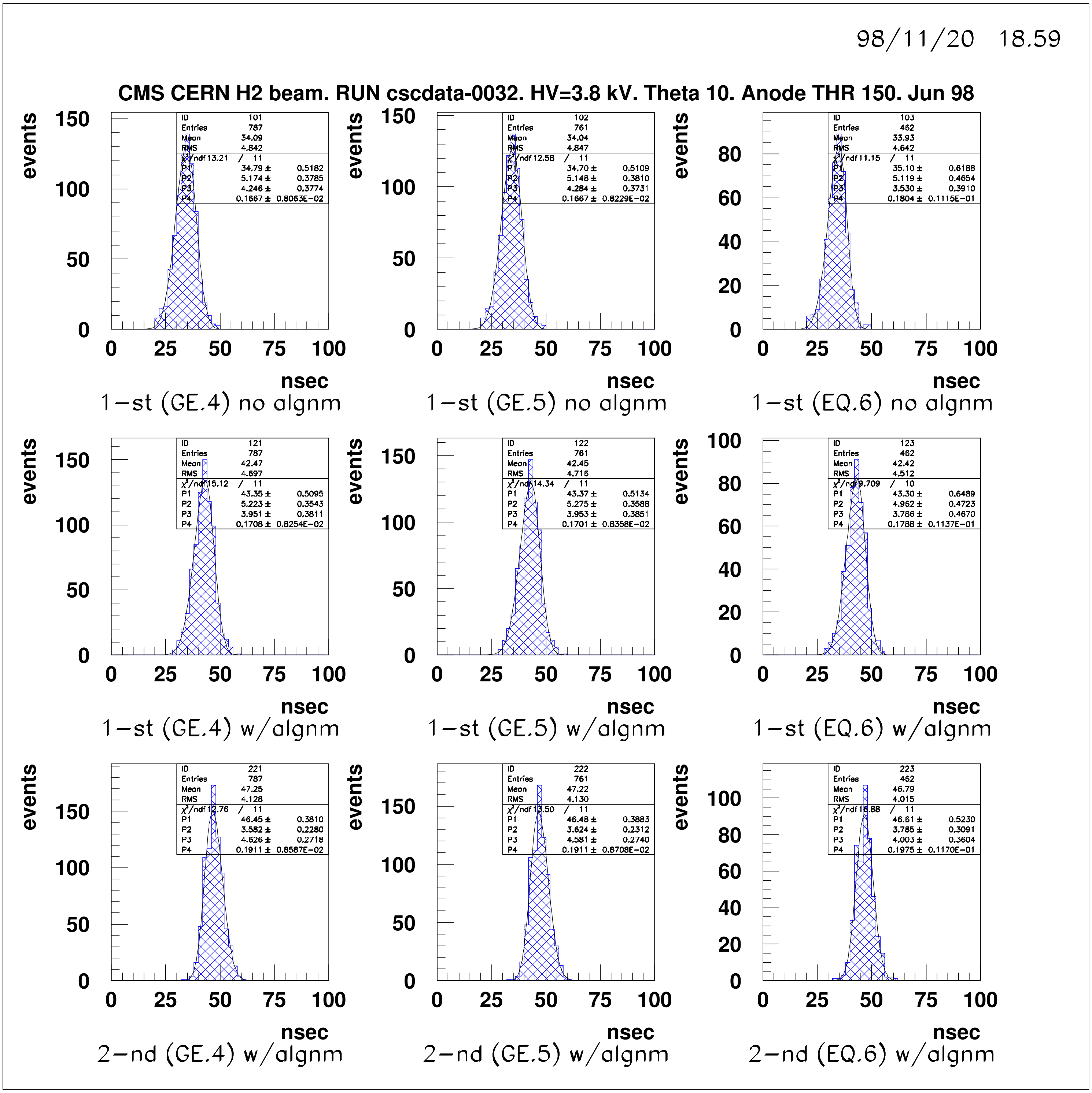
98/11/20 18.58

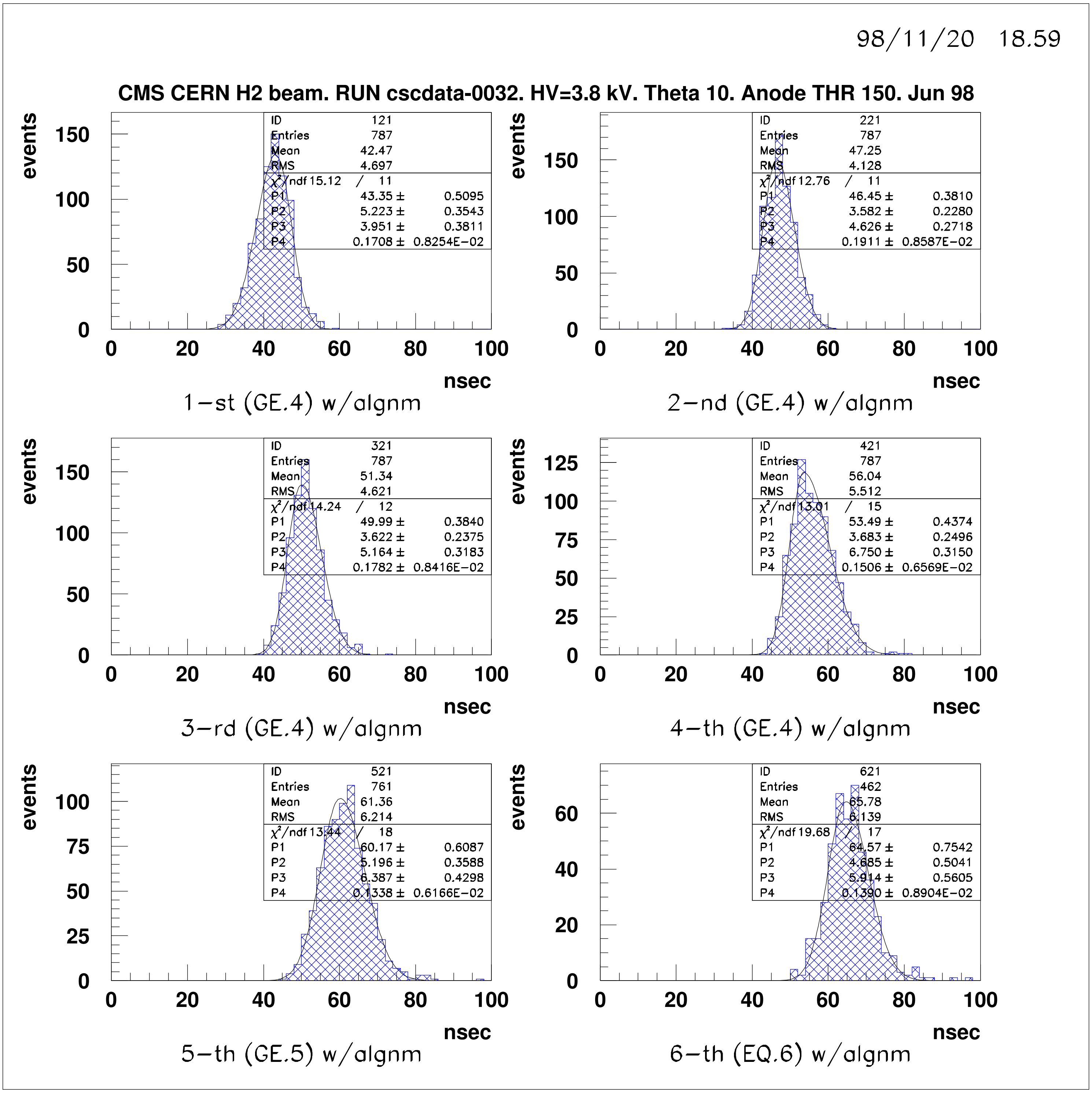
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98

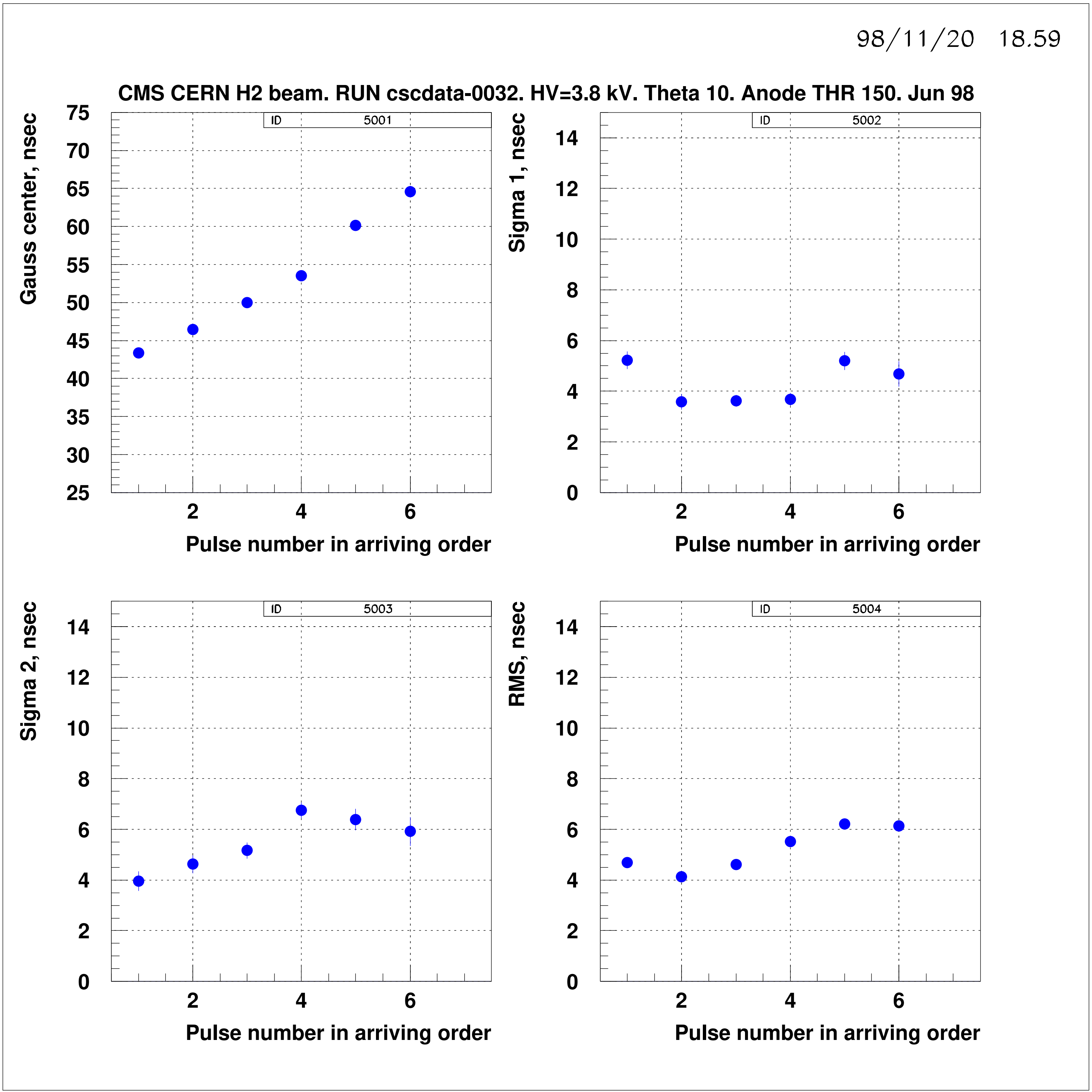


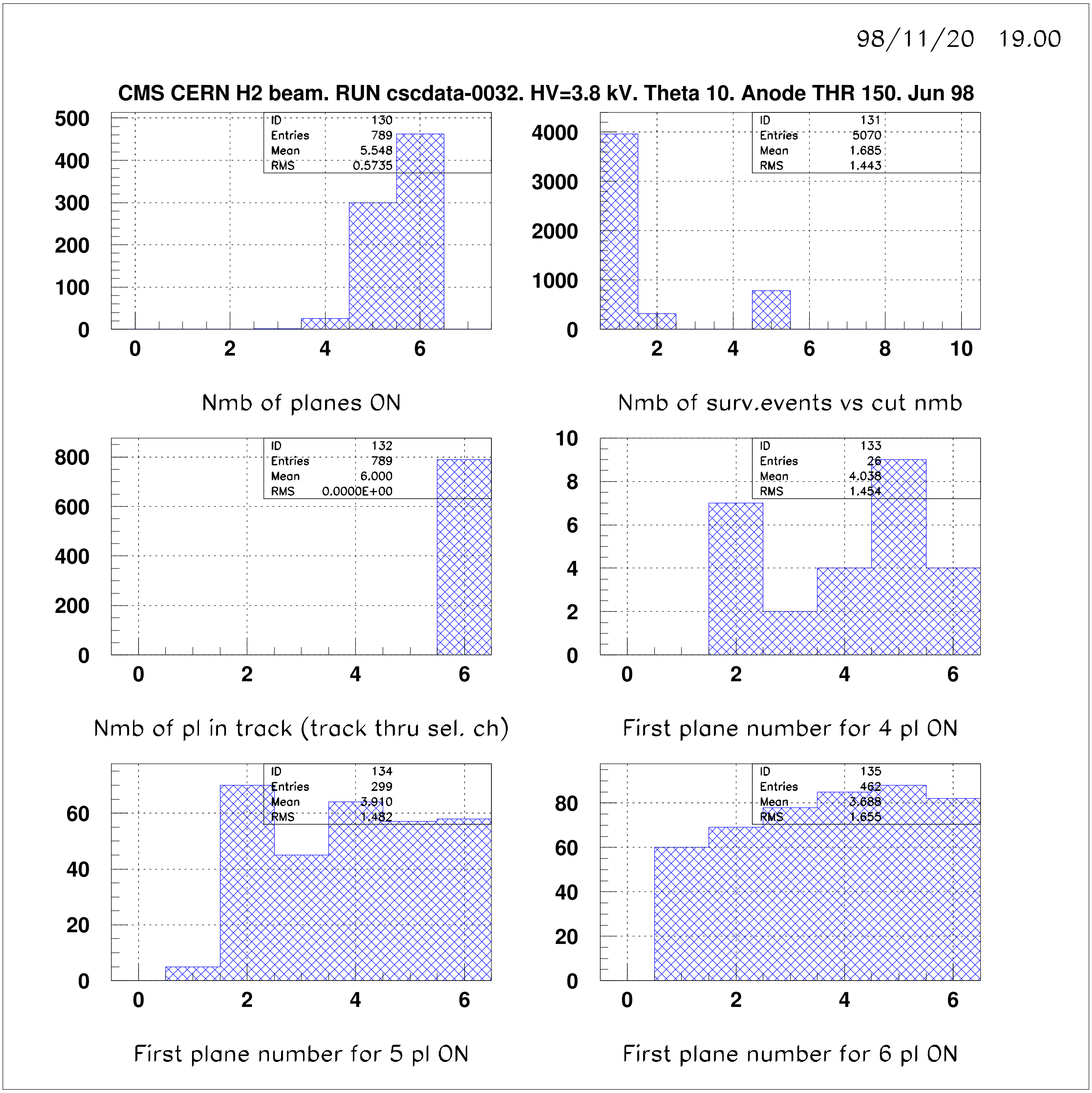

98/11/20 18.58
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 1041
Entries 740
Mean 42.71
RMS 8.564
χ²/ndf 35.97 / 22
P1 38.93 ± 0.8796
P2 5.597 ± 0.4902
P3 10.41 ± 0.5553
P4 0.9519E-01 ± 0.4312E-02
events
nsec
Time Pl 4 ch 43
ID 1042
Entries 2520
Mean 46.80
RMS 8.587
χ²/ndf 64.75 / 23
P1 44.89 ± 0.5156
P2 7.419 ± 0.3240
P3 9.467 ± 0.2853
P4 0.9218E-01 ± 0.2254E-02
events
nsec
Time Pl 4 ch 44
ID 1043
Entries 905
Mean 45.07
RMS 8.864
χ²/ndf 35.33 / 22
P1 43.28 ± 0.8481
P2 7.818 ± 0.6137
P3 9.705 ± 0.5188
P4 0.8777E-01 ± 0.3816E-02
events
nsec
Time Pl 4 ch 45
ID 1051
Entries 579
Mean 42.64
RMS 8.902
χ²/ndf 28.70 / 21
P1 39.44 ± 0.9789
P2 6.837 ± 0.6636
P3 10.46 ± 0.6348
P4 0.8807E-01 ± 0.4708E-02
events
nsec
Time Pl 5 ch 43
ID 1052
Entries 2501
Mean 43.78
RMS 8.739
χ²/ndf 82.11 / 26
P1 41.00 ± 0.5466
P2 6.922 ± 0.3165
P3 9.908 ± 0.2985
P4 0.9165E-01 ± 0.2219E-02
events
nsec
Time Pl 5 ch 44
ID 1053
Entries 1088
Mean 52.92
RMS 8.894
χ²/ndf 34.90 / 22
P1 50.86 ± 0.8673
P2 7.731 ± 0.5767
P3 9.985 ± 0.5187
P4 0.8766E-01 ± 0.3360E-02
events
nsec
Time Pl 5 ch 45
ID 1061
Entries 429
Mean 43.55
RMS 8.710
χ²/ndf 14.99 / 20
P1 40.60 ± 1.268
P2 6.813 ± 0.8230
P3 10.64 ± 0.8702
P4 0.8920E-01 ± 0.5489E-02
events
nsec
Time Pl 6 ch 43
ID 1062
Entries 2466
Mean 41.60
RMS 8.324
χ²/ndf 72.09 / 22
P1 39.47 ± 0.4891
P2 6.954 ± 0.2854
P3 9.205 ± 0.2723
P4 0.9592E-01 ± 0.2329E-02
events
nsec
Time Pl 6 ch 44
ID 1063
Entries 1236
Mean 45.58
RMS 9.591
χ²/ndf 45.11 / 24
P1 40.47 ± 0.7020
P2 6.144 ± 0.4344
P3 12.03 ± 0.4384
P4 0.8484E-01 ± 0.2980E-02
events
nsec
Time Pl 6 ch 45

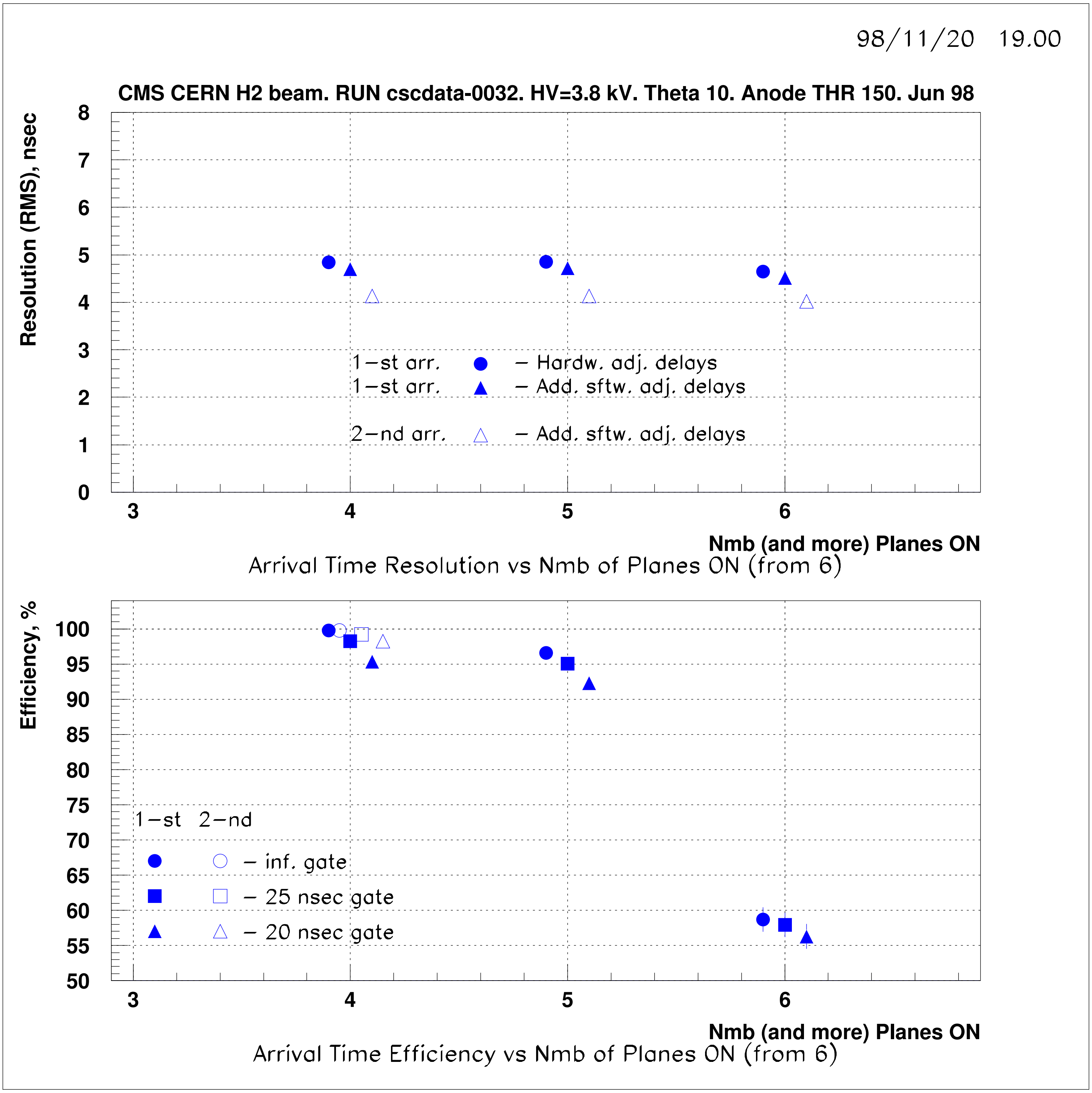

98/11/20 18.58
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 1001
Gauss center, nsec
Illumin. channels (planes 1-6)
ID 1002
Sigma 1, nsec
Illumin. channels (planes 1-6)
ID 1003
Sigma 2, nsec
Illumin. channels (planes 1-6)
ID 1004
Sigma, nsec
Illumin. channels (planes 1-6)

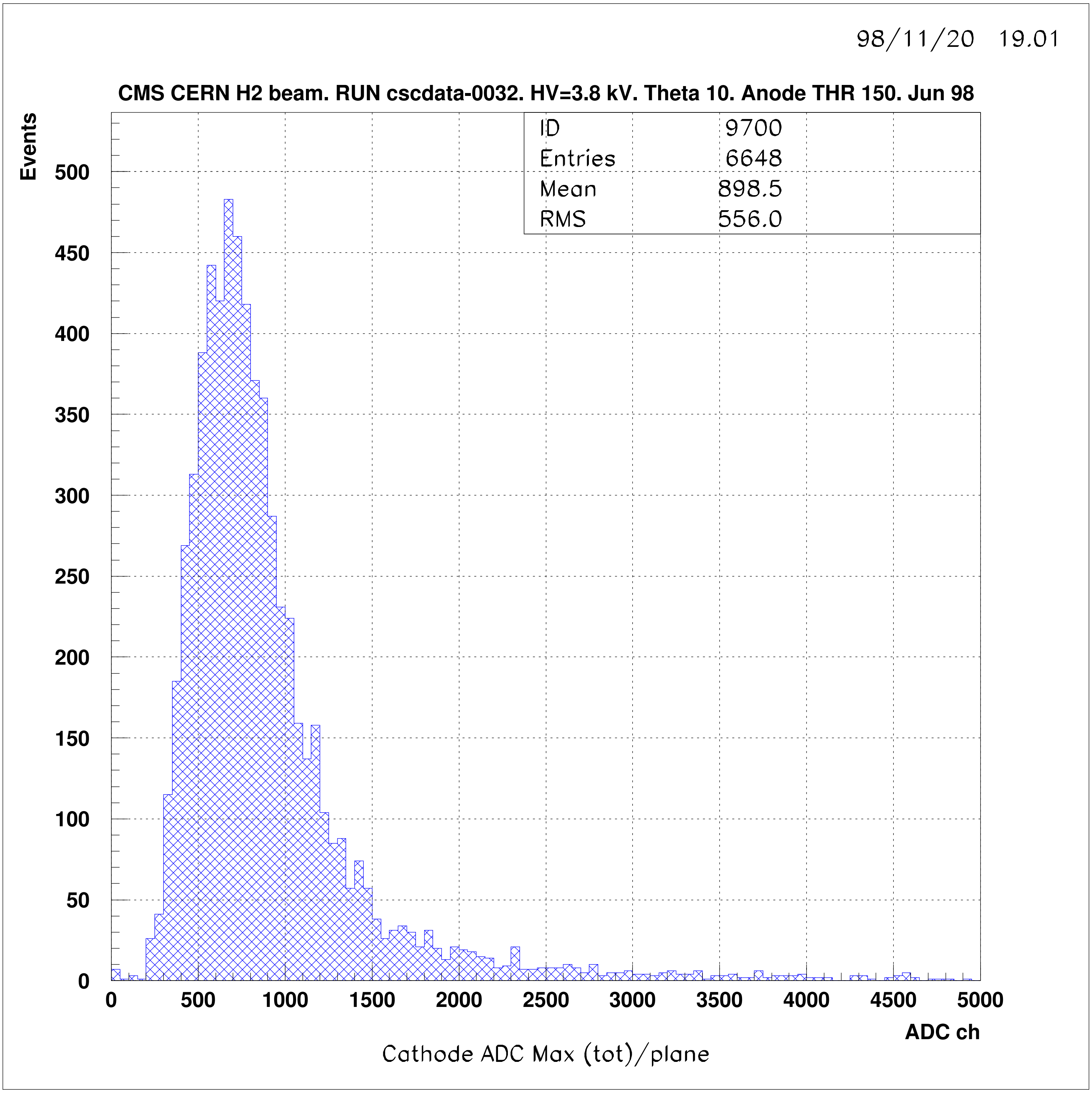

98/11/20 18.59
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
events
nsec
ID 101 Entries 787 Mean 34.09 RMS 4.842
χ²/ndf 13.21 / 11
P1 34.79 ± 0.5182
P2 5.174 ± 0.3785
P3 4.246 ± 0.3774
P4 0.1667 ± 0.8063E-02
1−st (GE.4) no algnm
ID 102 Entries 761 Mean 34.04 RMS 4.847
χ²/ndf 12.58 / 11
P1 34.70 ± 0.5109
P2 5.148 ± 0.3810
P3 4.284 ± 0.3731
P4 0.1667 ± 0.8229E-02
1−st (GE.5) no algnm
ID 103 Entries 462 Mean 33.93 RMS 4.642
χ²/ndf 11.15 / 11
P1 35.10 ± 0.6188
P2 5.119 ± 0.4654
P3 3.530 ± 0.3910
P4 0.1804 ± 0.1115E-01
1−st (EQ.6) no algnm
ID 121 Entries 787 Mean 42.47 RMS 4.697
χ²/ndf 15.12 / 11
P1 43.35 ± 0.5095
P2 5.223 ± 0.3543
P3 3.951 ± 0.3811
P4 0.1708 ± 0.8254E-02
1−st (GE.4) w/algnm
ID 122 Entries 761 Mean 42.45 RMS 4.716
χ²/ndf 14.34 / 11
P1 43.37 ± 0.5134
P2 5.275 ± 0.3588
P3 3.953 ± 0.3851
P4 0.1701 ± 0.8358E-02
1−st (GE.5) w/algnm
ID 123 Entries 462 Mean 42.42 RMS 4.512
χ²/ndf 9.709 / 10
P1 43.30 ± 0.6489
P2 4.962 ± 0.4723
P3 3.786 ± 0.4670
P4 0.1788 ± 0.1137E-01
1−st (EQ.6) w/algnm
ID 221 Entries 787 Mean 47.25 RMS 4.128
χ²/ndf 12.76 / 11
P1 46.45 ± 0.3810
P2 3.582 ± 0.2280
P3 4.626 ± 0.2718
P4 0.1911 ± 0.8587E-02
2−nd (GE.4) w/algnm
ID 222 Entries 761 Mean 47.22 RMS 4.130
χ²/ndf 13.50 / 11
P1 46.48 ± 0.3883
P2 3.624 ± 0.2312
P3 4.581 ± 0.2740
P4 0.1911 ± 0.8708E-02
2−nd (GE.5) w/algnm
ID 223 Entries 462 Mean 46.79 RMS 4.015
χ²/ndf 16.88 / 11
P1 46.61 ± 0.5230
P2 3.785 ± 0.3091
P3 4.003 ± 0.3604
P4 0.1975 ± 0.1170E-01
2−nd (EQ.6) w/algnm

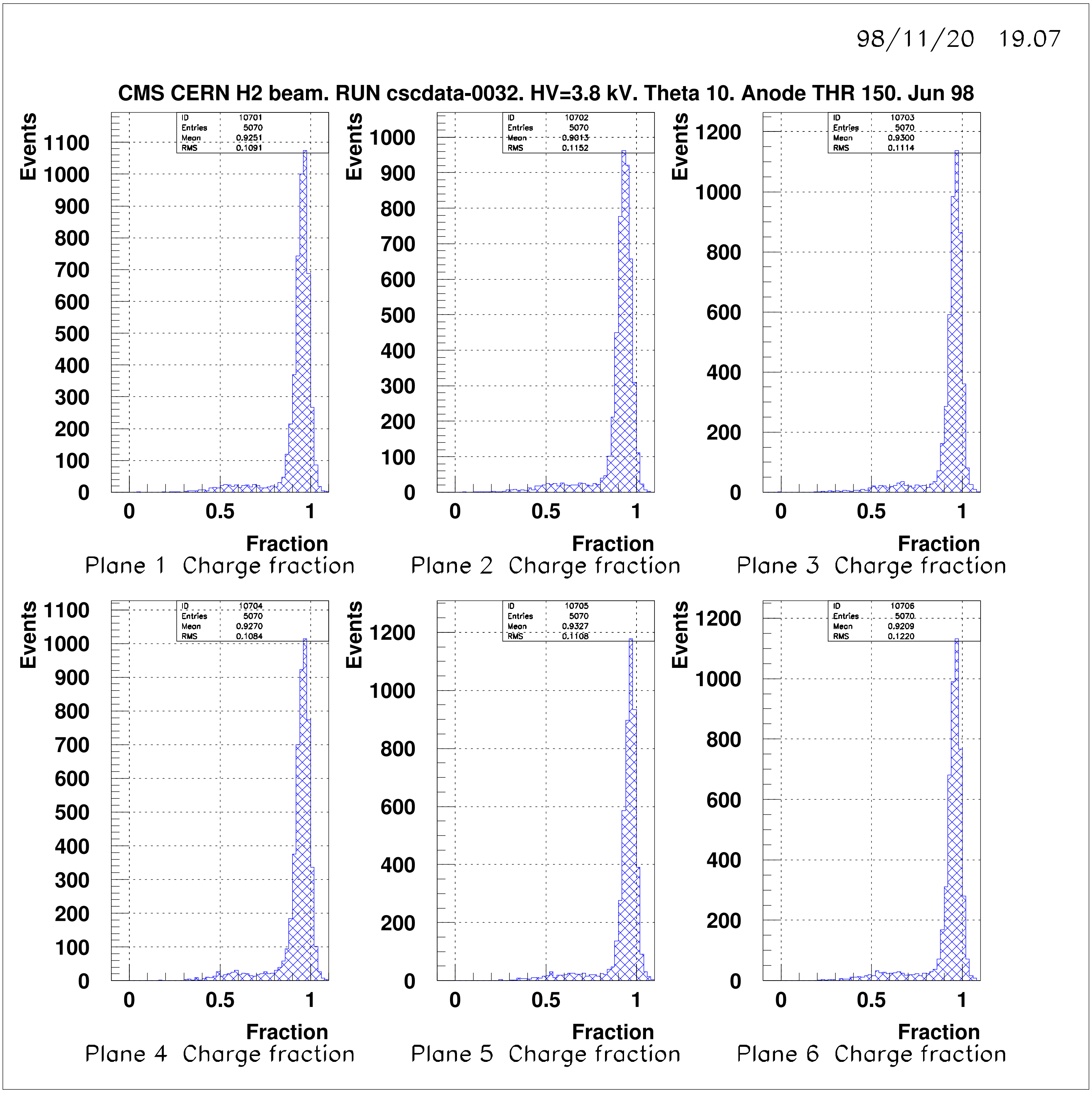

98/11/20 18.59
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 121
Entries 787
Mean 42.47
RMS 4.697
χ^2/ndf 15.12 / 11
P1 43.35 ± 0.5095
P2 5.223 ± 0.3543
P3 3.951 ± 0.3811
P4 0.1708 ± 0.8254E−02
events
nsec
1−st (GE.4) w/algnm
ID 221
Entries 787
Mean 47.25
RMS 4.128
χ^2/ndf 12.76 / 11
P1 46.45 ± 0.3810
P2 3.582 ± 0.2280
P3 4.626 ± 0.2718
P4 0.1911 ± 0.8587E−02
events
nsec
2−nd (GE.4) w/algnm
ID 321
Entries 787
Mean 51.34
RMS 4.621
χ^2/ndf 14.24 / 12
P1 49.99 ± 0.3840
P2 3.622 ± 0.2375
P3 5.164 ± 0.3183
P4 0.1782 ± 0.8416E−02
events
nsec
3−rd (GE.4) w/algnm
ID 421
Entries 787
Mean 56.04
RMS 5.512
χ^2/ndf 13.01 / 15
P1 53.49 ± 0.4374
P2 3.683 ± 0.2496
P3 6.750 ± 0.3150
P4 0.1506 ± 0.6569E−02
events
nsec
4−th (GE.4) w/algnm
ID 521
Entries 761
Mean 61.36
RMS 6.214
χ^2/ndf 13.44 / 18
P1 60.17 ± 0.6087
P2 5.196 ± 0.3588
P3 6.387 ± 0.4298
P4 0.1338 ± 0.6166E−02
events
nsec
5−th (GE.5) w/algnm
ID 621
Entries 462
Mean 65.78
RMS 6.139
χ^2/ndf 19.68 / 17
P1 64.57 ± 0.7542
P2 4.685 ± 0.5041
P3 5.914 ± 0.5605
P4 0.1390 ± 0.8904E−02
events
nsec
6−th (EQ.6) w/algnm


98/11/20 18.59
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 5001
Gauss center, nsec
Pulse number in arriving order
ID 5002
Sigma 1, nsec
Pulse number in arriving order
ID 5003
Sigma 2, nsec
Pulse number in arriving order
ID 5004
RMS, nsec
Pulse number in arriving order

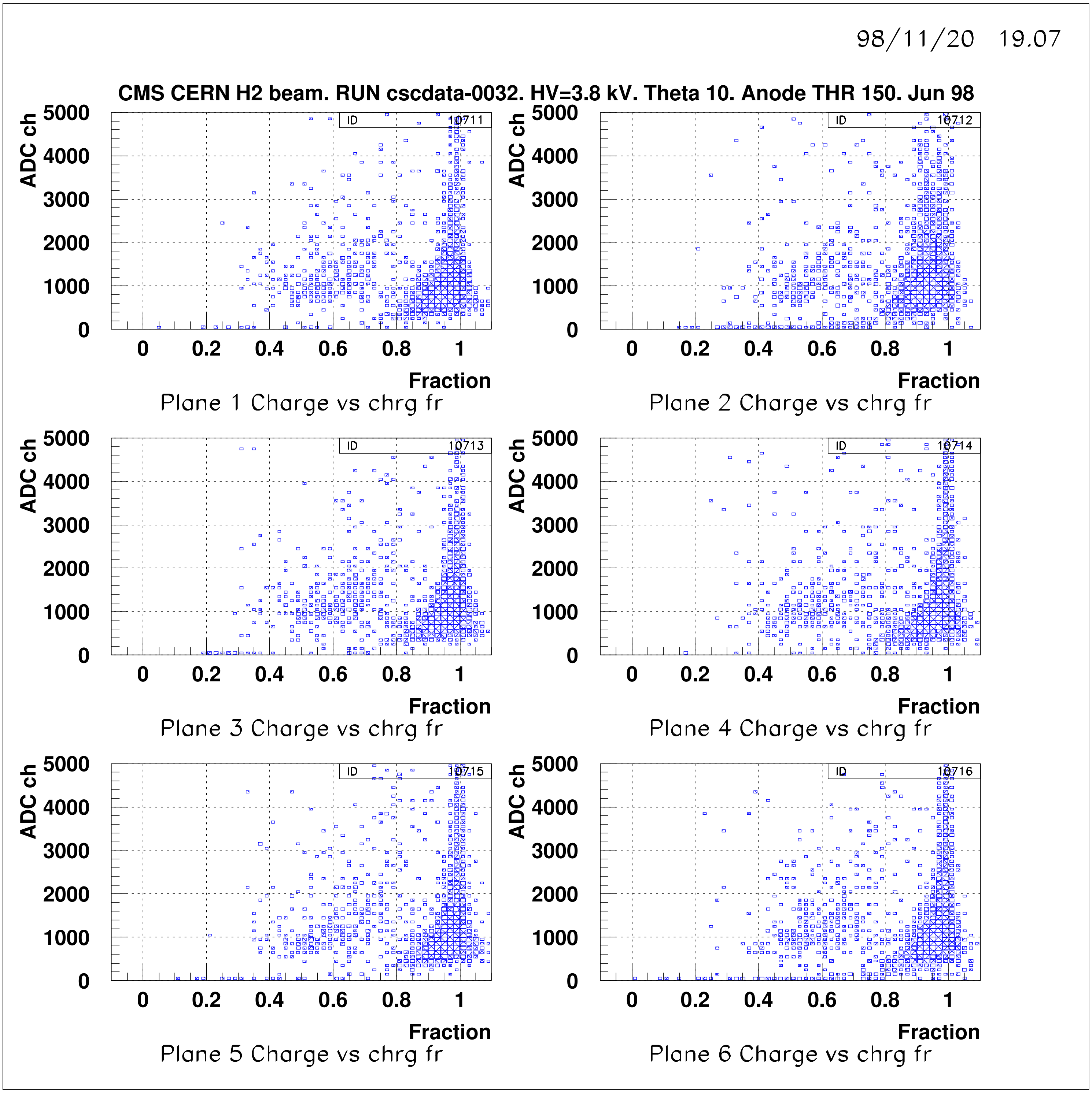

98/11/20 19.00
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 130
Entries 789
Mean 5.548
RMS 0.5735
Nmb of planes ON
ID 131
Entries 5070
Mean 1.685
RMS 1.443
Nmb of surv.events vs cut nmb
ID 132
Entries 789
Mean 6.000
RMS 0.0000E+00
Nmb of pl in track (track thru sel. ch)
ID 133
Entries 26
Mean 4.038
RMS 1.454
First plane number for 4 pl ON
ID 134
Entries 299
Mean 3.910
RMS 1.482
First plane number for 5 pl ON
ID 135
Entries 462
Mean 3.688
RMS 1.655
First plane number for 6 pl ON

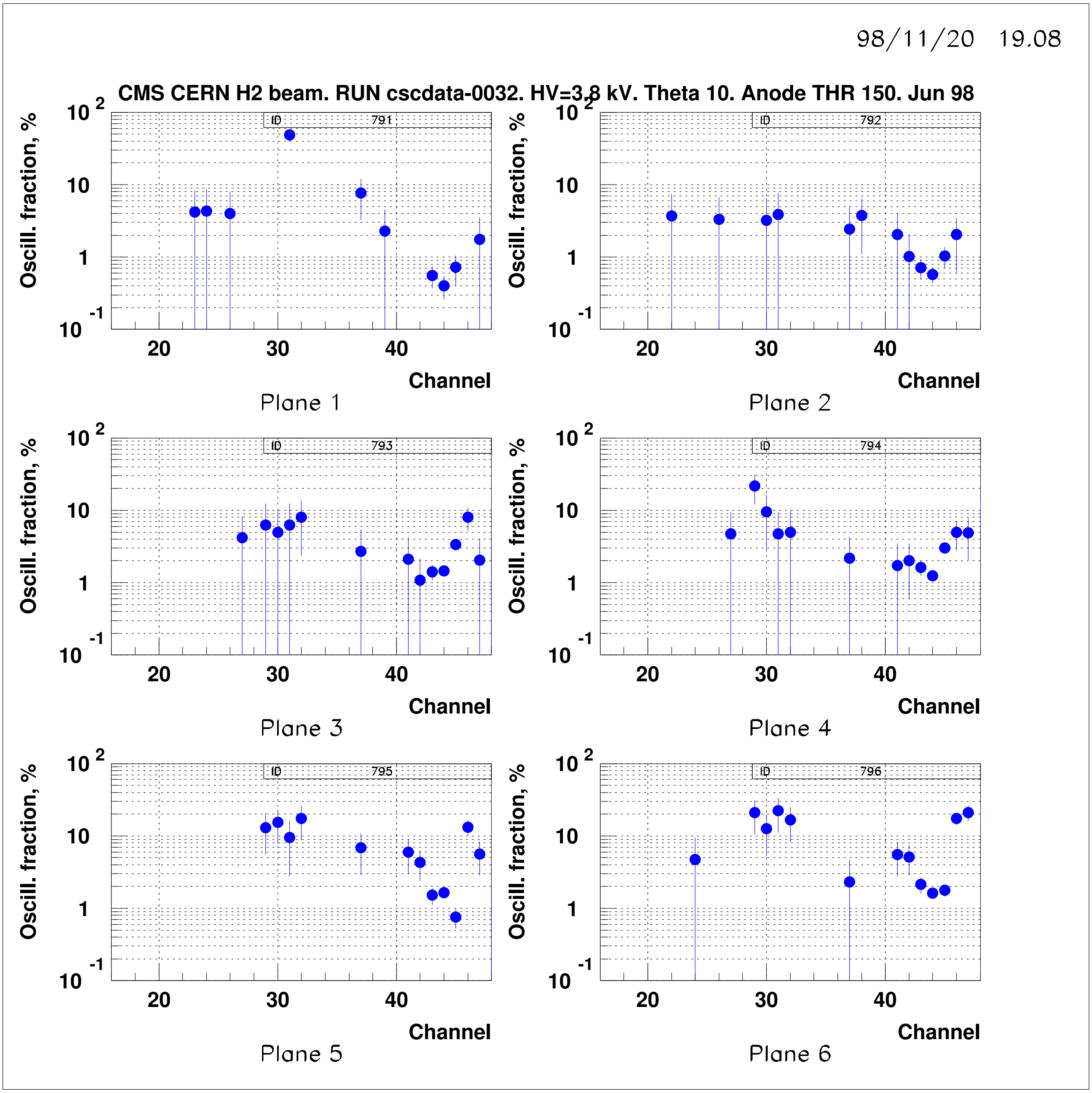

98/11/20 19.00
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
Resolution (RMS), nsec
8
7
6
5
4
3
2
1
0
3
4
5
6
1−st arr. − Hardw. adj. delays
1−st arr. − Add. sftw. adj. delays
2−nd arr. − Add. sftw. adj. delays
Nmb (and more) Planes ON
Arrival Time Resolution vs Nmb of Planes ON (from 6)
Efficiency, %
100
95
90
85
80
75
70
65
60
55
50
3
4
5
6
1−st 2−nd
− inf. gate
− 25 nsec gate
− 20 nsec gate
Nmb (and more) Planes ON
Arrival Time Efficiency vs Nmb of Planes ON (from 6)

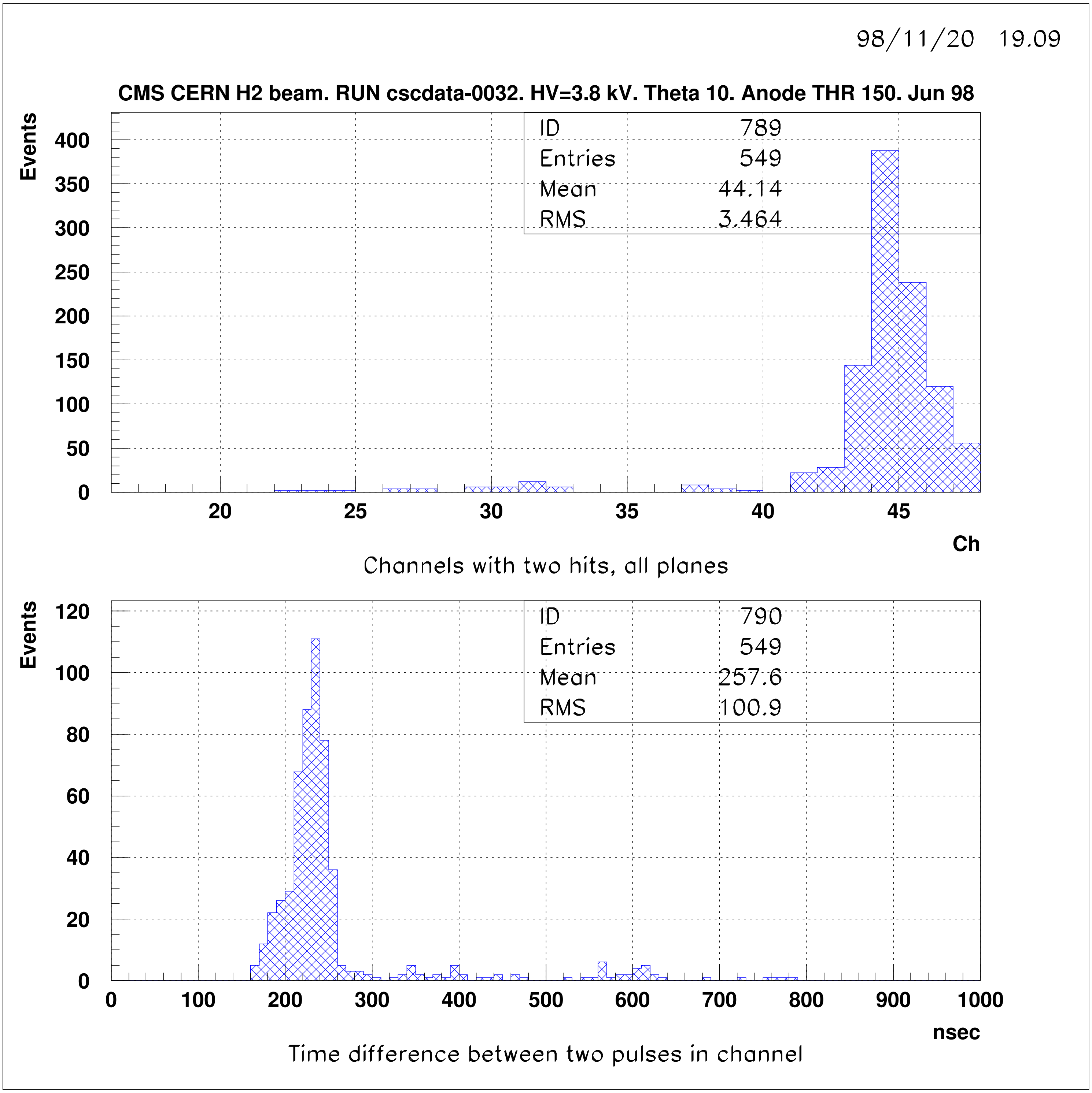

98/11/20 19.01
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 9700
Entries 6648
Mean 898.5
RMS 556.0
Events
0
50
100
150
200
250
300
350
400
450
500
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
ADC ch
Cathode ADC Max (tot)/plane



98/11/20 19.07
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 10701
Entries 5070
Mean 0.9251
RMS 0.1091
Events
Fraction
Plane 1 Charge fraction
ID 10702
Entries 5070
Mean 0.9013
RMS 0.1152
Events
Fraction
Plane 2 Charge fraction
ID 10703
Entries 5070
Mean 0.9300
RMS 0.1114
Events
Fraction
Plane 3 Charge fraction
ID 10704
Entries 5070
Mean 0.9270
RMS 0.1084
Events
Fraction
Plane 4 Charge fraction
ID 10705
Entries 5070
Mean 0.9327
RMS 0.1108
Events
Fraction
Plane 5 Charge fraction
ID 10706
Entries 5070
Mean 0.9209
RMS 0.1220
Events
Fraction
Plane 6 Charge fraction


98/11/20 19.07
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ADC ch
Fraction
ID 10711
Plane 1 Charge vs chrg fr
ID 10712
Plane 2 Charge vs chrg fr
ID 10713
Plane 3 Charge vs chrg fr
ID 10714
Plane 4 Charge vs chrg fr
ID 10715
Plane 5 Charge vs chrg fr
ID 10716
Plane 6 Charge vs chrg fr


98/11/20 19.08
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
ID 791
ID 792
ID 793
ID 794
ID 795
ID 796
Oscill. fraction, %
Channel
Plane 1
Plane 2
Plane 3
Plane 4
Plane 5
Plane 6


98/11/20 19.09
CMS CERN H2 beam. RUN cscdata-0032. HV=3.8 kV. Theta 10. Anode THR 150. Jun 98
Events
ID 789
Entries 549
Mean 44.14
RMS 3.464
Ch
Channels with two hits, all planes
Events
ID 790
Entries 549
Mean 257.6
RMS 100.9
nsec
Time difference between two pulses in channel