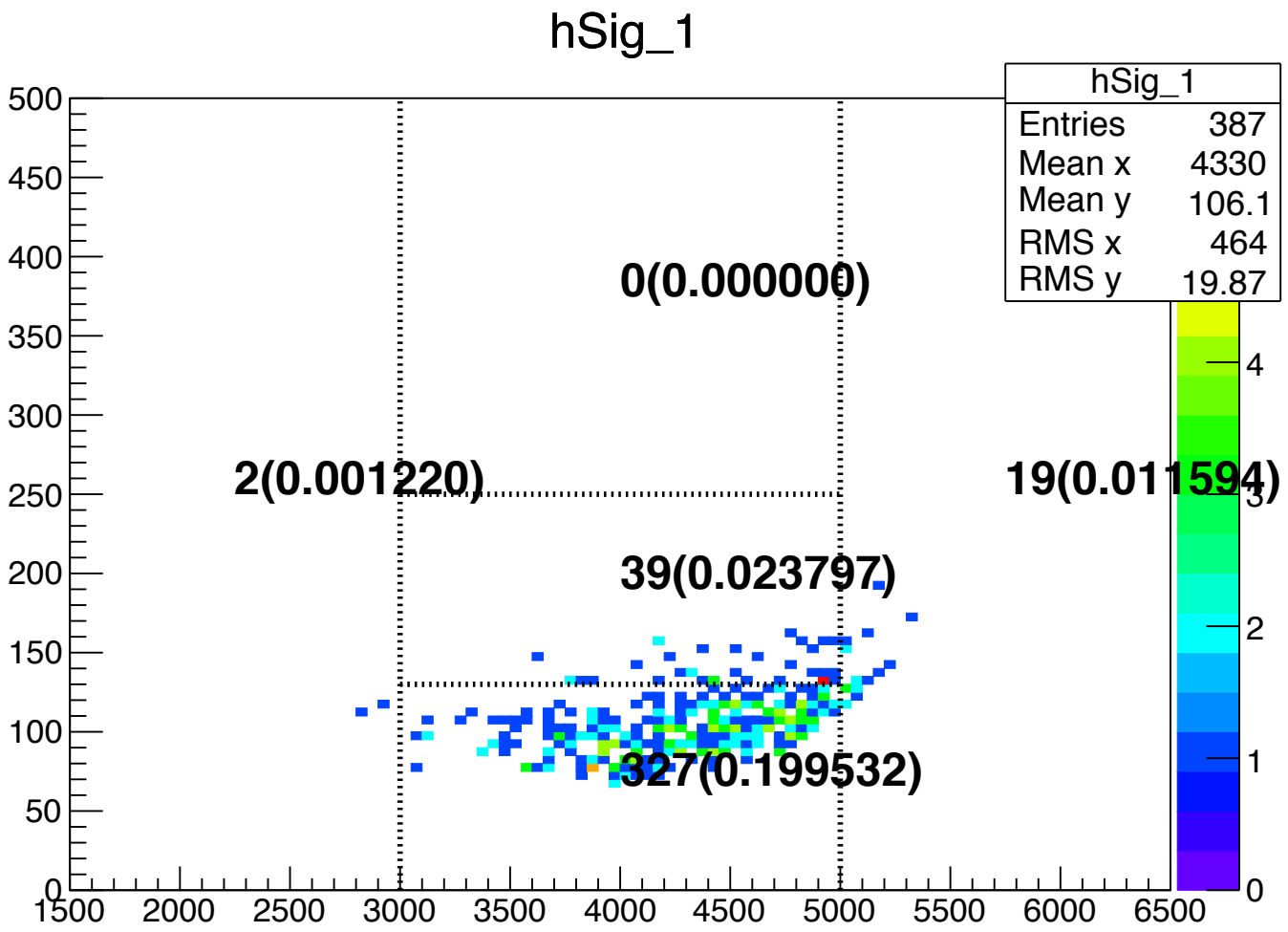
Report_170927

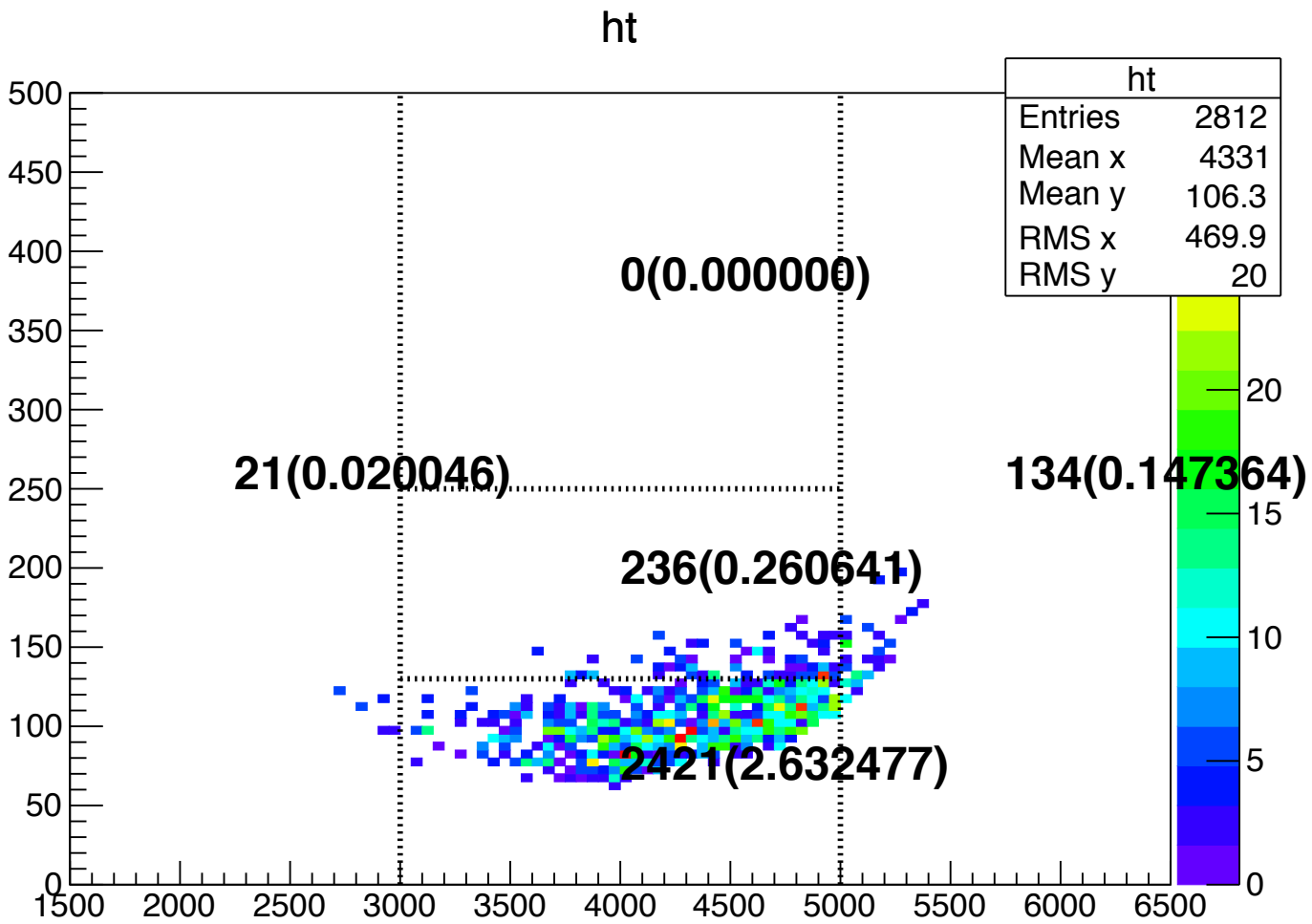
KLpipipi0 BG

- 9 data type
  - Run62_24kW, 62_27kW, 63_27kW, 63_29kW, 63_32kW, 64_32kW, 64_39kW, 65_39kW, 65_42kW
  - Accidental files for each run period & beam power
    - If there was no accidental files, Acc. For Run62_24kW is used
    - No Acc.files for newBHCV, BHGC, BPCV in Run63_27 ~
  - Recycling method is used
    - 5e3*5e2*2e7(Nfiles*Nrecycle*Nkaon) event
    - 3.98e14 kaon(including BR)
    - All data set are normalized to MC
    - No cuts are applied about Neutron

BG estimation for Run62_27

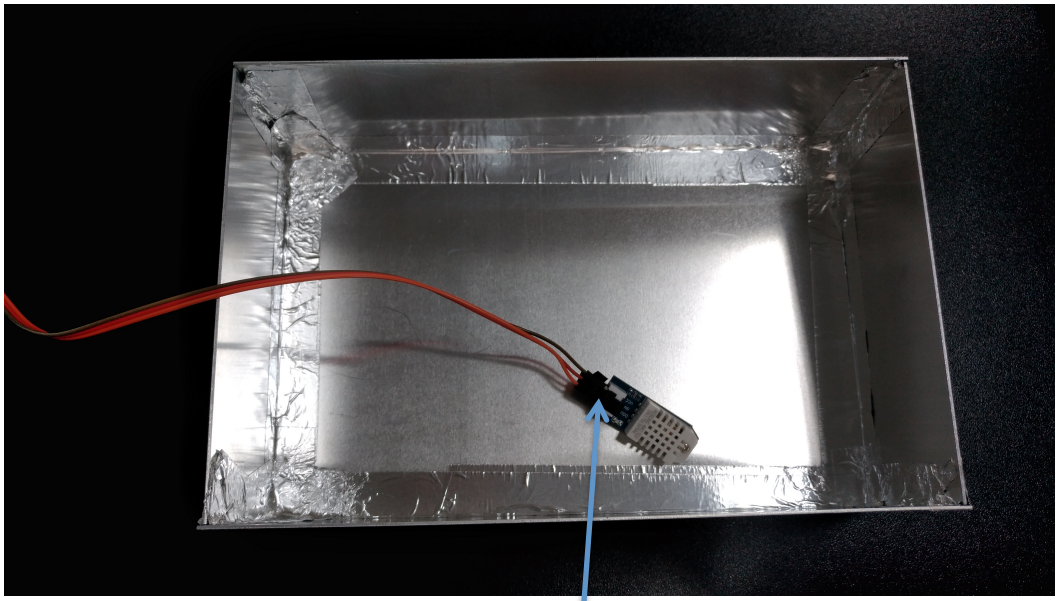


BG estimation for 2015



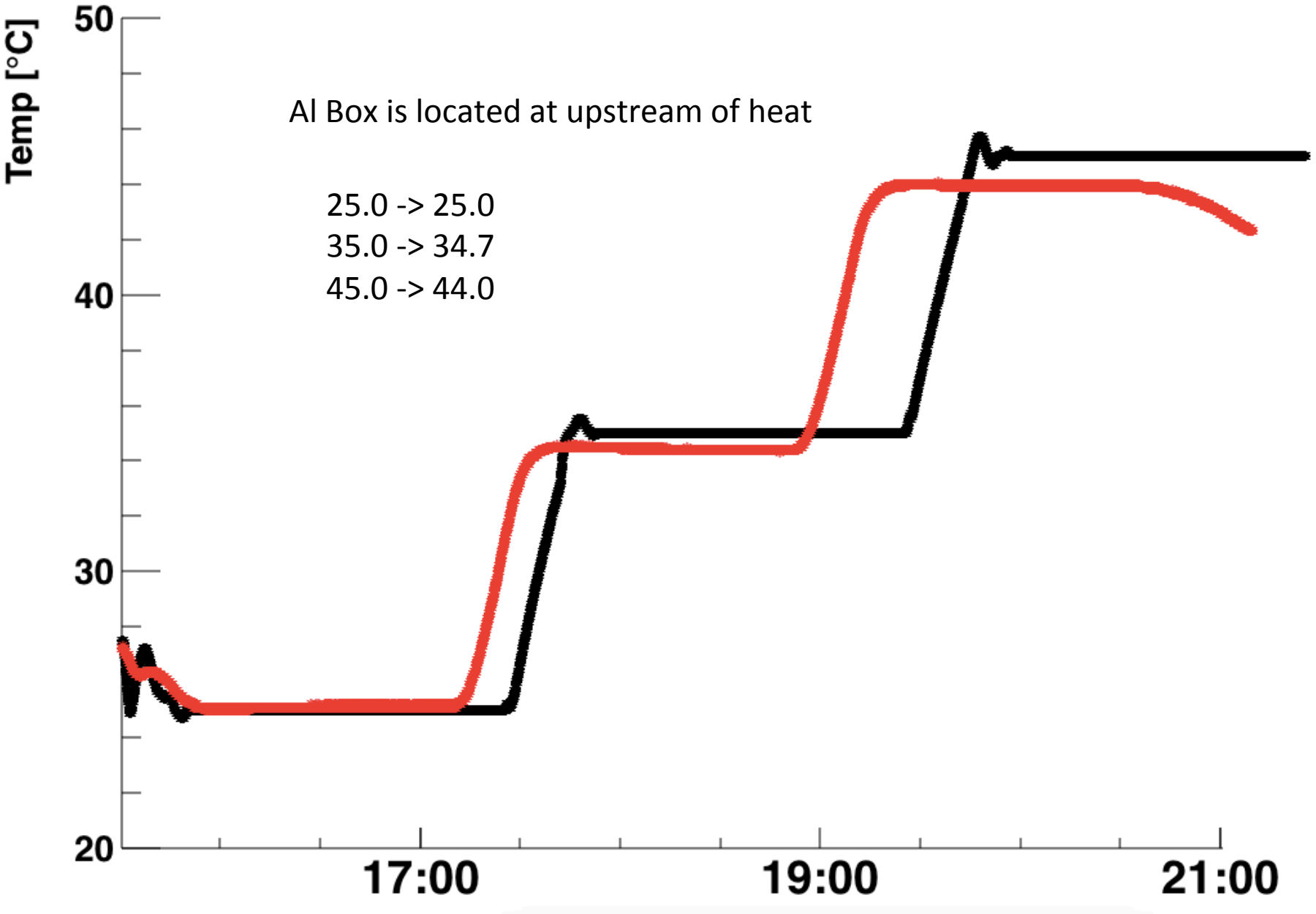
Thermal Bath Study

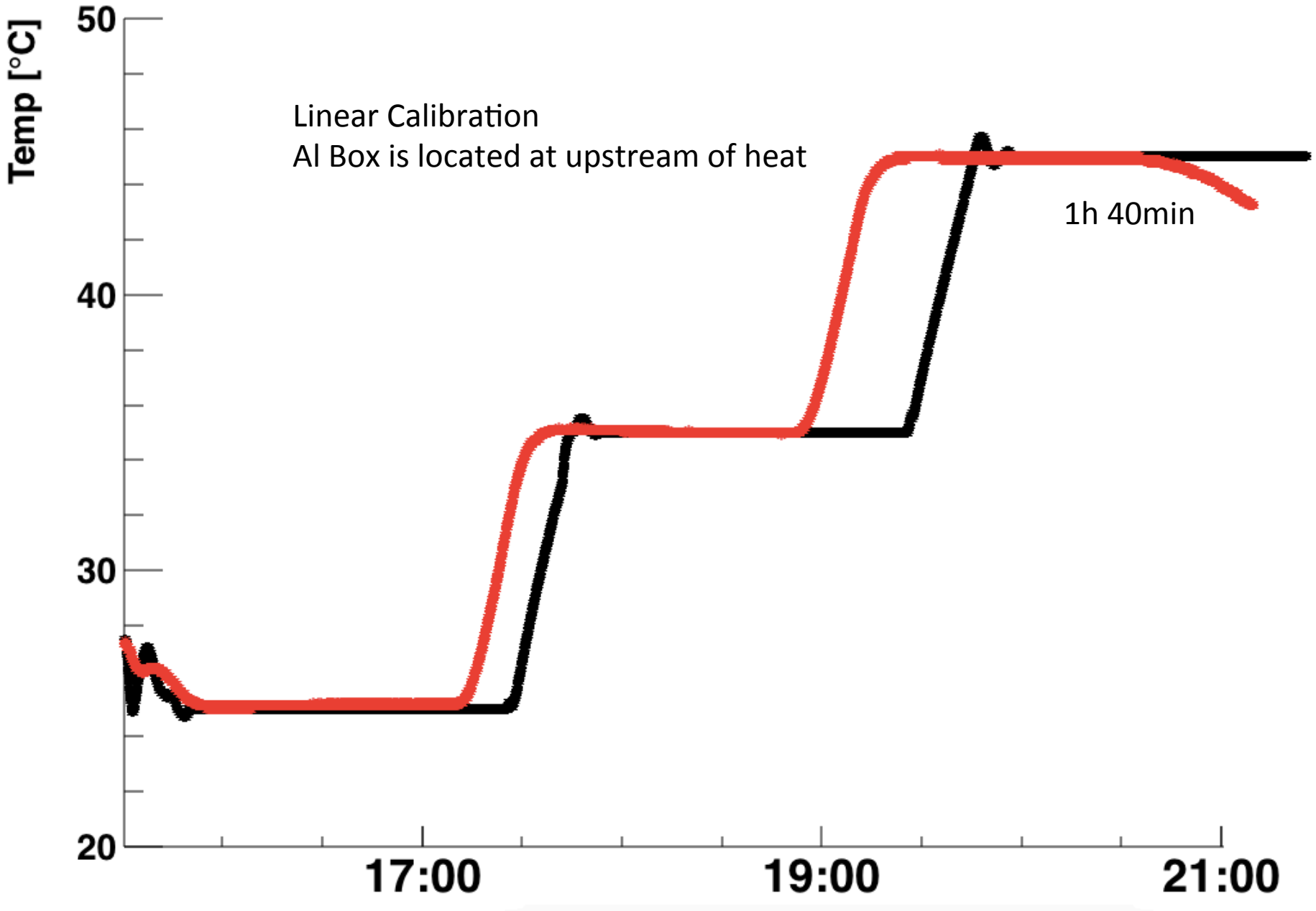
7.2*14,5*23.0cm3 Al Box

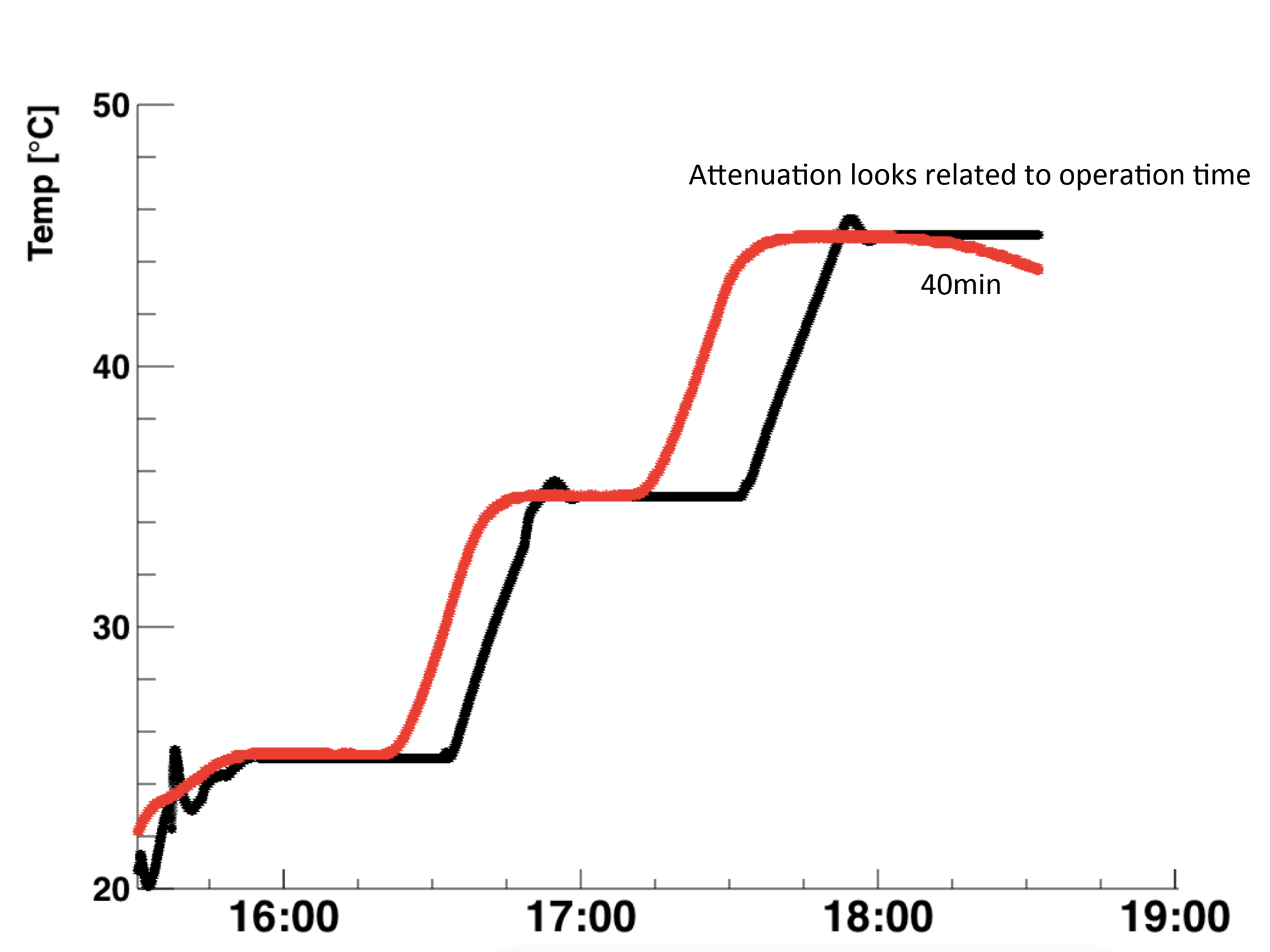


Fixed with tape

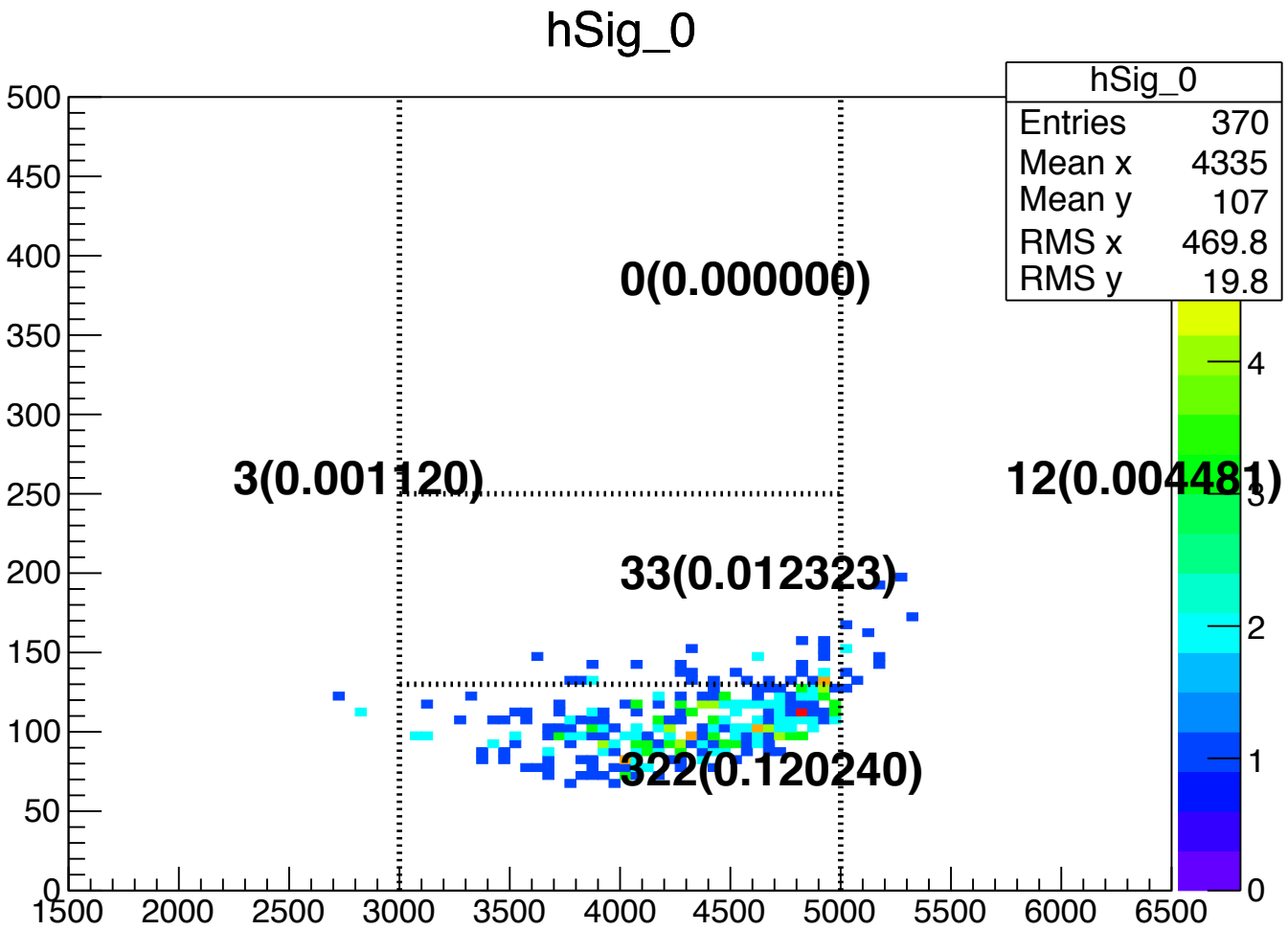
- Check feedback of temperature inside Al Box


Temp [°C]
50
40
30
20
17:00
19:00
21:00
Al Box is located at upstream of heat
25.0 -> 25.0
35.0 -> 34.7
45.0 -> 44.0

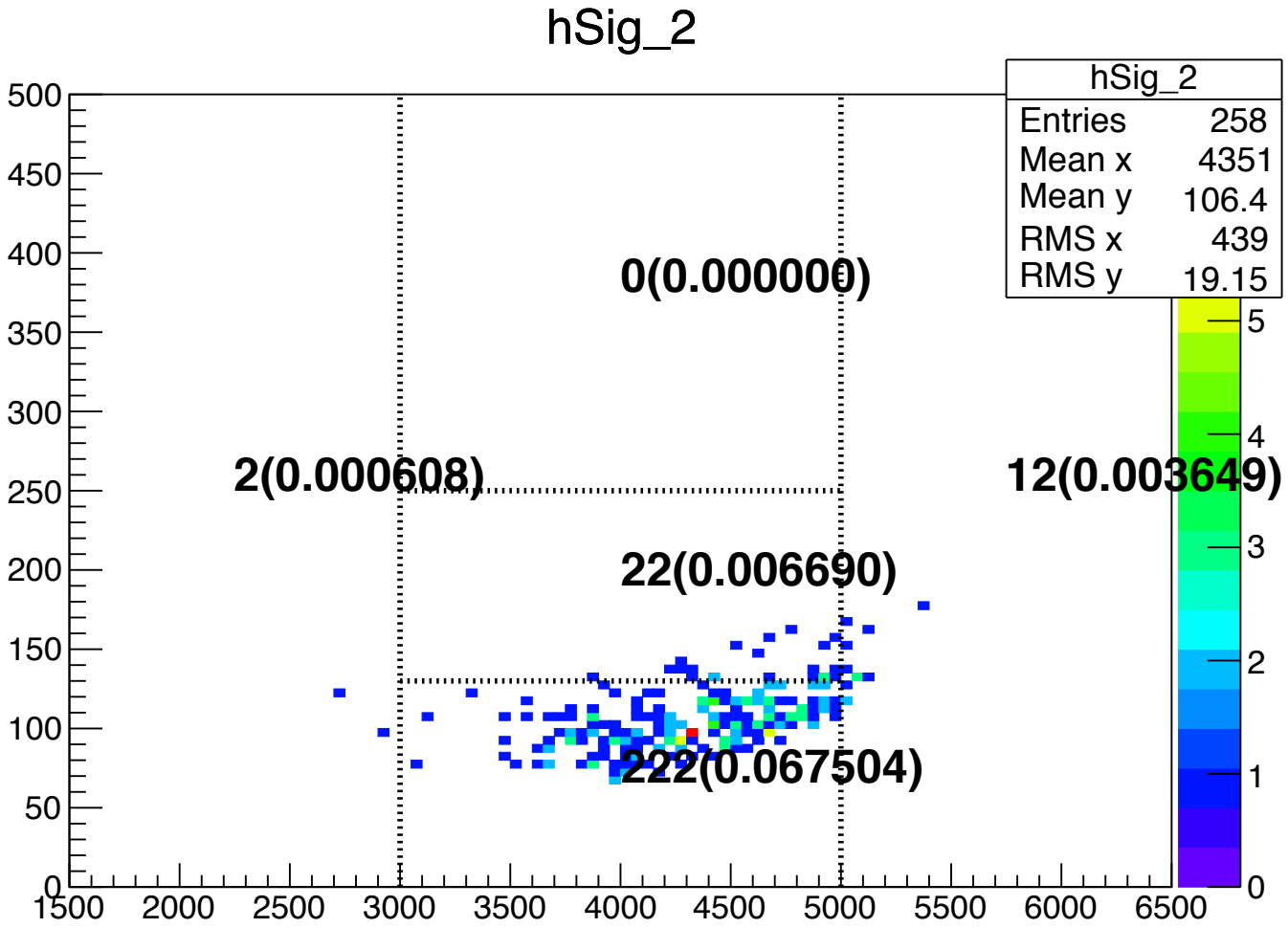

Temp [°C]
50
40
30
20
17:00
19:00
21:00
Linear Calibration
Al Box is located at upstream of heat
1h 40min


Temp [°C]
50
40
30
20
16:00
17:00
18:00
19:00
Attenuation looks related to operation time
40min

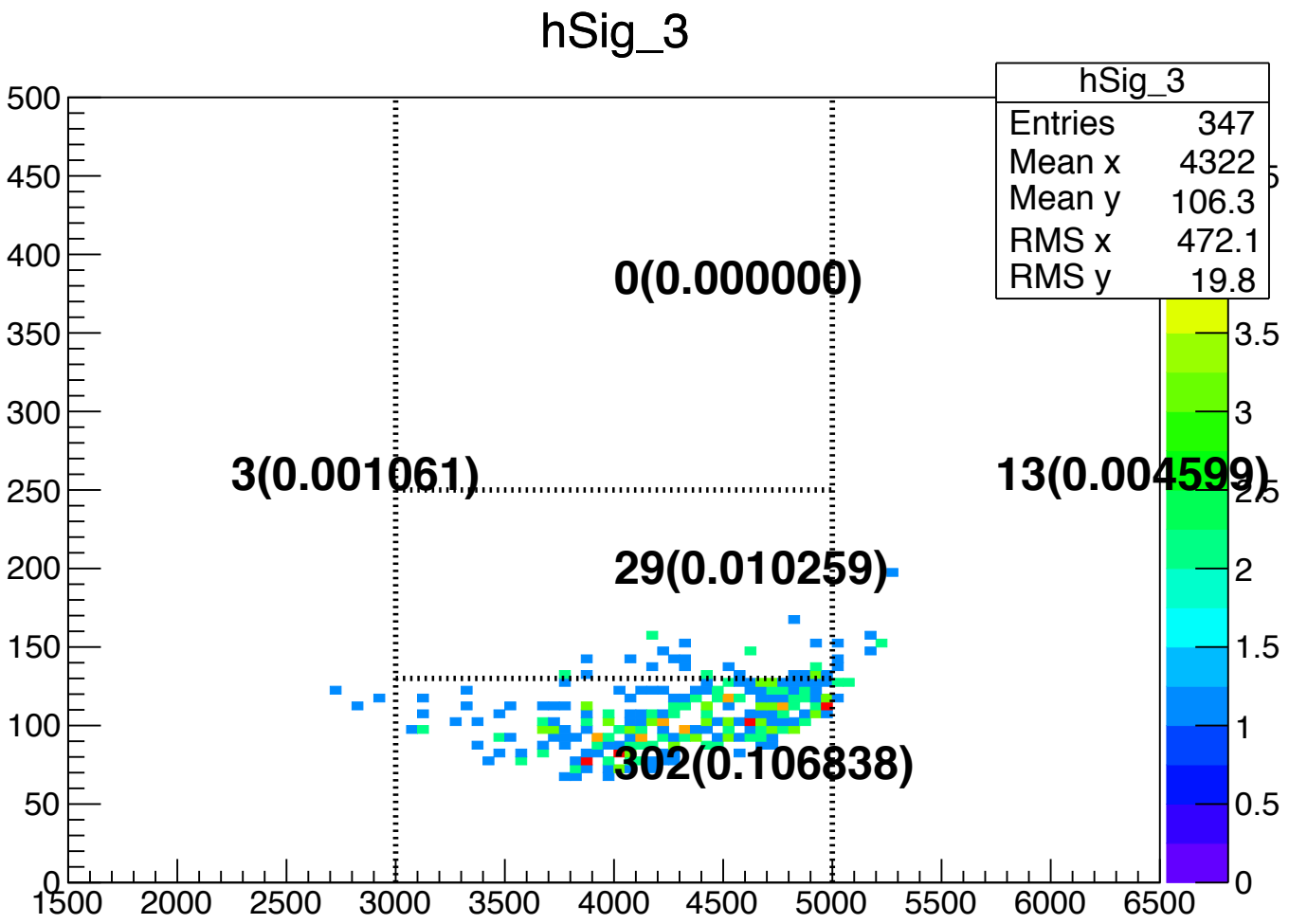
Run62_24


hSig_0
hSig_0
Entries 370
Mean x 4335
Mean y 107
RMS x 469.8
RMS y 19.8
0(0.000000)
3(0.001120)
12(0.004481)
33(0.012323)
322(0.120240)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
4
3
2
1
0

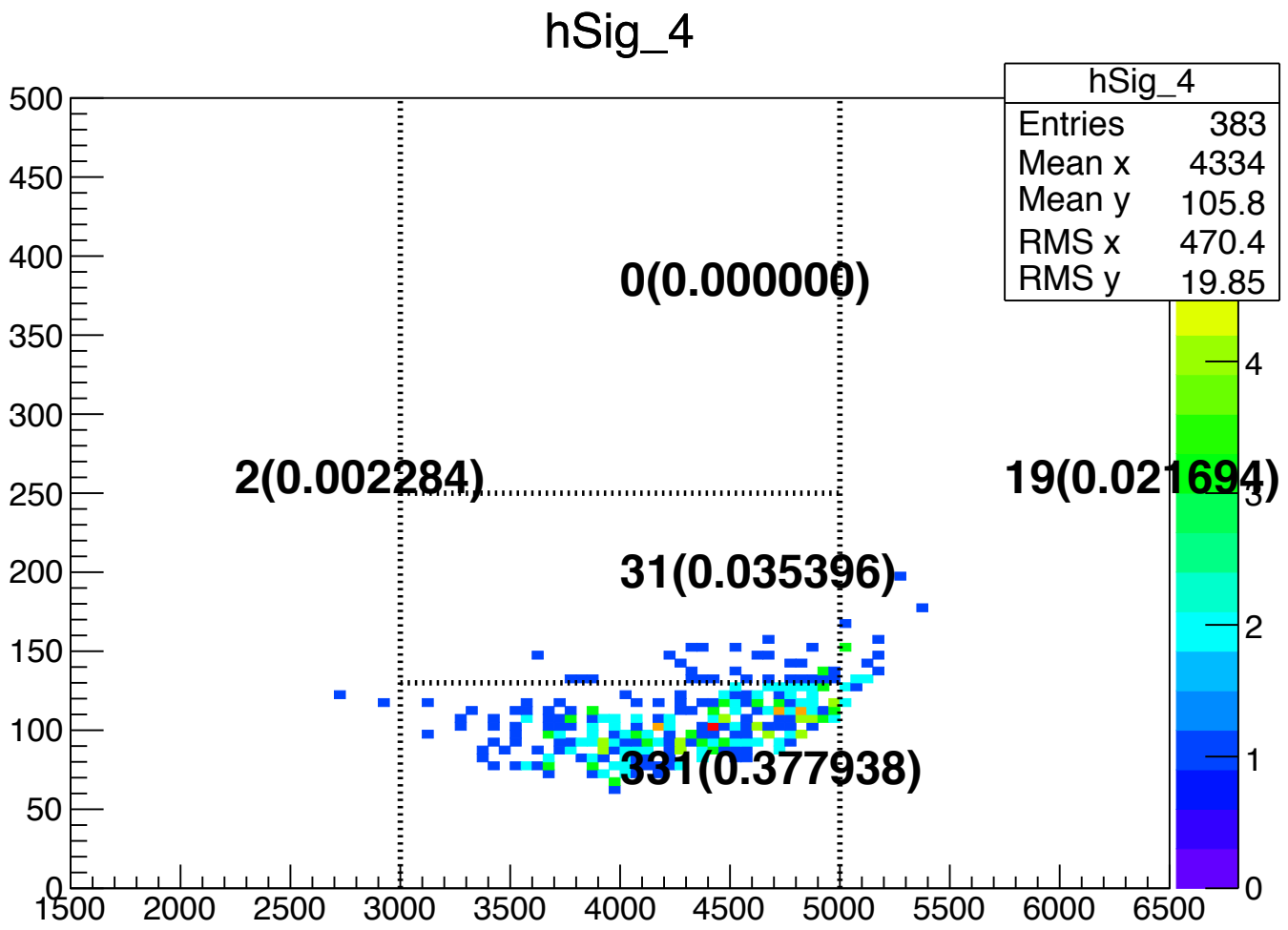
Run63_27


hSig_2
hSig_2
Entries 258
Mean x 4351
Mean y 106.4
RMS x 439
RMS y 19.15
0(0.000000)
2(0.000608)
12(0.003649)
22(0.006690)
222(0.067504)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
5
4
3
2
1
0

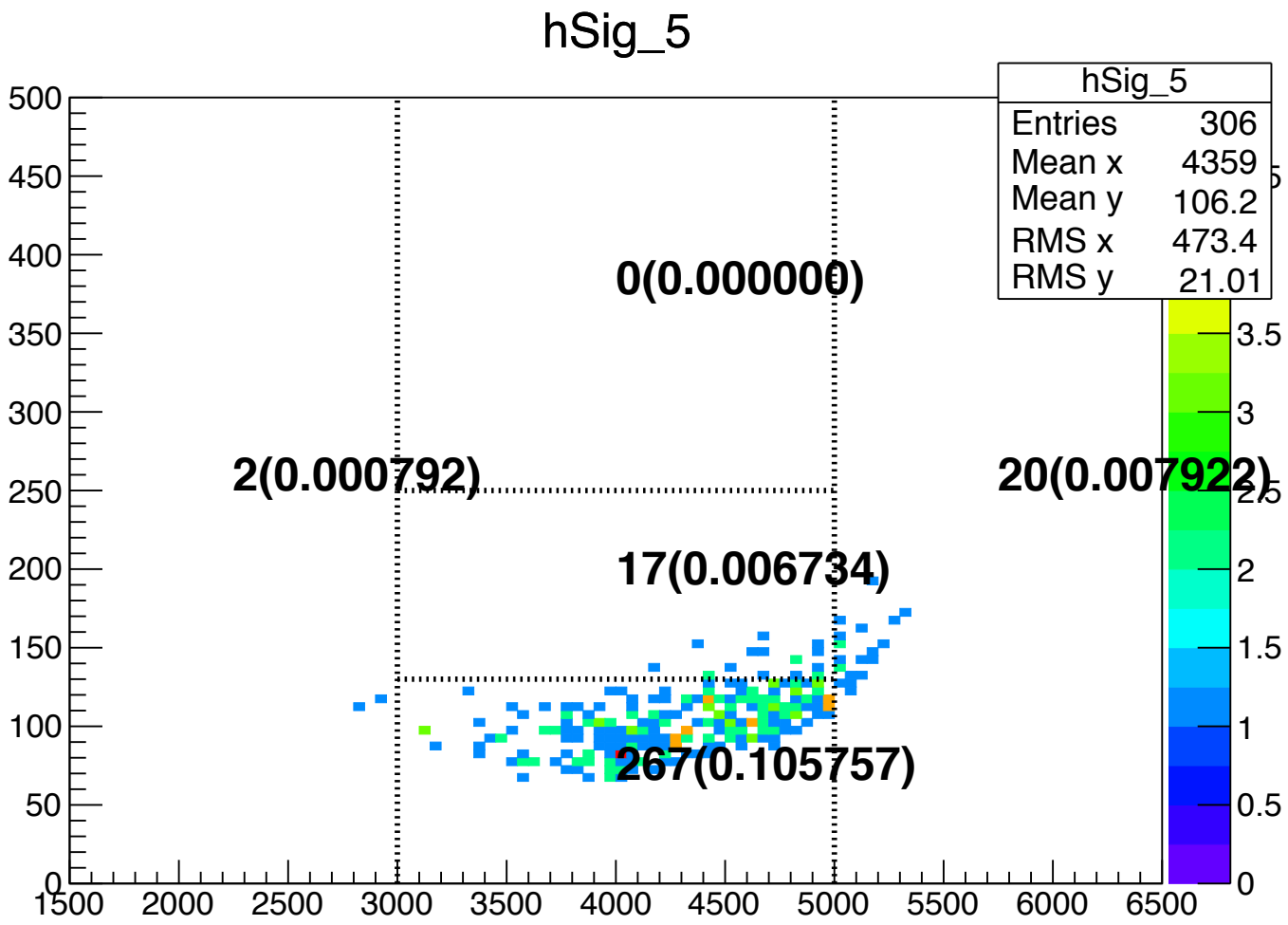
Run63_29


hSig_3
hSig_3
Entries 347
Mean x 4322
Mean y 106.3
RMS x 472.1
RMS y 19.8
0(0.000000)
3(0.001061)
13(0.004599)
29(0.010259)
302(0.106838)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
3.5
3
2.5
2
1.5
1
0.5
0

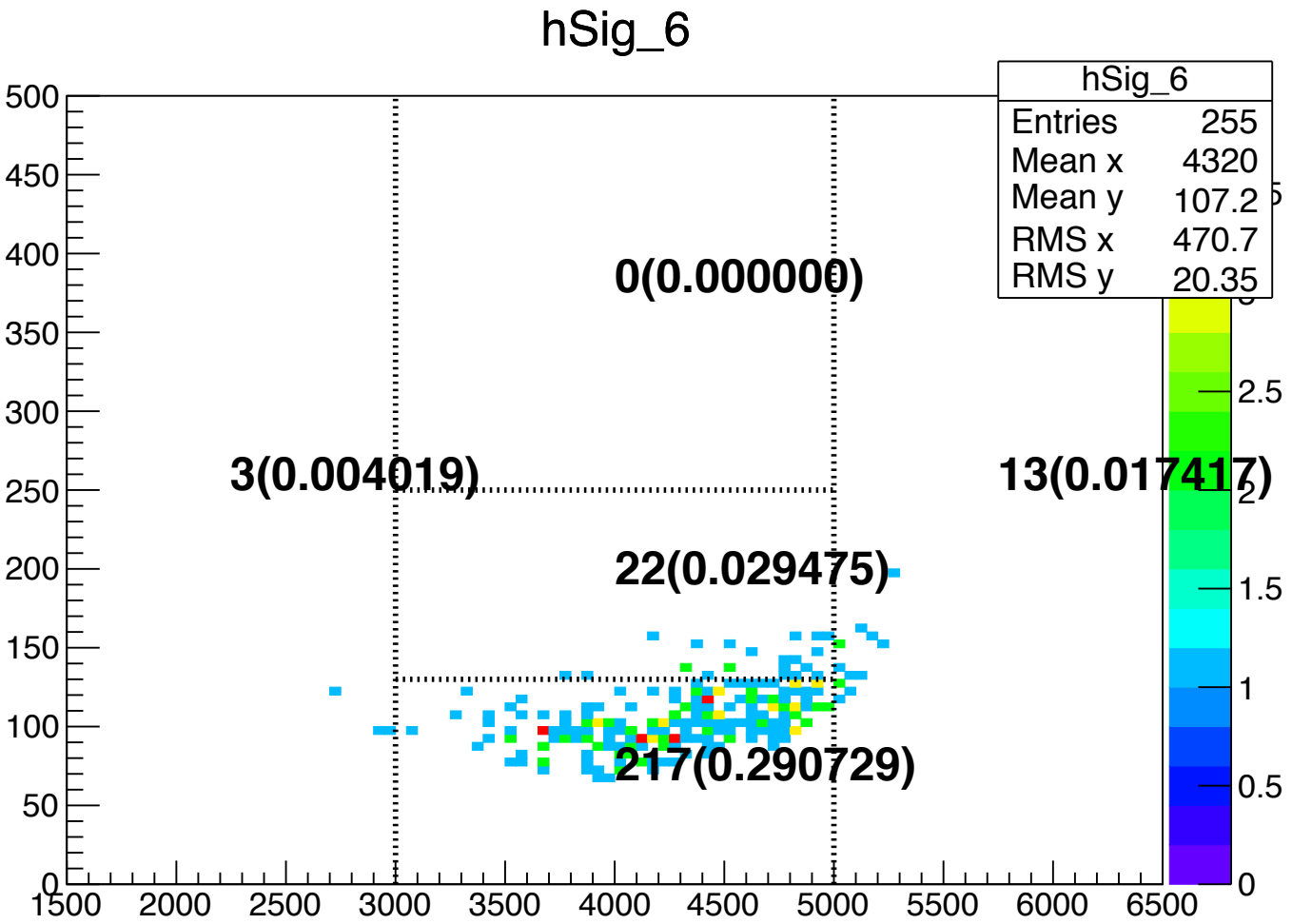
Run63_32


hSig_4
hSig_4
Entries 383
Mean x 4334
Mean y 105.8
RMS x 470.4
RMS y 19.85
0(0.000000)
2(0.002284)
19(0.021694)
31(0.035396)
331(0.377938)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
4
3
2
1
0

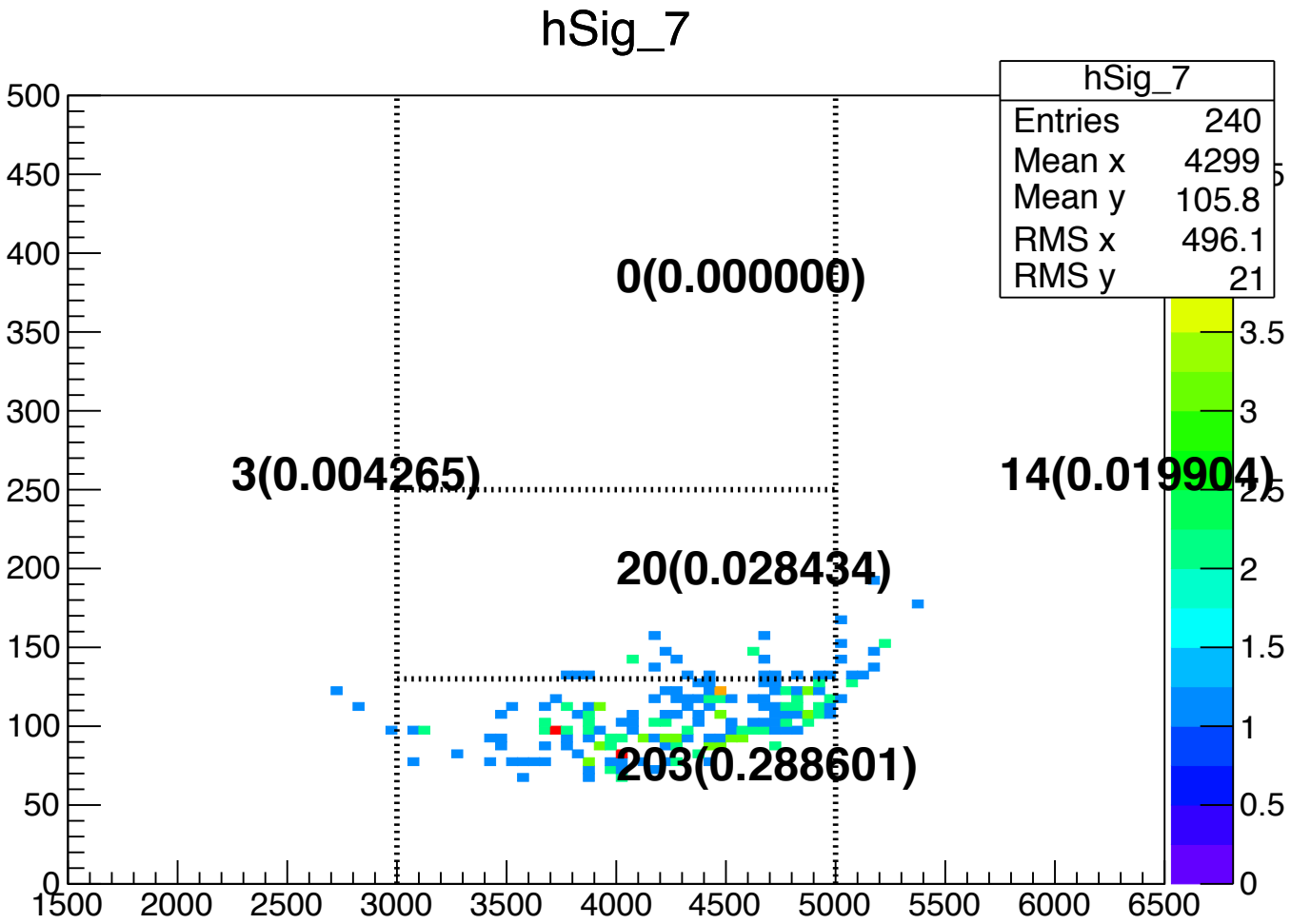
Run64_32


hSig_5
hSig_5
Entries 306
Mean x 4359
Mean y 106.2
RMS x 473.4
RMS y 21.01
0(0.000000)
2(0.000792)
20(0.007922)
17(0.006734)
267(0.105757)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
3.5
3
2.5
2
1.5
1
0.5
0

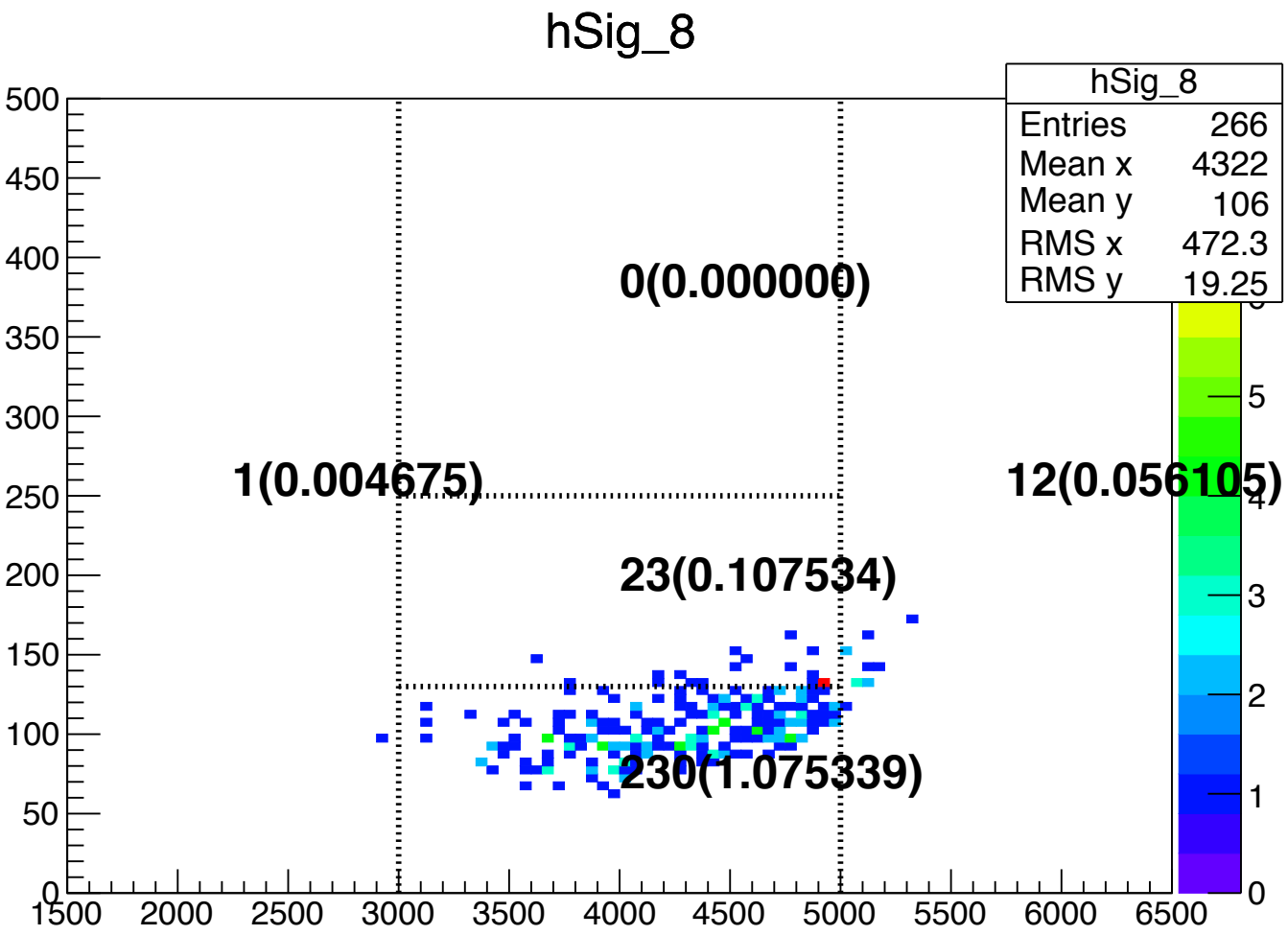
Run64_39


hSig_6
hSig_6
Entries 255
Mean x 4320
Mean y 107.2
RMS x 470.7
RMS y 20.35
0(0.000000)
3(0.004019)
13(0.017417)
22(0.029475)
217(0.290729)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
2.5
2
1.5
1
0.5
0

Run65_39


hSig_7
hSig_7
Entries 240
Mean x 4299
Mean y 105.8
RMS x 496.1
RMS y 21
0(0.000000)
3(0.004265)
14(0.019904)
20(0.028434)
203(0.288601)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
3.5
3
2.5
2
1.5
1
0.5
0

Run65_42


hSig_8
hSig_8
Entries 266
Mean x 4322
Mean y 106
RMS x 472.3
RMS y 19.25
0(0.000000)
1(0.004675)
12(0.056105)
23(0.107534)
230(1.075339)
500
450
400
350
300
250
200
150
100
50
0
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
5
4
3
2
1
0