TB 2021: Data Evaluation
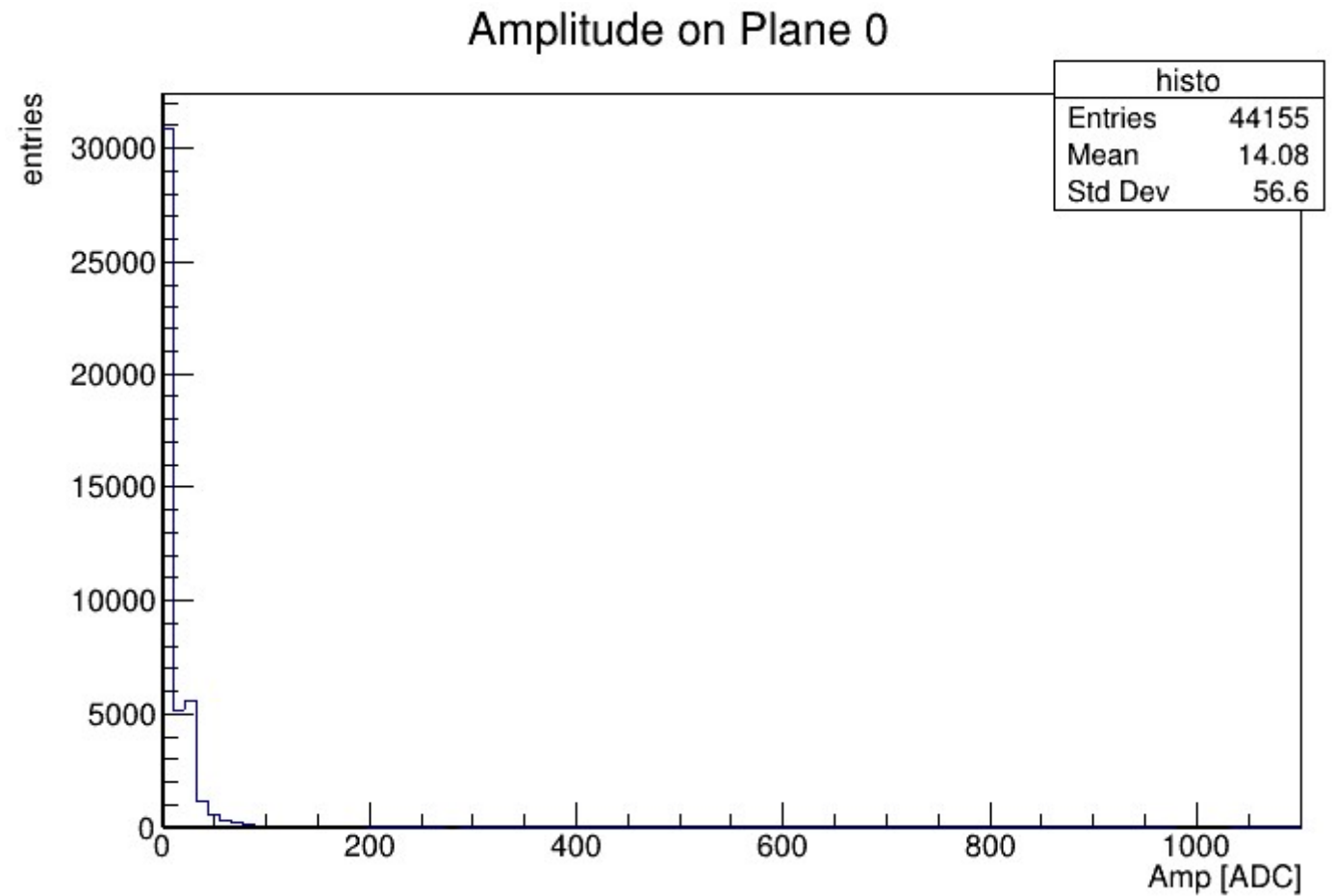
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### Institute of Space Science, Bucharest

TB 2021: Sensor data

Run 652

- **Anton1 sensor without W planes**
- **Beam energy 5 GeV**
- **Beam position on X: 0 mm; Y: -10**
- **Number of events: 1 390 730**

Amplitude on Plane 0

histo	
Entries	44155
Mean	14.08
Std Dev	56.6

entries

Amp [ADC]

TB 2021: Sensor data

Run 652

- **Anton1 sensor without W planes**
- **Beam energy 5 GeV**
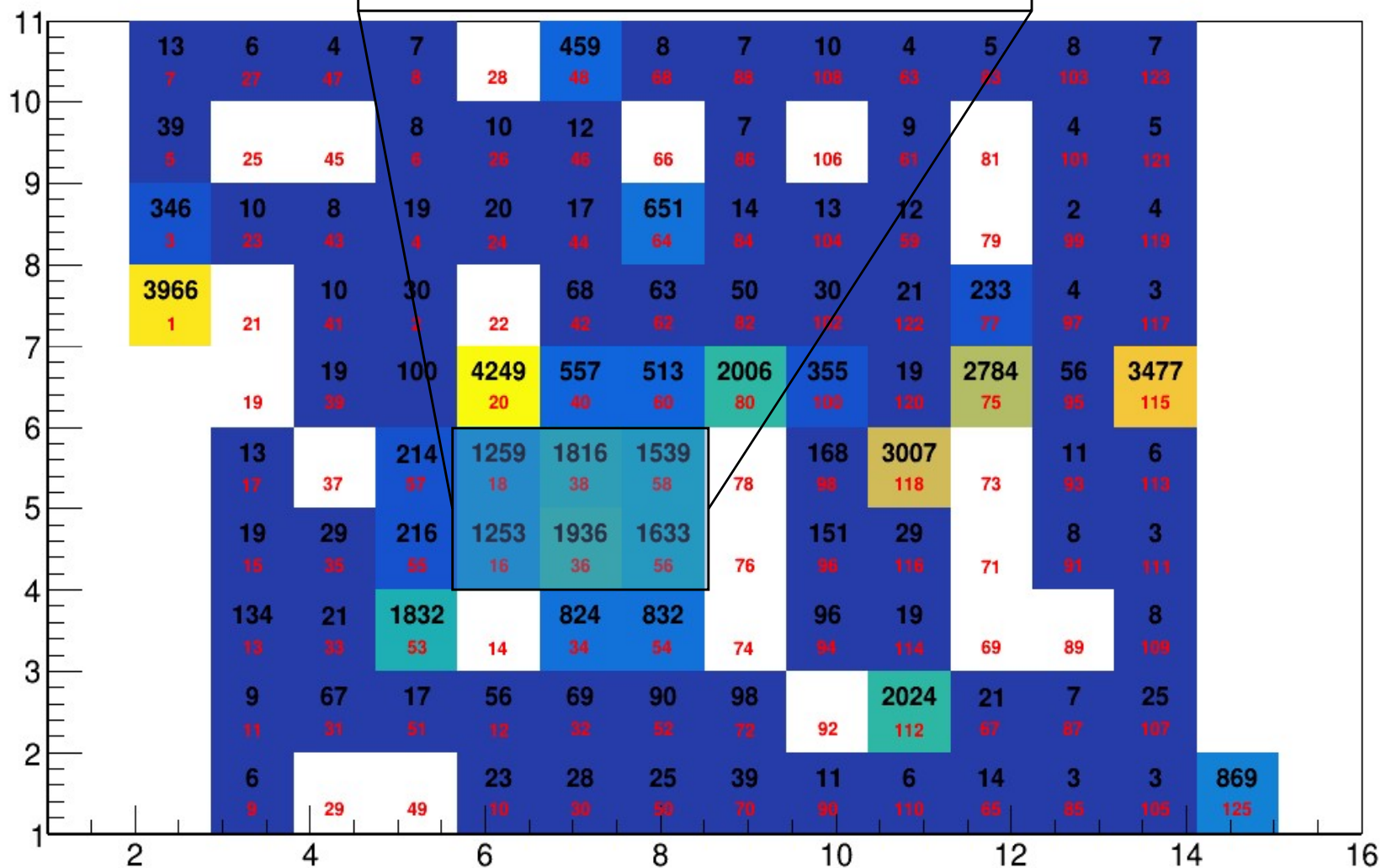- **Beam position on X: 0 mm; Y: -10**
- **Number of events: 1 390 730**
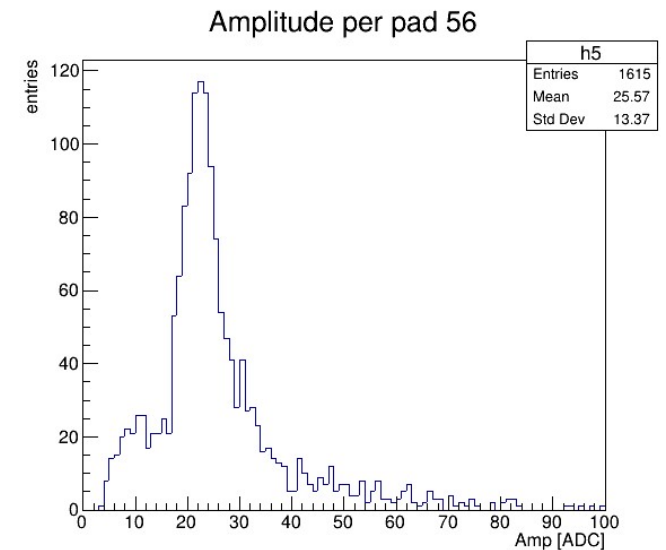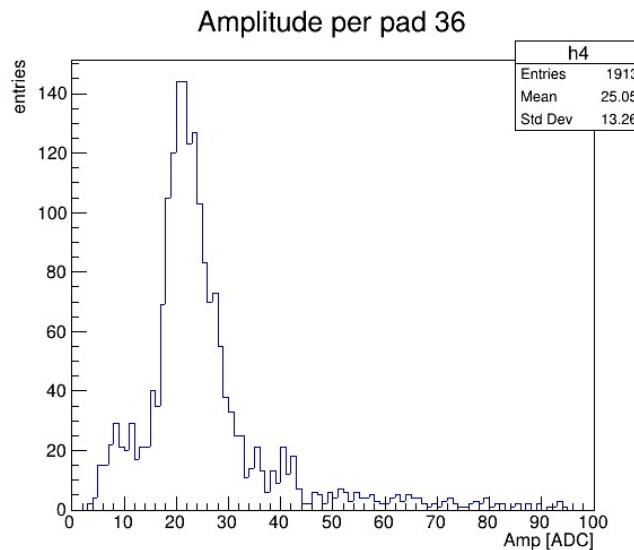

Hit Map for plane 0
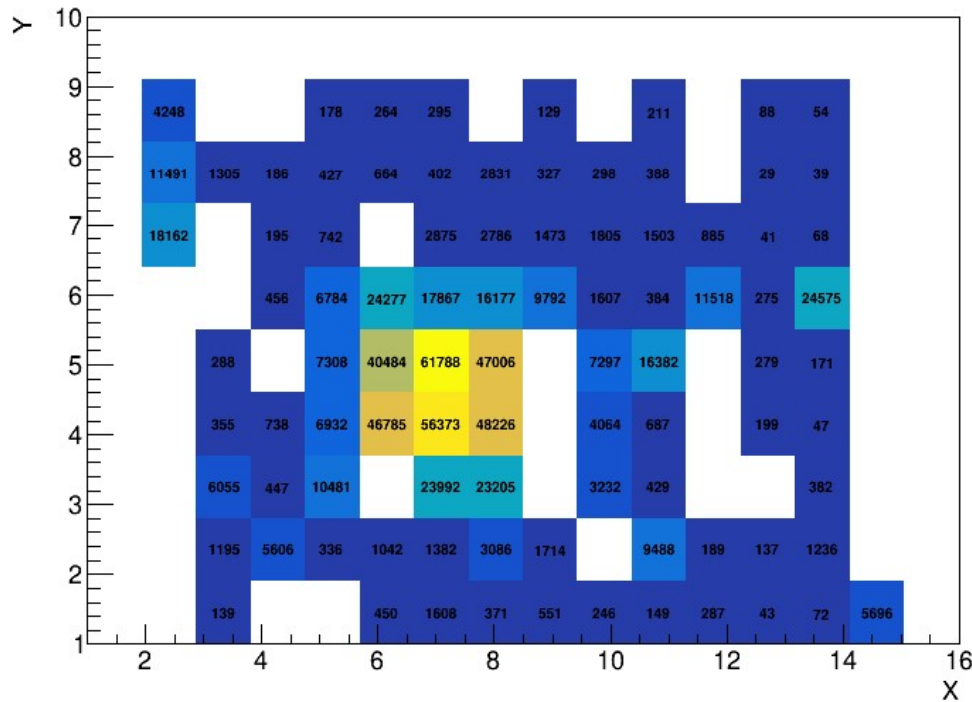
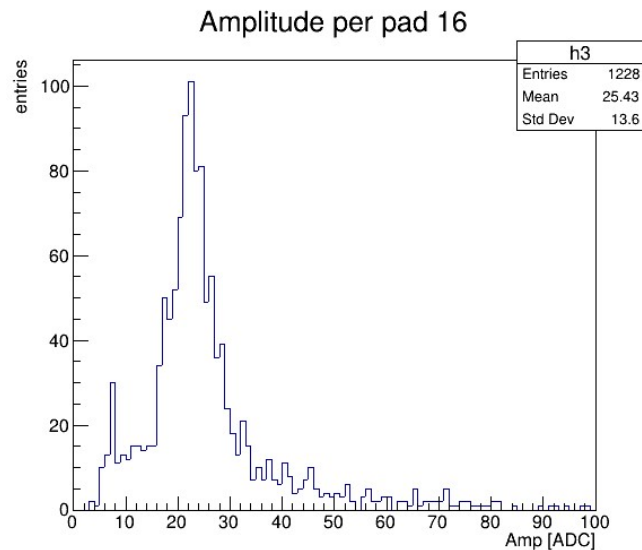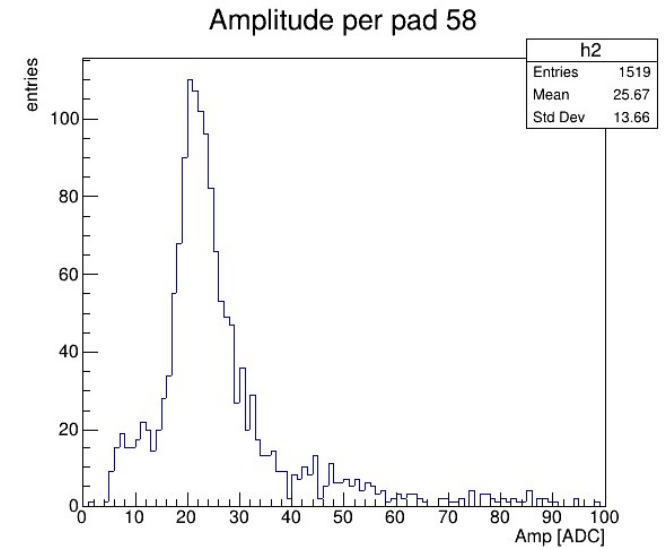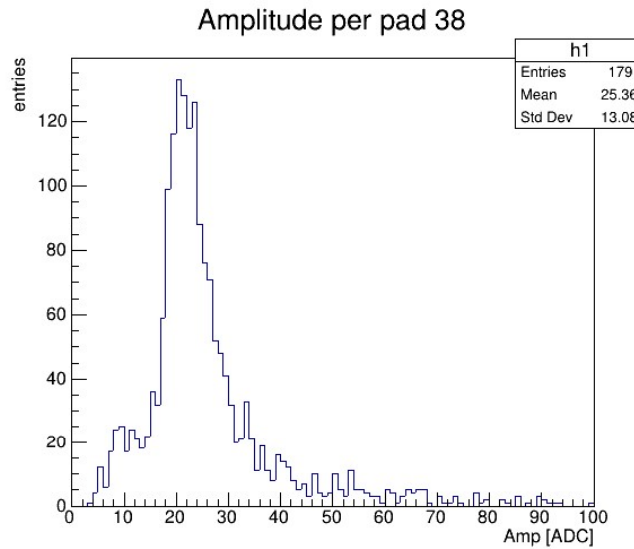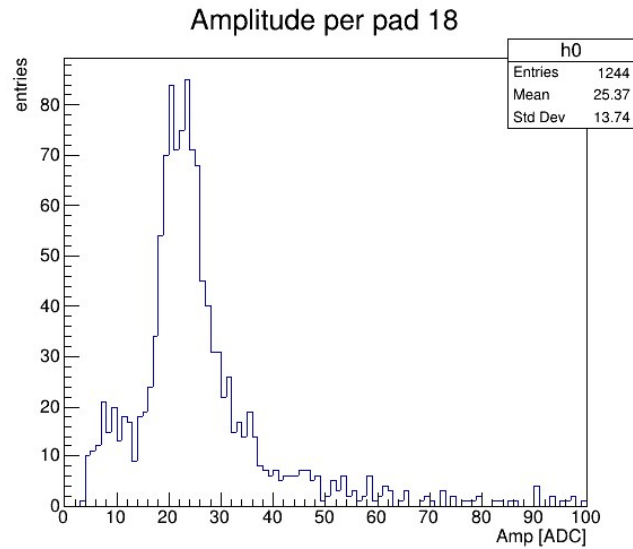Hit map for Plane 0 - Run 652
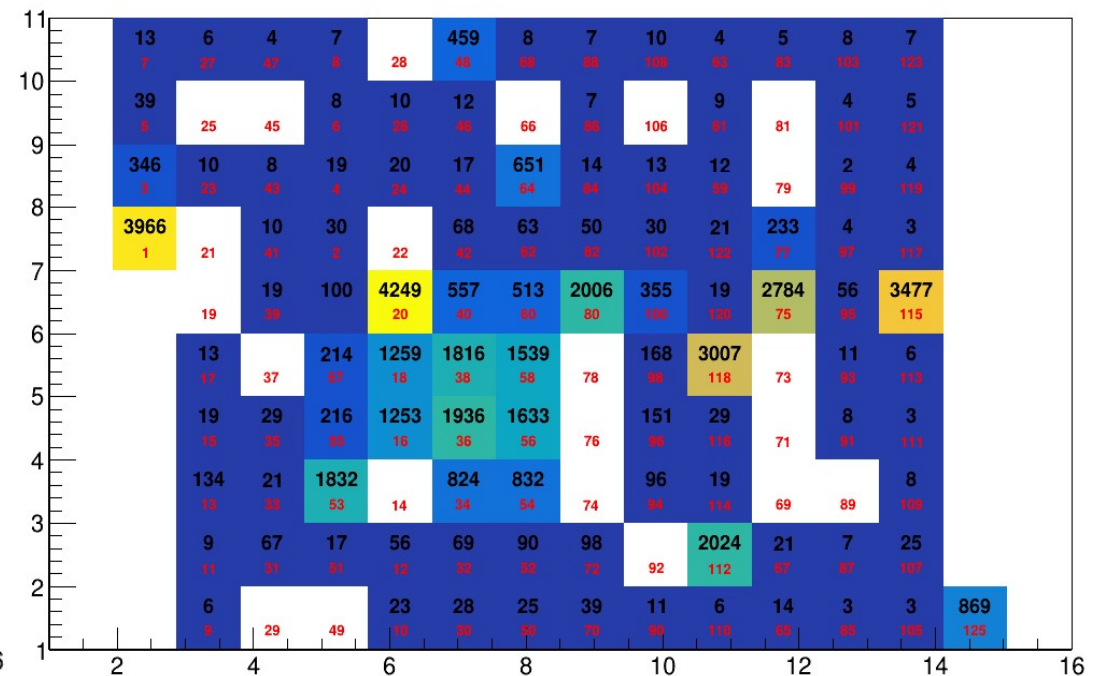
TB 2021: Sensor data

Selected the pads where the beam hited:
18, 38, 58 and 16, 36, 56

- Cut on amplitude < 900

TB 2021: Sensor data

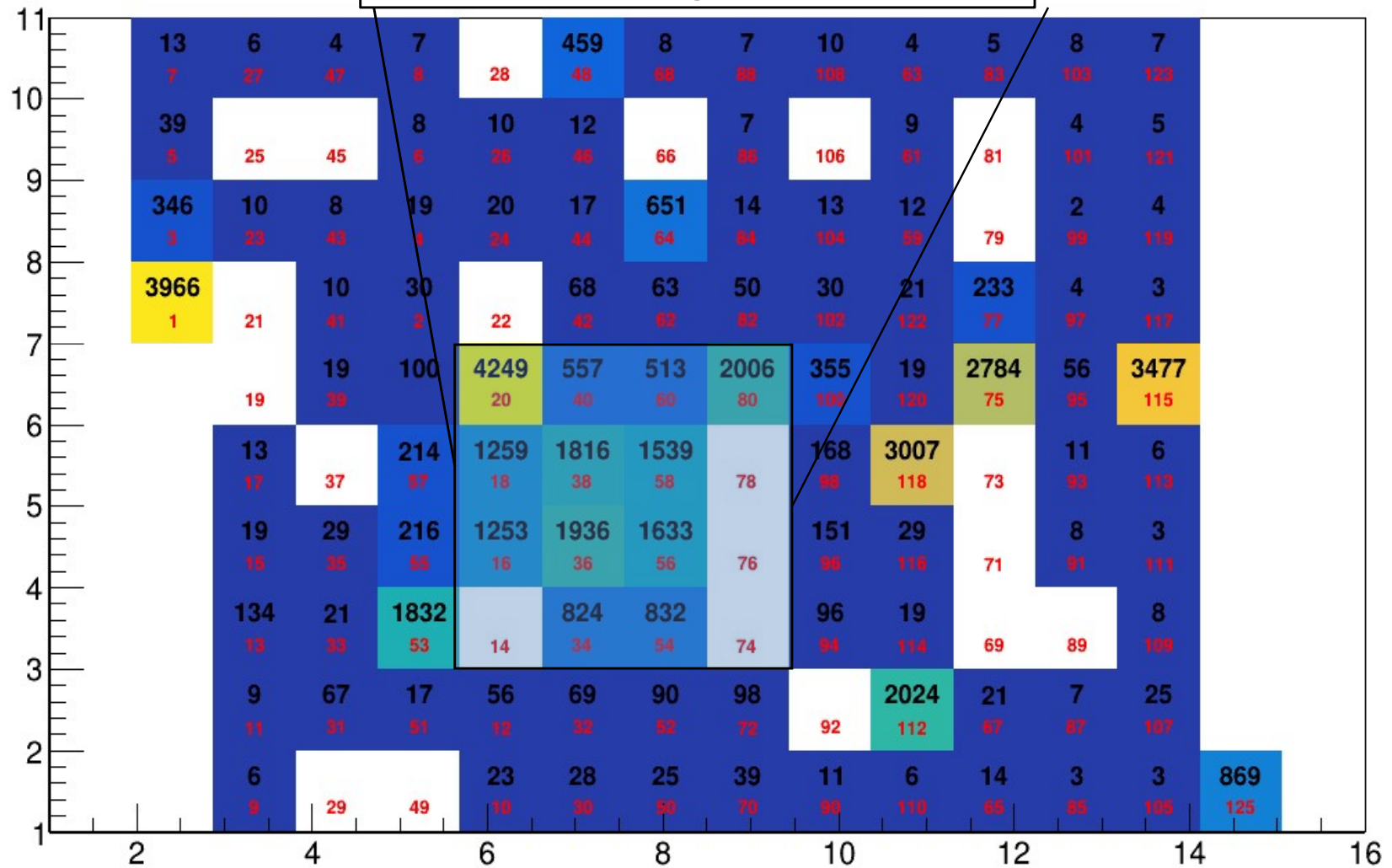Selected the pads where the beam hited: 18, 38, 58 and 16, 36, 56

- Cut on amplitude < 900

TB 2021: Sensor data

Extended the evaluation on pads:
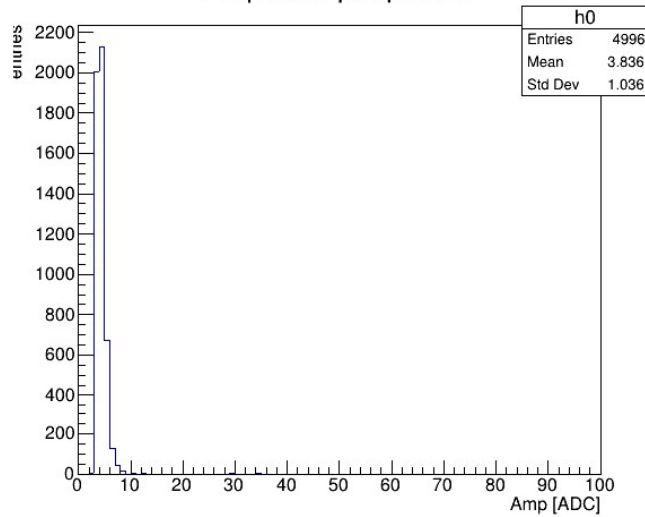
20, 40, 60, 80 and 34, 54

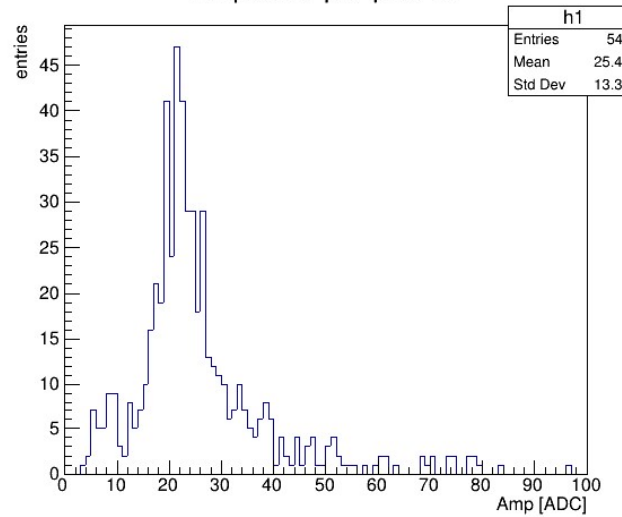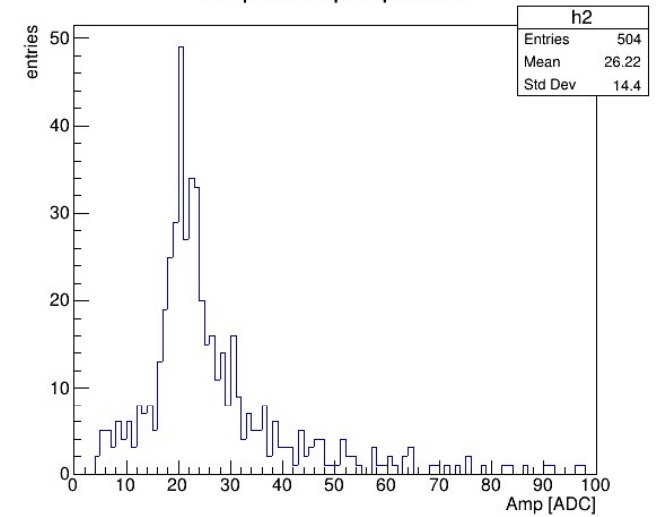- Cut on amplitude < 900

TB 2021: Sensor data

Amplitude per pad 20

h0	
Entries	4996
Mean	3.836
Std Dev	1.036

Amplitude per pad 40

h1	
Entries	549
Mean	25.47
Std Dev	13.36

Amplitude per pad 60

h2	
Entries	504
Mean	26.22
Std Dev	14.4

Amplitude per pad 80

h3	
Entries	2437
Mean	4.018
Std Dev	0.8281

Amplitude per pad 34

h4	
Entries	816
Mean	23.85
Std Dev	12.68

Amplitude per pad 54

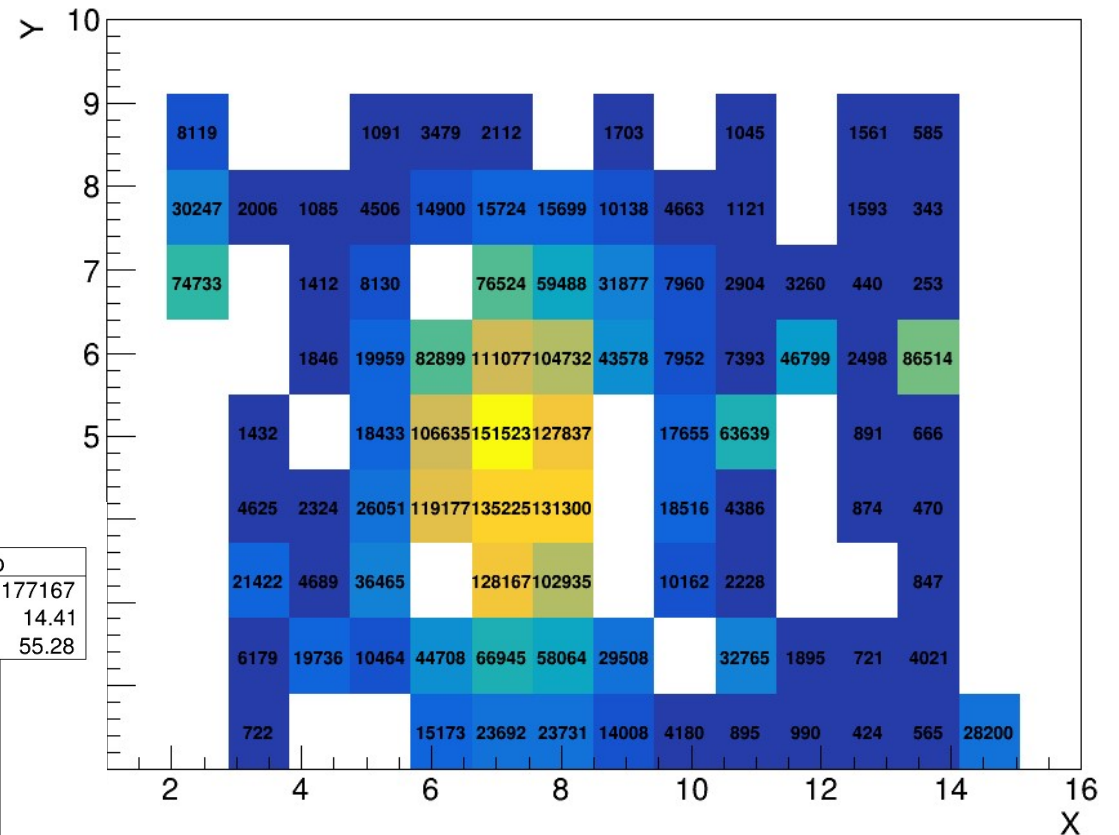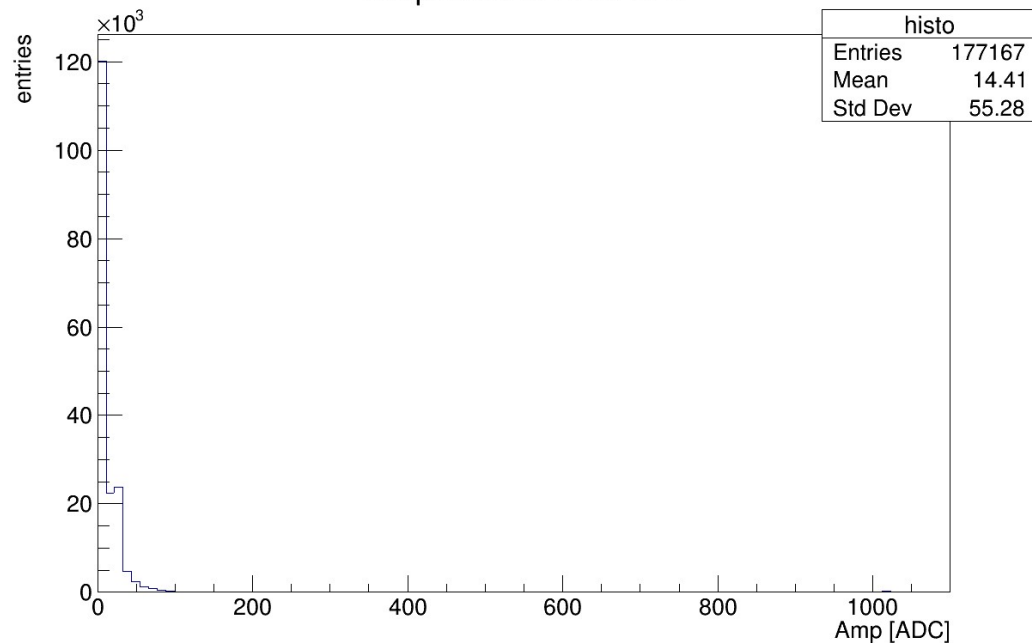| h5	
Entries	825
Mean	24.92
Std Dev	13.37

TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

- **Anton1 sensor without W planes**

- **Beam energy 5 GeV**

- **Beam position on X: 0 ; Y: from 0 to -20**

- **Number of events: 5 957 674**

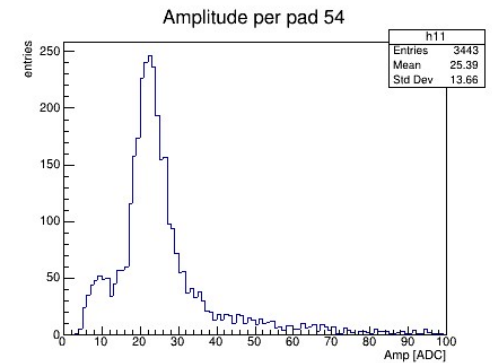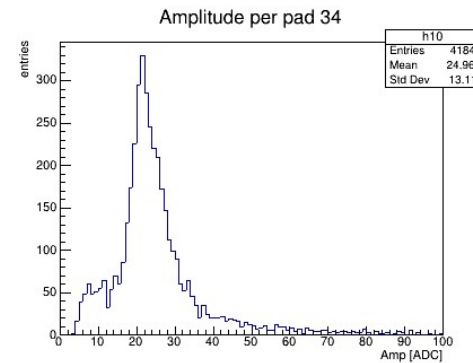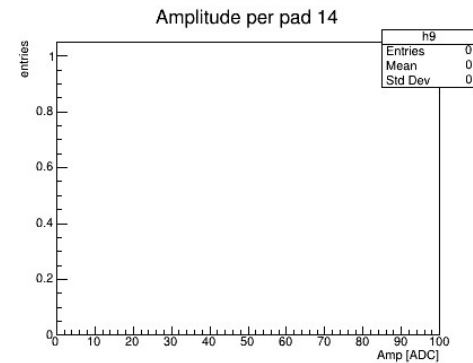

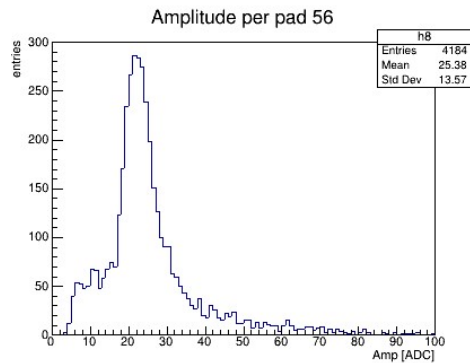Hit Map for plane 0

Amplitude on Plane 0

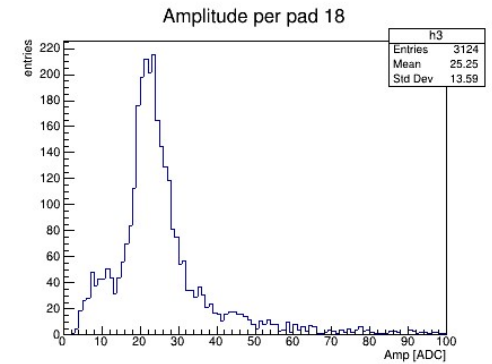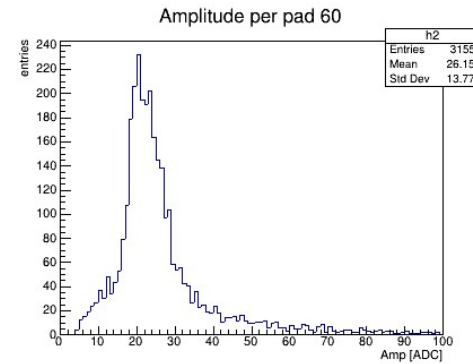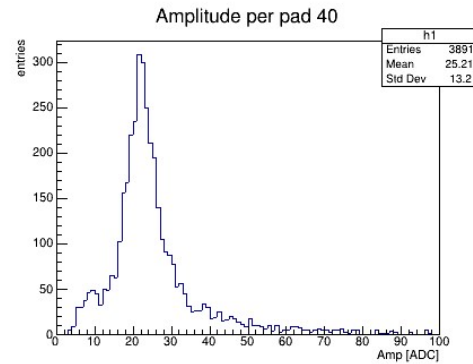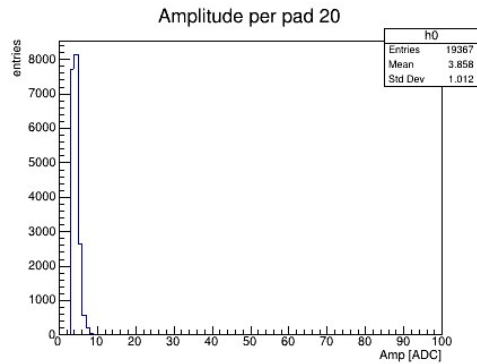| histo	
Entries	177167
Mean	14.41
Std Dev	55.28

TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

Selected the pads where the beam hit: 20, 40, 60, 18, 38, 58, 16, 36, 56, 14, 34, 54
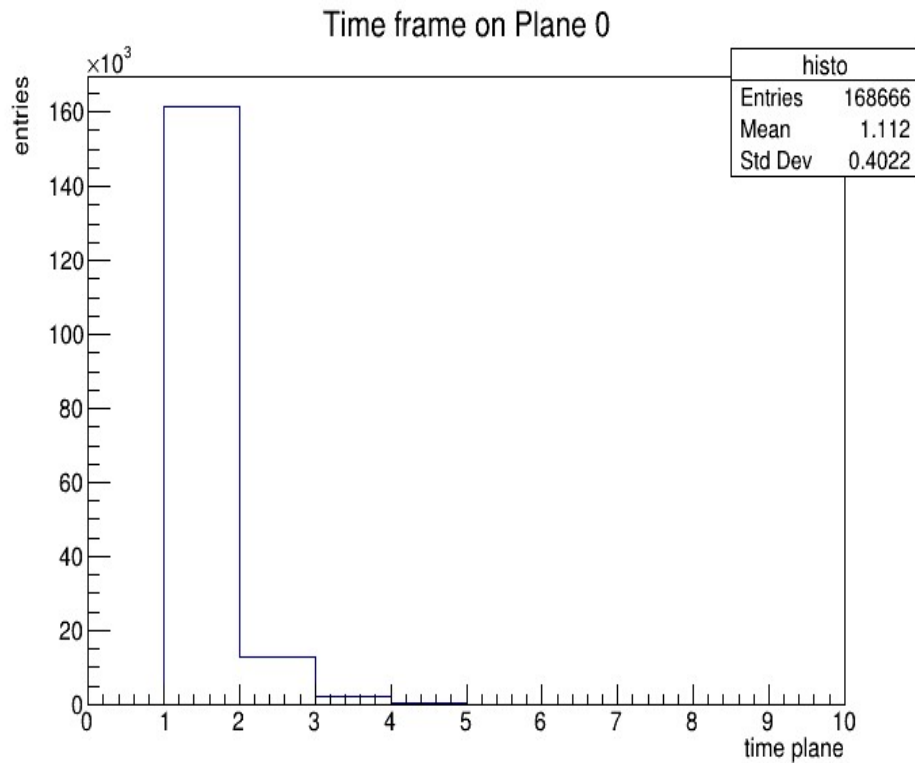
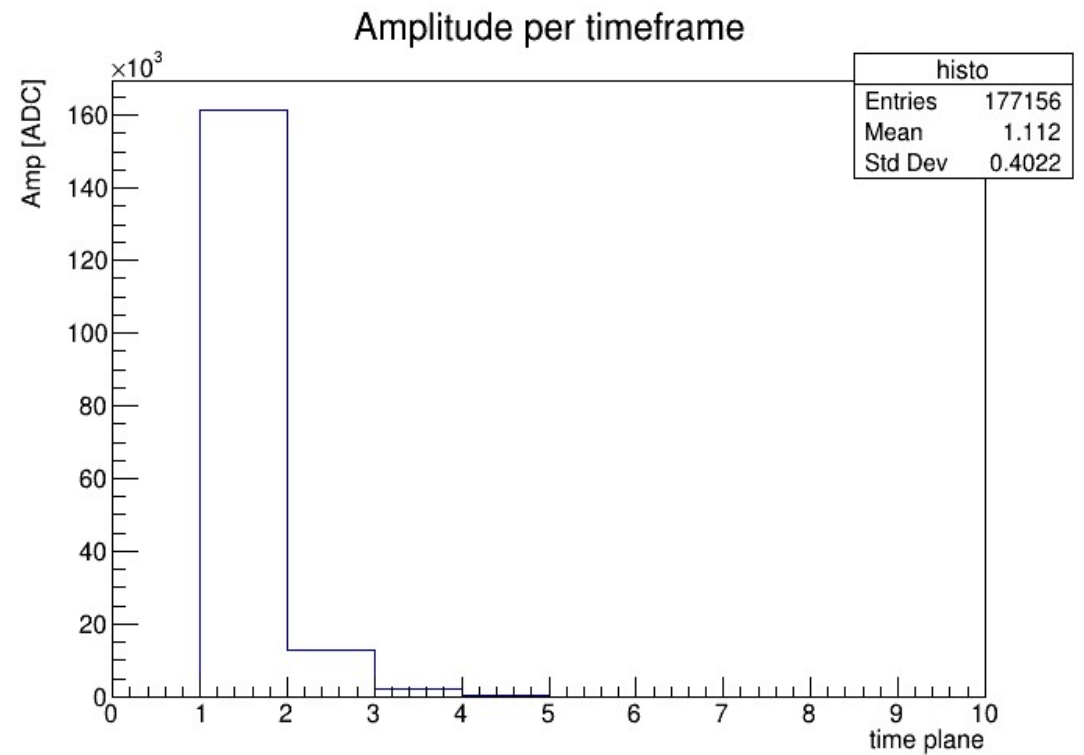**- Cut on amplitude < 900**
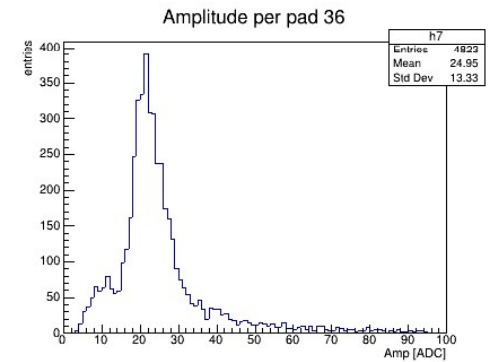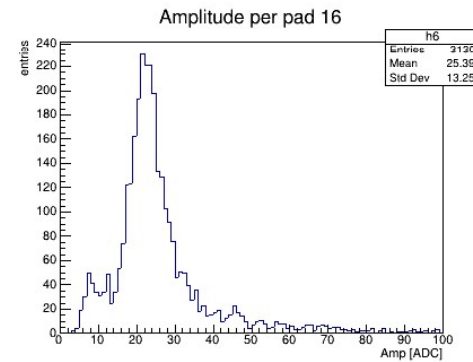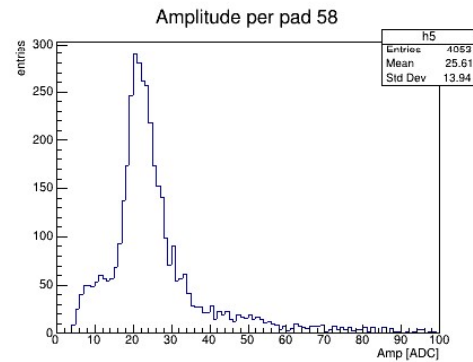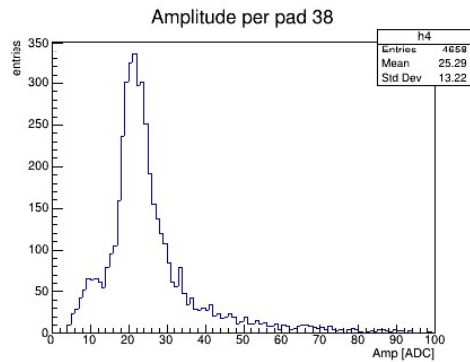
TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

- **Check of the timeframes**

  - **Number of Timeframes with signal**

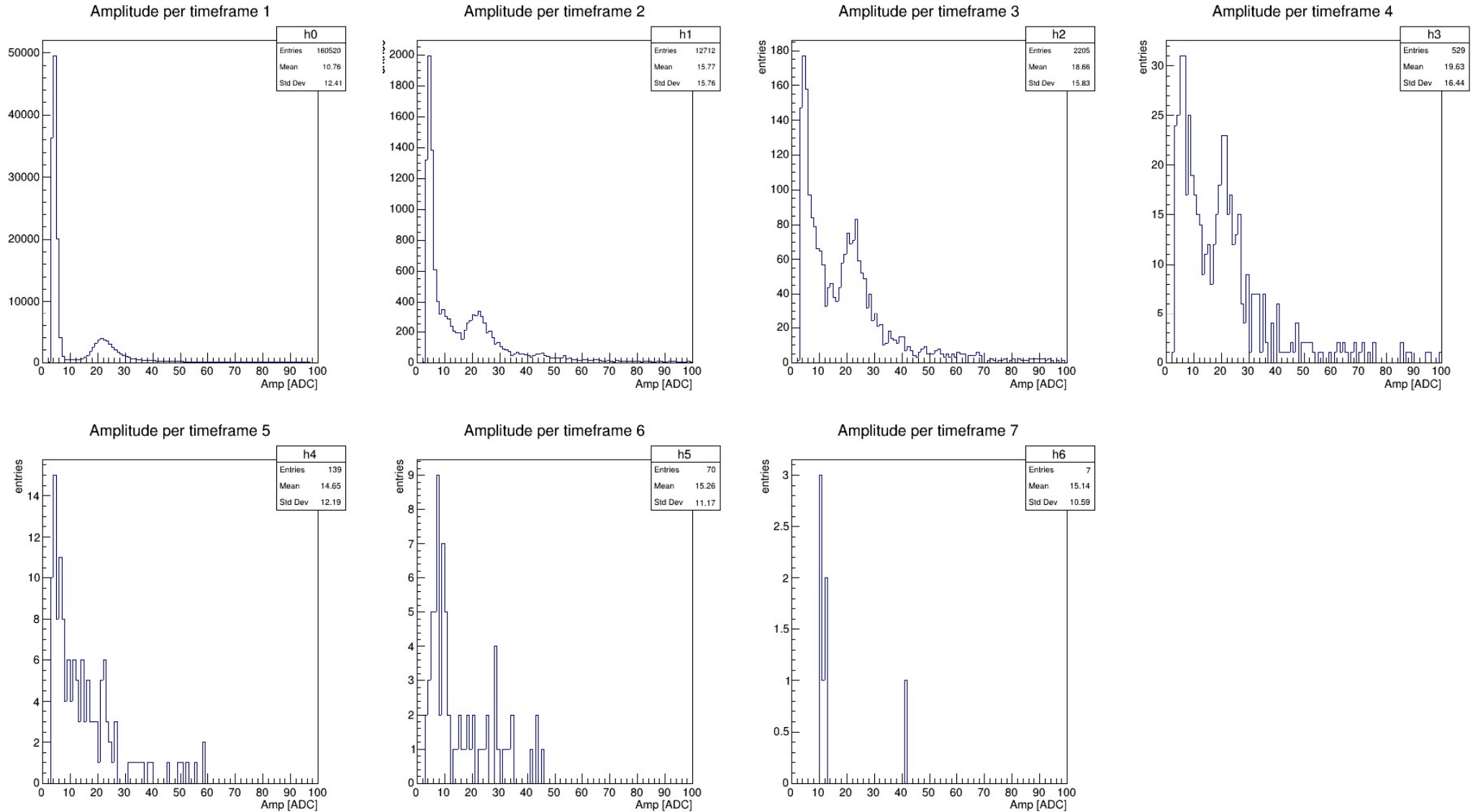 - **Signal of each timeframe**

Time frame on Plane 0

histo	
Entries	168666
Mean	1.112
Std Dev	0.4022

Amplitude per timeframe

histo	
Entries	177156
Mean	1.112
Std Dev	0.4022

TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

- **Amplitude on each timeframe**

TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

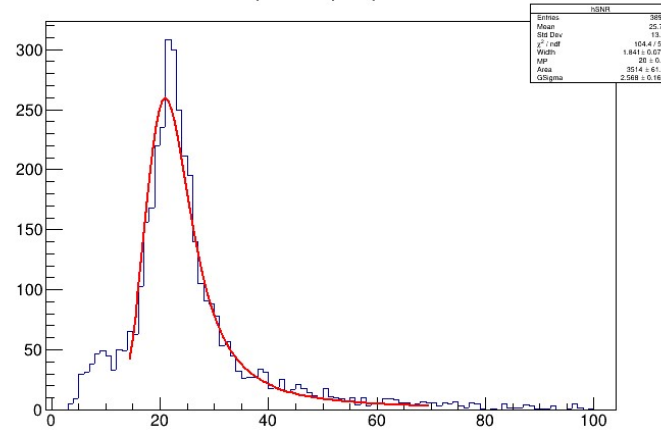- **Langaus fit range [14,70] on each central pad**
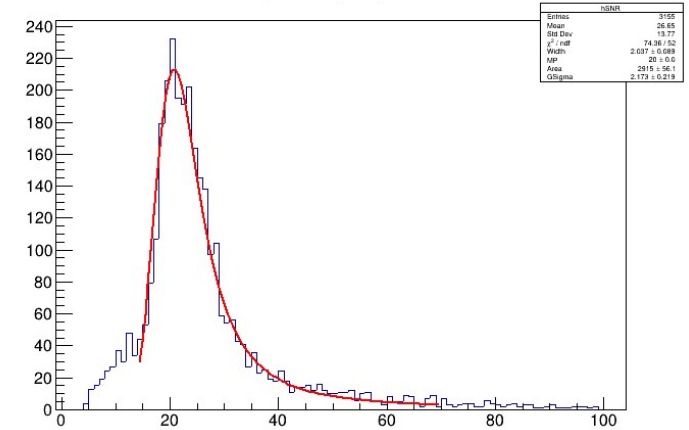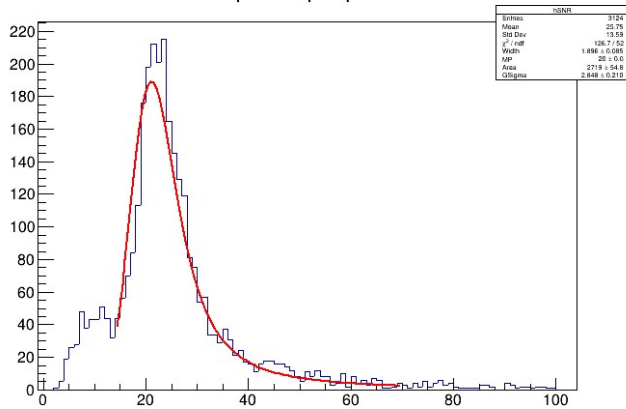
TB 2021: Sensor data

Concatenation of Runs 650, 651, 652, 653, 654

- **Langaus fit range [14,70] on each central pad**
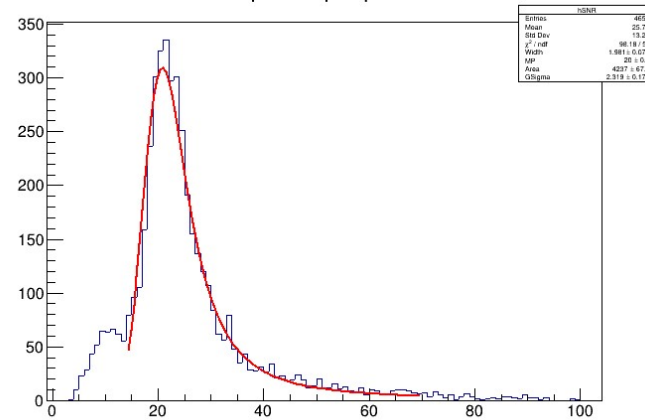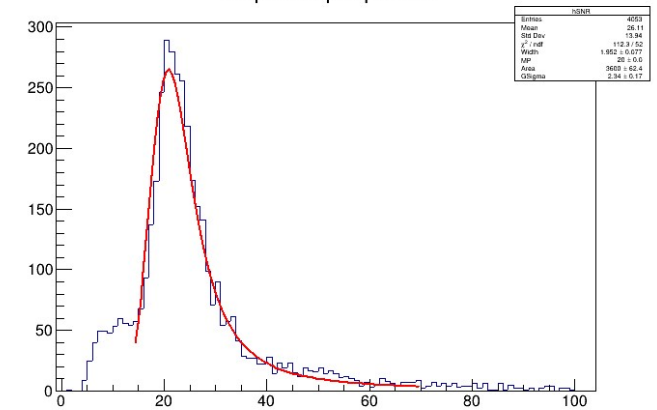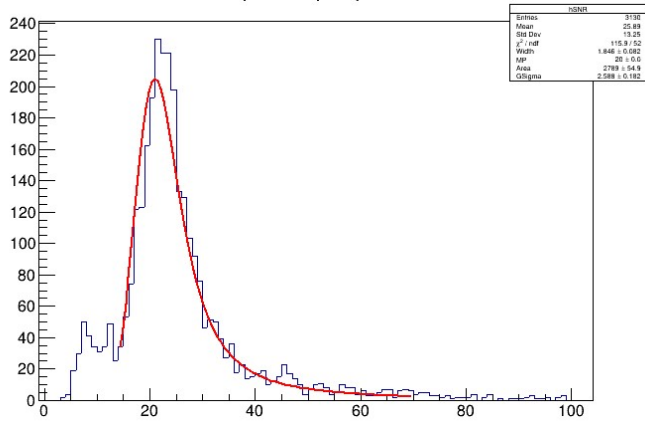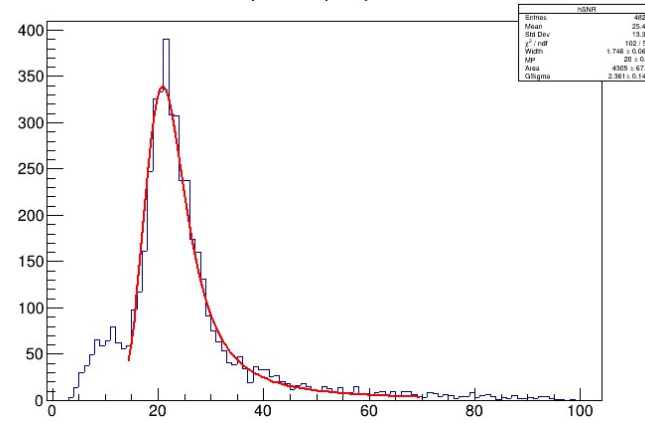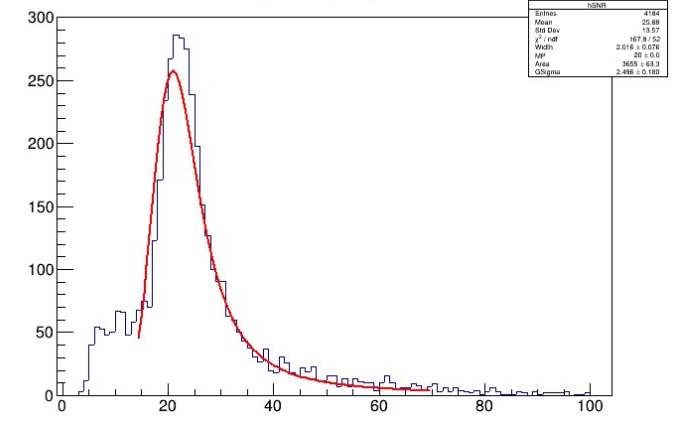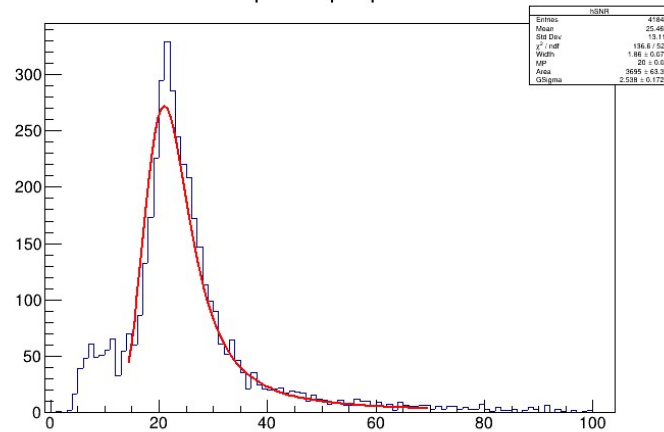
Amplitude per pad 16
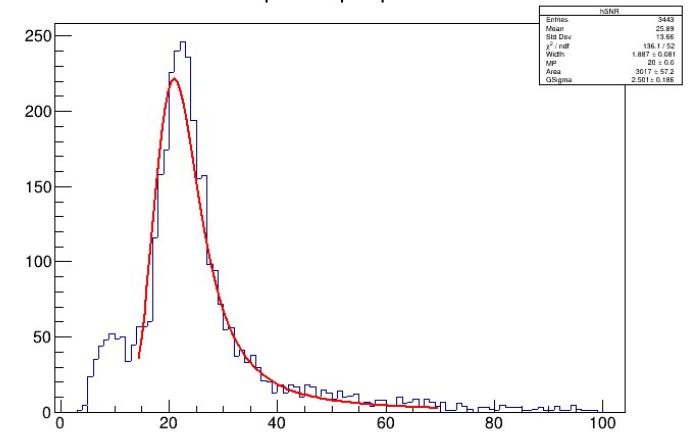
Amplitude per pad 36

Amplitude per pad 56

Amplitude per pad 34

Amplitude per pad 54

TB 2021: Sensor data

- **Michal map**