

Hotchannel in streaming readout mode and trigger mode

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# Run

- ↓ trigger
- Run48517
- Run48518
- ↓ streaming readout
- Run48872
- Run48892
- Run48896
- Run48937
- Run48943
- Run48946
- Run48988
- ↓ trigger
- Run49044
- Run49045

# About images

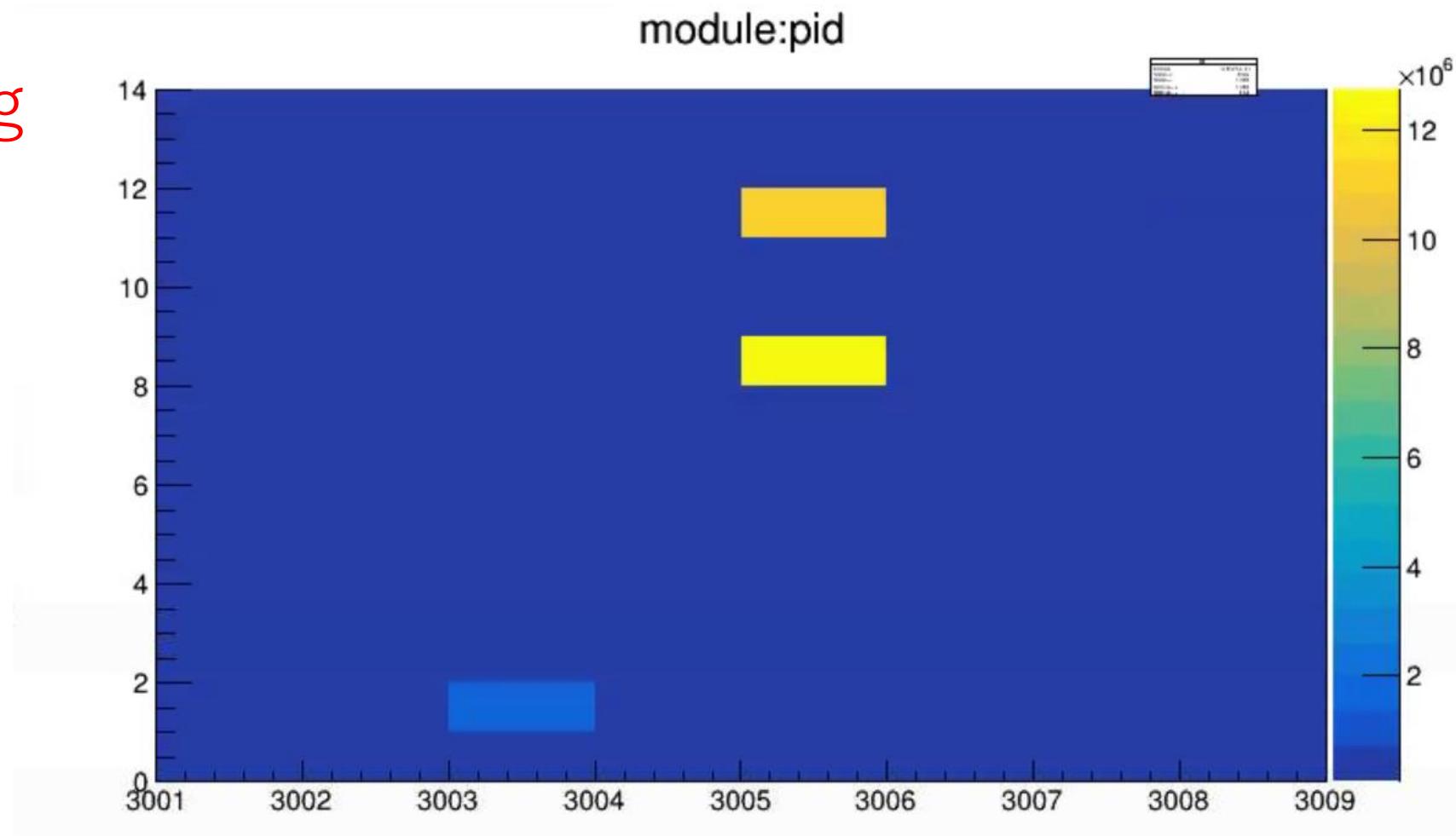
- Each run contains 6 slides.
- Hit count (pid vs module)
- ADC distribution (pid vs adc)
- Hitmap of intt4 (3 types of Zaxis maximum)
- Some most noisy channels (about 10-20 channels)

# Z axis maximum

- Zaxis=Maximum of intt4
- →Relative hit entries with respect to the maximum hit entry channel in intt4 server
- Zaxis= $10 \times$  mean
- →All channels (including all intt server) mean
- Zaxis= not fixed
- →Just not fixed (Relative hit entries with each module)

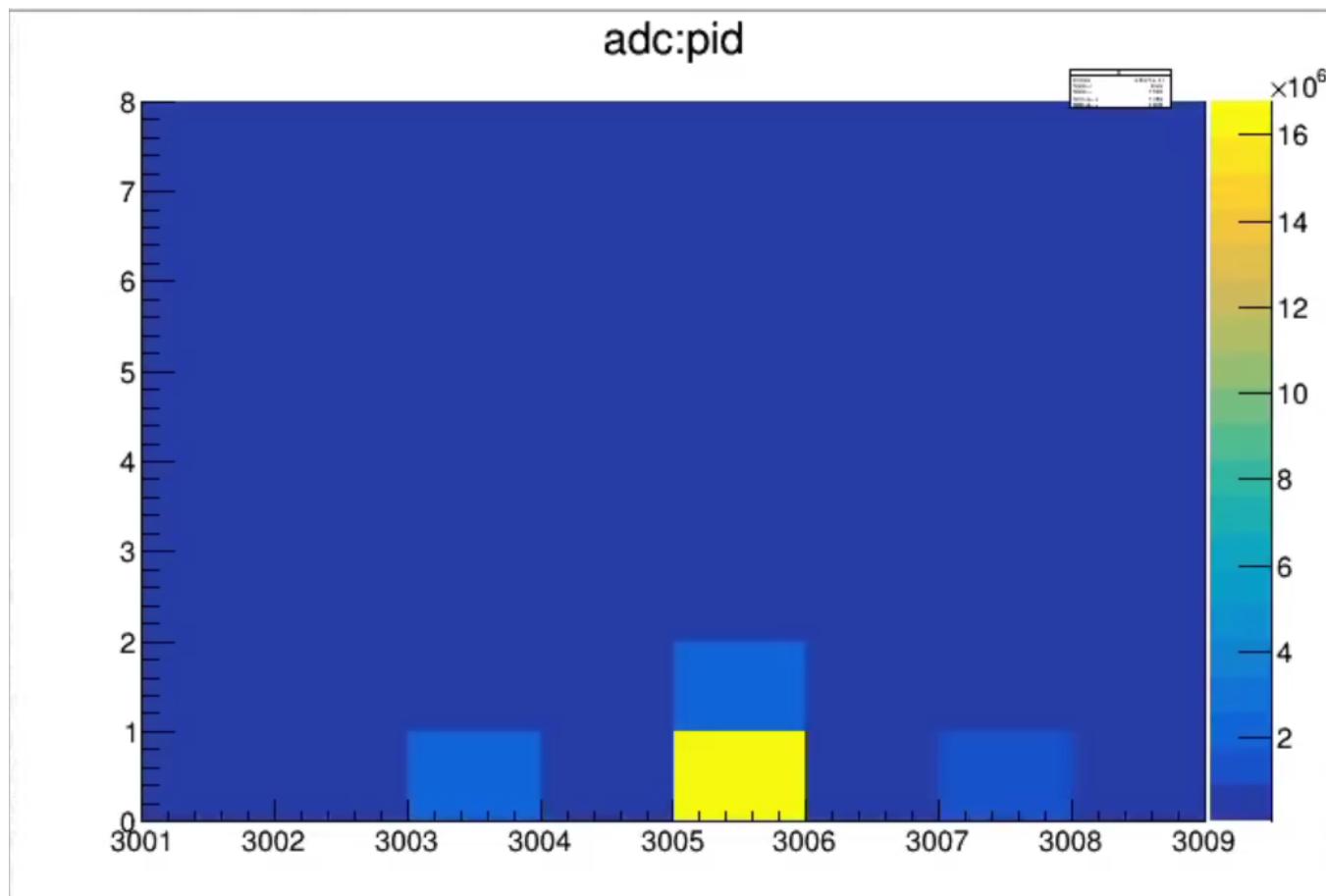
# Run48872 Hit count (pid vs module)

# Streaming



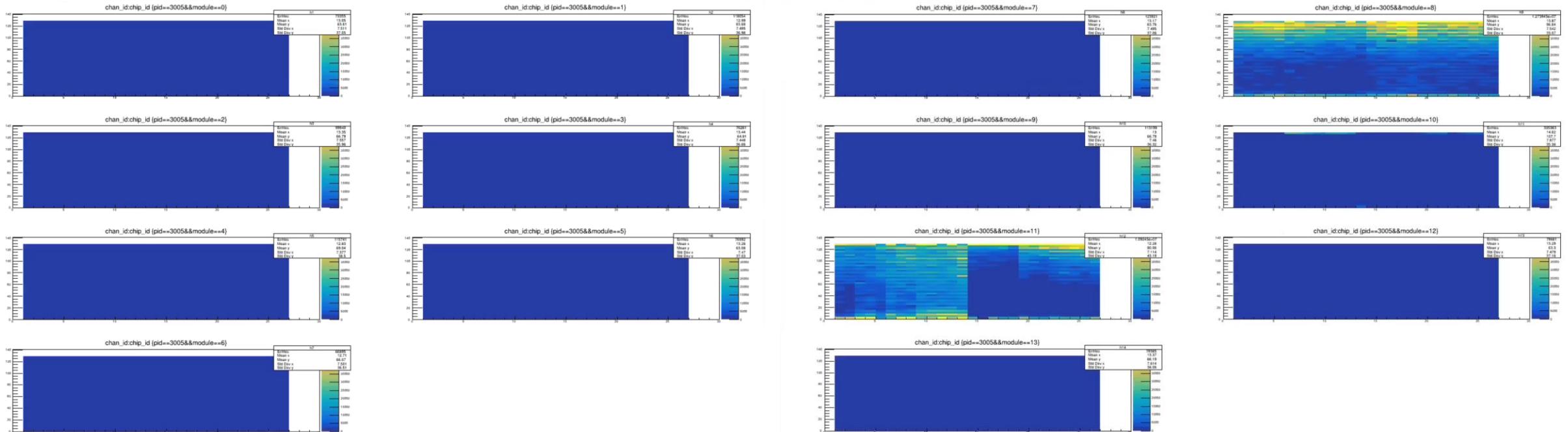
# Run48872 adc distribution

Streaming



# Run48872 (Zaxis=Maximum of intt4)

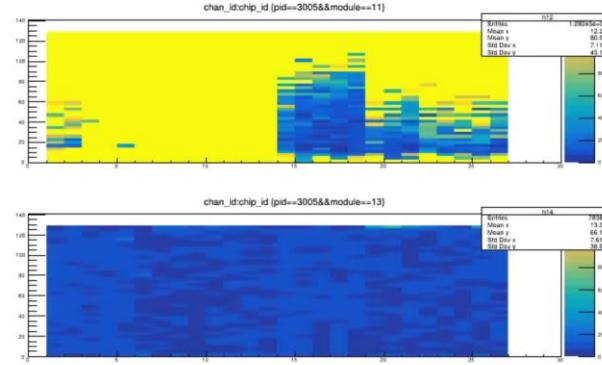
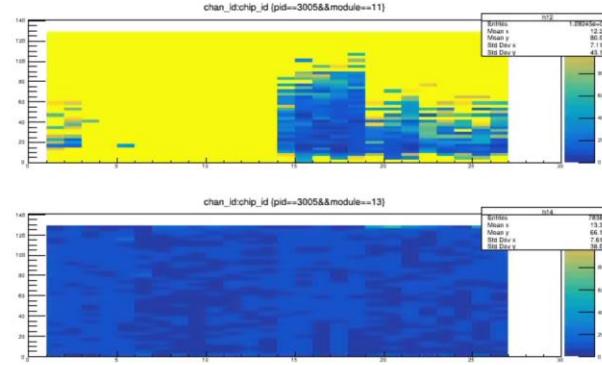
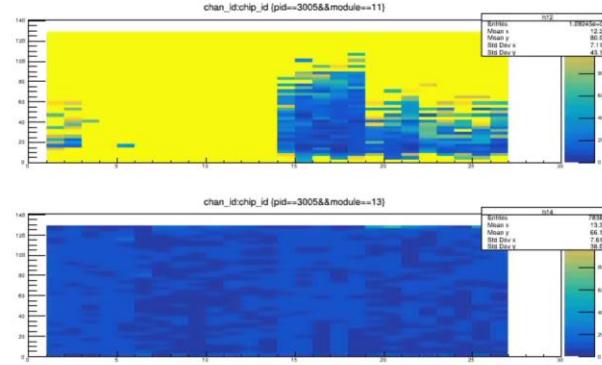
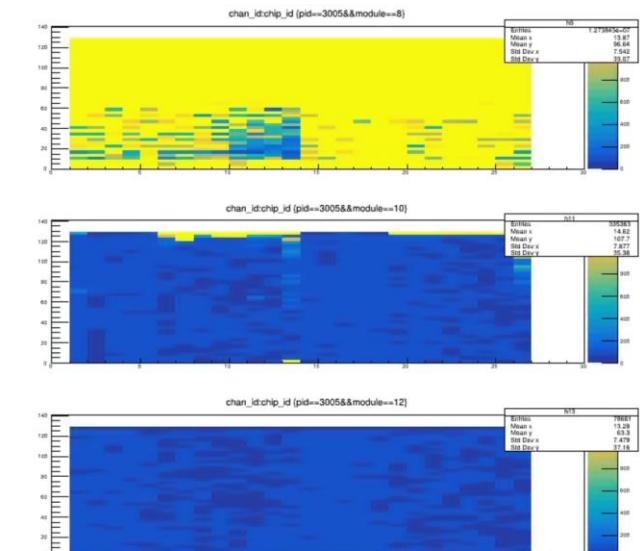
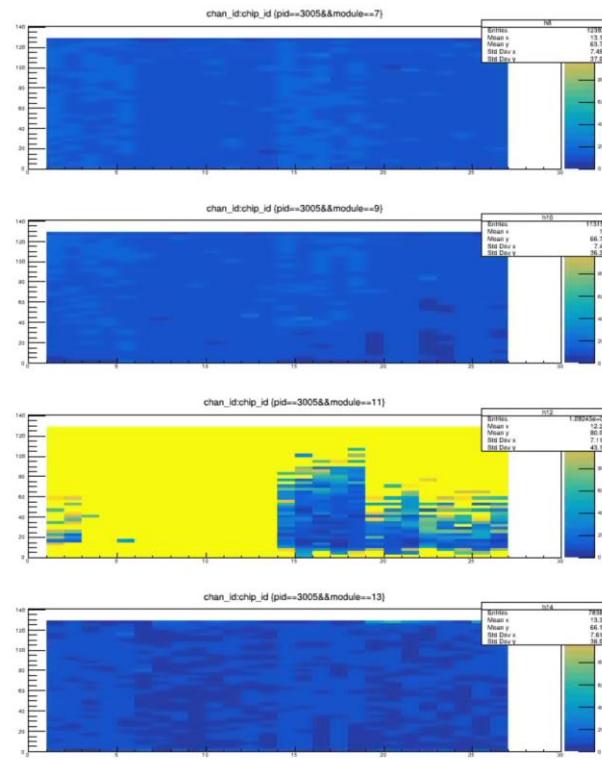
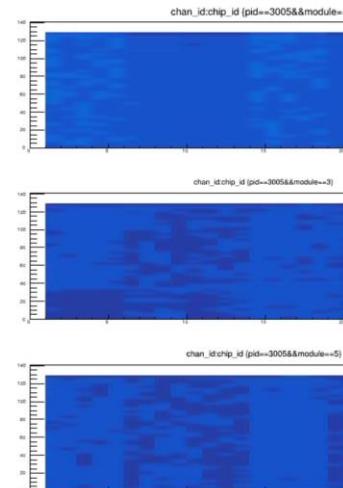
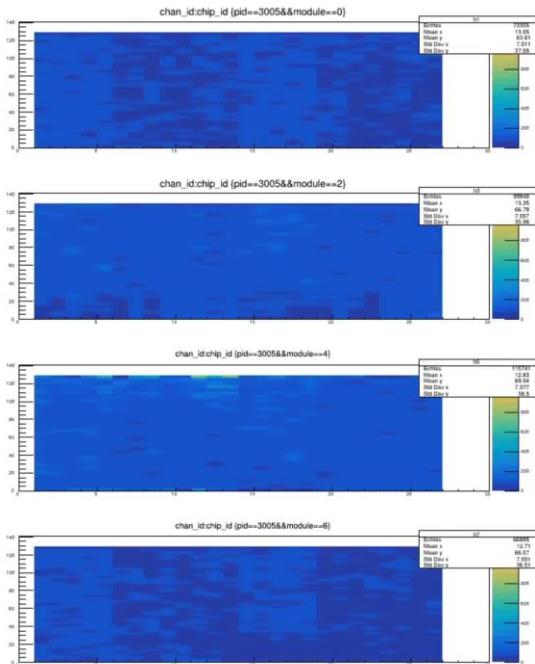
## Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

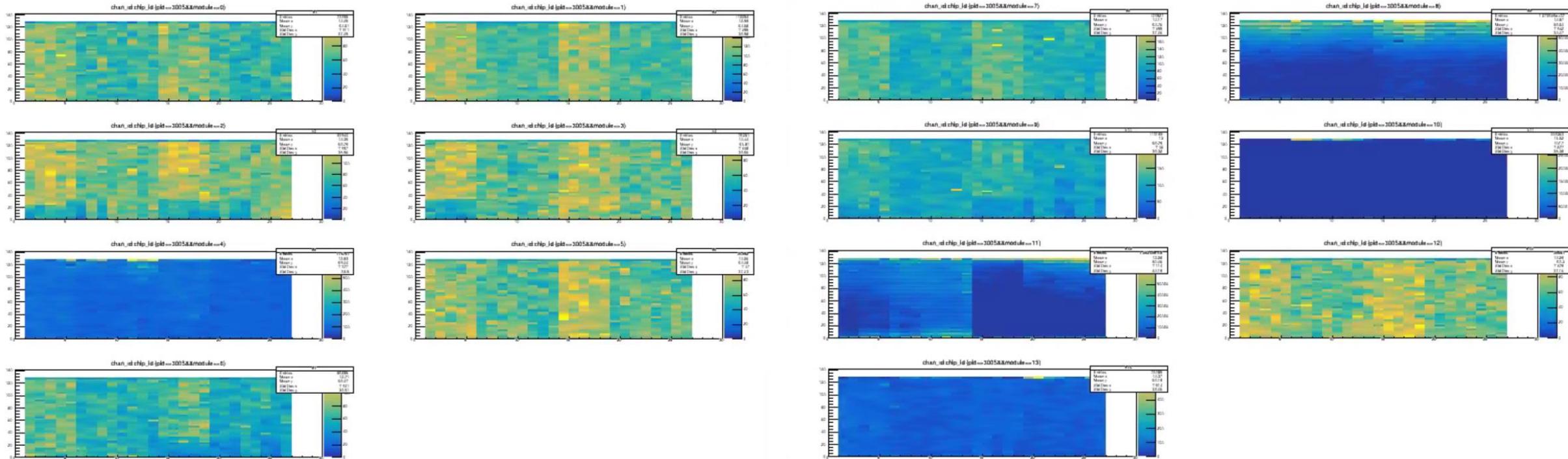
# Run48872 (Zaxis=10 × mean)

## Streaming



# Run48872 (Zaxis= not fixed)

## Streaming



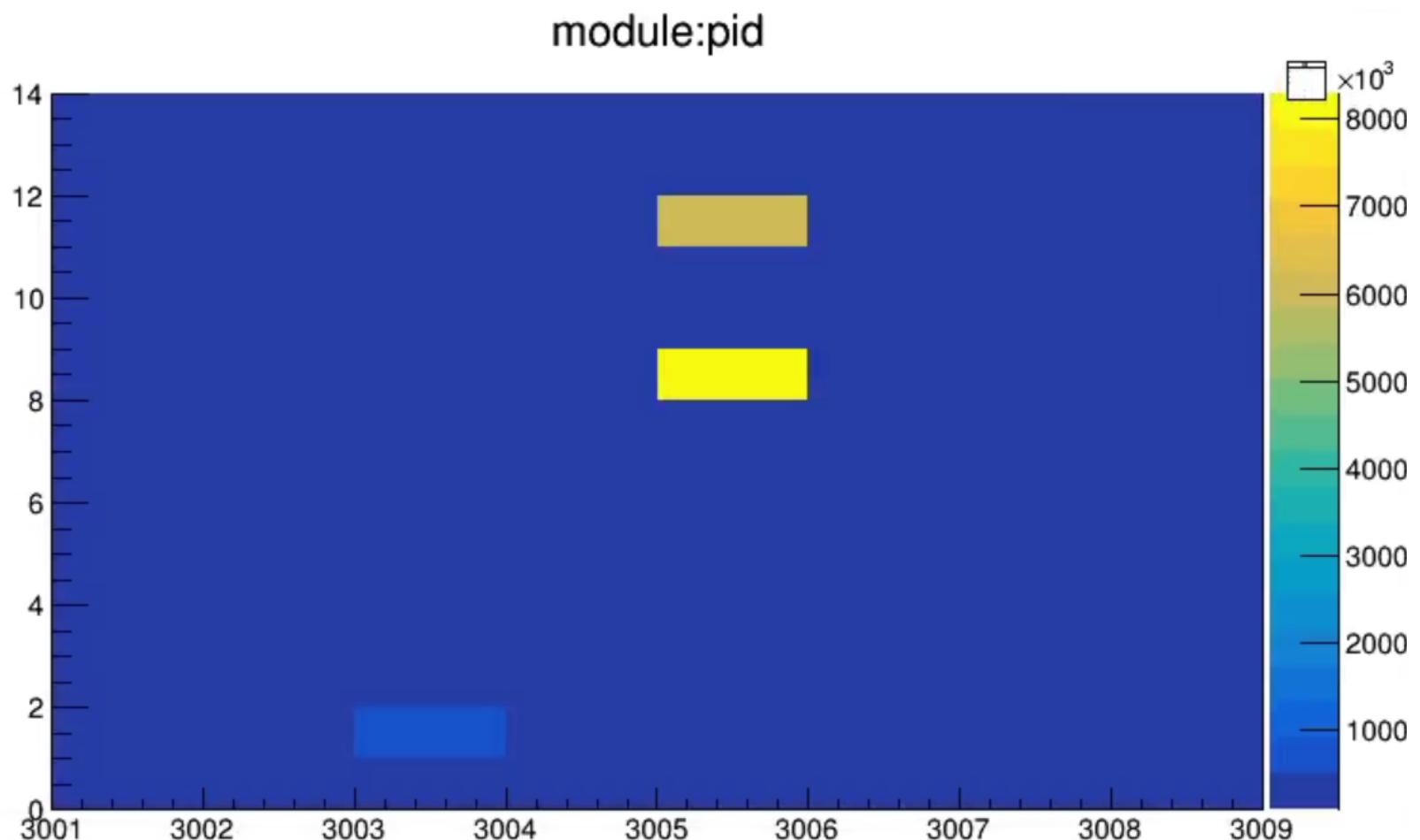
# Run48872 (hit mean=128)

## Streaming

```
root [8] tree->Scan("", "hit_count>38000")
*****
*   Row   * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 *    48872 * 9.494e+09 *    3003 *      1 *      8 *      0 *  1198758 *
* 214782 *      0 *    48872 * 1.048e+10 *    3005 *      8 *     14 *    126 *   38324 *
* 215038 *      0 *    48872 * 1.048e+10 *    3005 *      8 *     16 *    126 *   38754 *
* 215166 *      0 *    48872 * 1.048e+10 *    3005 *      8 *     17 *    126 *   41365 *
* 215934 *      0 *    48872 * 1.048e+10 *    3005 *      8 *     23 *    126 *   38674 *
* 216318 *      0 *    48872 * 1.048e+10 *    3005 *      8 *     26 *    126 *   41437 *
* 223872 *      0 *    48872 * 1.048e+10 *    3005 *     11 *      8 *      0 *  42181 *
* 224126 *      0 *    48872 * 1.048e+10 *    3005 *     11 *      9 *    126 *   39451 *
* 224256 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     11 *      0 *   51173 *
* 224510 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     12 *    126 *   45225 *
* 225150 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     17 *    126 *   39347 *
* 226046 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     24 *    126 *   39198 *
* 226174 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     25 *    126 *   38478 *
* 226302 *      0 *    48872 * 1.048e+10 *    3005 *     11 *     26 *    126 *   41356 *
* 321792 *      0 *    48872 * 1.058e+10 *    3007 *     12 *     19 *      0 *  183622 *
*****
=> 15 selected entries
(long long) 15
```

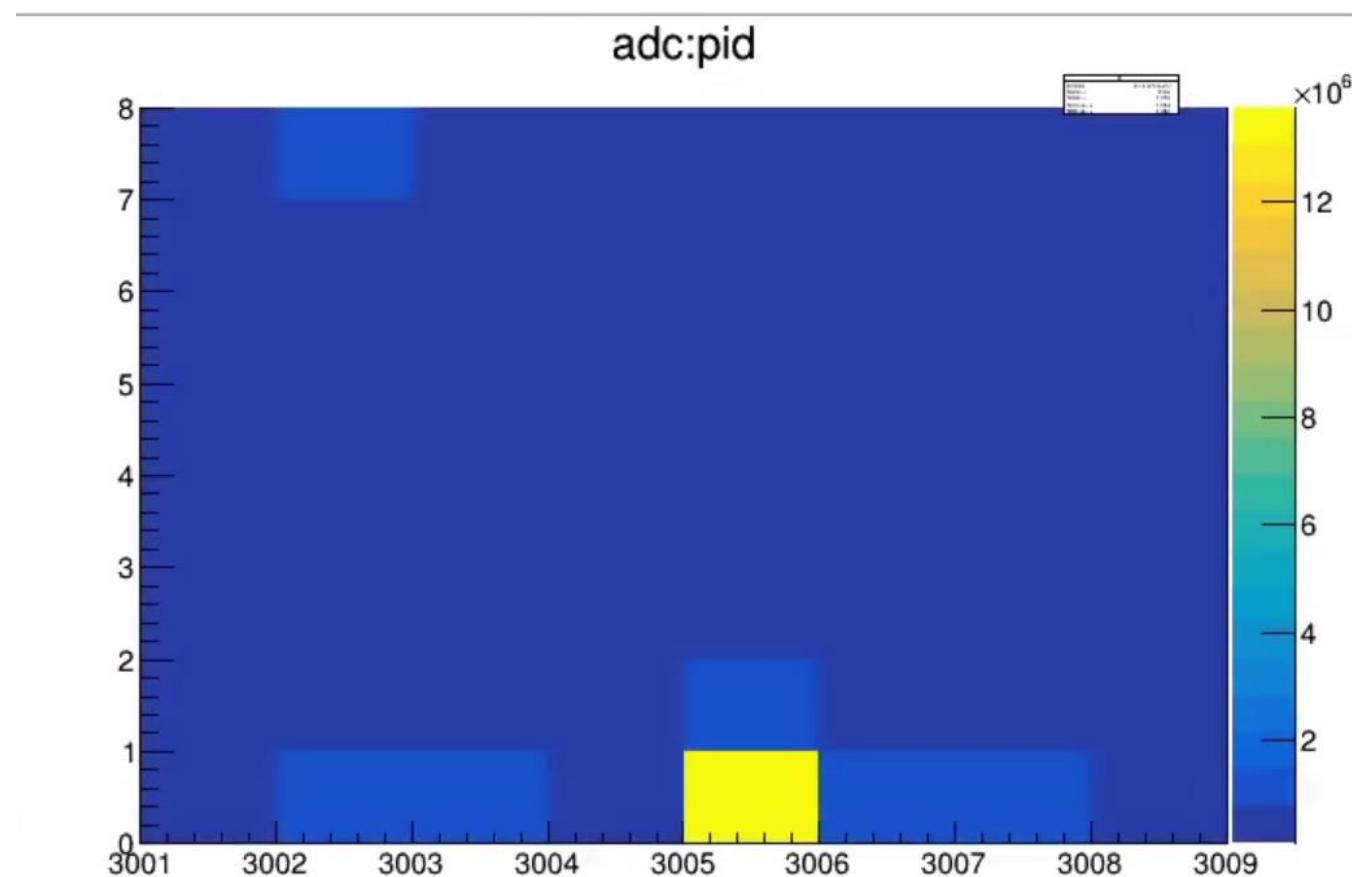
# Run48892 Hit count (pid vs module)

Streaming



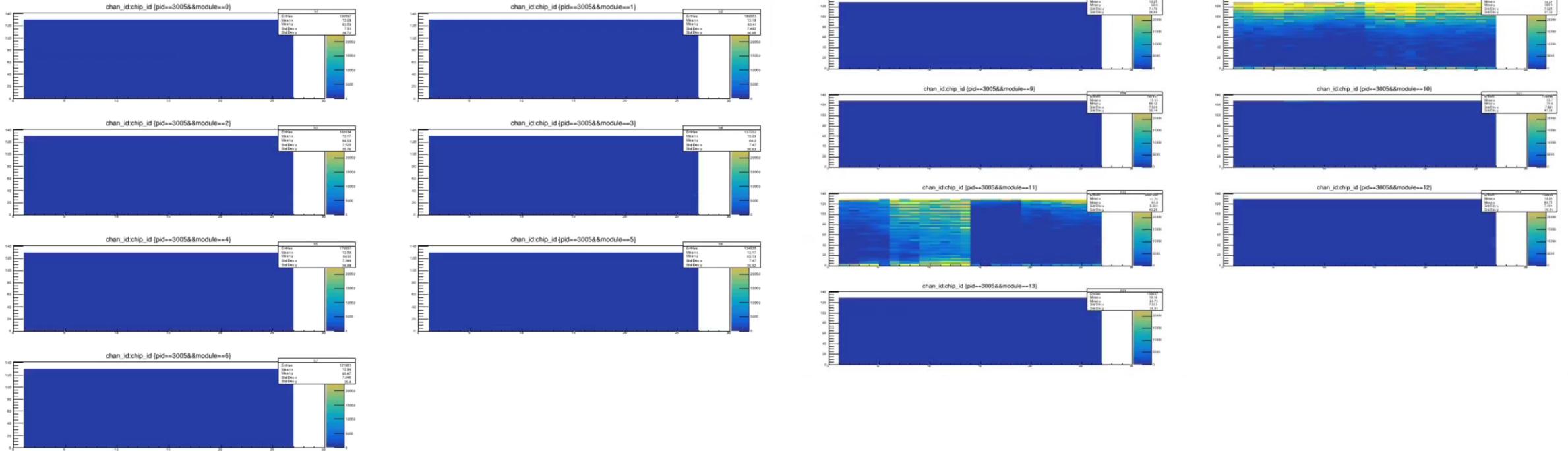
# Run48892 adc distribution

Streaming



# Run48892 (Zaxis=Maximum of intt4)

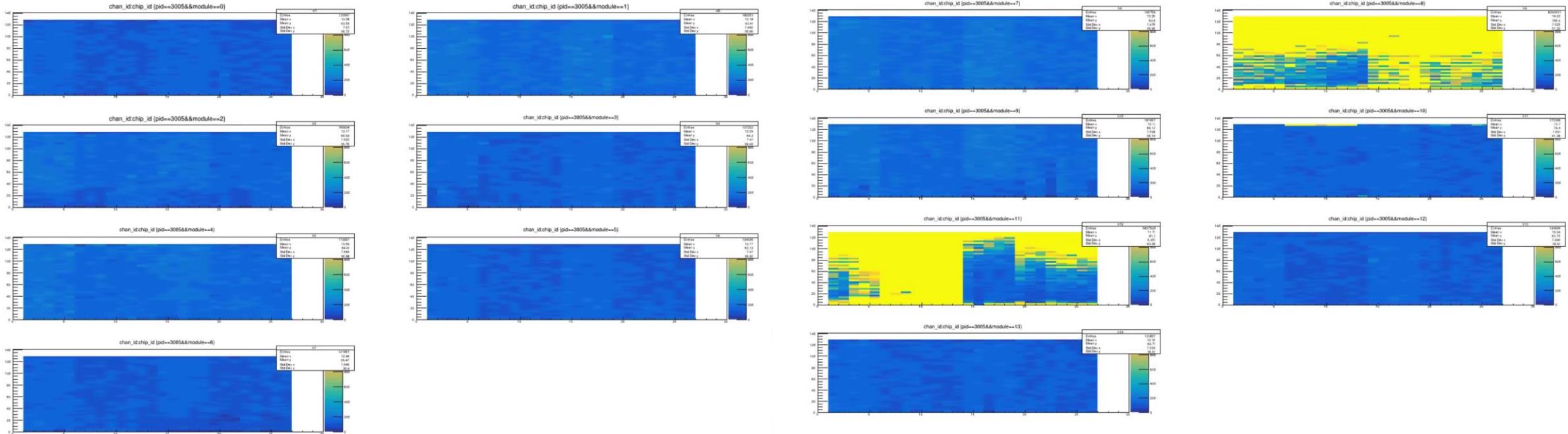
## Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

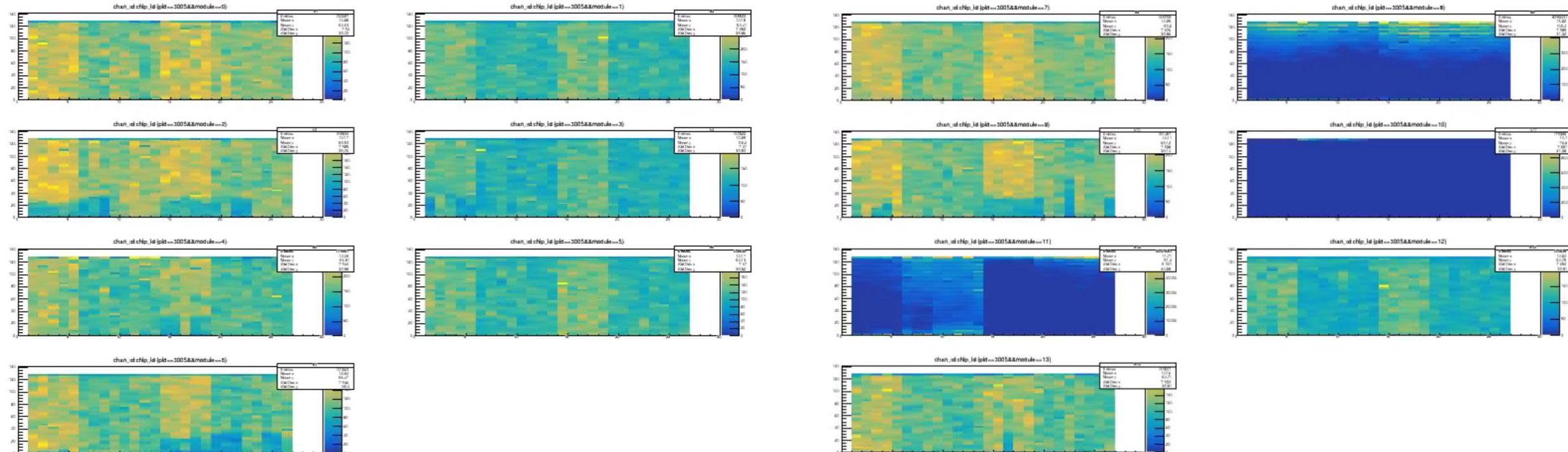
# Run48892 (Zaxis=10 × mean)

## Streaming



# Run48892 (Zaxis= not fixed)

Streaming



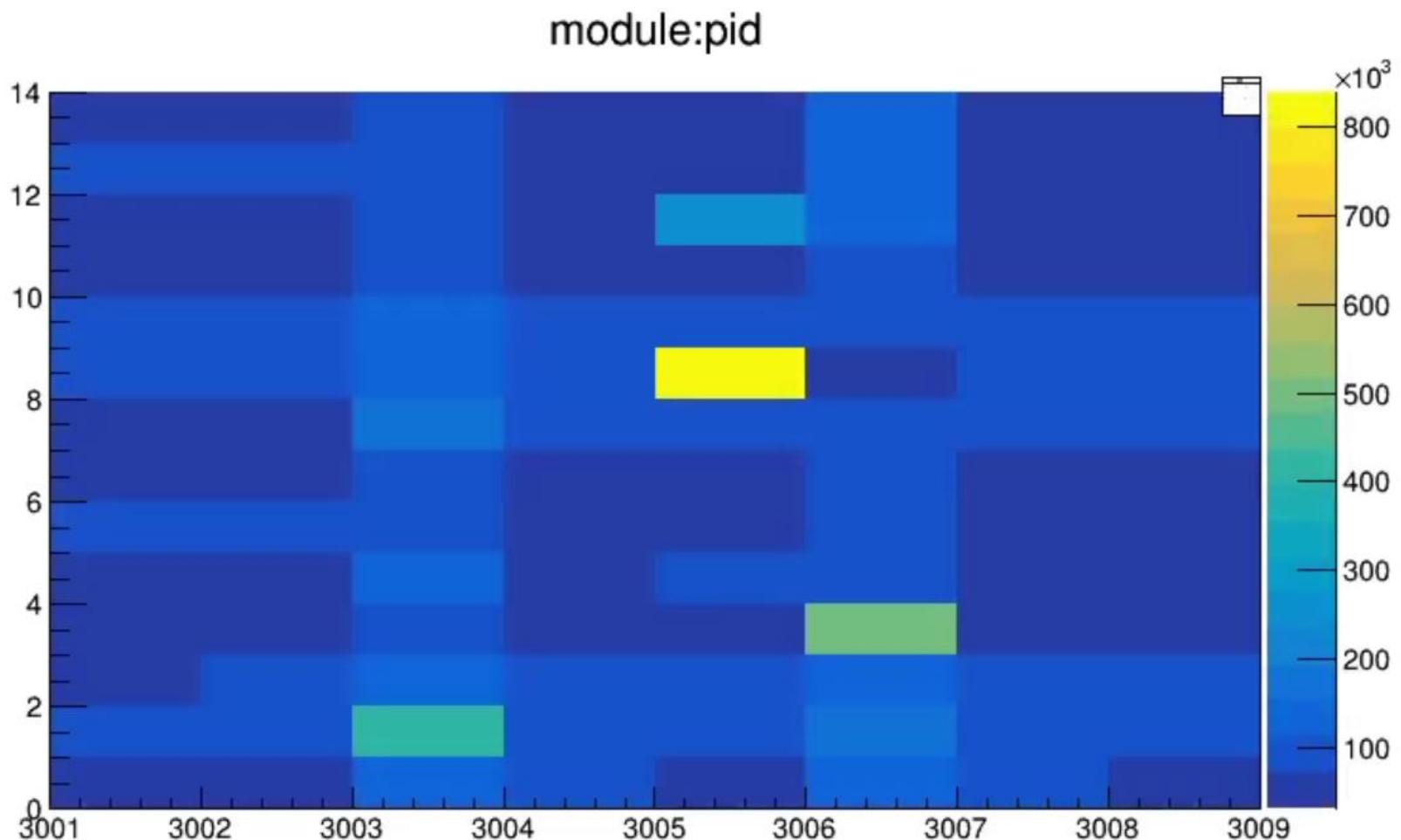
# Run48892 (hit mean=110)

## Streaming

```
root [4] tree->Scan("", "hit_count>30000")
*****
*   Row   * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 * 48892 * 6.252e+09 * 3003 *      1 *      8 *      0 * 238767 *
* 215038 *      0 * 48892 * 6.859e+09 * 3005 *      8 *     16 *     126 * 30847 *
* 215166 *      0 * 48892 * 6.859e+09 * 3005 *      8 *     17 *     126 * 34996 *
* 215294 *      0 * 48892 * 6.859e+09 * 3005 *      8 *     18 *     126 * 30382 *
* 215934 *      0 * 48892 * 6.859e+09 * 3005 *      8 *     23 *     126 * 30886 *
* 216318 *      0 * 48892 * 6.859e+09 * 3005 *      8 *     26 *     126 * 33263 *
* 223872 *      0 * 48892 * 6.859e+09 * 3005 *     11 *      8 *      0 * 30415 *
* 224126 *      0 * 48892 * 6.859e+09 * 3005 *     11 *      9 *     126 * 30694 *
* 224256 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     11 *      0 * 41245 *
* 224510 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     12 *     126 * 36760 *
* 225790 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     22 *     126 * 30001 *
* 226046 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     24 *     126 * 32505 *
* 226174 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     25 *     126 * 30620 *
* 226302 *      0 * 48892 * 6.859e+09 * 3005 *     11 *     26 *     126 * 34655 *
* 321792 *      0 * 48892 * 6.714e+09 * 3007 *     12 *     19 *      0 * 120915 *
*****
==> 15 selected entries
(long long) 15
```

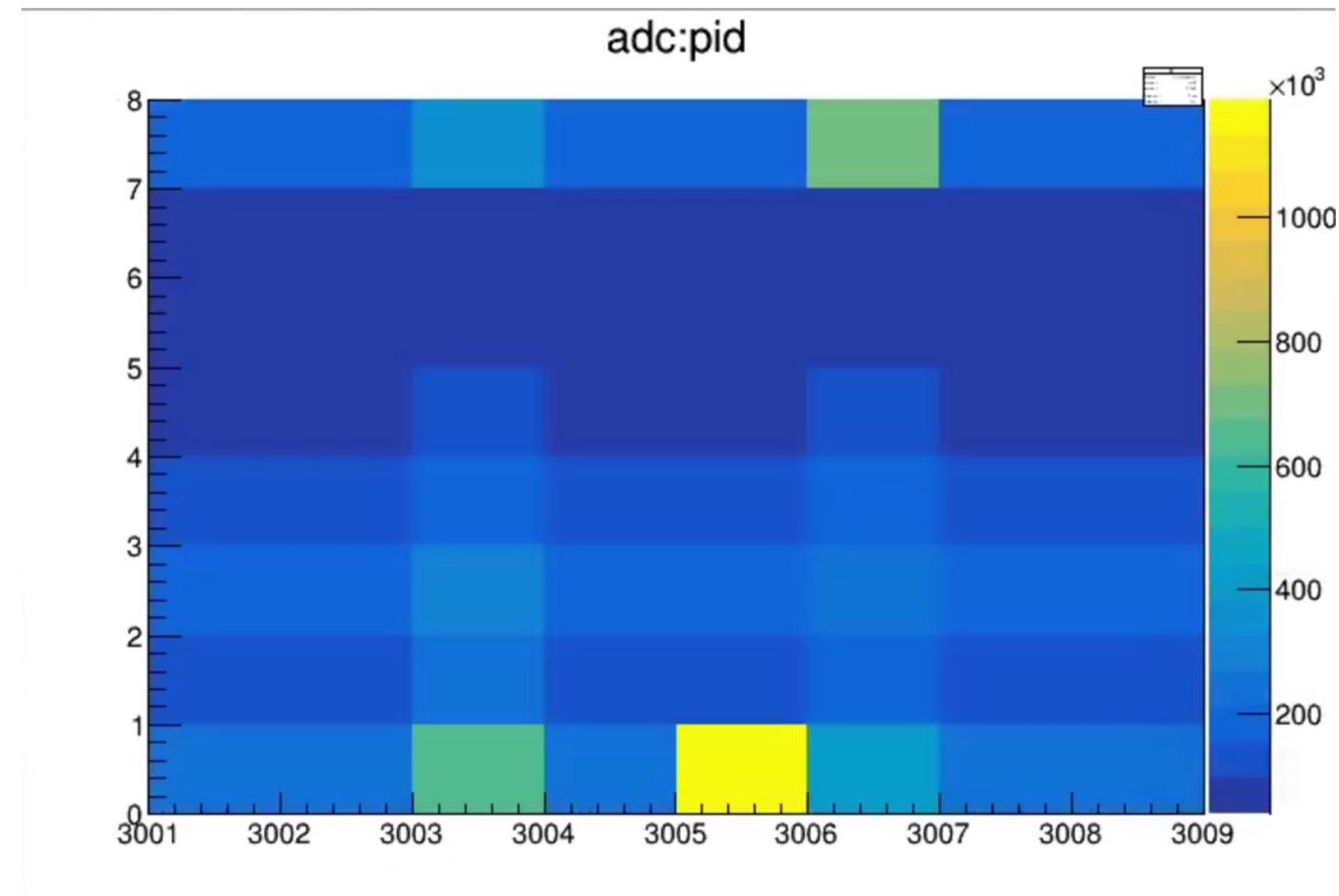
# Run48896 Hit count (pid vs module)

Streaming



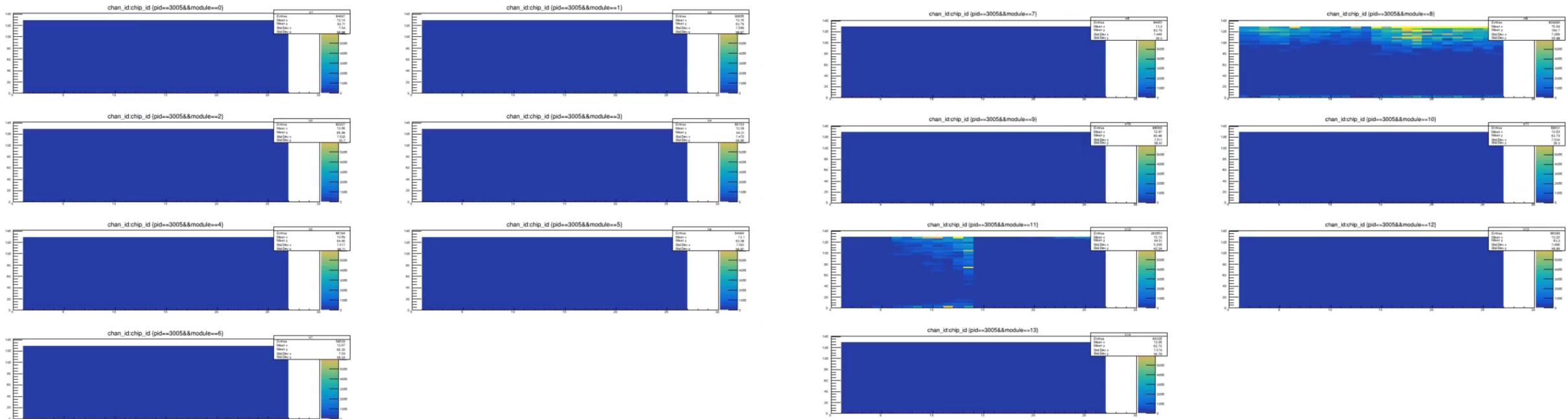
# Run48896 adc distribution

# Streaming



# Run48896 (Zaxis=Maximum of intt4)

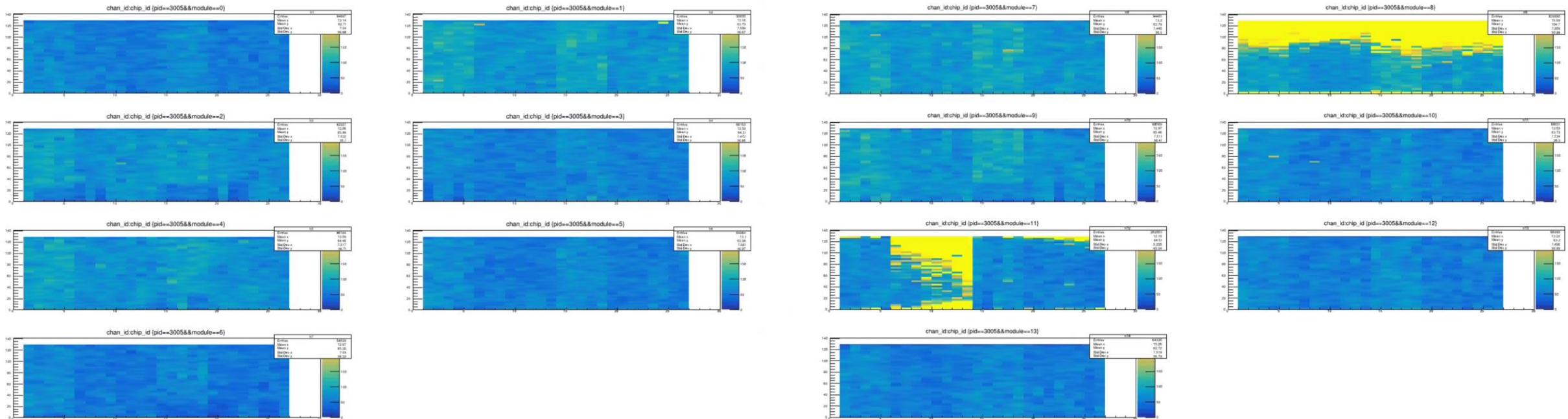
## Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

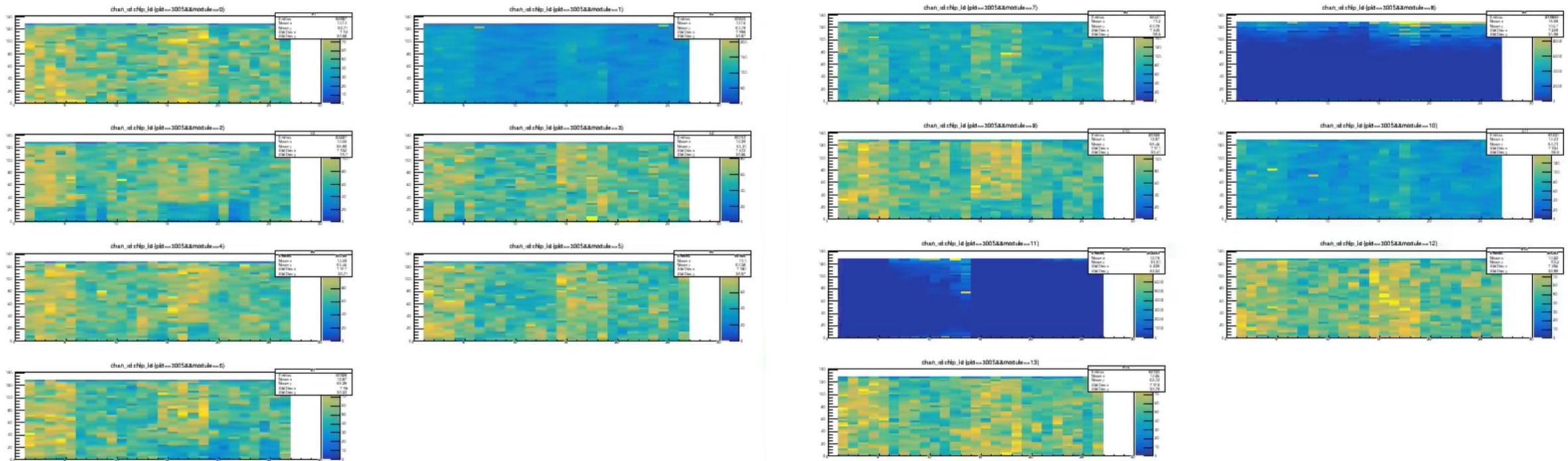
# Run48896 (Zaxis=10 × mean)

## Streaming



# Run48896 (Zaxis= not fixed)

# Streaming



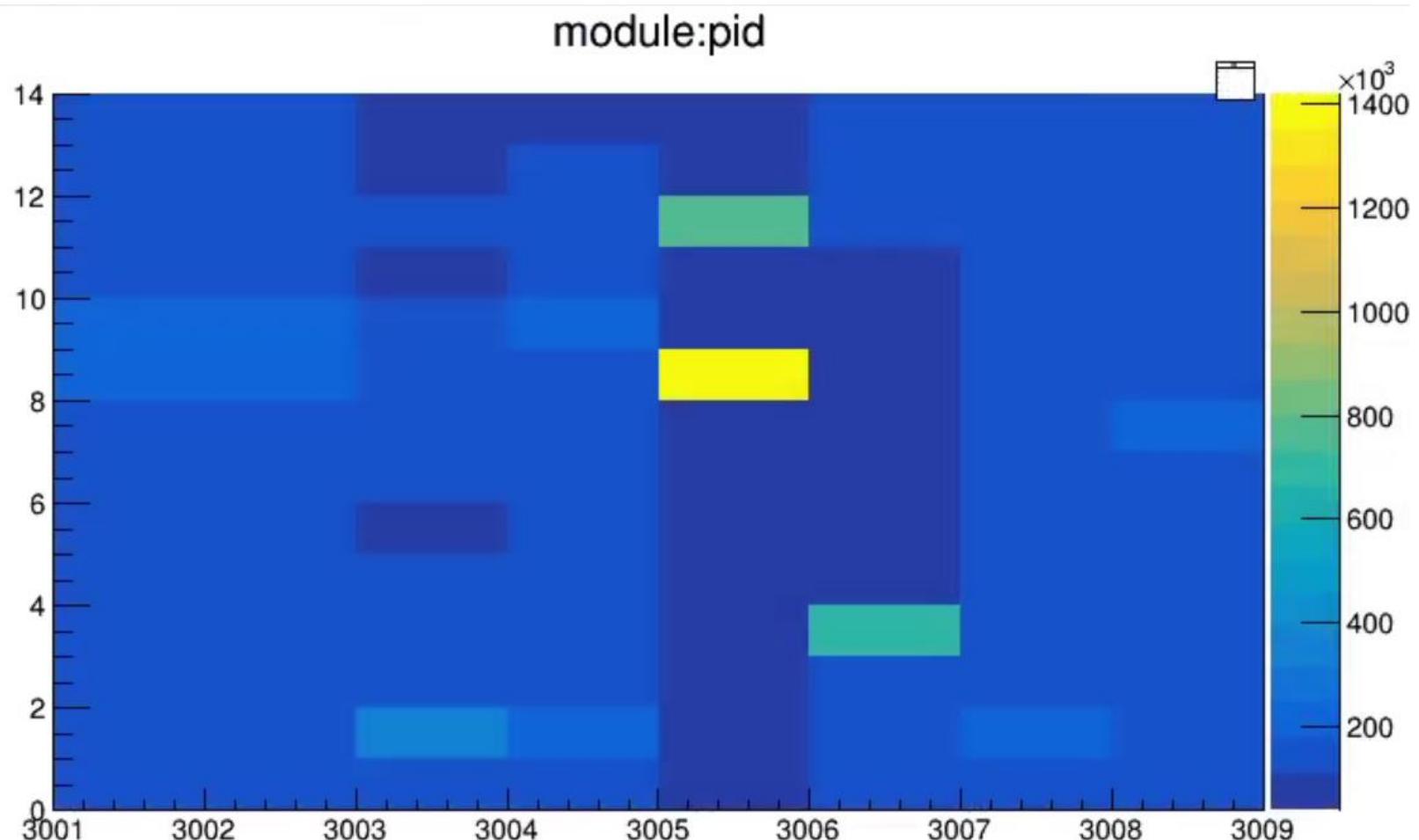
# Run48896 (hit mean=26)

## Streaming

```
root [5] tree->Scan("", "hit_count>5000")
*****
*   Row * run_id.ru * run_number * run_time. * pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 *    48896 * 2.004e+09 *    3003 *      1 *      8 *      0 *    256888 *
* 214911 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     15 *    127 *      5031 *
* 215038 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     16 *    126 *      6490 *
* 215164 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     17 *    124 *      5967 *
* 215166 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     17 *    126 *      8464 *
* 215294 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     18 *    126 *      7081 *
* 215422 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     19 *    126 *      6150 *
* 215550 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     20 *    126 *      6811 *
* 215678 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     21 *    126 *      6208 *
* 215806 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     22 *    126 *      6303 *
* 215934 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     23 *    126 *      6005 *
* 216062 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     24 *    126 *      5447 *
* 216190 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     25 *    126 *      6067 *
* 216318 *      0 *    48896 * 1.188e+09 *    3005 *      8 *     26 *    126 *      6879 *
* 224256 *      0 *    48896 * 1.188e+09 *    3005 *     11 *     11 *      0 *    6295 *
* 224510 *      0 *    48896 * 1.188e+09 *    3005 *     11 *     12 *    126 *      8225 *
* 224584 *      0 *    48896 * 1.188e+09 *    3005 *     11 *     13 *      72 *    7675 *
* 244991 *      0 *    48896 * 1.943e+09 *    3006 *      3 *     16 *    127 *    416998 *
*****
==> 18 selected entries
(long long) 18
```

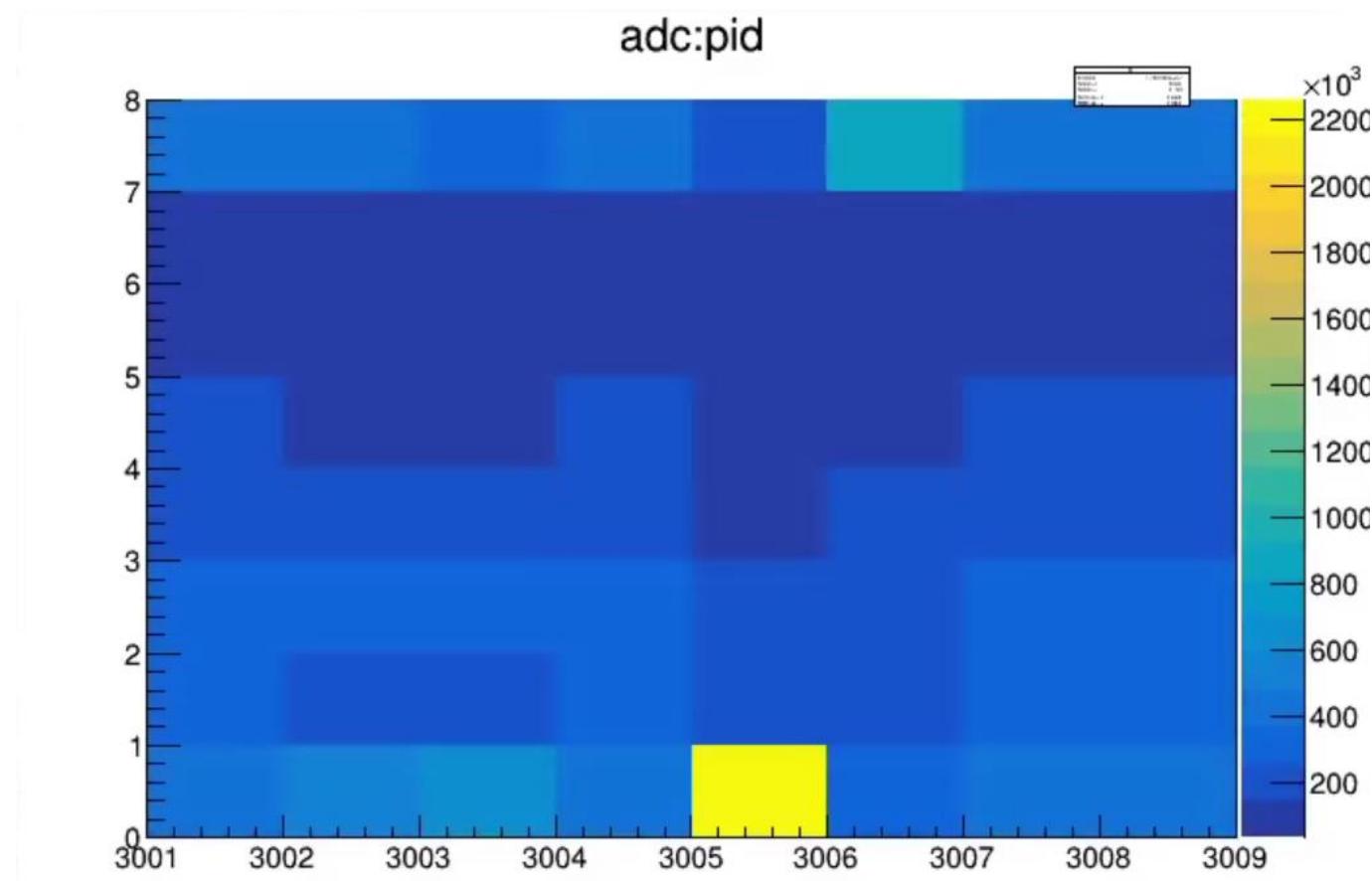
# Run48973 Hit count (pid vs module)

Streaming



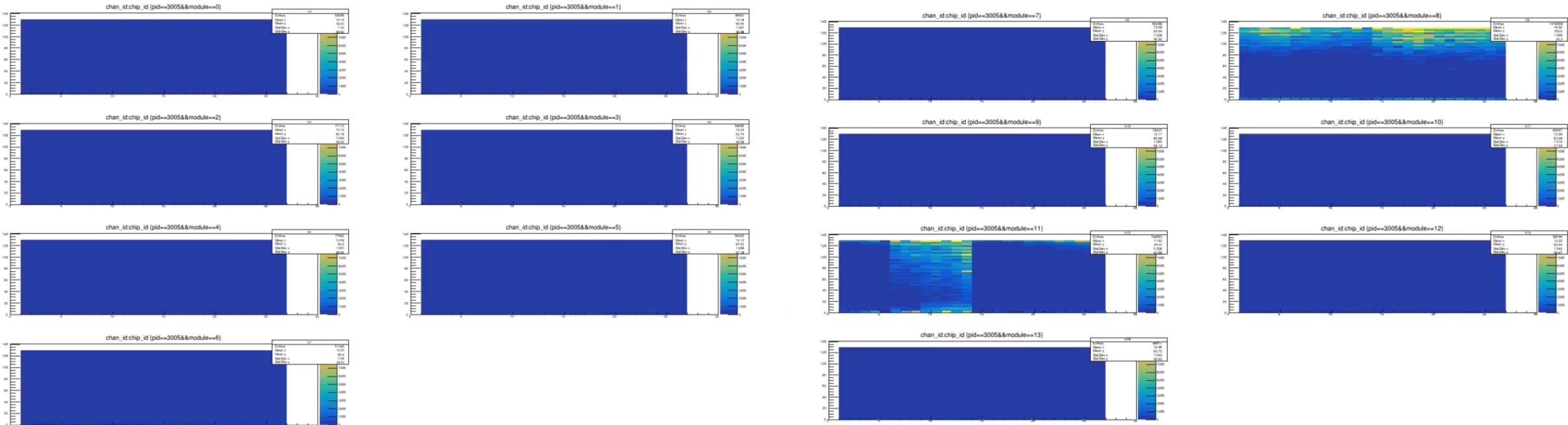
# Run48937 adc distribution

Streaming



# Run48937 (Zaxis=Maximum of intt4)

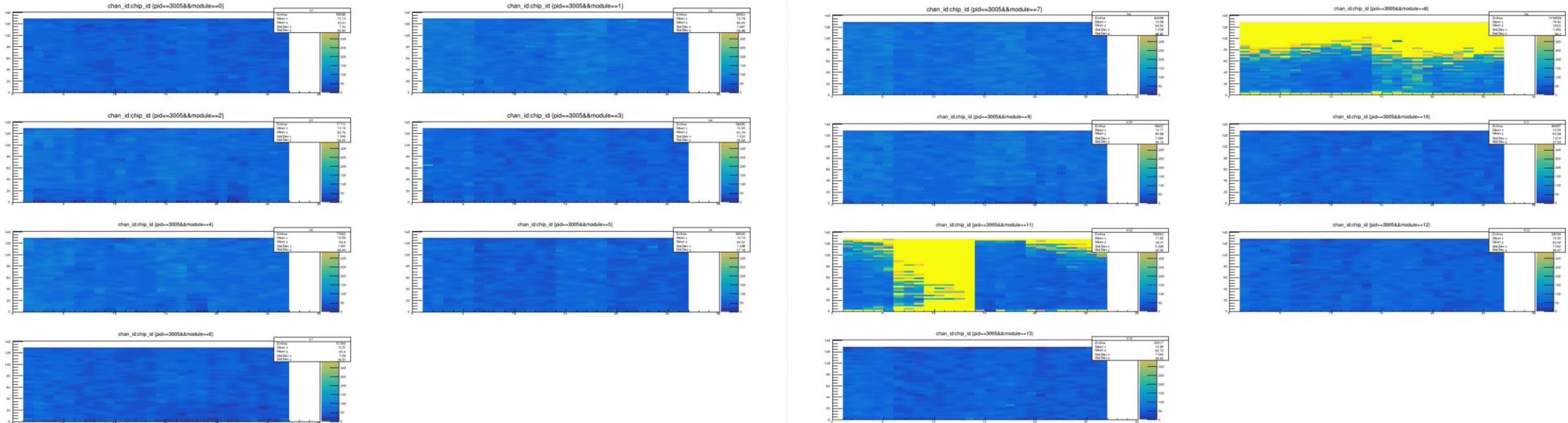
## Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

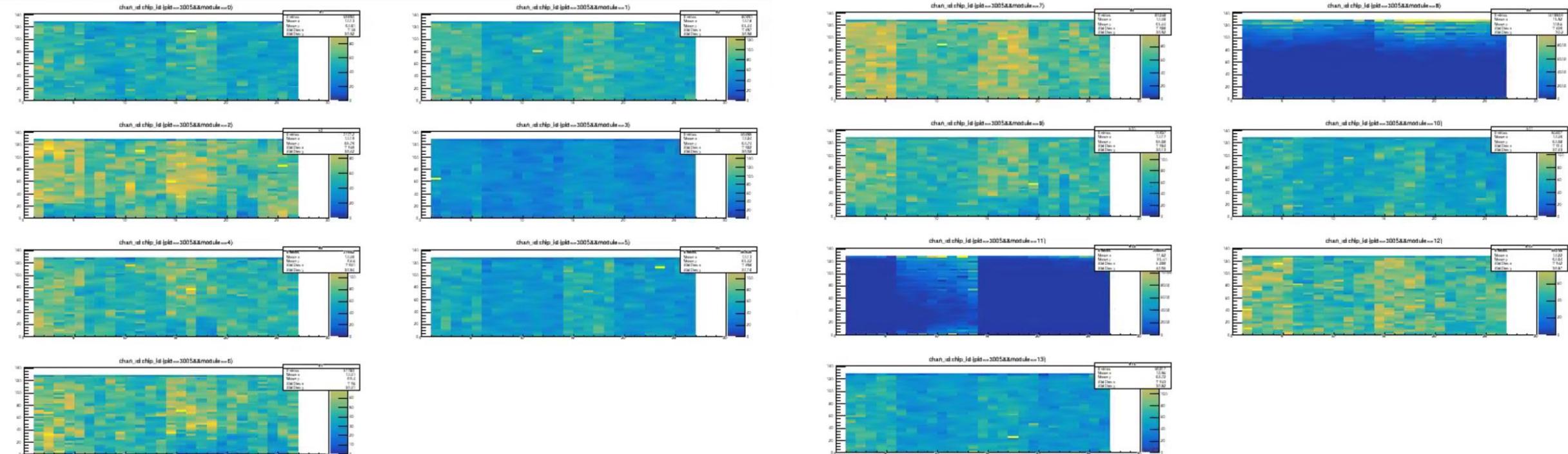
# Run48937 (Zaxis=10 × mean)

## Streaming



# Run48937 (Zaxis= not fixed)

## Streaming



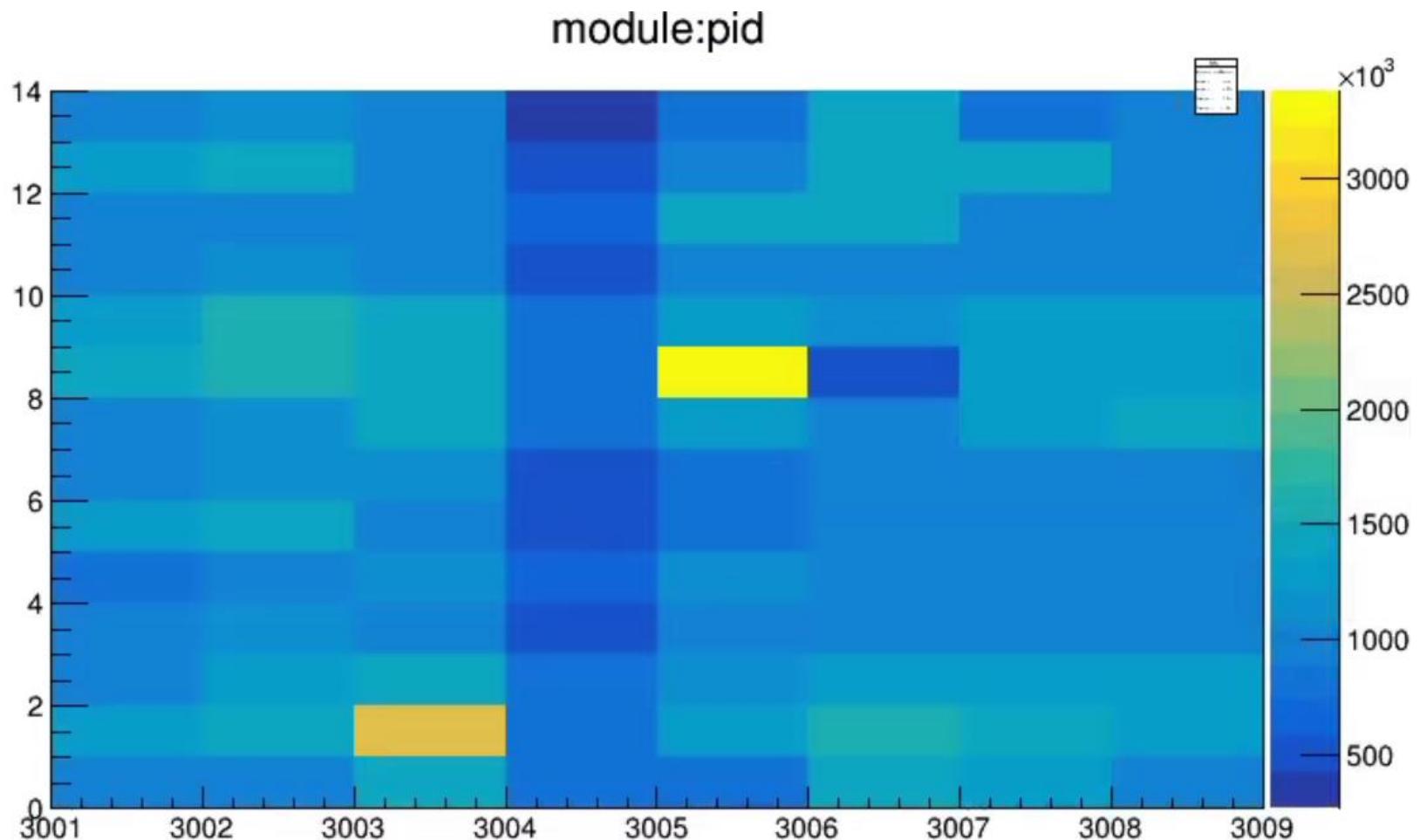
# Run48937 (hit mean=45)

## Streaming

```
root [3] tree->Scan("", "hit_count>7000")
*****
*   Row   * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 * 48937 * 1.589e+09 *    3003 *      1 *      8 *      0 * 179279 *
* 213758 *      0 * 48937 * 1.524e+09 *    3005 *      8 *      6 *    126 *  7130 *
* 215038 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     16 *    126 *  7199 *
* 215166 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     17 *    126 *  8778 *
* 215294 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     18 *    126 *  8110 *
* 215422 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     19 *    126 *  7111 *
* 215550 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     20 *    126 *  7748 *
* 215678 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     21 *    126 *  7166 *
* 215934 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     23 *    126 *  7528 *
* 216190 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     25 *    126 *  7076 *
* 216318 *      0 * 48937 * 1.524e+09 *    3005 *      8 *     26 *    126 *  7645 *
* 223998 *      0 * 48937 * 1.524e+09 *    3005 *     11 *      8 *    126 *  7452 *
* 224126 *      0 * 48937 * 1.524e+09 *    3005 *     11 *      9 *    126 *  8155 *
* 224254 *      0 * 48937 * 1.524e+09 *    3005 *     11 *     10 *    126 *  7970 *
* 224256 *      0 * 48937 * 1.524e+09 *    3005 *     11 *     11 *      0 * 10707 *
* 224510 *      0 * 48937 * 1.524e+09 *    3005 *     11 *     12 *    126 * 10808 *
* 244991 *      0 * 48937 * 1.278e+09 *    3006 *      3 *     16 *    127 * 629368 *
*****
==> 17 selected entries
(long long) 17
```

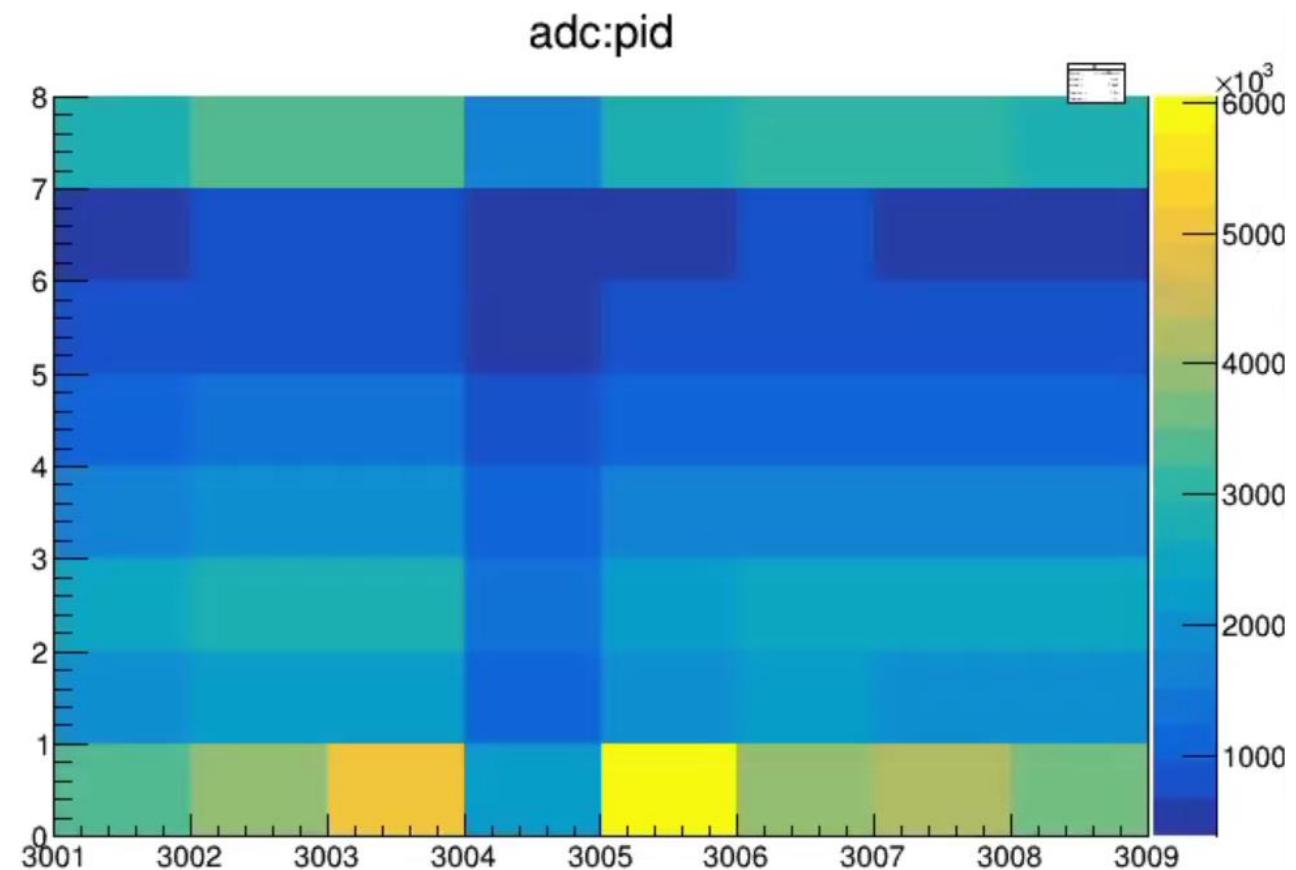
# Run48943 Hit count (pid vs module)

Streaming



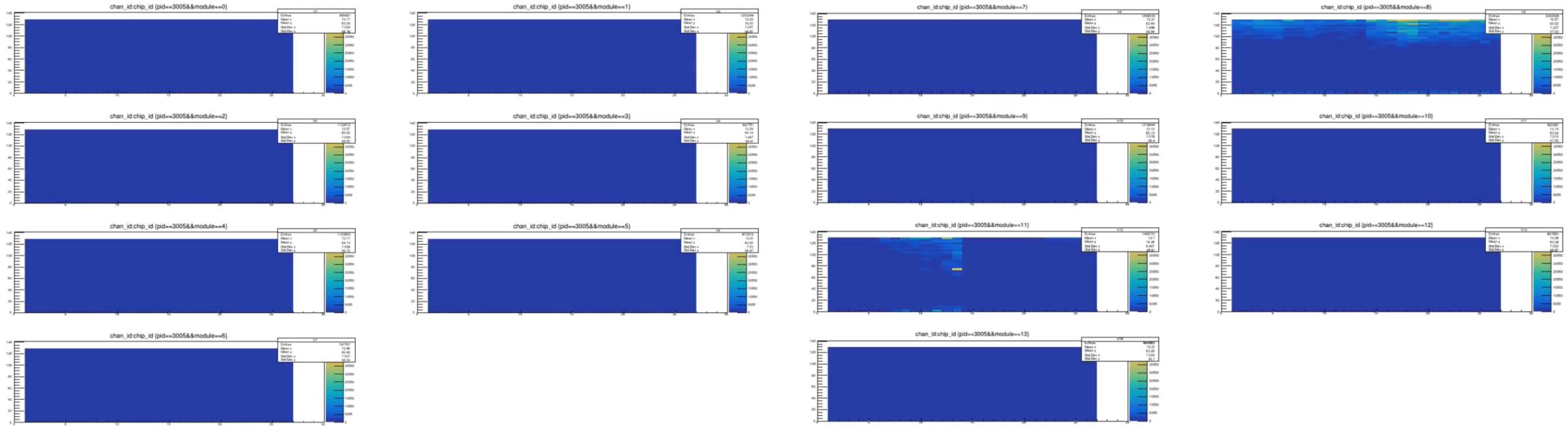
# Run48943 adc distribution

# Streaming



# Run48943 (Zaxis=Maximum of intt4)

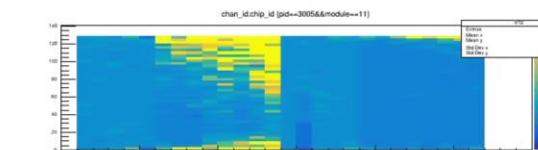
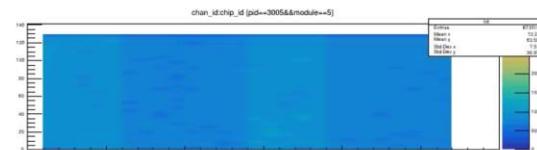
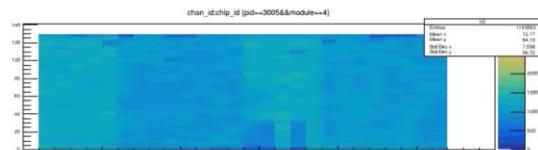
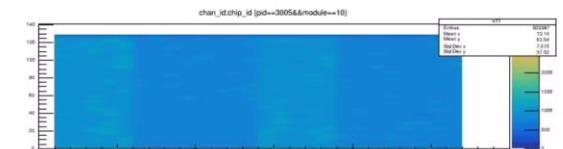
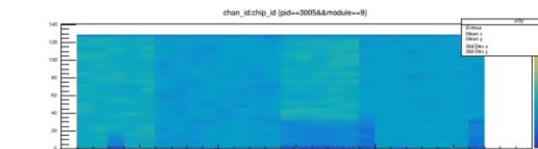
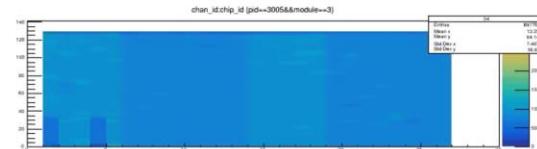
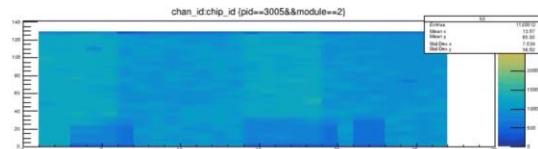
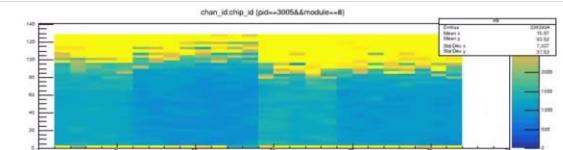
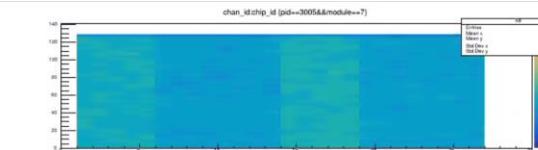
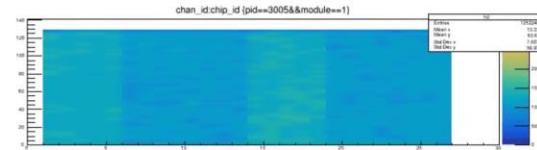
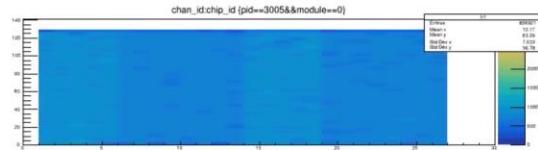
Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

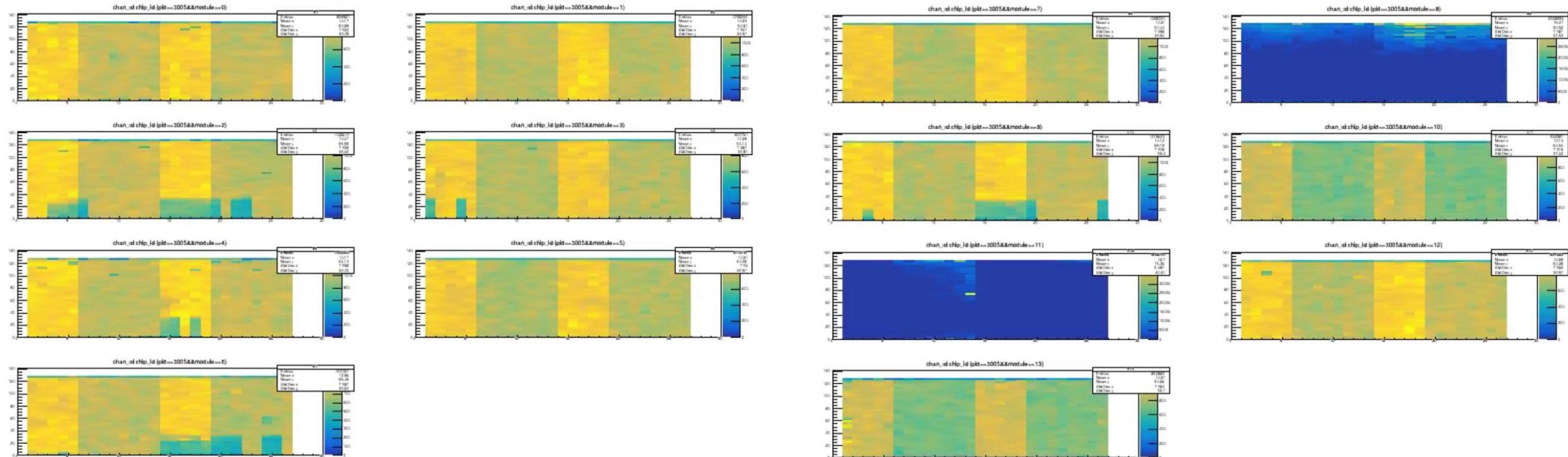
# Run48943 (Zaxis=10 × mean)

Streaming



# Run48943 (Zaxis= not fixed)

## Streaming



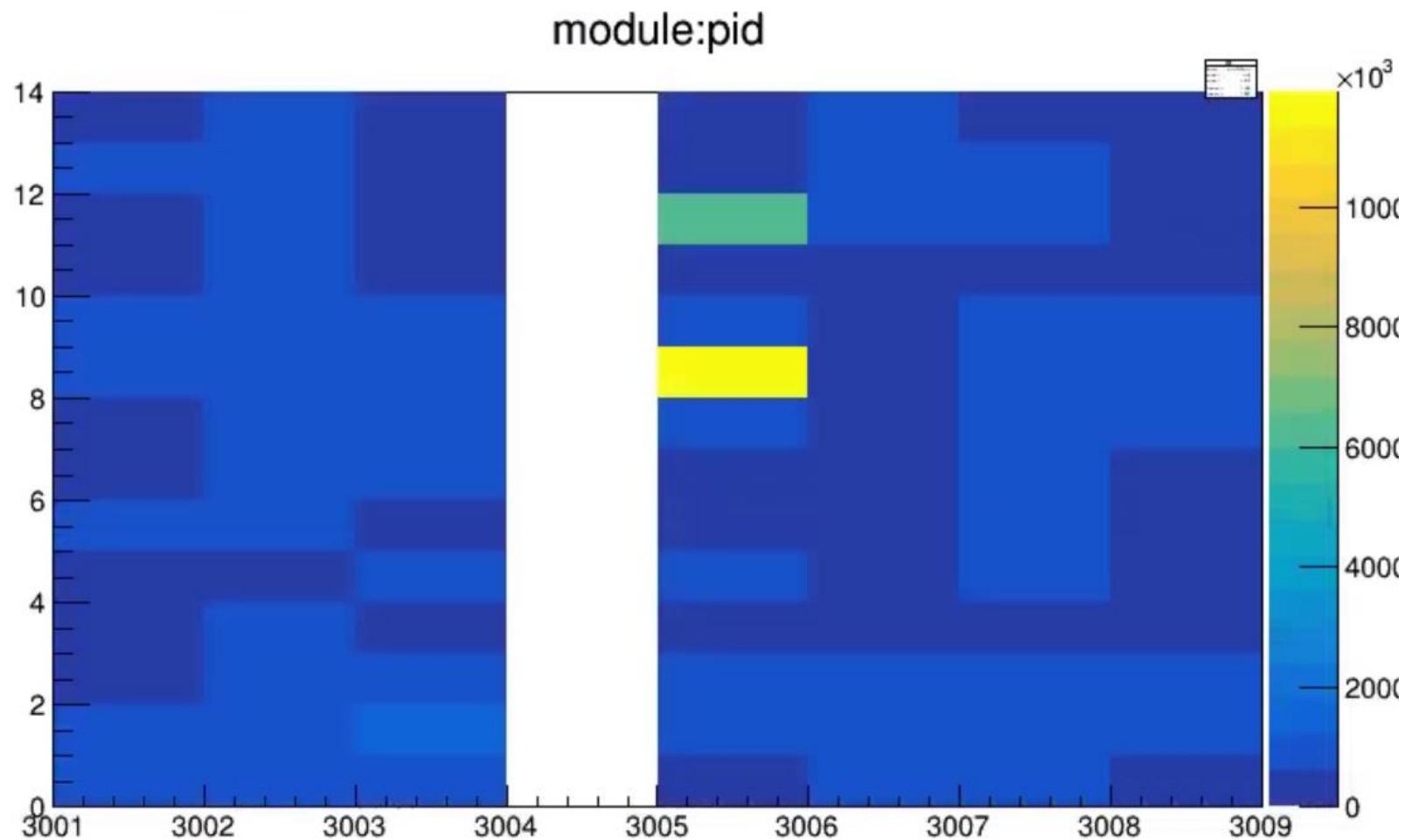
# Run48943 (hit mean=330)

## Streaming

```
root [11] tree->Scan("", "hit_count>20000")
*****
k Row * run_id.ru * run_numbe * run_time. * pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
k 97408 * 0 * 48943 * 3.327e+10 * 3003 * 1 * 8 * 0 * 1119457 *
k 215038 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 16 * 126 * 21059 *
k 215166 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 17 * 126 * 29031 *
k 215294 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 18 * 126 * 23470 *
k 215550 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 20 * 126 * 21989 *
k 215678 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 21 * 126 * 20016 *
k 215806 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 22 * 126 * 20449 *
k 216318 * 0 * 48943 * 3.268e+10 * 3005 * 8 * 26 * 126 * 22748 *
k 224510 * 0 * 48943 * 3.268e+10 * 3005 * 11 * 12 * 126 * 24544 *
k 224584 * 0 * 48943 * 3.268e+10 * 3005 * 11 * 13 * 72 * 45555 *
k 321792 * 0 * 48943 * 3.172e+10 * 3007 * 12 * 19 * 0 * 586969 *
k 326912 * 0 * 48943 * 3.263e+10 * 3008 * 0 * 7 * 0 * 28446 *
*****
==> 12 selected entries
(long long) 12
```

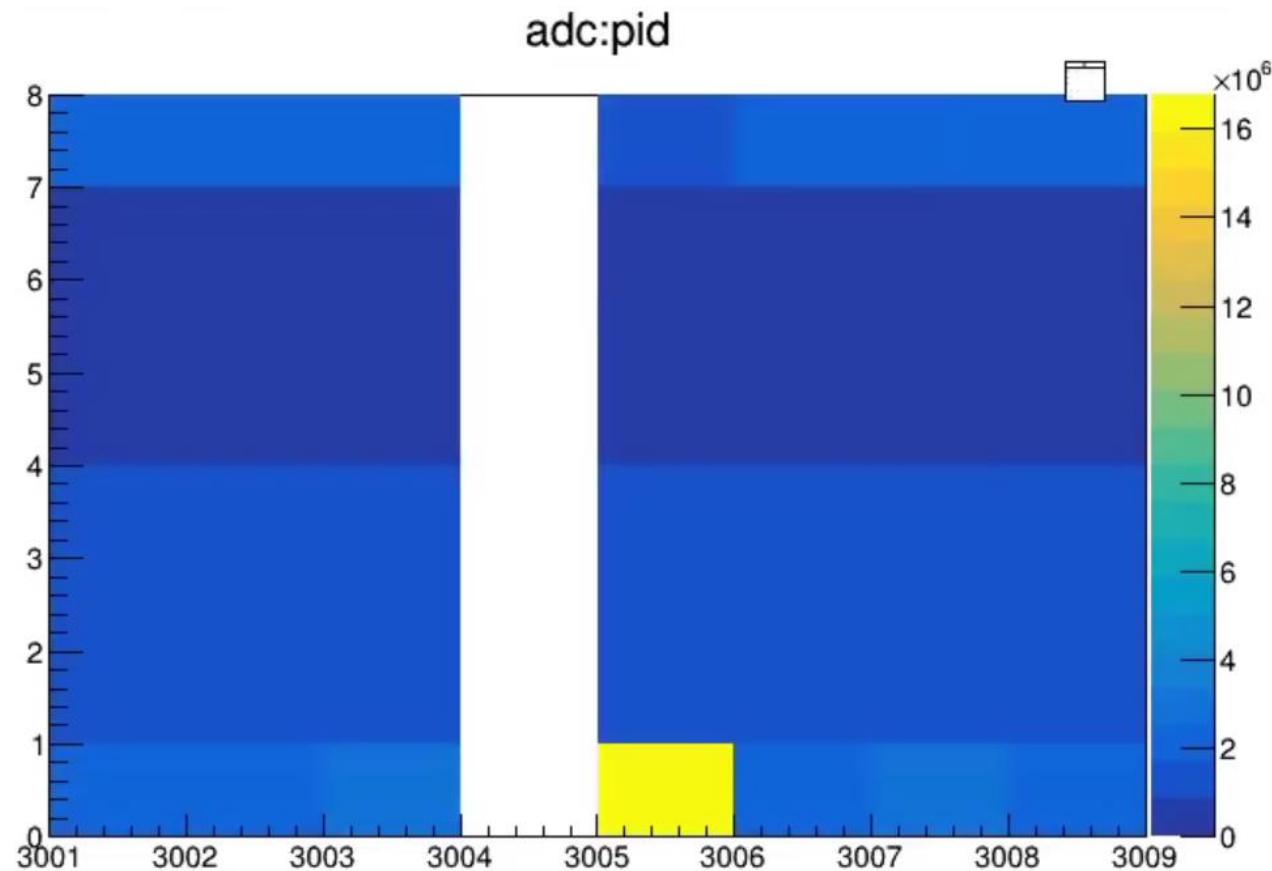
# Run48946 Hit count (pid vs module)

Streaming



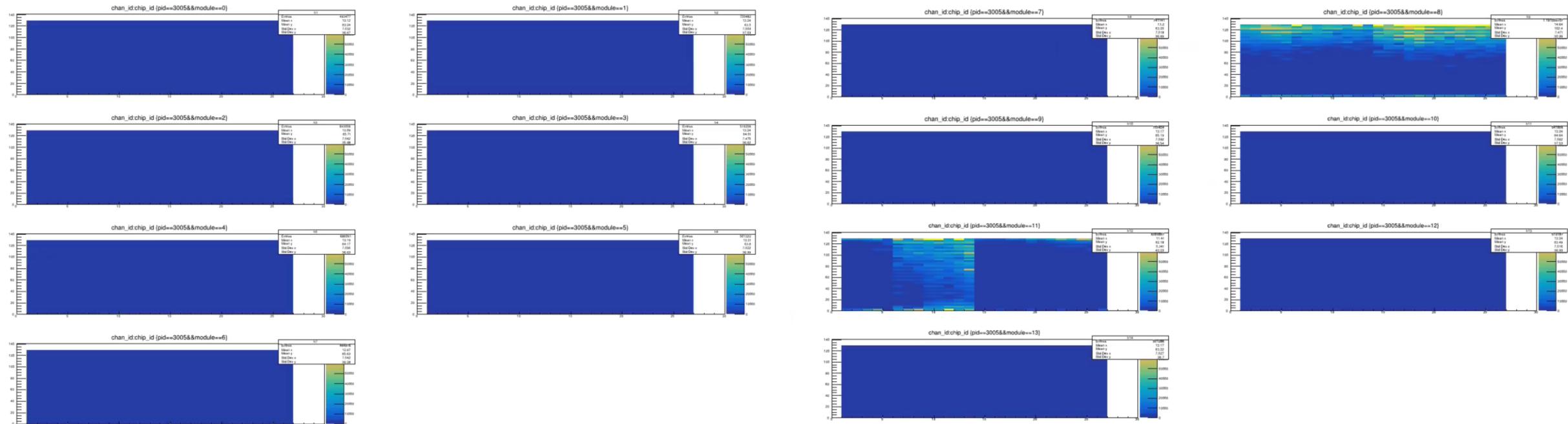
# Run48946 adc distribution

Streaming



# Run48946 (Zaxis=Maximum of intt4)

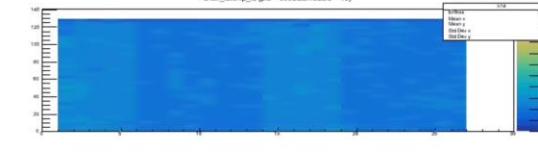
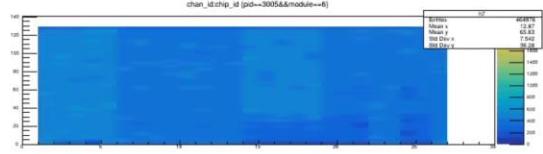
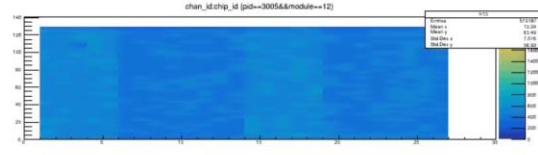
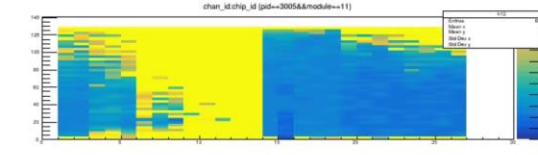
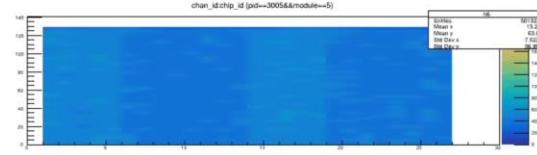
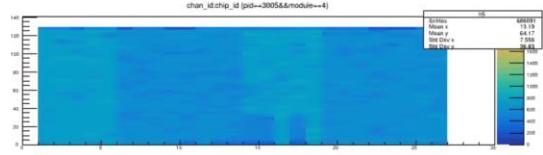
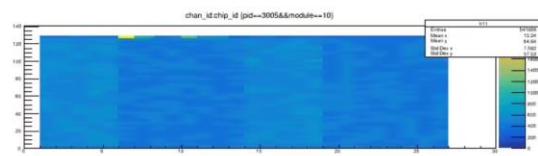
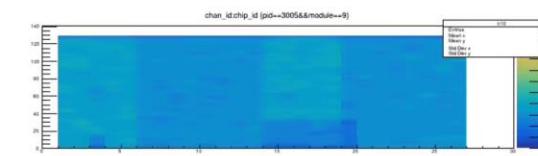
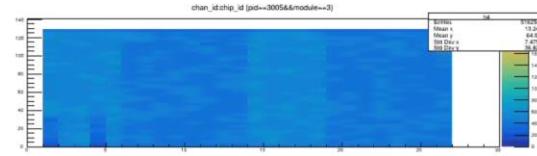
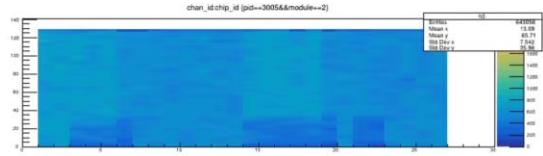
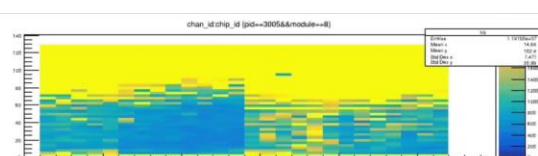
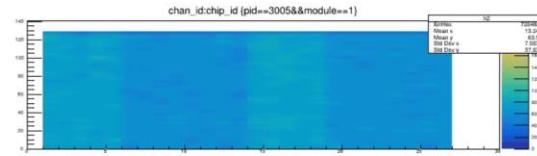
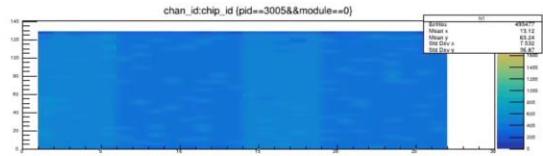
Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

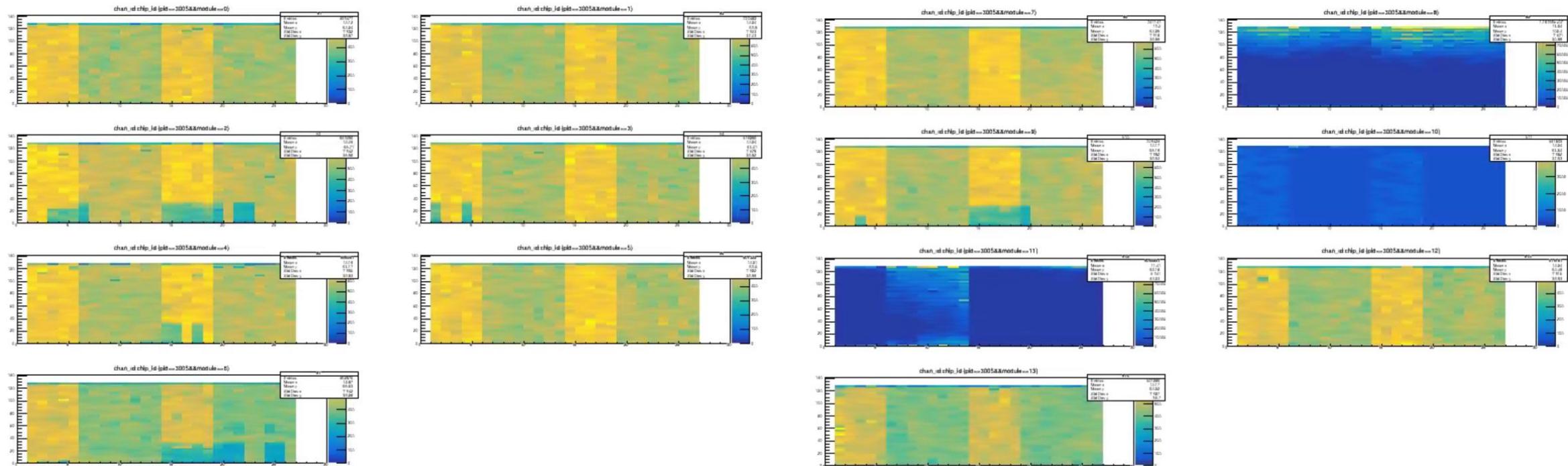
# Run48946 (Zaxis=10 × mean)

Streaming



# Run48946 (Zaxis= not fixed)

Streaming



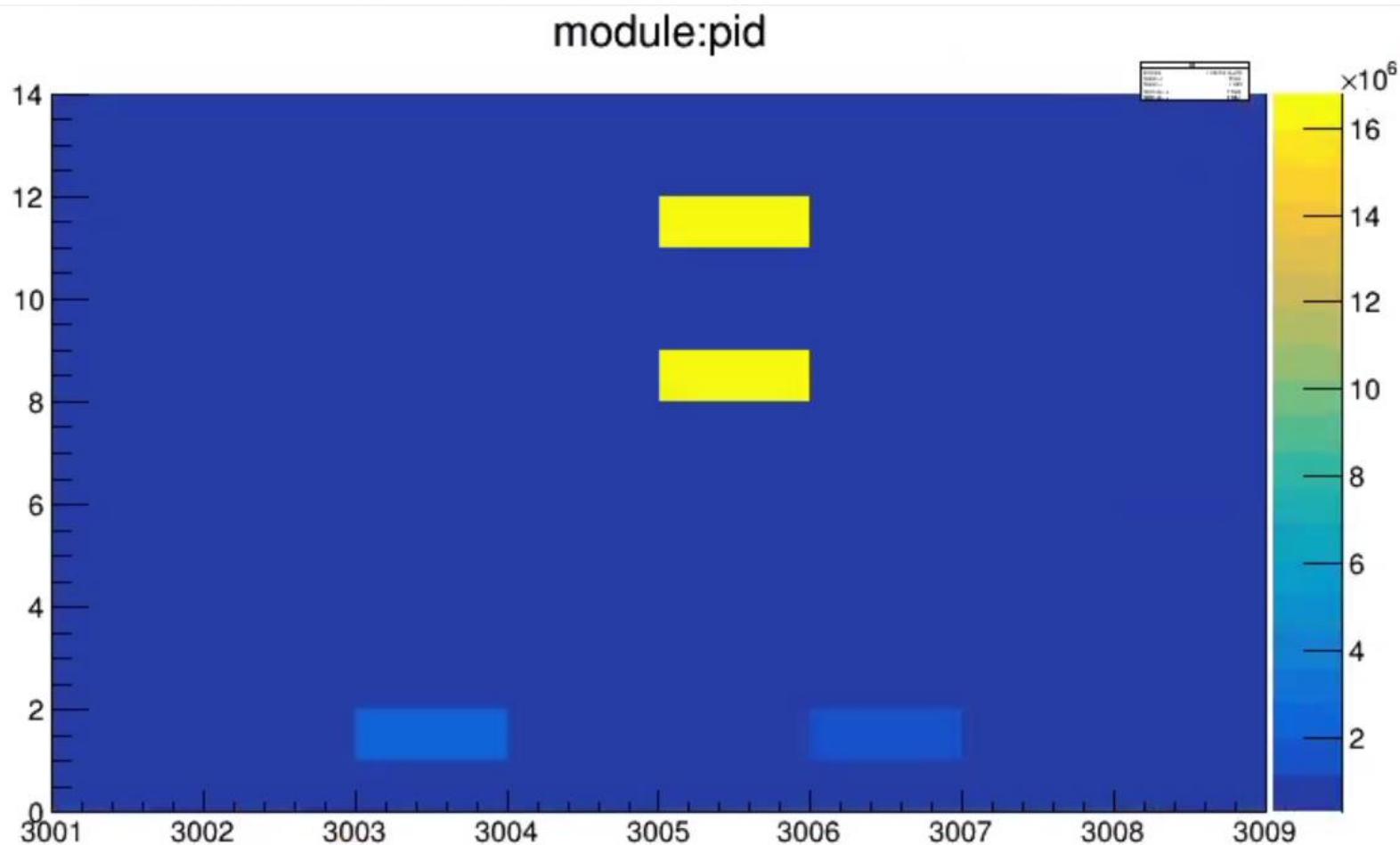
# Run48946 (hit mean=220)

## Streaming

```
root [5] tree->Scan("", "hit_count>50000")
*****
*   Row * run_id.ru * run_numbe * run_time. * pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 * 48946 * 1.998e+10 * 3003 *      1 *      8 *      0 * 485059 *
* 213758 *      0 * 48946 * 2.043e+10 * 3005 *      8 *      6 *     126 * 54646 *
* 215038 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     16 *     126 * 56831 *
* 215166 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     17 *     126 * 66127 *
* 215294 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     18 *     126 * 57486 *
* 215422 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     19 *     126 * 52083 *
* 215550 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     20 *     126 * 56248 *
* 215678 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     21 *     126 * 52316 *
* 215806 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     22 *     126 * 53672 *
* 215934 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     23 *     126 * 56389 *
* 216062 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     24 *     126 * 50161 *
* 216190 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     25 *     126 * 51946 *
* 216318 *      0 * 48946 * 2.043e+10 * 3005 *      8 *     26 *     126 * 59831 *
* 223872 *      0 * 48946 * 2.043e+10 * 3005 *     11 *      8 *      0 * 50953 *
* 223998 *      0 * 48946 * 2.043e+10 * 3005 *     11 *      8 *     126 * 52455 *
* 224126 *      0 * 48946 * 2.043e+10 * 3005 *     11 *      9 *     126 * 56840 *
* 224254 *      0 * 48946 * 2.043e+10 * 3005 *     11 *     10 *     126 * 53328 *
* 224256 *      0 * 48946 * 2.043e+10 * 3005 *     11 *     11 *      0 * 74537 *
* 224510 *      0 * 48946 * 2.043e+10 * 3005 *     11 *     12 *     126 * 70105 *
* 321792 *      0 * 48946 * 2.069e+10 * 3007 *     12 *     19 *      0 * 354998 *
*****
==> 20 selected entries
(long long) 20
```

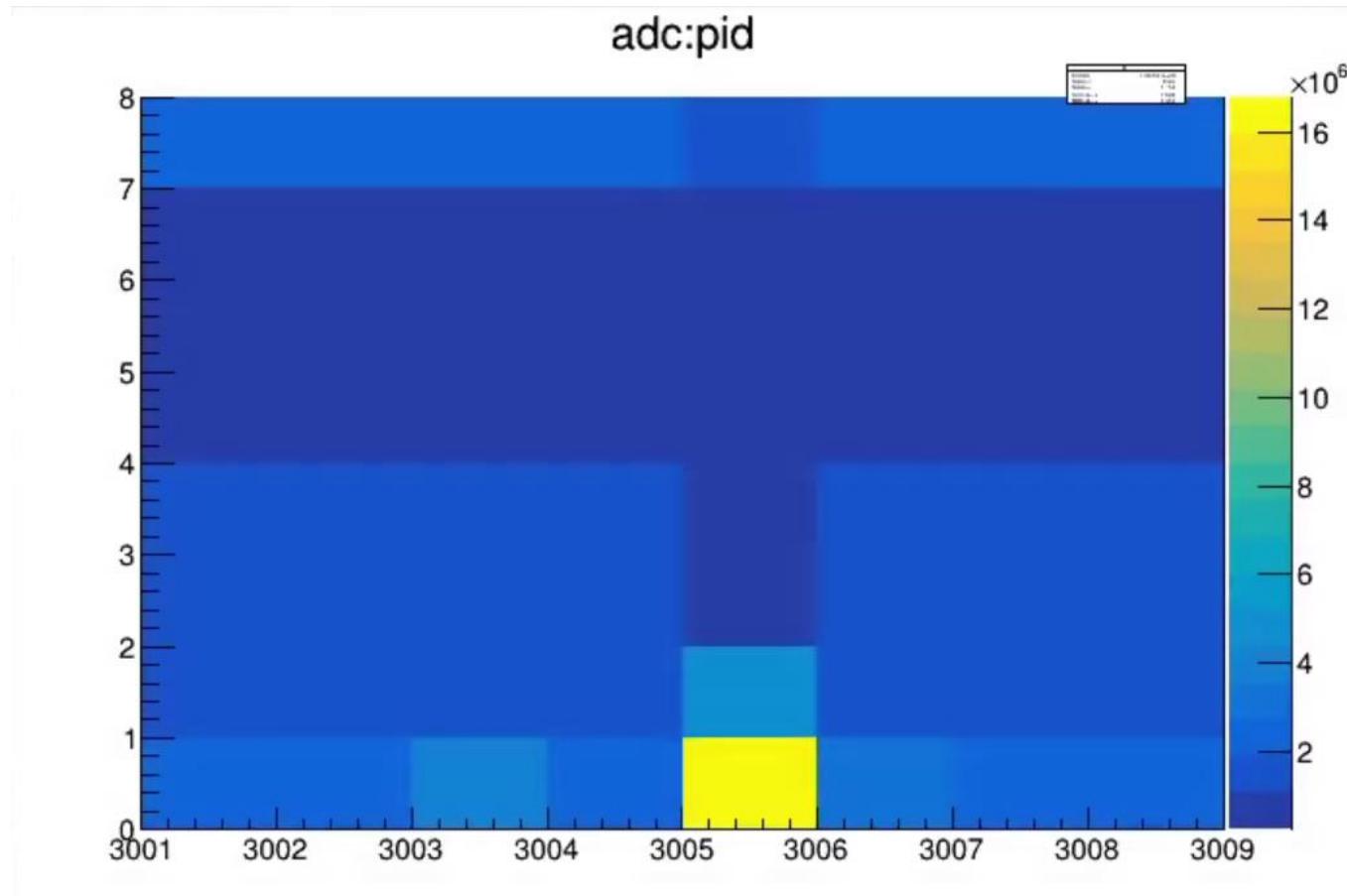
# Run48988 Hit count (pid vs module)

Streaming



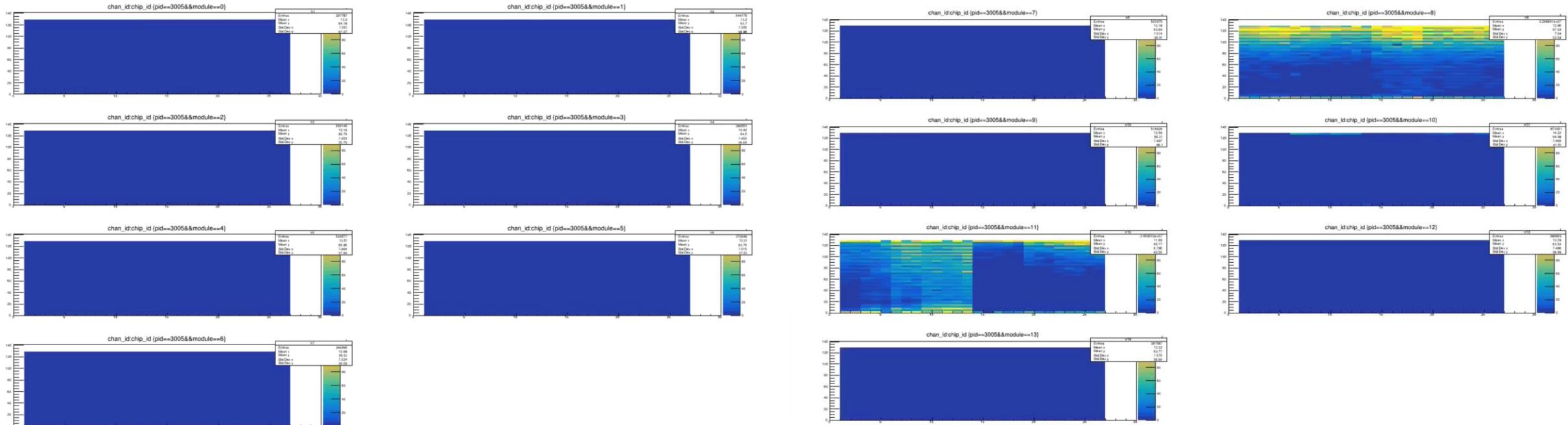
# Run48988 adc distribution

# Streaming



# Run48988 (Zaxis=Maximum of intt4)

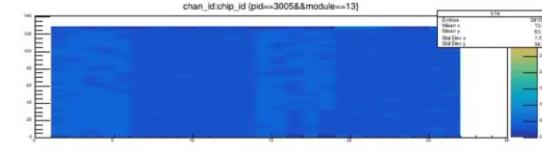
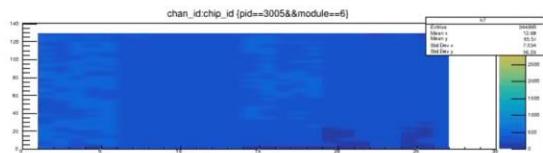
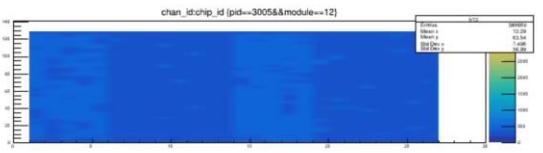
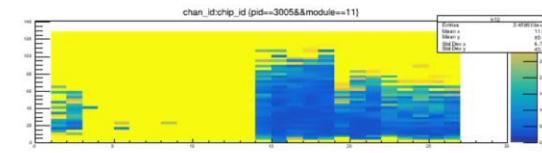
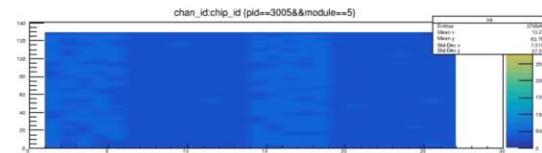
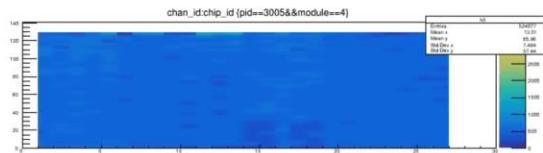
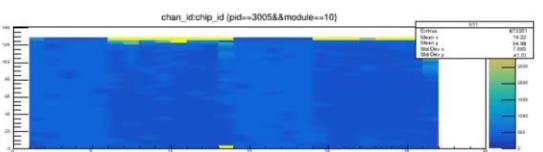
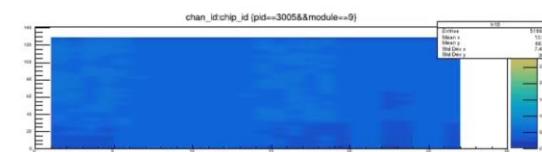
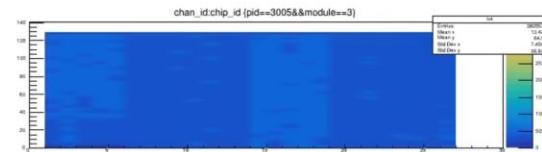
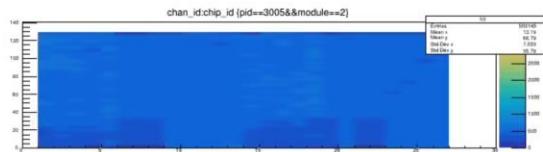
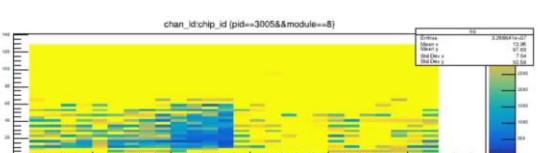
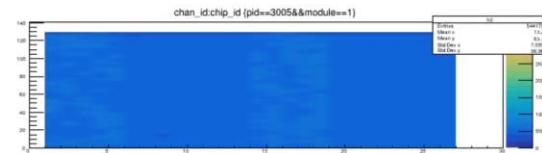
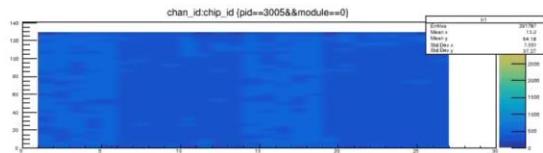
## Streaming



Relative hit entries with respect to the maximum hit entry channel in intt4 server

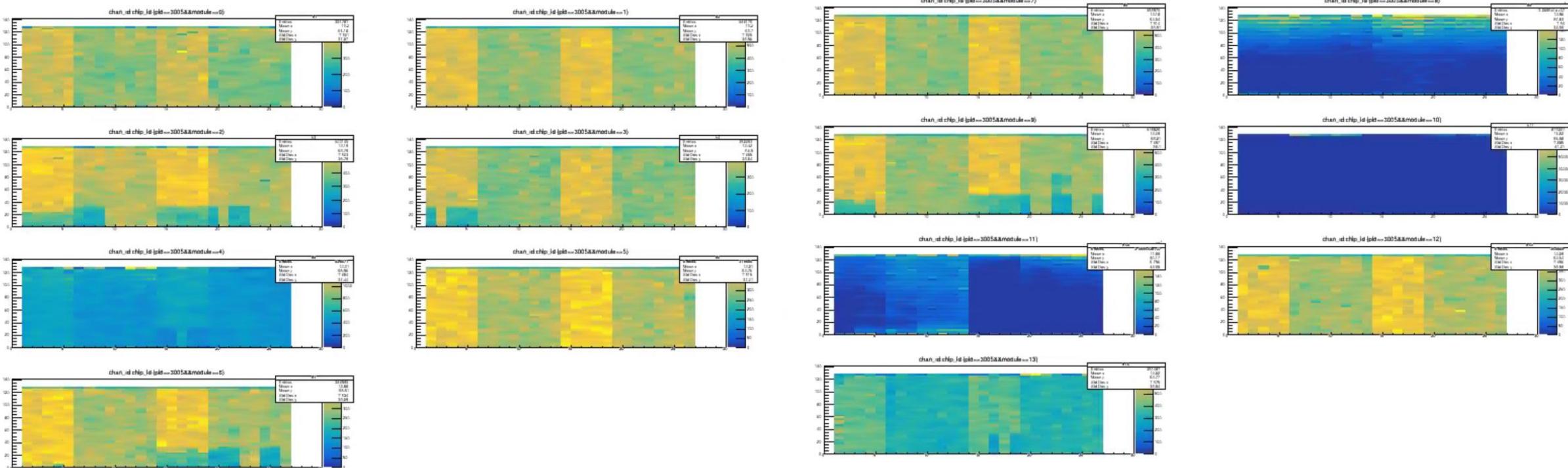
# Run48988 (Zaxis=10 × mean)

# Streaming



# Run48988 (Zaxis= not fixed)

# Streaming



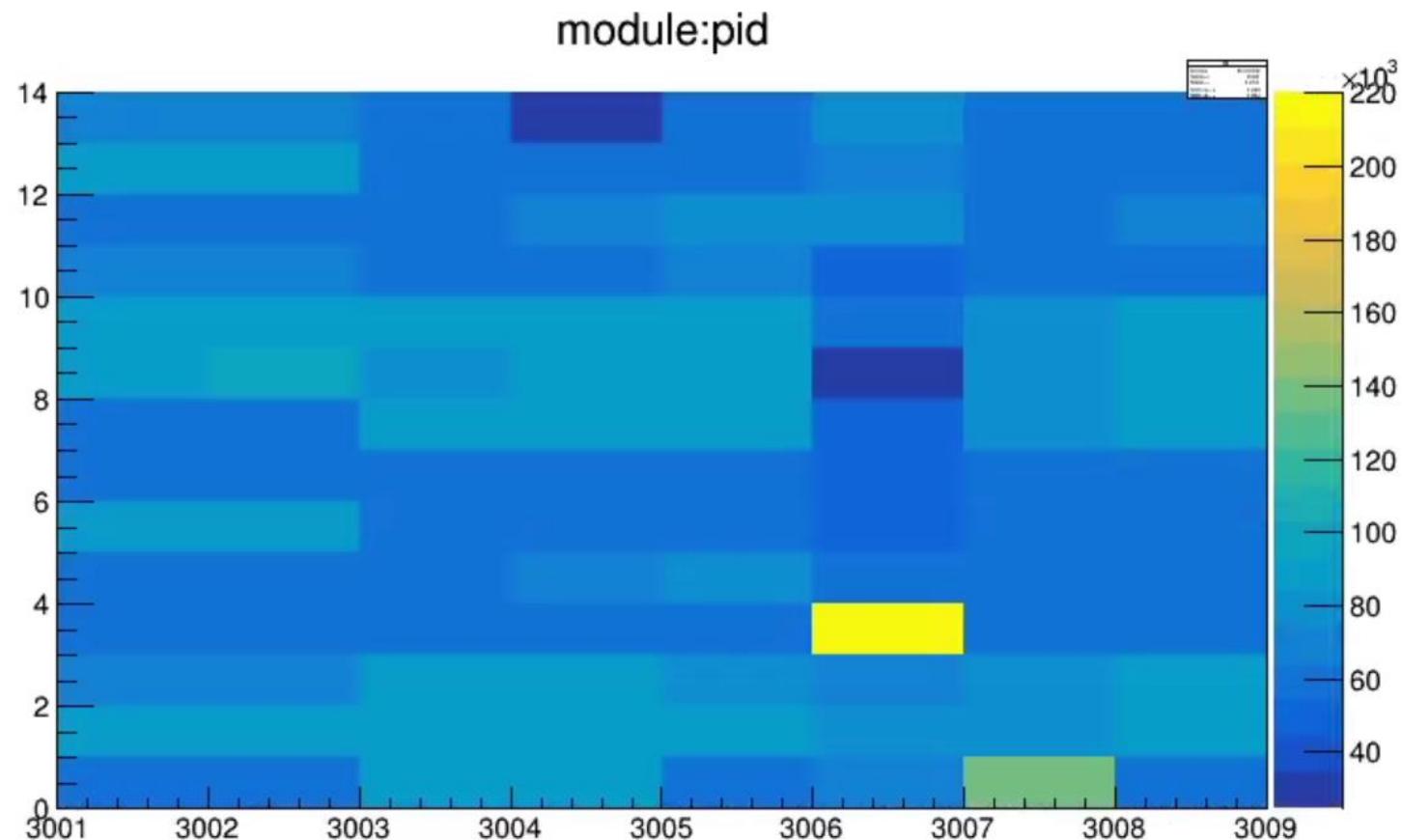
# Run48988 (hit mean=373)

## Streaming

```
root [3] tree->Scan("", "hit_count>100000")
*****
*   Row * run_id.ru * run_number * run_time. * pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 97408 *      0 *    48988 * 2.625e+10 *    3003 *      1 *      8 *      0 * 1097768 *
* 214782 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     14 *     126 * 101927 *
* 215038 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     16 *     126 * 104099 *
* 215166 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     17 *     126 * 113647 *
* 215294 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     18 *     126 * 103932 *
* 215934 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     23 *     126 * 104409 *
* 216318 *      0 *    48988 * 2.695e+10 *    3005 *      8 *     26 *     126 * 111632 *
* 223360 *      0 *    48988 * 2.695e+10 *    3005 *     11 *      4 *      0 * 101999 *
* 223872 *      0 *    48988 * 2.695e+10 *    3005 *     11 *      8 *      0 * 104388 *
* 224256 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     11 *      0 * 139434 *
* 224510 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     12 *     126 * 117712 *
* 225790 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     22 *     126 * 108864 *
* 225918 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     23 *     126 * 103019 *
* 226046 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     24 *     126 * 114204 *
* 226174 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     25 *     126 * 110172 *
* 226302 *      0 *    48988 * 2.695e+10 *    3005 *     11 *     26 *     126 * 118490 *
*****
==> 16 selected entries
(long long) 16
```

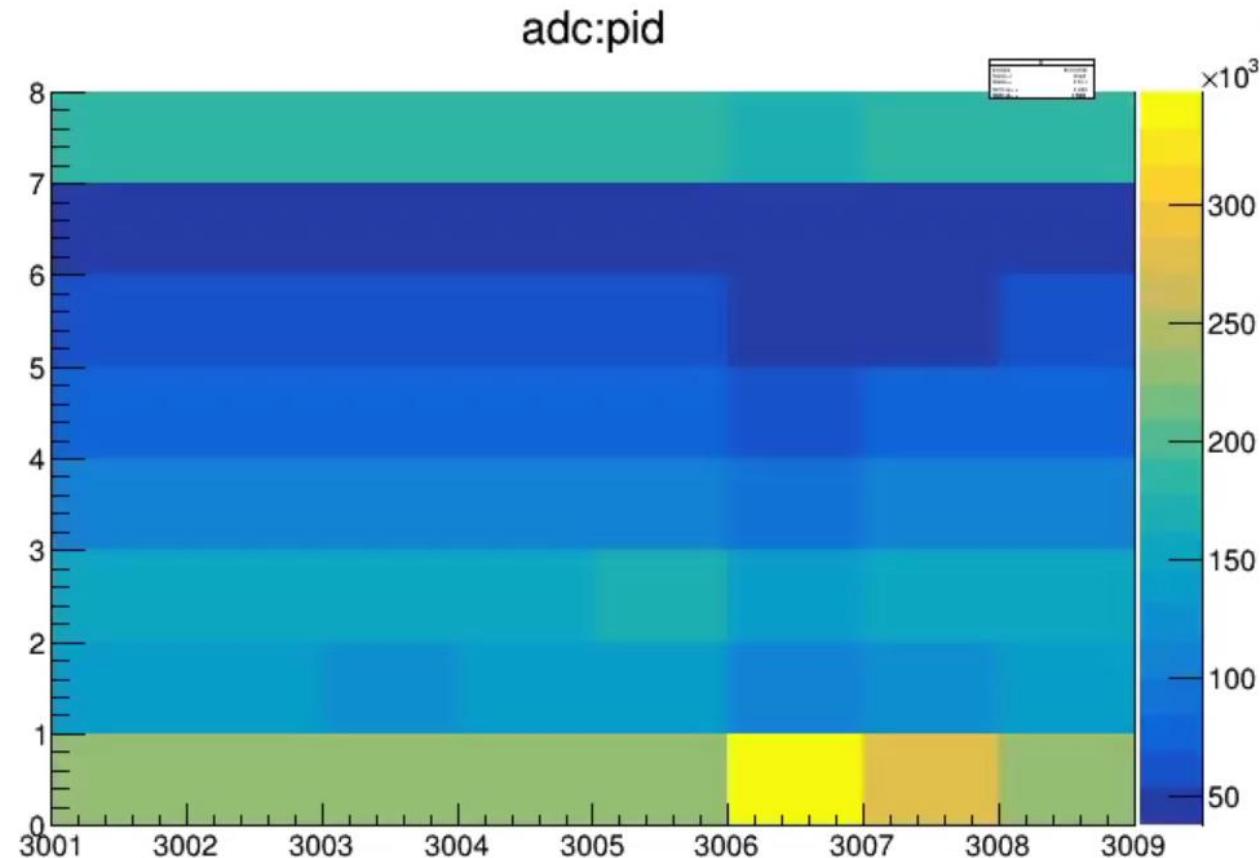
# Run48517 hitmap

# Trigger



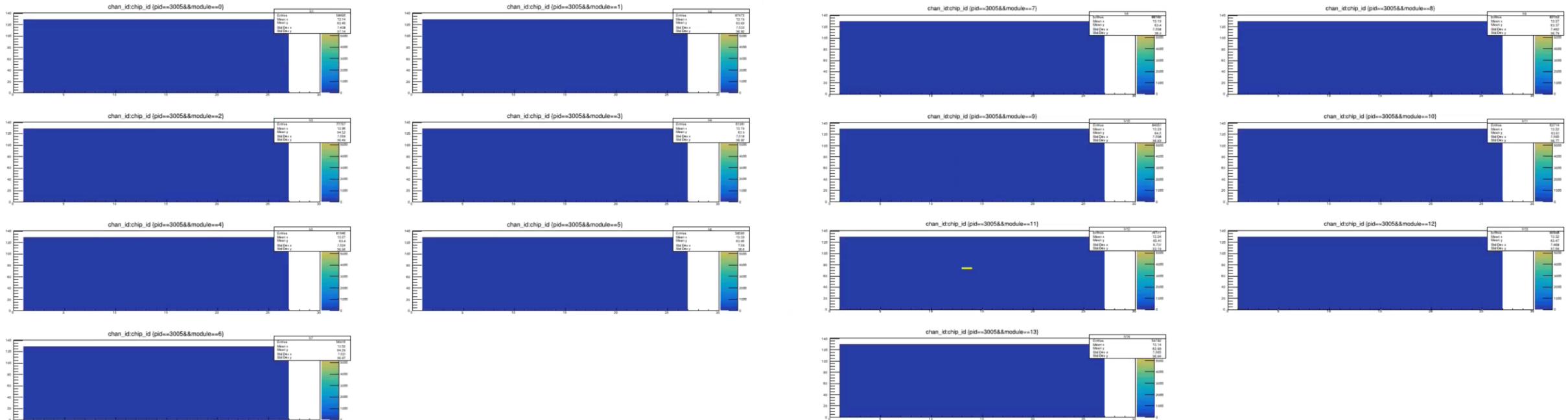
# Run48517 adc distribution

Trigger



# Run48517 (Zaxis=Maximum of intt4)

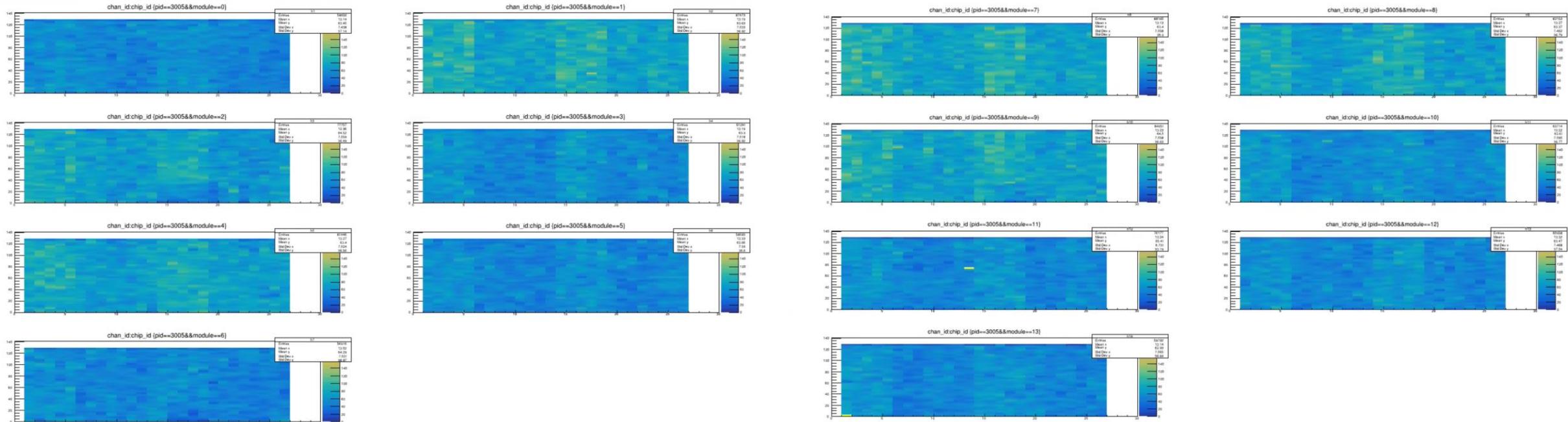
## Trigger



Relative hit entries with respect to the maximum hit entry channel in intt4 server

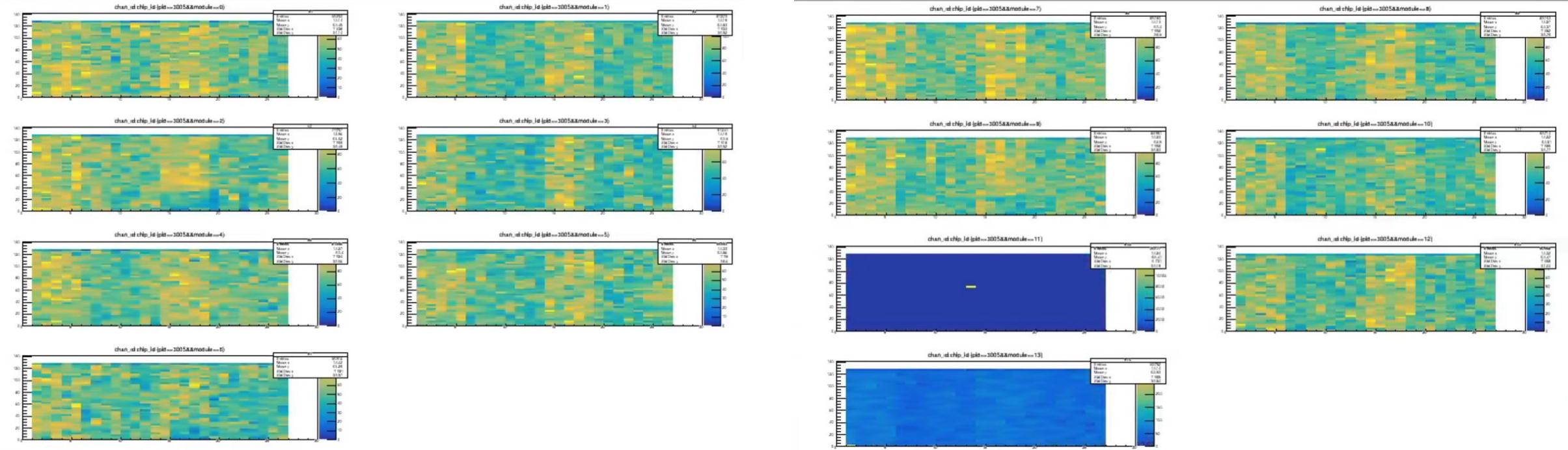
# Run48517 (Zaxis=10 × mean)

## Trigger



# Run48517 (Zaxis= not fixed)

## Trigger



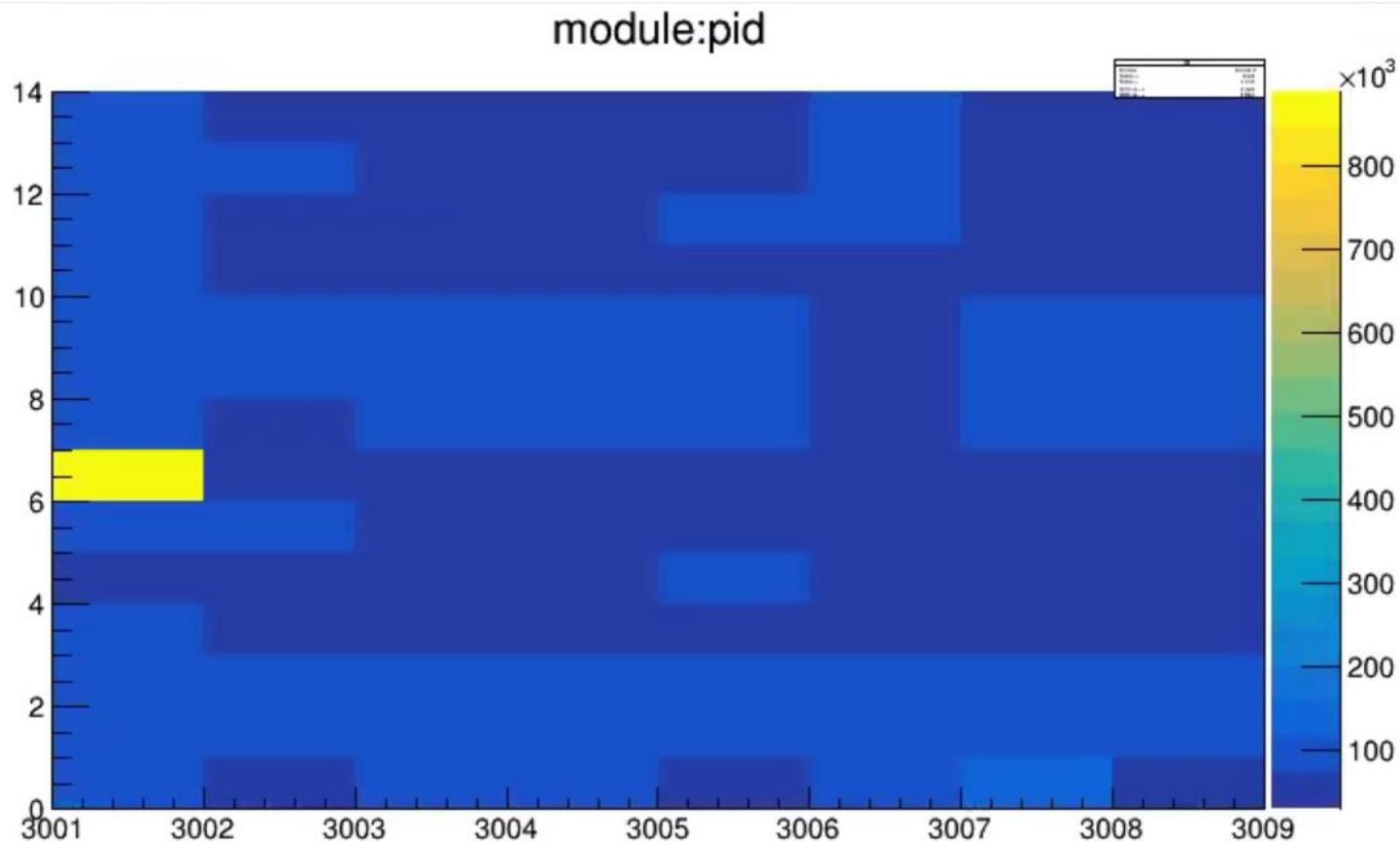
# Run48517 (hit mean=21)

## Trigger

```
root [4] tree->Scan("", "hit_count>500")
*****
*   Row * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 20992 *      0 * 48517 * 1.775e+09 *    3001 *       6 *       9 *      0 *      508 *
* 185344 *      0 * 48517 * 8852109 *    3004 *      13 *      19 *      0 *      2641 *
* 224584 *      0 * 48517 * 1.775e+09 *    3005 *      11 *      13 *      72 *      15255 *
* 244864 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *      0 *      147979 *
* 244865 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *       1 *      696 *
* 244976 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     112 *      2421 *
* 244984 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     120 *      4826 *
* 244985 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     121 *      956 *
* 244986 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     122 *      532 *
* 244987 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     123 *      909 *
* 244988 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     124 *      6487 *
* 244989 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     125 *      607 *
* 244990 *      0 * 48517 * 6899975 *    3006 *       3 *      16 *     126 *      3824 *
* 248541 *      0 * 48517 * 6899975 *    3006 *       4 *      18 *      93 *      1329 *
* 269178 *      0 * 48517 * 6899975 *    3006 *      10 *      23 *     122 *      570 *
* 281600 *      0 * 48517 * 1.774e+09 *    3007 *       0 *      17 *      0 *      53223 *
* 326912 *      0 * 48517 * 1.775e+09 *    3008 *       0 *       7 *      0 *      1645 *
*****
==> 17 selected entries
(long long) 17
```

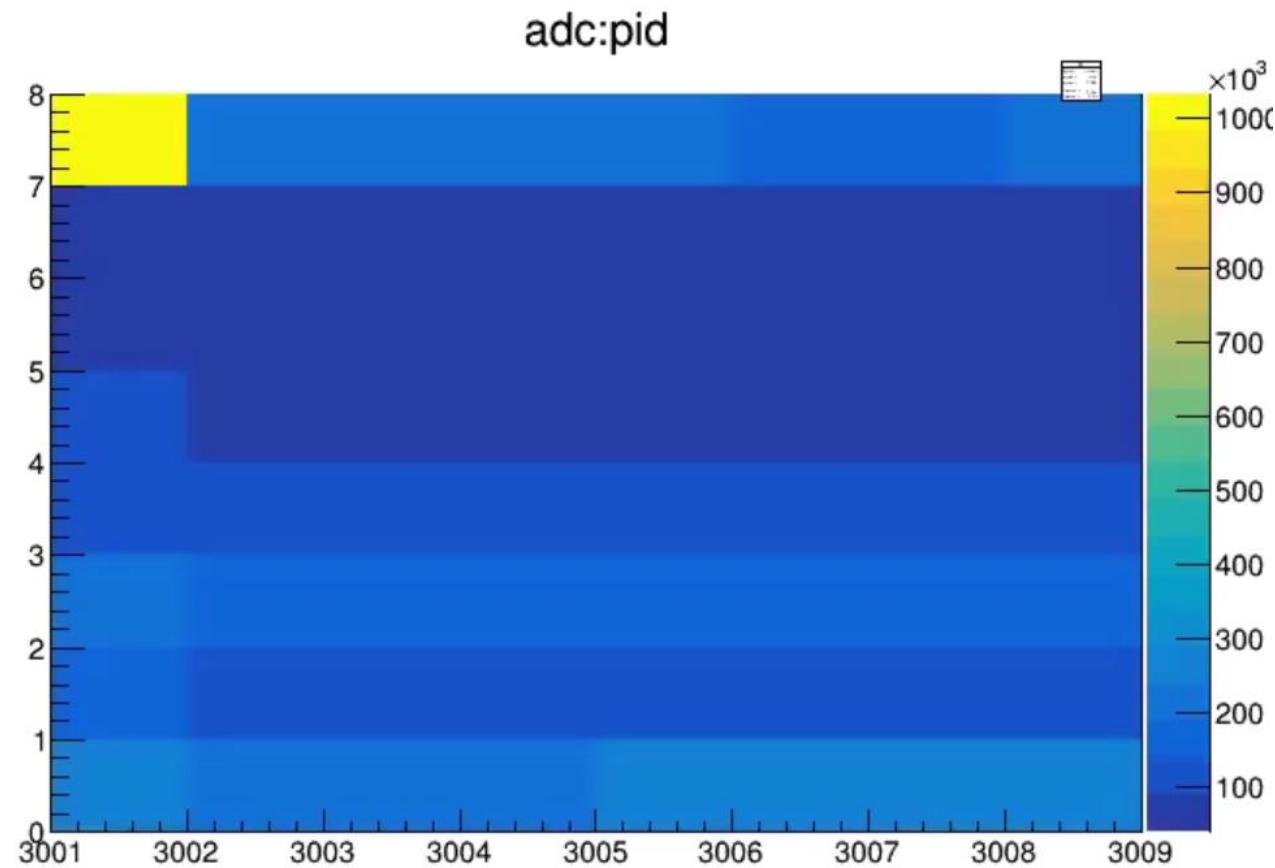
# Run48518 hitmap

Trigger



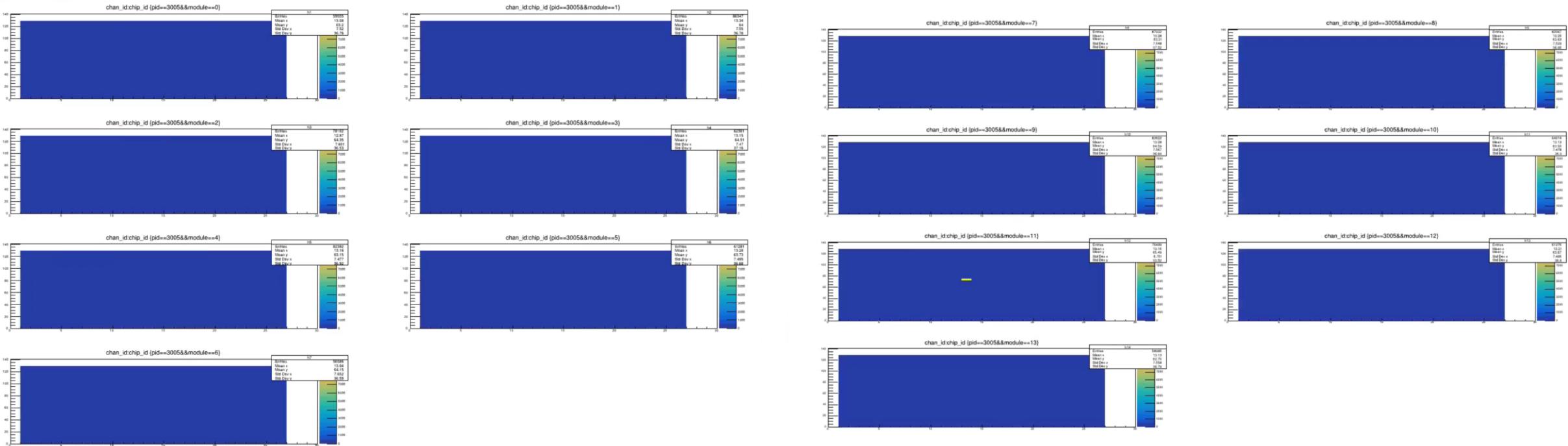
# Run48518 adc distribution

# Trigger



# Run48518 (Zaxis=Maximum of intt4)

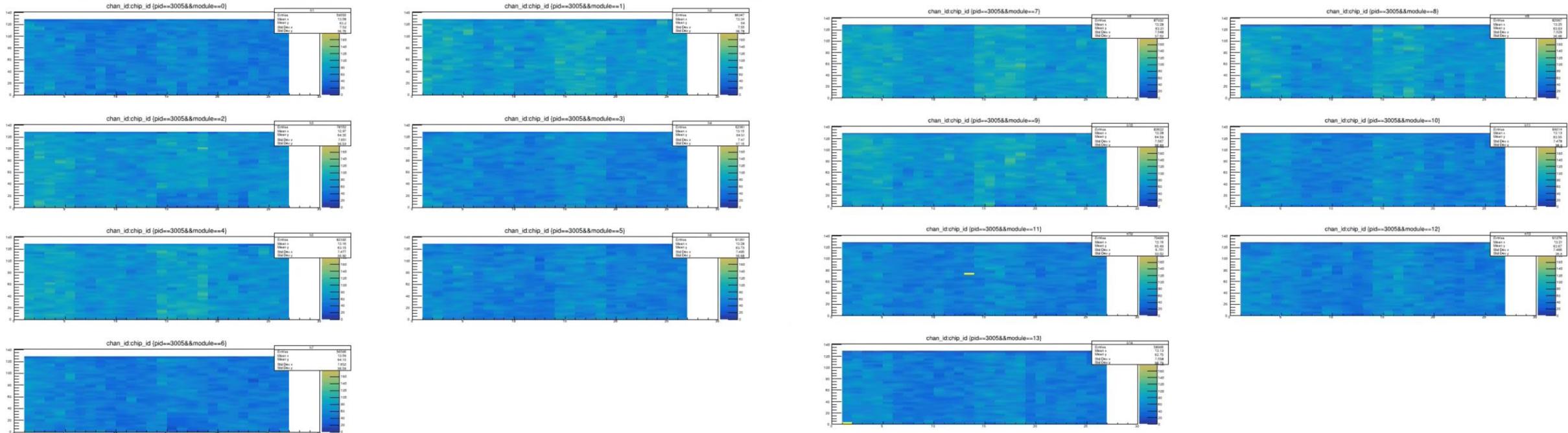
## Trigger



Relative hit entries with respect to the maximum hit entry channel in intt4 server

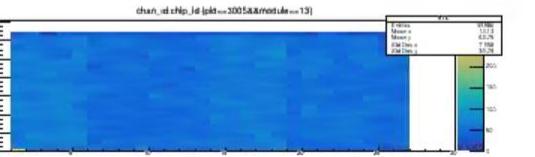
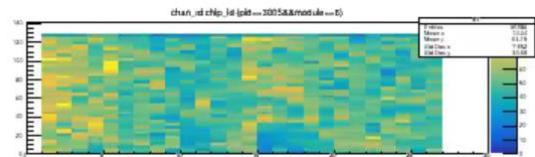
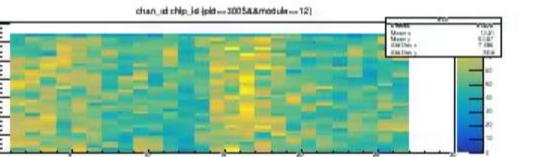
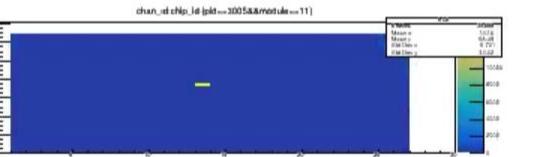
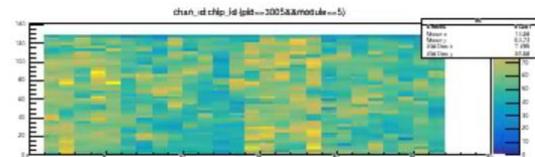
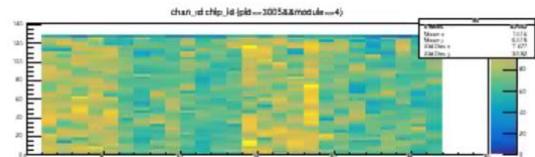
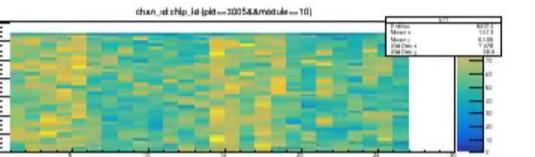
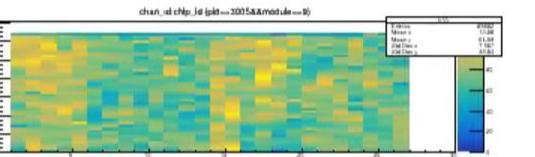
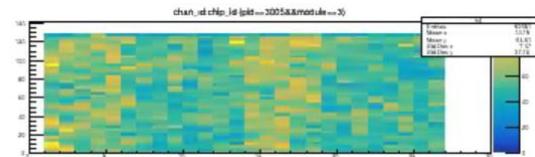
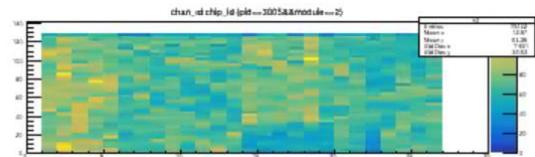
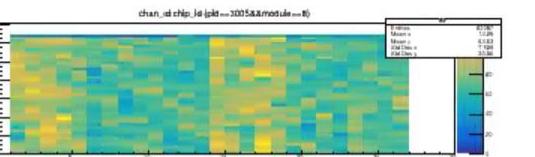
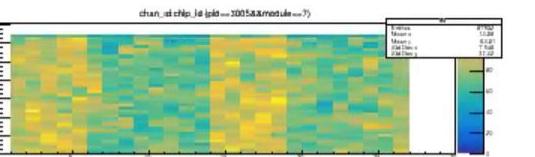
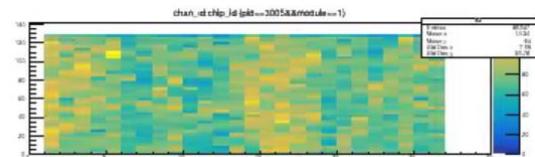
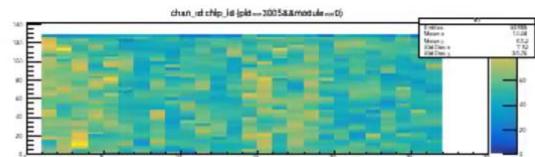
# Run48518 (Zaxis=10 × mean)

## Trigger



# Run48518 (Zaxis= not fixed)

Trigger



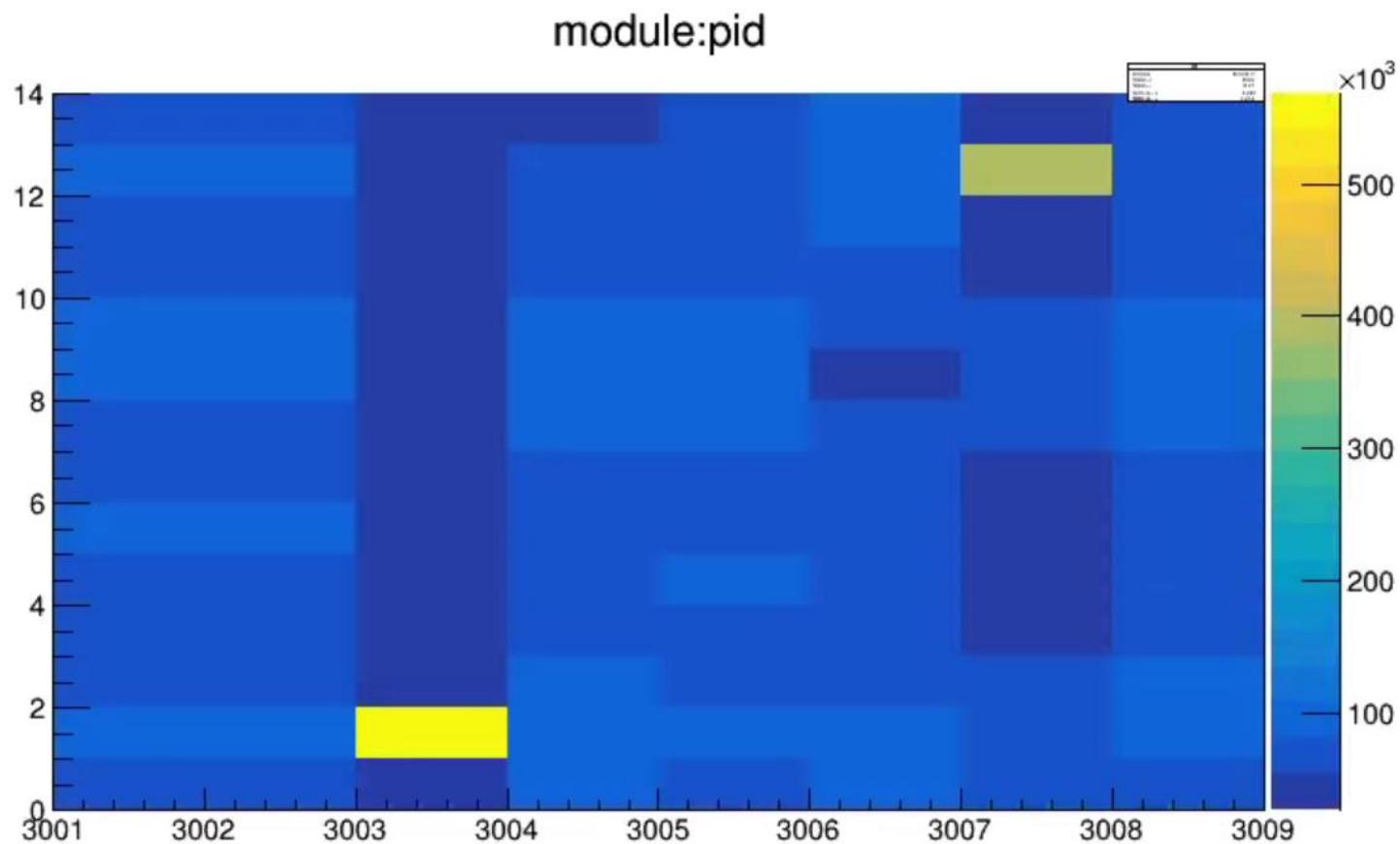
# Run48518 (hit mean=24)

## Trigger

```
*****
*   Row   * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
*   20798 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *      62 *     1362 *
*   20799 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *      63 *     2731 *
*   20827 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *      91 *     782 *
*   20831 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *      95 *     5643 *
*   20845 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     109 *     1073 *
*   20847 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     111 *     1027 *
*   20854 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     118 *      578 *
*   20855 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     119 *      673 *
*   20859 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     123 *     1736 *
*   20861 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     125 *    101726 *
*   20862 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     126 *     91147 *
*   20863 *      0 *    48518 * 1.638e+10 *    3001 *       6 *       7 *     127 *    605118 *
*   224584 *      0 *    48518 * 1.613e+09 *    3005 *      11 *      13 *      72 *     15345 *
*   248541 *      0 *    48518 * 7393635 *    3006 *       4 *      18 *      93 *     1260 *
*   269178 *      0 *    48518 * 7393635 *    3006 *      10 *      23 *     122 *      579 *
*   281600 *      0 *    48518 * 1.613e+09 *    3007 *       0 *      17 *       0 *     47743 *
*   326912 *      0 *    48518 * 1.614e+09 *    3008 *       0 *       7 *       0 *     1386 *
*****
==> 17 selected entries
(long long) 17
```

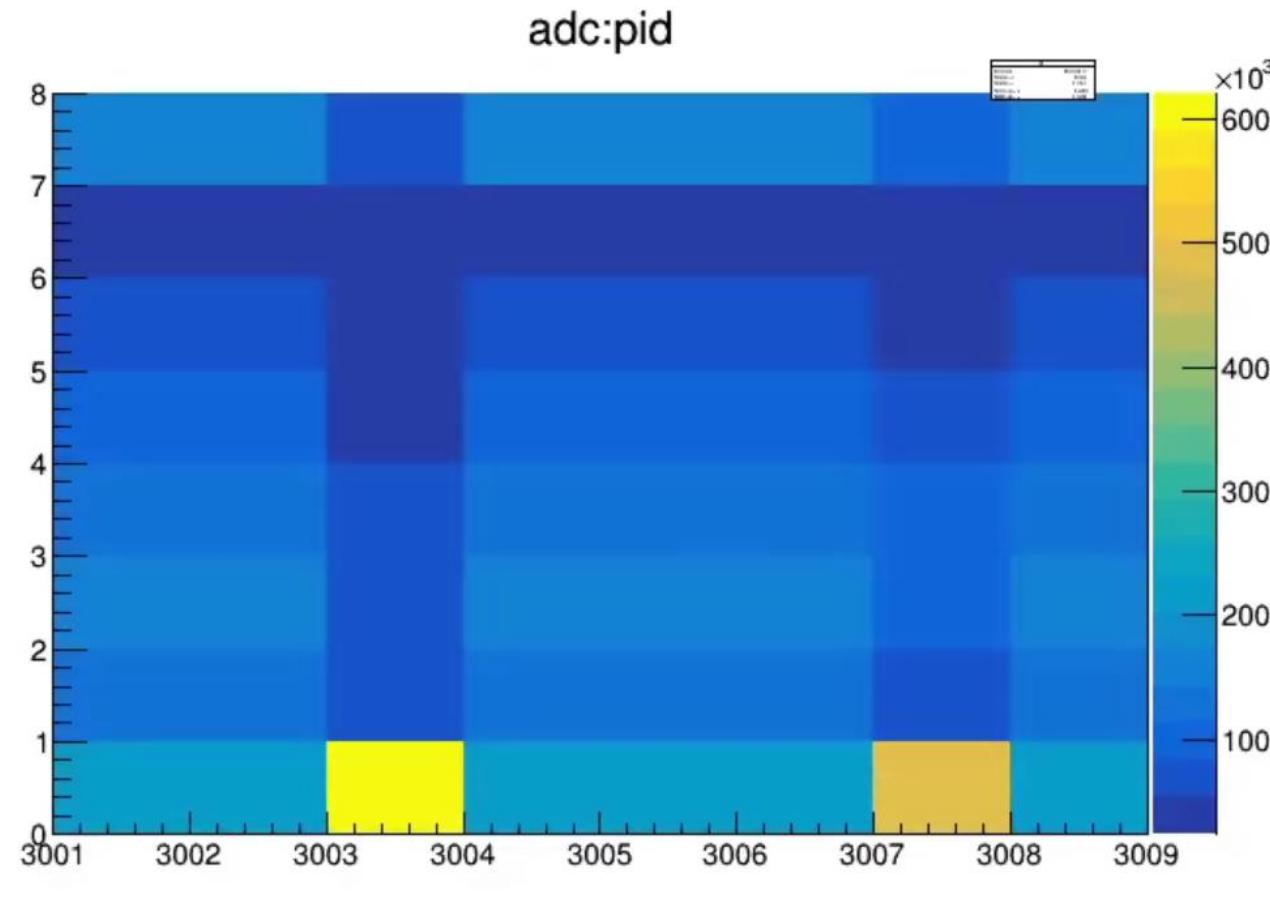
# Run49044 hitmap

Trigger



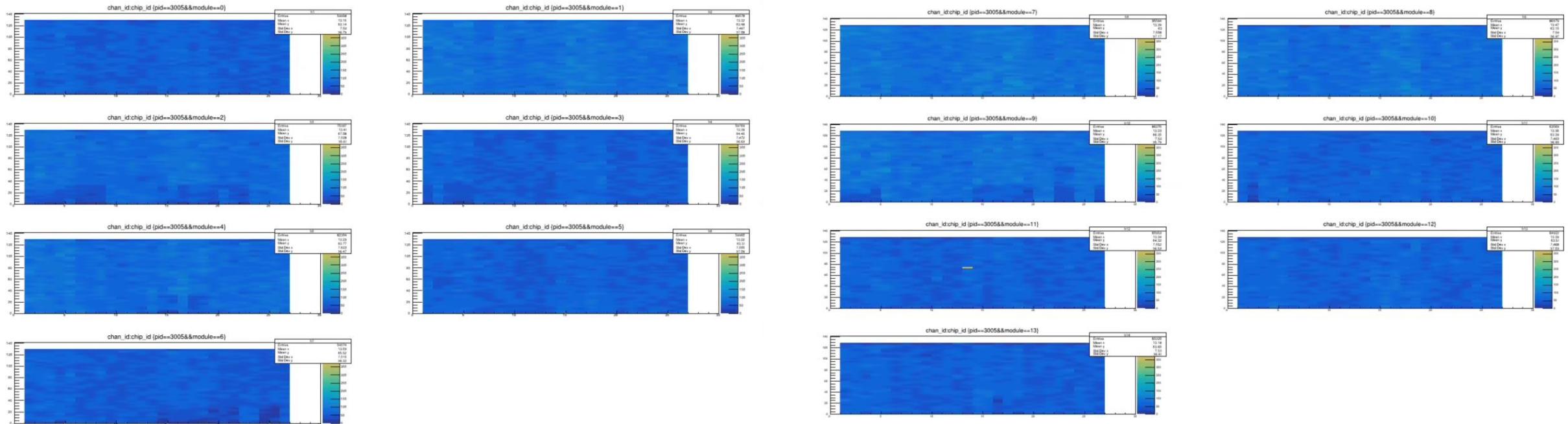
# Run49044 adc distribution

# Trigger



# Run49044 (Zaxis=Maximum of intt4)

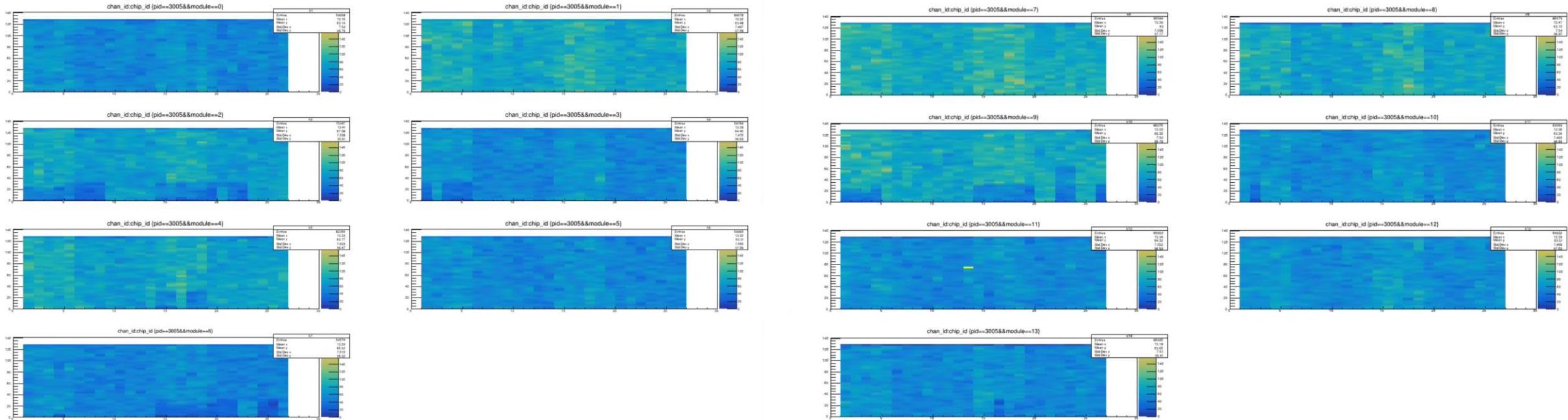
## Trigger



Relative hit entries with respect to the maximum hit entry channel in intt4 server

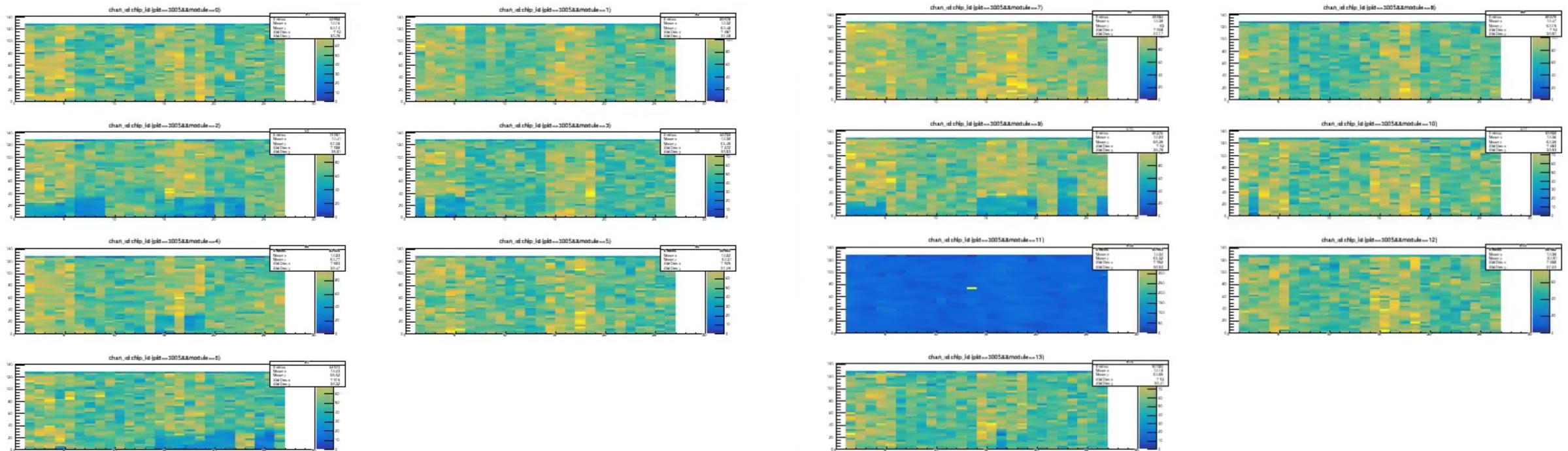
# Run49044 (Zaxis=10 × mean)

## Trigger



# Run49044 (Zaxis= not fixed)

## Trigger



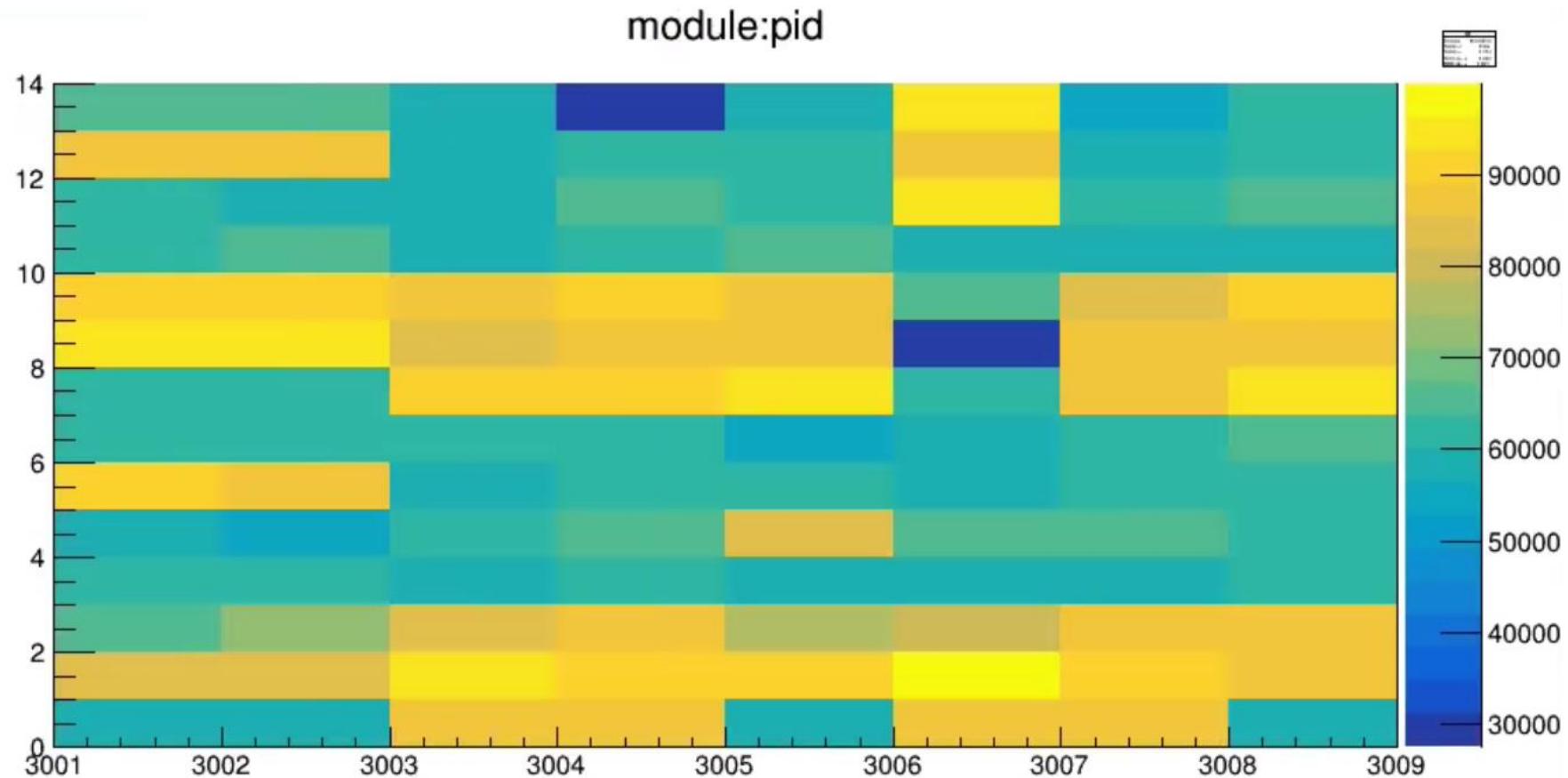
# Run49044 (hit mean=21)

## Trigger

```
*****
*   Row * run_id.ru * run_number * run_time. * pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
*   97408 *      0 *    49044 * 11028577 *     3003 *      1 *      8 *      0 *   523873 *
*   160876 *      0 *    49044 * 26524697 *     3004 *      6 *      9 *   108 *    462 *
*   224584 *      0 *    49044 * 1.426e+09 *     3005 *     11 *     13 *    72 *    389 *
*   238590 *      0 *    49044 * 23919998 *     3006 *      1 *     18 *   126 *   652 *
*   238846 *      0 *    49044 * 23919998 *     3006 *      1 *     20 *   126 *   388 *
*   238974 *      0 *    49044 * 23919998 *     3006 *      1 *     21 *   126 *   400 *
*   239358 *      0 *    49044 * 23919998 *     3006 *      1 *     24 *   126 *   576 *
*   239614 *      0 *    49044 * 23919998 *     3006 *      1 *     26 *   126 *   382 *
*   314240 *      0 *    49044 * 15790577 *     3007 *     10 *     12 *      0 *   332 *
*   321792 *      0 *    49044 * 15790577 *     3007 *     12 *     19 *      0 *  345881 *
*   326272 *      0 *    49044 * 26570384 *     3008 *      0 *      2 *      0 *    527 *
*   326912 *      0 *    49044 * 26570384 *     3008 *      0 *      7 *      0 *   1498 *
*   326928 *      0 *    49044 * 26570384 *     3008 *      0 *      7 *     16 *    306 *
*   327168 *      0 *    49044 * 26570384 *     3008 *      0 *      9 *      0 *    357 *
*   328320 *      0 *    49044 * 26570384 *     3008 *      0 *     18 *      0 *   1785 *
*****
==> 15 selected entries
(long long) 15
```

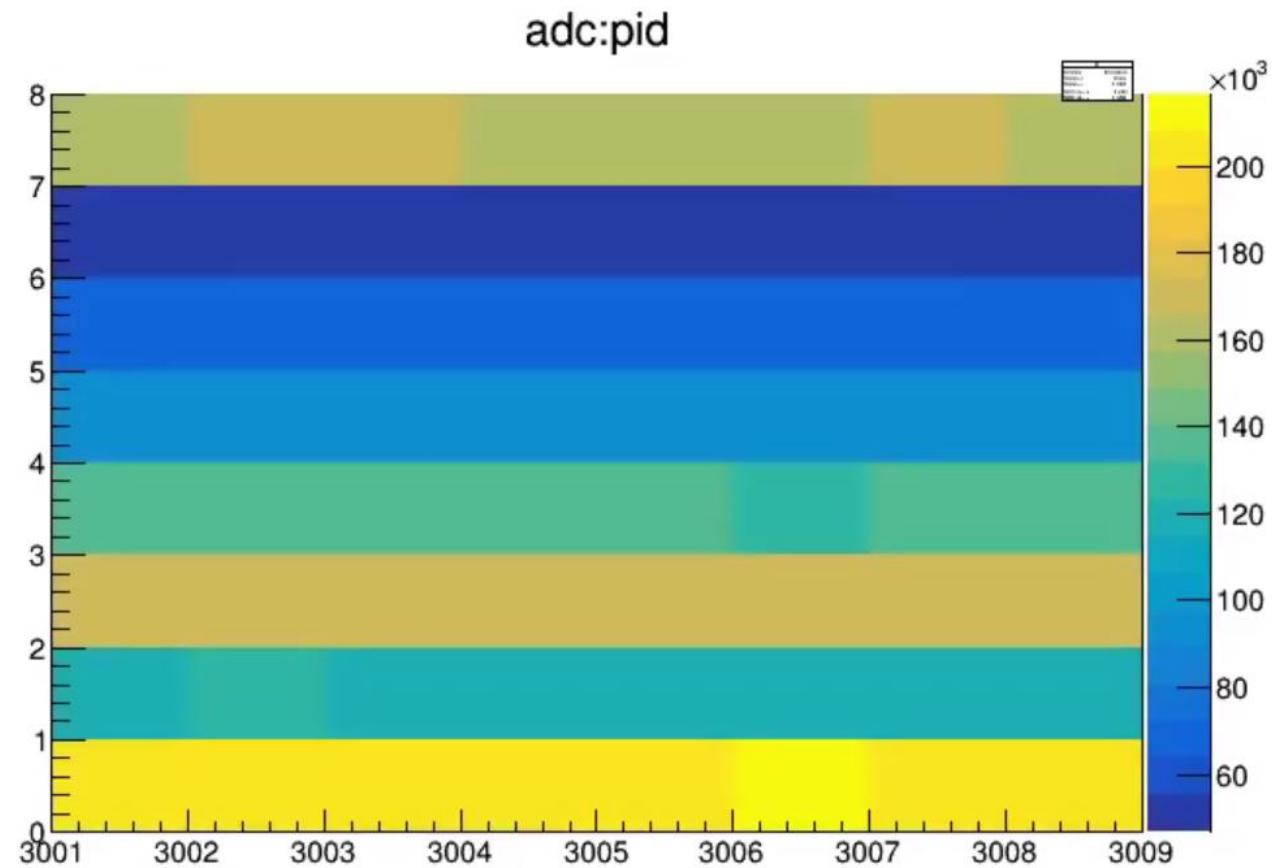
# Run49045 hitmap

# Trigger



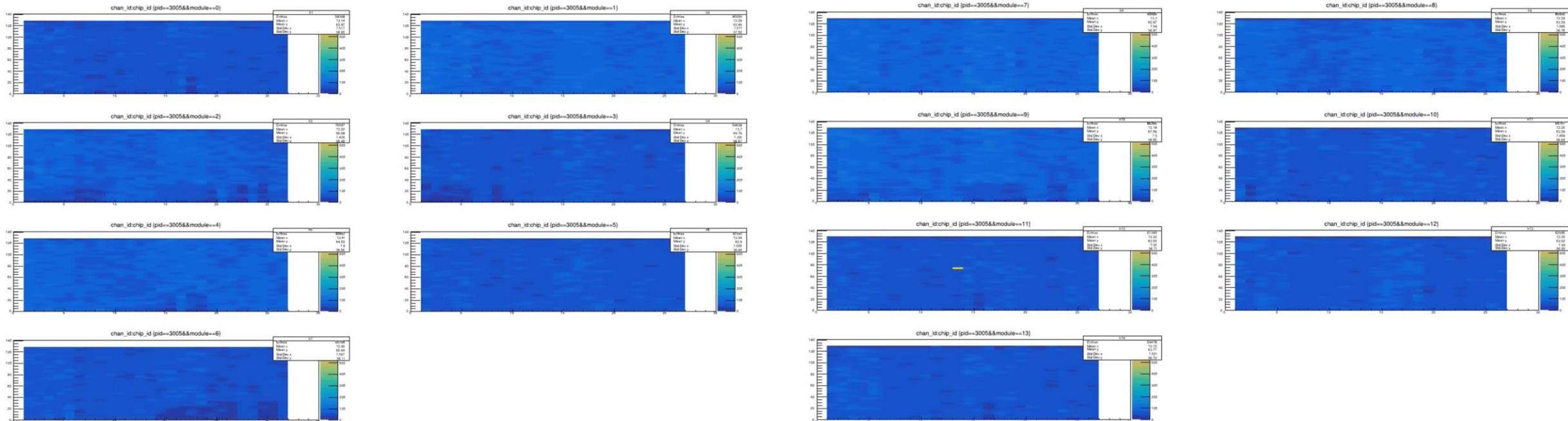
# Run49045 adc distribution

Trigger



# Run49045 (Zaxis=Maximum of intt4)

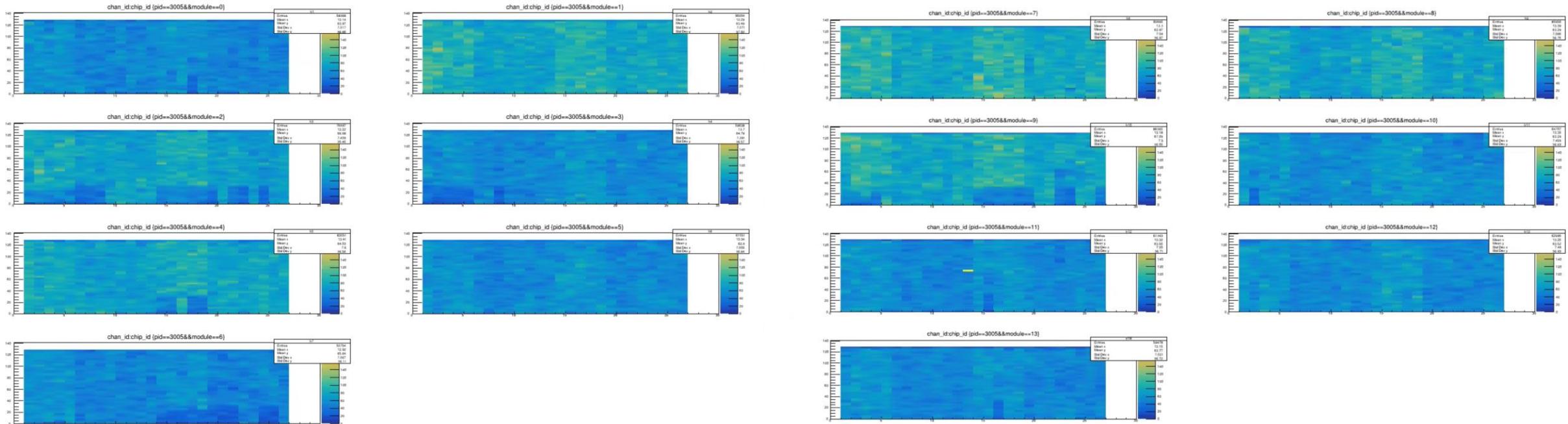
## Trigger



Relative hit entries with respect to the maximum hit entry channel in intt4 server

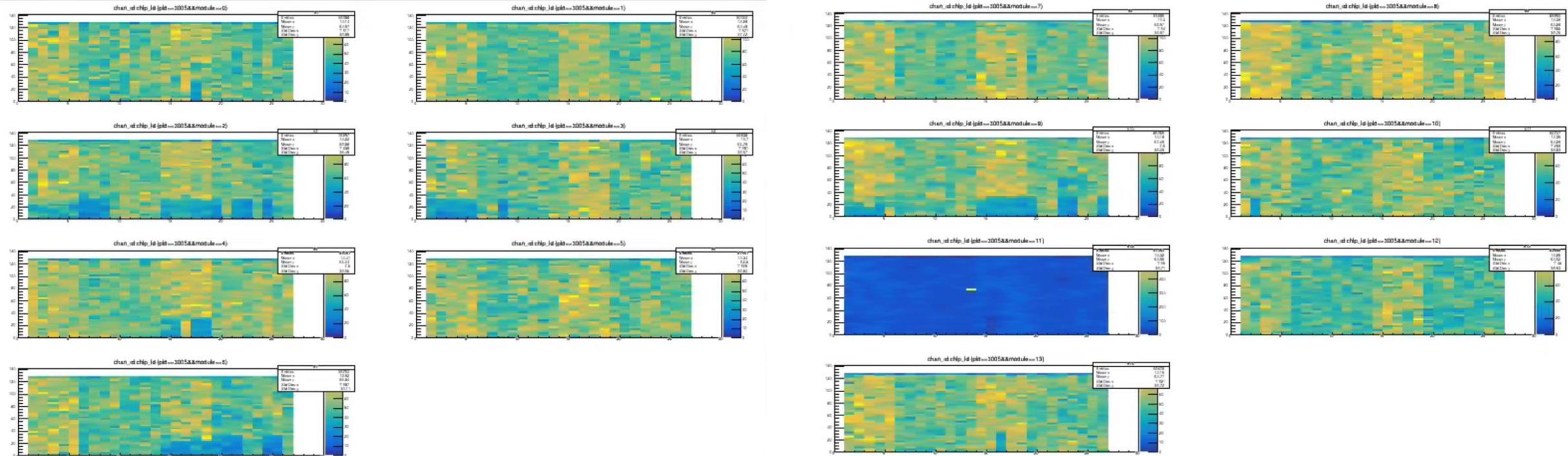
# Run49045 (Zaxis=10 × mean)

## Trigger



# Run49045 (Zaxis= not fixed)

## Trigger



# Run49045 (hit mean=21)

## Trigger

```
root [2] tree->Scan("", "hit_count>200")
*****
*   Row   * run_id.ru * run_number * run_time. *   pid.pid * module.mo * chip_id.c * chan_id.c * hit_count *
*****
* 185344 *      0 *    49045 * 6.183e+09 *    3004 *      13 *      19 *      0 *      335 *
* 224584 *      0 *    49045 * 6.183e+09 *    3005 *      11 *      13 *      72 *      589 *
* 238572 *      0 *    49045 * 24688369 *    3006 *      1 *      18 *      108 *      210 *
* 238590 *      0 *    49045 * 24688369 *    3006 *      1 *      18 *      126 *      696 *
* 238591 *      0 *    49045 * 24688369 *    3006 *      1 *      18 *      127 *      214 *
* 238718 *      0 *    49045 * 24688369 *    3006 *      1 *      19 *      126 *      207 *
* 238846 *      0 *    49045 * 24688369 *    3006 *      1 *      20 *      126 *      405 *
* 238964 *      0 *    49045 * 24688369 *    3006 *      1 *      21 *      116 *      229 *
* 238974 *      0 *    49045 * 24688369 *    3006 *      1 *      21 *      126 *      422 *
* 239082 *      0 *    49045 * 24688369 *    3006 *      1 *      22 *      106 *      211 *
* 239228 *      0 *    49045 * 24688369 *    3006 *      1 *      23 *      124 *      233 *
* 239358 *      0 *    49045 * 24688369 *    3006 *      1 *      24 *      126 *      616 *
* 239486 *      0 *    49045 * 24688369 *    3006 *      1 *      25 *      126 *      311 *
* 239614 *      0 *    49045 * 24688369 *    3006 *      1 *      26 *      126 *      401 *
* 314240 *      0 *    49045 * 6.181e+09 *    3007 *      10 *      12 *      0 *      503 *
*****
==> 15 selected entries
(long long) 15
```