



中国科学院高能物理研究所
Institute of High Energy Physics Chinese Academy of Sciences

Beta source test for TaichuPix3 chip

Tianya Wu, Wei Wang, Ziyue Yan

wuty@ihep.ac.cn

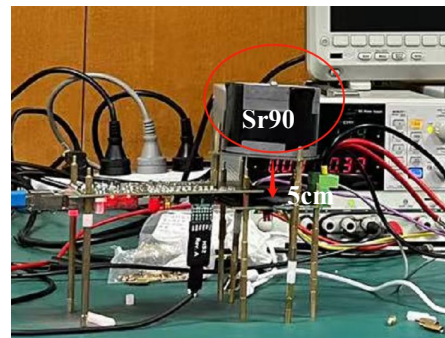
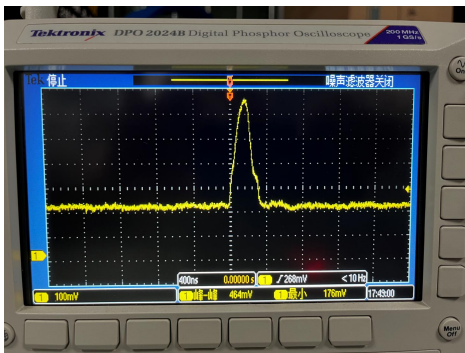
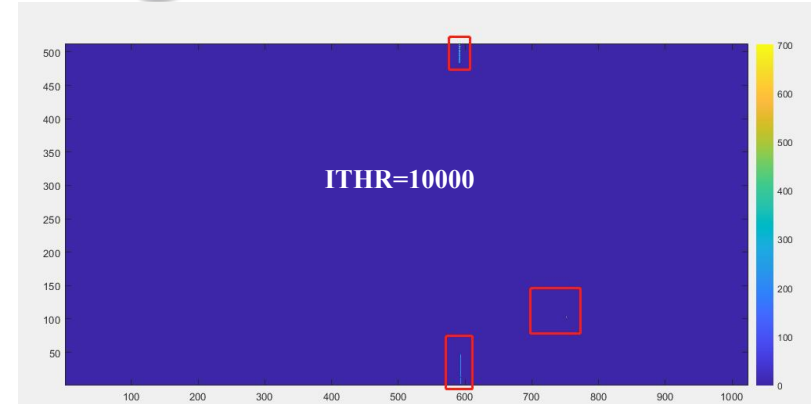
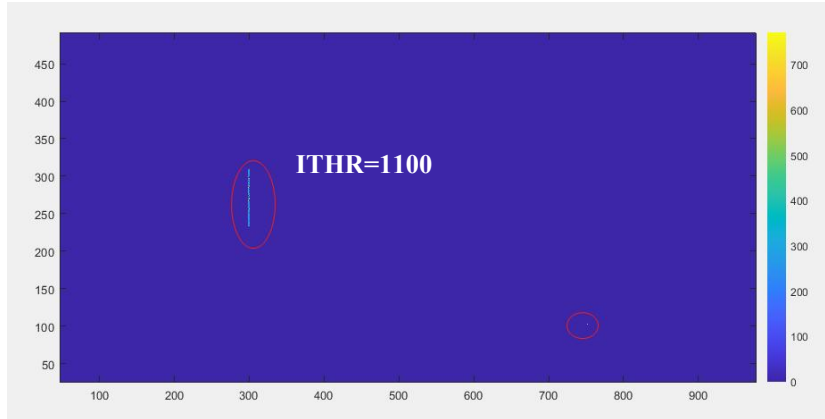
2022-9-8



Circular Electron Positron Collider



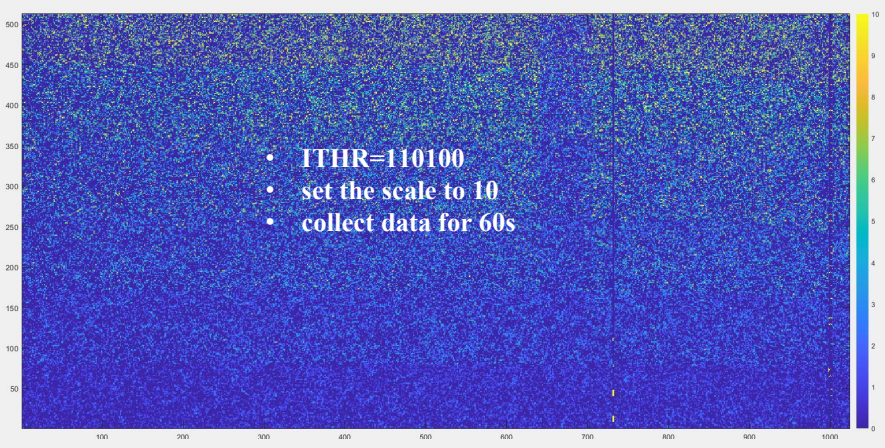
TaichuPix3 without injected charge

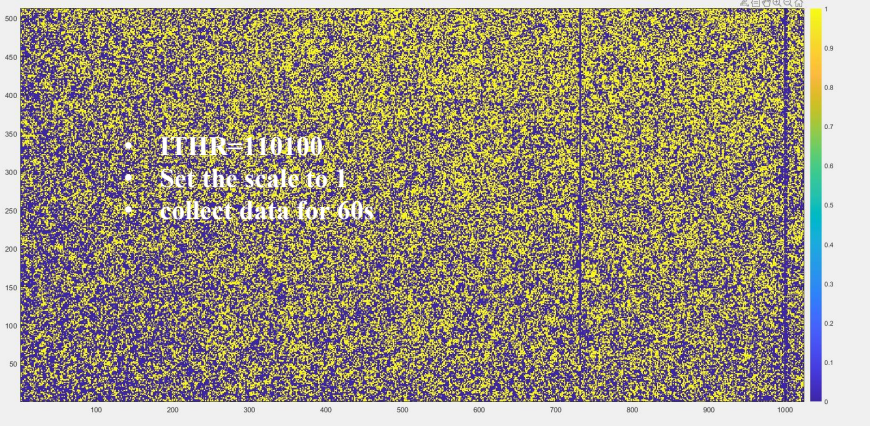


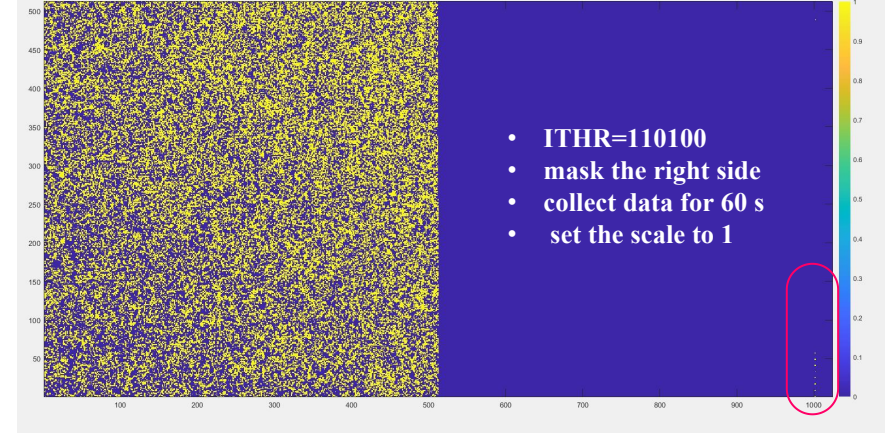
- When ITHR is higher than 110100, open all the pixels. No noisy pixels detected

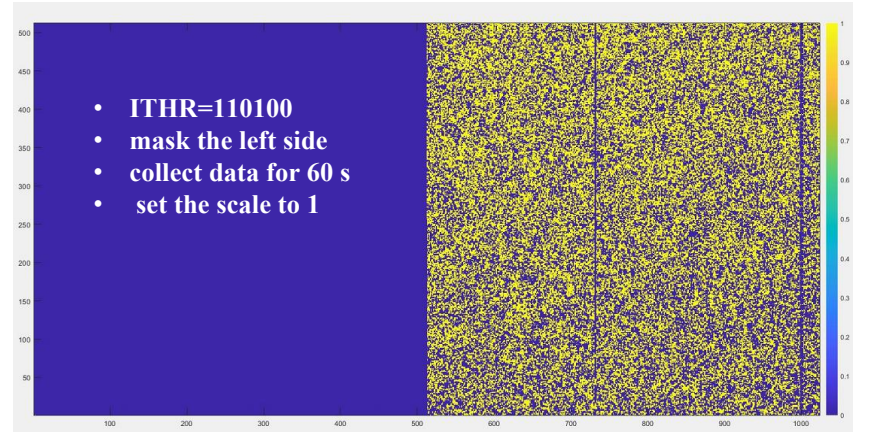


Inject bata source from the front

- 
- ITHR=110100
 - set the scale to 10
 - collect data for 60s

- 
- ITHR=110100
 - Set the scale to 1
 - collect data for 60s

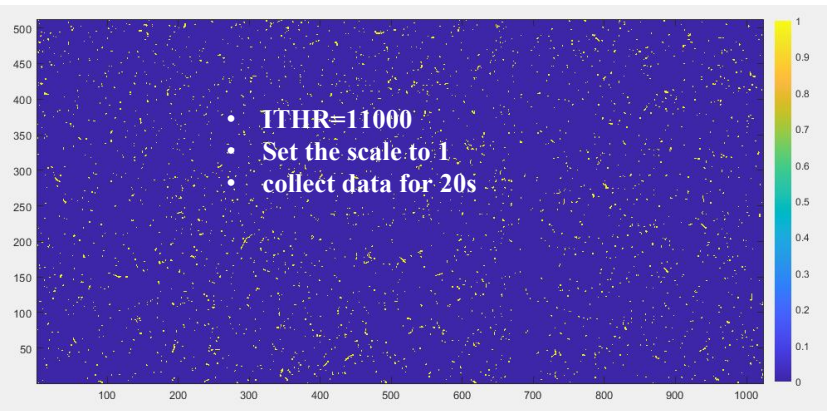
- 
- ITHR=110100
 - mask the right side
 - collect data for 60 s
 - set the scale to 1

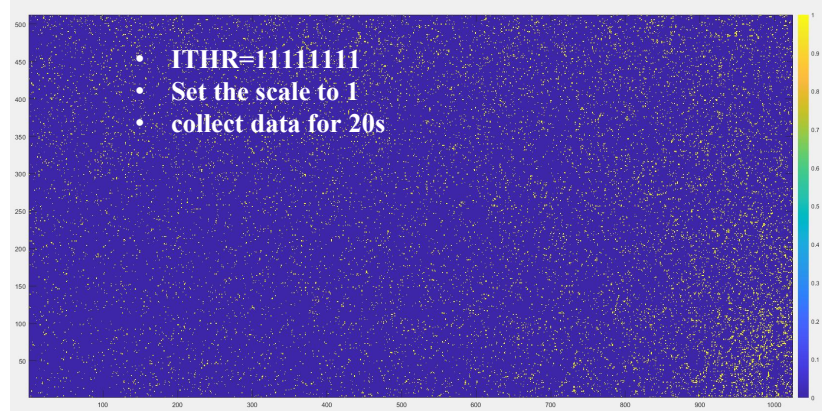
- 
- ITHR=110100
 - mask the left side
 - collect data for 60 s
 - set the scale to 1

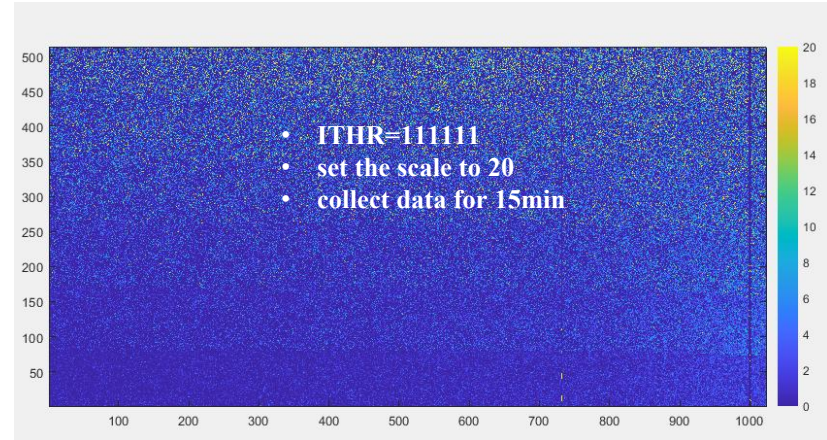
- **ITHR =110100, open all the pixels.**
- **no noisy pixels but some bad pixels.**
- **two columns on the right is not working**
- **Mask right-half pixels, some pixels cannot mask correctly.**

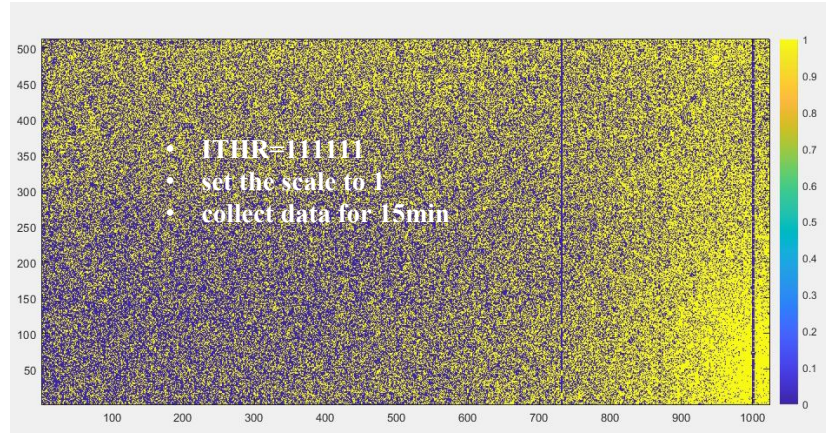


Inject data source from the front

- 
- ITHR=11000
 - Set the scale to 1
 - collect data for 20s

- 
- ITHR=1111111
 - Set the scale to 1
 - collect data for 20s

- 
- ITHR=111111
 - set the scale to 20
 - collect data for 15min

- 
- ITHR=111111
 - set the scale to 1
 - collect data for 15min



Thanks for your attention!