

Beam check- pedestal study

Jie Liu

06/22/2016

Carbon Cover (carbon sponge)

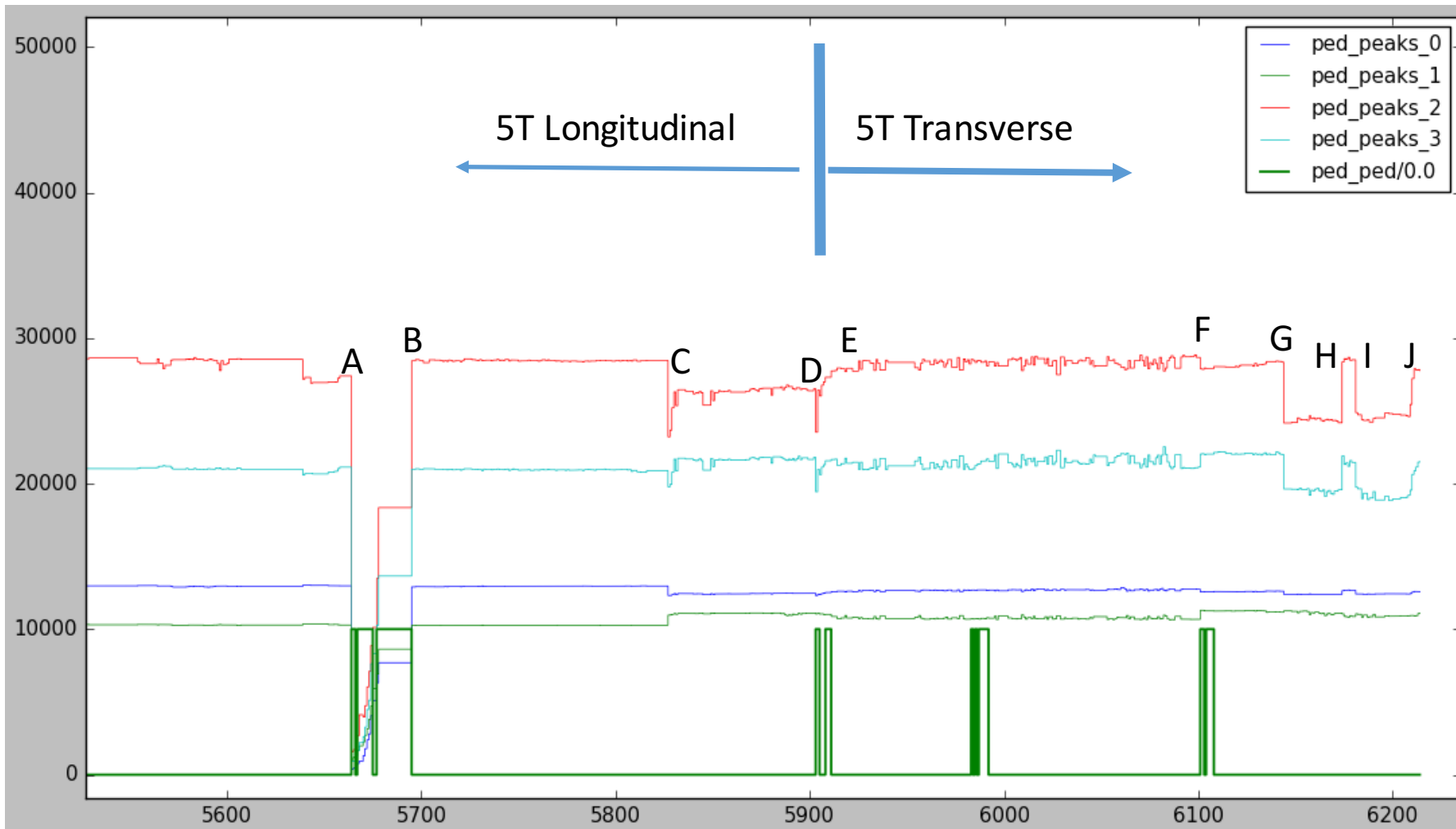


- carbon sponge put inside the case of the BPM receiver
- not electronic
- used to absorb the background radiation
- about 1mm thick

Carbon cover added twice (one near 5817, one near 5903)

BPM gain/division setting did not change from run 5485 to 6218

Pedestals for each BPM A channel



A:

- septum trip, broken water line
- Bigbite power supply issue

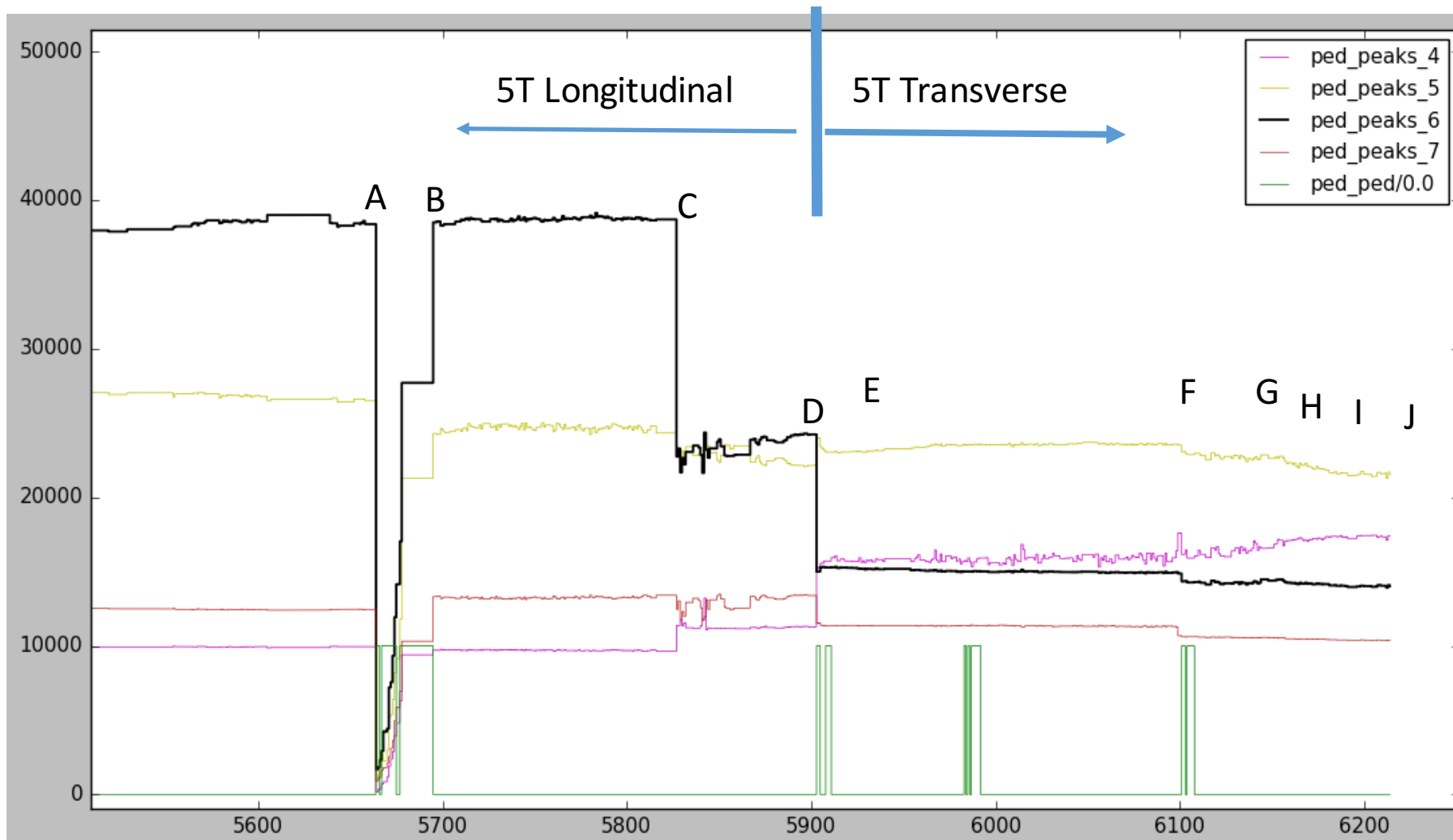
A-B:

- Beam off 21 hours
- beam noise check runs, with a lot of gain settings

C:

- Beam off 2 hours
- Add the carbon cover to BPMB
- Move the BPMB receiver to ground
- Pengjia does not remember about BPMA, may not move

Pedestals for each BPM B channel



A:

- septum trip, broken water line
- Bigbite power supply issue

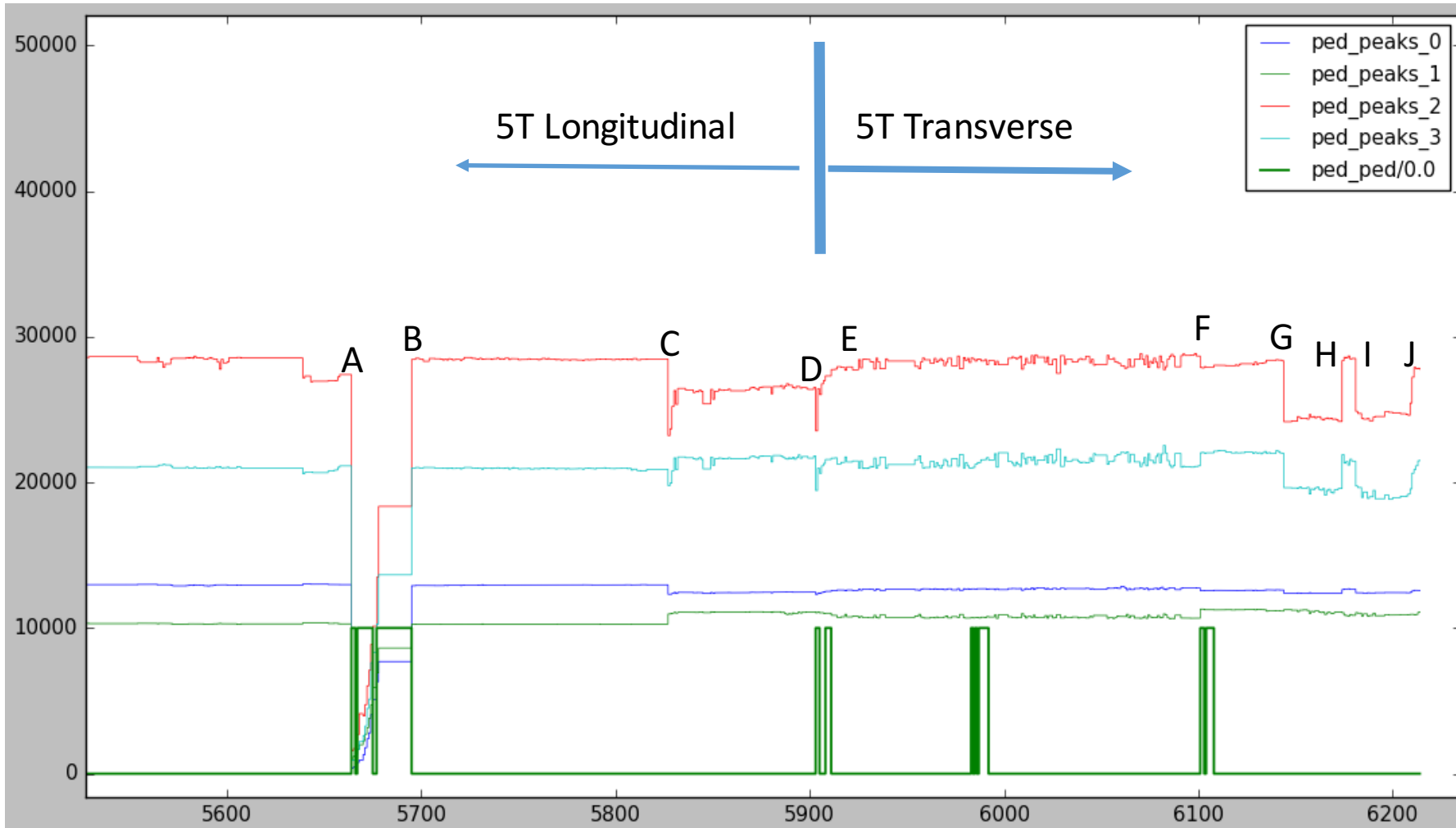
A-B:

- Beam off 21 hours
- beam noise check runs, with a lot of gain settings

C:

- Beam off 2 hours
- Add the carbon cover to BPMB
- Move the BPMB receiver to ground
- Pengjia does not remember about BPMA, may not move

Pedestals for each BPM A channel



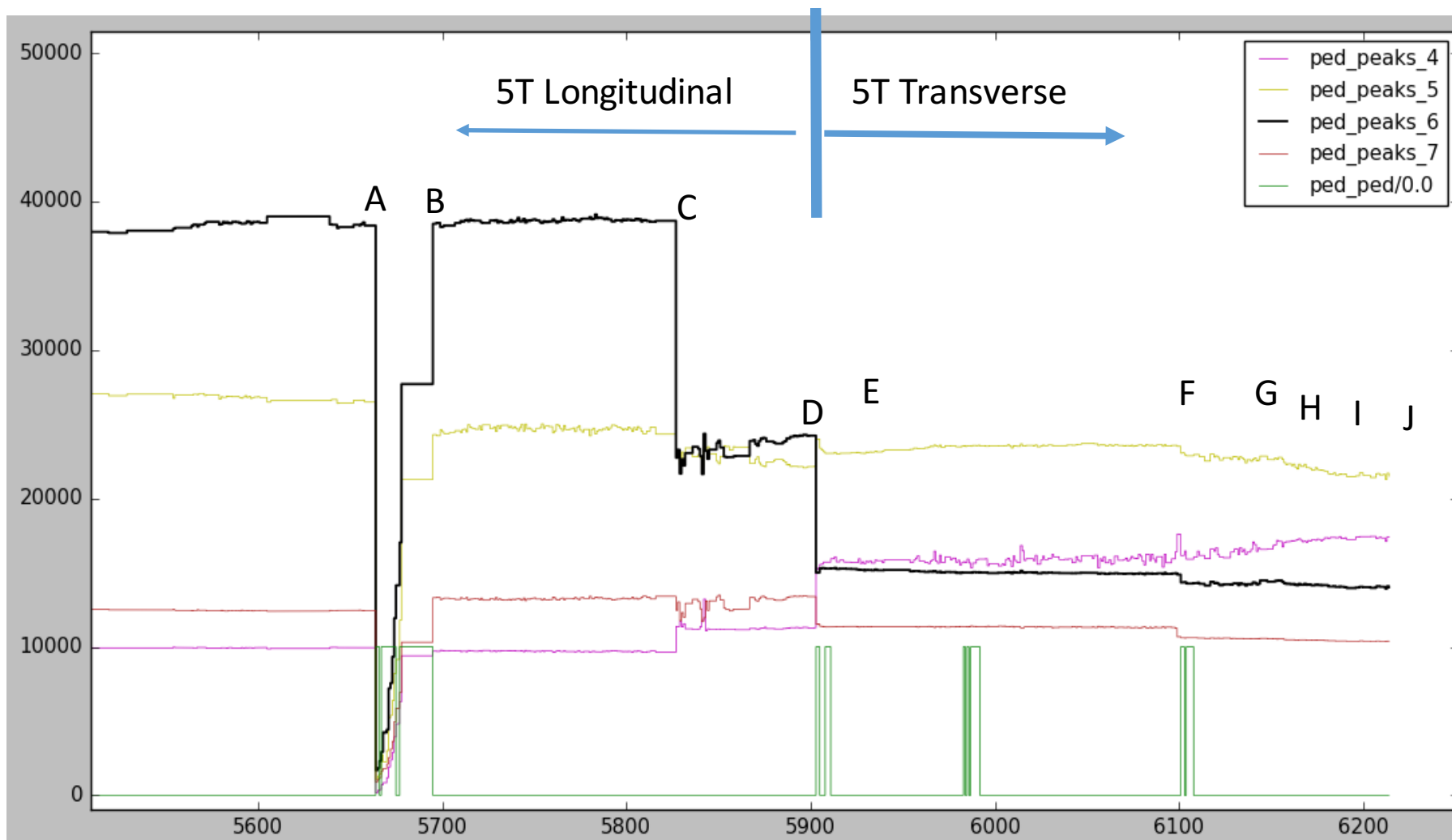
D:

- Add second carbon cover

D-E:

- Run 5903-5904 pedestal run
- 5903-5904 taken within 4 mins
- Target ramp up/down/up during Run 5905-5906
- Run 5909-5910 bpm calibrations
- After run 5910, target quench ~ 10 hours
- Run 5911-5920 bpm calibrations
- Pedestal became stable from Run 5911

Pedestals for each BPM B channel



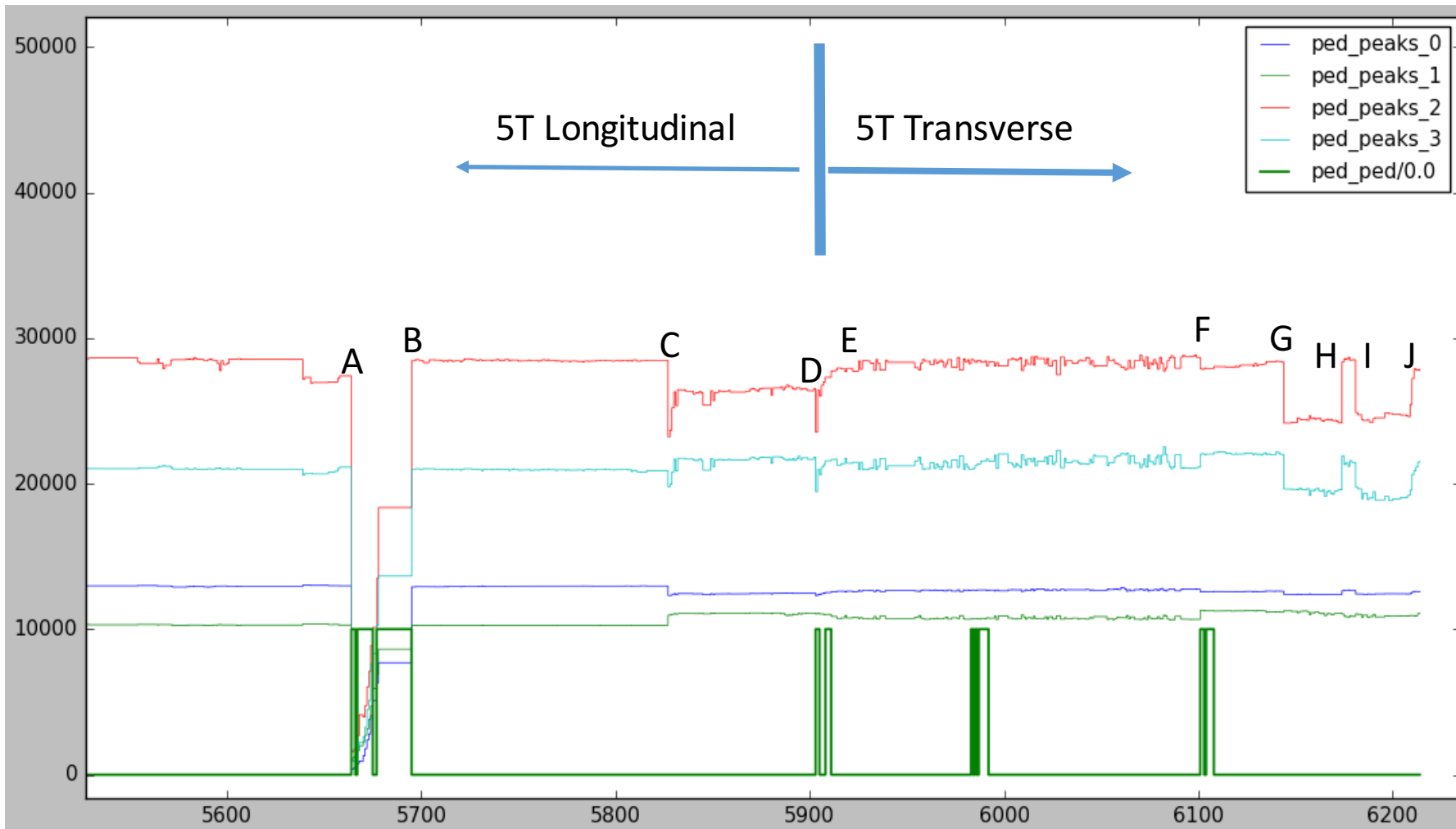
D:

- Add second carbon cover

D-E:

- Run 5903-5904 pedestal run
- 5903-5904 taken within 4 mins
- Target ramp up/down/up during Run 5905-5906
- Run 5909-5910 bpm calibrations
- After run 5910, target quench ~ 10 hours
- Run 5911-5920 bpm calibrations
- Pedestal became stable from Run 5911

Pedestals for each BPM A channel



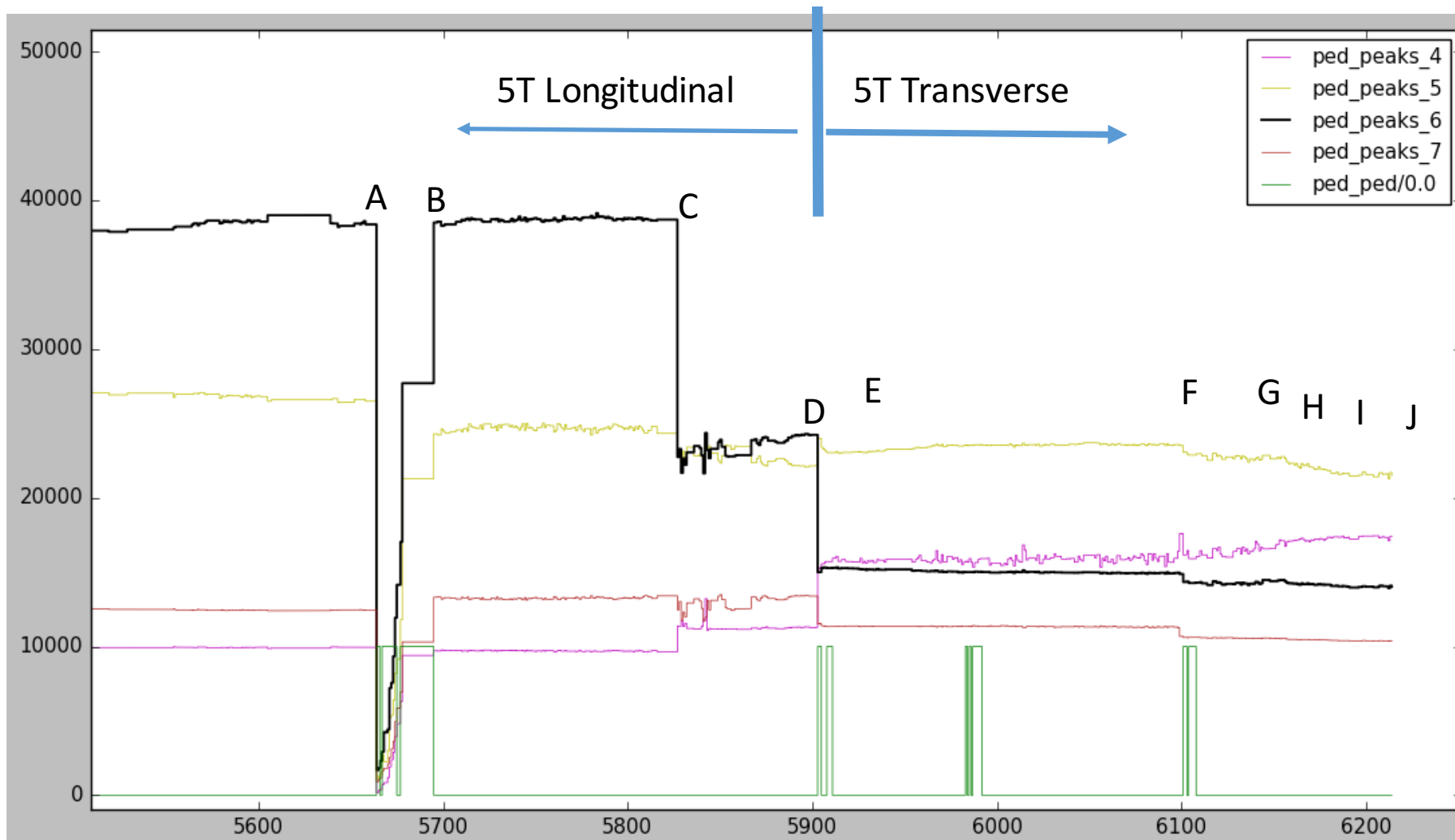
F:

- Moved to 3.3GeV setting
- 10 hours beam off
- Pedestal run 6101-6102

G:

- After run 6143, septum trip and Moller
- After Moller, flood in Hall A
- Beam back run 6144
- 20 hours between run 6143-6144

Pedestals for each BPM B channel



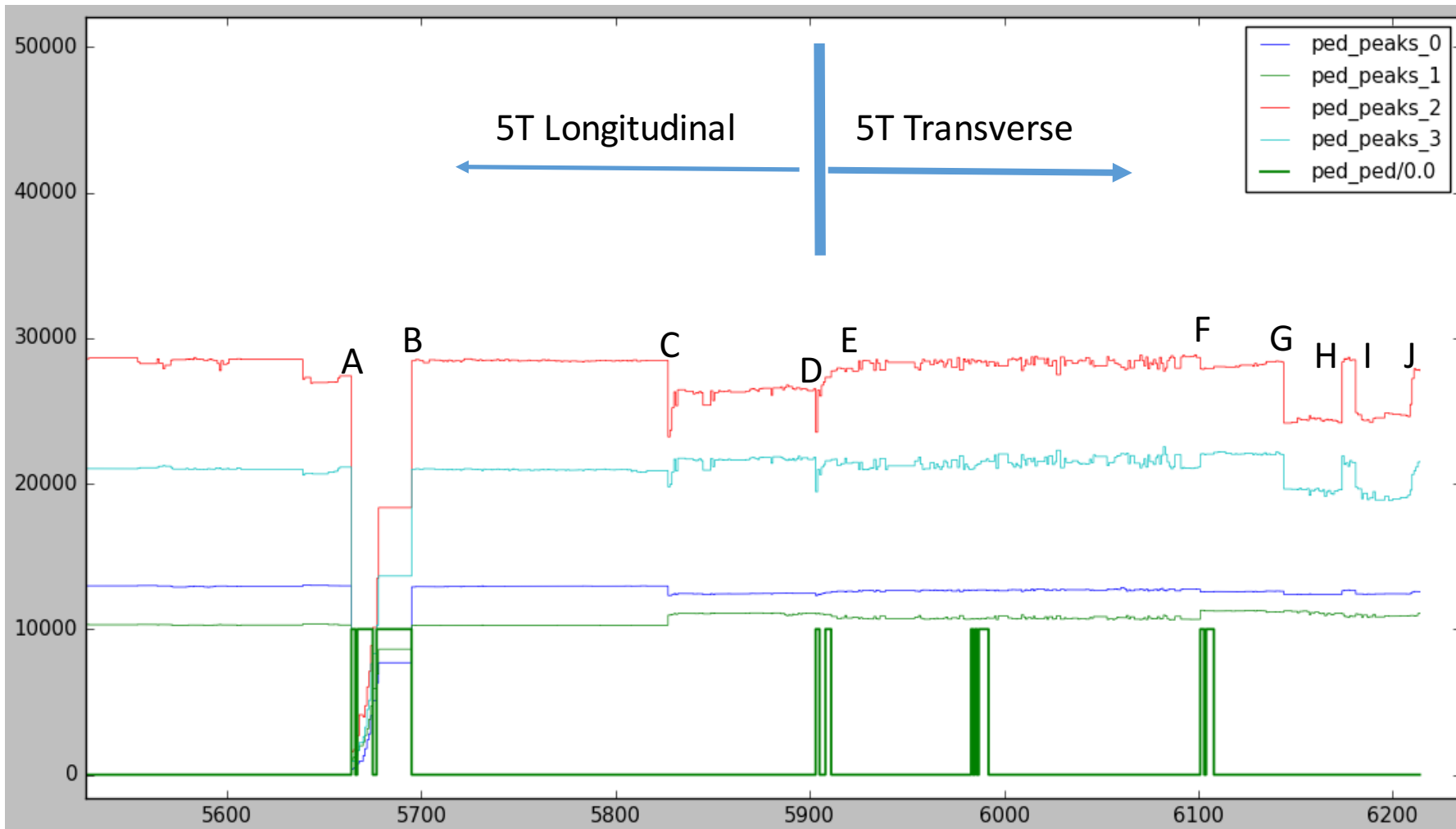
F:

- Moved to 3.3GeV setting
- 10 hours beam off
- Pedestal run 6101-6102

G:

- After run 6143, septum trip and Moller
- After Moller, flood in Hall A
- Beam back run 6144
- 20 hours between run 6143-6144

Pedestals for each BPM A channel



H:

- After run 6173, target anneal BCM calibration
- 2.5hours later, back production

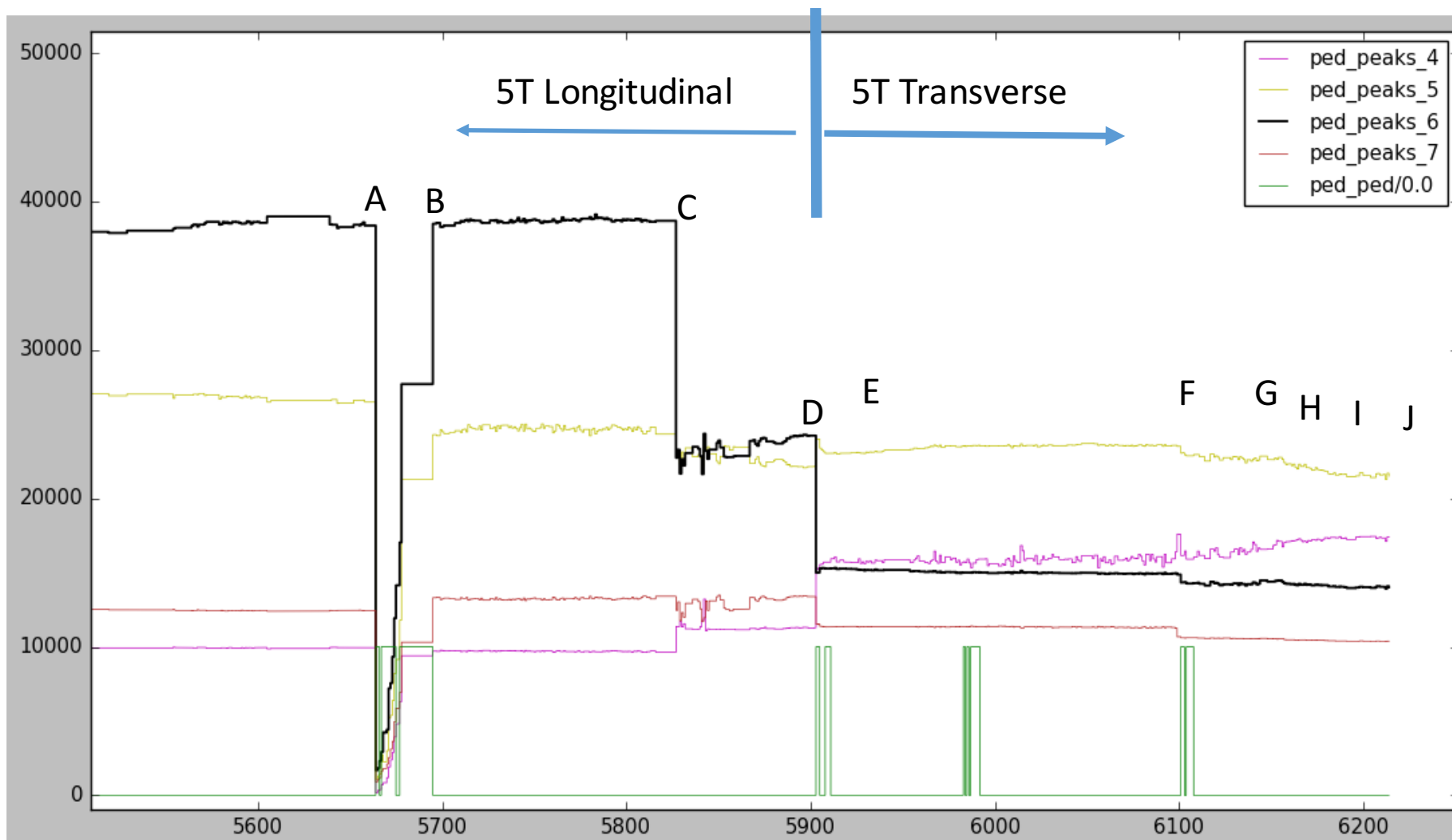
I:

- After run 6179, escorted access to check septum trip (not real trip, but rebooted)
- 2 hours later, back production

J:

- Jumps happen run 6210
- But continuous taking data from run 6208-6212, no stop

Pedestals for each BPM B channel



H:

- After run 6173, target anneal BCM calibration
- 2.5hours later, back production

I:

- After run 6179, escorted access to check septum trip (not real trip, but rebooted)
- 2 hours later, back production

J:

- Jumps happen run 6210
- But continuous taking data from run 6208-6212, no stop

Pedestals for each BPM channel

