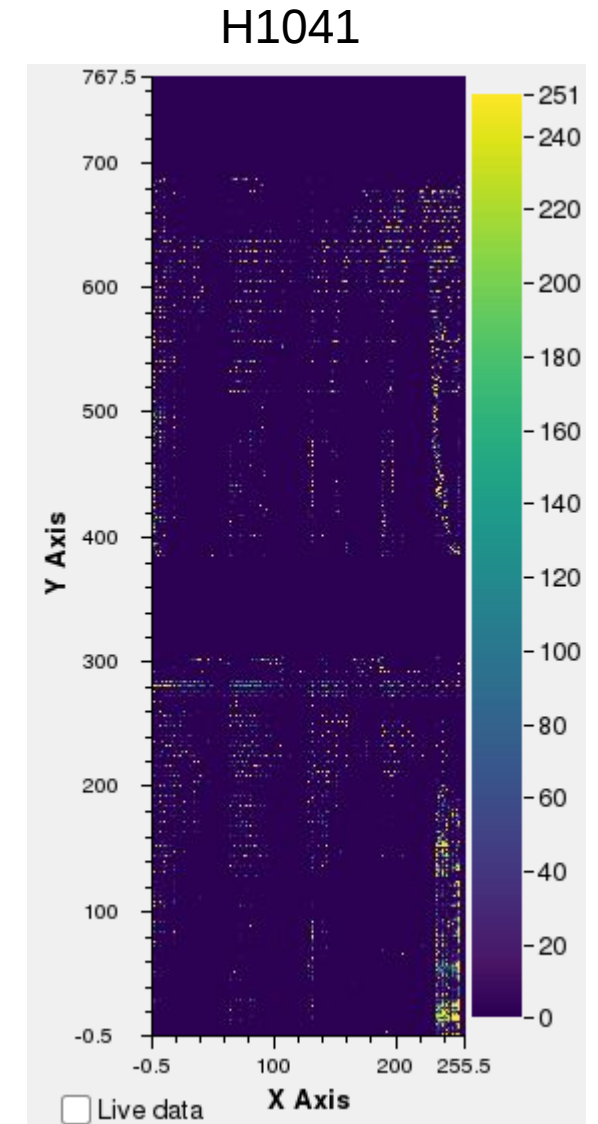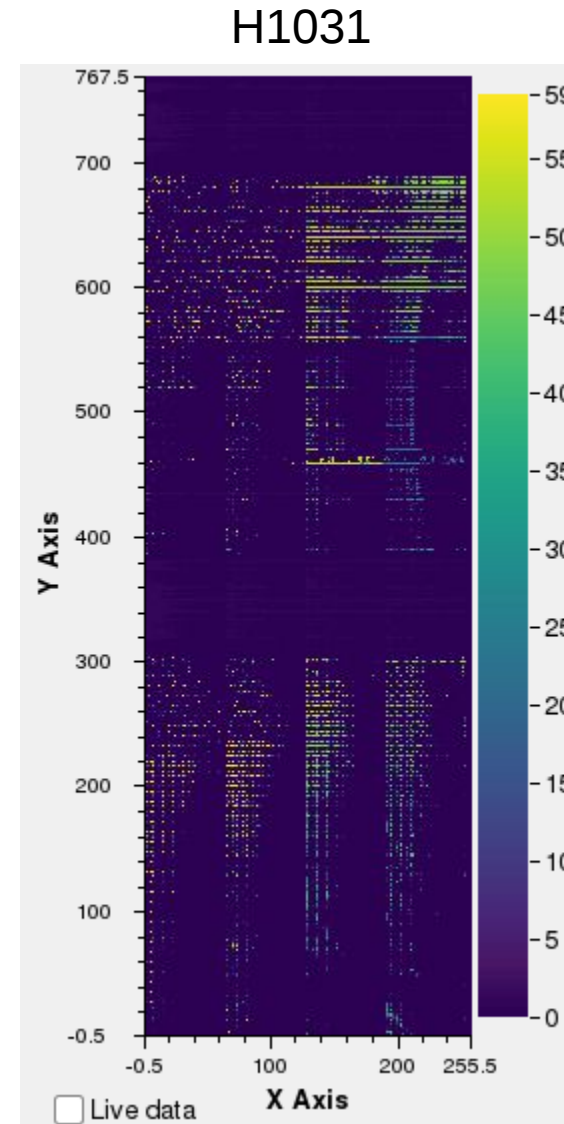# Gated Mode at KEK

Gated Mode at KEK.

- We wanted to see if the system behaves similar to the DESY system

  → Perform optimization at DESY

- Check current consumption with higher clear on/off currents of irradiated modules

- DHH firmware not in the final state since we decided to get the parameters from epics (not from FTSW)

- But we could redo all the tests from the DESY setup

- Internal triggers

- H1031 and H1041 only (since they are close by, have different DHCs and relative low currents)

- On rather short notice we successfully run GM

Currents.

- Normally:
  - Clear off: -21 mA → -39 mA → -55 mA
  - Clear on: 27 mA → 48 mA → 67 mA

- H1031:
  - Clear off: -21 mA → -50 mA → -68 mA
  - Clear on: 42 mA → 72 mA → 90 mA

- H1041:
  - Clear off: -25 mA → -43 mA → -69 mA
  - Clear on: 48 mA → 69 mA → 94 mA

- Increase of currents is slightly higher than for not radiated modules
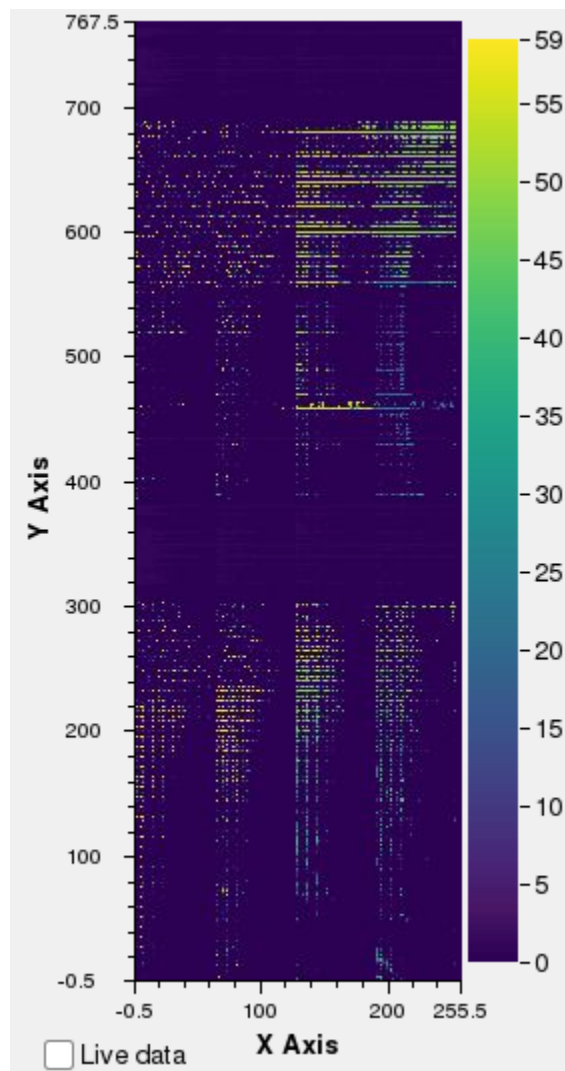
Occupancies.

- GM length: 10 gates

- No trigger: 20 gates

- Pedestal oscillations on the hole module
  - Higher thresholds
  - Improve voltage settings (optimization at DESY?)

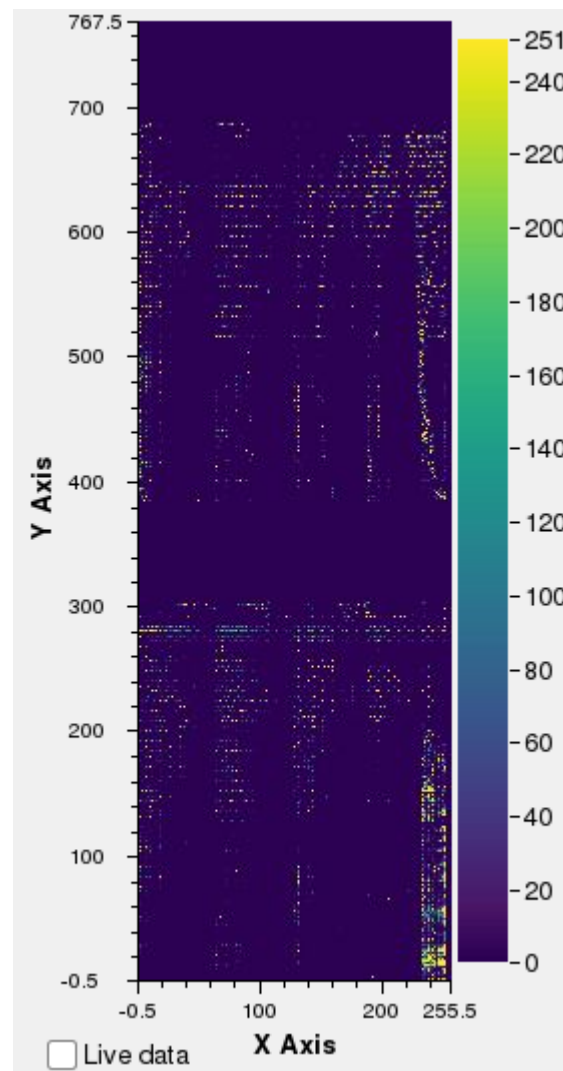- Data is stored under /data/commissioning/runs/2019_06_13_002/data.dat

- Further analysis

H1031

H1041

Occupancies.

H1031

H1041

DESY measurement (Varghese)