

# SCT DAQ

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# SCT DAQ

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- Mostly unchanged
  - Next run
    - more occupancy -> data volume
    - more irradiation -> changing parameters
- ROD crates
  - New RODs and BOCs
  - New fibre mapping
- Software

# ROD updates

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- Now have RODs and BOCs to fill 8 crates
  - Up from 90 to 128
- Installed and fibres remapped in the barrel
  - Endcaps to come
- Dual HOLA, duplicate data stream for FTK
  - Installed in new BOCs
- Check mapping with modules off
  - Current through PIN, low power

# Software

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- External constraints
  - tdaq, slc6, 64bit, new gcc
- Calibration updates
  - Threshold – look at scan ranges
  - Noise – low occupancy and low thresholds
- Monitoring
  - Better monitoring on ROD (at L1A rates?)
- Configuration

# ROD Firmware

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- Updates to ROD firmware for ROD busy
  - Previously, some issues in the formatter
  - Now also looking at controller FPGA
    - Possible issue with event counting after busy
    - Looks promising
- Thorough testing needed to be confident
  - Issue intermittent, only seen during beam
  - This is where extra monitoring helps

# Conclusion

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- Hardware progressing well
  - RODs, BOCs, HOLAs
- Software more open ended
  - Essentials under control (tdaq, slc6 etc)
  - More work needed for smooth running
    - Calibration updates
    - Monitoring
    - Driver for new TX plugins