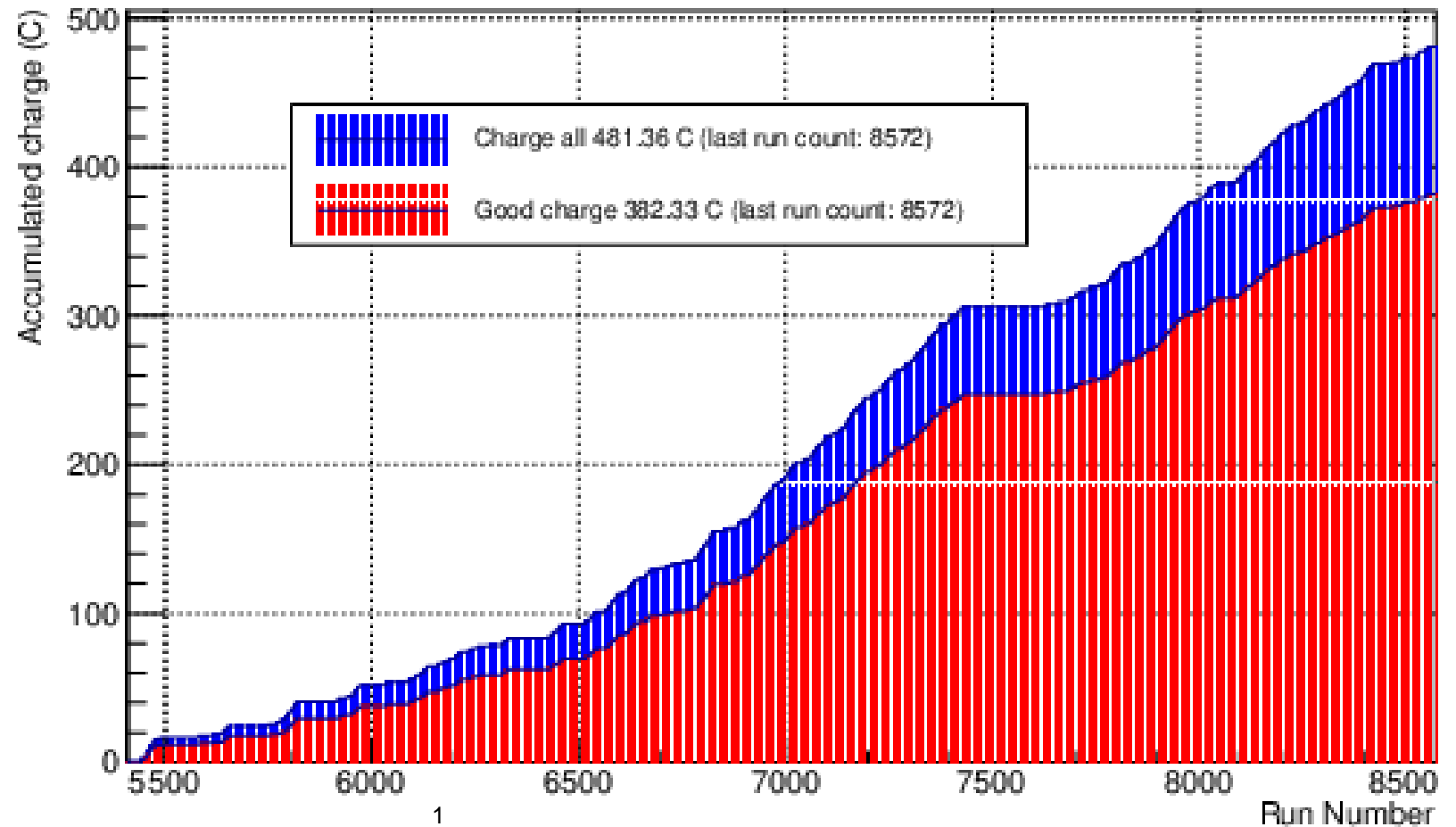# CREX data set

- First run period: 5408 – 7430 (slugs 100 – 185)
- Second run period: 7626 – 8558 (slugs 186 – 223)

Charge total vs run

CREX run period 1 preparations

- Work on these areas was largely done at end of April
  - Pedestal run-ranging was considered and pedestals re-evaluated similarly to PREX
  - BMOD correction files ready

- What needs to be done
  - Add an event-level difference between analog BCMs and burp cut on it
    - bcm_an_diff == (bcm_an_us-bcm_an_ds)/2
    - Low and high range cuts: -10 to +10 range (so up to +/-20 uA difference allowed)
    - No stability cut
    - Burp cut level of 0.15 (so a change in the disagreement by 0.3 uA triggers the burp) --- Cut level may be relaxed after evaluation by Victoria
  - Ensure the AT combinations have been added to CREX map files
  - Set up script to track the error cause for discarded events across multiple runs
  - Clean up stability/burp definitions: two periods around 5500 and 7700 have mixed settings

  - Check and clear space for the outputs: can we remove the PREX web plots?
  - Aim to start respin1 the week of Dec 7

CREX run period 2 preparations

- Run list evaluation and event cut evaluation: ongoing by WACs

- Pedestals: we will do some simple cleanup of the pedestals and propagate pedestal changes to the run we think they ought to have started

- BMOD: we won't wait for the dithering correction slopes to start respin1; may be able to have these available by the time we get to slug 186

- During prompt, the burp cuts were changed at around run 7934; need to evaluate either pushing this change earlier or keeping the change

Other possible changes

- Add restriction to 12X range?
  - http://ace.phys.virginia.edu/HAPPEX/4071 was a study by Devi of how much data might be cut by excluding 12X excursions at the 0.8mm or 1.0mm level for a subset of the run
  - This particular study used deviation away from the mean of each run, which is not a cut that we have; implementation could be done using a fixed cut for certain run ranges but would need more study

- Full pedestal study as done for PREX

- Cross-check for runs in which slow controls settings change partway through the run; blinding fails for events after the change, but we may not have the "right" configuration