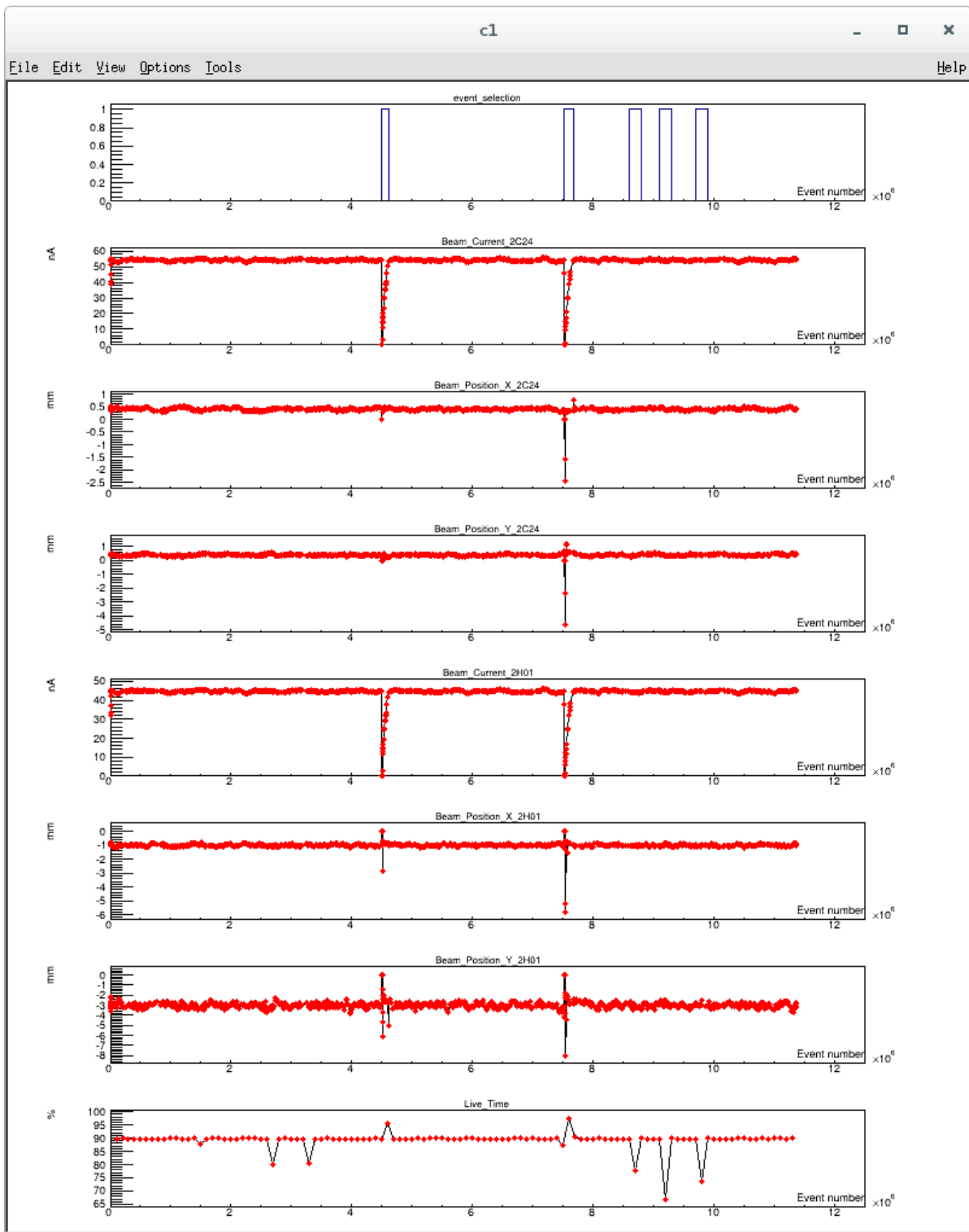# Event Selection Rule

- Select good events based on beam current and beam position at 2H01 and 2C24 and live time
  - Beam current +/- 5nA

  - Beam position +/- 1mm (+/- 2mm for 2H01 Y after run 1394)

  - Live time drops less than 10%

  - Event number > 20000

  - *Stability of the cell pressure, temperature and target thickness
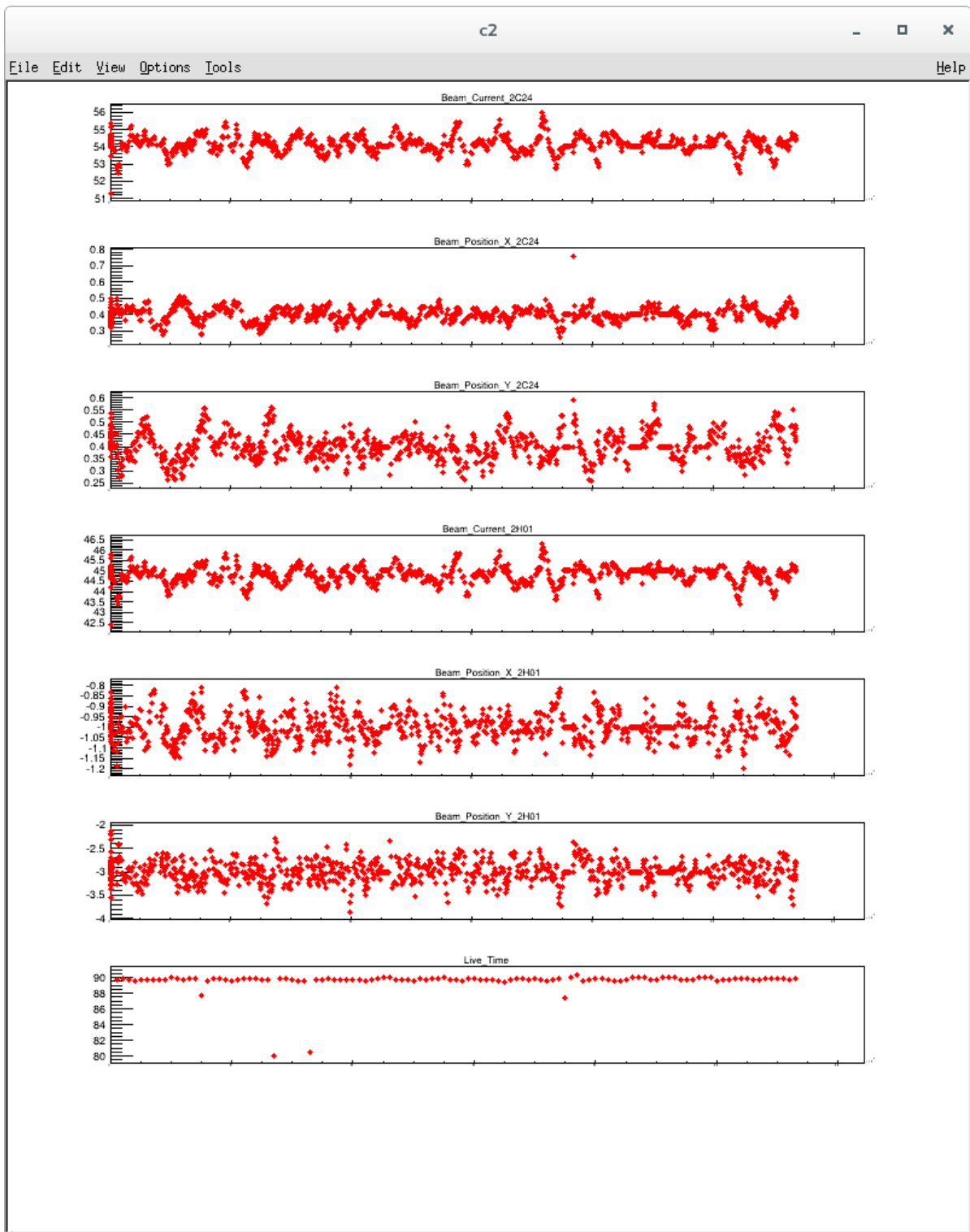
  - Bad runs: 1428, 1483

File Edit View Options Tools   Help

c1

event_selection

Event number ×10⁶

Beam_Current_2C24

Current 2C24

Beam_Position_X_2C24

X position 2C24

Beam_Position_Y_2C24

Y position 2C24

Beam_Current_2H01

Current 2H01

Beam_Position_X_2H01

X position 2H01

Beam_Position_Y_2H01

Y position 2H01

Live_Time

Live time

c2

File Edit View Options Tools   Help

Beam_Current_2C24

Beam_Position_X_2C24

Beam_Position_Y_2C24

Beam_Current_2H01

Beam_Position_X_2H01

Beam_Position_Y_2H01

Live_Time

Current 2C24

X position 2C24

Y position 2C24

Current 2H01

X position 2H01

Y position 2H01

Live time

- Two types of files for each run on ifarm in directory /work/hallb/prad/data_EnS/

- Root file (prad_<run number>_EnS.root) has all the plots

- A txt file (EventSelect_<run number>.txt)has the bad event number

- Example format of the txt file:
  - *20000 2000000
  - 8800000 9000001
  - 13196233 13333585

- * means it is due to stability of the target temperature, pressure and target thickness. I think this cut is optional, so it is marked with *

- ~4% of data cut away if without *, 5.5% with *