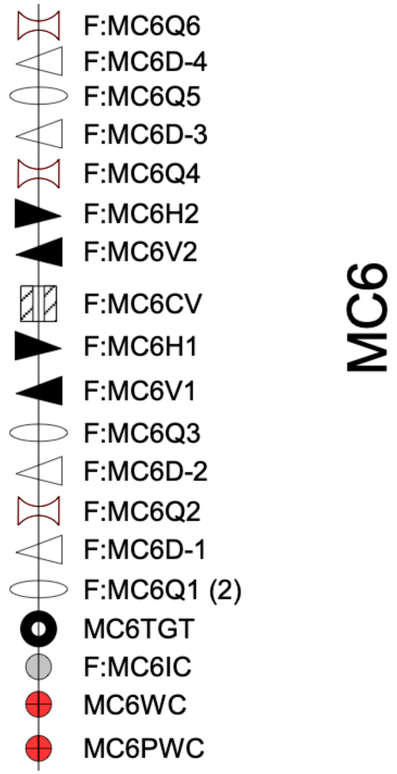
Secondary Beam Studies

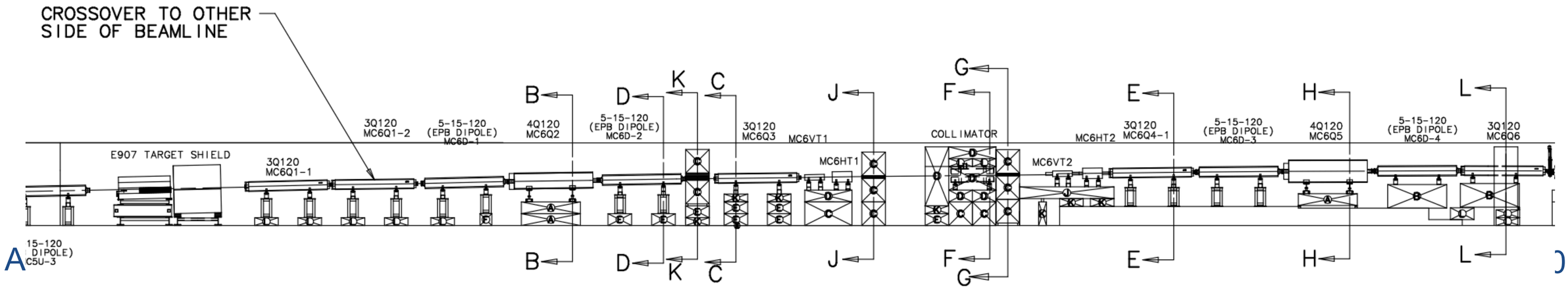
Andrew Sutton

Mar 2, 2020

Overview

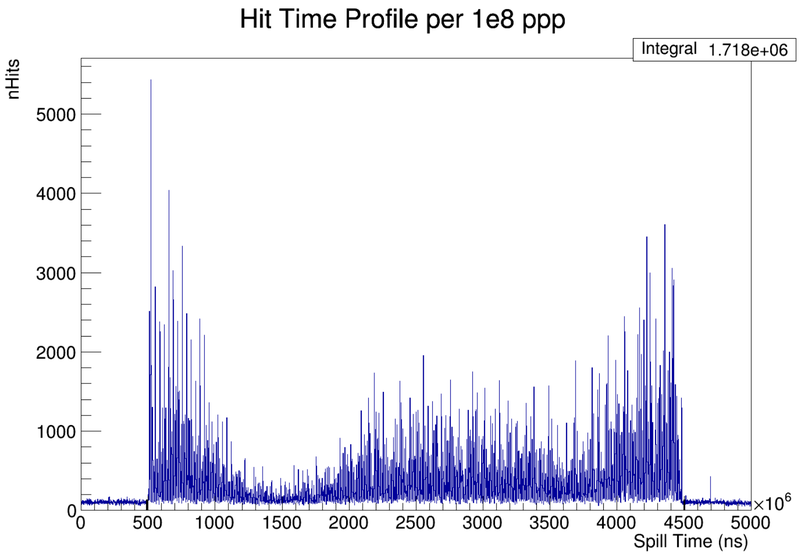
- Fri 02/28/2020 runs 100749 - 100763
- Adam turned off all quads and trims in secondary beamline (only F:MC6D still on)
- Scanned secondary momentum
  - Collimator opened to 12.75 mm (usual value)
  - Collimator closed to 0 mm
- Requested intensity: 1e8 ppp/spill
  - Fairly consistent but still normalized all plots to 1e8 ppp

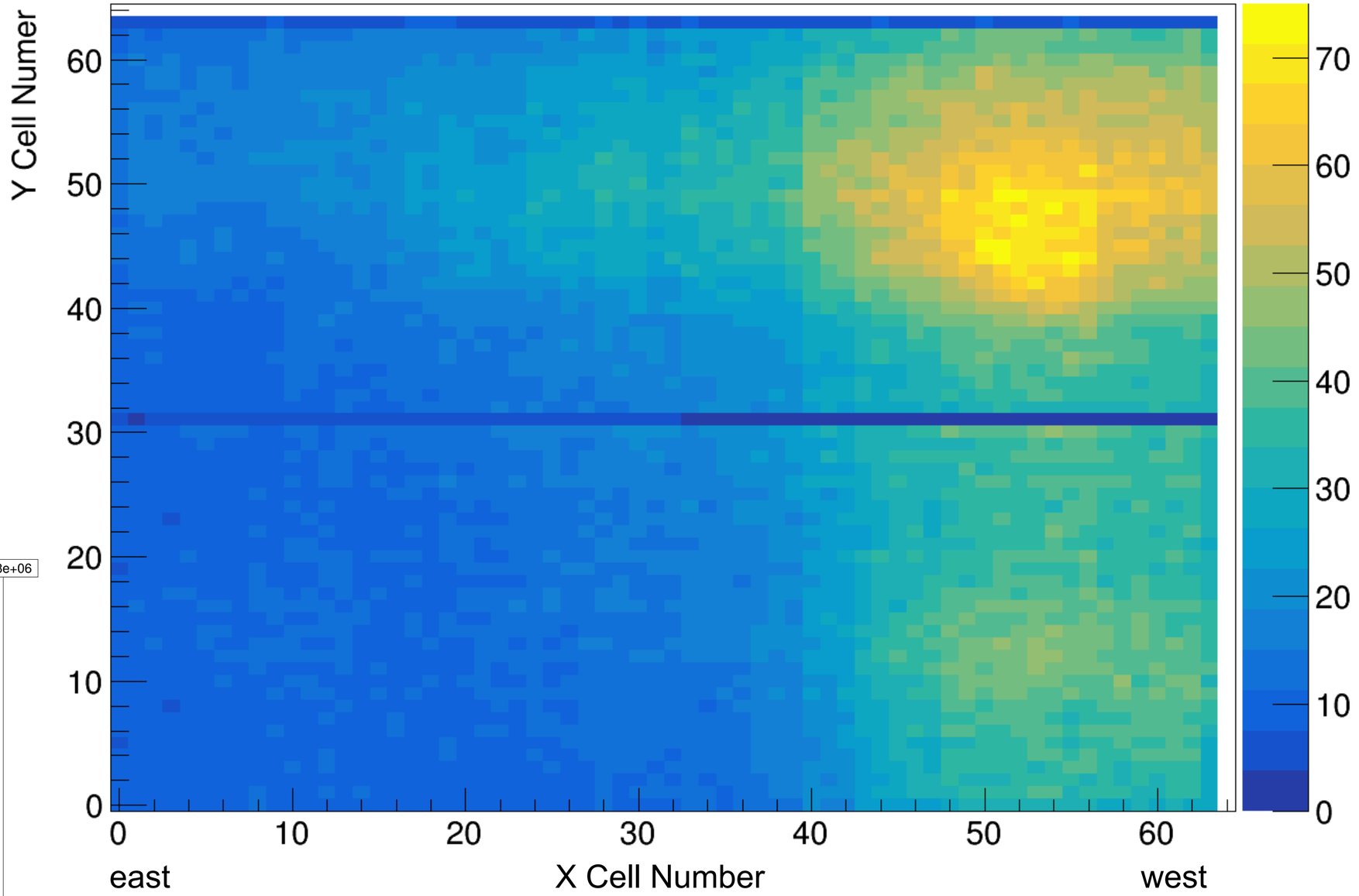




80 GeV

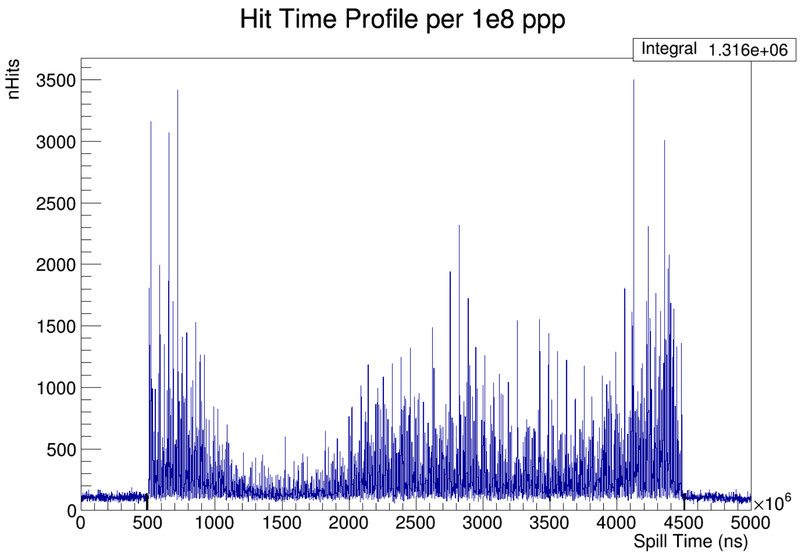
17.2e5 hits/1e8ppp

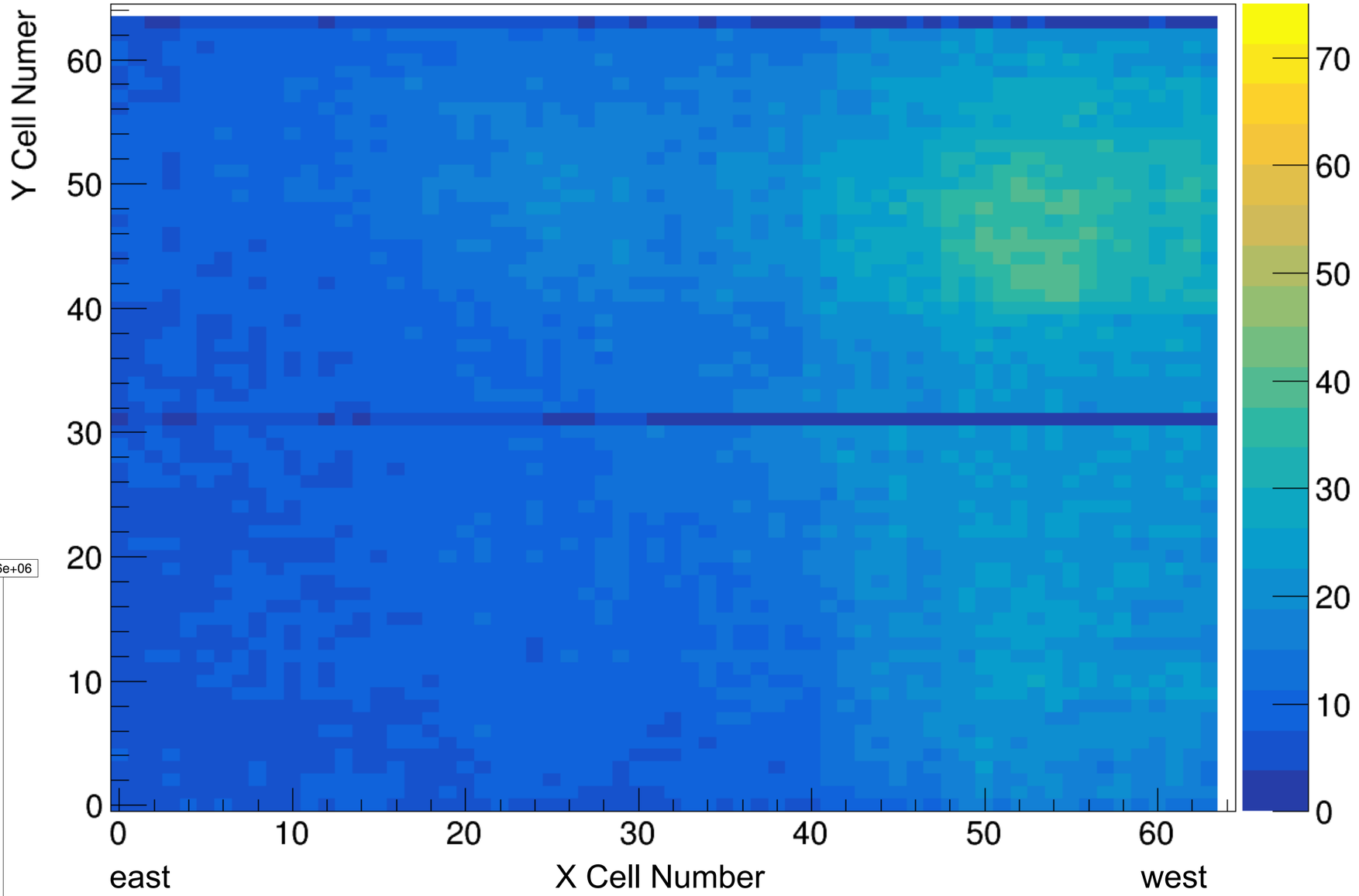




70 GeV

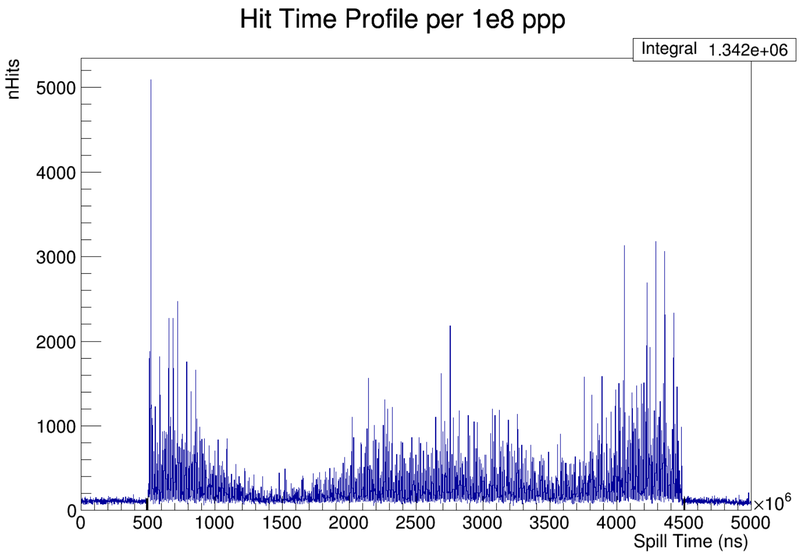
13.2e5 hits/1e8ppp

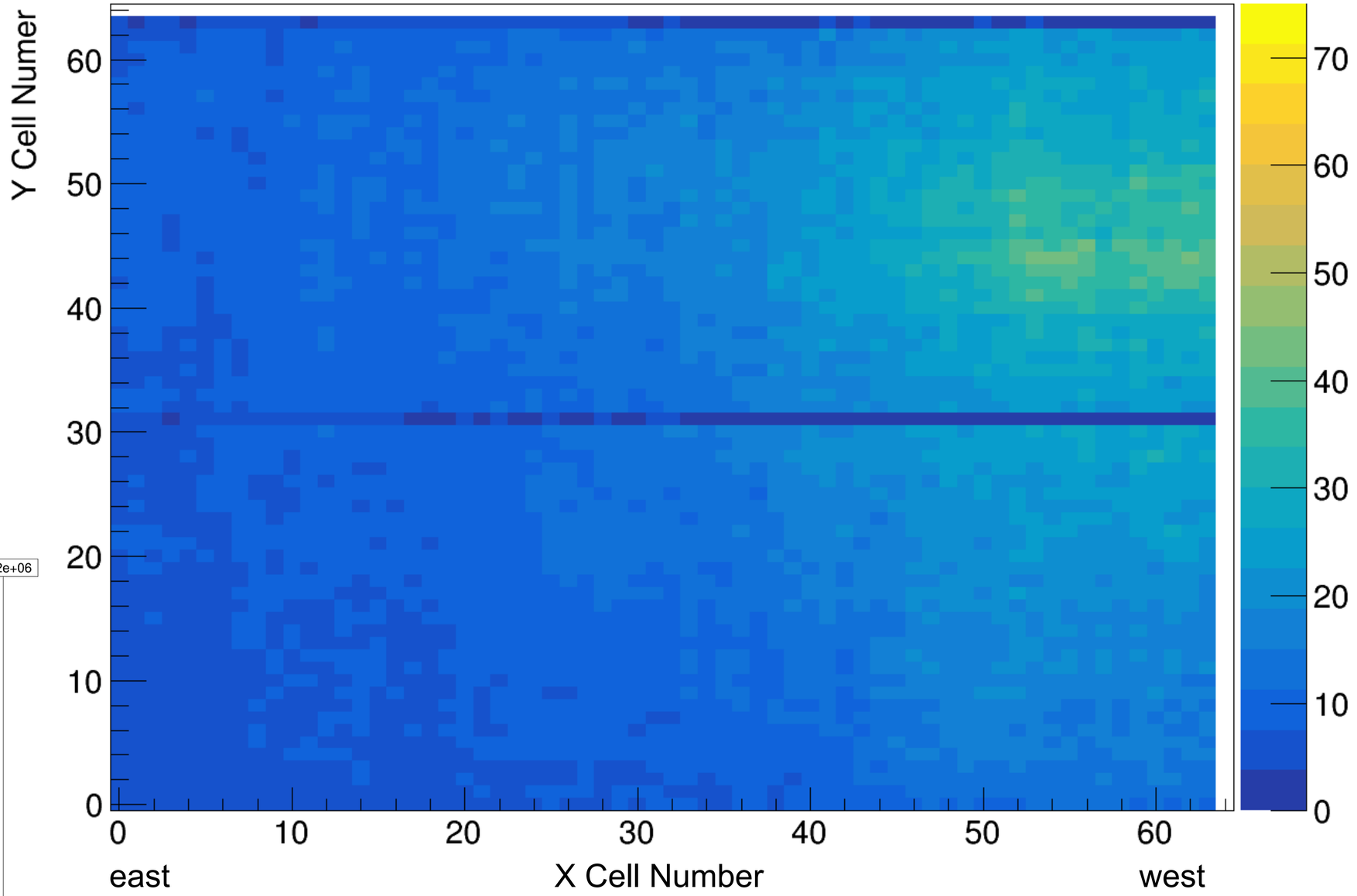




60 GeV

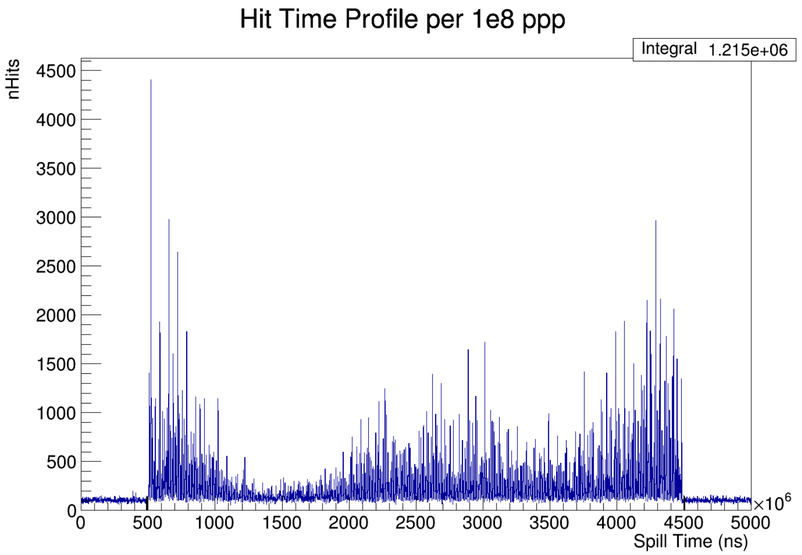
13.4e5 hits/1e8ppp

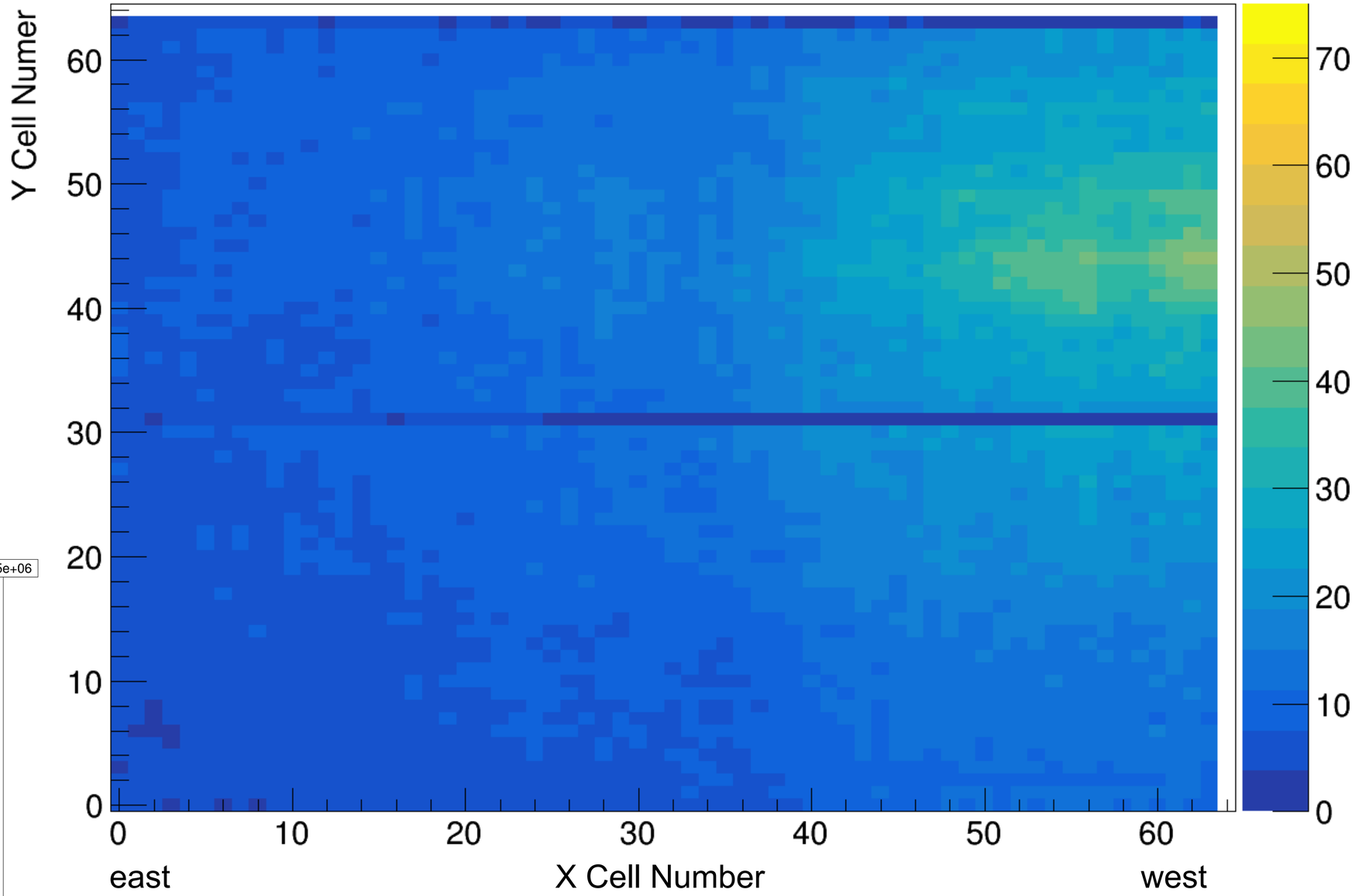




50 GeV

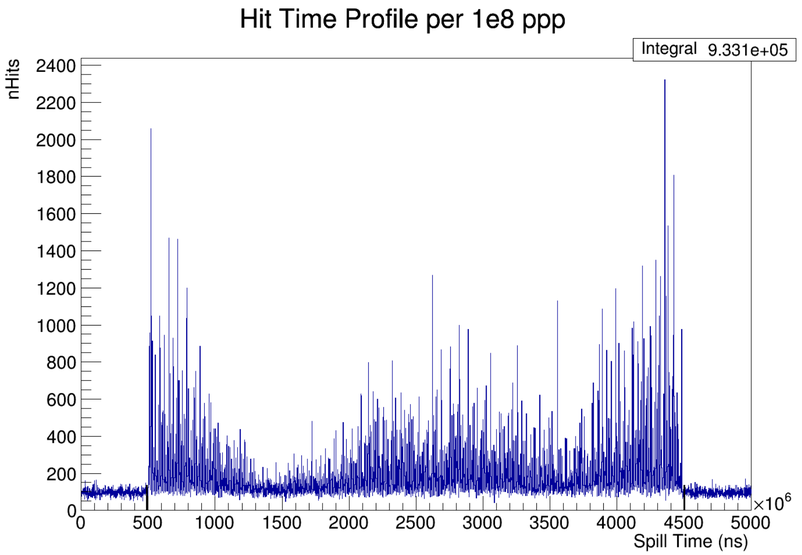
12.2e5 hits/1e8ppp

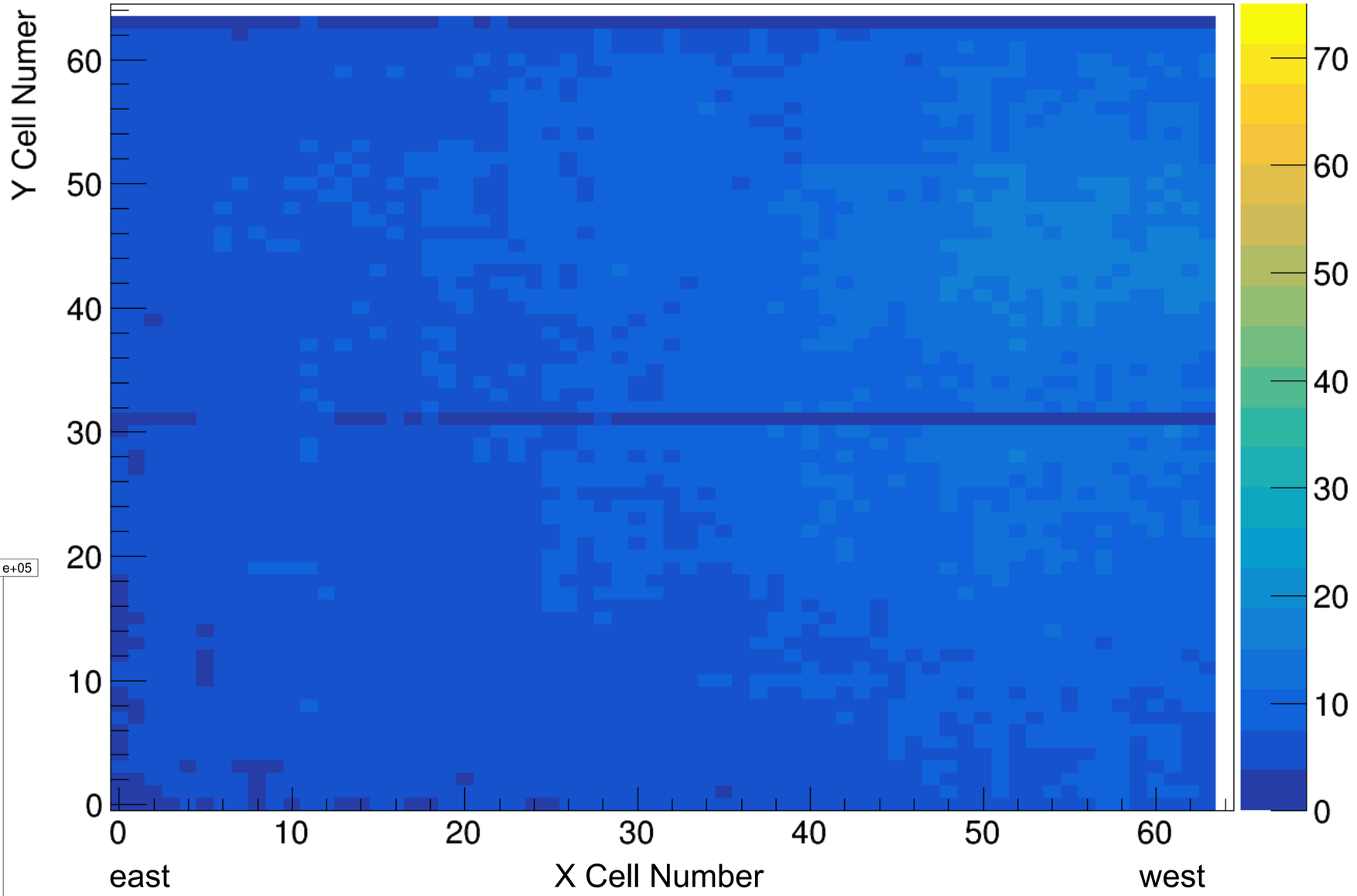




40 GeV

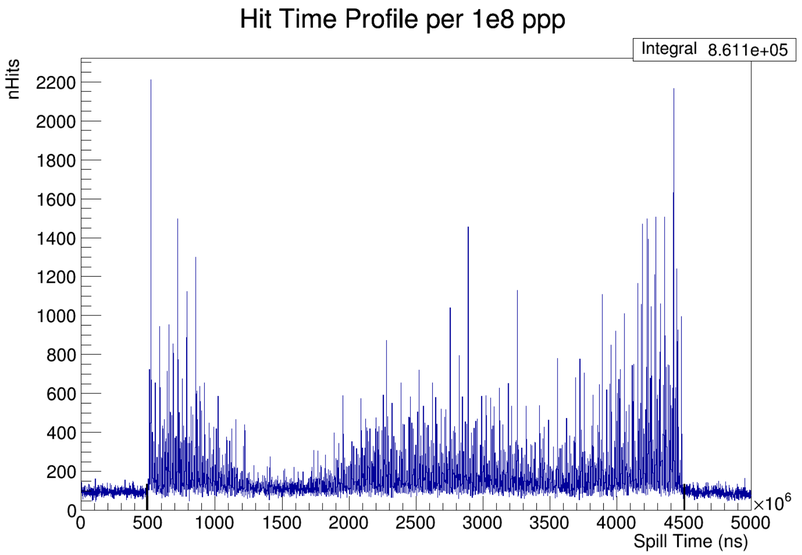
9.33e5 hits/1e8ppp

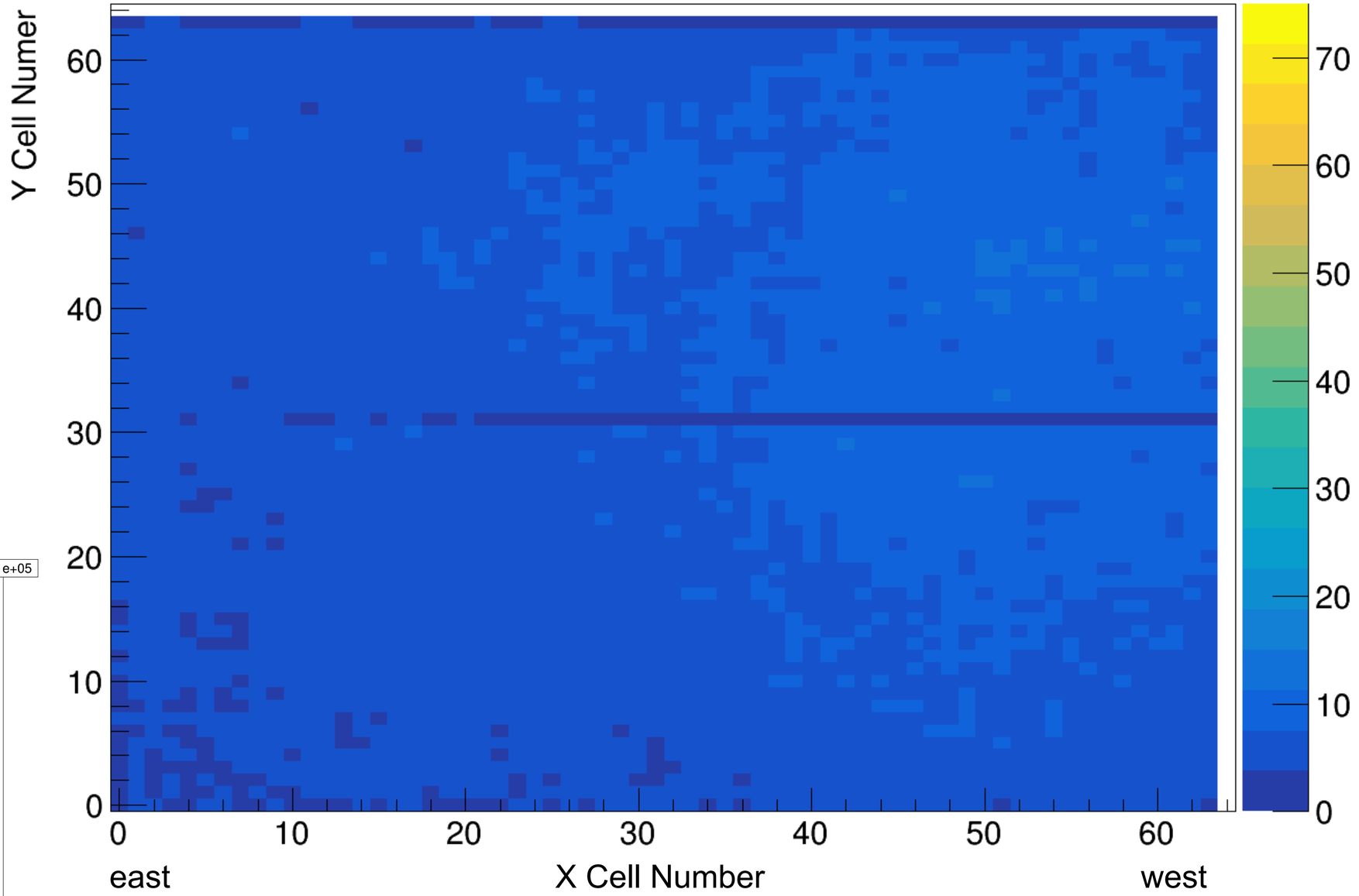




30 GeV

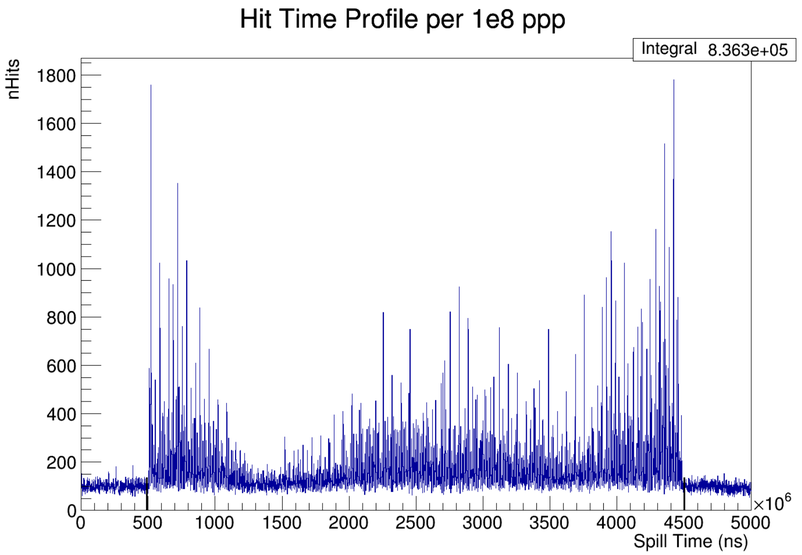
8.61e5 hits/1e8ppp

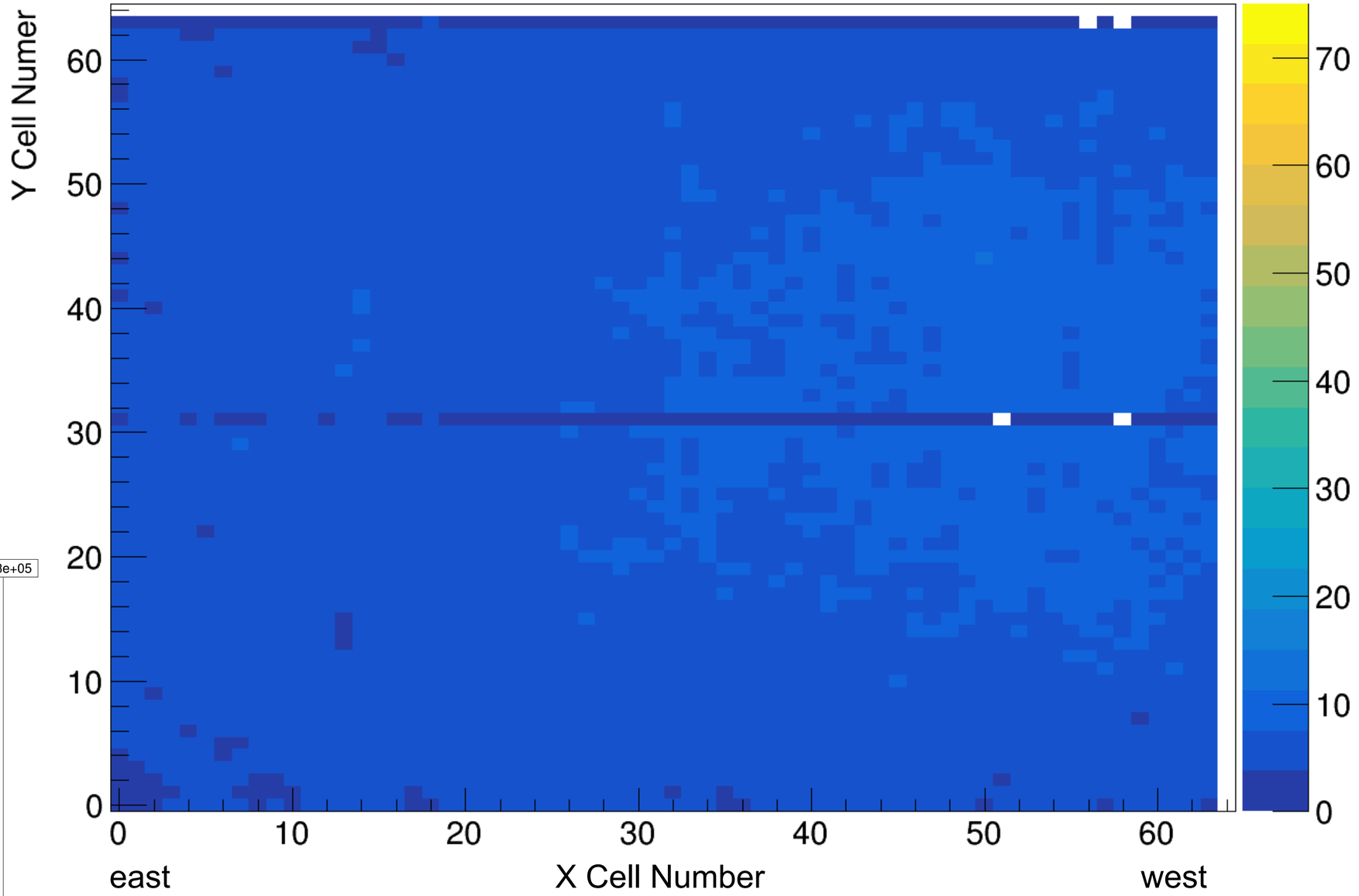




20 GeV

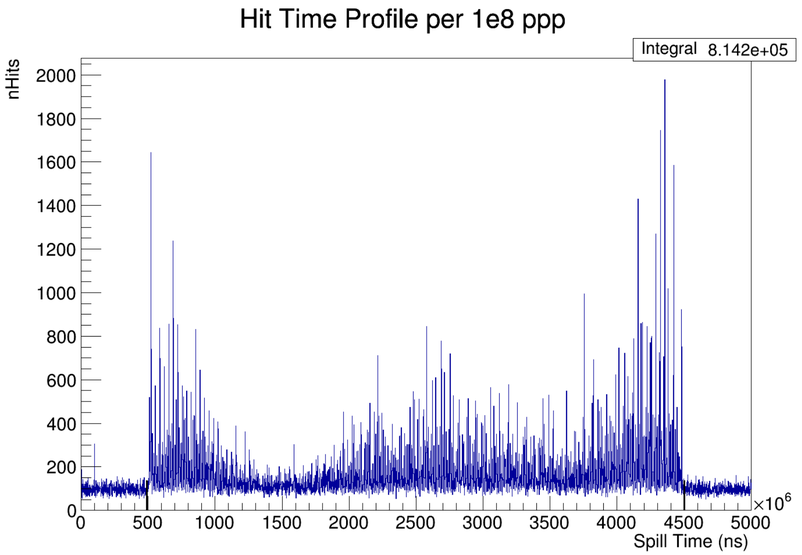
8.36e5 hits/1e8ppp

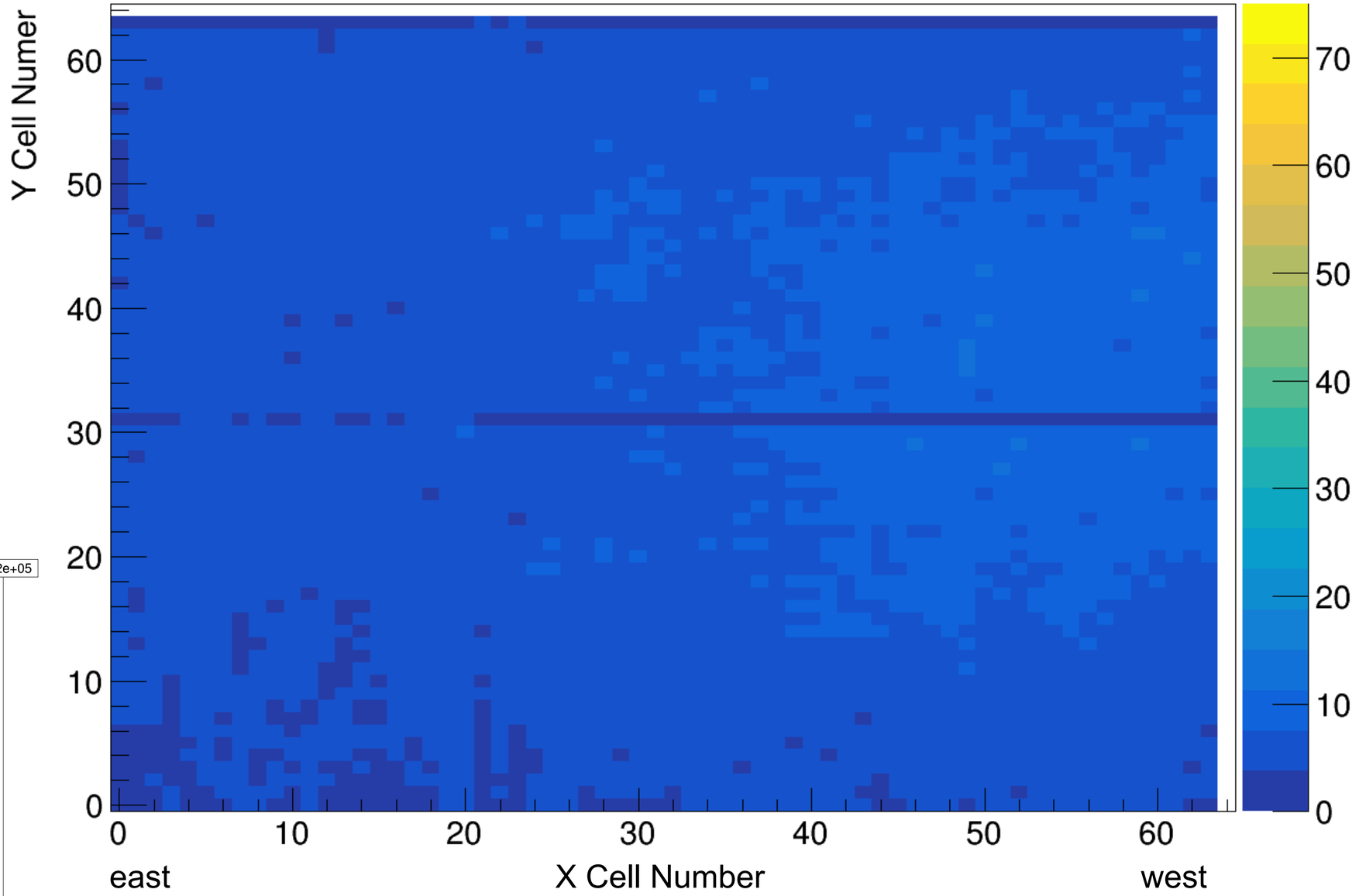




10 GeV

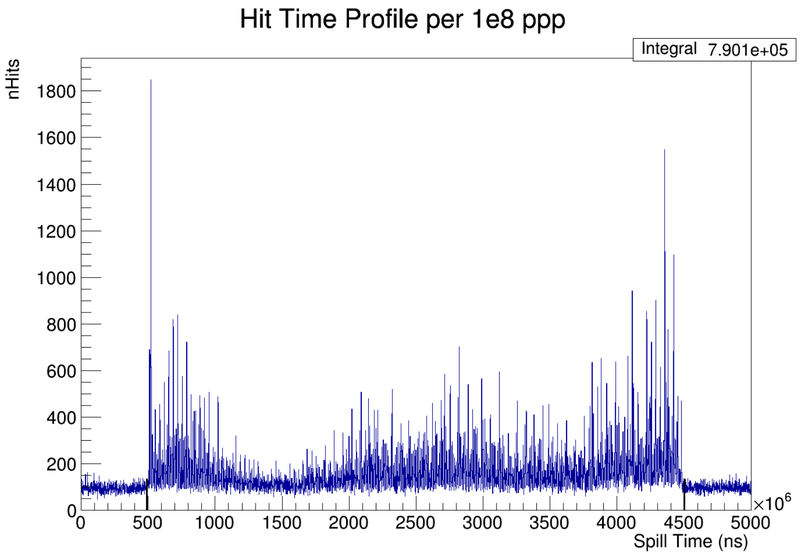
8.14e5 hits/1e8ppp

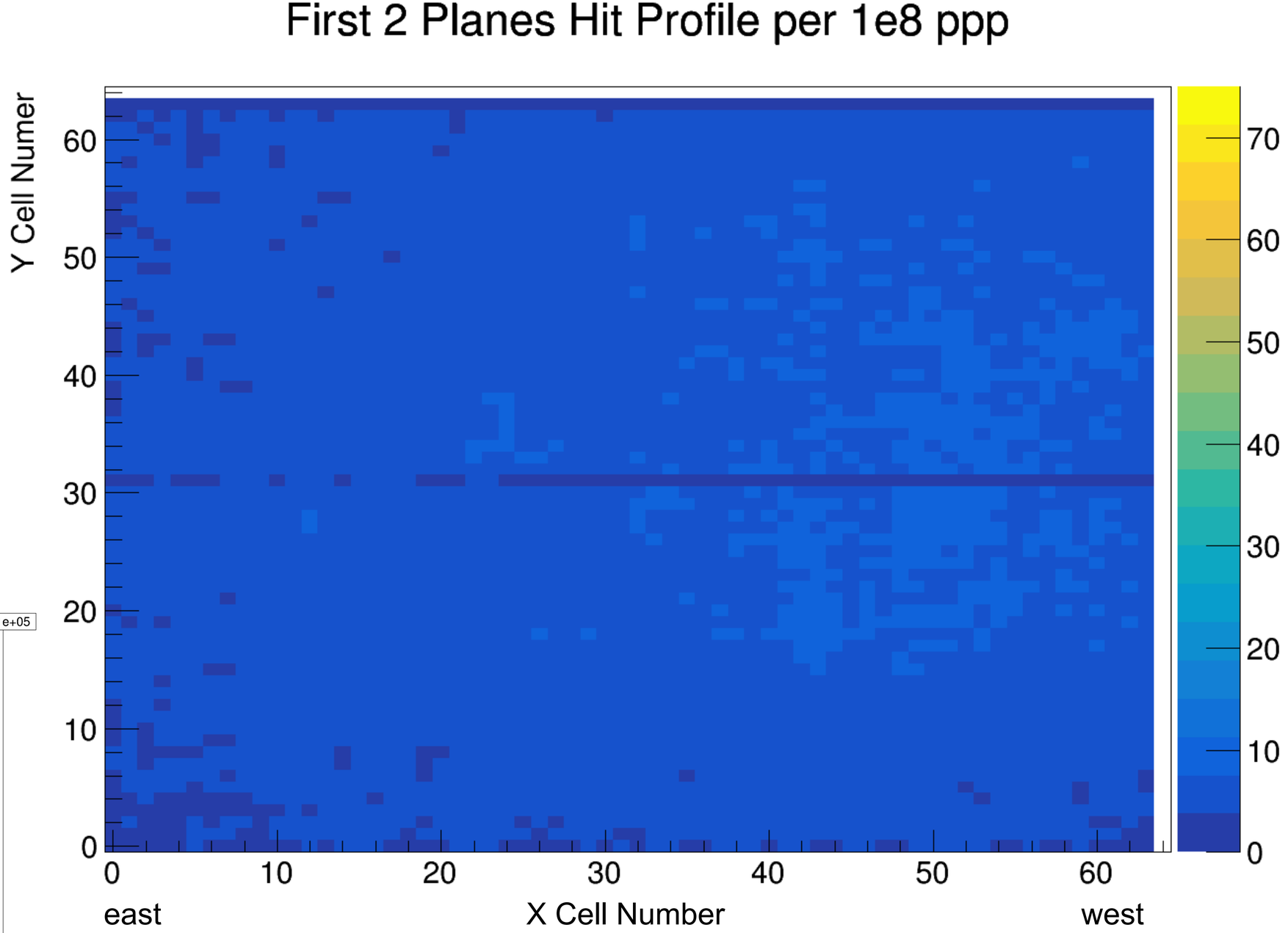




0 GeV
(dipoles off)

7.90e5 hits/1e8ppp

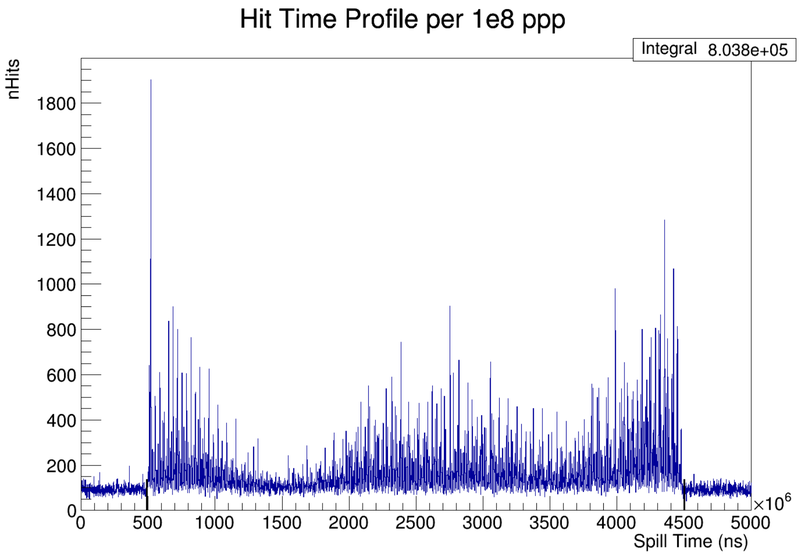


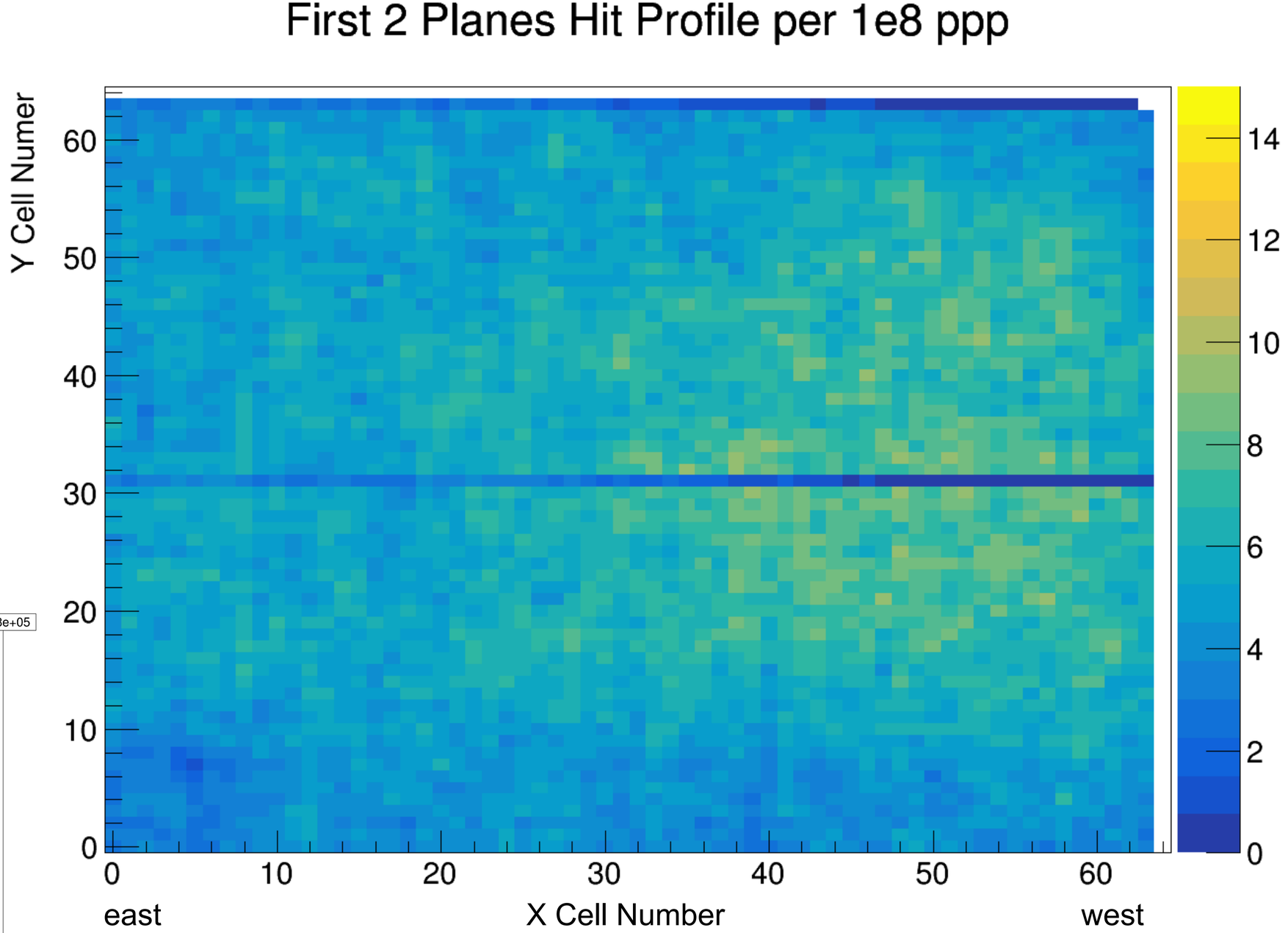


Closed Collimator

80 GeV

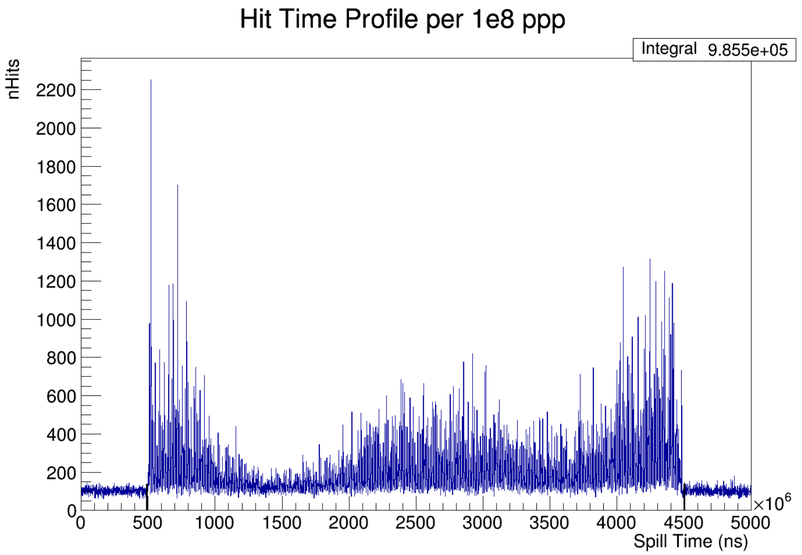
8.04e5 hits/1e8ppp

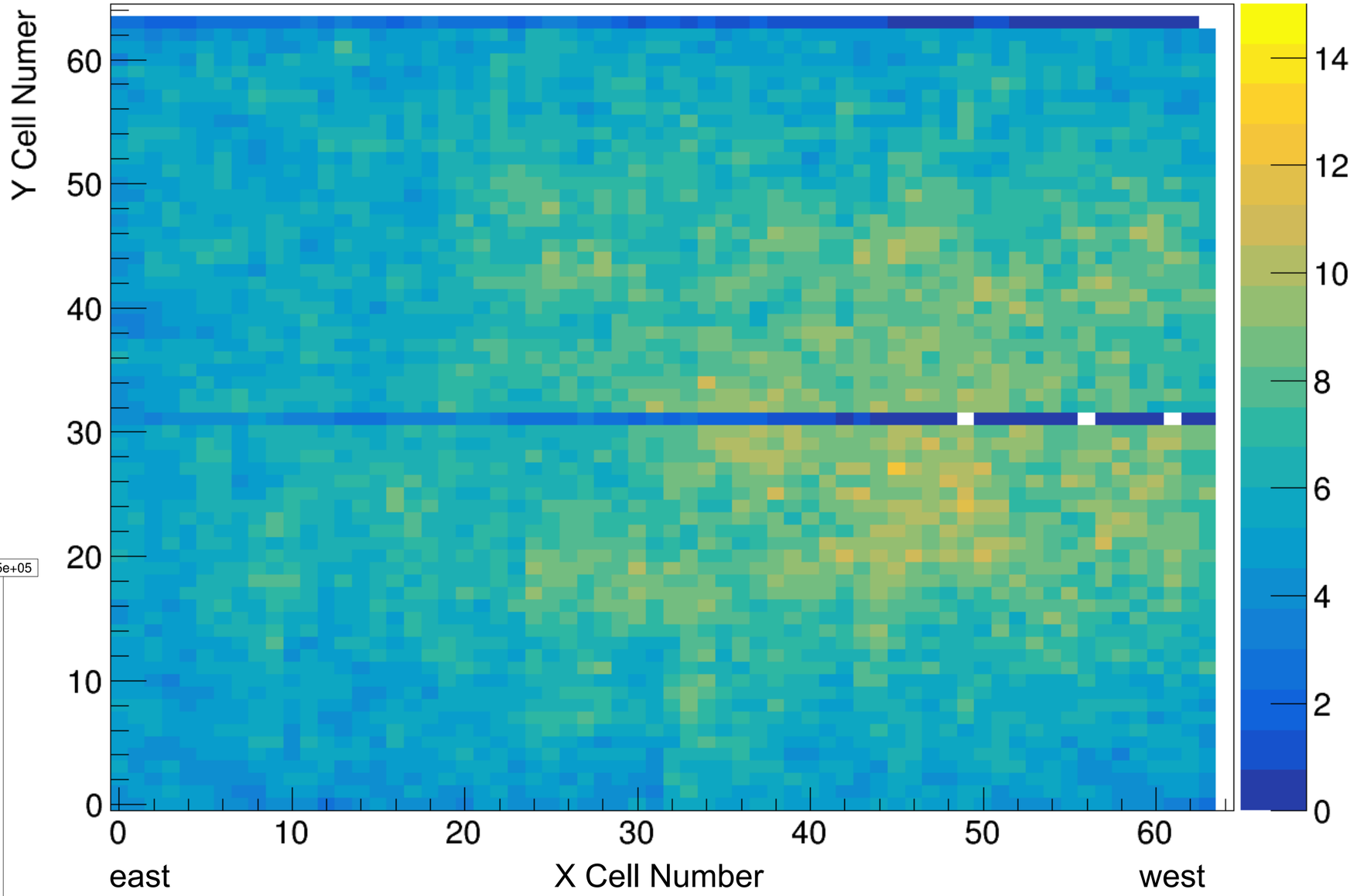




64 GeV

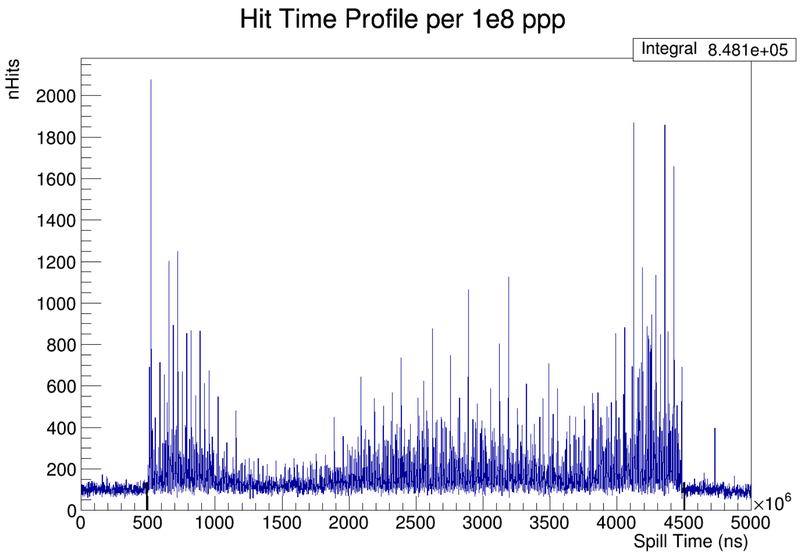
9.86e5 hits/1e8ppp

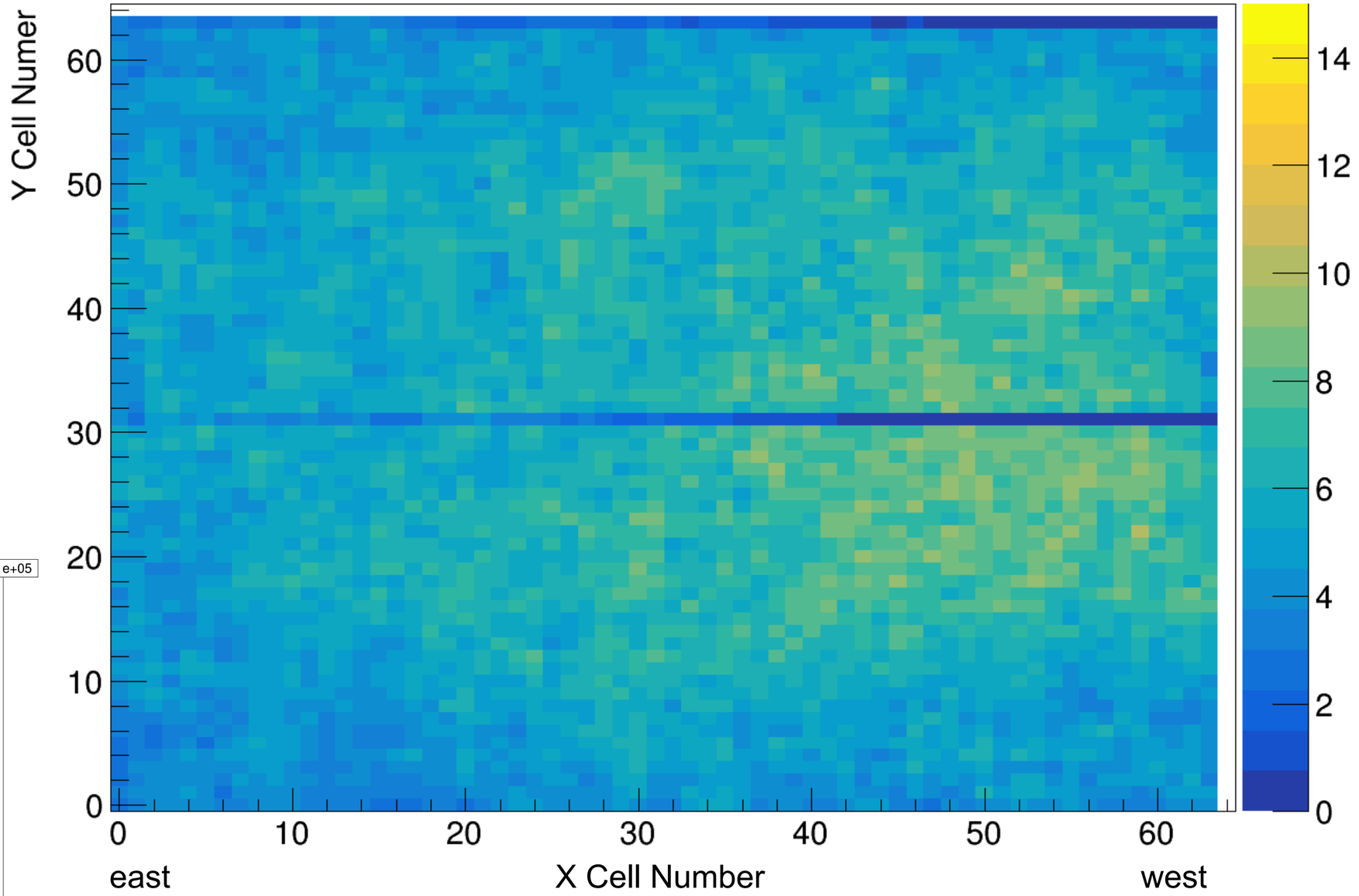




40 GeV

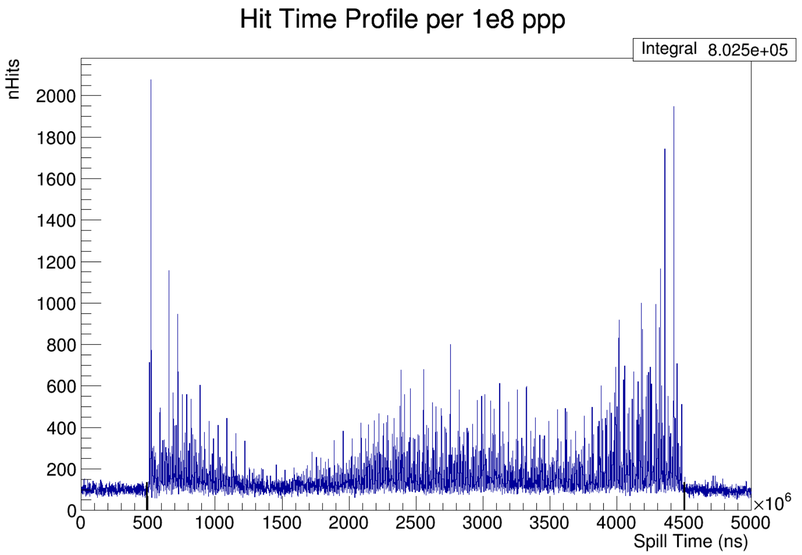
8.48e5 hits/1e8ppp

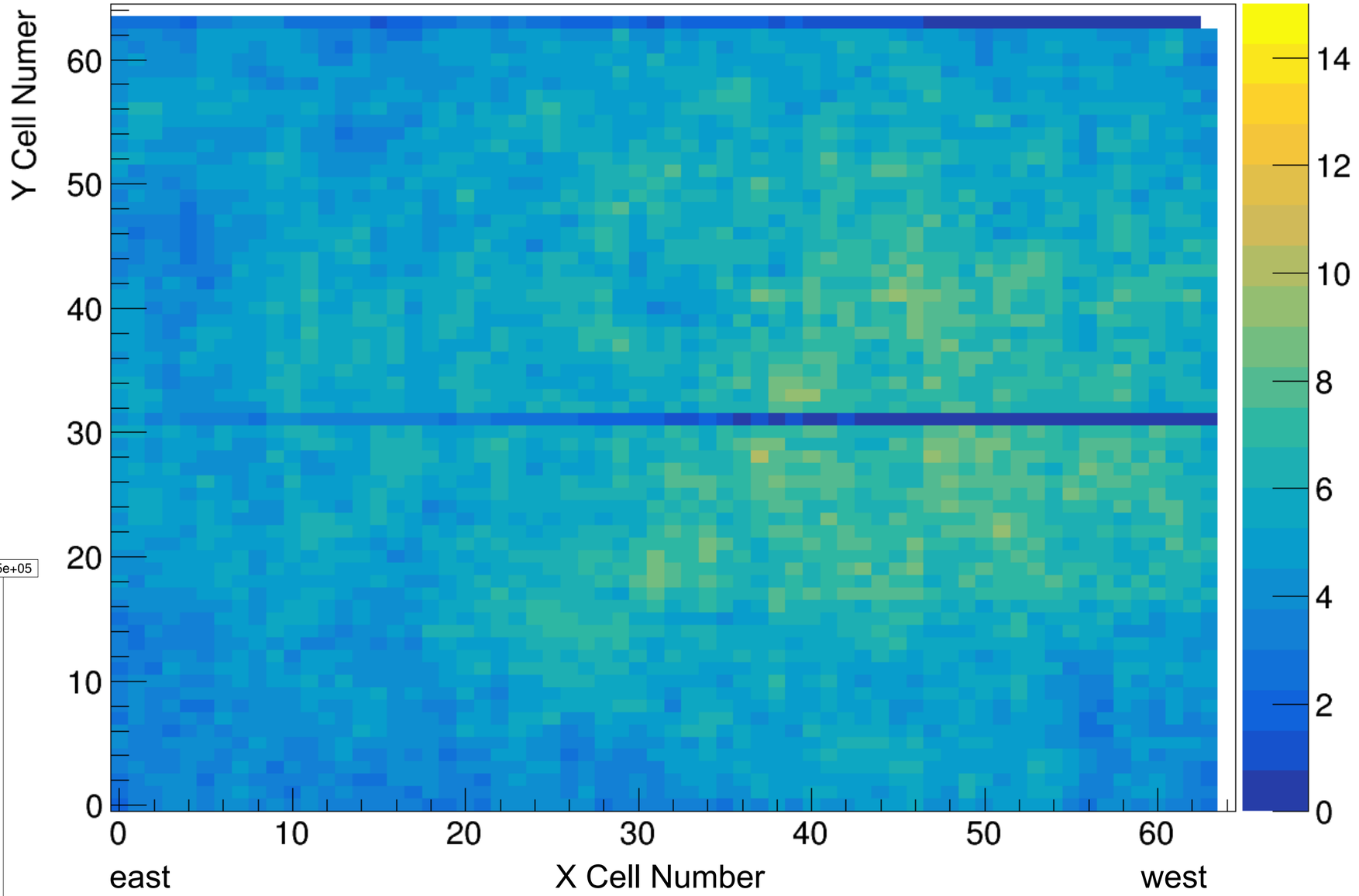


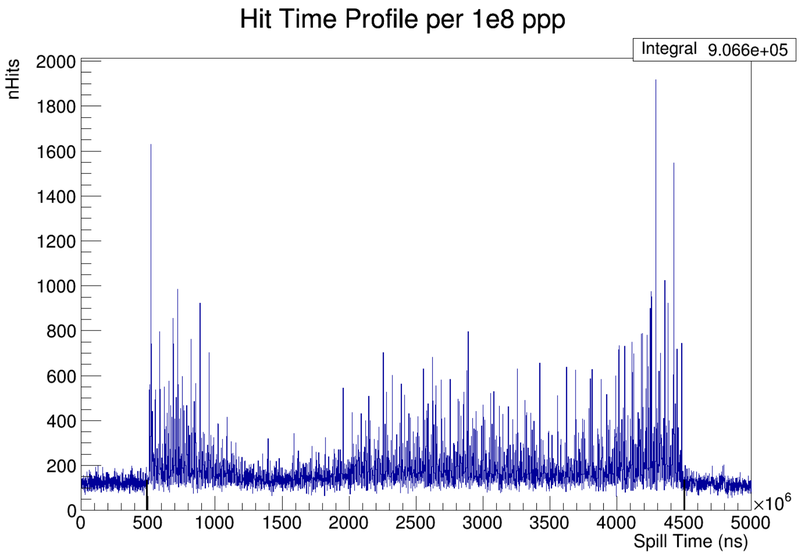
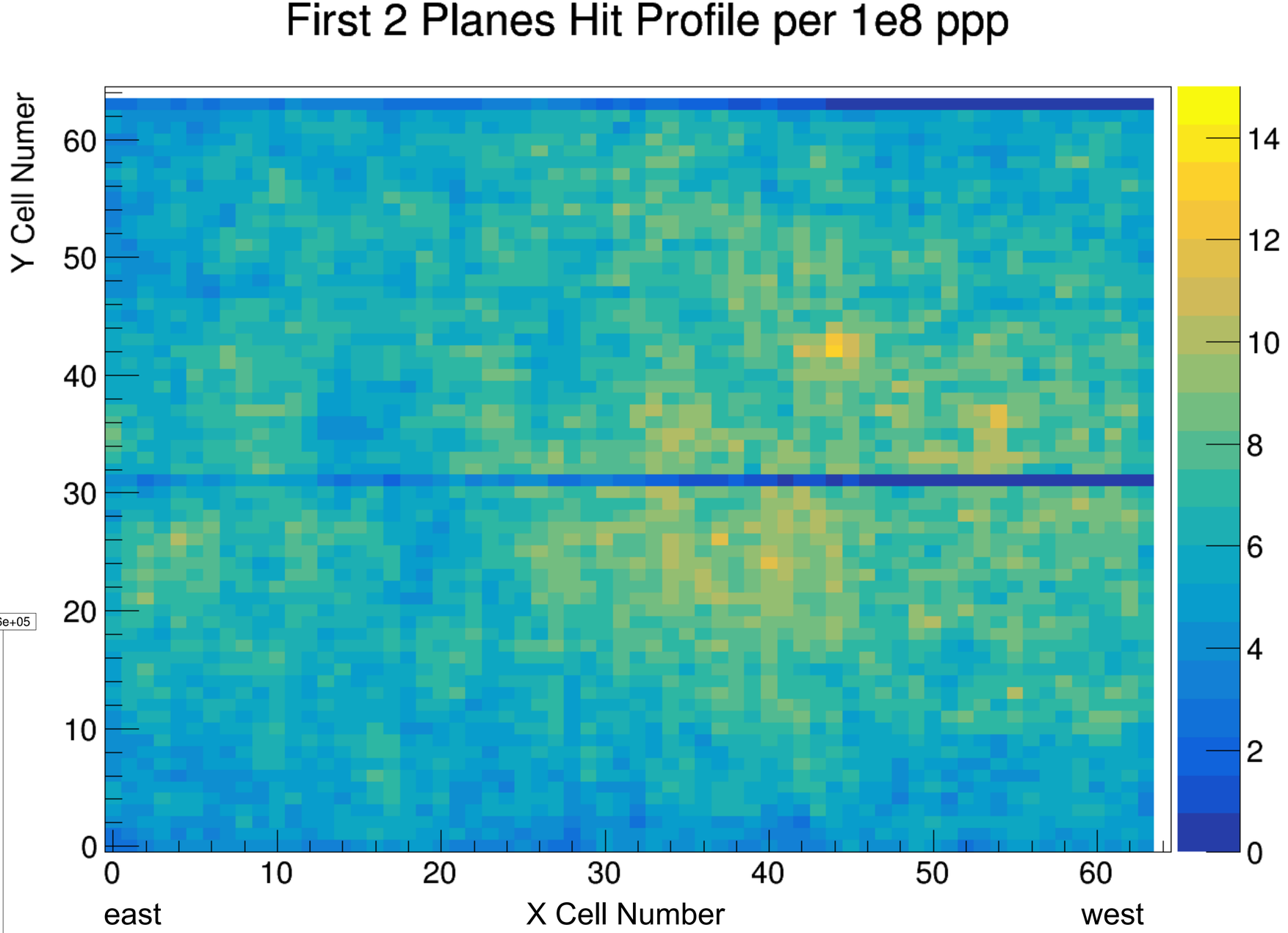


20 GeV

8.03e5 hits/1e8ppp





0 GeV

9.07e5 hits/1e8ppp