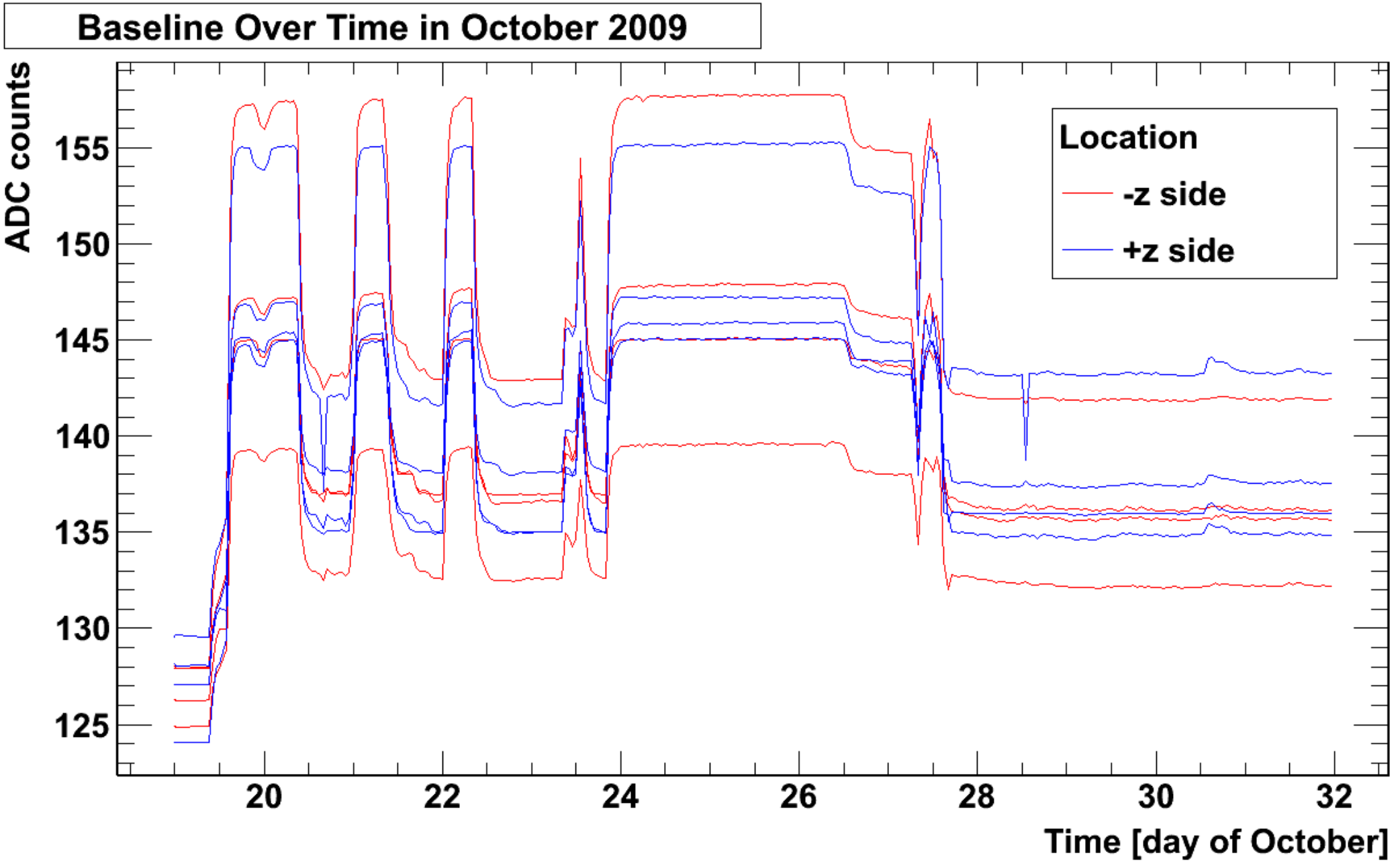
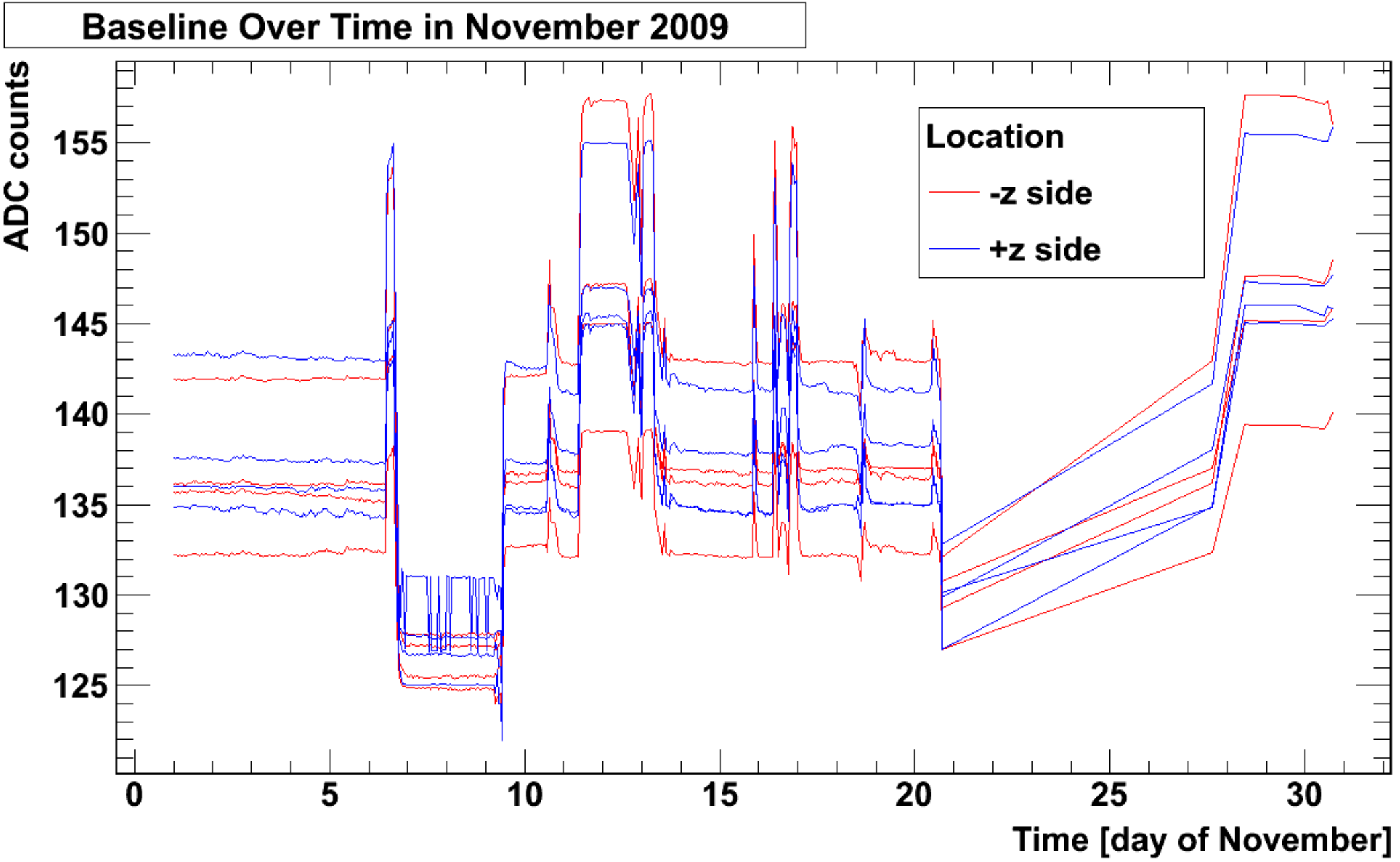
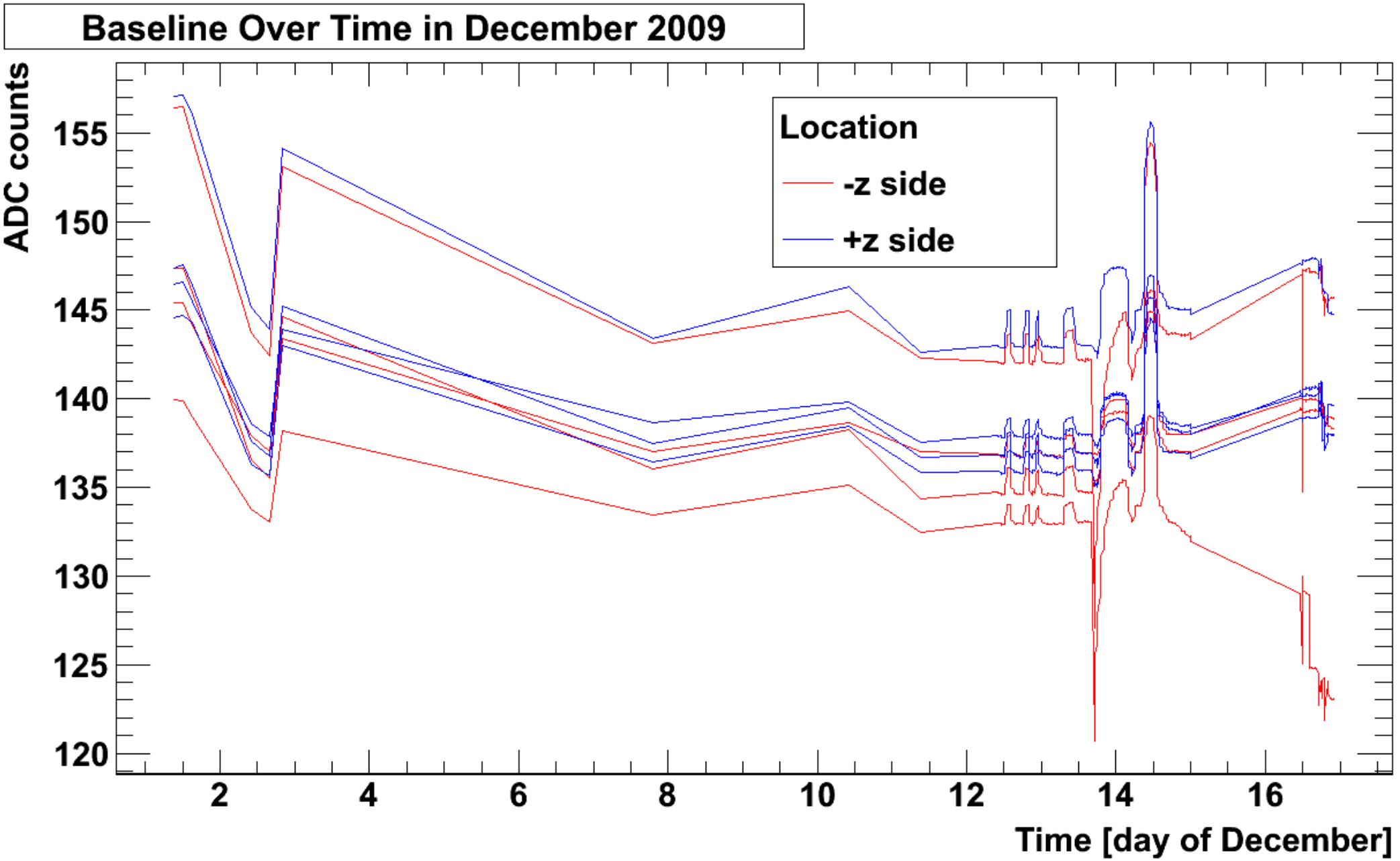
Summary of the Activity at CERN in February 2010

Baseline Stability

- Hourly baseline measurements during the shutdown
- Baseline data during the run supposed to be extracted from captured signals (to be done)
- Later on, baseline measured at each restart of the readout process every 15 min (established to work around the memory leak)


Baseline Over Time in October 2009
ADC counts
155
150
145
140
135
130
125
20
22
24
26
28
30
32
Time [day of October]
Location
-z side
+z side


Baseline Over Time in November 2009
ADC counts
155
150
145
140
135
130
125
0
5
10
15
20
25
30
Time [day of November]
Location
-z side
+z side


Baseline Over Time in December 2009
ADC counts
155
150
145
140
135
130
125
120
2
4
6
8
10
12
14
16
Time [day of December]
Location
-z side
+z side

Look-up Table

- Stored in a CAEN V1495 FPGA board
- Board installed, connected, and tested
  - No interference of the wiretapped signal
  - Output signals checked and ok
- Software loads new configurations immediately (no power cycle needed)
- Coincidences A-D + OR are fed into the scaler
- Flat cable ECL/NIM converter to scaler needed

Investigation of Channel 1/2

- Connectors at optical receiver cleaned
- Connection tested with scope
  - No outside influences
- Ribbon fibres swapped