

FIDVR

Voltage Dip Recordings

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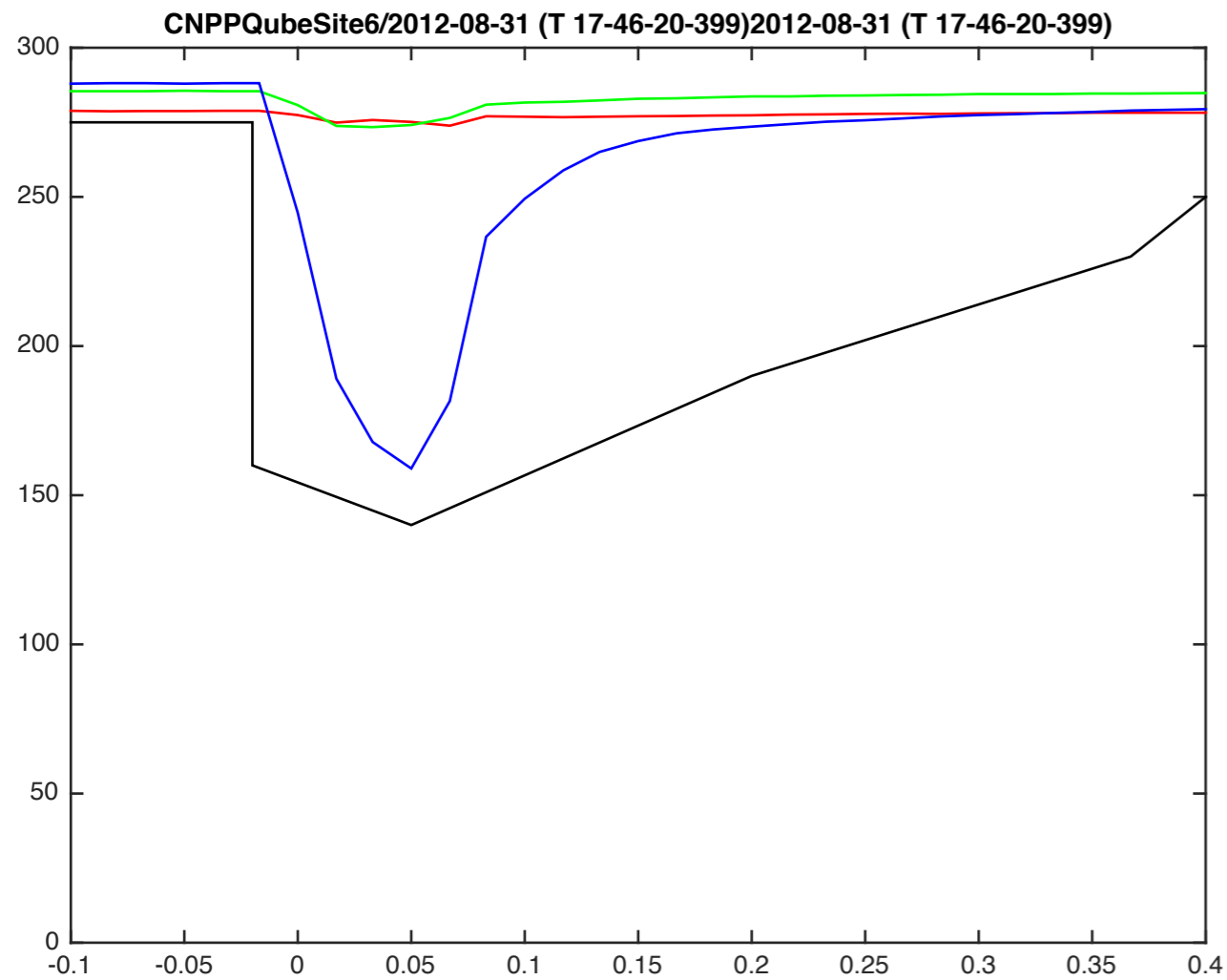
PQube power quality recorders placed at 10 locations in Centerpoint distribution system in 2011

1830 events recorded in 2011 - 2013

Many events are not of interest with regard to FIDVR

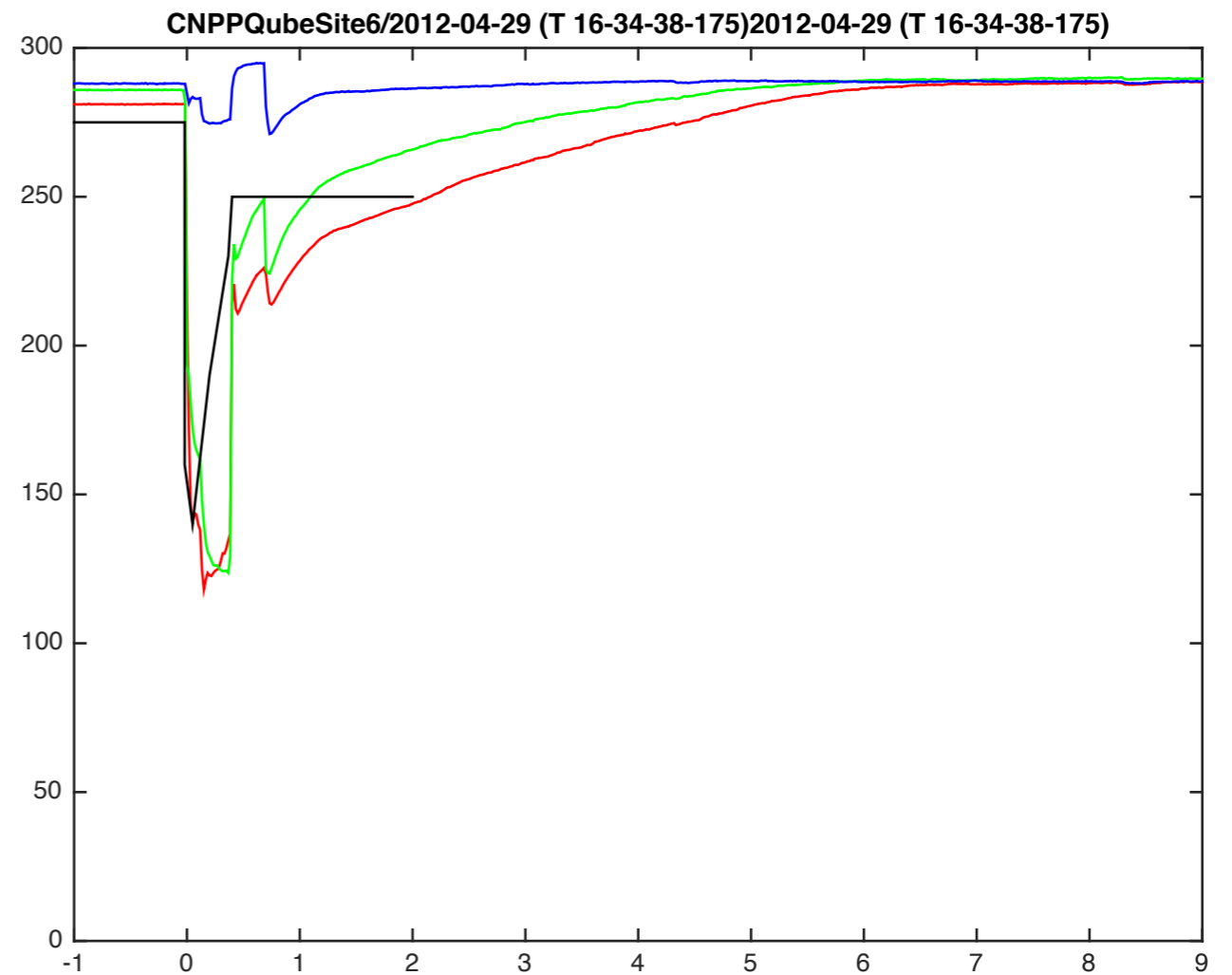
- single point data dropouts
- noise spikes
- normally cleared fault events

Not of interest

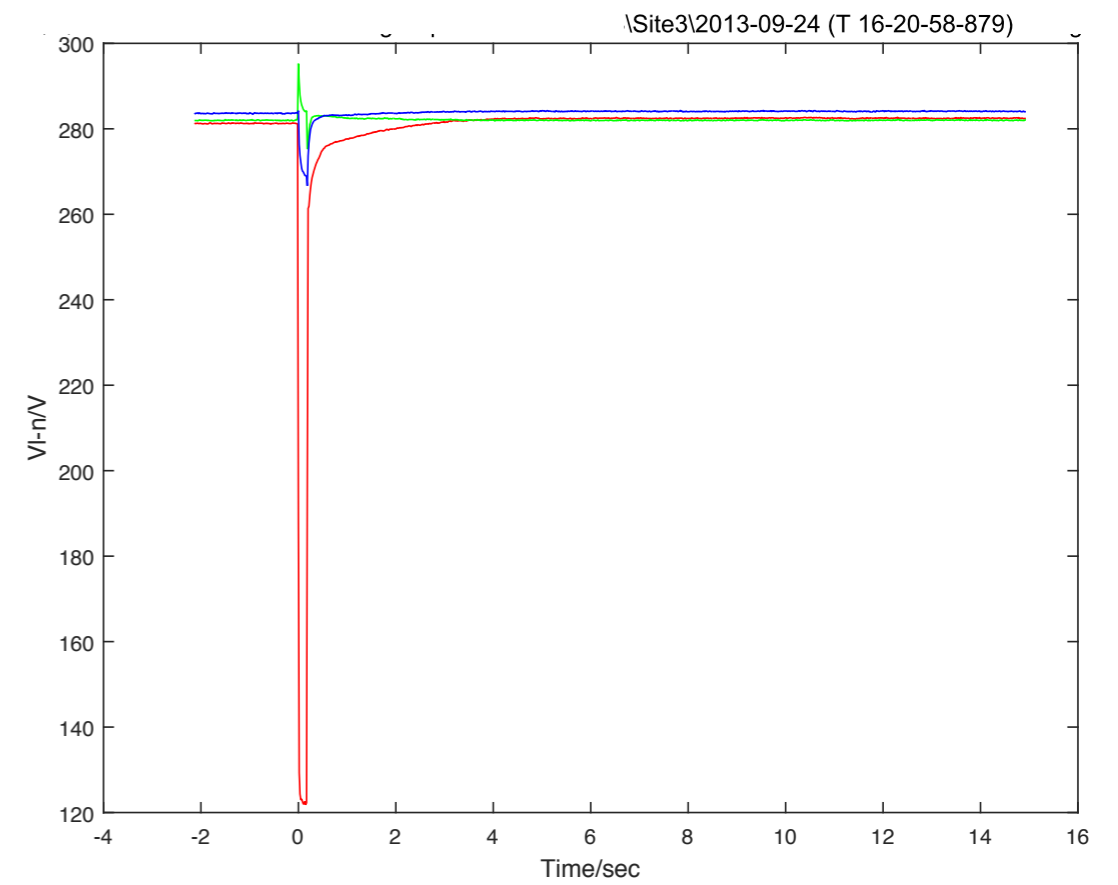
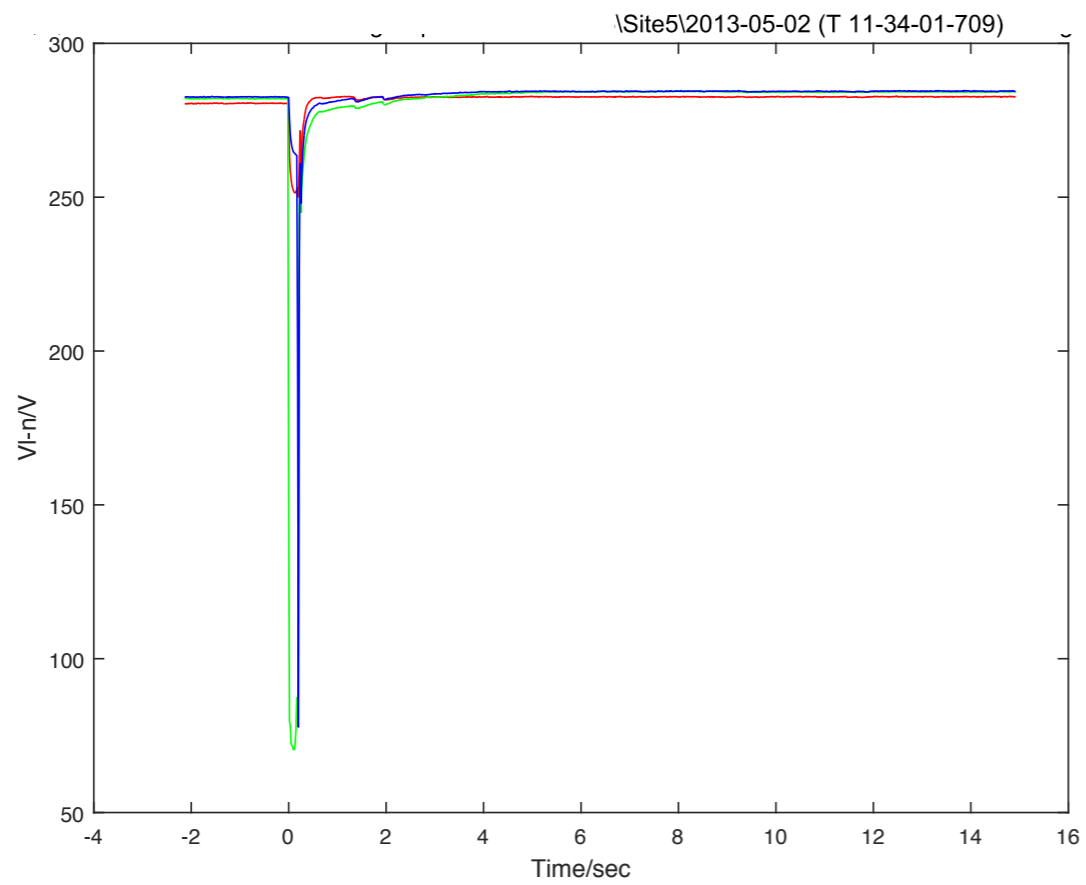
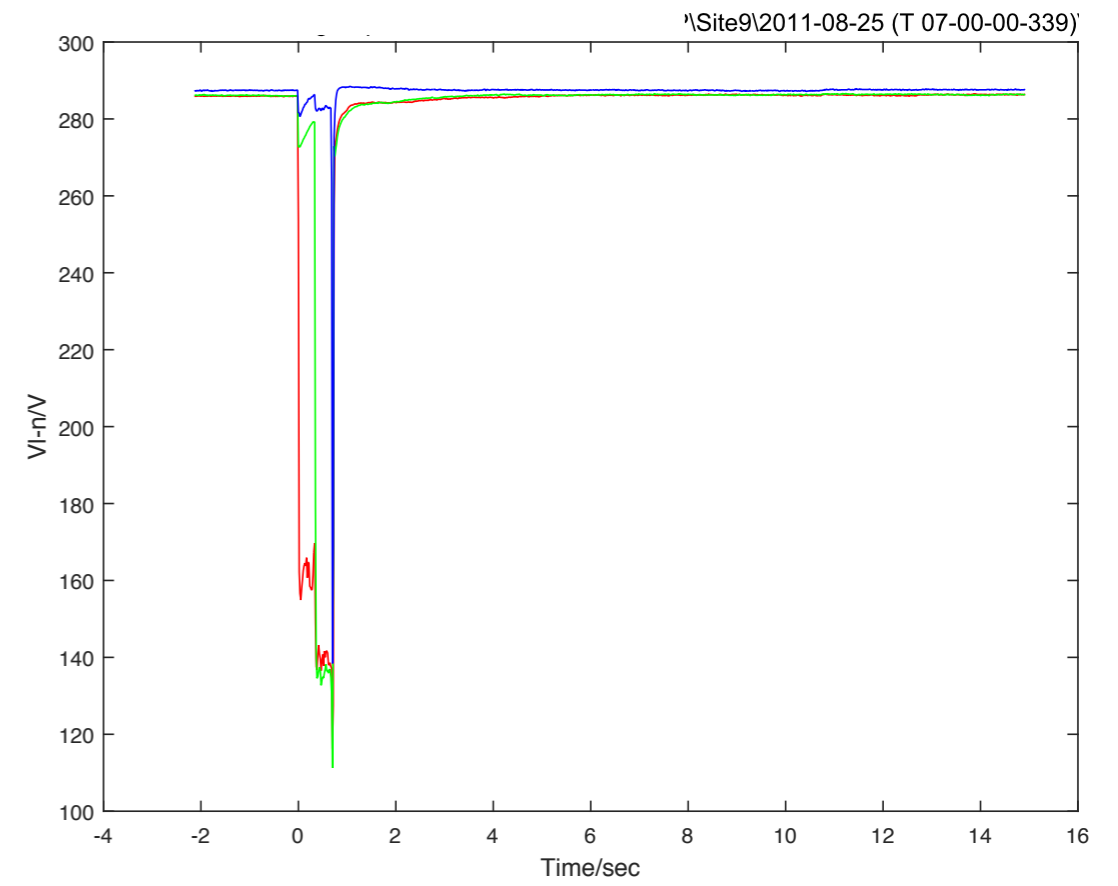
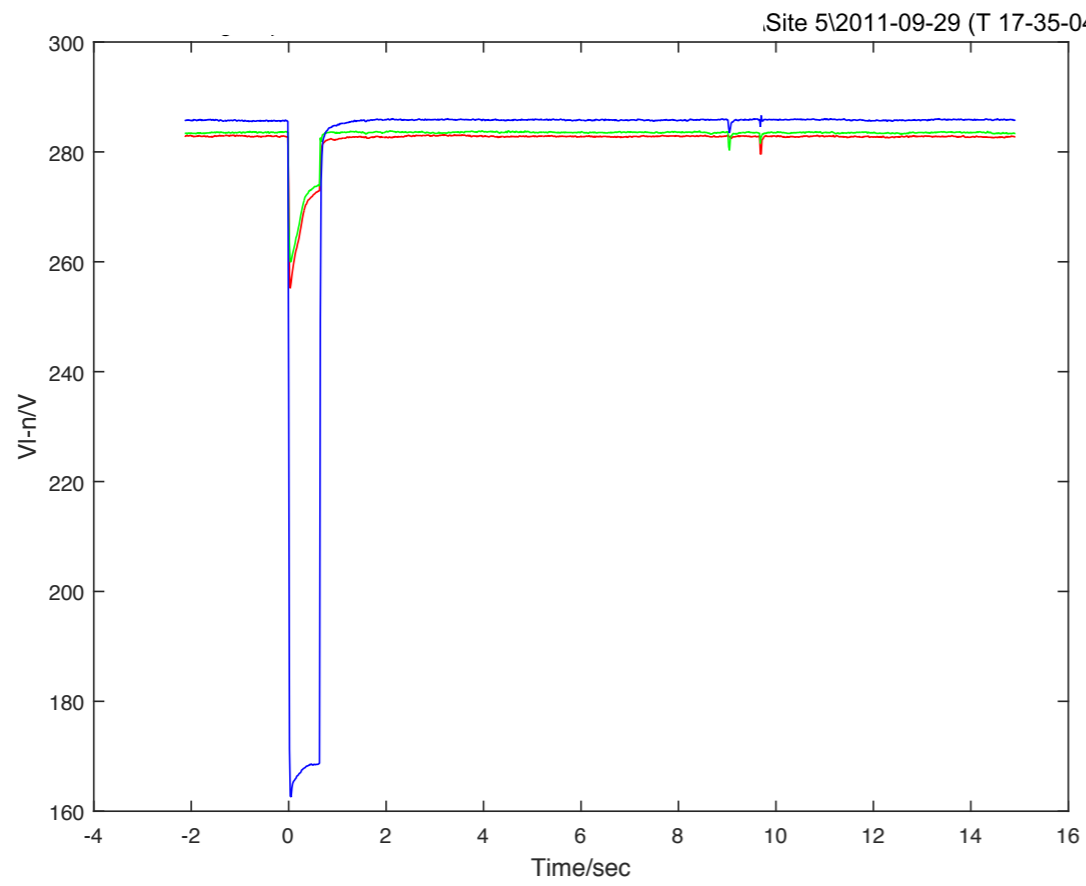


Selected

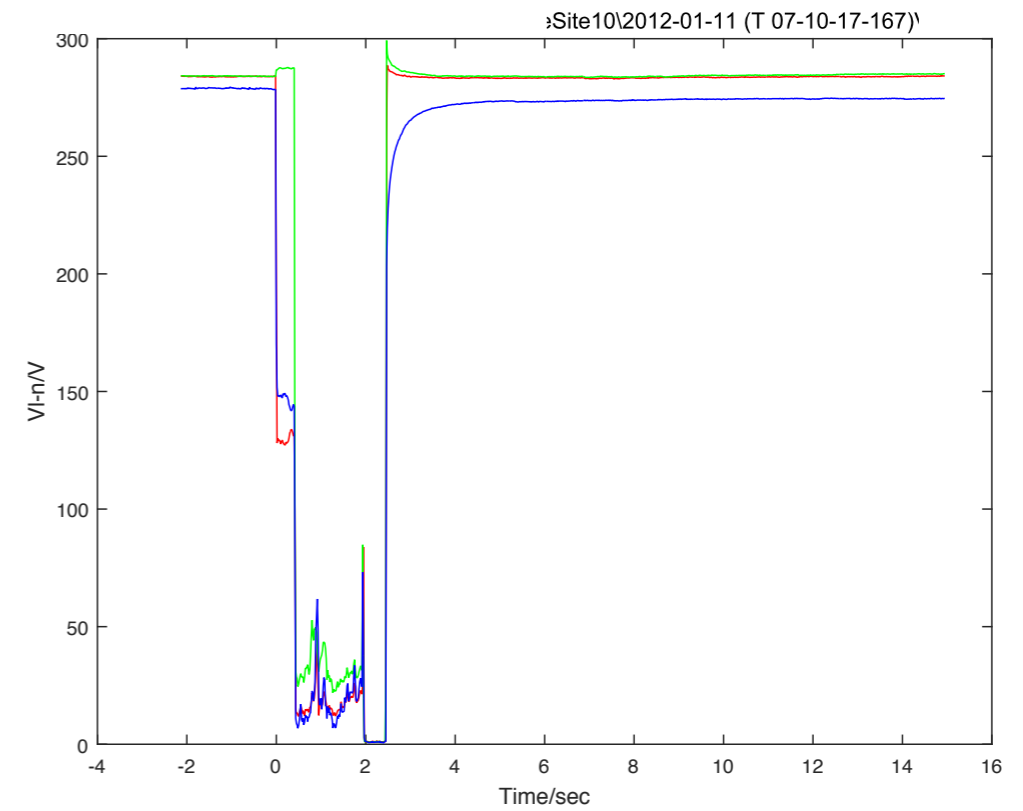
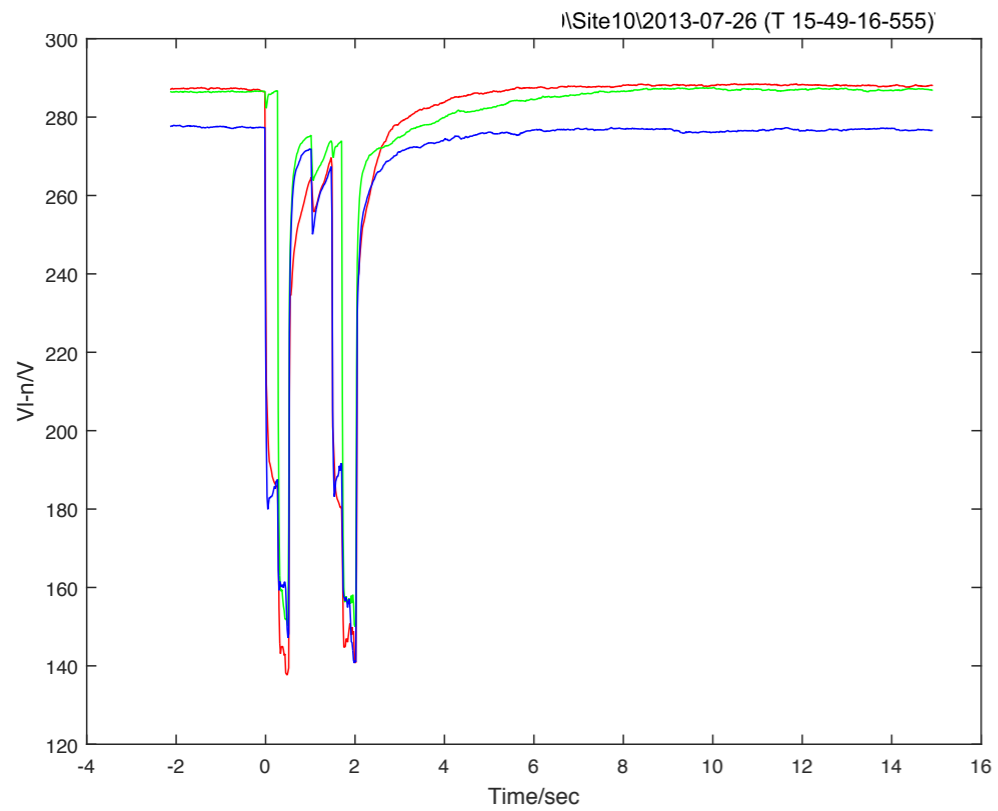
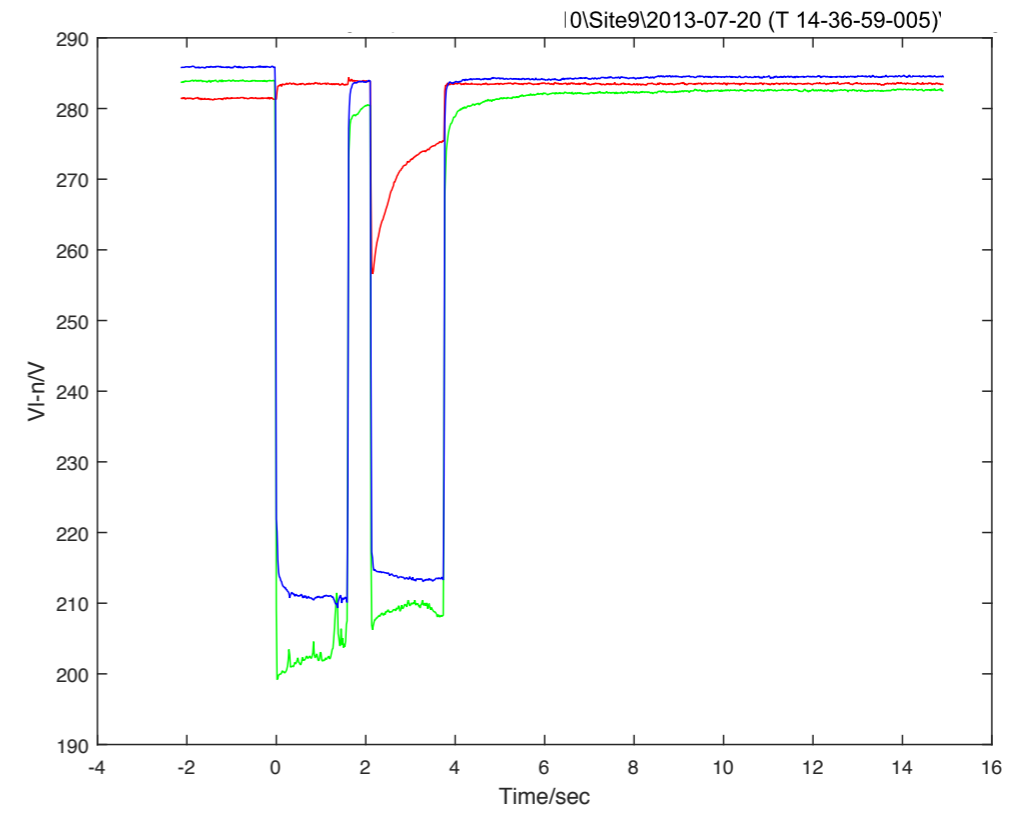
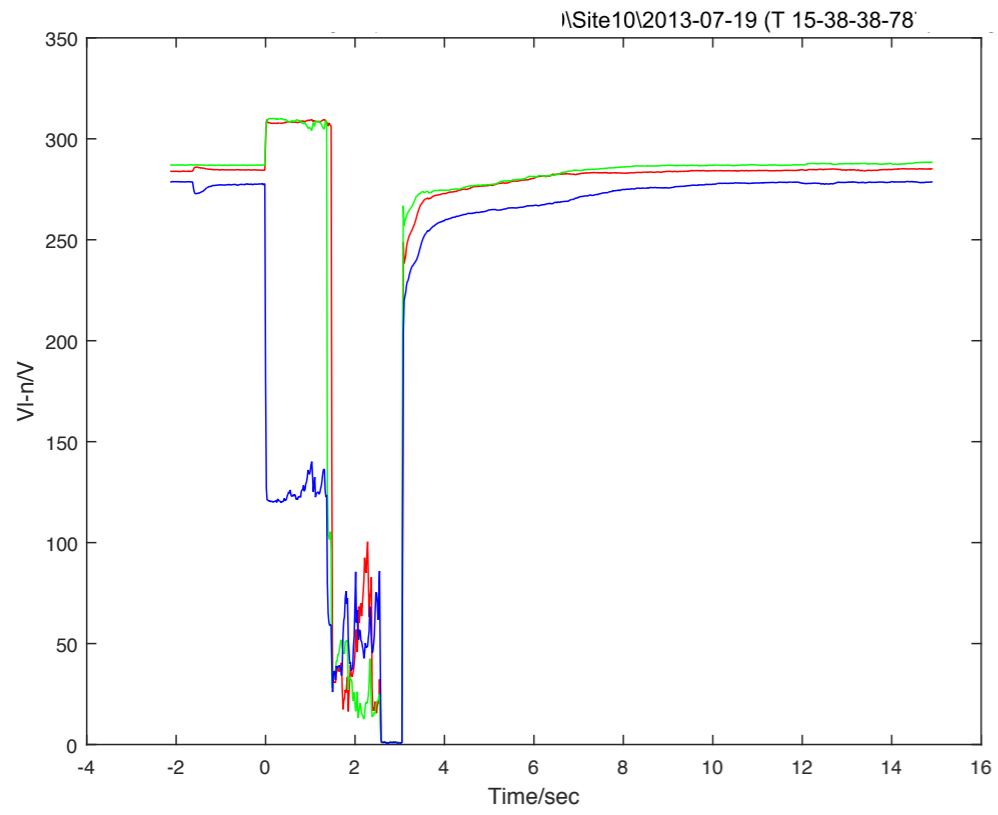
first pass filtering
selected 317 events



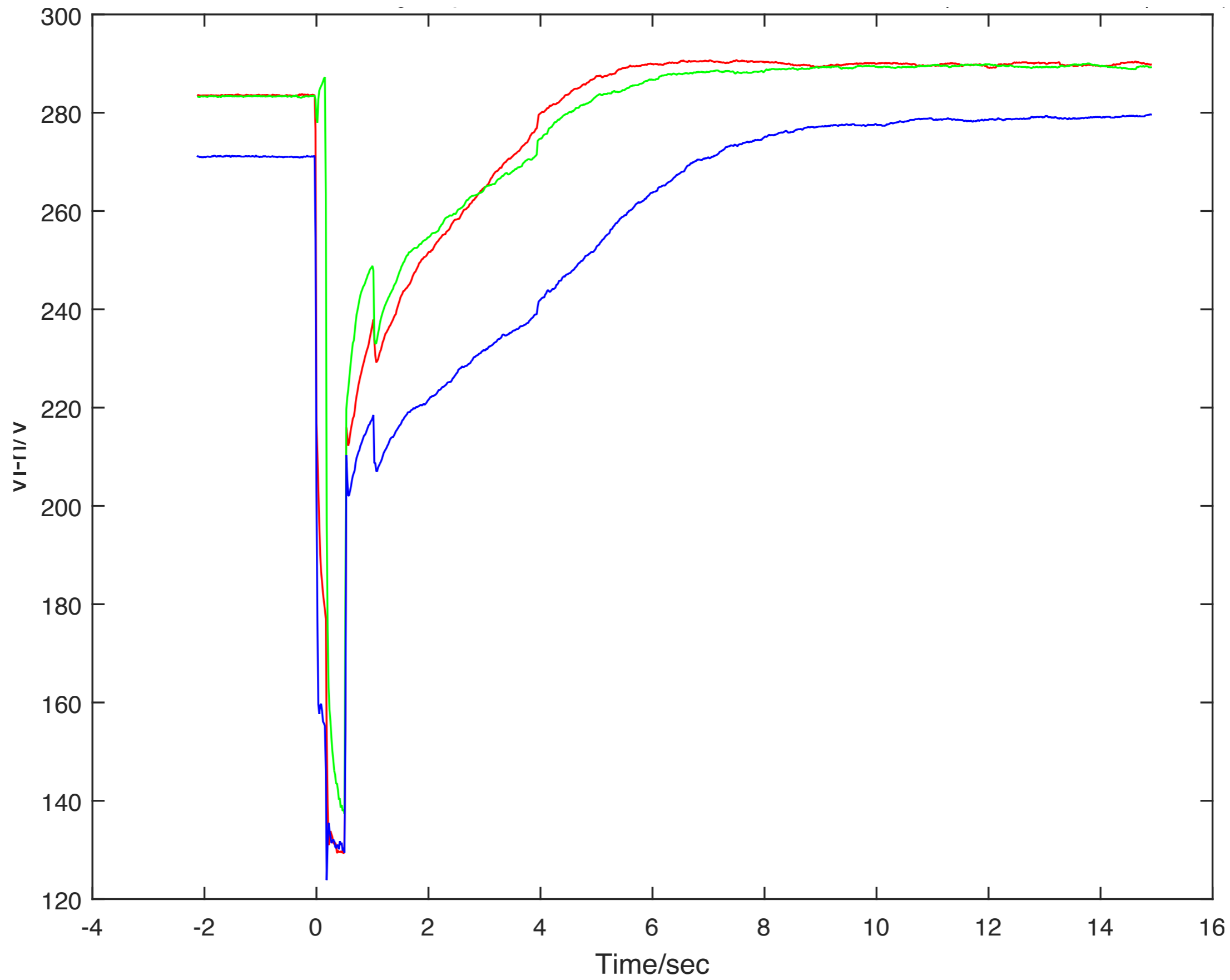
Non-FIDVR events



Complicated events



Events of interest

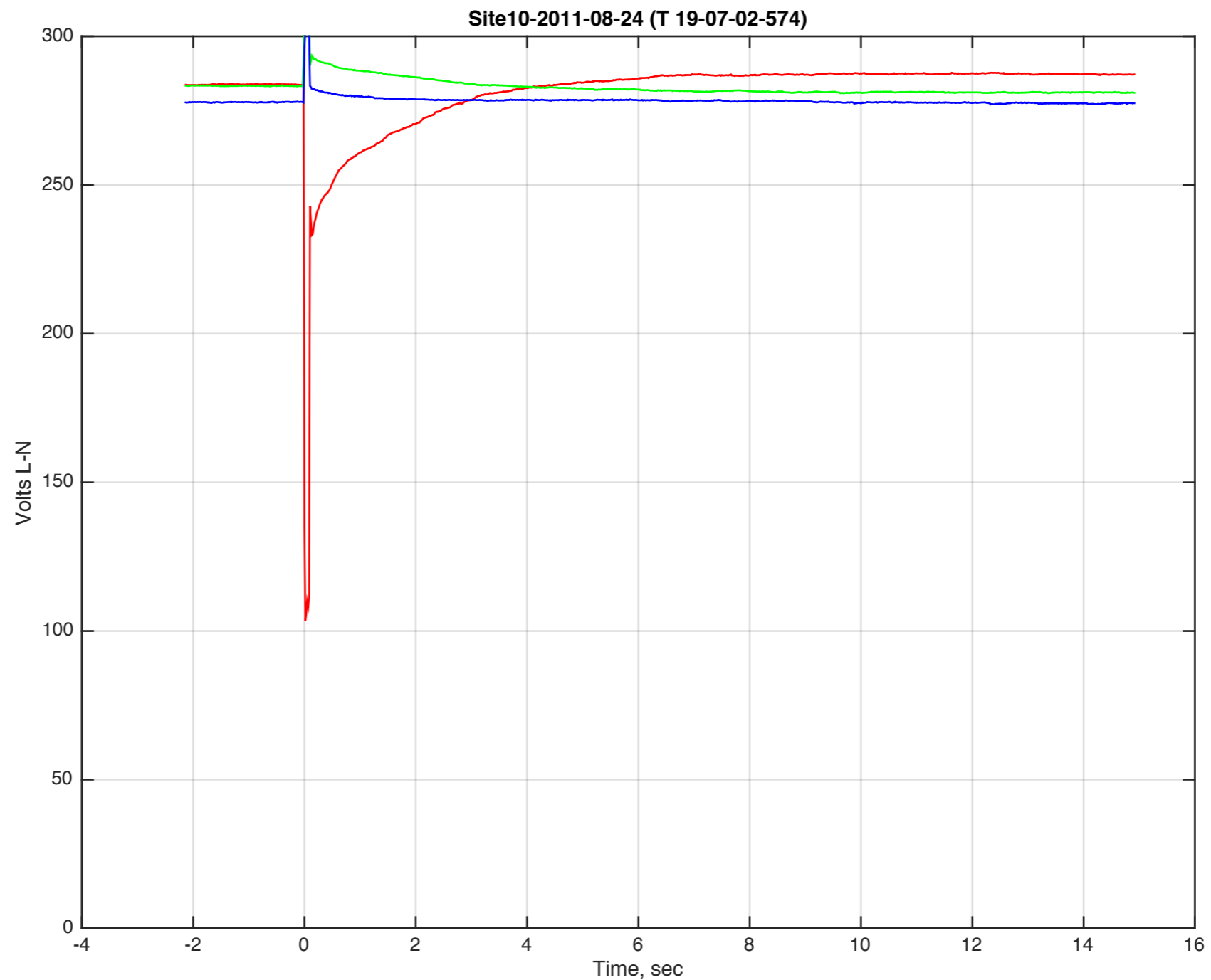


Event 291

Dip Duration 0.117 second (7 cycles)

Initial voltage a,b,c 283.7 283.3 277.8

Final voltage a,b,c 287.4 281.1 277.7

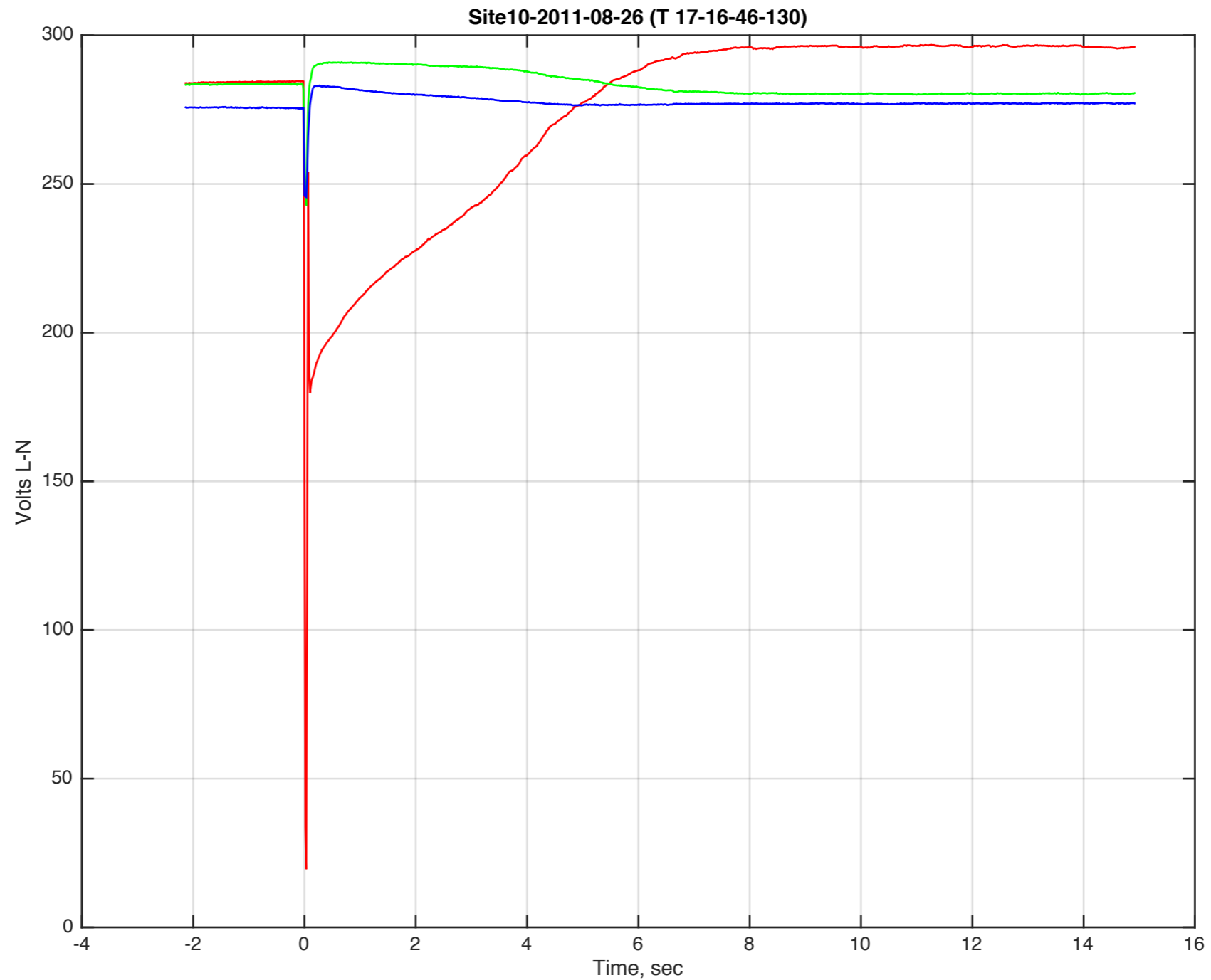


Event 265

Dip Duration 0.067 second (4 cycles)

Initial voltage a,b,c 284.5 283.7 275.4

Final voltage a,b,c 296.4 280.3 277.7

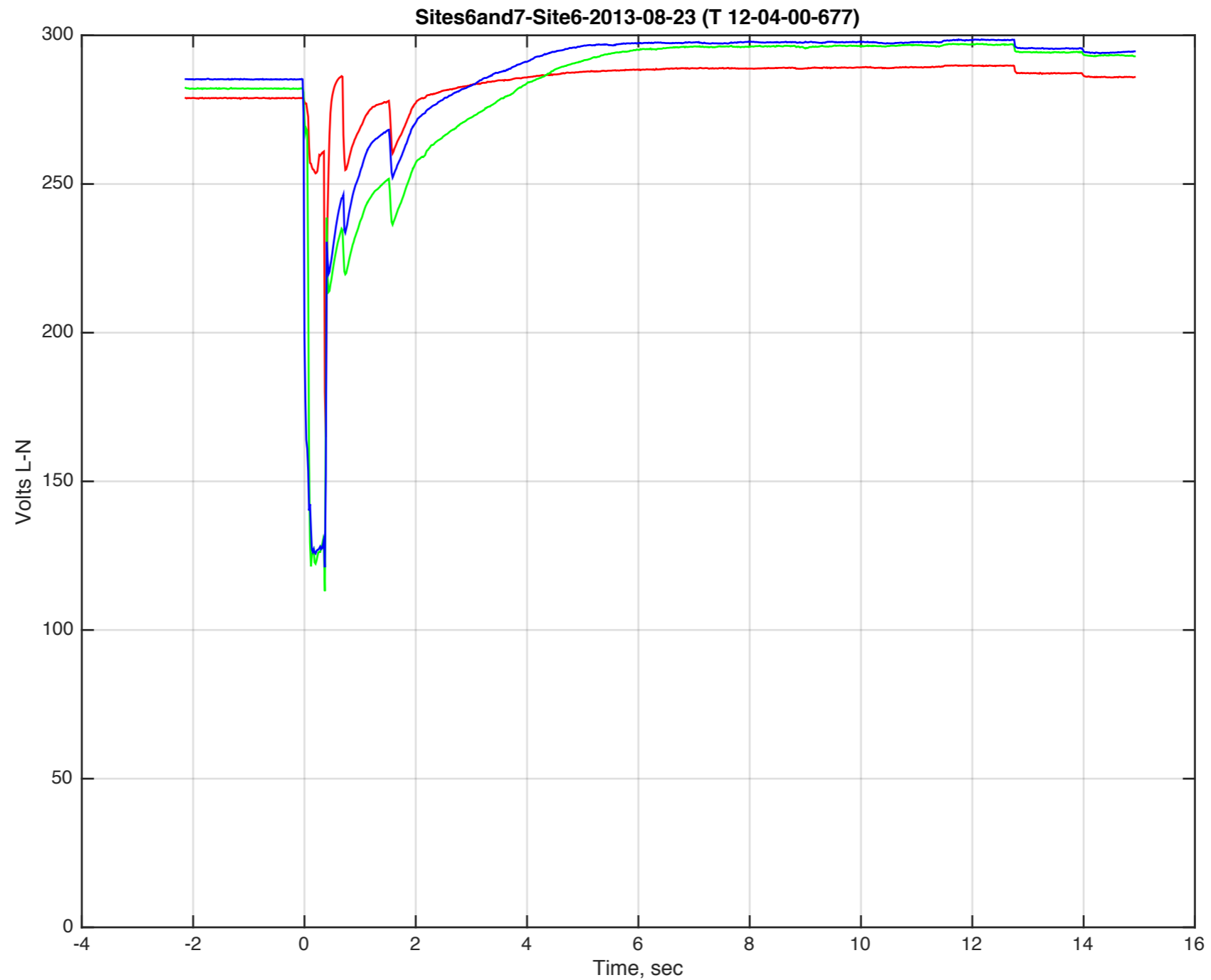


Event 55

Dip Duration 0.4 second (24 cycles)

Initial voltage a,b,c 278.9 282.1 285.2

Final voltage a,b,c 289.2 296.9 298.5

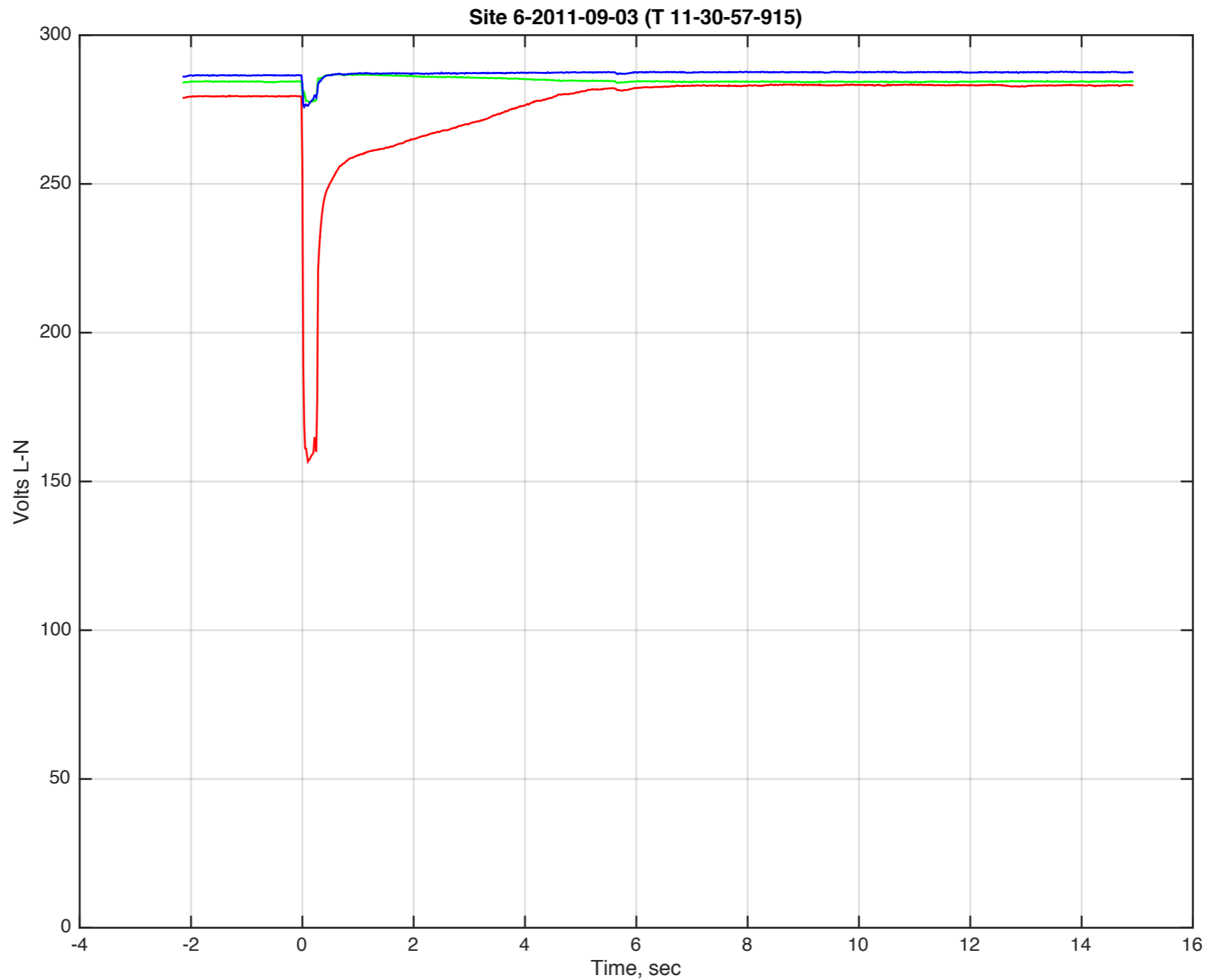


Event 243

Dip Duration 0.3 second (18 cycles)

Initial voltage a,b,c 279.4 284.5 286.5

Final voltage a,b,c 283.1 284.3 287.6

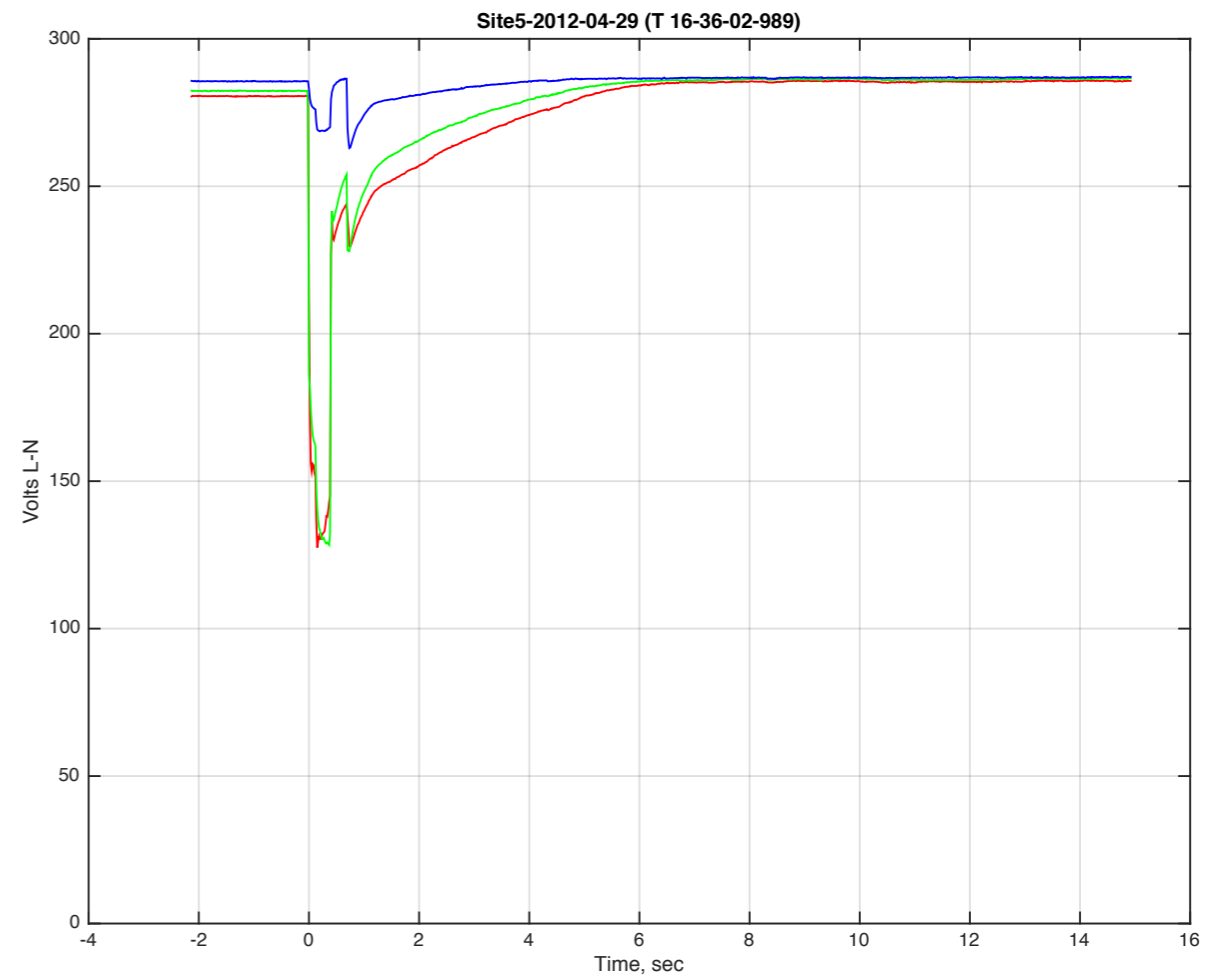
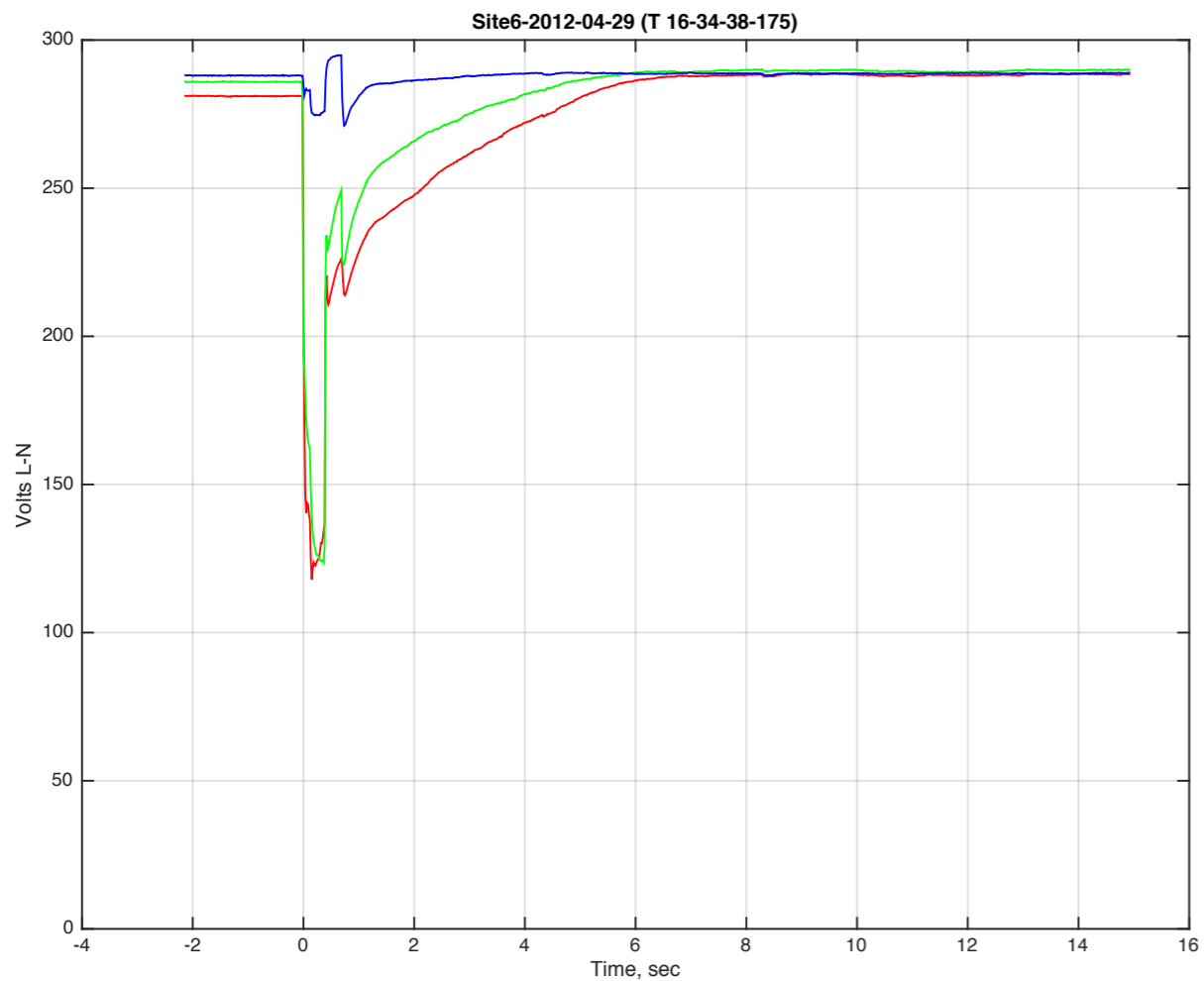


Events 126 and 139

Dip Duration 0.4 second (24 cycles)

Init a,b,c 281.1 285.8 288.0
Final a,b,c 288.7 288.7 288.7

Init a,b,c 280.5 282.3 285.5
Final a,b,c 285.2 286.4 286.9



Thanks to Centerpoint Energy