

Saclay Day 5 data. These data were taken at IRAMIS on July 29, 2015. We focus on Bulk 128 with 500-700 V :

Amp was Cividec, BW was full scope BW, sampling 10 GSa/a.

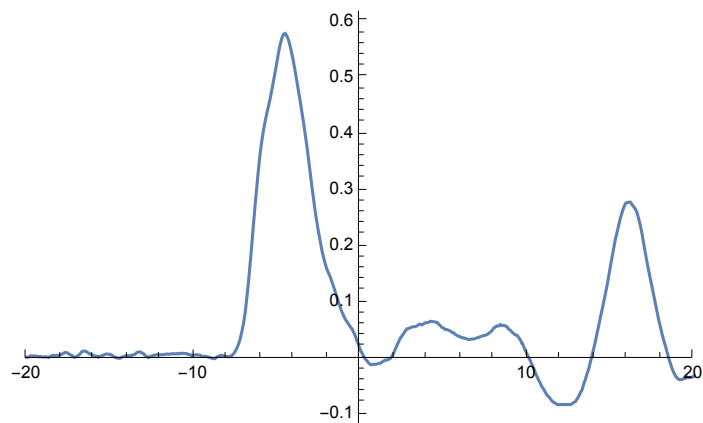
```
SetDirectory["~bastian/Desktop/day5/bulk128/500-700/500-700x10/c2"];
Namelist = FileNames[];
Namelist // Length;
nfiles = %
2305
```

```
nevents = nfiles - 1;
vv = ConstantArray[0, {nevents, 475}];
dimscope = ConstantArray[0, nevents];
```

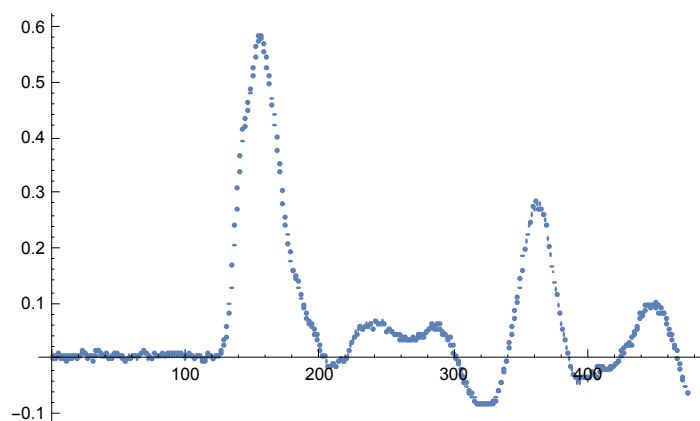
```
Do[
  scopedata = Import[Namelist[[j]], "tsv"];
  vv[[j]] = Table[scopedata[[i, 2]], {i, 6, 480}];
  , {j, 1, nevents, 1}];

tt = Table[scopedata[[i, 1]], {i, 6, 480}] * 10^9;

i = 600;
ListPlot[Transpose[{tt, WienerFilter[vv[[i]], 2, .03]}],
  PlotRange -> {{-20, 20}, Full}, Joined -> True]
```



```
ListPlot[vv[[600]], PlotRange → Full]
```

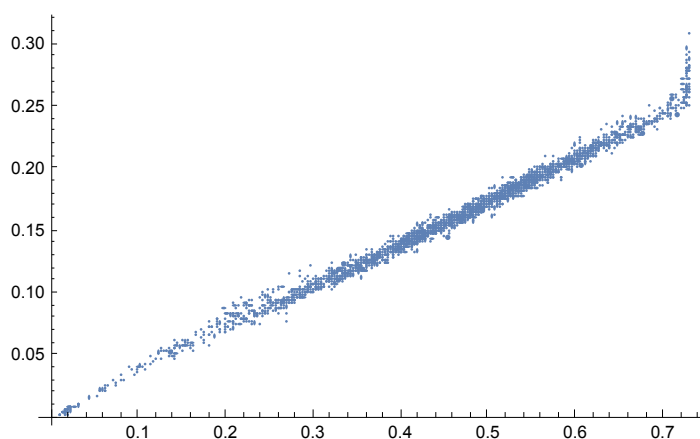


```
inbase2 = Table[Mean[Take[vv[[i]], 100]], {i, nevents}];
innoise2 =
  Table[RootMeanSquare[Take[vv[[i]], 100] - inbase2[[i]]], {i, nevents}];

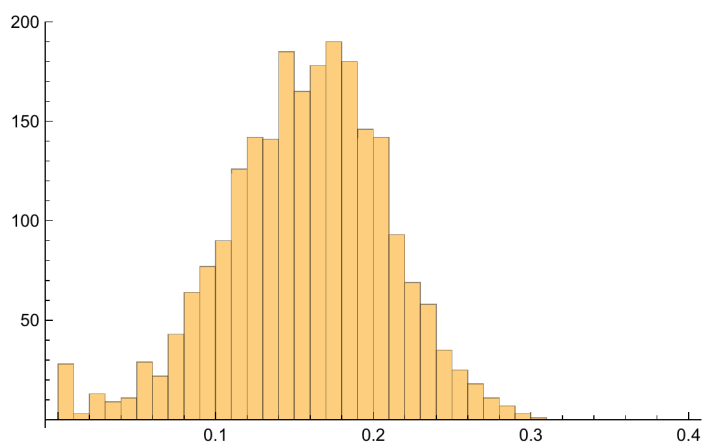
v = Table[(vv[[i]] - inbase2[[i]]), {i, nevents}];

peak = Table[Max[Take[v[[i]], {100, 200}]], {i, nevents}];
area = Table[Total[Take[v[[i]], {100, 200}]]/100, {i, nevents}];

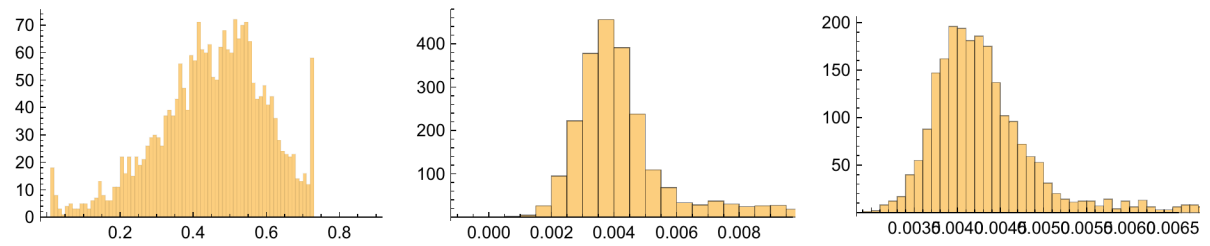
ListPlot[Transpose[{peak, area}], PlotRange → Full]
```



```
Histogram[area, {0, .4, .01}]
```



```
GraphicsRow[{Histogram[peak, {0, .9, .01}],
Histogram[inbase2], Histogram[innoise2]], ImageSize -> Full]
```



```
mp = Mean[peak]
rmsp = RootMeanSquare[peak - mp]
rmsp / mp
0.45219
0.147573
0.326352
```