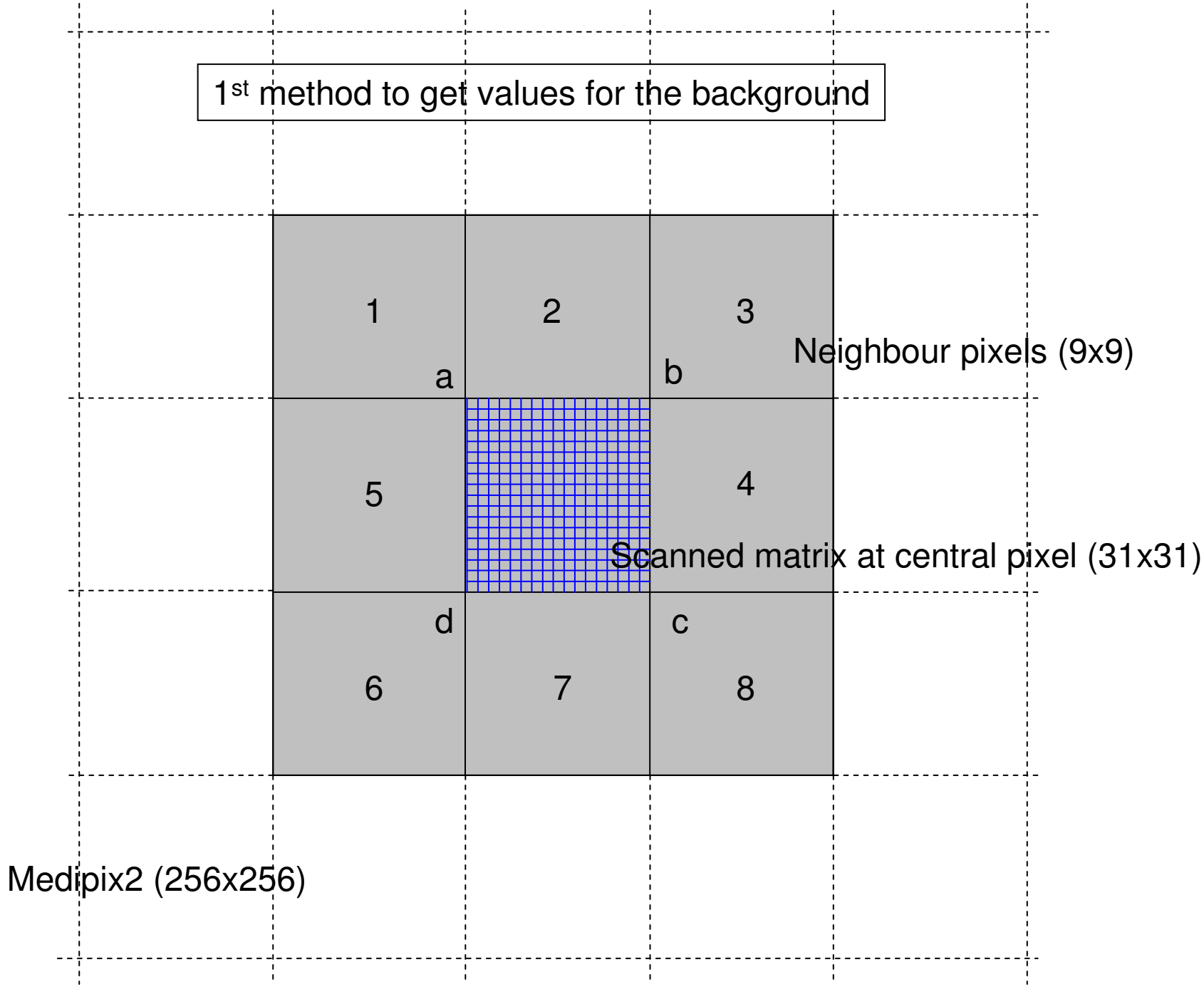
3rd Report on the analysis status of the 3D test beam experiment at Diamond in May 2009

-REMOVING BACKGROUND-

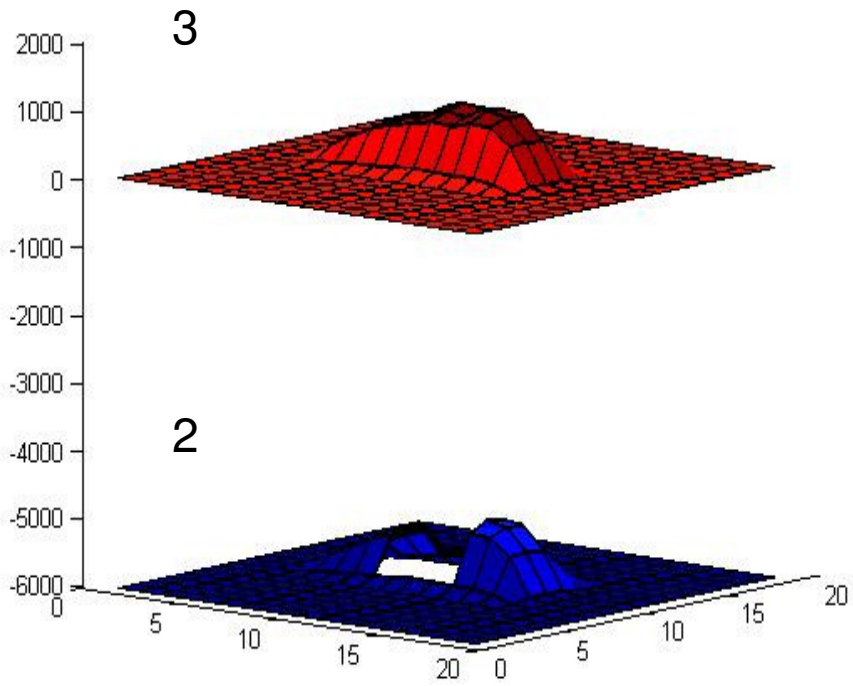
15/07/09

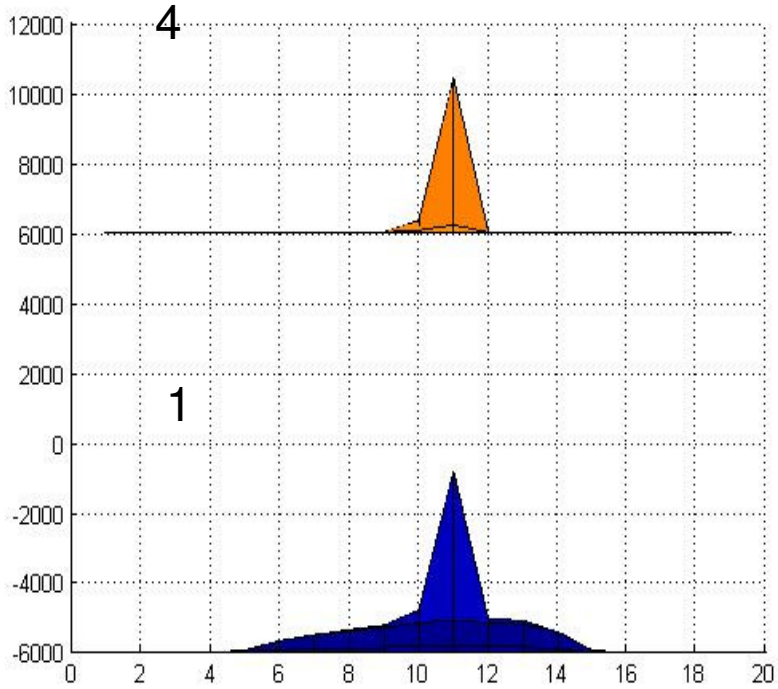
E.N. Gimenez


1st method to get values for the background
1
2
3
a
b
Neighbour pixels (9x9)
5
4
Scanned matrix at central pixel (31x31)
d
c
6
7
8
Medipix2 (256x256)

1st method to get values for the background

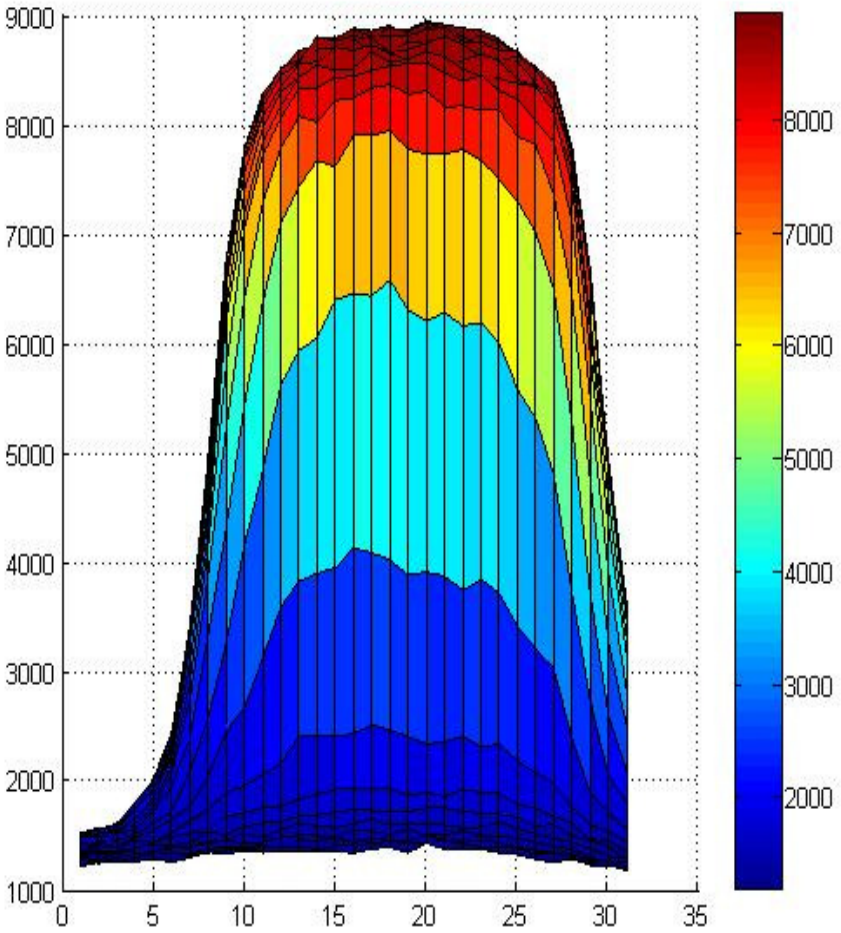
Interpolation of a surface given by 9 elements of the matrix





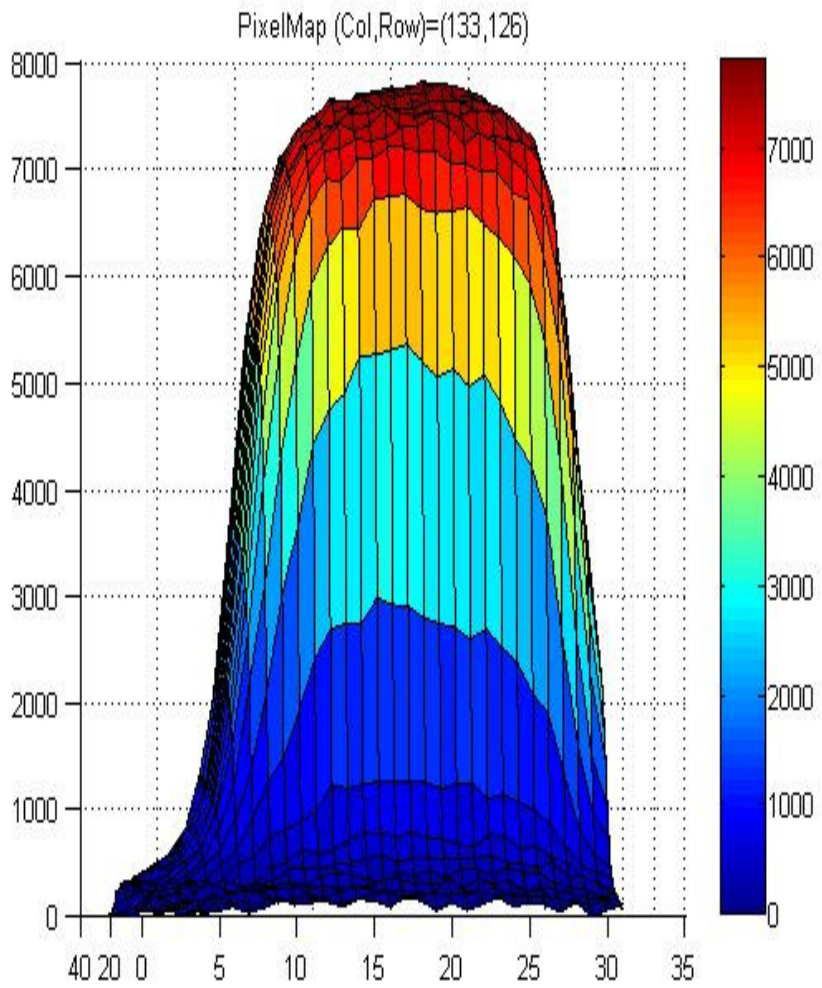
1. Original set of data from one scan file with background
2. Removing the central points corresponding to the closest neighbours (matrix 9x9) to do the interpolation
3. Interpolating the values for the matrix 9x9
4. Set of data when removing the background values obtained from the interpolation.

C44



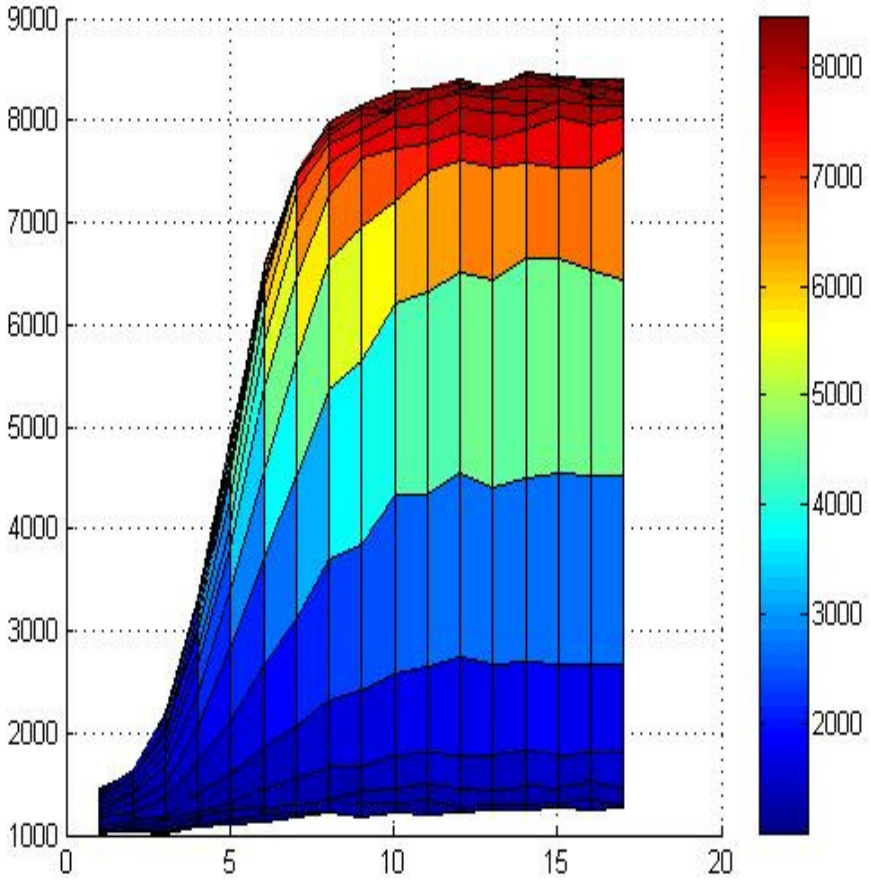
Original data set

C44



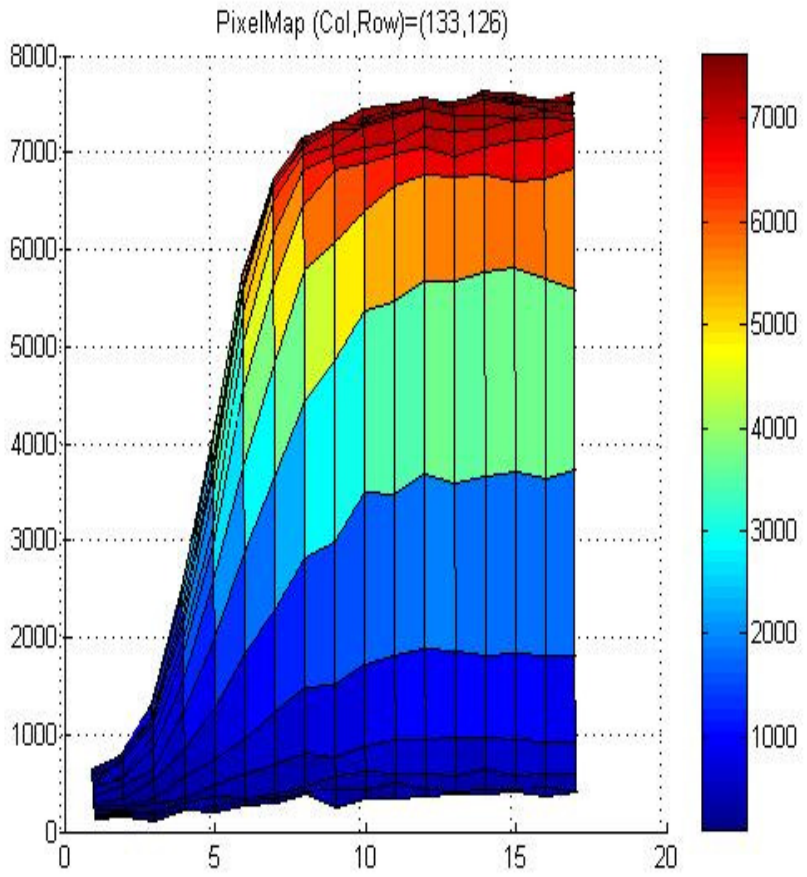
Background obtained with interpolation surface removed form original data set

C41

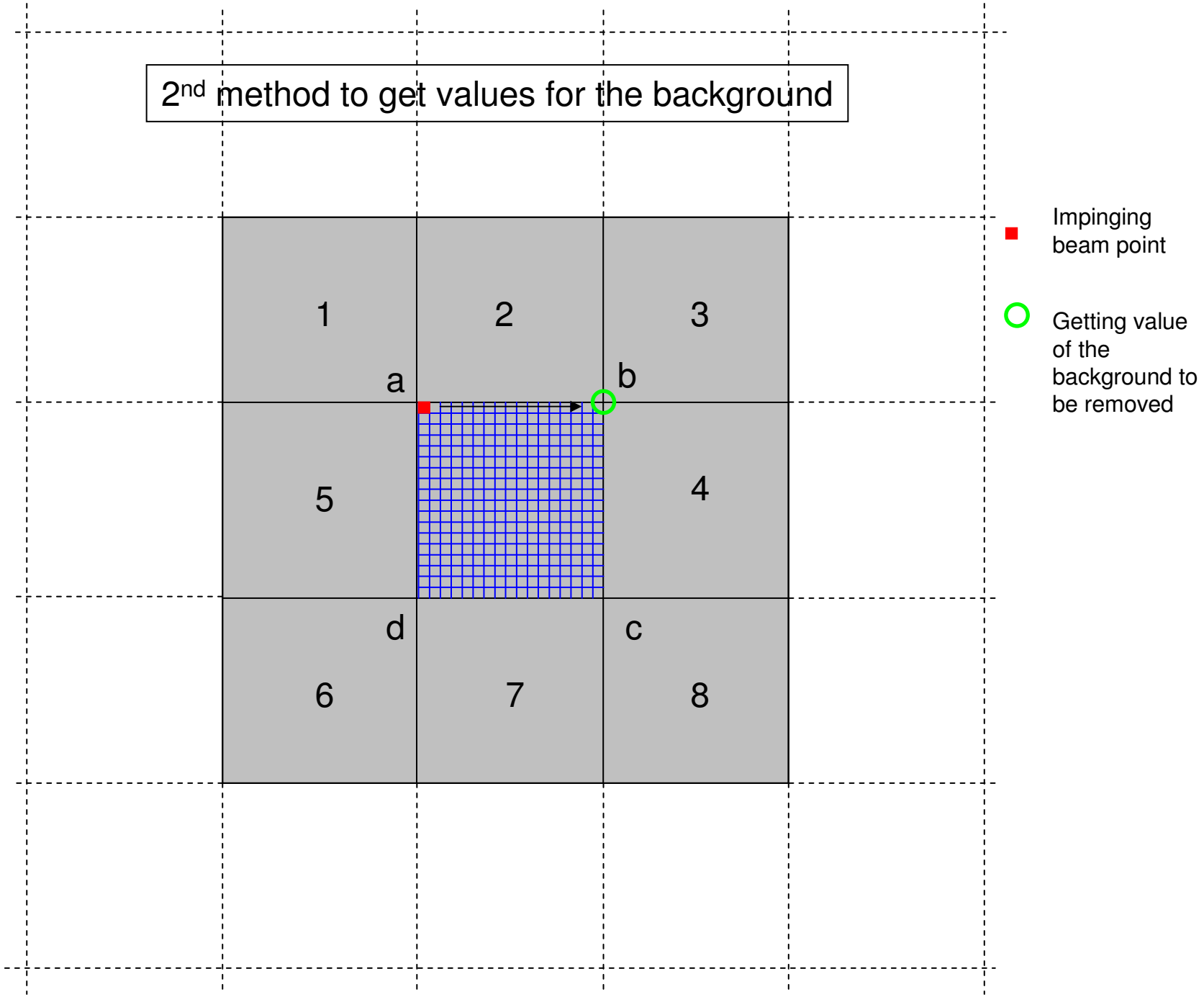


Original data set

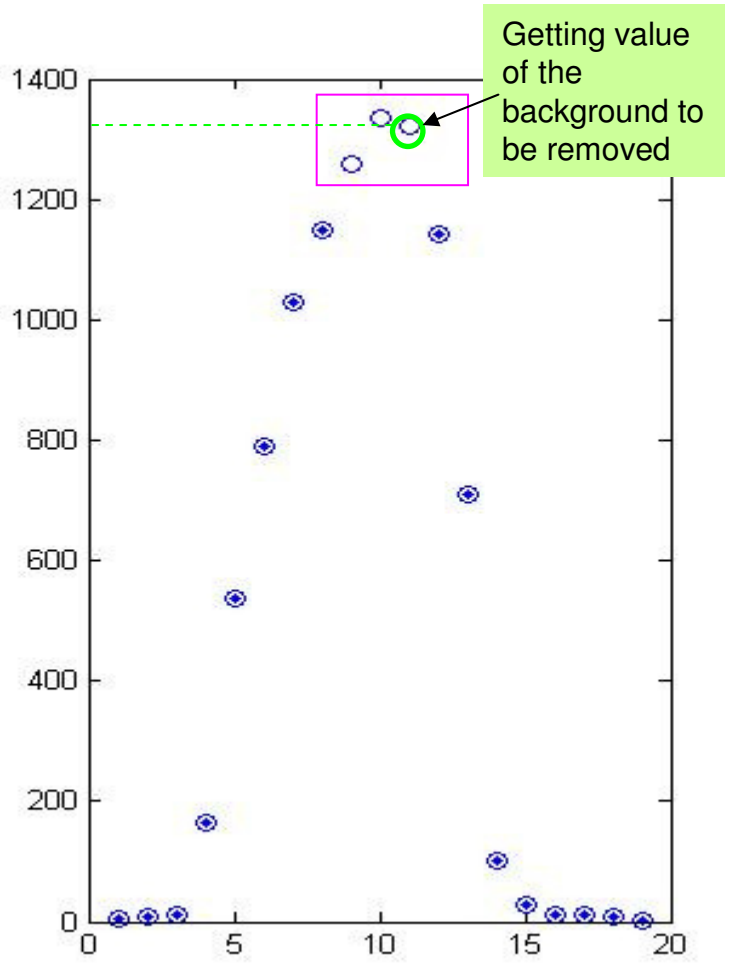
C41

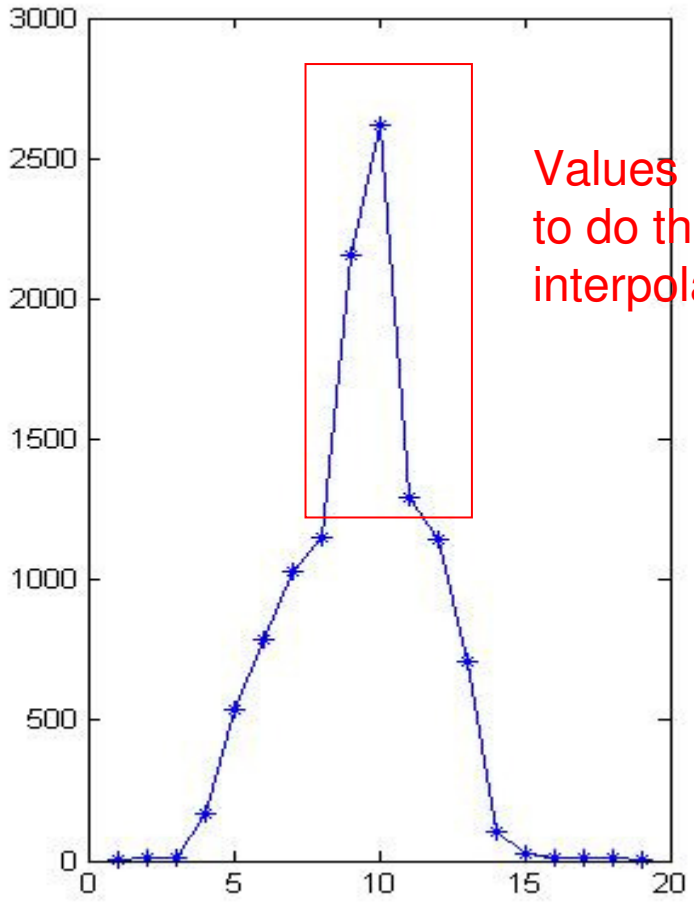


Background obtained with interpolation surface removed form original data set


2nd method to get values for the background
1
2
3
a
b
5
4
d
c
6
7
8
Impinging beam point
Getting value of the background to be removed

C41





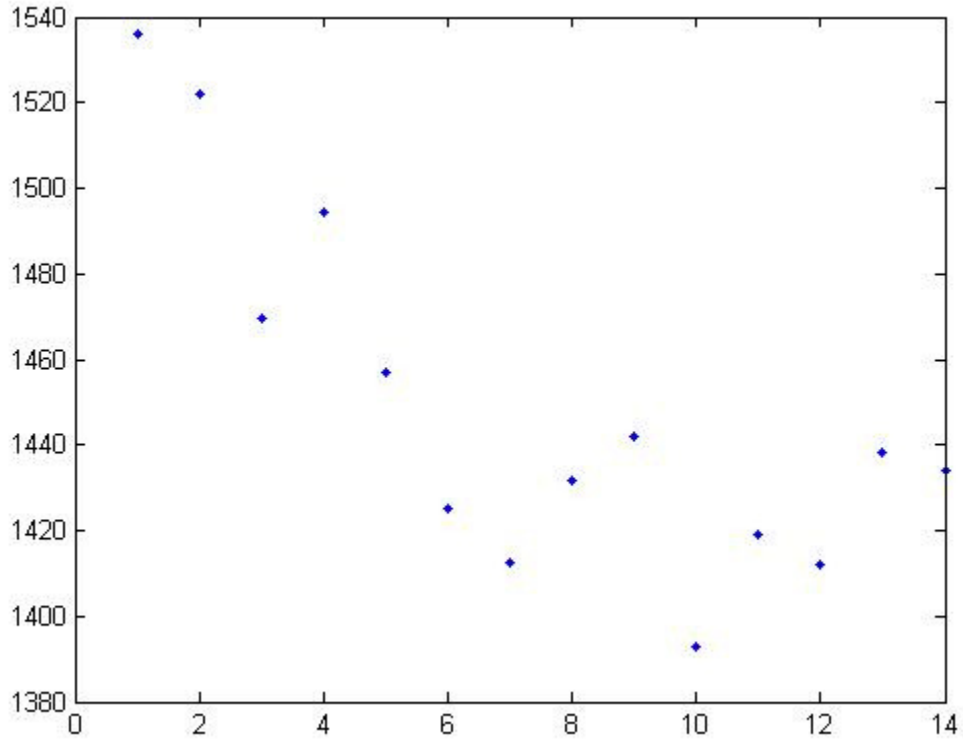
Values removed to do the interpolation

Original data set

◉ Vector values employed for interpolation

○ Interpolated data

Repeating the process for all the scanning points from a to b



Averaged background value to be removed for C41 = 1450