

GANIL
Spatial2



UNICAEN
université de Caen
Basse-Normandie

Journée d'analyse INDRA

Présentation de l'éditeur de grilles

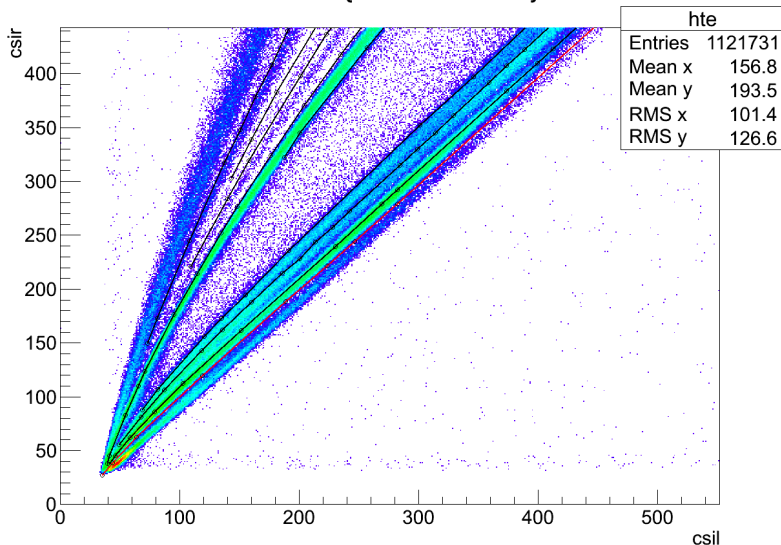
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27.03.2012

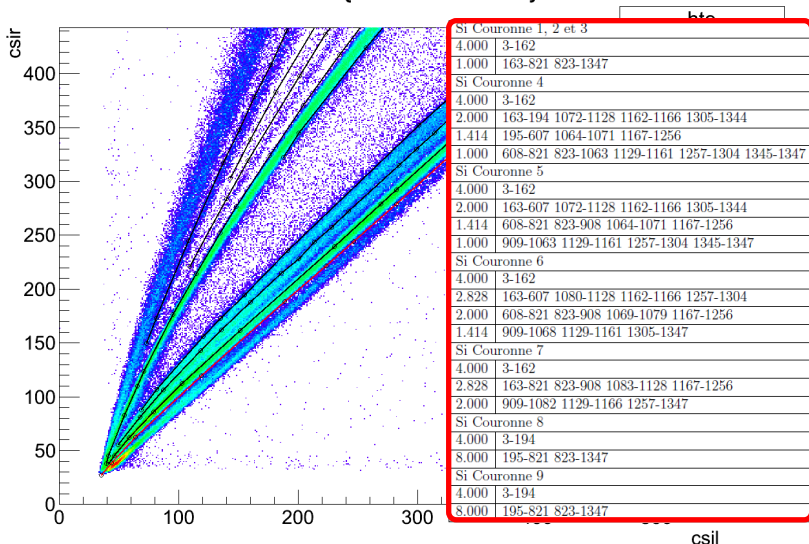
Motivations

csir:csil {nmodule==10}



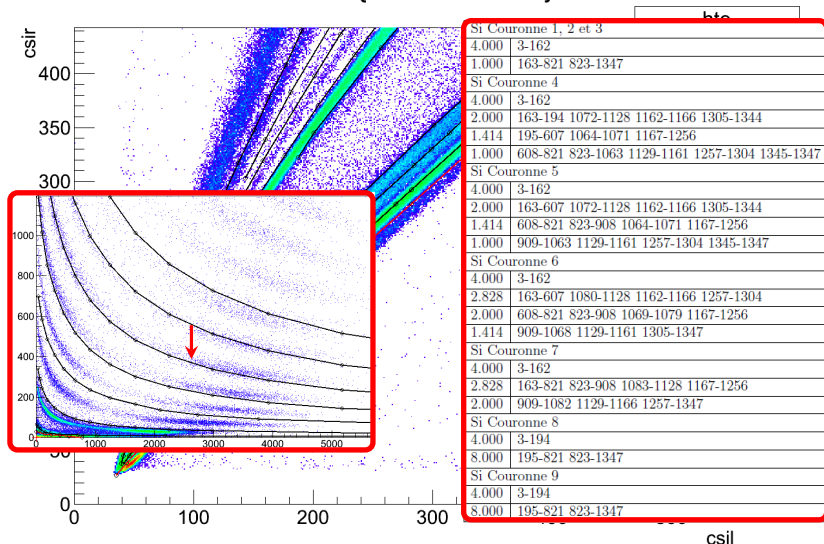
Motivations

csir:csil {nmodule==10}



Motivations

csir:csil {nmodule==10}



Motivations

Objectif

Modifier un groupe de lignes via des transformations simples :

- translation, rotation, scaling...

Interface graphique

- simple d'utilisation, rapide et stable,
- intégrée dans l'interface existante (KVIDGridManagerGUI).

- 1 Introduction
- 2 Démarrage et description de l'éditeur
- 3 FAQ
- 4 Conclusion et perspectives

Premiers pas...

ID Grid Manager

Selected grid SL_C8I_0102 (KVTDG Grid)

CSI SL_C8I

Name	VarX	VarY	ID Telescopes	RunList	OnlyZid	# Ident.	# Cuts	X scaling
SL_C8I_0102	CSL_TOT_LIGHT	SL_PG	SL_C8I_0102	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0102	CSL_TOT_LIGHT	SL_GG	SL_C8I_0102	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0103	CSL_TOT_LIGHT	SL_PG	SL_C8I_0103	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0103	CSL_TOT_LIGHT	SL_GG	SL_C8I_0103	163-821 823-1347	✓	10	1	1.000000
SL_C8I_0104	CSL_TOT_LIGHT	SL_PG	SL_C8I_0104	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0104	CSL_TOT_LIGHT	SL_GG	SL_C8I_0104	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0106	CSL_TOT_LIGHT	SL_PG	SL_C8I_0106	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0106	CSL_TOT_LIGHT	SL_GG	SL_C8I_0106	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0107	CSL_TOT_LIGHT	SL_PG	SL_C8I_0107	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0107	CSL_TOT_LIGHT	SL_GG	SL_C8I_0107	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0108	CSL_TOT_LIGHT	SL_PG	SL_C8I_0108	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0108	CSL_TOT_LIGHT	SL_GG	SL_C8I_0108	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0109	CSL_TOT_LIGHT	SL_PG	SL_C8I_0109	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0109	CSL_TOT_LIGHT	SL_GG	SL_C8I_0109	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0110	CSL_TOT_LIGHT	SL_PG	SL_C8I_0110	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0110	CSL_TOT_LIGHT	SL_GG	SL_C8I_0110	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0111	CSL_TOT_LIGHT	SL_PG	SL_C8I_0111	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0111	CSL_TOT_LIGHT	SL_GG	SL_C8I_0111	163-821 823-1347	✓	9	1	1.000000
SL_C8I_0112	CSL_TOT_LIGHT	SL_PG	SL_C8I_0112	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0112	CSL_TOT_LIGHT	SL_GG	SL_C8I_0112	163-821 823-1347	✓	10	1	1.000000
SL_C8I_0201	CSL_TOT_LIGHT	SL_PG	SL_C8I_0201	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0201	CSL_TOT_LIGHT	SL_GG	SL_C8I_0201	163-821 823-1347	✓	12	1	1.000000
SL_C8I_0203	CSL_TOT_LIGHT	SL_PG	SL_C8I_0203	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0203	CSL_TOT_LIGHT	SL_GG	SL_C8I_0203	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0207	CSL_TOT_LIGHT	SL_PG	SL_C8I_0207	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0207	CSL_TOT_LIGHT	SL_GG	SL_C8I_0207	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0211	CSL_TOT_LIGHT	SL_PG	SL_C8I_0211	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0211	CSL_TOT_LIGHT	SL_GG	SL_C8I_0211	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0213	CSL_TOT_LIGHT	SL_PG	SL_C8I_0213	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0213	CSL_TOT_LIGHT	SL_GG	SL_C8I_0213	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0215	CSL_TOT_LIGHT	SL_PG	SL_C8I_0215	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0215	CSL_TOT_LIGHT	SL_GG	SL_C8I_0215	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0217	CSL_TOT_LIGHT	SL_PG	SL_C8I_0217	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0217	CSL_TOT_LIGHT	SL_GG	SL_C8I_0217	163-821 823-1347	✓	10	1	1.000000
SL_C8I_0219	CSL_TOT_LIGHT	SL_PG	SL_C8I_0219	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0219	CSL_TOT_LIGHT	SL_GG	SL_C8I_0219	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0221	CSL_TOT_LIGHT	SL_PG	SL_C8I_0221	163-821 823-1347	✓	100	0	1.000000
SL_C8I_0221	CSL_TOT_LIGHT	SL_GG	SL_C8I_0221	163-821 823-1347	✓	11	1	1.000000
SL_C8I_0223	CSL_TOT_LIGHT	SL_PG	SL_C8I_0223	163-821 823-1347	✓	100	0	1.000000

CURRENT GRID IDENTIFIERS

Name	Z	A	OnlyZid	MassForma
2-1 A=1	1	1	✓	3
2-2 A=4	2	4	✓	3
2-3 A=7	3	7	✓	3
2-4 A=9	4	9	✓	3
2-5 A=11	5	11	✓	3
2-6 A=13	6	13	✓	3
2-7 A=15	7	15	✓	3
2-8 A=17	8	17	✓	3
2-9 A=19	9	19	✓	3
2-10 A=21	10	21	✓	3
2-11 A=23	11	23	✓	3
2-12 A=26	12	26	✓	3
2-13 A=28	13	28	✓	3
2-14 A=30	14	30	✓	3
2-15 A=32	15	32	✓	3
2-16 A=34	16	34	✓	3
2-17 A=36	17	36	✓	3
2-18 A=38	18	38	✓	3
2-19 A=41	19	41	✓	3

CUT LINES

Name	# Points	Direction
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CUT CONTOURS

Name	# Points	Exclusive
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Premiers pas : ouvrir un fichier root

The screenshot shows the ID Grid Manager interface. The main window displays a table of grids. A terminal window in the foreground shows the execution of the following commands:

```

root [2] gFile->ls()
TFile* /home/dgruyer/e613/data/SI_CSI_GG_R610to851_Ring4.root
TFile* /home/dgruyer/e613/data/SI_CSI_GG_R610to851_Ring4.root
OBJ: TH2F SI_CSI_0410 SI_CSI_0410 : 0 at: 0x125a0660
KEY: TH2F SI_CSI_0401; 1 SI_CSI_0401
KEY: TH2F SI_CSI_0402; 1 SI_CSI_0402
KEY: TH2F SI_CSI_0403; 1 SI_CSI_0403
KEY: TH2F SI_CSI_0404; 1 SI_CSI_0404
KEY: TH2F SI_CSI_0405; 1 SI_CSI_0405
KEY: TH2F SI_CSI_0406; 1 SI_CSI_0406
KEY: TH2F SI_CSI_0407; 1 SI_CSI_0407
KEY: TH2F SI_CSI_0408; 1 SI_CSI_0408
KEY: TH2F SI_CSI_0409; 1 SI_CSI_0409
KEY: TH2F SI_CSI_0410; 1 SI_CSI_0410
KEY: TH2F SI_CSI_0411; 1 SI_CSI_0411
KEY: TH2F SI_CSI_0412; 1 SI_CSI_0412
KEY: TH2F SI_CSI_0413; 1 SI_CSI_0413
KEY: TH2F SI_CSI_0414; 1 SI_CSI_0414
KEY: TH2F SI_CSI_0415; 1 SI_CSI_0415
KEY: TH2F SI_CSI_0416; 1 SI_CSI_0416
KEY: TH2F SI_CSI_0417; 1 SI_CSI_0417
KEY: TH2F SI_CSI_0418; 1 SI_CSI_0418
KEY: TH2F SI_CSI_0419; 1 SI_CSI_0419
KEY: TH2F SI_CSI_0420; 1 SI_CSI_0420
KEY: TH2F SI_CSI_0421; 1 SI_CSI_0421
KEY: TH2F SI_CSI_0422; 1 SI_CSI_0422
KEY: TH2F SI_CSI_0423; 1 SI_CSI_0423
KEY: TH2F SI_CSI_0424; 1 SI_CSI_0424
root [3]
  
```

A file dialog box is open, showing the 'File' menu and a list of files. A red arrow points to the 'Open' button (represented by a green circular arrow icon) with the text 'Open root file'.

The file dialog shows the following files:

File Name	# Points	Direction	Exclusive
2-10 An-21	10	21	✓ 3
2-11 An-23	11	23	✓ 3
2-12 An-26	12	26	✓ 3
2-13 An-28	13	28	✓ 3
2-14 An-30	14	30	✓ 3
2-15 An-32	15	32	✓ 3
2-16 An-34	16	34	✓ 3
2-17 An-36	17	36	✓ 3
2-18 An-38	18	38	✓ 3
2-19 An-41	19	41	✓ 3

The dialog also shows sections for 'CUT LINES' and 'CUT CONTOURS' with empty tables.

Premiers pas : sélectionner une grille

Selected grid SL_CSI_0410 (KMDZAG84)

CSI SL_CSI

Name	VarX	VarY	ID Telescopes	RunList	OnlyZid	# Ident	# Cuts	X scaling
SL_CSI_0407	CSI_TOT_LIGHT	SL_FG	SL_CSI_0407	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0407	CSI_TOT_LIGHT	SL_GG	SL_CSI_0407	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0407	CSI_TOT_LIGHT	SL_GG	SL_CSI_0407	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0407	CSI_TOT_LIGHT	SL_FG	SL_CSI_0407	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0408	CSI_TOT_LIGHT	SL_FG	SL_CSI_0408	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0408	CSI_TOT_LIGHT	SL_GG	SL_CSI_0408	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0408	CSI_TOT_LIGHT	SL_GG	SL_CSI_0408	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0408	CSI_TOT_LIGHT	SL_FG	SL_CSI_0408	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0409	CSI_TOT_LIGHT	SL_FG	SL_CSI_0409	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0409	CSI_TOT_LIGHT	SL_GG	SL_CSI_0409	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0409	CSI_TOT_LIGHT	SL_GG	SL_CSI_0409	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0409	CSI_TOT_LIGHT	SL_FG	SL_CSI_0409	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0410	CSI_TOT_LIGHT	SL_FG	SL_CSI_0410	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0410	CSI_TOT_LIGHT	SL_GG	SL_CSI_0410	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0410	CSI_TOT_LIGHT	SL_GG	SL_CSI_0410	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0410	CSI_TOT_LIGHT	SL_FG	SL_CSI_0410	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0411	CSI_TOT_LIGHT	SL_FG	SL_CSI_0411	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0411	CSI_TOT_LIGHT	SL_GG	SL_CSI_0411	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0411	CSI_TOT_LIGHT	SL_GG	SL_CSI_0411	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0411	CSI_TOT_LIGHT	SL_FG	SL_CSI_0411	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0412	CSI_TOT_LIGHT	SL_FG	SL_CSI_0412	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0412	CSI_TOT_LIGHT	SL_GG	SL_CSI_0412	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0412	CSI_TOT_LIGHT	SL_GG	SL_CSI_0412	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0412	CSI_TOT_LIGHT	SL_FG	SL_CSI_0412	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0413	CSI_TOT_LIGHT	SL_FG	SL_CSI_0413	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0413	CSI_TOT_LIGHT	SL_GG	SL_CSI_0413	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0413	CSI_TOT_LIGHT	SL_GG	SL_CSI_0413	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0413	CSI_TOT_LIGHT	SL_FG	SL_CSI_0413	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0414	CSI_TOT_LIGHT	SL_FG	SL_CSI_0414	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0414	CSI_TOT_LIGHT	SL_GG	SL_CSI_0414	195-607 1064-107...	✓	18	1	1.000000
SL_CSI_0414	CSI_TOT_LIGHT	SL_GG	SL_CSI_0414	608-821 823-1063...	✓	18	1	1.000000
SL_CSI_0414	CSI_TOT_LIGHT	SL_FG	SL_CSI_0414	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0415	CSI_TOT_LIGHT	SL_FG	SL_CSI_0415	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0415	CSI_TOT_LIGHT	SL_GG	SL_CSI_0415	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0415	CSI_TOT_LIGHT	SL_GG	SL_CSI_0415	608-821 823-1063...	✓	7	1	1.000000
SL_CSI_0415	CSI_TOT_LIGHT	SL_FG	SL_CSI_0415	608-821 823-1063...	✓	80	0	1.000000
SL_CSI_0416	CSI_TOT_LIGHT	SL_FG	SL_CSI_0416	195-607 1064-107...	✓	80	0	1.000000
SL_CSI_0416	CSI_TOT_LIGHT	SL_GG	SL_CSI_0416	195-607 1064-107...	✓	7	1	1.000000
SL_CSI_0416	CSI_TOT_LIGHT	SL_GG	SL_CSI_0416	608-821 823-1063...	✓	7	1	1.000000

DOUBLE CLIC SUR UNE GRILLE

CURRENT GRID IDENTIFIERS

Name	Z	A	OnlyZid	MassFormula
2x1 A+1	1	1	✓	2
2x2 A+4	2	4	✓	2
2x3 A+7	3	7	✓	2
2x4 A+9	4	9	✓	2
2x5 A+11	5	11	✓	2
2x6 A+13	6	13	✓	2
2x7 A+15	7	15	✓	2

CUT LINES

Name	# Points	Direction
<input type="checkbox"/> PIEDESTAL	7	above

CUT CONTOURS

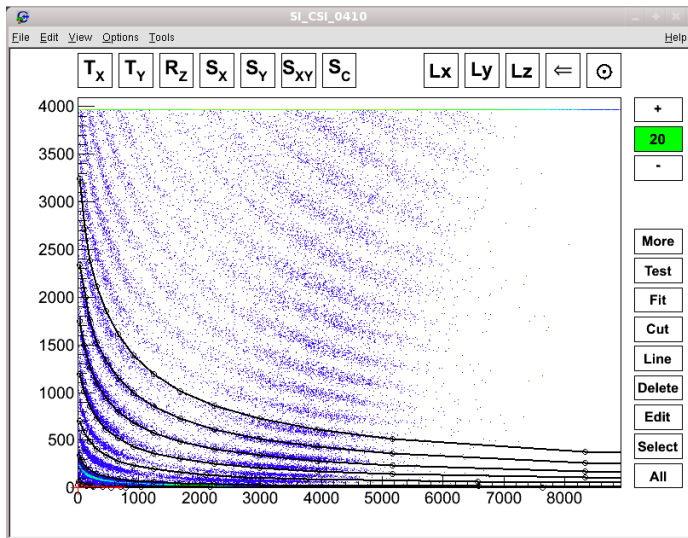
Name	# Points	Exclusive
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Premiers pas : choisir un histogramme

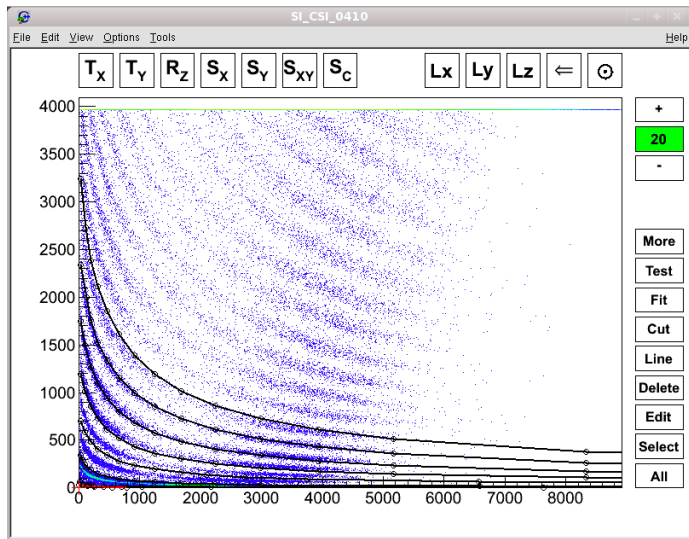


Liste des histogrammes dans gFile

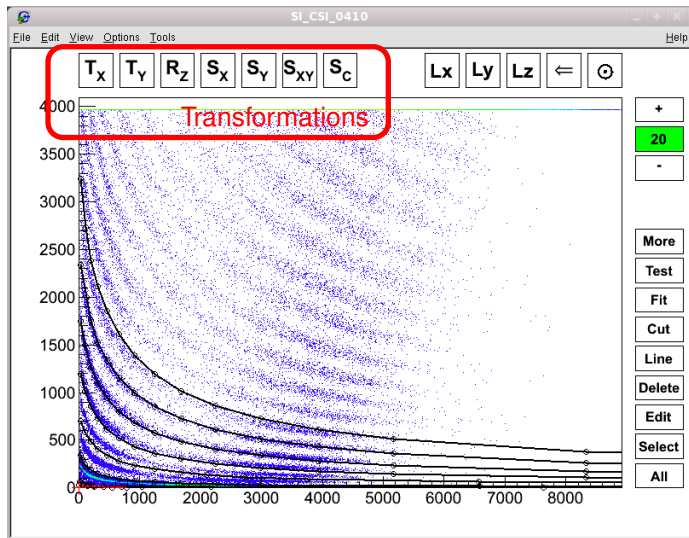
Premiers pas



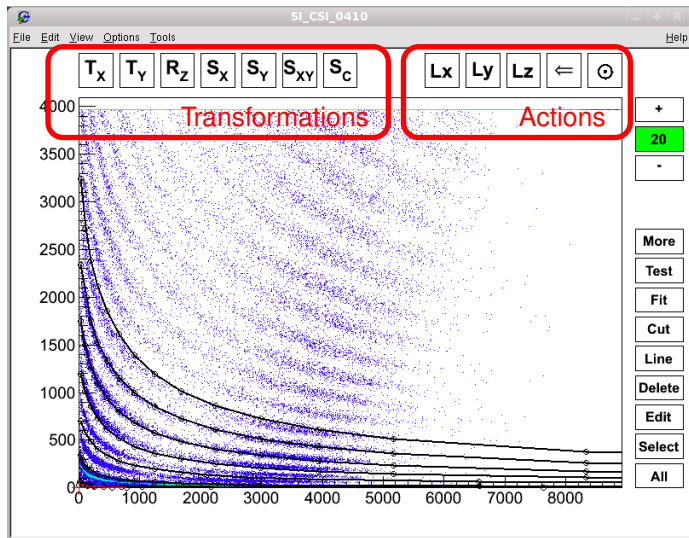
Description de l'éditeur de grilles



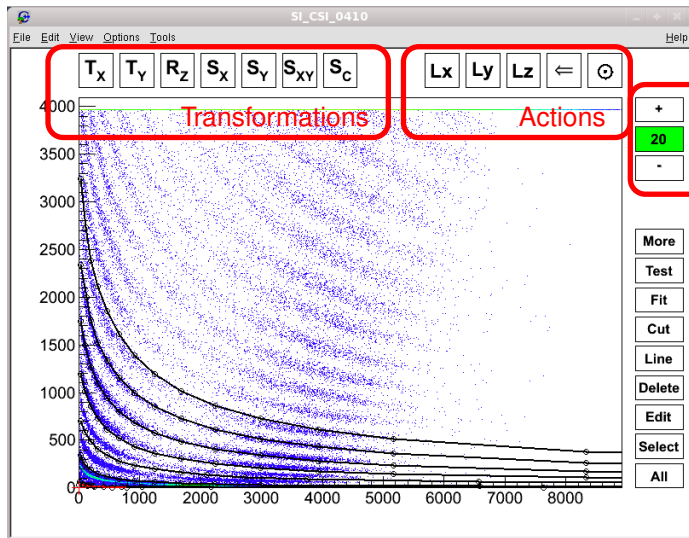
Description de l'éditeur de grilles



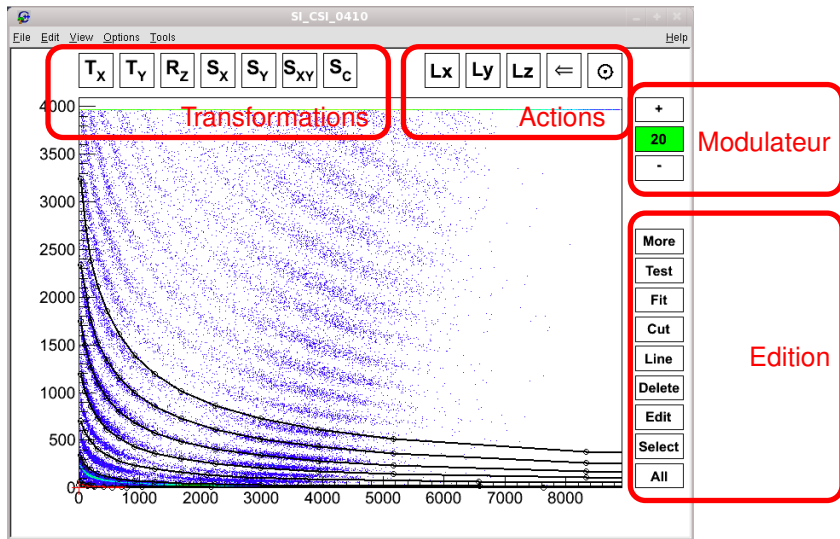
Description de l'éditeur de grilles



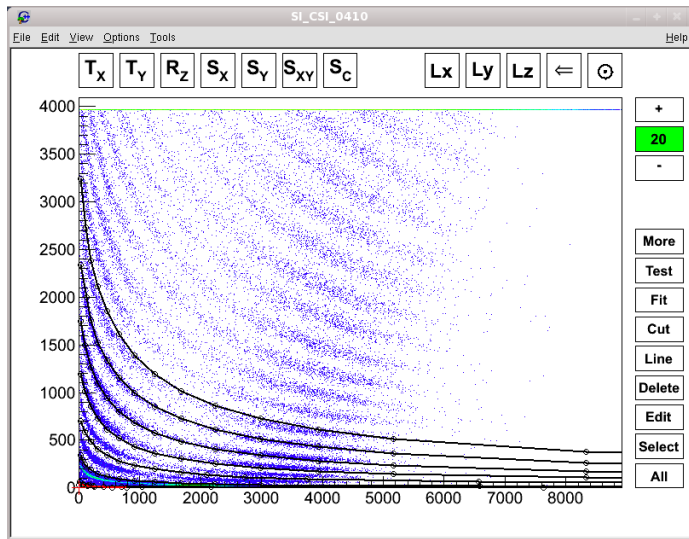
Description de l'éditeur de grilles



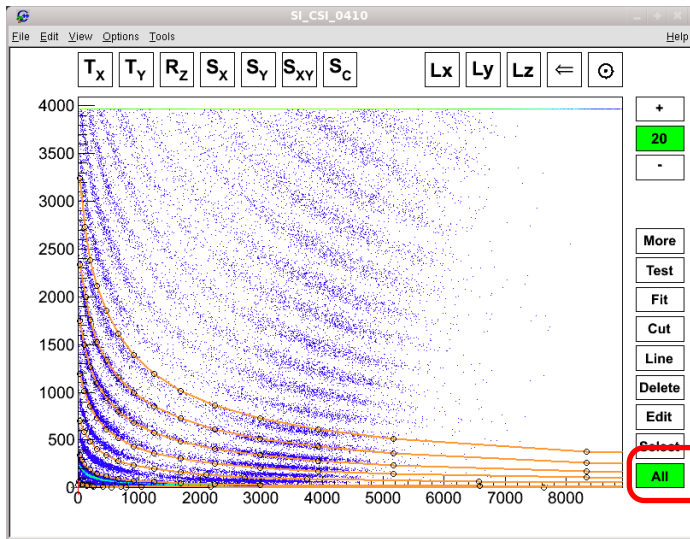
Description de l'éditeur de grilles



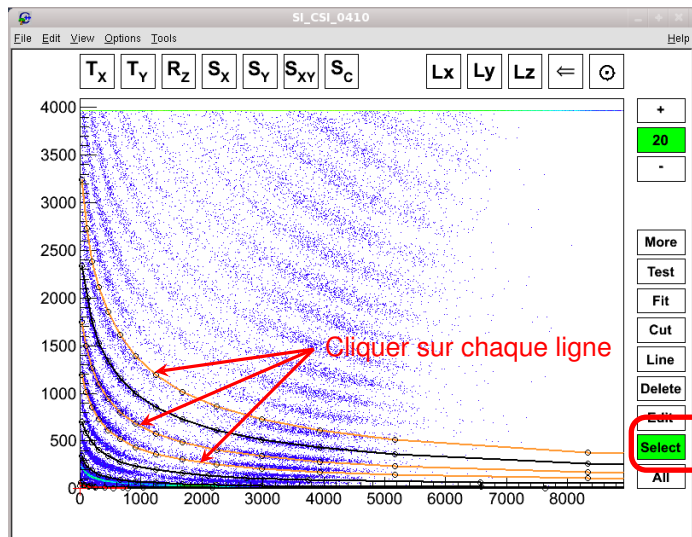
Comment sélectionner des lignes ?



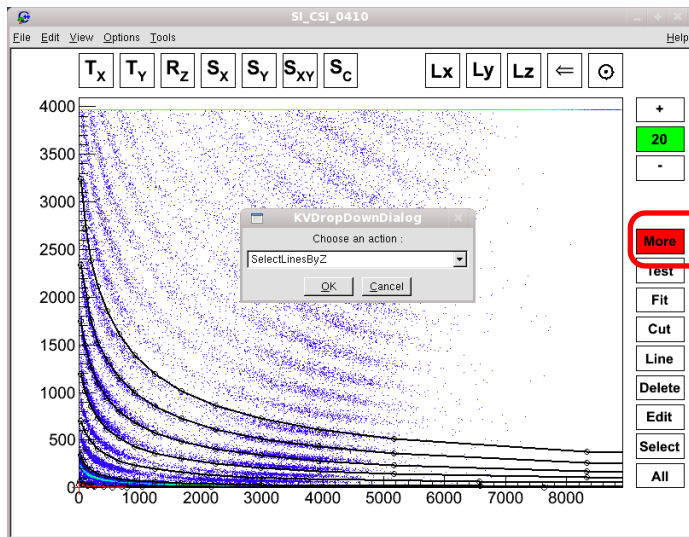
Comment sélectionner des lignes ?



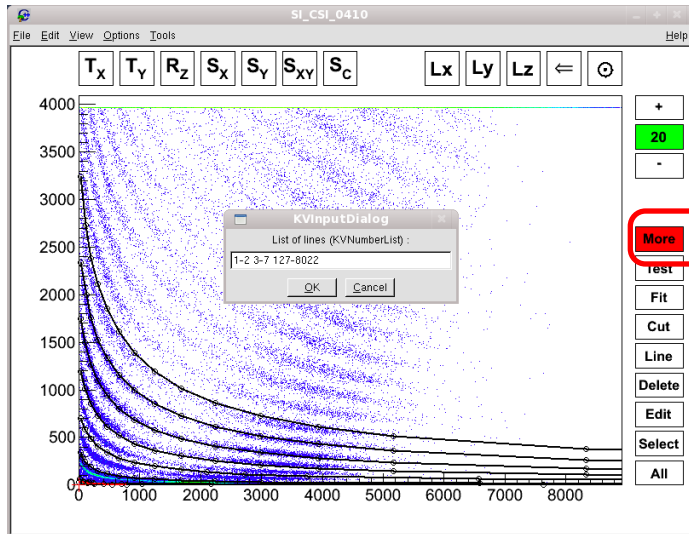
Comment sélectionner des lignes ?



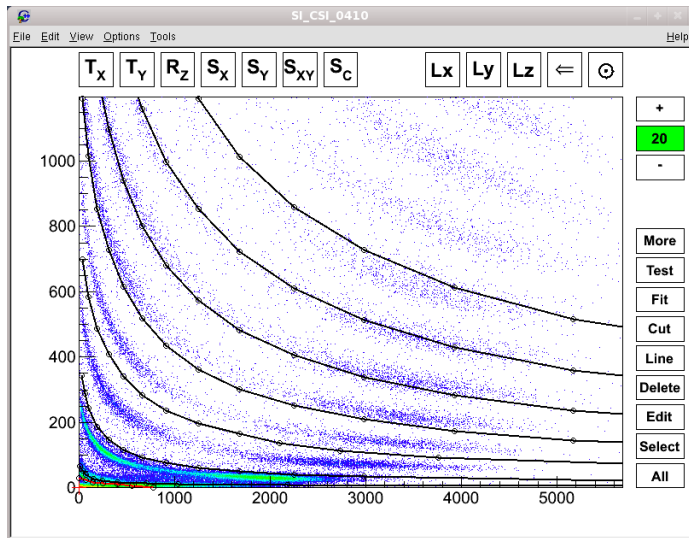
Comment sélectionner des lignes ?



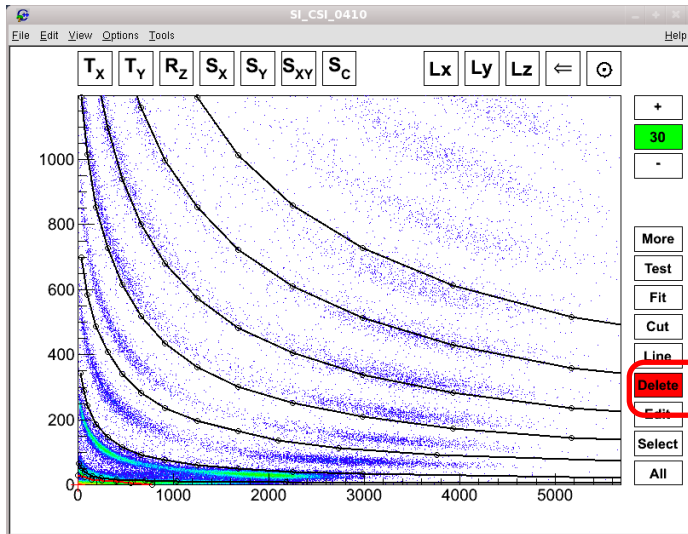
Comment sélectionner des lignes ?



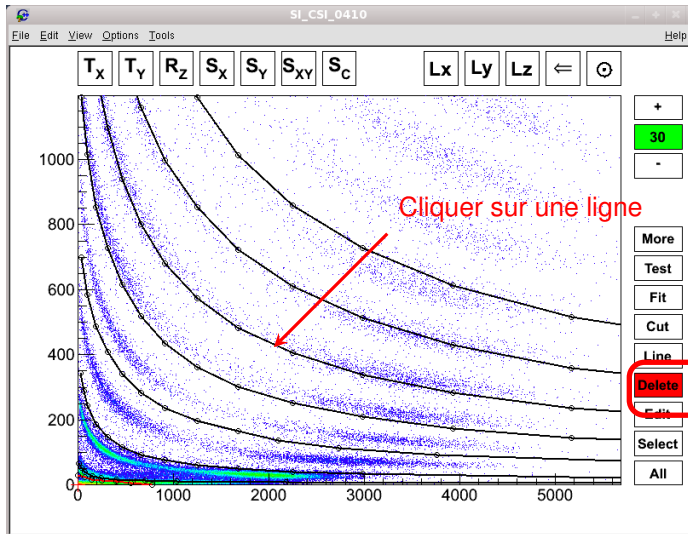
Comment supprimer une ligne ?



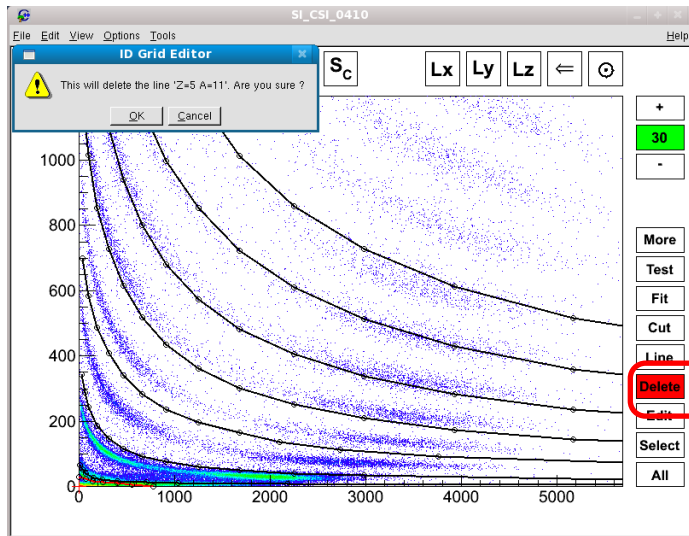
Comment supprimer une ligne ?



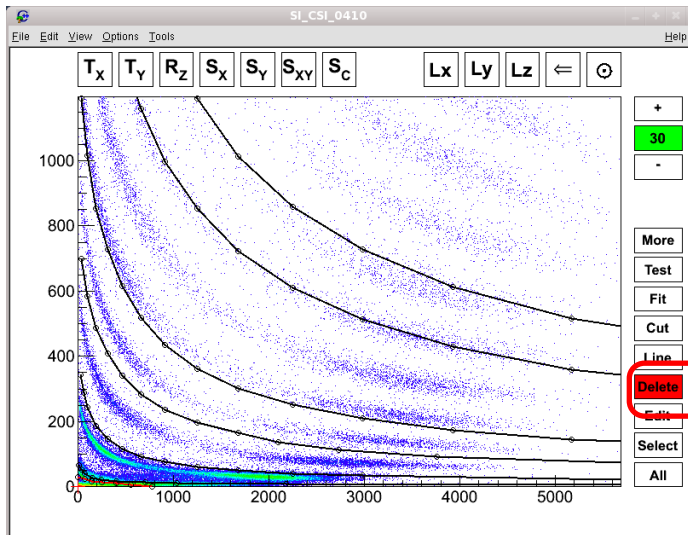
Comment supprimer une ligne ?



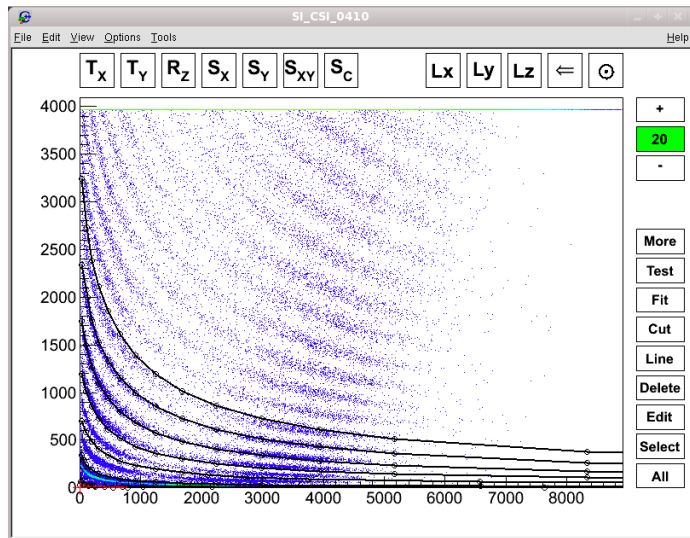
Comment supprimer une ligne ?



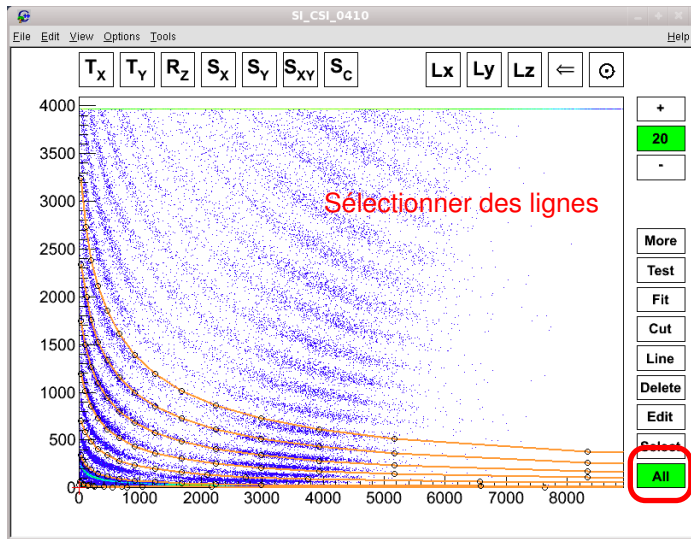
Comment supprimer une ligne ?



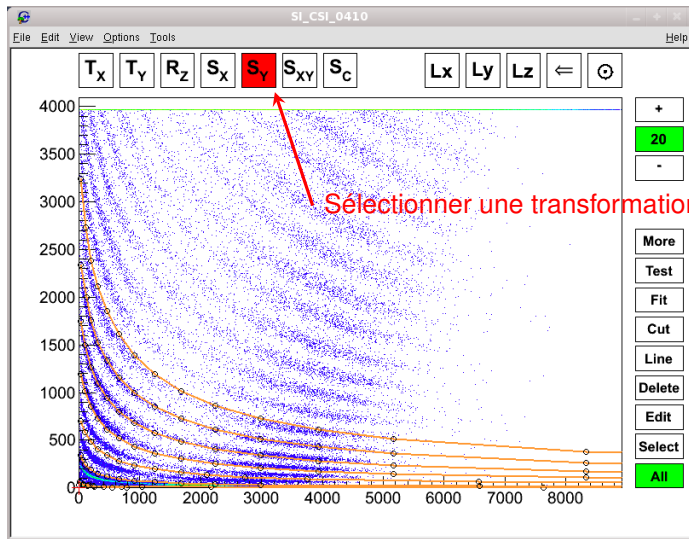
Comment appliquer une transformation ?



Comment appliquer une transformation ?

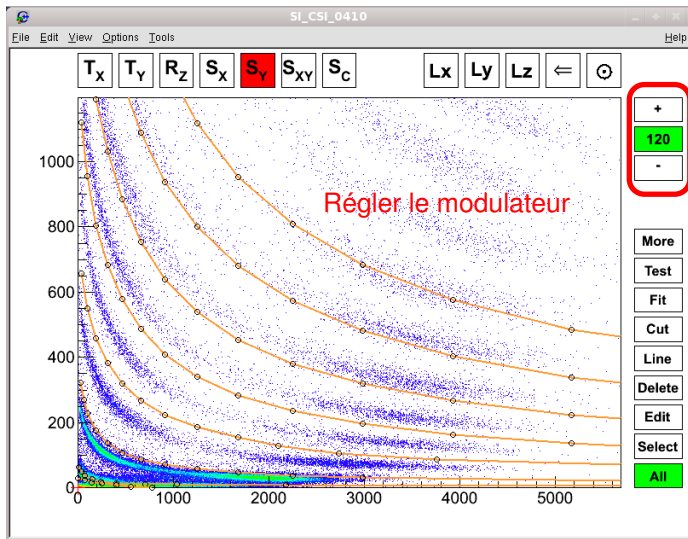


Comment appliquer une transformation ?

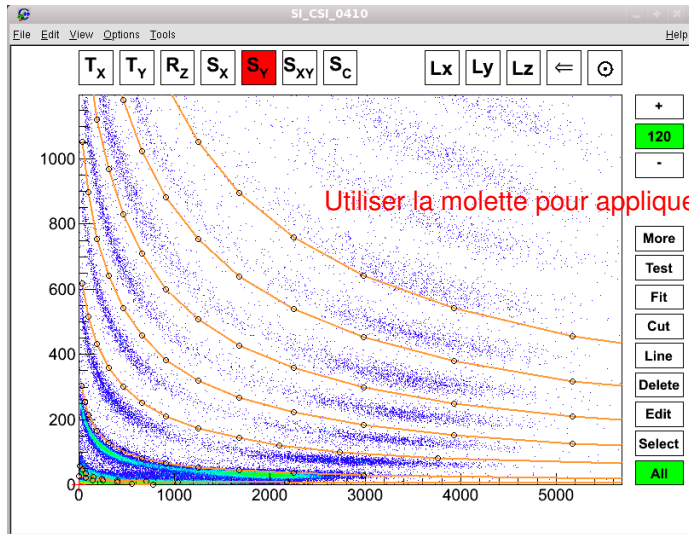


Sélectionner une transformation (Scale Y)

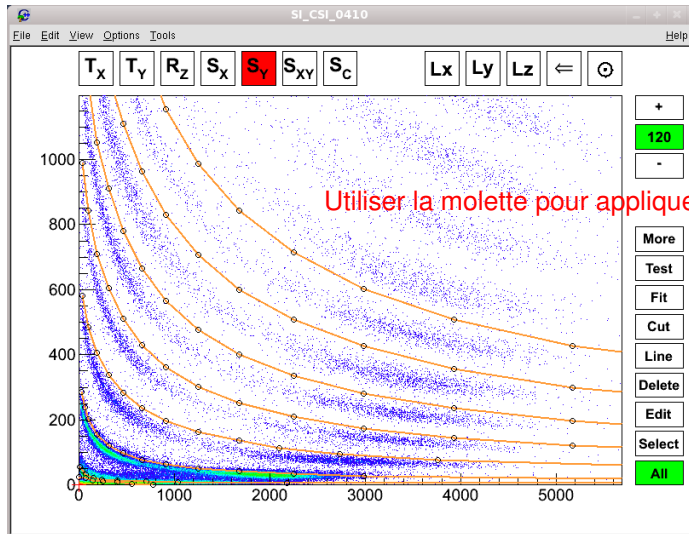
Comment appliquer une transformation ?



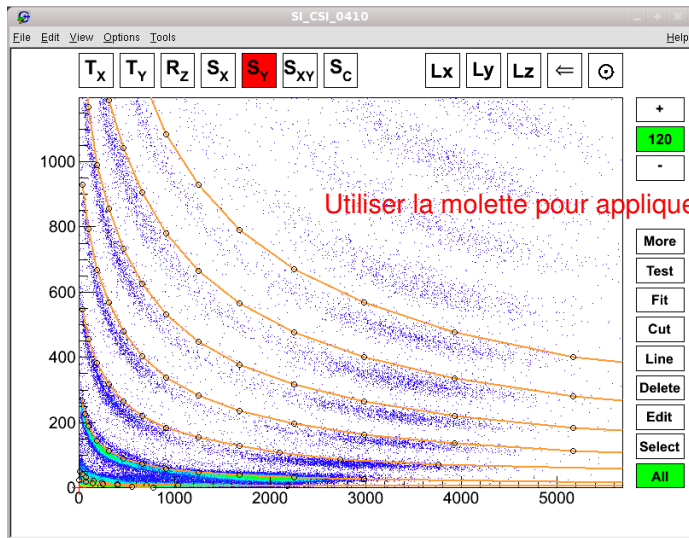
Comment appliquer une transformation ?



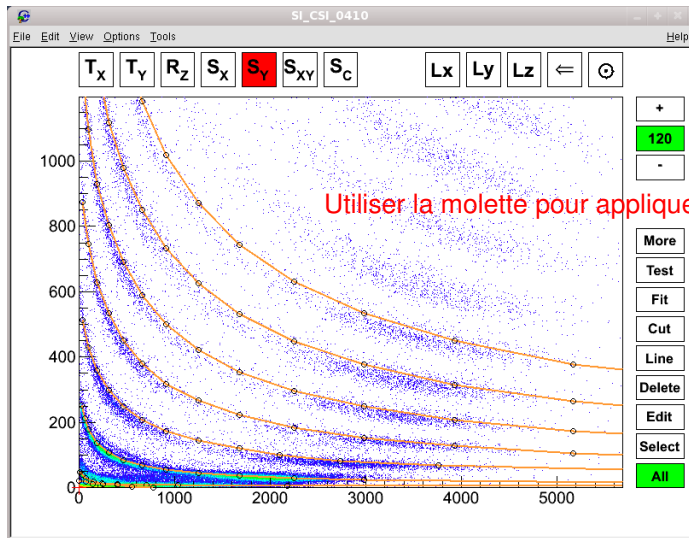
Comment appliquer une transformation ?



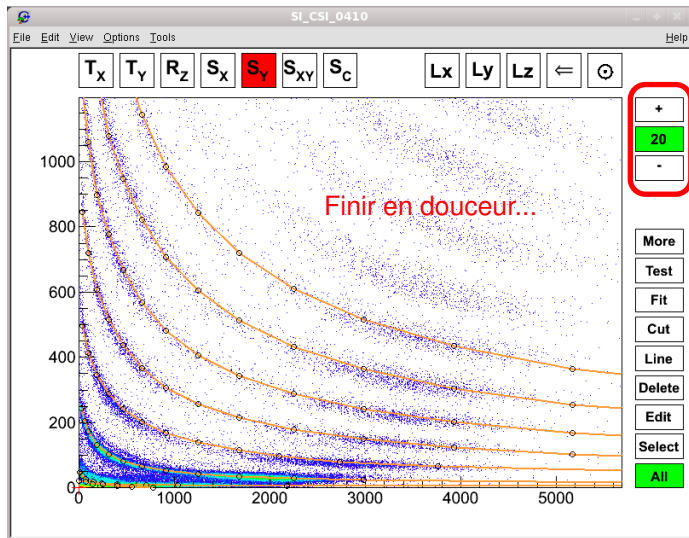
Comment appliquer une transformation ?



Comment appliquer une transformation ?



Comment appliquer une transformation ?



Transférés du KVIDGridManagerGUI

- Test grid, Fit grid, new Line-Cut, SetEditable...

Bouton "More"

- SaveCurrentGrid,
- SetVarXVarY, SetRunList, AddParameters,
- SetSelectedColor (change la couleur des lignes sélectionnées),

Utilitaires

- Zoom glissé à la gnuplot,
- zoom/unzoom et déplacement molette à la google map,
- "Undo"...

Personnalisation

- Ajout de nouvelles fonctionnalités dans "More" très simple.

Conclusion et perspectives

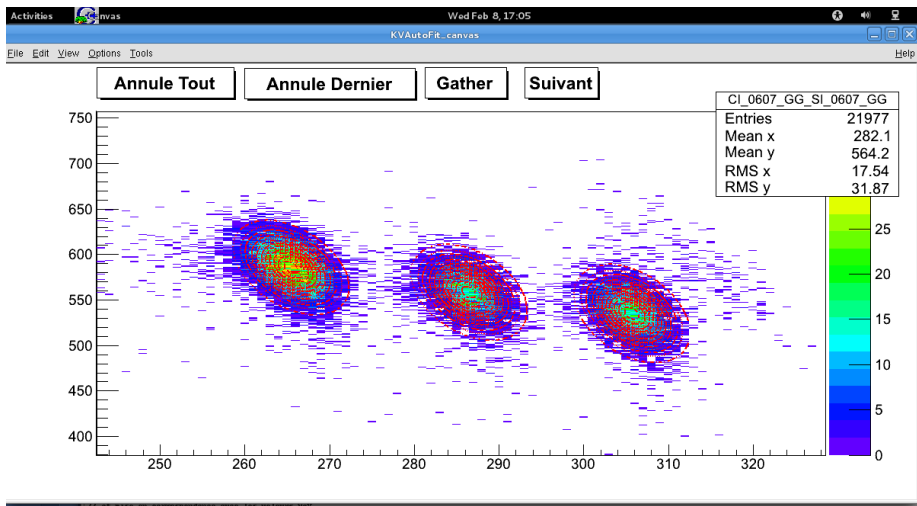
Conclusion

- Disponible dans KaliVeda 1.8.5,
- utilisé avec succès pour modifier les grilles SI-CSI lors des changements de gains (144 grilles).

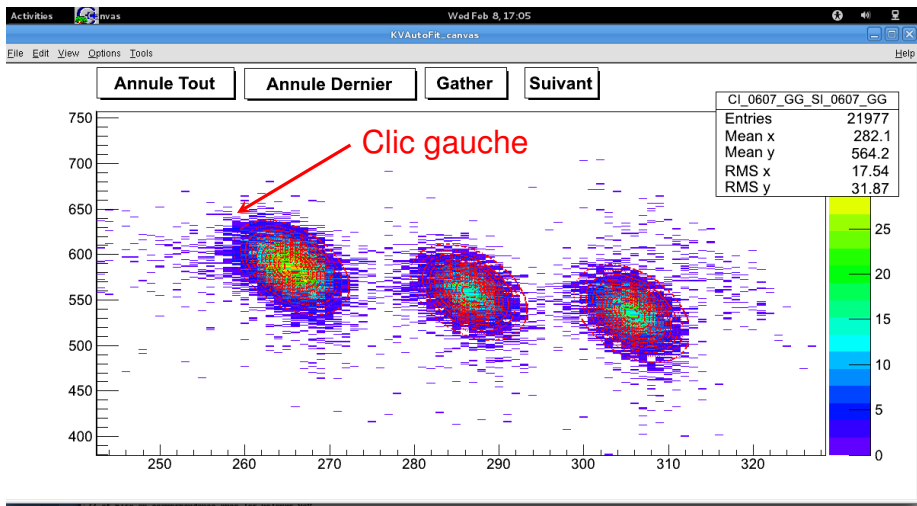
Perspectives

- Intégrer la Spider Identification,
- écrire une doc...

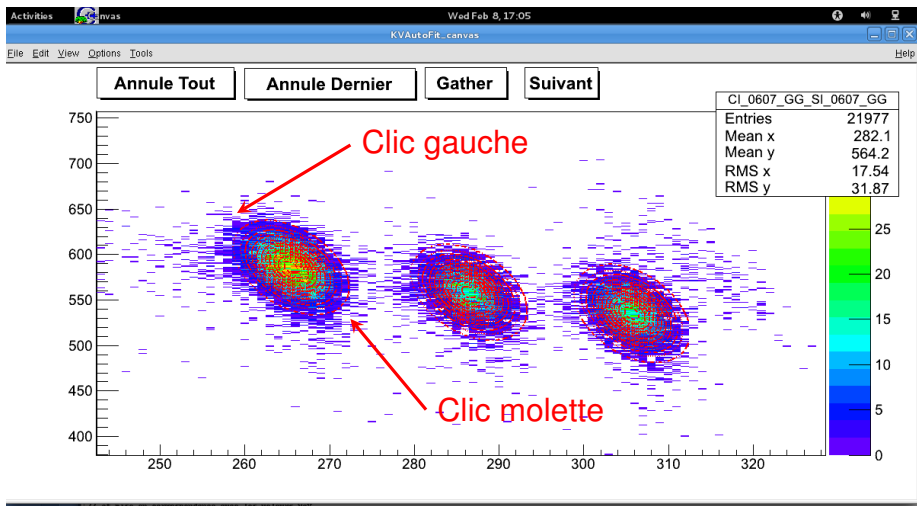
Extraire les pics α et élastiques : KV Gauss2D



Extraire les pics α et élastiques : KV Gauss2D



Extraire les pics α et élastiques : KV Gauss2D



The End

La Fin...