

# JupyLabBook

May 25, 2020

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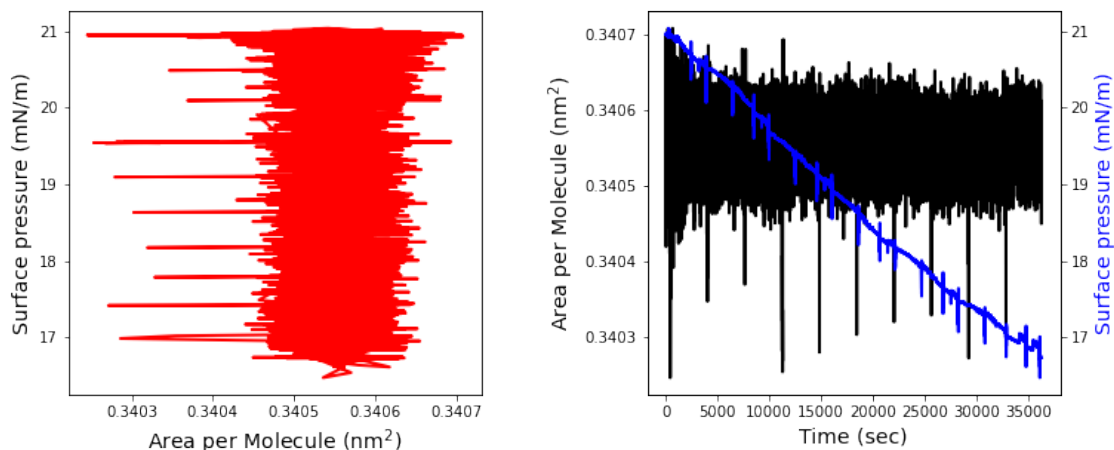
## 1 Form

13

<IPython.core.display.Javascript object>

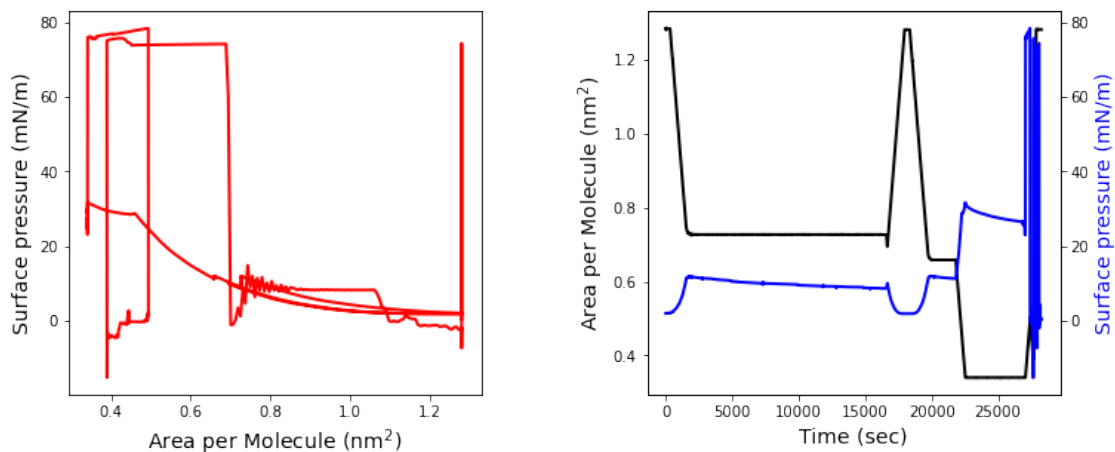
### 0.0.1 SIRIUS\_Isotherm\_2019\_02\_15\_01541: isotherm 1.97 46 35000 1

SIRIUS\_Isotherm\_2019\_02\_15\_01541



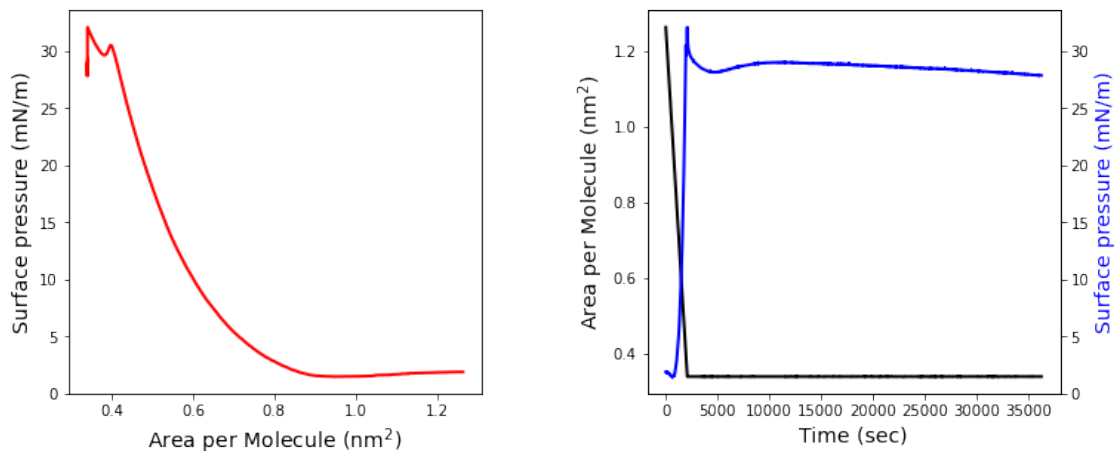
0.0.2 SIRIUS\_Isotherm\_2019\_02\_16\_01542: isotherm 1.97 46 35000 1

SIRIUS\_Isotherm\_2019\_02\_16\_01542

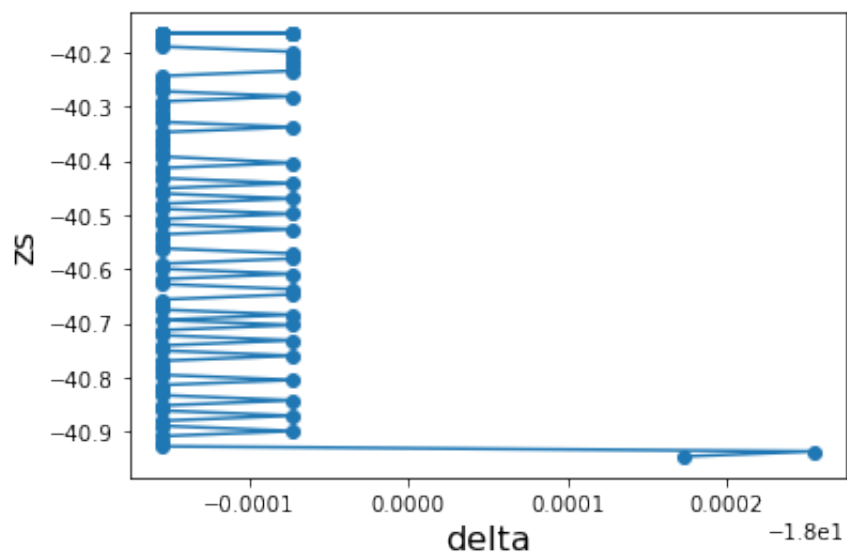


0.0.3 SIRIUS\_Isotherm\_2019\_02\_17\_01544: isotherm 1.97 46 35000 1

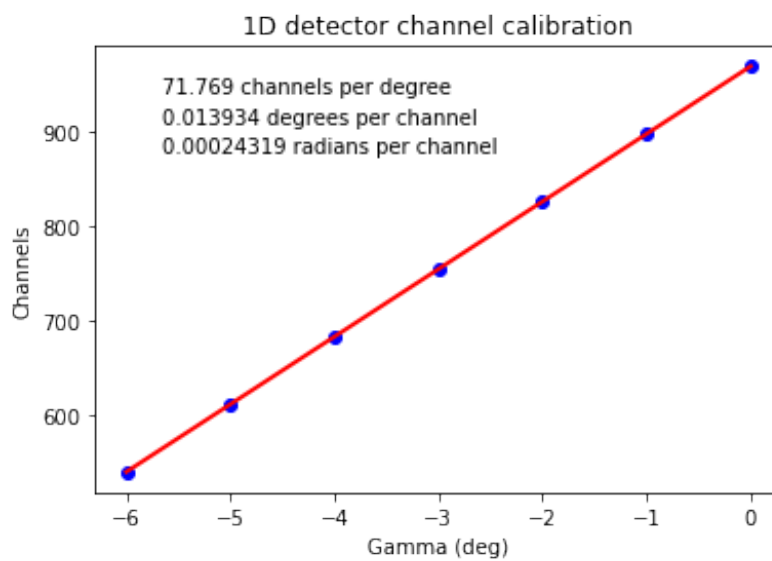
SIRIUS\_Isotherm\_2019\_02\_17\_01544



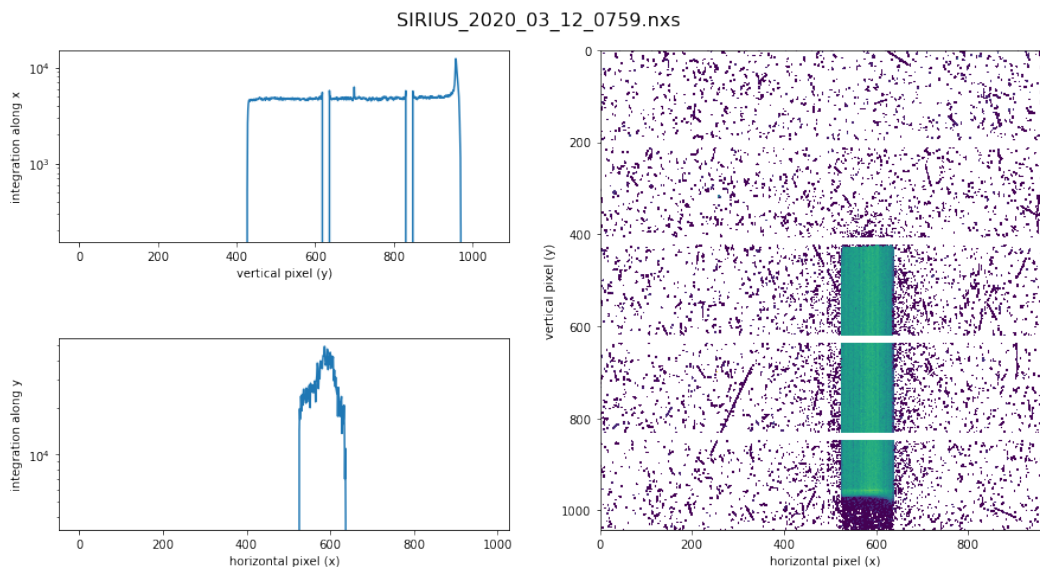
#### 0.0.4 SIRIUS\_2020\_03\_12\_0760: run cont\_regh.ipy



#### 0.1 Calibration thetaz



#### 0.1.1 SIRIUS\_2020\_03\_12\_0759: continuous\_ascan delta -24 -15 150 5



- Open Nexus Data File :

```

/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/recording
/SIRIUS_2020_03_12_0759.nxs
. Number of data points: 151
. Pilatus data found, (column 11, alias pilatus)
. qxy data found, (column 10, alias qxy)
. Valid data between points 0 and 150
. Surface pressure data found, mean value 4.652 ± 0.002447 mN/m
. Area per molecule data found, mean value 0.2927 ± 0.0002703 nm2 per
molecule
. Gamma motor data found, mean value 9.009e-05 deg
. For more details on the geometry, see:
  -Fig.2 in doi:10.1107/S0909049512022017
  -Slide 4 in http://gisaxs.com/files/Strzalka.pdf
. Original, non binned matrix saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat
. Scalar data saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.dat
. Qz values saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz10.dat
. Binned matrix saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat10
. XYZ data saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy10
. Qz values saved in:
  /Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz20.dat
. Binned matrix saved in:

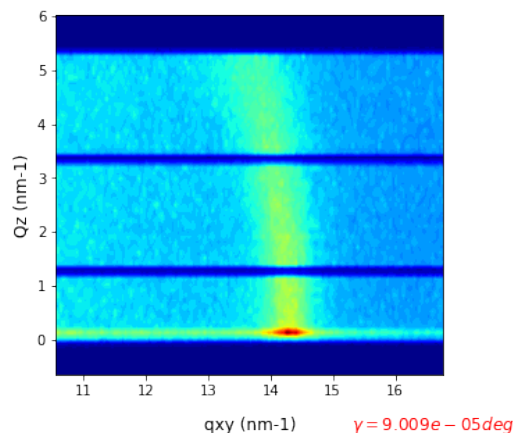
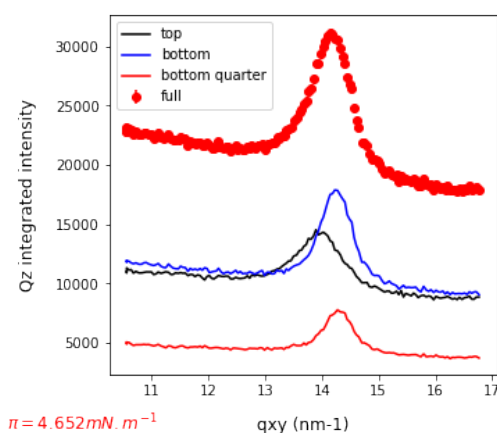
```

```

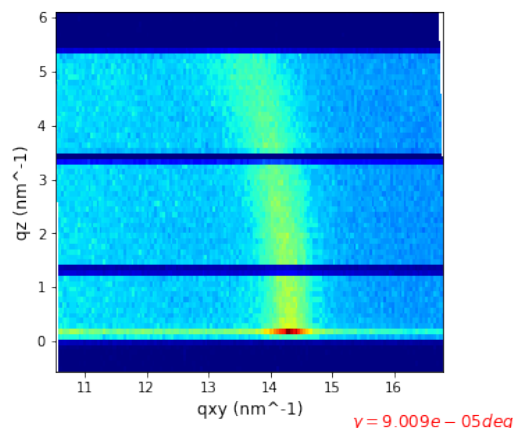
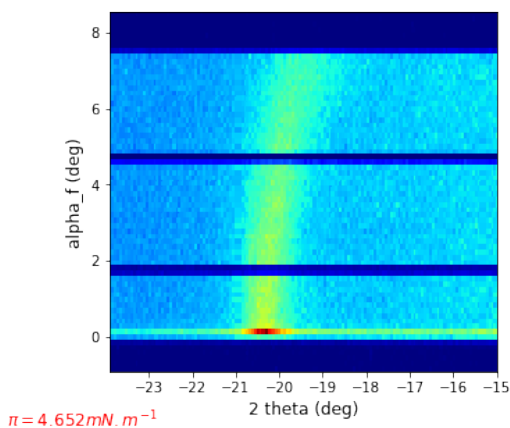
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat20
. XYZ      data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy20
. Qz values saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz40.dat
. Binned matrix saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat40
. XYZ      data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy40

```

SIRIUS\_2020\_03\_12\_0759.nxs



True GIXD



#### - Open Nexus Data File :

```

/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyLabBook/recording
/SIRIUS_2020_03_12_0759.nxs
. Number of data points: 151
. Pilatus data found, (column 11, alias pilatus)
. qxy data found, (column 10, alias qxy)
. Valid data between points 0 and 150

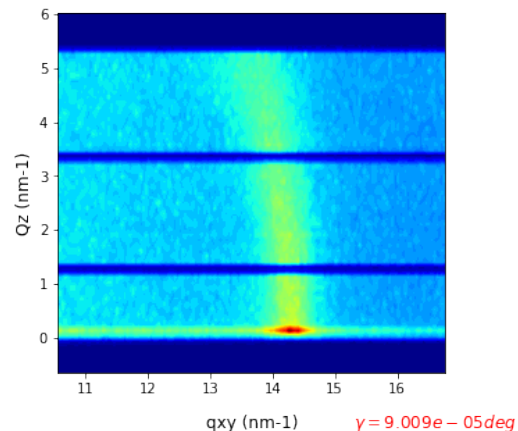
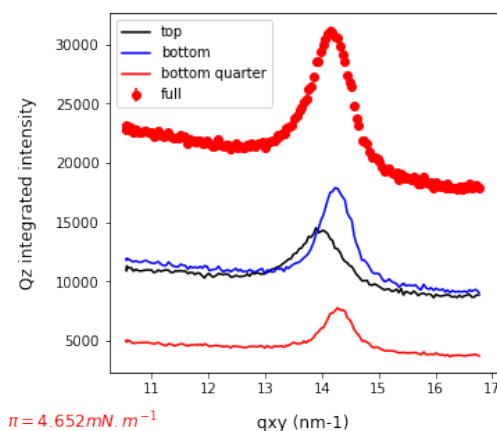
```

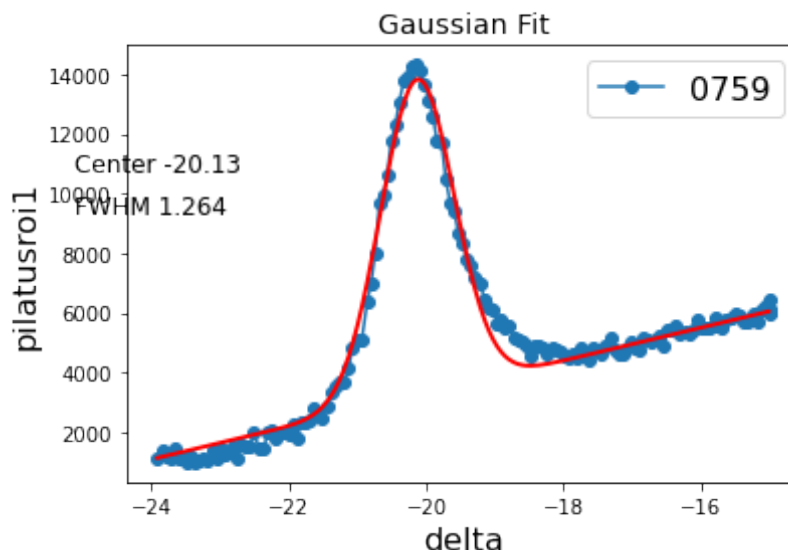
```

. Surface pressure data found, mean value 4.652 ± 0.002447 mN/m
. Area per molecule data found, mean value 0.2927 ± 0.0002703 nm2 per
molecule
. Gamma motor data found, mean value 9.009e-05 deg
. Original, non binned matrix saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat
. Scalar data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.dat
. Qz values saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz10.dat
. Binned matrix saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat10
. XYZ data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy10
. Qz values saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz20.dat
. Binned matrix saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat20
. XYZ data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy20
. Qz values saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/S
IRIUS_2020_03_12_0759_1D_qz40.dat
. Binned matrix saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.mat40
. XYZ data saved in:
/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/working/
SIRIUS_2020_03_12_0759_1D.moy40

```

SIRIUS\_2020\_03\_12\_0759.nxs





### 0.1.2 SIRIUS\_2020\_03\_12\_0759: continuous\_ascan delta -24 -15 150 5

#### - Open Nexus Data File :

/Users/arnaudhemmerle/Documents/Recherche/Analysis/JupyterLabBook/recording  
/SIRIUS\_2020\_03\_12\_0759.nxs

. Number of data points: 151

. Available Counters:

```

0 -----> delta
1 -----> zs
2 -----> gamma
3 -----> hu36energy
4 -----> xs
5 -----> energydcm
6 -----> current
7 -----> mon2
8 -----> surfacepressure
9 -----> areapermolecule
10 -----> qxy
11 -----> pilatus
12 -----> pilatusroi1
13 -----> integration_time
14 -----> sensorsRelTimestamps
15 -----> sensorsTimestamps

```

. Pilatus data found, (column 11, alias pilatus)

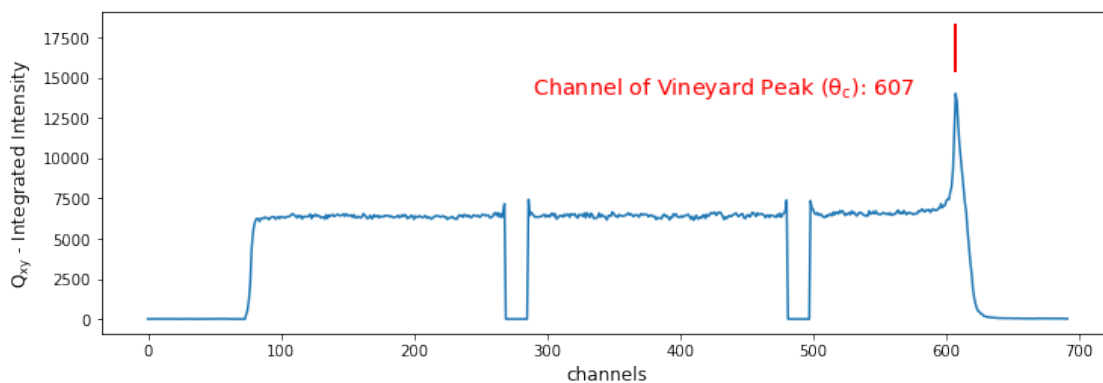
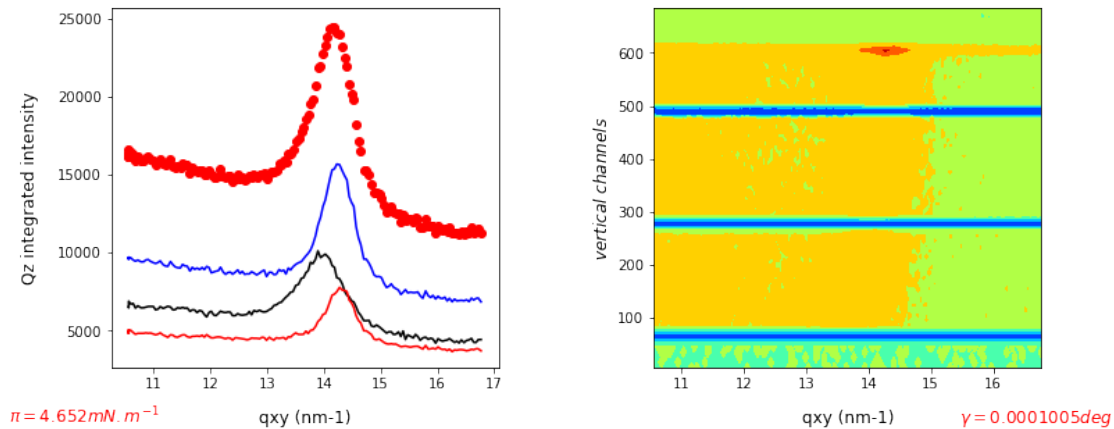
. qxy data found, (column 10, alias qxy)

. Surface pressure data found, mean value  $4.652 \pm 0.002432$  mN/m

. Area per molecule data found, mean value  $0.2927 \pm 0.000273$  nm<sup>2</sup> per  
molecule

. Gamma motor data found, mean value  $0.0001005$  deg

SIRIUS\_2020\_03\_12\_0759.nxs

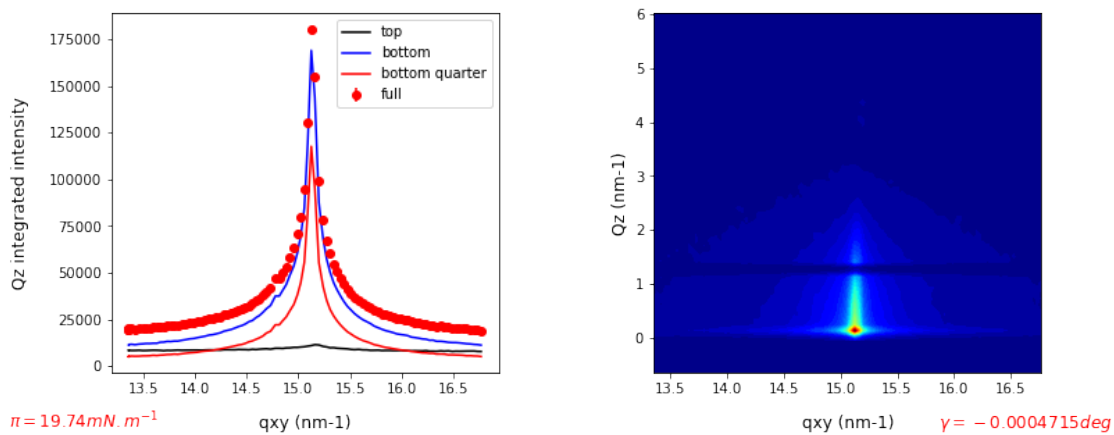


Data not saved. To save data, run a GIXD on the scan.

Channel0: 607

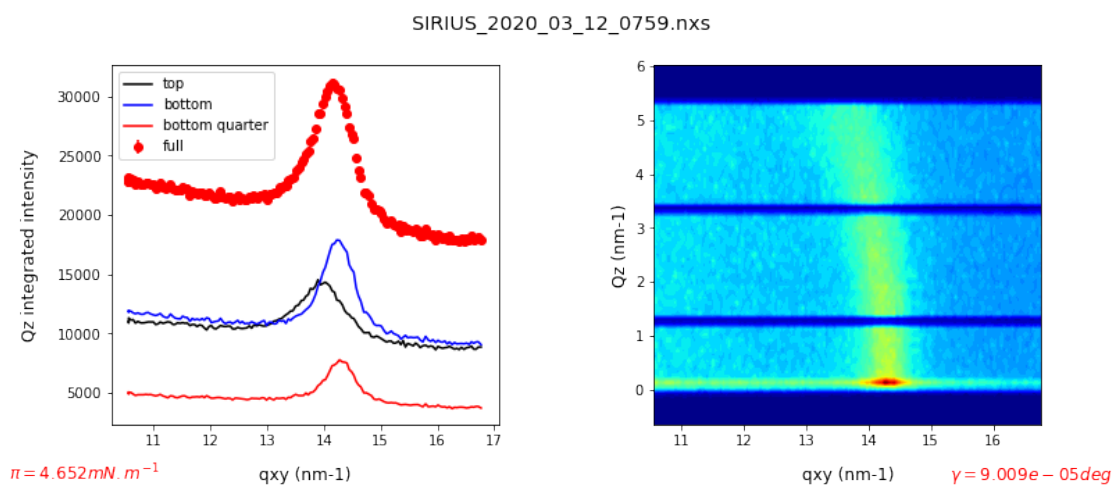
### 0.1.3 SIRIUS\_2020\_03\_12\_0756: continuous\_ascan delta -24 -19 100 5

SIRIUS\_2020\_03\_12\_0756.nxs

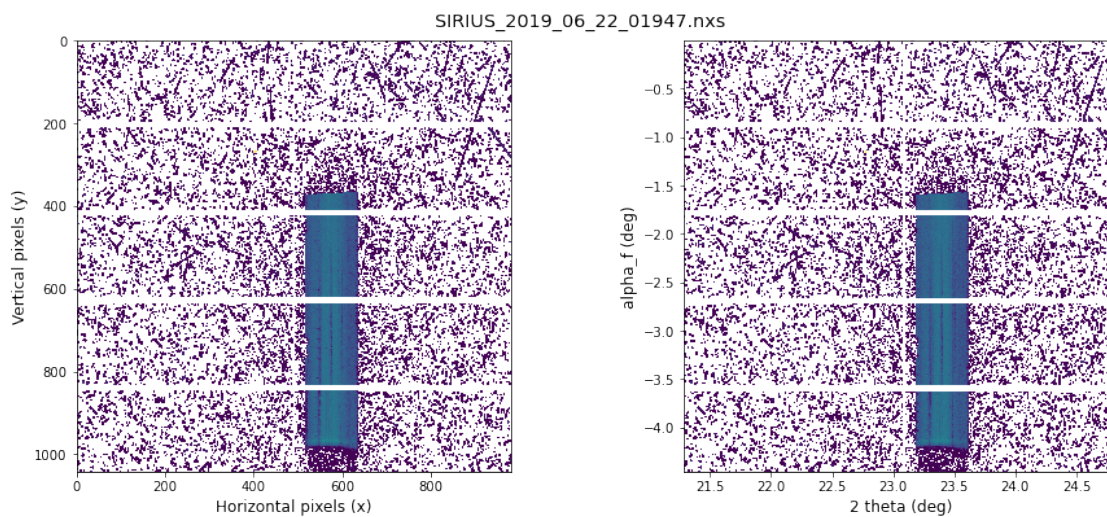




#### 0.1.4 SIRIUS\_2020\_03\_12\_0759: continuous\_ascan delta -24 -15 150 5



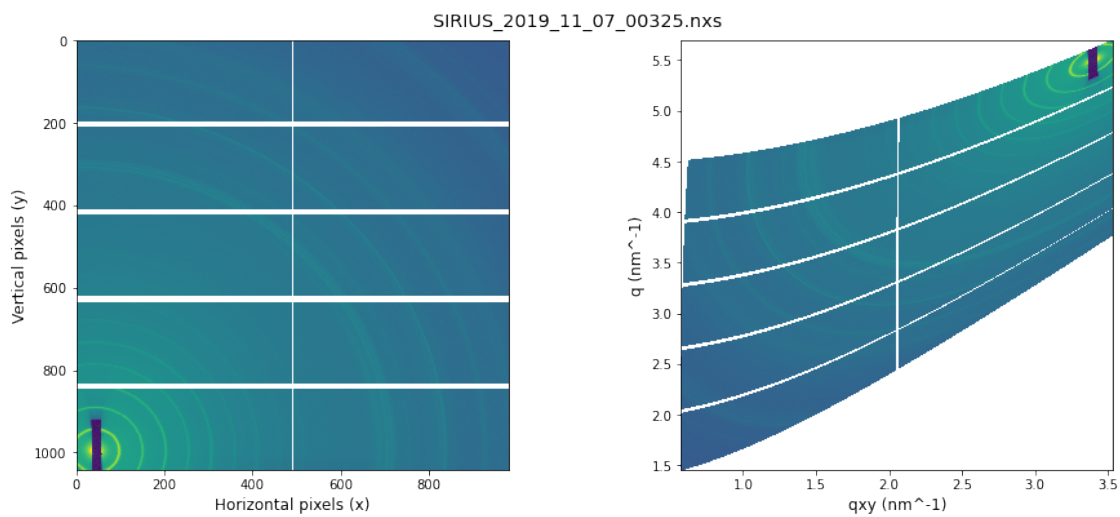
#### 0.1.5 SIRIUS\_2019\_06\_22\_01947: No command found



#### 0.1.6 SIRIUS\_2019\_11\_07\_00325: No command found

```
. No gamma found!
Enter gamma:-2
. gamma = -2

. No delta found!
Enter delta:5
. delta = 5
```



. No gamma found!

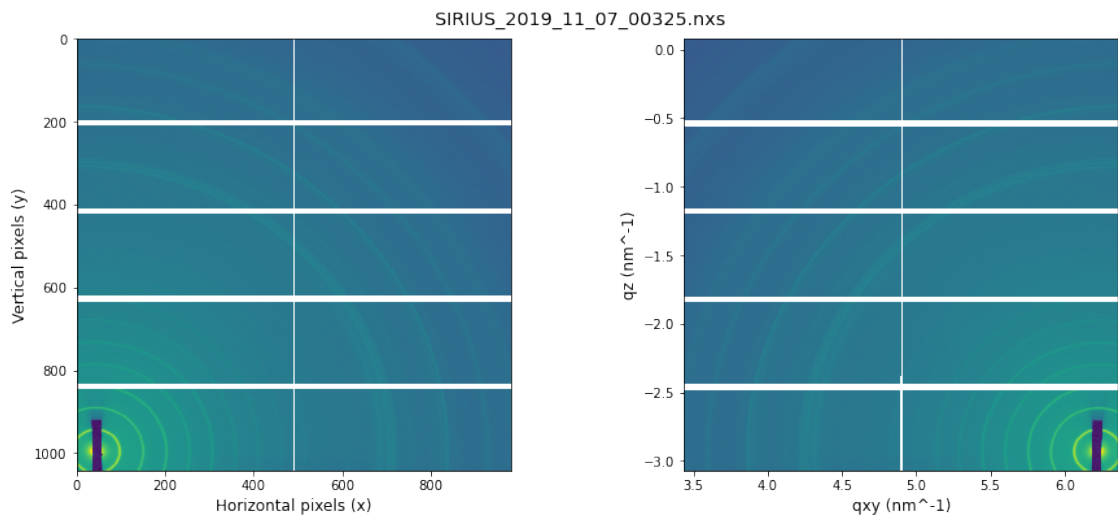
Enter gamma:

. gamma = 0

. No delta found!

Enter delta:9

. delta = 9



. No gamma found!

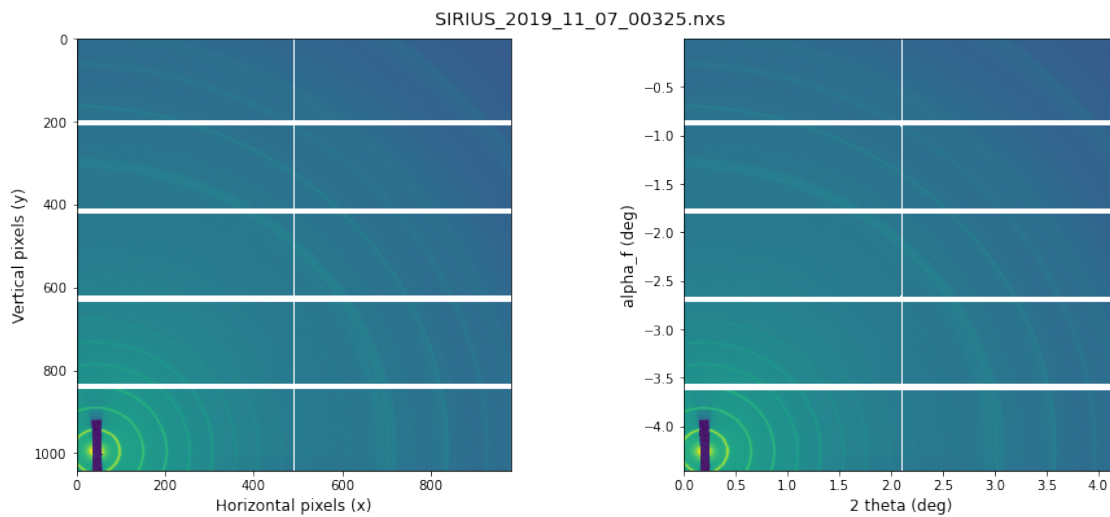
Enter gamma:

. gamma = 0

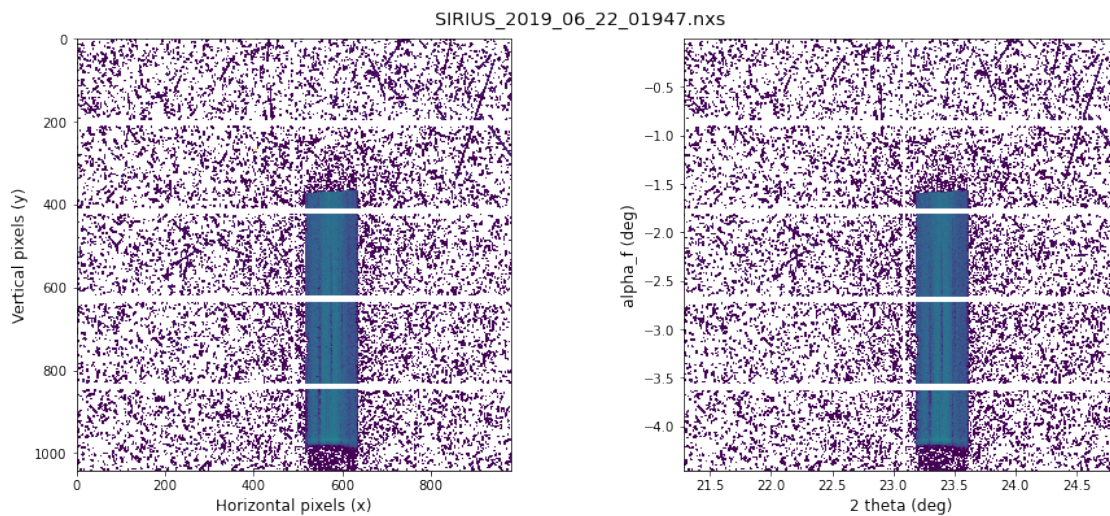
. No delta found!

Enter delta:

. delta = 0



### 0.1.7 SIRIUS\_2019\_06\_22\_01947: No command found



### 0.1.8 SIRIUS\_2019\_11\_07\_00325: No command found

`. No gamma found!`

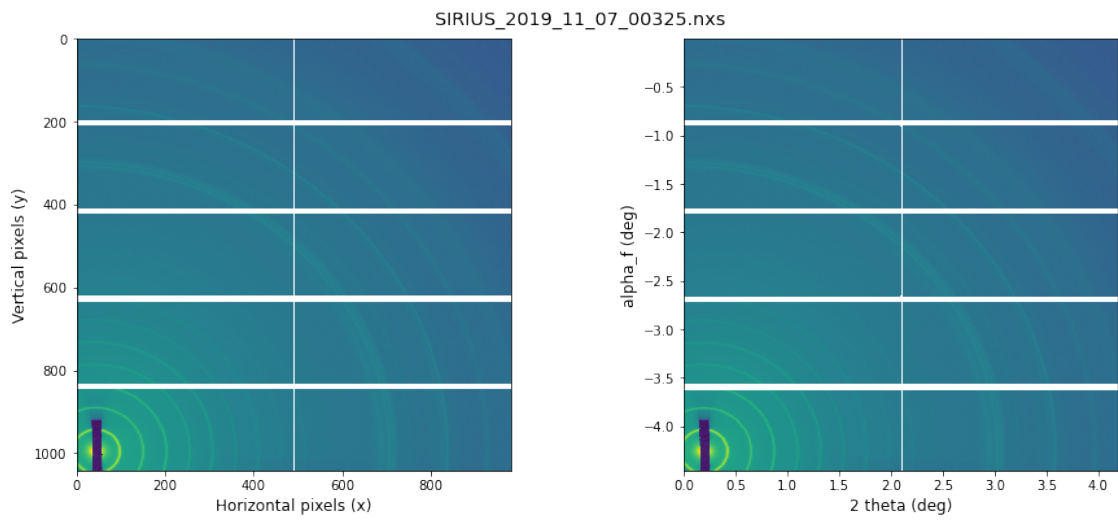
Enter gamma:

`. gamma = 0`

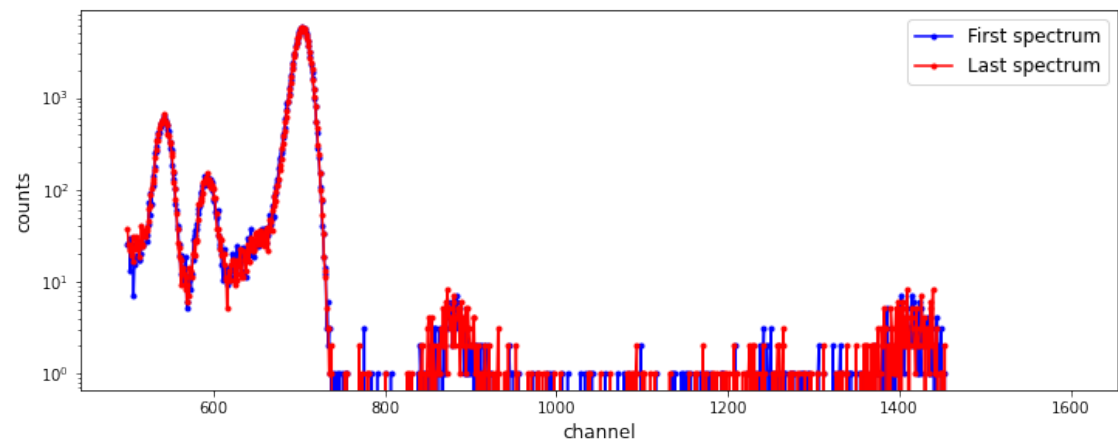
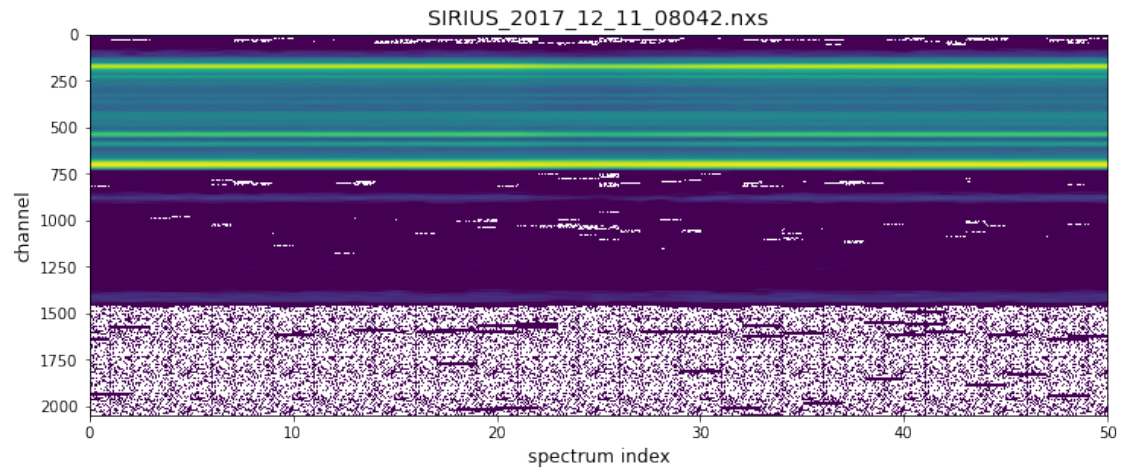
`. No delta found!`

Enter delta:

`. delta = 0`



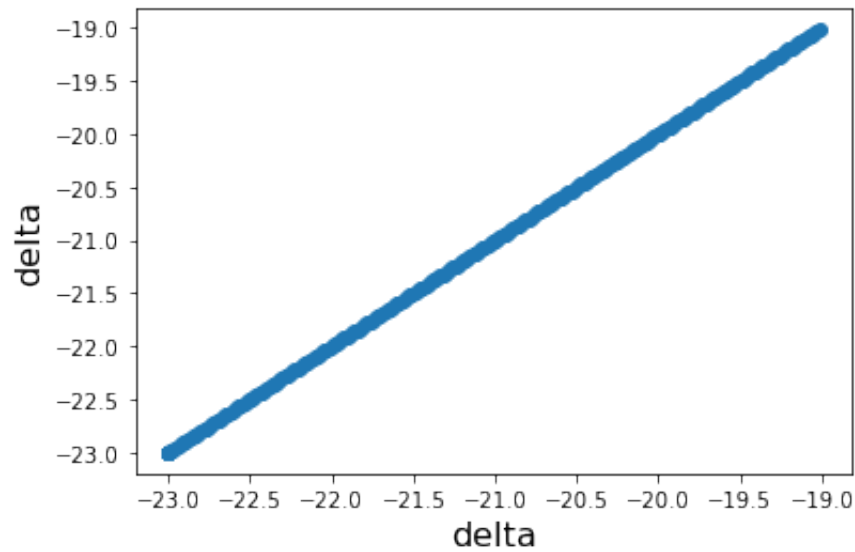
### 0.1.9 SIRIUS\_2017\_12\_11\_08042: run xsw7.ipy



0.1.10 SIRIUS\_2017\_12\_11\_08042: run xsw7.ipy

0.1.11 SIRIUS\_2019\_06\_22\_01947: No command found

0.1.12 SIRIUS\_2019\_06\_22\_01947: No command found



## 1 Form

### SIRIUS Beamline : Experiment

- Type:
- Safety: Yellow
- Date:
- Main proposer:
- Local contact:
- Users (on site):
- Recording directory:
- Machine:
  - Current:
  - Mode:
- Optics:
  - DCM: Si111
  - MGM: Not used
  - M1: M1-A Pt Track
  - M2: M2 Pt Track
  - M3: No M3
  - M4: M4 Pt Track
- Beam:
  - Fixed/Variable energy: Fixed

- Energy (keV):
- Wavelength (nm):
- Harmonic:
- Polarisation: LH
- Phase (deg): 0
- Horizontal focalisation True
- Vertical focalisation True
- Horizontal beamsize (mm):
- Monitors and XBPM:
  - mon1:
  - mon2:
  - mon3:
  - mon4:
  - Detectors:
- Remarks: