

autoPROC	1.3.0 (20200318)
XDS	VERSION Jan 31, 2020 BUILT=20200131
AIMLESS	Version 0.7.4
STARANISO	Version 2.3.33 (11-Apr-2020)
CCP4	Version 7.0.078
Host	server8
User	vonrhein (group = users)
Date	Fri Apr 24 08:42:24 CEST 2020
autoPROC	/home/software/xtal/GPhL/20200420
ADRP_Pmin_F11_d1_data	ADRP_Pmin_F11_d1_data_#####.cbf (720 images, 360°)
ADRP_Pmin_F11_d1_data2	ADRP_Pmin_F11_d1_data2_#####.cbf (200 images, 100°)

## Anisotropic data analysis with STARANISO:

**Spacegroup**  
**Cell parameters**

C2

139.5938 29.6609 37.8595  
90.0000 103.5076 90.0000

0.97918

**Wavelength [Å]**

1.137 1.169 1.081

0.929 0.000 -0.371

0.000 1.000 0.000

0.371 0.000 0.929

0.986  $a^*$  -0.166  $c^*$

$b^*$

0.858  $a^*$  + 0.513  $c^*$

**Eigenvector-1**

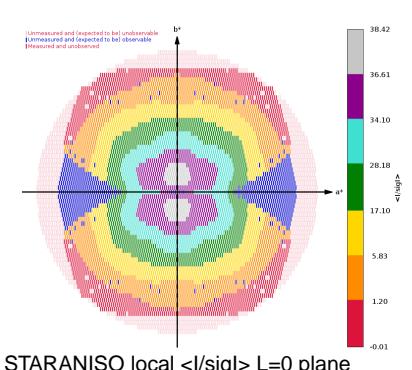
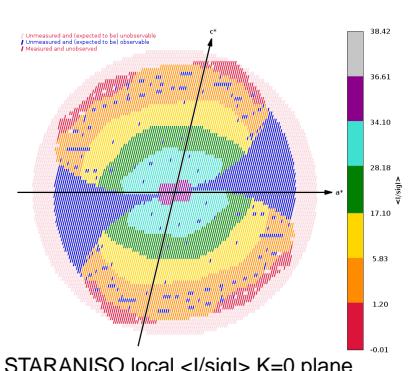
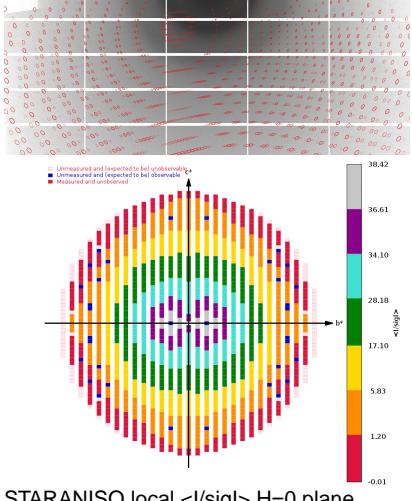
**Eigenvector-2**

**Eigenvector-3**

**Direction-1**

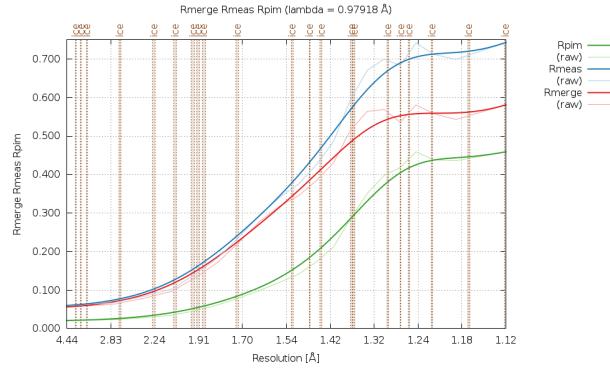
**Direction-2**

**Direction-3**

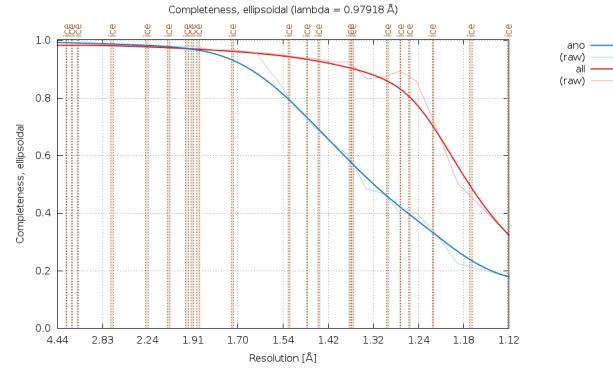


	Overall	Inner Shell	Outer Shell
Low resolution limit	36.083	36.083	1.169
High resolution limit	1.081	3.149	1.081
Rmerge (all I+ & I-)	0.118	0.056	0.581
Rmeas (all I+ & I-)	0.129	0.060	0.743
Rpim (all I+ & I-)	0.049	0.021	0.459
Total number of observations	264271	21814	4685
Total number unique	47849	2712	2279
Mean(I)/sd(I)	12.0	34.2	1.5
Completeness (spherical)	73.8	98.4	16.9
Completeness (ellipsoidal)	82.9	98.4	32.4
Multiplicity	5.5	8.0	2.1
CC(1/2)	0.995	0.998	0.437
Anomalous completeness (spherical)	56.6	99.3	8.8
Anomalous completeness (ellipsoidal)	64.1	99.3	18.0
Anomalous multiplicity	3.4	4.3	1.3
CC(ano)	-0.100	-0.158	NA
DANO /sd(DANO)	0.731	0.687	0.637

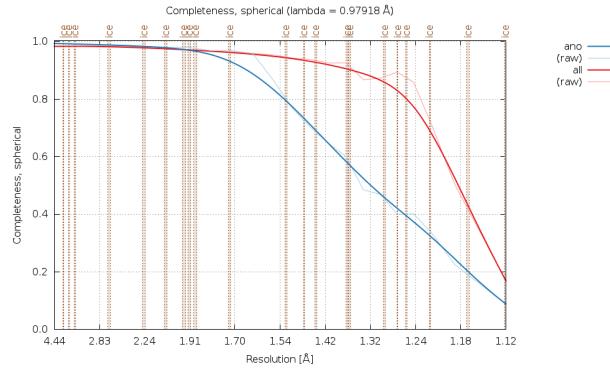
# Final scaling/merging - anisotropic data analysis via STARANISO



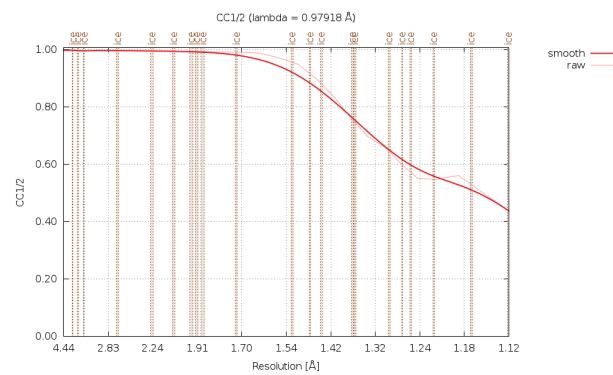
**Fig.1 :** R-values as a function of resolution (observations)



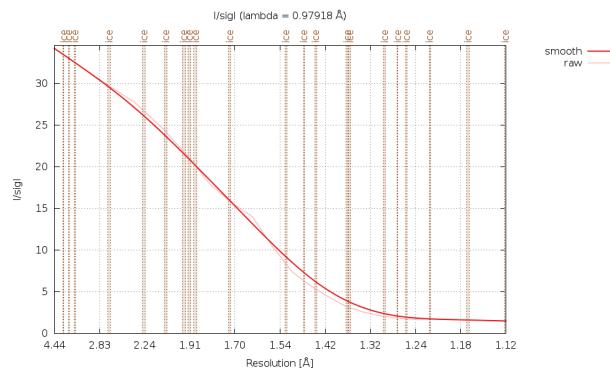
**Fig.2 :** Completeness (ellipsoidal) as a function of resolution (observations) - this is the relevant value here.



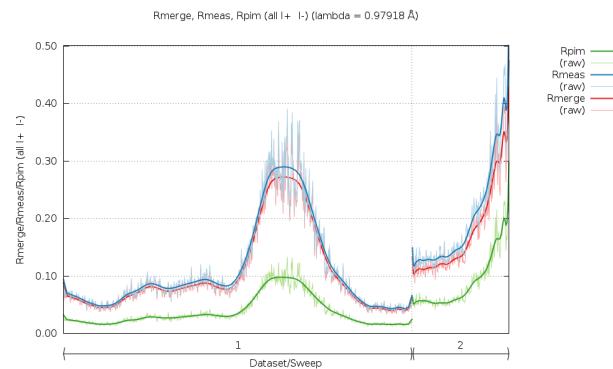
**Fig.3 :** Completeness (spherical) as a function of resolution (observations)



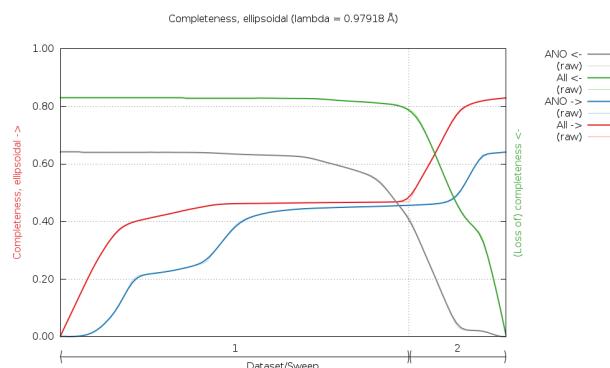
**Fig.4 :** CC<sub>1/2</sub> as a function of resolution (observations)



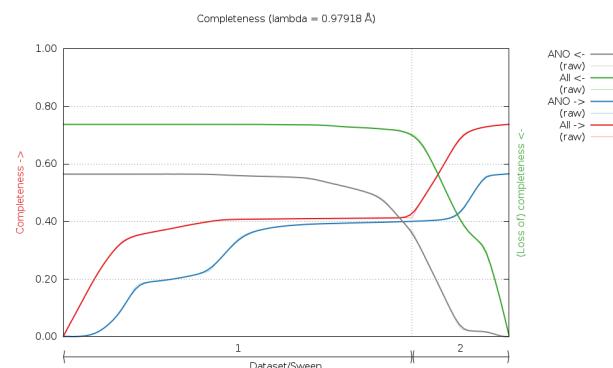
**Fig.5 :** I/sigI as a function of resolution (observations)



**Fig.6 :** R-values as a function of image number (observations)

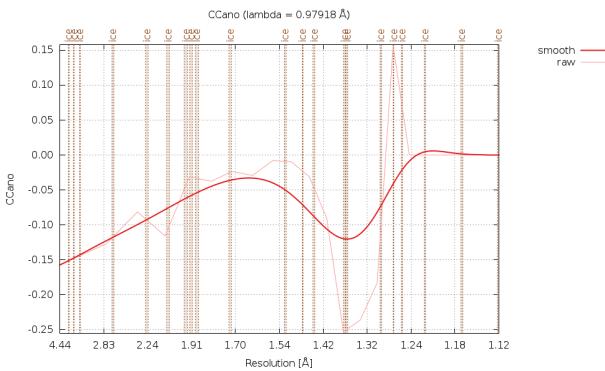


**Fig.7 :** Completeness (ellipsoidal) as a function of image number (observations) - this is the relevant value here.

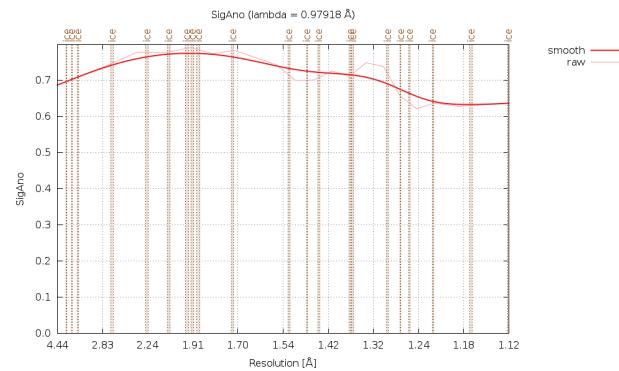


**Fig.8 :** Completeness (spherical) as a function of image number (observations)

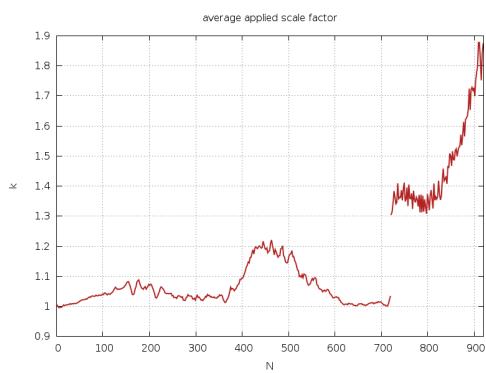
## Final scaling/merging - anisotropic data analysis via STARANISO



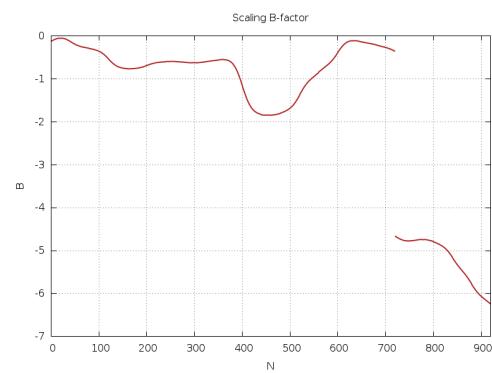
**Fig.9 :** CCano as a function of resolution (observations)



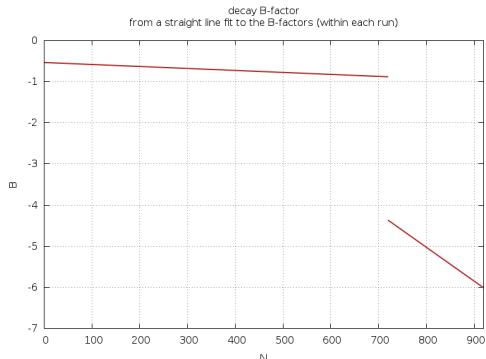
**Fig.10 :** SigAno as a function of resolution (observations)



**Fig.11 :** Scale factor (isotropic AIMLESS scaling) as a function of image number (measurements)

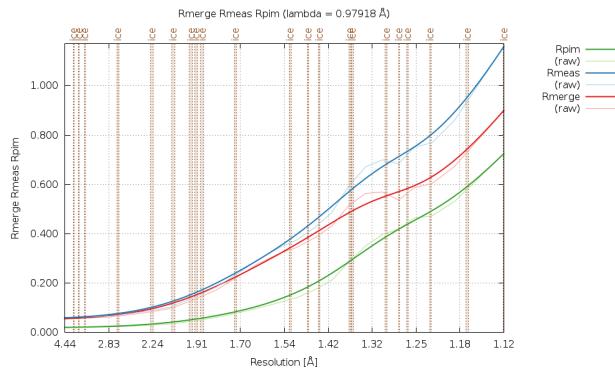


**Fig.12 :** Scaling B-factor (isotropic AIMLESS scaling) as a function of image number (measurements)

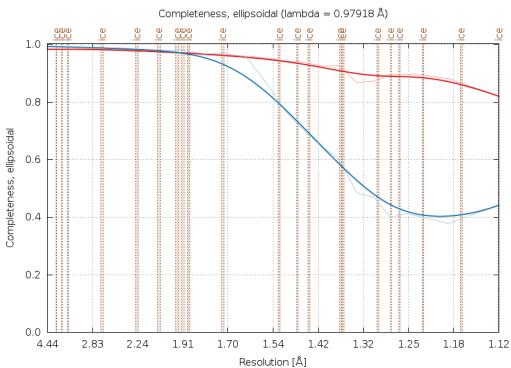


**Fig.13 :** Decay B-factor (isotropic AIMLESS scaling) as a function of image number (measurements)

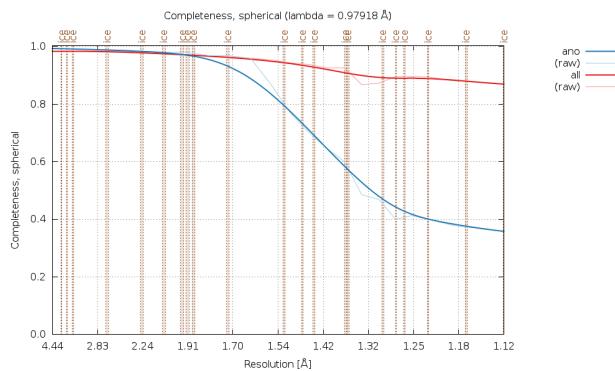
## Final scaling/merging - anisotropic data analysis via STARANISO (all measurements - for comparison only)



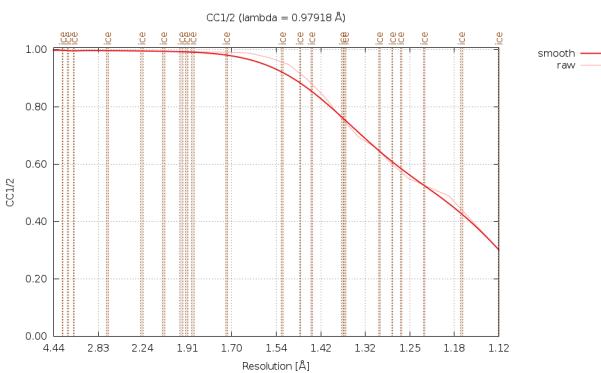
**Fig.14 :** R-values as a function of resolution (measurements)



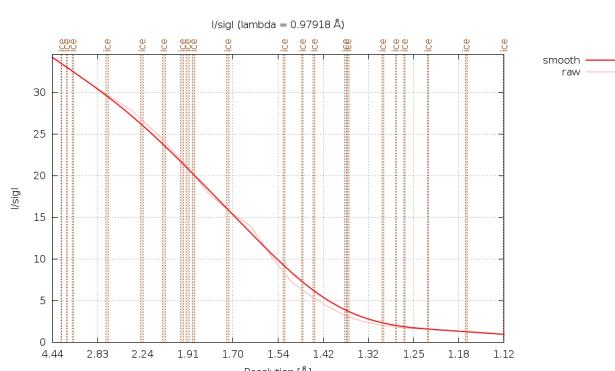
**Fig.15 :** Completeness (ellipsoidal) as a function of resolution (measurements)



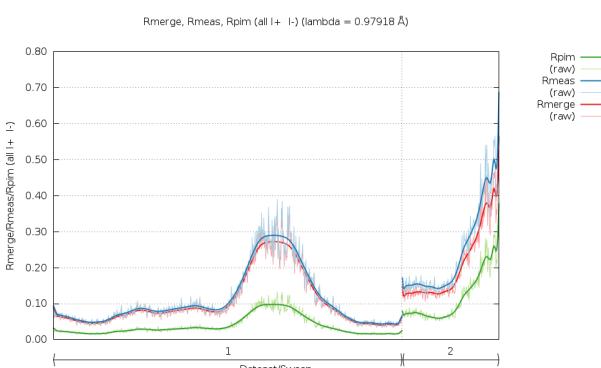
**Fig.16 :** Completeness (spherical) as a function of resolution (measurements)



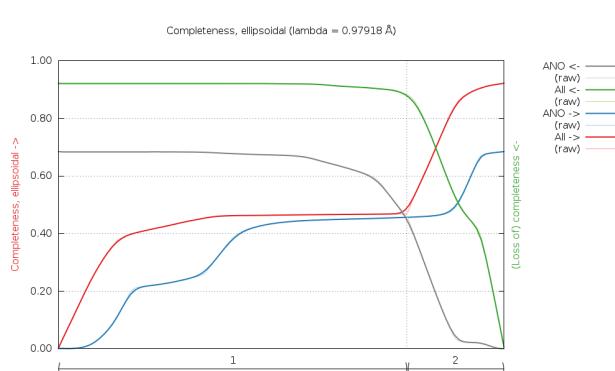
**Fig.17 :** CC<sub>1/2</sub> as a function of resolution (measurements)



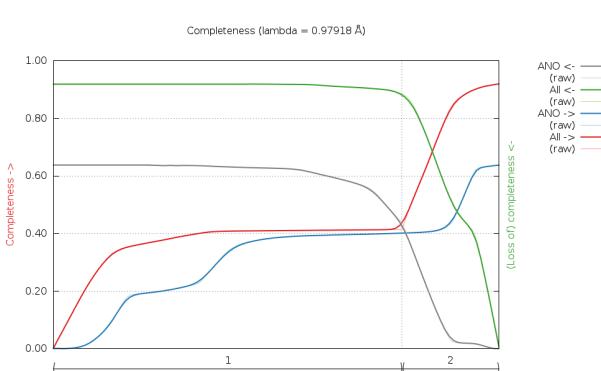
**Fig.18 :** I/sigI as a function of resolution (measurements)



**Fig.19 :** R-values as a function of image number (measurements)



**Fig.20 :** Completeness (ellipsoidal) as a function of image number (measurements)



**Fig.21 :** Completeness (spherical) as a function of image number (measurements)

## Final scaling/merging - anisotropic data analysis via STARANISO (all measurements - for comparison only)

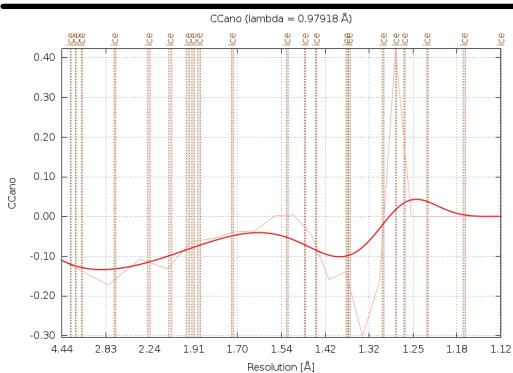


Fig.22 : CCano as a function of resolution (measurements)

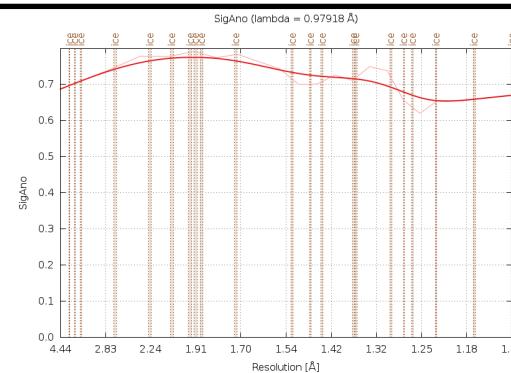
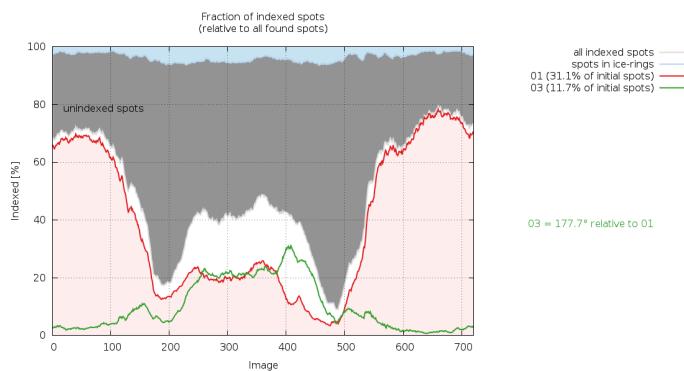


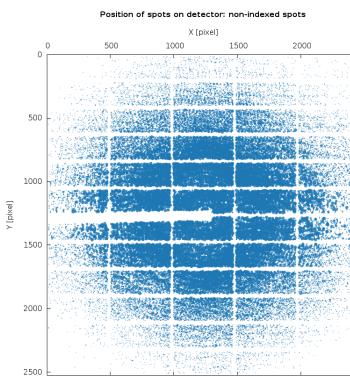
Fig.23 : SigAno as a function of resolution (measurements)

## Data processing sweep ADRP\_Pmin\_F11\_d1\_data

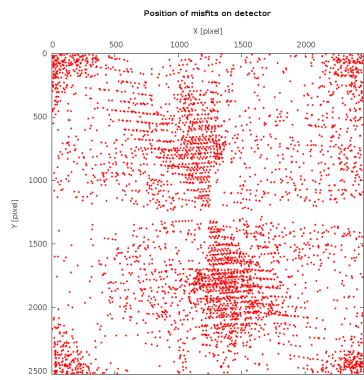
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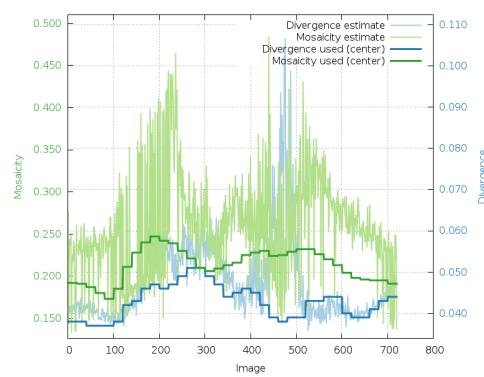
**Fig.24 :** (sweep ADRP\_Pmin\_F11\_d1\_data) number of spots for each indexing solution as a function of image number



**Fig.25 :** (sweep ADRP\_Pmin\_F11\_d1\_data) unindexed spots as a function of detector position



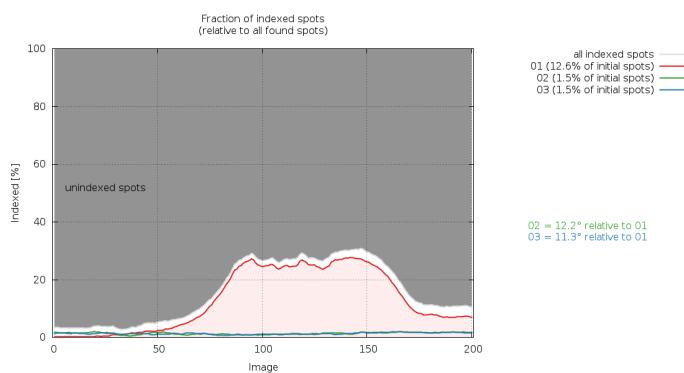
**Fig.26 :** (sweep ADRP\_Pmin\_F11\_d1\_data) reflections classified as misfits (as a function of detector position)



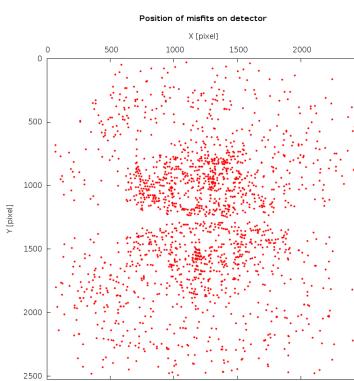
**Fig.27 :** (sweep ADRP\_Pmin\_F11\_d1\_data) divergence and mosaicity (estimated and used) as a function of image number

## Data processing sweep ADRP\_Pmin\_F11\_d1\_data2

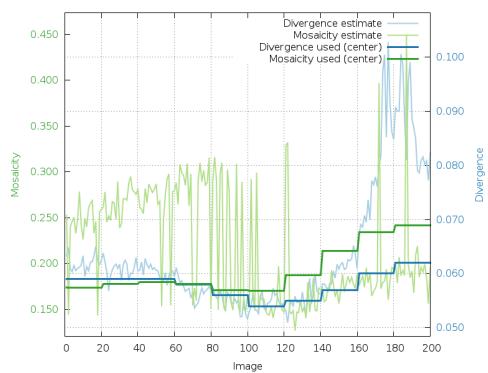
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**Fig.28 :** (sweep ADRP\_Pmin\_F11\_d1\_data2) number of spots for each indexing solution as a function of image number



**Fig.29 :** (sweep ADRP\_Pmin\_F11\_d1\_data2) reflections classified as misfits (as a function of detector position)



**Fig.30 :** (sweep ADRP\_Pmin\_F11\_d1\_data2) divergence and mosaicity (estimated and used) as a function of image number

## References

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- autoPROC      Vonrhein, C., Flensburg, C., Keller, P., Sharff, A., Smart, O., Paciorek, W., Womack, T. and Bricogne, G. (2011). Data processing and analysis with the autoPROC toolbox. *Acta Cryst. D67*, 293-302.
- XDS            Kabsch, W. (2010). XDS. *Acta Cryst. D66*, 125-132.
- POINTLESS     Evans, P.R. (2006). Scaling and assessment of data quality, *Acta Cryst. D62*, 72-82.
- AIMLESS        Evans, P.R. and Murshudov, G.N. (2013). How good are my data and what is the resolution?, *Acta Cryst. D69*, 1204-1214.
- CCP4           Winn, M.D., Ballard, C.C., Cowtan, K.D. Dodson, E.J., Emsley, P., Evans, P.R., Keegan, R.M., Krissinel, E.B., Leslie, A.G.W., McCoy, A., McNicholas, S.J., Murshudov, G.N., Pannu, N.S., Potterton, E.A., Powell, H.R., Read, R.J., Vagin, A. and Wilson, K.S. (2011). Overview of the CCP4 suite and current developments, *Acta Cryst. D67*, 235-242.
- STARANISO     Tickle, I.J., Flensburg, C., Keller, P., Paciorek, W., Sharff, A., Vonrhein, C., and Bricogne, G. (2020). STARANISO. Cambridge, United Kingdom: Global Phasing Ltd.