

checkCIF/PLATON report (publication check)

No syntax errors found.
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[CIF dictionary](#)
[Interpreting this report](#)

Datablock: complex1

Bond precision:	C-C = 0.0065 A	Wavelength=0.71073
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Cell:	a=11.6822(8)	b=11.7376(8)	c=6.2220(4)
	alpha=90	beta=90.0466 (18)	gamma=90

Temperature: 295 K

	Calculated	Reported
Volume	853.17(10)	853.17(10)
Space group	P 21/c	P 21/c
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C6 H3 Ag2 Cl O4 S	C6 H3 Ag2 Cl O4 S
Sum formula	C6 H3 Ag2 Cl O4 S	C6 H3 Ag2 Cl O4 S
Mr	422.34	422.33
Dx,g cm-3	3.288	3.288
Z	4	4
Mu (mm-1)	5.125	5.125
F000	792.0	792.0
F000'	786.19	
h,k,lmax	15,15,8	15,15,8
Nref	1941	1937
Tmin,Tmax	0.427,0.541	0.476,0.578
Tmin'	0.414	

Correction method= MULTI-SCAN

Data completeness= 0.998 Theta(max)= 27.470

R(reflections)= 0.0250(1830) wR2(reflections)= 0.0614(1937)

S = 1.060 Npar= 128

The following ALERTS were generated. Each ALERT has the format

[test-name_ALERT_alert-type_alert-level.](#)

Click on the hyperlinks for more details of the test.

● Alert level C

PLAT232_ALERT_2_C	Hirshfeld Test Diff (M-X)	Ag1	--	O3_d	..	5.32	su
PLAT232_ALERT_2_C	Hirshfeld Test Diff (M-X)	Ag2	--	O2	..	6.38	su

● Alert level G

PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd)	.	1.38	Ratio
PLAT794_ALERT_5_G	Note: Tentative Bond Valency for Ag1	1.02	
PLAT794_ALERT_5_G	Note: Tentative Bond Valency for Ag2	0.85	

0 **ALERT level A** = In general: serious problem
0 **ALERT level B** = Potentially serious problem
2 **ALERT level C** = Check and explain
3 **ALERT level G** = General alerts; check

0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
2 ALERT type 2 Indicator that the structure model may be wrong or deficient
0 ALERT type 3 Indicator that the structure quality may be low
1 ALERT type 4 Improvement, methodology, query or suggestion
2 ALERT type 5 Informative message, check

Datablock: complex2

Bond precision: C-C = 0.0043 Å Wavelength=0.71073

Cell: a=9.6946(19) b=11.245(2) c=9.2827(19)

alpha=90 beta=100.76(3) gamma=90

Temperature: 295 K

	Calculated	Reported
Volume	994.2(3)	994.2(3)
Space group	P 21/c	P 21/c
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C6 H5 Ag2 Cl O5 S	C6 H5 Ag2 Cl O5 S
Sum formula	C6 H5 Ag2 Cl O5 S	C6 H5 Ag2 Cl O5 S
Mr	440.36	440.35
Dx, g cm ⁻³	2.942	2.942

Z	4	4
Mu (mm-1)	4.411	4.412
F000	832.0	832.0
F000'	826.23	
h,k,lmax	12,14,12	12,14,12
Nref	2267	2264
Tmin,Tmax	0.535,0.616	0.539,0.642
Tmin'	0.489	
Correction method= MULTI-SCAN		
Data completeness=	0.999	Theta(max)= 27.420
R(reflections)=	0.0282(2125)	wR2(reflections)= 0.0710(2264)
S =	1.071	Npar= 142

The following ALERTS were generated. Each ALERT has the format

test-name_ALERT_alert-type_alert-level.

Click on the hyperlinks for more details of the test.

● Alert level C

PLAT220_ALERT_2_C	Large Non-Solvent	O	Ueq(max)/Ueq(min)	...	3.44	Ratio
PLAT222_ALERT_3_C	Large Non-Solvent	H	Uiso(max)/Uiso(min)	...	5.22	Ratio
PLAT232_ALERT_2_C	Hirshfeld Test Diff (M-X)	Ag1	--	Cl1_b	..	8.17 su
PLAT232_ALERT_2_C	Hirshfeld Test Diff (M-X)	Ag1	--	C3_f	..	5.66 su
PLAT232_ALERT_2_C	Hirshfeld Test Diff (M-X)	Ag2	--	OlW	..	6.43 su
PLAT242_ALERT_2_C	Check Low	Ueq as Compared to Neighbors for				Ag2
PLAT366_ALERT_2_C	Short? C(sp?)-C(sp?) Bond	C3	-	C4	...	1.39 Ang.
PLAT366_ALERT_2_C	Short? C(sp?)-C(sp?) Bond	C4	-	C5	...	1.39 Ang.

● Alert level G

PLAT860_ALERT_3_G	Note: Number of Least-Squares Restraints	3
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels	2
PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd)	.	1.29 Ratio
PLAT794_ALERT_5_G	Note: Tentative Bond Valency for Ag1	0.80
PLAT794_ALERT_5_G	Note: Tentative Bond Valency for Ag2	1.01

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- 8 **ALERT level C** = Check and explain
- 5 **ALERT level G** = General alerts; check

0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
7 ALERT type 2 Indicator that the structure model may be wrong or deficient
2 ALERT type 3 Indicator that the structure quality may be low
2 ALERT type 4 Improvement, methodology, query or suggestion
2 ALERT type 5 Informative message, check

Datablock: complex3

Bond precision: C-C = 0.0053 A Wavelength=0.71073
Cell: a=9.7366(19) b=11.322(2) c=9.4589(19)
alpha=90 beta=101.22(3) gamma=90
Temperature: 295 K

	Calculated	Reported
Volume	1022.8(4)	1022.8(4)
Space group	P 21/c	P 21/c
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C6 H5 Ag2 Br O5 S	C6 H5 Ag2 Br O5 S
Sum formula	C6 H5 Ag2 Br O5 S	C6 H5 Ag2 Br O5 S
Mr	484.81	484.81
Dx,g cm-3	3.148	3.148
Z	4	4
Mu (mm-1)	7.934	7.934
F000	904.0	904.0
F000'	896.59	
h,k,lmax	12,14,12	12,14,12
Nref	2339	2335
Tmin,Tmax	0.332,0.490	0.382,0.535
Tmin'	0.292	

Correction method= MULTI-SCAN
Data completeness= 0.998 Theta(max)= 27.440
R(reflections)= 0.0296(2061) wR2(reflections)= 0.0748(2335)
S = 1.073 Npar= 142

The following ALERTS were generated. Each ALERT has the format

[test-name_ALERT_alert-type_alert-level.](#)

Click on the hyperlinks for more details of the test.

● Alert level B

[PLAT232_ALERT_2_B](#) Hirshfeld Test Diff (M-X) Ag1 -- Br1_d .. 15.86 su

● Alert level C

[PLAT220_ALERT_2_C](#) Large Non-Solvent O Ueq(max)/Ueq(min) ... 3.20 Ratio
[PLAT222_ALERT_3_C](#) Large Non-Solvent H Uiso(max)/Uiso(min) ... 4.78 Ratio
[PLAT232_ALERT_2_C](#) Hirshfeld Test Diff (M-X) Ag2 -- OlW .. 5.76 su
[PLAT242_ALERT_2_C](#) Check Low Ueq as Compared to Neighbors for Ag2
[PLAT366_ALERT_2_C](#) Short? C(sp?)-C(sp?) Bond C3 - C4 ... 1.38 Ang.

● Alert level G

[PLAT860_ALERT_3_G](#) Note: Number of Least-Squares Restraints 3
[PLAT720_ALERT_4_G](#) Number of Unusual/Non-Standard Labels 2
[PLAT764_ALERT_4_G](#) Overcomplete CIF Bond List Detected (Rep/Expd) . 1.40 Ratio
[PLAT794_ALERT_5_G](#) Note: Tentative Bond Valency for Ag1 0.68
[PLAT794_ALERT_5_G](#) Note: Tentative Bond Valency for Ag2 0.95

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Datablock: complex4

Bond precision: C-C = 0.0068 Å Wavelength=0.71073

Cell: a=11.761(2) b=23.561(5) c=5.7475(11)

alpha=90 beta=91.35(3) gamma=90

Temperature: 295 K

Calculated

Reported

Volume	1592.2(5)	1592.2(5)
Space group	C 2/m	C 2/m
Hall group	-C 2y	-C 2y
Moiety formula	C6 H2 Ag4 N O11 S2, Ag H6 N2	C6 H2 Ag4 N O11 S2, Ag H6 N2
Sum formula	C6 H8 Ag5 N3 O11 S2	C6 H8 Ag5 N3 O11 S2
Mr	901.64	901.62
Dx,g cm-3	3.761	3.761
Z	4	4
Mu (mm-1)	6.370	6.370
F000	1680.0	1680.0
F000'	1663.71	
h,k,lmax	15,30,7	15,30,7
Nref	1879	1868
Tmin,Tmax	0.273,0.410	0.348,0.469
Tmin'	0.252	
Correction method=	MULTI-SCAN	
Data completeness=	0.994	Theta(max)= 27.470
R(reflections)=	0.0494(1736)	wR2(reflections)= 0.1259(1868)
S =	1.083	Npar= 139

The following ALERTS were generated. Each ALERT has the format

test-name_ALERT_alert-type_alert-level.

Click on the hyperlinks for more details of the test.

● Alert level C

PLAT241_ALERT_2_C	Check High	Ueq as Compared to Neighbors for	N1
PLAT242_ALERT_2_C	Check Low	Ueq as Compared to Neighbors for	O5
PLAT420_ALERT_2_C	D-H Without Acceptor	N2 - H2N2 ...	?
PLAT420_ALERT_2_C	D-H Without Acceptor	N3 - H3N1 ...	?
PLAT244_ALERT_4_C	Low	'Solvent' Ueq as Compared to Neighbors of	Ag3

● Alert level G

PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large.	16.35
PLAT860_ALERT_3_G	Note: Number of Least-Squares Restraints	13
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels	4
PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd) .	1.64 Ratio
PLAT794_ALERT_5_G	Note: Tentative Bond Valency for Ag1	0.75

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checkCIF publication errors

Alert level A

[PUBL004_ALERT_1_A](#) The contact author's name and address are missing,
_publ_contact_author_name and _publ_contact_author_address.

[PUBL005_ALERT_1_A](#) _publ_contact_author_email, _publ_contact_author_fax and
_publ_contact_author_phone are all missing.
At least one of these should be present.

[PUBL006_ALERT_1_A](#) _publ_requested_journal is missing
e.g. 'Acta Crystallographica Section C'

[PUBL008_ALERT_1_A](#) _publ_section_title is missing. Title of paper.

[PUBL009_ALERT_1_A](#) _publ_author_name is missing. List of author(s) name(s).

[PUBL010_ALERT_1_A](#) _publ_author_address is missing. Author(s) address(es).

[PUBL012_ALERT_1_A](#) _publ_section_abstract is missing.
Abstract of paper in English.

Alert level G

[PUBL013_ALERT_1_G](#) The _publ_section_comment (discussion of study) is
missing. This is required for a full paper submission (but is
optional for an electronic paper).

[PUBL017_ALERT_1_G](#) The _publ_section_references section is missing or
empty.

7 **ALERT level A** = Data missing that is essential or data in wrong format
2 **ALERT level G** = General alerts. Data that may be required is missing

Publication of your CIF

You should always attempt to resolve as many as possible of the alerts in all categories. Often the minor alerts point to easily fixed oversights, errors and omissions in your CIF or refinement strategy, so attention to these fine details can be worthwhile. In order to resolve some of the more serious problems it may be necessary to carry out additional measurements or structure refinements. However, the nature of your study may justify the reported deviations from the submission requirements of the journal and these should be commented upon in the discussion or experimental section of a paper - after all, they might represent an interesting feature.

If level A alerts remain, which you believe to be justified deviations, and you intend to submit this CIF for publication in Acta Crystallographica Section C or Section E, you should additionally insert an explanation in your CIF using the Validation Reply Form (VRF) below. Your explanation will be considered as part of the review process.

If you intend to submit to another section of Acta Crystallographica or Journal of Applied Crystallography or Journal of Synchrotron Radiation, you should make sure that at least a [basic structural check](#) is run on the final version of your CIF prior to submission.

```
# start Validation Reply Form
_vrf_PUBL004_GLOBAL
;
PROBLEM: The contact author's name and address are missing,
RESPONSE: ...
;
_vrf_PUBL005_GLOBAL
;
PROBLEM: _publ_contact_author_email, _publ_contact_author_fax and
RESPONSE: ...
;
_vrf_PUBL006_GLOBAL
;
PROBLEM: _publ_requested_journal is missing
RESPONSE: ...
;
_vrf_PUBL008_GLOBAL
;
```

```
PROBLEM: _publ_section_title is missing. Title of paper.
RESPONSE: ...
;
_vrf_PUBL009_GLOBAL
;
PROBLEM: _publ_author_name is missing. List of author(s) name(s).
RESPONSE: ...
;
_vrf_PUBL010_GLOBAL
;
PROBLEM: _publ_author_address is missing. Author(s) address(es).
RESPONSE: ...
;
_vrf_PUBL012_GLOBAL
;
PROBLEM: _publ_section_abstract is missing.
RESPONSE: ...
;
# end Validation Reply Form
```

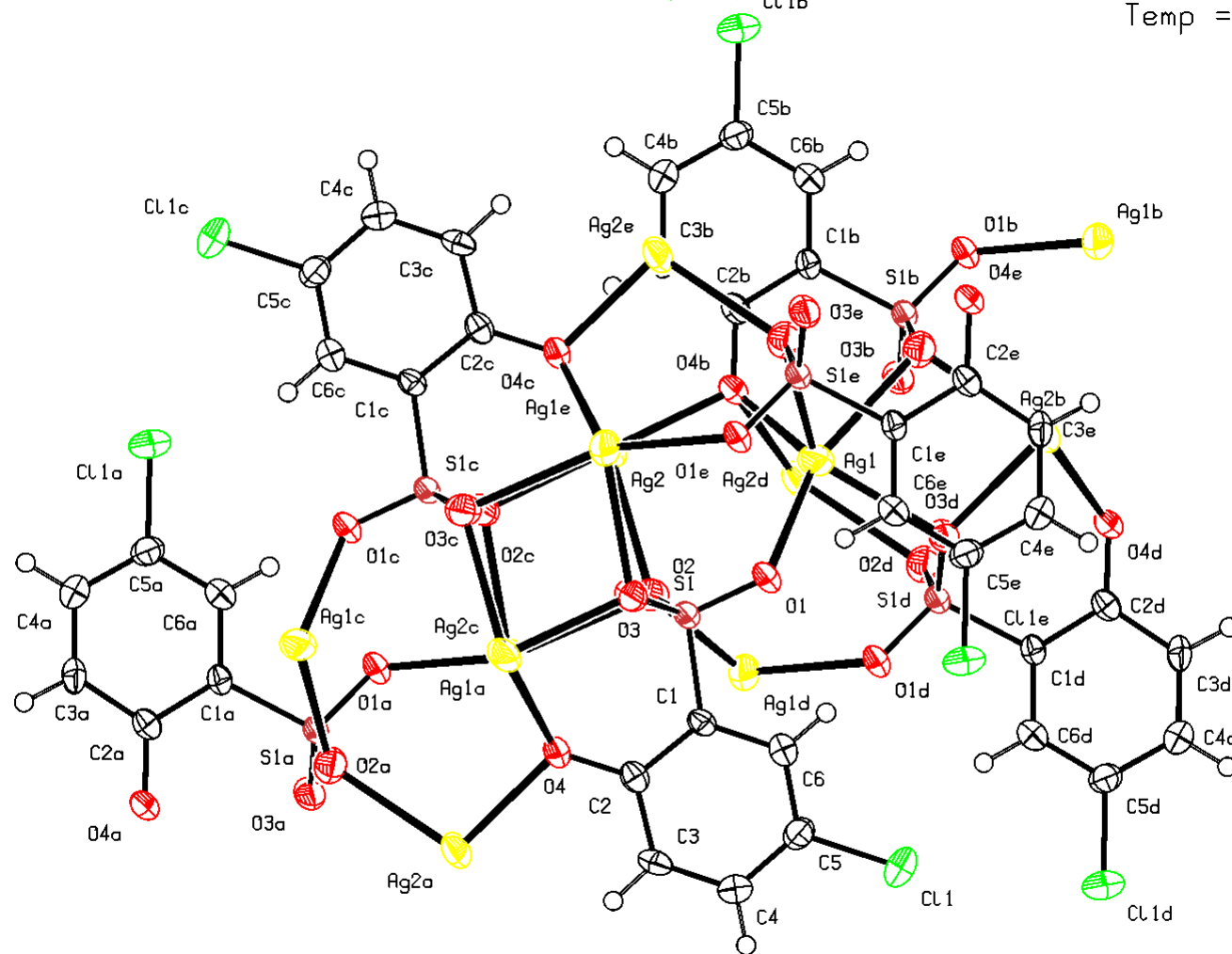
If you wish to submit your CIF for publication in Acta Crystallographica Section C or E, you should upload your CIF via [the web](#). If your CIF is to form part of a submission to another IUCr journal, you will be asked, either during electronic [submission](#) or by the Co-editor handling your paper, to upload your CIF via our web site.

PLATON version of 22/10/2010; check.def file version of 11/10/2010

Datablock complex1 - ellipsoid plot

NOMOVE FORCED

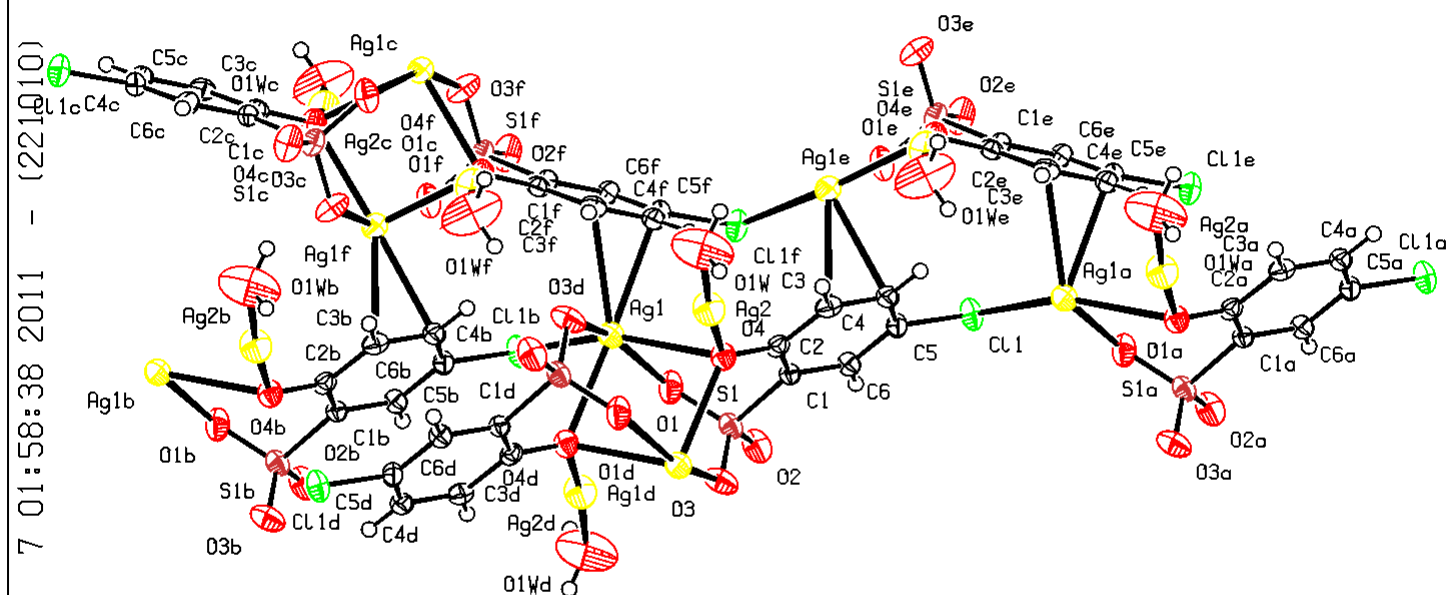
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Temp = 295



Datablock complex2 - ellipsoid plot

77 Y

NOMOVE FORCED

Prob = 50
Temp = 295

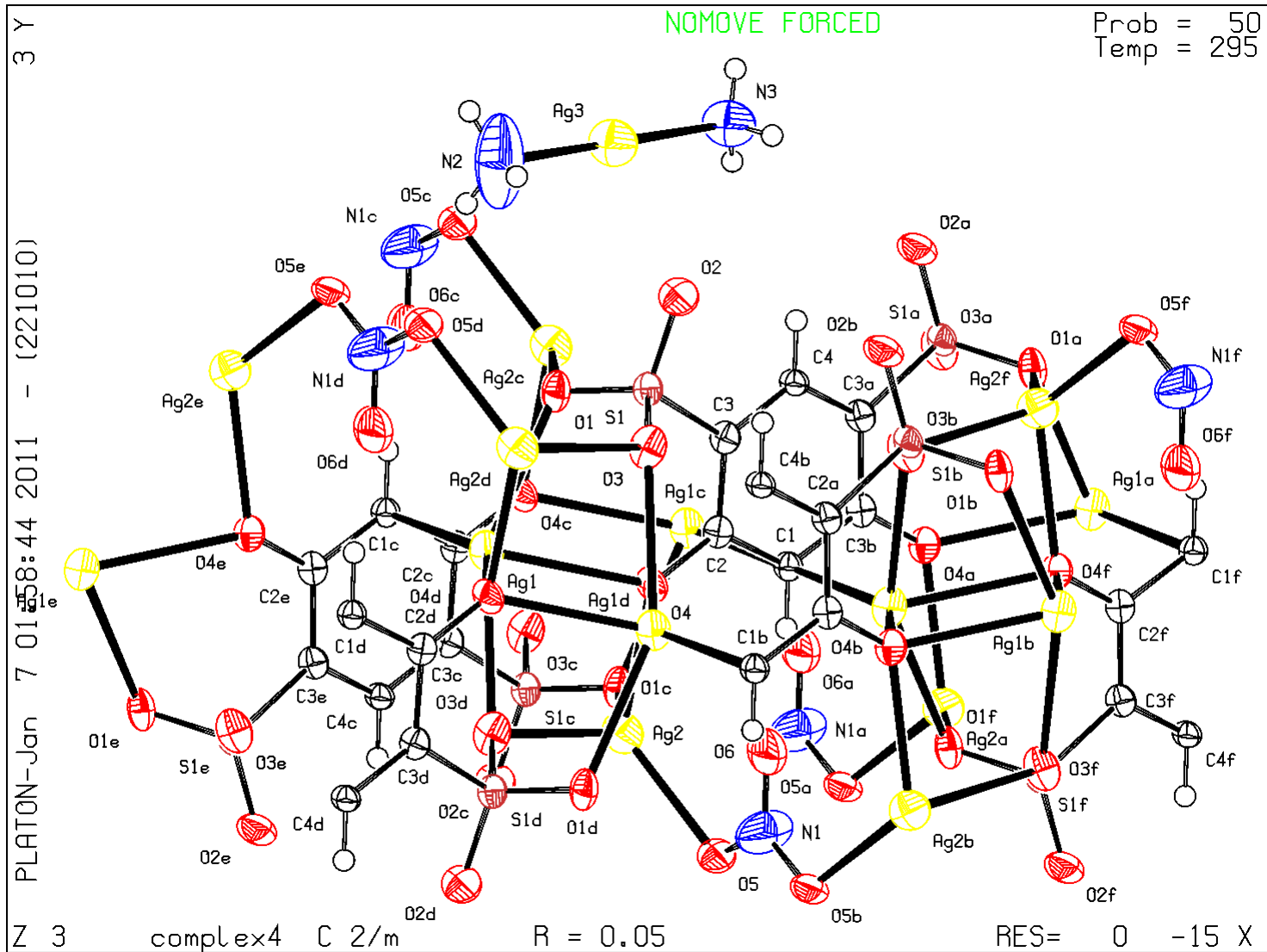
Z -54 complex2 P 21/c

R = 0.03

RES= 0 51 X

Datablock complex3 - ellipsoid plot

Datablock complex4 - ellipsoid plot



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