Full wwPDB X-ray Structure Validation Report (i)

Aug 6, 2020 – 04:59 PM BST

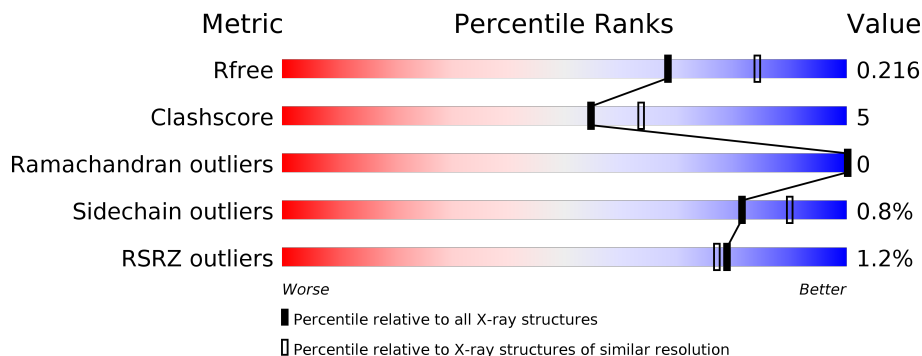|		
PDB ID	:	6SKW
Title	:	Crystal structure of the Legionella pneumophila type II secretion system substrate NttE
Authors	:	Portlock, T.J.; Rehman, S.; Garnett, J.A.
Deposited on	:	2019-08-16
Resolution	:	2.20 Å(reported)

---

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.20 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.

Metric | Percentile Ranks | Value

Rfree — 0.216
Clashscore — 5
Ramachandran outliers — 0
Sidechain outliers — 0.8%
RSRZ outliers — 1.2%

Worse   Better

■ Percentile relative to all X-ray structures

☐ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R$_{free}$	130704	4898 (2.20-2.20)
Clashscore	141614	5594 (2.20-2.20)
Ramachandran outliers	138981	5503 (2.20-2.20)
Sidechain outliers	138945	5504 (2.20-2.20)
RSRZ outliers	127900	4800 (2.20-2.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AAA	284	85% 7% · 7%
1	BBB	284	82% 10% 7%

2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 8954 atoms, of which 4220 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called NttE.

Mol	Chain	Residues	Atoms							ZeroOcc	AltConf	Trace
			Total	C	H	N	O	S	Se			
1	AAA	263	4250	1387	2077	353	421	4	8	139	1	0
1	BBB	263	Total	C	H	N	O	S	Se	139	1	0
			4250	1387	2077	353	421	4	8			

There are 30 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AAA	-14	MSE	-	initiating methionine	UNP A0A4Q5N6R9
AAA	-13	ALA	-	expression tag	UNP A0A4Q5N6R9
AAA	-12	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-11	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-10	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-9	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-8	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-7	HIS	-	expression tag	UNP A0A4Q5N6R9
AAA	-6	VAL	-	expression tag	UNP A0A4Q5N6R9
AAA	-5	ASP	-	expression tag	UNP A0A4Q5N6R9
AAA	-4	ASP	-	expression tag	UNP A0A4Q5N6R9
AAA	-3	ASP	-	expression tag	UNP A0A4Q5N6R9
AAA	-2	ASP	-	expression tag	UNP A0A4Q5N6R9
AAA	-1	LYS	-	expression tag	UNP A0A4Q5N6R9
AAA	0	MSE	-	expression tag	UNP A0A4Q5N6R9
BBB	-14	MSE	-	initiating methionine	UNP A0A4Q5N6R9
BBB	-13	ALA	-	expression tag	UNP A0A4Q5N6R9
BBB	-12	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-11	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-10	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-9	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-8	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-7	HIS	-	expression tag	UNP A0A4Q5N6R9
BBB	-6	VAL	-	expression tag	UNP A0A4Q5N6R9
BBB	-5	ASP	-	expression tag	UNP A0A4Q5N6R9

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
BBB	-4	ASP	-	expression tag	UNP A0A4Q5N6R9
BBB	-3	ASP	-	expression tag	UNP A0A4Q5N6R9
BBB	-2	ASP	-	expression tag	UNP A0A4Q5N6R9
BBB	-1	LYS	-	expression tag	UNP A0A4Q5N6R9
BBB	0	MSE	-	expression tag	UNP A0A4Q5N6R9

- Molecule 2 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$) (labeled as "Ligand of Interest" by author).
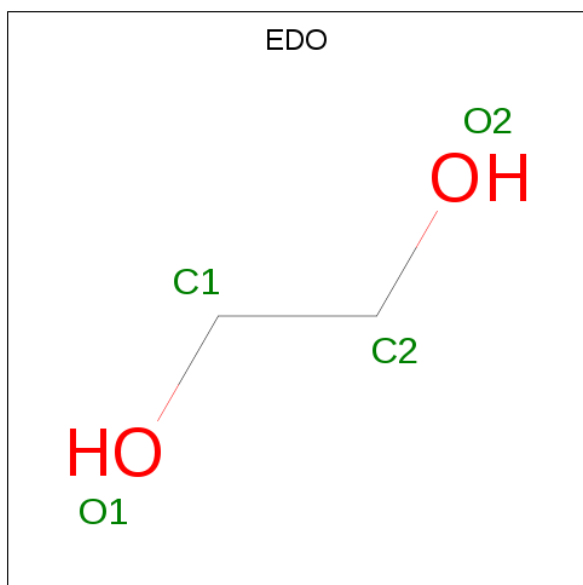
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	AAA	1	Total 10	C 2	H 6	O 2	1	0
2	BBB	1	Total 10	C 2	H 6	O 2	1	0
2	BBB	1	Total 10	C 2	H 6	O 2	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	BBB	1	Total 10	C 2	H 6	O 2	1	0
2	BBB	1	Total 10	C 2	H 6	O 2	1	0
2	BBB	1	Total 10	C 2	H 6	O 2	1	0

- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	AAA	180	Total 180	O 180	0	0
3	BBB	164	Total 164	O 164	0	0

3 Residue-property plots ⓘ

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: NttE

Chain AAA:
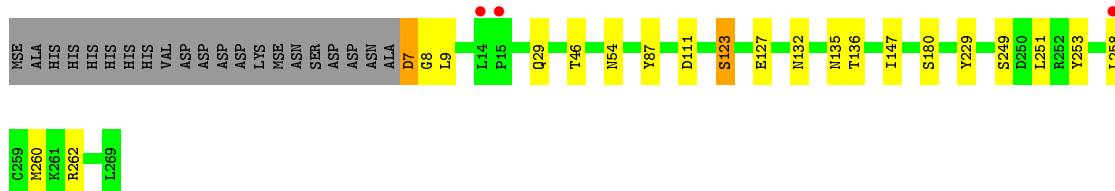
- Molecule 1: NttE

Chain BBB:
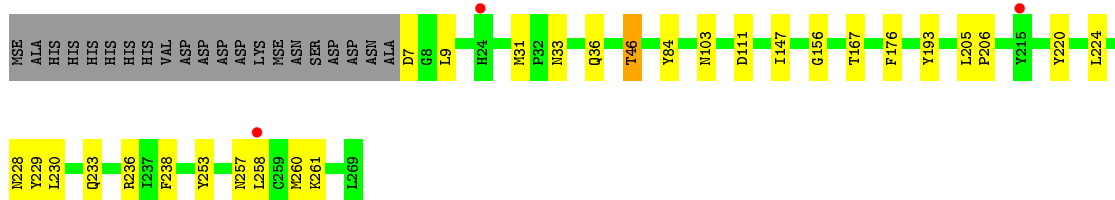
4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 32 2 1	Depositor
Cell constants a, b, c, α, β, γ	120.87Å 120.87Å 104.39Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	104.68 – 2.20 104.68 – 2.20	Depositor EDS
% Data completeness (in resolution range)	99.8 (104.68-2.20) 99.8 (104.68-2.20)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	6.05 (at 2.20Å)	Xtriage
Refinement program	REFMAC 5.8.0253	Depositor
R, R_{free}	0.187 , 0.210 0.199 , 0.216	Depositor DCC
R_{free} test set	2273 reflections (5.05%)	wwPDB-VP
Wilson B-factor (Å^2)	33.0	Xtriage
Anisotropy	0.561	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.38 , 41.1	EDS
L-test for twinning[2]	$< |L| > = 0.48, < L^2 > = 0.31$	Xtriage
Estimated twinning fraction	0.032 for -h,-k,l	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	8954	wwPDB-VP
Average B, all atoms (Å^2)	42.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 9.09% of the height of the origin peak. No significant pseudotranslation is detected.*

---

[1]Intensities estimated from amplitudes.

[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: EDO

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$|Z|$>5	RMSZ	#$|Z|$>5
1	AAA	0.72	0/2220	0.90	0/2999
1	BBB	0.71	0/2220	0.89	0/2999
All	All	0.72	0/4440	0.90	0/5998

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AAA	2173	2077	2072	19	0
1	BBB	2173	2077	2072	26	0
2	AAA	24	36	36	1	0
2	BBB	20	30	30	2	0
3	AAA	180	0	0	0	0
3	BBB	164	0	0	0	0
All	All	4734	4220	4210	45	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 5.

All (45) close contacts within the same asymmetric unit are listed below, sorted by their clash

magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:BBB:258:LEU:HB3	1:BBB:260[B]:MSE:SE	2.10	1.01
1:BBB:147:ILE:HD11	1:BBB:236:ARG:HB3	1.61	0.82
1:AAA:7:ASP:OD1	1:AAA:8:GLY:N	2.20	0.74
1:BBB:7:ASP:HB3	1:BBB:258:LEU:HG	1.69	0.74
1:AAA:7:ASP:HB2	1:AAA:258:LEU:HG	1.70	0.73
1:BBB:236:ARG:NH2	1:BBB:253:TYR:OH	2.23	0.71
1:BBB:147:ILE:HD12	1:BBB:238:PHE:CE1	2.28	0.69
1:BBB:258:LEU:HD22	1:BBB:260[B]:MSE:SE	2.46	0.65
1:AAA:9:LEU:HD11	1:AAA:253:TYR:CD1	2.32	0.64
1:AAA:147:ILE:HD13	1:AAA:180:SER:C	2.19	0.63
1:AAA:147:ILE:CD1	1:AAA:180:SER:C	2.67	0.62
1:AAA:87:TYR:HB2	1:AAA:251:LEU:HD21	1.81	0.62
1:AAA:7:ASP:C	1:AAA:7:ASP:OD1	2.38	0.61
1:AAA:9:LEU:HD23	1:AAA:29:GLN:HA	1.83	0.60
1:BBB:46:THR:HG23	1:BBB:111:ASP:OD1	2.03	0.59
1:BBB:147:ILE:HD11	1:BBB:236:ARG:CB	2.29	0.59
1:BBB:84:TYR:CD1	2:BBB:303:EDO:H12	2.38	0.58
1:AAA:46:THR:HG23	1:AAA:111:ASP:OD1	2.04	0.58
1:AAA:258:LEU:HB3	1:AAA:260[B]:MSE:SE	2.53	0.57
1:AAA:123:SER:O	1:AAA:127:GLU:OE1	2.22	0.57
1:BBB:258:LEU:CB	1:BBB:260[B]:MSE:SE	2.95	0.57
1:AAA:54:ASN:O	1:AAA:136:THR:HG21	2.06	0.55
1:AAA:262:ARG:NH2	2:AAA:301:EDO:O1	2.39	0.55
1:BBB:7:ASP:HB3	1:BBB:258:LEU:CG	2.37	0.55
1:AAA:229:TYR:CD1	1:AAA:258:LEU:HD23	2.43	0.53
1:BBB:260[B]:MSE:HG2	1:BBB:261:LYS:N	2.21	0.53
1:BBB:33:ASN:HB3	1:BBB:36:GLN:HG3	1.90	0.53
1:BBB:229:TYR:CD1	1:BBB:258:LEU:HD23	2.43	0.53
1:BBB:228:ASN:O	1:BBB:260[B]:MSE:HE3	2.08	0.53
1:BBB:233:GLN:HE21	2:BBB:305:EDO:C2	2.22	0.52
1:BBB:147:ILE:HD12	1:BBB:238:PHE:CZ	2.44	0.52
1:AAA:147:ILE:HD13	1:AAA:180:SER:O	2.10	0.51
1:AAA:229:TYR:HD1	1:AAA:258:LEU:HD23	1.77	0.50
1:BBB:31:MSE:HE2	1:BBB:193:TYR:CD1	2.46	0.50
1:AAA:7:ASP:HB3	1:AAA:258:LEU:HD12	1.95	0.48
1:BBB:9:LEU:HD11	1:BBB:253:TYR:CE1	2.48	0.48
1:AAA:249:SER:OG	1:AAA:251:LEU:HB2	2.13	0.48
1:AAA:132:ASN:OD1	1:AAA:135:ASN:HA	2.15	0.47
1:BBB:230:LEU:HB2	1:BBB:257:ASN:HB3	2.00	0.44
1:BBB:46:THR:HG23	1:BBB:111:ASP:CG	2.39	0.43
1:BBB:205:LEU:HB2	1:BBB:206:PRO:HD3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:BBB:103:ASN:C	1:BBB:103:ASN:OD1	2.58	0.42
1:BBB:156:GLY:HA3	1:BBB:167:THR:O	2.20	0.41
1:BBB:229:TYR:HD1	1:BBB:258:LEU:HD23	1.85	0.41
1:BBB:220:TYR:O	1:BBB:224:LEU:HG	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AAA	262/284 (92%)	255 (97%)	7 (3%)	0	100	100
1	BBB	262/284 (92%)	256 (98%)	6 (2%)	0	100	100
All	All	524/568 (92%)	511 (98%)	13 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	AAA	247/256 (96%)	245 (99%)	2 (1%)	81	90
1	BBB	247/256 (96%)	245 (99%)	2 (1%)	81	90
All	All	494/512 (96%)	490 (99%)	4 (1%)	81	90

All (4) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AAA	7	ASP
1	AAA	123	SER
1	BBB	46	THR
1	BBB	176	PHE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3   RNA (i)

There are no RNA molecules in this entry.

5.4   Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5   Carbohydrates (i)

There are no monosaccharides in this entry.

5.6   Ligand geometry (i)

11 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#|Z| > 2$	Counts	RMSZ	$\#|Z| > 2$
2	EDO	AAA	304	-	3,3,3	0.11	0	2,2,2	0.08	0
2	EDO	BBB	303	-	3,3,3	0.17	0	2,2,2	0.23	0
2	EDO	AAA	305	-	3,3,3	0.22	0	2,2,2	0.37	0
2	EDO	AAA	301	-	3,3,3	0.14	0	2,2,2	0.12	0
2	EDO	BBB	302	-	3,3,3	0.07	0	2,2,2	0.10	0
2	EDO	AAA	306	-	3,3,3	0.09	0	2,2,2	0.14	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#|Z| > 2$	Counts	RMSZ	$\#|Z| > 2$
2	EDO	BBB	305	-	3,3,3	0.19	0	2,2,2	0.43	0
2	EDO	AAA	302	-	3,3,3	0.19	0	2,2,2	0.37	0
2	EDO	BBB	304	-	3,3,3	0.20	0	2,2,2	0.34	0
2	EDO	BBB	301	-	3,3,3	0.06	0	2,2,2	0.18	0
2	EDO	AAA	303	-	3,3,3	0.07	0	2,2,2	0.22	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	EDO	AAA	304	-	-	1/1/1/1	-
2	EDO	BBB	303	-	-	0/1/1/1	-
2	EDO	AAA	305	-	-	1/1/1/1	-
2	EDO	AAA	301	-	-	0/1/1/1	-
2	EDO	BBB	302	-	-	1/1/1/1	-
2	EDO	AAA	306	-	-	1/1/1/1	-
2	EDO	BBB	305	-	-	0/1/1/1	-
2	EDO	AAA	302	-	-	1/1/1/1	-
2	EDO	BBB	304	-	-	1/1/1/1	-
2	EDO	BBB	301	-	-	1/1/1/1	-
2	EDO	AAA	303	-	-	0/1/1/1	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	AAA	305	EDO	O1-C1-C2-O2
2	BBB	304	EDO	O1-C1-C2-O2
2	AAA	302	EDO	O1-C1-C2-O2
2	AAA	306	EDO	O1-C1-C2-O2
2	AAA	304	EDO	O1-C1-C2-O2
2	BBB	302	EDO	O1-C1-C2-O2
2	BBB	301	EDO	O1-C1-C2-O2

There are no ring outliers.

3 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	BBB	303	EDO	1	0
2	AAA	301	EDO	1	0
2	BBB	305	EDO	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand EDO AAA 304

Ligand EDO BBB 303

Ligand EDO AAA 305

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO AAA 301

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO BBB 302

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO AAA 306

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO BBB 305

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO AAA 302

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO BBB 304

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO BBB 301

Bond lengths

Bond angles

Torsions

Rings

Ligand EDO AAA 303

Bond lengths

Bond angles

Torsions

Rings

5.7　Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	AAA	256/284 (90%)	-0.02	3 (1%)	79	77	24, 37, 60, 100	0
1	BBB	256/284 (90%)	-0.08	3 (1%)	79	77	26, 40, 66, 81	0
All	All	512/568 (90%)	-0.05	6 (1%)	79	77	24, 38, 66, 100	0

All (6) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	AAA	14	LEU	6.0
1	AAA	15	PRO	4.2
1	BBB	258	LEU	2.8
1	AAA	258	LEU	2.3
1	BBB	215	TYR	2.1
1	BBB	24	HIS	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	EDO	BBB	304	4/4	0.46	0.22	67,73,73,73	1
2	EDO	BBB	302	4/4	0.56	0.35	68,71,73,73	1
2	EDO	AAA	305	4/4	0.66	0.18	62,67,68,68	1
2	EDO	BBB	305	4/4	0.76	0.24	56,63,65,65	1
2	EDO	AAA	306	4/4	0.77	0.20	71,76,78,78	1
2	EDO	AAA	303	4/4	0.80	0.32	69,76,77,77	1
2	EDO	AAA	304	4/4	0.89	0.23	66,71,73,73	1
2	EDO	BBB	301	4/4	0.92	0.17	39,42,44,44	1
2	EDO	BBB	303	4/4	0.94	0.27	36,43,45,45	1
2	EDO	AAA	302	4/4	0.95	0.10	52,56,58,58	1
2	EDO	AAA	301	4/4	0.95	0.12	56,58,60,60	1

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.
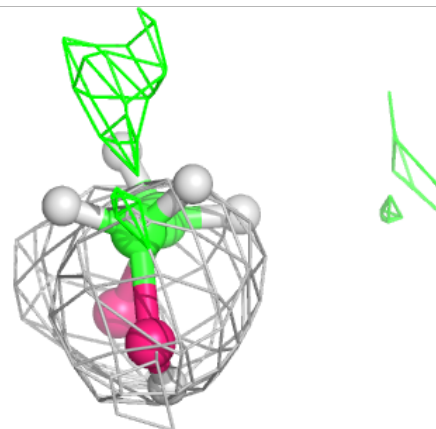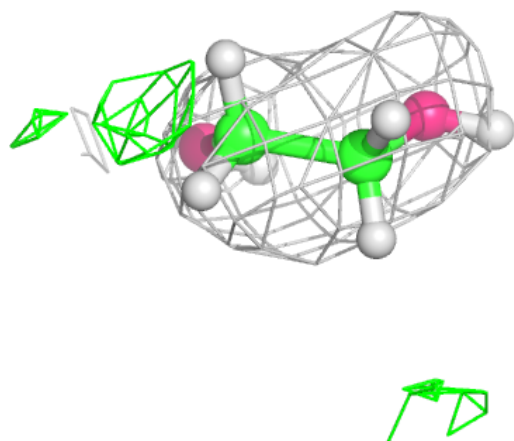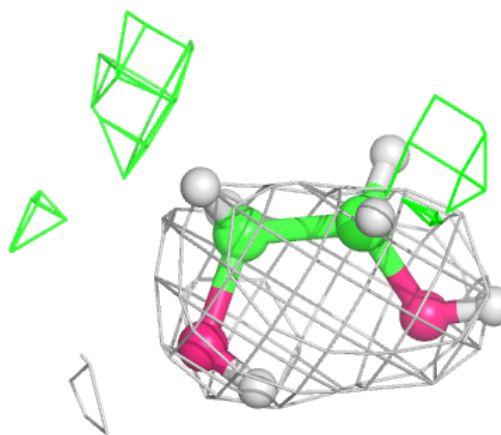
Electron density around EDO BBB 304:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
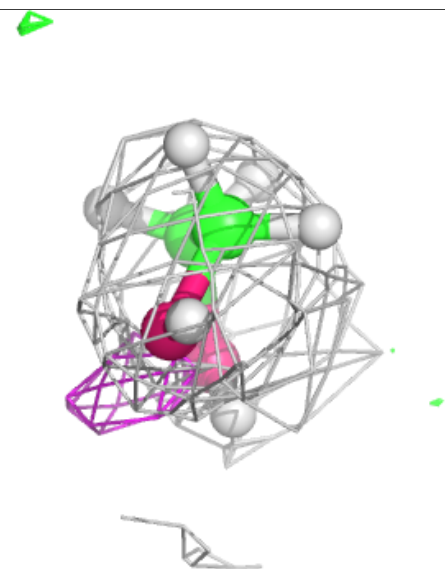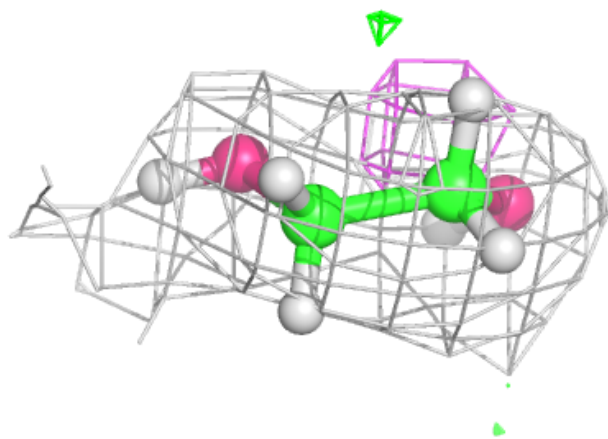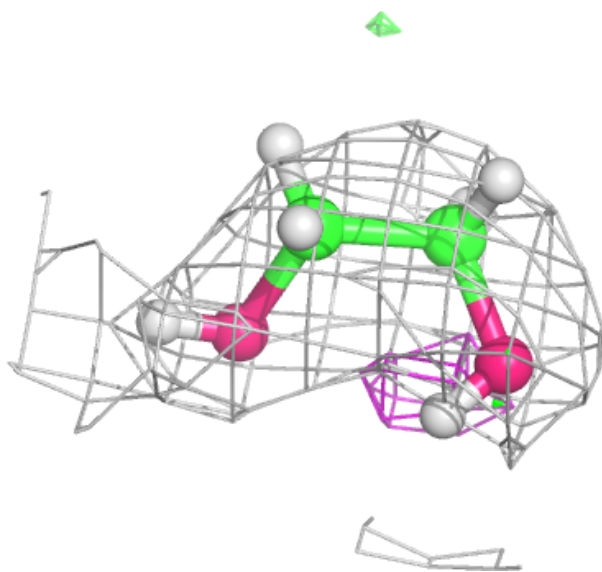and green (positive)
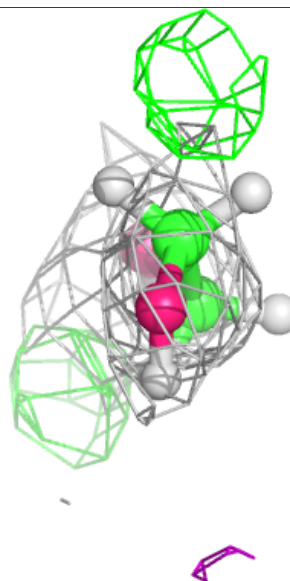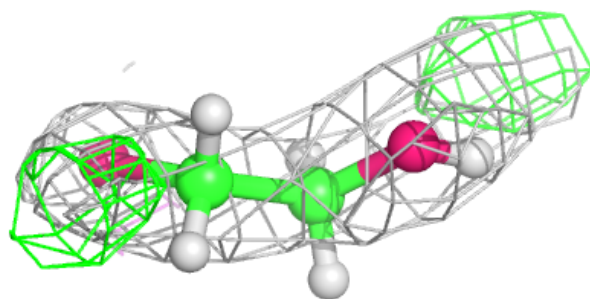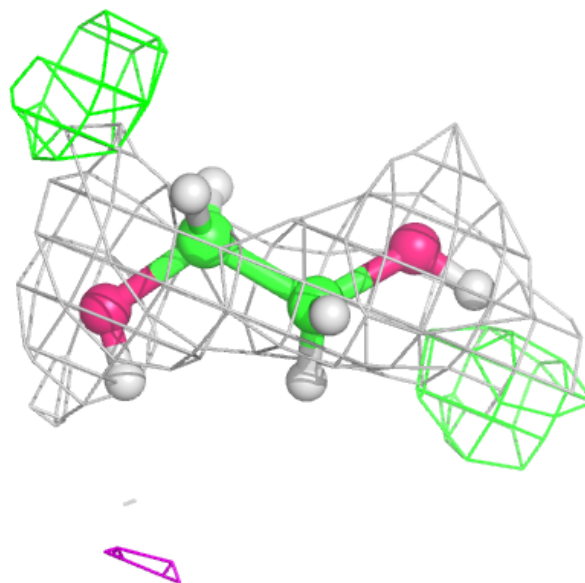
Electron density around EDO BBB 302:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
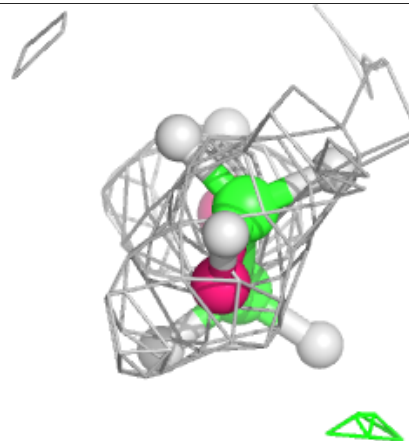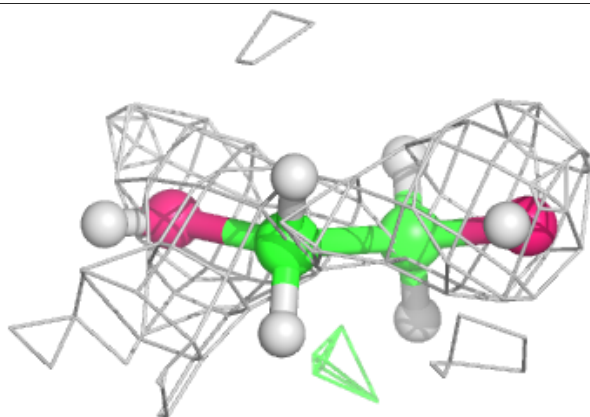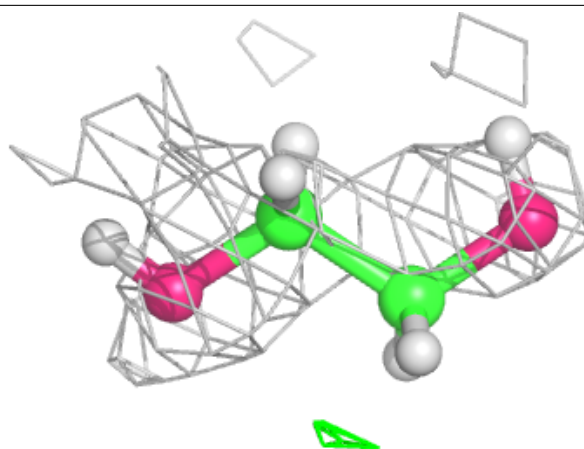
Electron density around EDO AAA 305:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
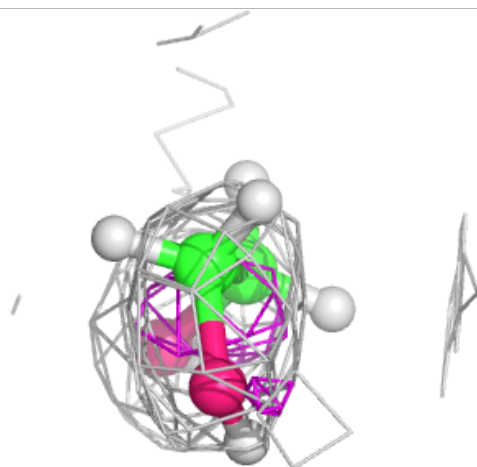$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
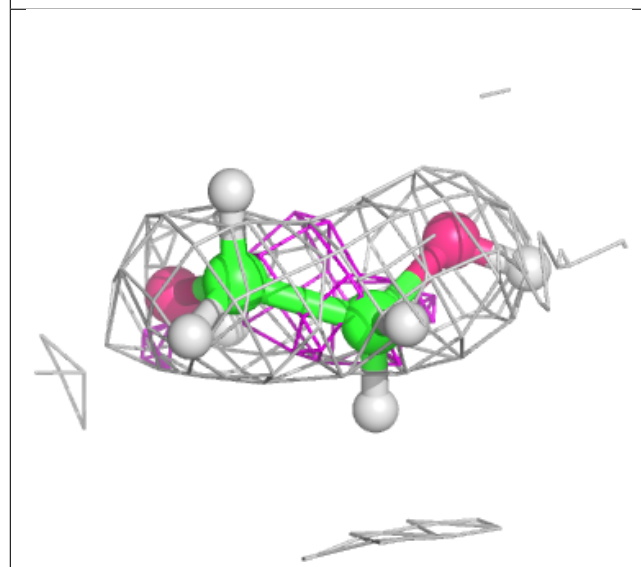and green (positive)
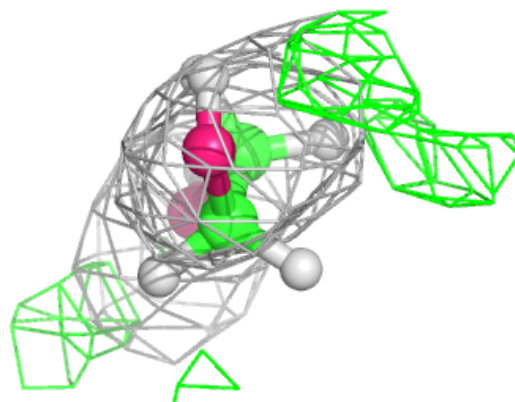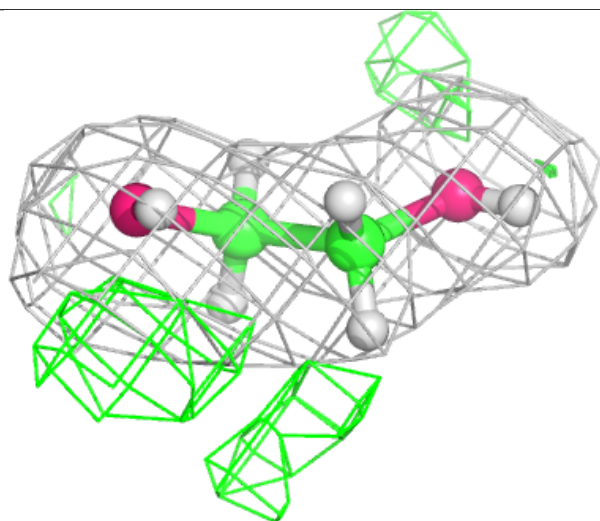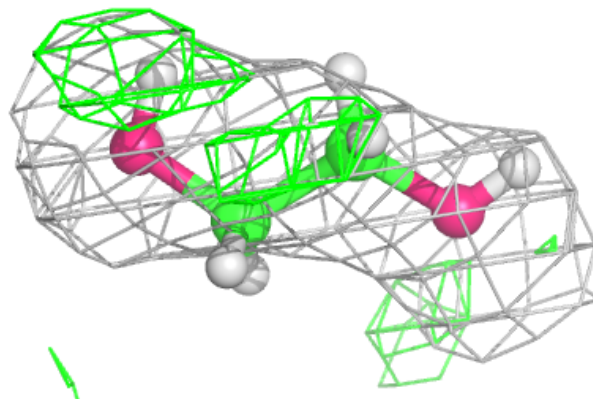
Electron density around EDO BBB 305:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
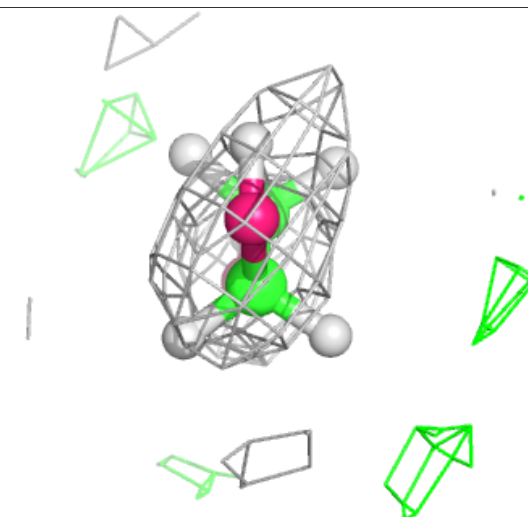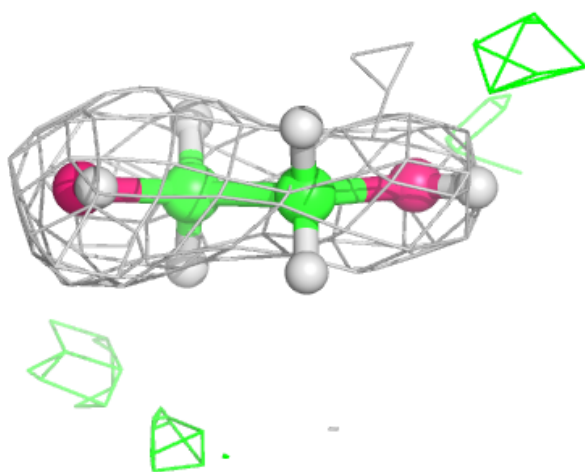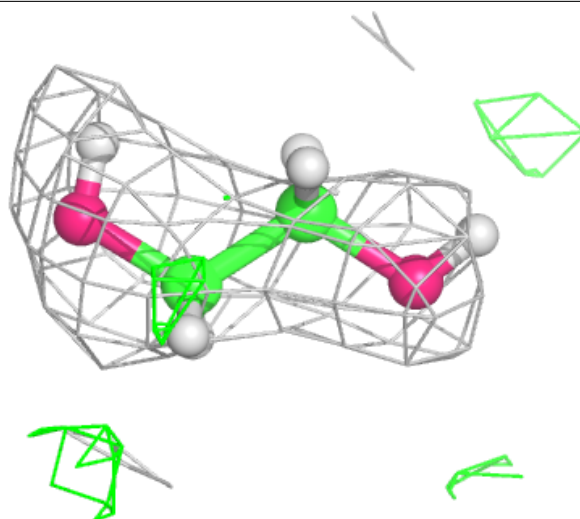
Electron density around EDO AAA 306:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
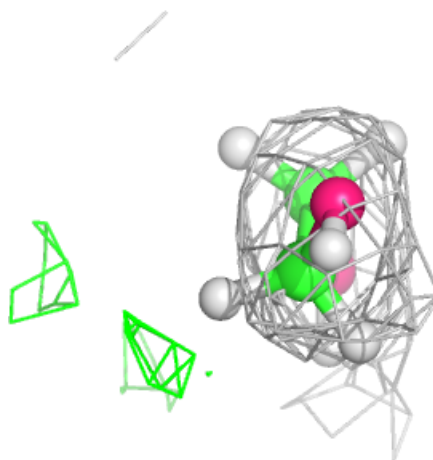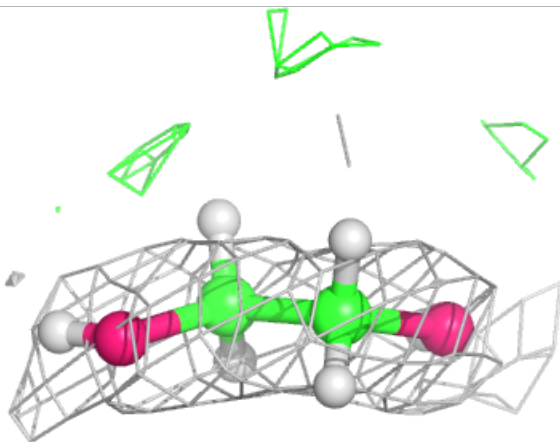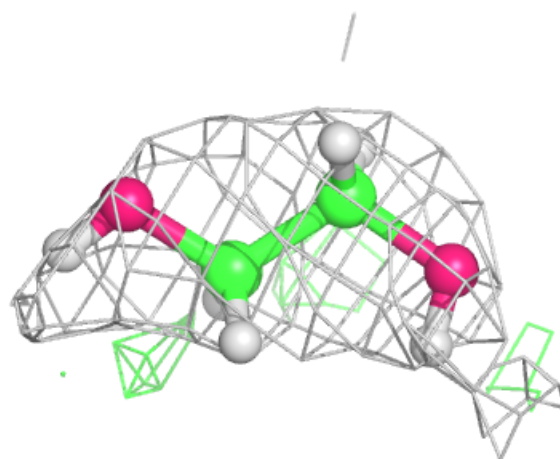
Electron density around EDO AAA 303:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
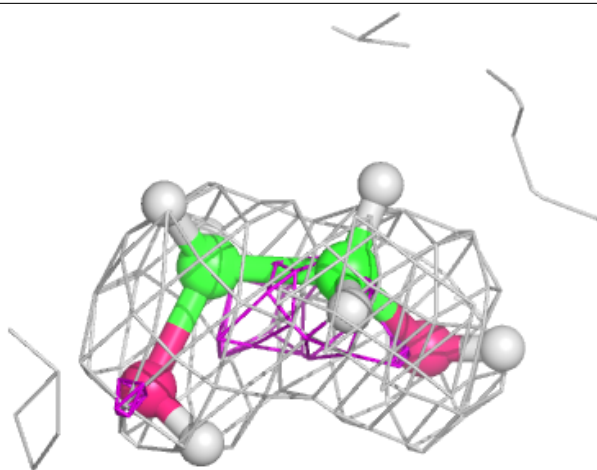$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
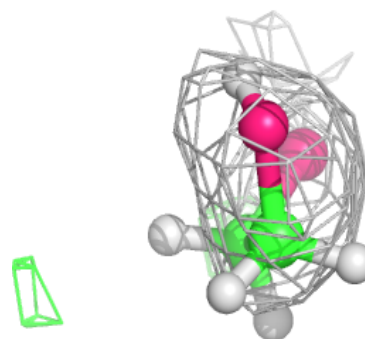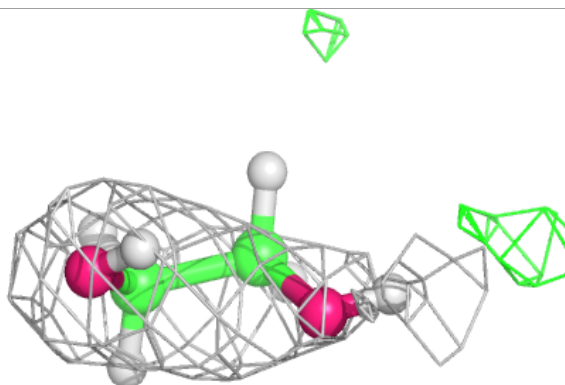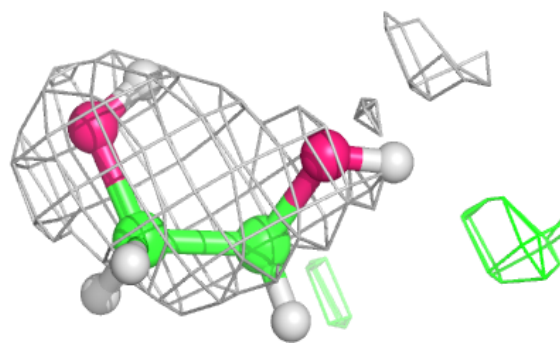
Electron density around EDO AAA 304:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
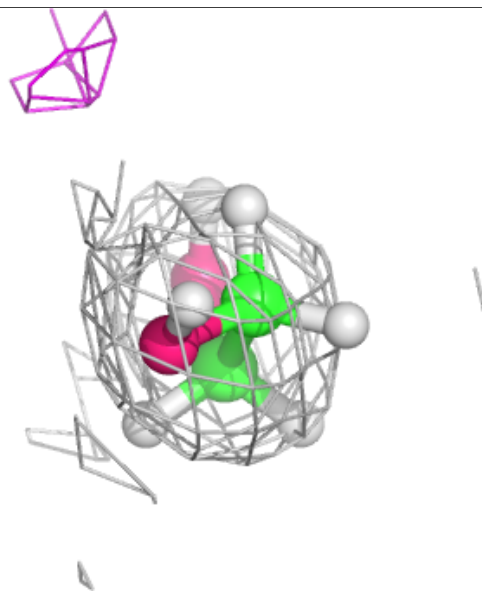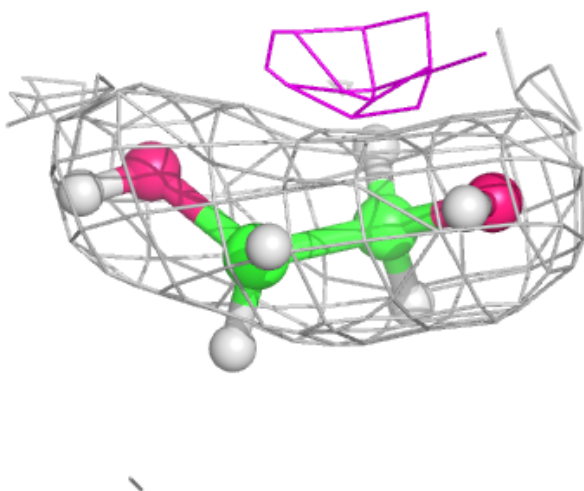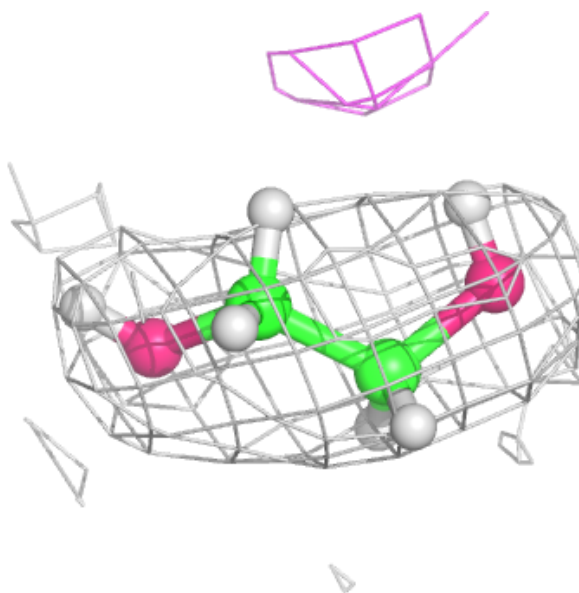and green (positive)

Electron density around EDO BBB 301:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
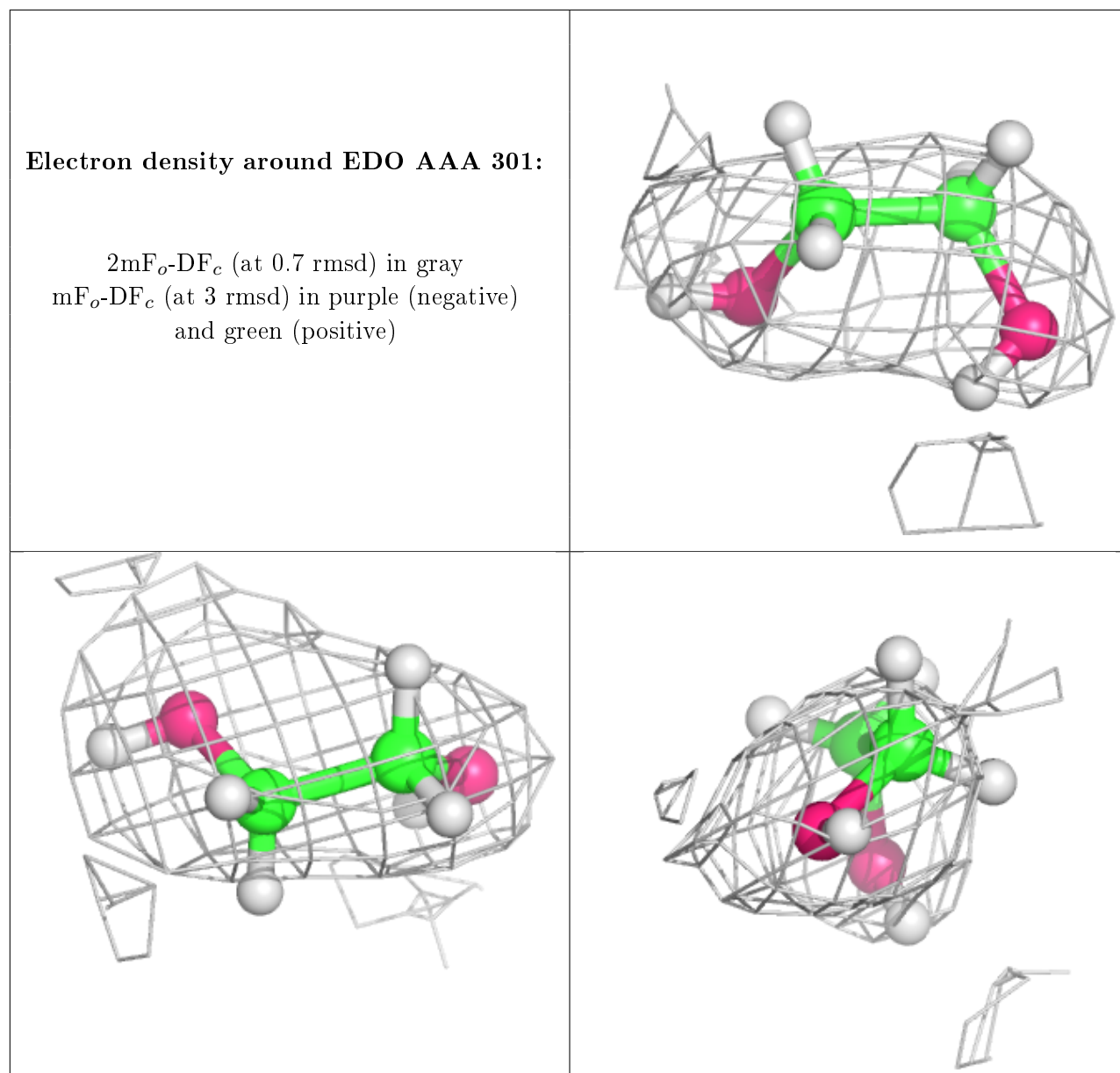and green (positive)

Electron density around EDO BBB 303:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around EDO AAA 302:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around EDO AAA 301:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

6.5 Other polymers (i)

There are no such residues in this entry.