



Full wwPDB EM Validation Report ⓘ

Mar 7, 2026 – 02:25 AM UTC

PDB ID : 7TKI / pdb_00007tki
EMDB ID : EMD-25970
Title : Yeast ATP synthase State 2catalytic(c) with 10 mM ATP backbone model
Authors : Guo, H.; Rubinstein, J.L.
Deposited on : 2022-01-17
Resolution : 7.10 Å(reported)
Based on initial model : 2HLD

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

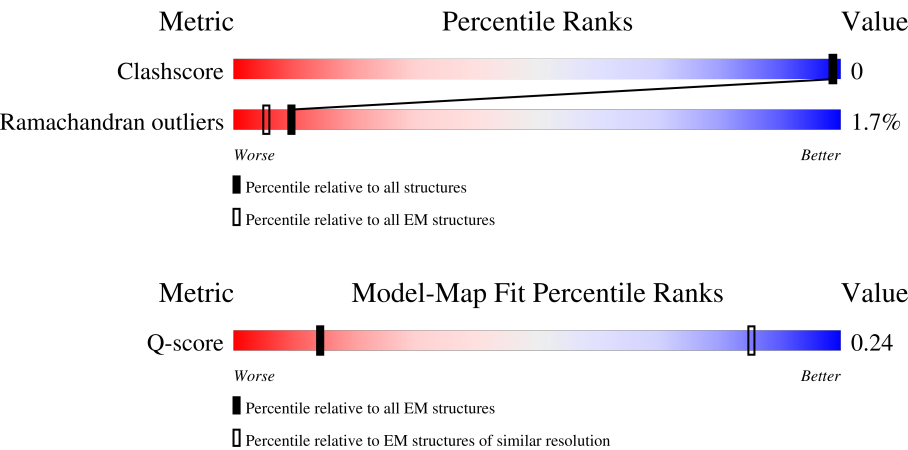
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 7.10 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	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	464 (6.60 - 7.60)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	0	76	62%37%
1	1	76	50%45%
1	2	76	17% 51%47%
1	3	76	9% 47%49%
1	4	76	17% 51%47%

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Mol	Chain	Length	Quality of chain
1	5	76	
1	6	76	
1	7	76	
1	8	76	
1	9	76	
2	A	510	
2	B	510	
2	C	510	
3	D	478	
3	E	478	
3	F	478	
4	G	278	
5	H	138	
6	I	61	
7	O	195	
8	T	249	
9	U	209	
10	V	173	
11	W	95	
12	X	92	
13	Y	59	
14	Z	48	

2 Entry composition

There are 14 unique types of molecules in this entry. The entry contains 20226 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 ATP synthase subunit 9.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	0	75	Total	C	N	O	0	0
			300	150	75	75		
1	1	75	Total	C	N	O	0	0
			300	150	75	75		
1	2	75	Total	C	N	O	0	0
			300	150	75	75		
1	3	74	Total	C	N	O	0	0
			296	148	74	74		
1	4	75	Total	C	N	O	0	0
			300	150	75	75		
1	5	75	Total	C	N	O	0	0
			300	150	75	75		
1	6	74	Total	C	N	O	0	0
			296	148	74	74		
1	7	73	Total	C	N	O	0	0
			292	146	73	73		
1	8	75	Total	C	N	O	0	0
			300	150	75	75		
1	9	74	Total	C	N	O	0	0
			296	148	74	74		

- Molecule 2 is a protein called ATP synthase subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	A	501	Total	C	N	O	0	0
			2004	1002	501	501		
2	B	505	Total	C	N	O	0	0
			2020	1010	505	505		
2	C	496	Total	C	N	O	0	0
			1984	992	496	496		

- Molecule 3 is a protein called ATP synthase subunit beta.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	D	469	Total	C	N	O	0	0
			1876	938	469	469		
3	E	470	Total	C	N	O	0	0
			1880	940	470	470		
3	F	468	Total	C	N	O	0	0
			1872	936	468	468		

- Molecule 4 is a protein called ATP synthase subunit gamma.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	G	265	Total	C	N	O	0	0
			1060	530	265	265		

- Molecule 5 is a protein called ATP synthase subunit delta.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	H	120	Total	C	N	O	0	0
			478	240	120	118		

- Molecule 6 is a protein called ATP synthase subunit epsilon.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	I	48	Total	C	N	O	0	0
			193	96	48	49		

- Molecule 7 is a protein called ATP synthase subunit 5.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	O	187	Total	C	N	O	0	0
			748	374	187	187		

- Molecule 8 is a protein called ATP synthase subunit a.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	T	224	Total	C	N	O	0	0
			897	448	224	225		

- Molecule 9 is a protein called ATP synthase subunit 4.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	U	155	Total	C	N	O	0	0
			620	310	155	155		

- Molecule 10 is a protein called ATP synthase subunit d.

Mol	Chain	Residues	Atoms				AltConf	Trace
10	V	171	Total	C	N	O	0	0
			685	342	171	172		

- Molecule 11 is a protein called ATP synthase subunit f.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	W	85	Total	C	N	O	0	0
			340	170	85	85		

- Molecule 12 is a protein called ATP synthase subunit H.

Mol	Chain	Residues	Atoms				AltConf	Trace
12	X	62	Total	C	N	O	0	0
			248	124	62	62		

- Molecule 13 is a protein called ATP synthase subunit J.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	Y	37	Total	C	N	O	0	0
			148	74	37	37		

- Molecule 14 is a protein called ATP synthase protein 8.

Mol	Chain	Residues	Atoms				AltConf	Trace
14	Z	48	Total	C	N	O	0	0
			193	96	48	49		

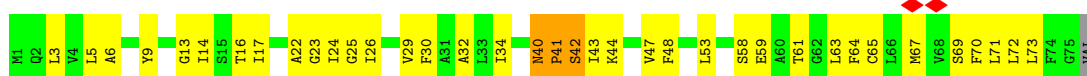
3 Residue-property plots [i](#)

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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

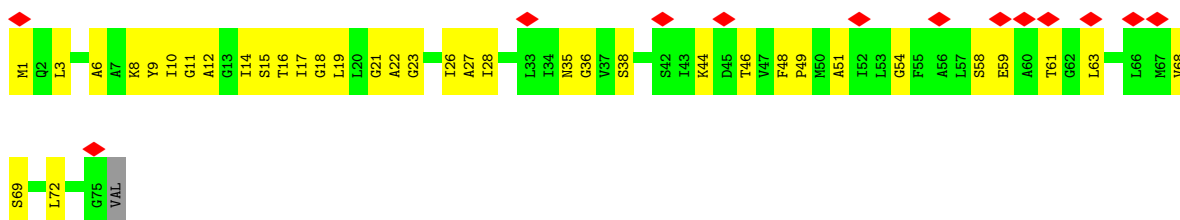
- Molecule 1: ATP synthase subunit 9



- Molecule 1: ATP synthase subunit 9



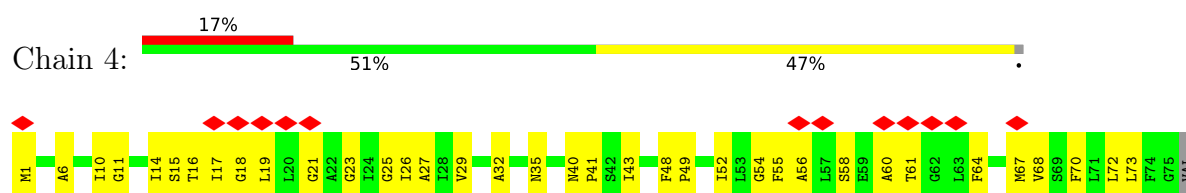
- Molecule 1: ATP synthase subunit 9



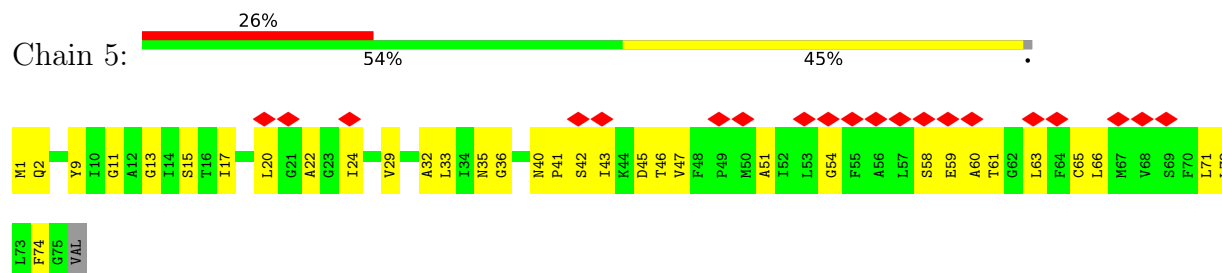
- Molecule 1: ATP synthase subunit 9



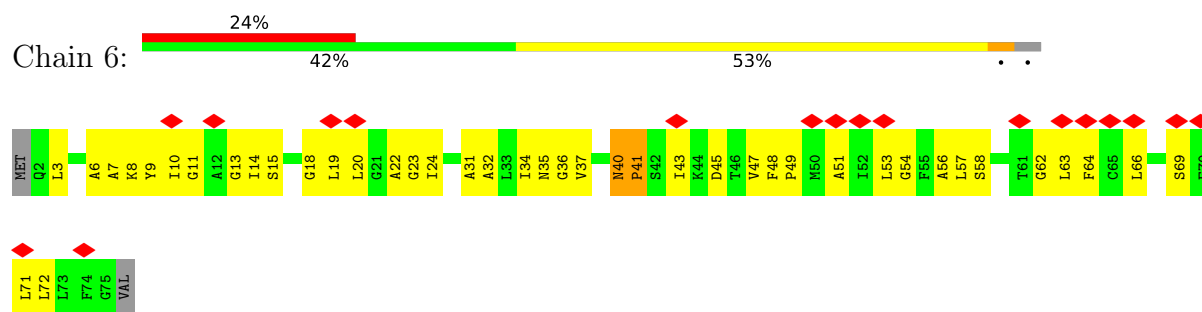
- Molecule 1: ATP synthase subunit 9



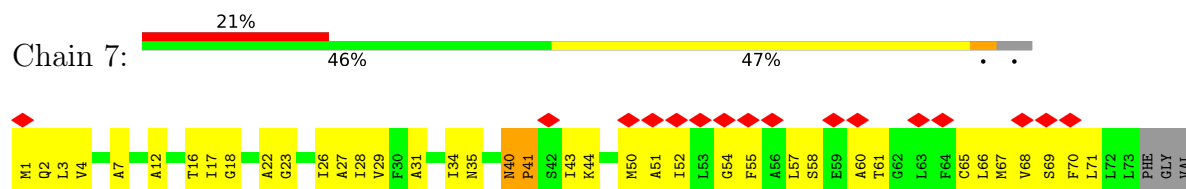
- Molecule 1: ATP synthase subunit 9



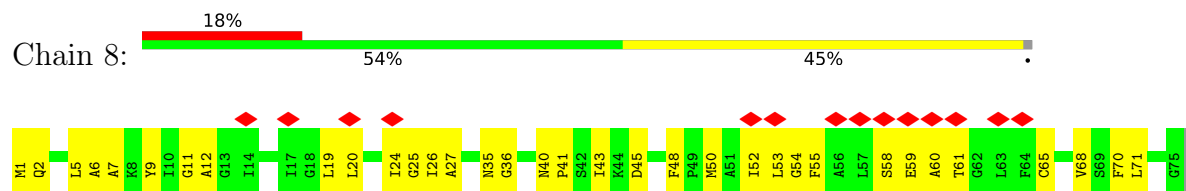
- Molecule 1: ATP synthase subunit 9



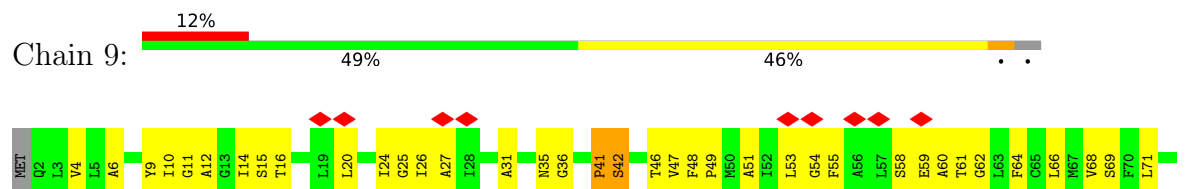
- Molecule 1: ATP synthase subunit 9



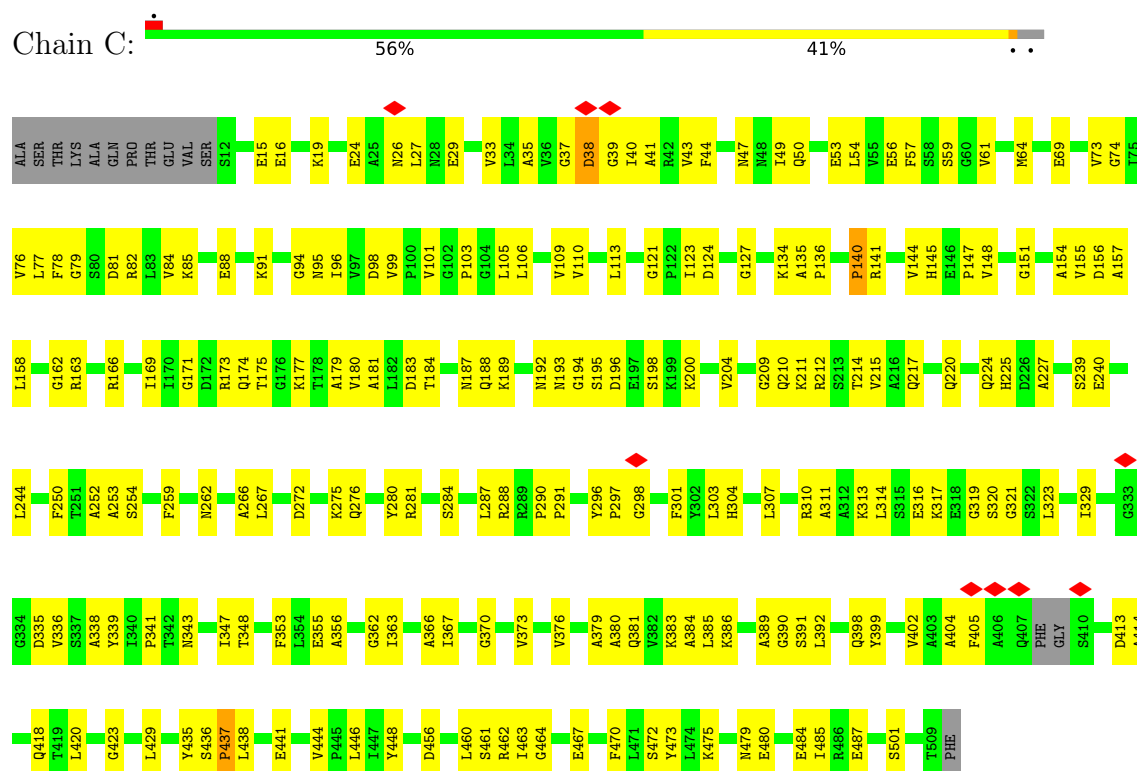
- Molecule 1: ATP synthase subunit 9



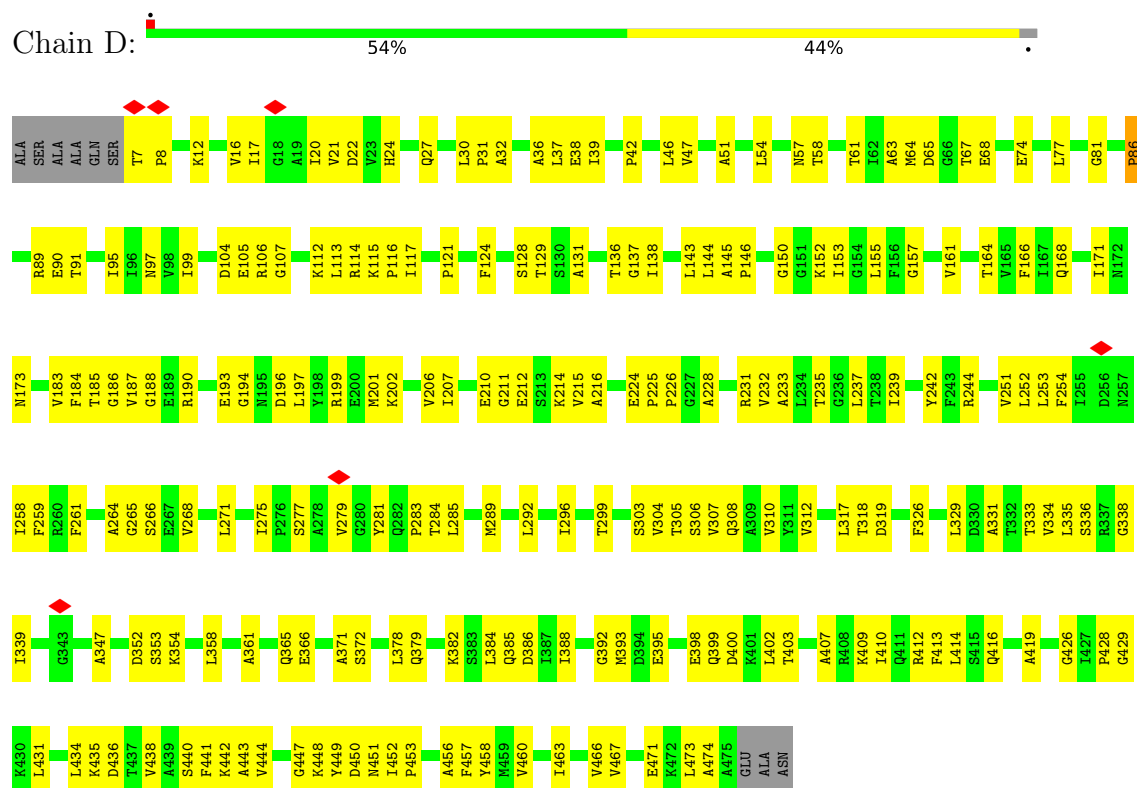
- Molecule 1: ATP synthase subunit 9



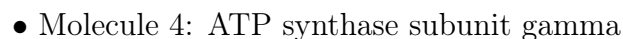
- Molecule 2: ATP synthase subunit alpha

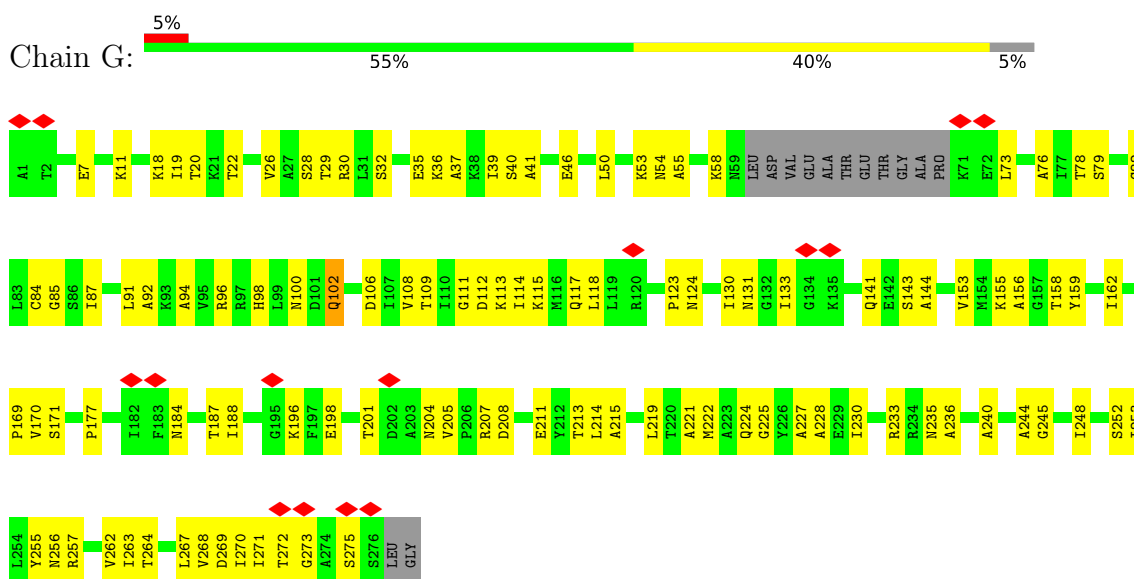


- Molecule 3: ATP synthase subunit beta

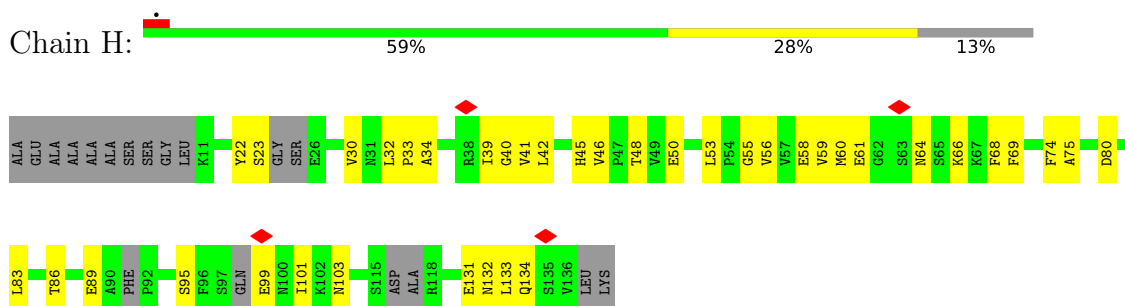


- Molecule 3: ATP synthase subunit beta

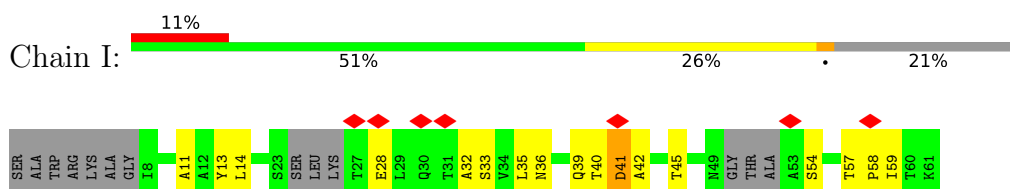




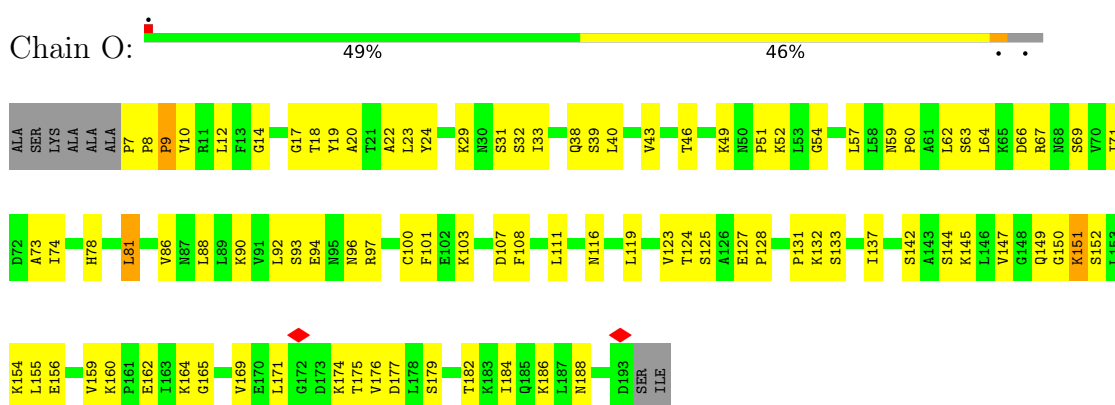
• Molecule 5: ATP synthase subunit delta



• Molecule 6: ATP synthase subunit epsilon

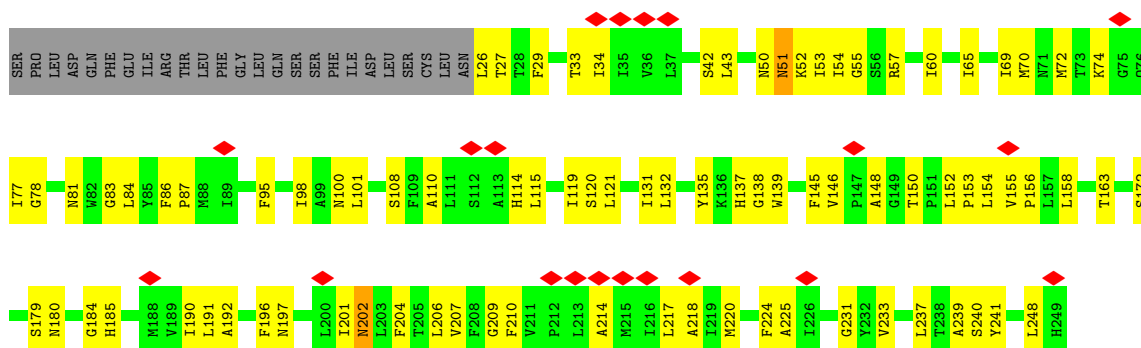


• Molecule 7: ATP synthase subunit 5



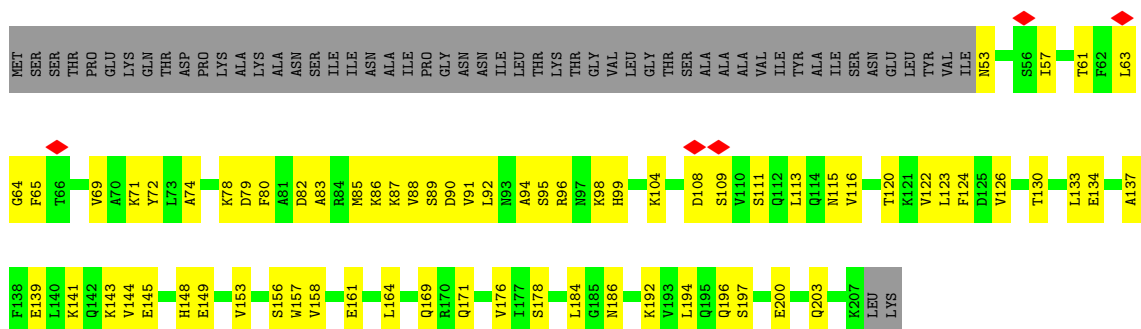
• Molecule 8: ATP synthase subunit a

Chain T: 



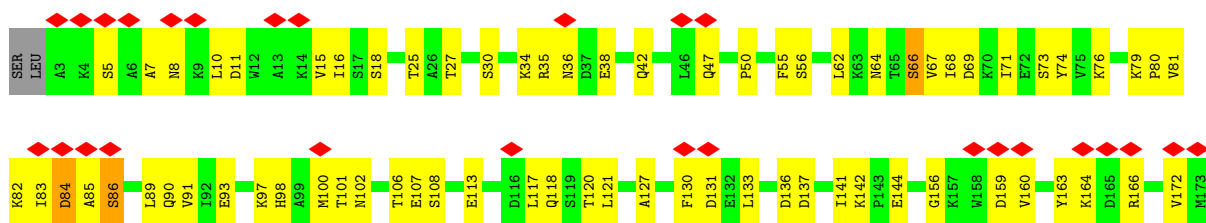
• Molecule 9: ATP synthase subunit 4

Chain U: 



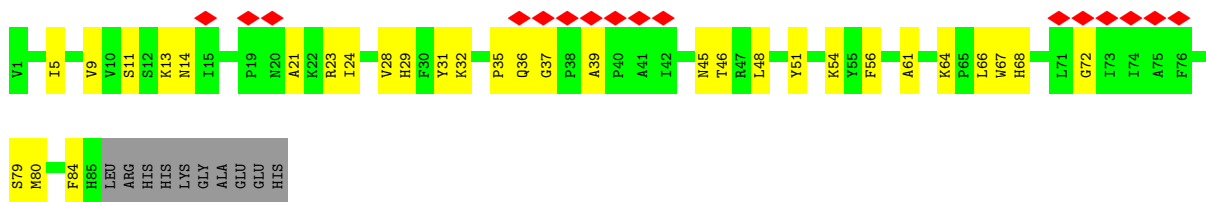
• Molecule 10: ATP synthase subunit d

Chain V: 

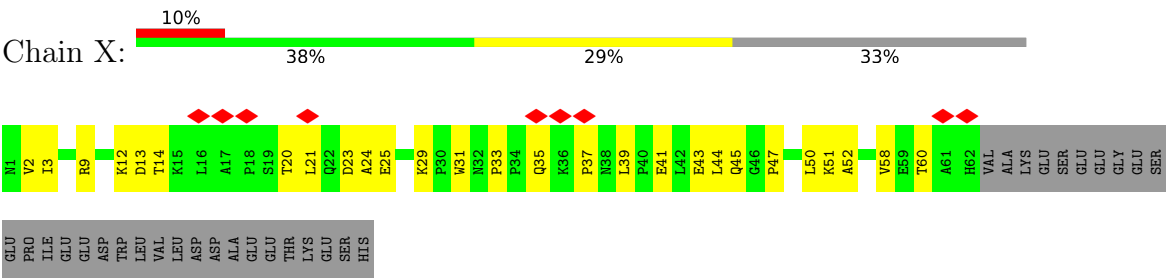


• Molecule 11: ATP synthase subunit f

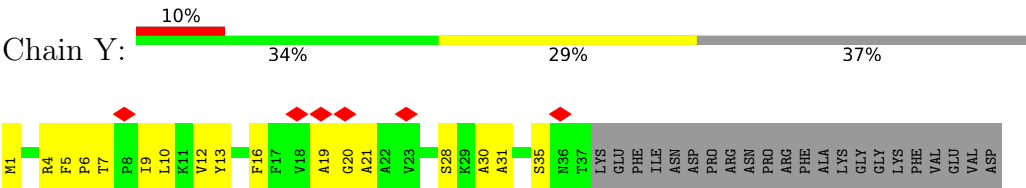
Chain W: 



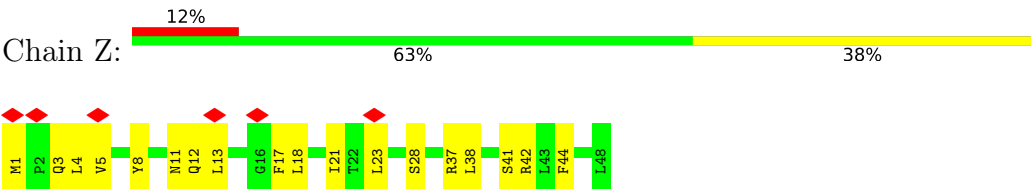
• Molecule 12: ATP synthase subunit H



• Molecule 13: ATP synthase subunit J



• Molecule 14: ATP synthase protein 8



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	4213	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	40	Depositor
Minimum defocus (nm)	1100	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	103896	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	1.882	Depositor
Minimum map value	-0.582	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.118	Depositor
Recommended contour level	0.55	Depositor
Map size (Å)	344.96, 344.96, 344.96	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.3475, 1.3475, 1.3475	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	0	2.51	10/299 (3.3%)	3.26	39/372 (10.5%)
1	1	2.42	15/299 (5.0%)	3.06	36/372 (9.7%)
1	2	2.54	18/299 (6.0%)	3.33	49/372 (13.2%)
1	3	2.53	16/295 (5.4%)	3.22	48/367 (13.1%)
1	4	2.63	20/299 (6.7%)	3.24	41/372 (11.0%)
1	5	2.36	7/299 (2.3%)	3.40	55/372 (14.8%)
1	6	2.30	9/295 (3.1%)	3.53	67/367 (18.3%)
1	7	2.51	17/291 (5.8%)	3.39	45/362 (12.4%)
1	8	2.58	20/299 (6.7%)	3.19	35/372 (9.4%)
1	9	2.63	18/295 (6.1%)	3.38	53/367 (14.4%)
2	A	2.58	119/2003 (5.9%)	2.83	194/2502 (7.8%)
2	B	2.49	91/2018 (4.5%)	2.87	192/2519 (7.6%)
2	C	2.57	106/1982 (5.3%)	2.80	203/2474 (8.2%)
3	D	2.52	87/1875 (4.6%)	2.96	230/2342 (9.8%)
3	E	2.47	90/1879 (4.8%)	2.93	198/2347 (8.4%)
3	F	2.56	93/1871 (5.0%)	2.87	183/2337 (7.8%)
4	G	2.61	58/1058 (5.5%)	2.93	110/1319 (8.3%)
5	H	2.16	18/473 (3.8%)	2.45	29/583 (5.0%)
6	I	2.40	6/190 (3.2%)	2.95	24/231 (10.4%)
7	O	2.59	45/747 (6.0%)	3.01	88/932 (9.4%)
8	T	2.53	45/896 (5.0%)	2.83	81/1117 (7.3%)
9	U	2.46	29/619 (4.7%)	3.12	76/772 (9.8%)
10	V	2.55	41/684 (6.0%)	2.69	58/852 (6.8%)
11	W	2.30	8/339 (2.4%)	2.81	33/422 (7.8%)
12	X	2.67	19/247 (7.7%)	2.96	21/307 (6.8%)
13	Y	2.34	8/147 (5.4%)	2.93	17/182 (9.3%)
14	Z	2.50	10/192 (5.2%)	2.73	14/237 (5.9%)
All	All	2.52	1023/20190 (5.1%)	2.94	2219/25170 (8.8%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	1	0	1
1	6	0	1
1	7	0	1
1	8	0	1
2	B	0	2
3	E	0	1
8	T	0	1
10	V	0	1
All	All	0	9

All (1023) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	H	50	GLU	CA-C	-11.30	1.38	1.52
2	B	40	ILE	CA-C	-11.15	1.43	1.53
3	F	305	THR	CA-C	-10.68	1.39	1.52
3	F	153	ILE	C-N	10.01	1.38	1.33
12	X	60	THR	CA-C	-9.98	1.41	1.52
11	W	79	SER	CA-C	-9.95	1.39	1.52
2	A	232	ILE	CA-C	-9.52	1.41	1.52
3	F	184	PHE	CA-C	-9.52	1.41	1.52
3	F	181	PHE	CA-C	-9.50	1.40	1.52
1	0	31	ALA	C-N	9.43	1.46	1.33
3	D	251	VAL	CA-C	-9.42	1.42	1.53
2	C	252	ALA	CA-C	-9.15	1.40	1.52
2	C	173	ARG	CA-C	-9.14	1.40	1.52
11	W	9	VAL	CA-C	-9.06	1.45	1.53
6	I	57	THR	C-N	9.03	1.43	1.33
2	B	237	THR	CA-C	-8.98	1.41	1.53
1	2	28	ILE	C-N	8.91	1.45	1.33
2	A	67	ASN	CA-C	-8.84	1.41	1.52
10	V	18	SER	C-N	8.81	1.45	1.33
7	O	24	TYR	C-N	8.79	1.46	1.34
1	2	23	GLY	C-N	8.76	1.44	1.33
2	C	85	LYS	CA-C	-8.63	1.41	1.52
2	A	329	ILE	N-CA	-8.47	1.35	1.46
8	T	150	THR	C-O	-8.45	1.16	1.24
2	A	156	ASP	CA-C	-8.45	1.41	1.52
1	9	71	LEU	C-N	8.44	1.45	1.33
2	C	57	PHE	N-CA	-8.43	1.35	1.45
4	G	270	ILE	N-CA	8.38	1.56	1.46
1	5	66	LEU	CA-C	-8.38	1.41	1.52
9	U	186	ASN	CA-C	-8.37	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	7	55	PHE	CA-C	-8.37	1.42	1.52
3	F	217	LEU	CA-C	-8.36	1.42	1.52
2	B	123	ILE	N-CA	-8.35	1.37	1.46
1	1	65	CYS	CA-C	-8.34	1.42	1.52
2	A	154	ALA	N-CA	-8.31	1.36	1.46
2	A	375	ARG	C-N	8.31	1.42	1.34
2	B	157	ALA	CA-C	-8.29	1.44	1.52
2	B	296	TYR	CA-C	-8.29	1.41	1.52
1	8	36	GLY	CA-C	-8.25	1.43	1.52
2	A	51	ALA	N-CA	-8.24	1.35	1.46
6	I	14	LEU	CA-C	-8.15	1.42	1.52
2	C	480	GLU	N-CA	-8.14	1.36	1.46
8	T	158	LEU	C-N	8.13	1.43	1.33
2	A	465	GLU	CA-C	-8.11	1.42	1.52
2	B	41	ALA	CA-C	-8.07	1.42	1.52
8	T	225	ALA	N-CA	-8.02	1.36	1.46
3	E	264	ALA	CA-C	-8.02	1.42	1.52
7	O	69	SER	C-N	7.99	1.44	1.33
1	9	61	THR	C-N	7.99	1.43	1.33
1	3	4	VAL	C-N	7.97	1.44	1.33
2	B	350	GLY	CA-C	-7.97	1.44	1.52
3	F	31	PRO	C-N	7.97	1.44	1.33
3	E	295	ARG	C-N	7.93	1.41	1.33
12	X	47	PRO	N-CA	-7.91	1.38	1.47
4	G	100	ASN	C-N	7.91	1.43	1.33
3	D	426	GLY	C-N	7.90	1.42	1.33
7	O	188	ASN	CA-C	-7.90	1.42	1.52
6	I	13	TYR	CA-C	-7.88	1.42	1.52
10	V	121	LEU	CA-C	-7.85	1.42	1.52
4	G	109	THR	CA-C	-7.85	1.43	1.52
1	8	54	GLY	C-N	7.84	1.43	1.33
2	B	56	GLU	CA-C	7.80	1.61	1.52
3	E	306	SER	CA-C	-7.79	1.42	1.52
3	F	376	GLU	N-CA	-7.78	1.36	1.46
2	C	250	PHE	C-N	7.75	1.44	1.33
2	A	75	ILE	CA-C	-7.75	1.42	1.52
2	C	50	GLN	C-N	7.75	1.44	1.33
8	T	233	VAL	CA-C	-7.71	1.42	1.52
2	C	209	GLY	CA-C	-7.71	1.43	1.51
3	F	151	GLY	CA-C	-7.70	1.44	1.52
2	C	180	VAL	CA-C	-7.68	1.43	1.52
2	B	321	GLY	CA-C	-7.68	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	323	LEU	CA-C	-7.68	1.46	1.53
3	E	464	GLU	CA-C	-7.67	1.42	1.52
3	E	303	SER	CA-C	-7.65	1.42	1.53
7	O	90	LYS	C-N	7.65	1.43	1.33
3	F	164	THR	CA-C	7.63	1.62	1.52
1	4	11	GLY	CA-C	-7.62	1.43	1.52
3	E	291	LEU	CA-C	-7.62	1.42	1.52
4	G	208	ASP	C-N	7.61	1.44	1.33
2	A	238	ALA	C-N	7.56	1.43	1.33
12	X	3	ILE	CA-C	-7.55	1.43	1.52
2	A	213	SER	C-N	7.55	1.43	1.33
8	T	196	PHE	CA-C	-7.55	1.43	1.52
1	0	54	GLY	CA-C	7.54	1.60	1.52
3	D	261	PHE	CA-C	-7.51	1.43	1.52
10	V	101	THR	C-O	-7.50	1.15	1.24
2	A	435	TYR	C-N	7.49	1.40	1.33
2	B	123	ILE	CA-C	-7.49	1.44	1.52
3	F	464	GLU	C-O	-7.49	1.15	1.24
2	C	144	VAL	C-N	7.48	1.44	1.33
3	D	308	GLN	CA-C	-7.47	1.43	1.52
1	8	58	SER	C-N	7.47	1.43	1.33
2	C	291	PRO	CA-C	-7.46	1.42	1.52
10	V	159	ASP	C-N	7.45	1.41	1.33
2	A	56	GLU	C-N	7.43	1.43	1.33
2	A	460	LEU	C-N	7.43	1.43	1.33
1	7	51	ALA	CA-C	-7.42	1.43	1.52
3	D	24	HIS	CA-C	-7.42	1.44	1.52
3	F	229	ARG	N-CA	-7.40	1.37	1.46
8	T	184	GLY	CA-C	-7.39	1.44	1.52
3	D	409	LYS	CA-C	-7.39	1.43	1.52
3	E	6	SER	C-N	7.39	1.41	1.33
3	E	50	VAL	CA-C	7.38	1.61	1.52
8	T	154	LEU	C-N	7.38	1.41	1.33
14	Z	38	LEU	CA-C	-7.35	1.43	1.52
2	A	325	ALA	C-N	7.34	1.40	1.33
2	A	411	ASP	CA-C	-7.33	1.43	1.52
3	D	228	ALA	CA-C	-7.33	1.43	1.52
8	T	70	MET	CA-C	-7.32	1.43	1.52
1	2	38	SER	N-CA	7.29	1.55	1.46
4	G	58	LYS	CA-C	-7.29	1.43	1.52
2	A	165	GLN	CA-C	-7.27	1.43	1.53
3	D	361	ALA	N-CA	-7.27	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	86	PRO	N-CA	-7.26	1.38	1.46
10	V	55	PHE	C-N	7.26	1.42	1.33
2	C	188	GLN	CA-C	-7.23	1.43	1.52
2	B	182	LEU	C-N	7.22	1.43	1.33
3	D	39	ILE	N-CA	-7.22	1.37	1.46
7	O	29	LYS	N-CA	-7.22	1.36	1.46
10	V	90	GLN	C-N	7.22	1.42	1.33
12	X	20	THR	C-N	7.22	1.43	1.33
12	X	13	ASP	C-N	7.21	1.42	1.33
2	A	242	ALA	N-CA	-7.19	1.38	1.46
8	T	210	PHE	C-N	7.18	1.41	1.33
4	G	115	LYS	CA-C	-7.16	1.43	1.52
2	C	501	SER	N-CA	-7.16	1.37	1.46
10	V	25	THR	N-CA	-7.15	1.37	1.46
2	C	470	PHE	CA-C	-7.14	1.43	1.52
2	A	97	VAL	C-N	7.14	1.42	1.33
3	F	445	LEU	CA-C	-7.13	1.43	1.52
3	F	137	GLY	CA-C	-7.12	1.41	1.51
2	C	155	VAL	N-CA	-7.11	1.39	1.46
11	W	24	ILE	N-CA	-7.10	1.36	1.46
3	F	50	VAL	C-O	-7.10	1.16	1.24
4	G	40	SER	N-CA	-7.10	1.37	1.46
3	F	397	SER	N-CA	-7.09	1.37	1.45
2	A	348	THR	CA-C	-7.08	1.43	1.53
2	C	193	ASN	C-N	7.08	1.42	1.33
2	A	466	PHE	N-CA	-7.06	1.37	1.46
3	E	344	ILE	N-CA	-7.06	1.37	1.46
3	F	366	GLU	CA-C	-7.06	1.43	1.52
3	D	206	VAL	C-N	7.05	1.42	1.33
3	F	197	LEU	C-N	7.05	1.43	1.33
3	E	111	SER	CA-C	-7.04	1.44	1.52
3	F	11	GLY	N-CA	7.04	1.52	1.45
1	3	50	MET	N-CA	-7.04	1.37	1.46
3	F	65	ASP	C-N	7.03	1.39	1.33
4	G	170	VAL	N-CA	7.03	1.54	1.46
3	D	37	LEU	CA-C	-7.03	1.44	1.52
9	U	98	LYS	C-N	7.03	1.44	1.33
2	A	345	ILE	CA-C	-7.02	1.43	1.52
2	C	141	ARG	N-CA	-7.02	1.37	1.45
2	C	156	ASP	C-N	7.01	1.43	1.33
8	T	121	LEU	CA-C	-7.01	1.43	1.52
3	F	55	GLY	CA-C	-7.01	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	58	THR	C-N	7.00	1.43	1.33
10	V	62	LEU	CA-C	-7.00	1.44	1.52
7	O	22	ALA	CA-C	-7.00	1.44	1.52
1	7	70	PHE	C-N	7.00	1.43	1.33
1	4	27	ALA	CA-C	-6.99	1.43	1.52
2	C	148	VAL	CA-C	-6.99	1.45	1.52
3	E	257	ASN	C-N	6.99	1.42	1.34
3	D	74	GLU	C-N	6.97	1.42	1.33
2	C	200	LYS	C-N	6.97	1.43	1.33
2	B	322	SER	CA-C	-6.96	1.44	1.52
2	A	450	GLY	CA-C	-6.95	1.44	1.52
2	A	476	SER	N-CA	-6.95	1.37	1.46
3	F	48	LEU	CA-C	-6.95	1.44	1.52
3	D	138	ILE	C-N	6.94	1.42	1.33
3	F	290	GLY	C-O	-6.94	1.15	1.23
2	A	443	GLN	N-CA	6.93	1.54	1.45
1	0	51	ALA	C-N	6.92	1.42	1.33
2	B	347	ILE	N-CA	6.92	1.54	1.46
1	1	48	PHE	N-CA	-6.92	1.40	1.46
3	D	242	TYR	CA-C	-6.90	1.43	1.52
4	G	102	GLN	C-N	6.90	1.42	1.34
7	O	177	ASP	C-N	6.90	1.43	1.33
7	O	8	PRO	CA-C	-6.89	1.48	1.51
2	B	248	ALA	N-CA	6.88	1.52	1.46
4	G	255	TYR	CA-C	-6.86	1.43	1.52
4	G	30	ARG	CA-C	6.86	1.61	1.52
1	3	67	MET	N-CA	6.84	1.54	1.46
4	G	269	ASP	C-N	6.84	1.42	1.33
5	H	34	ALA	CA-C	-6.84	1.44	1.52
2	C	210	GLN	N-CA	-6.83	1.37	1.45
14	Z	42	ARG	N-CA	-6.83	1.38	1.46
10	V	82	LYS	C-N	6.82	1.40	1.33
2	A	307	LEU	N-CA	-6.82	1.38	1.46
2	C	56	GLU	CA-C	-6.82	1.44	1.52
3	F	250	ASP	C-N	6.82	1.42	1.33
2	C	423	GLY	CA-C	-6.81	1.44	1.52
1	9	16	THR	C-N	6.80	1.42	1.34
8	T	220	MET	C-N	6.80	1.42	1.33
2	C	460	LEU	C-O	-6.80	1.16	1.24
1	2	15	SER	CA-C	-6.80	1.44	1.52
1	3	63	LEU	CA-C	-6.78	1.44	1.52
3	F	451	ASN	N-CA	6.77	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	T	148	ALA	CA-C	-6.76	1.43	1.52
3	E	14	THR	CA-C	-6.75	1.44	1.52
3	E	178	HIS	CA-C	-6.75	1.43	1.53
4	G	256	ASN	CA-C	-6.75	1.44	1.52
4	G	263	ILE	N-CA	6.75	1.54	1.46
3	F	446	GLU	N-CA	-6.75	1.37	1.46
9	U	94	ALA	CA-C	6.74	1.61	1.52
2	B	356	ALA	CA-C	-6.74	1.44	1.52
3	E	96	ILE	CA-C	-6.71	1.44	1.52
2	B	108	ARG	CA-C	-6.70	1.44	1.52
4	G	187	THR	CA-C	-6.70	1.44	1.52
7	O	74	ILE	C-N	6.70	1.42	1.34
2	A	387	GLN	C-N	6.69	1.42	1.33
11	W	48	LEU	CA-C	-6.69	1.44	1.52
3	E	426	GLY	C-N	6.68	1.39	1.32
3	F	458	TYR	C-N	6.68	1.42	1.33
2	B	193	ASN	C-N	6.67	1.41	1.33
12	X	41	GLU	C-N	6.67	1.42	1.33
9	U	72	TYR	CA-C	-6.67	1.45	1.52
2	A	326	LEU	C-N	-6.66	1.25	1.33
3	E	40	LYS	N-CA	-6.66	1.38	1.46
7	O	32	SER	CA-C	-6.65	1.45	1.52
3	F	249	GLN	C-N	6.64	1.42	1.33
1	7	71	LEU	N-CA	-6.64	1.38	1.46
8	T	101	LEU	N-CA	-6.61	1.37	1.46
1	2	69	SER	C-N	6.61	1.43	1.34
2	A	95	ASN	CA-C	-6.61	1.44	1.52
7	O	97	ARG	N-CA	-6.60	1.38	1.46
2	A	477	ASN	N-CA	-6.59	1.38	1.46
3	F	126	GLU	N-CA	-6.59	1.37	1.46
7	O	160	LYS	CA-C	-6.59	1.45	1.52
2	C	239	SER	C-N	6.58	1.42	1.33
7	O	165	GLY	N-CA	-6.58	1.35	1.45
10	V	102	ASN	CA-C	-6.58	1.44	1.52
2	B	175	THR	N-CA	6.58	1.53	1.46
2	C	141	ARG	CA-C	-6.58	1.44	1.53
9	U	71	LYS	C-N	6.58	1.42	1.33
3	E	288	ASP	N-CA	-6.57	1.38	1.46
2	A	432	GLN	CA-C	-6.56	1.44	1.52
2	B	340	ILE	CA-C	6.56	1.58	1.52
2	C	204	VAL	CA-C	-6.55	1.44	1.52
2	B	137	GLY	C-N	6.55	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	121	GLY	C-N	6.55	1.41	1.33
3	D	358	LEU	CA-C	-6.55	1.44	1.53
1	7	18	GLY	CA-C	6.54	1.59	1.52
1	1	23	GLY	CA-C	6.54	1.59	1.52
4	G	7	GLU	C-N	6.54	1.42	1.33
3	F	46	LEU	N-CA	-6.54	1.38	1.46
3	D	104	ASP	CA-C	-6.53	1.43	1.52
10	V	117	LEU	N-CA	-6.52	1.38	1.46
2	A	170	ILE	C-N	6.52	1.39	1.32
5	H	74	PHE	CA-C	-6.52	1.44	1.52
2	B	258	TRP	N-CA	-6.52	1.38	1.46
8	T	172	SER	N-CA	-6.52	1.38	1.46
10	V	15	VAL	N-CA	6.52	1.54	1.46
1	3	5	LEU	N-CA	-6.51	1.38	1.46
7	O	133	SER	C-O	-6.51	1.16	1.24
2	C	314	LEU	CA-C	-6.50	1.44	1.53
1	7	67	MET	C-N	6.50	1.42	1.33
1	4	19	LEU	CA-C	-6.48	1.44	1.52
5	H	55	GLY	C-N	-6.48	1.25	1.33
10	V	34	LYS	CA-C	-6.48	1.44	1.52
3	F	381	TYR	CA-C	-6.48	1.44	1.52
1	6	41	PRO	C-O	-6.47	1.15	1.24
3	D	211	GLY	CA-C	-6.47	1.42	1.51
3	F	386	ASP	N-CA	-6.46	1.38	1.46
9	U	153	VAL	C-N	6.46	1.42	1.34
11	W	84	PHE	CA-C	6.43	1.57	1.52
3	F	439	ALA	CA-C	6.43	1.61	1.52
3	E	451	ASN	C-N	6.42	1.39	1.33
2	A	55	VAL	N-CA	-6.42	1.38	1.46
2	B	450	GLY	CA-C	-6.41	1.45	1.52
1	9	46	THR	CA-C	-6.41	1.44	1.52
1	9	14	ILE	N-CA	6.41	1.54	1.46
10	V	73	SER	C-N	6.41	1.43	1.33
2	A	70	PRO	N-CA	-6.40	1.40	1.47
3	D	228	ALA	N-CA	-6.40	1.38	1.46
12	X	12	LYS	CA-C	-6.39	1.44	1.52
8	T	98	ILE	CA-C	-6.38	1.44	1.52
2	A	441	GLU	N-CA	-6.38	1.38	1.46
8	T	150	THR	N-CA	-6.37	1.40	1.46
2	A	379	ALA	N-CA	-6.37	1.38	1.46
3	E	436	ASP	CA-C	-6.37	1.44	1.52
9	U	65	PHE	C-N	6.37	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	Z	5	VAL	N-CA	-6.36	1.38	1.46
3	E	353	SER	C-N	6.34	1.43	1.33
3	F	241	GLU	CA-C	-6.34	1.43	1.52
3	F	398	GLU	CA-C	-6.34	1.44	1.52
3	F	431	LEU	N-CA	-6.33	1.38	1.46
4	G	222	MET	CA-C	-6.33	1.44	1.52
2	B	361	LYS	C-N	6.33	1.40	1.33
4	G	256	ASN	C-N	6.33	1.42	1.33
2	C	485	ILE	C-N	6.32	1.42	1.33
3	E	371	ALA	N-CA	-6.32	1.38	1.46
3	D	173	ASN	C-N	6.32	1.41	1.33
3	F	346	PRO	N-CA	-6.32	1.36	1.47
3	F	306	SER	CA-C	-6.32	1.44	1.52
3	F	72	ARG	CA-C	-6.31	1.44	1.52
3	E	178	HIS	N-CA	-6.31	1.38	1.45
3	E	72	ARG	CA-C	-6.31	1.45	1.52
1	8	55	PHE	N-CA	-6.31	1.38	1.46
3	D	46	LEU	CA-C	-6.31	1.45	1.52
2	A	312	ALA	C-N	6.30	1.42	1.33
7	O	128	PRO	CA-C	-6.30	1.45	1.52
2	A	119	GLY	CA-C	-6.30	1.42	1.51
8	T	95	PHE	CA-C	-6.30	1.44	1.52
2	C	323	LEU	N-CA	-6.30	1.38	1.47
5	H	86	THR	N-CA	-6.30	1.38	1.46
1	6	9	TYR	N-CA	6.29	1.54	1.46
3	D	292	LEU	CA-C	-6.29	1.44	1.52
2	C	484	GLU	C-N	6.29	1.41	1.33
13	Y	1	MET	C-N	6.29	1.42	1.33
7	O	159	VAL	CA-C	-6.28	1.44	1.52
3	F	252	LEU	C-N	6.28	1.42	1.33
2	B	204	VAL	N-CA	-6.28	1.38	1.46
5	H	64	ASN	N-CA	-6.27	1.38	1.46
2	C	162	GLY	CA-C	-6.27	1.43	1.51
3	E	166	PHE	C-N	6.27	1.41	1.33
3	F	267	GLU	CA-C	-6.27	1.44	1.52
8	T	145	PHE	C-N	6.27	1.39	1.33
2	C	171	GLY	C-N	6.26	1.42	1.33
2	B	57	PHE	C-N	6.26	1.42	1.33
9	U	115	ASN	CA-C	6.25	1.60	1.52
9	U	108	ASP	N-CA	-6.25	1.38	1.46
4	G	240	ALA	N-CA	-6.23	1.39	1.46
10	V	160	VAL	N-CA	-6.22	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	27	ALA	N-CA	-6.22	1.38	1.46
1	4	58	SER	CA-C	-6.22	1.44	1.52
3	F	139	LYS	CA-C	-6.21	1.44	1.52
1	8	71	LEU	C-O	-6.21	1.16	1.24
1	3	33	LEU	C-O	-6.20	1.17	1.24
2	C	288	ARG	CA-C	-6.20	1.46	1.53
3	D	392	GLY	C-N	6.20	1.42	1.33
3	E	140	VAL	CA-C	-6.20	1.44	1.52
8	T	114	HIS	CA-C	-6.20	1.45	1.52
4	G	262	VAL	C-N	6.20	1.41	1.33
2	C	287	LEU	CA-C	-6.19	1.43	1.52
3	D	233	ALA	C-N	6.19	1.42	1.34
2	C	124	ASP	CA-C	-6.19	1.45	1.52
1	6	58	SER	N-CA	-6.18	1.38	1.46
4	G	171	SER	C-N	6.18	1.42	1.33
3	F	17	ILE	CA-C	-6.17	1.45	1.52
7	O	62	LEU	CA-C	-6.17	1.47	1.53
9	U	86	LYS	C-N	6.17	1.42	1.33
9	U	178	SER	N-CA	6.17	1.53	1.46
2	B	382	VAL	C-N	6.16	1.42	1.34
2	A	506	PHE	CA-C	-6.16	1.46	1.53
3	F	449	TYR	N-CA	-6.16	1.38	1.46
3	D	166	PHE	N-CA	-6.16	1.39	1.46
2	B	167	GLU	C-N	6.15	1.42	1.33
7	O	182	THR	CA-C	6.15	1.60	1.52
1	9	6	ALA	CA-C	6.15	1.60	1.52
1	8	68	VAL	CA-C	-6.14	1.44	1.52
2	A	395	PHE	CA-C	-6.13	1.45	1.52
4	G	215	ALA	CA-C	-6.13	1.44	1.52
4	G	198	GLU	C-O	-6.12	1.16	1.23
2	B	372	SER	N-CA	-6.12	1.38	1.46
2	C	109	VAL	CA-C	-6.12	1.45	1.52
2	C	244	LEU	CA-C	-6.11	1.44	1.52
1	8	6	ALA	N-CA	-6.11	1.39	1.46
2	A	70	PRO	CA-C	-6.11	1.45	1.52
2	C	39	GLY	CA-C	-6.11	1.43	1.51
3	D	183	VAL	C-N	6.11	1.41	1.33
2	B	20	GLY	CA-C	6.10	1.59	1.51
4	G	19	ILE	CA-C	-6.10	1.44	1.52
3	E	165	VAL	N-CA	-6.09	1.39	1.46
1	4	16	THR	N-CA	6.09	1.54	1.46
3	E	65	ASP	CA-C	-6.09	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	228	ALA	C-N	6.09	1.42	1.33
2	B	28	ASN	N-CA	-6.09	1.38	1.46
3	D	237	LEU	C-N	6.08	1.42	1.33
12	X	25	GLU	C-O	-6.08	1.17	1.24
1	9	46	THR	N-CA	-6.08	1.38	1.46
3	E	245	ASP	C-N	6.07	1.42	1.33
2	A	423	GLY	CA-C	-6.07	1.45	1.52
2	C	467	GLU	C-O	6.07	1.31	1.24
3	D	275	ILE	C-N	-6.07	1.26	1.33
3	E	217	LEU	CA-C	-6.07	1.45	1.52
3	E	329	LEU	CA-C	-6.06	1.45	1.52
1	9	49	PRO	C-N	6.06	1.41	1.33
3	D	254	PHE	C-N	6.06	1.40	1.33
2	C	316	GLU	CA-C	-6.06	1.44	1.52
4	G	236	ALA	N-CA	-6.06	1.39	1.46
1	4	56	ALA	CA-C	-6.05	1.45	1.52
2	B	466	PHE	N-CA	-6.05	1.39	1.46
2	C	320	SER	C-N	6.05	1.43	1.33
3	E	135	GLU	CA-C	-6.04	1.45	1.52
1	0	16	THR	C-O	-6.04	1.16	1.24
1	3	17	ILE	C-N	6.04	1.43	1.33
10	V	7	ALA	CA-C	-6.04	1.45	1.52
2	B	324	THR	CA-C	-6.04	1.44	1.52
2	B	30	THR	CA-C	-6.04	1.46	1.53
3	F	410	ILE	CA-C	-6.04	1.45	1.52
1	8	65	CYS	N-CA	-6.03	1.39	1.46
4	G	94	ALA	C-N	6.03	1.41	1.33
2	C	113	LEU	CA-C	-6.03	1.44	1.52
3	D	67	THR	CA-C	-6.03	1.44	1.53
11	W	5	ILE	C-N	6.03	1.40	1.33
1	0	24	ILE	C-N	6.03	1.41	1.33
8	T	191	LEU	CA-C	-6.03	1.44	1.52
1	3	21	GLY	CA-C	-6.02	1.45	1.52
10	V	50	PRO	N-CA	-6.02	1.40	1.47
3	D	42	PRO	CA-C	-6.02	1.46	1.52
8	T	78	GLY	N-CA	-6.02	1.36	1.45
2	B	203	CYS	C-N	6.01	1.41	1.33
1	7	29	VAL	N-CA	-6.01	1.39	1.46
1	8	52	ILE	CA-C	-6.00	1.45	1.52
4	G	255	TYR	C-N	6.00	1.41	1.33
3	D	474	ALA	N-CA	-6.00	1.39	1.46
8	T	120	SER	CA-C	-6.00	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	8	60	ALA	CA-C	-5.99	1.45	1.52
3	F	68	GLU	N-CA	-5.99	1.38	1.46
10	V	71	ILE	N-CA	-5.99	1.38	1.46
3	D	429	GLY	CA-C	-5.99	1.43	1.52
10	V	136	ASP	C-N	5.99	1.42	1.33
3	E	102	PRO	N-CA	-5.99	1.40	1.46
3	E	431	LEU	C-N	5.99	1.41	1.33
12	X	43	GLU	CA-C	-5.99	1.45	1.52
1	4	14	ILE	N-CA	-5.99	1.39	1.46
9	U	63	LEU	N-CA	-5.99	1.39	1.46
2	C	335	ASP	CA-C	-5.98	1.45	1.52
2	A	260	ARG	N-CA	-5.98	1.39	1.46
8	T	241	TYR	CA-C	-5.98	1.44	1.52
10	V	118	GLN	C-N	5.98	1.41	1.33
2	A	414	ALA	C-N	5.98	1.41	1.33
3	D	449	TYR	CA-C	-5.98	1.45	1.52
2	A	49	ILE	CA-C	5.97	1.59	1.52
3	F	171	ILE	CA-C	-5.97	1.45	1.52
2	A	146	GLU	C-N	5.97	1.41	1.33
3	E	297	THR	N-CA	-5.97	1.39	1.46
2	A	48	ASN	C-N	5.96	1.41	1.33
3	E	322	PRO	C-O	-5.96	1.16	1.24
8	T	209	GLY	CA-C	5.96	1.60	1.51
1	2	27	ALA	CA-C	-5.95	1.45	1.52
2	A	251	THR	C-N	5.95	1.42	1.33
3	F	388	ILE	CA-C	-5.95	1.45	1.52
2	A	112	ALA	CA-C	5.95	1.60	1.52
2	A	201	LEU	CA-C	-5.95	1.45	1.52
4	G	124	ASN	N-CA	5.95	1.53	1.46
2	C	98	ASP	N-CA	-5.95	1.38	1.45
3	D	358	LEU	C-N	-5.94	1.25	1.33
3	E	277	SER	C-N	5.93	1.41	1.33
3	E	215	VAL	N-CA	-5.93	1.39	1.46
2	C	194	GLY	C-N	5.92	1.41	1.33
1	0	55	PHE	N-CA	-5.92	1.39	1.46
3	F	130	SER	N-CA	-5.92	1.38	1.46
2	B	471	LEU	N-CA	-5.92	1.39	1.46
3	D	64	MET	N-CA	-5.92	1.39	1.46
1	2	63	LEU	CA-C	-5.92	1.45	1.52
2	A	36	VAL	C-N	5.91	1.41	1.33
3	D	473	LEU	C-N	5.91	1.41	1.33
1	4	11	GLY	C-N	5.91	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	138	ILE	C-N	5.91	1.42	1.33
2	B	426	LEU	CA-C	5.91	1.60	1.52
3	E	449	TYR	C-O	-5.91	1.16	1.24
3	F	324	THR	N-CA	-5.91	1.39	1.46
4	G	219	LEU	C-N	5.91	1.41	1.33
1	0	13	GLY	C-N	5.90	1.41	1.34
2	B	171	GLY	N-CA	-5.90	1.39	1.45
3	F	198	TYR	N-CA	-5.90	1.39	1.46
2	B	463	ILE	CA-C	5.90	1.60	1.52
12	X	45	GLN	C-N	5.90	1.42	1.33
2	A	369	VAL	N-CA	-5.89	1.39	1.46
2	C	195	SER	CA-C	-5.89	1.45	1.52
10	V	11	ASP	CA-C	-5.89	1.45	1.52
2	A	165	GLN	N-CA	5.88	1.52	1.45
3	D	434	LEU	C-N	5.88	1.42	1.33
10	V	144	GLU	C-N	-5.88	1.26	1.33
1	4	72	LEU	C-N	5.88	1.41	1.33
3	D	386	ASP	C-N	5.88	1.41	1.33
3	F	211	GLY	CA-C	-5.88	1.44	1.52
13	Y	5	PHE	CA-C	-5.88	1.46	1.52
3	D	281	TYR	CA-C	-5.87	1.45	1.52
2	A	316	GLU	N-CA	-5.87	1.38	1.46
3	F	305	THR	C-N	5.87	1.42	1.33
2	C	418	GLN	N-CA	-5.87	1.39	1.46
1	4	6	ALA	C-N	5.87	1.41	1.34
3	E	427	ILE	CA-C	-5.86	1.48	1.52
2	A	324	THR	N-CA	-5.86	1.38	1.45
14	Z	12	GLN	CA-C	-5.86	1.45	1.52
1	6	8	LYS	N-CA	-5.86	1.39	1.46
7	O	155	LEU	N-CA	-5.86	1.38	1.46
3	F	343	GLY	C-N	5.85	1.40	1.33
3	E	122	PRO	CA-C	-5.85	1.44	1.52
1	9	48	PHE	CA-C	5.85	1.59	1.52
2	A	487	GLU	N-CA	-5.85	1.39	1.46
3	F	134	LEU	C-N	5.85	1.41	1.33
2	C	366	ALA	CA-C	-5.84	1.45	1.52
4	G	155	LYS	CA-C	-5.84	1.46	1.53
7	O	71	ILE	N-CA	5.84	1.53	1.46
3	D	137	GLY	CA-C	-5.84	1.42	1.51
5	H	131	GLU	C-N	5.84	1.41	1.33
2	A	19	LYS	CA-C	5.84	1.60	1.52
4	G	273	GLY	CA-C	-5.84	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	Z	23	LEU	N-CA	-5.83	1.39	1.46
2	A	206	VAL	CA-C	-5.83	1.45	1.52
2	A	335	ASP	N-CA	-5.83	1.38	1.46
2	B	106	LEU	C-O	-5.83	1.17	1.24
2	C	105	LEU	N-CA	-5.83	1.38	1.46
3	F	88	GLY	N-CA	-5.83	1.39	1.45
2	C	272	ASP	C-N	5.83	1.42	1.33
1	7	51	ALA	C-N	5.82	1.41	1.33
2	A	139	LEU	CA-C	5.82	1.59	1.52
3	D	212	GLU	N-CA	-5.81	1.39	1.45
2	A	340	ILE	CA-C	5.81	1.58	1.52
7	O	131	PRO	N-CA	-5.81	1.39	1.47
8	T	155	VAL	CA-C	5.81	1.58	1.52
2	A	10	VAL	C-O	5.80	1.31	1.24
10	V	30	SER	N-CA	-5.80	1.39	1.46
1	8	50	MET	C-O	-5.80	1.17	1.24
1	7	26	ILE	C-N	5.80	1.41	1.33
3	F	243	PHE	CA-C	-5.79	1.45	1.52
3	E	129	THR	C-O	-5.79	1.17	1.24
3	F	345	TYR	CA-C	-5.79	1.47	1.52
8	T	135	TYR	C-N	5.79	1.42	1.33
2	B	31	GLY	N-CA	-5.78	1.39	1.45
3	F	323	ALA	C-N	5.78	1.41	1.33
2	C	147	PRO	N-CA	-5.78	1.40	1.47
5	H	101	ILE	CA-C	5.78	1.60	1.52
1	2	48	PHE	CA-C	5.78	1.59	1.52
9	U	57	ILE	CA-C	-5.78	1.44	1.52
2	C	38	ASP	C-N	5.78	1.41	1.33
3	E	232	VAL	CA-C	-5.77	1.45	1.52
10	V	172	VAL	C-O	-5.77	1.17	1.24
4	G	268	VAL	N-CA	-5.76	1.39	1.46
3	E	80	GLY	CA-C	-5.76	1.43	1.51
1	2	28	ILE	CA-C	-5.76	1.45	1.52
7	O	147	VAL	C-N	5.76	1.43	1.33
2	C	399	TYR	C-N	5.76	1.41	1.33
3	D	402	LEU	C-N	5.75	1.41	1.33
9	U	194	LEU	C-N	5.75	1.41	1.33
3	F	334	VAL	C-N	5.75	1.41	1.33
4	G	141	GLN	CA-C	5.75	1.60	1.52
2	A	18	ILE	CA-C	-5.75	1.45	1.52
2	B	147	PRO	CA-C	-5.75	1.47	1.53
1	3	59	GLU	N-CA	-5.74	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	463	ILE	C-O	-5.74	1.17	1.24
4	G	87	ILE	CA-C	-5.74	1.45	1.52
1	7	40	ASN	CA-C	5.74	1.60	1.52
1	7	52	ILE	CA-C	-5.74	1.45	1.52
4	G	131	ASN	CA-C	-5.74	1.45	1.52
5	H	80	ASP	N-CA	5.73	1.53	1.46
2	B	226	ASP	N-CA	-5.73	1.39	1.46
2	A	32	ARG	CA-C	-5.72	1.45	1.52
1	7	28	ILE	N-CA	-5.72	1.39	1.46
2	C	414	ALA	CA-C	-5.72	1.45	1.52
3	D	467	VAL	N-CA	-5.72	1.39	1.46
2	A	64	MET	CA-C	-5.71	1.45	1.53
2	C	41	ALA	C-N	5.71	1.41	1.33
3	E	269	SER	N-CA	-5.71	1.39	1.46
3	F	321	ALA	N-CA	5.71	1.52	1.46
3	E	416	GLN	N-CA	-5.71	1.41	1.46
1	8	7	ALA	CA-C	-5.71	1.45	1.52
3	E	243	PHE	C-N	5.71	1.41	1.33
3	E	97	ASN	C-N	5.70	1.40	1.33
3	F	157	GLY	N-CA	-5.70	1.38	1.45
2	A	45	GLY	CA-C	-5.69	1.43	1.51
3	E	132	GLU	C-N	5.69	1.40	1.33
8	T	72	MET	C-N	5.69	1.42	1.33
1	4	1	MET	N-CA	5.69	1.57	1.46
13	Y	16	PHE	CA-C	-5.68	1.45	1.52
13	Y	28	SER	C-N	5.68	1.41	1.33
2	B	77	LEU	C-N	5.68	1.41	1.33
7	O	71	ILE	CA-C	-5.68	1.45	1.52
2	A	28	ASN	C-N	5.67	1.40	1.33
2	A	455	LEU	C-N	5.67	1.42	1.33
2	B	67	ASN	C-N	5.67	1.41	1.33
2	A	105	LEU	C-N	5.67	1.41	1.33
3	E	90	GLU	N-CA	-5.67	1.38	1.46
2	C	404	ALA	C-N	5.67	1.41	1.33
9	U	161	GLU	N-CA	-5.67	1.39	1.46
1	0	67	MET	N-CA	-5.66	1.39	1.46
1	1	9	TYR	C-N	5.66	1.41	1.33
4	G	264	THR	CA-C	-5.66	1.45	1.52
10	V	16	ILE	CA-C	5.66	1.60	1.52
14	Z	3	GLN	C-N	5.66	1.41	1.33
3	F	421	ALA	N-CA	-5.66	1.39	1.46
10	V	15	VAL	C-N	5.66	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	384	LEU	N-CA	5.65	1.53	1.46
2	B	175	THR	C-N	5.65	1.39	1.33
2	A	415	SER	C-N	5.65	1.41	1.33
2	C	304	HIS	CA-C	-5.64	1.45	1.52
3	D	22	ASP	CA-C	-5.64	1.45	1.52
1	9	35	ASN	C-N	-5.64	1.27	1.33
4	G	253	ILE	N-CA	-5.64	1.39	1.46
8	T	185	HIS	CA-C	-5.64	1.45	1.52
3	E	460	VAL	N-CA	-5.64	1.39	1.46
8	T	179	SER	C-N	5.64	1.41	1.33
3	E	260	ARG	N-CA	-5.64	1.39	1.46
3	F	408	ARG	C-N	5.64	1.41	1.34
10	V	120	THR	C-N	5.64	1.41	1.33
3	E	15	ALA	C-N	5.63	1.40	1.33
1	3	42	SER	CA-C	-5.63	1.45	1.52
2	B	488	LYS	C-N	5.63	1.41	1.33
3	D	113	LEU	CA-C	-5.63	1.45	1.52
3	D	155	LEU	CA-C	-5.63	1.45	1.52
3	F	256	ASP	C-N	5.63	1.41	1.33
8	T	217	LEU	N-CA	-5.62	1.39	1.46
14	Z	13	LEU	CA-C	-5.62	1.45	1.52
1	3	23	GLY	C-O	-5.62	1.17	1.23
1	8	12	ALA	N-CA	-5.62	1.39	1.46
1	2	72	LEU	C-O	-5.61	1.17	1.24
2	C	85	LYS	C-N	5.61	1.41	1.33
14	Z	1	MET	N-CA	5.61	1.56	1.46
2	B	434	GLN	CA-C	5.61	1.60	1.52
3	D	21	VAL	C-O	5.61	1.31	1.24
3	E	57	ASN	N-CA	-5.61	1.39	1.46
8	T	52	LYS	CA-C	-5.61	1.45	1.52
2	B	147	PRO	N-CA	-5.60	1.41	1.46
3	D	16	VAL	CA-C	-5.60	1.45	1.52
1	4	52	ILE	N-CA	5.60	1.53	1.46
3	D	185	THR	C-O	-5.60	1.17	1.23
7	O	169	VAL	CA-C	-5.60	1.45	1.52
2	A	125	ALA	N-CA	-5.59	1.39	1.46
2	C	189	LYS	N-CA	-5.59	1.39	1.46
7	O	152	SER	N-CA	-5.59	1.39	1.46
12	X	39	LEU	N-CA	-5.59	1.40	1.46
2	A	373	VAL	C-N	5.59	1.41	1.33
9	U	83	ALA	C-N	5.59	1.41	1.33
2	C	77	LEU	CA-C	5.58	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	V	5	SER	C-N	5.58	1.41	1.33
3	E	129	THR	N-CA	-5.58	1.39	1.46
7	O	38	GLN	C-N	5.58	1.41	1.33
1	1	34	ILE	C-N	5.57	1.41	1.33
2	B	136	PRO	N-CA	-5.57	1.40	1.47
1	3	41	PRO	C-N	5.57	1.41	1.33
8	T	29	PHE	C-N	5.57	1.41	1.33
2	C	463	ILE	C-O	-5.57	1.17	1.24
3	D	334	VAL	CA-C	5.57	1.59	1.52
3	E	353	SER	N-CA	-5.56	1.39	1.46
2	B	140	PRO	C-O	5.56	1.31	1.24
8	T	108	SER	N-CA	-5.56	1.39	1.46
1	9	66	LEU	N-CA	-5.55	1.39	1.46
9	U	133	LEU	C-N	5.55	1.41	1.34
10	V	74	TYR	N-CA	-5.55	1.39	1.46
4	G	248	ILE	CA-C	-5.55	1.46	1.52
3	E	371	ALA	CA-C	-5.55	1.45	1.52
9	U	69	VAL	CA-C	-5.55	1.46	1.52
2	A	462	ARG	CA-C	-5.55	1.44	1.52
3	D	212	GLU	C-N	5.55	1.41	1.33
2	C	414	ALA	N-CA	-5.54	1.39	1.46
2	A	394	LEU	C-N	5.53	1.41	1.33
3	D	89	ARG	C-O	-5.53	1.16	1.24
1	1	29	VAL	C-N	5.53	1.41	1.33
2	A	425	ARG	CA-C	5.53	1.59	1.52
8	T	55	GLY	CA-C	5.53	1.59	1.51
13	Y	7	THR	CA-C	-5.53	1.45	1.52
2	C	313	LYS	CA-C	-5.52	1.46	1.52
2	C	321	GLY	C-N	5.52	1.41	1.33
1	8	20	LEU	C-O	-5.52	1.17	1.24
2	B	218	LEU	CA-C	-5.52	1.45	1.52
3	D	27	GLN	CA-C	-5.52	1.46	1.52
3	D	438	VAL	C-N	5.52	1.41	1.33
3	E	149	ARG	N-CA	-5.52	1.39	1.46
2	B	102	GLY	N-CA	-5.51	1.37	1.44
1	8	35	ASN	C-N	5.51	1.40	1.33
5	H	68	PHE	C-N	5.51	1.40	1.33
1	2	36	GLY	CA-C	-5.50	1.45	1.52
1	8	25	GLY	CA-C	-5.50	1.46	1.52
2	A	107	GLY	C-N	5.50	1.40	1.33
2	A	396	LEU	C-N	5.50	1.41	1.33
4	G	269	ASP	N-CA	-5.50	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	342	THR	C-O	-5.50	1.17	1.24
9	U	82	ASP	C-N	5.50	1.41	1.33
2	B	436	SER	CA-C	5.49	1.58	1.52
3	F	205	GLY	C-N	5.49	1.40	1.34
1	9	24	ILE	N-CA	-5.49	1.40	1.46
12	X	9	ARG	N-CA	-5.49	1.39	1.46
3	D	333	THR	C-N	5.49	1.40	1.33
1	9	54	GLY	C-N	5.48	1.40	1.33
2	C	27	LEU	N-CA	-5.48	1.38	1.46
5	H	66	LYS	N-CA	-5.48	1.39	1.46
3	E	374	VAL	C-N	5.48	1.40	1.33
2	B	236	ALA	CA-C	-5.48	1.46	1.53
2	C	438	LEU	CA-C	-5.48	1.45	1.52
3	F	253	LEU	CA-C	-5.47	1.46	1.52
4	G	94	ALA	CA-C	-5.47	1.45	1.52
4	G	177	PRO	C-N	5.47	1.40	1.33
8	T	74	LYS	N-CA	-5.47	1.39	1.46
4	G	84	CYS	CA-C	-5.47	1.45	1.52
1	9	26	ILE	C-O	-5.46	1.18	1.24
6	I	41	ASP	C-N	5.46	1.40	1.33
10	V	137	ASP	CA-C	-5.46	1.45	1.52
2	B	176	GLY	CA-C	-5.46	1.45	1.51
1	2	51	ALA	C-N	5.46	1.40	1.33
1	6	63	LEU	C-N	5.46	1.40	1.33
2	B	167	GLU	CA-C	-5.46	1.46	1.52
2	C	88	GLU	CA-C	-5.46	1.45	1.52
2	C	134	LYS	CA-C	-5.46	1.45	1.52
11	W	68	HIS	CA-C	-5.45	1.45	1.52
3	F	285	LEU	CA-C	-5.45	1.46	1.52
1	3	25	GLY	CA-C	-5.45	1.46	1.52
2	B	345	ILE	C-N	5.45	1.41	1.33
2	C	385	LEU	CA-C	-5.45	1.44	1.52
3	F	102	PRO	C-N	5.45	1.39	1.33
1	1	32	ALA	N-CA	-5.45	1.39	1.46
2	B	10	VAL	C-N	5.44	1.41	1.33
3	E	357	LEU	N-CA	-5.44	1.39	1.46
9	U	197	SER	C-N	5.44	1.40	1.33
14	Z	18	LEU	CA-C	-5.43	1.45	1.52
3	F	413	PHE	CA-C	-5.43	1.45	1.52
8	T	84	LEU	CA-C	-5.43	1.45	1.52
2	C	384	ALA	CA-C	-5.43	1.46	1.52
2	A	144	VAL	CA-C	-5.43	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	G	82	GLY	CA-C	-5.43	1.45	1.52
2	A	171	GLY	N-CA	-5.42	1.40	1.45
3	F	262	THR	C-N	5.42	1.41	1.33
2	A	129	SER	CA-C	-5.42	1.45	1.52
2	C	40	ILE	CA-C	-5.42	1.46	1.52
3	D	231	ARG	C-N	5.42	1.40	1.33
3	E	18	GLY	CA-C	5.42	1.59	1.51
3	F	61	THR	CA-C	-5.42	1.46	1.52
5	H	83	LEU	CA-C	-5.42	1.46	1.53
8	T	202	ASN	N-CA	5.42	1.53	1.46
2	A	493	LYS	CA-C	-5.42	1.46	1.52
3	E	334	VAL	N-CA	-5.41	1.40	1.46
7	O	51	PRO	CA-C	-5.41	1.44	1.52
7	O	171	LEU	CA-C	-5.41	1.45	1.52
10	V	47	GLN	N-CA	-5.41	1.39	1.46
12	X	29	LYS	CA-C	5.41	1.58	1.52
13	Y	13	TYR	N-CA	-5.41	1.39	1.46
4	G	117	GLN	C-N	-5.41	1.26	1.34
6	I	59	ILE	C-N	5.41	1.40	1.33
2	A	354	LEU	N-CA	-5.41	1.39	1.46
3	D	104	ASP	C-N	5.41	1.40	1.33
3	F	253	LEU	C-N	5.41	1.41	1.33
2	A	113	LEU	N-CA	-5.41	1.38	1.46
2	B	5	ALA	C-N	5.41	1.39	1.33
2	C	347	ILE	N-CA	-5.41	1.39	1.46
4	G	76	ALA	C-N	5.40	1.40	1.33
8	T	69	ILE	C-N	5.40	1.41	1.33
13	Y	9	ILE	CA-C	-5.40	1.46	1.53
1	4	10	ILE	CA-C	-5.40	1.46	1.52
2	A	295	ALA	N-CA	-5.40	1.39	1.46
3	E	151	GLY	N-CA	-5.39	1.38	1.45
12	X	14	THR	C-O	-5.39	1.17	1.23
3	F	308	GLN	CA-C	-5.39	1.46	1.52
2	A	299	ASP	CA-C	5.39	1.60	1.52
9	U	120	THR	C-N	5.39	1.41	1.33
2	A	118	ASP	C-N	5.38	1.40	1.33
3	F	217	LEU	C-N	-5.38	1.26	1.33
2	A	175	THR	C-N	5.38	1.39	1.33
7	O	54	GLY	CA-C	-5.38	1.44	1.51
9	U	109	SER	C-N	5.38	1.40	1.33
2	A	280	TYR	C-N	5.37	1.41	1.33
13	Y	19	ALA	N-CA	-5.37	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	166	ARG	N-CA	-5.37	1.39	1.46
8	T	138	GLY	N-CA	-5.37	1.38	1.45
3	E	261	PHE	N-CA	-5.37	1.40	1.46
3	E	465	ASP	CA-C	5.37	1.59	1.52
1	6	13	GLY	CA-C	-5.37	1.46	1.52
9	U	130	THR	C-N	5.37	1.40	1.33
8	T	110	ALA	CA-C	-5.36	1.45	1.52
1	5	58	SER	N-CA	5.36	1.52	1.46
1	2	27	ALA	C-N	5.36	1.40	1.33
3	E	388	ILE	C-N	5.36	1.41	1.33
7	O	111	LEU	C-N	5.36	1.40	1.33
2	B	184	THR	CA-C	-5.35	1.45	1.52
1	5	63	LEU	C-N	5.35	1.41	1.33
2	B	382	VAL	C-O	-5.35	1.18	1.24
1	4	73	LEU	CA-C	-5.35	1.46	1.52
1	8	11	GLY	CA-C	5.35	1.58	1.52
11	W	39	ALA	N-CA	5.35	1.53	1.46
2	C	101	VAL	C-N	5.35	1.41	1.33
4	G	184	ASN	N-CA	5.35	1.52	1.45
2	C	380	ALA	N-CA	5.35	1.53	1.46
2	A	153	LYS	C-N	5.34	1.40	1.33
2	C	106	LEU	C-O	-5.34	1.17	1.24
2	B	265	HIS	C-N	5.34	1.40	1.33
3	F	324	THR	C-N	5.34	1.41	1.33
4	G	144	ALA	C-O	-5.34	1.18	1.24
3	D	196	ASP	C-N	5.33	1.41	1.33
3	E	340	SER	C-N	5.33	1.41	1.34
1	5	74	PHE	N-CA	-5.33	1.39	1.46
2	C	304	HIS	N-CA	-5.33	1.39	1.46
2	C	348	THR	CA-C	-5.33	1.46	1.53
4	G	18	LYS	C-N	5.33	1.40	1.33
2	A	240	GLU	CA-C	-5.32	1.46	1.52
2	B	332	GLN	C-N	5.32	1.41	1.33
7	O	100	CYS	CA-C	-5.32	1.47	1.53
1	4	26	ILE	N-CA	-5.32	1.40	1.46
3	E	214	LYS	C-N	5.32	1.39	1.33
1	9	42	SER	N-CA	-5.32	1.39	1.46
2	B	137	GLY	N-CA	5.31	1.50	1.45
2	C	47	ASN	N-CA	5.31	1.52	1.46
3	D	105	GLU	CA-C	-5.31	1.47	1.53
2	C	353	PHE	N-CA	-5.30	1.39	1.46
3	D	46	LEU	C-N	5.30	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	48	LEU	CA-C	-5.30	1.46	1.52
4	G	29	THR	CA-C	-5.30	1.46	1.52
1	0	63	LEU	CA-C	-5.30	1.45	1.52
2	A	335	ASP	C-O	5.30	1.30	1.24
7	O	60	PRO	N-CA	-5.29	1.40	1.47
2	B	484	GLU	CA-C	-5.29	1.45	1.52
7	O	119	LEU	N-CA	-5.29	1.39	1.45
1	3	58	SER	CA-C	-5.29	1.46	1.52
1	5	2	GLN	CA-C	-5.29	1.46	1.52
2	C	29	GLU	C-N	5.29	1.40	1.33
3	D	450	ASP	C-N	5.29	1.41	1.33
1	7	69	SER	C-N	5.29	1.41	1.33
2	A	293	ARG	N-CA	-5.28	1.39	1.46
2	B	179	ALA	N-CA	-5.28	1.40	1.46
3	D	365	GLN	C-O	5.28	1.30	1.24
1	2	19	LEU	CA-C	5.28	1.59	1.52
3	D	186	GLY	CA-C	-5.28	1.44	1.51
1	8	26	ILE	CA-C	-5.27	1.46	1.52
2	A	24	GLU	C-N	5.27	1.41	1.33
2	C	181	ALA	N-CA	-5.27	1.39	1.46
3	D	283	PRO	CA-C	5.27	1.59	1.52
2	A	70	PRO	C-N	5.27	1.41	1.33
3	D	244	ARG	N-CA	-5.27	1.40	1.46
2	C	224	GLN	CA-C	-5.27	1.46	1.52
2	A	124	ASP	CA-C	-5.26	1.46	1.52
2	C	250	PHE	CA-C	-5.26	1.46	1.52
2	C	275	LYS	CA-C	-5.26	1.45	1.52
2	C	370	GLY	C-N	5.26	1.42	1.33
7	O	96	ASN	CA-C	-5.26	1.46	1.53
2	B	213	SER	CA-C	5.26	1.59	1.52
3	D	235	THR	C-N	5.26	1.39	1.33
3	E	402	LEU	C-N	5.26	1.40	1.33
1	9	10	ILE	C-N	5.26	1.40	1.33
7	O	116	ASN	C-N	5.26	1.39	1.33
14	Z	37	ARG	C-N	5.26	1.40	1.33
2	A	10	VAL	C-N	5.25	1.40	1.33
9	U	200	GLU	C-N	5.25	1.40	1.33
10	V	81	VAL	C-N	5.25	1.40	1.33
1	1	61	THR	CA-C	-5.25	1.46	1.52
2	A	302	TYR	C-O	5.25	1.30	1.24
3	D	310	VAL	CA-C	-5.25	1.46	1.52
12	X	41	GLU	CA-C	-5.25	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	8	70	PHE	CA-C	-5.25	1.46	1.52
3	D	258	ILE	CA-C	-5.25	1.44	1.52
2	A	234	VAL	CA-C	-5.24	1.46	1.52
3	F	85	VAL	CA-C	-5.24	1.47	1.52
3	D	58	THR	C-O	-5.24	1.17	1.23
1	4	25	GLY	CA-C	-5.24	1.46	1.52
2	B	217	GLN	C-O	-5.24	1.18	1.24
4	G	144	ALA	C-N	5.24	1.41	1.33
3	F	220	GLY	CA-C	-5.23	1.44	1.51
5	H	58	GLU	N-CA	5.23	1.52	1.46
8	T	224	PHE	CA-C	5.23	1.59	1.52
8	T	231	GLY	CA-C	-5.23	1.46	1.52
10	V	102	ASN	C-N	5.23	1.40	1.33
2	A	98	ASP	C-N	5.23	1.39	1.33
3	D	336	SER	C-N	5.23	1.41	1.34
3	F	405	GLU	N-CA	-5.22	1.40	1.46
7	O	184	ILE	N-CA	-5.22	1.40	1.46
10	V	38	GLU	CA-C	-5.22	1.46	1.52
3	D	8	PRO	C-N	5.22	1.39	1.33
10	V	159	ASP	CA-C	5.22	1.59	1.52
8	T	180	ASN	CA-C	5.22	1.59	1.52
2	C	192	ASN	CA-C	-5.21	1.45	1.52
3	F	315	ASP	CA-C	-5.21	1.48	1.53
3	D	331	ALA	C-N	5.21	1.40	1.33
2	A	390	GLY	N-CA	-5.21	1.39	1.45
5	H	89	GLU	CA-C	-5.21	1.46	1.52
2	B	392	LEU	N-CA	5.21	1.52	1.46
2	C	220	GLN	C-N	5.21	1.40	1.33
3	F	294	GLU	C-O	-5.21	1.17	1.24
7	O	19	TYR	N-CA	-5.21	1.40	1.46
2	C	211	LYS	C-N	5.21	1.40	1.33
9	U	157	TRP	C-N	5.20	1.40	1.33
10	V	66	SER	N-CA	5.20	1.52	1.46
1	6	35	ASN	C-N	5.20	1.40	1.33
3	E	191	THR	CA-C	5.20	1.59	1.52
2	A	142	ARG	C-N	5.19	1.40	1.33
2	C	392	LEU	N-CA	-5.19	1.39	1.46
3	E	320	PRO	C-N	5.19	1.41	1.33
1	9	53	LEU	CA-C	5.19	1.59	1.52
9	U	203	GLN	C-N	5.19	1.41	1.33
2	C	175	THR	CA-C	-5.19	1.46	1.52
7	O	92	LEU	C-N	5.19	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	63	LEU	N-CA	-5.19	1.39	1.46
3	E	447	GLY	CA-C	-5.19	1.44	1.51
4	G	133	ILE	CA-C	-5.19	1.44	1.52
2	A	12	SER	C-N	5.19	1.40	1.33
3	D	68	GLU	C-N	5.19	1.40	1.33
1	6	15	SER	C-N	5.18	1.41	1.34
2	C	81	ASP	C-N	5.18	1.41	1.34
2	C	177	LYS	CA-C	5.18	1.59	1.52
3	D	187	VAL	C-N	5.18	1.38	1.33
1	3	61	THR	C-N	5.18	1.41	1.33
2	A	494	GLU	N-CA	-5.18	1.40	1.46
2	C	386	LYS	N-CA	-5.18	1.39	1.46
1	7	3	LEU	CA-C	-5.17	1.46	1.52
3	D	306	SER	C-N	5.17	1.40	1.33
1	8	43	ILE	C-N	5.17	1.40	1.33
3	F	189	GLU	CA-C	-5.17	1.46	1.52
3	E	15	ALA	N-CA	-5.17	1.40	1.46
4	G	53	LYS	C-N	5.17	1.41	1.33
3	D	152	LYS	N-CA	-5.17	1.40	1.46
3	D	407	ALA	N-CA	-5.17	1.39	1.46
1	2	14	ILE	CA-C	5.17	1.59	1.52
2	A	476	SER	C-N	5.17	1.40	1.33
1	5	29	VAL	N-CA	-5.17	1.40	1.46
1	9	68	VAL	CA-C	5.16	1.59	1.52
2	B	403	ALA	C-N	5.16	1.41	1.33
3	D	410	ILE	C-N	5.15	1.40	1.33
3	E	22	ASP	C-O	-5.15	1.17	1.23
3	F	339	ILE	C-N	5.15	1.41	1.34
2	B	118	ASP	C-N	5.15	1.41	1.33
3	E	330	ASP	C-O	-5.15	1.18	1.24
3	E	375	GLN	CA-C	-5.15	1.46	1.52
3	F	327	ALA	CA-C	-5.15	1.46	1.52
4	G	91	LEU	C-N	5.15	1.40	1.33
2	A	354	LEU	CA-C	-5.14	1.46	1.52
3	D	431	LEU	CA-C	-5.14	1.46	1.52
3	F	63	ALA	N-CA	5.14	1.51	1.45
2	B	103	PRO	N-CA	-5.14	1.40	1.47
2	B	348	THR	N-CA	-5.14	1.39	1.45
7	O	52	LYS	CA-C	-5.14	1.46	1.52
7	O	66	ASP	N-CA	5.14	1.52	1.46
7	O	94	GLU	C-N	5.14	1.41	1.33
3	E	427	ILE	C-O	-5.13	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	221	THR	CA-C	-5.13	1.46	1.52
12	X	35	GLN	C-O	-5.13	1.18	1.24
2	A	168	LEU	CA-C	-5.13	1.46	1.52
2	B	506	PHE	N-CA	-5.13	1.40	1.46
1	2	6	ALA	N-CA	-5.13	1.40	1.46
10	V	56	SER	CA-C	5.12	1.59	1.53
1	5	24	ILE	N-CA	-5.12	1.40	1.46
3	E	181	PHE	CA-C	-5.12	1.46	1.52
3	F	79	THR	CA-C	5.12	1.59	1.52
5	H	48	THR	C-N	5.12	1.39	1.33
2	A	180	VAL	N-CA	-5.12	1.40	1.46
4	G	267	LEU	N-CA	-5.12	1.40	1.46
1	1	70	PHE	C-O	-5.12	1.17	1.24
2	B	82	ARG	CA-C	-5.12	1.46	1.52
3	F	277	SER	C-N	5.12	1.40	1.33
1	4	48	PHE	C-O	-5.11	1.19	1.24
1	7	12	ALA	C-N	5.11	1.41	1.33
2	A	130	ARG	N-CA	-5.11	1.39	1.45
8	T	26	LEU	N-CA	5.11	1.55	1.46
3	E	350	PRO	C-N	5.11	1.40	1.33
12	X	52	ALA	N-CA	-5.11	1.40	1.46
1	1	14	ILE	N-CA	5.10	1.52	1.46
1	1	69	SER	C-N	5.10	1.41	1.33
2	A	219	VAL	N-CA	5.10	1.52	1.46
3	F	90	GLU	N-CA	-5.10	1.39	1.46
9	U	171	GLN	CA-C	5.10	1.59	1.52
2	C	171	GLY	CA-C	-5.09	1.46	1.52
7	O	123	VAL	CA-C	-5.09	1.46	1.52
2	C	225	HIS	C-N	5.09	1.40	1.33
5	H	30	VAL	CA-C	-5.09	1.46	1.52
3	D	353	SER	C-N	5.09	1.39	1.33
3	D	436	ASP	N-CA	-5.09	1.40	1.46
1	4	18	GLY	C-N	5.09	1.40	1.33
2	C	467	GLU	N-CA	-5.09	1.40	1.46
1	4	60	ALA	CA-C	-5.08	1.46	1.52
1	1	58	SER	N-CA	-5.08	1.40	1.46
2	B	82	ARG	C-N	5.08	1.40	1.33
6	I	36	ASN	N-CA	-5.08	1.40	1.46
2	B	23	ASP	C-N	5.08	1.40	1.33
3	E	319	ASP	CA-C	5.08	1.58	1.52
9	U	91	VAL	CA-C	-5.08	1.46	1.52
2	A	302	TYR	C-N	-5.08	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	354	LYS	C-O	-5.08	1.17	1.23
3	E	162	GLY	CA-C	-5.07	1.44	1.51
3	F	255	ILE	CA-C	-5.07	1.46	1.52
1	4	68	VAL	C-N	5.07	1.40	1.33
10	V	84	ASP	C-N	5.07	1.40	1.33
3	F	48	LEU	C-N	5.07	1.40	1.33
1	2	21	GLY	CA-C	-5.07	1.46	1.52
2	A	185	ILE	N-CA	-5.07	1.40	1.46
3	D	153	ILE	CA-C	-5.07	1.46	1.52
2	B	101	VAL	CA-C	-5.06	1.46	1.52
1	1	42	SER	C-N	5.06	1.39	1.34
2	B	35	ALA	CA-C	-5.06	1.46	1.52
2	C	373	VAL	CA-C	-5.06	1.46	1.52
2	C	404	ALA	CA-C	5.06	1.59	1.52
3	D	443	ALA	C-N	5.06	1.40	1.33
3	E	27	GLN	C-N	5.06	1.40	1.33
4	G	207	ARG	N-CA	5.06	1.52	1.46
5	H	48	THR	CA-C	5.06	1.58	1.52
1	3	65	CYS	C-N	5.06	1.40	1.33
2	A	205	TYR	CA-C	-5.05	1.46	1.52
2	B	372	SER	C-N	5.05	1.39	1.33
3	F	295	ARG	N-CA	-5.05	1.39	1.46
1	7	7	ALA	C-N	5.05	1.40	1.33
2	C	336	VAL	N-CA	-5.05	1.39	1.46
3	F	462	GLY	N-CA	-5.05	1.38	1.45
7	O	162	GLU	CA-C	5.05	1.60	1.52
9	U	99	HIS	C-N	5.05	1.40	1.33
3	E	258	ILE	C-N	5.05	1.41	1.34
3	E	296	ILE	CA-C	-5.05	1.48	1.53
2	A	144	VAL	C-O	-5.04	1.18	1.24
3	D	63	ALA	C-N	5.04	1.40	1.33
2	C	317	LYS	C-N	5.04	1.40	1.33
2	B	440	THR	C-N	5.04	1.40	1.33
3	E	45	LYS	CA-C	-5.04	1.46	1.52
2	A	37	GLY	CA-C	5.04	1.58	1.52
3	F	176	LYS	CA-C	-5.04	1.46	1.52
3	E	383	SER	C-N	5.04	1.40	1.33
2	A	477	ASN	CA-C	-5.03	1.47	1.53
2	B	92	ARG	N-CA	-5.03	1.40	1.46
2	C	356	ALA	N-CA	-5.03	1.40	1.46
3	E	203	GLU	N-CA	-5.03	1.40	1.46
2	B	268	ILE	C-N	5.03	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	96	ILE	C-O	-5.03	1.19	1.24
4	G	20	THR	C-N	5.03	1.40	1.33
2	A	271	ASP	CA-C	5.03	1.58	1.52
10	V	97	LYS	N-CA	5.02	1.52	1.46
12	X	33	PRO	CA-C	5.02	1.56	1.52
2	A	288	ARG	CA-C	-5.02	1.46	1.53
3	E	210	GLU	CA-C	-5.02	1.46	1.52
7	O	78	HIS	CA-C	-5.02	1.46	1.52
12	X	39	LEU	C-N	5.02	1.40	1.33
2	C	61	VAL	N-CA	-5.01	1.40	1.46
1	1	67	MET	C-N	5.01	1.40	1.33
7	O	107	ASP	CA-C	-5.01	1.46	1.52
2	B	154	ALA	C-N	5.01	1.40	1.33
2	B	413	ASP	C-N	5.01	1.40	1.34
4	G	275	SER	CA-C	-5.01	1.46	1.52
10	V	42	GLN	N-CA	5.01	1.52	1.46
1	0	5	LEU	N-CA	-5.01	1.40	1.46
2	B	240	GLU	CA-C	5.01	1.59	1.52
4	G	248	ILE	N-CA	-5.01	1.40	1.46
1	6	22	ALA	CA-C	5.00	1.59	1.52
2	A	11	SER	C-N	5.00	1.40	1.33
2	B	126	ALA	CA-C	-5.00	1.45	1.52
5	H	133	LEU	N-CA	-5.00	1.40	1.46
8	T	207	VAL	C-N	5.00	1.39	1.33
10	V	97	LYS	C-O	5.00	1.29	1.24
1	7	57	LEU	CA-C	-5.00	1.46	1.52
2	B	72	GLN	C-O	-5.00	1.16	1.23

All (2219) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	3	12	ALA	CA-C-N	13.66	135.10	119.94
1	3	12	ALA	C-N-CA	13.66	135.10	119.94
1	3	47	VAL	N-CA-C	13.24	124.10	110.72
2	B	376	VAL	N-CA-C	-13.01	99.31	111.67
7	O	7	PRO	CA-C-N	12.61	128.87	119.66
7	O	7	PRO	C-N-CA	12.61	128.87	119.66
2	B	99	VAL	O-C-N	-12.57	113.77	121.69
2	A	156	ASP	CA-C-N	12.31	136.44	120.44
2	A	156	ASP	C-N-CA	12.31	136.44	120.44
3	F	452	ILE	CA-C-O	-11.17	111.93	119.19
1	4	61	THR	CA-C-N	10.98	132.17	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	61	THR	C-N-CA	10.98	132.17	119.98
2	A	494	GLU	CA-C-N	10.90	135.77	120.29
2	A	494	GLU	C-N-CA	10.90	135.77	120.29
1	7	61	THR	CA-C-N	10.89	132.07	119.98
1	7	61	THR	C-N-CA	10.89	132.07	119.98
1	2	1	MET	CA-C-N	10.77	134.71	120.28
1	2	1	MET	C-N-CA	10.77	134.71	120.28
1	8	24	ILE	CA-C-N	10.75	131.87	119.94
1	8	24	ILE	C-N-CA	10.75	131.87	119.94
2	A	93	THR	N-CA-C	-10.54	99.87	111.36
3	E	415	SER	CA-C-N	10.47	134.66	122.52
3	E	415	SER	C-N-CA	10.47	134.66	122.52
4	G	205	VAL	CA-C-O	-10.46	109.96	118.85
8	T	74	LYS	CA-C-N	10.43	133.46	120.22
8	T	74	LYS	C-N-CA	10.43	133.46	120.22
1	0	35	ASN	CA-C-N	10.30	131.38	119.94
1	0	35	ASN	C-N-CA	10.30	131.38	119.94
3	E	76	VAL	CA-C-O	10.21	130.58	120.27
2	B	251	THR	CA-C-N	10.08	133.79	120.28
2	B	251	THR	C-N-CA	10.08	133.79	120.28
3	E	387	ILE	CA-C-O	-10.06	110.50	121.17
9	U	53	ASN	CA-C-N	10.04	134.29	120.63
9	U	53	ASN	C-N-CA	10.04	134.29	120.63
1	7	66	LEU	CA-C-N	10.04	134.54	120.29
1	7	66	LEU	C-N-CA	10.04	134.54	120.29
3	E	121	PRO	N-CA-C	9.88	122.75	110.70
1	6	43	ILE	CA-C-N	9.86	133.89	120.38
1	6	43	ILE	C-N-CA	9.86	133.89	120.38
7	O	127	GLU	N-CA-C	-9.80	99.40	108.22
1	7	31	ALA	CA-C-N	9.79	133.40	120.28
1	7	31	ALA	C-N-CA	9.79	133.40	120.28
2	B	378	SER	O-C-N	9.62	134.79	122.39
2	A	339	TYR	CA-C-N	9.60	128.01	120.33
2	A	339	TYR	C-N-CA	9.60	128.01	120.33
7	O	154	LYS	N-CA-C	-9.57	92.81	108.41
3	F	179	GLY	N-CA-C	-9.56	102.28	112.04
1	9	61	THR	CA-C-N	9.54	130.50	120.00
1	9	61	THR	C-N-CA	9.54	130.50	120.00
3	F	13	VAL	N-CA-C	9.41	121.06	109.30
1	8	53	LEU	CA-C-N	9.38	130.39	119.98
1	8	53	LEU	C-N-CA	9.38	130.39	119.98
3	F	424	PHE	N-CA-C	9.37	121.50	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	139	GLU	CA-C-N	9.37	132.62	120.44
9	U	139	GLU	C-N-CA	9.37	132.62	120.44
8	T	54	ILE	N-CA-C	-9.37	104.25	112.12
2	B	439	ALA	CA-C-N	9.34	132.80	120.28
2	B	439	ALA	C-N-CA	9.34	132.80	120.28
1	0	15	SER	CA-C-N	9.29	133.66	120.28
1	0	15	SER	C-N-CA	9.29	133.66	120.28
2	B	175	THR	N-CA-C	-9.27	102.15	112.72
3	D	112	LYS	N-CA-C	-9.25	102.57	114.04
1	7	54	GLY	CA-C-N	9.20	132.39	120.44
1	7	54	GLY	C-N-CA	9.20	132.39	120.44
1	3	66	LEU	O-C-N	-9.18	111.68	122.15
8	T	192	ALA	CA-C-N	9.16	131.86	120.22
8	T	192	ALA	C-N-CA	9.16	131.86	120.22
3	E	300	LYS	N-CA-C	-9.13	102.70	112.93
5	H	56	VAL	N-CA-C	-9.12	95.35	108.11
12	X	29	LYS	CA-C-O	-9.11	112.44	119.46
2	C	54	LEU	N-CA-C	-9.10	94.42	109.07
9	U	123	LEU	CA-C-N	9.09	132.25	120.44
9	U	123	LEU	C-N-CA	9.09	132.25	120.44
7	O	9	PRO	CA-C-N	9.04	138.25	121.97
7	O	9	PRO	C-N-CA	9.04	138.25	121.97
1	5	61	THR	CA-C-N	9.04	130.02	119.98
1	5	61	THR	C-N-CA	9.04	130.02	119.98
7	O	92	LEU	CA-C-O	-9.03	110.85	120.42
9	U	96	ARG	CA-C-N	9.03	132.17	120.44
9	U	96	ARG	C-N-CA	9.03	132.17	120.44
3	D	81	GLY	CA-C-N	9.00	129.55	119.92
3	D	81	GLY	C-N-CA	9.00	129.55	119.92
6	I	28	GLU	N-CA-C	-8.98	102.25	113.02
1	2	12	ALA	CA-C-N	8.92	129.84	119.94
1	2	12	ALA	C-N-CA	8.92	129.84	119.94
12	X	24	ALA	CA-C-N	8.91	132.21	120.28
12	X	24	ALA	C-N-CA	8.91	132.21	120.28
2	B	465	GLU	CA-C-N	8.90	132.01	120.44
2	B	465	GLU	C-N-CA	8.90	132.01	120.44
1	6	48	PHE	O-C-N	-8.87	112.58	120.48
1	3	66	LEU	CA-C-O	8.85	129.80	120.42
3	E	472	LYS	N-CA-C	8.79	120.86	111.28
1	6	66	LEU	CA-C-N	8.77	132.04	120.28
1	6	66	LEU	C-N-CA	8.77	132.04	120.28
9	U	137	ALA	CA-C-N	8.76	132.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	137	ALA	C-N-CA	8.76	132.02	120.28
9	U	113	LEU	CA-C-N	8.75	131.81	120.44
9	U	113	LEU	C-N-CA	8.75	131.81	120.44
2	B	443	GLN	N-CA-C	8.74	122.06	111.40
5	H	45	HIS	N-CA-C	-8.74	96.05	109.24
8	T	150	THR	CA-C-N	8.73	130.76	119.84
8	T	150	THR	C-N-CA	8.73	130.76	119.84
7	O	29	LYS	N-CA-C	8.73	123.72	112.89
3	F	153	ILE	N-CA-C	-8.72	94.47	107.37
1	8	12	ALA	CA-C-N	8.70	129.60	119.94
1	8	12	ALA	C-N-CA	8.70	129.60	119.94
3	E	240	ALA	N-CA-C	8.67	120.73	111.28
3	D	74	GLU	CA-C-N	8.66	134.53	120.94
3	D	74	GLU	C-N-CA	8.66	134.53	120.94
1	4	17	ILE	CA-C-N	8.65	130.96	120.14
1	4	17	ILE	C-N-CA	8.65	130.96	120.14
1	5	24	ILE	CA-C-N	8.64	129.53	119.94
1	5	24	ILE	C-N-CA	8.64	129.53	119.94
2	B	145	HIS	N-CA-C	-8.64	103.86	114.75
3	D	17	ILE	CA-C-N	8.63	133.97	120.07
3	D	17	ILE	C-N-CA	8.63	133.97	120.07
5	H	42	LEU	N-CA-C	-8.63	93.93	108.26
8	T	196	PHE	N-CA-C	8.63	120.31	111.07
1	5	36	GLY	CA-C-N	8.62	132.27	120.46
1	5	36	GLY	C-N-CA	8.62	132.27	120.46
2	B	457	GLY	CA-C-N	8.61	133.54	121.66
2	B	457	GLY	C-N-CA	8.61	133.54	121.66
1	5	45	ASP	CA-C-N	8.60	132.14	120.44
1	5	45	ASP	C-N-CA	8.60	132.14	120.44
3	F	115	LYS	CA-C-N	8.60	128.54	119.85
3	F	115	LYS	C-N-CA	8.60	128.54	119.85
9	U	88	VAL	CA-C-N	8.59	131.79	120.28
9	U	88	VAL	C-N-CA	8.59	131.79	120.28
3	F	226	PRO	CA-C-N	8.53	129.45	119.98
3	F	226	PRO	C-N-CA	8.53	129.45	119.98
11	W	13	LYS	N-CA-C	-8.53	101.88	112.88
7	O	108	PHE	CA-C-N	8.52	129.43	119.98
7	O	108	PHE	C-N-CA	8.52	129.43	119.98
11	W	45	ASN	N-CA-C	-8.51	102.06	114.39
3	D	242	TYR	CA-C-N	8.49	131.66	120.28
3	D	242	TYR	C-N-CA	8.49	131.66	120.28
1	2	61	THR	CA-C-N	8.46	130.97	120.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	61	THR	C-N-CA	8.46	130.97	120.22
3	F	393	MET	N-CA-C	-8.45	102.28	112.59
3	F	228	ALA	CA-C-N	8.41	131.56	120.28
3	F	228	ALA	C-N-CA	8.41	131.56	120.28
2	A	255	ILE	CA-C-N	8.41	129.25	120.00
2	A	255	ILE	C-N-CA	8.41	129.25	120.00
9	U	124	PHE	CA-C-N	8.39	131.85	120.44
9	U	124	PHE	C-N-CA	8.39	131.85	120.44
1	7	16	THR	CA-C-N	8.39	131.96	120.46
1	7	16	THR	C-N-CA	8.39	131.96	120.46
2	C	240	GLU	CA-C-N	8.38	133.41	120.75
2	C	240	GLU	C-N-CA	8.38	133.41	120.75
4	G	41	ALA	CA-C-N	8.38	131.51	120.28
4	G	41	ALA	C-N-CA	8.38	131.51	120.28
3	E	10	THR	CA-C-N	8.37	128.78	121.58
3	E	10	THR	C-N-CA	8.37	128.78	121.58
8	T	146	VAL	N-CA-C	-8.37	98.65	107.60
2	C	211	LYS	CA-C-N	8.36	131.48	120.28
2	C	211	LYS	C-N-CA	8.36	131.48	120.28
1	0	13	GLY	O-C-N	8.31	130.16	122.18
1	0	13	GLY	CA-C-O	-8.30	112.03	121.00
3	E	240	ALA	CA-C-N	8.30	131.41	120.28
3	E	240	ALA	C-N-CA	8.30	131.41	120.28
2	B	390	GLY	O-C-N	8.30	130.24	122.19
3	E	330	ASP	CA-C-O	-8.29	112.12	120.82
2	A	289	ARG	CA-C-N	8.28	128.91	120.38
2	A	289	ARG	C-N-CA	8.28	128.91	120.38
14	Z	11	ASN	CA-C-N	8.28	131.21	120.44
14	Z	11	ASN	C-N-CA	8.28	131.21	120.44
2	C	85	LYS	CA-C-N	8.27	132.49	120.82
2	C	85	LYS	C-N-CA	8.27	132.49	120.82
2	B	6	GLN	O-C-N	-8.26	116.43	121.71
3	D	107	GLY	CA-C-N	8.24	128.31	119.90
3	D	107	GLY	C-N-CA	8.24	128.31	119.90
3	F	265	GLY	CA-C-N	8.24	131.32	120.28
3	F	265	GLY	C-N-CA	8.24	131.32	120.28
11	W	79	SER	N-CA-C	8.24	120.26	111.28
2	B	289	ARG	CA-C-N	8.23	128.86	120.38
2	B	289	ARG	C-N-CA	8.23	128.86	120.38
3	E	435	LYS	CA-C-N	8.23	131.31	120.28
3	E	435	LYS	C-N-CA	8.23	131.31	120.28
3	F	349	ASP	CA-C-N	8.23	127.92	119.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	349	ASP	C-N-CA	8.23	127.92	119.19
3	D	253	LEU	O-C-N	-8.23	114.10	123.48
2	B	30	THR	CA-C-N	8.19	130.16	121.48
2	B	30	THR	C-N-CA	8.19	130.16	121.48
3	F	442	LYS	CA-C-N	8.16	131.21	120.28
3	F	442	LYS	C-N-CA	8.16	131.21	120.28
10	V	131	ASP	N-CA-C	-8.16	102.78	114.12
9	U	186	ASN	CA-C-O	-8.15	111.90	120.87
3	E	296	ILE	CA-C-O	-8.14	113.07	121.70
1	9	25	GLY	CA-C-N	8.14	130.82	120.56
1	9	25	GLY	C-N-CA	8.14	130.82	120.56
11	W	28	VAL	CA-C-O	-8.12	112.04	121.05
1	5	72	LEU	CA-C-O	-8.10	111.97	120.55
7	O	123	VAL	CA-C-N	8.10	132.21	120.71
7	O	123	VAL	C-N-CA	8.10	132.21	120.71
12	X	43	GLU	CA-C-N	8.09	133.86	122.46
12	X	43	GLU	C-N-CA	8.09	133.86	122.46
2	B	316	GLU	N-CA-C	-8.06	102.89	112.89
8	T	239	ALA	N-CA-C	-8.06	101.24	112.45
2	C	297	PRO	CA-C-N	8.05	128.92	119.98
2	C	297	PRO	C-N-CA	8.05	128.92	119.98
2	A	468	SER	N-CA-C	-8.05	102.59	111.36
1	1	23	GLY	O-C-N	8.04	129.91	122.19
3	D	239	ILE	N-CA-C	8.01	118.79	110.62
8	T	131	ILE	O-C-N	7.98	130.05	121.83
3	E	350	PRO	CA-C-O	-7.98	110.63	118.29
9	U	196	GLN	CA-C-O	7.97	129.00	120.55
2	B	208	VAL	CA-C-O	-7.96	112.11	120.39
10	V	142	LYS	CA-C-O	-7.96	112.27	120.63
2	B	296	TYR	CA-C-O	-7.95	112.04	120.87
3	D	452	ILE	CA-C-O	-7.93	112.39	121.59
7	O	59	ASN	CA-C-N	7.93	127.69	119.76
7	O	59	ASN	C-N-CA	7.93	127.69	119.76
4	G	240	ALA	O-C-N	7.92	130.23	122.07
3	E	78	ASP	CA-C-N	7.91	131.53	120.29
3	E	78	ASP	C-N-CA	7.91	131.53	120.29
2	B	359	PHE	CA-C-O	-7.90	112.18	120.55
4	G	159	TYR	CA-C-N	7.89	127.53	119.56
4	G	159	TYR	C-N-CA	7.89	127.53	119.56
3	D	216	ALA	N-CA-C	-7.88	97.30	109.52
2	C	479	ASN	CA-C-N	7.88	131.47	120.29
2	C	479	ASN	C-N-CA	7.88	131.47	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	115	ASN	CA-C-N	7.87	127.62	119.76
2	B	115	ASN	C-N-CA	7.87	127.62	119.76
2	C	280	TYR	CA-C-N	7.84	130.78	120.28
2	C	280	TYR	C-N-CA	7.84	130.78	120.28
3	F	39	ILE	N-CA-C	-7.83	96.31	107.75
4	G	37	ALA	CA-C-N	7.83	130.77	120.28
4	G	37	ALA	C-N-CA	7.83	130.77	120.28
9	U	116	VAL	CA-C-N	7.83	130.77	120.28
9	U	116	VAL	C-N-CA	7.83	130.77	120.28
3	D	128	SER	N-CA-C	-7.82	97.31	108.96
3	D	303	SER	N-CA-C	-7.82	96.66	108.46
2	B	134	LYS	CA-C-N	7.81	132.56	120.68
2	B	134	LYS	C-N-CA	7.81	132.56	120.68
2	B	508	ALA	N-CA-C	7.81	119.79	111.28
3	F	302	GLY	O-C-N	-7.80	114.17	123.61
4	G	272	THR	CA-C-N	7.80	128.60	119.94
4	G	272	THR	C-N-CA	7.80	128.60	119.94
3	D	136	THR	N-CA-C	-7.79	101.62	112.45
7	O	160	LYS	CA-C-O	-7.79	112.07	119.55
3	E	314	ALA	N-CA-C	7.79	122.18	111.90
7	O	33	ILE	N-CA-C	-7.78	105.60	111.90
2	A	111	ASP	CA-C-N	7.78	130.55	120.44
2	A	111	ASP	C-N-CA	7.78	130.55	120.44
9	U	149	GLU	CA-C-O	-7.77	112.69	120.70
3	E	231	ARG	N-CA-C	-7.77	103.86	112.72
4	G	26	VAL	CA-C-N	7.76	130.68	120.28
4	G	26	VAL	C-N-CA	7.76	130.68	120.28
1	8	20	LEU	CA-C-N	7.76	128.53	120.00
1	8	20	LEU	C-N-CA	7.76	128.53	120.00
3	E	92	LEU	O-C-N	-7.75	113.64	122.93
3	F	258	ILE	N-CA-C	-7.74	103.70	113.22
2	C	473	TYR	CA-C-N	7.74	130.65	120.28
2	C	473	TYR	C-N-CA	7.74	130.65	120.28
7	O	20	ALA	N-CA-C	-7.74	102.92	111.36
3	F	269	SER	N-CA-C	7.73	119.34	111.07
1	2	26	ILE	CA-C-N	7.73	130.63	120.28
1	2	26	ILE	C-N-CA	7.73	130.63	120.28
2	C	193	ASN	N-CA-C	-7.72	102.74	114.16
2	C	73	VAL	N-CA-C	-7.71	96.97	108.46
3	D	398	GLU	N-CA-C	7.71	119.69	111.28
3	D	199	ARG	O-C-N	7.70	130.93	122.15
3	F	467	VAL	CA-C-N	7.70	130.45	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	467	VAL	C-N-CA	7.70	130.45	120.44
7	O	176	VAL	N-CA-C	-7.69	96.39	107.77
9	U	85	MET	CA-C-N	7.69	130.92	120.54
9	U	85	MET	C-N-CA	7.69	130.92	120.54
2	B	105	LEU	CA-C-N	7.67	132.29	121.24
2	B	105	LEU	C-N-CA	7.67	132.29	121.24
1	9	55	PHE	CA-C-N	7.67	131.18	120.29
1	9	55	PHE	C-N-CA	7.67	131.18	120.29
2	B	479	ASN	N-CA-C	-7.66	103.93	113.28
3	D	12	LYS	N-CA-C	-7.66	97.77	109.41
3	D	352	ASP	N-CA-C	-7.66	99.05	109.54
7	O	17	GLY	N-CA-C	-7.65	103.72	115.66
3	E	61	THR	CA-C-N	7.64	132.96	123.10
3	E	61	THR	C-N-CA	7.64	132.96	123.10
2	A	83	LEU	CA-C-N	7.64	131.53	120.91
2	A	83	LEU	C-N-CA	7.64	131.53	120.91
1	1	71	LEU	N-CA-C	7.63	119.60	111.28
2	C	303	LEU	CA-C-N	7.63	131.12	120.29
2	C	303	LEU	C-N-CA	7.63	131.12	120.29
1	5	36	GLY	O-C-N	-7.62	114.86	122.18
1	8	43	ILE	CA-C-N	7.62	130.82	120.38
1	8	43	ILE	C-N-CA	7.62	130.82	120.38
13	Y	21	ALA	CA-C-N	7.61	131.09	120.29
13	Y	21	ALA	C-N-CA	7.61	131.09	120.29
3	E	320	PRO	N-CA-C	7.60	123.91	113.65
3	D	90	GLU	N-CA-C	-7.59	103.33	112.59
3	D	452	ILE	CA-C-N	7.59	129.33	119.84
3	D	452	ILE	C-N-CA	7.59	129.33	119.84
1	0	10	ILE	CA-C-N	7.57	129.60	120.14
1	0	10	ILE	C-N-CA	7.57	129.60	120.14
2	B	189	LYS	CA-C-N	7.56	130.27	120.44
2	B	189	LYS	C-N-CA	7.56	130.27	120.44
1	9	54	GLY	CA-C-N	7.56	130.27	120.44
1	9	54	GLY	C-N-CA	7.56	130.27	120.44
3	E	241	GLU	CA-C-O	-7.56	112.54	120.55
7	O	23	LEU	CA-C-N	7.56	130.72	120.44
7	O	23	LEU	C-N-CA	7.56	130.72	120.44
3	F	387	ILE	CA-C-N	7.55	130.81	120.46
3	F	387	ILE	C-N-CA	7.55	130.81	120.46
3	E	408	ARG	CA-C-N	7.55	131.01	120.29
3	E	408	ARG	C-N-CA	7.55	131.01	120.29
3	D	326	PHE	CA-C-N	7.55	130.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	326	PHE	C-N-CA	7.55	130.39	120.28
2	B	6	GLN	CA-C-O	-7.53	113.57	120.50
10	V	30	SER	CA-C-N	7.52	130.66	120.44
10	V	30	SER	C-N-CA	7.52	130.66	120.44
1	0	22	ALA	CA-C-N	7.51	128.28	119.94
1	0	22	ALA	C-N-CA	7.51	128.28	119.94
2	B	449	ALA	CA-C-N	7.51	128.32	119.98
2	B	449	ALA	C-N-CA	7.51	128.32	119.98
7	O	8	PRO	CA-C-O	-7.51	115.49	120.90
8	T	191	LEU	CA-C-N	7.51	130.34	120.28
8	T	191	LEU	C-N-CA	7.51	130.34	120.28
2	A	436	SER	CA-C-O	7.50	127.21	119.49
3	F	224	GLU	CA-C-N	7.50	125.13	119.66
3	F	224	GLU	C-N-CA	7.50	125.13	119.66
4	G	78	THR	N-CA-C	-7.50	99.87	108.49
9	U	104	LYS	N-CA-C	7.49	119.52	111.36
3	D	382	LYS	CA-C-N	7.48	130.30	120.28
3	D	382	LYS	C-N-CA	7.48	130.30	120.28
3	E	148	ALA	N-CA-C	-7.48	97.69	109.50
3	E	288	ASP	CA-C-O	-7.48	112.49	120.42
7	O	162	GLU	CA-C-O	7.48	128.68	119.78
2	B	60	GLY	N-CA-C	-7.45	105.83	114.69
10	V	55	PHE	N-CA-C	-7.44	102.45	112.94
2	A	488	LYS	O-C-N	7.43	131.47	122.48
1	5	65	CYS	CA-C-N	7.42	130.22	120.28
1	5	65	CYS	C-N-CA	7.42	130.22	120.28
1	6	34	ILE	CA-C-O	-7.42	112.98	120.85
6	I	39	GLN	O-C-N	-7.42	114.95	123.33
2	A	156	ASP	O-C-N	7.41	129.98	122.12
2	B	218	LEU	CA-C-N	7.40	130.93	120.42
2	B	218	LEU	C-N-CA	7.40	130.93	120.42
10	V	82	LYS	N-CA-C	7.40	119.86	110.24
1	1	63	LEU	CA-C-O	-7.38	111.48	119.97
1	9	47	VAL	CA-C-N	7.38	130.15	120.26
1	9	47	VAL	C-N-CA	7.38	130.15	120.26
2	B	241	ALA	CA-C-N	7.38	128.84	120.06
2	B	241	ALA	C-N-CA	7.38	128.84	120.06
1	1	26	ILE	O-C-N	7.38	129.14	121.91
3	F	128	SER	N-CA-C	7.38	120.92	110.23
2	B	422	ARG	CA-C-N	7.37	128.16	119.98
2	B	422	ARG	C-N-CA	7.37	128.16	119.98
2	C	436	SER	CA-C-O	-7.37	112.81	119.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	T	86	PHE	CA-C-N	7.36	127.22	119.05
8	T	86	PHE	C-N-CA	7.36	127.22	119.05
2	C	41	ALA	N-CA-C	-7.36	97.87	109.50
2	A	330	GLU	N-CA-C	-7.34	97.26	109.07
3	E	27	GLN	CA-C-O	-7.33	112.97	120.96
2	A	455	LEU	N-CA-C	-7.33	103.91	112.92
3	F	317	LEU	N-CA-C	-7.33	102.62	113.61
3	E	452	ILE	CA-C-N	7.33	129.00	119.84
3	E	452	ILE	C-N-CA	7.33	129.00	119.84
1	1	13	GLY	O-C-N	7.32	129.22	122.19
2	A	64	MET	N-CA-C	-7.32	101.08	110.53
3	D	210	GLU	CA-C-N	7.32	130.75	120.57
3	D	210	GLU	C-N-CA	7.32	130.75	120.57
3	E	449	TYR	N-CA-C	-7.32	101.90	111.71
1	0	12	ALA	CA-C-N	7.32	128.06	119.94
1	0	12	ALA	C-N-CA	7.32	128.06	119.94
8	T	120	SER	N-CA-C	7.32	119.26	111.28
2	A	148	VAL	CA-C-O	-7.32	114.81	120.96
3	E	174	ILE	CA-C-N	7.31	129.95	120.44
3	E	174	ILE	C-N-CA	7.31	129.95	120.44
8	T	27	THR	N-CA-C	-7.31	96.60	108.52
2	B	418	GLN	CA-C-N	7.31	130.07	120.28
2	B	418	GLN	C-N-CA	7.31	130.07	120.28
10	V	121	LEU	CA-C-O	-7.30	112.81	120.55
3	F	223	ASN	N-CA-C	-7.30	103.83	112.89
2	C	462	ARG	CA-C-O	-7.29	110.61	119.43
3	E	236	GLY	O-C-N	7.28	129.25	122.19
1	3	68	VAL	CA-C-N	7.27	130.02	120.28
1	3	68	VAL	C-N-CA	7.27	130.02	120.28
1	9	15	SER	CA-C-N	7.26	130.74	120.28
1	9	15	SER	C-N-CA	7.26	130.74	120.28
1	4	55	PHE	N-CA-C	-7.26	103.30	111.07
1	3	36	GLY	CA-C-N	7.26	130.40	120.46
1	3	36	GLY	C-N-CA	7.26	130.40	120.46
3	E	32	ALA	N-CA-C	-7.26	100.07	110.59
2	C	214	THR	CA-C-N	7.25	130.39	120.46
2	C	214	THR	C-N-CA	7.25	130.39	120.46
4	G	158	THR	N-CA-C	7.24	119.26	111.36
2	A	154	ALA	N-CA-C	7.23	118.81	111.07
4	G	113	LYS	N-CA-C	7.22	119.23	111.36
1	9	15	SER	CA-C-O	-7.22	111.94	120.10
2	C	179	ALA	N-CA-C	7.22	119.23	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	H	53	LEU	CA-C-N	7.22	128.86	119.84
5	H	53	LEU	C-N-CA	7.22	128.86	119.84
3	E	99	ILE	N-CA-C	-7.21	105.79	112.43
1	2	18	GLY	CA-C-N	7.21	130.66	120.28
1	2	18	GLY	C-N-CA	7.21	130.66	120.28
2	A	177	LYS	CA-C-N	7.21	130.53	120.29
2	A	177	LYS	C-N-CA	7.21	130.53	120.29
2	B	293	ARG	CA-C-N	7.21	132.85	122.40
2	B	293	ARG	C-N-CA	7.21	132.85	122.40
1	7	17	ILE	CA-C-N	7.20	127.98	119.98
1	7	17	ILE	C-N-CA	7.20	127.98	119.98
2	B	379	ALA	N-CA-C	-7.19	104.39	113.02
1	9	12	ALA	CA-C-N	7.19	127.92	119.94
1	9	12	ALA	C-N-CA	7.19	127.92	119.94
3	F	225	PRO	CA-C-O	-7.18	115.73	120.90
7	O	66	ASP	CA-C-N	7.18	129.90	120.28
7	O	66	ASP	C-N-CA	7.18	129.90	120.28
1	0	2	GLN	CA-C-N	7.17	129.89	120.28
1	0	2	GLN	C-N-CA	7.17	129.89	120.28
2	B	381	GLN	N-CA-C	-7.17	98.17	109.50
3	D	365	GLN	CA-C-N	7.17	129.88	120.28
3	D	365	GLN	C-N-CA	7.17	129.88	120.28
3	E	227	GLY	O-C-N	7.17	129.07	122.19
3	D	435	LYS	CA-C-N	7.16	130.46	120.29
3	D	435	LYS	C-N-CA	7.16	130.46	120.29
2	C	109	VAL	N-CA-C	-7.16	98.09	108.11
1	5	46	THR	CA-C-N	7.16	132.03	120.30
1	5	46	THR	C-N-CA	7.16	132.03	120.30
3	D	371	ALA	CA-C-N	7.15	129.74	120.44
3	D	371	ALA	C-N-CA	7.15	129.74	120.44
2	A	276	GLN	N-CA-C	-7.14	103.57	111.36
3	D	30	LEU	CA-C-N	7.14	128.76	119.84
3	D	30	LEU	C-N-CA	7.14	128.76	119.84
1	2	35	ASN	CA-C-N	7.14	127.85	120.00
1	2	35	ASN	C-N-CA	7.14	127.85	120.00
1	7	23	GLY	CA-C-N	7.13	130.23	120.46
1	7	23	GLY	C-N-CA	7.13	130.23	120.46
2	A	24	GLU	CA-C-O	7.13	129.69	121.28
3	E	463	ILE	CA-C-N	7.12	129.82	120.28
3	E	463	ILE	C-N-CA	7.12	129.82	120.28
2	C	398	GLN	N-CA-C	-7.12	104.22	113.12
2	B	494	GLU	N-CA-C	7.12	119.04	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	60	ALA	N-CA-C	7.11	119.03	111.28
3	F	322	PRO	CA-C-N	7.11	129.68	120.44
3	F	322	PRO	C-N-CA	7.11	129.68	120.44
1	8	19	LEU	CA-C-N	7.11	130.11	120.38
1	8	19	LEU	C-N-CA	7.11	130.11	120.38
2	B	472	SER	CA-C-N	7.10	129.68	120.44
2	B	472	SER	C-N-CA	7.10	129.68	120.44
3	E	11	GLY	O-C-N	7.10	129.88	123.42
3	E	284	THR	N-CA-C	-7.10	103.93	112.59
3	F	338	GLY	CA-C-N	7.10	130.19	120.46
3	F	338	GLY	C-N-CA	7.10	130.19	120.46
2	C	123	ILE	N-CA-C	-7.09	96.78	106.85
2	C	26	ASN	N-CA-C	-7.09	103.80	113.30
3	D	428	PRO	CA-C-N	7.09	127.94	120.43
3	D	428	PRO	C-N-CA	7.09	127.94	120.43
3	D	419	ALA	CA-C-N	7.08	131.61	121.55
3	D	419	ALA	C-N-CA	7.08	131.61	121.55
2	B	498	SER	CA-C-N	7.08	130.34	120.29
2	B	498	SER	C-N-CA	7.08	130.34	120.29
2	A	36	VAL	CA-C-N	7.06	133.59	122.01
2	A	36	VAL	C-N-CA	7.06	133.59	122.01
2	A	499	LEU	CA-C-O	-7.06	112.93	120.42
1	4	10	ILE	N-CA-C	7.06	117.20	110.42
1	5	54	GLY	CA-C-N	7.06	129.62	120.44
1	5	54	GLY	C-N-CA	7.06	129.62	120.44
4	G	257	ARG	CA-C-O	-7.06	113.07	120.55
9	U	149	GLU	CA-C-N	7.06	129.74	120.28
9	U	149	GLU	C-N-CA	7.06	129.74	120.28
12	X	39	LEU	CA-C-N	7.05	127.08	119.89
12	X	39	LEU	C-N-CA	7.05	127.08	119.89
2	A	169	ILE	N-CA-C	-7.05	97.70	107.99
2	B	289	ARG	CA-C-O	-7.05	114.27	120.19
2	C	405	PHE	CA-C-N	7.05	130.03	120.44
2	C	405	PHE	C-N-CA	7.05	130.03	120.44
3	D	107	GLY	CA-C-O	-7.05	111.44	121.52
3	D	289	MET	CA-C-N	7.04	127.75	119.94
3	D	289	MET	C-N-CA	7.04	127.75	119.94
3	E	343	GLY	CA-C-O	7.04	125.38	118.77
3	F	452	ILE	O-C-N	7.04	128.01	121.61
3	E	208	ASN	N-CA-C	-7.03	97.16	108.55
1	7	34	ILE	O-C-N	7.03	129.07	121.83
2	B	198	SER	N-CA-C	-7.02	103.38	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	Y	20	GLY	CA-C-N	7.01	129.68	120.28
13	Y	20	GLY	C-N-CA	7.01	129.68	120.28
3	F	451	ASN	CA-C-N	7.01	129.49	123.04
3	F	451	ASN	C-N-CA	7.01	129.49	123.04
1	5	33	LEU	CA-C-O	-7.01	113.46	120.82
10	V	71	ILE	CA-C-N	7.01	129.67	120.28
10	V	71	ILE	C-N-CA	7.01	129.67	120.28
3	D	412	ARG	CA-C-N	7.00	129.66	120.28
3	D	412	ARG	C-N-CA	7.00	129.66	120.28
2	A	349	ASP	N-CA-C	-7.00	103.92	113.30
1	2	9	TYR	CA-C-N	6.99	129.37	120.56
1	2	9	TYR	C-N-CA	6.99	129.37	120.56
3	D	329	LEU	CA-C-N	6.99	130.22	120.29
3	D	329	LEU	C-N-CA	6.99	130.22	120.29
3	F	430	LYS	CA-C-N	6.99	132.90	121.86
3	F	430	LYS	C-N-CA	6.99	132.90	121.86
2	C	444	VAL	CA-C-O	-6.99	114.01	118.69
2	C	78	PHE	CA-C-O	-6.99	114.34	122.37
3	E	278	ALA	CA-C-N	6.99	134.55	121.97
3	E	278	ALA	C-N-CA	6.99	134.55	121.97
3	F	145	ALA	CA-C-N	6.98	127.40	119.93
3	F	145	ALA	C-N-CA	6.98	127.40	119.93
4	G	96	ARG	CA-C-N	6.98	129.63	120.28
4	G	96	ARG	C-N-CA	6.98	129.63	120.28
11	W	28	VAL	O-C-N	6.97	129.15	121.90
2	C	183	ASP	CA-C-N	6.96	129.61	120.28
2	C	183	ASP	C-N-CA	6.96	129.61	120.28
2	C	313	LYS	N-CA-C	-6.96	97.89	108.96
7	O	179	SER	N-CA-C	-6.95	100.17	110.46
2	C	484	GLU	N-CA-C	-6.95	103.63	111.14
1	5	43	ILE	CA-C-N	6.93	130.50	120.38
1	5	43	ILE	C-N-CA	6.93	130.50	120.38
1	5	43	ILE	N-CA-C	6.93	121.87	111.89
1	4	70	PHE	N-CA-C	6.92	118.90	111.36
1	6	14	ILE	CA-C-N	6.92	130.25	120.28
1	6	14	ILE	C-N-CA	6.92	130.25	120.28
3	F	304	VAL	O-C-N	6.92	131.17	122.52
2	B	491	LEU	CA-C-O	6.92	127.80	120.33
3	D	194	GLY	N-CA-C	-6.92	104.43	112.73
4	G	270	ILE	N-CA-C	-6.92	103.73	110.72
2	C	367	ILE	CA-C-O	-6.91	112.58	120.67
1	9	9	TYR	CA-C-O	-6.91	113.10	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	143	SER	CA-C-N	6.90	129.83	120.44
4	G	143	SER	C-N-CA	6.90	129.83	120.44
1	9	27	ALA	CA-C-N	6.90	129.91	120.46
1	9	27	ALA	C-N-CA	6.90	129.91	120.46
1	5	59	GLU	O-C-N	-6.90	114.81	122.12
2	A	75	ILE	CA-C-N	6.89	131.45	121.80
2	A	75	ILE	C-N-CA	6.89	131.45	121.80
3	D	214	LYS	N-CA-C	-6.89	104.86	112.72
9	U	120	THR	CA-C-O	-6.89	112.31	120.10
1	8	27	ALA	N-CA-C	6.88	118.43	111.07
2	B	396	LEU	CA-C-N	6.88	129.38	120.44
2	B	396	LEU	C-N-CA	6.88	129.38	120.44
1	5	59	GLU	CA-C-O	6.87	127.83	120.55
1	6	24	ILE	CA-C-N	6.87	127.56	119.94
1	6	24	ILE	C-N-CA	6.87	127.56	119.94
3	E	152	LYS	CA-C-N	6.87	129.90	120.35
3	E	152	LYS	C-N-CA	6.87	129.90	120.35
2	A	142	ARG	N-CA-C	-6.87	98.91	109.14
3	D	400	ASP	CA-C-N	6.87	129.48	120.28
3	D	400	ASP	C-N-CA	6.87	129.48	120.28
3	E	169	GLU	CA-C-O	-6.86	113.63	120.70
3	E	174	ILE	N-CA-C	6.86	117.62	110.62
4	G	188	ILE	CA-C-N	6.86	129.47	120.28
4	G	188	ILE	C-N-CA	6.86	129.47	120.28
3	D	184	PHE	N-CA-C	-6.85	97.73	108.90
1	5	35	ASN	CA-C-N	6.85	127.55	119.94
1	5	35	ASN	C-N-CA	6.85	127.55	119.94
1	0	67	MET	N-CA-C	6.85	118.40	111.07
3	D	65	ASP	N-CA-C	-6.84	100.10	109.95
13	Y	6	PRO	CA-C-O	-6.84	113.91	121.23
3	D	201	MET	N-CA-C	6.84	118.81	111.36
5	H	59	VAL	N-CA-C	-6.84	98.28	108.12
1	5	74	PHE	CA-C-O	-6.83	111.61	119.60
1	4	67	MET	CA-C-N	6.83	129.81	120.46
1	4	67	MET	C-N-CA	6.83	129.81	120.46
1	2	54	GLY	CA-C-N	6.82	129.31	120.44
1	2	54	GLY	C-N-CA	6.82	129.31	120.44
1	5	32	ALA	CA-C-O	-6.82	113.19	120.42
4	G	108	VAL	N-CA-C	-6.82	98.62	108.17
1	9	47	VAL	N-CA-C	6.82	119.61	111.09
3	F	189	GLU	CA-C-N	6.82	130.50	120.95
3	F	189	GLU	C-N-CA	6.82	130.50	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	145	GLU	O-C-N	6.81	129.09	122.07
1	2	49	PRO	CA-C-N	6.81	130.66	120.31
1	2	49	PRO	C-N-CA	6.81	130.66	120.31
2	A	85	LYS	N-CA-C	-6.80	99.01	109.14
2	A	406	ALA	N-CA-C	6.79	119.70	111.82
2	B	164	GLY	N-CA-C	-6.79	105.85	115.43
1	6	40	ASN	CA-C-O	-6.79	110.86	120.16
1	7	41	PRO	N-CA-C	6.79	126.45	112.47
3	E	429	GLY	N-CA-C	6.79	121.35	112.25
1	5	1	MET	CA-C-N	6.78	129.67	120.44
1	5	1	MET	C-N-CA	6.78	129.67	120.44
3	E	302	GLY	N-CA-C	-6.78	102.89	110.96
1	6	35	ASN	CA-C-N	6.78	127.46	119.94
1	6	35	ASN	C-N-CA	6.78	127.46	119.94
2	B	339	TYR	CA-C-N	6.78	124.51	120.24
2	B	339	TYR	C-N-CA	6.78	124.51	120.24
3	F	470	ALA	CA-C-N	6.78	129.25	120.44
3	F	470	ALA	C-N-CA	6.78	129.25	120.44
2	C	338	ALA	N-CA-C	-6.77	98.71	108.60
2	B	257	GLU	CA-C-N	6.77	129.35	120.28
2	B	257	GLU	C-N-CA	6.77	129.35	120.28
6	I	33	SER	CA-C-N	6.77	129.09	120.56
6	I	33	SER	C-N-CA	6.77	129.09	120.56
1	6	31	ALA	CA-C-N	6.77	129.35	120.28
1	6	31	ALA	C-N-CA	6.77	129.35	120.28
3	F	463	ILE	CA-C-N	6.77	129.24	120.44
3	F	463	ILE	C-N-CA	6.77	129.24	120.44
1	6	54	GLY	CA-C-O	6.76	127.71	120.75
2	C	95	ASN	CA-C-N	6.75	130.61	120.75
2	C	95	ASN	C-N-CA	6.75	130.61	120.75
11	W	48	LEU	N-CA-C	-6.75	103.63	114.09
1	3	18	GLY	CA-C-N	6.75	130.23	120.38
1	3	18	GLY	C-N-CA	6.75	130.23	120.38
11	W	32	LYS	N-CA-C	-6.75	103.23	113.89
3	E	407	ALA	N-CA-C	6.74	118.71	111.36
6	I	14	LEU	CA-C-N	6.74	129.20	120.44
6	I	14	LEU	C-N-CA	6.74	129.20	120.44
3	E	364	GLY	O-C-N	-6.74	115.56	122.70
13	Y	30	ALA	CA-C-N	6.73	129.30	120.28
13	Y	30	ALA	C-N-CA	6.73	129.30	120.28
5	H	69	PHE	N-CA-C	-6.73	97.93	108.90
2	A	253	ALA	N-CA-C	-6.72	104.04	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	235	THR	CA-C-N	6.72	127.26	119.94
3	D	235	THR	C-N-CA	6.72	127.26	119.94
1	2	44	LYS	N-CA-C	6.71	119.45	111.33
3	E	363	VAL	N-CA-C	-6.71	105.98	112.29
3	E	408	ARG	CA-C-O	-6.71	112.25	119.97
1	4	29	VAL	CA-C-N	6.71	130.51	120.31
1	4	29	VAL	C-N-CA	6.71	130.51	120.31
3	E	462	GLY	O-C-N	6.71	127.94	122.71
5	H	39	ILE	CA-C-N	6.70	126.77	121.61
5	H	39	ILE	C-N-CA	6.70	126.77	121.61
1	7	35	ASN	CA-C-N	6.69	127.37	119.94
1	7	35	ASN	C-N-CA	6.69	127.37	119.94
2	A	422	ARG	CA-C-N	6.69	127.41	119.98
2	A	422	ARG	C-N-CA	6.69	127.41	119.98
3	D	471	GLU	CA-C-N	6.69	129.13	120.44
3	D	471	GLU	C-N-CA	6.69	129.13	120.44
1	5	47	VAL	CA-C-N	6.69	129.22	120.26
1	5	47	VAL	C-N-CA	6.69	129.22	120.26
3	D	441	PHE	CA-C-N	6.67	129.11	120.44
3	D	441	PHE	C-N-CA	6.67	129.11	120.44
1	4	58	SER	CA-C-N	6.67	129.21	120.28
1	4	58	SER	C-N-CA	6.67	129.21	120.28
2	B	197	GLU	N-CA-C	-6.67	103.54	112.94
1	2	26	ILE	N-CA-C	6.66	117.35	110.36
1	5	15	SER	N-CA-C	6.66	119.39	111.33
2	B	381	GLN	CA-C-N	6.66	129.49	120.63
2	B	381	GLN	C-N-CA	6.66	129.49	120.63
2	C	180	VAL	CA-C-N	6.66	129.74	120.29
2	C	180	VAL	C-N-CA	6.66	129.74	120.29
4	G	114	ILE	CA-C-N	6.65	129.19	120.28
4	G	114	ILE	C-N-CA	6.65	129.19	120.28
7	O	67	ARG	CA-C-N	6.64	129.18	120.28
7	O	67	ARG	C-N-CA	6.64	129.18	120.28
2	C	429	LEU	CA-C-N	6.64	129.18	120.28
2	C	429	LEU	C-N-CA	6.64	129.18	120.28
3	F	312	VAL	CA-C-O	-6.64	114.88	119.19
2	B	127	GLY	O-C-N	-6.63	117.59	123.76
3	F	175	ALA	N-CA-C	6.63	118.59	111.36
1	2	46	THR	N-CA-C	-6.63	104.13	111.36
3	D	409	LYS	CA-C-N	6.62	129.54	120.46
3	D	409	LYS	C-N-CA	6.62	129.54	120.46
1	8	45	ASP	CA-C-N	6.62	129.45	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	45	ASP	C-N-CA	6.62	129.45	120.44
3	D	416	GLN	CA-C-N	6.62	128.12	119.84
3	D	416	GLN	C-N-CA	6.62	128.12	119.84
3	D	458	TYR	CA-C-N	6.62	134.18	121.54
3	D	458	TYR	C-N-CA	6.62	134.18	121.54
10	V	67	VAL	N-CA-C	-6.62	107.42	113.71
1	7	18	GLY	CA-C-N	6.62	129.81	120.28
1	7	18	GLY	C-N-CA	6.62	129.81	120.28
5	H	61	GLU	N-CA-C	-6.61	97.49	108.34
14	Z	8	TYR	CA-C-N	6.61	129.14	120.28
14	Z	8	TYR	C-N-CA	6.61	129.14	120.28
3	E	214	LYS	N-CA-C	-6.61	104.44	113.30
2	B	204	VAL	N-CA-C	-6.61	98.61	108.12
1	9	58	SER	CA-C-N	6.61	129.43	120.38
1	9	58	SER	C-N-CA	6.61	129.43	120.38
2	B	11	SER	CA-C-N	6.61	129.67	120.29
2	B	11	SER	C-N-CA	6.61	129.67	120.29
1	2	3	LEU	N-CA-C	6.60	118.48	111.28
1	1	22	ALA	CA-C-N	6.59	127.30	119.98
1	1	22	ALA	C-N-CA	6.59	127.30	119.98
2	B	353	PHE	CA-C-N	6.59	131.20	122.30
2	B	353	PHE	C-N-CA	6.59	131.20	122.30
4	G	100	ASN	N-CA-C	-6.58	105.16	113.72
12	X	44	LEU	CA-C-N	6.58	130.68	120.75
12	X	44	LEU	C-N-CA	6.58	130.68	120.75
4	G	228	ALA	CA-C-N	6.57	128.99	120.44
4	G	228	ALA	C-N-CA	6.57	128.99	120.44
4	G	118	LEU	CA-C-N	6.57	129.74	120.28
4	G	118	LEU	C-N-CA	6.57	129.74	120.28
3	E	30	LEU	CA-C-O	-6.57	114.02	120.26
2	B	153	LYS	N-CA-C	6.57	118.44	111.28
1	4	23	GLY	O-C-N	6.57	128.49	122.19
3	D	226	PRO	CA-C-N	6.56	127.27	119.98
3	D	226	PRO	C-N-CA	6.56	127.27	119.98
2	A	449	ALA	CA-C-O	6.56	127.51	120.55
3	D	335	LEU	N-CA-C	-6.56	98.70	109.40
3	E	218	VAL	N-CA-C	-6.56	95.69	109.34
1	2	12	ALA	N-CA-C	-6.56	104.05	111.07
4	G	87	ILE	CA-C-N	6.56	129.07	120.28
4	G	87	ILE	C-N-CA	6.56	129.07	120.28
2	A	290	PRO	N-CA-C	6.56	118.70	110.70
2	C	456	ASP	N-CA-C	-6.55	103.97	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	300	LYS	N-CA-C	-6.54	105.26	112.72
3	E	202	LYS	CA-C-N	6.54	128.94	120.44
3	E	202	LYS	C-N-CA	6.54	128.94	120.44
1	5	72	LEU	O-C-N	6.54	129.05	122.12
7	O	40	LEU	CA-C-N	6.53	128.93	120.44
7	O	40	LEU	C-N-CA	6.53	128.93	120.44
2	C	79	GLY	N-CA-C	-6.53	104.93	111.85
8	T	43	LEU	CA-C-O	6.53	127.47	119.11
1	3	59	GLU	CA-C-N	6.53	129.03	120.28
1	3	59	GLU	C-N-CA	6.53	129.03	120.28
6	I	11	ALA	CA-C-N	6.52	129.55	120.29
6	I	11	ALA	C-N-CA	6.52	129.55	120.29
2	A	482	LEU	CA-C-N	6.52	129.01	120.28
2	A	482	LEU	C-N-CA	6.52	129.01	120.28
1	8	2	GLN	CA-C-N	6.52	129.01	120.28
1	8	2	GLN	C-N-CA	6.52	129.01	120.28
2	B	154	ALA	O-C-N	-6.51	115.21	122.12
2	A	78	PHE	N-CA-C	-6.51	102.78	111.96
2	B	350	GLY	CA-C-O	-6.51	117.02	122.29
4	G	111	GLY	N-CA-C	-6.51	97.75	113.18
1	0	47	VAL	O-C-N	-6.51	115.12	121.83
1	0	39	ARG	N-CA-C	6.51	119.37	111.82
4	G	233	ARG	O-C-N	6.51	129.02	122.12
3	D	224	GLU	CA-C-N	6.50	127.08	120.38
3	D	224	GLU	C-N-CA	6.50	127.08	120.38
2	C	389	ALA	CA-C-O	6.50	126.95	119.35
7	O	101	PHE	N-CA-C	-6.50	104.29	112.93
4	G	267	LEU	CA-C-N	6.49	129.35	120.46
4	G	267	LEU	C-N-CA	6.49	129.35	120.46
8	T	152	LEU	CA-C-O	-6.49	111.26	120.16
13	Y	12	VAL	N-CA-C	-6.49	105.23	113.22
2	C	163	ARG	CA-C-N	6.49	130.48	121.26
2	C	163	ARG	C-N-CA	6.49	130.48	121.26
3	E	323	ALA	O-C-N	-6.48	115.25	122.12
2	B	189	LYS	N-CA-C	6.48	118.34	111.28
10	V	5	SER	CA-C-N	6.48	128.86	120.44
10	V	5	SER	C-N-CA	6.48	128.86	120.44
3	D	207	ILE	O-C-N	-6.47	116.07	122.67
3	E	310	VAL	CA-C-O	6.47	127.85	121.19
1	2	16	THR	CA-C-N	6.46	129.64	120.53
1	2	16	THR	C-N-CA	6.46	129.64	120.53
2	A	145	HIS	O-C-N	6.46	128.78	121.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	78	LYS	O-C-N	-6.46	115.41	122.07
2	C	379	ALA	N-CA-C	-6.46	105.56	113.50
8	T	77	ILE	CA-C-O	6.45	128.69	120.76
2	C	290	PRO	CA-C-N	6.45	126.36	119.85
2	C	290	PRO	C-N-CA	6.45	126.36	119.85
2	B	99	VAL	CA-C-N	6.45	126.40	119.76
2	B	99	VAL	C-N-CA	6.45	126.40	119.76
10	V	36	ASN	CA-C-O	-6.45	114.23	121.00
11	W	35	PRO	N-CA-C	-6.45	106.29	114.35
3	E	284	THR	CA-C-N	6.45	128.92	120.28
3	E	284	THR	C-N-CA	6.45	128.92	120.28
3	F	442	LYS	O-C-N	-6.45	115.29	122.12
4	G	227	ALA	CA-C-O	-6.45	114.06	120.70
2	B	217	GLN	CA-C-N	6.44	128.82	120.44
2	B	217	GLN	C-N-CA	6.44	128.82	120.44
2	C	355	GLU	CA-C-N	6.44	128.91	120.28
2	C	355	GLU	C-N-CA	6.44	128.91	120.28
3	E	74	GLU	O-C-N	6.44	130.57	123.22
10	V	91	VAL	N-CA-C	-6.44	103.27	112.35
4	G	22	THR	CA-C-N	6.44	128.81	120.44
4	G	22	THR	C-N-CA	6.44	128.81	120.44
3	F	255	ILE	N-CA-C	-6.44	98.37	108.86
4	G	32	SER	O-C-N	-6.44	115.30	122.12
3	F	304	VAL	N-CA-C	-6.44	103.03	110.05
9	U	87	LYS	CA-C-N	6.43	128.67	120.56
9	U	87	LYS	C-N-CA	6.43	128.67	120.56
2	A	280	TYR	CA-C-N	6.43	128.90	120.28
2	A	280	TYR	C-N-CA	6.43	128.90	120.28
3	D	164	THR	CA-C-N	6.43	129.27	120.46
3	D	164	THR	C-N-CA	6.43	129.27	120.46
1	3	59	GLU	CA-C-O	-6.43	113.74	120.55
6	I	40	THR	CA-C-O	-6.43	114.43	121.31
2	C	298	GLY	CA-C-O	-6.42	114.14	120.75
2	A	117	ILE	CA-C-O	6.42	126.09	119.35
3	F	29	GLU	N-CA-C	-6.42	99.36	109.50
5	H	75	ALA	N-CA-C	-6.42	98.93	109.40
7	O	90	LYS	CA-C-O	6.42	127.56	120.82
3	E	282	GLN	N-CA-C	6.42	118.76	109.84
3	E	78	ASP	CA-C-O	-6.41	113.44	120.30
4	G	235	ASN	O-C-N	-6.41	115.32	122.12
1	9	11	GLY	CA-C-N	6.41	128.78	120.44
1	9	11	GLY	C-N-CA	6.41	128.78	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	386	LYS	CA-C-N	6.41	128.77	120.44
2	C	386	LYS	C-N-CA	6.41	128.77	120.44
2	A	128	ARG	N-CA-C	-6.41	99.58	109.52
13	Y	13	TYR	CA-C-N	6.41	128.10	120.09
13	Y	13	TYR	C-N-CA	6.41	128.10	120.09
3	E	41	THR	O-C-N	-6.40	117.37	121.85
2	C	198	SER	N-CA-C	-6.40	104.51	112.90
7	O	108	PHE	CA-C-O	-6.40	113.77	120.55
6	I	57	THR	N-CA-C	-6.39	102.08	110.39
1	8	65	CYS	CA-C-N	6.39	128.74	120.44
1	8	65	CYS	C-N-CA	6.39	128.74	120.44
2	A	168	LEU	CA-C-N	6.39	131.07	122.90
2	A	168	LEU	C-N-CA	6.39	131.07	122.90
3	F	252	LEU	O-C-N	-6.38	115.57	123.36
2	A	289	ARG	N-CA-C	-6.38	100.50	110.14
8	T	137	HIS	CA-C-O	6.38	126.83	120.32
7	O	175	THR	N-CA-C	-6.38	99.34	109.23
1	1	17	ILE	CA-C-N	6.38	128.11	120.14
1	1	17	ILE	C-N-CA	6.38	128.11	120.14
1	9	64	PHE	N-CA-C	6.38	118.23	111.28
2	B	391	SER	CA-C-N	6.38	129.46	120.28
2	B	391	SER	C-N-CA	6.38	129.46	120.28
6	I	35	LEU	CA-C-N	6.38	129.34	120.29
6	I	35	LEU	C-N-CA	6.38	129.34	120.29
1	1	24	ILE	CA-C-N	6.37	127.01	119.94
1	1	24	ILE	C-N-CA	6.37	127.01	119.94
3	F	399	GLN	CA-C-N	6.37	128.81	120.28
3	F	399	GLN	C-N-CA	6.37	128.81	120.28
3	E	104	ASP	N-CA-C	-6.37	104.82	112.59
3	E	416	GLN	CA-C-N	6.36	126.73	119.92
3	E	416	GLN	C-N-CA	6.36	126.73	119.92
11	W	14	ASN	N-CA-C	-6.36	105.45	113.72
2	A	216	ALA	CA-C-O	-6.36	113.68	120.42
3	E	154	GLY	CA-C-N	6.36	131.46	122.05
3	E	154	GLY	C-N-CA	6.36	131.46	122.05
1	4	43	ILE	CA-C-N	6.35	129.09	120.38
1	4	43	ILE	C-N-CA	6.35	129.09	120.38
3	F	349	ASP	N-CA-C	-6.35	97.26	108.69
3	F	400	ASP	O-C-N	6.35	128.85	122.12
2	A	358	LEU	CA-C-O	6.35	127.19	119.38
3	D	442	LYS	O-C-N	6.35	128.61	122.07
3	E	368	TYR	O-C-N	6.35	128.61	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	54	ASN	N-CA-C	6.35	118.28	111.36
2	A	198	SER	N-CA-C	-6.34	105.29	113.16
11	W	72	GLY	N-CA-C	6.34	120.34	112.73
8	T	51	ASN	CA-C-N	6.34	129.84	120.90
8	T	51	ASN	C-N-CA	6.34	129.84	120.90
3	D	20	ILE	CA-C-N	6.34	130.01	120.75
3	D	20	ILE	C-N-CA	6.34	130.01	120.75
10	V	108	SER	O-C-N	6.34	128.84	122.12
8	T	87	PRO	O-C-N	6.34	129.84	122.23
2	C	94	GLY	N-CA-C	-6.33	105.88	115.00
2	B	158	LEU	N-CA-C	6.33	119.17	111.82
1	3	55	PHE	CA-C-N	6.33	128.76	120.28
1	3	55	PHE	C-N-CA	6.33	128.76	120.28
2	A	255	ILE	O-C-N	6.33	128.34	121.83
1	5	60	ALA	CA-C-N	6.32	128.75	120.28
1	5	60	ALA	C-N-CA	6.32	128.75	120.28
3	E	330	ASP	N-CA-C	6.32	117.83	111.07
3	E	120	ASP	CA-C-N	6.32	126.89	120.38
3	E	120	ASP	C-N-CA	6.32	126.89	120.38
1	4	32	ALA	CA-C-N	6.31	128.65	120.44
1	4	32	ALA	C-N-CA	6.31	128.65	120.44
3	F	411	GLN	CA-C-N	6.31	129.25	120.29
3	F	411	GLN	C-N-CA	6.31	129.25	120.29
2	B	9	GLU	N-CA-C	-6.30	104.22	112.41
2	C	135	ALA	CA-C-N	6.30	126.33	119.90
2	C	135	ALA	C-N-CA	6.30	126.33	119.90
3	E	107	GLY	CA-C-N	6.29	127.71	119.84
3	E	107	GLY	C-N-CA	6.29	127.71	119.84
1	3	27	ALA	N-CA-C	6.29	118.95	111.71
2	A	215	VAL	CA-C-N	6.29	129.23	120.29
2	A	215	VAL	C-N-CA	6.29	129.23	120.29
8	T	101	LEU	CA-C-N	6.29	129.08	120.46
8	T	101	LEU	C-N-CA	6.29	129.08	120.46
10	V	156	GLY	N-CA-C	-6.29	106.25	115.63
2	B	240	GLU	CA-C-N	6.29	133.54	121.54
2	B	240	GLU	C-N-CA	6.29	133.54	121.54
1	3	15	SER	CA-C-N	6.28	129.32	120.28
1	3	15	SER	C-N-CA	6.28	129.32	120.28
1	6	20	LEU	CA-C-N	6.28	126.95	119.98
1	6	20	LEU	C-N-CA	6.28	126.95	119.98
10	V	68	ILE	CA-C-N	6.28	129.85	120.31
10	V	68	ILE	C-N-CA	6.28	129.85	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	168	GLN	N-CA-C	6.28	118.12	111.28
2	A	78	PHE	CA-C-O	6.27	129.70	120.42
1	7	58	SER	CA-C-N	6.27	129.31	120.28
1	7	58	SER	C-N-CA	6.27	129.31	120.28
3	D	51	ALA	N-CA-C	-6.27	106.27	114.04
14	Z	37	ARG	CA-C-N	6.27	128.59	120.44
14	Z	37	ARG	C-N-CA	6.27	128.59	120.44
3	E	347	ALA	N-CA-C	-6.27	105.69	113.15
1	2	68	VAL	N-CA-C	6.26	117.04	110.72
9	U	79	ASP	CA-C-N	6.26	129.18	120.29
9	U	79	ASP	C-N-CA	6.26	129.18	120.29
1	5	51	ALA	N-CA-C	6.25	118.10	111.28
2	B	301	PHE	CA-C-N	6.25	128.66	120.28
2	B	301	PHE	C-N-CA	6.25	128.66	120.28
2	C	43	VAL	N-CA-C	-6.25	99.22	108.85
2	A	340	ILE	O-C-N	6.25	124.42	120.42
2	A	292	GLY	CA-C-N	6.25	130.24	121.24
2	A	292	GLY	C-N-CA	6.25	130.24	121.24
2	B	12	SER	CA-C-N	6.25	128.43	120.56
2	B	12	SER	C-N-CA	6.25	128.43	120.56
1	5	2	GLN	CA-C-N	6.25	128.65	120.28
1	5	2	GLN	C-N-CA	6.25	128.65	120.28
7	O	186	LYS	N-CA-C	6.24	118.17	111.36
2	C	155	VAL	N-CA-C	-6.24	107.17	113.47
3	D	95	ILE	N-CA-C	-6.24	99.37	108.11
3	E	243	PHE	CA-C-N	6.24	128.55	120.44
3	E	243	PHE	C-N-CA	6.24	128.55	120.44
3	F	92	LEU	O-C-N	6.24	130.40	123.16
3	E	38	GLU	CA-C-N	6.24	131.39	123.10
3	E	38	GLU	C-N-CA	6.24	131.39	123.10
2	A	359	PHE	CA-C-N	6.23	129.14	120.29
2	A	359	PHE	C-N-CA	6.23	129.14	120.29
3	D	86	PRO	CA-C-N	6.23	131.90	122.92
3	D	86	PRO	C-N-CA	6.23	131.90	122.92
2	C	323	LEU	N-CA-C	-6.23	96.38	107.28
3	F	403	THR	N-CA-C	-6.23	104.57	111.36
9	U	158	VAL	CA-C-N	6.23	128.63	120.28
9	U	158	VAL	C-N-CA	6.23	128.63	120.28
2	C	296	TYR	CA-C-N	6.23	127.08	120.11
2	C	296	TYR	C-N-CA	6.23	127.08	120.11
2	C	140	PRO	N-CA-C	6.22	125.28	112.47
2	A	307	LEU	CA-C-N	6.21	129.75	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	307	LEU	C-N-CA	6.21	129.75	120.31
3	E	426	GLY	N-CA-C	-6.21	106.34	115.72
3	D	211	GLY	N-CA-C	-6.21	101.46	111.59
3	F	175	ALA	CA-C-N	6.21	129.11	120.29
3	F	175	ALA	C-N-CA	6.21	129.11	120.29
10	V	120	THR	O-C-N	6.21	128.70	122.12
1	0	73	LEU	N-CA-C	6.20	118.12	111.36
4	G	213	THR	N-CA-C	-6.20	105.36	113.17
2	B	392	LEU	O-C-N	-6.20	114.97	122.22
3	D	171	ILE	CA-C-N	6.20	128.58	120.28
3	D	171	ILE	C-N-CA	6.20	128.58	120.28
7	O	164	LYS	N-CA-C	-6.19	105.57	112.57
3	E	299	THR	N-CA-C	-6.19	100.00	109.41
1	7	29	VAL	CA-C-N	6.19	128.57	120.28
1	7	29	VAL	C-N-CA	6.19	128.57	120.28
2	A	423	GLY	N-CA-C	6.19	120.16	112.73
2	C	74	GLY	CA-C-N	6.18	130.11	120.34
2	C	74	GLY	C-N-CA	6.18	130.11	120.34
3	D	299	THR	CA-C-N	6.18	129.71	120.31
3	D	299	THR	C-N-CA	6.18	129.71	120.31
3	E	284	THR	O-C-N	-6.18	114.66	122.26
4	G	98	HIS	N-CA-C	-6.18	105.60	113.02
9	U	126	VAL	CA-C-N	6.18	128.48	120.44
9	U	126	VAL	C-N-CA	6.18	128.48	120.44
3	F	232	VAL	N-CA-C	6.18	116.92	110.62
1	4	26	ILE	CA-C-N	6.18	128.56	120.28
1	4	26	ILE	C-N-CA	6.18	128.56	120.28
3	E	225	PRO	CA-C-O	-6.18	111.61	120.56
3	E	32	ALA	O-C-N	-6.17	115.46	122.68
2	A	239	SER	CA-C-N	6.17	129.47	120.71
2	A	239	SER	C-N-CA	6.17	129.47	120.71
3	D	338	GLY	CA-C-O	-6.17	114.39	120.75
9	U	120	THR	O-C-N	6.17	129.44	122.22
1	9	69	SER	N-CA-C	6.17	117.67	111.07
11	W	14	ASN	CA-C-O	6.16	125.83	119.05
11	W	80	MET	CA-C-N	6.16	128.86	120.54
11	W	80	MET	C-N-CA	6.16	128.86	120.54
3	F	11	GLY	O-C-N	-6.16	117.83	123.56
2	B	336	VAL	O-C-N	6.16	128.13	121.78
2	C	343	ASN	CA-C-N	6.16	129.17	120.42
2	C	343	ASN	C-N-CA	6.16	129.17	120.42
4	G	73	LEU	N-CA-C	-6.16	100.16	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	339	ILE	CA-C-N	6.16	128.53	120.28
3	D	339	ILE	C-N-CA	6.16	128.53	120.28
10	V	141	ILE	CA-C-N	6.16	129.03	122.26
10	V	141	ILE	C-N-CA	6.16	129.03	122.26
3	D	366	GLU	O-C-N	6.15	128.64	122.12
2	A	282	GLN	N-CA-C	-6.15	104.66	111.36
2	A	195	SER	O-C-N	6.15	128.64	122.12
1	0	73	LEU	CA-C-O	-6.14	113.91	120.42
1	7	22	ALA	CA-C-N	6.14	126.76	119.94
1	7	22	ALA	C-N-CA	6.14	126.76	119.94
3	E	203	GLU	O-C-N	6.14	128.40	122.07
7	O	64	LEU	N-CA-C	-6.14	104.67	111.36
9	U	124	PHE	CA-C-O	-6.14	114.37	120.82
3	D	304	VAL	CA-C-N	6.14	130.62	121.72
3	D	304	VAL	C-N-CA	6.14	130.62	121.72
2	C	215	VAL	O-C-N	6.14	127.82	121.87
3	E	457	PHE	N-CA-C	-6.14	105.08	113.30
7	O	52	LYS	N-CA-C	-6.13	98.39	108.76
3	F	308	GLN	N-CA-C	-6.13	100.02	109.52
2	A	122	PRO	O-C-N	6.13	130.85	123.13
3	E	380	THR	CA-C-N	6.12	128.49	120.28
3	E	380	THR	C-N-CA	6.12	128.49	120.28
2	B	242	ALA	CA-C-N	6.12	125.84	119.05
2	B	242	ALA	C-N-CA	6.12	125.84	119.05
3	F	240	ALA	CA-C-N	6.12	130.39	120.60
3	F	240	ALA	C-N-CA	6.12	130.39	120.60
10	V	64	ASN	CA-C-N	6.12	131.21	120.87
10	V	64	ASN	C-N-CA	6.12	131.21	120.87
1	1	64	PHE	CA-C-N	6.11	128.97	120.29
1	1	64	PHE	C-N-CA	6.11	128.97	120.29
1	5	11	GLY	CA-C-N	6.11	128.97	120.29
1	5	11	GLY	C-N-CA	6.11	128.97	120.29
3	F	31	PRO	N-CA-C	6.11	120.82	111.11
3	F	263	GLN	CA-C-N	6.11	128.97	120.29
3	F	263	GLN	C-N-CA	6.11	128.97	120.29
10	V	76	LYS	CA-C-N	6.11	128.38	120.44
10	V	76	LYS	C-N-CA	6.11	128.38	120.44
7	O	156	GLU	N-CA-C	-6.10	98.34	108.34
11	W	14	ASN	O-C-N	-6.10	114.85	122.35
1	0	61	THR	CA-C-N	6.10	126.71	120.00
1	0	61	THR	C-N-CA	6.10	126.71	120.00
2	A	102	GLY	CA-C-N	6.10	127.46	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	102	GLY	C-N-CA	6.10	127.46	119.84
2	A	109	VAL	CA-C-N	6.10	132.38	122.69
2	A	109	VAL	C-N-CA	6.10	132.38	122.69
2	B	245	GLN	CA-C-N	6.10	128.45	120.28
2	B	245	GLN	C-N-CA	6.10	128.45	120.28
1	0	63	LEU	CA-C-N	6.10	128.45	120.28
1	0	63	LEU	C-N-CA	6.10	128.45	120.28
3	D	145	ALA	CA-C-O	-6.09	115.22	121.07
3	F	99	ILE	O-C-N	6.09	128.77	122.07
3	F	89	ARG	CA-C-N	6.09	129.57	120.31
3	F	89	ARG	C-N-CA	6.09	129.57	120.31
2	B	194	GLY	CA-C-N	6.09	128.44	120.28
2	B	194	GLY	C-N-CA	6.09	128.44	120.28
3	D	97	ASN	N-CA-C	-6.09	101.95	110.35
9	U	90	ASP	CA-C-N	6.09	128.23	120.56
9	U	90	ASP	C-N-CA	6.09	128.23	120.56
11	W	66	LEU	O-C-N	6.09	128.42	122.09
5	H	41	VAL	N-CA-C	-6.09	99.39	108.46
10	V	142	LYS	O-C-N	-6.09	117.62	121.27
1	6	19	LEU	CA-C-N	6.08	128.43	120.28
1	6	19	LEU	C-N-CA	6.08	128.43	120.28
2	A	452	ASN	N-CA-C	-6.08	105.79	112.72
3	E	307	VAL	N-CA-C	-6.08	98.77	107.77
1	8	48	PHE	N-CA-C	6.08	121.02	112.75
3	E	27	GLN	CA-C-N	6.08	133.15	121.54
3	E	27	GLN	C-N-CA	6.08	133.15	121.54
1	1	5	LEU	CA-C-N	6.08	128.42	120.28
1	1	5	LEU	C-N-CA	6.08	128.42	120.28
3	E	288	ASP	O-C-N	6.08	129.08	122.15
1	6	62	GLY	CA-C-N	6.08	128.42	120.28
1	6	62	GLY	C-N-CA	6.08	128.42	120.28
3	D	277	SER	CA-C-O	-6.08	115.63	122.01
11	W	23	ARG	N-CA-C	6.08	117.57	111.07
1	2	17	ILE	N-CA-C	6.07	117.54	110.62
3	E	461	GLY	O-C-N	6.07	130.59	122.70
8	T	42	SER	N-CA-C	-6.07	105.13	112.54
4	G	153	VAL	N-CA-C	6.07	116.23	110.53
9	U	65	PHE	O-C-N	-6.07	115.69	122.12
3	F	266	SER	CA-C-N	6.07	128.90	120.29
3	F	266	SER	C-N-CA	6.07	128.90	120.29
2	C	135	ALA	CA-C-O	-6.06	114.39	120.63
11	W	54	LYS	CA-C-O	-6.06	112.51	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	48	PHE	CA-C-O	-6.06	112.46	118.34
3	F	176	LYS	CA-C-N	6.06	128.32	120.44
3	F	176	LYS	C-N-CA	6.06	128.32	120.44
3	D	106	ARG	N-CA-C	-6.06	105.20	112.59
2	C	463	ILE	CA-C-N	6.05	126.66	120.00
2	C	463	ILE	C-N-CA	6.05	126.66	120.00
3	D	372	SER	O-C-N	6.05	128.31	122.07
3	D	460	VAL	O-C-N	-6.05	116.34	123.00
8	T	233	VAL	CA-C-O	-6.05	114.43	120.85
3	D	225	PRO	CA-C-O	-6.05	111.79	120.56
3	E	245	ASP	CA-C-N	6.05	128.88	120.29
3	E	245	ASP	C-N-CA	6.05	128.88	120.29
2	C	15	GLU	O-C-N	6.05	128.53	122.12
1	4	25	GLY	O-C-N	6.04	127.99	122.19
3	D	366	GLU	CA-C-N	6.04	128.29	120.44
3	D	366	GLU	C-N-CA	6.04	128.29	120.44
3	E	418	PHE	CA-C-N	6.04	128.97	120.28
3	E	418	PHE	C-N-CA	6.04	128.97	120.28
3	D	296	ILE	N-CA-C	-6.04	97.68	107.28
1	6	53	LEU	CA-C-N	6.03	126.67	119.98
1	6	53	LEU	C-N-CA	6.03	126.67	119.98
1	7	65	CYS	CA-C-N	6.03	128.64	120.44
1	7	65	CYS	C-N-CA	6.03	128.64	120.44
4	G	171	SER	N-CA-C	-6.03	100.42	108.74
3	E	7	THR	N-CA-C	-6.03	101.26	108.25
3	D	448	LYS	CA-C-O	-6.03	114.49	120.82
3	F	410	ILE	CA-C-N	6.02	128.35	120.28
3	F	410	ILE	C-N-CA	6.02	128.35	120.28
1	6	6	ALA	CA-C-O	6.02	127.14	120.82
9	U	82	ASP	O-C-N	-6.02	115.87	122.07
1	7	43	ILE	CA-C-N	6.02	128.62	120.38
1	7	43	ILE	C-N-CA	6.02	128.62	120.38
2	A	492	SER	CA-C-N	6.02	128.26	120.44
2	A	492	SER	C-N-CA	6.02	128.26	120.44
3	E	318	THR	N-CA-C	-6.01	105.98	113.38
2	B	25	ALA	O-C-N	6.01	130.00	122.55
3	D	47	VAL	O-C-N	6.01	129.49	123.18
1	1	16	THR	CA-C-O	-6.01	113.31	120.10
1	9	20	LEU	N-CA-C	6.00	117.82	111.28
9	U	111	SER	CA-C-N	6.00	128.32	120.28
9	U	111	SER	C-N-CA	6.00	128.32	120.28
2	B	368	ASN	CA-C-O	6.00	127.15	120.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	92	ARG	CA-C-N	6.00	128.81	120.29
2	B	92	ARG	C-N-CA	6.00	128.81	120.29
3	E	450	ASP	N-CA-C	-6.00	105.54	112.92
4	G	271	ILE	CA-C-N	6.00	128.31	120.28
4	G	271	ILE	C-N-CA	6.00	128.31	120.28
7	O	43	VAL	CA-C-N	5.99	128.80	120.29
7	O	43	VAL	C-N-CA	5.99	128.80	120.29
8	T	29	PHE	CA-C-N	5.99	128.30	120.28
8	T	29	PHE	C-N-CA	5.99	128.30	120.28
3	E	422	GLU	CA-C-N	5.99	129.70	122.16
3	E	422	GLU	C-N-CA	5.99	129.70	122.16
4	G	18	LYS	CA-C-N	5.99	128.92	120.42
4	G	18	LYS	C-N-CA	5.99	128.92	120.42
1	4	64	PHE	CA-C-N	5.99	128.79	120.29
1	4	64	PHE	C-N-CA	5.99	128.79	120.29
1	6	71	LEU	CA-C-N	5.99	128.22	120.44
1	6	71	LEU	C-N-CA	5.99	128.22	120.44
3	E	76	VAL	O-C-N	-5.98	116.96	123.18
3	E	405	GLU	CA-C-N	5.98	128.30	120.28
3	E	405	GLU	C-N-CA	5.98	128.30	120.28
8	T	163	THR	CA-C-N	5.98	128.30	120.28
8	T	163	THR	C-N-CA	5.98	128.30	120.28
2	A	11	SER	CA-C-N	5.98	128.29	120.28
2	A	11	SER	C-N-CA	5.98	128.29	120.28
3	D	190	ARG	CA-C-N	5.98	128.29	120.28
3	D	190	ARG	C-N-CA	5.98	128.29	120.28
2	A	405	PHE	CA-C-N	5.98	129.39	120.31
2	A	405	PHE	C-N-CA	5.98	129.39	120.31
3	F	360	ALA	CA-C-N	5.97	132.95	121.54
3	F	360	ALA	C-N-CA	5.97	132.95	121.54
8	T	190	ILE	O-C-N	5.97	127.98	121.83
3	F	167	ILE	CA-C-O	-5.97	114.52	120.85
11	W	67	TRP	CA-C-O	-5.97	114.55	120.82
1	9	51	ALA	CA-C-N	5.97	128.08	120.56
1	9	51	ALA	C-N-CA	5.97	128.08	120.56
3	F	168	GLN	CA-C-O	5.96	126.87	120.55
4	G	162	ILE	N-CA-C	-5.96	99.67	108.85
1	3	22	ALA	CA-C-N	5.96	126.59	119.98
1	3	22	ALA	C-N-CA	5.96	126.59	119.98
3	E	352	ASP	N-CA-C	-5.96	104.68	113.61
3	F	401	LYS	CA-C-N	5.96	128.26	120.28
3	F	401	LYS	C-N-CA	5.96	128.26	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	62	GLY	O-C-N	5.96	127.97	122.19
3	F	245	ASP	N-CA-C	5.96	117.85	111.36
2	C	462	ARG	N-CA-C	-5.95	105.88	113.02
4	G	130	ILE	N-CA-C	-5.95	99.55	108.12
2	A	432	GLN	CA-C-N	5.95	130.93	122.72
2	A	432	GLN	C-N-CA	5.95	130.93	122.72
3	E	462	GLY	CA-C-N	5.95	128.61	120.46
3	E	462	GLY	C-N-CA	5.95	128.61	120.46
2	B	285	LEU	CA-C-O	-5.95	114.11	120.42
3	D	312	VAL	CA-C-O	-5.95	115.82	119.51
4	G	156	ALA	N-CA-C	5.95	117.76	111.28
2	C	441	GLU	CA-C-N	5.94	129.34	120.31
2	C	441	GLU	C-N-CA	5.94	129.34	120.31
2	B	452	ASN	CA-C-O	5.94	126.47	119.28
10	V	27	THR	N-CA-C	-5.94	104.89	111.36
1	7	1	MET	CA-C-N	5.93	128.15	120.44
1	7	1	MET	C-N-CA	5.93	128.15	120.44
1	3	63	LEU	CA-C-N	5.93	128.22	120.28
1	3	63	LEU	C-N-CA	5.93	128.22	120.28
7	O	8	PRO	N-CA-C	-5.93	104.78	110.47
2	B	241	ALA	CA-C-O	5.93	128.99	120.51
3	E	52	GLN	N-CA-C	5.93	118.08	109.07
3	E	210	GLU	N-CA-C	-5.93	100.83	110.20
4	G	55	ALA	N-CA-C	5.92	119.61	112.38
1	6	18	GLY	CA-C-N	5.92	128.81	120.28
1	6	18	GLY	C-N-CA	5.92	128.81	120.28
2	C	464	GLY	CA-C-N	5.92	128.70	120.29
2	C	464	GLY	C-N-CA	5.92	128.70	120.29
5	H	40	GLY	N-CA-C	-5.92	101.73	111.38
3	E	106	ARG	CA-C-N	5.92	131.16	121.87
3	E	106	ARG	C-N-CA	5.92	131.16	121.87
3	D	54	LEU	N-CA-C	-5.91	105.38	113.30
2	A	137	GLY	CA-C-N	5.91	128.01	120.56
2	A	137	GLY	C-N-CA	5.91	128.01	120.56
3	D	285	LEU	N-CA-C	-5.91	104.92	111.36
3	D	22	ASP	N-CA-C	-5.91	99.38	109.24
3	E	236	GLY	CA-C-N	5.91	128.19	120.28
3	E	236	GLY	C-N-CA	5.91	128.19	120.28
2	B	62	LYS	CA-C-N	5.90	131.45	121.47
2	B	62	LYS	C-N-CA	5.90	131.45	121.47
3	F	336	SER	N-CA-C	-5.90	100.16	108.96
1	5	71	LEU	N-CA-C	5.90	117.39	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	250	ASP	N-CA-C	-5.90	100.38	109.76
3	E	470	ALA	CA-C-N	5.90	128.18	120.28
3	E	470	ALA	C-N-CA	5.90	128.18	120.28
2	B	62	LYS	N-CA-C	-5.90	100.53	109.85
8	T	119	ILE	O-C-N	-5.90	116.15	121.87
2	C	341	PRO	CA-C-N	5.89	129.27	120.31
2	C	341	PRO	C-N-CA	5.89	129.27	120.31
1	9	62	GLY	CA-C-N	5.89	128.17	120.28
1	9	62	GLY	C-N-CA	5.89	128.17	120.28
3	E	83	ILE	O-C-N	5.89	129.43	122.66
9	U	124	PHE	N-CA-C	-5.89	104.77	111.07
2	C	210	GLN	N-CA-C	-5.89	100.40	109.52
7	O	63	SER	N-CA-C	-5.89	101.30	110.42
2	B	461	SER	O-C-N	-5.88	115.33	122.22
3	F	24	HIS	N-CA-C	-5.88	98.93	108.52
2	A	212	ARG	CA-C-N	5.88	128.16	120.28
2	A	212	ARG	C-N-CA	5.88	128.16	120.28
3	E	110	LYS	N-CA-C	-5.88	99.61	108.96
10	V	55	PHE	O-C-N	-5.88	115.07	122.19
1	6	34	ILE	O-C-N	5.88	127.89	121.83
8	T	101	LEU	N-CA-C	-5.88	106.02	113.43
8	T	237	LEU	N-CA-C	-5.88	104.46	111.69
8	T	240	SER	N-CA-C	5.88	117.77	111.36
9	U	74	ALA	N-CA-C	5.88	121.50	113.16
5	H	34	ALA	CA-C-N	5.87	130.53	120.72
5	H	34	ALA	C-N-CA	5.87	130.53	120.72
5	H	99	GLU	CA-C-N	5.87	128.15	120.28
5	H	99	GLU	C-N-CA	5.87	128.15	120.28
10	V	35	ARG	CA-C-N	5.87	128.40	120.65
10	V	35	ARG	C-N-CA	5.87	128.40	120.65
7	O	174	LYS	O-C-N	-5.87	116.45	123.31
1	2	51	ALA	N-CA-C	-5.86	104.81	111.14
1	3	21	GLY	N-CA-C	5.86	119.76	112.73
2	B	44	PHE	CA-C-O	-5.86	113.88	120.32
2	C	184	THR	CA-C-N	5.86	127.94	120.56
2	C	184	THR	C-N-CA	5.86	127.94	120.56
3	F	134	LEU	CA-C-O	-5.86	114.05	120.43
2	B	163	ARG	N-CA-C	5.85	118.06	108.52
2	C	19	LYS	CA-C-O	5.85	126.70	119.97
8	T	156	PRO	CA-C-N	5.85	128.12	120.28
8	T	156	PRO	C-N-CA	5.85	128.12	120.28
1	4	35	ASN	CA-C-N	5.84	126.31	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	35	ASN	C-N-CA	5.84	126.31	119.94
1	6	7	ALA	CA-C-N	5.84	128.11	120.28
1	6	7	ALA	C-N-CA	5.84	128.11	120.28
2	C	154	ALA	CA-C-N	5.84	128.63	122.14
2	C	154	ALA	C-N-CA	5.84	128.63	122.14
2	B	384	ALA	O-C-N	5.84	128.09	122.07
1	1	41	PRO	N-CA-C	5.83	124.49	112.47
7	O	127	GLU	CA-C-N	5.83	126.17	119.93
7	O	127	GLU	C-N-CA	5.83	126.17	119.93
3	E	421	ALA	N-CA-C	-5.83	102.96	111.30
1	6	72	LEU	CA-C-N	5.83	128.02	120.44
1	6	72	LEU	C-N-CA	5.83	128.02	120.44
1	6	57	LEU	O-C-N	-5.83	115.51	122.15
7	O	142	SER	CA-C-N	5.83	128.09	120.28
7	O	142	SER	C-N-CA	5.83	128.09	120.28
1	3	62	GLY	CA-C-N	5.82	128.56	120.29
1	3	62	GLY	C-N-CA	5.82	128.56	120.29
2	B	210	GLN	CA-C-O	5.82	126.59	120.36
3	F	324	THR	N-CA-C	5.82	117.63	111.28
1	6	51	ALA	O-C-N	5.82	128.07	122.07
2	A	287	LEU	CA-C-N	5.82	130.63	122.36
2	A	287	LEU	C-N-CA	5.82	130.63	122.36
3	F	242	TYR	CA-C-N	5.82	128.56	120.29
3	F	242	TYR	C-N-CA	5.82	128.56	120.29
4	G	32	SER	CA-C-N	5.82	128.56	120.29
4	G	32	SER	C-N-CA	5.82	128.56	120.29
12	X	21	LEU	N-CA-C	-5.82	104.93	111.28
7	O	49	LYS	CA-C-O	5.82	126.47	119.43
3	F	198	TYR	CA-C-O	-5.82	114.71	120.70
3	D	24	HIS	CA-C-N	5.81	129.09	120.95
3	D	24	HIS	C-N-CA	5.81	129.09	120.95
2	B	183	ASP	N-CA-C	5.81	117.61	111.28
3	D	38	GLU	CA-C-O	-5.81	114.08	120.36
8	T	153	PRO	CA-C-O	-5.81	110.85	118.86
2	A	274	SER	CA-C-N	5.81	129.13	120.31
2	A	274	SER	C-N-CA	5.81	129.13	120.31
2	A	242	ALA	O-C-N	-5.80	115.25	120.71
2	A	235	ALA	N-CA-C	5.80	118.66	109.50
2	B	27	LEU	N-CA-C	-5.80	103.56	111.56
1	8	52	ILE	CA-C-N	5.79	127.96	120.44
1	8	52	ILE	C-N-CA	5.79	127.96	120.44
7	O	111	LEU	O-C-N	5.79	128.03	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	290	PRO	CA-C-N	5.79	125.76	120.21
2	B	290	PRO	C-N-CA	5.79	125.76	120.21
4	G	39	ILE	CA-C-N	5.79	128.03	120.28
4	G	39	ILE	C-N-CA	5.79	128.03	120.28
1	2	10	ILE	CA-C-N	5.78	126.40	119.98
1	2	10	ILE	C-N-CA	5.78	126.40	119.98
2	B	359	PHE	O-C-N	5.78	128.25	122.12
1	6	51	ALA	N-CA-C	5.78	117.26	111.07
4	G	221	ALA	CA-C-O	-5.78	114.42	120.55
7	O	133	SER	CA-C-O	-5.78	114.75	120.82
2	B	41	ALA	CA-C-O	-5.78	114.69	121.16
2	B	461	SER	CA-C-O	5.78	126.63	120.10
4	G	170	VAL	N-CA-C	-5.78	104.88	110.72
2	B	113	LEU	N-CA-C	-5.78	105.73	112.89
2	C	329	ILE	N-CA-C	-5.78	100.15	108.53
2	A	115	ASN	CA-C-N	5.78	125.53	119.76
2	A	115	ASN	C-N-CA	5.78	125.53	119.76
3	E	336	SER	CA-C-N	5.78	128.02	120.28
3	E	336	SER	C-N-CA	5.78	128.02	120.28
3	E	289	MET	CA-C-N	5.77	126.39	119.98
3	E	289	MET	C-N-CA	5.77	126.39	119.98
3	F	91	THR	CA-C-O	5.77	126.65	119.78
3	F	296	ILE	N-CA-C	-5.77	98.83	107.37
3	F	309	ALA	N-CA-C	-5.77	99.78	109.07
1	0	54	GLY	CA-C-N	5.77	127.94	120.44
1	0	54	GLY	C-N-CA	5.77	127.94	120.44
1	2	22	ALA	CA-C-N	5.77	126.38	119.98
1	2	22	ALA	C-N-CA	5.77	126.38	119.98
1	6	54	GLY	CA-C-N	5.77	127.94	120.44
1	6	54	GLY	C-N-CA	5.77	127.94	120.44
3	D	463	ILE	O-C-N	5.77	127.69	121.87
11	W	56	PHE	CA-C-N	5.77	129.30	120.82
11	W	56	PHE	C-N-CA	5.77	129.30	120.82
1	5	36	GLY	CA-C-O	5.76	127.23	121.00
1	2	11	GLY	CA-C-N	5.76	127.93	120.44
1	2	11	GLY	C-N-CA	5.76	127.93	120.44
2	C	366	ALA	CA-C-N	5.76	131.01	123.06
2	C	366	ALA	C-N-CA	5.76	131.01	123.06
3	D	115	LYS	CA-C-N	5.76	125.69	119.76
3	D	115	LYS	C-N-CA	5.76	125.69	119.76
3	D	310	VAL	N-CA-C	-5.76	100.17	108.53
2	C	239	SER	CA-C-N	5.76	129.45	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	239	SER	C-N-CA	5.76	129.45	120.75
2	C	319	GLY	N-CA-C	-5.76	107.44	114.92
2	C	262	ASN	CA-C-O	5.75	126.24	119.28
3	D	188	GLY	CA-C-N	5.75	129.44	120.75
3	D	188	GLY	C-N-CA	5.75	129.44	120.75
3	E	427	ILE	CA-C-O	-5.75	115.45	119.19
3	F	301	LYS	N-CA-C	-5.75	106.18	113.43
2	B	259	PHE	O-C-N	5.75	127.99	122.07
3	E	183	VAL	N-CA-C	-5.75	99.77	108.17
2	C	96	ILE	CA-C-O	-5.74	115.67	121.59
2	C	110	VAL	O-C-N	-5.74	116.67	123.04
2	B	349	ASP	N-CA-C	-5.73	97.84	107.99
3	D	124	PHE	CA-C-N	5.73	127.96	120.28
3	D	124	PHE	C-N-CA	5.73	127.96	120.28
8	T	83	GLY	CA-C-O	-5.73	112.69	119.45
3	D	284	THR	CA-C-N	5.73	128.43	120.29
3	D	284	THR	C-N-CA	5.73	128.43	120.29
3	E	25	PHE	CA-C-O	-5.73	115.31	121.56
2	C	402	VAL	N-CA-C	5.73	116.46	110.62
2	C	437	PRO	CA-C-N	5.73	129.50	121.02
2	C	437	PRO	C-N-CA	5.73	129.50	121.02
3	E	173	ASN	CA-C-N	5.73	128.31	120.46
3	E	173	ASN	C-N-CA	5.73	128.31	120.46
3	F	73	GLY	O-C-N	-5.72	115.26	122.70
3	F	326	PHE	CA-C-N	5.72	128.22	120.44
3	F	326	PHE	C-N-CA	5.72	128.22	120.44
1	1	73	LEU	CA-C-O	-5.72	114.81	120.82
3	F	343	GLY	CA-C-O	-5.72	112.59	119.00
2	A	303	LEU	N-CA-C	5.72	117.19	111.07
4	G	244	ALA	CA-C-N	5.72	126.29	119.94
4	G	244	ALA	C-N-CA	5.72	126.29	119.94
3	D	39	ILE	CA-C-O	-5.72	114.41	120.53
3	D	319	ASP	CA-C-N	5.71	125.57	119.28
3	D	319	ASP	C-N-CA	5.71	125.57	119.28
3	D	413	PHE	CA-C-N	5.71	128.72	120.38
3	D	413	PHE	C-N-CA	5.71	128.72	120.38
4	G	115	LYS	N-CA-C	-5.71	105.05	111.28
2	C	381	GLN	N-CA-C	5.71	119.40	110.32
2	C	259	PHE	N-CA-C	-5.71	105.06	111.28
8	T	53	ILE	CA-C-N	5.71	128.76	122.77
8	T	53	ILE	C-N-CA	5.71	128.76	122.77
8	T	100	ASN	N-CA-C	-5.71	104.73	112.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	36	GLY	CA-C-O	5.71	127.16	121.00
1	3	45	ASP	CA-C-N	5.70	128.19	120.44
1	3	45	ASP	C-N-CA	5.70	128.19	120.44
2	A	72	GLN	O-C-N	-5.70	116.60	123.27
3	F	277	SER	N-CA-C	-5.70	101.53	110.36
3	E	95	ILE	N-CA-C	-5.69	100.28	108.48
3	F	434	LEU	CA-C-N	5.69	127.91	120.28
3	F	434	LEU	C-N-CA	5.69	127.91	120.28
4	G	205	VAL	CA-C-N	5.69	125.06	118.85
4	G	205	VAL	C-N-CA	5.69	125.06	118.85
8	T	172	SER	CA-C-N	5.69	128.48	120.28
8	T	172	SER	C-N-CA	5.69	128.48	120.28
2	C	16	GLU	CA-C-N	5.69	128.37	120.29
2	C	16	GLU	C-N-CA	5.69	128.37	120.29
1	0	25	GLY	CA-C-N	5.69	128.25	120.46
1	0	25	GLY	C-N-CA	5.69	128.25	120.46
1	9	60	ALA	CA-C-N	5.69	128.37	120.29
1	9	60	ALA	C-N-CA	5.69	128.37	120.29
4	G	46	GLU	CA-C-N	5.69	127.90	120.28
4	G	46	GLU	C-N-CA	5.69	127.90	120.28
6	I	59	ILE	N-CA-C	-5.69	100.29	108.42
4	G	28	SER	CA-C-N	5.69	127.83	120.44
4	G	28	SER	C-N-CA	5.69	127.83	120.44
3	E	304	VAL	N-CA-C	-5.68	99.31	107.78
2	C	446	LEU	N-CA-C	5.68	117.47	111.28
2	A	199	LYS	CA-C-N	5.68	128.78	120.71
2	A	199	LYS	C-N-CA	5.68	128.78	120.71
2	B	421	VAL	CA-C-N	5.68	128.36	120.29
2	B	421	VAL	C-N-CA	5.68	128.36	120.29
3	D	77	LEU	N-CA-C	-5.68	99.40	109.06
3	F	71	VAL	O-C-N	5.68	128.94	123.14
4	G	112	ASP	N-CA-C	5.68	117.47	111.28
1	3	67	MET	CA-C-O	-5.68	114.40	120.42
2	C	448	TYR	O-C-N	5.68	128.14	122.12
3	D	347	ALA	N-CA-C	-5.68	105.94	112.92
3	F	150	GLY	N-CA-C	-5.68	107.49	115.32
7	O	188	ASN	N-CA-C	5.68	117.14	111.07
3	D	414	LEU	N-CA-C	5.67	119.01	111.75
3	F	16	VAL	N-CA-C	-5.67	97.53	109.34
3	F	264	ALA	N-CA-C	-5.67	105.17	111.36
11	W	21	ALA	CA-C-N	5.67	128.35	120.29
11	W	21	ALA	C-N-CA	5.67	128.35	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	T	248	LEU	O-C-N	5.67	129.57	122.65
1	9	20	LEU	CA-C-N	5.67	126.28	119.98
1	9	20	LEU	C-N-CA	5.67	126.28	119.98
3	E	312	VAL	N-CA-C	-5.67	96.63	108.88
8	T	33	THR	CA-C-O	-5.67	114.41	120.42
8	T	152	LEU	CA-C-N	5.67	125.77	119.87
8	T	152	LEU	C-N-CA	5.67	125.77	119.87
1	1	34	ILE	CA-C-O	-5.67	115.16	121.17
2	A	401	GLU	CA-C-N	5.67	128.22	120.46
2	A	401	GLU	C-N-CA	5.67	128.22	120.46
2	B	487	GLU	CA-C-O	5.67	126.91	120.00
7	O	73	ALA	CA-C-N	5.66	128.46	120.42
7	O	73	ALA	C-N-CA	5.66	128.46	120.42
11	W	37	GLY	CA-C-N	5.66	126.15	120.04
11	W	37	GLY	C-N-CA	5.66	126.15	120.04
2	C	259	PHE	CA-C-N	5.66	128.33	120.29
2	C	259	PHE	C-N-CA	5.66	128.33	120.29
2	B	433	ASN	O-C-N	-5.66	116.62	123.13
2	C	225	HIS	CA-C-N	5.66	132.34	121.54
2	C	225	HIS	C-N-CA	5.66	132.34	121.54
2	C	136	PRO	CA-C-O	-5.66	114.97	121.36
3	F	357	LEU	N-CA-C	-5.66	104.79	112.26
4	G	224	GLN	CA-C-N	5.66	126.22	119.94
4	G	224	GLN	C-N-CA	5.66	126.22	119.94
6	I	42	ALA	N-CA-C	-5.66	100.34	108.60
2	A	148	VAL	O-C-N	5.65	127.89	122.97
3	E	141	VAL	CA-C-O	-5.65	114.78	121.05
1	9	31	ALA	CA-C-N	5.65	127.85	120.28
1	9	31	ALA	C-N-CA	5.65	127.85	120.28
3	D	166	PHE	CA-C-N	5.64	128.19	120.46
3	D	166	PHE	C-N-CA	5.64	128.19	120.46
3	E	298	THR	CA-C-O	5.64	126.74	120.43
10	V	107	GLU	CA-C-N	5.64	127.83	120.28
10	V	107	GLU	C-N-CA	5.64	127.83	120.28
2	A	273	LEU	CA-C-N	5.63	127.83	120.28
2	A	273	LEU	C-N-CA	5.63	127.83	120.28
8	T	132	LEU	CA-C-N	5.63	126.08	119.94
8	T	132	LEU	C-N-CA	5.63	126.08	119.94
2	A	387	GLN	CA-C-O	-5.63	114.91	120.82
2	B	185	ILE	O-C-N	5.63	127.33	121.87
2	C	84	VAL	CA-C-N	5.63	131.37	122.36
2	C	84	VAL	C-N-CA	5.63	131.37	122.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	59	GLU	O-C-N	5.63	128.09	122.12
2	A	359	PHE	CA-C-O	-5.63	114.91	120.82
3	E	398	GLU	CA-C-N	5.63	127.82	120.28
3	E	398	GLU	C-N-CA	5.63	127.82	120.28
3	F	120	ASP	CA-C-O	5.62	124.92	120.19
2	B	10	VAL	N-CA-C	-5.62	100.25	108.97
1	6	31	ALA	O-C-N	5.62	127.86	122.07
4	G	92	ALA	O-C-N	5.62	128.08	122.12
3	F	161	VAL	N-CA-C	-5.62	107.50	112.90
2	A	388	VAL	N-CA-C	5.62	118.11	111.09
9	U	80	PHE	O-C-N	-5.62	115.75	122.15
2	B	184	THR	N-CA-C	-5.61	105.24	111.36
5	H	133	LEU	CA-C-O	-5.61	114.92	120.70
1	2	68	VAL	CA-C-N	5.61	127.73	120.44
1	2	68	VAL	C-N-CA	5.61	127.73	120.44
1	6	53	LEU	O-C-N	-5.61	116.29	122.07
2	C	436	SER	N-CA-C	-5.61	98.38	109.10
4	G	133	ILE	CA-C-N	5.61	130.61	120.79
4	G	133	ILE	C-N-CA	5.61	130.61	120.79
3	F	440	SER	CA-C-O	5.61	126.50	120.55
1	2	58	SER	O-C-N	5.61	127.85	122.07
4	G	109	THR	O-C-N	-5.61	116.66	123.27
4	G	78	THR	CA-C-O	-5.60	116.16	120.19
1	6	53	LEU	N-CA-C	-5.60	105.08	111.07
3	D	307	VAL	N-CA-C	-5.60	99.48	107.77
4	G	82	GLY	N-CA-C	-5.60	103.73	112.58
10	V	163	TYR	N-CA-C	-5.60	107.44	114.56
1	1	13	GLY	CA-C-O	-5.60	114.98	120.75
3	E	233	ALA	CA-C-N	5.60	127.79	120.28
3	E	233	ALA	C-N-CA	5.60	127.79	120.28
1	0	23	GLY	O-C-N	-5.60	116.80	122.18
4	G	106	ASP	N-CA-C	-5.60	100.11	109.24
5	H	95	SER	CA-C-N	5.60	128.82	120.31
5	H	95	SER	C-N-CA	5.60	128.82	120.31
11	W	36	GLN	CA-C-N	5.60	130.66	121.87
11	W	36	GLN	C-N-CA	5.60	130.66	121.87
1	5	20	LEU	CA-C-O	5.60	126.67	120.63
1	6	45	ASP	CA-C-O	-5.60	114.49	120.42
3	D	266	SER	CA-C-O	-5.60	114.62	120.55
13	Y	4	ARG	N-CA-C	-5.59	99.61	108.73
3	D	305	THR	N-CA-C	-5.59	100.70	109.25
2	A	345	ILE	CA-C-O	5.59	126.76	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	267	LEU	N-CA-C	-5.58	100.22	108.99
3	D	317	LEU	N-CA-C	-5.58	106.05	112.92
6	I	39	GLN	CA-C-O	5.58	127.24	120.99
8	T	81	ASN	CA-C-N	5.58	128.80	120.31
8	T	81	ASN	C-N-CA	5.58	128.80	120.31
2	A	374	SER	CA-C-N	5.58	127.76	120.28
2	A	374	SER	C-N-CA	5.58	127.76	120.28
2	B	63	GLY	CA-C-N	5.58	131.35	122.59
2	B	63	GLY	C-N-CA	5.58	131.35	122.59
6	I	36	ASN	CA-C-O	5.58	126.34	120.42
2	A	59	SER	N-CA-C	-5.58	106.60	113.41
1	7	4	VAL	CA-C-N	5.58	127.75	120.28
1	7	4	VAL	C-N-CA	5.58	127.75	120.28
3	F	251	VAL	CA-C-O	-5.57	116.18	121.64
1	3	19	LEU	CA-C-O	5.57	126.44	120.20
1	3	47	VAL	O-C-N	5.57	127.57	121.83
2	A	306	ARG	CA-C-N	5.57	127.68	120.44
2	A	306	ARG	C-N-CA	5.57	127.68	120.44
2	B	441	GLU	N-CA-C	5.57	119.69	113.01
3	D	202	LYS	N-CA-C	5.57	117.35	111.28
1	9	41	PRO	N-CA-C	5.57	123.94	112.47
2	A	432	GLN	N-CA-C	-5.57	100.61	109.07
3	D	265	GLY	CA-C-N	5.57	127.74	120.28
3	D	265	GLY	C-N-CA	5.57	127.74	120.28
7	O	18	THR	CA-C-N	5.57	128.19	120.29
7	O	18	THR	C-N-CA	5.57	128.19	120.29
10	V	80	PRO	CA-C-N	5.57	131.45	123.27
10	V	80	PRO	C-N-CA	5.57	131.45	123.27
2	B	128	ARG	O-C-N	5.56	129.85	123.29
2	C	448	TYR	CA-C-N	5.56	127.67	120.44
2	C	448	TYR	C-N-CA	5.56	127.67	120.44
3	F	228	ALA	N-CA-C	5.56	118.27	111.82
13	Y	35	SER	N-CA-C	-5.56	106.27	113.16
1	3	41	PRO	N-CA-C	5.56	123.92	112.47
2	B	210	GLN	N-CA-C	-5.56	99.67	108.73
7	O	119	LEU	N-CA-C	-5.56	100.72	109.50
9	U	64	GLY	CA-C-O	-5.56	115.03	120.75
1	4	25	GLY	CA-C-O	-5.55	115.03	120.75
2	A	206	VAL	N-CA-C	-5.55	100.39	108.17
3	D	116	PRO	CA-C-N	5.55	128.07	120.46
3	D	116	PRO	C-N-CA	5.55	128.07	120.46
1	6	10	ILE	CA-C-N	5.55	126.14	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	10	ILE	C-N-CA	5.55	126.14	119.98
1	9	49	PRO	CA-C-N	5.55	127.66	120.44
1	9	49	PRO	C-N-CA	5.55	127.66	120.44
2	C	301	PHE	CA-C-O	-5.55	115.00	120.82
2	A	384	ALA	CA-C-N	5.54	128.73	120.31
2	A	384	ALA	C-N-CA	5.54	128.73	120.31
3	D	379	GLN	CA-C-O	5.54	126.29	120.42
1	3	50	MET	CA-C-N	5.54	128.16	120.29
1	3	50	MET	C-N-CA	5.54	128.16	120.29
2	C	64	MET	CA-C-O	-5.54	114.37	120.30
3	E	143	LEU	CA-C-O	-5.54	114.99	120.70
2	A	451	VAL	O-C-N	5.54	127.53	121.83
3	D	99	ILE	N-CA-C	-5.54	105.48	113.07
10	V	164	LYS	N-CA-C	-5.54	105.88	113.30
1	6	36	GLY	CA-C-N	5.54	128.28	120.42
1	6	36	GLY	C-N-CA	5.54	128.28	120.42
3	F	412	ARG	CA-C-N	5.53	128.72	120.31
3	F	412	ARG	C-N-CA	5.53	128.72	120.31
3	D	385	GLN	CA-C-N	5.53	127.95	120.65
3	D	385	GLN	C-N-CA	5.53	127.95	120.65
1	9	35	ASN	CA-C-N	5.53	125.97	119.94
1	9	35	ASN	C-N-CA	5.53	125.97	119.94
3	E	17	ILE	N-CA-C	-5.53	97.84	109.34
4	G	106	ASP	O-C-N	5.53	129.52	123.27
1	1	40	ASN	N-CA-C	5.53	122.03	109.81
3	D	414	LEU	CA-C-N	5.53	130.21	120.87
3	D	414	LEU	C-N-CA	5.53	130.21	120.87
6	I	45	THR	N-CA-C	-5.53	98.62	108.13
8	T	34	ILE	N-CA-C	-5.53	104.98	110.62
2	C	37	GLY	N-CA-C	-5.52	100.09	113.18
4	G	225	GLY	N-CA-C	-5.52	106.09	112.50
1	0	17	ILE	O-C-N	-5.52	116.51	121.87
2	A	233	ILE	CA-C-N	5.52	130.04	123.19
2	A	233	ILE	C-N-CA	5.52	130.04	123.19
3	E	236	GLY	CA-C-O	-5.52	114.81	120.66
9	U	148	HIS	CA-C-O	-5.52	114.70	120.55
3	D	144	LEU	CA-C-N	5.52	127.91	122.28
3	D	144	LEU	C-N-CA	5.52	127.91	122.28
3	D	386	ASP	CA-C-N	5.52	127.51	120.56
3	D	386	ASP	C-N-CA	5.52	127.51	120.56
3	E	13	VAL	CA-C-O	-5.52	115.33	121.23
3	F	249	GLN	CA-C-N	5.52	129.39	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	249	GLN	C-N-CA	5.52	129.39	121.50
11	W	67	TRP	O-C-N	5.52	127.75	122.07
3	F	229	ARG	CA-C-O	5.52	126.40	120.55
3	F	133	ILE	N-CA-C	-5.51	100.13	108.17
10	V	69	ASP	CA-C-O	-5.51	113.64	119.97
2	B	289	ARG	N-CA-C	-5.51	103.13	110.07
8	T	218	ALA	CA-C-N	5.50	128.24	120.42
8	T	218	ALA	C-N-CA	5.50	128.24	120.42
2	B	240	GLU	N-CA-C	-5.50	100.83	109.25
3	F	97	ASN	CA-C-N	5.50	128.00	120.46
3	F	97	ASN	C-N-CA	5.50	128.00	120.46
4	G	252	SER	N-CA-C	5.50	117.36	111.36
8	T	225	ALA	N-CA-C	5.50	116.96	111.07
1	1	30	PHE	N-CA-C	5.50	117.36	111.36
2	C	53	GLU	N-CA-C	-5.50	103.44	110.53
3	D	253	LEU	CA-C-O	5.50	126.92	120.43
1	3	54	GLY	CA-C-N	5.50	127.58	120.44
1	3	54	GLY	C-N-CA	5.50	127.58	120.44
3	E	319	ASP	CA-C-O	-5.50	115.23	119.46
4	G	253	ILE	N-CA-C	-5.50	105.17	110.72
1	6	37	VAL	O-C-N	-5.49	116.17	121.83
3	E	468	ALA	O-C-N	-5.49	115.89	122.15
3	F	429	GLY	O-C-N	-5.49	117.92	122.92
2	C	76	VAL	N-CA-C	-5.49	99.73	107.75
3	E	330	ASP	O-C-N	5.49	127.73	122.07
1	5	58	SER	CA-C-N	5.49	127.64	120.28
1	5	58	SER	C-N-CA	5.49	127.64	120.28
2	C	217	GLN	CA-C-O	-5.49	114.73	120.55
2	C	44	PHE	N-CA-C	-5.49	100.24	109.07
3	D	407	ALA	CA-C-N	5.49	127.63	120.28
3	D	407	ALA	C-N-CA	5.49	127.63	120.28
10	V	113	GLU	CA-C-N	5.49	127.57	120.44
10	V	113	GLU	C-N-CA	5.49	127.57	120.44
1	0	21	GLY	CA-C-N	5.49	127.63	120.28
1	0	21	GLY	C-N-CA	5.49	127.63	120.28
1	2	27	ALA	CA-C-N	5.49	127.97	120.46
1	2	27	ALA	C-N-CA	5.49	127.97	120.46
2	C	413	ASP	CA-C-N	5.49	128.18	120.28
2	C	413	ASP	C-N-CA	5.49	128.18	120.28
3	D	271	LEU	CA-C-N	5.49	128.65	120.31
3	D	271	LEU	C-N-CA	5.49	128.65	120.31
2	A	382	VAL	N-CA-C	-5.48	101.73	109.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	318	THR	N-CA-C	-5.48	106.59	113.28
3	D	338	GLY	CA-C-N	5.48	129.29	120.30
3	D	338	GLY	C-N-CA	5.48	129.29	120.30
11	W	46	THR	N-CA-C	-5.48	106.38	112.57
2	C	311	ALA	N-CA-C	-5.48	100.36	109.46
3	E	166	PHE	CA-C-N	5.48	127.96	120.46
3	E	166	PHE	C-N-CA	5.48	127.96	120.46
1	7	50	MET	CA-C-N	5.47	128.06	120.29
1	7	50	MET	C-N-CA	5.47	128.06	120.29
3	D	157	GLY	O-C-N	5.47	128.50	122.70
3	D	193	GLU	CA-C-N	5.47	126.06	119.98
3	D	193	GLU	C-N-CA	5.47	126.06	119.98
3	D	378	LEU	CA-C-N	5.47	128.06	120.29
3	D	378	LEU	C-N-CA	5.47	128.06	120.29
2	C	174	GLN	O-C-N	-5.47	115.08	122.41
2	C	362	GLY	CA-C-N	-5.47	115.80	123.13
2	C	362	GLY	C-N-CA	-5.47	115.80	123.13
3	F	174	ILE	O-C-N	5.47	127.18	121.87
7	O	93	SER	CA-C-N	5.47	128.06	120.29
7	O	93	SER	C-N-CA	5.47	128.06	120.29
3	D	36	ALA	CA-C-O	-5.47	114.71	121.11
6	I	59	ILE	CA-C-N	5.47	131.43	121.97
6	I	59	ILE	C-N-CA	5.47	131.43	121.97
1	5	29	VAL	CA-C-N	5.47	128.05	120.29
1	5	29	VAL	C-N-CA	5.47	128.05	120.29
1	3	19	LEU	CA-C-N	5.46	127.86	120.38
1	3	19	LEU	C-N-CA	5.46	127.86	120.38
2	C	88	GLU	N-CA-C	-5.46	101.95	110.42
3	F	309	ALA	CA-C-O	5.46	126.33	120.38
1	5	17	ILE	CA-C-N	5.46	126.96	120.14
1	5	17	ILE	C-N-CA	5.46	126.96	120.14
2	B	168	LEU	CA-C-O	-5.46	115.28	121.72
5	H	131	GLU	CA-C-N	5.46	127.59	120.28
5	H	131	GLU	C-N-CA	5.46	127.59	120.28
8	T	65	ILE	O-C-N	-5.46	116.58	121.87
10	V	83	ILE	N-CA-C	-5.45	99.75	107.98
1	6	35	ASN	N-CA-C	5.45	117.22	111.28
5	H	60	MET	CA-C-N	5.45	130.45	122.77
5	H	60	MET	C-N-CA	5.45	130.45	122.77
10	V	47	GLN	CA-C-N	5.45	131.94	121.54
10	V	47	GLN	C-N-CA	5.45	131.94	121.54
10	V	91	VAL	CA-C-O	-5.45	114.20	119.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	V	106	THR	CA-C-N	5.45	127.52	120.44
10	V	106	THR	C-N-CA	5.45	127.52	120.44
3	D	457	PHE	CA-C-N	5.44	129.20	121.42
3	D	457	PHE	C-N-CA	5.44	129.20	121.42
2	A	263	GLY	O-C-N	5.44	128.78	122.30
8	T	87	PRO	CA-C-O	-5.44	111.37	119.86
9	U	156	SER	CA-C-N	5.44	127.57	120.28
9	U	156	SER	C-N-CA	5.44	127.57	120.28
2	A	123	ILE	O-C-N	5.44	129.32	122.52
9	U	109	SER	O-C-N	5.44	127.69	122.03
12	X	23	ASP	CA-C-O	5.44	126.31	120.55
3	E	424	PHE	N-CA-C	-5.44	102.76	111.02
2	A	76	VAL	O-C-N	-5.43	116.75	122.83
5	H	132	ASN	CA-C-O	5.43	126.30	120.55
14	Z	4	LEU	CA-C-O	5.43	126.36	119.95
1	2	46	THR	CA-C-O	-5.42	114.67	120.42
1	6	11	GLY	CA-C-O	5.42	126.34	120.75
2	C	391	SER	CA-C-N	5.42	128.56	120.31
2	C	391	SER	C-N-CA	5.42	128.56	120.31
2	C	487	GLU	CA-C-N	5.42	127.82	120.44
2	C	487	GLU	C-N-CA	5.42	127.82	120.44
3	E	224	GLU	CA-C-O	-5.42	113.46	121.27
10	V	100	MET	CA-C-N	5.42	127.49	120.44
10	V	100	MET	C-N-CA	5.42	127.49	120.44
2	B	73	VAL	N-CA-C	-5.42	99.83	107.75
3	D	460	VAL	CA-C-N	5.42	132.04	121.41
3	D	460	VAL	C-N-CA	5.42	132.04	121.41
2	B	160	PRO	N-CA-C	5.42	119.73	111.11
3	F	282	GLN	O-C-N	-5.42	114.27	121.64
9	U	92	LEU	CA-C-O	-5.42	115.13	120.82
3	D	434	LEU	CA-C-N	5.42	127.98	120.29
3	D	434	LEU	C-N-CA	5.42	127.98	120.29
8	T	115	LEU	N-CA-C	5.42	119.05	112.23
8	T	214	ALA	CA-C-N	5.42	127.54	120.28
8	T	214	ALA	C-N-CA	5.42	127.54	120.28
10	V	98	HIS	CA-C-N	5.42	127.53	120.28
10	V	98	HIS	C-N-CA	5.42	127.53	120.28
2	B	266	ALA	CA-C-O	5.41	127.07	121.28
1	2	48	PHE	CA-C-N	5.41	125.23	119.28
1	2	48	PHE	C-N-CA	5.41	125.23	119.28
2	C	158	LEU	N-CA-C	-5.41	106.84	113.50
3	F	339	ILE	CA-C-O	5.41	126.58	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	147	PRO	O-C-N	5.41	129.23	123.23
3	D	150	GLY	CA-C-N	5.41	132.01	121.41
3	D	150	GLY	C-N-CA	5.41	132.01	121.41
3	F	469	LYS	CA-C-N	5.41	127.53	120.28
3	F	469	LYS	C-N-CA	5.41	127.53	120.28
10	V	56	SER	N-CA-C	-5.41	103.28	111.56
2	A	176	GLY	N-CA-C	-5.41	104.67	114.46
1	6	32	ALA	O-C-N	5.41	127.85	122.12
2	C	390	GLY	CA-C-N	5.41	132.25	123.93
2	C	390	GLY	C-N-CA	5.41	132.25	123.93
1	4	6	ALA	N-CA-C	-5.40	105.29	111.07
2	C	338	ALA	CA-C-N	5.40	127.47	120.44
2	C	338	ALA	C-N-CA	5.40	127.47	120.44
2	A	271	ASP	N-CA-C	-5.40	99.61	108.41
3	D	268	VAL	CA-C-N	5.40	127.46	120.44
3	D	268	VAL	C-N-CA	5.40	127.46	120.44
2	C	59	SER	CA-C-N	5.40	130.18	121.00
2	C	59	SER	C-N-CA	5.40	130.18	121.00
1	1	63	LEU	O-C-N	5.40	128.91	122.27
1	6	41	PRO	CA-C-O	-5.40	110.78	120.60
2	C	266	ALA	CA-C-O	-5.40	115.67	121.45
3	F	460	VAL	CA-C-O	5.40	125.52	121.09
2	C	339	TYR	CA-C-O	-5.39	115.16	120.82
2	B	205	TYR	N-CA-C	-5.39	100.61	109.40
3	D	466	VAL	N-CA-C	5.39	115.59	110.42
1	3	52	ILE	O-C-N	5.39	127.89	121.80
2	A	208	VAL	CA-C-O	-5.39	114.73	120.39
2	A	355	GLU	CA-C-N	5.39	127.77	120.44
2	A	355	GLU	C-N-CA	5.39	127.77	120.44
2	C	175	THR	N-CA-C	-5.39	106.02	112.59
2	C	460	LEU	N-CA-C	5.39	117.15	111.28
3	E	407	ALA	O-C-N	-5.39	116.01	122.15
1	7	27	ALA	CA-C-N	5.38	127.84	120.46
1	7	27	ALA	C-N-CA	5.38	127.84	120.46
2	A	395	PHE	N-CA-C	5.38	116.83	111.07
8	T	139	TRP	CA-C-N	5.38	131.66	121.97
8	T	139	TRP	C-N-CA	5.38	131.66	121.97
8	T	152	LEU	O-C-N	-5.38	115.13	121.32
2	A	425	ARG	CA-C-O	5.38	126.25	120.55
2	B	271	ASP	O-C-N	-5.38	116.98	123.27
2	C	69	GLU	O-C-N	-5.38	117.36	121.55
3	D	456	ALA	CA-C-O	-5.38	114.85	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	260	ARG	CA-C-N	5.38	127.48	120.28
2	B	260	ARG	C-N-CA	5.38	127.48	120.28
3	E	453	PRO	CA-C-N	5.37	127.48	120.28
3	E	453	PRO	C-N-CA	5.37	127.48	120.28
2	A	167	GLU	CA-C-N	5.37	129.55	122.30
2	A	167	GLU	C-N-CA	5.37	129.55	122.30
2	B	378	SER	CA-C-O	-5.37	112.93	119.43
2	C	47	ASN	CA-C-O	-5.37	114.86	120.55
1	3	32	ALA	CA-C-N	5.37	127.42	120.44
1	3	32	ALA	C-N-CA	5.37	127.42	120.44
2	B	259	PHE	CA-C-N	5.37	127.47	120.28
2	B	259	PHE	C-N-CA	5.37	127.47	120.28
3	F	428	PRO	CA-C-O	-5.37	110.83	120.60
1	6	69	SER	CA-C-N	5.36	127.41	120.44
1	6	69	SER	C-N-CA	5.36	127.41	120.44
3	D	399	GLN	CA-C-N	5.36	128.46	120.31
3	D	399	GLN	C-N-CA	5.36	128.46	120.31
3	D	457	PHE	CA-C-O	5.36	125.56	119.18
3	D	46	LEU	N-CA-C	-5.36	100.66	109.40
3	D	358	LEU	CA-C-O	-5.36	115.05	120.84
2	A	459	GLU	O-C-N	-5.36	116.22	122.81
9	U	144	VAL	N-CA-C	-5.36	105.28	110.42
1	8	20	LEU	N-CA-C	5.36	117.81	111.33
3	F	235	THR	O-C-N	5.36	128.25	122.15
3	F	303	SER	CA-C-O	5.36	127.13	120.54
8	T	60	ILE	CA-C-N	5.35	127.40	120.44
8	T	60	ILE	C-N-CA	5.35	127.40	120.44
1	9	24	ILE	CA-C-N	5.35	125.92	119.98
1	9	24	ILE	C-N-CA	5.35	125.92	119.98
2	A	271	ASP	CA-C-N	5.35	131.34	121.70
2	A	271	ASP	C-N-CA	5.35	131.34	121.70
2	B	483	THR	CA-C-N	5.35	127.45	120.28
2	B	483	THR	C-N-CA	5.35	127.45	120.28
8	T	150	THR	N-CA-C	-5.35	101.98	108.14
14	Z	44	PHE	CA-C-N	5.35	128.02	120.42
14	Z	44	PHE	C-N-CA	5.35	128.02	120.42
1	7	68	VAL	O-C-N	-5.35	116.32	121.83
7	O	144	SER	O-C-N	5.35	129.23	122.65
2	A	386	LYS	CA-C-N	5.35	127.39	120.44
2	A	386	LYS	C-N-CA	5.35	127.39	120.44
2	B	291	PRO	CA-C-N	5.35	131.90	121.41
2	B	291	PRO	C-N-CA	5.35	131.90	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	307	LEU	CA-C-O	-5.35	115.19	120.70
3	F	144	LEU	CA-C-O	5.35	125.54	119.18
1	4	10	ILE	CA-C-N	5.34	125.91	119.98
1	4	10	ILE	C-N-CA	5.34	125.91	119.98
2	B	256	GLY	N-CA-C	5.34	119.61	112.77
2	B	465	GLU	N-CA-C	5.34	117.11	111.28
3	F	285	LEU	O-C-N	5.34	127.86	122.09
8	T	201	ILE	CA-C-N	5.34	131.75	121.54
8	T	201	ILE	C-N-CA	5.34	131.75	121.54
9	U	69	VAL	O-C-N	-5.34	116.67	121.91
3	F	27	GLN	CA-C-N	5.34	131.64	123.47
3	F	27	GLN	C-N-CA	5.34	131.64	123.47
7	O	86	VAL	CA-C-N	5.34	129.76	120.68
7	O	86	VAL	C-N-CA	5.34	129.76	120.68
9	U	176	VAL	N-CA-C	-5.34	105.51	110.53
1	8	54	GLY	CA-C-N	5.34	127.38	120.44
1	8	54	GLY	C-N-CA	5.34	127.38	120.44
2	C	321	GLY	N-CA-C	-5.34	104.44	112.60
9	U	122	VAL	CA-C-O	-5.34	115.51	121.17
3	F	48	LEU	O-C-N	-5.33	116.44	123.21
3	F	450	ASP	N-CA-C	-5.33	104.14	111.81
8	T	154	LEU	N-CA-C	-5.33	105.43	112.94
2	A	451	VAL	CA-C-O	-5.33	115.20	120.85
2	C	310	ARG	N-CA-C	-5.33	106.74	113.18
3	D	117	ILE	O-C-N	5.33	127.03	121.87
12	X	50	LEU	CA-C-O	-5.33	115.23	120.82
2	A	283	LEU	CA-C-N	5.32	127.85	120.29
2	A	283	LEU	C-N-CA	5.32	127.85	120.29
3	E	127	GLN	N-CA-C	5.32	117.59	110.35
11	W	51	TYR	N-CA-C	5.32	116.76	111.07
2	A	466	PHE	CA-C-O	-5.32	114.91	120.55
2	C	276	GLN	CA-C-N	5.32	127.41	120.28
2	C	276	GLN	C-N-CA	5.32	127.41	120.28
3	E	409	LYS	CA-C-N	5.32	127.74	120.46
3	E	409	LYS	C-N-CA	5.32	127.74	120.46
12	X	29	LYS	O-C-N	5.32	125.83	121.31
2	A	69	GLU	CA-C-N	5.31	127.32	120.89
2	A	69	GLU	C-N-CA	5.31	127.32	120.89
2	A	122	PRO	CA-C-O	-5.31	115.38	121.86
9	U	95	SER	O-C-N	5.31	128.81	122.27
3	D	440	SER	N-CA-C	5.31	117.15	111.36
1	4	48	PHE	CA-C-O	-5.31	113.53	118.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	91	THR	N-CA-C	-5.31	106.03	112.88
3	E	469	LYS	CA-C-O	5.31	125.91	119.38
3	F	419	ALA	CA-C-N	5.31	128.86	120.47
3	F	419	ALA	C-N-CA	5.31	128.86	120.47
2	B	415	SER	CA-C-O	5.31	126.39	120.82
2	A	472	SER	CA-C-N	5.30	127.39	120.28
2	A	472	SER	C-N-CA	5.30	127.39	120.28
2	C	298	GLY	O-C-N	5.30	127.28	122.19
13	Y	9	ILE	N-CA-C	-5.30	106.26	111.88
1	4	17	ILE	N-CA-C	5.30	116.66	110.62
2	C	446	LEU	CA-C-O	5.30	126.16	120.55
1	8	9	TYR	N-CA-C	5.29	117.13	111.36
1	1	72	LEU	CA-C-N	5.29	127.32	120.44
1	1	72	LEU	C-N-CA	5.29	127.32	120.44
1	9	4	VAL	CA-C-O	5.29	126.45	120.95
7	O	14	GLY	O-C-N	-5.29	115.82	122.70
3	E	172	ASN	CA-C-O	-5.29	114.81	120.42
3	E	15	ALA	N-CA-C	5.29	118.00	108.48
3	E	176	LYS	O-C-N	5.29	128.18	122.15
12	X	47	PRO	N-CA-C	-5.29	109.18	114.68
6	I	32	ALA	O-C-N	-5.29	116.12	122.15
9	U	184	LEU	CA-C-O	5.29	125.88	119.11
1	2	48	PHE	O-C-N	5.28	125.68	120.71
1	7	69	SER	O-C-N	5.28	127.72	122.12
2	B	135	ALA	CA-C-N	5.28	125.28	120.21
2	B	135	ALA	C-N-CA	5.28	125.28	120.21
2	B	221	THR	CA-C-N	5.28	127.79	120.29
2	B	221	THR	C-N-CA	5.28	127.79	120.29
3	E	338	GLY	N-CA-C	5.28	119.07	112.73
3	F	387	ILE	CA-C-O	5.28	124.27	119.20
3	D	259	PHE	N-CA-C	-5.28	105.69	111.82
2	B	121	GLY	O-C-N	-5.28	116.49	121.77
7	O	81	LEU	N-CA-C	-5.28	99.56	110.80
10	V	86	SER	N-CA-C	-5.28	99.56	110.80
11	W	29	HIS	O-C-N	5.28	127.58	122.09
14	Z	17	PHE	CA-C-O	-5.28	113.90	119.97
1	6	64	PHE	CA-C-O	-5.27	115.28	120.82
10	V	8	ASN	CA-C-N	5.27	127.35	120.28
10	V	8	ASN	C-N-CA	5.27	127.35	120.28
1	3	7	ALA	N-CA-C	5.27	117.03	111.28
4	G	211	GLU	O-C-N	-5.27	116.53	122.12
3	D	225	PRO	CA-C-N	5.27	125.33	119.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	225	PRO	C-N-CA	5.27	125.33	119.32
4	G	269	ASP	CA-C-O	5.27	126.14	120.55
2	A	479	ASN	N-CA-C	-5.27	106.70	113.23
3	F	291	LEU	N-CA-C	5.27	116.83	111.14
8	T	204	PHE	O-C-N	-5.26	115.20	122.46
10	V	55	PHE	CA-C-O	5.26	125.69	119.48
12	X	33	PRO	CA-C-O	-5.26	112.93	120.56
1	4	40	ASN	N-CA-C	5.26	121.43	109.81
2	C	284	SER	CA-C-N	5.26	127.76	120.29
2	C	284	SER	C-N-CA	5.26	127.76	120.29
9	U	192	LYS	CA-C-N	5.26	128.93	120.30
9	U	192	LYS	C-N-CA	5.26	128.93	120.30
2	A	392	LEU	CA-C-N	5.26	127.59	120.44
2	A	392	LEU	C-N-CA	5.26	127.59	120.44
3	F	342	LEU	N-CA-C	-5.26	107.04	112.93
7	O	12	LEU	N-CA-C	-5.26	100.12	109.06
10	V	10	LEU	O-C-N	5.26	128.14	122.15
2	A	267	LEU	CA-C-N	5.25	130.02	123.14
2	A	267	LEU	C-N-CA	5.25	130.02	123.14
1	1	25	GLY	O-C-N	5.25	127.22	122.18
1	2	8	LYS	O-C-N	5.25	127.48	122.07
3	D	197	LEU	CA-C-N	5.25	127.32	120.28
3	D	197	LEU	C-N-CA	5.25	127.32	120.28
7	O	132	LYS	CA-C-O	5.25	126.12	120.55
2	C	414	ALA	CA-C-N	5.25	127.27	120.44
2	C	414	ALA	C-N-CA	5.25	127.27	120.44
3	E	22	ASP	N-CA-C	-5.25	101.60	109.95
3	F	241	GLU	N-CA-C	5.25	118.78	112.38
8	T	57	ARG	N-CA-C	5.25	117.75	111.71
2	B	496	LEU	O-C-N	5.25	128.73	122.27
3	D	146	PRO	O-C-N	5.25	129.25	122.85
8	T	78	GLY	CA-C-N	5.25	128.78	120.07
8	T	78	GLY	C-N-CA	5.25	128.78	120.07
4	G	41	ALA	O-C-N	5.25	127.68	122.12
8	T	197	ASN	N-CA-C	-5.25	106.83	113.18
2	B	466	PHE	O-C-N	5.25	127.47	122.07
2	C	254	SER	CA-C-N	5.25	127.87	120.42
2	C	254	SER	C-N-CA	5.25	127.87	120.42
3	D	143	LEU	CA-C-O	5.25	125.98	120.42
1	3	9	TYR	CA-C-O	-5.24	115.30	120.70
2	C	82	ARG	CA-C-O	5.24	126.00	119.97
3	D	395	GLU	CA-C-N	5.24	132.33	121.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	395	GLU	C-N-CA	5.24	132.33	121.32
2	C	76	VAL	CA-C-N	5.24	129.37	122.30
2	C	76	VAL	C-N-CA	5.24	129.37	122.30
3	D	7	THR	O-C-N	-5.24	114.61	123.00
3	E	367	HIS	N-CA-C	5.24	116.99	111.28
1	0	1	MET	CA-C-N	5.24	127.30	120.28
1	0	1	MET	C-N-CA	5.24	127.30	120.28
2	C	81	ASP	N-CA-C	-5.24	106.28	113.30
3	D	264	ALA	CA-C-N	5.24	125.79	119.98
3	D	264	ALA	C-N-CA	5.24	125.79	119.98
3	E	418	PHE	CA-C-O	5.23	126.98	120.54
9	U	86	LYS	CA-C-O	-5.23	115.30	120.90
1	7	2	GLN	N-CA-C	5.23	116.67	111.07
3	D	121	PRO	CA-C-N	5.23	126.38	119.84
3	D	121	PRO	C-N-CA	5.23	126.38	119.84
3	D	388	ILE	CA-C-O	-5.23	115.63	121.17
9	U	143	LYS	CA-C-N	5.23	127.15	120.56
9	U	143	LYS	C-N-CA	5.23	127.15	120.56
3	D	129	THR	CA-C-O	5.23	127.23	121.11
3	D	31	PRO	CA-C-O	-5.23	111.09	120.60
2	B	42	ARG	CA-C-N	5.23	130.27	123.06
2	B	42	ARG	C-N-CA	5.23	130.27	123.06
4	G	85	GLY	CA-C-N	5.23	130.86	122.86
4	G	85	GLY	C-N-CA	5.23	130.86	122.86
3	E	215	VAL	N-CA-C	-5.22	101.11	108.27
6	I	36	ASN	N-CA-C	-5.22	105.67	111.36
2	C	461	SER	CA-C-N	5.22	131.54	122.56
2	C	461	SER	C-N-CA	5.22	131.54	122.56
7	O	124	THR	CA-C-O	-5.22	115.45	121.19
1	8	5	LEU	CA-C-N	5.22	127.23	120.44
1	8	5	LEU	C-N-CA	5.22	127.23	120.44
3	E	142	ASP	O-C-N	5.22	127.45	122.07
2	A	395	PHE	O-C-N	-5.22	116.69	122.07
2	C	187	ASN	CA-C-O	-5.22	115.02	120.55
8	T	43	LEU	N-CA-C	5.22	119.49	113.18
11	W	21	ALA	O-C-N	5.22	127.65	122.12
2	B	277	ALA	O-C-N	5.21	127.44	122.07
2	C	472	SER	CA-C-O	-5.21	114.89	120.42
3	F	335	LEU	CA-C-N	-5.21	113.32	121.87
3	F	335	LEU	C-N-CA	-5.21	113.32	121.87
3	E	39	ILE	CA-C-N	5.21	128.24	120.95
3	E	39	ILE	C-N-CA	5.21	128.24	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	5	9	TYR	N-CA-C	5.21	117.04	111.36
2	C	475	LYS	CA-C-N	5.21	127.69	120.29
2	C	475	LYS	C-N-CA	5.21	127.69	120.29
2	C	35	ALA	N-CA-C	-5.21	102.35	110.42
2	C	304	HIS	N-CA-C	5.21	117.03	111.36
3	D	444	VAL	CA-C-O	5.21	126.37	120.95
13	Y	31	ALA	CA-C-N	5.21	127.69	120.29
13	Y	31	ALA	C-N-CA	5.21	127.69	120.29
13	Y	20	GLY	CA-C-O	5.21	126.11	120.75
1	6	49	PRO	CA-C-N	5.20	127.20	120.44
1	6	49	PRO	C-N-CA	5.20	127.20	120.44
3	D	277	SER	O-C-N	5.20	129.33	122.36
3	F	107	GLY	CA-C-N	5.20	125.20	119.90
3	F	107	GLY	C-N-CA	5.20	125.20	119.90
7	O	145	LYS	CA-C-N	5.20	127.25	120.28
7	O	145	LYS	C-N-CA	5.20	127.25	120.28
1	8	43	ILE	N-CA-C	5.20	119.32	112.04
2	C	343	ASN	O-C-N	-5.20	116.22	122.15
2	A	173	ARG	CA-C-N	5.20	129.56	122.34
2	A	173	ARG	C-N-CA	5.20	129.56	122.34
3	F	309	ALA	O-C-N	-5.20	117.16	123.29
1	1	47	VAL	N-CA-C	5.19	117.58	111.09
3	D	114	ARG	N-CA-C	-5.19	100.44	108.90
2	A	289	ARG	O-C-N	-5.19	116.78	121.66
8	T	185	HIS	CA-C-O	-5.19	114.92	120.42
1	6	22	ALA	N-CA-C	-5.19	105.63	111.28
4	G	79	SER	CA-C-N	5.19	127.23	120.28
4	G	79	SER	C-N-CA	5.19	127.23	120.28
7	O	57	LEU	N-CA-C	-5.19	98.83	107.80
2	A	203	CYS	CA-C-O	-5.19	115.35	121.16
3	D	168	GLN	CA-C-N	5.18	127.65	120.29
3	D	168	GLN	C-N-CA	5.18	127.65	120.29
3	D	393	MET	N-CA-C	-5.18	105.63	112.94
3	F	170	LEU	CA-C-O	-5.18	115.05	120.55
9	U	89	SER	CA-C-O	5.18	126.05	120.55
9	U	164	LEU	CA-C-N	5.18	127.65	120.29
9	U	164	LEU	C-N-CA	5.18	127.65	120.29
3	D	410	ILE	N-CA-C	-5.18	105.33	110.62
3	D	403	THR	CA-C-N	5.18	127.09	120.56
3	D	403	THR	C-N-CA	5.18	127.09	120.56
7	O	93	SER	N-CA-C	5.18	117.01	111.36
3	D	438	VAL	CA-C-N	5.18	127.22	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	438	VAL	C-N-CA	5.18	127.22	120.28
1	7	44	LYS	O-C-N	-5.18	116.63	122.12
2	B	155	VAL	O-C-N	5.18	126.98	121.91
8	T	131	ILE	CA-C-O	-5.18	115.36	120.85
1	2	14	ILE	CA-C-N	5.17	127.21	120.28
1	2	14	ILE	C-N-CA	5.17	127.21	120.28
1	6	6	ALA	CA-C-N	5.17	127.21	120.28
1	6	6	ALA	C-N-CA	5.17	127.21	120.28
1	9	10	ILE	CA-C-N	5.17	125.72	119.98
1	9	10	ILE	C-N-CA	5.17	125.72	119.98
1	5	65	CYS	O-C-N	5.17	127.40	122.07
1	0	48	PHE	CA-C-N	5.17	124.79	119.05
1	0	48	PHE	C-N-CA	5.17	124.79	119.05
3	E	64	MET	O-C-N	5.17	128.30	122.20
7	O	125	SER	CA-C-N	5.17	128.17	120.31
7	O	125	SER	C-N-CA	5.17	128.17	120.31
2	B	420	LEU	O-C-N	-5.17	116.51	122.09
2	B	242	ALA	CA-C-O	-5.17	112.97	117.98
3	E	382	LYS	N-CA-C	-5.17	105.73	111.36
3	F	84	SER	CA-C-N	5.17	131.69	122.13
3	F	84	SER	C-N-CA	5.17	131.69	122.13
5	H	103	ASN	N-CA-C	5.17	116.60	111.07
7	O	151	LYS	CA-C-N	5.17	129.69	121.99
7	O	151	LYS	C-N-CA	5.17	129.69	121.99
1	2	59	GLU	CA-C-N	5.17	127.20	120.28
1	2	59	GLU	C-N-CA	5.17	127.20	120.28
2	B	150	THR	CA-C-N	5.17	130.79	120.77
2	B	150	THR	C-N-CA	5.17	130.79	120.77
2	C	82	ARG	CA-C-N	5.17	131.34	122.09
2	C	82	ARG	C-N-CA	5.17	131.34	122.09
2	C	151	GLY	CA-C-O	5.16	124.70	118.97
3	E	412	ARG	N-CA-C	-5.16	106.57	112.92
3	F	102	PRO	O-C-N	5.16	128.95	123.01
1	0	36	GLY	O-C-N	5.16	127.14	122.18
1	5	13	GLY	CA-C-N	5.16	127.53	120.46
1	5	13	GLY	C-N-CA	5.16	127.53	120.46
2	B	335	ASP	N-CA-C	5.16	117.18	109.59
4	G	204	ASN	CA-C-N	5.16	123.49	120.24
4	G	204	ASN	C-N-CA	5.16	123.49	120.24
2	A	225	HIS	CA-C-N	5.16	130.06	122.63
2	A	225	HIS	C-N-CA	5.16	130.06	122.63
2	A	366	ALA	CA-C-O	-5.16	114.81	120.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	O	88	LEU	CA-C-N	5.16	127.19	120.28
7	O	88	LEU	C-N-CA	5.16	127.19	120.28
1	0	46	THR	CA-C-N	5.16	127.74	120.42
1	0	46	THR	C-N-CA	5.16	127.74	120.42
1	6	8	LYS	N-CA-C	5.16	116.90	111.28
3	F	390	ILE	N-CA-C	5.15	115.37	110.53
2	B	154	ALA	CA-C-O	5.15	126.01	120.55
3	E	361	ALA	CA-C-N	5.15	131.25	121.97
3	E	361	ALA	C-N-CA	5.15	131.25	121.97
3	E	364	GLY	CA-C-O	5.15	127.18	122.39
3	D	7	THR	CA-C-N	5.15	126.28	119.84
3	D	7	THR	C-N-CA	5.15	126.28	119.84
1	8	1	MET	CA-C-N	5.15	127.13	120.44
1	8	1	MET	C-N-CA	5.15	127.13	120.44
2	A	504	GLU	CA-C-N	5.15	129.32	120.72
2	A	504	GLU	C-N-CA	5.15	129.32	120.72
3	F	65	ASP	CA-C-N	5.15	124.86	119.92
3	F	65	ASP	C-N-CA	5.15	124.86	119.92
4	G	36	LYS	CA-C-N	5.15	127.13	120.44
4	G	36	LYS	C-N-CA	5.15	127.13	120.44
5	H	46	VAL	O-C-N	-5.15	115.23	121.10
1	4	21	GLY	O-C-N	5.14	127.13	122.19
2	A	467	GLU	CA-C-N	5.14	127.60	120.29
2	A	467	GLU	C-N-CA	5.14	127.60	120.29
2	C	281	ARG	N-CA-C	-5.14	105.67	111.28
2	C	479	ASN	CA-C-O	5.14	125.50	119.28
4	G	100	ASN	CA-C-O	5.14	124.71	119.05
4	G	196	LYS	O-C-N	-5.14	116.13	122.25
12	X	39	LEU	CA-C-O	-5.14	115.51	119.99
10	V	93	GLU	CA-C-O	-5.14	113.72	119.79
7	O	159	VAL	N-CA-C	5.14	115.25	107.80
1	6	23	GLY	CA-C-O	-5.14	115.46	120.75
1	1	53	LEU	O-C-N	5.14	128.01	122.15
2	B	40	ILE	N-CA-C	-5.14	98.67	106.42
2	C	99	VAL	CA-C-N	5.14	125.05	119.76
2	C	99	VAL	C-N-CA	5.14	125.05	119.76
1	1	3	LEU	CA-C-N	5.13	127.71	120.42
1	1	3	LEU	C-N-CA	5.13	127.71	120.42
1	1	43	ILE	O-C-N	5.13	128.78	122.05
3	E	413	PHE	N-CA-C	-5.13	106.26	112.88
2	C	145	HIS	CA-C-O	-5.13	113.17	120.51
1	1	59	GLU	CA-C-N	5.13	127.16	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	59	GLU	C-N-CA	5.13	127.16	120.28
1	5	40	ASN	O-C-N	5.13	127.22	121.32
2	C	363	ILE	CA-C-N	5.13	130.22	122.42
2	C	363	ILE	C-N-CA	5.13	130.22	122.42
3	E	37	LEU	CA-C-N	-5.13	115.75	122.99
3	E	37	LEU	C-N-CA	-5.13	115.75	122.99
4	G	256	ASN	O-C-N	5.13	127.63	122.09
4	G	272	THR	O-C-N	5.13	127.56	122.12
6	I	58	PRO	CA-C-O	-5.13	115.88	121.27
5	H	32	LEU	CA-C-O	-5.13	115.00	120.28
7	O	142	SER	N-CA-C	-5.13	105.77	111.36
10	V	108	SER	N-CA-C	5.13	116.87	111.28
2	C	480	GLU	CA-C-N	5.13	127.10	120.44
2	C	480	GLU	C-N-CA	5.13	127.10	120.44
3	E	7	THR	O-C-N	5.13	125.39	121.65
7	O	92	LEU	O-C-N	5.13	127.99	122.15
7	O	103	LYS	N-CA-C	-5.12	105.61	111.14
2	B	303	LEU	CA-C-O	-5.12	115.44	120.82
2	A	402	VAL	CA-C-N	5.12	127.56	120.29
2	A	402	VAL	C-N-CA	5.12	127.56	120.29
2	C	253	ALA	CA-C-O	-5.12	114.32	120.10
7	O	8	PRO	O-C-N	5.12	123.67	121.31
1	4	72	LEU	CA-C-N	5.12	127.59	120.63
1	4	72	LEU	C-N-CA	5.12	127.59	120.63
1	9	59	GLU	CA-C-N	5.12	127.14	120.28
1	9	59	GLU	C-N-CA	5.12	127.14	120.28
4	G	50	LEU	CA-C-N	5.12	127.09	120.44
4	G	50	LEU	C-N-CA	5.12	127.09	120.44
2	A	28	ASN	N-CA-C	-5.12	105.40	113.02
2	A	346	SER	CA-C-N	5.12	127.68	120.42
2	A	346	SER	C-N-CA	5.12	127.68	120.42
3	E	146	PRO	O-C-N	-5.12	116.39	122.89
8	T	86	PHE	O-C-N	-5.11	115.91	120.92
1	9	48	PHE	CA-C-N	5.11	124.42	118.85
1	9	48	PHE	C-N-CA	5.11	124.42	118.85
2	A	367	ILE	O-C-N	-5.11	117.25	122.82
9	U	61	THR	N-CA-C	5.11	116.85	111.28
3	F	172	ASN	CA-C-N	5.11	127.55	120.29
3	F	172	ASN	C-N-CA	5.11	127.55	120.29
1	1	47	VAL	O-C-N	-5.11	116.03	121.80
2	A	476	SER	CA-C-O	-5.11	115.08	120.55
3	E	150	GLY	N-CA-C	-5.11	107.75	114.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	196	ASP	N-CA-C	5.11	116.85	111.28
1	5	22	ALA	CA-C-N	5.10	125.61	119.94
1	5	22	ALA	C-N-CA	5.10	125.61	119.94
1	6	64	PHE	O-C-N	5.10	127.33	122.07
2	A	329	ILE	O-C-N	-5.10	117.88	123.18
2	A	436	SER	CA-C-N	5.10	125.09	119.89
2	A	436	SER	C-N-CA	5.10	125.09	119.89
7	O	137	ILE	O-C-N	-5.10	116.58	121.83
3	D	232	VAL	O-C-N	5.10	127.08	121.83
2	A	176	GLY	CA-C-O	5.10	125.84	119.88
4	G	11	LYS	CA-C-N	5.10	127.07	120.44
4	G	11	LYS	C-N-CA	5.10	127.07	120.44
12	X	21	LEU	CA-C-O	-5.10	115.15	120.55
14	Z	28	SER	CA-C-O	-5.10	115.15	120.55
3	E	176	LYS	N-CA-C	-5.10	105.81	111.36
1	4	15	SER	CA-C-N	5.09	128.75	120.60
1	4	15	SER	C-N-CA	5.09	128.75	120.60
9	U	92	LEU	O-C-N	5.09	127.32	122.07
2	C	383	LYS	N-CA-C	-5.09	105.92	111.82
3	D	168	GLN	CA-C-O	5.09	125.94	120.55
2	A	253	ALA	CA-C-N	5.09	128.04	120.31
2	A	253	ALA	C-N-CA	5.09	128.04	120.31
6	I	33	SER	N-CA-C	5.09	117.56	111.71
1	6	47	VAL	CA-C-O	-5.08	114.98	120.47
3	F	140	VAL	CA-C-N	5.08	126.97	120.56
3	F	140	VAL	C-N-CA	5.08	126.97	120.56
2	C	169	ILE	CA-C-O	5.08	125.40	120.27
3	E	429	GLY	CA-C-O	-5.08	116.26	122.82
12	X	2	VAL	CA-C-N	5.08	126.96	120.56
12	X	2	VAL	C-N-CA	5.08	126.96	120.56
2	C	171	GLY	CA-C-O	5.08	126.68	121.35
3	F	73	GLY	CA-C-N	5.08	127.92	120.71
3	F	73	GLY	C-N-CA	5.08	127.92	120.71
3	D	215	VAL	CA-C-O	5.08	126.66	121.63
3	F	59	VAL	CA-C-N	5.08	130.56	122.74
3	F	59	VAL	C-N-CA	5.08	130.56	122.74
5	H	134	GLN	N-CA-C	5.08	116.81	111.28
1	9	36	GLY	CA-C-N	5.07	127.62	120.42
1	9	36	GLY	C-N-CA	5.07	127.62	120.42
4	G	230	ILE	CA-C-N	5.07	127.50	120.29
4	G	230	ILE	C-N-CA	5.07	127.50	120.29
11	W	64	LYS	CA-C-N	5.07	124.38	118.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	W	64	LYS	C-N-CA	5.07	124.38	118.85
12	X	51	LYS	N-CA-C	-5.07	105.83	111.36
2	C	212	ARG	CA-C-N	5.07	127.08	120.28
2	C	212	ARG	C-N-CA	5.07	127.08	120.28
7	O	46	THR	CA-C-N	5.07	127.05	120.56
7	O	46	THR	C-N-CA	5.07	127.05	120.56
2	B	290	PRO	CA-C-O	-5.07	113.21	120.56
2	B	139	LEU	CA-C-O	5.07	123.25	118.34
2	B	415	SER	CA-C-N	5.07	127.33	120.44
2	B	415	SER	C-N-CA	5.07	127.33	120.44
3	E	225	PRO	N-CA-C	5.07	116.88	110.70
2	C	217	GLN	O-C-N	5.07	127.49	122.12
13	Y	10	LEU	CA-C-O	5.07	125.21	119.18
3	E	212	GLU	CA-C-O	5.06	125.78	120.36
9	U	141	LYS	CA-C-N	5.06	128.01	120.31
9	U	141	LYS	C-N-CA	5.06	128.01	120.31
3	D	224	GLU	O-C-N	-5.06	115.21	121.64
3	F	90	GLU	N-CA-C	-5.06	105.95	111.82
2	A	221	THR	CA-C-O	5.06	125.78	120.42
1	6	56	ALA	CA-C-O	-5.06	115.19	120.55
9	U	134	GLU	CA-C-N	5.06	127.06	120.28
9	U	134	GLU	C-N-CA	5.06	127.06	120.28
3	E	252	LEU	CA-C-N	5.05	128.88	120.94
3	E	252	LEU	C-N-CA	5.05	128.88	120.94
1	4	49	PRO	CA-C-N	5.05	127.05	120.28
1	4	49	PRO	C-N-CA	5.05	127.05	120.28
1	1	44	LYS	N-CA-C	5.05	118.22	111.75
3	E	379	GLN	CA-C-O	5.05	125.78	119.97
3	F	161	VAL	CA-C-N	5.05	131.31	121.41
3	F	161	VAL	C-N-CA	5.05	131.31	121.41
1	6	3	LEU	CA-C-N	5.05	128.58	120.30
1	6	3	LEU	C-N-CA	5.05	128.58	120.30
1	7	3	LEU	CA-C-N	5.05	127.59	120.42
1	7	3	LEU	C-N-CA	5.05	127.59	120.42
1	1	6	ALA	N-CA-C	-5.05	105.78	111.28
2	A	460	LEU	CA-C-N	5.05	127.04	120.28
2	A	460	LEU	C-N-CA	5.05	127.04	120.28
9	U	169	GLN	N-CA-C	5.05	116.86	111.36
14	Z	21	ILE	O-C-N	5.05	127.03	121.83
2	B	468	SER	CA-C-O	5.04	125.77	119.97
6	I	35	LEU	CA-C-O	5.04	125.90	120.55
1	3	37	VAL	CA-C-O	-5.04	115.71	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	359	ASP	O-C-N	5.04	128.71	123.06
2	A	223	GLU	CA-C-N	5.04	127.03	120.28
2	A	223	GLU	C-N-CA	5.04	127.03	120.28
1	3	43	ILE	CA-C-N	5.04	127.53	120.28
1	3	43	ILE	C-N-CA	5.04	127.53	120.28
2	B	155	VAL	CA-C-N	5.04	127.97	120.31
2	B	155	VAL	C-N-CA	5.04	127.97	120.31
3	E	176	LYS	CA-C-O	-5.04	115.08	120.42
2	B	488	LYS	N-CA-C	-5.04	105.87	111.36
3	D	32	ALA	O-C-N	-5.04	116.61	123.15
1	4	18	GLY	O-C-N	5.03	127.58	122.24
2	A	388	VAL	CA-C-O	5.03	125.91	120.47
9	U	95	SER	CA-C-O	-5.03	114.19	119.97
1	8	61	THR	CA-C-N	5.03	125.53	120.00
1	8	61	THR	C-N-CA	5.03	125.53	120.00
3	D	57	ASN	CA-C-O	5.03	125.90	120.12
2	B	244	LEU	O-C-N	5.03	127.45	122.12
2	B	94	GLY	O-C-N	-5.03	116.09	122.32
2	C	91	LYS	CA-C-O	-5.03	115.43	121.11
3	E	392	GLY	N-CA-C	-5.03	101.27	113.18
2	A	438	LEU	N-CA-C	-5.02	101.43	109.07
4	G	144	ALA	O-C-N	5.02	127.52	122.09
1	4	54	GLY	N-CA-C	5.02	118.75	112.73
2	A	428	GLN	CA-C-N	5.02	127.01	120.28
2	A	428	GLN	C-N-CA	5.02	127.01	120.28
3	F	141	VAL	CA-C-N	5.02	129.10	120.72
3	F	141	VAL	C-N-CA	5.02	129.10	120.72
12	X	33	PRO	N-CA-C	5.02	116.82	110.70
14	Z	41	SER	CA-C-N	5.02	127.01	120.28
14	Z	41	SER	C-N-CA	5.02	127.01	120.28
4	G	35	GLU	N-CA-C	5.02	116.83	111.36
2	C	420	LEU	CA-C-N	5.02	127.33	120.46
2	C	420	LEU	C-N-CA	5.02	127.33	120.46
2	C	198	SER	CA-C-N	5.01	127.41	120.29
2	C	198	SER	C-N-CA	5.01	127.41	120.29
3	D	447	GLY	N-CA-C	-5.01	108.36	115.43
3	F	333	THR	N-CA-C	-5.01	100.35	108.52
4	G	245	GLY	N-CA-C	-5.01	106.68	112.50
2	A	139	LEU	CA-C-O	-5.01	113.82	118.73
2	A	419	THR	CA-C-O	-5.01	115.56	120.82
3	D	153	ILE	O-C-N	-5.01	117.61	122.97
10	V	93	GLU	O-C-N	5.01	129.05	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	219	VAL	CA-C-N	5.01	127.41	120.29
2	B	219	VAL	C-N-CA	5.01	127.41	120.29
3	F	259	PHE	CA-C-N	5.01	129.09	120.72
3	F	259	PHE	C-N-CA	5.01	129.09	120.72
2	C	227	ALA	N-CA-C	-5.01	104.92	112.99
3	D	61	THR	CA-C-N	5.01	129.22	121.71
3	D	61	THR	C-N-CA	5.01	129.22	121.71
3	E	354	LYS	N-CA-C	-5.01	100.87	109.24
1	3	8	LYS	O-C-N	-5.01	116.44	122.15
2	C	33	VAL	CA-C-O	-5.01	115.43	121.54
3	D	252	LEU	N-CA-C	-5.01	101.80	109.41
1	3	64	PHE	CA-C-O	-5.00	115.24	120.55
2	B	399	TYR	CA-C-N	5.00	127.25	120.44
2	B	399	TYR	C-N-CA	5.00	127.25	120.44
2	C	127	GLY	N-CA-C	-5.00	101.22	110.73
3	F	114	ARG	N-CA-C	-5.00	101.76	109.52
4	G	214	LEU	N-CA-C	-5.00	105.90	111.36
2	A	383	LYS	CA-C-N	5.00	126.95	120.44
2	A	383	LYS	C-N-CA	5.00	126.95	120.44
1	0	15	SER	N-CA-C	5.00	116.73	111.28
2	B	57	PHE	CA-C-O	-5.00	116.23	121.88
7	O	39	SER	CA-C-N	5.00	127.39	120.29
7	O	39	SER	C-N-CA	5.00	127.39	120.29
7	O	150	GLY	O-C-N	5.00	128.52	122.32

There are no chirality outliers.

All (9) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	40	ASN	Peptide
1	6	40	ASN	Peptide
1	7	40	ASN	Peptide
1	8	40	ASN	Peptide
2	B	193	ASN	Mainchain
2	B	29	GLU	Peptide
3	E	256	ASP	Peptide
8	T	206	LEU	Peptide
10	V	79	LYS	Peptide

5.2 Too-close contacts

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	0	300	0	95	0	0
1	1	300	0	95	0	0
1	2	300	0	95	0	0
1	3	296	0	91	0	0
1	4	300	0	95	0	0
1	5	300	0	95	0	0
1	6	296	0	91	0	0
1	7	292	0	91	0	0
1	8	300	0	95	0	0
1	9	296	0	91	0	0
2	A	2004	0	575	0	0
2	B	2020	0	575	0	0
2	C	1984	0	567	0	0
3	D	1876	0	537	0	0
3	E	1880	0	538	0	0
3	F	1872	0	537	1	0
4	G	1060	0	277	0	0
5	H	478	0	122	1	0
6	I	193	0	43	0	0
7	O	748	0	205	0	0
8	T	897	0	248	0	0
9	U	620	0	158	0	0
10	V	685	0	173	0	0
11	W	340	0	92	0	0
12	X	248	0	61	0	0
13	Y	148	0	40	0	0
14	Z	193	0	49	0	0
All	All	20226	0	5731	2	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 0.

All (2) 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)
3:F:41:THR:C	3:F:43:GLN:H	2.14	0.55
5:H:22:TYR:O	5:H:23:SER:C	2.63	0.41

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 PDB entries followed by that with respect to all EM entries.

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	0	73/76 (96%)	73 (100%)	0	0	100	100
1	1	73/76 (96%)	70 (96%)	1 (1%)	2 (3%)	4	25
1	2	73/76 (96%)	72 (99%)	1 (1%)	0	100	100
1	3	72/76 (95%)	69 (96%)	2 (3%)	1 (1%)	9	40
1	4	73/76 (96%)	70 (96%)	2 (3%)	1 (1%)	9	40
1	5	73/76 (96%)	70 (96%)	1 (1%)	2 (3%)	4	25
1	6	72/76 (95%)	69 (96%)	2 (3%)	1 (1%)	9	40
1	7	71/76 (93%)	69 (97%)	1 (1%)	1 (1%)	9	40
1	8	73/76 (96%)	70 (96%)	2 (3%)	1 (1%)	9	40
1	9	72/76 (95%)	69 (96%)	1 (1%)	2 (3%)	4	24
2	A	499/510 (98%)	462 (93%)	31 (6%)	6 (1%)	10	44
2	B	501/510 (98%)	469 (94%)	25 (5%)	7 (1%)	9	40
2	C	492/510 (96%)	458 (93%)	24 (5%)	10 (2%)	6	31
3	D	467/478 (98%)	431 (92%)	30 (6%)	6 (1%)	9	42
3	E	468/478 (98%)	441 (94%)	21 (4%)	6 (1%)	9	42
3	F	466/478 (98%)	435 (93%)	25 (5%)	6 (1%)	9	42
4	G	261/278 (94%)	244 (94%)	13 (5%)	4 (2%)	8	40
5	H	110/138 (80%)	102 (93%)	7 (6%)	1 (1%)	14	51

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	I	42/61 (69%)	38 (90%)	2 (5%)	2 (5%)	2	16
7	O	185/195 (95%)	164 (89%)	15 (8%)	6 (3%)	3	21
8	T	222/249 (89%)	209 (94%)	10 (4%)	3 (1%)	9	40
9	U	153/209 (73%)	151 (99%)	2 (1%)	0	100	100
10	V	169/173 (98%)	150 (89%)	10 (6%)	9 (5%)	1	15
11	W	83/95 (87%)	67 (81%)	13 (16%)	3 (4%)	2	20
12	X	60/92 (65%)	53 (88%)	4 (7%)	3 (5%)	1	16
13	Y	35/59 (59%)	34 (97%)	1 (3%)	0	100	100
14	Z	46/48 (96%)	46 (100%)	0	0	100	100
All	All	4984/5321 (94%)	4655 (93%)	246 (5%)	83 (2%)	9	36

All (83) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	41	PRO
1	3	41	PRO
1	4	41	PRO
1	5	41	PRO
1	6	41	PRO
1	7	41	PRO
1	8	41	PRO
1	9	41	PRO
2	A	23	ASP
2	B	29	GLU
2	C	24	GLU
3	D	451	ASN
3	F	361	ALA
6	I	41	ASP
11	W	31	TYR
12	X	58	VAL
1	5	42	SER
1	9	42	SER
2	A	38	ASP
2	B	229	LYS
2	C	49	ILE
2	C	196	ASP
2	C	437	PRO
3	D	279	VAL
3	E	34	LEU

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Mol	Chain	Res	Type
3	E	360	ALA
4	G	201	THR
5	H	33	PRO
7	O	10	VAL
8	T	202	ASN
10	V	66	SER
10	V	130	PHE
1	1	42	SER
2	A	22	SER
2	A	36	VAL
2	A	229	LYS
2	A	335	ASP
2	B	227	ALA
3	D	86	PRO
3	E	68	GLU
3	F	16	VAL
3	F	314	ALA
7	O	151	LYS
8	T	50	ASN
8	T	51	ASN
10	V	86	SER
10	V	89	LEU
10	V	133	LEU
10	V	166	ARG
2	B	241	ALA
2	C	38	ASP
3	D	131	ALA
3	E	57	ASN
3	F	30	LEU
4	G	102	GLN
4	G	123	PRO
7	O	31	SER
7	O	81	LEU
11	W	11	SER
11	W	61	ALA
2	B	7	PRO
2	B	103	PRO
2	B	380	ALA
2	C	157	ALA
3	E	86	PRO
3	E	90	GLU
6	I	54	SER

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Mol	Chain	Res	Type
7	O	9	PRO
7	O	149	GLN
10	V	84	ASP
10	V	85	ALA
10	V	127	ALA
12	X	31	TRP
12	X	37	PRO
2	C	103	PRO
2	C	435	TYR
2	C	140	PRO
3	F	279	VAL
4	G	169	PRO
3	D	453	PRO
2	C	376	VAL
3	F	137	GLY
3	D	161	VAL

5.3.2 Protein sidechains [i](#)

There are no protein residues with a non-rotameric sidechain to report in this entry.

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

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.

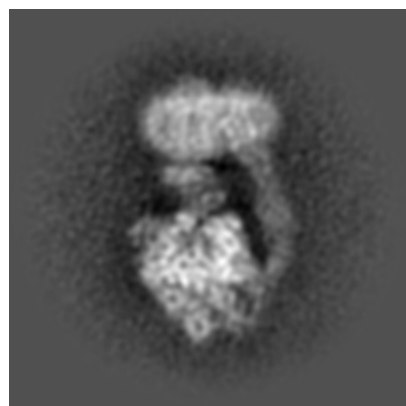
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-25970. These allow visual inspection of the internal detail of the map and identification of artifacts.

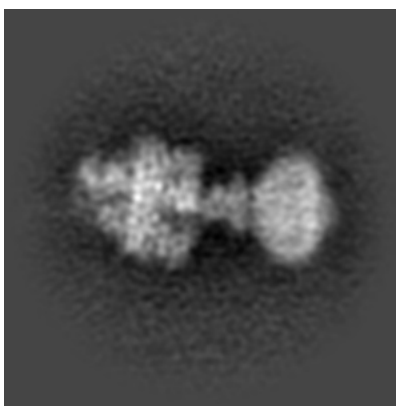
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

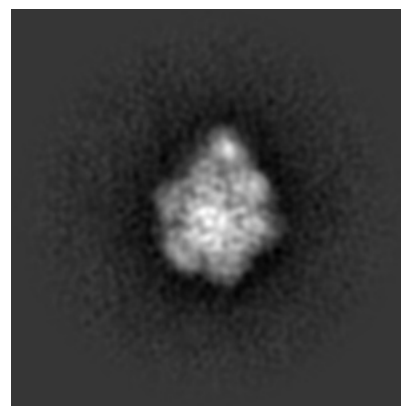
6.1.1 Primary map



X

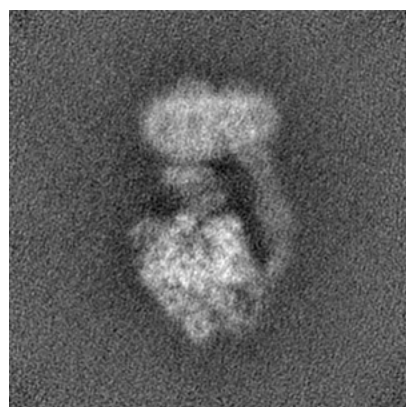


Y

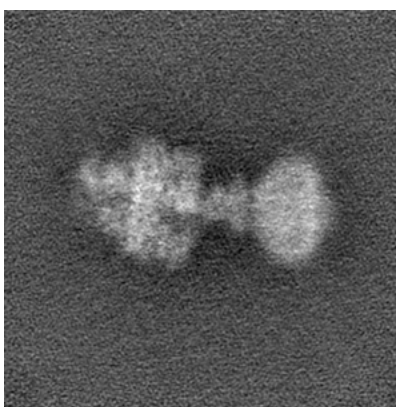


Z

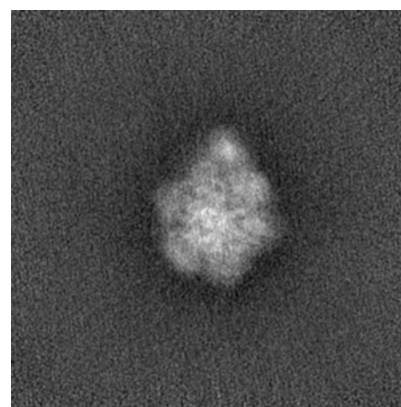
6.1.2 Raw map



X



Y

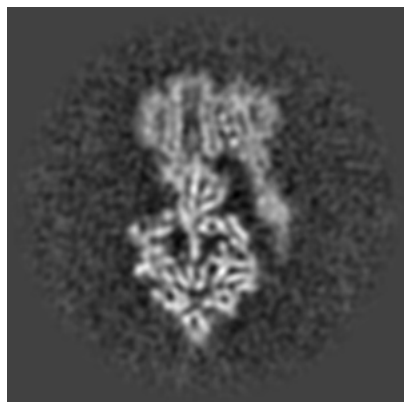


Z

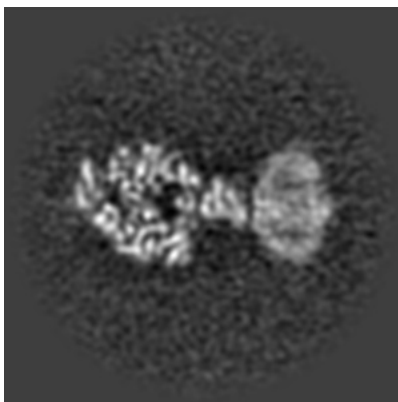
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

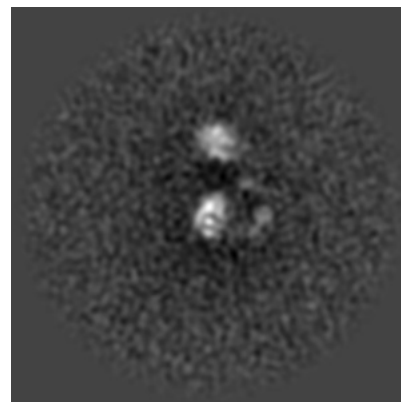
6.2.1 Primary map



X Index: 128

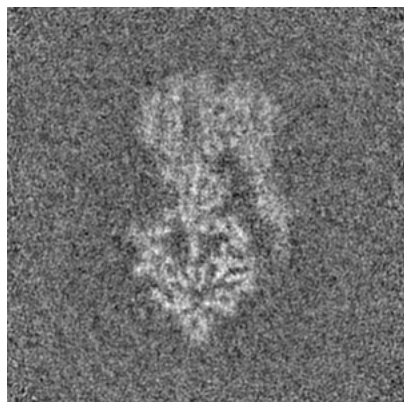


Y Index: 128

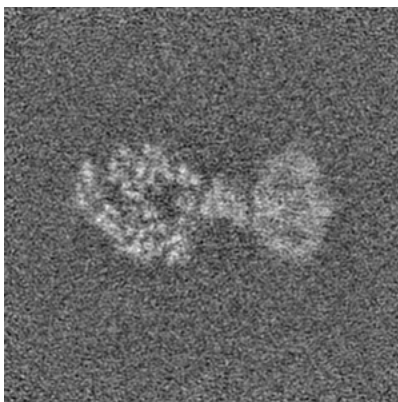


Z Index: 128

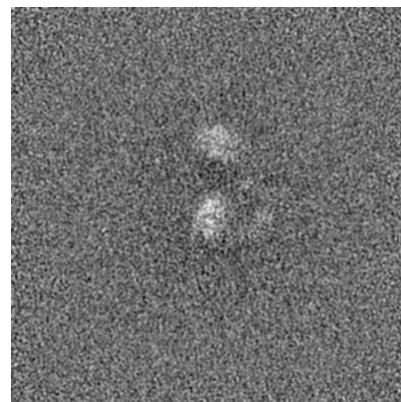
6.2.2 Raw map



X Index: 128



Y Index: 128



Z Index: 128

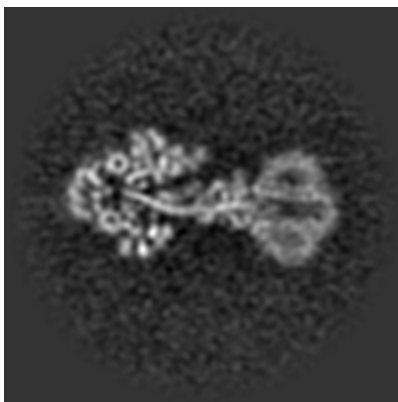
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

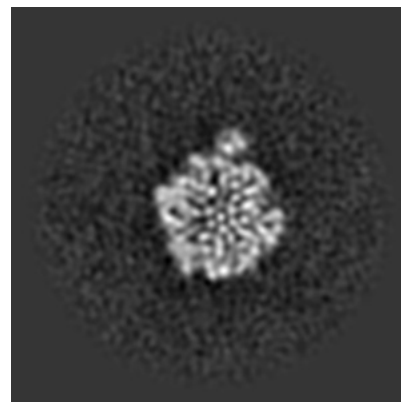
6.3.1 Primary map



X Index: 134

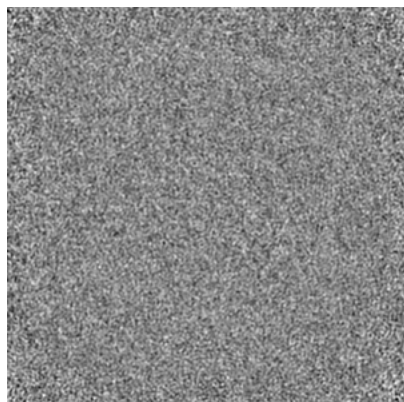


Y Index: 120

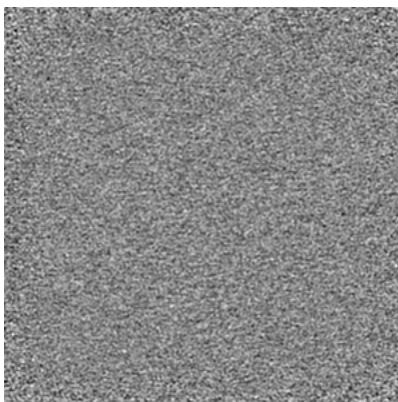


Z Index: 87

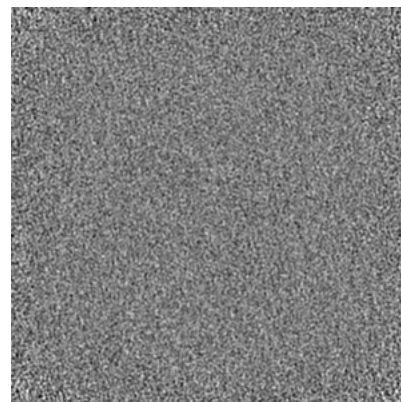
6.3.2 Raw map



X Index: 0



Y Index: 0

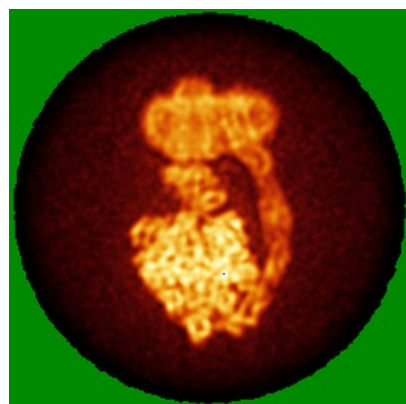


Z Index: 0

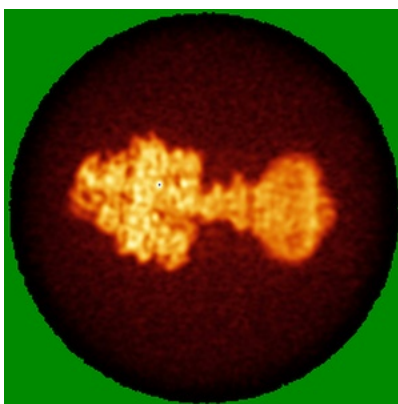
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

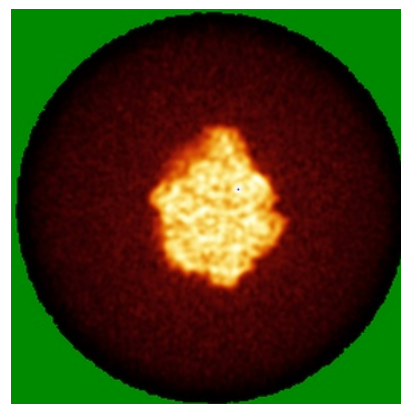
6.4.1 Primary map



X

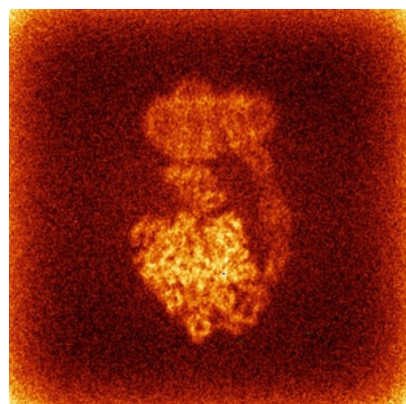


Y

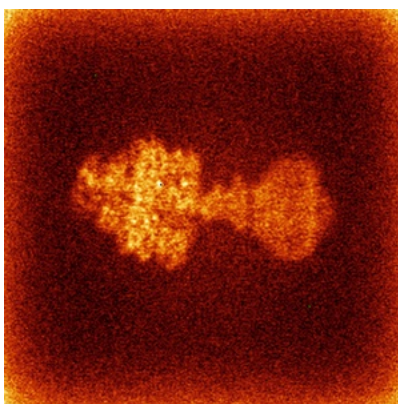


Z

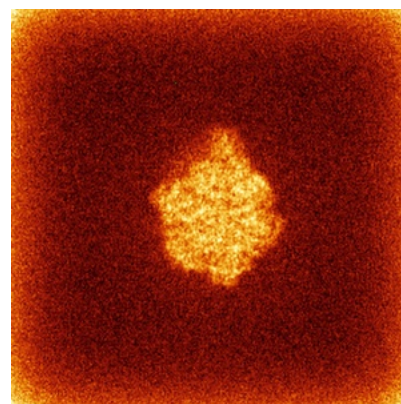
6.4.2 Raw map



X



Y

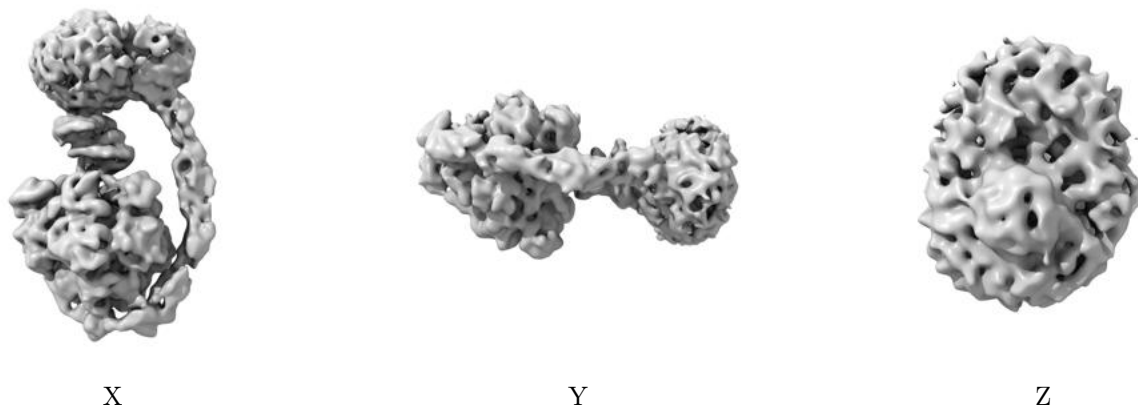


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

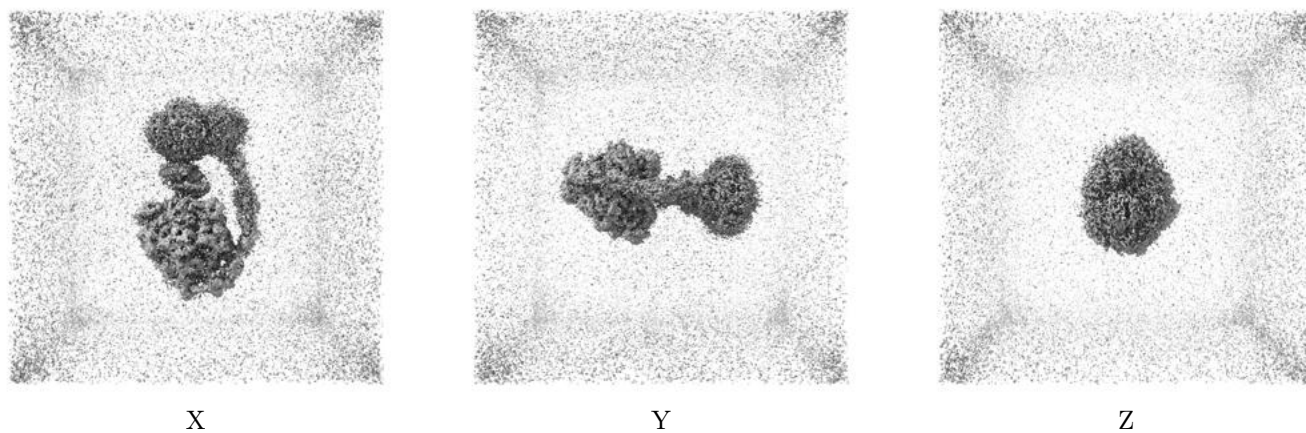
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.55. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

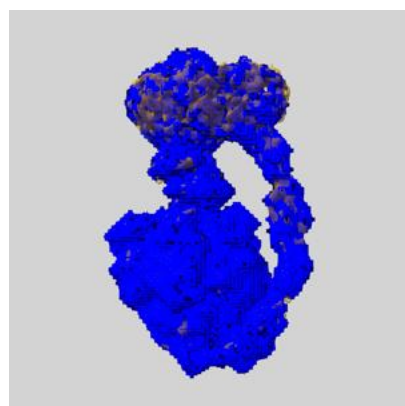
6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

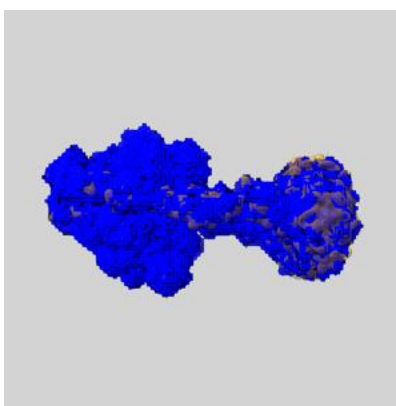
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

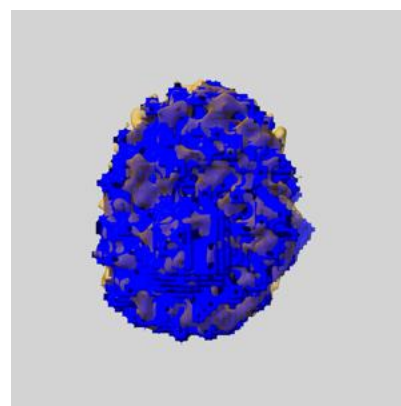
6.6.1 emd_25970_msk_1.map [i](#)



X



Y

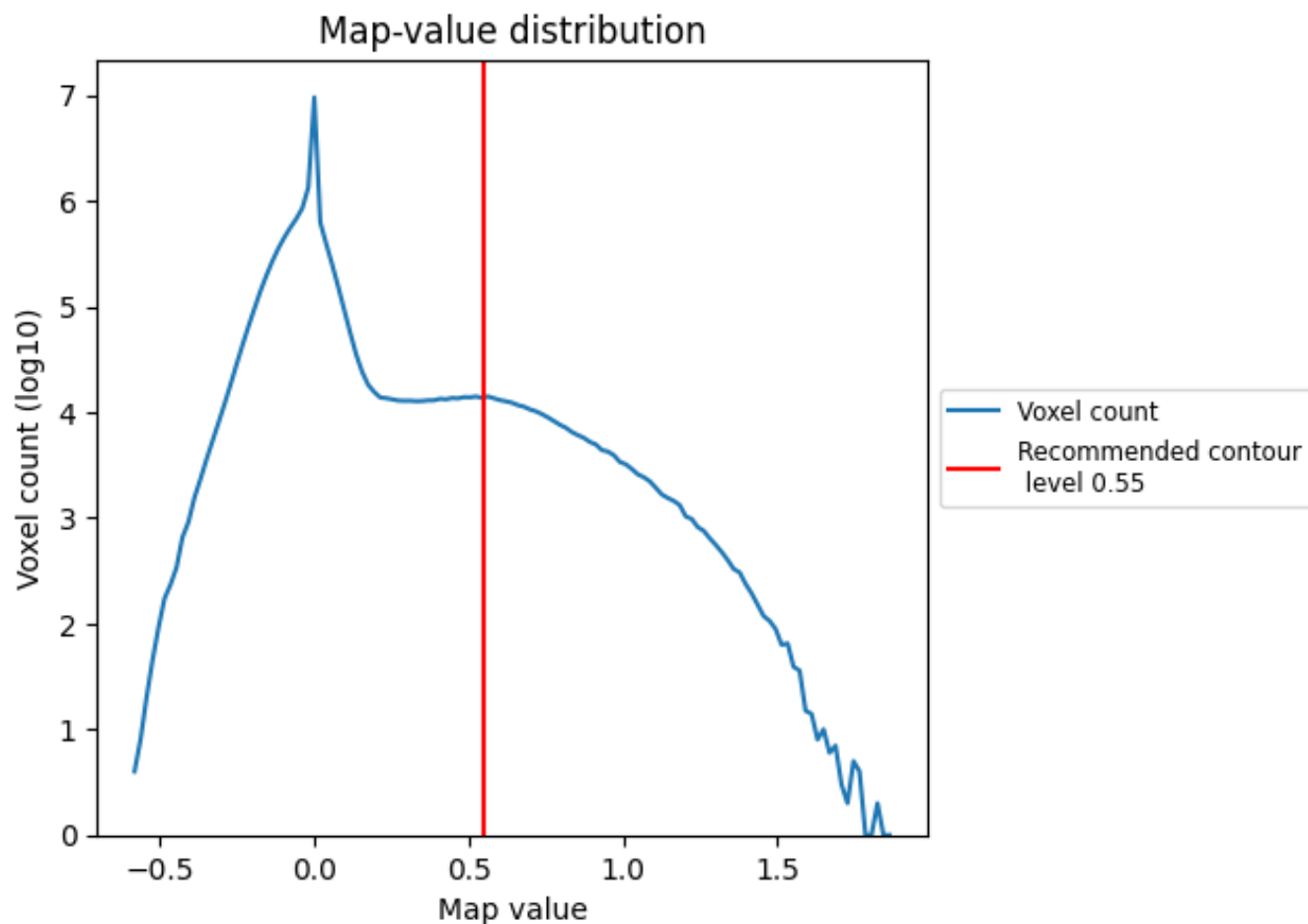


Z

7 Map analysis [i](#)

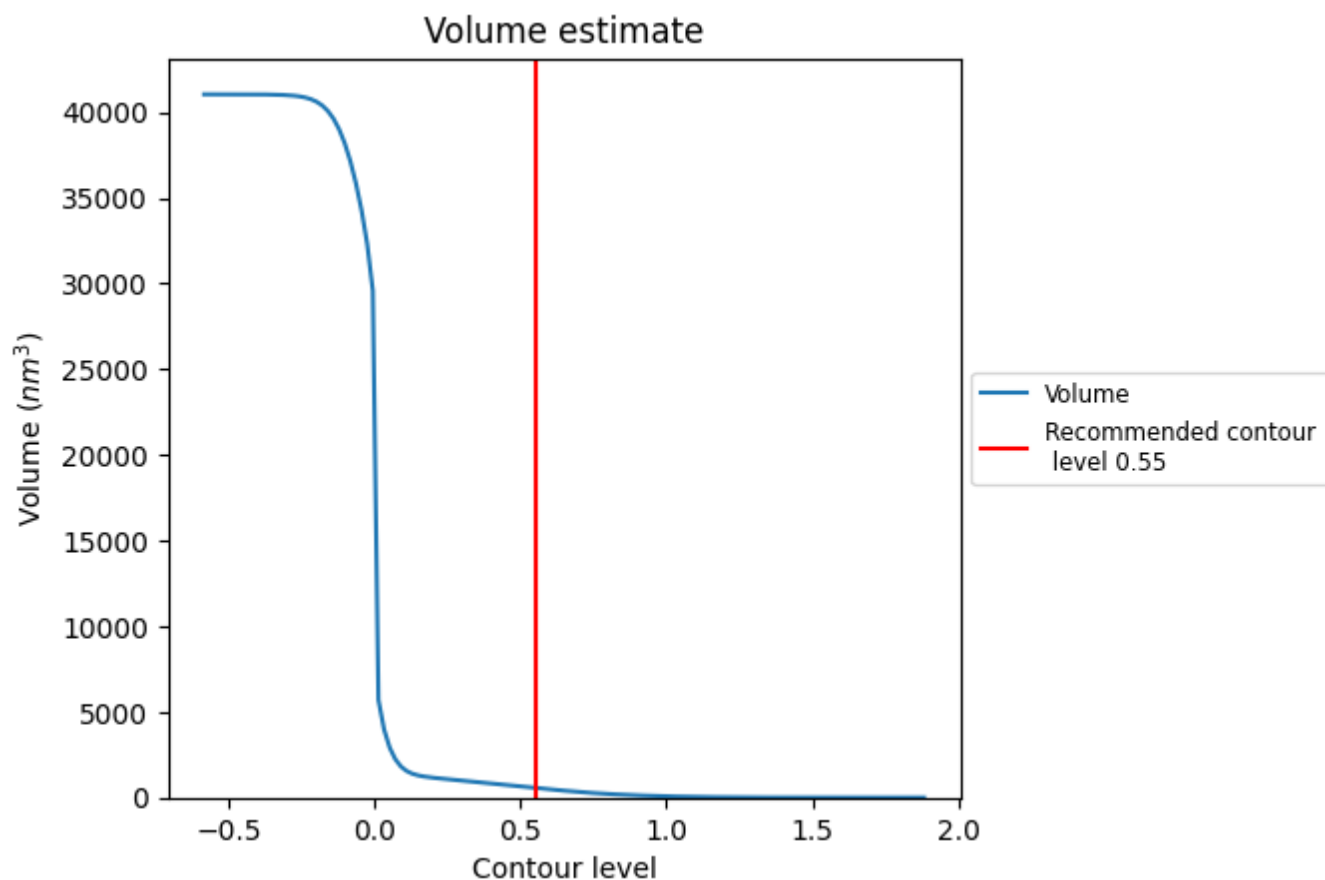
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

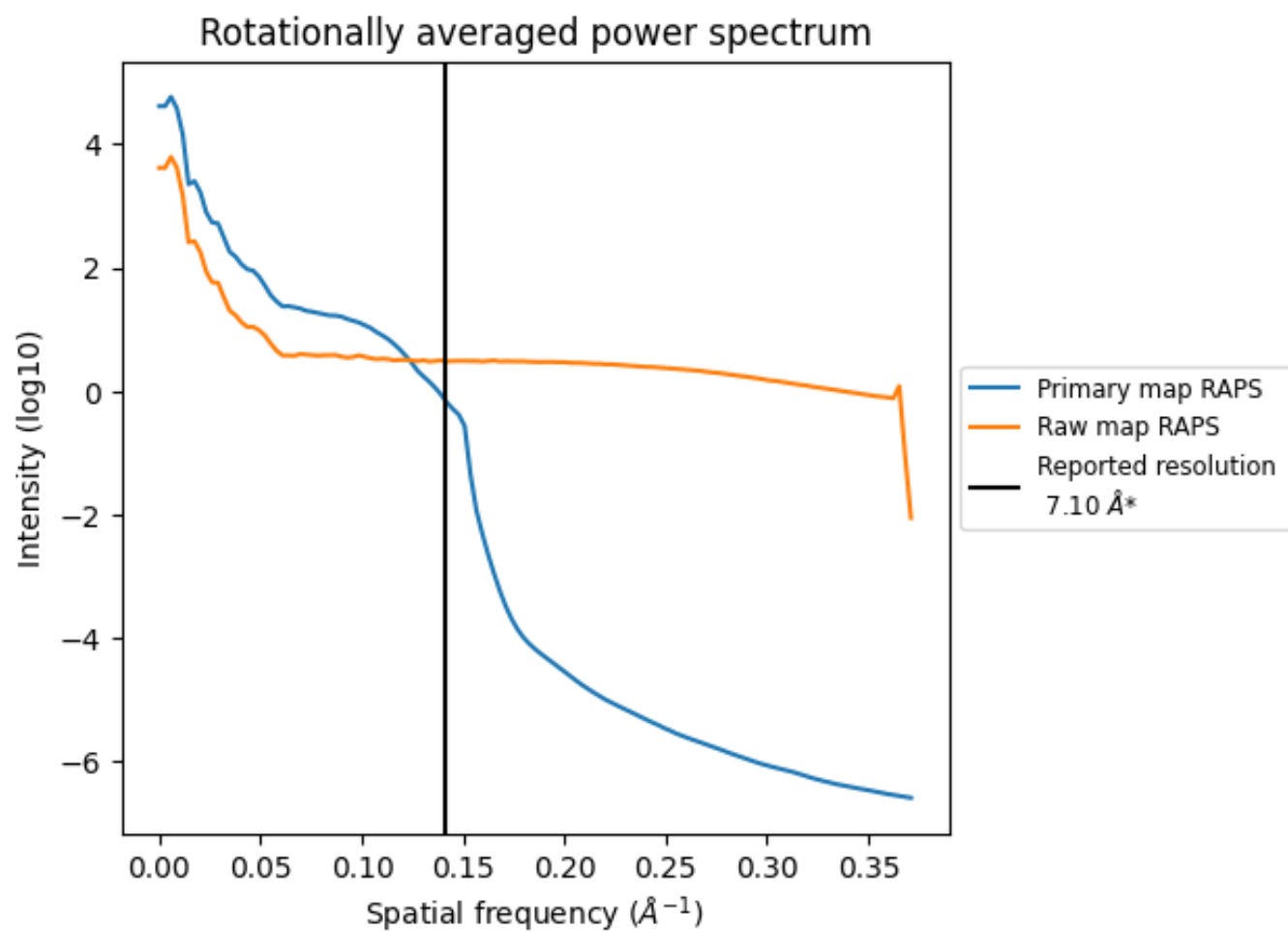
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 569 nm³; this corresponds to an approximate mass of 514 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ

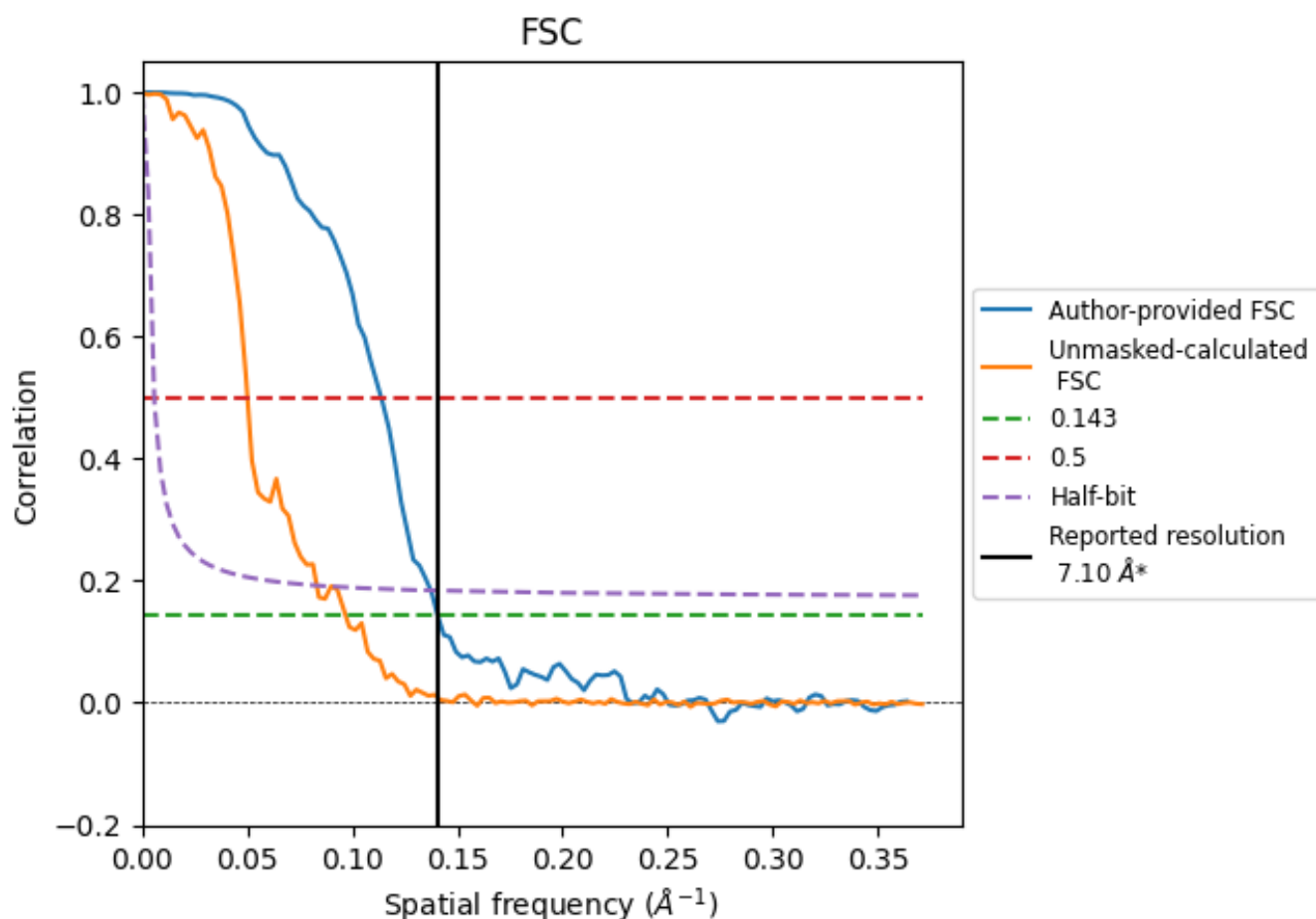


*Reported resolution corresponds to spatial frequency of 0.141 $\text{\AA}^{-1}$

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.141 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

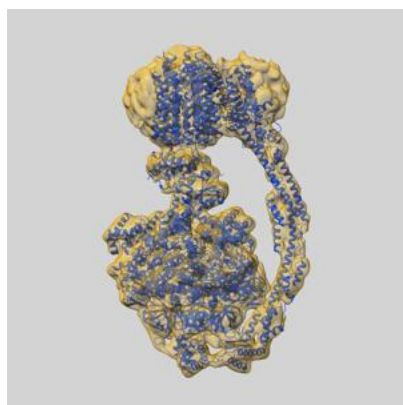
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	7.10	-	-
Author-provided FSC curve	7.11	8.80	7.28
Unmasked-calculated*	10.33	19.96	12.05

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 10.33 differs from the reported value 7.1 by more than 10 %

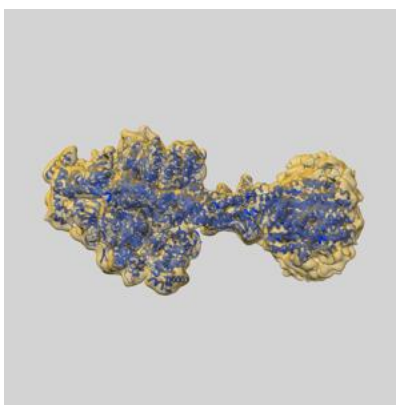
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-25970 and PDB model 7TKI. Per-residue inclusion information can be found in section [3](#) on page [7](#).

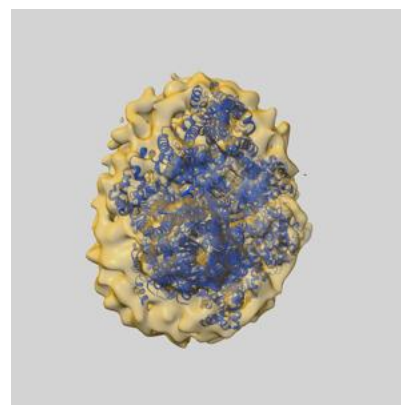
9.1 Map-model overlay [i](#)



X



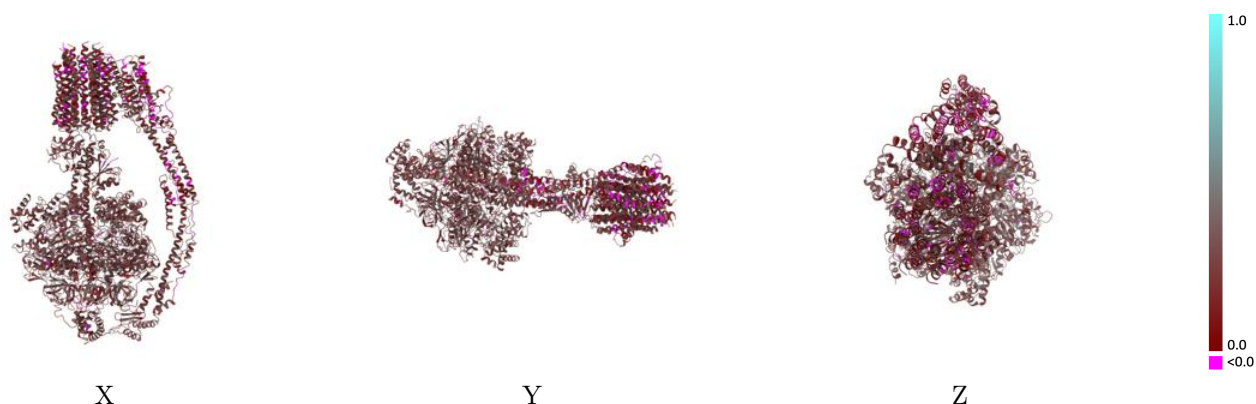
Y



Z

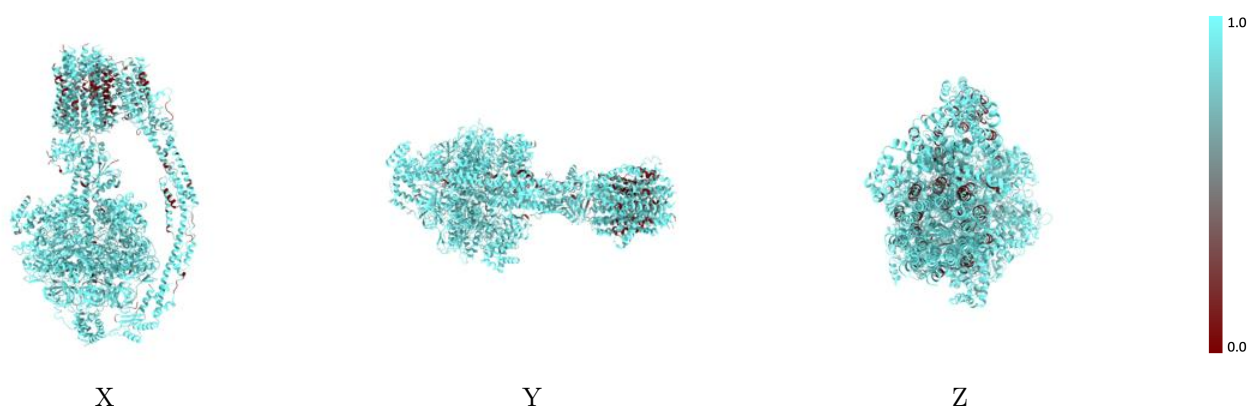
The images above show the 3D surface view of the map at the recommended contour level 0.55 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



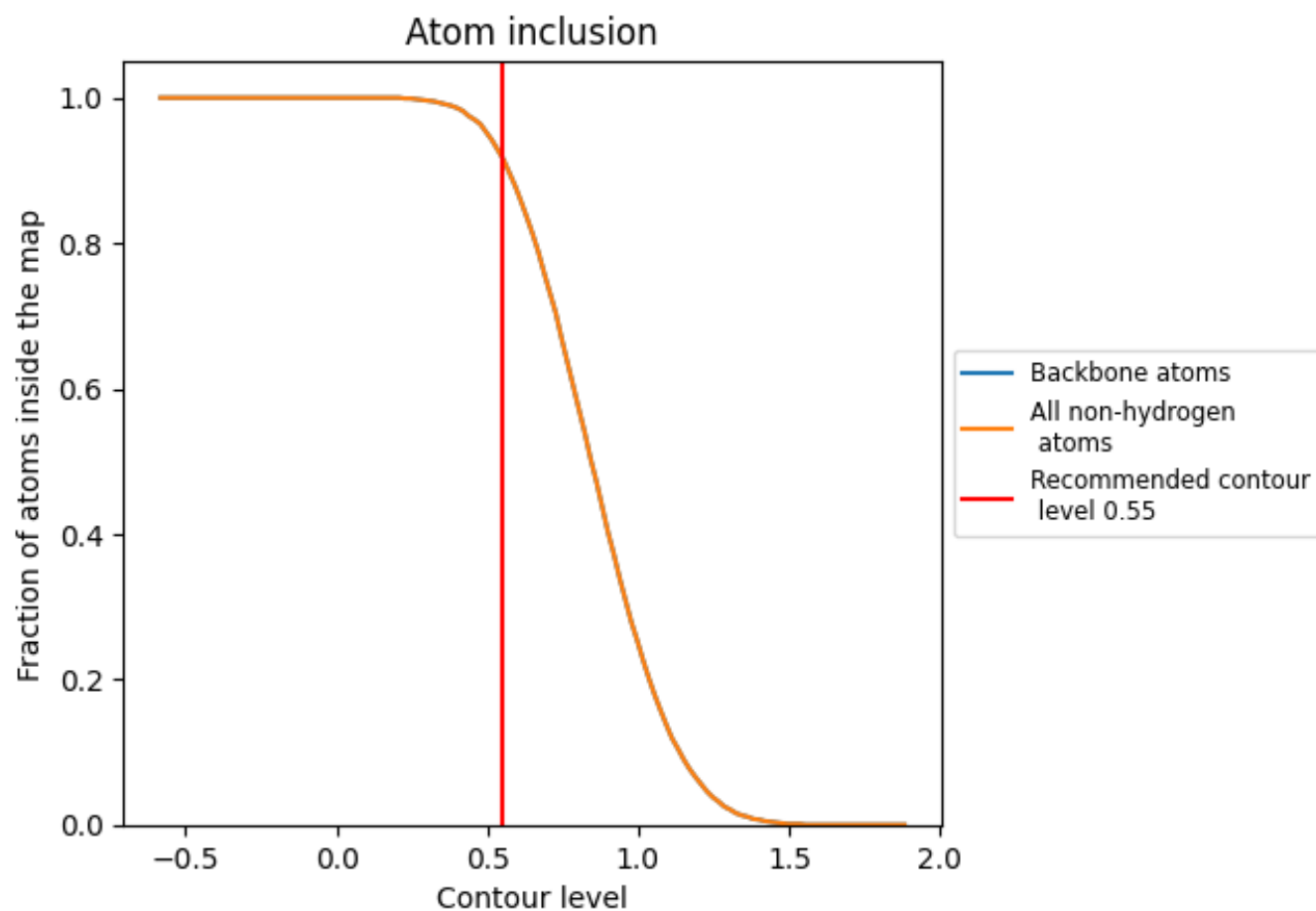
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.55).

9.4 Atom inclusion [i](#)



At the recommended contour level, 92% of all backbone atoms, 92% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.55) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9170	 0.2400
0	 0.9300	 0.2130
1	 0.9470	 0.2130
2	 0.7670	 0.1260
3	 0.8720	 0.1940
4	 0.7670	 0.1770
5	 0.6630	 0.1840
6	 0.7130	 0.1490
7	 0.7700	 0.1810
8	 0.7870	 0.1600
9	 0.8310	 0.1590
A	 0.9550	 0.2740
B	 0.9660	 0.2680
C	 0.9630	 0.2650
D	 0.9580	 0.2740
E	 0.9460	 0.2630
F	 0.9610	 0.2610
G	 0.9260	 0.2480
H	 0.9460	 0.2360
I	 0.8500	 0.2380
O	 0.9800	 0.2760
T	 0.8670	 0.2140
U	 0.9530	 0.2350
V	 0.8150	 0.1850
W	 0.8000	 0.1080
X	 0.8060	 0.1770
Y	 0.7840	 0.1370
Z	 0.8190	 0.1110

