



Full wwPDB X-ray Structure Validation Report ⓘ

Oct 8, 2023 – 08:51 PM EDT

PDB ID : 6W1Q
Title : RT XFEL structure of Photosystem II 50 microseconds after the second illumination at 2.27 Angstrom resolution
Authors : Ibrahim, M.; Fransson, T.; Chatterjee, R.; Cheah, M.H.; Hussein, R.; Lassalle, L.; Sutherlin, K.D.; Young, I.D.; Fuller, F.D.; Gul, S.; Kim, I.-S.; Simon, P.S.; de Lichtenberg, C.; Chernev, P.; Bogacz, I.; Pham, C.; Orville, A.M.; Saichek, N.; Northen, T.R.; Batyuk, A.; Carbajo, S.; Alonso-Mori, R.; Tono, K.; Owada, S.; Bhowmick, A.; Bolotovskii, R.; Mendez, D.; Moriarty, N.W.; Holton, J.M.; Dobbek, H.; Brewster, A.S.; Adams, P.D.; Sauter, N.K.; Bergmann, U.; Zouni, A.; Messinger, J.; Kern, J.; Yachandra, V.K.; Yano, J.
Deposited on : 2020-03-04
Resolution : 2.27 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp>

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:

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.35.1
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)

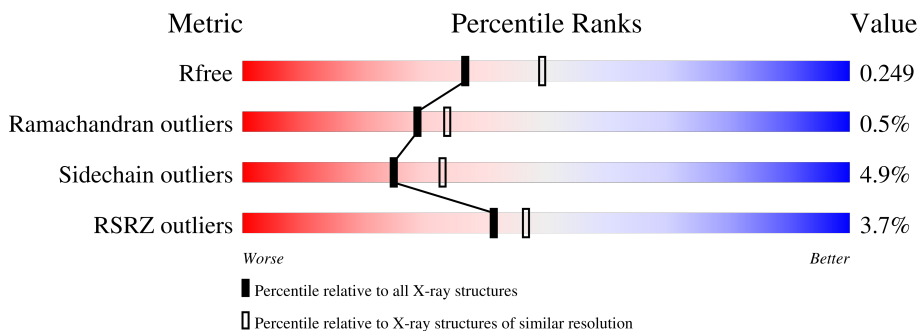
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.27 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) | Similar resolution (#Entries, resolution range(Å)) |
|-----------------------|-----------------------------|---|
| R_{free} | 130704 | 6980 (2.30-2.26) |
| Ramachandran outliers | 138981 | 7597 (2.30-2.26) |
| Sidechain outliers | 138945 | 7598 (2.30-2.26) |
| RSRZ outliers | 127900 | 6849 (2.30-2.26) |

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

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | A | 344 | 94% |
| 1 | a | 344 | 93% |
| 2 | B | 506 | 98% |

Continued on next page...

Refmac : 5.8.0158
 CCP4 : 7.0.044 (Gargrove)
 Ideal geometry (proteins) : Engh & Huber (2001)
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.35.1

Continued from previous page...

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 2 | b | 506 | 3% 96% |
| 3 | C | 461 | 2% 94% |
| 3 | c | 461 | 2% 94% |
| 4 | D | 352 | 94% |
| 4 | d | 352 | 93% |
| 5 | E | 84 | 4% 93% 5% |
| 5 | e | 84 | 10% 93% 5% |
| 6 | F | 45 | 76% 24% |
| 6 | f | 45 | 2% 73% 24% |
| 7 | H | 66 | 2% 91% 8% |
| 7 | h | 66 | 9% 83% 12% 5% |
| 8 | I | 38 | 3% 87% 8% 5% |
| 8 | i | 38 | 8% 87% 8% 5% |
| 9 | J | 40 | 8% 88% 10% |
| 9 | j | 40 | 10% 85% 5% 10% |
| 10 | K | 46 | 7% 76% 20% |
| 10 | k | 46 | 65% 15% 20% |
| 11 | L | 37 | 97% |
| 11 | l | 37 | 8% 86% 11% |
| 12 | M | 36 | 3% 86% 6% 8% |
| 12 | m | 36 | 81% 8% 11% |
| 13 | O | 272 | 4% 84% 6% 10% |
| 13 | o | 272 | 4% 84% 6% 10% |
| 14 | R | 41 | 27% 71% 12% 17% |
| 14 | r | 41 | 61% 61% 15% 24% |

Continued on next page...

Continued from previous page...

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 15 | T | 30 | |
| 15 | t | 30 | |
| 16 | U | 134 | |
| 16 | u | 134 | |
| 17 | V | 163 | |
| 17 | v | 163 | |
| 18 | X | 41 | |
| 18 | x | 41 | |
| 19 | Y | 46 | |
| 19 | y | 46 | |
| 20 | Z | 62 | |
| 20 | z | 62 | |

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|-----|-----------|----------|---------|------------------|
| 22 | CLA | A | 402 | X | - | - | - |
| 22 | CLA | A | 405 | X | - | - | - |
| 22 | CLA | B | 602 | X | - | - | - |
| 22 | CLA | B | 603 | X | - | - | - |
| 22 | CLA | B | 604 | X | - | - | - |
| 22 | CLA | B | 605 | X | - | - | - |
| 22 | CLA | B | 606 | X | - | - | - |
| 22 | CLA | B | 607 | X | - | - | - |
| 22 | CLA | B | 609 | X | - | - | - |
| 22 | CLA | B | 611 | X | - | - | - |
| 22 | CLA | B | 612 | X | - | - | - |
| 22 | CLA | B | 613 | X | - | - | - |
| 22 | CLA | B | 614 | X | - | - | - |
| 22 | CLA | B | 615 | X | - | - | - |
| 22 | CLA | C | 501 | X | - | - | - |
| 22 | CLA | C | 502 | X | - | - | - |
| 22 | CLA | C | 503 | X | - | - | - |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|-----|-----------|----------|---------|------------------|
| 22 | CLA | C | 504 | X | - | - | - |
| 22 | CLA | C | 505 | X | - | - | - |
| 22 | CLA | C | 506 | X | - | - | - |
| 22 | CLA | C | 507 | X | - | - | - |
| 22 | CLA | C | 509 | X | - | - | - |
| 22 | CLA | C | 510 | X | - | - | - |
| 22 | CLA | C | 511 | X | - | - | - |
| 22 | CLA | C | 512 | X | - | - | - |
| 22 | CLA | C | 513 | X | - | - | - |
| 22 | CLA | D | 403 | X | - | - | - |
| 22 | CLA | D | 404 | X | - | - | - |
| 22 | CLA | H | 101 | X | - | - | - |
| 22 | CLA | a | 405 | X | - | - | - |
| 22 | CLA | b | 601 | X | - | - | - |
| 22 | CLA | b | 602 | X | - | - | - |
| 22 | CLA | b | 603 | X | - | - | - |
| 22 | CLA | b | 604 | X | - | - | - |
| 22 | CLA | b | 605 | X | - | - | - |
| 22 | CLA | b | 606 | X | - | - | - |
| 22 | CLA | b | 607 | X | - | - | - |
| 22 | CLA | b | 608 | X | - | - | - |
| 22 | CLA | b | 609 | X | - | - | - |
| 22 | CLA | b | 610 | X | - | - | - |
| 22 | CLA | b | 612 | X | - | - | - |
| 22 | CLA | b | 613 | X | - | - | - |
| 22 | CLA | b | 614 | X | - | - | - |
| 22 | CLA | b | 615 | X | - | - | - |
| 22 | CLA | b | 616 | X | - | - | - |
| 22 | CLA | c | 501 | X | - | - | - |
| 22 | CLA | c | 502 | X | - | - | - |
| 22 | CLA | c | 504 | X | - | - | - |
| 22 | CLA | c | 505 | X | - | - | - |
| 22 | CLA | c | 506 | X | - | - | - |
| 22 | CLA | c | 507 | X | - | - | - |
| 22 | CLA | c | 509 | X | - | - | - |
| 22 | CLA | c | 510 | X | - | - | - |
| 22 | CLA | c | 511 | X | - | - | - |
| 22 | CLA | c | 512 | X | - | - | - |
| 22 | CLA | c | 513 | X | - | - | - |
| 22 | CLA | d | 403 | X | - | - | - |
| 22 | CLA | d | 404 | X | - | - | - |
| 22 | CLA | d | 405 | X | - | - | - |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|------------|-------------|--------------|------------|------------------|-----------------|----------------|-------------------------|
| 31 | STE | a | 412 | - | - | - | X |

2 Entry composition

There are 36 unique types of molecules in this entry. The entry contains 103197 atoms, of which 51556 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Photosystem II protein D1 1.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 1 | A | 334 | 5130 | 1717 | 2508 | 431 | 459 | 15 | 0 | 0 | 0 |
| 1 | a | 334 | 5118 | 1714 | 2499 | 431 | 459 | 15 | 0 | 0 | 0 |

- Molecule 2 is a protein called Photosystem II CP47 reaction center protein.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 2 | B | 505 | 7864 | 2631 | 3859 | 666 | 695 | 13 | 0 | 5 | 0 |
| 2 | b | 505 | 7800 | 2610 | 3822 | 665 | 690 | 13 | 0 | 0 | 0 |

- Molecule 3 is a protein called Photosystem II CP43 reaction center protein.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 3 | C | 442 | 6767 | 2249 | 3341 | 571 | 593 | 13 | 0 | 2 | 0 |
| 3 | c | 451 | 6913 | 2290 | 3413 | 587 | 610 | 13 | 0 | 2 | 0 |

- Molecule 4 is a protein called Photosystem II D2 protein.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 4 | D | 341 | 5330 | 1800 | 2613 | 444 | 461 | 12 | 0 | 0 | 0 |
| 4 | d | 341 | 5342 | 1804 | 2619 | 444 | 463 | 12 | 0 | 1 | 0 |

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|-----|---------|---------|-------|
| 5 | E | 82 | Total | C | H | N | O | 0 | 1 | 0 |
| | | | 1316 | 436 | 650 | 107 | 123 | | | |
| 5 | e | 82 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 1311 | 434 | 647 | 108 | 122 | | | |

- Molecule 6 is a protein called Cytochrome b559 subunit beta.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|---|
| 6 | F | 34 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 556 | 187 | 281 | 45 | 42 | 1 | | | |
| 6 | f | 34 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 556 | 187 | 281 | 45 | 42 | 1 | | | |

- Molecule 7 is a protein called Photosystem II reaction center protein H.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|---|
| 7 | H | 65 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 1042 | 341 | 532 | 82 | 85 | 2 | | | |
| 7 | h | 63 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 1016 | 333 | 518 | 80 | 83 | 2 | | | |

- Molecule 8 is a protein called Photosystem II reaction center protein I.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|---|
| 8 | I | 36 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 607 | 200 | 311 | 46 | 49 | 1 | | | |
| 8 | i | 36 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 607 | 200 | 311 | 46 | 49 | 1 | | | |

There are 2 discrepancies between the modelled and reference sequences:

| Chain | Residue | Modelled | Actual | Comment | Reference |
|-------|---------|----------|--------|-----------------------|------------|
| I | 1 | FME | - | initiating methionine | UNP Q8DJZ6 |
| i | 1 | FME | - | initiating methionine | UNP Q8DJZ6 |

- Molecule 9 is a protein called Photosystem II reaction center protein J.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|---|
| 9 | J | 36 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 525 | 174 | 268 | 40 | 42 | 1 | | | |
| 9 | j | 36 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 525 | 174 | 268 | 40 | 42 | 1 | | | |

- Molecule 10 is a protein called Photosystem II reaction center protein K.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|---------|-------|
| | | | Total | C | H | N | O | | | |
| 10 | K | 37 | Total 598 | C 204 | H 305 | N 43 | O 46 | 0 | 0 | 0 |
| 10 | k | 37 | Total 598 | C 204 | H 305 | N 43 | O 46 | 0 | 0 | 0 |

- Molecule 11 is a protein called Photosystem II reaction center protein L.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 11 | L | 37 | Total 620 | C 202 | H 316 | N 48 | O 53 | S 1 | 0 | 0 | 0 |
| 11 | l | 36 | Total 600 | C 197 | H 304 | N 47 | O 52 | | 0 | 0 | 0 |

- Molecule 12 is a protein called Photosystem II reaction center protein M.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 12 | M | 33 | Total 525 | C 171 | H 269 | N 37 | O 47 | S 1 | 0 | 0 | 0 |
| 12 | m | 32 | Total 518 | C 168 | H 267 | N 36 | O 46 | S 1 | 0 | 0 | 0 |

There are 2 discrepancies between the modelled and reference sequences:

| Chain | Residue | Modelled | Actual | Comment | Reference |
|-------|---------|----------|--------|-----------------------|------------|
| M | 1 | FME | - | initiating methionine | UNP Q8DHA7 |
| m | 1 | FME | - | initiating methionine | UNP Q8DHA7 |

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|---------------|-----------|-----------|----------|----------|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 13 | O | 244 | Total 3698 | C 1168 | H 1828 | N 313 | O 385 | S 4 | 0 | 1 | 0 |
| 13 | o | 244 | Total 3718 | C 1170 | H 1844 | N 317 | O 383 | S 4 | 0 | 0 | 0 |

- Molecule 14 is a protein called Photosystem II protein Y.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|-------|---|
| | | | Total | C | H | N | | | | O |
| 14 | R | 34 | Total 569 | C 184 | H 298 | N 47 | O 40 | 0 | 0 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|
| 14 | r | 31 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 493 | 162 | 253 | 42 | 36 | | | |

- Molecule 15 is a protein called Photosystem II reaction center protein T.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|---|
| 15 | T | 30 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 519 | 181 | 261 | 36 | 39 | 2 | | | |
| 15 | t | 30 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 512 | 180 | 256 | 36 | 38 | 2 | | | |

There are 2 discrepancies between the modelled and reference sequences:

| Chain | Residue | Modelled | Actual | Comment | Reference |
|-------|---------|----------|--------|-----------------------|------------|
| T | 1 | FME | - | initiating methionine | UNP Q8DIQ0 |
| t | 1 | FME | - | initiating methionine | UNP Q8DIQ0 |

- Molecule 16 is a protein called Photosystem II 12 kDa extrinsic protein.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|-----|---------|---------|-------|
| 16 | U | 97 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 1546 | 491 | 772 | 129 | 154 | | | |
| 16 | u | 97 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 1546 | 491 | 772 | 129 | 154 | | | |

- Molecule 17 is a protein called Cytochrome c-550.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|------|-----|-----|---------|---------|-------|---|
| 17 | V | 137 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 2132 | 675 | 1068 | 177 | 208 | 4 | | | |
| 17 | v | 137 | Total | C | H | N | O | S | 0 | 0 | 0 |
| | | | 2132 | 675 | 1068 | 177 | 208 | 4 | | | |

- Molecule 18 is a protein called Photosystem II reaction center X protein.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|----|---------|---------|-------|
| 18 | X | 38 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 593 | 188 | 312 | 45 | 48 | | | |
| 18 | x | 39 | Total | C | H | N | O | 0 | 0 | 0 |
| | | | 602 | 191 | 316 | 46 | 49 | | | |

- Molecule 19 is a protein called Photosystem II reaction center protein Ycf12.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 19 | Y | 27 | Total 413 | C 128 | H 217 | N 35 | O 30 | S 3 | 0 | 0 | 0 |
| 19 | y | 30 | Total 459 | C 144 | H 241 | N 35 | O 36 | S 3 | 0 | 0 | 0 |

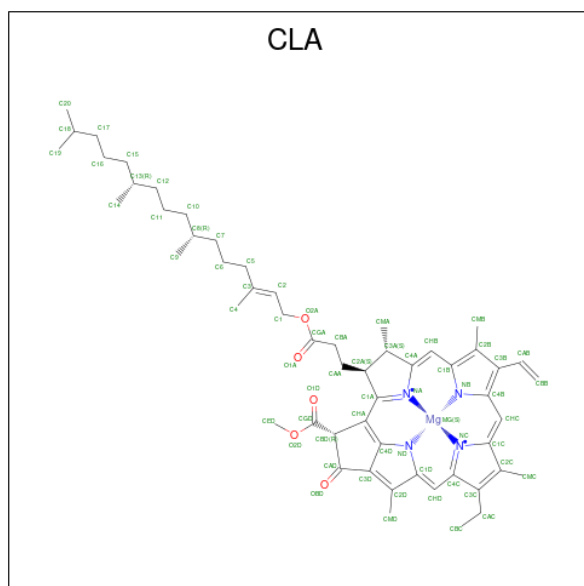
- Molecule 20 is a protein called Photosystem II reaction center protein Z.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|----------|---------|---------|---------|---------|-------|---|
| | | | Total | C | H | N | O | | | | S |
| 20 | Z | 62 | Total 995 | C 328 | H 516 | N 72 | O 77 | S 2 | 0 | 0 | 0 |
| 20 | z | 62 | Total 986 | C 326 | H 509 | N 72 | O 77 | S 2 | 0 | 0 | 0 |

- Molecule 21 is FE (II) ION (three-letter code: FE2) (formula: Fe).

| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|-----------------|---------|---------|
| 21 | A | 1 | Total Fe 1 1 | 0 | 0 |
| 21 | a | 1 | Total Fe 1 1 | 0 | 0 |

- Molecule 22 is CHLOROPHYLL A (three-letter code: CLA) (formula: C₅₅H₇₂MgN₄O₅).



| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|--------------|---------|---------|---------|--------|---------|---------|---|
| 22 | A | 1 | Total 137 | C 55 | H 72 | Mg 1 | N 4 | O 5 | 0 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|----|---|---------|---------|---|
| 22 | A | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | A | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 102 | 44 | 48 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | B | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 119 | 50 | 59 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 117 | 49 | 58 | 1 | 4 | 5 | | |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|----|---|---------|---------|---|
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | C | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | D | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | D | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | D | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | H | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | a | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | a | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | a | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |

Continued on next page...

Continued from previous page...

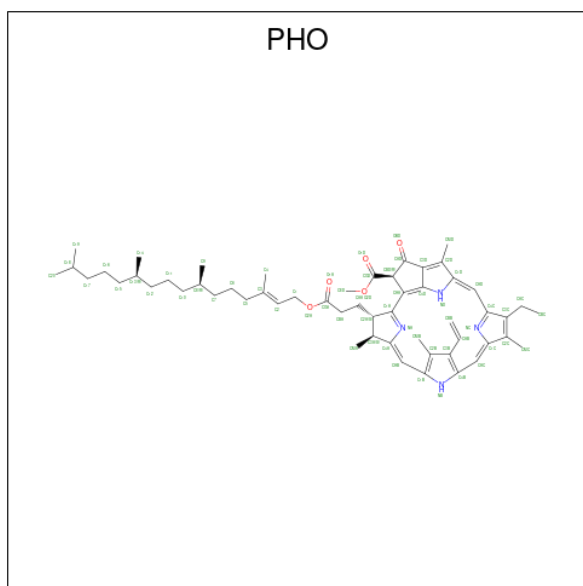
| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|----|---|---------|---------|---|
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | b | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 119 | 50 | 59 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 132 | 54 | 68 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|----|---|---------|---------|---|
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | c | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | d | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | d | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |
| 22 | d | 1 | Total | C | H | Mg | N | O | 0 | 0 |
| | | | 137 | 55 | 72 | 1 | 4 | 5 | | |

- Molecule 23 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).

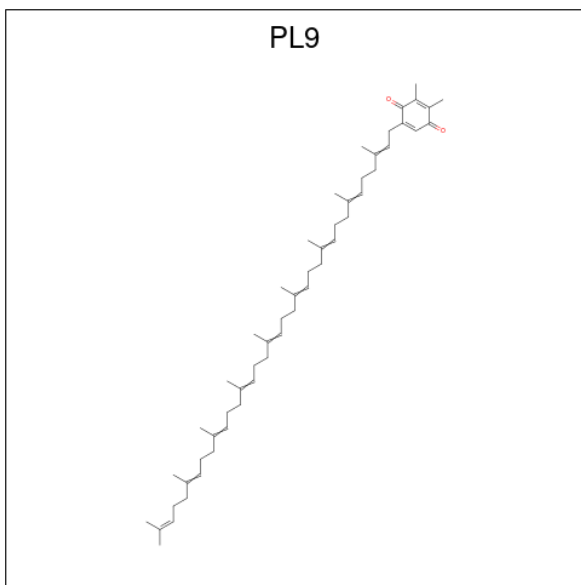


| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|---|---------|---------|---|
| 23 | A | 1 | Total | C | H | N | O | 0 | 0 |
| | | | 138 | 55 | 74 | 4 | 5 | | |
| 23 | D | 1 | Total | C | H | N | O | 0 | 0 |
| | | | 138 | 55 | 74 | 4 | 5 | | |
| 23 | a | 1 | Total | C | H | N | O | 0 | 0 |
| | | | 138 | 55 | 74 | 4 | 5 | | |
| 23 | d | 1 | Total | C | H | N | O | 0 | 0 |
| | | | 138 | 55 | 74 | 4 | 5 | | |

- Molecule 24 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

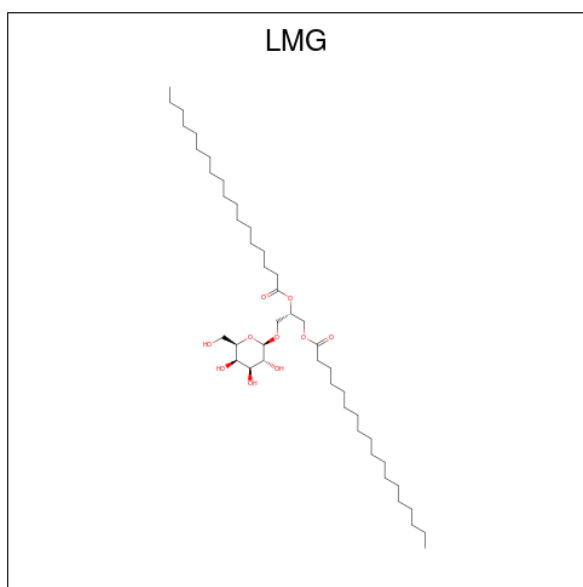
| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|-----------------|---------|---------|
| 24 | A | 2 | Total Cl 2 2 | 0 | 0 |
| 24 | a | 2 | Total Cl 2 2 | 0 | 0 |

- Molecule 25 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula: $C_{53}H_{80}O_2$) (labeled as "Ligand of Interest" by depositor).



| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|----------------------------|---------|---------|
| 25 | A | 1 | Total C H O 135 53 80 2 | 0 | 0 |
| 25 | D | 1 | Total C H O 135 53 80 2 | 0 | 0 |
| 25 | a | 1 | Total C H O 135 53 80 2 | 0 | 0 |
| 25 | d | 1 | Total C H O 135 53 80 2 | 0 | 0 |

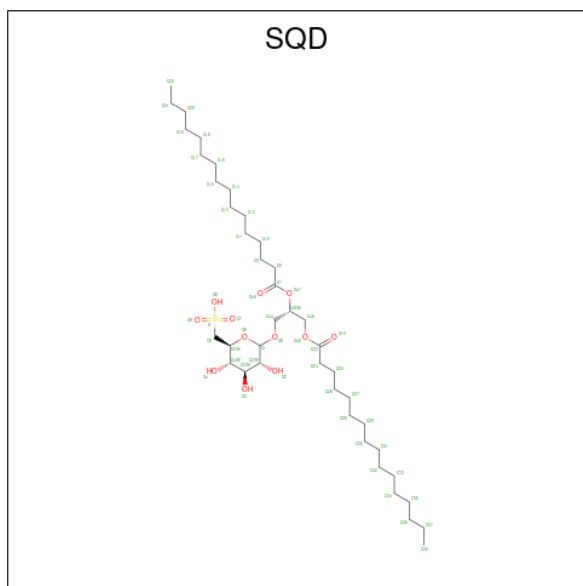
- Molecule 26 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|----|---------|---------|
| | | | Total | C | H | O | | |
| 26 | A | 1 | Total | C | H | O | 0 | 0 |
| | | | 114 | 38 | 66 | 10 | | |
| 26 | B | 1 | Total | C | H | O | 0 | 0 |
| | | | 68 | 24 | 40 | 4 | | |
| 26 | D | 1 | Total | C | H | O | 0 | 0 |
| | | | 120 | 41 | 69 | 10 | | |
| 26 | D | 1 | Total | C | H | O | 0 | 0 |
| | | | 78 | 27 | 45 | 6 | | |
| 26 | M | 1 | Total | C | H | O | 0 | 0 |
| | | | 120 | 41 | 69 | 10 | | |
| 26 | Y | 1 | Total | C | H | O | 0 | 0 |
| | | | 114 | 38 | 66 | 10 | | |
| 26 | a | 1 | Total | C | H | O | 0 | 0 |
| | | | 140 | 45 | 85 | 10 | | |
| 26 | b | 1 | Total | C | H | O | 0 | 0 |
| | | | 141 | 45 | 86 | 10 | | |
| 26 | c | 1 | Total | C | H | O | 0 | 0 |
| | | | 79 | 27 | 42 | 10 | | |
| 26 | c | 1 | Total | C | H | O | 0 | 0 |
| | | | 116 | 38 | 68 | 10 | | |
| 26 | c | 1 | Total | C | H | O | 0 | 0 |
| | | | 117 | 39 | 68 | 10 | | |
| 26 | d | 1 | Total | C | H | O | 0 | 0 |
| | | | 101 | 34 | 57 | 10 | | |
| 26 | m | 1 | Total | C | H | O | 0 | 0 |
| | | | 122 | 41 | 71 | 10 | | |

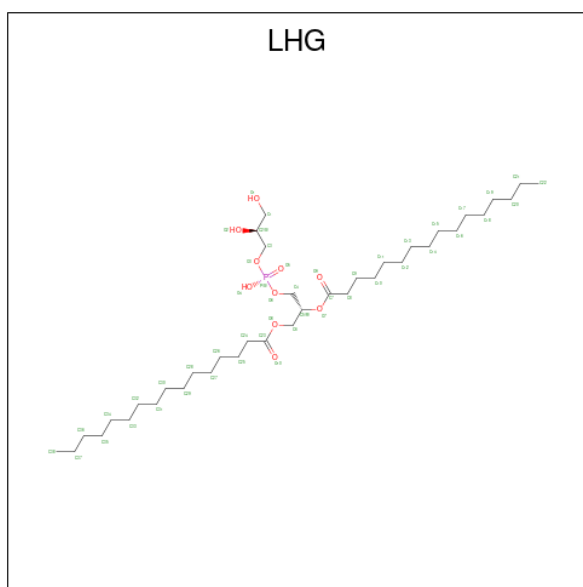
- Molecule 27 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSY]

L]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



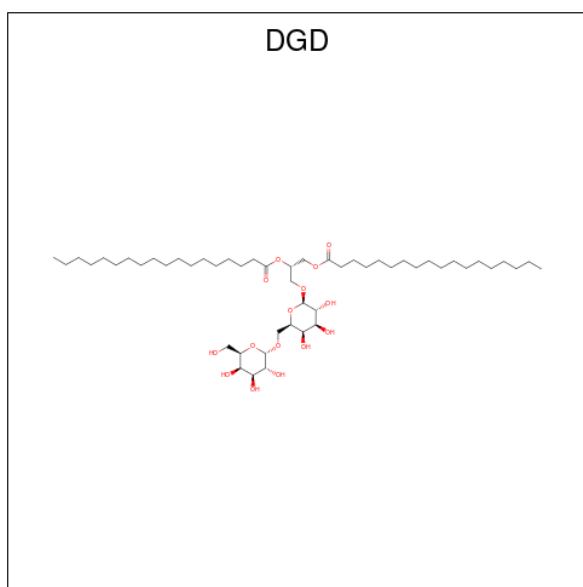
| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|----|---|---------|---------|
| 27 | A | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 121 | 39 | 69 | 12 | 1 | | |
| 27 | A | 1 | Total | C | H | O | | 0 | 0 |
| | | | 104 | 35 | 65 | 4 | | | |
| 27 | B | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 131 | 41 | 77 | 12 | 1 | | |
| 27 | D | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 81 | 25 | 45 | 10 | 1 | | |
| 27 | L | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 114 | 36 | 65 | 12 | 1 | | |
| 27 | a | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 131 | 41 | 77 | 12 | 1 | | |
| 27 | f | 1 | Total | C | H | O | S | 0 | 0 |
| | | | 89 | 28 | 48 | 12 | 1 | | |
| 27 | t | 1 | Total | C | H | O | | 0 | 0 |
| | | | 92 | 31 | 56 | 5 | | | |

- Molecule 28 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



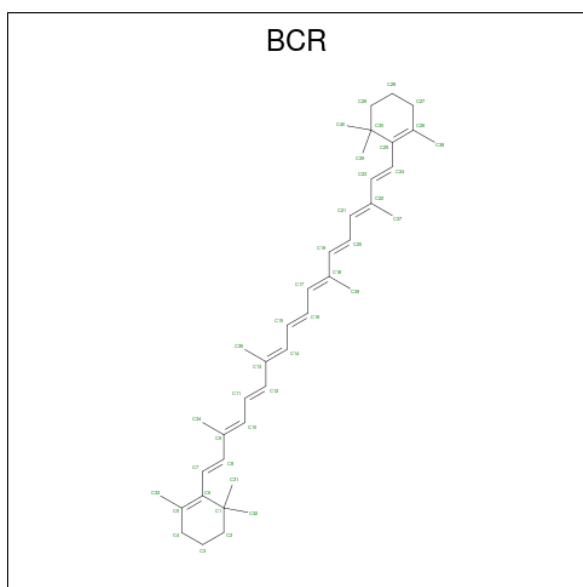
| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf |
|-----|-------|----------|--------------|---------|---------|---------|--------|---------|---------|
| | | | Total | C | H | O | P | | |
| 28 | A | 1 | Total 121 | C 38 | H 72 | O 10 | P 1 | 0 | 0 |
| 28 | D | 1 | Total 122 | C 38 | H 73 | O 10 | P 1 | 0 | 0 |
| 28 | D | 1 | Total 113 | C 36 | H 66 | O 10 | P 1 | 0 | 0 |
| 28 | D | 1 | Total 121 | C 38 | H 72 | O 10 | P 1 | 0 | 0 |
| 28 | L | 1 | Total 122 | C 38 | H 73 | O 10 | P 1 | 0 | 0 |
| 28 | a | 1 | Total 97 | C 31 | H 55 | O 10 | P 1 | 0 | 0 |
| 28 | b | 1 | Total 122 | C 38 | H 73 | O 10 | P 1 | 0 | 0 |
| 28 | d | 1 | Total 121 | C 38 | H 72 | O 10 | P 1 | 0 | 0 |
| 28 | d | 1 | Total 88 | C 28 | H 49 | O 10 | P 1 | 0 | 0 |
| 28 | l | 1 | Total 123 | C 38 | H 74 | O 10 | P 1 | 0 | 0 |

- Molecule 29 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf |
|-----|-------|----------|--------------|---------|---------|---------|---------|---------|
| | | | Total | C | H | O | | |
| 29 | A | 1 | Total 160 | C 51 | H 94 | O 15 | 0 | 0 |
| 29 | C | 1 | Total 143 | C 47 | H 81 | O 15 | 0 | 0 |
| 29 | C | 1 | Total 143 | C 47 | H 81 | O 15 | 0 | 0 |
| 29 | C | 1 | Total 141 | C 47 | H 79 | O 15 | 0 | 0 |
| 29 | H | 1 | Total 139 | C 47 | H 77 | O 15 | 0 | 0 |
| 29 | c | 1 | Total 141 | C 47 | H 79 | O 15 | 0 | 0 |
| 29 | c | 1 | Total 140 | C 47 | H 78 | O 15 | 0 | 0 |
| 29 | c | 1 | Total 139 | C 47 | H 77 | O 15 | 0 | 0 |
| 29 | h | 1 | Total 141 | C 47 | H 79 | O 15 | 0 | 0 |

- Molecule 30 is BETA-CAROTENE (three-letter code: BCR) (formula: C₄₀H₅₆).



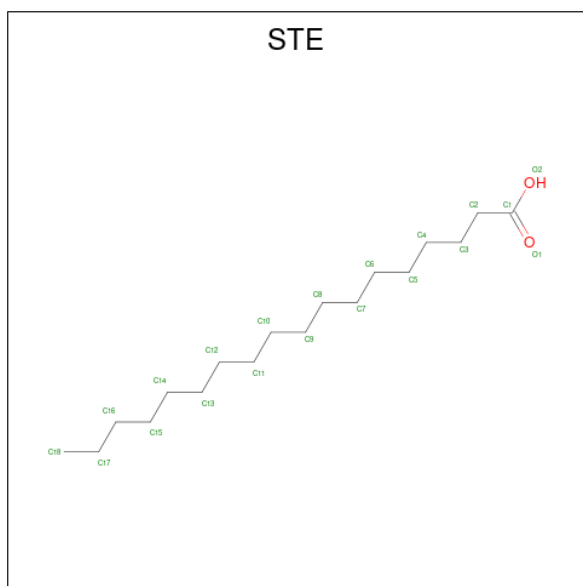
| Mol | Chain | Residues | Atoms | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|---------|---------|
| 30 | B | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | B | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | B | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | C | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | C | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | D | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | H | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | I | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | K | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | K | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | T | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | a | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | b | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | b | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|---------|---------|
| 30 | b | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | c | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | d | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | k | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | k | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | k | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | t | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |
| 30 | x | 1 | Total | C | H | 0 | 0 |
| | | | 96 | 40 | 56 | | |

- Molecule 31 is STEARIC ACID (three-letter code: STE) (formula: $C_{18}H_{36}O_2$).



| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|---|---------|---------|
| 31 | B | 1 | Total | C | H | O | 0 | 0 |
| | | | 43 | 15 | 26 | 2 | | |
| 31 | B | 1 | Total | C | H | O | 0 | 0 |
| | | | 28 | 10 | 16 | 2 | | |
| 31 | B | 1 | Total | C | H | O | 0 | 0 |
| | | | 46 | 16 | 28 | 2 | | |

Continued on next page...

Continued from previous page...

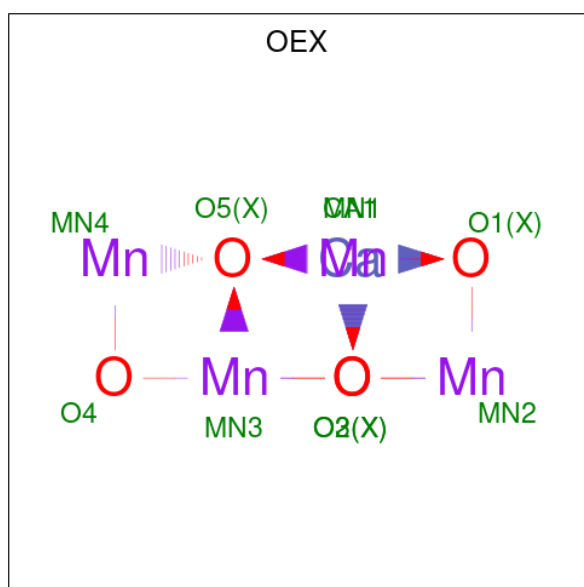
| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|---------------------------|---------|---------|
| 31 | B | 1 | Total C H 47 16 31 | 0 | 0 |
| 31 | B | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | C | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | C | 1 | Total C H 47 16 31 | 0 | 0 |
| 31 | C | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | H | 1 | Total C H 53 18 35 | 0 | 0 |
| 31 | I | 1 | Total C H 41 15 26 | 0 | 0 |
| 31 | J | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | L | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | M | 1 | Total C H O 37 13 22 2 | 0 | 0 |
| 31 | M | 1 | Total C H 26 10 16 | 0 | 0 |
| 31 | M | 1 | Total C H 53 18 35 | 0 | 0 |
| 31 | R | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | X | 1 | Total C H O 55 18 35 2 | 0 | 0 |
| 31 | Z | 1 | Total C H 20 8 12 | 0 | 0 |
| 31 | a | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | a | 1 | Total C H 41 15 26 | 0 | 0 |
| 31 | b | 1 | Total C H 47 16 31 | 0 | 0 |
| 31 | b | 1 | Total C H O 55 18 35 2 | 0 | 0 |
| 31 | b | 1 | Total C H O 40 14 24 2 | 0 | 0 |
| 31 | b | 1 | Total C H 44 15 29 | 0 | 0 |

Continued on next page...

Continued from previous page...

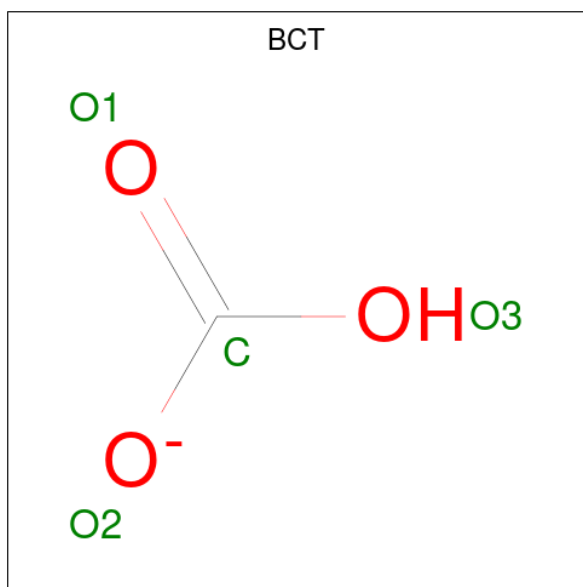
| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|---------------------------|---------|---------|
| 31 | b | 1 | Total C H O 55 18 35 2 | 0 | 0 |
| 31 | b | 1 | Total C H 26 10 16 | 0 | 0 |
| 31 | b | 1 | Total C H 41 14 27 | 0 | 0 |
| 31 | b | 1 | Total C H O 55 18 35 2 | 0 | 0 |
| 31 | c | 1 | Total C H O 55 18 35 2 | 0 | 0 |
| 31 | d | 1 | Total C H O 43 15 26 2 | 0 | 0 |
| 31 | j | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | k | 1 | Total C H O 28 10 16 2 | 0 | 0 |
| 31 | t | 1 | Total C H O 34 12 20 2 | 0 | 0 |
| 31 | t | 1 | Total C H 26 10 16 | 0 | 0 |
| 31 | x | 1 | Total C H O 55 18 35 2 | 0 | 0 |

- Molecule 32 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn_4O_5).



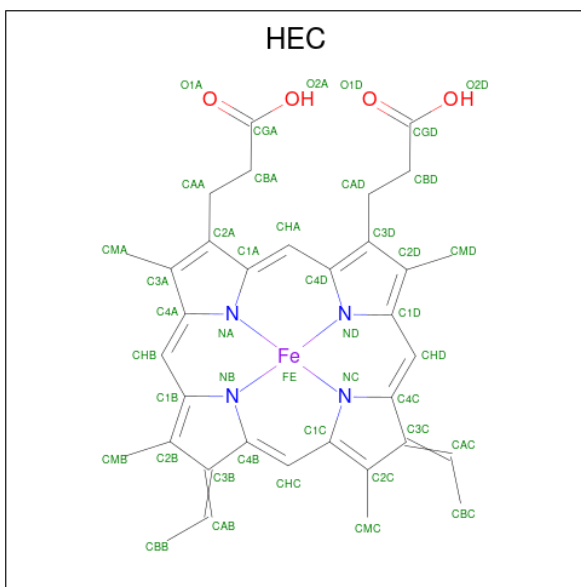
| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|----|---|---------|---------|
| | | | Total | Ca | Mn | O | | |
| 32 | C | 1 | 10 | 1 | 4 | 5 | 0 | 0 |
| 32 | a | 1 | 10 | 1 | 4 | 5 | 0 | 0 |

- Molecule 33 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf |
|-----|-------|----------|-------|---|---|---|---------|---------|
| | | | Total | C | H | O | | |
| 33 | D | 1 | 5 | 1 | 1 | 3 | 0 | 0 |
| 33 | d | 1 | 5 | 1 | 1 | 3 | 0 | 0 |

- Molecule 34 is HEME C (three-letter code: HEC) (formula: $\text{C}_{34}\text{H}_{34}\text{FeN}_4\text{O}_4$).



| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | |
|-----|-------|----------|-------|----|----|----|---|---------|---------|---|
| | | | Total | C | Fe | H | N | | | O |
| 34 | F | 1 | 75 | 34 | 1 | 32 | 4 | 4 | 0 | 0 |
| 34 | V | 1 | 73 | 34 | 1 | 30 | 4 | 4 | 0 | 0 |
| 34 | f | 1 | 75 | 34 | 1 | 32 | 4 | 4 | 0 | 0 |
| 34 | v | 1 | 73 | 34 | 1 | 30 | 4 | 4 | 0 | 0 |

- Molecule 35 is SODIUM ION (three-letter code: NA) (formula: Na).

| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|---------|---------|
| 35 | V | 1 | Total | Na | 0 | 0 |
| | | | 1 | 1 | | |

- Molecule 36 is water.

| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|-------|-----|---------|---------|
| 36 | A | 112 | Total | O | 0 | 0 |
| | | | 112 | 112 | | |
| 36 | B | 142 | Total | O | 0 | 0 |
| | | | 142 | 142 | | |
| 36 | C | 125 | Total | O | 0 | 0 |
| | | | 125 | 125 | | |
| 36 | D | 96 | Total | O | 0 | 0 |
| | | | 96 | 96 | | |

Continued on next page...

Continued from previous page...

| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|--------------------|---------|---------|
| 36 | E | 22 | Total O 22 22 | 0 | 0 |
| 36 | F | 6 | Total O 6 6 | 0 | 0 |
| 36 | H | 16 | Total O 16 16 | 0 | 0 |
| 36 | I | 10 | Total O 10 10 | 0 | 0 |
| 36 | J | 14 | Total O 14 14 | 0 | 0 |
| 36 | K | 3 | Total O 3 3 | 0 | 0 |
| 36 | L | 10 | Total O 10 10 | 0 | 0 |
| 36 | M | 9 | Total O 9 9 | 0 | 0 |
| 36 | O | 60 | Total O 60 60 | 0 | 0 |
| 36 | R | 11 | Total O 11 11 | 0 | 0 |
| 36 | T | 8 | Total O 8 8 | 0 | 0 |
| 36 | U | 28 | Total O 28 28 | 0 | 0 |
| 36 | V | 49 | Total O 49 49 | 0 | 0 |
| 36 | X | 10 | Total O 10 10 | 0 | 0 |
| 36 | Y | 2 | Total O 2 2 | 0 | 0 |
| 36 | Z | 7 | Total O 7 7 | 0 | 0 |
| 36 | a | 96 | Total O 96 96 | 0 | 0 |
| 36 | b | 116 | Total O 116 116 | 0 | 0 |
| 36 | c | 108 | Total O 108 108 | 0 | 0 |
| 36 | d | 87 | Total O 87 87 | 0 | 0 |
| 36 | e | 11 | Total O 11 11 | 0 | 0 |

Continued on next page...

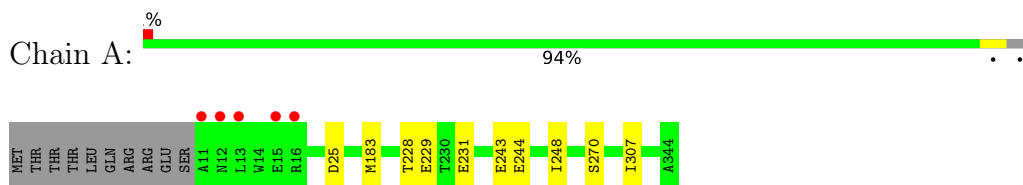
Continued from previous page...

| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|------------------|---------|---------|
| 36 | f | 7 | Total O 7 7 | 0 | 0 |
| 36 | h | 17 | Total O 17 17 | 0 | 0 |
| 36 | i | 14 | Total O 14 14 | 0 | 0 |
| 36 | j | 8 | Total O 8 8 | 0 | 0 |
| 36 | k | 7 | Total O 7 7 | 0 | 0 |
| 36 | l | 11 | Total O 11 11 | 0 | 0 |
| 36 | m | 4 | Total O 4 4 | 0 | 0 |
| 36 | o | 67 | Total O 67 67 | 0 | 0 |
| 36 | r | 3 | Total O 3 3 | 0 | 0 |
| 36 | t | 8 | Total O 8 8 | 0 | 0 |
| 36 | u | 34 | Total O 34 34 | 0 | 0 |
| 36 | v | 30 | Total O 30 30 | 0 | 0 |
| 36 | x | 6 | Total O 6 6 | 0 | 0 |
| 36 | y | 12 | Total O 12 12 | 0 | 0 |
| 36 | z | 6 | Total O 6 6 | 0 | 0 |

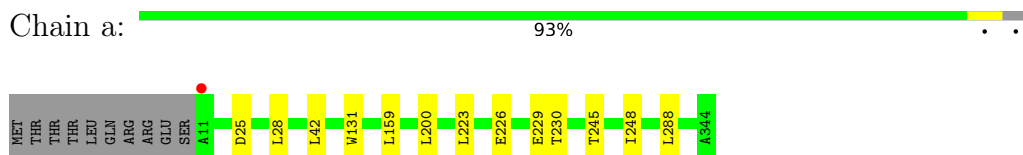
3 Residue-property plots [i](#)

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 electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

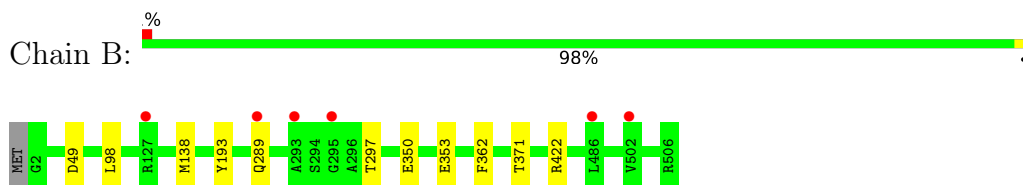
- Molecule 1: Photosystem II protein D1 1



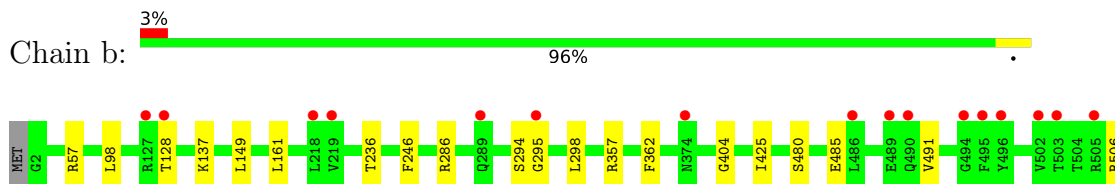
- Molecule 1: Photosystem II protein D1 1



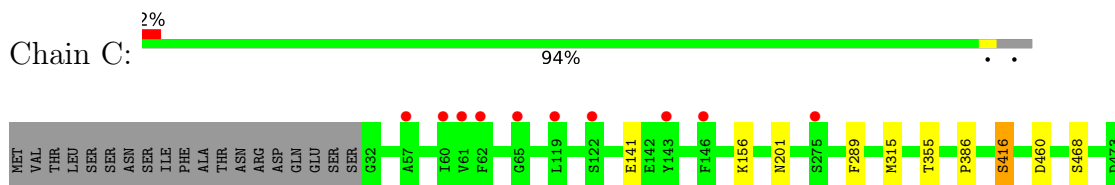
- Molecule 2: Photosystem II CP47 reaction center protein



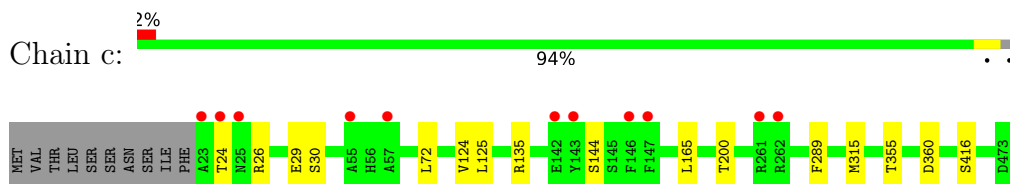
- Molecule 2: Photosystem II CP47 reaction center protein



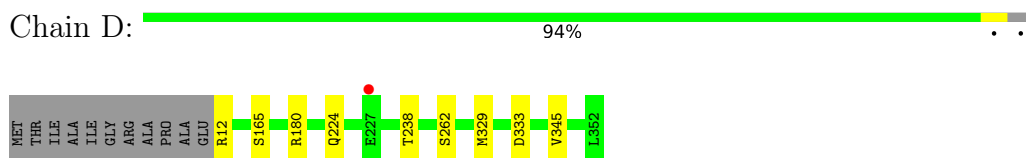
- Molecule 3: Photosystem II CP43 reaction center protein



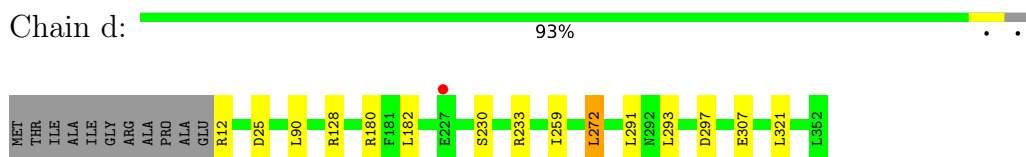
- Molecule 3: Photosystem II CP43 reaction center protein



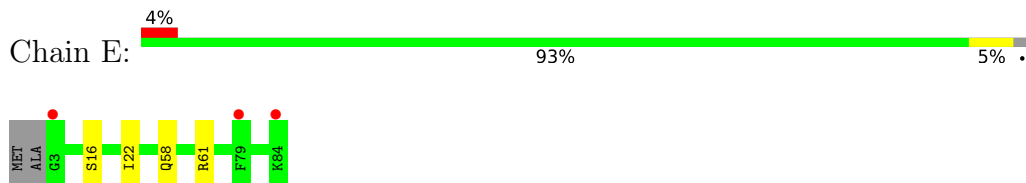
• Molecule 4: Photosystem II D2 protein



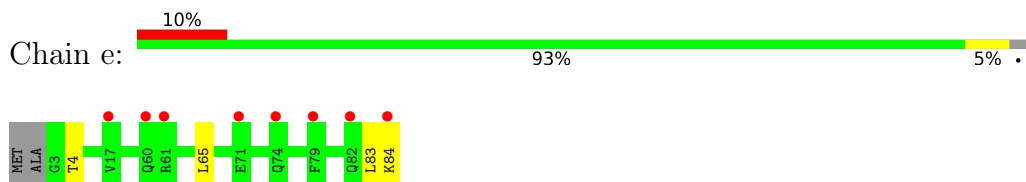
• Molecule 4: Photosystem II D2 protein



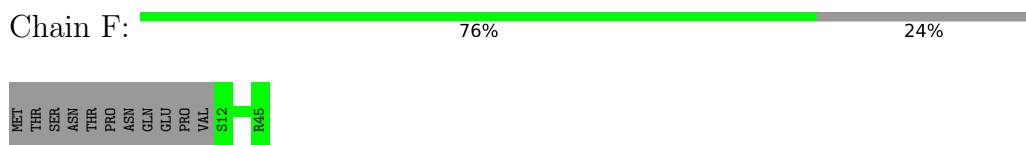
• Molecule 5: Cytochrome b559 subunit alpha



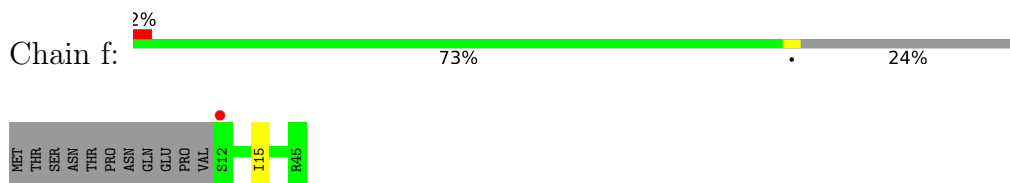
• Molecule 5: Cytochrome b559 subunit alpha



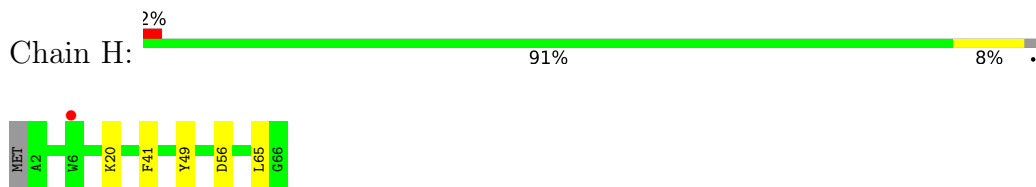
• Molecule 6: Cytochrome b559 subunit beta



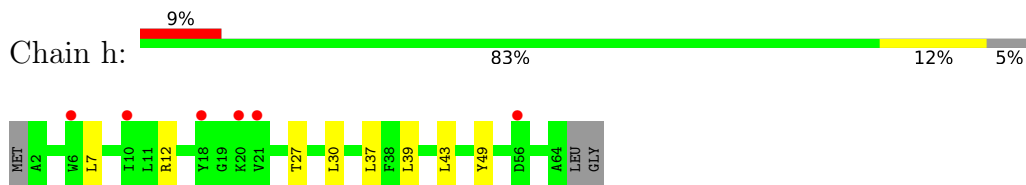
• Molecule 6: Cytochrome b559 subunit beta



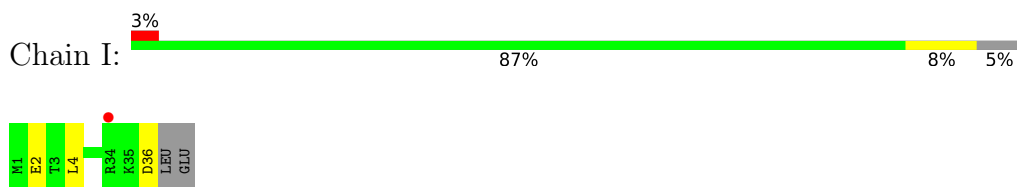
- Molecule 7: Photosystem II reaction center protein H



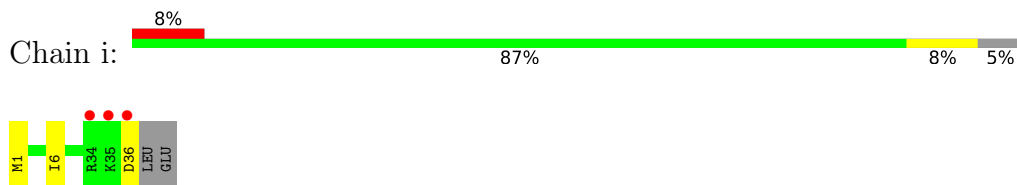
- Molecule 7: Photosystem II reaction center protein H



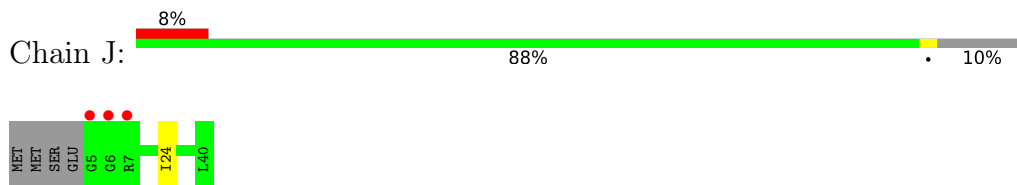
- Molecule 8: Photosystem II reaction center protein I



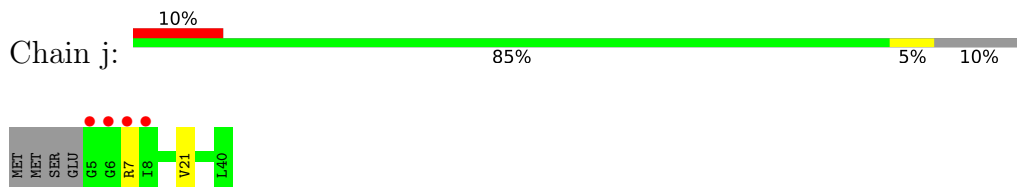
- Molecule 8: Photosystem II reaction center protein I



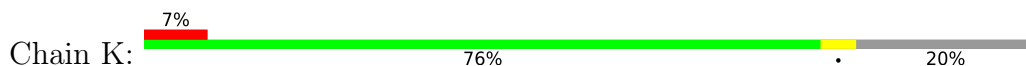
- Molecule 9: Photosystem II reaction center protein J

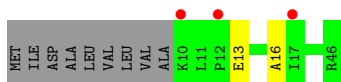


- Molecule 9: Photosystem II reaction center protein J



- Molecule 10: Photosystem II reaction center protein K





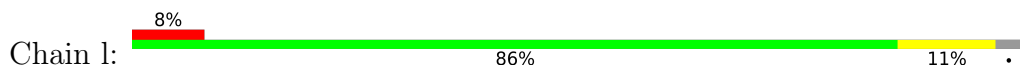
- Molecule 10: Photosystem II reaction center protein K



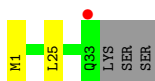
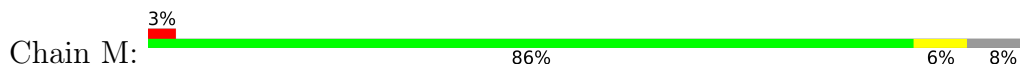
- Molecule 11: Photosystem II reaction center protein L



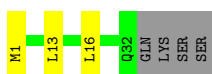
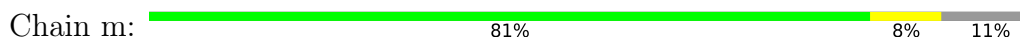
- Molecule 11: Photosystem II reaction center protein L



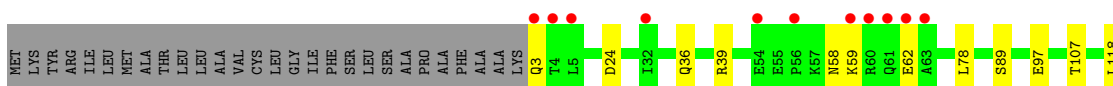
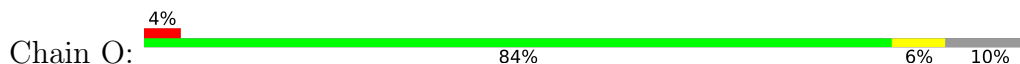
- Molecule 12: Photosystem II reaction center protein M



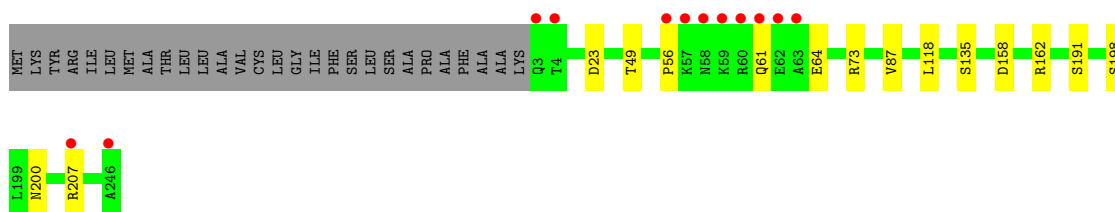
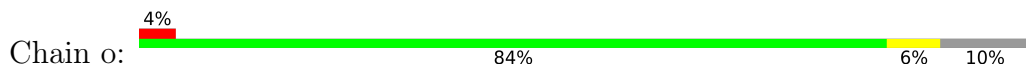
- Molecule 12: Photosystem II reaction center protein M



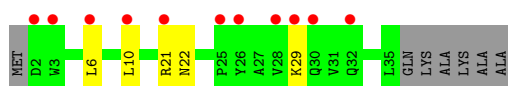
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



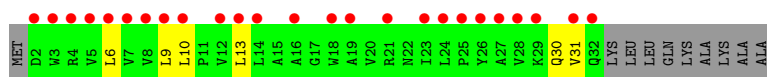
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



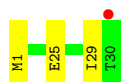
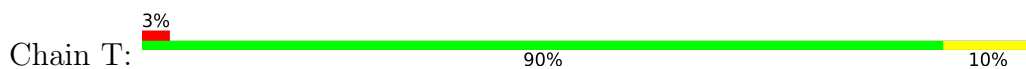
- Molecule 14: Photosystem II protein Y



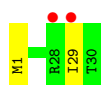
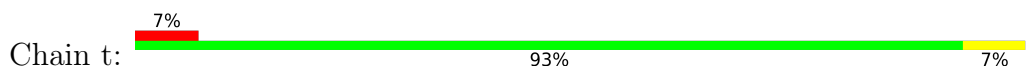
- Molecule 14: Photosystem II protein Y



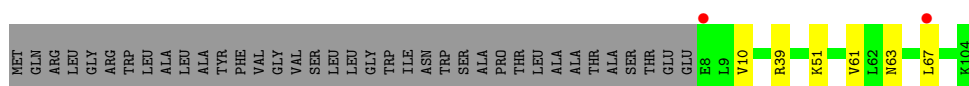
- Molecule 15: Photosystem II reaction center protein T



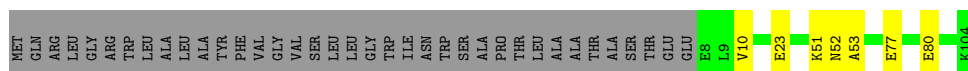
- Molecule 15: Photosystem II reaction center protein T



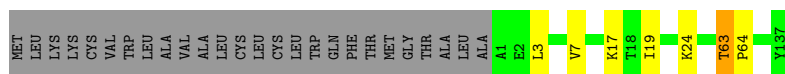
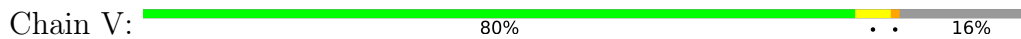
- Molecule 16: Photosystem II 12 kDa extrinsic protein



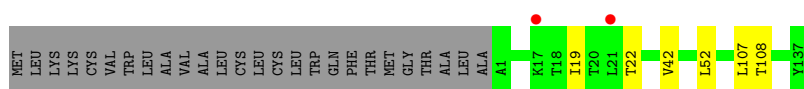
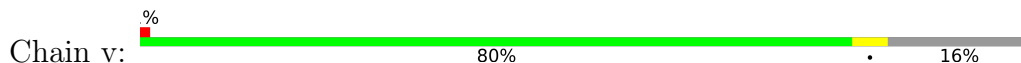
- Molecule 16: Photosystem II 12 kDa extrinsic protein



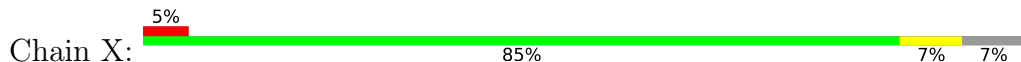
● Molecule 17: Cytochrome c-550



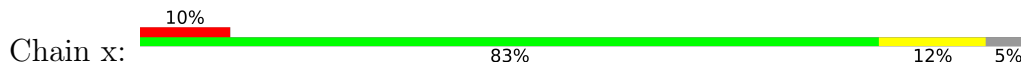
● Molecule 17: Cytochrome c-550



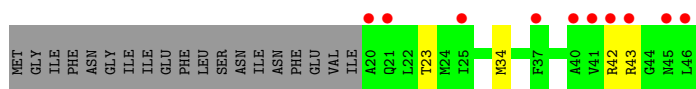
● Molecule 18: Photosystem II reaction center X protein



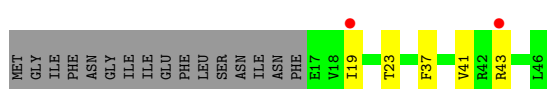
● Molecule 18: Photosystem II reaction center X protein




● Molecule 19: Photosystem II reaction center protein Ycf12

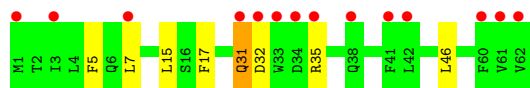


● Molecule 19: Photosystem II reaction center protein Ycf12




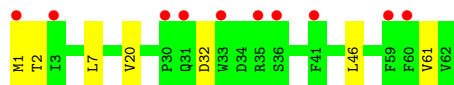
● Molecule 20: Photosystem II reaction center protein Z

Chain Z:  23% 87% 11%



● Molecule 20: Photosystem II reaction center protein Z

Chain z:  16% 89% 11%



4 Data and refinement statistics

| Property | Value | Source |
|---|---|------------------|
| Space group | P 21 21 21 | Depositor |
| Cell constants a, b, c, α , β , γ | 117.07Å 222.05Å 308.36Å 90.00° 90.00° 90.00° | Depositor |
| Resolution (Å) | 33.45 – 2.27 33.45 – 2.27 | Depositor EDS |
| % Data completeness (in resolution range) | 99.5 (33.45-2.27) 84.3 (33.45-2.27) | Depositor EDS |
| R_{merge} | (Not available) | Depositor |
| R_{sym} | (Not available) | Depositor |
| $\langle I/\sigma(I) \rangle$ ¹ | 0.58 (at 2.27Å) | Xtrriage |
| Refinement program | PHENIX 1.17.1_3660 | Depositor |
| R, R_{free} | 0.178 , 0.249 0.178 , 0.249 | Depositor DCC |
| R_{free} test set | 3275 reflections (0.89%) | wwPDB-VP |
| Wilson B-factor (Å ²) | 30.9 | Xtrriage |
| Anisotropy | 0.204 | Xtrriage |
| Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²) | 0.32 , 63.1 | EDS |
| L-test for twinning ² | $\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.28$ | Xtrriage |
| Estimated twinning fraction | No twinning to report. | Xtrriage |
| F_o, F_c correlation | 0.95 | EDS |
| Total number of atoms | 103197 | wwPDB-VP |
| Average B, all atoms (Å ²) | 53.0 | wwPDB-VP |

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.47% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: FE2, STE, BCR, PL9, CLA, LMG, CL, LHG, NA, OEX, HEC, BCT, SQD, DGD, PHO, FME

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 | A | 0.70 | 0/2707 | 0.75 | 2/3692 (0.1%) |
| 1 | a | 0.71 | 0/2704 | 0.73 | 2/3688 (0.1%) |
| 2 | B | 0.70 | 1/4161 (0.0%) | 0.72 | 2/5669 (0.0%) |
| 2 | b | 0.67 | 0/4118 | 0.72 | 1/5611 (0.0%) |
| 3 | C | 0.67 | 1/3547 (0.0%) | 0.72 | 1/4830 (0.0%) |
| 3 | c | 0.64 | 0/3619 | 0.72 | 1/4926 (0.0%) |
| 4 | D | 0.72 | 0/2812 | 0.73 | 2/3832 (0.1%) |
| 4 | d | 0.70 | 0/2821 | 0.75 | 4/3844 (0.1%) |
| 5 | E | 0.64 | 0/688 | 0.65 | 0/940 |
| 5 | e | 0.60 | 0/683 | 0.65 | 0/932 |
| 6 | F | 0.53 | 0/284 | 0.62 | 0/387 |
| 6 | f | 0.50 | 0/284 | 0.67 | 0/387 |
| 7 | H | 0.70 | 1/523 (0.2%) | 0.73 | 0/713 |
| 7 | h | 0.60 | 0/511 | 0.72 | 0/697 |
| 8 | I | 0.67 | 0/293 | 0.72 | 0/396 |
| 8 | i | 0.69 | 0/293 | 0.69 | 0/396 |
| 9 | J | 0.58 | 0/263 | 0.67 | 0/356 |
| 9 | j | 0.57 | 0/263 | 0.63 | 0/356 |
| 10 | K | 0.64 | 0/303 | 0.67 | 0/416 |
| 10 | k | 0.52 | 0/303 | 0.64 | 0/416 |
| 11 | L | 0.69 | 0/311 | 0.77 | 0/422 |
| 11 | l | 0.75 | 0/303 | 0.73 | 0/412 |
| 12 | M | 0.68 | 0/249 | 0.66 | 0/341 |
| 12 | m | 0.73 | 0/244 | 0.77 | 0/334 |
| 13 | O | 0.66 | 0/1904 | 0.77 | 0/2585 |
| 13 | o | 0.69 | 0/1905 | 0.81 | 2/2583 (0.1%) |
| 14 | R | 0.50 | 0/277 | 0.60 | 0/380 |
| 14 | r | 0.43 | 0/246 | 0.54 | 0/339 |
| 15 | T | 0.83 | 0/257 | 0.80 | 0/349 |
| 15 | t | 0.78 | 0/255 | 0.67 | 0/346 |
| 16 | U | 0.60 | 0/785 | 0.71 | 0/1064 |
| 16 | u | 0.67 | 0/785 | 0.78 | 0/1064 |

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|----------------|-------------|-----------------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 17 | V | 0.62 | 0/1085 | 0.74 | 1/1473 (0.1%) |
| 17 | v | 0.59 | 0/1085 | 0.71 | 0/1473 |
| 18 | X | 0.62 | 0/284 | 0.74 | 0/384 |
| 18 | x | 0.51 | 0/289 | 0.68 | 0/391 |
| 19 | Y | 0.49 | 0/197 | 0.71 | 0/264 |
| 19 | y | 0.41 | 0/219 | 0.59 | 0/294 |
| 20 | Z | 0.50 | 0/490 | 0.60 | 0/669 |
| 20 | z | 0.49 | 0/488 | 0.59 | 0/666 |
| All | All | 0.67 | 3/42838 (0.0%) | 0.72 | 18/58317 (0.0%) |

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 |
|-----|-------|---------------------|---------------------|
| 16 | u | 0 | 1 |
| 17 | V | 0 | 1 |
| All | All | 0 | 2 |

All (3) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | C | 468 | SER | C-N | -7.38 | 1.17 | 1.34 |
| 2 | B | 193 | TYR | CD2-CE2 | -6.56 | 1.29 | 1.39 |
| 7 | H | 41 | PHE | CB-CG | -5.27 | 1.42 | 1.51 |

All (18) bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-----------|-------|-------------|----------|
| 2 | b | 57 | ARG | NE-CZ-NH1 | -7.43 | 116.59 | 120.30 |
| 17 | V | 63 | THR | C-N-CD | -7.34 | 104.45 | 120.60 |
| 3 | C | 460 | ASP | CB-CG-OD1 | 6.72 | 124.35 | 118.30 |
| 4 | d | 128 | ARG | NE-CZ-NH2 | -6.60 | 117.00 | 120.30 |
| 13 | o | 162 | ARG | NE-CZ-NH2 | 6.60 | 123.60 | 120.30 |
| 13 | o | 158 | ASP | CB-CG-OD1 | 6.55 | 124.20 | 118.30 |
| 1 | A | 183 | MET | CA-CB-CG | 6.51 | 124.36 | 113.30 |
| 4 | d | 297 | ASP | CB-CG-OD1 | 6.36 | 124.02 | 118.30 |
| 4 | d | 272 | LEU | CB-CG-CD1 | -5.94 | 100.90 | 111.00 |
| 2 | B | 422 | ARG | NE-CZ-NH1 | -5.76 | 117.42 | 120.30 |
| 4 | D | 333 | ASP | CB-CG-OD2 | -5.76 | 113.12 | 118.30 |
| 4 | D | 333 | ASP | CB-CG-OD1 | 5.70 | 123.43 | 118.30 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-----------|-------|-------------|----------|
| 2 | B | 49 | ASP | CB-CG-OD1 | 5.53 | 123.28 | 118.30 |
| 3 | c | 360 | ASP | CB-CG-OD2 | -5.44 | 113.41 | 118.30 |
| 1 | a | 25 | ASP | CB-CG-OD1 | 5.35 | 123.11 | 118.30 |
| 1 | A | 25 | ASP | CB-CG-OD1 | 5.23 | 123.01 | 118.30 |
| 4 | d | 272 | LEU | CA-CB-CG | 5.18 | 127.22 | 115.30 |
| 1 | a | 131 | TRP | CA-CB-CG | -5.11 | 103.99 | 113.70 |

There are no chirality outliers.

All (2) planarity outliers are listed below:

| Mol | Chain | Res | Type | Group |
|-----|-------|-----|------|---------|
| 17 | V | 63 | THR | Peptide |
| 16 | u | 52 | ASN | Peptide |

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|----------------|-----------|---------|----------|-------------|-----|
| 1 | A | 332/344 (96%) | 324 (98%) | 8 (2%) | 0 | 100 | 100 |
| 1 | a | 332/344 (96%) | 324 (98%) | 8 (2%) | 0 | 100 | 100 |
| 2 | B | 508/506 (100%) | 494 (97%) | 14 (3%) | 0 | 100 | 100 |
| 2 | b | 503/506 (99%) | 484 (96%) | 16 (3%) | 3 (1%) | 25 | 29 |
| 3 | C | 442/461 (96%) | 423 (96%) | 18 (4%) | 1 (0%) | 47 | 57 |
| 3 | c | 451/461 (98%) | 437 (97%) | 13 (3%) | 1 (0%) | 47 | 57 |
| 4 | D | 339/352 (96%) | 331 (98%) | 8 (2%) | 0 | 100 | 100 |
| 4 | d | 340/352 (97%) | 327 (96%) | 13 (4%) | 0 | 100 | 100 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|---------|----------|-------------|-----|
| 5 | E | 81/84 (96%) | 78 (96%) | 2 (2%) | 1 (1%) | 13 | 12 |
| 5 | e | 80/84 (95%) | 78 (98%) | 1 (1%) | 1 (1%) | 12 | 11 |
| 6 | F | 32/45 (71%) | 32 (100%) | 0 | 0 | 100 | 100 |
| 6 | f | 32/45 (71%) | 28 (88%) | 4 (12%) | 0 | 100 | 100 |
| 7 | H | 63/66 (96%) | 60 (95%) | 3 (5%) | 0 | 100 | 100 |
| 7 | h | 61/66 (92%) | 55 (90%) | 6 (10%) | 0 | 100 | 100 |
| 8 | I | 34/38 (90%) | 33 (97%) | 1 (3%) | 0 | 100 | 100 |
| 8 | i | 34/38 (90%) | 33 (97%) | 1 (3%) | 0 | 100 | 100 |
| 9 | J | 34/40 (85%) | 32 (94%) | 2 (6%) | 0 | 100 | 100 |
| 9 | j | 34/40 (85%) | 32 (94%) | 2 (6%) | 0 | 100 | 100 |
| 10 | K | 35/46 (76%) | 33 (94%) | 1 (3%) | 1 (3%) | 4 | 2 |
| 10 | k | 35/46 (76%) | 32 (91%) | 2 (6%) | 1 (3%) | 4 | 2 |
| 11 | L | 35/37 (95%) | 35 (100%) | 0 | 0 | 100 | 100 |
| 11 | l | 34/37 (92%) | 34 (100%) | 0 | 0 | 100 | 100 |
| 12 | M | 31/36 (86%) | 31 (100%) | 0 | 0 | 100 | 100 |
| 12 | m | 30/36 (83%) | 29 (97%) | 1 (3%) | 0 | 100 | 100 |
| 13 | O | 243/272 (89%) | 227 (93%) | 13 (5%) | 3 (1%) | 13 | 12 |
| 13 | o | 242/272 (89%) | 224 (93%) | 15 (6%) | 3 (1%) | 13 | 12 |
| 14 | R | 32/41 (78%) | 31 (97%) | 1 (3%) | 0 | 100 | 100 |
| 14 | r | 29/41 (71%) | 25 (86%) | 2 (7%) | 2 (7%) | 1 | 0 |
| 15 | T | 28/30 (93%) | 28 (100%) | 0 | 0 | 100 | 100 |
| 15 | t | 28/30 (93%) | 27 (96%) | 1 (4%) | 0 | 100 | 100 |
| 16 | U | 95/134 (71%) | 91 (96%) | 4 (4%) | 0 | 100 | 100 |
| 16 | u | 95/134 (71%) | 89 (94%) | 5 (5%) | 1 (1%) | 14 | 14 |
| 17 | V | 135/163 (83%) | 129 (96%) | 5 (4%) | 1 (1%) | 22 | 25 |
| 17 | v | 135/163 (83%) | 128 (95%) | 6 (4%) | 1 (1%) | 22 | 25 |
| 18 | X | 36/41 (88%) | 36 (100%) | 0 | 0 | 100 | 100 |
| 18 | x | 37/41 (90%) | 37 (100%) | 0 | 0 | 100 | 100 |
| 19 | Y | 25/46 (54%) | 24 (96%) | 0 | 1 (4%) | 3 | 1 |
| 19 | y | 28/46 (61%) | 20 (71%) | 6 (21%) | 2 (7%) | 1 | 0 |
| 20 | Z | 60/62 (97%) | 56 (93%) | 2 (3%) | 2 (3%) | 4 | 2 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles |
|-----|-------|-----------------|------------|----------|----------|-------------|
| 20 | z | 60/62 (97%) | 53 (88%) | 5 (8%) | 2 (3%) | 4 2 |
| All | All | 5240/5688 (92%) | 5024 (96%) | 189 (4%) | 27 (0%) | 29 34 |

All (27) Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 3 | C | 416 | SER |
| 10 | K | 16 | ALA |
| 13 | O | 58 | ASN |
| 13 | O | 62 | GLU |
| 17 | V | 64 | PRO |
| 20 | Z | 31 | GLN |
| 20 | Z | 32 | ASP |
| 3 | c | 416 | SER |
| 14 | r | 31 | VAL |
| 16 | u | 53 | ALA |
| 19 | y | 41 | VAL |
| 19 | y | 43 | ARG |
| 20 | z | 2 | THR |
| 19 | Y | 43 | ARG |
| 2 | b | 294 | SER |
| 2 | b | 295 | GLY |
| 2 | b | 404 | GLY |
| 5 | E | 58 | GLN |
| 13 | o | 61 | GLN |
| 14 | r | 30 | GLN |
| 13 | O | 59 | LYS |
| 5 | e | 83 | LEU |
| 13 | o | 73 | ARG |
| 13 | o | 56 | PRO |
| 10 | k | 38 | VAL |
| 20 | z | 61 | VAL |
| 17 | v | 42 | VAL |

5.3.2 Protein sidechains [i](#)

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

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

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|----------------|-----------|----------|-------------|-----|
| 1 | A | 270/280 (96%) | 262 (97%) | 8 (3%) | 41 | 54 |
| 1 | a | 269/280 (96%) | 258 (96%) | 11 (4%) | 30 | 41 |
| 2 | B | 408/404 (101%) | 400 (98%) | 8 (2%) | 55 | 70 |
| 2 | b | 402/404 (100%) | 386 (96%) | 16 (4%) | 31 | 42 |
| 3 | C | 346/362 (96%) | 338 (98%) | 8 (2%) | 50 | 65 |
| 3 | c | 354/362 (98%) | 340 (96%) | 14 (4%) | 31 | 42 |
| 4 | D | 276/283 (98%) | 268 (97%) | 8 (3%) | 42 | 56 |
| 4 | d | 277/283 (98%) | 264 (95%) | 13 (5%) | 26 | 34 |
| 5 | E | 72/73 (99%) | 68 (94%) | 4 (6%) | 21 | 27 |
| 5 | e | 71/73 (97%) | 68 (96%) | 3 (4%) | 30 | 39 |
| 6 | F | 28/39 (72%) | 28 (100%) | 0 | 100 | 100 |
| 6 | f | 28/39 (72%) | 27 (96%) | 1 (4%) | 35 | 47 |
| 7 | H | 54/55 (98%) | 50 (93%) | 4 (7%) | 13 | 16 |
| 7 | h | 53/55 (96%) | 45 (85%) | 8 (15%) | 3 | 2 |
| 8 | I | 32/34 (94%) | 29 (91%) | 3 (9%) | 8 | 9 |
| 8 | i | 32/34 (94%) | 30 (94%) | 2 (6%) | 18 | 22 |
| 9 | J | 24/28 (86%) | 23 (96%) | 1 (4%) | 30 | 39 |
| 9 | j | 24/28 (86%) | 22 (92%) | 2 (8%) | 11 | 12 |
| 10 | K | 30/37 (81%) | 29 (97%) | 1 (3%) | 38 | 51 |
| 10 | k | 30/37 (81%) | 24 (80%) | 6 (20%) | 1 | 1 |
| 11 | L | 35/35 (100%) | 34 (97%) | 1 (3%) | 42 | 56 |
| 11 | l | 34/35 (97%) | 30 (88%) | 4 (12%) | 5 | 5 |
| 12 | M | 28/32 (88%) | 27 (96%) | 1 (4%) | 35 | 47 |
| 12 | m | 28/32 (88%) | 26 (93%) | 2 (7%) | 14 | 17 |
| 13 | O | 206/228 (90%) | 193 (94%) | 13 (6%) | 18 | 22 |
| 13 | o | 207/228 (91%) | 197 (95%) | 10 (5%) | 25 | 34 |
| 14 | R | 28/33 (85%) | 23 (82%) | 5 (18%) | 2 | 1 |
| 14 | r | 23/33 (70%) | 19 (83%) | 4 (17%) | 2 | 1 |
| 15 | T | 26/26 (100%) | 24 (92%) | 2 (8%) | 13 | 15 |
| 15 | t | 25/26 (96%) | 24 (96%) | 1 (4%) | 31 | 42 |
| 16 | U | 84/112 (75%) | 78 (93%) | 6 (7%) | 14 | 17 |
| 16 | u | 84/112 (75%) | 79 (94%) | 5 (6%) | 19 | 24 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|-----------------|------------|----------|-------------|----|
| 17 | V | 117/138 (85%) | 112 (96%) | 5 (4%) | 29 | 38 |
| 17 | v | 117/138 (85%) | 112 (96%) | 5 (4%) | 29 | 38 |
| 18 | X | 31/34 (91%) | 28 (90%) | 3 (10%) | 8 | 8 |
| 18 | x | 31/34 (91%) | 26 (84%) | 5 (16%) | 2 | 2 |
| 19 | Y | 19/37 (51%) | 16 (84%) | 3 (16%) | 2 | 2 |
| 19 | y | 22/37 (60%) | 19 (86%) | 3 (14%) | 3 | 3 |
| 20 | Z | 52/52 (100%) | 45 (86%) | 7 (14%) | 4 | 3 |
| 20 | z | 51/52 (98%) | 46 (90%) | 5 (10%) | 8 | 8 |
| All | All | 4328/4644 (93%) | 4117 (95%) | 211 (5%) | 25 | 33 |

All (211) residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | A | 228 | THR |
| 1 | A | 229 | GLU |
| 1 | A | 231 | GLU |
| 1 | A | 243 | GLU |
| 1 | A | 244 | GLU |
| 1 | A | 248 | ILE |
| 1 | A | 270 | SER |
| 1 | A | 307 | ILE |
| 2 | B | 98 | LEU |
| 2 | B | 138 | MET |
| 2 | B | 289 | GLN |
| 2 | B | 297 | THR |
| 2 | B | 350 | GLU |
| 2 | B | 353 | GLU |
| 2 | B | 362 | PHE |
| 2 | B | 371 | THR |
| 3 | C | 141 | GLU |
| 3 | C | 156 | LYS |
| 3 | C | 201 | ASN |
| 3 | C | 289 | PHE |
| 3 | C | 315 | MET |
| 3 | C | 355 | THR |
| 3 | C | 386 | PRO |
| 3 | C | 416 | SER |
| 4 | D | 12 | ARG |
| 4 | D | 165 | SER |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 4 | D | 180 | ARG |
| 4 | D | 224 | GLN |
| 4 | D | 238 | THR |
| 4 | D | 262 | SER |
| 4 | D | 329 | MET |
| 4 | D | 345 | VAL |
| 5 | E | 16 | SER |
| 5 | E | 22[A] | ILE |
| 5 | E | 22[B] | ILE |
| 5 | E | 61 | ARG |
| 7 | H | 20 | LYS |
| 7 | H | 49 | TYR |
| 7 | H | 56 | ASP |
| 7 | H | 65 | LEU |
| 8 | I | 2 | GLU |
| 8 | I | 4 | LEU |
| 8 | I | 36 | ASP |
| 9 | J | 24 | ILE |
| 10 | K | 13 | GLU |
| 11 | L | 11 | GLU |
| 12 | M | 25 | LEU |
| 13 | O | 3 | GLN |
| 13 | O | 24 | ASP |
| 13 | O | 36 | GLN |
| 13 | O | 39 | ARG |
| 13 | O | 78 | LEU |
| 13 | O | 89 | SER |
| 13 | O | 97 | GLU |
| 13 | O | 107 | THR |
| 13 | O | 118 | LEU |
| 13 | O | 191 | SER |
| 13 | O | 198 | SER |
| 13 | O | 214 | THR |
| 13 | O | 225 | MET |
| 14 | R | 6 | LEU |
| 14 | R | 10 | LEU |
| 14 | R | 21 | ARG |
| 14 | R | 22 | ASN |
| 14 | R | 29 | LYS |
| 15 | T | 25 | GLU |
| 15 | T | 29 | ILE |
| 16 | U | 10 | VAL |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 16 | U | 39 | ARG |
| 16 | U | 51 | LYS |
| 16 | U | 61 | VAL |
| 16 | U | 63 | ASN |
| 16 | U | 67 | LEU |
| 17 | V | 3 | LEU |
| 17 | V | 7 | VAL |
| 17 | V | 17 | LYS |
| 17 | V | 19 | ILE |
| 17 | V | 24 | LYS |
| 18 | X | 3 | ILE |
| 18 | X | 29 | ILE |
| 18 | X | 37 | VAL |
| 19 | Y | 23 | THR |
| 19 | Y | 34 | MET |
| 19 | Y | 42 | ARG |
| 20 | Z | 5 | PHE |
| 20 | Z | 7 | LEU |
| 20 | Z | 15 | LEU |
| 20 | Z | 17 | PHE |
| 20 | Z | 31 | GLN |
| 20 | Z | 35 | ARG |
| 20 | Z | 46 | LEU |
| 1 | a | 28 | LEU |
| 1 | a | 42 | LEU |
| 1 | a | 159 | LEU |
| 1 | a | 200 | LEU |
| 1 | a | 223 | LEU |
| 1 | a | 226 | GLU |
| 1 | a | 229 | GLU |
| 1 | a | 230 | THR |
| 1 | a | 245 | THR |
| 1 | a | 248 | ILE |
| 1 | a | 288 | LEU |
| 2 | b | 98 | LEU |
| 2 | b | 128 | THR |
| 2 | b | 137 | LYS |
| 2 | b | 149 | LEU |
| 2 | b | 161 | LEU |
| 2 | b | 236 | THR |
| 2 | b | 246 | PHE |
| 2 | b | 286 | ARG |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 2 | b | 298 | LEU |
| 2 | b | 357 | ARG |
| 2 | b | 362 | PHE |
| 2 | b | 425 | ILE |
| 2 | b | 480 | SER |
| 2 | b | 485 | GLU |
| 2 | b | 491 | VAL |
| 2 | b | 506 | ARG |
| 3 | c | 24 | THR |
| 3 | c | 26 | ARG |
| 3 | c | 29 | GLU |
| 3 | c | 30 | SER |
| 3 | c | 72 | LEU |
| 3 | c | 124 | VAL |
| 3 | c | 125 | LEU |
| 3 | c | 135 | ARG |
| 3 | c | 144 | SER |
| 3 | c | 165 | LEU |
| 3 | c | 200 | THR |
| 3 | c | 289 | PHE |
| 3 | c | 315 | MET |
| 3 | c | 355 | THR |
| 4 | d | 12 | ARG |
| 4 | d | 25 | ASP |
| 4 | d | 90 | LEU |
| 4 | d | 180 | ARG |
| 4 | d | 182 | LEU |
| 4 | d | 230 | SER |
| 4 | d | 233 | ARG |
| 4 | d | 259 | ILE |
| 4 | d | 272 | LEU |
| 4 | d | 291 | LEU |
| 4 | d | 293 | LEU |
| 4 | d | 307 | GLU |
| 4 | d | 321 | LEU |
| 5 | e | 4 | THR |
| 5 | e | 65 | LEU |
| 5 | e | 84 | LYS |
| 6 | f | 15 | ILE |
| 7 | h | 7 | LEU |
| 7 | h | 12 | ARG |
| 7 | h | 27 | THR |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 7 | h | 30 | LEU |
| 7 | h | 37 | LEU |
| 7 | h | 39 | LEU |
| 7 | h | 43 | LEU |
| 7 | h | 49 | TYR |
| 8 | i | 6 | ILE |
| 8 | i | 36 | ASP |
| 9 | j | 7 | ARG |
| 9 | j | 21 | VAL |
| 10 | k | 10 | LYS |
| 10 | k | 13 | GLU |
| 10 | k | 17 | ILE |
| 10 | k | 30 | VAL |
| 10 | k | 35 | LEU |
| 10 | k | 46 | ARG |
| 11 | l | 2 | GLU |
| 11 | l | 7 | ARG |
| 11 | l | 21 | LEU |
| 11 | l | 30 | LEU |
| 12 | m | 13 | LEU |
| 12 | m | 16 | LEU |
| 13 | o | 23 | ASP |
| 13 | o | 49 | THR |
| 13 | o | 64 | GLU |
| 13 | o | 87 | VAL |
| 13 | o | 118 | LEU |
| 13 | o | 135 | SER |
| 13 | o | 191 | SER |
| 13 | o | 198 | SER |
| 13 | o | 200 | ASN |
| 13 | o | 207 | ARG |
| 14 | r | 6 | LEU |
| 14 | r | 9 | LEU |
| 14 | r | 10 | LEU |
| 14 | r | 13 | LEU |
| 15 | t | 29 | ILE |
| 16 | u | 10 | VAL |
| 16 | u | 23 | GLU |
| 16 | u | 51 | LYS |
| 16 | u | 77 | GLU |
| 16 | u | 80 | GLU |
| 17 | v | 19 | ILE |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 17 | v | 22 | THR |
| 17 | v | 52 | LEU |
| 17 | v | 107 | LEU |
| 17 | v | 108 | THR |
| 18 | x | 2 | THR |
| 18 | x | 8 | LYS |
| 18 | x | 14 | LEU |
| 18 | x | 15 | LEU |
| 18 | x | 21 | LEU |
| 19 | y | 19 | ILE |
| 19 | y | 23 | THR |
| 19 | y | 37 | PHE |
| 20 | z | 1 | MET |
| 20 | z | 7 | LEU |
| 20 | z | 20 | VAL |
| 20 | z | 32 | ASP |
| 20 | z | 46 | LEU |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (14) such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | A | 338 | ASN |
| 2 | B | 289 | GLN |
| 3 | C | 327 | ASN |
| 5 | E | 60 | GLN |
| 13 | O | 36 | GLN |
| 13 | O | 88 | ASN |
| 18 | X | 38 | GLN |
| 19 | Y | 45 | ASN |
| 20 | Z | 6 | GLN |
| 20 | Z | 31 | GLN |
| 1 | a | 234 | ASN |
| 3 | c | 28 | GLN |
| 13 | o | 61 | GLN |
| 13 | o | 130 | GLN |

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

6 non-standard protein/DNA/RNA residues are modelled in this entry.

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

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 15 | FME | T | 1 | 15 | 8,9,10 | 1.11 | 1 (12%) | 7,9,11 | 0.94 | 1 (14%) |
| 12 | FME | M | 1 | 12 | 8,9,10 | 1.17 | 1 (12%) | 7,9,11 | 1.09 | 1 (14%) |
| 8 | FME | I | 1 | 8 | 8,9,10 | 1.06 | 0 | 7,9,11 | 0.66 | 0 |
| 8 | FME | i | 1 | 8 | 8,9,10 | 1.28 | 1 (12%) | 7,9,11 | 1.24 | 1 (14%) |
| 15 | FME | t | 1 | 15 | 8,9,10 | 1.56 | 1 (12%) | 7,9,11 | 1.18 | 0 |
| 12 | FME | m | 1 | 12 | 8,9,10 | 0.89 | 0 | 7,9,11 | 1.36 | 1 (14%) |

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

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|---------|----------|-------|
| 15 | FME | T | 1 | 15 | - | 4/7/9/11 | - |
| 12 | FME | M | 1 | 12 | - | 1/7/9/11 | - |
| 8 | FME | I | 1 | 8 | - | 3/7/9/11 | - |
| 8 | FME | i | 1 | 8 | - | 2/7/9/11 | - |
| 15 | FME | t | 1 | 15 | - | 4/7/9/11 | - |
| 12 | FME | m | 1 | 12 | - | 1/7/9/11 | - |

All (4) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|-------|-------|-------------|----------|
| 15 | t | 1 | FME | CA-N | -4.11 | 1.40 | 1.46 |
| 8 | i | 1 | FME | CA-N | -2.73 | 1.42 | 1.46 |
| 12 | M | 1 | FME | CA-N | -2.62 | 1.42 | 1.46 |
| 15 | T | 1 | FME | CA-N | -2.10 | 1.43 | 1.46 |

All (4) bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|----------|-------|-------------|----------|
| 12 | m | 1 | FME | CA-N-CN | 2.85 | 127.20 | 122.82 |
| 8 | i | 1 | FME | CA-N-CN | -2.39 | 119.14 | 122.82 |
| 12 | M | 1 | FME | CA-N-CN | -2.06 | 119.65 | 122.82 |
| 15 | T | 1 | FME | CG-CB-CA | 2.03 | 118.59 | 112.95 |

There are no chirality outliers.

All (15) torsion outliers are listed below:

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-------------|
| 15 | T | 1 | FME | O-C-CA-CB |
| 15 | t | 1 | FME | O-C-CA-CB |
| 15 | t | 1 | FME | CB-CG-SD-CE |
| 8 | I | 1 | FME | N-CA-CB-CG |
| 15 | T | 1 | FME | N-CA-CB-CG |
| 15 | T | 1 | FME | CB-CG-SD-CE |
| 8 | I | 1 | FME | CB-CG-SD-CE |
| 15 | T | 1 | FME | C-CA-CB-CG |
| 15 | t | 1 | FME | N-CA-CB-CG |
| 15 | t | 1 | FME | C-CA-CB-CG |
| 8 | i | 1 | FME | CB-CG-SD-CE |
| 12 | m | 1 | FME | CB-CG-SD-CE |
| 8 | I | 1 | FME | CB-CA-N-CN |
| 8 | i | 1 | FME | CB-CA-N-CN |
| 12 | M | 1 | FME | CB-CA-N-CN |

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 190 ligands modelled in this entry, 7 are monoatomic - leaving 183 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|-------------|-------------|------|-------------|
| | | | | | Counts | RMSZ | # $ Z > 2$ | Counts | RMSZ | # $ Z > 2$ |
| 22 | CLA | C | 506 | - | 65,73,73 | 1.87 | 11 (16%) | 76,113,113 | 1.44 | 11 (14%) |
| 22 | CLA | C | 501 | - | 65,73,73 | 1.64 | 10 (15%) | 76,113,113 | 1.57 | 10 (13%) |
| 22 | CLA | B | 614 | - | 65,73,73 | 1.76 | 11 (16%) | 76,113,113 | 1.50 | 10 (13%) |
| 22 | CLA | c | 501 | - | 65,73,73 | 1.67 | 9 (13%) | 76,113,113 | 1.62 | 10 (13%) |
| 30 | BCR | B | 616 | - | 41,41,41 | 1.07 | 3 (7%) | 56,56,56 | 1.40 | 9 (16%) |
| 28 | LHG | d | 409 | - | 38,38,48 | 1.06 | 4 (10%) | 41,44,54 | 1.21 | 5 (12%) |
| 26 | LMG | b | 622 | - | 55,55,55 | 1.16 | 5 (9%) | 63,63,63 | 1.45 | 5 (7%) |
| 34 | HEC | F | 101 | 5,6 | 32,50,50 | 2.29 | 3 (9%) | 24,82,82 | 2.02 | 7 (29%) |
| 22 | CLA | C | 505 | - | 65,73,73 | 1.46 | 7 (10%) | 76,113,113 | 1.39 | 10 (13%) |
| 22 | CLA | a | 405 | - | 65,73,73 | 1.65 | 9 (13%) | 76,113,113 | 1.40 | 11 (14%) |
| 22 | CLA | c | 505 | - | 65,73,73 | 1.54 | 7 (10%) | 76,113,113 | 1.48 | 10 (13%) |
| 31 | STE | b | 621 | - | 19,19,19 | 0.72 | 0 | 19,19,19 | 0.96 | 1 (5%) |
| 22 | CLA | B | 609 | 36 | 65,73,73 | 1.55 | 11 (16%) | 76,113,113 | 1.65 | 10 (13%) |
| 22 | CLA | B | 604 | - | 65,73,73 | 1.26 | 5 (7%) | 76,113,113 | 1.53 | 13 (17%) |
| 22 | CLA | C | 509 | - | 65,73,73 | 1.55 | 10 (15%) | 76,113,113 | 1.38 | 11 (14%) |
| 22 | CLA | D | 403 | - | 65,73,73 | 1.59 | 8 (12%) | 76,113,113 | 1.37 | 10 (13%) |
| 30 | BCR | D | 406 | - | 41,41,41 | 1.08 | 3 (7%) | 56,56,56 | 1.30 | 6 (10%) |
| 22 | CLA | c | 509 | - | 65,73,73 | 1.55 | 9 (13%) | 76,113,113 | 1.66 | 13 (17%) |
| 22 | CLA | C | 511 | 3 | 65,73,73 | 1.73 | 11 (16%) | 76,113,113 | 1.54 | 6 (7%) |
| 30 | BCR | b | 618 | - | 41,41,41 | 1.46 | 4 (9%) | 56,56,56 | 1.36 | 9 (16%) |
| 30 | BCR | H | 102 | - | 41,41,41 | 1.00 | 1 (2%) | 56,56,56 | 1.24 | 8 (14%) |
| 22 | CLA | b | 615 | - | 65,73,73 | 2.34 | 12 (18%) | 76,113,113 | 1.42 | 8 (10%) |
| 30 | BCR | K | 101 | - | 41,41,41 | 1.13 | 2 (4%) | 56,56,56 | 1.54 | 12 (21%) |
| 27 | SQD | t | 102 | - | 35,35,54 | 1.19 | 3 (8%) | 37,37,65 | 1.46 | 4 (10%) |
| 31 | STE | d | 411 | - | 16,16,19 | 0.78 | 0 | 16,16,19 | 0.98 | 1 (6%) |
| 22 | CLA | C | 510 | - | 65,73,73 | 1.56 | 10 (15%) | 76,113,113 | 1.78 | 11 (14%) |
| 22 | CLA | c | 510 | - | 65,73,73 | 1.41 | 7 (10%) | 76,113,113 | 1.50 | 9 (11%) |
| 30 | BCR | k | 103 | - | 41,41,41 | 1.07 | 2 (4%) | 56,56,56 | 1.32 | 6 (10%) |
| 30 | BCR | a | 406 | - | 41,41,41 | 1.09 | 3 (7%) | 56,56,56 | 1.53 | 12 (21%) |
| 22 | CLA | a | 403 | 36 | 65,73,73 | 1.58 | 10 (15%) | 76,113,113 | 1.48 | 12 (15%) |
| 25 | PL9 | A | 408 | - | 55,55,55 | 1.65 | 4 (7%) | 68,69,69 | 1.54 | 15 (22%) |
| 34 | HEC | V | 201 | 17 | 32,50,50 | 1.97 | 3 (9%) | 24,82,82 | 1.89 | 6 (25%) |
| 22 | CLA | b | 601 | 36 | 65,73,73 | 1.60 | 9 (13%) | 76,113,113 | 1.58 | 11 (14%) |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|--------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 30 | BCR | K | 102 | - | 41,41,41 | 1.14 | 2 (4%) | 56,56,56 | 1.33 | 9 (16%) |
| 33 | BCT | d | 402 | 21 | 2,3,3 | 1.20 | 0 | 2,3,3 | 3.06 | 1 (50%) |
| 22 | CLA | C | 507 | 36 | 65,73,73 | 1.44 | 10 (15%) | 76,113,113 | 1.51 | 7 (9%) |
| 31 | STE | C | 520 | - | 15,15,19 | 0.55 | 0 | 14,14,19 | 0.52 | 0 |
| 22 | CLA | b | 608 | - | 65,73,73 | 1.42 | 9 (13%) | 76,113,113 | 1.43 | 12 (15%) |
| 23 | PHO | D | 401 | - | 51,69,69 | 1.24 | 6 (11%) | 47,99,99 | 1.36 | 6 (12%) |
| 31 | STE | L | 103 | - | 11,11,19 | 0.75 | 0 | 11,11,19 | 1.68 | 2 (18%) |
| 22 | CLA | A | 403 | 36 | 65,73,73 | 1.94 | 10 (15%) | 76,113,113 | 1.52 | 13 (17%) |
| 23 | PHO | A | 404 | - | 51,69,69 | 1.22 | 7 (13%) | 47,99,99 | 1.43 | 8 (17%) |
| 28 | LHG | a | 411 | - | 41,41,48 | 1.15 | 6 (14%) | 44,47,54 | 1.24 | 4 (9%) |
| 22 | CLA | C | 512 | - | 65,73,73 | 1.41 | 7 (10%) | 76,113,113 | 1.57 | 11 (14%) |
| 31 | STE | B | 624 | - | 15,15,19 | 0.47 | 0 | 14,14,19 | 0.84 | 0 |
| 22 | CLA | B | 607 | - | 65,73,73 | 1.60 | 11 (16%) | 76,113,113 | 1.25 | 8 (10%) |
| 27 | SQD | D | 409 | - | 35,36,54 | 1.09 | 4 (11%) | 42,45,65 | 1.97 | 11 (26%) |
| 22 | CLA | H | 101 | 36 | 65,73,73 | 1.80 | 8 (12%) | 76,113,113 | 1.48 | 5 (6%) |
| 30 | BCR | b | 619 | - | 41,41,41 | 1.07 | 2 (4%) | 56,56,56 | 1.35 | 9 (16%) |
| 27 | SQD | L | 101 | - | 48,49,54 | 1.00 | 2 (4%) | 57,60,65 | 2.32 | 18 (31%) |
| 32 | OEX | C | 522 | 3,36,1 | 0,15,15 | - | - | - | - | - |
| 23 | PHO | a | 404 | - | 51,69,69 | 1.00 | 5 (9%) | 47,99,99 | 1.44 | 8 (17%) |
| 26 | LMG | D | 412 | - | 31,31,55 | 1.24 | 3 (9%) | 33,33,63 | 1.11 | 2 (6%) |
| 31 | STE | C | 521 | - | 11,11,19 | 0.66 | 0 | 11,11,19 | 1.44 | 2 (18%) |
| 30 | BCR | C | 514 | - | 41,41,41 | 1.24 | 2 (4%) | 56,56,56 | 1.56 | 12 (21%) |
| 31 | STE | Z | 101 | - | 7,7,19 | 0.52 | 0 | 6,6,19 | 0.26 | 0 |
| 31 | STE | b | 626 | - | 19,19,19 | 0.82 | 0 | 19,19,19 | 0.53 | 0 |
| 22 | CLA | b | 612 | - | 65,73,73 | 1.61 | 9 (13%) | 76,113,113 | 1.59 | 12 (15%) |
| 25 | PL9 | a | 409 | - | 55,55,55 | 1.13 | 4 (7%) | 68,69,69 | 1.53 | 12 (17%) |
| 27 | SQD | f | 102 | - | 40,41,54 | 1.13 | 4 (10%) | 49,52,65 | 2.02 | 12 (24%) |
| 28 | LHG | A | 411 | - | 48,48,48 | 1.01 | 2 (4%) | 51,54,54 | 1.22 | 5 (9%) |
| 29 | DGD | H | 103 | - | 63,63,67 | 1.34 | 9 (14%) | 77,77,81 | 1.58 | 13 (16%) |
| 26 | LMG | c | 521 | - | 49,49,55 | 1.13 | 6 (12%) | 57,57,63 | 1.34 | 8 (14%) |
| 34 | HEC | v | 201 | 17 | 32,50,50 | 2.31 | 5 (15%) | 24,82,82 | 2.21 | 4 (16%) |
| 26 | LMG | B | 620 | - | 26,26,55 | 1.38 | 4 (15%) | 26,26,63 | 1.08 | 2 (7%) |
| 22 | CLA | B | 615 | - | 60,68,73 | 1.80 | 13 (21%) | 70,107,113 | 1.57 | 10 (14%) |
| 22 | CLA | b | 613 | - | 65,73,73 | 1.47 | 9 (13%) | 76,113,113 | 1.60 | 10 (13%) |
| 22 | CLA | b | 602 | - | 65,73,73 | 1.73 | 11 (16%) | 76,113,113 | 1.65 | 13 (17%) |
| 30 | BCR | k | 102 | - | 41,41,41 | 1.04 | 3 (7%) | 56,56,56 | 1.16 | 4 (7%) |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 31 | STE | b | 629 | - | 19,19,19 | 0.77 | 1 (5%) | 19,19,19 | 0.93 | 0 |
| 22 | CLA | a | 402 | - | 65,73,73 | 1.39 | 9 (13%) | 76,113,113 | 1.56 | 10 (13%) |
| 22 | CLA | B | 602 | - | 65,73,73 | 1.39 | 10 (15%) | 76,113,113 | 1.58 | 17 (22%) |
| 26 | LMG | c | 518 | - | 37,37,55 | 1.44 | 7 (18%) | 45,45,63 | 1.31 | 5 (11%) |
| 31 | STE | b | 620 | - | 15,15,19 | 0.54 | 0 | 14,14,19 | 0.72 | 0 |
| 22 | CLA | B | 605 | - | 65,73,73 | 1.90 | 10 (15%) | 76,113,113 | 1.42 | 9 (11%) |
| 22 | CLA | C | 502 | - | 65,73,73 | 1.50 | 8 (12%) | 76,113,113 | 1.41 | 9 (11%) |
| 22 | CLA | c | 507 | 36 | 65,73,73 | 1.77 | 12 (18%) | 76,113,113 | 1.54 | 12 (15%) |
| 31 | STE | B | 625 | - | 11,11,19 | 0.81 | 0 | 11,11,19 | 1.49 | 3 (27%) |
| 29 | DGD | C | 518 | - | 63,63,67 | 1.11 | 6 (9%) | 77,77,81 | 1.53 | 11 (14%) |
| 31 | STE | b | 624 | - | 15,15,19 | 0.86 | 0 | 15,15,19 | 0.90 | 0 |
| 22 | CLA | b | 610 | 36 | 65,73,73 | 1.52 | 11 (16%) | 76,113,113 | 1.44 | 12 (15%) |
| 22 | CLA | B | 611 | - | 65,73,73 | 1.63 | 10 (15%) | 76,113,113 | 1.46 | 11 (14%) |
| 26 | LMG | m | 101 | - | 51,51,55 | 1.25 | 4 (7%) | 59,59,63 | 1.49 | 8 (13%) |
| 29 | DGD | c | 517 | - | 63,63,67 | 1.24 | 10 (15%) | 77,77,81 | 1.38 | 8 (10%) |
| 28 | LHG | L | 102 | - | 48,48,48 | 0.88 | 2 (4%) | 51,54,54 | 1.17 | 4 (7%) |
| 29 | DGD | h | 101 | - | 63,63,67 | 1.03 | 4 (6%) | 77,77,81 | 1.46 | 14 (18%) |
| 28 | LHG | D | 410 | - | 48,48,48 | 0.96 | 3 (6%) | 51,54,54 | 1.22 | 5 (9%) |
| 22 | CLA | B | 610 | - | 65,73,73 | 1.66 | 10 (15%) | 76,113,113 | 1.78 | 13 (17%) |
| 22 | CLA | b | 604 | - | 65,73,73 | 1.57 | 7 (10%) | 76,113,113 | 1.60 | 14 (18%) |
| 30 | BCR | d | 406 | - | 41,41,41 | 1.08 | 2 (4%) | 56,56,56 | 1.39 | 8 (14%) |
| 22 | CLA | d | 405 | - | 65,73,73 | 1.86 | 14 (21%) | 76,113,113 | 1.31 | 9 (11%) |
| 26 | LMG | D | 408 | - | 51,51,55 | 1.18 | 4 (7%) | 59,59,63 | 1.35 | 6 (10%) |
| 30 | BCR | x | 101 | - | 41,41,41 | 1.01 | 2 (4%) | 56,56,56 | 1.47 | 11 (19%) |
| 31 | STE | M | 104 | - | 17,17,19 | 0.41 | 0 | 16,16,19 | 0.85 | 0 |
| 22 | CLA | D | 405 | - | 65,73,73 | 1.84 | 12 (18%) | 76,113,113 | 1.21 | 6 (7%) |
| 30 | BCR | c | 514 | - | 41,41,41 | 1.16 | 3 (7%) | 56,56,56 | 1.65 | 12 (21%) |
| 22 | CLA | B | 603 | - | 65,73,73 | 1.47 | 8 (12%) | 76,113,113 | 1.81 | 14 (18%) |
| 31 | STE | t | 103 | - | 13,13,19 | 0.87 | 0 | 13,13,19 | 1.10 | 2 (15%) |
| 28 | LHG | D | 413 | - | 48,48,48 | 1.00 | 3 (6%) | 51,54,54 | 1.40 | 7 (13%) |
| 30 | BCR | b | 617 | - | 41,41,41 | 1.05 | 2 (4%) | 56,56,56 | 1.36 | 9 (16%) |
| 31 | STE | a | 412 | - | 11,11,19 | 0.81 | 0 | 11,11,19 | 0.95 | 0 |
| 29 | DGD | C | 516 | - | 63,63,67 | 1.37 | 9 (14%) | 77,77,81 | 1.39 | 11 (14%) |
| 29 | DGD | c | 516 | - | 63,63,67 | 1.10 | 7 (11%) | 77,77,81 | 1.55 | 16 (20%) |
| 31 | STE | B | 622 | - | 11,11,19 | 0.77 | 0 | 11,11,19 | 1.41 | 1 (9%) |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|--------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 27 | SQD | a | 410 | - | 53,54,54 | 1.04 | 3 (5%) | 62,65,65 | 1.78 | 13 (20%) |
| 28 | LHG | D | 411 | - | 46,46,48 | 1.05 | 3 (6%) | 49,52,54 | 1.21 | 5 (10%) |
| 28 | LHG | d | 408 | - | 48,48,48 | 0.77 | 1 (2%) | 51,54,54 | 1.12 | 3 (5%) |
| 30 | BCR | t | 101 | - | 41,41,41 | 1.14 | 3 (7%) | 56,56,56 | 1.44 | 10 (17%) |
| 31 | STE | H | 104 | - | 17,17,19 | 0.46 | 0 | 16,16,19 | 0.64 | 0 |
| 22 | CLA | c | 506 | - | 65,73,73 | 1.79 | 8 (12%) | 76,113,113 | 1.62 | 16 (21%) |
| 22 | CLA | c | 502 | - | 65,73,73 | 1.62 | 11 (16%) | 76,113,113 | 1.51 | 13 (17%) |
| 27 | SQD | A | 410 | - | 51,52,54 | 1.12 | 4 (7%) | 60,63,65 | 2.08 | 16 (26%) |
| 22 | CLA | b | 606 | - | 65,73,73 | 2.00 | 12 (18%) | 76,113,113 | 1.56 | 12 (15%) |
| 33 | BCT | D | 402 | 21 | 2,3,3 | 0.96 | 0 | 2,3,3 | 3.91 | 2 (100%) |
| 22 | CLA | C | 508 | - | 65,73,73 | 1.72 | 10 (15%) | 76,113,113 | 1.53 | 14 (18%) |
| 25 | PL9 | d | 407 | - | 55,55,55 | 1.58 | 11 (20%) | 68,69,69 | 1.52 | 15 (22%) |
| 30 | BCR | k | 101 | - | 41,41,41 | 1.12 | 2 (4%) | 56,56,56 | 1.44 | 10 (17%) |
| 31 | STE | k | 104 | - | 11,11,19 | 0.92 | 0 | 11,11,19 | 0.87 | 0 |
| 31 | STE | t | 104 | - | 9,9,19 | 0.56 | 0 | 8,8,19 | 0.37 | 0 |
| 31 | STE | x | 102 | - | 19,19,19 | 0.76 | 0 | 19,19,19 | 0.96 | 2 (10%) |
| 32 | OEX | a | 415 | 3,36,1 | 0,15,15 | - | - | - | - | - |
| 22 | CLA | c | 511 | 3 | 65,73,73 | 1.83 | 7 (10%) | 76,113,113 | 1.59 | 11 (14%) |
| 22 | CLA | A | 405 | - | 54,62,73 | 1.62 | 8 (14%) | 62,99,113 | 1.70 | 12 (19%) |
| 22 | CLA | b | 609 | - | 65,73,73 | 1.92 | 12 (18%) | 76,113,113 | 1.50 | 12 (15%) |
| 22 | CLA | d | 403 | - | 65,73,73 | 1.72 | 10 (15%) | 76,113,113 | 1.45 | 7 (9%) |
| 30 | BCR | T | 101 | - | 41,41,41 | 1.06 | 2 (4%) | 56,56,56 | 1.27 | 4 (7%) |
| 31 | STE | X | 101 | - | 19,19,19 | 0.62 | 0 | 19,19,19 | 1.24 | 2 (10%) |
| 29 | DGD | c | 515 | - | 63,63,67 | 1.31 | 8 (12%) | 77,77,81 | 1.45 | 13 (16%) |
| 22 | CLA | d | 404 | 36 | 65,73,73 | 1.81 | 8 (12%) | 76,113,113 | 1.72 | 15 (19%) |
| 27 | SQD | A | 412 | - | 38,38,54 | 1.09 | 2 (5%) | 40,40,65 | 1.44 | 5 (12%) |
| 31 | STE | I | 102 | - | 14,14,19 | 0.66 | 0 | 13,13,19 | 0.40 | 0 |
| 26 | LMG | a | 414 | - | 55,55,55 | 1.50 | 8 (14%) | 63,63,63 | 1.30 | 7 (11%) |
| 31 | STE | J | 101 | - | 11,11,19 | 0.67 | 0 | 11,11,19 | 1.29 | 1 (9%) |
| 29 | DGD | C | 517 | - | 63,63,67 | 1.24 | 10 (15%) | 77,77,81 | 1.39 | 10 (12%) |
| 29 | DGD | A | 413 | - | 67,67,67 | 1.39 | 10 (14%) | 81,81,81 | 1.33 | 14 (17%) |
| 26 | LMG | d | 410 | - | 44,44,55 | 1.18 | 4 (9%) | 52,52,63 | 1.26 | 6 (11%) |
| 22 | CLA | B | 606 | 36 | 65,73,73 | 1.62 | 12 (18%) | 76,113,113 | 1.50 | 8 (10%) |
| 30 | BCR | I | 101 | - | 41,41,41 | 1.19 | 4 (9%) | 56,56,56 | 1.57 | 11 (19%) |
| 31 | STE | M | 102 | - | 14,14,19 | 0.90 | 0 | 14,14,19 | 1.02 | 1 (7%) |
| 31 | STE | a | 413 | - | 14,14,19 | 0.46 | 0 | 13,13,19 | 0.66 | 0 |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 34 | HEC | f | 101 | 5,6 | 32,50,50 | 2.30 | 4 (12%) | 24,82,82 | 2.39 | 5 (20%) |
| 30 | BCR | B | 618 | - | 41,41,41 | 1.22 | 2 (4%) | 56,56,56 | 1.59 | 10 (17%) |
| 31 | STE | R | 101 | - | 11,11,19 | 0.74 | 0 | 11,11,19 | 1.09 | 1 (9%) |
| 26 | LMG | A | 409 | - | 48,48,55 | 1.16 | 5 (10%) | 56,56,63 | 1.42 | 8 (14%) |
| 31 | STE | b | 627 | - | 9,9,19 | 0.57 | 0 | 8,8,19 | 0.44 | 0 |
| 22 | CLA | C | 513 | - | 65,73,73 | 1.55 | 11 (16%) | 76,113,113 | 1.58 | 13 (17%) |
| 22 | CLA | b | 616 | - | 60,68,73 | 1.46 | 7 (11%) | 70,107,113 | 1.64 | 10 (14%) |
| 22 | CLA | B | 612 | - | 65,73,73 | 2.23 | 11 (16%) | 76,113,113 | 1.39 | 11 (14%) |
| 22 | CLA | C | 503 | - | 65,73,73 | 1.71 | 10 (15%) | 76,113,113 | 1.82 | 15 (19%) |
| 22 | CLA | b | 603 | - | 65,73,73 | 1.76 | 10 (15%) | 76,113,113 | 1.86 | 16 (21%) |
| 22 | CLA | c | 513 | - | 65,73,73 | 1.57 | 7 (10%) | 76,113,113 | 1.38 | 8 (10%) |
| 25 | PL9 | D | 407 | - | 55,55,55 | 1.58 | 13 (23%) | 68,69,69 | 1.70 | 17 (25%) |
| 22 | CLA | c | 503 | - | 65,73,73 | 1.49 | 9 (13%) | 76,113,113 | 1.42 | 15 (19%) |
| 30 | BCR | B | 617 | - | 41,41,41 | 1.07 | 1 (2%) | 56,56,56 | 1.44 | 11 (19%) |
| 22 | CLA | D | 404 | 36 | 65,73,73 | 1.79 | 10 (15%) | 76,113,113 | 1.31 | 10 (13%) |
| 31 | STE | M | 103 | - | 9,9,19 | 0.71 | 0 | 8,8,19 | 0.40 | 0 |
| 31 | STE | b | 628 | - | 13,13,19 | 0.56 | 0 | 12,12,19 | 0.37 | 0 |
| 26 | LMG | M | 101 | - | 51,51,55 | 1.10 | 4 (7%) | 59,59,63 | 1.39 | 8 (13%) |
| 31 | STE | j | 101 | - | 11,11,19 | 1.00 | 1 (9%) | 11,11,19 | 0.73 | 0 |
| 22 | CLA | B | 601 | - | 65,73,73 | 1.75 | 9 (13%) | 76,113,113 | 1.48 | 14 (18%) |
| 22 | CLA | b | 607 | 36 | 65,73,73 | 1.50 | 12 (18%) | 76,113,113 | 1.30 | 7 (9%) |
| 27 | SQD | B | 621 | - | 53,54,54 | 1.02 | 3 (5%) | 62,65,65 | 1.93 | 14 (22%) |
| 30 | BCR | C | 515 | - | 41,41,41 | 1.00 | 2 (4%) | 56,56,56 | 1.30 | 9 (16%) |
| 22 | CLA | A | 402 | - | 65,73,73 | 1.56 | 6 (9%) | 76,113,113 | 1.69 | 18 (23%) |
| 22 | CLA | c | 512 | - | 65,73,73 | 1.95 | 13 (20%) | 76,113,113 | 1.52 | 12 (15%) |
| 28 | LHG | b | 623 | - | 48,48,48 | 0.93 | 2 (4%) | 51,54,54 | 1.24 | 3 (5%) |
| 26 | LMG | c | 520 | - | 48,48,55 | 1.06 | 5 (10%) | 56,56,63 | 1.29 | 7 (12%) |
| 31 | STE | b | 625 | - | 14,14,19 | 0.38 | 0 | 13,13,19 | 0.92 | 0 |
| 22 | CLA | b | 605 | - | 65,73,73 | 1.43 | 11 (16%) | 76,113,113 | 1.64 | 14 (18%) |
| 28 | LHG | l | 101 | - | 48,48,48 | 0.90 | 3 (6%) | 51,54,54 | 1.11 | 2 (3%) |
| 31 | STE | C | 519 | - | 11,11,19 | 0.99 | 0 | 11,11,19 | 1.42 | 2 (18%) |
| 31 | STE | c | 519 | - | 19,19,19 | 0.76 | 1 (5%) | 19,19,19 | 0.84 | 0 |
| 31 | STE | B | 619 | - | 16,16,19 | 0.86 | 1 (6%) | 16,16,19 | 0.91 | 0 |
| 22 | CLA | B | 613 | - | 65,73,73 | 1.66 | 6 (9%) | 76,113,113 | 1.26 | 9 (11%) |
| 23 | PHO | d | 401 | - | 51,69,69 | 1.13 | 5 (9%) | 47,99,99 | 1.50 | 7 (14%) |
| 31 | STE | B | 623 | - | 17,17,19 | 0.76 | 0 | 17,17,19 | 0.94 | 0 |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 22 | CLA | C | 504 | 36 | 59,67,73 | 1.59 | 9 (15%) | 68,105,113 | 1.46 | 9 (13%) |
| 22 | CLA | c | 504 | 36 | 60,68,73 | 1.57 | 8 (13%) | 70,107,113 | 1.43 | 13 (18%) |
| 22 | CLA | c | 508 | - | 64,72,73 | 1.52 | 7 (10%) | 74,111,113 | 1.40 | 10 (13%) |
| 26 | LMG | Y | 101 | - | 48,48,55 | 1.10 | 7 (14%) | 56,56,63 | 1.26 | 6 (10%) |
| 22 | CLA | B | 608 | - | 65,73,73 | 1.49 | 7 (10%) | 76,113,113 | 1.51 | 11 (14%) |
| 22 | CLA | b | 611 | - | 65,73,73 | 1.54 | 9 (13%) | 76,113,113 | 1.65 | 17 (22%) |
| 22 | CLA | b | 614 | - | 65,73,73 | 1.78 | 11 (16%) | 76,113,113 | 1.53 | 12 (15%) |

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

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 22 | CLA | C | 506 | - | 1/1/20/20 | 23/37/115/115 | - |
| 22 | CLA | C | 501 | - | 1/1/20/20 | 5/37/115/115 | - |
| 22 | CLA | B | 614 | - | 1/1/20/20 | 7/37/115/115 | - |
| 22 | CLA | c | 501 | - | 1/1/20/20 | 5/37/115/115 | - |
| 30 | BCR | B | 616 | - | - | 8/29/63/63 | 0/2/2/2 |
| 28 | LHG | d | 409 | - | - | 13/43/43/53 | - |
| 26 | LMG | b | 622 | - | - | 28/50/70/70 | 0/1/1/1 |
| 34 | HEC | F | 101 | 5,6 | - | 3/10/54/54 | - |
| 22 | CLA | C | 505 | - | 1/1/20/20 | 9/37/115/115 | - |
| 22 | CLA | a | 405 | - | 1/1/20/20 | 7/37/115/115 | - |
| 22 | CLA | c | 505 | - | 1/1/20/20 | 14/37/115/115 | - |
| 31 | STE | b | 621 | - | - | 10/17/17/17 | - |
| 22 | CLA | B | 609 | 36 | 1/1/20/20 | 6/37/115/115 | - |
| 22 | CLA | B | 604 | - | 1/1/20/20 | 12/37/115/115 | - |
| 22 | CLA | C | 509 | - | 1/1/20/20 | 16/37/115/115 | - |
| 22 | CLA | D | 403 | - | 1/1/20/20 | 6/37/115/115 | - |
| 30 | BCR | D | 406 | - | - | 8/29/63/63 | 0/2/2/2 |
| 22 | CLA | c | 509 | - | 1/1/20/20 | 8/37/115/115 | - |
| 22 | CLA | C | 511 | 3 | 1/1/20/20 | 7/37/115/115 | - |
| 30 | BCR | b | 618 | - | - | 5/29/63/63 | 0/2/2/2 |
| 30 | BCR | H | 102 | - | - | 11/29/63/63 | 0/2/2/2 |
| 22 | CLA | b | 615 | - | 1/1/20/20 | 13/37/115/115 | - |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 30 | BCR | K | 101 | - | - | 12/29/63/63 | 0/2/2/2 |
| 27 | SQD | t | 102 | - | - | 12/37/37/69 | - |
| 31 | STE | d | 411 | - | - | 9/14/14/17 | - |
| 22 | CLA | C | 510 | - | 1/1/20/20 | 14/37/115/115 | - |
| 22 | CLA | c | 510 | - | 1/1/20/20 | 13/37/115/115 | - |
| 30 | BCR | k | 103 | - | - | 7/29/63/63 | 0/2/2/2 |
| 30 | BCR | a | 406 | - | - | 2/29/63/63 | 0/2/2/2 |
| 22 | CLA | a | 403 | 36 | - | 10/37/115/115 | - |
| 25 | PL9 | A | 408 | - | - | 21/53/73/73 | 0/1/1/1 |
| 34 | HEC | V | 201 | 17 | - | 2/10/54/54 | - |
| 22 | CLA | b | 601 | 36 | 1/1/20/20 | 22/37/115/115 | - |
| 30 | BCR | K | 102 | - | - | 13/29/63/63 | 0/2/2/2 |
| 22 | CLA | C | 507 | 36 | 1/1/20/20 | 6/37/115/115 | - |
| 31 | STE | C | 520 | - | - | 4/13/13/17 | - |
| 22 | CLA | b | 608 | - | 1/1/20/20 | 7/37/115/115 | - |
| 23 | PHO | D | 401 | - | - | 5/37/103/103 | 0/5/6/6 |
| 31 | STE | L | 103 | - | - | 5/9/9/17 | - |
| 22 | CLA | A | 403 | 36 | - | 10/37/115/115 | - |
| 23 | PHO | A | 404 | - | - | 6/37/103/103 | 0/5/6/6 |
| 28 | LHG | a | 411 | - | - | 26/46/46/53 | - |
| 22 | CLA | C | 512 | - | 1/1/20/20 | 9/37/115/115 | - |
| 31 | STE | B | 624 | - | - | 7/13/13/17 | - |
| 22 | CLA | B | 607 | - | 1/1/20/20 | 8/37/115/115 | - |
| 27 | SQD | D | 409 | - | - | 14/28/48/69 | 0/1/1/1 |
| 22 | CLA | H | 101 | 36 | 1/1/20/20 | 20/37/115/115 | - |
| 30 | BCR | b | 619 | - | - | 3/29/63/63 | 0/2/2/2 |
| 27 | SQD | L | 101 | - | - | 24/44/64/69 | 0/1/1/1 |
| 23 | PHO | a | 404 | - | - | 3/37/103/103 | 0/5/6/6 |
| 26 | LMG | D | 412 | - | - | 19/33/33/70 | - |
| 31 | STE | C | 521 | - | - | 2/9/9/17 | - |
| 30 | BCR | C | 514 | - | - | 8/29/63/63 | 0/2/2/2 |
| 31 | STE | Z | 101 | - | - | 4/5/5/17 | - |
| 31 | STE | b | 626 | - | - | 9/17/17/17 | - |
| 22 | CLA | b | 612 | - | 1/1/20/20 | 7/37/115/115 | - |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 25 | PL9 | a | 409 | - | - | 26/53/73/73 | 0/1/1/1 |
| 27 | SQD | f | 102 | - | - | 14/36/56/69 | 0/1/1/1 |
| 28 | LHG | A | 411 | - | - | 23/53/53/53 | - |
| 29 | DGD | H | 103 | - | - | 17/51/91/95 | 0/2/2/2 |
| 26 | LMG | c | 521 | - | - | 24/44/64/70 | 0/1/1/1 |
| 34 | HEC | v | 201 | 17 | - | 2/10/54/54 | - |
| 26 | LMG | B | 620 | - | - | 8/22/22/70 | - |
| 22 | CLA | B | 615 | - | 1/1/19/20 | 9/31/109/115 | - |
| 22 | CLA | b | 613 | - | 1/1/20/20 | 10/37/115/115 | - |
| 22 | CLA | b | 602 | - | 1/1/20/20 | 10/37/115/115 | - |
| 30 | BCR | k | 102 | - | - | 14/29/63/63 | 0/2/2/2 |
| 31 | STE | b | 629 | - | - | 6/17/17/17 | - |
| 22 | CLA | a | 402 | - | - | 1/37/115/115 | - |
| 22 | CLA | B | 602 | - | 1/1/20/20 | 12/37/115/115 | - |
| 26 | LMG | c | 518 | - | - | 12/31/51/70 | 0/1/1/1 |
| 31 | STE | b | 620 | - | - | 6/13/13/17 | - |
| 22 | CLA | B | 605 | - | 1/1/20/20 | 10/37/115/115 | - |
| 22 | CLA | C | 502 | - | 1/1/20/20 | 11/37/115/115 | - |
| 22 | CLA | c | 507 | 36 | 1/1/20/20 | 11/37/115/115 | - |
| 31 | STE | B | 625 | - | - | 4/9/9/17 | - |
| 29 | DGD | C | 518 | - | - | 15/51/91/95 | 0/2/2/2 |
| 31 | STE | b | 624 | - | - | 10/13/13/17 | - |
| 22 | CLA | b | 610 | 36 | 1/1/20/20 | 7/37/115/115 | - |
| 22 | CLA | B | 611 | - | 1/1/20/20 | 8/37/115/115 | - |
| 26 | LMG | m | 101 | - | - | 17/46/66/70 | 0/1/1/1 |
| 29 | DGD | c | 517 | - | - | 14/51/91/95 | 0/2/2/2 |
| 28 | LHG | L | 102 | - | - | 25/53/53/53 | - |
| 29 | DGD | h | 101 | - | - | 17/51/91/95 | 0/2/2/2 |
| 28 | LHG | D | 410 | - | - | 23/53/53/53 | - |
| 22 | CLA | B | 610 | - | - | 6/37/115/115 | - |
| 22 | CLA | b | 604 | - | 1/1/20/20 | 12/37/115/115 | - |
| 30 | BCR | d | 406 | - | - | 8/29/63/63 | 0/2/2/2 |
| 22 | CLA | d | 405 | - | 1/1/20/20 | 7/37/115/115 | - |
| 26 | LMG | D | 408 | - | - | 17/46/66/70 | 0/1/1/1 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 30 | BCR | x | 101 | - | - | 7/29/63/63 | 0/2/2/2 |
| 31 | STE | M | 104 | - | - | 9/15/15/17 | - |
| 22 | CLA | D | 405 | - | - | 12/37/115/115 | - |
| 30 | BCR | c | 514 | - | - | 7/29/63/63 | 0/2/2/2 |
| 22 | CLA | B | 603 | - | 1/1/20/20 | 14/37/115/115 | - |
| 31 | STE | t | 103 | - | - | 5/11/11/17 | - |
| 28 | LHG | D | 413 | - | - | 19/53/53/53 | - |
| 30 | BCR | b | 617 | - | - | 13/29/63/63 | 0/2/2/2 |
| 31 | STE | a | 412 | - | - | 4/9/9/17 | - |
| 29 | DGD | C | 516 | - | - | 18/51/91/95 | 0/2/2/2 |
| 29 | DGD | c | 516 | - | - | 18/51/91/95 | 0/2/2/2 |
| 31 | STE | B | 622 | - | - | 5/9/9/17 | - |
| 27 | SQD | a | 410 | - | - | 22/49/69/69 | 0/1/1/1 |
| 28 | LHG | D | 411 | - | - | 21/51/51/53 | - |
| 28 | LHG | d | 408 | - | - | 22/53/53/53 | - |
| 30 | BCR | t | 101 | - | - | 13/29/63/63 | 0/2/2/2 |
| 31 | STE | H | 104 | - | - | 9/15/15/17 | - |
| 22 | CLA | c | 506 | - | 1/1/20/20 | 14/37/115/115 | - |
| 22 | CLA | c | 502 | - | 1/1/20/20 | 13/37/115/115 | - |
| 27 | SQD | A | 410 | - | - | 23/47/67/69 | 0/1/1/1 |
| 22 | CLA | b | 606 | - | 1/1/20/20 | 8/37/115/115 | - |
| 22 | CLA | C | 508 | - | - | 11/37/115/115 | - |
| 25 | PL9 | d | 407 | - | - | 18/53/73/73 | 0/1/1/1 |
| 30 | BCR | k | 101 | - | - | 10/29/63/63 | 0/2/2/2 |
| 31 | STE | k | 104 | - | - | 5/9/9/17 | - |
| 31 | STE | t | 104 | - | - | 3/7/7/17 | - |
| 31 | STE | x | 102 | - | - | 11/17/17/17 | - |
| 22 | CLA | c | 511 | 3 | 1/1/20/20 | 9/37/115/115 | - |
| 22 | CLA | A | 405 | - | 1/1/17/20 | 3/24/102/115 | - |
| 22 | CLA | b | 609 | - | 1/1/20/20 | 8/37/115/115 | - |
| 22 | CLA | d | 403 | - | 1/1/20/20 | 9/37/115/115 | - |
| 30 | BCR | T | 101 | - | - | 11/29/63/63 | 0/2/2/2 |
| 31 | STE | X | 101 | - | - | 10/17/17/17 | - |
| 29 | DGD | c | 515 | - | - | 22/51/91/95 | 0/2/2/2 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 22 | CLA | d | 404 | 36 | 1/1/20/20 | 3/37/115/115 | - |
| 27 | SQD | A | 412 | - | - | 19/39/39/69 | - |
| 31 | STE | I | 102 | - | - | 5/12/12/17 | - |
| 26 | LMG | a | 414 | - | - | 31/50/70/70 | 0/1/1/1 |
| 31 | STE | J | 101 | - | - | 5/9/9/17 | - |
| 29 | DGD | C | 517 | - | - | 22/51/91/95 | 0/2/2/2 |
| 29 | DGD | A | 413 | - | - | 28/55/95/95 | 0/2/2/2 |
| 26 | LMG | d | 410 | - | - | 10/39/59/70 | 0/1/1/1 |
| 22 | CLA | B | 606 | 36 | 1/1/20/20 | 18/37/115/115 | - |
| 30 | BCR | I | 101 | - | - | 7/29/63/63 | 0/2/2/2 |
| 31 | STE | M | 102 | - | - | 6/12/12/17 | - |
| 31 | STE | a | 413 | - | - | 9/12/12/17 | - |
| 34 | HEC | f | 101 | 5,6 | - | 2/10/54/54 | - |
| 30 | BCR | B | 618 | - | - | 9/29/63/63 | 0/2/2/2 |
| 31 | STE | R | 101 | - | - | 5/9/9/17 | - |
| 26 | LMG | A | 409 | - | - | 15/43/63/70 | 0/1/1/1 |
| 31 | STE | b | 627 | - | - | 5/7/7/17 | - |
| 22 | CLA | C | 513 | - | 1/1/20/20 | 7/37/115/115 | - |
| 22 | CLA | b | 616 | - | 1/1/19/20 | 6/31/109/115 | - |
| 22 | CLA | B | 612 | - | 1/1/20/20 | 12/37/115/115 | - |
| 22 | CLA | C | 503 | - | 1/1/20/20 | 5/37/115/115 | - |
| 22 | CLA | b | 603 | - | 1/1/20/20 | 8/37/115/115 | - |
| 22 | CLA | c | 513 | - | 1/1/20/20 | 10/37/115/115 | - |
| 25 | PL9 | D | 407 | - | - | 14/53/73/73 | 0/1/1/1 |
| 22 | CLA | c | 503 | - | - | 10/37/115/115 | - |
| 30 | BCR | B | 617 | - | - | 10/29/63/63 | 0/2/2/2 |
| 22 | CLA | D | 404 | 36 | 1/1/20/20 | 10/37/115/115 | - |
| 31 | STE | M | 103 | - | - | 2/7/7/17 | - |
| 31 | STE | b | 628 | - | - | 7/11/11/17 | - |
| 26 | LMG | M | 101 | - | - | 17/46/66/70 | 0/1/1/1 |
| 31 | STE | j | 101 | - | - | 4/9/9/17 | - |
| 22 | CLA | B | 601 | - | - | 10/37/115/115 | - |
| 22 | CLA | b | 607 | 36 | 1/1/20/20 | 16/37/115/115 | - |
| 27 | SQD | B | 621 | - | - | 27/49/69/69 | 0/1/1/1 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|-----------|---------------|---------|
| 30 | BCR | C | 515 | - | - | 11/29/63/63 | 0/2/2/2 |
| 22 | CLA | A | 402 | - | 1/1/20/20 | 5/37/115/115 | - |
| 22 | CLA | c | 512 | - | 1/1/20/20 | 20/37/115/115 | - |
| 28 | LHG | b | 623 | - | - | 26/53/53/53 | - |
| 26 | LMG | c | 520 | - | - | 20/43/63/70 | 0/1/1/1 |
| 31 | STE | b | 625 | - | - | 7/12/12/17 | - |
| 22 | CLA | b | 605 | - | 1/1/20/20 | 13/37/115/115 | - |
| 28 | LHG | l | 101 | - | - | 18/53/53/53 | - |
| 31 | STE | C | 519 | - | - | 5/9/9/17 | - |
| 31 | STE | c | 519 | - | - | 7/17/17/17 | - |
| 31 | STE | B | 619 | - | - | 6/14/14/17 | - |
| 22 | CLA | B | 613 | - | 1/1/20/20 | 16/37/115/115 | - |
| 23 | PHO | d | 401 | - | - | 6/37/103/103 | 0/5/6/6 |
| 31 | STE | B | 623 | - | - | 11/15/15/17 | - |
| 22 | CLA | C | 504 | 36 | 1/1/18/20 | 6/30/108/115 | - |
| 22 | CLA | c | 504 | 36 | 1/1/19/20 | 7/31/109/115 | - |
| 22 | CLA | c | 508 | - | - | 13/36/114/115 | - |
| 26 | LMG | Y | 101 | - | - | 22/43/63/70 | 0/1/1/1 |
| 22 | CLA | B | 608 | - | - | 7/37/115/115 | - |
| 22 | CLA | b | 611 | - | - | 9/37/115/115 | - |
| 22 | CLA | b | 614 | - | 1/1/20/20 | 20/37/115/115 | - |

All (984) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|--------|-------------|----------|
| 22 | B | 612 | CLA | MG-ND | -12.14 | 1.81 | 2.05 |
| 22 | A | 403 | CLA | C4B-NB | 11.07 | 1.45 | 1.35 |
| 22 | b | 615 | CLA | MG-ND | -10.89 | 1.84 | 2.05 |
| 22 | B | 613 | CLA | C4B-NB | 9.31 | 1.43 | 1.35 |
| 22 | B | 605 | CLA | MG-NA | 9.19 | 2.28 | 2.06 |
| 22 | b | 606 | CLA | MG-NA | 9.02 | 2.27 | 2.06 |
| 22 | c | 512 | CLA | C4B-NB | 8.96 | 1.43 | 1.35 |
| 22 | c | 511 | CLA | C4B-NB | 8.80 | 1.43 | 1.35 |
| 22 | b | 609 | CLA | C4B-NB | 8.54 | 1.42 | 1.35 |
| 34 | v | 201 | HEC | C2B-C3B | -8.40 | 1.32 | 1.40 |
| 22 | B | 601 | CLA | C4B-NB | 8.32 | 1.42 | 1.35 |
| 22 | b | 615 | CLA | MG-NA | 8.29 | 2.26 | 2.06 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | B | 612 | CLA | C4B-NB | 8.16 | 1.42 | 1.35 |
| 34 | f | 101 | HEC | C2B-C3B | -8.06 | 1.32 | 1.40 |
| 22 | C | 506 | CLA | C4B-NB | 8.06 | 1.42 | 1.35 |
| 22 | b | 602 | CLA | C4B-NB | 8.05 | 1.42 | 1.35 |
| 34 | F | 101 | HEC | C2B-C3B | -8.03 | 1.32 | 1.40 |
| 22 | b | 615 | CLA | C4B-NB | 7.80 | 1.42 | 1.35 |
| 22 | A | 402 | CLA | C4B-NB | 7.72 | 1.42 | 1.35 |
| 22 | c | 504 | CLA | C4B-NB | 7.71 | 1.42 | 1.35 |
| 22 | c | 501 | CLA | C4B-NB | 7.69 | 1.42 | 1.35 |
| 22 | H | 101 | CLA | MG-NA | 7.61 | 2.24 | 2.06 |
| 22 | B | 611 | CLA | C4B-NB | 7.61 | 1.42 | 1.35 |
| 22 | b | 601 | CLA | C4B-NB | 7.61 | 1.42 | 1.35 |
| 22 | c | 513 | CLA | C4B-NB | 7.59 | 1.42 | 1.35 |
| 22 | b | 603 | CLA | MG-NA | 7.51 | 2.24 | 2.06 |
| 22 | d | 404 | CLA | MG-NA | 7.50 | 2.24 | 2.06 |
| 22 | H | 101 | CLA | C4B-NB | 7.47 | 1.41 | 1.35 |
| 22 | b | 606 | CLA | C4B-NB | 7.44 | 1.41 | 1.35 |
| 22 | C | 510 | CLA | C4B-NB | 7.25 | 1.41 | 1.35 |
| 22 | c | 505 | CLA | C4B-NB | 7.25 | 1.41 | 1.35 |
| 22 | b | 604 | CLA | C4B-NB | 7.20 | 1.41 | 1.35 |
| 22 | B | 614 | CLA | C4B-NB | 7.20 | 1.41 | 1.35 |
| 25 | A | 408 | PL9 | C7-C3 | -7.15 | 1.44 | 1.51 |
| 22 | d | 404 | CLA | C4B-NB | 7.12 | 1.41 | 1.35 |
| 22 | C | 513 | CLA | C4B-NB | 7.12 | 1.41 | 1.35 |
| 22 | D | 405 | CLA | C4B-NB | 6.94 | 1.41 | 1.35 |
| 22 | d | 405 | CLA | MG-NA | 6.92 | 2.22 | 2.06 |
| 22 | C | 504 | CLA | C4B-NB | 6.90 | 1.41 | 1.35 |
| 22 | a | 403 | CLA | C4B-NB | 6.87 | 1.41 | 1.35 |
| 22 | C | 506 | CLA | MG-ND | -6.85 | 1.92 | 2.05 |
| 22 | b | 611 | CLA | C4B-NB | 6.85 | 1.41 | 1.35 |
| 22 | c | 511 | CLA | MG-NA | 6.81 | 2.22 | 2.06 |
| 22 | C | 511 | CLA | C4B-NB | 6.78 | 1.41 | 1.35 |
| 22 | B | 608 | CLA | C4B-NB | 6.75 | 1.41 | 1.35 |
| 22 | b | 612 | CLA | C4B-NB | 6.73 | 1.41 | 1.35 |
| 22 | C | 503 | CLA | C4B-NB | 6.69 | 1.41 | 1.35 |
| 22 | c | 507 | CLA | MG-NA | 6.69 | 2.22 | 2.06 |
| 22 | C | 505 | CLA | C4B-NB | 6.62 | 1.41 | 1.35 |
| 22 | c | 506 | CLA | MG-ND | -6.47 | 1.93 | 2.05 |
| 22 | D | 403 | CLA | C4B-NB | 6.42 | 1.40 | 1.35 |
| 22 | b | 607 | CLA | C4B-NB | 6.42 | 1.40 | 1.35 |
| 22 | C | 508 | CLA | C4B-NB | 6.40 | 1.40 | 1.35 |
| 22 | b | 609 | CLA | MG-NC | 6.40 | 2.21 | 2.06 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | A | 405 | CLA | C4B-NB | 6.38 | 1.40 | 1.35 |
| 22 | B | 610 | CLA | MG-NA | 6.37 | 2.21 | 2.06 |
| 22 | b | 605 | CLA | C4B-NB | 6.37 | 1.40 | 1.35 |
| 22 | d | 403 | CLA | C4B-NB | 6.36 | 1.40 | 1.35 |
| 22 | a | 405 | CLA | MG-ND | -6.33 | 1.93 | 2.05 |
| 22 | D | 404 | CLA | C4B-NB | 6.29 | 1.40 | 1.35 |
| 22 | c | 502 | CLA | C4B-NB | 6.23 | 1.40 | 1.35 |
| 22 | D | 404 | CLA | MG-NA | 6.20 | 2.21 | 2.06 |
| 22 | B | 615 | CLA | MG-NC | 6.18 | 2.20 | 2.06 |
| 22 | C | 508 | CLA | MG-NA | 6.17 | 2.20 | 2.06 |
| 34 | V | 201 | HEC | C2B-C3B | -6.12 | 1.34 | 1.40 |
| 22 | B | 607 | CLA | MG-NA | 6.12 | 2.20 | 2.06 |
| 22 | c | 506 | CLA | C4B-NB | 6.11 | 1.40 | 1.35 |
| 22 | B | 615 | CLA | C4B-NB | 6.11 | 1.40 | 1.35 |
| 22 | C | 502 | CLA | C4B-NB | 6.10 | 1.40 | 1.35 |
| 22 | c | 508 | CLA | C4B-NB | 6.09 | 1.40 | 1.35 |
| 22 | b | 613 | CLA | C4B-NB | 6.09 | 1.40 | 1.35 |
| 22 | b | 608 | CLA | C4B-NB | 6.06 | 1.40 | 1.35 |
| 22 | C | 511 | CLA | MG-NA | 6.06 | 2.20 | 2.06 |
| 22 | C | 509 | CLA | C4B-NB | 6.06 | 1.40 | 1.35 |
| 22 | c | 503 | CLA | C4B-NB | 6.05 | 1.40 | 1.35 |
| 34 | v | 201 | HEC | C3C-C2C | -6.05 | 1.34 | 1.40 |
| 22 | B | 605 | CLA | C4B-NB | 6.04 | 1.40 | 1.35 |
| 22 | b | 614 | CLA | C4B-NB | 6.04 | 1.40 | 1.35 |
| 22 | b | 614 | CLA | MG-NC | 6.01 | 2.20 | 2.06 |
| 22 | b | 616 | CLA | C4B-NB | 6.01 | 1.40 | 1.35 |
| 34 | V | 201 | HEC | C3C-C2C | -5.95 | 1.34 | 1.40 |
| 22 | B | 607 | CLA | MG-NC | -5.90 | 1.92 | 2.06 |
| 34 | f | 101 | HEC | C3C-C2C | -5.85 | 1.34 | 1.40 |
| 22 | B | 610 | CLA | C4B-NB | 5.82 | 1.40 | 1.35 |
| 22 | C | 501 | CLA | MG-NA | 5.80 | 2.20 | 2.06 |
| 22 | b | 614 | CLA | MG-ND | 5.79 | 2.17 | 2.05 |
| 22 | b | 603 | CLA | C4B-NB | 5.68 | 1.40 | 1.35 |
| 22 | C | 508 | CLA | MG-ND | 5.66 | 2.17 | 2.05 |
| 22 | c | 510 | CLA | C4B-NB | 5.63 | 1.40 | 1.35 |
| 30 | b | 618 | BCR | C30-C25 | -5.57 | 1.46 | 1.53 |
| 34 | F | 101 | HEC | C3C-C2C | -5.55 | 1.35 | 1.40 |
| 22 | C | 503 | CLA | MG-NC | 5.51 | 2.19 | 2.06 |
| 22 | d | 405 | CLA | C4B-NB | 5.51 | 1.40 | 1.35 |
| 22 | c | 507 | CLA | C4B-NB | 5.49 | 1.40 | 1.35 |
| 22 | C | 512 | CLA | C4B-NB | 5.47 | 1.40 | 1.35 |
| 22 | c | 501 | CLA | MG-NA | 5.43 | 2.19 | 2.06 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | B | 614 | CLA | C4D-ND | -5.42 | 1.30 | 1.37 |
| 22 | C | 507 | CLA | C4B-NB | 5.41 | 1.40 | 1.35 |
| 22 | d | 405 | CLA | MG-NC | -5.38 | 1.93 | 2.06 |
| 22 | B | 603 | CLA | MG-NA | 5.37 | 2.19 | 2.06 |
| 22 | c | 512 | CLA | MG-NC | 5.33 | 2.18 | 2.06 |
| 22 | a | 405 | CLA | C4B-NB | 5.32 | 1.40 | 1.35 |
| 26 | m | 101 | LMG | C4-C3 | 5.30 | 1.65 | 1.52 |
| 34 | F | 101 | HEC | C3D-C2D | 5.30 | 1.53 | 1.37 |
| 22 | B | 601 | CLA | C1D-ND | 5.27 | 1.44 | 1.37 |
| 30 | C | 514 | BCR | C1-C6 | -5.19 | 1.46 | 1.53 |
| 22 | C | 501 | CLA | C4B-NB | 5.11 | 1.39 | 1.35 |
| 22 | B | 604 | CLA | C4B-NB | 5.08 | 1.39 | 1.35 |
| 22 | c | 509 | CLA | C4B-NB | 5.06 | 1.39 | 1.35 |
| 22 | c | 512 | CLA | MG-ND | 5.05 | 2.15 | 2.05 |
| 22 | B | 602 | CLA | C4B-NB | 5.05 | 1.39 | 1.35 |
| 22 | a | 405 | CLA | C1D-ND | 5.05 | 1.44 | 1.37 |
| 22 | B | 606 | CLA | MG-NC | -5.02 | 1.94 | 2.06 |
| 22 | D | 405 | CLA | MG-NC | 4.96 | 2.18 | 2.06 |
| 22 | D | 405 | CLA | MG-ND | -4.94 | 1.96 | 2.05 |
| 25 | A | 408 | PL9 | C7-C8 | -4.90 | 1.43 | 1.50 |
| 22 | B | 603 | CLA | C4B-NB | 4.89 | 1.39 | 1.35 |
| 22 | c | 507 | CLA | MG-NC | -4.88 | 1.94 | 2.06 |
| 22 | a | 403 | CLA | C4D-ND | -4.88 | 1.31 | 1.37 |
| 22 | D | 404 | CLA | C4D-ND | -4.88 | 1.31 | 1.37 |
| 34 | v | 201 | HEC | C3D-C2D | 4.87 | 1.52 | 1.37 |
| 22 | D | 405 | CLA | C1D-ND | 4.86 | 1.43 | 1.37 |
| 22 | D | 403 | CLA | MG-NA | 4.84 | 2.17 | 2.06 |
| 22 | b | 611 | CLA | MG-NA | 4.81 | 2.17 | 2.06 |
| 22 | c | 505 | CLA | C4D-ND | -4.81 | 1.31 | 1.37 |
| 22 | B | 609 | CLA | C4B-NB | 4.80 | 1.39 | 1.35 |
| 22 | b | 602 | CLA | C1D-ND | 4.79 | 1.43 | 1.37 |
| 22 | c | 509 | CLA | MG-NC | -4.78 | 1.94 | 2.06 |
| 34 | f | 101 | HEC | C3D-C2D | 4.78 | 1.51 | 1.37 |
| 22 | c | 506 | CLA | C1D-ND | 4.72 | 1.43 | 1.37 |
| 22 | b | 610 | CLA | MG-ND | 4.72 | 2.15 | 2.05 |
| 22 | a | 402 | CLA | C4B-NB | 4.71 | 1.39 | 1.35 |
| 22 | b | 606 | CLA | C1B-NB | 4.69 | 1.39 | 1.35 |
| 22 | b | 610 | CLA | C4D-ND | -4.66 | 1.31 | 1.37 |
| 22 | b | 613 | CLA | MG-ND | 4.64 | 2.15 | 2.05 |
| 22 | B | 606 | CLA | C4B-NB | 4.62 | 1.39 | 1.35 |
| 22 | c | 509 | CLA | MG-ND | 4.58 | 2.14 | 2.05 |
| 22 | d | 403 | CLA | C1D-ND | 4.58 | 1.43 | 1.37 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | B | 605 | CLA | MG-NC | -4.57 | 1.95 | 2.06 |
| 25 | A | 408 | PL9 | C3-C4 | -4.57 | 1.42 | 1.49 |
| 22 | B | 606 | CLA | MG-NA | 4.54 | 2.17 | 2.06 |
| 22 | B | 611 | CLA | C4D-ND | -4.53 | 1.31 | 1.37 |
| 22 | b | 610 | CLA | C4B-NB | 4.52 | 1.39 | 1.35 |
| 22 | b | 609 | CLA | MG-ND | -4.50 | 1.96 | 2.05 |
| 25 | D | 407 | PL9 | C52-C5 | -4.47 | 1.41 | 1.50 |
| 22 | c | 510 | CLA | C4D-ND | -4.46 | 1.31 | 1.37 |
| 22 | B | 609 | CLA | MG-NA | 4.44 | 2.16 | 2.06 |
| 22 | C | 505 | CLA | CHC-C1C | 4.43 | 1.46 | 1.35 |
| 22 | D | 403 | CLA | C1D-ND | 4.42 | 1.43 | 1.37 |
| 22 | a | 405 | CLA | C4D-ND | -4.40 | 1.31 | 1.37 |
| 22 | b | 606 | CLA | C1D-ND | 4.40 | 1.43 | 1.37 |
| 22 | A | 402 | CLA | C4D-ND | -4.40 | 1.31 | 1.37 |
| 22 | B | 604 | CLA | C4D-ND | -4.40 | 1.31 | 1.37 |
| 22 | c | 508 | CLA | C4D-ND | -4.38 | 1.31 | 1.37 |
| 29 | H | 103 | DGD | C1E-C2E | 4.38 | 1.65 | 1.52 |
| 22 | b | 602 | CLA | MG-NA | 4.36 | 2.16 | 2.06 |
| 22 | b | 609 | CLA | C1D-ND | 4.35 | 1.43 | 1.37 |
| 22 | a | 402 | CLA | MG-NA | 4.35 | 2.16 | 2.06 |
| 26 | a | 414 | LMG | C4-C5 | 4.34 | 1.62 | 1.53 |
| 22 | C | 509 | CLA | MG-NA | 4.34 | 2.16 | 2.06 |
| 22 | d | 405 | CLA | C1D-ND | 4.34 | 1.43 | 1.37 |
| 29 | c | 515 | DGD | O5D-C6D | -4.33 | 1.35 | 1.43 |
| 22 | c | 509 | CLA | C4D-ND | -4.31 | 1.31 | 1.37 |
| 22 | b | 604 | CLA | MG-NC | 4.31 | 2.16 | 2.06 |
| 29 | A | 413 | DGD | C4D-C5D | 4.30 | 1.62 | 1.53 |
| 22 | B | 613 | CLA | C4D-ND | -4.26 | 1.31 | 1.37 |
| 22 | B | 614 | CLA | CMB-C2B | -4.23 | 1.42 | 1.51 |
| 22 | D | 404 | CLA | C1D-ND | 4.22 | 1.43 | 1.37 |
| 22 | A | 403 | CLA | C4D-ND | -4.21 | 1.31 | 1.37 |
| 22 | B | 606 | CLA | C4D-ND | -4.21 | 1.31 | 1.37 |
| 22 | D | 403 | CLA | C4D-ND | -4.18 | 1.32 | 1.37 |
| 25 | d | 407 | PL9 | C3-C4 | -4.18 | 1.42 | 1.49 |
| 22 | c | 502 | CLA | MG-NC | -4.16 | 1.96 | 2.06 |
| 22 | c | 512 | CLA | CHC-C1C | 4.14 | 1.45 | 1.35 |
| 22 | C | 507 | CLA | C1D-ND | 4.14 | 1.42 | 1.37 |
| 25 | d | 407 | PL9 | C53-C6 | -4.14 | 1.42 | 1.50 |
| 22 | d | 404 | CLA | C4D-ND | -4.14 | 1.32 | 1.37 |
| 22 | c | 502 | CLA | MG-NA | 4.09 | 2.16 | 2.06 |
| 22 | B | 601 | CLA | C4D-ND | -4.09 | 1.32 | 1.37 |
| 22 | C | 513 | CLA | C1D-ND | 4.08 | 1.42 | 1.37 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 26 | A | 409 | LMG | O1-C7 | -4.08 | 1.36 | 1.43 |
| 22 | b | 615 | CLA | C1D-ND | 4.06 | 1.42 | 1.37 |
| 22 | d | 403 | CLA | MG-NC | 4.06 | 2.15 | 2.06 |
| 22 | d | 403 | CLA | C4D-ND | -4.05 | 1.32 | 1.37 |
| 29 | A | 413 | DGD | C3G-C2G | 4.03 | 1.63 | 1.50 |
| 34 | V | 201 | HEC | C3D-C2D | 4.01 | 1.49 | 1.37 |
| 22 | C | 502 | CLA | MG-NA | 4.01 | 2.15 | 2.06 |
| 30 | b | 619 | BCR | C1-C6 | -4.01 | 1.48 | 1.53 |
| 22 | c | 513 | CLA | MG-ND | -4.00 | 1.97 | 2.05 |
| 25 | a | 409 | PL9 | C53-C6 | -4.00 | 1.42 | 1.50 |
| 22 | b | 605 | CLA | MG-ND | 4.00 | 2.13 | 2.05 |
| 22 | b | 614 | CLA | C4D-ND | -3.99 | 1.32 | 1.37 |
| 22 | c | 506 | CLA | MG-NA | 3.98 | 2.15 | 2.06 |
| 23 | D | 401 | PHO | CAC-C3C | -3.97 | 1.45 | 1.52 |
| 30 | k | 101 | BCR | C1-C6 | -3.97 | 1.48 | 1.53 |
| 22 | c | 508 | CLA | C1D-ND | 3.95 | 1.42 | 1.37 |
| 22 | A | 405 | CLA | C4D-ND | -3.94 | 1.32 | 1.37 |
| 22 | b | 601 | CLA | MG-NA | 3.94 | 2.15 | 2.06 |
| 22 | b | 608 | CLA | C4D-ND | -3.93 | 1.32 | 1.37 |
| 30 | K | 102 | BCR | C1-C6 | -3.93 | 1.48 | 1.53 |
| 22 | C | 512 | CLA | MG-ND | 3.93 | 2.13 | 2.05 |
| 30 | K | 102 | BCR | C30-C25 | -3.92 | 1.48 | 1.53 |
| 22 | B | 611 | CLA | C1D-ND | 3.91 | 1.42 | 1.37 |
| 26 | D | 408 | LMG | C4-C5 | 3.90 | 1.61 | 1.53 |
| 30 | b | 617 | BCR | C1-C6 | -3.89 | 1.48 | 1.53 |
| 25 | D | 407 | PL9 | C11-C9 | -3.88 | 1.43 | 1.51 |
| 26 | M | 101 | LMG | C1-C2 | 3.87 | 1.63 | 1.52 |
| 22 | b | 603 | CLA | MG-NC | -3.86 | 1.97 | 2.06 |
| 22 | C | 501 | CLA | C1D-ND | 3.86 | 1.42 | 1.37 |
| 22 | c | 507 | CLA | MG-ND | 3.86 | 2.13 | 2.05 |
| 22 | B | 611 | CLA | MG-NA | 3.86 | 2.15 | 2.06 |
| 22 | b | 612 | CLA | MG-ND | -3.86 | 1.98 | 2.05 |
| 22 | c | 503 | CLA | C4D-ND | -3.85 | 1.32 | 1.37 |
| 26 | c | 521 | LMG | C3-C2 | 3.84 | 1.62 | 1.52 |
| 30 | H | 102 | BCR | C30-C25 | -3.83 | 1.48 | 1.53 |
| 22 | D | 405 | CLA | C3B-C2B | -3.82 | 1.35 | 1.40 |
| 22 | c | 510 | CLA | C1D-ND | 3.82 | 1.42 | 1.37 |
| 26 | D | 412 | LMG | C7-C8 | 3.82 | 1.60 | 1.51 |
| 22 | B | 612 | CLA | C4D-ND | -3.81 | 1.32 | 1.37 |
| 26 | d | 410 | LMG | C4-C5 | 3.81 | 1.61 | 1.53 |
| 22 | B | 610 | CLA | C4D-ND | -3.81 | 1.32 | 1.37 |
| 22 | B | 609 | CLA | C3B-C2B | -3.80 | 1.35 | 1.40 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | D | 404 | CLA | MG-ND | 3.80 | 2.13 | 2.05 |
| 22 | c | 501 | CLA | C4D-ND | -3.80 | 1.32 | 1.37 |
| 22 | C | 503 | CLA | C4D-ND | -3.80 | 1.32 | 1.37 |
| 22 | C | 511 | CLA | C4D-ND | -3.80 | 1.32 | 1.37 |
| 26 | B | 620 | LMG | O8-C28 | 3.79 | 1.43 | 1.30 |
| 22 | B | 615 | CLA | MG-ND | 3.78 | 2.13 | 2.05 |
| 22 | b | 612 | CLA | C1D-ND | 3.78 | 1.42 | 1.37 |
| 30 | t | 101 | BCR | C30-C25 | -3.77 | 1.48 | 1.53 |
| 22 | b | 612 | CLA | MG-NC | 3.77 | 2.15 | 2.06 |
| 22 | C | 503 | CLA | MG-ND | 3.77 | 2.13 | 2.05 |
| 26 | c | 518 | LMG | C4-C5 | 3.76 | 1.60 | 1.53 |
| 22 | b | 608 | CLA | CHC-C1C | 3.75 | 1.44 | 1.35 |
| 30 | B | 618 | BCR | C1-C6 | -3.74 | 1.48 | 1.53 |
| 22 | c | 502 | CLA | C1D-ND | 3.72 | 1.42 | 1.37 |
| 22 | c | 511 | CLA | C1D-ND | 3.72 | 1.42 | 1.37 |
| 27 | A | 412 | SQD | O48-C23 | 3.72 | 1.44 | 1.33 |
| 27 | A | 412 | SQD | O47-C7 | 3.71 | 1.44 | 1.34 |
| 30 | K | 101 | BCR | C30-C25 | -3.68 | 1.48 | 1.53 |
| 22 | c | 512 | CLA | C4D-ND | -3.68 | 1.32 | 1.37 |
| 22 | b | 614 | CLA | CHC-C1C | 3.67 | 1.44 | 1.35 |
| 30 | D | 406 | BCR | C30-C25 | -3.67 | 1.48 | 1.53 |
| 22 | b | 616 | CLA | C4D-ND | -3.67 | 1.32 | 1.37 |
| 27 | L | 101 | SQD | O48-C23 | 3.66 | 1.44 | 1.33 |
| 30 | c | 514 | BCR | C1-C6 | -3.66 | 1.48 | 1.53 |
| 22 | b | 603 | CLA | C3B-C2B | -3.65 | 1.35 | 1.40 |
| 22 | B | 615 | CLA | C1D-ND | 3.63 | 1.42 | 1.37 |
| 22 | C | 502 | CLA | C4D-ND | -3.63 | 1.32 | 1.37 |
| 27 | a | 410 | SQD | O48-C23 | 3.63 | 1.43 | 1.33 |
| 26 | m | 101 | LMG | O1-C7 | -3.63 | 1.37 | 1.43 |
| 22 | C | 501 | CLA | C4D-ND | -3.62 | 1.32 | 1.37 |
| 22 | B | 609 | CLA | C1D-ND | 3.62 | 1.42 | 1.37 |
| 22 | b | 604 | CLA | C4D-ND | -3.61 | 1.32 | 1.37 |
| 22 | a | 402 | CLA | C1D-ND | 3.61 | 1.42 | 1.37 |
| 22 | c | 502 | CLA | C4D-ND | -3.61 | 1.32 | 1.37 |
| 27 | B | 621 | SQD | O47-C7 | 3.60 | 1.44 | 1.34 |
| 26 | a | 414 | LMG | O1-C7 | 3.60 | 1.50 | 1.43 |
| 29 | C | 516 | DGD | O5D-C6D | -3.59 | 1.37 | 1.43 |
| 22 | c | 512 | CLA | MG-NA | -3.58 | 1.97 | 2.06 |
| 27 | A | 410 | SQD | O47-C7 | 3.58 | 1.44 | 1.34 |
| 22 | B | 614 | CLA | C3B-C2B | -3.58 | 1.35 | 1.40 |
| 22 | H | 101 | CLA | CHC-C1C | 3.57 | 1.44 | 1.35 |
| 22 | A | 403 | CLA | C1D-ND | 3.57 | 1.42 | 1.37 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 30 | b | 618 | BCR | C1-C6 | -3.55 | 1.48 | 1.53 |
| 22 | B | 614 | CLA | C3B-CAB | -3.54 | 1.40 | 1.47 |
| 22 | C | 501 | CLA | C3B-C2B | -3.54 | 1.35 | 1.40 |
| 22 | d | 405 | CLA | C4D-ND | -3.54 | 1.32 | 1.37 |
| 29 | C | 518 | DGD | O1G-C1G | -3.53 | 1.37 | 1.45 |
| 27 | D | 409 | SQD | O48-C23 | 3.53 | 1.43 | 1.33 |
| 22 | C | 506 | CLA | CHC-C1C | 3.53 | 1.44 | 1.35 |
| 22 | B | 605 | CLA | C3B-C2B | -3.53 | 1.35 | 1.40 |
| 26 | D | 412 | LMG | C9-C8 | 3.52 | 1.61 | 1.50 |
| 22 | b | 616 | CLA | MG-ND | -3.52 | 1.98 | 2.05 |
| 22 | a | 403 | CLA | CHC-C1C | 3.52 | 1.44 | 1.35 |
| 22 | C | 511 | CLA | C1D-ND | 3.52 | 1.42 | 1.37 |
| 22 | C | 510 | CLA | MG-NA | 3.51 | 2.14 | 2.06 |
| 25 | d | 407 | PL9 | C16-C14 | -3.51 | 1.44 | 1.51 |
| 22 | B | 603 | CLA | C1D-ND | 3.50 | 1.42 | 1.37 |
| 22 | c | 508 | CLA | CHC-C1C | 3.50 | 1.43 | 1.35 |
| 22 | C | 506 | CLA | MG-NC | 3.50 | 2.14 | 2.06 |
| 28 | D | 411 | LHG | P-O6 | 3.49 | 1.73 | 1.59 |
| 29 | H | 103 | DGD | C4E-C5E | 3.47 | 1.60 | 1.53 |
| 27 | t | 102 | SQD | O48-C23 | 3.47 | 1.43 | 1.33 |
| 22 | A | 405 | CLA | C1D-ND | 3.47 | 1.42 | 1.37 |
| 30 | T | 101 | BCR | C30-C25 | -3.46 | 1.49 | 1.53 |
| 22 | b | 604 | CLA | MG-NA | -3.46 | 1.98 | 2.06 |
| 22 | C | 501 | CLA | CHC-C1C | 3.45 | 1.43 | 1.35 |
| 22 | B | 606 | CLA | C3B-C2B | -3.44 | 1.35 | 1.40 |
| 30 | x | 101 | BCR | C30-C25 | -3.44 | 1.49 | 1.53 |
| 29 | C | 516 | DGD | O1G-C1A | 3.44 | 1.43 | 1.33 |
| 28 | D | 411 | LHG | O3-C3 | -3.43 | 1.31 | 1.44 |
| 22 | c | 503 | CLA | MG-NA | 3.43 | 2.14 | 2.06 |
| 22 | C | 504 | CLA | MG-ND | -3.43 | 1.99 | 2.05 |
| 22 | c | 501 | CLA | CMB-C2B | -3.42 | 1.44 | 1.51 |
| 22 | C | 509 | CLA | C4D-ND | -3.42 | 1.33 | 1.37 |
| 27 | t | 102 | SQD | O47-C7 | 3.42 | 1.44 | 1.34 |
| 27 | L | 101 | SQD | O47-C7 | 3.42 | 1.43 | 1.34 |
| 23 | D | 401 | PHO | CMD-C2D | -3.41 | 1.43 | 1.51 |
| 22 | B | 609 | CLA | C4D-ND | -3.41 | 1.33 | 1.37 |
| 22 | B | 610 | CLA | MG-NC | -3.41 | 1.98 | 2.06 |
| 22 | B | 612 | CLA | C1D-ND | 3.40 | 1.42 | 1.37 |
| 22 | B | 605 | CLA | CHC-C1C | 3.40 | 1.43 | 1.35 |
| 22 | B | 609 | CLA | MG-NC | -3.40 | 1.98 | 2.06 |
| 27 | A | 410 | SQD | O48-C23 | 3.39 | 1.43 | 1.33 |
| 30 | k | 102 | BCR | C30-C25 | -3.39 | 1.49 | 1.53 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 28 | d | 409 | LHG | P-O6 | 3.37 | 1.73 | 1.59 |
| 22 | D | 404 | CLA | CHC-C1C | 3.37 | 1.43 | 1.35 |
| 22 | c | 513 | CLA | CHC-C1C | 3.37 | 1.43 | 1.35 |
| 27 | B | 621 | SQD | O48-C23 | 3.37 | 1.43 | 1.33 |
| 30 | I | 101 | BCR | C1-C6 | -3.36 | 1.49 | 1.53 |
| 22 | d | 403 | CLA | CMB-C2B | -3.36 | 1.44 | 1.51 |
| 22 | b | 609 | CLA | CMB-C2B | -3.35 | 1.44 | 1.51 |
| 22 | b | 607 | CLA | C3B-C2B | -3.35 | 1.35 | 1.40 |
| 22 | B | 610 | CLA | CMD-C2D | -3.34 | 1.43 | 1.50 |
| 22 | B | 607 | CLA | C4B-NB | 3.34 | 1.38 | 1.35 |
| 30 | d | 406 | BCR | C30-C25 | -3.33 | 1.49 | 1.53 |
| 22 | B | 609 | CLA | CMB-C2B | -3.33 | 1.44 | 1.51 |
| 22 | b | 614 | CLA | C1D-ND | 3.32 | 1.41 | 1.37 |
| 29 | c | 517 | DGD | O2E-C2E | -3.32 | 1.35 | 1.43 |
| 22 | A | 402 | CLA | MG-NC | -3.32 | 1.98 | 2.06 |
| 22 | c | 511 | CLA | CHC-C1C | 3.32 | 1.43 | 1.35 |
| 22 | C | 512 | CLA | CHC-C1C | 3.32 | 1.43 | 1.35 |
| 22 | B | 608 | CLA | C4D-ND | -3.32 | 1.33 | 1.37 |
| 23 | d | 401 | PHO | CAC-C3C | -3.32 | 1.46 | 1.52 |
| 22 | b | 606 | CLA | CHC-C1C | 3.31 | 1.43 | 1.35 |
| 22 | c | 501 | CLA | CMC-C2C | -3.31 | 1.43 | 1.50 |
| 25 | D | 407 | PL9 | C6-C1 | -3.31 | 1.42 | 1.48 |
| 30 | a | 406 | BCR | C30-C25 | -3.31 | 1.49 | 1.53 |
| 22 | A | 402 | CLA | C1D-ND | 3.30 | 1.41 | 1.37 |
| 22 | c | 507 | CLA | C3B-C2B | -3.29 | 1.35 | 1.40 |
| 26 | c | 520 | LMG | C3-C2 | 3.29 | 1.60 | 1.52 |
| 22 | B | 601 | CLA | CMB-C2B | -3.29 | 1.44 | 1.51 |
| 22 | C | 512 | CLA | C4D-ND | -3.28 | 1.33 | 1.37 |
| 22 | A | 403 | CLA | CMB-C2B | -3.28 | 1.44 | 1.51 |
| 30 | k | 103 | BCR | C30-C25 | -3.28 | 1.49 | 1.53 |
| 26 | c | 518 | LMG | C1-C2 | 3.28 | 1.61 | 1.52 |
| 28 | A | 411 | LHG | C24-C23 | 3.27 | 1.60 | 1.50 |
| 22 | c | 507 | CLA | C4D-ND | -3.27 | 1.33 | 1.37 |
| 29 | c | 515 | DGD | O2G-C2G | -3.27 | 1.38 | 1.46 |
| 22 | c | 501 | CLA | C1D-ND | 3.27 | 1.41 | 1.37 |
| 26 | a | 414 | LMG | O8-C9 | -3.27 | 1.37 | 1.45 |
| 22 | d | 403 | CLA | CHC-C1C | 3.26 | 1.43 | 1.35 |
| 29 | C | 518 | DGD | O3G-C3G | -3.26 | 1.37 | 1.43 |
| 26 | Y | 101 | LMG | C4-C5 | 3.25 | 1.59 | 1.53 |
| 22 | b | 607 | CLA | C1D-ND | 3.25 | 1.41 | 1.37 |
| 22 | C | 503 | CLA | CHC-C1C | 3.25 | 1.43 | 1.35 |
| 22 | B | 615 | CLA | CMB-C2B | -3.25 | 1.44 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | d | 404 | CLA | CMB-C2B | -3.25 | 1.44 | 1.51 |
| 22 | b | 605 | CLA | CMC-C2C | -3.24 | 1.43 | 1.50 |
| 26 | A | 409 | LMG | C4-C3 | 3.24 | 1.60 | 1.52 |
| 22 | c | 503 | CLA | C1D-ND | 3.23 | 1.41 | 1.37 |
| 22 | C | 510 | CLA | CHC-C1C | 3.23 | 1.43 | 1.35 |
| 22 | d | 405 | CLA | C3B-CAB | -3.23 | 1.41 | 1.47 |
| 22 | B | 615 | CLA | C4D-ND | -3.23 | 1.33 | 1.37 |
| 22 | c | 508 | CLA | MG-NC | 3.23 | 2.13 | 2.06 |
| 22 | C | 513 | CLA | CMB-C2B | -3.21 | 1.45 | 1.51 |
| 22 | C | 503 | CLA | CMB-C2B | -3.21 | 1.45 | 1.51 |
| 22 | a | 403 | CLA | C1D-ND | 3.21 | 1.41 | 1.37 |
| 29 | c | 516 | DGD | O2E-C2E | -3.21 | 1.35 | 1.43 |
| 22 | c | 512 | CLA | C1D-ND | 3.21 | 1.41 | 1.37 |
| 22 | C | 508 | CLA | C4D-ND | -3.21 | 1.33 | 1.37 |
| 22 | B | 603 | CLA | C4D-ND | -3.21 | 1.33 | 1.37 |
| 22 | c | 505 | CLA | CHC-C1C | 3.21 | 1.43 | 1.35 |
| 29 | A | 413 | DGD | O5D-C1E | 3.20 | 1.45 | 1.40 |
| 22 | A | 403 | CLA | MG-NA | 3.20 | 2.13 | 2.06 |
| 22 | b | 609 | CLA | CHC-C1C | 3.19 | 1.43 | 1.35 |
| 22 | b | 610 | CLA | MG-NC | -3.18 | 1.98 | 2.06 |
| 26 | c | 521 | LMG | C1-C2 | 3.18 | 1.61 | 1.52 |
| 22 | B | 608 | CLA | CMD-C2D | -3.18 | 1.44 | 1.50 |
| 22 | C | 510 | CLA | C4D-ND | -3.17 | 1.33 | 1.37 |
| 22 | b | 610 | CLA | C3B-C2B | -3.17 | 1.36 | 1.40 |
| 22 | b | 602 | CLA | C4D-ND | -3.15 | 1.33 | 1.37 |
| 22 | H | 101 | CLA | C1D-ND | 3.15 | 1.41 | 1.37 |
| 22 | B | 613 | CLA | MG-NA | 3.15 | 2.13 | 2.06 |
| 29 | C | 516 | DGD | C3G-C2G | 3.14 | 1.60 | 1.50 |
| 22 | H | 101 | CLA | CMB-C2B | -3.14 | 1.45 | 1.51 |
| 22 | B | 603 | CLA | CHC-C1C | 3.14 | 1.43 | 1.35 |
| 29 | A | 413 | DGD | C1E-C2E | 3.13 | 1.61 | 1.52 |
| 22 | b | 601 | CLA | C1D-ND | 3.12 | 1.41 | 1.37 |
| 22 | B | 607 | CLA | C4D-ND | -3.12 | 1.33 | 1.37 |
| 22 | c | 513 | CLA | C1D-ND | 3.11 | 1.41 | 1.37 |
| 22 | b | 603 | CLA | CMC-C2C | -3.11 | 1.44 | 1.50 |
| 26 | b | 622 | LMG | O6-C1 | 3.11 | 1.49 | 1.41 |
| 26 | M | 101 | LMG | C7-C8 | 3.11 | 1.60 | 1.50 |
| 22 | C | 507 | CLA | MG-ND | -3.11 | 1.99 | 2.05 |
| 22 | D | 405 | CLA | MG-NA | -3.11 | 1.98 | 2.06 |
| 22 | b | 602 | CLA | CMD-C2D | -3.10 | 1.44 | 1.50 |
| 22 | C | 513 | CLA | CHC-C1C | 3.10 | 1.42 | 1.35 |
| 22 | b | 612 | CLA | CMB-C2B | -3.10 | 1.45 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 29 | C | 517 | DGD | C1E-C2E | 3.09 | 1.61 | 1.52 |
| 22 | b | 601 | CLA | CHC-C1C | 3.09 | 1.42 | 1.35 |
| 22 | c | 506 | CLA | CMB-C2B | -3.09 | 1.45 | 1.51 |
| 22 | c | 504 | CLA | C4D-ND | -3.09 | 1.33 | 1.37 |
| 22 | c | 513 | CLA | C4D-ND | -3.08 | 1.33 | 1.37 |
| 28 | L | 102 | LHG | O7-C5 | -3.08 | 1.38 | 1.46 |
| 22 | B | 602 | CLA | C3B-CAB | -3.08 | 1.41 | 1.47 |
| 22 | b | 603 | CLA | CMB-C2B | -3.08 | 1.45 | 1.51 |
| 27 | f | 102 | SQD | O47-C7 | 3.07 | 1.43 | 1.34 |
| 26 | d | 410 | LMG | O1-C7 | -3.07 | 1.38 | 1.43 |
| 22 | B | 608 | CLA | MG-NA | 3.07 | 2.13 | 2.06 |
| 25 | d | 407 | PL9 | C21-C19 | -3.07 | 1.44 | 1.51 |
| 28 | D | 413 | LHG | O7-C5 | -3.07 | 1.38 | 1.46 |
| 22 | C | 507 | CLA | C1B-NB | -3.07 | 1.32 | 1.35 |
| 22 | C | 504 | CLA | C1D-ND | 3.07 | 1.41 | 1.37 |
| 22 | b | 616 | CLA | C1D-ND | 3.06 | 1.41 | 1.37 |
| 22 | b | 603 | CLA | CMD-C2D | -3.06 | 1.44 | 1.50 |
| 29 | H | 103 | DGD | C6D-C5D | 3.06 | 1.61 | 1.51 |
| 22 | C | 503 | CLA | C1D-ND | 3.06 | 1.41 | 1.37 |
| 29 | c | 517 | DGD | C3G-C2G | 3.05 | 1.60 | 1.50 |
| 26 | M | 101 | LMG | O7-C8 | -3.05 | 1.39 | 1.46 |
| 22 | B | 612 | CLA | CMD-C2D | -3.05 | 1.44 | 1.50 |
| 22 | H | 101 | CLA | C3B-C2B | -3.04 | 1.36 | 1.40 |
| 22 | C | 506 | CLA | C1D-ND | 3.04 | 1.41 | 1.37 |
| 22 | b | 611 | CLA | C4D-ND | -3.04 | 1.33 | 1.37 |
| 30 | k | 103 | BCR | C1-C6 | -3.03 | 1.49 | 1.53 |
| 25 | D | 407 | PL9 | C26-C24 | -3.03 | 1.45 | 1.51 |
| 22 | c | 503 | CLA | CHC-C1C | 3.03 | 1.42 | 1.35 |
| 22 | b | 613 | CLA | C1D-ND | 3.03 | 1.41 | 1.37 |
| 30 | K | 101 | BCR | C1-C6 | -3.02 | 1.49 | 1.53 |
| 22 | c | 509 | CLA | CHC-C1C | 3.02 | 1.42 | 1.35 |
| 22 | B | 602 | CLA | C3B-C2B | -3.02 | 1.36 | 1.40 |
| 22 | c | 510 | CLA | CHC-C1C | 3.01 | 1.42 | 1.35 |
| 22 | b | 611 | CLA | CHC-C1C | 3.01 | 1.42 | 1.35 |
| 28 | a | 411 | LHG | P-O6 | 3.01 | 1.71 | 1.59 |
| 22 | B | 602 | CLA | C1D-ND | 3.01 | 1.41 | 1.37 |
| 22 | B | 614 | CLA | C1D-ND | 3.00 | 1.41 | 1.37 |
| 22 | D | 405 | CLA | CMD-C2D | -3.00 | 1.44 | 1.50 |
| 22 | B | 606 | CLA | C1D-ND | 3.00 | 1.41 | 1.37 |
| 22 | B | 601 | CLA | CHC-C1C | 2.99 | 1.42 | 1.35 |
| 22 | c | 510 | CLA | CMB-C2B | -2.99 | 1.45 | 1.51 |
| 22 | b | 615 | CLA | CHC-C1C | 2.99 | 1.42 | 1.35 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 30 | B | 616 | BCR | C30-C25 | -2.99 | 1.49 | 1.53 |
| 22 | B | 614 | CLA | MG-ND | 2.99 | 2.11 | 2.05 |
| 25 | d | 407 | PL9 | C7-C8 | -2.98 | 1.46 | 1.50 |
| 22 | c | 509 | CLA | C1D-ND | 2.98 | 1.41 | 1.37 |
| 22 | B | 607 | CLA | CHC-C1C | 2.98 | 1.42 | 1.35 |
| 30 | B | 616 | BCR | C1-C6 | -2.98 | 1.49 | 1.53 |
| 22 | b | 615 | CLA | CMB-C2B | -2.97 | 1.45 | 1.51 |
| 30 | k | 101 | BCR | C30-C25 | -2.97 | 1.49 | 1.53 |
| 27 | a | 410 | SQD | O47-C7 | 2.96 | 1.42 | 1.34 |
| 22 | C | 511 | CLA | CMB-C2B | -2.95 | 1.45 | 1.51 |
| 27 | f | 102 | SQD | O48-C23 | 2.95 | 1.42 | 1.33 |
| 29 | C | 517 | DGD | C6D-C5D | 2.95 | 1.60 | 1.51 |
| 22 | C | 511 | CLA | C1B-NB | 2.94 | 1.37 | 1.35 |
| 22 | B | 612 | CLA | C3B-C2B | -2.94 | 1.36 | 1.40 |
| 22 | B | 614 | CLA | CHC-C1C | 2.93 | 1.42 | 1.35 |
| 22 | b | 602 | CLA | C3B-C2B | -2.93 | 1.36 | 1.40 |
| 29 | c | 515 | DGD | C3D-C2D | 2.92 | 1.59 | 1.52 |
| 22 | B | 601 | CLA | MG-NA | 2.92 | 2.13 | 2.06 |
| 22 | C | 502 | CLA | C3B-C2B | -2.92 | 1.36 | 1.40 |
| 22 | c | 506 | CLA | CHC-C1C | 2.92 | 1.42 | 1.35 |
| 29 | A | 413 | DGD | C4E-C5E | 2.91 | 1.59 | 1.53 |
| 22 | B | 610 | CLA | CHC-C1C | 2.90 | 1.42 | 1.35 |
| 25 | D | 407 | PL9 | C53-C6 | -2.89 | 1.44 | 1.50 |
| 22 | C | 504 | CLA | C1B-NB | -2.89 | 1.32 | 1.35 |
| 29 | C | 516 | DGD | C4E-C3E | 2.89 | 1.59 | 1.52 |
| 22 | C | 506 | CLA | C4D-ND | -2.88 | 1.33 | 1.37 |
| 22 | d | 404 | CLA | CHC-C1C | 2.88 | 1.42 | 1.35 |
| 22 | a | 402 | CLA | CMB-C2B | -2.88 | 1.45 | 1.51 |
| 22 | H | 101 | CLA | MG-ND | -2.88 | 2.00 | 2.05 |
| 22 | B | 608 | CLA | C1D-ND | 2.88 | 1.41 | 1.37 |
| 28 | A | 411 | LHG | P-O6 | 2.87 | 1.70 | 1.59 |
| 22 | C | 501 | CLA | MG-ND | 2.86 | 2.11 | 2.05 |
| 29 | c | 516 | DGD | C3D-C2D | 2.85 | 1.59 | 1.52 |
| 22 | b | 603 | CLA | CHC-C1C | 2.85 | 1.42 | 1.35 |
| 22 | b | 607 | CLA | C4D-ND | -2.85 | 1.33 | 1.37 |
| 26 | a | 414 | LMG | C3-C2 | 2.85 | 1.59 | 1.52 |
| 22 | B | 610 | CLA | MG-ND | 2.85 | 2.11 | 2.05 |
| 22 | C | 511 | CLA | C3B-C2B | -2.85 | 1.36 | 1.40 |
| 22 | b | 611 | CLA | CMD-C2D | -2.85 | 1.44 | 1.50 |
| 23 | D | 401 | PHO | C3B-CAB | -2.84 | 1.42 | 1.47 |
| 22 | b | 606 | CLA | C4D-ND | -2.84 | 1.33 | 1.37 |
| 22 | c | 513 | CLA | CMB-C2B | -2.84 | 1.45 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 29 | H | 103 | DGD | O2D-C2D | -2.84 | 1.36 | 1.43 |
| 22 | C | 512 | CLA | MG-NA | 2.84 | 2.13 | 2.06 |
| 22 | C | 509 | CLA | CMB-C2B | -2.84 | 1.45 | 1.51 |
| 22 | b | 615 | CLA | MG-NC | -2.83 | 1.99 | 2.06 |
| 29 | H | 103 | DGD | O5D-C1E | 2.83 | 1.45 | 1.40 |
| 22 | B | 606 | CLA | C3B-CAB | -2.83 | 1.42 | 1.47 |
| 22 | C | 501 | CLA | CMD-C2D | -2.82 | 1.44 | 1.50 |
| 22 | C | 509 | CLA | CMD-C2D | -2.82 | 1.44 | 1.50 |
| 28 | b | 623 | LHG | O7-C5 | -2.82 | 1.39 | 1.46 |
| 26 | b | 622 | LMG | O8-C28 | 2.81 | 1.41 | 1.33 |
| 22 | D | 403 | CLA | CHC-C1C | 2.81 | 1.42 | 1.35 |
| 28 | l | 101 | LHG | O7-C5 | -2.81 | 1.39 | 1.46 |
| 22 | c | 502 | CLA | CMD-C2D | -2.81 | 1.44 | 1.50 |
| 22 | b | 612 | CLA | C4D-ND | -2.81 | 1.33 | 1.37 |
| 22 | b | 601 | CLA | CMB-C2B | -2.81 | 1.45 | 1.51 |
| 22 | C | 509 | CLA | MG-NC | -2.81 | 1.99 | 2.06 |
| 29 | c | 517 | DGD | O4E-C4E | -2.80 | 1.36 | 1.43 |
| 22 | b | 607 | CLA | CMB-C2B | -2.80 | 1.45 | 1.51 |
| 29 | c | 517 | DGD | C4D-C5D | 2.80 | 1.58 | 1.53 |
| 22 | c | 511 | CLA | MG-ND | -2.80 | 2.00 | 2.05 |
| 22 | B | 611 | CLA | CHC-C1C | 2.80 | 1.42 | 1.35 |
| 28 | a | 411 | LHG | O8-C23 | 2.79 | 1.41 | 1.33 |
| 22 | C | 513 | CLA | C4D-ND | -2.79 | 1.33 | 1.37 |
| 28 | D | 410 | LHG | O7-C5 | -2.79 | 1.39 | 1.46 |
| 30 | I | 101 | BCR | C33-C5 | -2.79 | 1.46 | 1.50 |
| 30 | C | 515 | BCR | C1-C6 | -2.78 | 1.49 | 1.53 |
| 26 | A | 409 | LMG | O8-C9 | -2.78 | 1.38 | 1.45 |
| 30 | t | 101 | BCR | C1-C6 | -2.78 | 1.50 | 1.53 |
| 22 | D | 405 | CLA | CMB-C2B | -2.77 | 1.45 | 1.51 |
| 22 | b | 604 | CLA | CHC-C1C | 2.77 | 1.42 | 1.35 |
| 22 | B | 615 | CLA | CMD-C2D | -2.77 | 1.44 | 1.50 |
| 22 | B | 602 | CLA | C4D-ND | -2.77 | 1.33 | 1.37 |
| 26 | a | 414 | LMG | C1-C2 | 2.77 | 1.60 | 1.52 |
| 22 | b | 610 | CLA | C4B-CHC | -2.76 | 1.33 | 1.41 |
| 22 | C | 506 | CLA | C3B-C2B | -2.76 | 1.36 | 1.40 |
| 22 | c | 506 | CLA | C4D-ND | -2.75 | 1.33 | 1.37 |
| 22 | b | 605 | CLA | C1D-ND | 2.75 | 1.41 | 1.37 |
| 22 | c | 504 | CLA | C1D-ND | 2.75 | 1.41 | 1.37 |
| 22 | c | 504 | CLA | CMD-C2D | -2.75 | 1.45 | 1.50 |
| 26 | a | 414 | LMG | O7-C10 | 2.75 | 1.42 | 1.34 |
| 22 | c | 503 | CLA | C3B-C2B | -2.75 | 1.36 | 1.40 |
| 29 | A | 413 | DGD | O1G-C1A | 2.75 | 1.41 | 1.33 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | b | 613 | CLA | CMD-C2D | -2.74 | 1.45 | 1.50 |
| 22 | B | 609 | CLA | CHC-C1C | 2.74 | 1.42 | 1.35 |
| 22 | b | 602 | CLA | CMB-C2B | -2.74 | 1.45 | 1.51 |
| 22 | c | 506 | CLA | C3B-C2B | -2.73 | 1.36 | 1.40 |
| 22 | b | 616 | CLA | CMD-C2D | -2.73 | 1.45 | 1.50 |
| 30 | D | 406 | BCR | C1-C6 | -2.73 | 1.50 | 1.53 |
| 22 | B | 601 | CLA | C1B-NB | 2.73 | 1.37 | 1.35 |
| 23 | A | 404 | PHO | C1C-NC | -2.73 | 1.30 | 1.38 |
| 22 | C | 505 | CLA | CMB-C2B | -2.73 | 1.46 | 1.51 |
| 30 | B | 618 | BCR | C30-C25 | -2.73 | 1.50 | 1.53 |
| 22 | D | 405 | CLA | C4D-ND | -2.73 | 1.33 | 1.37 |
| 22 | c | 507 | CLA | C1D-ND | 2.72 | 1.41 | 1.37 |
| 22 | b | 602 | CLA | CHC-C1C | 2.72 | 1.41 | 1.35 |
| 22 | c | 513 | CLA | CMD-C2D | -2.72 | 1.45 | 1.50 |
| 22 | A | 402 | CLA | CHC-C1C | 2.72 | 1.41 | 1.35 |
| 29 | C | 518 | DGD | O2D-C2D | -2.71 | 1.36 | 1.43 |
| 25 | A | 408 | PL9 | C6-C1 | -2.70 | 1.43 | 1.48 |
| 26 | d | 410 | LMG | O7-C8 | -2.70 | 1.39 | 1.46 |
| 22 | B | 614 | CLA | C4B-CHC | -2.70 | 1.33 | 1.41 |
| 26 | Y | 101 | LMG | C3-C2 | 2.70 | 1.59 | 1.52 |
| 22 | c | 502 | CLA | CHC-C1C | 2.70 | 1.41 | 1.35 |
| 26 | c | 518 | LMG | O2-C2 | -2.69 | 1.36 | 1.43 |
| 22 | b | 609 | CLA | C4D-ND | -2.69 | 1.34 | 1.37 |
| 22 | b | 615 | CLA | C1B-NB | 2.69 | 1.37 | 1.35 |
| 22 | B | 612 | CLA | CHC-C1C | 2.69 | 1.41 | 1.35 |
| 22 | c | 502 | CLA | CMC-C2C | -2.69 | 1.45 | 1.50 |
| 28 | D | 410 | LHG | O8-C6 | -2.69 | 1.39 | 1.45 |
| 22 | c | 511 | CLA | C4D-ND | -2.69 | 1.34 | 1.37 |
| 22 | a | 403 | CLA | C3B-CAB | -2.69 | 1.42 | 1.47 |
| 22 | a | 403 | CLA | CMB-C2B | -2.68 | 1.46 | 1.51 |
| 22 | C | 504 | CLA | CMB-C2B | -2.68 | 1.46 | 1.51 |
| 26 | Y | 101 | LMG | C6-C5 | 2.68 | 1.60 | 1.51 |
| 22 | c | 504 | CLA | CHC-C1C | 2.68 | 1.41 | 1.35 |
| 29 | C | 517 | DGD | C4D-C3D | 2.67 | 1.59 | 1.52 |
| 29 | c | 516 | DGD | C3E-C2E | 2.67 | 1.59 | 1.52 |
| 26 | c | 518 | LMG | O1-C1 | 2.67 | 1.44 | 1.40 |
| 23 | A | 404 | PHO | C3B-C2B | -2.66 | 1.36 | 1.40 |
| 28 | L | 102 | LHG | P-O6 | 2.66 | 1.70 | 1.59 |
| 22 | b | 610 | CLA | C3B-CAB | -2.66 | 1.42 | 1.47 |
| 22 | C | 505 | CLA | C4D-ND | -2.66 | 1.34 | 1.37 |
| 22 | b | 608 | CLA | C3B-CAB | -2.66 | 1.42 | 1.47 |
| 29 | C | 516 | DGD | C1D-C2D | 2.66 | 1.60 | 1.52 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 29 | C | 518 | DGD | O2G-C2G | -2.65 | 1.40 | 1.46 |
| 22 | b | 601 | CLA | O2A-CGA | 2.65 | 1.41 | 1.33 |
| 22 | d | 403 | CLA | C3D-C4D | 2.64 | 1.50 | 1.44 |
| 22 | A | 403 | CLA | CMD-C2D | -2.64 | 1.45 | 1.50 |
| 26 | b | 622 | LMG | C9-C8 | 2.64 | 1.58 | 1.50 |
| 22 | C | 507 | CLA | CHC-C1C | 2.63 | 1.41 | 1.35 |
| 22 | C | 507 | CLA | C3B-C2B | -2.63 | 1.36 | 1.40 |
| 22 | C | 509 | CLA | CHC-C1C | 2.63 | 1.41 | 1.35 |
| 26 | c | 520 | LMG | O1-C1 | 2.63 | 1.44 | 1.40 |
| 22 | A | 403 | CLA | MG-ND | -2.63 | 2.00 | 2.05 |
| 22 | C | 509 | CLA | C1D-ND | 2.62 | 1.41 | 1.37 |
| 22 | c | 512 | CLA | CMB-C2B | -2.62 | 1.46 | 1.51 |
| 30 | b | 619 | BCR | C30-C25 | -2.62 | 1.50 | 1.53 |
| 22 | C | 508 | CLA | CHC-C1C | 2.62 | 1.41 | 1.35 |
| 22 | B | 610 | CLA | CMB-C2B | -2.60 | 1.46 | 1.51 |
| 22 | B | 611 | CLA | MG-ND | -2.60 | 2.00 | 2.05 |
| 22 | b | 613 | CLA | MG-NC | 2.60 | 2.12 | 2.06 |
| 30 | d | 406 | BCR | C1-C6 | -2.60 | 1.50 | 1.53 |
| 22 | b | 605 | CLA | CHC-C1C | 2.60 | 1.41 | 1.35 |
| 22 | a | 402 | CLA | C3D-C4D | 2.60 | 1.50 | 1.44 |
| 22 | b | 602 | CLA | MG-ND | 2.59 | 2.10 | 2.05 |
| 27 | A | 410 | SQD | O2-C2 | -2.59 | 1.36 | 1.43 |
| 22 | d | 405 | CLA | CMD-C2D | -2.59 | 1.45 | 1.50 |
| 22 | a | 402 | CLA | CHC-C1C | 2.59 | 1.41 | 1.35 |
| 22 | a | 403 | CLA | CMD-C2D | -2.59 | 1.45 | 1.50 |
| 28 | d | 409 | LHG | C6-C5 | 2.58 | 1.58 | 1.50 |
| 22 | A | 405 | CLA | C3B-CAB | -2.58 | 1.42 | 1.47 |
| 26 | Y | 101 | LMG | O8-C9 | -2.58 | 1.39 | 1.45 |
| 23 | A | 404 | PHO | C3B-CAB | -2.58 | 1.42 | 1.47 |
| 22 | c | 505 | CLA | MG-NC | -2.57 | 2.00 | 2.06 |
| 26 | Y | 101 | LMG | O7-C8 | -2.57 | 1.40 | 1.46 |
| 22 | A | 405 | CLA | CMC-C2C | -2.57 | 1.45 | 1.50 |
| 29 | c | 517 | DGD | C2A-C1A | -2.56 | 1.43 | 1.50 |
| 22 | b | 606 | CLA | C3B-C2B | -2.56 | 1.36 | 1.40 |
| 22 | A | 405 | CLA | CMD-C2D | -2.56 | 1.45 | 1.50 |
| 22 | d | 403 | CLA | C1B-NB | -2.56 | 1.32 | 1.35 |
| 22 | b | 613 | CLA | C4D-ND | -2.56 | 1.34 | 1.37 |
| 25 | D | 407 | PL9 | C45-C44 | -2.56 | 1.44 | 1.50 |
| 27 | a | 410 | SQD | O3-C3 | -2.56 | 1.36 | 1.43 |
| 22 | A | 403 | CLA | CHC-C1C | 2.56 | 1.41 | 1.35 |
| 22 | b | 614 | CLA | C3B-C2B | -2.56 | 1.36 | 1.40 |
| 29 | H | 103 | DGD | O6E-C1E | 2.56 | 1.48 | 1.41 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 23 | a | 404 | PHO | C1C-NC | -2.55 | 1.30 | 1.38 |
| 30 | I | 101 | BCR | C34-C9 | -2.55 | 1.45 | 1.50 |
| 29 | c | 516 | DGD | O3D-C3D | -2.55 | 1.37 | 1.43 |
| 22 | B | 605 | CLA | C1D-ND | 2.54 | 1.40 | 1.37 |
| 22 | C | 502 | CLA | CMB-C2B | -2.53 | 1.46 | 1.51 |
| 22 | B | 612 | CLA | CMB-C2B | -2.53 | 1.46 | 1.51 |
| 26 | B | 620 | LMG | O7-C10 | 2.53 | 1.39 | 1.30 |
| 22 | B | 615 | CLA | CMC-C2C | -2.53 | 1.45 | 1.50 |
| 30 | a | 406 | BCR | C38-C26 | -2.52 | 1.46 | 1.50 |
| 29 | C | 517 | DGD | O3G-C3G | -2.52 | 1.39 | 1.43 |
| 29 | C | 518 | DGD | C2A-C1A | -2.52 | 1.43 | 1.50 |
| 22 | C | 507 | CLA | C3B-CAB | -2.51 | 1.42 | 1.47 |
| 22 | b | 604 | CLA | C1D-ND | 2.51 | 1.40 | 1.37 |
| 22 | B | 608 | CLA | C3B-CAB | -2.51 | 1.42 | 1.47 |
| 22 | C | 502 | CLA | C1D-ND | 2.51 | 1.40 | 1.37 |
| 26 | D | 412 | LMG | O8-C28 | 2.51 | 1.40 | 1.33 |
| 29 | C | 517 | DGD | C4E-C5E | 2.51 | 1.58 | 1.53 |
| 22 | C | 505 | CLA | C3B-CAB | -2.50 | 1.42 | 1.47 |
| 28 | D | 413 | LHG | O8-C23 | 2.50 | 1.40 | 1.33 |
| 22 | d | 405 | CLA | CHC-C1C | 2.50 | 1.41 | 1.35 |
| 22 | B | 613 | CLA | C3B-CAB | -2.50 | 1.42 | 1.47 |
| 22 | c | 507 | CLA | C3D-C4D | 2.50 | 1.49 | 1.44 |
| 29 | C | 516 | DGD | O2G-C2G | -2.49 | 1.40 | 1.46 |
| 22 | B | 610 | CLA | C4B-CHC | -2.49 | 1.34 | 1.41 |
| 22 | d | 405 | CLA | CMB-C2B | -2.49 | 1.46 | 1.51 |
| 29 | C | 517 | DGD | C1G-C2G | 2.49 | 1.58 | 1.50 |
| 22 | C | 510 | CLA | CMB-C2B | -2.48 | 1.46 | 1.51 |
| 28 | b | 623 | LHG | C8-C7 | -2.47 | 1.43 | 1.50 |
| 22 | b | 607 | CLA | C4B-CHC | -2.47 | 1.34 | 1.41 |
| 22 | C | 502 | CLA | CHC-C1C | 2.47 | 1.41 | 1.35 |
| 22 | C | 509 | CLA | MG-ND | -2.47 | 2.00 | 2.05 |
| 23 | A | 404 | PHO | CMD-C2D | -2.46 | 1.45 | 1.51 |
| 22 | B | 605 | CLA | C4D-ND | -2.46 | 1.34 | 1.37 |
| 28 | l | 101 | LHG | P-O6 | 2.46 | 1.69 | 1.59 |
| 27 | D | 409 | SQD | O4-C4 | -2.46 | 1.37 | 1.43 |
| 22 | C | 510 | CLA | C3C-C2C | 2.46 | 1.41 | 1.36 |
| 29 | C | 516 | DGD | O1A-C1A | 2.46 | 1.29 | 1.22 |
| 23 | A | 404 | PHO | CAC-C3C | -2.46 | 1.47 | 1.52 |
| 22 | b | 616 | CLA | CMC-C2C | -2.45 | 1.45 | 1.50 |
| 22 | c | 507 | CLA | C4B-CHC | -2.45 | 1.34 | 1.41 |
| 27 | f | 102 | SQD | O3-C3 | -2.45 | 1.37 | 1.43 |
| 25 | d | 407 | PL9 | C7-C3 | -2.45 | 1.48 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | b | 615 | CLA | CMD-C2D | -2.44 | 1.45 | 1.50 |
| 22 | c | 507 | CLA | CMB-C2B | -2.44 | 1.46 | 1.51 |
| 22 | C | 507 | CLA | C4D-ND | -2.44 | 1.34 | 1.37 |
| 22 | B | 605 | CLA | CMA-C3A | -2.44 | 1.47 | 1.53 |
| 25 | d | 407 | PL9 | C10-C9 | -2.44 | 1.44 | 1.50 |
| 22 | B | 606 | CLA | CMB-C2B | -2.43 | 1.46 | 1.51 |
| 22 | B | 613 | CLA | C1D-ND | 2.43 | 1.40 | 1.37 |
| 22 | C | 501 | CLA | CAC-C3C | -2.43 | 1.44 | 1.51 |
| 23 | D | 401 | PHO | C3B-C2B | -2.43 | 1.37 | 1.40 |
| 22 | B | 603 | CLA | C3B-C2B | -2.43 | 1.37 | 1.40 |
| 22 | c | 511 | CLA | CMB-C2B | -2.43 | 1.46 | 1.51 |
| 22 | C | 513 | CLA | C3B-C2B | -2.43 | 1.37 | 1.40 |
| 25 | a | 409 | PL9 | C7-C3 | -2.43 | 1.48 | 1.51 |
| 28 | d | 409 | LHG | O8-C6 | 2.43 | 1.50 | 1.45 |
| 29 | h | 101 | DGD | C4E-C3E | 2.42 | 1.58 | 1.52 |
| 22 | b | 612 | CLA | CHC-C1C | 2.42 | 1.41 | 1.35 |
| 22 | C | 504 | CLA | C4D-ND | -2.42 | 1.34 | 1.37 |
| 22 | c | 503 | CLA | CMC-C2C | -2.42 | 1.45 | 1.50 |
| 22 | c | 512 | CLA | C3D-C4D | 2.42 | 1.49 | 1.44 |
| 22 | b | 605 | CLA | C1D-C2D | 2.42 | 1.50 | 1.45 |
| 22 | c | 509 | CLA | CMB-C2B | -2.42 | 1.46 | 1.51 |
| 29 | c | 515 | DGD | C1E-C2E | 2.41 | 1.59 | 1.52 |
| 22 | b | 611 | CLA | C4B-CHC | -2.41 | 1.34 | 1.41 |
| 22 | c | 504 | CLA | CAC-C3C | -2.41 | 1.44 | 1.51 |
| 25 | d | 407 | PL9 | C40-C39 | -2.41 | 1.44 | 1.50 |
| 22 | C | 512 | CLA | CMD-C2D | -2.41 | 1.45 | 1.50 |
| 22 | B | 602 | CLA | C4B-CHC | -2.41 | 1.34 | 1.41 |
| 26 | c | 518 | LMG | C7-C8 | 2.41 | 1.58 | 1.50 |
| 22 | b | 607 | CLA | CHD-C1D | -2.40 | 1.33 | 1.38 |
| 22 | B | 614 | CLA | O2A-CGA | 2.40 | 1.40 | 1.33 |
| 29 | c | 516 | DGD | C4E-C5E | 2.40 | 1.58 | 1.53 |
| 22 | D | 405 | CLA | CMC-C2C | -2.40 | 1.45 | 1.50 |
| 22 | D | 403 | CLA | MG-NC | -2.40 | 2.00 | 2.06 |
| 29 | c | 517 | DGD | O2G-C1B | 2.40 | 1.41 | 1.34 |
| 22 | C | 511 | CLA | MG-NC | 2.39 | 2.11 | 2.06 |
| 22 | c | 504 | CLA | CMB-C2B | -2.39 | 1.46 | 1.51 |
| 23 | d | 401 | PHO | CBD-CGD | -2.39 | 1.49 | 1.52 |
| 22 | b | 611 | CLA | C3B-C2B | -2.39 | 1.37 | 1.40 |
| 22 | a | 405 | CLA | CMB-C2B | -2.39 | 1.46 | 1.51 |
| 22 | c | 505 | CLA | C1D-ND | 2.39 | 1.40 | 1.37 |
| 26 | b | 622 | LMG | C3-C2 | 2.39 | 1.58 | 1.52 |
| 29 | c | 517 | DGD | O3D-C3D | -2.38 | 1.37 | 1.43 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 23 | d | 401 | PHO | C3B-CAB | -2.38 | 1.43 | 1.47 |
| 22 | a | 405 | CLA | C4B-CHC | -2.38 | 1.34 | 1.41 |
| 22 | B | 604 | CLA | C5-C3 | -2.38 | 1.46 | 1.51 |
| 30 | T | 101 | BCR | C38-C26 | -2.38 | 1.47 | 1.50 |
| 22 | D | 404 | CLA | CMB-C2B | -2.38 | 1.46 | 1.51 |
| 22 | C | 506 | CLA | CMB-C2B | -2.37 | 1.46 | 1.51 |
| 22 | b | 601 | CLA | C4D-ND | -2.37 | 1.34 | 1.37 |
| 22 | A | 403 | CLA | C3B-CAB | -2.37 | 1.43 | 1.47 |
| 22 | C | 512 | CLA | CMC-C2C | -2.37 | 1.45 | 1.50 |
| 29 | A | 413 | DGD | O5D-C6D | -2.37 | 1.39 | 1.43 |
| 30 | I | 101 | BCR | C38-C26 | -2.37 | 1.47 | 1.50 |
| 22 | b | 603 | CLA | C3B-CAB | -2.36 | 1.43 | 1.47 |
| 22 | c | 505 | CLA | C3B-CAB | -2.36 | 1.43 | 1.47 |
| 22 | C | 507 | CLA | CMB-C2B | -2.36 | 1.46 | 1.51 |
| 22 | B | 607 | CLA | C4B-CHC | -2.36 | 1.34 | 1.41 |
| 30 | B | 617 | BCR | C30-C25 | -2.36 | 1.50 | 1.53 |
| 25 | D | 407 | PL9 | C26-C27 | 2.35 | 1.61 | 1.53 |
| 23 | d | 401 | PHO | CMC-C2C | -2.35 | 1.46 | 1.51 |
| 26 | b | 622 | LMG | C4-C3 | 2.35 | 1.58 | 1.52 |
| 22 | C | 504 | CLA | C4B-CHC | -2.35 | 1.34 | 1.41 |
| 22 | c | 505 | CLA | CMB-C2B | -2.35 | 1.46 | 1.51 |
| 22 | b | 612 | CLA | CMD-C2D | -2.35 | 1.45 | 1.50 |
| 26 | Y | 101 | LMG | C1-C2 | 2.35 | 1.59 | 1.52 |
| 22 | a | 402 | CLA | C1D-C2D | 2.35 | 1.50 | 1.45 |
| 22 | C | 503 | CLA | C3D-C4D | 2.35 | 1.49 | 1.44 |
| 22 | C | 510 | CLA | CMD-C2D | -2.35 | 1.45 | 1.50 |
| 29 | h | 101 | DGD | O5D-C6D | -2.34 | 1.39 | 1.43 |
| 29 | A | 413 | DGD | O1G-C1G | -2.34 | 1.39 | 1.45 |
| 29 | c | 515 | DGD | O3G-C1D | -2.33 | 1.36 | 1.40 |
| 22 | b | 612 | CLA | CMC-C2C | -2.33 | 1.45 | 1.50 |
| 26 | c | 521 | LMG | C4-C5 | 2.33 | 1.57 | 1.53 |
| 22 | B | 602 | CLA | CHC-C1C | 2.33 | 1.40 | 1.35 |
| 23 | A | 404 | PHO | O2D-CGD | 2.33 | 1.38 | 1.33 |
| 30 | x | 101 | BCR | C1-C6 | -2.33 | 1.50 | 1.53 |
| 26 | m | 101 | LMG | C1-C2 | 2.33 | 1.59 | 1.52 |
| 29 | H | 103 | DGD | C1G-C2G | 2.33 | 1.57 | 1.50 |
| 22 | A | 405 | CLA | C4B-CHC | -2.33 | 1.34 | 1.41 |
| 29 | c | 516 | DGD | C1E-C2E | 2.33 | 1.59 | 1.52 |
| 22 | B | 601 | CLA | C4B-CHC | -2.33 | 1.34 | 1.41 |
| 30 | t | 101 | BCR | C27-C26 | -2.32 | 1.46 | 1.51 |
| 22 | c | 501 | CLA | C4B-CHC | -2.32 | 1.34 | 1.41 |
| 22 | b | 606 | CLA | C4B-CHC | -2.32 | 1.34 | 1.41 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 30 | k | 102 | BCR | C1-C6 | -2.32 | 1.50 | 1.53 |
| 25 | D | 407 | PL9 | C21-C19 | -2.32 | 1.46 | 1.51 |
| 26 | D | 408 | LMG | O4-C4 | 2.32 | 1.48 | 1.43 |
| 22 | B | 615 | CLA | CHC-C1C | 2.32 | 1.40 | 1.35 |
| 22 | C | 504 | CLA | CHC-C1C | 2.31 | 1.40 | 1.35 |
| 22 | B | 606 | CLA | C4B-CHC | -2.31 | 1.34 | 1.41 |
| 22 | d | 405 | CLA | C4B-CHC | -2.31 | 1.34 | 1.41 |
| 22 | b | 611 | CLA | MG-NC | -2.31 | 2.00 | 2.06 |
| 26 | c | 518 | LMG | C3-C2 | 2.30 | 1.58 | 1.52 |
| 22 | b | 613 | CLA | CAA-C2A | -2.30 | 1.49 | 1.54 |
| 29 | h | 101 | DGD | C4E-C5E | 2.30 | 1.57 | 1.53 |
| 22 | B | 615 | CLA | C3B-C2B | -2.30 | 1.37 | 1.40 |
| 22 | A | 405 | CLA | CHC-C1C | 2.30 | 1.40 | 1.35 |
| 30 | b | 617 | BCR | C30-C25 | -2.30 | 1.50 | 1.53 |
| 22 | B | 604 | CLA | CMD-C2D | -2.30 | 1.45 | 1.50 |
| 28 | l | 101 | LHG | C6-C5 | 2.30 | 1.57 | 1.50 |
| 22 | b | 614 | CLA | C1B-NB | -2.30 | 1.33 | 1.35 |
| 26 | c | 518 | LMG | C6-C5 | 2.30 | 1.59 | 1.51 |
| 22 | b | 605 | CLA | C4D-ND | -2.29 | 1.34 | 1.37 |
| 25 | d | 407 | PL9 | C26-C24 | -2.29 | 1.46 | 1.51 |
| 22 | C | 501 | CLA | CMC-C2C | -2.29 | 1.45 | 1.50 |
| 22 | B | 606 | CLA | CHC-C1C | 2.29 | 1.40 | 1.35 |
| 22 | b | 603 | CLA | C4D-ND | -2.29 | 1.34 | 1.37 |
| 22 | B | 606 | CLA | CMC-C2C | -2.28 | 1.46 | 1.50 |
| 27 | t | 102 | SQD | C24-C23 | 2.28 | 1.57 | 1.50 |
| 22 | B | 612 | CLA | CMC-C2C | -2.28 | 1.46 | 1.50 |
| 22 | b | 614 | CLA | CMB-C2B | -2.28 | 1.46 | 1.51 |
| 22 | B | 613 | CLA | C1B-NB | 2.28 | 1.37 | 1.35 |
| 22 | B | 603 | CLA | C1D-C2D | 2.28 | 1.49 | 1.45 |
| 22 | b | 608 | CLA | CMB-C2B | -2.27 | 1.46 | 1.51 |
| 22 | B | 610 | CLA | C1D-ND | 2.27 | 1.40 | 1.37 |
| 22 | B | 607 | CLA | C3B-CAB | -2.27 | 1.43 | 1.47 |
| 25 | D | 407 | PL9 | C7-C3 | -2.27 | 1.49 | 1.51 |
| 29 | C | 518 | DGD | O2E-C2E | -2.26 | 1.37 | 1.43 |
| 22 | b | 605 | CLA | CMD-C2D | -2.26 | 1.46 | 1.50 |
| 22 | a | 402 | CLA | CMC-C2C | -2.26 | 1.46 | 1.50 |
| 30 | B | 616 | BCR | C33-C5 | -2.26 | 1.47 | 1.50 |
| 22 | b | 606 | CLA | CMD-C2D | -2.26 | 1.46 | 1.50 |
| 22 | b | 606 | CLA | CMB-C2B | -2.26 | 1.46 | 1.51 |
| 22 | C | 510 | CLA | C1D-ND | 2.26 | 1.40 | 1.37 |
| 31 | B | 619 | STE | C2-C1 | 2.25 | 1.55 | 1.50 |
| 22 | B | 601 | CLA | CAC-C3C | -2.25 | 1.45 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | B | 602 | CLA | CMB-C2B | -2.25 | 1.47 | 1.51 |
| 22 | B | 605 | CLA | CMB-C2B | -2.25 | 1.47 | 1.51 |
| 29 | c | 517 | DGD | O2G-C2G | -2.24 | 1.41 | 1.46 |
| 30 | C | 514 | BCR | C33-C5 | -2.24 | 1.47 | 1.50 |
| 22 | C | 513 | CLA | C4B-CHC | -2.24 | 1.34 | 1.41 |
| 22 | b | 607 | CLA | CMD-C2D | -2.23 | 1.46 | 1.50 |
| 25 | D | 407 | PL9 | C16-C17 | 2.23 | 1.61 | 1.53 |
| 22 | c | 502 | CLA | C4B-CHC | -2.23 | 1.34 | 1.41 |
| 30 | c | 514 | BCR | C38-C26 | -2.22 | 1.47 | 1.50 |
| 22 | C | 511 | CLA | C4B-CHC | -2.22 | 1.34 | 1.41 |
| 22 | d | 405 | CLA | O1D-CGD | 2.22 | 1.26 | 1.21 |
| 22 | b | 609 | CLA | C3B-C2B | -2.22 | 1.37 | 1.40 |
| 22 | D | 405 | CLA | C4B-CHC | -2.22 | 1.34 | 1.41 |
| 22 | c | 503 | CLA | CMB-C2B | -2.21 | 1.47 | 1.51 |
| 26 | a | 414 | LMG | C7-C8 | 2.21 | 1.57 | 1.50 |
| 30 | k | 102 | BCR | C38-C26 | -2.21 | 1.47 | 1.50 |
| 22 | C | 505 | CLA | CMC-C2C | -2.21 | 1.46 | 1.50 |
| 22 | B | 611 | CLA | CMD-C2D | -2.21 | 1.46 | 1.50 |
| 22 | b | 602 | CLA | C3B-CAB | -2.21 | 1.43 | 1.47 |
| 28 | a | 411 | LHG | C24-C23 | 2.21 | 1.57 | 1.50 |
| 26 | a | 414 | LMG | O1-C1 | 2.21 | 1.44 | 1.40 |
| 22 | a | 403 | CLA | C3B-C2B | -2.21 | 1.37 | 1.40 |
| 22 | b | 607 | CLA | CMC-C2C | -2.21 | 1.46 | 1.50 |
| 22 | b | 608 | CLA | CMA-C3A | -2.21 | 1.48 | 1.53 |
| 22 | b | 606 | CLA | O2D-CED | -2.20 | 1.40 | 1.45 |
| 22 | C | 506 | CLA | CAC-C3C | -2.20 | 1.45 | 1.51 |
| 22 | d | 404 | CLA | C3B-CAB | -2.20 | 1.43 | 1.47 |
| 22 | C | 509 | CLA | O2D-CGD | 2.20 | 1.38 | 1.33 |
| 22 | b | 605 | CLA | C4B-CHC | -2.20 | 1.34 | 1.41 |
| 26 | B | 620 | LMG | C11-C10 | 2.20 | 1.55 | 1.50 |
| 26 | A | 409 | LMG | C4-C5 | 2.19 | 1.57 | 1.53 |
| 29 | C | 517 | DGD | C2B-C1B | -2.19 | 1.44 | 1.50 |
| 22 | D | 404 | CLA | C3C-C2C | 2.19 | 1.41 | 1.36 |
| 27 | A | 410 | SQD | O3-C3 | -2.19 | 1.37 | 1.43 |
| 26 | A | 409 | LMG | C1-C2 | 2.19 | 1.58 | 1.52 |
| 26 | c | 520 | LMG | C4-C3 | 2.19 | 1.57 | 1.52 |
| 22 | D | 404 | CLA | C3D-C4D | 2.18 | 1.49 | 1.44 |
| 22 | B | 611 | CLA | C1C-NC | -2.18 | 1.34 | 1.37 |
| 26 | D | 408 | LMG | C7-C8 | 2.18 | 1.57 | 1.50 |
| 22 | c | 510 | CLA | CMC-C2C | -2.18 | 1.46 | 1.50 |
| 22 | a | 403 | CLA | C4B-CHC | -2.18 | 1.34 | 1.41 |
| 22 | a | 402 | CLA | C4B-CHC | -2.18 | 1.34 | 1.41 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | c | 507 | CLA | C3B-CAB | -2.17 | 1.43 | 1.47 |
| 22 | b | 608 | CLA | C1C-C2C | 2.17 | 1.48 | 1.44 |
| 22 | B | 615 | CLA | C1D-C2D | 2.17 | 1.49 | 1.45 |
| 22 | b | 610 | CLA | CMD-C2D | -2.17 | 1.46 | 1.50 |
| 22 | c | 507 | CLA | CMC-C2C | -2.17 | 1.46 | 1.50 |
| 34 | v | 201 | HEC | C1D-CHD | -2.17 | 1.35 | 1.41 |
| 22 | d | 405 | CLA | C3B-C2B | -2.17 | 1.37 | 1.40 |
| 22 | b | 615 | CLA | C3B-C2B | -2.17 | 1.37 | 1.40 |
| 22 | C | 507 | CLA | C3D-C4D | 2.17 | 1.49 | 1.44 |
| 23 | D | 401 | PHO | CMB-C2B | -2.17 | 1.46 | 1.51 |
| 22 | B | 603 | CLA | MG-NC | 2.16 | 2.11 | 2.06 |
| 22 | B | 607 | CLA | O2A-CGA | 2.16 | 1.39 | 1.33 |
| 22 | B | 607 | CLA | CMC-C2C | -2.16 | 1.46 | 1.50 |
| 26 | d | 410 | LMG | O2-C2 | -2.16 | 1.37 | 1.43 |
| 22 | C | 503 | CLA | C1D-C2D | 2.16 | 1.49 | 1.45 |
| 22 | d | 404 | CLA | CMA-C3A | -2.16 | 1.48 | 1.53 |
| 22 | b | 602 | CLA | CAC-C3C | -2.16 | 1.45 | 1.51 |
| 22 | B | 612 | CLA | C4-C3 | -2.16 | 1.45 | 1.50 |
| 22 | b | 608 | CLA | O2A-CGA | 2.16 | 1.39 | 1.33 |
| 25 | d | 407 | PL9 | C11-C9 | -2.15 | 1.46 | 1.51 |
| 22 | a | 405 | CLA | CMC-C2C | -2.15 | 1.46 | 1.50 |
| 29 | A | 413 | DGD | C3D-C2D | 2.15 | 1.57 | 1.52 |
| 28 | a | 411 | LHG | C3-C2 | 2.15 | 1.58 | 1.51 |
| 22 | C | 508 | CLA | CMD-C2D | -2.15 | 1.46 | 1.50 |
| 22 | A | 403 | CLA | CMC-C2C | -2.15 | 1.46 | 1.50 |
| 22 | c | 509 | CLA | C4B-CHC | -2.15 | 1.35 | 1.41 |
| 22 | B | 611 | CLA | MG-NC | 2.15 | 2.11 | 2.06 |
| 22 | B | 615 | CLA | C3B-CAB | -2.15 | 1.43 | 1.47 |
| 22 | C | 508 | CLA | CMB-C2B | -2.15 | 1.47 | 1.51 |
| 22 | b | 604 | CLA | CMC-C2C | -2.15 | 1.46 | 1.50 |
| 26 | M | 101 | LMG | O6-C1 | 2.14 | 1.47 | 1.41 |
| 28 | D | 413 | LHG | C24-C23 | 2.14 | 1.57 | 1.50 |
| 29 | C | 516 | DGD | C1G-C2G | 2.14 | 1.57 | 1.50 |
| 29 | C | 517 | DGD | O1G-C1G | -2.14 | 1.40 | 1.45 |
| 30 | C | 515 | BCR | C30-C25 | -2.14 | 1.50 | 1.53 |
| 29 | c | 517 | DGD | C1D-C2D | 2.14 | 1.58 | 1.52 |
| 30 | b | 618 | BCR | C33-C5 | -2.14 | 1.47 | 1.50 |
| 22 | c | 512 | CLA | C1D-C2D | 2.14 | 1.49 | 1.45 |
| 27 | f | 102 | SQD | O2-C2 | -2.14 | 1.37 | 1.43 |
| 29 | c | 515 | DGD | C3G-C2G | 2.14 | 1.57 | 1.50 |
| 28 | d | 409 | LHG | P-O3 | 2.14 | 1.67 | 1.59 |
| 22 | c | 503 | CLA | CAC-C3C | -2.13 | 1.45 | 1.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 25 | D | 407 | PL9 | C2-C3 | 2.13 | 1.40 | 1.34 |
| 22 | C | 504 | CLA | CMD-C2D | -2.13 | 1.46 | 1.50 |
| 22 | b | 609 | CLA | CMD-C2D | -2.13 | 1.46 | 1.50 |
| 22 | c | 509 | CLA | C3B-CAB | -2.13 | 1.43 | 1.47 |
| 22 | B | 614 | CLA | CMD-C2D | -2.13 | 1.46 | 1.50 |
| 22 | d | 403 | CLA | C3B-C2B | -2.13 | 1.37 | 1.40 |
| 28 | D | 410 | LHG | C8-C7 | -2.13 | 1.44 | 1.50 |
| 22 | b | 609 | CLA | CMC-C2C | -2.13 | 1.46 | 1.50 |
| 22 | B | 609 | CLA | MG-ND | -2.13 | 2.01 | 2.05 |
| 22 | c | 501 | CLA | CMD-C2D | -2.13 | 1.46 | 1.50 |
| 22 | a | 405 | CLA | MG-NC | -2.13 | 2.01 | 2.06 |
| 27 | B | 621 | SQD | O2-C2 | -2.13 | 1.38 | 1.43 |
| 26 | c | 521 | LMG | C4-C3 | 2.13 | 1.57 | 1.52 |
| 26 | Y | 101 | LMG | O1-C1 | 2.13 | 1.43 | 1.40 |
| 22 | C | 505 | CLA | C1D-ND | 2.13 | 1.40 | 1.37 |
| 22 | C | 513 | CLA | C3B-CAB | -2.13 | 1.43 | 1.47 |
| 22 | b | 613 | CLA | CMC-C2C | -2.13 | 1.46 | 1.50 |
| 22 | b | 607 | CLA | CHC-C1C | 2.12 | 1.40 | 1.35 |
| 22 | B | 604 | CLA | CHC-C1C | 2.12 | 1.40 | 1.35 |
| 22 | b | 614 | CLA | C5-C3 | -2.12 | 1.46 | 1.51 |
| 22 | b | 607 | CLA | C1A-CHA | -2.12 | 1.34 | 1.43 |
| 22 | a | 405 | CLA | CMD-C2D | -2.12 | 1.46 | 1.50 |
| 22 | b | 606 | CLA | O2A-CGA | 2.12 | 1.39 | 1.33 |
| 22 | c | 508 | CLA | CMB-C2B | -2.12 | 1.47 | 1.51 |
| 30 | b | 618 | BCR | C36-C18 | -2.12 | 1.46 | 1.50 |
| 30 | c | 514 | BCR | C30-C25 | -2.11 | 1.50 | 1.53 |
| 26 | B | 620 | LMG | C29-C28 | 2.11 | 1.55 | 1.50 |
| 29 | C | 517 | DGD | O2G-C2G | -2.11 | 1.41 | 1.46 |
| 22 | B | 607 | CLA | CMB-C2B | -2.10 | 1.47 | 1.51 |
| 22 | d | 405 | CLA | MG-ND | -2.10 | 2.01 | 2.05 |
| 22 | b | 614 | CLA | CMC-C2C | -2.10 | 1.46 | 1.50 |
| 23 | A | 404 | PHO | CMC-C2C | -2.10 | 1.46 | 1.51 |
| 26 | m | 101 | LMG | C6-C5 | 2.10 | 1.58 | 1.51 |
| 22 | C | 510 | CLA | O2A-CGA | 2.10 | 1.39 | 1.33 |
| 26 | c | 521 | LMG | O1-C1 | 2.10 | 1.43 | 1.40 |
| 28 | d | 408 | LHG | C8-C7 | -2.09 | 1.44 | 1.50 |
| 26 | D | 408 | LMG | O7-C8 | -2.09 | 1.41 | 1.46 |
| 22 | B | 612 | CLA | C3B-CAB | -2.09 | 1.43 | 1.47 |
| 31 | j | 101 | STE | O1-C1 | 2.09 | 1.29 | 1.22 |
| 22 | C | 508 | CLA | C3B-C2B | -2.09 | 1.37 | 1.40 |
| 25 | a | 409 | PL9 | C3-C4 | -2.09 | 1.46 | 1.49 |
| 22 | b | 611 | CLA | CAA-C2A | -2.09 | 1.50 | 1.54 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 30 | a | 406 | BCR | C1-C6 | -2.08 | 1.50 | 1.53 |
| 27 | D | 409 | SQD | O2-C2 | -2.08 | 1.38 | 1.43 |
| 22 | c | 510 | CLA | CMD-C2D | -2.08 | 1.46 | 1.50 |
| 22 | B | 607 | CLA | CMD-C2D | -2.08 | 1.46 | 1.50 |
| 22 | B | 606 | CLA | C3D-C4D | 2.08 | 1.48 | 1.44 |
| 28 | a | 411 | LHG | P-O3 | 2.08 | 1.67 | 1.59 |
| 22 | b | 601 | CLA | C3D-C4D | 2.08 | 1.48 | 1.44 |
| 22 | C | 502 | CLA | CMC-C2C | -2.08 | 1.46 | 1.50 |
| 22 | C | 508 | CLA | MG-NC | -2.08 | 2.01 | 2.06 |
| 22 | b | 615 | CLA | C4D-ND | -2.08 | 1.34 | 1.37 |
| 22 | B | 611 | CLA | CMC-C2C | -2.08 | 1.46 | 1.50 |
| 22 | b | 610 | CLA | C1C-NC | -2.08 | 1.34 | 1.37 |
| 23 | a | 404 | PHO | CMB-C2B | -2.08 | 1.46 | 1.51 |
| 30 | D | 406 | BCR | C38-C26 | -2.07 | 1.47 | 1.50 |
| 22 | A | 402 | CLA | C3C-C2C | 2.07 | 1.41 | 1.36 |
| 22 | C | 511 | CLA | CMD-C2D | -2.07 | 1.46 | 1.50 |
| 22 | c | 512 | CLA | CMC-C2C | -2.07 | 1.46 | 1.50 |
| 22 | B | 615 | CLA | C4B-CHC | -2.07 | 1.35 | 1.41 |
| 22 | b | 616 | CLA | C3B-C2B | -2.07 | 1.37 | 1.40 |
| 22 | C | 506 | CLA | O2D-CGD | 2.07 | 1.38 | 1.33 |
| 22 | C | 513 | CLA | CMC-C2C | -2.07 | 1.46 | 1.50 |
| 29 | H | 103 | DGD | O4D-C4D | -2.07 | 1.38 | 1.43 |
| 23 | a | 404 | PHO | CAC-C3C | -2.07 | 1.48 | 1.52 |
| 29 | A | 413 | DGD | C6D-C5D | 2.07 | 1.58 | 1.51 |
| 22 | D | 404 | CLA | MG-NC | -2.07 | 2.01 | 2.06 |
| 22 | B | 608 | CLA | CHC-C1C | 2.07 | 1.40 | 1.35 |
| 31 | c | 519 | STE | C2-C1 | 2.07 | 1.55 | 1.50 |
| 25 | a | 409 | PL9 | C6-C1 | -2.07 | 1.44 | 1.48 |
| 22 | b | 607 | CLA | C3B-CAB | -2.07 | 1.43 | 1.47 |
| 28 | a | 411 | LHG | C4-C5 | 2.06 | 1.57 | 1.50 |
| 29 | h | 101 | DGD | C4D-C3D | 2.06 | 1.57 | 1.52 |
| 22 | b | 613 | CLA | CMB-C2B | -2.06 | 1.47 | 1.51 |
| 29 | c | 516 | DGD | O6D-C5D | -2.06 | 1.39 | 1.44 |
| 22 | b | 601 | CLA | CMD-C2D | -2.06 | 1.46 | 1.50 |
| 25 | d | 407 | PL9 | C16-C17 | 2.06 | 1.60 | 1.53 |
| 22 | a | 403 | CLA | MG-ND | -2.06 | 2.01 | 2.05 |
| 25 | D | 407 | PL9 | C46-C44 | -2.06 | 1.47 | 1.51 |
| 29 | c | 515 | DGD | C4D-C3D | 2.06 | 1.57 | 1.52 |
| 29 | C | 517 | DGD | O3E-C3E | -2.06 | 1.38 | 1.43 |
| 22 | B | 605 | CLA | C3B-CAB | -2.06 | 1.43 | 1.47 |
| 25 | D | 407 | PL9 | C15-C14 | 2.05 | 1.56 | 1.50 |
| 22 | b | 610 | CLA | C1D-ND | 2.05 | 1.40 | 1.37 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | b | 610 | CLA | CMC-C2C | -2.05 | 1.46 | 1.50 |
| 28 | D | 411 | LHG | C8-C7 | -2.05 | 1.44 | 1.50 |
| 29 | H | 103 | DGD | O3G-C1D | 2.05 | 1.43 | 1.40 |
| 22 | c | 512 | CLA | C3B-CAB | -2.05 | 1.43 | 1.47 |
| 22 | B | 609 | CLA | CMD-C2D | -2.05 | 1.46 | 1.50 |
| 22 | d | 403 | CLA | CMD-C2D | -2.05 | 1.46 | 1.50 |
| 22 | D | 403 | CLA | C1A-CHA | -2.05 | 1.34 | 1.43 |
| 22 | C | 506 | CLA | CMA-C3A | -2.05 | 1.48 | 1.53 |
| 22 | C | 513 | CLA | C1D-C2D | 2.05 | 1.49 | 1.45 |
| 34 | f | 101 | HEC | C4B-C3B | 2.05 | 1.46 | 1.43 |
| 22 | b | 605 | CLA | C1A-CHA | -2.05 | 1.34 | 1.43 |
| 22 | c | 504 | CLA | MG-NA | -2.04 | 2.01 | 2.06 |
| 29 | C | 516 | DGD | C2A-C1A | -2.04 | 1.44 | 1.50 |
| 22 | C | 513 | CLA | C3D-C4D | 2.04 | 1.48 | 1.44 |
| 22 | D | 403 | CLA | C4B-CHC | -2.04 | 1.35 | 1.41 |
| 31 | b | 629 | STE | C2-C1 | 2.04 | 1.55 | 1.50 |
| 22 | B | 602 | CLA | MG-NA | 2.04 | 2.11 | 2.06 |
| 22 | b | 608 | CLA | CMC-C2C | -2.04 | 1.46 | 1.50 |
| 34 | v | 201 | HEC | CMD-C2D | 2.04 | 1.55 | 1.51 |
| 26 | c | 521 | LMG | O6-C5 | -2.04 | 1.39 | 1.44 |
| 29 | c | 517 | DGD | O3E-C3E | -2.03 | 1.38 | 1.43 |
| 26 | c | 520 | LMG | C7-C8 | 2.03 | 1.56 | 1.50 |
| 22 | c | 508 | CLA | C3B-C2B | -2.03 | 1.37 | 1.40 |
| 22 | b | 615 | CLA | CAC-C3C | -2.03 | 1.45 | 1.51 |
| 22 | B | 609 | CLA | CAC-C3C | -2.03 | 1.45 | 1.51 |
| 23 | d | 401 | PHO | CMD-C2D | -2.03 | 1.46 | 1.51 |
| 22 | D | 405 | CLA | CAA-C2A | -2.03 | 1.50 | 1.54 |
| 22 | b | 609 | CLA | C3D-C4D | 2.03 | 1.48 | 1.44 |
| 22 | c | 501 | CLA | C3B-C2B | -2.03 | 1.37 | 1.40 |
| 23 | a | 404 | PHO | O2D-CGD | 2.02 | 1.38 | 1.33 |
| 22 | b | 609 | CLA | C3B-CAB | -2.02 | 1.43 | 1.47 |
| 22 | C | 508 | CLA | CMC-C2C | -2.02 | 1.46 | 1.50 |
| 22 | d | 405 | CLA | CMC-C2C | -2.02 | 1.46 | 1.50 |
| 22 | B | 602 | CLA | CMA-C3A | -2.02 | 1.48 | 1.53 |
| 29 | c | 515 | DGD | O3G-C3G | -2.02 | 1.40 | 1.43 |
| 22 | c | 502 | CLA | C3B-C2B | -2.01 | 1.37 | 1.40 |
| 27 | D | 409 | SQD | O3-C3 | -2.01 | 1.38 | 1.43 |
| 22 | C | 511 | CLA | CMC-C2C | -2.01 | 1.46 | 1.50 |
| 22 | c | 512 | CLA | CMD-C2D | -2.01 | 1.46 | 1.50 |
| 23 | D | 401 | PHO | CBD-CGD | -2.01 | 1.49 | 1.52 |
| 22 | b | 605 | CLA | C3D-C4D | 2.01 | 1.48 | 1.44 |
| 22 | C | 503 | CLA | C3B-CAB | -2.01 | 1.43 | 1.47 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 22 | d | 404 | CLA | MG-ND | 2.00 | 2.09 | 2.05 |
| 26 | c | 520 | LMG | C4-C5 | 2.00 | 1.57 | 1.53 |
| 23 | a | 404 | PHO | CMC-C2C | -2.00 | 1.46 | 1.51 |
| 22 | C | 510 | CLA | CAC-C3C | -2.00 | 1.46 | 1.51 |
| 22 | c | 502 | CLA | C3B-CAB | -2.00 | 1.43 | 1.47 |
| 22 | H | 101 | CLA | C3C-C2C | 2.00 | 1.41 | 1.36 |

All (1446) bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | C | 510 | CLA | C4A-NA-C1A | 10.34 | 111.35 | 106.71 |
| 27 | L | 101 | SQD | O6-C1-C2 | 10.31 | 124.40 | 108.30 |
| 22 | C | 503 | CLA | C4A-NA-C1A | 9.87 | 111.14 | 106.71 |
| 22 | C | 511 | CLA | C4A-NA-C1A | 9.09 | 110.79 | 106.71 |
| 22 | H | 101 | CLA | C4A-NA-C1A | 9.03 | 110.76 | 106.71 |
| 22 | c | 511 | CLA | C4A-NA-C1A | 8.73 | 110.63 | 106.71 |
| 34 | f | 101 | HEC | CBD-CAD-C3D | -8.26 | 98.53 | 112.62 |
| 22 | b | 601 | CLA | C4A-NA-C1A | 8.25 | 110.42 | 106.71 |
| 22 | C | 501 | CLA | C4A-NA-C1A | 8.13 | 110.36 | 106.71 |
| 22 | c | 501 | CLA | C4A-NA-C1A | 7.88 | 110.25 | 106.71 |
| 22 | a | 402 | CLA | C4A-NA-C1A | 7.79 | 110.21 | 106.71 |
| 22 | B | 609 | CLA | C4A-NA-C1A | 7.77 | 110.20 | 106.71 |
| 22 | B | 603 | CLA | C4A-NA-C1A | 7.67 | 110.16 | 106.71 |
| 22 | B | 614 | CLA | C4A-NA-C1A | 7.42 | 110.04 | 106.71 |
| 22 | C | 502 | CLA | C4A-NA-C1A | 7.17 | 109.93 | 106.71 |
| 22 | C | 507 | CLA | C4A-NA-C1A | 7.16 | 109.92 | 106.71 |
| 22 | B | 606 | CLA | C4A-NA-C1A | 6.88 | 109.80 | 106.71 |
| 22 | B | 615 | CLA | C4A-NA-C1A | 6.86 | 109.79 | 106.71 |
| 22 | B | 605 | CLA | C4A-NA-C1A | 6.71 | 109.72 | 106.71 |
| 22 | b | 606 | CLA | C4A-NA-C1A | 6.38 | 109.58 | 106.71 |
| 22 | C | 513 | CLA | C4A-NA-C1A | 6.25 | 109.52 | 106.71 |
| 27 | B | 621 | SQD | O6-C1-C2 | 6.25 | 118.06 | 108.30 |
| 22 | d | 404 | CLA | C4A-NA-C1A | 6.24 | 109.51 | 106.71 |
| 22 | B | 608 | CLA | C4A-NA-C1A | 6.21 | 109.50 | 106.71 |
| 27 | D | 409 | SQD | O8-S-C6 | 6.19 | 115.60 | 105.74 |
| 22 | b | 603 | CLA | O2D-CGD-O1D | -6.14 | 111.84 | 123.84 |
| 22 | c | 507 | CLA | C4A-NA-C1A | 6.10 | 109.45 | 106.71 |
| 27 | f | 102 | SQD | O9-S-C6 | 5.99 | 114.06 | 106.94 |
| 22 | B | 610 | CLA | CMB-C2B-C1B | -5.99 | 119.26 | 128.46 |
| 27 | A | 410 | SQD | O7-S-C6 | 5.90 | 113.95 | 106.94 |
| 27 | a | 410 | SQD | O6-C1-C2 | 5.90 | 117.51 | 108.30 |
| 34 | F | 101 | HEC | CBD-CAD-C3D | -5.89 | 102.57 | 112.62 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | b | 603 | CLA | C4A-NA-C1A | 5.88 | 109.35 | 106.71 |
| 22 | c | 510 | CLA | C4A-NA-C1A | 5.76 | 109.30 | 106.71 |
| 22 | d | 403 | CLA | C4A-NA-C1A | 5.68 | 109.26 | 106.71 |
| 34 | v | 201 | HEC | C1D-C2D-C3D | -5.64 | 103.07 | 107.00 |
| 22 | b | 616 | CLA | O2D-CGD-O1D | -5.64 | 112.81 | 123.84 |
| 27 | D | 409 | SQD | O9-S-C6 | 5.63 | 113.63 | 106.94 |
| 22 | b | 606 | CLA | O2D-CGD-O1D | -5.60 | 112.89 | 123.84 |
| 27 | f | 102 | SQD | O7-S-C6 | 5.60 | 113.59 | 106.94 |
| 22 | b | 615 | CLA | C4A-NA-C1A | 5.58 | 109.22 | 106.71 |
| 22 | A | 402 | CLA | C4A-NA-C1A | 5.58 | 109.21 | 106.71 |
| 22 | c | 509 | CLA | C4A-NA-C1A | 5.55 | 109.20 | 106.71 |
| 22 | a | 403 | CLA | C4A-NA-C1A | 5.52 | 109.19 | 106.71 |
| 22 | b | 612 | CLA | C4A-NA-C1A | 5.47 | 109.16 | 106.71 |
| 27 | B | 621 | SQD | O7-S-C6 | 5.45 | 113.42 | 106.94 |
| 22 | b | 603 | CLA | O2D-CGD-CBD | 5.45 | 120.95 | 111.27 |
| 22 | c | 501 | CLA | O2D-CGD-O1D | -5.40 | 113.27 | 123.84 |
| 29 | H | 103 | DGD | O3G-C3G-C2G | -5.37 | 97.93 | 110.90 |
| 22 | c | 513 | CLA | C4A-NA-C1A | 5.35 | 109.11 | 106.71 |
| 27 | f | 102 | SQD | O6-C1-C2 | 5.30 | 116.58 | 108.30 |
| 30 | c | 514 | BCR | C35-C13-C14 | -5.28 | 115.53 | 122.92 |
| 22 | B | 604 | CLA | O2D-CGD-O1D | -5.23 | 113.61 | 123.84 |
| 22 | B | 602 | CLA | O2D-CGD-O1D | -5.22 | 113.64 | 123.84 |
| 34 | v | 201 | HEC | CBD-CAD-C3D | -5.16 | 103.81 | 112.62 |
| 22 | A | 403 | CLA | CMB-C2B-C1B | -5.15 | 120.55 | 128.46 |
| 22 | b | 602 | CLA | O2D-CGD-CBD | 5.15 | 120.42 | 111.27 |
| 27 | t | 102 | SQD | O47-C7-C8 | 5.15 | 122.60 | 111.50 |
| 27 | B | 621 | SQD | O47-C7-C8 | 5.09 | 122.47 | 111.50 |
| 22 | A | 402 | CLA | CHD-C1D-ND | -5.08 | 119.79 | 124.45 |
| 22 | b | 616 | CLA | C4A-NA-C1A | 5.05 | 108.98 | 106.71 |
| 22 | c | 506 | CLA | C4A-NA-C1A | 5.05 | 108.98 | 106.71 |
| 22 | B | 611 | CLA | C4A-NA-C1A | 5.04 | 108.97 | 106.71 |
| 22 | b | 605 | CLA | C4A-NA-C1A | 5.02 | 108.96 | 106.71 |
| 22 | C | 513 | CLA | O2D-CGD-O1D | -5.02 | 114.03 | 123.84 |
| 22 | b | 605 | CLA | CHD-C1D-ND | -4.97 | 119.89 | 124.45 |
| 25 | a | 409 | PL9 | C7-C3-C4 | 4.96 | 120.91 | 116.88 |
| 22 | c | 506 | CLA | C2D-C1D-ND | -4.96 | 106.45 | 110.10 |
| 27 | A | 410 | SQD | O6-C1-C2 | 4.94 | 116.01 | 108.30 |
| 22 | C | 512 | CLA | C4A-NA-C1A | 4.93 | 108.92 | 106.71 |
| 27 | A | 412 | SQD | C45-O47-C7 | 4.93 | 124.22 | 117.88 |
| 33 | D | 402 | BCT | O2-C-O1 | 4.90 | 132.24 | 119.55 |
| 27 | D | 409 | SQD | O6-C1-C2 | 4.89 | 115.93 | 108.30 |
| 22 | b | 611 | CLA | C4A-NA-C1A | 4.88 | 108.90 | 106.71 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | b | 611 | CLA | CHD-C1D-ND | -4.88 | 119.97 | 124.45 |
| 26 | b | 622 | LMG | C1-O6-C5 | -4.87 | 104.14 | 113.69 |
| 22 | B | 610 | CLA | O2D-CGD-CBD | 4.86 | 119.91 | 111.27 |
| 22 | b | 614 | CLA | CMB-C2B-C1B | -4.86 | 120.99 | 128.46 |
| 22 | b | 614 | CLA | C4A-NA-C1A | 4.85 | 108.89 | 106.71 |
| 22 | c | 508 | CLA | C4A-NA-C1A | 4.83 | 108.88 | 106.71 |
| 27 | a | 410 | SQD | O8-S-C6 | 4.82 | 113.42 | 105.74 |
| 22 | B | 601 | CLA | O2D-CGD-CBD | 4.79 | 119.78 | 111.27 |
| 22 | b | 615 | CLA | CMB-C2B-C1B | -4.77 | 121.14 | 128.46 |
| 22 | b | 613 | CLA | C4A-NA-C1A | 4.76 | 108.85 | 106.71 |
| 22 | B | 610 | CLA | O2D-CGD-O1D | -4.74 | 114.56 | 123.84 |
| 22 | b | 605 | CLA | O2D-CGD-O1D | -4.74 | 114.57 | 123.84 |
| 22 | C | 504 | CLA | CMB-C2B-C1B | -4.74 | 121.19 | 128.46 |
| 22 | C | 506 | CLA | C4A-NA-C1A | 4.68 | 108.81 | 106.71 |
| 27 | A | 410 | SQD | O47-C7-C8 | 4.68 | 121.58 | 111.50 |
| 22 | D | 404 | CLA | C4A-NA-C1A | 4.66 | 108.80 | 106.71 |
| 34 | V | 201 | HEC | CMC-C2C-C1C | -4.65 | 121.31 | 128.46 |
| 22 | b | 612 | CLA | O2A-CGA-O1A | -4.65 | 111.85 | 123.59 |
| 22 | b | 602 | CLA | O2D-CGD-O1D | -4.64 | 114.76 | 123.84 |
| 22 | B | 603 | CLA | CMB-C2B-C1B | -4.64 | 121.33 | 128.46 |
| 22 | d | 404 | CLA | C1D-ND-C4D | 4.64 | 109.63 | 106.33 |
| 22 | B | 610 | CLA | CMB-C2B-C3B | 4.62 | 133.33 | 124.68 |
| 22 | C | 508 | CLA | C4A-NA-C1A | 4.62 | 108.78 | 106.71 |
| 34 | v | 201 | HEC | CMC-C2C-C1C | -4.61 | 121.38 | 128.46 |
| 29 | h | 101 | DGD | C3D-C4D-C5D | -4.61 | 102.02 | 110.24 |
| 22 | c | 505 | CLA | O2D-CGD-O1D | -4.59 | 114.86 | 123.84 |
| 22 | b | 613 | CLA | CMB-C2B-C1B | -4.57 | 121.44 | 128.46 |
| 29 | C | 518 | DGD | O3G-C3G-C2G | -4.56 | 99.90 | 110.90 |
| 22 | A | 403 | CLA | C4A-NA-C1A | 4.54 | 108.75 | 106.71 |
| 22 | d | 403 | CLA | CMB-C2B-C1B | -4.54 | 121.49 | 128.46 |
| 22 | C | 508 | CLA | CHD-C1D-ND | -4.53 | 120.29 | 124.45 |
| 22 | c | 509 | CLA | O2A-CGA-O1A | -4.49 | 112.26 | 123.59 |
| 22 | C | 505 | CLA | CMB-C2B-C1B | -4.48 | 121.58 | 128.46 |
| 25 | D | 407 | PL9 | C7-C3-C4 | 4.47 | 120.51 | 116.88 |
| 22 | b | 609 | CLA | C4A-NA-C1A | 4.47 | 108.71 | 106.71 |
| 22 | b | 609 | CLA | CMB-C2B-C1B | -4.44 | 121.64 | 128.46 |
| 22 | C | 512 | CLA | CHB-C4A-NA | 4.42 | 130.63 | 124.51 |
| 22 | b | 613 | CLA | O2D-CGD-O1D | -4.41 | 115.21 | 123.84 |
| 22 | c | 502 | CLA | C4A-NA-C1A | 4.38 | 108.68 | 106.71 |
| 27 | L | 101 | SQD | C1-C2-C3 | -4.37 | 100.89 | 110.00 |
| 22 | A | 405 | CLA | CHD-C1D-ND | -4.33 | 120.47 | 124.45 |
| 22 | B | 609 | CLA | O2D-CGD-O1D | -4.32 | 115.39 | 123.84 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 28 | D | 411 | LHG | O4-P-O5 | 4.30 | 133.49 | 112.24 |
| 22 | B | 603 | CLA | O2A-CGA-O1A | -4.28 | 112.80 | 123.59 |
| 27 | B | 621 | SQD | C3-C4-C5 | 4.27 | 117.86 | 110.24 |
| 22 | B | 604 | CLA | O1D-CGD-CBD | 4.27 | 133.23 | 124.48 |
| 26 | m | 101 | LMG | O3-C3-C2 | -4.27 | 100.47 | 110.35 |
| 22 | B | 609 | CLA | CHD-C1D-ND | -4.25 | 120.55 | 124.45 |
| 22 | b | 604 | CLA | C1-C2-C3 | -4.25 | 118.69 | 126.04 |
| 22 | C | 508 | CLA | CMB-C2B-C1B | -4.25 | 121.94 | 128.46 |
| 28 | A | 411 | LHG | O4-P-O5 | 4.24 | 133.19 | 112.24 |
| 22 | c | 512 | CLA | CHD-C1D-ND | -4.23 | 120.56 | 124.45 |
| 22 | b | 610 | CLA | C4A-NA-C1A | 4.23 | 108.61 | 106.71 |
| 22 | c | 510 | CLA | CMB-C2B-C1B | -4.23 | 121.96 | 128.46 |
| 22 | c | 509 | CLA | CHD-C1D-ND | -4.21 | 120.59 | 124.45 |
| 27 | A | 410 | SQD | O9-S-O7 | -4.21 | 99.39 | 113.95 |
| 27 | A | 410 | SQD | C46-C45-C44 | -4.20 | 101.86 | 111.79 |
| 22 | b | 602 | CLA | C4A-NA-C1A | 4.20 | 108.59 | 106.71 |
| 22 | B | 601 | CLA | CMB-C2B-C1B | -4.19 | 122.02 | 128.46 |
| 22 | c | 507 | CLA | O2D-CGD-O1D | -4.19 | 115.65 | 123.84 |
| 22 | b | 604 | CLA | CMB-C2B-C1B | -4.18 | 122.04 | 128.46 |
| 22 | B | 601 | CLA | O2D-CGD-O1D | -4.16 | 115.70 | 123.84 |
| 22 | c | 502 | CLA | CMB-C2B-C1B | -4.14 | 122.10 | 128.46 |
| 28 | b | 623 | LHG | O4-P-O5 | 4.13 | 132.68 | 112.24 |
| 27 | a | 410 | SQD | O9-S-C6 | 4.13 | 111.85 | 106.94 |
| 27 | L | 101 | SQD | C45-O47-C7 | 4.13 | 127.96 | 117.79 |
| 33 | d | 402 | BCT | O2-C-O1 | 4.10 | 130.17 | 119.55 |
| 22 | c | 508 | CLA | CHD-C1D-ND | -4.09 | 120.70 | 124.45 |
| 22 | D | 403 | CLA | CMB-C2B-C1B | -4.08 | 122.19 | 128.46 |
| 22 | c | 505 | CLA | O2D-CGD-CBD | 4.07 | 118.50 | 111.27 |
| 28 | D | 413 | LHG | O4-P-O5 | 4.07 | 132.36 | 112.24 |
| 25 | A | 408 | PL9 | C7-C3-C4 | 4.06 | 120.18 | 116.88 |
| 22 | b | 603 | CLA | CHD-C1D-ND | -4.05 | 120.73 | 124.45 |
| 22 | c | 504 | CLA | CMB-C2B-C1B | -4.04 | 122.25 | 128.46 |
| 25 | D | 407 | PL9 | C36-C34-C33 | -4.04 | 112.94 | 121.12 |
| 22 | b | 616 | CLA | CMB-C2B-C1B | -4.03 | 122.26 | 128.46 |
| 22 | c | 512 | CLA | C4A-NA-C1A | 4.03 | 108.52 | 106.71 |
| 26 | b | 622 | LMG | O1-C1-C2 | -4.03 | 102.01 | 108.30 |
| 29 | c | 516 | DGD | O3G-C3G-C2G | -4.03 | 101.18 | 110.90 |
| 22 | a | 405 | CLA | CHB-C4A-NA | 4.02 | 130.07 | 124.51 |
| 22 | c | 506 | CLA | CMB-C2B-C1B | -4.02 | 122.29 | 128.46 |
| 34 | V | 201 | HEC | C1D-C2D-C3D | -4.00 | 104.21 | 107.00 |
| 22 | C | 512 | CLA | O2D-CGD-O1D | -4.00 | 116.02 | 123.84 |
| 29 | C | 517 | DGD | O3G-C3G-C2G | -4.00 | 101.25 | 110.90 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | c | 502 | CLA | CMB-C2B-C3B | 3.99 | 132.15 | 124.68 |
| 22 | A | 402 | CLA | CHB-C4A-NA | 3.99 | 130.03 | 124.51 |
| 22 | b | 604 | CLA | C4A-NA-C1A | 3.98 | 108.50 | 106.71 |
| 30 | b | 617 | BCR | C2-C1-C6 | 3.98 | 116.61 | 110.48 |
| 28 | a | 411 | LHG | O4-P-O5 | 3.98 | 131.90 | 112.24 |
| 28 | d | 408 | LHG | O4-P-O5 | 3.97 | 131.87 | 112.24 |
| 22 | B | 603 | CLA | CMB-C2B-C3B | 3.96 | 132.09 | 124.68 |
| 27 | a | 410 | SQD | C1-C2-C3 | -3.96 | 101.75 | 110.00 |
| 34 | v | 201 | HEC | CBA-CAA-C2A | -3.95 | 105.94 | 112.60 |
| 27 | t | 102 | SQD | O48-C23-O10 | -3.93 | 113.67 | 123.59 |
| 28 | D | 410 | LHG | O4-P-O5 | 3.91 | 131.55 | 112.24 |
| 22 | c | 509 | CLA | O2D-CGD-O1D | -3.90 | 116.21 | 123.84 |
| 31 | L | 103 | STE | O2-C1-C2 | 3.90 | 126.57 | 114.03 |
| 25 | A | 408 | PL9 | C36-C34-C33 | -3.89 | 113.24 | 121.12 |
| 22 | a | 403 | CLA | CHB-C4A-NA | 3.88 | 129.88 | 124.51 |
| 22 | b | 608 | CLA | CHD-C1D-ND | -3.87 | 120.89 | 124.45 |
| 30 | B | 617 | BCR | C29-C30-C25 | 3.86 | 116.42 | 110.48 |
| 30 | B | 618 | BCR | C29-C30-C25 | 3.86 | 116.42 | 110.48 |
| 27 | L | 101 | SQD | O5-C5-C4 | 3.85 | 116.69 | 109.69 |
| 22 | c | 507 | CLA | CHD-C1D-ND | -3.85 | 120.92 | 124.45 |
| 27 | a | 410 | SQD | C1-O5-C5 | -3.85 | 106.14 | 113.69 |
| 27 | f | 102 | SQD | O9-S-O7 | -3.85 | 100.64 | 113.95 |
| 34 | F | 101 | HEC | CMC-C2C-C1C | -3.85 | 122.55 | 128.46 |
| 22 | b | 616 | CLA | O1D-CGD-CBD | 3.84 | 132.34 | 124.48 |
| 22 | B | 614 | CLA | C1B-CHB-C4A | -3.83 | 122.52 | 130.12 |
| 22 | B | 613 | CLA | C4A-NA-C1A | 3.83 | 108.43 | 106.71 |
| 27 | L | 101 | SQD | O48-C23-C24 | 3.83 | 123.92 | 111.91 |
| 30 | B | 616 | BCR | C2-C1-C6 | 3.83 | 116.37 | 110.48 |
| 22 | c | 502 | CLA | CHD-C1D-ND | -3.82 | 120.94 | 124.45 |
| 22 | B | 607 | CLA | CHD-C1D-ND | -3.82 | 120.94 | 124.45 |
| 22 | D | 405 | CLA | C1B-CHB-C4A | -3.82 | 122.56 | 130.12 |
| 22 | c | 512 | CLA | O2D-CGD-O1D | -3.82 | 116.38 | 123.84 |
| 28 | l | 101 | LHG | O4-P-O5 | 3.81 | 131.09 | 112.24 |
| 34 | V | 201 | HEC | CBD-CAD-C3D | -3.80 | 106.13 | 112.62 |
| 22 | B | 606 | CLA | CMB-C2B-C1B | -3.80 | 122.62 | 128.46 |
| 22 | b | 614 | CLA | O2D-CGD-O1D | -3.79 | 116.44 | 123.84 |
| 22 | d | 403 | CLA | CHD-C1D-ND | -3.77 | 120.99 | 124.45 |
| 30 | B | 618 | BCR | C38-C26-C25 | -3.77 | 120.30 | 124.53 |
| 22 | b | 604 | CLA | C4-C3-C5 | 3.76 | 121.60 | 115.27 |
| 22 | C | 512 | CLA | CMB-C2B-C1B | -3.76 | 122.69 | 128.46 |
| 28 | d | 409 | LHG | O4-P-O5 | 3.75 | 130.80 | 112.24 |
| 22 | C | 503 | CLA | CHD-C1D-ND | -3.74 | 121.01 | 124.45 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | C | 509 | CLA | CMB-C2B-C1B | -3.74 | 122.72 | 128.46 |
| 22 | B | 602 | CLA | C6-C7-C8 | -3.74 | 103.84 | 115.92 |
| 30 | C | 514 | BCR | C33-C5-C6 | -3.73 | 120.33 | 124.53 |
| 22 | b | 613 | CLA | CMB-C2B-C3B | 3.73 | 131.66 | 124.68 |
| 22 | c | 505 | CLA | CHD-C1D-ND | -3.71 | 121.04 | 124.45 |
| 25 | D | 407 | PL9 | C40-C39-C41 | 3.71 | 121.51 | 115.27 |
| 25 | A | 408 | PL9 | O1-C4-C3 | -3.70 | 116.64 | 120.72 |
| 22 | B | 603 | CLA | CHB-C4A-NA | 3.70 | 129.63 | 124.51 |
| 22 | C | 512 | CLA | CHD-C1D-ND | -3.70 | 121.06 | 124.45 |
| 22 | b | 601 | CLA | CHD-C1D-ND | -3.69 | 121.06 | 124.45 |
| 25 | d | 407 | PL9 | C22-C23-C24 | -3.69 | 118.77 | 127.66 |
| 27 | A | 410 | SQD | C45-O47-C7 | 3.69 | 126.88 | 117.79 |
| 22 | B | 609 | CLA | CHB-C4A-NA | 3.69 | 129.61 | 124.51 |
| 27 | A | 410 | SQD | C1-O5-C5 | -3.69 | 106.45 | 113.69 |
| 22 | b | 613 | CLA | CHB-C4A-NA | 3.68 | 129.61 | 124.51 |
| 22 | b | 603 | CLA | CMB-C2B-C1B | -3.68 | 122.80 | 128.46 |
| 22 | a | 402 | CLA | O1D-CGD-CBD | 3.68 | 132.02 | 124.48 |
| 28 | L | 102 | LHG | O4-P-O5 | 3.68 | 130.43 | 112.24 |
| 26 | A | 409 | LMG | O6-C1-O1 | -3.68 | 101.26 | 109.97 |
| 29 | C | 516 | DGD | O1G-C1A-C2A | -3.68 | 100.37 | 111.91 |
| 22 | B | 603 | CLA | O2D-CGD-O1D | -3.67 | 116.66 | 123.84 |
| 22 | C | 509 | CLA | C4A-NA-C1A | 3.67 | 108.35 | 106.71 |
| 30 | B | 617 | BCR | C37-C22-C21 | -3.66 | 117.79 | 122.92 |
| 26 | c | 521 | LMG | C1-O6-C5 | -3.66 | 106.50 | 113.69 |
| 22 | B | 611 | CLA | CMB-C2B-C1B | -3.66 | 122.84 | 128.46 |
| 22 | c | 503 | CLA | CHD-C1D-ND | -3.66 | 121.09 | 124.45 |
| 22 | c | 509 | CLA | CHB-C4A-NA | 3.64 | 129.55 | 124.51 |
| 22 | d | 405 | CLA | CMB-C2B-C3B | 3.64 | 131.49 | 124.68 |
| 29 | C | 518 | DGD | C4D-C3D-C2D | -3.63 | 104.48 | 110.82 |
| 34 | f | 101 | HEC | CBA-CAA-C2A | -3.63 | 106.48 | 112.60 |
| 22 | A | 403 | CLA | O2D-CGD-O1D | -3.63 | 116.75 | 123.84 |
| 22 | c | 509 | CLA | CMB-C2B-C3B | 3.62 | 131.44 | 124.68 |
| 27 | A | 410 | SQD | O9-S-C6 | 3.61 | 111.23 | 106.94 |
| 22 | A | 405 | CLA | O2D-CGD-CBD | 3.61 | 117.69 | 111.27 |
| 22 | d | 404 | CLA | C2D-C1D-ND | -3.61 | 107.44 | 110.10 |
| 22 | B | 611 | CLA | CMB-C2B-C3B | 3.60 | 131.42 | 124.68 |
| 30 | k | 103 | BCR | C39-C30-C25 | -3.60 | 104.46 | 110.30 |
| 22 | C | 505 | CLA | CMB-C2B-C3B | 3.60 | 131.41 | 124.68 |
| 22 | b | 607 | CLA | C4A-NA-C1A | 3.60 | 108.32 | 106.71 |
| 27 | B | 621 | SQD | O48-C23-C24 | 3.60 | 123.19 | 111.91 |
| 27 | A | 412 | SQD | O47-C7-C8 | 3.59 | 119.25 | 111.50 |
| 22 | C | 505 | CLA | CHB-C4A-NA | 3.59 | 129.48 | 124.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 34 | f | 101 | HEC | CMC-C2C-C1C | -3.59 | 122.94 | 128.46 |
| 22 | d | 404 | CLA | C1C-C2C-C3C | -3.59 | 103.18 | 106.96 |
| 31 | B | 625 | STE | O2-C1-C2 | 3.59 | 125.56 | 114.03 |
| 23 | d | 401 | PHO | O1D-CGD-CBD | 3.59 | 130.71 | 124.74 |
| 27 | L | 101 | SQD | O7-S-C6 | 3.58 | 111.19 | 106.94 |
| 22 | b | 612 | CLA | CMB-C2B-C1B | -3.57 | 122.97 | 128.46 |
| 30 | K | 101 | BCR | C7-C8-C9 | -3.57 | 120.84 | 126.23 |
| 22 | c | 504 | CLA | CMB-C2B-C3B | 3.56 | 131.35 | 124.68 |
| 22 | c | 512 | CLA | C1-C2-C3 | -3.56 | 119.89 | 126.04 |
| 22 | b | 601 | CLA | CMB-C2B-C1B | -3.55 | 123.00 | 128.46 |
| 29 | c | 517 | DGD | O3G-C3G-C2G | -3.55 | 102.33 | 110.90 |
| 27 | L | 101 | SQD | O9-S-C6 | 3.55 | 111.16 | 106.94 |
| 25 | A | 408 | PL9 | C22-C23-C24 | -3.55 | 119.11 | 127.66 |
| 22 | b | 616 | CLA | CMB-C2B-C3B | 3.55 | 131.32 | 124.68 |
| 27 | A | 410 | SQD | C1-C2-C3 | -3.55 | 102.61 | 110.00 |
| 31 | C | 519 | STE | O2-C1-O1 | -3.55 | 114.46 | 123.30 |
| 22 | d | 404 | CLA | O2D-CGD-O1D | -3.54 | 116.91 | 123.84 |
| 22 | c | 510 | CLA | CMB-C2B-C3B | 3.54 | 131.31 | 124.68 |
| 22 | C | 509 | CLA | O2D-CGD-O1D | -3.53 | 116.93 | 123.84 |
| 29 | c | 517 | DGD | C3D-C4D-C5D | -3.53 | 103.94 | 110.24 |
| 22 | b | 614 | CLA | CMB-C2B-C3B | 3.53 | 131.28 | 124.68 |
| 30 | B | 618 | BCR | C36-C18-C17 | -3.53 | 117.98 | 122.92 |
| 22 | A | 403 | CLA | CMB-C2B-C3B | 3.53 | 131.28 | 124.68 |
| 22 | b | 611 | CLA | O2D-CGD-O1D | -3.53 | 116.95 | 123.84 |
| 22 | c | 505 | CLA | CMB-C2B-C1B | -3.53 | 123.05 | 128.46 |
| 25 | a | 409 | PL9 | C7-C3-C2 | -3.52 | 118.67 | 123.30 |
| 23 | A | 404 | PHO | C5-C3-C2 | 3.52 | 128.25 | 121.12 |
| 22 | c | 509 | CLA | CMB-C2B-C1B | -3.52 | 123.06 | 128.46 |
| 22 | B | 607 | CLA | CMB-C2B-C1B | -3.52 | 123.06 | 128.46 |
| 22 | a | 405 | CLA | O2A-CGA-O1A | -3.51 | 114.74 | 123.59 |
| 30 | C | 514 | BCR | C7-C8-C9 | -3.50 | 120.94 | 126.23 |
| 22 | C | 504 | CLA | O2D-CGD-O1D | -3.50 | 116.99 | 123.84 |
| 30 | K | 101 | BCR | C15-C16-C17 | -3.49 | 116.32 | 123.47 |
| 29 | h | 101 | DGD | C4D-C3D-C2D | -3.49 | 104.73 | 110.82 |
| 22 | A | 405 | CLA | C4A-NA-C1A | 3.49 | 108.27 | 106.71 |
| 22 | A | 405 | CLA | O2D-CGD-O1D | -3.48 | 117.03 | 123.84 |
| 22 | b | 605 | CLA | O1D-CGD-CBD | 3.48 | 131.61 | 124.48 |
| 29 | C | 518 | DGD | O5D-C6D-C5D | -3.48 | 102.61 | 109.05 |
| 22 | c | 503 | CLA | O2D-CGD-O1D | -3.48 | 117.04 | 123.84 |
| 27 | L | 101 | SQD | O5-C1-C2 | -3.48 | 102.99 | 110.35 |
| 22 | d | 405 | CLA | CMB-C2B-C1B | -3.47 | 123.12 | 128.46 |
| 22 | B | 612 | CLA | CHA-C1A-NA | -3.47 | 118.44 | 126.40 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | c | 512 | CLA | CHB-C4A-NA | 3.47 | 129.32 | 124.51 |
| 22 | C | 510 | CLA | CMB-C2B-C1B | -3.47 | 123.12 | 128.46 |
| 30 | d | 406 | BCR | C38-C26-C25 | -3.47 | 120.63 | 124.53 |
| 22 | c | 511 | CLA | O2A-C1-C2 | -3.47 | 99.52 | 108.64 |
| 22 | B | 606 | CLA | CHD-C1D-ND | -3.46 | 121.27 | 124.45 |
| 22 | b | 604 | CLA | CMB-C2B-C3B | 3.46 | 131.15 | 124.68 |
| 22 | B | 610 | CLA | C4A-NA-C1A | 3.45 | 108.26 | 106.71 |
| 23 | A | 404 | PHO | C1-C2-C3 | -3.45 | 120.07 | 126.04 |
| 26 | m | 101 | LMG | O1-C7-C8 | -3.45 | 102.57 | 110.90 |
| 26 | m | 101 | LMG | O7-C10-O9 | -3.45 | 115.37 | 123.70 |
| 27 | D | 409 | SQD | O8-S-O9 | -3.44 | 102.87 | 111.27 |
| 22 | B | 608 | CLA | CMB-C2B-C1B | -3.44 | 123.18 | 128.46 |
| 23 | d | 401 | PHO | CMB-C2B-C3B | 3.43 | 131.10 | 124.68 |
| 22 | B | 613 | CLA | O2D-CGD-O1D | -3.43 | 117.14 | 123.84 |
| 22 | b | 606 | CLA | O2D-CGD-CBD | 3.42 | 117.35 | 111.27 |
| 22 | B | 612 | CLA | CMB-C2B-C1B | -3.42 | 123.21 | 128.46 |
| 25 | D | 407 | PL9 | C50-C49-C48 | -3.41 | 112.78 | 122.65 |
| 22 | D | 403 | CLA | CMB-C2B-C3B | 3.41 | 131.06 | 124.68 |
| 22 | d | 404 | CLA | CMB-C2B-C1B | -3.41 | 123.23 | 128.46 |
| 22 | c | 510 | CLA | CHB-C4A-NA | 3.41 | 129.22 | 124.51 |
| 22 | B | 607 | CLA | CMB-C2B-C3B | 3.40 | 131.04 | 124.68 |
| 22 | b | 612 | CLA | C1B-CHB-C4A | -3.40 | 123.38 | 130.12 |
| 22 | A | 402 | CLA | CMB-C2B-C1B | -3.39 | 123.25 | 128.46 |
| 22 | C | 507 | CLA | O2D-CGD-O1D | -3.39 | 117.20 | 123.84 |
| 22 | C | 506 | CLA | CMB-C2B-C1B | -3.39 | 123.25 | 128.46 |
| 22 | b | 613 | CLA | C1B-CHB-C4A | -3.39 | 123.41 | 130.12 |
| 27 | t | 102 | SQD | O48-C23-C24 | 3.39 | 122.53 | 111.91 |
| 30 | x | 101 | BCR | C27-C26-C25 | 3.38 | 127.64 | 122.73 |
| 30 | t | 101 | BCR | C7-C8-C9 | -3.37 | 121.14 | 126.23 |
| 27 | L | 101 | SQD | O47-C7-C8 | 3.37 | 118.76 | 111.50 |
| 30 | T | 101 | BCR | C7-C8-C9 | -3.37 | 121.15 | 126.23 |
| 22 | c | 501 | CLA | CMB-C2B-C1B | -3.37 | 123.29 | 128.46 |
| 30 | T | 101 | BCR | C27-C26-C25 | 3.36 | 127.61 | 122.73 |
| 22 | b | 608 | CLA | C1B-CHB-C4A | -3.36 | 123.46 | 130.12 |
| 22 | C | 508 | CLA | CMB-C2B-C3B | 3.36 | 130.96 | 124.68 |
| 22 | b | 613 | CLA | O2D-CGD-CBD | 3.36 | 117.23 | 111.27 |
| 22 | b | 610 | CLA | C1B-CHB-C4A | -3.36 | 123.47 | 130.12 |
| 22 | C | 503 | CLA | CMB-C2B-C1B | -3.35 | 123.31 | 128.46 |
| 26 | M | 101 | LMG | C4-C3-C2 | -3.35 | 104.97 | 110.82 |
| 30 | D | 406 | BCR | C7-C8-C9 | -3.35 | 121.18 | 126.23 |
| 22 | D | 405 | CLA | O2D-CGD-O1D | -3.35 | 117.30 | 123.84 |
| 22 | c | 501 | CLA | O2D-CGD-CBD | 3.35 | 117.21 | 111.27 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 31 | B | 622 | STE | C3-C2-C1 | -3.34 | 106.04 | 114.47 |
| 22 | C | 510 | CLA | CHB-C4A-NA | 3.34 | 129.14 | 124.51 |
| 22 | A | 402 | CLA | C1D-ND-C4D | -3.34 | 103.96 | 106.33 |
| 22 | c | 513 | CLA | O2D-CGD-O1D | -3.34 | 117.30 | 123.84 |
| 29 | c | 516 | DGD | O6D-C1D-O3G | -3.34 | 102.07 | 109.97 |
| 22 | B | 615 | CLA | C1B-CHB-C4A | -3.33 | 123.52 | 130.12 |
| 27 | f | 102 | SQD | C1-C2-C3 | -3.33 | 103.06 | 110.00 |
| 22 | C | 504 | CLA | CMB-C2B-C3B | 3.33 | 130.90 | 124.68 |
| 22 | B | 612 | CLA | CHB-C4A-NA | 3.33 | 129.11 | 124.51 |
| 22 | B | 615 | CLA | C2C-C1C-NC | 3.32 | 113.09 | 109.97 |
| 22 | b | 612 | CLA | CAC-C3C-C4C | 3.31 | 129.11 | 124.81 |
| 22 | b | 602 | CLA | C2D-C1D-ND | -3.31 | 107.67 | 110.10 |
| 27 | D | 409 | SQD | O48-C23-C24 | 3.31 | 122.28 | 111.91 |
| 22 | b | 602 | CLA | O2A-CGA-O1A | -3.30 | 115.25 | 123.59 |
| 22 | a | 403 | CLA | C2D-C1D-ND | -3.30 | 107.67 | 110.10 |
| 22 | b | 612 | CLA | CHB-C4A-NA | 3.30 | 129.07 | 124.51 |
| 22 | B | 601 | CLA | C1B-CHB-C4A | -3.29 | 123.59 | 130.12 |
| 26 | c | 518 | LMG | O6-C1-O1 | -3.29 | 102.17 | 109.97 |
| 22 | b | 602 | CLA | CMB-C2B-C3B | 3.29 | 130.84 | 124.68 |
| 34 | F | 101 | HEC | CBA-CAA-C2A | -3.29 | 107.06 | 112.60 |
| 22 | D | 403 | CLA | O2A-CGA-O1A | -3.29 | 115.30 | 123.59 |
| 22 | B | 610 | CLA | C1-C2-C3 | -3.28 | 120.36 | 126.04 |
| 22 | B | 612 | CLA | C1B-CHB-C4A | -3.28 | 123.61 | 130.12 |
| 23 | d | 401 | PHO | CMC-C2C-C3C | 3.28 | 131.13 | 124.94 |
| 22 | B | 608 | CLA | C2C-C1C-NC | 3.28 | 113.05 | 109.97 |
| 28 | D | 413 | LHG | O8-C23-C24 | 3.28 | 122.20 | 111.91 |
| 26 | a | 414 | LMG | C7-O1-C1 | 3.28 | 120.14 | 113.74 |
| 22 | b | 602 | CLA | CMB-C2B-C1B | -3.28 | 123.43 | 128.46 |
| 26 | D | 408 | LMG | C3-C4-C5 | -3.27 | 104.41 | 110.24 |
| 22 | b | 612 | CLA | CMB-C2B-C3B | 3.27 | 130.79 | 124.68 |
| 30 | I | 101 | BCR | C27-C26-C25 | 3.27 | 127.47 | 122.73 |
| 22 | C | 507 | CLA | CHB-C4A-NA | 3.27 | 129.03 | 124.51 |
| 22 | C | 502 | CLA | O1D-CGD-CBD | 3.26 | 131.16 | 124.48 |
| 30 | k | 101 | BCR | C15-C14-C13 | -3.26 | 122.65 | 127.31 |
| 22 | c | 506 | CLA | CHB-C4A-NA | 3.26 | 129.02 | 124.51 |
| 25 | D | 407 | PL9 | C30-C29-C31 | -3.26 | 109.79 | 115.27 |
| 28 | D | 413 | LHG | O8-C23-O10 | -3.25 | 115.38 | 123.59 |
| 25 | d | 407 | PL9 | C37-C38-C39 | -3.25 | 119.83 | 127.66 |
| 22 | b | 609 | CLA | C1B-CHB-C4A | -3.25 | 123.68 | 130.12 |
| 22 | c | 502 | CLA | O2D-CGD-O1D | -3.24 | 117.50 | 123.84 |
| 22 | B | 603 | CLA | C2D-C1D-ND | -3.24 | 107.72 | 110.10 |
| 26 | m | 101 | LMG | O6-C1-O1 | -3.24 | 102.30 | 109.97 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | b | 613 | CLA | CAC-C3C-C4C | 3.24 | 129.01 | 124.81 |
| 29 | c | 515 | DGD | O6D-C1D-O3G | -3.24 | 102.31 | 109.97 |
| 30 | C | 514 | BCR | C35-C13-C14 | -3.24 | 118.39 | 122.92 |
| 27 | L | 101 | SQD | O2-C2-C1 | 3.23 | 117.89 | 110.05 |
| 22 | c | 503 | CLA | C4A-NA-C1A | 3.23 | 108.16 | 106.71 |
| 26 | d | 410 | LMG | O6-C1-O1 | -3.23 | 102.33 | 109.97 |
| 22 | b | 614 | CLA | O2A-CGA-O1A | -3.23 | 115.45 | 123.59 |
| 30 | B | 618 | BCR | C15-C14-C13 | -3.22 | 122.71 | 127.31 |
| 22 | b | 602 | CLA | C1B-CHB-C4A | -3.22 | 123.74 | 130.12 |
| 22 | c | 507 | CLA | O2A-CGA-O1A | -3.22 | 115.46 | 123.59 |
| 22 | A | 405 | CLA | CMB-C2B-C3B | 3.22 | 130.70 | 124.68 |
| 22 | B | 601 | CLA | CMB-C2B-C3B | 3.22 | 130.70 | 124.68 |
| 22 | B | 611 | CLA | C11-C12-C13 | -3.21 | 105.53 | 115.92 |
| 22 | b | 605 | CLA | CHB-C4A-NA | 3.21 | 128.96 | 124.51 |
| 22 | C | 506 | CLA | C2D-C1D-ND | -3.21 | 107.74 | 110.10 |
| 22 | b | 615 | CLA | C1B-CHB-C4A | -3.21 | 123.77 | 130.12 |
| 23 | a | 404 | PHO | CMB-C2B-C3B | 3.21 | 130.68 | 124.68 |
| 22 | b | 603 | CLA | CED-O2D-CGD | -3.20 | 108.69 | 115.94 |
| 22 | b | 611 | CLA | O2D-CGD-CBD | 3.20 | 116.96 | 111.27 |
| 23 | d | 401 | PHO | O2D-CGD-O1D | -3.20 | 117.58 | 123.84 |
| 22 | B | 606 | CLA | CMB-C2B-C3B | 3.20 | 130.66 | 124.68 |
| 22 | c | 508 | CLA | O2A-CGA-O1A | -3.19 | 115.54 | 123.59 |
| 22 | B | 607 | CLA | O2D-CGD-O1D | -3.18 | 117.62 | 123.84 |
| 30 | C | 514 | BCR | C36-C18-C17 | -3.18 | 118.47 | 122.92 |
| 27 | f | 102 | SQD | O48-C23-O10 | -3.18 | 115.58 | 123.59 |
| 22 | A | 405 | CLA | C1B-CHB-C4A | -3.18 | 123.83 | 130.12 |
| 22 | d | 404 | CLA | O2D-CGD-CBD | 3.17 | 116.91 | 111.27 |
| 29 | c | 516 | DGD | C3D-C4D-C5D | -3.17 | 104.58 | 110.24 |
| 22 | c | 512 | CLA | CHD-C4C-NC | 3.17 | 129.20 | 124.20 |
| 30 | x | 101 | BCR | C35-C13-C14 | -3.17 | 118.48 | 122.92 |
| 29 | H | 103 | DGD | O2D-C2D-C1D | -3.17 | 102.36 | 110.05 |
| 22 | B | 602 | CLA | C4-C3-C5 | 3.16 | 120.58 | 115.27 |
| 22 | b | 607 | CLA | CMB-C2B-C1B | -3.16 | 123.61 | 128.46 |
| 25 | D | 407 | PL9 | C22-C23-C24 | -3.15 | 120.07 | 127.66 |
| 22 | d | 403 | CLA | CMB-C2B-C3B | 3.15 | 130.57 | 124.68 |
| 27 | B | 621 | SQD | C1-O5-C5 | -3.15 | 107.51 | 113.69 |
| 22 | b | 609 | CLA | O1D-CGD-CBD | 3.15 | 130.93 | 124.48 |
| 22 | C | 501 | CLA | O2D-CGD-O1D | -3.15 | 117.69 | 123.84 |
| 22 | C | 513 | CLA | O1D-CGD-CBD | 3.15 | 130.92 | 124.48 |
| 22 | B | 602 | CLA | CMB-C2B-C3B | 3.14 | 130.56 | 124.68 |
| 22 | b | 608 | CLA | CHB-C4A-NA | 3.14 | 128.86 | 124.51 |
| 22 | b | 602 | CLA | CHB-C4A-NA | 3.14 | 128.85 | 124.51 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | b | 610 | CLA | CHB-C4A-NA | 3.14 | 128.85 | 124.51 |
| 30 | D | 406 | BCR | C2-C1-C6 | 3.13 | 115.31 | 110.48 |
| 22 | B | 605 | CLA | CHD-C1D-ND | -3.13 | 121.58 | 124.45 |
| 29 | H | 103 | DGD | C1D-C2D-C3D | -3.13 | 103.48 | 110.00 |
| 30 | C | 514 | BCR | C15-C16-C17 | -3.13 | 117.07 | 123.47 |
| 34 | f | 101 | HEC | C1D-C2D-C3D | -3.12 | 104.82 | 107.00 |
| 22 | C | 513 | CLA | CHD-C1D-ND | -3.12 | 121.59 | 124.45 |
| 22 | b | 607 | CLA | CHD-C1D-ND | -3.12 | 121.59 | 124.45 |
| 22 | C | 512 | CLA | CMB-C2B-C3B | 3.12 | 130.51 | 124.68 |
| 22 | c | 505 | CLA | CMB-C2B-C3B | 3.12 | 130.51 | 124.68 |
| 29 | C | 516 | DGD | O5D-C6D-C5D | -3.12 | 103.28 | 109.05 |
| 30 | B | 617 | BCR | C35-C13-C14 | -3.12 | 118.56 | 122.92 |
| 30 | k | 102 | BCR | C2-C1-C6 | 3.11 | 115.27 | 110.48 |
| 27 | A | 410 | SQD | O5-C5-C4 | 3.11 | 115.33 | 109.69 |
| 22 | C | 510 | CLA | O2D-CGD-O1D | -3.11 | 117.77 | 123.84 |
| 22 | C | 509 | CLA | CMB-C2B-C3B | 3.10 | 130.49 | 124.68 |
| 30 | I | 101 | BCR | C40-C30-C25 | 3.10 | 115.33 | 110.30 |
| 30 | I | 101 | BCR | C11-C10-C9 | -3.10 | 122.88 | 127.31 |
| 30 | a | 406 | BCR | C38-C26-C27 | -3.10 | 107.66 | 113.62 |
| 22 | D | 404 | CLA | C1B-CHB-C4A | -3.10 | 123.98 | 130.12 |
| 30 | K | 101 | BCR | C11-C10-C9 | -3.10 | 122.89 | 127.31 |
| 22 | C | 506 | CLA | C4-C3-C5 | 3.10 | 120.48 | 115.27 |
| 29 | c | 516 | DGD | C3E-C4E-C5E | -3.10 | 104.72 | 110.24 |
| 23 | A | 404 | PHO | CMC-C2C-C3C | 3.09 | 130.77 | 124.94 |
| 22 | a | 403 | CLA | CED-O2D-CGD | -3.09 | 108.95 | 115.94 |
| 27 | f | 102 | SQD | C1-O5-C5 | -3.08 | 107.64 | 113.69 |
| 29 | A | 413 | DGD | O6E-C5E-C4E | 3.08 | 115.29 | 109.69 |
| 22 | B | 615 | CLA | CHB-C4A-NA | 3.08 | 128.77 | 124.51 |
| 22 | b | 604 | CLA | CHB-C4A-NA | 3.08 | 128.77 | 124.51 |
| 29 | H | 103 | DGD | C3E-C4E-C5E | -3.08 | 104.75 | 110.24 |
| 30 | I | 101 | BCR | C38-C26-C27 | -3.08 | 107.71 | 113.62 |
| 22 | c | 501 | CLA | CED-O2D-CGD | -3.07 | 108.98 | 115.94 |
| 27 | L | 101 | SQD | O47-C45-C46 | 3.07 | 119.50 | 108.40 |
| 22 | b | 608 | CLA | C3B-C4B-NB | -3.07 | 105.25 | 109.21 |
| 22 | c | 513 | CLA | CHD-C1D-ND | -3.06 | 121.64 | 124.45 |
| 30 | k | 101 | BCR | C24-C23-C22 | -3.06 | 121.61 | 126.23 |
| 22 | c | 509 | CLA | C1B-CHB-C4A | -3.06 | 124.06 | 130.12 |
| 22 | b | 601 | CLA | CHB-C4A-NA | 3.05 | 128.74 | 124.51 |
| 27 | a | 410 | SQD | O9-S-O7 | -3.05 | 103.38 | 113.95 |
| 22 | B | 610 | CLA | CHB-C4A-NA | 3.05 | 128.74 | 124.51 |
| 23 | a | 404 | PHO | O2D-CGD-CBD | 3.05 | 114.86 | 111.00 |
| 29 | C | 518 | DGD | O6D-C1D-O3G | -3.05 | 102.75 | 109.97 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | C | 501 | CLA | C4-C3-C5 | 3.05 | 120.40 | 115.27 |
| 30 | B | 618 | BCR | C2-C1-C6 | 3.05 | 115.18 | 110.48 |
| 30 | c | 514 | BCR | C27-C26-C25 | 3.05 | 127.16 | 122.73 |
| 22 | b | 603 | CLA | O2A-CGA-O1A | -3.04 | 115.91 | 123.59 |
| 27 | A | 410 | SQD | O8-S-C6 | 3.04 | 110.59 | 105.74 |
| 22 | b | 606 | CLA | CMB-C2B-C1B | -3.04 | 123.79 | 128.46 |
| 22 | b | 616 | CLA | CHB-C4A-NA | 3.04 | 128.72 | 124.51 |
| 31 | L | 103 | STE | O1-C1-C2 | -3.04 | 113.31 | 123.08 |
| 26 | M | 101 | LMG | O6-C1-O1 | -3.04 | 102.77 | 109.97 |
| 28 | a | 411 | LHG | O8-C23-C24 | 3.04 | 121.45 | 111.91 |
| 30 | a | 406 | BCR | C37-C22-C21 | -3.04 | 118.67 | 122.92 |
| 22 | d | 405 | CLA | C1B-CHB-C4A | -3.04 | 124.11 | 130.12 |
| 30 | d | 406 | BCR | C3-C4-C5 | -3.03 | 108.66 | 114.08 |
| 23 | D | 401 | PHO | CMB-C2B-C3B | 3.03 | 130.35 | 124.68 |
| 23 | a | 404 | PHO | OBD-CAD-CBD | -3.03 | 121.38 | 125.82 |
| 22 | b | 611 | CLA | CHD-C1D-C2D | 3.03 | 131.83 | 125.48 |
| 22 | C | 502 | CLA | O2D-CGD-O1D | -3.02 | 117.93 | 123.84 |
| 25 | d | 407 | PL9 | C40-C39-C41 | 3.02 | 120.35 | 115.27 |
| 22 | B | 610 | CLA | C1C-C2C-C3C | -3.02 | 103.78 | 106.96 |
| 30 | K | 101 | BCR | C35-C13-C14 | -3.02 | 118.70 | 122.92 |
| 22 | b | 615 | CLA | CMB-C2B-C3B | 3.01 | 130.32 | 124.68 |
| 22 | d | 404 | CLA | C2C-C1C-NC | 3.01 | 112.80 | 109.97 |
| 22 | c | 511 | CLA | CHD-C1D-ND | -3.01 | 121.69 | 124.45 |
| 22 | B | 604 | CLA | CMB-C2B-C1B | -3.01 | 123.83 | 128.46 |
| 22 | c | 504 | CLA | C4A-NA-C1A | 3.01 | 108.06 | 106.71 |
| 22 | a | 403 | CLA | O2A-CGA-O1A | -3.01 | 116.00 | 123.59 |
| 28 | b | 623 | LHG | C11-C10-C9 | -3.01 | 99.15 | 114.42 |
| 22 | c | 507 | CLA | O2D-CGD-CBD | 3.01 | 116.61 | 111.27 |
| 22 | c | 513 | CLA | C1-C2-C3 | -3.01 | 120.84 | 126.04 |
| 22 | C | 502 | CLA | CMB-C2B-C1B | -3.01 | 123.84 | 128.46 |
| 22 | C | 503 | CLA | C4-C3-C5 | 3.00 | 120.33 | 115.27 |
| 27 | B | 621 | SQD | O8-S-C6 | 3.00 | 110.52 | 105.74 |
| 22 | A | 402 | CLA | O1D-CGD-CBD | 3.00 | 130.62 | 124.48 |
| 27 | B | 621 | SQD | O48-C23-O10 | -2.99 | 116.03 | 123.59 |
| 29 | C | 517 | DGD | C1D-C2D-C3D | -2.99 | 103.76 | 110.00 |
| 22 | A | 405 | CLA | CMB-C2B-C1B | -2.99 | 123.86 | 128.46 |
| 22 | c | 513 | CLA | CMB-C2B-C1B | -2.99 | 123.86 | 128.46 |
| 22 | C | 507 | CLA | CMB-C2B-C1B | -2.99 | 123.87 | 128.46 |
| 22 | C | 509 | CLA | CHB-C4A-NA | 2.99 | 128.64 | 124.51 |
| 30 | c | 514 | BCR | C34-C9-C10 | -2.99 | 118.74 | 122.92 |
| 22 | B | 613 | CLA | C2C-C1C-NC | 2.99 | 112.77 | 109.97 |
| 22 | D | 403 | CLA | C4-C3-C5 | 2.98 | 120.29 | 115.27 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 26 | m | 101 | LMG | O1-C1-C2 | -2.98 | 103.64 | 108.30 |
| 22 | c | 503 | CLA | C1B-CHB-C4A | -2.98 | 124.21 | 130.12 |
| 22 | c | 510 | CLA | O2D-CGD-O1D | -2.98 | 118.01 | 123.84 |
| 28 | D | 413 | LHG | O3-P-O5 | -2.98 | 97.43 | 109.07 |
| 26 | b | 622 | LMG | O2-C2-C1 | -2.97 | 102.83 | 110.05 |
| 22 | B | 604 | CLA | CHD-C1D-ND | -2.97 | 121.72 | 124.45 |
| 27 | a | 410 | SQD | O47-C7-O49 | -2.97 | 116.53 | 123.70 |
| 30 | c | 514 | BCR | C36-C18-C17 | -2.97 | 118.77 | 122.92 |
| 22 | b | 610 | CLA | C6-C5-C3 | 2.96 | 121.23 | 113.45 |
| 29 | c | 515 | DGD | O3G-C3G-C2G | -2.96 | 103.75 | 110.90 |
| 22 | B | 614 | CLA | CHB-C4A-NA | 2.96 | 128.60 | 124.51 |
| 22 | b | 606 | CLA | C1B-CHB-C4A | -2.96 | 124.26 | 130.12 |
| 22 | c | 507 | CLA | C2C-C1C-NC | 2.95 | 112.74 | 109.97 |
| 30 | H | 102 | BCR | C24-C23-C22 | -2.95 | 121.77 | 126.23 |
| 22 | d | 404 | CLA | CHB-C4A-NA | 2.95 | 128.59 | 124.51 |
| 22 | C | 507 | CLA | CMB-C2B-C3B | 2.95 | 130.20 | 124.68 |
| 29 | C | 516 | DGD | O6D-C1D-O3G | -2.94 | 103.00 | 109.97 |
| 22 | B | 613 | CLA | C1B-CHB-C4A | -2.94 | 124.29 | 130.12 |
| 22 | B | 609 | CLA | O2A-CGA-O1A | -2.94 | 116.16 | 123.59 |
| 22 | b | 609 | CLA | CMB-C2B-C3B | 2.94 | 130.18 | 124.68 |
| 28 | d | 409 | LHG | C26-C25-C24 | 2.94 | 123.76 | 113.19 |
| 22 | B | 614 | CLA | CHD-C1D-ND | -2.94 | 121.75 | 124.45 |
| 29 | c | 517 | DGD | O6D-C1D-O3G | -2.94 | 103.01 | 109.97 |
| 29 | C | 516 | DGD | O3G-C3G-C2G | -2.94 | 103.81 | 110.90 |
| 22 | B | 608 | CLA | CMB-C2B-C3B | 2.94 | 130.17 | 124.68 |
| 30 | k | 101 | BCR | C15-C16-C17 | -2.93 | 117.46 | 123.47 |
| 22 | B | 612 | CLA | O1D-CGD-CBD | 2.93 | 130.49 | 124.48 |
| 22 | b | 604 | CLA | C6-C7-C8 | -2.93 | 106.44 | 115.92 |
| 22 | c | 506 | CLA | O2D-CGD-O1D | -2.93 | 118.11 | 123.84 |
| 27 | L | 101 | SQD | O8-S-C6 | 2.93 | 110.41 | 105.74 |
| 22 | B | 612 | CLA | C4-C3-C5 | 2.93 | 120.20 | 115.27 |
| 30 | K | 101 | BCR | C36-C18-C17 | -2.93 | 118.82 | 122.92 |
| 22 | c | 506 | CLA | C1D-ND-C4D | 2.92 | 108.41 | 106.33 |
| 27 | D | 409 | SQD | C1-C2-C3 | -2.92 | 103.91 | 110.00 |
| 22 | c | 512 | CLA | CMB-C2B-C3B | 2.92 | 130.14 | 124.68 |
| 22 | c | 511 | CLA | C4-C3-C5 | 2.92 | 120.18 | 115.27 |
| 27 | L | 101 | SQD | C3-C4-C5 | 2.92 | 115.44 | 110.24 |
| 30 | b | 619 | BCR | C29-C30-C25 | 2.92 | 114.97 | 110.48 |
| 23 | D | 401 | PHO | O1D-CGD-CBD | 2.92 | 129.60 | 124.74 |
| 22 | B | 604 | CLA | CMB-C2B-C3B | 2.92 | 130.13 | 124.68 |
| 22 | a | 403 | CLA | CAC-C3C-C4C | 2.92 | 128.59 | 124.81 |
| 22 | B | 602 | CLA | O2D-CGD-CBD | 2.92 | 116.45 | 111.27 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | B | 603 | CLA | C6-C7-C8 | -2.91 | 106.50 | 115.92 |
| 30 | H | 102 | BCR | C2-C1-C6 | 2.91 | 114.97 | 110.48 |
| 27 | B | 621 | SQD | C46-C45-C44 | -2.91 | 104.90 | 111.79 |
| 22 | C | 504 | CLA | O2A-CGA-O1A | -2.91 | 116.25 | 123.59 |
| 22 | b | 616 | CLA | C1B-CHB-C4A | -2.91 | 124.35 | 130.12 |
| 29 | C | 516 | DGD | O3E-C3E-C2E | -2.91 | 103.62 | 110.35 |
| 22 | b | 608 | CLA | O2D-CGD-CBD | 2.91 | 116.44 | 111.27 |
| 22 | b | 605 | CLA | CMB-C2B-C1B | -2.91 | 123.99 | 128.46 |
| 22 | D | 403 | CLA | C1-C2-C3 | -2.91 | 121.02 | 126.04 |
| 22 | c | 510 | CLA | C16-C15-C13 | -2.90 | 106.53 | 115.92 |
| 30 | b | 618 | BCR | C35-C13-C14 | -2.90 | 118.86 | 122.92 |
| 29 | c | 516 | DGD | O5D-C6D-C5D | -2.90 | 103.68 | 109.05 |
| 30 | a | 406 | BCR | C27-C26-C25 | 2.90 | 126.94 | 122.73 |
| 22 | H | 101 | CLA | O2D-CGD-O1D | -2.90 | 118.17 | 123.84 |
| 22 | C | 509 | CLA | C1-O2A-CGA | 2.89 | 124.04 | 116.44 |
| 27 | f | 102 | SQD | O5-C1-O6 | 2.89 | 116.82 | 109.97 |
| 22 | d | 405 | CLA | O2A-CGA-O1A | -2.89 | 116.29 | 123.59 |
| 30 | K | 102 | BCR | C8-C7-C6 | -2.89 | 119.09 | 127.20 |
| 22 | d | 405 | CLA | CHD-C1D-ND | -2.89 | 121.80 | 124.45 |
| 22 | D | 405 | CLA | C2D-C1D-ND | -2.88 | 107.98 | 110.10 |
| 22 | C | 511 | CLA | CAC-C3C-C4C | 2.88 | 128.55 | 124.81 |
| 30 | b | 617 | BCR | C38-C26-C25 | -2.88 | 121.29 | 124.53 |
| 31 | C | 519 | STE | O2-C1-C2 | 2.88 | 123.28 | 114.03 |
| 30 | k | 101 | BCR | C7-C8-C9 | -2.88 | 121.88 | 126.23 |
| 22 | H | 101 | CLA | CMB-C2B-C1B | -2.88 | 124.04 | 128.46 |
| 22 | C | 501 | CLA | O2D-CGD-CBD | 2.88 | 116.38 | 111.27 |
| 25 | a | 409 | PL9 | C37-C38-C39 | -2.87 | 120.74 | 127.66 |
| 28 | D | 410 | LHG | C11-C10-C9 | -2.87 | 99.84 | 114.42 |
| 22 | B | 611 | CLA | O2A-CGA-O1A | -2.87 | 116.34 | 123.59 |
| 22 | b | 603 | CLA | CMB-C2B-C3B | 2.87 | 130.05 | 124.68 |
| 34 | V | 201 | HEC | CAD-CBD-CGD | -2.87 | 105.72 | 113.76 |
| 29 | H | 103 | DGD | C4E-C3E-C2E | -2.87 | 105.81 | 110.82 |
| 27 | A | 410 | SQD | O48-C23-C24 | 2.87 | 120.91 | 111.91 |
| 22 | d | 405 | CLA | CED-O2D-CGD | 2.87 | 122.42 | 115.94 |
| 27 | A | 410 | SQD | O5-C1-O6 | 2.86 | 116.75 | 109.97 |
| 30 | x | 101 | BCR | C36-C18-C17 | -2.86 | 118.92 | 122.92 |
| 22 | c | 512 | CLA | CMB-C2B-C1B | -2.86 | 124.07 | 128.46 |
| 22 | c | 502 | CLA | C1B-CHB-C4A | -2.86 | 124.45 | 130.12 |
| 22 | C | 510 | CLA | CMB-C2B-C3B | 2.86 | 130.02 | 124.68 |
| 22 | B | 615 | CLA | C2A-C3A-C4A | 2.85 | 106.48 | 101.87 |
| 26 | b | 622 | LMG | O6-C5-C6 | 2.85 | 113.53 | 106.44 |
| 22 | b | 601 | CLA | O2D-CGD-O1D | -2.85 | 118.26 | 123.84 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | C | 514 | BCR | C15-C14-C13 | -2.85 | 123.24 | 127.31 |
| 22 | A | 402 | CLA | C16-C15-C13 | -2.85 | 106.72 | 115.92 |
| 26 | c | 521 | LMG | C1-C2-C3 | 2.84 | 115.91 | 110.00 |
| 30 | K | 102 | BCR | C27-C26-C25 | 2.84 | 126.85 | 122.73 |
| 30 | b | 618 | BCR | C8-C7-C6 | -2.83 | 119.24 | 127.20 |
| 25 | D | 407 | PL9 | C7-C8-C9 | -2.83 | 122.08 | 126.79 |
| 22 | a | 405 | CLA | C2C-C1C-NC | 2.83 | 112.62 | 109.97 |
| 22 | b | 611 | CLA | CAA-C2A-C1A | -2.83 | 102.70 | 111.97 |
| 22 | b | 607 | CLA | C1B-CHB-C4A | -2.83 | 124.52 | 130.12 |
| 30 | k | 101 | BCR | C11-C10-C9 | -2.82 | 123.28 | 127.31 |
| 23 | a | 404 | PHO | CMD-C2D-C3D | 2.82 | 129.96 | 124.68 |
| 22 | B | 609 | CLA | C1B-CHB-C4A | -2.82 | 124.53 | 130.12 |
| 22 | C | 506 | CLA | CHB-C4A-NA | 2.82 | 128.41 | 124.51 |
| 22 | b | 611 | CLA | CMB-C2B-C1B | -2.81 | 124.14 | 128.46 |
| 30 | c | 514 | BCR | C30-C25-C26 | -2.81 | 118.65 | 122.61 |
| 30 | c | 514 | BCR | C33-C5-C6 | -2.81 | 121.38 | 124.53 |
| 22 | C | 513 | CLA | CMB-C2B-C1B | -2.80 | 124.16 | 128.46 |
| 22 | B | 605 | CLA | CHB-C4A-NA | 2.80 | 128.39 | 124.51 |
| 30 | d | 406 | BCR | C27-C26-C25 | 2.80 | 126.80 | 122.73 |
| 22 | a | 402 | CLA | O2D-CGD-O1D | -2.80 | 118.37 | 123.84 |
| 22 | B | 604 | CLA | C16-C15-C13 | -2.80 | 106.88 | 115.92 |
| 27 | B | 621 | SQD | C4-C3-C2 | 2.79 | 115.69 | 110.82 |
| 30 | K | 101 | BCR | C27-C26-C25 | 2.79 | 126.78 | 122.73 |
| 22 | D | 403 | CLA | C1B-CHB-C4A | -2.79 | 124.60 | 130.12 |
| 29 | C | 516 | DGD | CDB-CCB-CBB | -2.78 | 100.29 | 114.42 |
| 22 | B | 612 | CLA | O2A-C1-C2 | -2.78 | 101.33 | 108.64 |
| 30 | k | 103 | BCR | C1-C6-C5 | -2.78 | 118.70 | 122.61 |
| 25 | a | 409 | PL9 | C30-C29-C28 | -2.78 | 116.56 | 123.68 |
| 22 | b | 611 | CLA | CMB-C2B-C3B | 2.78 | 129.87 | 124.68 |
| 29 | H | 103 | DGD | O2G-C1B-O1B | -2.78 | 117.00 | 123.70 |
| 22 | c | 505 | CLA | C4A-NA-C1A | 2.77 | 107.95 | 106.71 |
| 22 | C | 506 | CLA | O2A-C1-C2 | -2.77 | 101.35 | 108.64 |
| 22 | A | 402 | CLA | C2D-C1D-ND | 2.77 | 112.15 | 110.10 |
| 30 | D | 406 | BCR | C3-C4-C5 | -2.77 | 109.13 | 114.08 |
| 22 | C | 508 | CLA | C3C-C4C-NC | -2.76 | 107.47 | 110.57 |
| 26 | b | 622 | LMG | C3-C4-C5 | -2.76 | 105.31 | 110.24 |
| 22 | A | 402 | CLA | CMD-C2D-C1D | 2.76 | 129.58 | 124.71 |
| 29 | C | 516 | DGD | C6D-O5D-C1E | 2.76 | 119.13 | 113.74 |
| 29 | A | 413 | DGD | O5D-C6D-C5D | -2.76 | 103.94 | 109.05 |
| 30 | b | 617 | BCR | C34-C9-C10 | -2.76 | 119.06 | 122.92 |
| 27 | B | 621 | SQD | O9-S-O7 | -2.76 | 104.41 | 113.95 |
| 29 | H | 103 | DGD | O6D-C1D-O3G | -2.76 | 103.45 | 109.97 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | a | 405 | CLA | CMA-C3A-C4A | -2.76 | 104.37 | 111.77 |
| 26 | A | 409 | LMG | C9-C8-C7 | -2.75 | 105.28 | 111.79 |
| 22 | C | 512 | CLA | C1-C2-C3 | -2.75 | 121.29 | 126.04 |
| 22 | A | 402 | CLA | C1B-CHB-C4A | -2.75 | 124.67 | 130.12 |
| 30 | B | 616 | BCR | C15-C16-C17 | -2.75 | 117.85 | 123.47 |
| 29 | h | 101 | DGD | O1G-C1A-O1A | -2.75 | 116.66 | 123.59 |
| 22 | C | 503 | CLA | O2A-C1-C2 | -2.74 | 101.42 | 108.64 |
| 30 | a | 406 | BCR | C7-C8-C9 | -2.74 | 122.09 | 126.23 |
| 30 | b | 619 | BCR | C12-C13-C14 | -2.74 | 114.74 | 118.94 |
| 22 | b | 609 | CLA | CHB-C4A-NA | 2.74 | 128.30 | 124.51 |
| 30 | D | 406 | BCR | C24-C23-C22 | -2.73 | 122.11 | 126.23 |
| 30 | c | 514 | BCR | C2-C1-C6 | 2.73 | 114.69 | 110.48 |
| 22 | b | 610 | CLA | CAA-CBA-CGA | -2.73 | 105.27 | 113.25 |
| 29 | c | 515 | DGD | O2D-C2D-C1D | -2.73 | 103.41 | 110.05 |
| 34 | V | 201 | HEC | CMC-C2C-C3C | 2.73 | 129.03 | 125.82 |
| 22 | c | 506 | CLA | CMB-C2B-C3B | 2.72 | 129.77 | 124.68 |
| 22 | B | 608 | CLA | CHD-C4C-NC | 2.72 | 128.49 | 124.20 |
| 22 | B | 611 | CLA | O2D-CGD-O1D | -2.72 | 118.52 | 123.84 |
| 22 | B | 615 | CLA | CMB-C2B-C1B | -2.72 | 124.29 | 128.46 |
| 22 | c | 508 | CLA | CHB-C4A-NA | 2.72 | 128.27 | 124.51 |
| 22 | a | 402 | CLA | CHD-C1D-ND | -2.71 | 121.96 | 124.45 |
| 22 | B | 607 | CLA | O2D-CGD-CBD | 2.71 | 116.09 | 111.27 |
| 26 | D | 408 | LMG | O4-C4-C5 | 2.71 | 116.03 | 109.30 |
| 30 | b | 617 | BCR | C27-C26-C25 | 2.71 | 126.67 | 122.73 |
| 26 | c | 520 | LMG | O7-C10-O9 | -2.71 | 117.16 | 123.70 |
| 25 | A | 408 | PL9 | C11-C9-C8 | -2.71 | 115.64 | 121.12 |
| 26 | B | 620 | LMG | O7-C10-O9 | -2.71 | 116.55 | 123.30 |
| 22 | c | 512 | CLA | O1D-CGD-CBD | 2.71 | 130.02 | 124.48 |
| 23 | a | 404 | PHO | O2D-CGD-O1D | -2.71 | 118.55 | 123.84 |
| 27 | f | 102 | SQD | O47-C7-C8 | 2.70 | 118.33 | 110.80 |
| 30 | d | 406 | BCR | C16-C15-C14 | -2.70 | 117.94 | 123.47 |
| 22 | C | 508 | CLA | O2D-CGD-O1D | -2.70 | 118.56 | 123.84 |
| 29 | c | 516 | DGD | CBB-CAB-C9B | -2.70 | 100.73 | 114.42 |
| 22 | b | 611 | CLA | C2D-C1D-ND | -2.70 | 108.12 | 110.10 |
| 23 | D | 401 | PHO | CMA-C3A-C4A | -2.70 | 108.47 | 114.38 |
| 30 | B | 618 | BCR | C30-C25-C26 | -2.69 | 118.82 | 122.61 |
| 30 | b | 619 | BCR | C16-C15-C14 | -2.69 | 117.96 | 123.47 |
| 30 | k | 101 | BCR | C33-C5-C6 | -2.69 | 121.51 | 124.53 |
| 26 | c | 521 | LMG | O8-C28-O10 | -2.69 | 116.80 | 123.59 |
| 25 | A | 408 | PL9 | C7-C3-C2 | -2.69 | 119.76 | 123.30 |
| 26 | a | 414 | LMG | O6-C5-C4 | 2.69 | 114.58 | 109.69 |
| 26 | Y | 101 | LMG | O2-C2-C1 | -2.69 | 103.52 | 110.05 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | x | 101 | BCR | C38-C26-C25 | -2.69 | 121.51 | 124.53 |
| 26 | D | 408 | LMG | O8-C28-O10 | -2.68 | 116.82 | 123.59 |
| 23 | D | 401 | PHO | C1-C2-C3 | -2.68 | 121.40 | 126.04 |
| 22 | B | 612 | CLA | CMB-C2B-C3B | 2.68 | 129.69 | 124.68 |
| 22 | C | 504 | CLA | C4-C3-C5 | 2.68 | 119.78 | 115.27 |
| 22 | b | 604 | CLA | C11-C12-C13 | -2.68 | 107.26 | 115.92 |
| 27 | L | 101 | SQD | O9-S-O7 | -2.68 | 104.68 | 113.95 |
| 22 | b | 605 | CLA | C4-C3-C5 | 2.68 | 119.77 | 115.27 |
| 22 | c | 512 | CLA | O2A-CGA-O1A | -2.68 | 116.84 | 123.59 |
| 29 | h | 101 | DGD | C1D-C2D-C3D | -2.68 | 104.42 | 110.00 |
| 30 | b | 619 | BCR | C1-C6-C5 | -2.68 | 118.84 | 122.61 |
| 22 | a | 402 | CLA | CHB-C4A-NA | 2.68 | 128.21 | 124.51 |
| 22 | b | 608 | CLA | CHD-C4C-C3C | -2.67 | 120.91 | 124.84 |
| 26 | D | 408 | LMG | O2-C2-C1 | -2.67 | 103.56 | 110.05 |
| 30 | H | 102 | BCR | C16-C15-C14 | -2.67 | 118.01 | 123.47 |
| 22 | d | 404 | CLA | C1B-CHB-C4A | -2.67 | 124.83 | 130.12 |
| 22 | b | 615 | CLA | CAA-CBA-CGA | -2.67 | 105.45 | 113.25 |
| 22 | C | 508 | CLA | CHD-C1D-C2D | 2.67 | 131.07 | 125.48 |
| 22 | c | 505 | CLA | CHB-C4A-NA | 2.67 | 128.20 | 124.51 |
| 29 | c | 515 | DGD | O5D-C6D-C5D | -2.67 | 104.11 | 109.05 |
| 22 | b | 613 | CLA | CBC-CAC-C3C | 2.67 | 119.78 | 112.43 |
| 22 | A | 403 | CLA | CAC-C3C-C4C | 2.66 | 128.27 | 124.81 |
| 23 | A | 404 | PHO | OBD-CAD-CBD | -2.66 | 121.92 | 125.82 |
| 22 | A | 403 | CLA | O2D-CGD-CBD | 2.66 | 116.00 | 111.27 |
| 26 | c | 520 | LMG | O2-C2-C1 | -2.66 | 103.59 | 110.05 |
| 27 | L | 101 | SQD | O47-C7-O49 | -2.66 | 117.28 | 123.70 |
| 26 | c | 521 | LMG | O3-C3-C2 | -2.66 | 104.21 | 110.35 |
| 22 | b | 612 | CLA | C11-C12-C13 | -2.66 | 107.33 | 115.92 |
| 26 | a | 414 | LMG | O7-C10-C11 | 2.66 | 117.22 | 111.50 |
| 22 | B | 613 | CLA | CMB-C2B-C1B | -2.65 | 124.38 | 128.46 |
| 22 | B | 602 | CLA | O1D-CGD-CBD | 2.65 | 129.91 | 124.48 |
| 22 | b | 608 | CLA | CMB-C2B-C1B | -2.65 | 124.39 | 128.46 |
| 22 | D | 404 | CLA | C16-C15-C13 | -2.65 | 107.35 | 115.92 |
| 22 | B | 605 | CLA | CHD-C4C-NC | 2.65 | 128.38 | 124.20 |
| 30 | C | 515 | BCR | C15-C16-C17 | -2.65 | 118.05 | 123.47 |
| 27 | A | 412 | SQD | O47-C45-C46 | 2.65 | 112.27 | 106.13 |
| 25 | D | 407 | PL9 | C12-C13-C14 | -2.65 | 121.29 | 127.66 |
| 22 | D | 404 | CLA | CHD-C1D-ND | -2.65 | 122.02 | 124.45 |
| 25 | a | 409 | PL9 | C12-C13-C14 | -2.65 | 121.29 | 127.66 |
| 29 | c | 515 | DGD | C4E-C3E-C2E | -2.64 | 106.21 | 110.82 |
| 22 | c | 508 | CLA | CMD-C2D-C1D | 2.64 | 129.37 | 124.71 |
| 26 | c | 520 | LMG | O6-C1-O1 | -2.64 | 103.72 | 109.97 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | a | 403 | CLA | C1D-ND-C4D | 2.64 | 108.21 | 106.33 |
| 25 | A | 408 | PL9 | O2-C1-C2 | -2.63 | 115.75 | 121.78 |
| 22 | b | 605 | CLA | CHD-C4C-NC | 2.63 | 128.35 | 124.20 |
| 22 | C | 512 | CLA | C1B-CHB-C4A | -2.63 | 124.91 | 130.12 |
| 22 | b | 610 | CLA | C2C-C1C-NC | 2.63 | 112.44 | 109.97 |
| 23 | A | 404 | PHO | C1B-NB-C4B | 2.63 | 112.49 | 107.09 |
| 22 | b | 607 | CLA | CMB-C2B-C3B | 2.63 | 129.59 | 124.68 |
| 29 | A | 413 | DGD | O6D-C1D-O3G | -2.63 | 103.75 | 109.97 |
| 22 | D | 404 | CLA | CHB-C4A-NA | 2.63 | 128.14 | 124.51 |
| 23 | d | 401 | PHO | O2A-CGA-O1A | -2.63 | 116.97 | 123.59 |
| 29 | h | 101 | DGD | O3G-C3G-C2G | -2.62 | 104.57 | 110.90 |
| 22 | c | 503 | CLA | CMB-C2B-C1B | -2.62 | 124.43 | 128.46 |
| 27 | a | 410 | SQD | O48-C23-C24 | 2.62 | 120.14 | 111.91 |
| 22 | c | 506 | CLA | CHD-C1D-C2D | 2.62 | 130.98 | 125.48 |
| 30 | c | 514 | BCR | C38-C26-C27 | -2.62 | 108.58 | 113.62 |
| 22 | B | 602 | CLA | C5-C3-C2 | -2.62 | 115.81 | 121.12 |
| 30 | t | 101 | BCR | C35-C13-C14 | -2.62 | 119.25 | 122.92 |
| 22 | C | 513 | CLA | CHB-C4A-NA | 2.62 | 128.13 | 124.51 |
| 30 | k | 101 | BCR | C36-C18-C17 | -2.62 | 119.26 | 122.92 |
| 30 | b | 618 | BCR | C15-C16-C17 | -2.62 | 118.11 | 123.47 |
| 22 | B | 608 | CLA | CBC-CAC-C3C | -2.61 | 105.22 | 112.43 |
| 22 | a | 402 | CLA | C2A-C1A-CHA | 2.61 | 128.43 | 123.86 |
| 30 | I | 101 | BCR | C37-C22-C21 | -2.61 | 119.26 | 122.92 |
| 28 | d | 409 | LHG | O8-C23-C24 | 2.61 | 120.10 | 111.91 |
| 31 | x | 102 | STE | O2-C1-C2 | 2.61 | 122.42 | 114.03 |
| 26 | c | 520 | LMG | O3-C3-C2 | -2.61 | 104.31 | 110.35 |
| 22 | A | 402 | CLA | O2A-CGA-O1A | -2.61 | 117.01 | 123.59 |
| 30 | k | 102 | BCR | C38-C26-C25 | -2.61 | 121.60 | 124.53 |
| 22 | C | 504 | CLA | C2C-C1C-NC | 2.60 | 112.41 | 109.97 |
| 30 | C | 515 | BCR | C40-C30-C25 | 2.60 | 114.52 | 110.30 |
| 26 | c | 518 | LMG | O2-C2-C3 | -2.60 | 104.33 | 110.35 |
| 22 | B | 611 | CLA | O1D-CGD-CBD | 2.60 | 129.81 | 124.48 |
| 30 | b | 617 | BCR | C15-C16-C17 | -2.60 | 118.15 | 123.47 |
| 22 | c | 502 | CLA | O1D-CGD-CBD | 2.60 | 129.80 | 124.48 |
| 22 | D | 404 | CLA | CMB-C2B-C1B | -2.60 | 124.47 | 128.46 |
| 25 | D | 407 | PL9 | C45-C44-C43 | -2.60 | 117.01 | 123.68 |
| 22 | c | 503 | CLA | C7-C6-C5 | -2.60 | 106.30 | 113.36 |
| 26 | a | 414 | LMG | C1-C2-C3 | -2.60 | 104.59 | 110.00 |
| 22 | B | 602 | CLA | CMB-C2B-C1B | -2.60 | 124.47 | 128.46 |
| 30 | H | 102 | BCR | C27-C26-C25 | 2.59 | 126.49 | 122.73 |
| 22 | C | 503 | CLA | O2D-CGD-O1D | -2.59 | 118.78 | 123.84 |
| 22 | B | 608 | CLA | C1C-C2C-C3C | -2.59 | 104.24 | 106.96 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | b | 619 | BCR | C37-C22-C21 | -2.59 | 119.30 | 122.92 |
| 26 | M | 101 | LMG | C3-C4-C5 | -2.59 | 105.63 | 110.24 |
| 22 | D | 405 | CLA | O1D-CGD-CBD | 2.59 | 129.78 | 124.48 |
| 22 | C | 513 | CLA | CHC-C1C-NC | 2.59 | 128.13 | 124.20 |
| 30 | c | 514 | BCR | C32-C1-C6 | -2.59 | 106.11 | 110.30 |
| 22 | C | 501 | CLA | CED-O2D-CGD | -2.58 | 110.10 | 115.94 |
| 22 | B | 611 | CLA | CHB-C4A-NA | 2.58 | 128.08 | 124.51 |
| 22 | B | 602 | CLA | O2A-C1-C2 | -2.58 | 101.85 | 108.64 |
| 30 | c | 514 | BCR | C15-C14-C13 | -2.58 | 123.63 | 127.31 |
| 26 | a | 414 | LMG | C6-C5-C4 | -2.58 | 106.96 | 113.00 |
| 29 | C | 516 | DGD | O2D-C2D-C1D | -2.58 | 103.78 | 110.05 |
| 30 | k | 103 | BCR | C27-C26-C25 | 2.57 | 126.47 | 122.73 |
| 22 | b | 606 | CLA | C3C-C4C-NC | -2.57 | 107.69 | 110.57 |
| 22 | b | 605 | CLA | CHD-C4C-C3C | -2.57 | 121.06 | 124.84 |
| 22 | c | 511 | CLA | O2D-CGD-O1D | -2.57 | 118.81 | 123.84 |
| 22 | b | 609 | CLA | C7-C6-C5 | -2.57 | 106.39 | 113.36 |
| 27 | D | 409 | SQD | C46-C45-C44 | -2.57 | 105.16 | 113.70 |
| 25 | a | 409 | PL9 | C7-C8-C9 | -2.57 | 122.52 | 126.79 |
| 33 | D | 402 | BCT | O3-C-O1 | -2.57 | 112.89 | 119.55 |
| 22 | C | 506 | CLA | CMB-C2B-C3B | 2.56 | 129.47 | 124.68 |
| 26 | d | 410 | LMG | O1-C1-C2 | -2.56 | 104.31 | 108.30 |
| 30 | I | 101 | BCR | C8-C7-C6 | -2.56 | 120.02 | 127.20 |
| 22 | c | 504 | CLA | C1B-CHB-C4A | -2.56 | 125.05 | 130.12 |
| 22 | B | 609 | CLA | C1-C2-C3 | -2.56 | 121.62 | 126.04 |
| 22 | D | 403 | CLA | C11-C12-C13 | -2.55 | 107.66 | 115.92 |
| 22 | b | 604 | CLA | O2D-CGD-O1D | -2.55 | 118.84 | 123.84 |
| 22 | C | 502 | CLA | CHA-C1A-NA | -2.55 | 120.56 | 126.40 |
| 22 | C | 502 | CLA | CMB-C2B-C3B | 2.55 | 129.45 | 124.68 |
| 22 | b | 608 | CLA | CMB-C2B-C3B | 2.55 | 129.44 | 124.68 |
| 30 | a | 406 | BCR | C2-C1-C6 | 2.55 | 114.40 | 110.48 |
| 22 | a | 402 | CLA | O2A-CGA-O1A | -2.54 | 117.17 | 123.59 |
| 22 | b | 608 | CLA | CMA-C3A-C4A | -2.54 | 104.94 | 111.77 |
| 30 | T | 101 | BCR | C38-C26-C27 | -2.54 | 108.73 | 113.62 |
| 29 | C | 518 | DGD | O3E-C3E-C2E | -2.54 | 104.47 | 110.35 |
| 22 | c | 508 | CLA | C7-C6-C5 | -2.54 | 106.47 | 113.36 |
| 22 | D | 403 | CLA | CHD-C1D-ND | -2.54 | 122.12 | 124.45 |
| 22 | B | 602 | CLA | CHB-C4A-NA | 2.54 | 128.02 | 124.51 |
| 22 | C | 510 | CLA | CHD-C1D-ND | -2.54 | 122.12 | 124.45 |
| 22 | B | 615 | CLA | O2D-CGD-O1D | -2.53 | 118.89 | 123.84 |
| 22 | A | 405 | CLA | O2A-CGA-O1A | -2.53 | 117.20 | 123.59 |
| 27 | A | 410 | SQD | O48-C23-O10 | -2.53 | 117.20 | 123.59 |
| 22 | C | 505 | CLA | C1-O2A-CGA | -2.53 | 109.81 | 116.44 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | c | 505 | CLA | O2A-CGA-O1A | -2.52 | 117.22 | 123.59 |
| 22 | c | 504 | CLA | CHD-C1D-ND | -2.52 | 122.13 | 124.45 |
| 30 | a | 406 | BCR | C20-C21-C22 | -2.52 | 123.71 | 127.31 |
| 22 | A | 403 | CLA | CED-O2D-CGD | -2.52 | 110.24 | 115.94 |
| 22 | C | 505 | CLA | O2A-CGA-O1A | -2.52 | 117.23 | 123.59 |
| 25 | a | 409 | PL9 | C32-C33-C34 | -2.52 | 121.59 | 127.66 |
| 29 | h | 101 | DGD | O6D-C1D-O3G | -2.52 | 104.01 | 109.97 |
| 22 | b | 606 | CLA | O1D-CGD-CBD | 2.52 | 129.64 | 124.48 |
| 22 | C | 504 | CLA | O2D-CGD-CBD | 2.52 | 115.74 | 111.27 |
| 22 | B | 615 | CLA | CMB-C2B-C3B | 2.52 | 129.39 | 124.68 |
| 30 | b | 618 | BCR | C37-C22-C21 | -2.52 | 119.40 | 122.92 |
| 28 | D | 410 | LHG | O8-C23-C24 | 2.51 | 119.79 | 111.91 |
| 22 | B | 608 | CLA | C2A-C3A-C4A | 2.51 | 105.93 | 101.87 |
| 22 | B | 608 | CLA | CHA-C1A-NA | -2.51 | 120.64 | 126.40 |
| 22 | a | 403 | CLA | O2D-CGD-CBD | 2.51 | 115.73 | 111.27 |
| 22 | c | 506 | CLA | C3C-C4C-NC | -2.51 | 107.76 | 110.57 |
| 22 | B | 605 | CLA | C2A-C3A-C4A | 2.51 | 105.92 | 101.87 |
| 22 | C | 503 | CLA | CMB-C2B-C3B | 2.51 | 129.37 | 124.68 |
| 22 | C | 509 | CLA | O2D-CGD-CBD | 2.51 | 115.72 | 111.27 |
| 22 | c | 503 | CLA | CBC-CAC-C3C | -2.51 | 105.52 | 112.43 |
| 22 | C | 503 | CLA | C4D-CHA-C1A | 2.51 | 124.30 | 121.25 |
| 30 | t | 101 | BCR | C15-C16-C17 | -2.51 | 118.34 | 123.47 |
| 30 | K | 101 | BCR | C34-C9-C8 | -2.50 | 114.13 | 118.08 |
| 22 | A | 403 | CLA | CHA-C1A-NA | -2.49 | 120.69 | 126.40 |
| 30 | c | 514 | BCR | C29-C30-C25 | 2.49 | 114.32 | 110.48 |
| 22 | c | 503 | CLA | C4D-CHA-C1A | 2.49 | 124.28 | 121.25 |
| 29 | c | 517 | DGD | CDB-CCB-CBB | -2.49 | 101.77 | 114.42 |
| 22 | C | 504 | CLA | CED-O2D-CGD | 2.49 | 121.57 | 115.94 |
| 22 | C | 513 | CLA | CBC-CAC-C3C | 2.49 | 119.29 | 112.43 |
| 27 | B | 621 | SQD | O5-C5-C4 | 2.49 | 114.21 | 109.69 |
| 22 | A | 402 | CLA | CMB-C2B-C3B | 2.49 | 129.33 | 124.68 |
| 22 | B | 609 | CLA | CHC-C1C-NC | 2.49 | 127.97 | 124.20 |
| 23 | d | 401 | PHO | C1-C2-C3 | -2.48 | 121.75 | 126.04 |
| 30 | k | 101 | BCR | C35-C13-C14 | -2.48 | 119.45 | 122.92 |
| 22 | B | 613 | CLA | CBC-CAC-C3C | -2.48 | 105.60 | 112.43 |
| 22 | b | 611 | CLA | CAC-C3C-C4C | 2.48 | 128.03 | 124.81 |
| 30 | B | 618 | BCR | C11-C10-C9 | -2.48 | 123.77 | 127.31 |
| 22 | B | 613 | CLA | O2D-CGD-CBD | 2.48 | 115.67 | 111.27 |
| 22 | c | 510 | CLA | CHD-C1D-ND | -2.48 | 122.18 | 124.45 |
| 22 | b | 605 | CLA | C1D-ND-C4D | -2.48 | 104.58 | 106.33 |
| 22 | B | 609 | CLA | O1D-CGD-CBD | 2.48 | 129.55 | 124.48 |
| 25 | D | 407 | PL9 | C25-C24-C26 | 2.48 | 119.44 | 115.27 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 26 | A | 409 | LMG | C3-C4-C5 | -2.48 | 105.82 | 110.24 |
| 30 | x | 101 | BCR | C33-C5-C6 | -2.48 | 121.75 | 124.53 |
| 25 | D | 407 | PL9 | C42-C43-C44 | -2.47 | 121.70 | 127.66 |
| 23 | d | 401 | PHO | C1B-NB-C4B | 2.47 | 112.17 | 107.09 |
| 30 | x | 101 | BCR | C2-C1-C6 | 2.47 | 114.29 | 110.48 |
| 29 | A | 413 | DGD | O3E-C3E-C2E | -2.47 | 104.63 | 110.35 |
| 22 | a | 405 | CLA | CHA-C1A-NA | -2.47 | 120.74 | 126.40 |
| 22 | b | 611 | CLA | CMD-C2D-C1D | 2.47 | 129.06 | 124.71 |
| 22 | b | 603 | CLA | CHD-C1D-C2D | 2.47 | 130.66 | 125.48 |
| 22 | b | 612 | CLA | C11-C10-C8 | -2.47 | 107.94 | 115.92 |
| 29 | c | 516 | DGD | O6E-C1E-O5D | -2.47 | 104.13 | 109.97 |
| 29 | c | 517 | DGD | C3E-C4E-C5E | -2.47 | 105.84 | 110.24 |
| 22 | B | 603 | CLA | O1D-CGD-CBD | 2.46 | 129.53 | 124.48 |
| 28 | d | 409 | LHG | O8-C23-O10 | -2.46 | 117.38 | 123.59 |
| 22 | c | 503 | CLA | O1D-CGD-CBD | 2.46 | 129.52 | 124.48 |
| 22 | b | 604 | CLA | C1-O2A-CGA | -2.46 | 110.00 | 116.44 |
| 30 | x | 101 | BCR | C15-C16-C17 | -2.46 | 118.44 | 123.47 |
| 26 | Y | 101 | LMG | C3-C4-C5 | -2.46 | 105.86 | 110.24 |
| 22 | b | 614 | CLA | CHB-C4A-NA | 2.46 | 127.91 | 124.51 |
| 30 | t | 101 | BCR | C34-C9-C10 | -2.46 | 119.48 | 122.92 |
| 22 | c | 513 | CLA | CHB-C4A-NA | 2.45 | 127.91 | 124.51 |
| 22 | B | 604 | CLA | CAA-CBA-CGA | -2.45 | 106.08 | 113.25 |
| 31 | R | 101 | STE | O2-C1-C2 | 2.45 | 121.91 | 114.03 |
| 22 | C | 503 | CLA | C1B-CHB-C4A | -2.45 | 125.26 | 130.12 |
| 22 | C | 503 | CLA | C3A-C2A-C1A | 2.45 | 105.01 | 101.34 |
| 26 | d | 410 | LMG | O6-C5-C4 | 2.45 | 114.14 | 109.69 |
| 22 | B | 605 | CLA | C6-C5-C3 | -2.45 | 107.03 | 113.45 |
| 30 | D | 406 | BCR | C27-C26-C25 | 2.45 | 126.29 | 122.73 |
| 22 | B | 605 | CLA | CMB-C2B-C1B | -2.45 | 124.70 | 128.46 |
| 22 | b | 606 | CLA | C2D-C1D-ND | -2.45 | 108.30 | 110.10 |
| 29 | c | 515 | DGD | C2G-O2G-C1B | 2.45 | 123.82 | 117.79 |
| 22 | C | 505 | CLA | C1B-CHB-C4A | -2.45 | 125.27 | 130.12 |
| 22 | B | 601 | CLA | C1-C2-C3 | -2.44 | 121.81 | 126.04 |
| 22 | d | 403 | CLA | CMD-C2D-C1D | 2.44 | 129.02 | 124.71 |
| 29 | c | 515 | DGD | C3G-C2G-C1G | -2.44 | 106.01 | 111.79 |
| 30 | K | 102 | BCR | C16-C15-C14 | -2.44 | 118.47 | 123.47 |
| 30 | B | 616 | BCR | C11-C10-C9 | -2.44 | 123.82 | 127.31 |
| 25 | d | 407 | PL9 | C50-C49-C48 | -2.44 | 115.59 | 122.65 |
| 22 | d | 404 | CLA | C16-C15-C13 | -2.44 | 108.04 | 115.92 |
| 30 | d | 406 | BCR | C11-C10-C9 | -2.44 | 123.83 | 127.31 |
| 22 | c | 501 | CLA | O1D-CGD-CBD | 2.44 | 129.47 | 124.48 |
| 22 | b | 611 | CLA | C3A-C2A-C1A | 2.43 | 104.98 | 101.34 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 25 | A | 408 | PL9 | O2-C1-C6 | 2.43 | 124.80 | 120.59 |
| 22 | C | 502 | CLA | C2A-C1A-CHA | 2.43 | 128.11 | 123.86 |
| 26 | M | 101 | LMG | C38-C37-C36 | -2.43 | 102.08 | 114.42 |
| 26 | c | 521 | LMG | O2-C2-C1 | -2.43 | 104.14 | 110.05 |
| 22 | C | 512 | CLA | O2A-CGA-O1A | -2.43 | 117.46 | 123.59 |
| 30 | b | 618 | BCR | C36-C18-C17 | -2.43 | 119.52 | 122.92 |
| 22 | B | 602 | CLA | CHD-C1D-ND | -2.43 | 122.22 | 124.45 |
| 22 | B | 606 | CLA | CED-O2D-CGD | 2.43 | 121.43 | 115.94 |
| 22 | C | 505 | CLA | C4A-NA-C1A | 2.43 | 107.80 | 106.71 |
| 22 | c | 513 | CLA | O1D-CGD-CBD | 2.43 | 129.45 | 124.48 |
| 30 | K | 102 | BCR | C1-C6-C5 | -2.43 | 119.20 | 122.61 |
| 30 | H | 102 | BCR | C29-C30-C25 | 2.43 | 114.22 | 110.48 |
| 30 | b | 618 | BCR | C15-C14-C13 | -2.42 | 123.85 | 127.31 |
| 22 | A | 405 | CLA | CHB-C4A-NA | 2.42 | 127.86 | 124.51 |
| 30 | C | 515 | BCR | C37-C22-C21 | -2.42 | 119.53 | 122.92 |
| 31 | X | 101 | STE | C11-C10-C9 | -2.42 | 102.14 | 114.42 |
| 30 | d | 406 | BCR | C30-C25-C26 | -2.42 | 119.20 | 122.61 |
| 30 | t | 101 | BCR | C2-C1-C6 | 2.42 | 114.20 | 110.48 |
| 30 | b | 619 | BCR | C31-C1-C6 | 2.42 | 114.22 | 110.30 |
| 22 | c | 507 | CLA | C1B-CHB-C4A | -2.42 | 125.33 | 130.12 |
| 34 | V | 201 | HEC | CMB-C2B-C1B | -2.42 | 124.75 | 128.46 |
| 22 | B | 602 | CLA | C4A-NA-C1A | 2.42 | 107.79 | 106.71 |
| 22 | b | 606 | CLA | CMB-C2B-C3B | 2.41 | 129.19 | 124.68 |
| 26 | c | 520 | LMG | O8-C28-O10 | -2.41 | 117.50 | 123.59 |
| 22 | C | 503 | CLA | CHD-C4C-NC | 2.41 | 128.01 | 124.20 |
| 23 | A | 404 | PHO | CMB-C2B-C3B | 2.41 | 129.19 | 124.68 |
| 29 | C | 517 | DGD | O2D-C2D-C1D | -2.41 | 104.19 | 110.05 |
| 22 | a | 403 | CLA | C2A-C1A-CHA | 2.41 | 128.07 | 123.86 |
| 30 | b | 619 | BCR | C7-C8-C9 | -2.41 | 122.59 | 126.23 |
| 23 | D | 401 | PHO | C1B-NB-C4B | 2.41 | 112.04 | 107.09 |
| 22 | A | 402 | CLA | CHD-C4C-C3C | -2.41 | 121.30 | 124.84 |
| 22 | c | 511 | CLA | CMB-C2B-C1B | -2.41 | 124.76 | 128.46 |
| 22 | b | 601 | CLA | O2D-CGD-CBD | 2.41 | 115.54 | 111.27 |
| 31 | J | 101 | STE | O2-C1-C2 | 2.40 | 121.75 | 114.03 |
| 22 | c | 504 | CLA | C4-C3-C5 | 2.40 | 119.31 | 115.27 |
| 26 | D | 408 | LMG | C1-O6-C5 | -2.40 | 108.97 | 113.69 |
| 22 | B | 604 | CLA | CHB-C4A-NA | 2.40 | 127.83 | 124.51 |
| 25 | d | 407 | PL9 | C32-C33-C34 | -2.40 | 121.88 | 127.66 |
| 29 | A | 413 | DGD | O5D-C1E-C2E | 2.40 | 112.05 | 108.30 |
| 29 | C | 518 | DGD | C3G-C2G-C1G | -2.40 | 106.11 | 111.79 |
| 22 | b | 609 | CLA | C2D-C1D-ND | -2.40 | 108.34 | 110.10 |
| 28 | L | 102 | LHG | C5-O7-C7 | -2.40 | 111.89 | 117.79 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | D | 403 | CLA | CHB-C4A-NA | 2.40 | 127.83 | 124.51 |
| 29 | C | 518 | DGD | O3D-C3D-C4D | -2.39 | 104.81 | 110.35 |
| 23 | A | 404 | PHO | C1A-C2A-C3A | -2.39 | 100.56 | 102.84 |
| 22 | A | 402 | CLA | C3D-C2D-C1D | -2.39 | 102.57 | 105.83 |
| 22 | b | 601 | CLA | O2A-CGA-O1A | -2.39 | 117.55 | 123.59 |
| 30 | a | 406 | BCR | C35-C13-C14 | -2.39 | 119.57 | 122.92 |
| 30 | C | 514 | BCR | C11-C10-C9 | -2.39 | 123.91 | 127.31 |
| 22 | b | 612 | CLA | C1-C2-C3 | -2.39 | 121.92 | 126.04 |
| 25 | a | 409 | PL9 | C42-C43-C44 | -2.38 | 121.92 | 127.66 |
| 22 | c | 508 | CLA | CHD-C1D-C2D | 2.38 | 130.48 | 125.48 |
| 30 | B | 616 | BCR | C37-C22-C23 | 2.38 | 121.83 | 118.08 |
| 28 | a | 411 | LHG | C11-C10-C9 | -2.38 | 102.34 | 114.42 |
| 34 | F | 101 | HEC | CMD-C2D-C1D | -2.38 | 124.81 | 128.46 |
| 22 | c | 504 | CLA | C6-C7-C8 | -2.38 | 108.23 | 115.92 |
| 22 | b | 610 | CLA | CHD-C1D-ND | -2.38 | 122.27 | 124.45 |
| 22 | c | 511 | CLA | CMA-C3A-C4A | 2.38 | 118.16 | 111.77 |
| 22 | c | 506 | CLA | C1B-CHB-C4A | -2.38 | 125.41 | 130.12 |
| 26 | c | 521 | LMG | C4-C3-C2 | 2.38 | 114.97 | 110.82 |
| 30 | B | 617 | BCR | C7-C8-C9 | -2.38 | 122.64 | 126.23 |
| 29 | H | 103 | DGD | CCB-CBB-CAB | -2.38 | 102.37 | 114.42 |
| 29 | A | 413 | DGD | O3D-C3D-C4D | -2.37 | 104.86 | 110.35 |
| 22 | B | 612 | CLA | C7-C6-C5 | -2.37 | 106.91 | 113.36 |
| 22 | A | 402 | CLA | CHD-C4C-NC | 2.37 | 127.94 | 124.20 |
| 29 | C | 517 | DGD | C7B-C6B-C5B | -2.37 | 102.38 | 114.42 |
| 29 | C | 517 | DGD | O3G-C1D-C2D | -2.37 | 104.60 | 108.30 |
| 22 | B | 601 | CLA | CHB-C4A-NA | 2.37 | 127.79 | 124.51 |
| 22 | c | 503 | CLA | CMB-C2B-C3B | 2.37 | 129.11 | 124.68 |
| 27 | A | 412 | SQD | O49-C7-C8 | -2.37 | 114.49 | 123.73 |
| 22 | b | 601 | CLA | CMB-C2B-C3B | 2.37 | 129.11 | 124.68 |
| 22 | c | 502 | CLA | CHD-C1D-C2D | 2.37 | 130.44 | 125.48 |
| 25 | a | 409 | PL9 | C20-C19-C21 | 2.36 | 119.25 | 115.27 |
| 22 | a | 405 | CLA | CMB-C2B-C3B | 2.36 | 129.10 | 124.68 |
| 22 | b | 610 | CLA | CMB-C2B-C3B | 2.36 | 129.10 | 124.68 |
| 22 | a | 402 | CLA | C4-C3-C5 | 2.36 | 119.24 | 115.27 |
| 30 | d | 406 | BCR | C19-C18-C17 | -2.36 | 115.32 | 118.94 |
| 29 | c | 516 | DGD | CDB-CCB-CBB | -2.36 | 102.45 | 114.42 |
| 30 | B | 617 | BCR | C15-C14-C13 | -2.36 | 123.94 | 127.31 |
| 22 | b | 601 | CLA | CHD-C4C-NC | 2.36 | 127.92 | 124.20 |
| 22 | B | 614 | CLA | CHC-C1C-C2C | -2.36 | 120.20 | 126.72 |
| 22 | c | 511 | CLA | O1A-CGA-CBA | 2.36 | 132.92 | 123.73 |
| 27 | D | 409 | SQD | C3-C4-C5 | 2.35 | 114.44 | 110.24 |
| 29 | A | 413 | DGD | C3E-C4E-C5E | -2.35 | 106.04 | 110.24 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | B | 604 | CLA | CMC-C2C-C1C | 2.35 | 128.62 | 125.04 |
| 29 | C | 516 | DGD | C5B-C4B-C3B | -2.35 | 102.49 | 114.42 |
| 23 | a | 404 | PHO | C1B-NB-C4B | 2.35 | 111.92 | 107.09 |
| 30 | T | 101 | BCR | C3-C4-C5 | -2.35 | 109.88 | 114.08 |
| 22 | c | 505 | CLA | C1B-CHB-C4A | -2.35 | 125.47 | 130.12 |
| 22 | b | 611 | CLA | C1B-CHB-C4A | -2.35 | 125.47 | 130.12 |
| 22 | c | 511 | CLA | O2A-CGA-O1A | -2.35 | 117.67 | 123.59 |
| 22 | C | 510 | CLA | C1D-ND-C4D | 2.35 | 108.00 | 106.33 |
| 29 | h | 101 | DGD | C2G-O2G-C1B | 2.35 | 123.57 | 117.79 |
| 29 | h | 101 | DGD | O3E-C3E-C2E | -2.35 | 104.93 | 110.35 |
| 22 | b | 608 | CLA | C4A-NA-C1A | 2.34 | 107.76 | 106.71 |
| 22 | A | 403 | CLA | C2D-C1D-ND | -2.34 | 108.38 | 110.10 |
| 26 | d | 410 | LMG | O2-C2-C1 | -2.34 | 104.36 | 110.05 |
| 22 | A | 405 | CLA | C4-C3-C5 | 2.34 | 119.21 | 115.27 |
| 22 | b | 610 | CLA | O1D-CGD-CBD | 2.34 | 129.28 | 124.48 |
| 25 | A | 408 | PL9 | C40-C39-C38 | -2.34 | 117.67 | 123.68 |
| 23 | a | 404 | PHO | O2A-CGA-O1A | -2.34 | 117.68 | 123.59 |
| 22 | b | 616 | CLA | C6-C5-C3 | 2.34 | 119.59 | 113.45 |
| 22 | C | 511 | CLA | C1B-CHB-C4A | -2.34 | 125.48 | 130.12 |
| 22 | B | 614 | CLA | CMC-C2C-C1C | -2.34 | 121.47 | 125.04 |
| 27 | A | 410 | SQD | O5-C1-C2 | -2.34 | 105.40 | 110.35 |
| 29 | C | 518 | DGD | O1G-C1A-O1A | -2.34 | 117.69 | 123.59 |
| 30 | K | 101 | BCR | C40-C30-C25 | 2.33 | 114.09 | 110.30 |
| 29 | C | 517 | DGD | C1D-O6D-C5D | -2.33 | 109.11 | 113.69 |
| 22 | B | 603 | CLA | C1D-ND-C4D | 2.33 | 107.99 | 106.33 |
| 30 | I | 101 | BCR | C34-C9-C8 | -2.33 | 114.40 | 118.08 |
| 31 | X | 101 | STE | C3-C2-C1 | -2.33 | 108.60 | 114.47 |
| 25 | d | 407 | PL9 | C27-C28-C29 | -2.33 | 122.05 | 127.66 |
| 28 | l | 101 | LHG | O8-C23-C24 | 2.33 | 119.22 | 111.91 |
| 22 | C | 507 | CLA | CHD-C1D-ND | -2.32 | 122.32 | 124.45 |
| 22 | A | 403 | CLA | O2A-CGA-O1A | -2.32 | 117.73 | 123.59 |
| 30 | k | 103 | BCR | C40-C30-C25 | 2.32 | 114.07 | 110.30 |
| 22 | b | 611 | CLA | CHB-C4A-NA | 2.32 | 127.72 | 124.51 |
| 22 | b | 604 | CLA | C1B-CHB-C4A | -2.32 | 125.52 | 130.12 |
| 22 | B | 605 | CLA | CHD-C4C-C3C | -2.32 | 121.43 | 124.84 |
| 29 | h | 101 | DGD | C1E-O6E-C5E | 2.32 | 118.24 | 113.69 |
| 22 | b | 611 | CLA | O2A-CGA-O1A | -2.32 | 117.74 | 123.59 |
| 30 | k | 102 | BCR | C27-C26-C25 | 2.32 | 126.10 | 122.73 |
| 22 | b | 602 | CLA | C4-C3-C5 | 2.32 | 119.17 | 115.27 |
| 28 | b | 623 | LHG | O8-C23-C24 | 2.32 | 119.18 | 111.91 |
| 22 | b | 612 | CLA | O2D-CGD-O1D | -2.32 | 119.31 | 123.84 |
| 30 | b | 618 | BCR | C28-C27-C26 | -2.32 | 109.94 | 114.08 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | K | 102 | BCR | C12-C13-C14 | -2.31 | 115.39 | 118.94 |
| 30 | a | 406 | BCR | C39-C30-C25 | -2.31 | 106.55 | 110.30 |
| 22 | C | 509 | CLA | CHA-C1A-NA | -2.31 | 121.10 | 126.40 |
| 22 | B | 614 | CLA | CMC-C2C-C3C | 2.31 | 132.39 | 126.12 |
| 22 | d | 404 | CLA | CMB-C2B-C3B | 2.31 | 129.00 | 124.68 |
| 22 | d | 403 | CLA | O2A-CGA-O1A | -2.31 | 117.76 | 123.59 |
| 29 | H | 103 | DGD | C6D-C5D-C4D | 2.31 | 116.92 | 112.09 |
| 27 | a | 410 | SQD | O5-C1-O6 | 2.31 | 115.44 | 109.97 |
| 34 | F | 101 | HEC | CMC-C2C-C3C | 2.31 | 128.53 | 125.82 |
| 25 | d | 407 | PL9 | C51-C49-C50 | 2.31 | 119.70 | 114.60 |
| 22 | b | 603 | CLA | C1B-CHB-C4A | -2.31 | 125.55 | 130.12 |
| 29 | c | 516 | DGD | C3G-O3G-C1D | 2.31 | 118.24 | 113.74 |
| 26 | c | 521 | LMG | O2-C2-C3 | -2.30 | 105.02 | 110.35 |
| 27 | B | 621 | SQD | O49-C7-C8 | -2.30 | 114.75 | 123.73 |
| 30 | B | 616 | BCR | C29-C30-C25 | 2.30 | 114.03 | 110.48 |
| 22 | c | 501 | CLA | C2C-C1C-NC | 2.30 | 112.13 | 109.97 |
| 26 | c | 518 | LMG | O8-C28-O10 | -2.30 | 117.78 | 123.59 |
| 22 | b | 609 | CLA | C6-C5-C3 | 2.30 | 119.49 | 113.45 |
| 22 | a | 403 | CLA | CMB-C2B-C1B | -2.30 | 124.93 | 128.46 |
| 29 | C | 517 | DGD | CDB-CCB-CBB | -2.30 | 102.76 | 114.42 |
| 22 | C | 512 | CLA | O1D-CGD-CBD | 2.30 | 129.19 | 124.48 |
| 22 | B | 601 | CLA | C4A-NA-C1A | 2.30 | 107.74 | 106.71 |
| 22 | b | 614 | CLA | O2A-C1-C2 | -2.29 | 102.60 | 108.64 |
| 22 | C | 506 | CLA | OBD-CAD-C3D | 2.29 | 134.04 | 128.52 |
| 22 | c | 504 | CLA | CED-O2D-CGD | 2.29 | 121.12 | 115.94 |
| 22 | b | 609 | CLA | CHA-C1A-NA | -2.29 | 121.15 | 126.40 |
| 26 | A | 409 | LMG | O3-C3-C2 | -2.29 | 105.06 | 110.35 |
| 29 | c | 516 | DGD | O5D-C1E-C2E | 2.29 | 111.88 | 108.30 |
| 22 | c | 512 | CLA | C3C-C4C-NC | -2.29 | 108.00 | 110.57 |
| 27 | a | 410 | SQD | O5-C5-C4 | 2.29 | 113.85 | 109.69 |
| 26 | D | 412 | LMG | C38-C37-C36 | -2.29 | 102.81 | 114.42 |
| 22 | D | 404 | CLA | CMB-C2B-C3B | 2.29 | 128.96 | 124.68 |
| 30 | k | 103 | BCR | C35-C13-C14 | -2.29 | 119.72 | 122.92 |
| 22 | B | 608 | CLA | C6-C5-C3 | 2.29 | 119.45 | 113.45 |
| 30 | C | 514 | BCR | C29-C30-C25 | 2.28 | 114.00 | 110.48 |
| 26 | M | 101 | LMG | O5-C6-C5 | -2.28 | 103.46 | 111.29 |
| 22 | c | 504 | CLA | OBD-CAD-C3D | 2.28 | 134.01 | 128.52 |
| 29 | c | 516 | DGD | O2G-C1B-O1B | -2.28 | 118.19 | 123.70 |
| 22 | C | 511 | CLA | C4-C3-C5 | 2.28 | 119.11 | 115.27 |
| 27 | D | 409 | SQD | O9-S-O7 | -2.28 | 106.05 | 113.95 |
| 22 | C | 508 | CLA | C7-C6-C5 | -2.28 | 107.16 | 113.36 |
| 23 | D | 401 | PHO | CMD-C2D-C3D | 2.28 | 128.94 | 124.68 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | A | 402 | CLA | CHC-C1C-NC | 2.28 | 127.66 | 124.20 |
| 25 | d | 407 | PL9 | C7-C8-C9 | -2.28 | 123.00 | 126.79 |
| 25 | D | 407 | PL9 | C8-C7-C3 | 2.27 | 118.40 | 111.98 |
| 25 | d | 407 | PL9 | C20-C19-C21 | 2.27 | 119.09 | 115.27 |
| 30 | x | 101 | BCR | C7-C8-C9 | -2.27 | 122.80 | 126.23 |
| 30 | c | 514 | BCR | C11-C10-C9 | -2.27 | 124.07 | 127.31 |
| 22 | b | 612 | CLA | O2A-CGA-CBA | 2.27 | 119.03 | 111.91 |
| 31 | t | 103 | STE | C3-C2-C1 | -2.27 | 108.75 | 114.47 |
| 22 | c | 504 | CLA | O2D-CGD-O1D | -2.27 | 119.40 | 123.84 |
| 26 | c | 520 | LMG | O1-C1-C2 | -2.27 | 104.76 | 108.30 |
| 25 | a | 409 | PL9 | O2-C1-C2 | -2.27 | 116.58 | 121.78 |
| 29 | c | 515 | DGD | C3D-C4D-C5D | -2.27 | 106.20 | 110.24 |
| 26 | B | 620 | LMG | O8-C28-O10 | -2.26 | 117.66 | 123.30 |
| 28 | A | 411 | LHG | O8-C23-C24 | 2.26 | 119.01 | 111.91 |
| 22 | B | 602 | CLA | CHC-C1C-NC | 2.26 | 127.63 | 124.20 |
| 22 | c | 505 | CLA | CHA-C1A-NA | -2.26 | 121.22 | 126.40 |
| 26 | d | 410 | LMG | O3-C3-C2 | -2.26 | 105.13 | 110.35 |
| 27 | a | 410 | SQD | O47-C7-C8 | 2.26 | 116.37 | 111.50 |
| 22 | C | 502 | CLA | CMD-C2D-C3D | 2.26 | 132.81 | 127.61 |
| 22 | B | 613 | CLA | C1C-C2C-C3C | -2.26 | 104.58 | 106.96 |
| 29 | c | 516 | DGD | O3D-C3D-C4D | -2.26 | 105.13 | 110.35 |
| 25 | D | 407 | PL9 | C11-C12-C13 | -2.26 | 104.47 | 111.88 |
| 22 | b | 609 | CLA | C4-C3-C5 | -2.26 | 111.48 | 115.27 |
| 30 | I | 101 | BCR | C16-C17-C18 | -2.26 | 124.09 | 127.31 |
| 30 | K | 102 | BCR | C39-C30-C25 | -2.25 | 106.64 | 110.30 |
| 22 | a | 405 | CLA | C1C-C2C-C3C | -2.25 | 104.59 | 106.96 |
| 25 | d | 407 | PL9 | C7-C3-C4 | 2.25 | 118.71 | 116.88 |
| 22 | c | 506 | CLA | CBC-CAC-C3C | -2.25 | 106.22 | 112.43 |
| 22 | b | 607 | CLA | CBC-CAC-C3C | -2.25 | 106.22 | 112.43 |
| 22 | b | 610 | CLA | C4-C3-C5 | 2.25 | 119.06 | 115.27 |
| 22 | c | 509 | CLA | C16-C15-C13 | -2.25 | 108.64 | 115.92 |
| 29 | c | 516 | DGD | C7B-C6B-C5B | -2.25 | 103.00 | 114.42 |
| 22 | c | 502 | CLA | C1-C2-C3 | -2.25 | 122.15 | 126.04 |
| 22 | d | 404 | CLA | C2A-C1A-CHA | 2.25 | 127.79 | 123.86 |
| 30 | k | 103 | BCR | C29-C30-C25 | 2.25 | 113.94 | 110.48 |
| 22 | a | 405 | CLA | C4D-CHA-C1A | -2.25 | 118.51 | 121.25 |
| 22 | C | 501 | CLA | O2A-CGA-O1A | -2.25 | 117.92 | 123.59 |
| 22 | C | 501 | CLA | CMB-C2B-C1B | -2.25 | 125.01 | 128.46 |
| 26 | Y | 101 | LMG | O6-C5-C6 | 2.25 | 112.02 | 106.44 |
| 22 | B | 603 | CLA | C2A-C1A-CHA | 2.25 | 127.78 | 123.86 |
| 30 | B | 616 | BCR | C27-C26-C25 | 2.24 | 125.99 | 122.73 |
| 22 | B | 604 | CLA | C2C-C1C-NC | 2.24 | 112.07 | 109.97 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 31 | b | 621 | STE | C3-C2-C1 | -2.24 | 108.82 | 114.47 |
| 22 | b | 614 | CLA | O2D-CGD-CBD | 2.24 | 115.25 | 111.27 |
| 22 | d | 404 | CLA | C1-C2-C3 | -2.24 | 122.17 | 126.04 |
| 22 | A | 403 | CLA | CHB-C4A-NA | 2.24 | 127.61 | 124.51 |
| 22 | B | 601 | CLA | CHA-C4D-ND | 2.24 | 137.18 | 132.50 |
| 27 | D | 409 | SQD | O48-C23-O10 | -2.24 | 117.95 | 123.59 |
| 29 | C | 517 | DGD | O5D-C6D-C5D | -2.24 | 104.91 | 109.05 |
| 28 | D | 411 | LHG | O8-C23-O10 | -2.24 | 117.95 | 123.59 |
| 22 | b | 606 | CLA | C1C-C2C-C3C | -2.24 | 104.61 | 106.96 |
| 22 | c | 501 | CLA | O2A-CGA-O1A | -2.23 | 117.96 | 123.59 |
| 22 | B | 610 | CLA | C2C-C1C-NC | 2.23 | 112.06 | 109.97 |
| 22 | B | 602 | CLA | CHD-C4C-C3C | -2.23 | 121.56 | 124.84 |
| 25 | A | 408 | PL9 | C25-C24-C23 | -2.23 | 117.95 | 123.68 |
| 25 | d | 407 | PL9 | C40-C39-C38 | -2.23 | 117.96 | 123.68 |
| 22 | B | 611 | CLA | C1B-CHB-C4A | -2.23 | 125.70 | 130.12 |
| 22 | B | 603 | CLA | O2A-CGA-CBA | 2.23 | 118.90 | 111.91 |
| 22 | b | 616 | CLA | C2C-C1C-NC | 2.23 | 112.06 | 109.97 |
| 22 | b | 605 | CLA | C3D-C4D-ND | 2.23 | 113.84 | 110.24 |
| 26 | Y | 101 | LMG | O1-C7-C8 | -2.22 | 105.53 | 110.90 |
| 22 | c | 507 | CLA | C1-C2-C3 | -2.22 | 122.20 | 126.04 |
| 26 | a | 414 | LMG | C9-C8-C7 | -2.22 | 106.53 | 111.79 |
| 22 | b | 611 | CLA | CAA-CBA-CGA | -2.22 | 106.76 | 113.25 |
| 22 | b | 603 | CLA | C1-C2-C3 | -2.22 | 122.20 | 126.04 |
| 22 | a | 405 | CLA | CMB-C2B-C1B | -2.22 | 125.05 | 128.46 |
| 27 | L | 101 | SQD | O48-C23-O10 | -2.22 | 117.99 | 123.59 |
| 22 | B | 615 | CLA | O1D-CGD-CBD | 2.22 | 129.03 | 124.48 |
| 30 | I | 101 | BCR | C15-C16-C17 | -2.22 | 118.93 | 123.47 |
| 22 | B | 604 | CLA | C2D-C1D-ND | -2.22 | 108.47 | 110.10 |
| 22 | B | 614 | CLA | CHC-C1C-NC | 2.22 | 127.57 | 124.20 |
| 22 | C | 501 | CLA | CHD-C1D-ND | -2.22 | 122.41 | 124.45 |
| 22 | C | 508 | CLA | O1D-CGD-CBD | 2.22 | 129.03 | 124.48 |
| 22 | C | 502 | CLA | O2A-CGA-O1A | -2.22 | 117.99 | 123.59 |
| 25 | D | 407 | PL9 | C41-C39-C38 | -2.22 | 116.63 | 121.12 |
| 26 | c | 520 | LMG | C9-C8-C7 | -2.22 | 106.54 | 111.79 |
| 29 | h | 101 | DGD | O6E-C5E-C4E | 2.22 | 113.72 | 109.69 |
| 22 | c | 501 | CLA | CMB-C2B-C3B | 2.22 | 128.82 | 124.68 |
| 22 | C | 506 | CLA | CGD-CBD-CAD | -2.22 | 103.56 | 110.73 |
| 29 | A | 413 | DGD | C3G-C2G-C1G | -2.21 | 106.55 | 111.79 |
| 29 | c | 516 | DGD | O6E-C5E-C4E | 2.21 | 113.71 | 109.69 |
| 22 | b | 603 | CLA | C7-C6-C5 | -2.21 | 107.35 | 113.36 |
| 30 | B | 617 | BCR | C15-C16-C17 | -2.21 | 118.94 | 123.47 |
| 22 | A | 405 | CLA | CHD-C1D-C2D | 2.21 | 130.12 | 125.48 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | K | 102 | BCR | C30-C25-C26 | -2.21 | 119.50 | 122.61 |
| 27 | a | 410 | SQD | O8-S-O7 | 2.21 | 116.68 | 111.27 |
| 22 | B | 605 | CLA | CHA-C1A-NA | -2.21 | 121.34 | 126.40 |
| 22 | a | 405 | CLA | O2D-CGD-O1D | -2.21 | 119.52 | 123.84 |
| 26 | A | 409 | LMG | O8-C28-O10 | -2.21 | 118.02 | 123.59 |
| 26 | M | 101 | LMG | O7-C10-O9 | -2.21 | 118.37 | 123.70 |
| 22 | b | 615 | CLA | C3A-C2A-C1A | 2.21 | 104.65 | 101.34 |
| 26 | A | 409 | LMG | O5-C6-C5 | -2.21 | 103.72 | 111.29 |
| 22 | C | 511 | CLA | C2A-C1A-CHA | 2.21 | 127.72 | 123.86 |
| 29 | c | 515 | DGD | O3D-C3D-C4D | -2.21 | 105.25 | 110.35 |
| 25 | d | 407 | PL9 | C8-C7-C3 | 2.21 | 118.21 | 111.98 |
| 28 | D | 411 | LHG | O8-C23-C24 | 2.20 | 118.82 | 111.91 |
| 22 | A | 405 | CLA | CHD-C4C-NC | 2.20 | 127.68 | 124.20 |
| 30 | b | 617 | BCR | C15-C14-C13 | -2.20 | 124.17 | 127.31 |
| 29 | c | 515 | DGD | C4D-C3D-C2D | -2.20 | 106.98 | 110.82 |
| 27 | A | 412 | SQD | O48-C46-C45 | 2.20 | 114.72 | 108.38 |
| 30 | K | 102 | BCR | C10-C11-C12 | -2.20 | 116.35 | 123.22 |
| 22 | C | 509 | CLA | CAA-C2A-C3A | -2.20 | 106.75 | 112.78 |
| 22 | B | 614 | CLA | C6-C7-C8 | -2.20 | 108.81 | 115.92 |
| 22 | d | 405 | CLA | O1D-CGD-CBD | 2.20 | 128.98 | 124.48 |
| 22 | B | 610 | CLA | O1A-CGA-CBA | 2.20 | 132.31 | 123.73 |
| 22 | c | 504 | CLA | O2D-CGD-CBD | 2.20 | 115.17 | 111.27 |
| 22 | c | 502 | CLA | C2D-C1D-ND | -2.20 | 108.48 | 110.10 |
| 26 | Y | 101 | LMG | O6-C1-O1 | -2.20 | 104.77 | 109.97 |
| 29 | c | 516 | DGD | C9A-C8A-C7A | -2.20 | 103.27 | 114.42 |
| 30 | C | 515 | BCR | C8-C7-C6 | -2.20 | 121.03 | 127.20 |
| 26 | c | 518 | LMG | O7-C10-O9 | -2.20 | 118.60 | 122.96 |
| 27 | t | 102 | SQD | O49-C7-C8 | -2.20 | 115.17 | 123.73 |
| 22 | c | 504 | CLA | CHB-C4A-NA | 2.20 | 127.55 | 124.51 |
| 22 | b | 610 | CLA | CAC-C3C-C4C | 2.19 | 127.66 | 124.81 |
| 23 | A | 404 | PHO | O2D-CGD-O1D | -2.19 | 119.55 | 123.84 |
| 22 | b | 606 | CLA | CED-O2D-CGD | -2.19 | 110.98 | 115.94 |
| 22 | C | 513 | CLA | C1B-CHB-C4A | -2.19 | 125.78 | 130.12 |
| 22 | b | 611 | CLA | CGD-CBD-CAD | -2.19 | 103.64 | 110.73 |
| 22 | B | 610 | CLA | C14-C13-C15 | -2.19 | 103.36 | 111.29 |
| 30 | I | 101 | BCR | C16-C15-C14 | -2.19 | 118.99 | 123.47 |
| 27 | D | 409 | SQD | C1-O5-C5 | -2.19 | 109.39 | 113.69 |
| 22 | B | 610 | CLA | C1B-CHB-C4A | -2.19 | 125.78 | 130.12 |
| 22 | B | 611 | CLA | O2A-C1-C2 | -2.19 | 102.88 | 108.64 |
| 22 | c | 507 | CLA | CMB-C2B-C1B | -2.19 | 125.10 | 128.46 |
| 28 | D | 411 | LHG | C18-C17-C16 | -2.19 | 103.32 | 114.42 |
| 22 | C | 508 | CLA | O2A-CGA-O1A | -2.18 | 118.08 | 123.59 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | B | 617 | BCR | C3-C4-C5 | -2.18 | 110.18 | 114.08 |
| 28 | D | 410 | LHG | C18-C17-C16 | -2.18 | 103.35 | 114.42 |
| 22 | D | 405 | CLA | O2A-CGA-O1A | -2.18 | 118.09 | 123.59 |
| 25 | d | 407 | PL9 | C11-C9-C8 | -2.18 | 116.70 | 121.12 |
| 30 | B | 617 | BCR | C2-C1-C6 | 2.18 | 113.84 | 110.48 |
| 29 | A | 413 | DGD | C1E-O6E-C5E | 2.18 | 117.97 | 113.69 |
| 29 | A | 413 | DGD | C1D-C2D-C3D | -2.18 | 105.46 | 110.00 |
| 30 | t | 101 | BCR | C12-C13-C14 | -2.18 | 115.60 | 118.94 |
| 31 | d | 411 | STE | O2-C1-C2 | 2.18 | 121.03 | 114.03 |
| 22 | B | 614 | CLA | CMD-C2D-C1D | 2.18 | 128.55 | 124.71 |
| 22 | c | 507 | CLA | O1A-CGA-CBA | 2.18 | 132.23 | 123.73 |
| 25 | D | 407 | PL9 | C36-C37-C38 | -2.18 | 104.72 | 111.88 |
| 29 | C | 516 | DGD | CAB-C9B-C8B | -2.18 | 103.37 | 114.42 |
| 27 | a | 410 | SQD | O8-S-O9 | -2.18 | 105.95 | 111.27 |
| 22 | B | 615 | CLA | CHD-C1D-ND | -2.18 | 122.45 | 124.45 |
| 30 | K | 101 | BCR | C37-C22-C23 | 2.18 | 121.50 | 118.08 |
| 30 | C | 514 | BCR | C38-C26-C27 | -2.17 | 109.44 | 113.62 |
| 25 | a | 409 | PL9 | C21-C19-C18 | -2.17 | 116.72 | 121.12 |
| 22 | C | 510 | CLA | C11-C10-C8 | -2.17 | 108.90 | 115.92 |
| 22 | b | 602 | CLA | CHA-C4D-ND | 2.17 | 137.04 | 132.50 |
| 22 | b | 615 | CLA | C7-C6-C5 | -2.17 | 107.46 | 113.36 |
| 28 | D | 411 | LHG | O3-P-O5 | -2.17 | 100.59 | 109.07 |
| 30 | B | 617 | BCR | C40-C30-C29 | -2.17 | 100.23 | 108.91 |
| 30 | x | 101 | BCR | C36-C18-C19 | 2.17 | 121.49 | 118.08 |
| 31 | C | 521 | STE | C4-C3-C2 | -2.17 | 105.40 | 113.19 |
| 22 | a | 403 | CLA | O2D-CGD-O1D | -2.17 | 119.60 | 123.84 |
| 31 | B | 625 | STE | O2-C1-O1 | -2.16 | 117.90 | 123.30 |
| 22 | B | 608 | CLA | CHB-C4A-NA | 2.16 | 127.50 | 124.51 |
| 28 | L | 102 | LHG | C12-C11-C10 | -2.16 | 103.44 | 114.42 |
| 30 | C | 514 | BCR | C31-C1-C6 | -2.16 | 106.79 | 110.30 |
| 22 | b | 607 | CLA | C3A-C2A-C1A | 2.16 | 104.58 | 101.34 |
| 29 | h | 101 | DGD | C7B-C6B-C5B | -2.16 | 103.45 | 114.42 |
| 30 | B | 618 | BCR | C15-C16-C17 | -2.16 | 119.05 | 123.47 |
| 22 | a | 403 | CLA | CHA-C1A-NA | -2.16 | 121.45 | 126.40 |
| 22 | b | 603 | CLA | OBD-CAD-C3D | 2.16 | 133.72 | 128.52 |
| 30 | B | 616 | BCR | C8-C7-C6 | -2.16 | 121.14 | 127.20 |
| 26 | Y | 101 | LMG | O7-C10-O9 | -2.16 | 118.48 | 123.70 |
| 22 | c | 503 | CLA | CHC-C1C-NC | 2.16 | 127.48 | 124.20 |
| 22 | c | 512 | CLA | C3B-C4B-NB | -2.16 | 106.42 | 109.21 |
| 31 | M | 102 | STE | O2-C1-O1 | -2.16 | 117.93 | 123.30 |
| 30 | b | 619 | BCR | C20-C21-C22 | -2.16 | 124.23 | 127.31 |
| 22 | C | 506 | CLA | C1D-ND-C4D | 2.16 | 107.87 | 106.33 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 22 | C | 510 | CLA | CBC-CAC-C3C | -2.15 | 106.49 | 112.43 |
| 31 | x | 102 | STE | O2-C1-O1 | -2.15 | 117.93 | 123.30 |
| 30 | t | 101 | BCR | C33-C5-C6 | -2.15 | 122.11 | 124.53 |
| 22 | c | 501 | CLA | CHA-C1A-NA | -2.15 | 121.47 | 126.40 |
| 25 | d | 407 | PL9 | C31-C29-C28 | 2.15 | 125.47 | 121.12 |
| 22 | A | 402 | CLA | C7-C6-C5 | -2.15 | 107.52 | 113.36 |
| 30 | C | 515 | BCR | C27-C26-C25 | 2.15 | 125.85 | 122.73 |
| 25 | A | 408 | PL9 | C27-C28-C29 | -2.15 | 122.48 | 127.66 |
| 30 | x | 101 | BCR | C34-C9-C8 | -2.15 | 114.69 | 118.08 |
| 22 | B | 601 | CLA | O2A-CGA-O1A | -2.15 | 118.17 | 123.59 |
| 31 | t | 103 | STE | O2-C1-C2 | 2.15 | 120.93 | 114.03 |
| 22 | D | 404 | CLA | O2D-CGD-O1D | -2.15 | 119.64 | 123.84 |
| 26 | A | 409 | LMG | C1-O6-C5 | -2.15 | 109.47 | 113.69 |
| 22 | C | 501 | CLA | CHD-C4C-NC | 2.15 | 127.59 | 124.20 |
| 22 | c | 508 | CLA | CHD-C4C-NC | 2.15 | 127.59 | 124.20 |
| 30 | b | 617 | BCR | C11-C10-C9 | -2.15 | 124.25 | 127.31 |
| 26 | M | 101 | LMG | C1-C2-C3 | -2.14 | 105.53 | 110.00 |
| 25 | A | 408 | PL9 | C41-C39-C38 | -2.14 | 116.78 | 121.12 |
| 22 | C | 510 | CLA | C2D-C1D-ND | -2.14 | 108.53 | 110.10 |
| 22 | C | 503 | CLA | C5-C3-C2 | -2.14 | 116.78 | 121.12 |
| 26 | D | 412 | LMG | O7-C10-O9 | -2.14 | 118.53 | 123.70 |
| 30 | C | 515 | BCR | C38-C26-C27 | -2.14 | 109.51 | 113.62 |
| 28 | a | 411 | LHG | C20-C19-C18 | -2.14 | 103.57 | 114.42 |
| 27 | f | 102 | SQD | O5-C1-C2 | -2.14 | 105.83 | 110.35 |
| 22 | C | 505 | CLA | C2D-C1D-ND | -2.14 | 108.53 | 110.10 |
| 29 | C | 517 | DGD | C5B-C4B-C3B | -2.14 | 103.58 | 114.42 |
| 30 | x | 101 | BCR | C35-C13-C12 | 2.14 | 121.44 | 118.08 |
| 30 | K | 101 | BCR | C37-C22-C21 | -2.13 | 119.93 | 122.92 |
| 22 | c | 507 | CLA | C7-C6-C5 | -2.13 | 107.56 | 113.36 |
| 29 | c | 515 | DGD | O3E-C3E-C2E | -2.13 | 105.42 | 110.35 |
| 30 | C | 515 | BCR | C2-C1-C6 | 2.13 | 113.77 | 110.48 |
| 22 | b | 603 | CLA | C4-C3-C5 | 2.13 | 118.86 | 115.27 |
| 27 | f | 102 | SQD | C45-O47-C7 | 2.13 | 123.04 | 117.79 |
| 29 | A | 413 | DGD | CAB-C9B-C8B | -2.13 | 103.61 | 114.42 |
| 22 | B | 603 | CLA | CHA-C1A-NA | -2.13 | 121.52 | 126.40 |
| 22 | B | 602 | CLA | CHC-C1C-C2C | -2.13 | 120.83 | 126.72 |
| 29 | h | 101 | DGD | CBB-CAB-C9B | -2.13 | 103.62 | 114.42 |
| 30 | I | 101 | BCR | C34-C9-C10 | -2.13 | 119.94 | 122.92 |
| 22 | C | 513 | CLA | O2D-CGD-CBD | 2.13 | 115.05 | 111.27 |
| 30 | a | 406 | BCR | C16-C17-C18 | -2.13 | 124.27 | 127.31 |
| 22 | c | 503 | CLA | CMA-C3A-C4A | 2.13 | 117.49 | 111.77 |
| 22 | C | 506 | CLA | CHA-C1A-NA | -2.13 | 121.53 | 126.40 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | b | 618 | BCR | C11-C10-C9 | -2.13 | 124.28 | 127.31 |
| 29 | C | 516 | DGD | O1G-C1A-O1A | 2.13 | 128.96 | 123.59 |
| 29 | A | 413 | DGD | C4E-C3E-C2E | -2.13 | 107.11 | 110.82 |
| 22 | B | 612 | CLA | C2A-C1A-CHA | 2.13 | 127.58 | 123.86 |
| 29 | C | 517 | DGD | CAB-C9B-C8B | -2.13 | 103.63 | 114.42 |
| 22 | B | 602 | CLA | CHD-C4C-NC | 2.13 | 127.55 | 124.20 |
| 29 | c | 516 | DGD | C4E-C3E-C2E | -2.12 | 107.11 | 110.82 |
| 22 | b | 614 | CLA | C2D-C1D-ND | -2.12 | 108.54 | 110.10 |
| 22 | B | 601 | CLA | C6-C5-C3 | -2.12 | 107.89 | 113.45 |
| 22 | D | 403 | CLA | O2D-CGD-O1D | -2.12 | 119.69 | 123.84 |
| 22 | B | 607 | CLA | C1B-CHB-C4A | -2.12 | 125.92 | 130.12 |
| 22 | c | 509 | CLA | O2D-CGD-CBD | 2.12 | 115.04 | 111.27 |
| 22 | c | 510 | CLA | C6-C5-C3 | -2.12 | 107.90 | 113.45 |
| 30 | t | 101 | BCR | C1-C6-C5 | -2.12 | 119.63 | 122.61 |
| 29 | H | 103 | DGD | CAB-C9B-C8B | -2.12 | 103.67 | 114.42 |
| 22 | B | 609 | CLA | O2D-CGD-CBD | 2.12 | 115.03 | 111.27 |
| 29 | c | 517 | DGD | C5B-C4B-C3B | -2.12 | 103.69 | 114.42 |
| 22 | b | 605 | CLA | CHC-C1C-NC | 2.12 | 127.41 | 124.20 |
| 27 | L | 101 | SQD | O10-C23-C24 | -2.11 | 115.48 | 123.73 |
| 30 | t | 101 | BCR | C29-C30-C25 | 2.11 | 113.73 | 110.48 |
| 22 | B | 601 | CLA | CGD-CBD-CAD | -2.11 | 103.89 | 110.73 |
| 22 | C | 513 | CLA | C2D-C1D-ND | -2.11 | 108.55 | 110.10 |
| 22 | C | 508 | CLA | CHD-C4C-NC | 2.11 | 127.53 | 124.20 |
| 22 | B | 607 | CLA | CHD-C4C-NC | 2.11 | 127.53 | 124.20 |
| 22 | B | 606 | CLA | C2D-C1D-ND | 2.11 | 111.66 | 110.10 |
| 27 | L | 101 | SQD | O49-C7-C8 | -2.11 | 115.50 | 123.73 |
| 22 | B | 606 | CLA | C1B-CHB-C4A | -2.11 | 125.94 | 130.12 |
| 22 | c | 504 | CLA | C3D-C4D-ND | 2.11 | 113.65 | 110.24 |
| 22 | c | 502 | CLA | C4D-CHA-C1A | 2.11 | 123.81 | 121.25 |
| 22 | C | 504 | CLA | CHA-C1A-NA | -2.11 | 121.57 | 126.40 |
| 22 | B | 601 | CLA | C16-C15-C13 | -2.11 | 109.11 | 115.92 |
| 30 | C | 514 | BCR | C34-C9-C10 | -2.11 | 119.97 | 122.92 |
| 29 | A | 413 | DGD | O5E-C6E-C5E | -2.10 | 104.07 | 111.29 |
| 22 | b | 603 | CLA | C1-O2A-CGA | 2.10 | 121.96 | 116.44 |
| 22 | c | 502 | CLA | C1D-ND-C4D | 2.10 | 107.83 | 106.33 |
| 26 | a | 414 | LMG | O7-C10-O9 | -2.10 | 118.62 | 123.70 |
| 28 | D | 410 | LHG | C27-C26-C25 | -2.10 | 103.76 | 114.42 |
| 30 | D | 406 | BCR | C28-C27-C26 | -2.10 | 110.33 | 114.08 |
| 30 | b | 617 | BCR | C3-C4-C5 | -2.10 | 110.33 | 114.08 |
| 22 | B | 607 | CLA | CHB-C4A-NA | 2.10 | 127.41 | 124.51 |
| 28 | D | 413 | LHG | C11-C10-C9 | -2.10 | 103.78 | 114.42 |
| 29 | C | 518 | DGD | O2D-C2D-C1D | -2.10 | 104.95 | 110.05 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | B | 616 | BCR | C37-C22-C21 | -2.10 | 119.99 | 122.92 |
| 22 | c | 511 | CLA | C1B-CHB-C4A | -2.09 | 125.97 | 130.12 |
| 26 | A | 409 | LMG | C20-C19-C18 | -2.09 | 103.80 | 114.42 |
| 25 | A | 408 | PL9 | C12-C13-C14 | -2.09 | 122.63 | 127.66 |
| 22 | B | 601 | CLA | C1C-C2C-C3C | -2.09 | 104.76 | 106.96 |
| 30 | K | 102 | BCR | C8-C9-C10 | -2.09 | 115.73 | 118.94 |
| 27 | A | 410 | SQD | O47-C45-C44 | 2.09 | 115.97 | 108.40 |
| 22 | b | 602 | CLA | C1-C2-C3 | -2.09 | 122.43 | 126.04 |
| 22 | c | 509 | CLA | O1D-CGD-CBD | 2.09 | 128.76 | 124.48 |
| 22 | C | 513 | CLA | CHD-C1D-C2D | 2.09 | 129.86 | 125.48 |
| 22 | C | 505 | CLA | CBA-CAA-C2A | 2.09 | 120.02 | 113.86 |
| 22 | D | 404 | CLA | C1C-C2C-C3C | -2.09 | 104.76 | 106.96 |
| 22 | b | 614 | CLA | C11-C10-C8 | -2.08 | 109.18 | 115.92 |
| 26 | m | 101 | LMG | O8-C28-O10 | -2.08 | 118.34 | 123.59 |
| 22 | H | 101 | CLA | C4-C3-C5 | 2.08 | 118.77 | 115.27 |
| 30 | K | 101 | BCR | C30-C25-C26 | -2.08 | 119.68 | 122.61 |
| 22 | C | 509 | CLA | CED-O2D-CGD | 2.08 | 120.64 | 115.94 |
| 22 | b | 605 | CLA | C4D-C3D-CAD | -2.08 | 105.64 | 108.10 |
| 30 | b | 619 | BCR | C11-C10-C9 | -2.08 | 124.34 | 127.31 |
| 22 | c | 502 | CLA | C4D-C3D-CAD | -2.08 | 105.64 | 108.10 |
| 28 | d | 408 | LHG | C20-C19-C18 | -2.08 | 103.87 | 114.42 |
| 22 | c | 506 | CLA | CHD-C1D-ND | -2.08 | 122.54 | 124.45 |
| 30 | C | 515 | BCR | C35-C13-C14 | -2.08 | 120.01 | 122.92 |
| 22 | b | 601 | CLA | C1B-CHB-C4A | -2.08 | 126.00 | 130.12 |
| 30 | B | 618 | BCR | C27-C26-C25 | 2.08 | 125.74 | 122.73 |
| 29 | A | 413 | DGD | C6D-O5D-C1E | 2.07 | 117.79 | 113.74 |
| 26 | c | 521 | LMG | O6-C1-O1 | -2.07 | 105.06 | 109.97 |
| 22 | b | 608 | CLA | CHD-C1D-C2D | 2.07 | 129.83 | 125.48 |
| 31 | C | 521 | STE | O2-C1-C2 | 2.07 | 120.68 | 114.03 |
| 28 | d | 409 | LHG | C29-C28-C27 | -2.07 | 103.91 | 114.42 |
| 22 | c | 513 | CLA | CMB-C2B-C3B | 2.07 | 128.55 | 124.68 |
| 22 | c | 508 | CLA | CHA-C1A-NA | -2.07 | 121.66 | 126.40 |
| 22 | c | 507 | CLA | CHA-C1A-NA | -2.07 | 121.66 | 126.40 |
| 22 | b | 604 | CLA | CBA-CAA-C2A | -2.07 | 107.76 | 113.86 |
| 28 | A | 411 | LHG | O8-C23-O10 | -2.07 | 118.38 | 123.59 |
| 29 | H | 103 | DGD | O2E-C2E-C3E | -2.07 | 105.57 | 110.35 |
| 22 | b | 615 | CLA | CHA-C4D-ND | 2.07 | 136.82 | 132.50 |
| 28 | A | 411 | LHG | C20-C19-C18 | -2.06 | 103.94 | 114.42 |
| 27 | B | 621 | SQD | O47-C45-C46 | 2.06 | 115.87 | 108.40 |
| 28 | D | 413 | LHG | C18-C17-C16 | -2.06 | 103.95 | 114.42 |
| 22 | d | 405 | CLA | CHA-C1A-NA | -2.06 | 121.67 | 126.40 |
| 30 | b | 618 | BCR | C16-C15-C14 | -2.06 | 119.25 | 123.47 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | k | 101 | BCR | C20-C21-C22 | -2.06 | 124.37 | 127.31 |
| 22 | b | 604 | CLA | C4D-C3D-CAD | -2.06 | 105.67 | 108.10 |
| 22 | b | 608 | CLA | CBA-CAA-C2A | 2.06 | 119.95 | 113.86 |
| 22 | C | 503 | CLA | O1D-CGD-CBD | 2.06 | 128.70 | 124.48 |
| 30 | H | 102 | BCR | C38-C26-C25 | -2.06 | 122.21 | 124.53 |
| 22 | c | 508 | CLA | CMB-C2B-C1B | -2.06 | 125.30 | 128.46 |
| 22 | a | 402 | CLA | C1D-CHD-C4C | -2.06 | 121.61 | 126.06 |
| 22 | c | 506 | CLA | CAC-C3C-C4C | 2.06 | 127.48 | 124.81 |
| 22 | A | 403 | CLA | C2C-C1C-NC | 2.06 | 111.90 | 109.97 |
| 23 | a | 404 | PHO | C1-C2-C3 | -2.06 | 122.48 | 126.04 |
| 30 | B | 618 | BCR | C1-C6-C5 | -2.06 | 119.71 | 122.61 |
| 22 | c | 503 | CLA | CHD-C4C-NC | 2.06 | 127.44 | 124.20 |
| 22 | B | 602 | CLA | C1B-CHB-C4A | -2.06 | 126.05 | 130.12 |
| 22 | C | 508 | CLA | CMD-C2D-C1D | 2.06 | 128.34 | 124.71 |
| 22 | A | 402 | CLA | CBC-CAC-C3C | 2.06 | 118.10 | 112.43 |
| 22 | B | 604 | CLA | CHD-C1D-C2D | 2.06 | 129.79 | 125.48 |
| 34 | F | 101 | HEC | CMB-C2B-C1B | -2.06 | 125.31 | 128.46 |
| 22 | B | 612 | CLA | O2D-CGD-O1D | -2.06 | 119.82 | 123.84 |
| 22 | c | 510 | CLA | C1B-CHB-C4A | -2.05 | 126.05 | 130.12 |
| 22 | C | 503 | CLA | CHB-C4A-NA | 2.05 | 127.35 | 124.51 |
| 22 | b | 602 | CLA | C3C-C4C-NC | -2.05 | 108.27 | 110.57 |
| 22 | C | 513 | CLA | CMB-C2B-C3B | 2.05 | 128.52 | 124.68 |
| 27 | f | 102 | SQD | O5-C5-C4 | 2.05 | 113.42 | 109.69 |
| 22 | c | 509 | CLA | CHC-C1C-C2C | -2.05 | 121.05 | 126.72 |
| 25 | a | 409 | PL9 | C45-C44-C43 | -2.05 | 118.42 | 123.68 |
| 22 | H | 101 | CLA | O2D-CGD-CBD | 2.05 | 114.91 | 111.27 |
| 26 | m | 101 | LMG | C1-O6-C5 | -2.05 | 109.66 | 113.69 |
| 22 | D | 404 | CLA | C11-C12-C13 | -2.05 | 109.29 | 115.92 |
| 22 | C | 501 | CLA | CAC-C3C-C4C | 2.05 | 127.47 | 124.81 |
| 22 | b | 606 | CLA | CHD-C1D-ND | -2.05 | 122.57 | 124.45 |
| 30 | b | 617 | BCR | C32-C1-C6 | -2.05 | 106.97 | 110.30 |
| 30 | K | 101 | BCR | C15-C14-C13 | -2.05 | 124.39 | 127.31 |
| 22 | b | 604 | CLA | O2A-CGA-O1A | -2.05 | 118.42 | 123.59 |
| 26 | M | 101 | LMG | C37-C36-C35 | -2.05 | 104.03 | 114.42 |
| 30 | k | 102 | BCR | C33-C5-C6 | -2.05 | 122.23 | 124.53 |
| 29 | c | 515 | DGD | O6E-C1E-O5D | -2.05 | 105.13 | 109.97 |
| 22 | b | 605 | CLA | CMB-C2B-C3B | 2.05 | 128.51 | 124.68 |
| 29 | H | 103 | DGD | C9A-C8A-C7A | -2.05 | 104.04 | 114.42 |
| 22 | C | 505 | CLA | O2D-CGD-O1D | -2.04 | 119.84 | 123.84 |
| 30 | k | 101 | BCR | C27-C26-C25 | 2.04 | 125.70 | 122.73 |
| 30 | B | 617 | BCR | C38-C26-C25 | -2.04 | 122.23 | 124.53 |
| 22 | C | 512 | CLA | C2A-C3A-C4A | 2.04 | 105.17 | 101.87 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | d | 406 | BCR | C7-C8-C9 | -2.04 | 123.15 | 126.23 |
| 29 | C | 518 | DGD | C8B-C7B-C6B | -2.04 | 104.06 | 114.42 |
| 22 | B | 613 | CLA | C6-C7-C8 | -2.04 | 109.32 | 115.92 |
| 29 | H | 103 | DGD | C8B-C7B-C6B | -2.04 | 104.07 | 114.42 |
| 29 | h | 101 | DGD | CDB-CCB-CBB | -2.04 | 104.07 | 114.42 |
| 31 | B | 625 | STE | O1-C1-C2 | -2.04 | 116.53 | 123.08 |
| 22 | B | 604 | CLA | CHD-C4C-NC | 2.04 | 127.42 | 124.20 |
| 30 | a | 406 | BCR | C33-C5-C6 | -2.04 | 122.24 | 124.53 |
| 30 | B | 616 | BCR | C30-C25-C26 | -2.04 | 119.75 | 122.61 |
| 22 | a | 402 | CLA | C1B-CHB-C4A | -2.04 | 126.08 | 130.12 |
| 26 | d | 410 | LMG | C40-C39-C38 | -2.04 | 104.09 | 114.42 |
| 22 | b | 603 | CLA | C2D-C1D-ND | -2.03 | 108.61 | 110.10 |
| 28 | D | 413 | LHG | O10-C23-C24 | -2.03 | 115.80 | 123.73 |
| 28 | L | 102 | LHG | C20-C19-C18 | -2.03 | 104.10 | 114.42 |
| 22 | C | 508 | CLA | CHA-C4D-ND | 2.03 | 136.75 | 132.50 |
| 22 | c | 506 | CLA | CHA-C1A-NA | -2.03 | 121.74 | 126.40 |
| 22 | d | 403 | CLA | C1-C2-C3 | -2.03 | 122.53 | 126.04 |
| 25 | D | 407 | PL9 | C7-C3-C2 | -2.03 | 120.63 | 123.30 |
| 22 | C | 507 | CLA | C1C-C2C-C3C | -2.03 | 104.82 | 106.96 |
| 22 | b | 614 | CLA | CHA-C4D-ND | 2.03 | 136.75 | 132.50 |
| 22 | B | 606 | CLA | C2C-C1C-NC | 2.03 | 111.87 | 109.97 |
| 29 | c | 517 | DGD | C7B-C6B-C5B | -2.03 | 104.12 | 114.42 |
| 22 | b | 614 | CLA | CBC-CAC-C3C | -2.03 | 106.84 | 112.43 |
| 22 | a | 405 | CLA | CHD-C1D-ND | -2.03 | 122.59 | 124.45 |
| 22 | b | 601 | CLA | O2A-CGA-CBA | 2.03 | 118.27 | 111.91 |
| 22 | C | 509 | CLA | C2A-C3A-C4A | 2.03 | 105.14 | 101.87 |
| 26 | D | 408 | LMG | O7-C10-O9 | -2.03 | 118.80 | 123.70 |
| 30 | a | 406 | BCR | C29-C30-C25 | 2.03 | 113.60 | 110.48 |
| 30 | C | 515 | BCR | C30-C25-C26 | -2.03 | 119.76 | 122.61 |
| 22 | A | 403 | CLA | C4-C3-C5 | -2.03 | 111.86 | 115.27 |
| 22 | c | 503 | CLA | C3A-C2A-C1A | 2.03 | 104.37 | 101.34 |
| 29 | h | 101 | DGD | O2E-C2E-C1E | -2.03 | 105.13 | 110.05 |
| 28 | A | 411 | LHG | C11-C10-C9 | -2.03 | 104.14 | 114.42 |
| 22 | c | 506 | CLA | C1-O2A-CGA | 2.02 | 121.76 | 116.44 |
| 22 | c | 509 | CLA | CHC-C1C-NC | 2.02 | 127.27 | 124.20 |
| 22 | B | 610 | CLA | C9-C8-C10 | -2.02 | 103.97 | 111.29 |
| 30 | a | 406 | BCR | C30-C25-C26 | -2.02 | 119.77 | 122.61 |
| 22 | C | 511 | CLA | C2D-C1D-ND | -2.02 | 108.61 | 110.10 |
| 29 | c | 515 | DGD | C4A-C3A-C2A | -2.02 | 105.93 | 113.19 |
| 28 | d | 408 | LHG | C27-C26-C25 | -2.02 | 104.17 | 114.42 |
| 22 | c | 503 | CLA | CHC-C1C-C2C | -2.02 | 121.13 | 126.72 |
| 29 | c | 517 | DGD | O5E-C6E-C5E | -2.02 | 104.36 | 111.29 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 30 | C | 514 | BCR | C36-C18-C19 | 2.02 | 121.26 | 118.08 |
| 25 | A | 408 | PL9 | C31-C32-C33 | -2.02 | 105.25 | 111.88 |
| 22 | d | 405 | CLA | CMA-C3A-C2A | -2.02 | 105.69 | 113.83 |
| 34 | f | 101 | HEC | C4C-C3C-C2C | 2.02 | 108.53 | 106.35 |
| 30 | t | 101 | BCR | C11-C10-C9 | -2.02 | 124.43 | 127.31 |
| 30 | H | 102 | BCR | C35-C13-C14 | -2.01 | 120.10 | 122.92 |
| 26 | m | 101 | LMG | C38-C37-C36 | -2.01 | 104.20 | 114.42 |
| 29 | C | 518 | DGD | CDB-CCB-CBB | -2.01 | 104.20 | 114.42 |
| 26 | c | 518 | LMG | C9-C8-C7 | -2.01 | 107.03 | 111.79 |
| 30 | B | 617 | BCR | C28-C27-C26 | -2.01 | 110.48 | 114.08 |
| 22 | D | 405 | CLA | O1A-CGA-CBA | 2.01 | 131.58 | 123.73 |
| 22 | b | 610 | CLA | O2D-CGD-O1D | -2.01 | 119.91 | 123.84 |
| 22 | b | 616 | CLA | O2D-CGD-CBD | 2.01 | 114.84 | 111.27 |
| 25 | d | 407 | PL9 | C11-C12-C13 | -2.01 | 105.27 | 111.88 |
| 22 | B | 603 | CLA | C1C-C2C-C3C | -2.01 | 104.84 | 106.96 |
| 30 | H | 102 | BCR | C36-C18-C17 | -2.01 | 120.11 | 122.92 |
| 22 | c | 506 | CLA | O2A-CGA-CBA | -2.01 | 105.60 | 111.91 |
| 34 | F | 101 | HEC | CMD-C2D-C3D | 2.01 | 128.73 | 124.94 |
| 22 | b | 613 | CLA | C1D-ND-C4D | -2.01 | 104.91 | 106.33 |
| 22 | C | 508 | CLA | C2D-C1D-ND | -2.01 | 108.62 | 110.10 |
| 22 | b | 609 | CLA | C5-C3-C2 | 2.01 | 125.18 | 121.12 |
| 22 | B | 611 | CLA | C4C-C3C-C2C | -2.01 | 103.97 | 106.90 |
| 22 | d | 404 | CLA | CMC-C2C-C1C | 2.01 | 128.09 | 125.04 |
| 22 | c | 511 | CLA | C3A-C2A-C1A | 2.01 | 104.34 | 101.34 |
| 25 | A | 408 | PL9 | C20-C19-C18 | -2.00 | 118.54 | 123.68 |
| 22 | C | 503 | CLA | C1-O2A-CGA | 2.00 | 121.70 | 116.44 |
| 25 | D | 407 | PL9 | C37-C38-C39 | -2.00 | 122.84 | 127.66 |
| 22 | C | 510 | CLA | C1-O2A-CGA | 2.00 | 121.69 | 116.44 |

All (59) chirality outliers are listed below:

| Mol | Chain | Res | Type | Atom |
|-----|-------|-----|------|------|
| 22 | A | 402 | CLA | ND |
| 22 | A | 405 | CLA | ND |
| 22 | B | 602 | CLA | ND |
| 22 | B | 603 | CLA | ND |
| 22 | B | 604 | CLA | ND |
| 22 | B | 605 | CLA | ND |
| 22 | B | 606 | CLA | ND |
| 22 | B | 607 | CLA | ND |
| 22 | B | 609 | CLA | ND |
| 22 | B | 611 | CLA | ND |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atom |
|------------|--------------|------------|-------------|-------------|
| 22 | B | 612 | CLA | ND |
| 22 | B | 613 | CLA | ND |
| 22 | B | 614 | CLA | ND |
| 22 | B | 615 | CLA | ND |
| 22 | C | 501 | CLA | ND |
| 22 | C | 502 | CLA | ND |
| 22 | C | 503 | CLA | ND |
| 22 | C | 504 | CLA | ND |
| 22 | C | 505 | CLA | ND |
| 22 | C | 506 | CLA | ND |
| 22 | C | 507 | CLA | ND |
| 22 | C | 509 | CLA | ND |
| 22 | C | 510 | CLA | ND |
| 22 | C | 511 | CLA | ND |
| 22 | C | 512 | CLA | ND |
| 22 | C | 513 | CLA | ND |
| 22 | D | 403 | CLA | ND |
| 22 | D | 404 | CLA | ND |
| 22 | H | 101 | CLA | ND |
| 22 | a | 405 | CLA | ND |
| 22 | b | 601 | CLA | ND |
| 22 | b | 602 | CLA | ND |
| 22 | b | 603 | CLA | ND |
| 22 | b | 604 | CLA | ND |
| 22 | b | 605 | CLA | ND |
| 22 | b | 606 | CLA | ND |
| 22 | b | 607 | CLA | ND |
| 22 | b | 608 | CLA | ND |
| 22 | b | 609 | CLA | ND |
| 22 | b | 610 | CLA | ND |
| 22 | b | 612 | CLA | ND |
| 22 | b | 613 | CLA | ND |
| 22 | b | 614 | CLA | ND |
| 22 | b | 615 | CLA | ND |
| 22 | b | 616 | CLA | ND |
| 22 | c | 501 | CLA | ND |
| 22 | c | 502 | CLA | ND |
| 22 | c | 504 | CLA | ND |
| 22 | c | 505 | CLA | ND |
| 22 | c | 506 | CLA | ND |
| 22 | c | 507 | CLA | ND |
| 22 | c | 509 | CLA | ND |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atom |
|-----|-------|-----|------|------|
| 22 | c | 510 | CLA | ND |
| 22 | c | 511 | CLA | ND |
| 22 | c | 512 | CLA | ND |
| 22 | c | 513 | CLA | ND |
| 22 | d | 403 | CLA | ND |
| 22 | d | 404 | CLA | ND |
| 22 | d | 405 | CLA | ND |

All (2018) torsion outliers are listed below:

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | A | 403 | CLA | CHA-CBD-CGD-O1D |
| 22 | A | 403 | CLA | CHA-CBD-CGD-O2D |
| 22 | B | 602 | CLA | C2-C3-C5-C6 |
| 22 | B | 602 | CLA | C4-C3-C5-C6 |
| 22 | B | 603 | CLA | C2-C3-C5-C6 |
| 22 | B | 603 | CLA | C4-C3-C5-C6 |
| 22 | B | 604 | CLA | C6-C7-C8-C9 |
| 22 | B | 605 | CLA | C11-C10-C8-C9 |
| 22 | B | 606 | CLA | CHA-CBD-CGD-O2D |
| 22 | B | 611 | CLA | CHA-CBD-CGD-O1D |
| 22 | B | 611 | CLA | CHA-CBD-CGD-O2D |
| 22 | B | 613 | CLA | CHA-CBD-CGD-O1D |
| 22 | B | 613 | CLA | C2-C3-C5-C6 |
| 22 | B | 613 | CLA | C4-C3-C5-C6 |
| 22 | C | 501 | CLA | CBD-CGD-O2D-CED |
| 22 | C | 502 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 502 | CLA | CHA-CBD-CGD-O2D |
| 22 | C | 502 | CLA | CAD-CBD-CGD-O1D |
| 22 | C | 502 | CLA | C14-C13-C15-C16 |
| 22 | C | 508 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 508 | CLA | CHA-CBD-CGD-O2D |
| 22 | C | 509 | CLA | C2-C1-O2A-CGA |
| 22 | C | 512 | CLA | C1A-C2A-CAA-CBA |
| 22 | C | 512 | CLA | C11-C10-C8-C9 |
| 22 | D | 404 | CLA | CHA-CBD-CGD-O2D |
| 22 | D | 405 | CLA | O2A-C1-C2-C3 |
| 22 | b | 601 | CLA | C1A-C2A-CAA-CBA |
| 22 | b | 601 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 604 | CLA | C2-C3-C5-C6 |
| 22 | b | 604 | CLA | C4-C3-C5-C6 |
| 22 | b | 605 | CLA | C2-C3-C5-C6 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | b | 605 | CLA | C4-C3-C5-C6 |
| 22 | b | 614 | CLA | CHA-CBD-CGD-O1D |
| 22 | b | 614 | CLA | CHA-CBD-CGD-O2D |
| 22 | b | 614 | CLA | CAD-CBD-CGD-O1D |
| 22 | b | 614 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 614 | CLA | C2-C3-C5-C6 |
| 22 | b | 614 | CLA | C4-C3-C5-C6 |
| 22 | c | 504 | CLA | C2-C3-C5-C6 |
| 22 | c | 504 | CLA | C4-C3-C5-C6 |
| 22 | c | 506 | CLA | CHA-CBD-CGD-O1D |
| 22 | c | 506 | CLA | CHA-CBD-CGD-O2D |
| 22 | c | 506 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 508 | CLA | CHA-CBD-CGD-O1D |
| 22 | c | 508 | CLA | CHA-CBD-CGD-O2D |
| 22 | c | 508 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 512 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 512 | CLA | C6-C7-C8-C9 |
| 22 | c | 513 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 513 | CLA | C3A-C2A-CAA-CBA |
| 22 | d | 404 | CLA | CHA-CBD-CGD-O1D |
| 22 | d | 404 | CLA | CHA-CBD-CGD-O2D |
| 25 | A | 408 | PL9 | C17-C18-C19-C20 |
| 25 | A | 408 | PL9 | C23-C24-C26-C27 |
| 25 | A | 408 | PL9 | C24-C26-C27-C28 |
| 25 | A | 408 | PL9 | C32-C33-C34-C36 |
| 25 | A | 408 | PL9 | C34-C36-C37-C38 |
| 25 | A | 408 | PL9 | C37-C38-C39-C40 |
| 25 | A | 408 | PL9 | C40-C39-C41-C42 |
| 25 | D | 407 | PL9 | C42-C43-C44-C45 |
| 25 | D | 407 | PL9 | C47-C48-C49-C51 |
| 25 | a | 409 | PL9 | C9-C11-C12-C13 |
| 25 | a | 409 | PL9 | C12-C13-C14-C15 |
| 25 | a | 409 | PL9 | C12-C13-C14-C16 |
| 25 | a | 409 | PL9 | C17-C18-C19-C21 |
| 25 | a | 409 | PL9 | C19-C21-C22-C23 |
| 25 | a | 409 | PL9 | C24-C26-C27-C28 |
| 25 | a | 409 | PL9 | C27-C28-C29-C30 |
| 25 | a | 409 | PL9 | C32-C33-C34-C35 |
| 25 | a | 409 | PL9 | C37-C38-C39-C40 |
| 25 | a | 409 | PL9 | C42-C43-C44-C45 |
| 25 | a | 409 | PL9 | C42-C43-C44-C46 |
| 25 | d | 407 | PL9 | C27-C28-C29-C31 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 25 | d | 407 | PL9 | C32-C33-C34-C36 |
| 25 | d | 407 | PL9 | C37-C38-C39-C41 |
| 25 | d | 407 | PL9 | C38-C39-C41-C42 |
| 25 | d | 407 | PL9 | C42-C43-C44-C46 |
| 25 | d | 407 | PL9 | C47-C48-C49-C50 |
| 26 | A | 409 | LMG | O9-C10-O7-C8 |
| 26 | a | 414 | LMG | C8-C7-O1-C1 |
| 26 | b | 622 | LMG | C11-C10-O7-C8 |
| 26 | c | 521 | LMG | O6-C1-O1-C7 |
| 27 | A | 412 | SQD | C46-C45-O47-C7 |
| 27 | B | 621 | SQD | C2-C1-O6-C44 |
| 27 | B | 621 | SQD | O5-C1-O6-C44 |
| 27 | B | 621 | SQD | O6-C44-C45-O47 |
| 27 | B | 621 | SQD | O49-C7-O47-C45 |
| 27 | B | 621 | SQD | C8-C7-O47-C45 |
| 27 | D | 409 | SQD | C45-C44-O6-C1 |
| 27 | L | 101 | SQD | O49-C7-O47-C45 |
| 27 | f | 102 | SQD | C2-C1-O6-C44 |
| 27 | f | 102 | SQD | O5-C1-O6-C44 |
| 27 | t | 102 | SQD | O49-C7-O47-C45 |
| 27 | t | 102 | SQD | C8-C7-O47-C45 |
| 28 | A | 411 | LHG | O1-C1-C2-C3 |
| 28 | A | 411 | LHG | C3-O3-P-O5 |
| 28 | A | 411 | LHG | C3-O3-P-O6 |
| 28 | D | 410 | LHG | O1-C1-C2-C3 |
| 28 | D | 410 | LHG | C3-O3-P-O5 |
| 28 | D | 410 | LHG | C4-O6-P-O4 |
| 28 | D | 411 | LHG | C3-O3-P-O5 |
| 28 | D | 411 | LHG | C3-O3-P-O6 |
| 28 | D | 413 | LHG | O1-C1-C2-O2 |
| 28 | D | 413 | LHG | O1-C1-C2-C3 |
| 28 | D | 413 | LHG | C1-C2-C3-O3 |
| 28 | L | 102 | LHG | C3-O3-P-O4 |
| 28 | L | 102 | LHG | C4-O6-P-O4 |
| 28 | a | 411 | LHG | O1-C1-C2-O2 |
| 28 | a | 411 | LHG | O1-C1-C2-C3 |
| 28 | a | 411 | LHG | C3-O3-P-O4 |
| 28 | a | 411 | LHG | O6-C4-C5-O7 |
| 28 | a | 411 | LHG | O10-C23-O8-C6 |
| 28 | a | 411 | LHG | C24-C23-O8-C6 |
| 28 | b | 623 | LHG | O1-C1-C2-C3 |
| 28 | b | 623 | LHG | C3-O3-P-O6 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 28 | b | 623 | LHG | C4-O6-P-O4 |
| 28 | d | 408 | LHG | O1-C1-C2-C3 |
| 28 | d | 408 | LHG | C3-O3-P-O4 |
| 28 | d | 408 | LHG | C4-O6-P-O4 |
| 29 | A | 413 | DGD | C2B-C1B-O2G-C2G |
| 29 | A | 413 | DGD | O1B-C1B-O2G-C2G |
| 29 | A | 413 | DGD | O2G-C2G-C3G-O3G |
| 30 | B | 616 | BCR | C35-C13-C14-C15 |
| 30 | B | 616 | BCR | C16-C17-C18-C36 |
| 30 | B | 616 | BCR | C20-C21-C22-C37 |
| 30 | B | 617 | BCR | C11-C10-C9-C34 |
| 30 | B | 617 | BCR | C10-C11-C12-C13 |
| 30 | B | 617 | BCR | C37-C22-C23-C24 |
| 30 | B | 618 | BCR | C7-C8-C9-C34 |
| 30 | B | 618 | BCR | C11-C10-C9-C8 |
| 30 | B | 618 | BCR | C35-C13-C14-C15 |
| 30 | C | 514 | BCR | C1-C6-C7-C8 |
| 30 | C | 514 | BCR | C5-C6-C7-C8 |
| 30 | C | 514 | BCR | C7-C8-C9-C10 |
| 30 | C | 515 | BCR | C7-C8-C9-C34 |
| 30 | C | 515 | BCR | C11-C12-C13-C14 |
| 30 | D | 406 | BCR | C7-C8-C9-C10 |
| 30 | D | 406 | BCR | C11-C10-C9-C34 |
| 30 | D | 406 | BCR | C37-C22-C23-C24 |
| 30 | D | 406 | BCR | C22-C23-C24-C25 |
| 30 | H | 102 | BCR | C11-C12-C13-C14 |
| 30 | H | 102 | BCR | C36-C18-C19-C20 |
| 30 | H | 102 | BCR | C37-C22-C23-C24 |
| 30 | I | 101 | BCR | C11-C10-C9-C34 |
| 30 | I | 101 | BCR | C11-C12-C13-C35 |
| 30 | I | 101 | BCR | C14-C15-C16-C17 |
| 30 | I | 101 | BCR | C16-C17-C18-C19 |
| 30 | I | 101 | BCR | C20-C21-C22-C37 |
| 30 | K | 101 | BCR | C6-C7-C8-C9 |
| 30 | K | 101 | BCR | C7-C8-C9-C34 |
| 30 | K | 101 | BCR | C11-C10-C9-C8 |
| 30 | K | 101 | BCR | C14-C15-C16-C17 |
| 30 | K | 101 | BCR | C16-C17-C18-C36 |
| 30 | K | 101 | BCR | C36-C18-C19-C20 |
| 30 | K | 102 | BCR | C1-C6-C7-C8 |
| 30 | K | 102 | BCR | C5-C6-C7-C8 |
| 30 | K | 102 | BCR | C11-C10-C9-C34 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | K | 102 | BCR | C11-C12-C13-C14 |
| 30 | K | 102 | BCR | C11-C12-C13-C35 |
| 30 | K | 102 | BCR | C16-C17-C18-C36 |
| 30 | K | 102 | BCR | C21-C22-C23-C24 |
| 30 | K | 102 | BCR | C37-C22-C23-C24 |
| 30 | T | 101 | BCR | C7-C8-C9-C10 |
| 30 | T | 101 | BCR | C7-C8-C9-C34 |
| 30 | T | 101 | BCR | C9-C10-C11-C12 |
| 30 | T | 101 | BCR | C11-C12-C13-C14 |
| 30 | a | 406 | BCR | C37-C22-C23-C24 |
| 30 | b | 617 | BCR | C7-C8-C9-C34 |
| 30 | b | 617 | BCR | C11-C10-C9-C8 |
| 30 | b | 617 | BCR | C11-C12-C13-C35 |
| 30 | b | 617 | BCR | C12-C13-C14-C15 |
| 30 | b | 617 | BCR | C35-C13-C14-C15 |
| 30 | b | 617 | BCR | C20-C21-C22-C37 |
| 30 | b | 617 | BCR | C21-C22-C23-C24 |
| 30 | b | 619 | BCR | C11-C12-C13-C35 |
| 30 | c | 514 | BCR | C11-C12-C13-C35 |
| 30 | c | 514 | BCR | C12-C13-C14-C15 |
| 30 | c | 514 | BCR | C16-C17-C18-C36 |
| 30 | d | 406 | BCR | C35-C13-C14-C15 |
| 30 | d | 406 | BCR | C37-C22-C23-C24 |
| 30 | d | 406 | BCR | C22-C23-C24-C25 |
| 30 | k | 101 | BCR | C6-C7-C8-C9 |
| 30 | k | 101 | BCR | C7-C8-C9-C10 |
| 30 | k | 101 | BCR | C35-C13-C14-C15 |
| 30 | k | 101 | BCR | C18-C19-C20-C21 |
| 30 | k | 101 | BCR | C20-C21-C22-C37 |
| 30 | k | 102 | BCR | C7-C8-C9-C10 |
| 30 | k | 102 | BCR | C7-C8-C9-C34 |
| 30 | k | 102 | BCR | C11-C12-C13-C35 |
| 30 | k | 102 | BCR | C17-C18-C19-C20 |
| 30 | k | 102 | BCR | C21-C22-C23-C24 |
| 30 | k | 102 | BCR | C37-C22-C23-C24 |
| 30 | k | 102 | BCR | C23-C24-C25-C30 |
| 30 | k | 103 | BCR | C37-C22-C23-C24 |
| 30 | t | 101 | BCR | C11-C10-C9-C34 |
| 30 | t | 101 | BCR | C35-C13-C14-C15 |
| 30 | t | 101 | BCR | C16-C17-C18-C19 |
| 30 | t | 101 | BCR | C16-C17-C18-C36 |
| 30 | x | 101 | BCR | C23-C24-C25-C30 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | b | 614 | CLA | O1D-CGD-O2D-CED |
| 26 | c | 518 | LMG | C11-C10-O7-C8 |
| 22 | C | 509 | CLA | O1D-CGD-O2D-CED |
| 22 | b | 613 | CLA | O1D-CGD-O2D-CED |
| 22 | C | 509 | CLA | CBD-CGD-O2D-CED |
| 22 | H | 101 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 613 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 510 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 513 | CLA | CBD-CGD-O2D-CED |
| 26 | c | 520 | LMG | O10-C28-O8-C9 |
| 26 | c | 521 | LMG | O10-C28-O8-C9 |
| 22 | c | 508 | CLA | O1D-CGD-O2D-CED |
| 22 | b | 601 | CLA | O1D-CGD-O2D-CED |
| 22 | c | 506 | CLA | O1D-CGD-O2D-CED |
| 25 | D | 407 | PL9 | C47-C48-C49-C50 |
| 25 | a | 409 | PL9 | C47-C48-C49-C50 |
| 25 | a | 409 | PL9 | C47-C48-C49-C51 |
| 25 | d | 407 | PL9 | C47-C48-C49-C51 |
| 22 | B | 615 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 607 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 512 | CLA | CBD-CGD-O2D-CED |
| 22 | B | 603 | CLA | O1A-CGA-O2A-C1 |
| 22 | H | 101 | CLA | O1A-CGA-O2A-C1 |
| 27 | L | 101 | SQD | O10-C23-O48-C46 |
| 26 | c | 518 | LMG | O9-C10-O7-C8 |
| 22 | C | 501 | CLA | O1D-CGD-O2D-CED |
| 22 | H | 101 | CLA | O1D-CGD-O2D-CED |
| 22 | B | 613 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 603 | CLA | CBD-CGD-O2D-CED |
| 26 | D | 412 | LMG | O9-C10-O7-C8 |
| 26 | Y | 101 | LMG | O9-C10-O7-C8 |
| 26 | b | 622 | LMG | O9-C10-O7-C8 |
| 27 | f | 102 | SQD | O49-C7-O47-C45 |
| 26 | M | 101 | LMG | O10-C28-O8-C9 |
| 22 | B | 603 | CLA | C3-C5-C6-C7 |
| 22 | B | 604 | CLA | C3-C5-C6-C7 |
| 22 | b | 601 | CLA | C3-C5-C6-C7 |
| 22 | c | 510 | CLA | C3-C5-C6-C7 |
| 26 | c | 521 | LMG | C29-C28-O8-C9 |
| 27 | L | 101 | SQD | C24-C23-O48-C46 |
| 27 | f | 102 | SQD | C24-C23-O48-C46 |
| 26 | A | 409 | LMG | C11-C10-O7-C8 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | D | 412 | LMG | C11-C10-O7-C8 |
| 26 | Y | 101 | LMG | C11-C10-O7-C8 |
| 26 | c | 520 | LMG | C11-C10-O7-C8 |
| 27 | L | 101 | SQD | C8-C7-O47-C45 |
| 22 | c | 510 | CLA | O1D-CGD-O2D-CED |
| 22 | c | 513 | CLA | O1D-CGD-O2D-CED |
| 22 | B | 611 | CLA | CBD-CGD-O2D-CED |
| 25 | A | 408 | PL9 | C43-C44-C46-C47 |
| 22 | b | 605 | CLA | CBD-CGD-O2D-CED |
| 22 | B | 605 | CLA | C2A-CAA-CBA-CGA |
| 22 | c | 513 | CLA | C2A-CAA-CBA-CGA |
| 22 | d | 405 | CLA | C3-C5-C6-C7 |
| 22 | B | 603 | CLA | CBA-CGA-O2A-C1 |
| 22 | H | 101 | CLA | CBA-CGA-O2A-C1 |
| 26 | a | 414 | LMG | C29-C28-O8-C9 |
| 26 | c | 520 | LMG | C29-C28-O8-C9 |
| 25 | a | 409 | PL9 | C17-C18-C19-C20 |
| 29 | h | 101 | DGD | O6E-C5E-C6E-O5E |
| 26 | c | 520 | LMG | O9-C10-O7-C8 |
| 25 | A | 408 | PL9 | C22-C23-C24-C26 |
| 25 | A | 408 | PL9 | C37-C38-C39-C41 |
| 25 | D | 407 | PL9 | C32-C33-C34-C36 |
| 25 | a | 409 | PL9 | C37-C38-C39-C41 |
| 22 | C | 502 | CLA | CBD-CGD-O2D-CED |
| 28 | D | 413 | LHG | O2-C2-C3-O3 |
| 22 | b | 609 | CLA | C3-C5-C6-C7 |
| 22 | b | 614 | CLA | C3-C5-C6-C7 |
| 26 | M | 101 | LMG | C29-C28-O8-C9 |
| 26 | A | 409 | LMG | C4-C5-C6-O5 |
| 22 | b | 609 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 501 | CLA | CBD-CGD-O2D-CED |
| 26 | A | 409 | LMG | O6-C5-C6-O5 |
| 29 | h | 101 | DGD | C4E-C5E-C6E-O5E |
| 31 | a | 413 | STE | C5-C6-C7-C8 |
| 26 | a | 414 | LMG | O10-C28-O8-C9 |
| 27 | f | 102 | SQD | O10-C23-O48-C46 |
| 29 | c | 517 | DGD | O1A-C1A-O1G-C1G |
| 31 | b | 621 | STE | C14-C15-C16-C17 |
| 22 | C | 504 | CLA | C4-C3-C5-C6 |
| 22 | C | 504 | CLA | C2-C3-C5-C6 |
| 25 | a | 409 | PL9 | C28-C29-C31-C32 |
| 22 | b | 606 | CLA | C2A-CAA-CBA-CGA |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 31 | B | 624 | STE | C11-C12-C13-C14 |
| 27 | D | 409 | SQD | O10-C23-O48-C46 |
| 25 | A | 408 | PL9 | C29-C31-C32-C33 |
| 25 | D | 407 | PL9 | C34-C36-C37-C38 |
| 25 | D | 407 | PL9 | C44-C46-C47-C48 |
| 25 | a | 409 | PL9 | C14-C16-C17-C18 |
| 25 | d | 407 | PL9 | C44-C46-C47-C48 |
| 26 | Y | 101 | LMG | O6-C5-C6-O5 |
| 22 | B | 615 | CLA | O1D-CGD-O2D-CED |
| 25 | A | 408 | PL9 | C47-C48-C49-C50 |
| 25 | A | 408 | PL9 | C7-C8-C9-C10 |
| 22 | C | 510 | CLA | CBD-CGD-O2D-CED |
| 26 | d | 410 | LMG | C10-C11-C12-C13 |
| 28 | a | 411 | LHG | C1-C2-C3-O3 |
| 25 | a | 409 | PL9 | C22-C23-C24-C26 |
| 27 | B | 621 | SQD | C24-C23-O48-C46 |
| 27 | D | 409 | SQD | C24-C23-O48-C46 |
| 22 | c | 507 | CLA | C5-C6-C7-C8 |
| 26 | B | 620 | LMG | C28-C29-C30-C31 |
| 22 | c | 510 | CLA | C5-C6-C7-C8 |
| 22 | c | 512 | CLA | C13-C15-C16-C17 |
| 28 | d | 409 | LHG | C24-C25-C26-C27 |
| 22 | B | 610 | CLA | C13-C15-C16-C17 |
| 22 | C | 506 | CLA | C15-C16-C17-C18 |
| 28 | D | 411 | LHG | O2-C2-C3-O3 |
| 28 | a | 411 | LHG | O2-C2-C3-O3 |
| 31 | c | 519 | STE | C2-C3-C4-C5 |
| 25 | a | 409 | PL9 | C30-C29-C31-C32 |
| 22 | B | 606 | CLA | C14-C13-C15-C16 |
| 22 | B | 613 | CLA | C11-C12-C13-C14 |
| 22 | B | 613 | CLA | C14-C13-C15-C16 |
| 22 | C | 503 | CLA | C11-C10-C8-C9 |
| 22 | C | 509 | CLA | C11-C10-C8-C9 |
| 22 | D | 405 | CLA | C11-C12-C13-C14 |
| 22 | H | 101 | CLA | C6-C7-C8-C9 |
| 22 | b | 601 | CLA | C11-C10-C8-C9 |
| 22 | b | 605 | CLA | C11-C10-C8-C9 |
| 22 | b | 607 | CLA | C11-C10-C8-C9 |
| 22 | b | 613 | CLA | C11-C12-C13-C14 |
| 22 | b | 614 | CLA | C6-C7-C8-C9 |
| 22 | b | 616 | CLA | C11-C10-C8-C9 |
| 22 | c | 503 | CLA | C11-C12-C13-C14 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | c | 509 | CLA | C6-C7-C8-C9 |
| 22 | d | 405 | CLA | C11-C12-C13-C14 |
| 23 | A | 404 | PHO | C14-C13-C15-C16 |
| 22 | b | 607 | CLA | O1D-CGD-O2D-CED |
| 22 | B | 606 | CLA | CBD-CGD-O2D-CED |
| 22 | c | 510 | CLA | C10-C11-C12-C13 |
| 30 | B | 618 | BCR | C37-C22-C23-C24 |
| 30 | C | 514 | BCR | C7-C8-C9-C34 |
| 30 | C | 515 | BCR | C11-C12-C13-C35 |
| 30 | H | 102 | BCR | C7-C8-C9-C34 |
| 30 | T | 101 | BCR | C11-C12-C13-C35 |
| 30 | T | 101 | BCR | C37-C22-C23-C24 |
| 30 | k | 101 | BCR | C7-C8-C9-C34 |
| 30 | x | 101 | BCR | C36-C18-C19-C20 |
| 29 | c | 515 | DGD | C1B-C2B-C3B-C4B |
| 22 | B | 602 | CLA | C8-C10-C11-C12 |
| 22 | C | 502 | CLA | C15-C16-C17-C18 |
| 22 | c | 505 | CLA | C15-C16-C17-C18 |
| 22 | b | 602 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 610 | CLA | CBD-CGD-O2D-CED |
| 29 | C | 516 | DGD | O6E-C5E-C6E-O5E |
| 22 | C | 512 | CLA | C3-C5-C6-C7 |
| 22 | B | 612 | CLA | C8-C10-C11-C12 |
| 22 | C | 510 | CLA | C13-C15-C16-C17 |
| 22 | c | 511 | CLA | C15-C16-C17-C18 |
| 26 | D | 408 | LMG | C10-C11-C12-C13 |
| 26 | M | 101 | LMG | C10-C11-C12-C13 |
| 26 | c | 518 | LMG | C28-C29-C30-C31 |
| 31 | b | 624 | STE | C1-C2-C3-C4 |
| 31 | x | 102 | STE | C1-C2-C3-C4 |
| 22 | C | 506 | CLA | CBD-CGD-O2D-CED |
| 22 | B | 603 | CLA | C5-C6-C7-C8 |
| 22 | C | 503 | CLA | C5-C6-C7-C8 |
| 22 | a | 405 | CLA | C5-C6-C7-C8 |
| 26 | M | 101 | LMG | C28-C29-C30-C31 |
| 26 | Y | 101 | LMG | C28-C29-C30-C31 |
| 26 | a | 414 | LMG | C10-C11-C12-C13 |
| 27 | A | 410 | SQD | C7-C8-C9-C10 |
| 28 | d | 409 | LHG | C23-C24-C25-C26 |
| 28 | l | 101 | LHG | C23-C24-C25-C26 |
| 29 | C | 517 | DGD | C1B-C2B-C3B-C4B |
| 31 | B | 623 | STE | C1-C2-C3-C4 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 31 | L | 103 | STE | C1-C2-C3-C4 |
| 22 | B | 604 | CLA | C8-C10-C11-C12 |
| 22 | B | 606 | CLA | C8-C10-C11-C12 |
| 22 | B | 607 | CLA | C15-C16-C17-C18 |
| 22 | B | 608 | CLA | C15-C16-C17-C18 |
| 22 | B | 613 | CLA | C8-C10-C11-C12 |
| 22 | C | 505 | CLA | C10-C11-C12-C13 |
| 22 | C | 508 | CLA | C15-C16-C17-C18 |
| 22 | b | 605 | CLA | C5-C6-C7-C8 |
| 22 | b | 615 | CLA | C8-C10-C11-C12 |
| 28 | d | 409 | LHG | C30-C31-C32-C33 |
| 22 | B | 613 | CLA | O1D-CGD-O2D-CED |
| 22 | B | 604 | CLA | C15-C16-C17-C18 |
| 22 | C | 506 | CLA | C8-C10-C11-C12 |
| 22 | C | 512 | CLA | C8-C10-C11-C12 |
| 31 | B | 625 | STE | C1-C2-C3-C4 |
| 31 | b | 626 | STE | C4-C5-C6-C7 |
| 22 | C | 505 | CLA | C5-C6-C7-C8 |
| 22 | B | 605 | CLA | C12-C13-C15-C16 |
| 22 | C | 510 | CLA | C6-C7-C8-C10 |
| 22 | C | 510 | CLA | C12-C13-C15-C16 |
| 22 | b | 602 | CLA | C12-C13-C15-C16 |
| 22 | b | 608 | CLA | C11-C12-C13-C15 |
| 22 | b | 613 | CLA | C11-C10-C8-C7 |
| 22 | d | 405 | CLA | C6-C7-C8-C10 |
| 26 | m | 101 | LMG | O10-C28-O8-C9 |
| 22 | d | 405 | CLA | CBD-CGD-O2D-CED |
| 22 | b | 601 | CLA | C2A-CAA-CBA-CGA |
| 22 | c | 512 | CLA | C2A-CAA-CBA-CGA |
| 22 | c | 512 | CLA | O1D-CGD-O2D-CED |
| 22 | C | 509 | CLA | C10-C11-C12-C13 |
| 22 | D | 405 | CLA | C10-C11-C12-C13 |
| 22 | b | 608 | CLA | C13-C15-C16-C17 |
| 22 | b | 615 | CLA | C5-C6-C7-C8 |
| 22 | c | 509 | CLA | C10-C11-C12-C13 |
| 26 | Y | 101 | LMG | C4-C5-C6-O5 |
| 30 | b | 617 | BCR | C6-C7-C8-C9 |
| 26 | Y | 101 | LMG | O6-C1-O1-C7 |
| 26 | b | 622 | LMG | O6-C1-O1-C7 |
| 29 | A | 413 | DGD | O6E-C1E-O5D-C6D |
| 25 | A | 408 | PL9 | C44-C46-C47-C48 |
| 30 | B | 617 | BCR | C18-C19-C20-C21 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | C | 515 | BCR | C18-C19-C20-C21 |
| 30 | T | 101 | BCR | C18-C19-C20-C21 |
| 30 | k | 102 | BCR | C10-C11-C12-C13 |
| 30 | k | 103 | BCR | C18-C19-C20-C21 |
| 30 | t | 101 | BCR | C10-C11-C12-C13 |
| 29 | A | 413 | DGD | O6D-C5D-C6D-O5D |
| 22 | b | 611 | CLA | C15-C16-C17-C18 |
| 29 | C | 518 | DGD | C8A-C9A-CAA-CBA |
| 26 | d | 410 | LMG | C28-C29-C30-C31 |
| 27 | B | 621 | SQD | C23-C24-C25-C26 |
| 22 | B | 606 | CLA | C5-C6-C7-C8 |
| 22 | C | 513 | CLA | C13-C15-C16-C17 |
| 22 | C | 513 | CLA | C15-C16-C17-C18 |
| 22 | D | 403 | CLA | C15-C16-C17-C18 |
| 22 | b | 606 | CLA | C10-C11-C12-C13 |
| 22 | b | 614 | CLA | C13-C15-C16-C17 |
| 29 | H | 103 | DGD | C4E-C5E-C6E-O5E |
| 22 | B | 603 | CLA | CBD-CGD-O2D-CED |
| 31 | B | 625 | STE | C5-C6-C7-C8 |
| 22 | B | 605 | CLA | C8-C10-C11-C12 |
| 22 | C | 509 | CLA | C13-C15-C16-C17 |
| 22 | C | 510 | CLA | C15-C16-C17-C18 |
| 22 | b | 603 | CLA | C10-C11-C12-C13 |
| 22 | b | 611 | CLA | C10-C11-C12-C13 |
| 22 | b | 614 | CLA | C8-C10-C11-C12 |
| 22 | c | 507 | CLA | C8-C10-C11-C12 |
| 28 | a | 411 | LHG | C3-O3-P-O6 |
| 28 | b | 623 | LHG | C4-O6-P-O3 |
| 28 | d | 408 | LHG | C3-O3-P-O6 |
| 22 | c | 512 | CLA | CBA-CGA-O2A-C1 |
| 27 | a | 410 | SQD | C24-C23-O48-C46 |
| 25 | D | 407 | PL9 | C32-C33-C34-C35 |
| 22 | b | 616 | CLA | C10-C11-C12-C13 |
| 22 | c | 511 | CLA | C13-C15-C16-C17 |
| 26 | D | 412 | LMG | C28-C29-C30-C31 |
| 25 | a | 409 | PL9 | C38-C39-C41-C42 |
| 22 | D | 404 | CLA | C13-C15-C16-C17 |
| 22 | c | 503 | CLA | C16-C17-C18-C20 |
| 29 | c | 517 | DGD | C2A-C1A-O1G-C1G |
| 22 | b | 613 | CLA | C13-C15-C16-C17 |
| 27 | B | 621 | SQD | C11-C10-C9-C8 |
| 26 | Y | 101 | LMG | C31-C32-C33-C34 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | b | 622 | LMG | C11-C12-C13-C14 |
| 28 | D | 410 | LHG | C29-C30-C31-C32 |
| 29 | A | 413 | DGD | C2B-C3B-C4B-C5B |
| 29 | C | 518 | DGD | CBA-CCA-CDA-CEA |
| 30 | B | 618 | BCR | C11-C10-C9-C34 |
| 30 | C | 514 | BCR | C16-C17-C18-C36 |
| 30 | C | 515 | BCR | C11-C10-C9-C34 |
| 30 | C | 515 | BCR | C20-C21-C22-C37 |
| 30 | D | 406 | BCR | C35-C13-C14-C15 |
| 30 | D | 406 | BCR | C20-C21-C22-C37 |
| 30 | I | 101 | BCR | C16-C17-C18-C36 |
| 30 | K | 101 | BCR | C20-C21-C22-C37 |
| 30 | T | 101 | BCR | C16-C17-C18-C36 |
| 30 | b | 619 | BCR | C35-C13-C14-C15 |
| 30 | d | 406 | BCR | C20-C21-C22-C37 |
| 30 | t | 101 | BCR | C20-C21-C22-C37 |
| 30 | x | 101 | BCR | C11-C10-C9-C34 |
| 22 | b | 602 | CLA | C3-C5-C6-C7 |
| 26 | D | 408 | LMG | C17-C18-C19-C20 |
| 26 | c | 520 | LMG | C15-C16-C17-C18 |
| 26 | c | 521 | LMG | C11-C12-C13-C14 |
| 26 | c | 521 | LMG | C34-C35-C36-C37 |
| 27 | a | 410 | SQD | C9-C10-C11-C12 |
| 27 | a | 410 | SQD | C10-C11-C12-C13 |
| 28 | A | 411 | LHG | C26-C27-C28-C29 |
| 28 | D | 410 | LHG | C28-C29-C30-C31 |
| 28 | D | 413 | LHG | C9-C10-C11-C12 |
| 28 | L | 102 | LHG | C30-C31-C32-C33 |
| 29 | A | 413 | DGD | CEA-CFA-CGA-CHA |
| 29 | c | 515 | DGD | C3B-C4B-C5B-C6B |
| 29 | c | 516 | DGD | CCB-CDB-CEB-CFB |
| 29 | h | 101 | DGD | C5B-C6B-C7B-C8B |
| 31 | I | 102 | STE | C10-C11-C12-C13 |
| 31 | R | 101 | STE | C2-C3-C4-C5 |
| 31 | b | 628 | STE | C11-C12-C13-C14 |
| 22 | B | 611 | CLA | O1D-CGD-O2D-CED |
| 22 | b | 605 | CLA | O1D-CGD-O2D-CED |
| 22 | B | 609 | CLA | C16-C17-C18-C20 |
| 22 | b | 601 | CLA | C16-C17-C18-C20 |
| 22 | b | 605 | CLA | C16-C17-C18-C19 |
| 22 | b | 613 | CLA | C16-C17-C18-C19 |
| 23 | D | 401 | PHO | C16-C17-C18-C19 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 27 | A | 410 | SQD | C25-C26-C27-C28 |
| 27 | f | 102 | SQD | C30-C31-C32-C33 |
| 28 | A | 411 | LHG | C32-C33-C34-C35 |
| 28 | b | 623 | LHG | C32-C33-C34-C35 |
| 29 | A | 413 | DGD | CBA-CCA-CDA-CEA |
| 31 | B | 622 | STE | C6-C7-C8-C9 |
| 31 | J | 101 | STE | C6-C7-C8-C9 |
| 31 | Z | 101 | STE | C13-C14-C15-C16 |
| 31 | a | 413 | STE | C7-C8-C9-C10 |
| 27 | L | 101 | SQD | C46-C45-O47-C7 |
| 27 | A | 412 | SQD | C24-C25-C26-C27 |
| 27 | B | 621 | SQD | C11-C12-C13-C14 |
| 27 | t | 102 | SQD | C15-C16-C17-C18 |
| 28 | D | 411 | LHG | C12-C13-C14-C15 |
| 28 | L | 102 | LHG | C31-C32-C33-C34 |
| 28 | d | 408 | LHG | C11-C12-C13-C14 |
| 29 | c | 516 | DGD | C8A-C9A-CAA-CBA |
| 31 | L | 103 | STE | C3-C4-C5-C6 |
| 31 | b | 620 | STE | C4-C5-C6-C7 |
| 26 | a | 414 | LMG | C12-C13-C14-C15 |
| 26 | c | 520 | LMG | C34-C35-C36-C37 |
| 26 | c | 521 | LMG | C30-C31-C32-C33 |
| 26 | m | 101 | LMG | C17-C18-C19-C20 |
| 27 | A | 410 | SQD | C14-C15-C16-C17 |
| 27 | D | 409 | SQD | C25-C26-C27-C28 |
| 28 | L | 102 | LHG | C24-C25-C26-C27 |
| 28 | d | 408 | LHG | C29-C30-C31-C32 |
| 29 | C | 518 | DGD | C4B-C5B-C6B-C7B |
| 29 | c | 517 | DGD | CCB-CDB-CEB-CFB |
| 31 | B | 624 | STE | C9-C10-C11-C12 |
| 31 | M | 104 | STE | C4-C5-C6-C7 |
| 31 | b | 621 | STE | C11-C12-C13-C14 |
| 31 | b | 628 | STE | C9-C10-C11-C12 |
| 31 | b | 629 | STE | C4-C5-C6-C7 |
| 22 | C | 510 | CLA | C10-C11-C12-C13 |
| 26 | c | 518 | LMG | C33-C34-C35-C36 |
| 27 | t | 102 | SQD | C11-C10-C9-C8 |
| 28 | A | 411 | LHG | C28-C29-C30-C31 |
| 28 | D | 410 | LHG | C15-C16-C17-C18 |
| 31 | B | 623 | STE | C10-C11-C12-C13 |
| 31 | b | 628 | STE | C13-C14-C15-C16 |
| 27 | A | 412 | SQD | C7-C8-C9-C10 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 27 | L | 101 | SQD | C7-C8-C9-C10 |
| 26 | Y | 101 | LMG | C2-C1-O1-C7 |
| 26 | b | 622 | LMG | C2-C1-O1-C7 |
| 26 | m | 101 | LMG | C2-C1-O1-C7 |
| 29 | A | 413 | DGD | C2E-C1E-O5D-C6D |
| 29 | C | 517 | DGD | C2E-C1E-O5D-C6D |
| 29 | c | 516 | DGD | C2E-C1E-O5D-C6D |
| 30 | B | 616 | BCR | C12-C13-C14-C15 |
| 30 | B | 616 | BCR | C16-C17-C18-C19 |
| 30 | B | 616 | BCR | C20-C21-C22-C23 |
| 30 | B | 617 | BCR | C11-C10-C9-C8 |
| 30 | C | 515 | BCR | C11-C10-C9-C8 |
| 30 | K | 101 | BCR | C16-C17-C18-C19 |
| 30 | K | 102 | BCR | C11-C10-C9-C8 |
| 30 | K | 102 | BCR | C16-C17-C18-C19 |
| 30 | T | 101 | BCR | C12-C13-C14-C15 |
| 30 | a | 406 | BCR | C20-C21-C22-C23 |
| 30 | k | 101 | BCR | C20-C21-C22-C23 |
| 30 | k | 103 | BCR | C16-C17-C18-C19 |
| 30 | k | 103 | BCR | C20-C21-C22-C23 |
| 30 | t | 101 | BCR | C11-C10-C9-C8 |
| 30 | t | 101 | BCR | C12-C13-C14-C15 |
| 30 | x | 101 | BCR | C11-C10-C9-C8 |
| 30 | x | 101 | BCR | C16-C17-C18-C19 |
| 26 | c | 521 | LMG | C17-C18-C19-C20 |
| 27 | B | 621 | SQD | C17-C18-C19-C20 |
| 27 | L | 101 | SQD | C12-C13-C14-C15 |
| 28 | D | 410 | LHG | C17-C18-C19-C20 |
| 29 | A | 413 | DGD | CCB-CDB-CEB-CFB |
| 29 | C | 517 | DGD | C6A-C7A-C8A-C9A |
| 31 | B | 622 | STE | C2-C3-C4-C5 |
| 31 | C | 519 | STE | C5-C6-C7-C8 |
| 31 | a | 413 | STE | C11-C10-C9-C8 |
| 31 | b | 620 | STE | C6-C7-C8-C9 |
| 31 | b | 621 | STE | C3-C4-C5-C6 |
| 26 | D | 412 | LMG | O10-C28-O8-C9 |
| 22 | B | 605 | CLA | C16-C17-C18-C20 |
| 22 | b | 603 | CLA | O1D-CGD-O2D-CED |
| 22 | d | 405 | CLA | O1D-CGD-O2D-CED |
| 22 | C | 506 | CLA | C4-C3-C5-C6 |
| 25 | d | 407 | PL9 | C15-C14-C16-C17 |
| 26 | c | 518 | LMG | C38-C39-C40-C41 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 28 | d | 408 | LHG | C33-C34-C35-C36 |
| 28 | l | 101 | LHG | C28-C29-C30-C31 |
| 29 | C | 517 | DGD | C3B-C4B-C5B-C6B |
| 29 | c | 515 | DGD | C4B-C5B-C6B-C7B |
| 31 | b | 624 | STE | C3-C4-C5-C6 |
| 31 | b | 629 | STE | C12-C13-C14-C15 |
| 31 | d | 411 | STE | C11-C12-C13-C14 |
| 31 | k | 104 | STE | C5-C6-C7-C8 |
| 31 | x | 102 | STE | C4-C5-C6-C7 |
| 31 | x | 102 | STE | C9-C10-C11-C12 |
| 22 | A | 403 | CLA | C14-C13-C15-C16 |
| 22 | B | 605 | CLA | C14-C13-C15-C16 |
| 22 | C | 505 | CLA | C14-C13-C15-C16 |
| 22 | C | 506 | CLA | C11-C12-C13-C14 |
| 22 | b | 608 | CLA | C11-C12-C13-C14 |
| 22 | c | 502 | CLA | C11-C12-C13-C14 |
| 26 | D | 408 | LMG | C30-C31-C32-C33 |
| 26 | a | 414 | LMG | C13-C14-C15-C16 |
| 26 | a | 414 | LMG | C39-C40-C41-C42 |
| 26 | c | 518 | LMG | C39-C40-C41-C42 |
| 26 | c | 520 | LMG | C30-C31-C32-C33 |
| 27 | D | 409 | SQD | C29-C30-C31-C32 |
| 27 | L | 101 | SQD | C24-C25-C26-C27 |
| 27 | t | 102 | SQD | C11-C12-C13-C14 |
| 28 | D | 411 | LHG | C11-C12-C13-C14 |
| 28 | D | 411 | LHG | C25-C26-C27-C28 |
| 28 | D | 411 | LHG | C32-C33-C34-C35 |
| 28 | d | 408 | LHG | C14-C15-C16-C17 |
| 29 | C | 518 | DGD | C6B-C7B-C8B-C9B |
| 31 | B | 623 | STE | C4-C5-C6-C7 |
| 31 | H | 104 | STE | C4-C5-C6-C7 |
| 31 | b | 624 | STE | C11-C10-C9-C8 |
| 31 | c | 519 | STE | C9-C10-C11-C12 |
| 31 | x | 102 | STE | C3-C4-C5-C6 |
| 22 | a | 405 | CLA | C10-C11-C12-C13 |
| 22 | b | 607 | CLA | C10-C11-C12-C13 |
| 22 | b | 611 | CLA | C8-C10-C11-C12 |
| 26 | M | 101 | LMG | C37-C38-C39-C40 |
| 26 | a | 414 | LMG | C22-C23-C24-C25 |
| 26 | a | 414 | LMG | C33-C34-C35-C36 |
| 27 | A | 410 | SQD | C30-C31-C32-C33 |
| 27 | B | 621 | SQD | C28-C29-C30-C31 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 27 | D | 409 | SQD | C30-C31-C32-C33 |
| 27 | L | 101 | SQD | C13-C14-C15-C16 |
| 29 | h | 101 | DGD | C2B-C3B-C4B-C5B |
| 28 | d | 409 | LHG | O1-C1-C2-C3 |
| 28 | a | 411 | LHG | O9-C7-O7-C5 |
| 22 | a | 403 | CLA | C13-C15-C16-C17 |
| 22 | c | 506 | CLA | C10-C11-C12-C13 |
| 26 | a | 414 | LMG | C11-C10-O7-C8 |
| 26 | c | 521 | LMG | C32-C33-C34-C35 |
| 27 | f | 102 | SQD | C27-C28-C29-C30 |
| 28 | D | 410 | LHG | C11-C12-C13-C14 |
| 28 | D | 413 | LHG | C15-C16-C17-C18 |
| 28 | D | 413 | LHG | C18-C19-C20-C21 |
| 28 | b | 623 | LHG | C16-C17-C18-C19 |
| 29 | A | 413 | DGD | C2A-C3A-C4A-C5A |
| 29 | A | 413 | DGD | C5B-C6B-C7B-C8B |
| 29 | c | 516 | DGD | C2A-C3A-C4A-C5A |
| 29 | c | 517 | DGD | C4B-C5B-C6B-C7B |
| 28 | d | 408 | LHG | C7-C8-C9-C10 |
| 22 | B | 606 | CLA | O1D-CGD-O2D-CED |
| 22 | C | 502 | CLA | O1D-CGD-O2D-CED |
| 26 | b | 622 | LMG | C19-C20-C21-C22 |
| 26 | c | 520 | LMG | C35-C36-C37-C38 |
| 26 | d | 410 | LMG | C14-C15-C16-C17 |
| 27 | A | 410 | SQD | C12-C13-C14-C15 |
| 27 | D | 409 | SQD | C26-C27-C28-C29 |
| 28 | A | 411 | LHG | C15-C16-C17-C18 |
| 28 | D | 413 | LHG | C24-C25-C26-C27 |
| 28 | l | 101 | LHG | C9-C10-C11-C12 |
| 28 | l | 101 | LHG | C11-C12-C13-C14 |
| 28 | l | 101 | LHG | C15-C16-C17-C18 |
| 29 | C | 517 | DGD | C8B-C9B-CAB-CBB |
| 29 | H | 103 | DGD | C7A-C8A-C9A-CAA |
| 29 | c | 515 | DGD | C4A-C5A-C6A-C7A |
| 31 | M | 104 | STE | C13-C14-C15-C16 |
| 31 | X | 101 | STE | C10-C11-C12-C13 |
| 31 | b | 624 | STE | C6-C7-C8-C9 |
| 29 | H | 103 | DGD | O6E-C5E-C6E-O5E |
| 22 | B | 612 | CLA | C16-C17-C18-C20 |
| 22 | D | 404 | CLA | C16-C17-C18-C20 |
| 22 | b | 604 | CLA | C16-C17-C18-C19 |
| 22 | b | 614 | CLA | C16-C17-C18-C19 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | b | 614 | CLA | C16-C17-C18-C20 |
| 22 | c | 510 | CLA | C16-C17-C18-C19 |
| 26 | m | 101 | LMG | O6-C1-O1-C7 |
| 29 | c | 516 | DGD | O6E-C1E-O5D-C6D |
| 22 | b | 608 | CLA | C8-C10-C11-C12 |
| 25 | d | 407 | PL9 | C34-C36-C37-C38 |
| 26 | A | 409 | LMG | C11-C12-C13-C14 |
| 26 | d | 410 | LMG | C34-C35-C36-C37 |
| 27 | a | 410 | SQD | C12-C13-C14-C15 |
| 27 | a | 410 | SQD | C26-C27-C28-C29 |
| 28 | L | 102 | LHG | C12-C13-C14-C15 |
| 31 | B | 623 | STE | C5-C6-C7-C8 |
| 31 | M | 102 | STE | C2-C3-C4-C5 |
| 31 | j | 101 | STE | C4-C5-C6-C7 |
| 29 | A | 413 | DGD | C4D-C5D-C6D-O5D |
| 22 | b | 609 | CLA | O1D-CGD-O2D-CED |
| 26 | a | 414 | LMG | C35-C36-C37-C38 |
| 27 | A | 412 | SQD | C12-C13-C14-C15 |
| 29 | C | 516 | DGD | C6B-C7B-C8B-C9B |
| 29 | H | 103 | DGD | C4B-C5B-C6B-C7B |
| 29 | c | 516 | DGD | CBA-CCA-CDA-CEA |
| 31 | b | 628 | STE | C6-C7-C8-C9 |
| 22 | c | 512 | CLA | O1A-CGA-O2A-C1 |
| 26 | Y | 101 | LMG | O10-C28-O8-C9 |
| 27 | t | 102 | SQD | C12-C13-C14-C15 |
| 28 | D | 411 | LHG | C27-C28-C29-C30 |
| 29 | A | 413 | DGD | CBB-CCB-CDB-CEB |
| 29 | h | 101 | DGD | C9A-CAA-CBA-CCA |
| 31 | J | 101 | STE | C2-C3-C4-C5 |
| 31 | b | 626 | STE | C12-C13-C14-C15 |
| 22 | b | 614 | CLA | CBA-CGA-O2A-C1 |
| 28 | D | 411 | LHG | C24-C25-C26-C27 |
| 29 | c | 516 | DGD | C7B-C8B-C9B-CAB |
| 31 | Z | 101 | STE | C11-C12-C13-C14 |
| 22 | C | 512 | CLA | C3A-C2A-CAA-CBA |
| 22 | b | 601 | CLA | C3A-C2A-CAA-CBA |
| 22 | c | 512 | CLA | C3A-C2A-CAA-CBA |
| 22 | A | 403 | CLA | C15-C16-C17-C18 |
| 22 | b | 607 | CLA | C8-C10-C11-C12 |
| 26 | D | 408 | LMG | C36-C37-C38-C39 |
| 26 | Y | 101 | LMG | C37-C38-C39-C40 |
| 26 | a | 414 | LMG | C38-C39-C40-C41 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | b | 622 | LMG | C30-C31-C32-C33 |
| 26 | c | 518 | LMG | C31-C32-C33-C34 |
| 26 | m | 101 | LMG | C39-C40-C41-C42 |
| 27 | f | 102 | SQD | C28-C29-C30-C31 |
| 27 | t | 102 | SQD | C30-C31-C32-C33 |
| 29 | C | 517 | DGD | C9B-CAB-CBB-CCB |
| 29 | c | 515 | DGD | CBA-CCA-CDA-CEA |
| 29 | c | 516 | DGD | C4A-C5A-C6A-C7A |
| 22 | H | 101 | CLA | C16-C17-C18-C19 |
| 22 | H | 101 | CLA | C16-C17-C18-C20 |
| 22 | b | 604 | CLA | C16-C17-C18-C20 |
| 22 | b | 605 | CLA | C16-C17-C18-C20 |
| 26 | A | 409 | LMG | C35-C36-C37-C38 |
| 26 | A | 409 | LMG | C36-C37-C38-C39 |
| 26 | D | 412 | LMG | C14-C15-C16-C17 |
| 27 | A | 412 | SQD | C10-C11-C12-C13 |
| 28 | a | 411 | LHG | C27-C28-C29-C30 |
| 31 | M | 104 | STE | C2-C3-C4-C5 |
| 31 | b | 625 | STE | C9-C10-C11-C12 |
| 31 | b | 628 | STE | C10-C11-C12-C13 |
| 26 | a | 414 | LMG | O1-C7-C8-C9 |
| 28 | D | 411 | LHG | C16-C17-C18-C19 |
| 28 | l | 101 | LHG | C24-C25-C26-C27 |
| 29 | C | 517 | DGD | C6B-C7B-C8B-C9B |
| 29 | H | 103 | DGD | C6B-C7B-C8B-C9B |
| 29 | c | 517 | DGD | C6B-C7B-C8B-C9B |
| 26 | c | 520 | LMG | O6-C5-C6-O5 |
| 28 | d | 409 | LHG | C29-C30-C31-C32 |
| 29 | H | 103 | DGD | CBB-CCB-CDB-CEB |
| 31 | B | 623 | STE | C11-C10-C9-C8 |
| 22 | c | 507 | CLA | C13-C15-C16-C17 |
| 22 | B | 610 | CLA | C4-C3-C5-C6 |
| 22 | C | 506 | CLA | C2-C3-C5-C6 |
| 25 | D | 407 | PL9 | C13-C14-C16-C17 |
| 27 | f | 102 | SQD | C8-C7-O47-C45 |
| 26 | M | 101 | LMG | C12-C13-C14-C15 |
| 28 | A | 411 | LHG | C13-C14-C15-C16 |
| 31 | B | 619 | STE | C11-C12-C13-C14 |
| 31 | B | 623 | STE | C3-C4-C5-C6 |
| 31 | x | 102 | STE | C13-C14-C15-C16 |
| 28 | D | 410 | LHG | O1-C1-C2-O2 |
| 28 | d | 408 | LHG | O1-C1-C2-O2 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | a | 414 | LMG | C30-C31-C32-C33 |
| 26 | c | 521 | LMG | C37-C38-C39-C40 |
| 28 | A | 411 | LHG | C25-C26-C27-C28 |
| 28 | L | 102 | LHG | C28-C29-C30-C31 |
| 28 | d | 408 | LHG | C32-C33-C34-C35 |
| 29 | C | 518 | DGD | CCB-CDB-CEB-CFB |
| 23 | D | 401 | PHO | C16-C17-C18-C20 |
| 26 | a | 414 | LMG | C17-C18-C19-C20 |
| 26 | b | 622 | LMG | C12-C13-C14-C15 |
| 26 | c | 521 | LMG | C31-C32-C33-C34 |
| 28 | a | 411 | LHG | C17-C18-C19-C20 |
| 22 | a | 403 | CLA | C8-C10-C11-C12 |
| 22 | c | 508 | CLA | C10-C11-C12-C13 |
| 29 | C | 517 | DGD | C5A-C6A-C7A-C8A |
| 29 | c | 516 | DGD | C6A-C7A-C8A-C9A |
| 26 | A | 409 | LMG | C18-C19-C20-C21 |
| 26 | M | 101 | LMG | C30-C31-C32-C33 |
| 28 | L | 102 | LHG | C33-C34-C35-C36 |
| 29 | A | 413 | DGD | C4B-C5B-C6B-C7B |
| 29 | C | 516 | DGD | CCB-CDB-CEB-CFB |
| 26 | A | 409 | LMG | C13-C14-C15-C16 |
| 27 | a | 410 | SQD | C24-C25-C26-C27 |
| 29 | C | 516 | DGD | C3B-C4B-C5B-C6B |
| 22 | c | 506 | CLA | C2-C1-O2A-CGA |
| 26 | D | 412 | LMG | C13-C14-C15-C16 |
| 26 | D | 412 | LMG | C31-C32-C33-C34 |
| 26 | c | 520 | LMG | C16-C17-C18-C19 |
| 27 | f | 102 | SQD | C31-C32-C33-C34 |
| 28 | l | 101 | LHG | C32-C33-C34-C35 |
| 29 | A | 413 | DGD | CAA-CBA-CCA-CDA |
| 29 | A | 413 | DGD | C6B-C7B-C8B-C9B |
| 31 | B | 624 | STE | C7-C8-C9-C10 |
| 31 | b | 625 | STE | C5-C6-C7-C8 |
| 31 | d | 411 | STE | C5-C6-C7-C8 |
| 31 | b | 629 | STE | C9-C10-C11-C12 |
| 22 | D | 404 | CLA | C16-C17-C18-C19 |
| 27 | A | 410 | SQD | C23-C24-C25-C26 |
| 30 | B | 617 | BCR | C23-C24-C25-C26 |
| 30 | B | 617 | BCR | C23-C24-C25-C30 |
| 30 | D | 406 | BCR | C23-C24-C25-C26 |
| 30 | D | 406 | BCR | C23-C24-C25-C30 |
| 30 | H | 102 | BCR | C23-C24-C25-C26 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | H | 102 | BCR | C23-C24-C25-C30 |
| 30 | T | 101 | BCR | C1-C6-C7-C8 |
| 30 | k | 102 | BCR | C1-C6-C7-C8 |
| 30 | k | 102 | BCR | C5-C6-C7-C8 |
| 30 | k | 102 | BCR | C23-C24-C25-C26 |
| 30 | x | 101 | BCR | C23-C24-C25-C26 |
| 29 | c | 517 | DGD | C3A-C4A-C5A-C6A |
| 31 | H | 104 | STE | C2-C3-C4-C5 |
| 27 | A | 410 | SQD | C24-C23-O48-C46 |
| 22 | b | 610 | CLA | C13-C15-C16-C17 |
| 22 | c | 505 | CLA | C5-C6-C7-C8 |
| 26 | c | 521 | LMG | C11-C10-O7-C8 |
| 27 | f | 102 | SQD | C25-C26-C27-C28 |
| 28 | D | 413 | LHG | C17-C18-C19-C20 |
| 28 | b | 623 | LHG | C15-C16-C17-C18 |
| 29 | A | 413 | DGD | CCA-CDA-CEA-CFA |
| 29 | C | 518 | DGD | C3B-C4B-C5B-C6B |
| 31 | H | 104 | STE | C13-C14-C15-C16 |
| 31 | b | 629 | STE | C2-C3-C4-C5 |
| 27 | A | 412 | SQD | C34-C35-C36-C37 |
| 22 | C | 511 | CLA | C8-C10-C11-C12 |
| 26 | c | 521 | LMG | C13-C14-C15-C16 |
| 28 | D | 410 | LHG | C30-C31-C32-C33 |
| 29 | C | 518 | DGD | C5A-C6A-C7A-C8A |
| 31 | J | 101 | STE | C5-C6-C7-C8 |
| 22 | A | 403 | CLA | C12-C13-C15-C16 |
| 22 | B | 610 | CLA | C2-C3-C5-C6 |
| 22 | C | 509 | CLA | C11-C10-C8-C7 |
| 22 | C | 510 | CLA | C2-C3-C5-C6 |
| 22 | H | 101 | CLA | C6-C7-C8-C10 |
| 22 | b | 607 | CLA | C11-C10-C8-C7 |
| 22 | b | 611 | CLA | C2-C3-C5-C6 |
| 22 | b | 613 | CLA | C11-C12-C13-C15 |
| 22 | b | 614 | CLA | C6-C7-C8-C10 |
| 22 | b | 615 | CLA | C11-C12-C13-C15 |
| 22 | b | 615 | CLA | C12-C13-C15-C16 |
| 22 | c | 502 | CLA | C11-C12-C13-C15 |
| 22 | c | 505 | CLA | C2-C3-C5-C6 |
| 25 | D | 407 | PL9 | C28-C29-C31-C32 |
| 25 | d | 407 | PL9 | C13-C14-C16-C17 |
| 25 | d | 407 | PL9 | C28-C29-C31-C32 |
| 25 | d | 407 | PL9 | C43-C44-C46-C47 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 28 | a | 411 | LHG | C11-C10-C9-C8 |
| 28 | l | 101 | LHG | C30-C31-C32-C33 |
| 31 | a | 413 | STE | C11-C12-C13-C14 |
| 22 | c | 504 | CLA | C10-C11-C12-C13 |
| 23 | A | 404 | PHO | C15-C16-C17-C18 |
| 30 | K | 101 | BCR | C15-C16-C17-C18 |
| 30 | t | 101 | BCR | C15-C16-C17-C18 |
| 22 | b | 601 | CLA | C16-C17-C18-C19 |
| 22 | c | 503 | CLA | C16-C17-C18-C19 |
| 22 | c | 510 | CLA | C16-C17-C18-C20 |
| 26 | a | 414 | LMG | O9-C10-O7-C8 |
| 28 | D | 410 | LHG | O9-C7-O7-C5 |
| 26 | b | 622 | LMG | C10-C11-C12-C13 |
| 31 | M | 102 | STE | C1-C2-C3-C4 |
| 26 | m | 101 | LMG | C18-C19-C20-C21 |
| 27 | a | 410 | SQD | C11-C10-C9-C8 |
| 28 | l | 101 | LHG | C17-C18-C19-C20 |
| 31 | k | 104 | STE | C6-C7-C8-C9 |
| 22 | B | 611 | CLA | C10-C11-C12-C13 |
| 22 | c | 508 | CLA | C8-C10-C11-C12 |
| 26 | c | 520 | LMG | C33-C34-C35-C36 |
| 28 | b | 623 | LHG | C11-C10-C9-C8 |
| 28 | b | 623 | LHG | C23-C24-C25-C26 |
| 29 | C | 518 | DGD | C1A-C2A-C3A-C4A |
| 22 | C | 506 | CLA | O1D-CGD-O2D-CED |
| 22 | C | 508 | CLA | C10-C11-C12-C13 |
| 26 | M | 101 | LMG | C38-C39-C40-C41 |
| 26 | b | 622 | LMG | C31-C32-C33-C34 |
| 26 | c | 521 | LMG | C12-C13-C14-C15 |
| 28 | D | 411 | LHG | C14-C15-C16-C17 |
| 31 | X | 101 | STE | C9-C10-C11-C12 |
| 31 | d | 411 | STE | C2-C3-C4-C5 |
| 22 | A | 405 | CLA | C3-C5-C6-C7 |
| 22 | b | 606 | CLA | C3-C5-C6-C7 |
| 26 | m | 101 | LMG | C33-C34-C35-C36 |
| 28 | D | 413 | LHG | C13-C14-C15-C16 |
| 29 | h | 101 | DGD | C6B-C7B-C8B-C9B |
| 30 | B | 616 | BCR | C6-C7-C8-C9 |
| 29 | C | 517 | DGD | O6E-C1E-O5D-C6D |
| 22 | a | 402 | CLA | C15-C16-C17-C18 |
| 22 | c | 503 | CLA | C5-C6-C7-C8 |
| 26 | B | 620 | LMG | C29-C30-C31-C32 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | b | 622 | LMG | C18-C19-C20-C21 |
| 28 | D | 413 | LHG | C16-C17-C18-C19 |
| 28 | L | 102 | LHG | C15-C16-C17-C18 |
| 29 | A | 413 | DGD | C7A-C8A-C9A-CAA |
| 31 | C | 519 | STE | C2-C3-C4-C5 |
| 27 | a | 410 | SQD | C8-C7-O47-C45 |
| 28 | A | 411 | LHG | C16-C17-C18-C19 |
| 29 | C | 516 | DGD | C4B-C5B-C6B-C7B |
| 31 | B | 619 | STE | C11-C10-C9-C8 |
| 22 | B | 615 | CLA | C5-C6-C7-C8 |
| 22 | b | 615 | CLA | C15-C16-C17-C18 |
| 22 | c | 507 | CLA | CBD-CGD-O2D-CED |
| 26 | c | 521 | LMG | C36-C37-C38-C39 |
| 27 | D | 409 | SQD | C27-C28-C29-C30 |
| 28 | D | 410 | LHG | C13-C14-C15-C16 |
| 31 | b | 625 | STE | C7-C8-C9-C10 |
| 28 | L | 102 | LHG | O9-C7-O7-C5 |
| 27 | A | 412 | SQD | C9-C10-C11-C12 |
| 31 | b | 629 | STE | C11-C12-C13-C14 |
| 22 | H | 101 | CLA | C13-C15-C16-C17 |
| 26 | a | 414 | LMG | O7-C8-C9-O8 |
| 27 | A | 410 | SQD | O6-C44-C45-O47 |
| 27 | a | 410 | SQD | O6-C44-C45-O47 |
| 26 | a | 414 | LMG | O6-C5-C6-O5 |
| 28 | a | 411 | LHG | C25-C26-C27-C28 |
| 31 | a | 412 | STE | C2-C3-C4-C5 |
| 22 | b | 614 | CLA | O1A-CGA-O2A-C1 |
| 22 | B | 612 | CLA | C16-C17-C18-C19 |
| 28 | D | 413 | LHG | C31-C32-C33-C34 |
| 22 | B | 609 | CLA | C8-C10-C11-C12 |
| 22 | C | 513 | CLA | C10-C11-C12-C13 |
| 22 | C | 510 | CLA | C4-C3-C5-C6 |
| 22 | b | 611 | CLA | C4-C3-C5-C6 |
| 22 | c | 505 | CLA | C4-C3-C5-C6 |
| 23 | A | 404 | PHO | C2-C3-C5-C6 |
| 25 | D | 407 | PL9 | C4-C3-C7-C8 |
| 25 | d | 407 | PL9 | C4-C3-C7-C8 |
| 27 | a | 410 | SQD | C13-C14-C15-C16 |
| 29 | H | 103 | DGD | C8B-C9B-CAB-CBB |
| 29 | c | 516 | DGD | C2B-C3B-C4B-C5B |
| 31 | c | 519 | STE | C10-C11-C12-C13 |
| 22 | A | 403 | CLA | C6-C7-C8-C9 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | B | 604 | CLA | C11-C10-C8-C9 |
| 22 | B | 606 | CLA | C11-C10-C8-C9 |
| 22 | B | 614 | CLA | C11-C12-C13-C14 |
| 22 | C | 510 | CLA | C6-C7-C8-C9 |
| 22 | C | 510 | CLA | C14-C13-C15-C16 |
| 22 | b | 602 | CLA | C14-C13-C15-C16 |
| 22 | b | 606 | CLA | C14-C13-C15-C16 |
| 22 | b | 615 | CLA | C14-C13-C15-C16 |
| 22 | c | 506 | CLA | C11-C12-C13-C14 |
| 22 | d | 405 | CLA | C6-C7-C8-C9 |
| 26 | a | 414 | LMG | C23-C24-C25-C26 |
| 27 | L | 101 | SQD | C9-C10-C11-C12 |
| 31 | H | 104 | STE | C5-C6-C7-C8 |
| 31 | b | 627 | STE | C4-C5-C6-C7 |
| 26 | b | 622 | LMG | C38-C39-C40-C41 |
| 31 | X | 101 | STE | C14-C15-C16-C17 |
| 31 | a | 412 | STE | C6-C7-C8-C9 |
| 27 | A | 412 | SQD | C16-C17-C18-C19 |
| 29 | A | 413 | DGD | C5A-C6A-C7A-C8A |
| 29 | c | 515 | DGD | CAB-CBB-CCB-CDB |
| 31 | c | 519 | STE | C7-C8-C9-C10 |
| 22 | H | 101 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 503 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 508 | CLA | C1A-C2A-CAA-CBA |
| 22 | B | 605 | CLA | C16-C17-C18-C19 |
| 26 | Y | 101 | LMG | C11-C12-C13-C14 |
| 26 | b | 622 | LMG | C34-C35-C36-C37 |
| 28 | D | 413 | LHG | C25-C26-C27-C28 |
| 29 | c | 517 | DGD | C2A-C3A-C4A-C5A |
| 29 | c | 517 | DGD | CCA-CDA-CEA-CFA |
| 31 | b | 628 | STE | C7-C8-C9-C10 |
| 22 | C | 512 | CLA | C15-C16-C17-C18 |
| 28 | A | 411 | LHG | C4-O6-P-O3 |
| 28 | D | 410 | LHG | C3-O3-P-O6 |
| 28 | L | 102 | LHG | C3-O3-P-O6 |
| 28 | d | 408 | LHG | C4-O6-P-O3 |
| 27 | A | 410 | SQD | C11-C10-C9-C8 |
| 26 | a | 414 | LMG | C15-C16-C17-C18 |
| 22 | C | 507 | CLA | C10-C11-C12-C13 |
| 25 | A | 408 | PL9 | C22-C23-C24-C25 |
| 27 | A | 412 | SQD | C11-C10-C9-C8 |
| 26 | c | 521 | LMG | C33-C34-C35-C36 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | d | 410 | LMG | O6-C5-C6-O5 |
| 26 | Y | 101 | LMG | C15-C16-C17-C18 |
| 26 | b | 622 | LMG | O6-C5-C6-O5 |
| 27 | A | 412 | SQD | C28-C29-C30-C31 |
| 31 | c | 519 | STE | C4-C5-C6-C7 |
| 22 | c | 511 | CLA | C3-C5-C6-C7 |
| 22 | C | 508 | CLA | C13-C15-C16-C17 |
| 26 | D | 412 | LMG | C36-C37-C38-C39 |
| 31 | R | 101 | STE | C4-C5-C6-C7 |
| 23 | A | 404 | PHO | C4-C3-C5-C6 |
| 25 | d | 407 | PL9 | C30-C29-C31-C32 |
| 25 | d | 407 | PL9 | C45-C44-C46-C47 |
| 26 | D | 412 | LMG | C12-C13-C14-C15 |
| 26 | Y | 101 | LMG | C14-C15-C16-C17 |
| 26 | b | 622 | LMG | C16-C17-C18-C19 |
| 27 | L | 101 | SQD | C26-C27-C28-C29 |
| 28 | D | 411 | LHG | C30-C31-C32-C33 |
| 29 | c | 516 | DGD | CAB-CBB-CCB-CDB |
| 29 | h | 101 | DGD | C3B-C4B-C5B-C6B |
| 27 | B | 621 | SQD | O10-C23-O48-C46 |
| 29 | C | 518 | DGD | C6A-C7A-C8A-C9A |
| 31 | b | 621 | STE | C6-C7-C8-C9 |
| 22 | D | 405 | CLA | C16-C17-C18-C20 |
| 22 | b | 613 | CLA | C16-C17-C18-C20 |
| 26 | c | 518 | LMG | O6-C5-C6-O5 |
| 22 | C | 510 | CLA | O1D-CGD-O2D-CED |
| 22 | c | 501 | CLA | O1D-CGD-O2D-CED |
| 26 | Y | 101 | LMG | O1-C7-C8-C9 |
| 26 | c | 520 | LMG | O1-C7-C8-C9 |
| 26 | c | 520 | LMG | C7-C8-C9-O8 |
| 26 | c | 521 | LMG | O1-C7-C8-C9 |
| 27 | B | 621 | SQD | O6-C44-C45-C46 |
| 27 | a | 410 | SQD | C25-C26-C27-C28 |
| 29 | A | 413 | DGD | C1G-C2G-C3G-O3G |
| 29 | C | 516 | DGD | O1G-C1G-C2G-C3G |
| 31 | X | 101 | STE | C3-C4-C5-C6 |
| 22 | B | 607 | CLA | C10-C11-C12-C13 |
| 22 | c | 512 | CLA | C8-C10-C11-C12 |
| 26 | m | 101 | LMG | C12-C13-C14-C15 |
| 29 | C | 517 | DGD | C2G-C3G-O3G-C1D |
| 29 | c | 516 | DGD | C2G-C3G-O3G-C1D |
| 22 | b | 602 | CLA | O1D-CGD-O2D-CED |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | d | 410 | LMG | C15-C16-C17-C18 |
| 28 | D | 413 | LHG | C32-C33-C34-C35 |
| 28 | d | 408 | LHG | C11-C10-C9-C8 |
| 22 | b | 601 | CLA | C10-C11-C12-C13 |
| 22 | b | 602 | CLA | C15-C16-C17-C18 |
| 27 | B | 621 | SQD | C32-C33-C34-C35 |
| 29 | C | 517 | DGD | C2B-C3B-C4B-C5B |
| 26 | d | 410 | LMG | C30-C31-C32-C33 |
| 29 | c | 515 | DGD | CBB-CCB-CDB-CEB |
| 31 | X | 101 | STE | C6-C7-C8-C9 |
| 31 | b | 624 | STE | C7-C8-C9-C10 |
| 31 | b | 625 | STE | C10-C11-C12-C13 |
| 31 | t | 104 | STE | C7-C8-C9-C10 |
| 22 | B | 611 | CLA | C3-C5-C6-C7 |
| 26 | D | 412 | LMG | C34-C35-C36-C37 |
| 27 | A | 412 | SQD | C15-C16-C17-C18 |
| 27 | B | 621 | SQD | C13-C14-C15-C16 |
| 31 | C | 520 | STE | C11-C10-C9-C8 |
| 31 | k | 104 | STE | C4-C5-C6-C7 |
| 28 | A | 411 | LHG | O1-C1-C2-O2 |
| 28 | b | 623 | LHG | O1-C1-C2-O2 |
| 28 | d | 409 | LHG | O1-C1-C2-O2 |
| 26 | A | 409 | LMG | C37-C38-C39-C40 |
| 26 | D | 412 | LMG | C37-C38-C39-C40 |
| 26 | Y | 101 | LMG | C33-C34-C35-C36 |
| 25 | D | 407 | PL9 | C37-C38-C39-C40 |
| 22 | B | 613 | CLA | C15-C16-C17-C18 |
| 27 | L | 101 | SQD | C19-C20-C21-C22 |
| 27 | L | 101 | SQD | C27-C28-C29-C30 |
| 31 | R | 101 | STE | C3-C4-C5-C6 |
| 27 | A | 410 | SQD | C8-C7-O47-C45 |
| 31 | k | 104 | STE | C7-C8-C9-C10 |
| 29 | c | 515 | DGD | O6E-C5E-C6E-O5E |
| 30 | b | 618 | BCR | C16-C17-C18-C36 |
| 22 | H | 101 | CLA | C3-C5-C6-C7 |
| 25 | A | 408 | PL9 | C15-C14-C16-C17 |
| 25 | D | 407 | PL9 | C30-C29-C31-C32 |
| 26 | D | 408 | LMG | C15-C16-C17-C18 |
| 22 | C | 509 | CLA | C16-C17-C18-C19 |
| 29 | C | 517 | DGD | CDA-CEA-CFA-CGA |
| 22 | C | 507 | CLA | C5-C6-C7-C8 |
| 22 | C | 510 | CLA | C8-C10-C11-C12 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | m | 101 | LMG | C15-C16-C17-C18 |
| 29 | C | 517 | DGD | C4A-C5A-C6A-C7A |
| 31 | b | 620 | STE | C3-C4-C5-C6 |
| 31 | b | 629 | STE | C15-C16-C17-C18 |
| 26 | D | 408 | LMG | O6-C5-C6-O5 |
| 22 | D | 403 | CLA | C2-C1-O2A-CGA |
| 28 | A | 411 | LHG | C18-C19-C20-C21 |
| 31 | J | 101 | STE | C3-C4-C5-C6 |
| 31 | a | 413 | STE | C13-C14-C15-C16 |
| 31 | b | 627 | STE | C7-C8-C9-C10 |
| 31 | c | 519 | STE | C11-C12-C13-C14 |
| 29 | C | 517 | DGD | CAA-CBA-CCA-CDA |
| 29 | c | 517 | DGD | C9B-CAB-CBB-CCB |
| 31 | a | 412 | STE | C3-C4-C5-C6 |
| 22 | C | 502 | CLA | C16-C17-C18-C19 |
| 26 | c | 520 | LMG | C32-C33-C34-C35 |
| 27 | A | 410 | SQD | C17-C18-C19-C20 |
| 27 | D | 409 | SQD | C28-C29-C30-C31 |
| 29 | A | 413 | DGD | CEB-CFB-CGB-CHB |
| 29 | H | 103 | DGD | C5B-C6B-C7B-C8B |
| 22 | B | 601 | CLA | C8-C10-C11-C12 |
| 26 | b | 622 | LMG | C15-C16-C17-C18 |
| 27 | A | 410 | SQD | C29-C30-C31-C32 |
| 28 | D | 411 | LHG | C13-C14-C15-C16 |
| 28 | b | 623 | LHG | C19-C20-C21-C22 |
| 28 | D | 410 | LHG | O2-C2-C3-O3 |
| 26 | Y | 101 | LMG | C32-C33-C34-C35 |
| 27 | a | 410 | SQD | C32-C33-C34-C35 |
| 27 | B | 621 | SQD | C7-C8-C9-C10 |
| 22 | B | 605 | CLA | C5-C6-C7-C8 |
| 22 | B | 612 | CLA | C5-C6-C7-C8 |
| 22 | b | 611 | CLA | C13-C15-C16-C17 |
| 26 | c | 521 | LMG | C2-C1-O1-C7 |
| 30 | d | 406 | BCR | C16-C17-C18-C19 |
| 28 | d | 408 | LHG | C34-C35-C36-C37 |
| 31 | B | 623 | STE | C12-C13-C14-C15 |
| 31 | a | 412 | STE | C7-C8-C9-C10 |
| 29 | C | 516 | DGD | O1G-C1A-C2A-C3A |
| 27 | a | 410 | SQD | O47-C45-C46-O48 |
| 26 | c | 521 | LMG | C20-C21-C22-C23 |
| 27 | t | 102 | SQD | C10-C11-C12-C13 |
| 29 | c | 515 | DGD | C5B-C6B-C7B-C8B |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | c | 513 | CLA | C5-C6-C7-C8 |
| 31 | L | 103 | STE | C6-C7-C8-C9 |
| 31 | M | 102 | STE | C4-C5-C6-C7 |
| 31 | Z | 101 | STE | C12-C13-C14-C15 |
| 22 | A | 403 | CLA | C6-C7-C8-C10 |
| 22 | B | 601 | CLA | C11-C12-C13-C15 |
| 22 | B | 602 | CLA | C6-C7-C8-C10 |
| 22 | B | 602 | CLA | C11-C12-C13-C15 |
| 22 | B | 603 | CLA | C12-C13-C15-C16 |
| 22 | B | 604 | CLA | C11-C10-C8-C7 |
| 22 | B | 606 | CLA | C11-C10-C8-C7 |
| 22 | B | 606 | CLA | C11-C12-C13-C15 |
| 22 | B | 610 | CLA | C11-C10-C8-C7 |
| 22 | B | 613 | CLA | C11-C12-C13-C15 |
| 22 | B | 613 | CLA | C12-C13-C15-C16 |
| 22 | B | 614 | CLA | C11-C12-C13-C15 |
| 22 | B | 615 | CLA | C6-C7-C8-C10 |
| 22 | C | 504 | CLA | C11-C10-C8-C7 |
| 22 | C | 506 | CLA | C12-C13-C15-C16 |
| 22 | C | 508 | CLA | C11-C10-C8-C7 |
| 22 | C | 509 | CLA | C12-C13-C15-C16 |
| 22 | C | 511 | CLA | C6-C7-C8-C10 |
| 22 | C | 512 | CLA | C11-C10-C8-C7 |
| 22 | C | 512 | CLA | C11-C12-C13-C15 |
| 22 | D | 403 | CLA | C11-C12-C13-C15 |
| 22 | D | 405 | CLA | C11-C12-C13-C15 |
| 22 | a | 403 | CLA | C11-C10-C8-C7 |
| 22 | a | 403 | CLA | C12-C13-C15-C16 |
| 22 | b | 604 | CLA | C12-C13-C15-C16 |
| 22 | b | 605 | CLA | C11-C12-C13-C15 |
| 22 | b | 606 | CLA | C6-C7-C8-C10 |
| 22 | b | 607 | CLA | C6-C7-C8-C10 |
| 22 | b | 608 | CLA | C11-C10-C8-C7 |
| 22 | b | 609 | CLA | C11-C12-C13-C15 |
| 22 | b | 615 | CLA | C11-C10-C8-C7 |
| 22 | b | 616 | CLA | C11-C10-C8-C7 |
| 22 | c | 501 | CLA | C11-C12-C13-C15 |
| 22 | c | 506 | CLA | C11-C12-C13-C15 |
| 22 | c | 508 | CLA | C11-C10-C8-C7 |
| 22 | c | 508 | CLA | C12-C13-C15-C16 |
| 22 | c | 510 | CLA | C12-C13-C15-C16 |
| 22 | c | 512 | CLA | C6-C7-C8-C10 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | D | 408 | LMG | C35-C36-C37-C38 |
| 27 | a | 410 | SQD | C14-C15-C16-C17 |
| 22 | B | 601 | CLA | C11-C12-C13-C14 |
| 22 | B | 602 | CLA | C6-C7-C8-C9 |
| 22 | B | 602 | CLA | C11-C12-C13-C14 |
| 22 | B | 615 | CLA | C6-C7-C8-C9 |
| 22 | C | 504 | CLA | C11-C10-C8-C9 |
| 22 | C | 506 | CLA | C14-C13-C15-C16 |
| 22 | C | 508 | CLA | C11-C10-C8-C9 |
| 22 | C | 511 | CLA | C6-C7-C8-C9 |
| 22 | C | 512 | CLA | C11-C12-C13-C14 |
| 22 | D | 404 | CLA | C11-C12-C13-C14 |
| 22 | D | 405 | CLA | C6-C7-C8-C9 |
| 22 | D | 405 | CLA | C11-C10-C8-C9 |
| 22 | a | 403 | CLA | C11-C10-C8-C9 |
| 22 | b | 601 | CLA | C11-C12-C13-C14 |
| 22 | b | 604 | CLA | C14-C13-C15-C16 |
| 22 | b | 605 | CLA | C11-C12-C13-C14 |
| 22 | b | 606 | CLA | C6-C7-C8-C9 |
| 22 | b | 607 | CLA | C6-C7-C8-C9 |
| 22 | b | 607 | CLA | C11-C12-C13-C14 |
| 22 | b | 607 | CLA | C14-C13-C15-C16 |
| 22 | c | 506 | CLA | C11-C10-C8-C9 |
| 22 | c | 508 | CLA | C11-C10-C8-C9 |
| 22 | c | 510 | CLA | C14-C13-C15-C16 |
| 22 | c | 512 | CLA | C14-C13-C15-C16 |
| 22 | d | 403 | CLA | C6-C7-C8-C9 |
| 26 | c | 521 | LMG | C39-C40-C41-C42 |
| 31 | b | 620 | STE | C15-C16-C17-C18 |
| 31 | b | 624 | STE | C4-C5-C6-C7 |
| 22 | B | 604 | CLA | CBA-CGA-O2A-C1 |
| 22 | b | 607 | CLA | CBA-CGA-O2A-C1 |
| 26 | D | 412 | LMG | C29-C28-O8-C9 |
| 27 | A | 412 | SQD | C24-C23-O48-C46 |
| 22 | b | 605 | CLA | C13-C15-C16-C17 |
| 22 | c | 502 | CLA | C15-C16-C17-C18 |
| 26 | D | 412 | LMG | C16-C17-C18-C19 |
| 26 | c | 521 | LMG | C35-C36-C37-C38 |
| 29 | c | 516 | DGD | CBB-CCB-CDB-CEB |
| 30 | b | 618 | BCR | C37-C22-C23-C24 |
| 22 | D | 405 | CLA | C16-C17-C18-C19 |
| 22 | b | 607 | CLA | C16-C17-C18-C20 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | d | 403 | CLA | C16-C17-C18-C20 |
| 29 | h | 101 | DGD | CAB-CBB-CCB-CDB |
| 31 | M | 104 | STE | C3-C4-C5-C6 |
| 27 | a | 410 | SQD | C16-C17-C18-C19 |
| 22 | C | 509 | CLA | C3-C5-C6-C7 |
| 22 | C | 506 | CLA | C10-C11-C12-C13 |
| 26 | Y | 101 | LMG | C12-C13-C14-C15 |
| 31 | a | 413 | STE | C10-C11-C12-C13 |
| 27 | t | 102 | SQD | C24-C23-O48-C46 |
| 26 | B | 620 | LMG | C37-C38-C39-C40 |
| 22 | C | 513 | CLA | C8-C10-C11-C12 |
| 28 | A | 411 | LHG | C10-C11-C12-C13 |
| 28 | D | 410 | LHG | C25-C26-C27-C28 |
| 28 | L | 102 | LHG | C13-C14-C15-C16 |
| 27 | A | 412 | SQD | C44-C45-O47-C7 |
| 22 | D | 405 | CLA | CBD-CGD-O2D-CED |
| 28 | l | 101 | LHG | C25-C26-C27-C28 |
| 22 | c | 509 | CLA | C13-C15-C16-C17 |
| 28 | a | 411 | LHG | C14-C15-C16-C17 |
| 29 | c | 517 | DGD | C8B-C9B-CAB-CBB |
| 28 | l | 101 | LHG | C34-C35-C36-C37 |
| 22 | C | 506 | CLA | CBA-CGA-O2A-C1 |
| 22 | B | 603 | CLA | O1D-CGD-O2D-CED |
| 29 | H | 103 | DGD | CDB-CEB-CFB-CGB |
| 29 | c | 515 | DGD | C6B-C7B-C8B-C9B |
| 25 | d | 407 | PL9 | C33-C34-C36-C37 |
| 28 | D | 411 | LHG | C29-C30-C31-C32 |
| 29 | A | 413 | DGD | C7B-C8B-C9B-CAB |
| 22 | B | 607 | CLA | C16-C17-C18-C20 |
| 22 | b | 609 | CLA | C16-C17-C18-C19 |
| 31 | B | 619 | STE | C9-C10-C11-C12 |
| 22 | B | 607 | CLA | C5-C6-C7-C8 |
| 22 | a | 405 | CLA | CBA-CGA-O2A-C1 |
| 22 | c | 509 | CLA | CAA-CBA-CGA-O2A |
| 28 | b | 623 | LHG | C7-C8-C9-C10 |
| 27 | f | 102 | SQD | C29-C30-C31-C32 |
| 22 | C | 506 | CLA | C3A-C2A-CAA-CBA |
| 26 | a | 414 | LMG | C37-C38-C39-C40 |
| 28 | D | 410 | LHG | C11-C10-C9-C8 |
| 29 | h | 101 | DGD | CDB-CEB-CFB-CGB |
| 30 | k | 102 | BCR | C19-C20-C21-C22 |
| 28 | b | 623 | LHG | C29-C30-C31-C32 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 29 | H | 103 | DGD | CCA-CDA-CEA-CFA |
| 26 | c | 521 | LMG | C19-C20-C21-C22 |
| 27 | L | 101 | SQD | C16-C17-C18-C19 |
| 31 | b | 621 | STE | C5-C6-C7-C8 |
| 22 | B | 609 | CLA | C16-C17-C18-C19 |
| 22 | B | 610 | CLA | C16-C17-C18-C19 |
| 22 | C | 509 | CLA | C16-C17-C18-C20 |
| 22 | C | 511 | CLA | CBA-CGA-O2A-C1 |
| 29 | c | 515 | DGD | C3A-C4A-C5A-C6A |
| 26 | M | 101 | LMG | C7-C8-C9-O8 |
| 26 | a | 414 | LMG | C7-C8-C9-O8 |
| 27 | A | 410 | SQD | O6-C44-C45-C46 |
| 27 | L | 101 | SQD | C44-C45-C46-O48 |
| 27 | a | 410 | SQD | O6-C44-C45-C46 |
| 29 | c | 517 | DGD | C7B-C8B-C9B-CAB |
| 28 | D | 413 | LHG | C27-C28-C29-C30 |
| 27 | A | 412 | SQD | C13-C14-C15-C16 |
| 27 | B | 621 | SQD | C29-C30-C31-C32 |
| 26 | D | 408 | LMG | C37-C38-C39-C40 |
| 29 | h | 101 | DGD | C7B-C8B-C9B-CAB |
| 22 | B | 606 | CLA | C10-C11-C12-C13 |
| 22 | c | 503 | CLA | C15-C16-C17-C18 |
| 23 | A | 404 | PHO | C10-C11-C12-C13 |
| 26 | a | 414 | LMG | C32-C33-C34-C35 |
| 31 | t | 104 | STE | C3-C4-C5-C6 |
| 29 | h | 101 | DGD | C1A-C2A-C3A-C4A |
| 26 | D | 408 | LMG | C40-C41-C42-C43 |
| 26 | a | 414 | LMG | C24-C25-C26-C27 |
| 31 | B | 619 | STE | C4-C5-C6-C7 |
| 22 | b | 604 | CLA | C3-C5-C6-C7 |
| 26 | b | 622 | LMG | C29-C30-C31-C32 |
| 26 | Y | 101 | LMG | C29-C28-O8-C9 |
| 22 | b | 607 | CLA | O1A-CGA-O2A-C1 |
| 28 | D | 410 | LHG | C23-C24-C25-C26 |
| 27 | a | 410 | SQD | C30-C31-C32-C33 |
| 29 | c | 515 | DGD | CDB-CEB-CFB-CGB |
| 31 | k | 104 | STE | C2-C3-C4-C5 |
| 26 | Y | 101 | LMG | O1-C7-C8-O7 |
| 26 | c | 520 | LMG | O1-C7-C8-O7 |
| 29 | A | 413 | DGD | O1G-C1G-C2G-O2G |
| 22 | b | 612 | CLA | C10-C11-C12-C13 |
| 27 | B | 621 | SQD | C25-C26-C27-C28 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | B | 606 | CLA | C16-C17-C18-C19 |
| 22 | B | 610 | CLA | C16-C17-C18-C20 |
| 22 | b | 602 | CLA | C16-C17-C18-C19 |
| 26 | a | 414 | LMG | C16-C17-C18-C19 |
| 31 | B | 624 | STE | C11-C10-C9-C8 |
| 22 | D | 404 | CLA | C15-C16-C17-C18 |
| 23 | D | 401 | PHO | C13-C15-C16-C17 |
| 26 | D | 412 | LMG | O1-C7-C8-C9 |
| 27 | B | 621 | SQD | C24-C25-C26-C27 |
| 22 | c | 502 | CLA | C2-C1-O2A-CGA |
| 22 | c | 513 | CLA | C2-C1-O2A-CGA |
| 26 | A | 409 | LMG | C14-C15-C16-C17 |
| 31 | b | 627 | STE | C3-C4-C5-C6 |
| 22 | B | 606 | CLA | C11-C12-C13-C14 |
| 22 | C | 506 | CLA | C6-C7-C8-C9 |
| 22 | C | 510 | CLA | C11-C10-C8-C9 |
| 22 | C | 513 | CLA | C11-C10-C8-C9 |
| 22 | b | 603 | CLA | C6-C7-C8-C9 |
| 23 | d | 401 | PHO | CBD-CGD-O2D-CED |
| 28 | L | 102 | LHG | C35-C36-C37-C38 |
| 22 | b | 610 | CLA | O1D-CGD-O2D-CED |
| 28 | b | 623 | LHG | C2-C3-O3-P |
| 28 | d | 409 | LHG | C2-C3-O3-P |
| 27 | A | 410 | SQD | C28-C29-C30-C31 |
| 29 | C | 517 | DGD | C4B-C5B-C6B-C7B |
| 29 | H | 103 | DGD | C3B-C4B-C5B-C6B |
| 31 | b | 627 | STE | C1-C2-C3-C4 |
| 22 | c | 501 | CLA | C2A-CAA-CBA-CGA |
| 22 | B | 607 | CLA | C16-C17-C18-C19 |
| 22 | b | 609 | CLA | C16-C17-C18-C20 |
| 22 | b | 615 | CLA | C16-C17-C18-C19 |
| 22 | A | 403 | CLA | C3-C5-C6-C7 |
| 30 | K | 102 | BCR | C23-C24-C25-C30 |
| 30 | T | 101 | BCR | C5-C6-C7-C8 |
| 30 | k | 103 | BCR | C23-C24-C25-C26 |
| 27 | A | 412 | SQD | C18-C19-C20-C21 |
| 29 | C | 516 | DGD | C9A-CAA-CBA-CCA |
| 31 | H | 104 | STE | C11-C10-C9-C8 |
| 31 | b | 626 | STE | C10-C11-C12-C13 |
| 26 | m | 101 | LMG | C16-C17-C18-C19 |
| 28 | d | 408 | LHG | C16-C17-C18-C19 |
| 31 | Z | 101 | STE | C14-C15-C16-C17 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | C | 515 | BCR | C7-C8-C9-C10 |
| 30 | K | 101 | BCR | C11-C12-C13-C14 |
| 30 | k | 101 | BCR | C21-C22-C23-C24 |
| 31 | I | 102 | STE | C11-C10-C9-C8 |
| 22 | c | 502 | CLA | CBD-CGD-O2D-CED |
| 26 | c | 521 | LMG | O6-C5-C6-O5 |
| 28 | a | 411 | LHG | C8-C7-O7-C5 |
| 29 | C | 518 | DGD | C3A-C4A-C5A-C6A |
| 28 | L | 102 | LHG | O10-C23-O8-C6 |
| 26 | a | 414 | LMG | C34-C35-C36-C37 |
| 31 | x | 102 | STE | C15-C16-C17-C18 |
| 22 | B | 604 | CLA | C16-C17-C18-C20 |
| 22 | B | 606 | CLA | C16-C17-C18-C20 |
| 28 | D | 410 | LHG | C12-C13-C14-C15 |
| 27 | D | 409 | SQD | O6-C44-C45-C46 |
| 28 | l | 101 | LHG | O6-C4-C5-C6 |
| 22 | C | 505 | CLA | C4-C3-C5-C6 |
| 22 | c | 511 | CLA | C2C-C3C-CAC-CBC |
| 31 | b | 628 | STE | C12-C13-C14-C15 |
| 22 | B | 603 | CLA | C11-C12-C13-C15 |
| 22 | B | 605 | CLA | C11-C10-C8-C7 |
| 22 | B | 606 | CLA | C12-C13-C15-C16 |
| 22 | C | 502 | CLA | C12-C13-C15-C16 |
| 22 | C | 503 | CLA | C11-C10-C8-C7 |
| 22 | C | 506 | CLA | C6-C7-C8-C10 |
| 22 | C | 513 | CLA | C11-C10-C8-C7 |
| 22 | D | 404 | CLA | C11-C12-C13-C15 |
| 22 | D | 405 | CLA | C6-C7-C8-C10 |
| 22 | D | 405 | CLA | C11-C10-C8-C7 |
| 22 | b | 601 | CLA | C11-C12-C13-C15 |
| 22 | b | 603 | CLA | C6-C7-C8-C10 |
| 22 | b | 605 | CLA | C11-C10-C8-C7 |
| 22 | b | 607 | CLA | C11-C12-C13-C15 |
| 22 | c | 506 | CLA | C11-C10-C8-C7 |
| 22 | c | 509 | CLA | C6-C7-C8-C10 |
| 22 | c | 512 | CLA | C12-C13-C15-C16 |
| 22 | d | 403 | CLA | C6-C7-C8-C10 |
| 23 | A | 404 | PHO | C12-C13-C15-C16 |
| 28 | L | 102 | LHG | C17-C18-C19-C20 |
| 28 | L | 102 | LHG | C18-C19-C20-C21 |
| 31 | H | 104 | STE | C6-C7-C8-C9 |
| 31 | a | 413 | STE | C2-C3-C4-C5 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 26 | D | 412 | LMG | O1-C7-C8-O7 |
| 22 | b | 609 | CLA | C15-C16-C17-C18 |
| 30 | H | 102 | BCR | C13-C14-C15-C16 |
| 30 | H | 102 | BCR | C15-C16-C17-C18 |
| 22 | B | 614 | CLA | C16-C17-C18-C19 |
| 22 | C | 508 | CLA | C16-C17-C18-C19 |
| 27 | A | 412 | SQD | C29-C30-C31-C32 |
| 29 | A | 413 | DGD | C4A-C5A-C6A-C7A |
| 31 | I | 102 | STE | C2-C3-C4-C5 |
| 22 | B | 606 | CLA | C15-C16-C17-C18 |
| 22 | C | 511 | CLA | O1A-CGA-O2A-C1 |
| 22 | C | 508 | CLA | CBD-CGD-O2D-CED |
| 31 | H | 104 | STE | C10-C11-C12-C13 |
| 30 | B | 617 | BCR | C20-C21-C22-C37 |
| 30 | C | 514 | BCR | C35-C13-C14-C15 |
| 30 | c | 514 | BCR | C20-C21-C22-C37 |
| 28 | D | 413 | LHG | C7-C8-C9-C10 |
| 27 | A | 410 | SQD | C11-C12-C13-C14 |
| 27 | A | 410 | SQD | C26-C27-C28-C29 |
| 31 | L | 103 | STE | C7-C8-C9-C10 |
| 22 | C | 502 | CLA | C16-C17-C18-C20 |
| 22 | c | 506 | CLA | CBA-CGA-O2A-C1 |
| 29 | H | 103 | DGD | O2G-C1B-C2B-C3B |
| 28 | a | 411 | LHG | C26-C27-C28-C29 |
| 26 | D | 408 | LMG | C20-C21-C22-C23 |
| 26 | D | 412 | LMG | C11-C12-C13-C14 |
| 26 | m | 101 | LMG | C32-C33-C34-C35 |
| 31 | B | 625 | STE | C7-C8-C9-C10 |
| 31 | b | 621 | STE | C2-C3-C4-C5 |
| 31 | b | 621 | STE | C11-C10-C9-C8 |
| 22 | b | 604 | CLA | C15-C16-C17-C18 |
| 27 | A | 410 | SQD | C16-C17-C18-C19 |
| 28 | A | 411 | LHG | C31-C32-C33-C34 |
| 29 | H | 103 | DGD | CAB-CBB-CCB-CDB |
| 31 | b | 625 | STE | C12-C13-C14-C15 |
| 22 | B | 615 | CLA | CAD-CBD-CGD-O2D |
| 22 | C | 505 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 601 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 610 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 612 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 614 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 616 | CLA | CAD-CBD-CGD-O2D |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | c | 509 | CLA | CAD-CBD-CGD-O2D |
| 27 | f | 102 | SQD | C46-C45-O47-C7 |
| 28 | L | 102 | LHG | C32-C33-C34-C35 |
| 28 | d | 409 | LHG | C35-C36-C37-C38 |
| 29 | C | 517 | DGD | CBB-CCB-CDB-CEB |
| 31 | x | 102 | STE | C11-C10-C9-C8 |
| 22 | d | 404 | CLA | C13-C15-C16-C17 |
| 31 | b | 621 | STE | C10-C11-C12-C13 |
| 22 | d | 403 | CLA | C16-C17-C18-C19 |
| 26 | a | 414 | LMG | O6-C1-O1-C7 |
| 22 | C | 505 | CLA | C2-C3-C5-C6 |
| 26 | m | 101 | LMG | C7-C8-C9-O8 |
| 29 | A | 413 | DGD | O1G-C1G-C2G-C3G |
| 27 | a | 410 | SQD | O10-C23-O48-C46 |
| 31 | B | 624 | STE | C10-C11-C12-C13 |
| 27 | D | 409 | SQD | O48-C23-C24-C25 |
| 22 | b | 610 | CLA | C2A-CAA-CBA-CGA |
| 31 | M | 104 | STE | C12-C13-C14-C15 |
| 27 | L | 101 | SQD | C23-C24-C25-C26 |
| 22 | C | 511 | CLA | CBD-CGD-O2D-CED |
| 22 | D | 403 | CLA | C16-C17-C18-C19 |
| 27 | A | 410 | SQD | C15-C16-C17-C18 |
| 27 | f | 102 | SQD | C33-C34-C35-C36 |
| 29 | C | 516 | DGD | O1B-C1B-O2G-C2G |
| 22 | B | 606 | CLA | CHA-CBD-CGD-O1D |
| 22 | B | 613 | CLA | CHA-CBD-CGD-O2D |
| 22 | B | 615 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 504 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 506 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 509 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 509 | CLA | CHA-CBD-CGD-O2D |
| 22 | H | 101 | CLA | CHA-CBD-CGD-O1D |
| 22 | H | 101 | CLA | CHA-CBD-CGD-O2D |
| 22 | a | 403 | CLA | CHA-CBD-CGD-O1D |
| 22 | a | 403 | CLA | CHA-CBD-CGD-O2D |
| 22 | b | 611 | CLA | CHA-CBD-CGD-O1D |
| 22 | c | 502 | CLA | CHA-CBD-CGD-O1D |
| 22 | c | 502 | CLA | CHA-CBD-CGD-O2D |
| 22 | c | 509 | CLA | CHA-CBD-CGD-O1D |
| 28 | d | 408 | LHG | C15-C16-C17-C18 |
| 22 | B | 604 | CLA | O1A-CGA-O2A-C1 |
| 22 | a | 405 | CLA | O1A-CGA-O2A-C1 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | c | 506 | CLA | O1A-CGA-O2A-C1 |
| 28 | D | 411 | LHG | C11-C10-C9-C8 |
| 31 | M | 102 | STE | C11-C10-C9-C8 |
| 30 | B | 617 | BCR | C12-C13-C14-C15 |
| 30 | B | 618 | BCR | C12-C13-C14-C15 |
| 30 | c | 514 | BCR | C11-C10-C9-C8 |
| 22 | B | 609 | CLA | C15-C16-C17-C18 |
| 26 | Y | 101 | LMG | C17-C18-C19-C20 |
| 27 | L | 101 | SQD | C18-C19-C20-C21 |
| 31 | B | 619 | STE | C2-C3-C4-C5 |
| 31 | B | 624 | STE | C14-C15-C16-C17 |
| 31 | t | 103 | STE | C6-C7-C8-C9 |
| 26 | c | 520 | LMG | O7-C8-C9-O8 |
| 26 | c | 521 | LMG | O1-C7-C8-O7 |
| 22 | C | 506 | CLA | O1A-CGA-O2A-C1 |
| 29 | C | 517 | DGD | O1A-C1A-O1G-C1G |
| 26 | D | 408 | LMG | C31-C32-C33-C34 |
| 22 | B | 602 | CLA | C16-C17-C18-C19 |
| 27 | a | 410 | SQD | C27-C28-C29-C30 |
| 29 | H | 103 | DGD | CBA-CCA-CDA-CEA |
| 22 | b | 601 | CLA | C8-C10-C11-C12 |
| 25 | a | 409 | PL9 | C4-C3-C7-C8 |
| 27 | B | 621 | SQD | C9-C10-C11-C12 |
| 22 | B | 614 | CLA | C5-C6-C7-C8 |
| 22 | H | 101 | CLA | C11-C10-C8-C9 |
| 22 | b | 615 | CLA | C11-C10-C8-C9 |
| 26 | M | 101 | LMG | C19-C20-C21-C22 |
| 26 | b | 622 | LMG | C32-C33-C34-C35 |
| 27 | L | 101 | SQD | C30-C31-C32-C33 |
| 27 | a | 410 | SQD | C35-C36-C37-C38 |
| 29 | H | 103 | DGD | CCB-CDB-CEB-CFB |
| 27 | t | 102 | SQD | C14-C15-C16-C17 |
| 28 | D | 410 | LHG | C32-C33-C34-C35 |
| 31 | I | 102 | STE | C12-C13-C14-C15 |
| 31 | M | 103 | STE | C2-C3-C4-C5 |
| 30 | I | 101 | BCR | C7-C8-C9-C34 |
| 31 | X | 101 | STE | C7-C8-C9-C10 |
| 26 | b | 622 | LMG | C42-C43-C44-C45 |
| 29 | h | 101 | DGD | C7A-C8A-C9A-CAA |
| 31 | C | 520 | STE | C4-C5-C6-C7 |
| 31 | M | 104 | STE | C9-C10-C11-C12 |
| 22 | a | 405 | CLA | C1A-C2A-CAA-CBA |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | b | 601 | CLA | C5-C6-C7-C8 |
| 31 | M | 104 | STE | C5-C6-C7-C8 |
| 22 | b | 616 | CLA | C8-C10-C11-C12 |
| 28 | L | 102 | LHG | C4-O6-P-O3 |
| 28 | l | 101 | LHG | C4-O6-P-O3 |
| 28 | b | 623 | LHG | C33-C34-C35-C36 |
| 26 | b | 622 | LMG | C35-C36-C37-C38 |
| 27 | A | 412 | SQD | C27-C28-C29-C30 |
| 28 | l | 101 | LHG | C18-C19-C20-C21 |
| 22 | c | 507 | CLA | C4-C3-C5-C6 |
| 28 | D | 411 | LHG | C15-C16-C17-C18 |
| 28 | A | 411 | LHG | C4-O6-P-O5 |
| 28 | b | 623 | LHG | C3-O3-P-O4 |
| 28 | l | 101 | LHG | C4-O6-P-O4 |
| 22 | B | 614 | CLA | C16-C17-C18-C20 |
| 22 | b | 602 | CLA | C16-C17-C18-C20 |
| 28 | a | 411 | LHG | C7-C8-C9-C10 |
| 28 | a | 411 | LHG | O6-C4-C5-C6 |
| 26 | D | 412 | LMG | C33-C34-C35-C36 |
| 29 | c | 515 | DGD | C1A-C2A-C3A-C4A |
| 26 | a | 414 | LMG | C36-C37-C38-C39 |
| 28 | a | 411 | LHG | C11-C12-C13-C14 |
| 28 | l | 101 | LHG | C14-C15-C16-C17 |
| 31 | C | 520 | STE | C6-C7-C8-C9 |
| 28 | b | 623 | LHG | C14-C15-C16-C17 |
| 22 | B | 606 | CLA | CAD-CBD-CGD-O1D |
| 22 | B | 611 | CLA | CAD-CBD-CGD-O1D |
| 22 | B | 613 | CLA | CAD-CBD-CGD-O1D |
| 22 | C | 504 | CLA | CAD-CBD-CGD-O1D |
| 22 | C | 506 | CLA | CAD-CBD-CGD-O1D |
| 22 | H | 101 | CLA | CAD-CBD-CGD-O1D |
| 22 | c | 502 | CLA | CAD-CBD-CGD-O1D |
| 22 | c | 506 | CLA | CAD-CBD-CGD-O1D |
| 26 | D | 408 | LMG | C16-C17-C18-C19 |
| 31 | b | 620 | STE | C10-C11-C12-C13 |
| 26 | D | 408 | LMG | C33-C34-C35-C36 |
| 29 | c | 515 | DGD | C4D-C5D-C6D-O5D |
| 26 | c | 520 | LMG | C41-C42-C43-C44 |
| 31 | b | 620 | STE | C11-C12-C13-C14 |
| 22 | A | 403 | CLA | C11-C12-C13-C15 |
| 22 | B | 604 | CLA | C6-C7-C8-C10 |
| 22 | B | 612 | CLA | C12-C13-C15-C16 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | H | 101 | CLA | C11-C10-C8-C7 |
| 22 | a | 403 | CLA | C11-C12-C13-C15 |
| 22 | b | 601 | CLA | C11-C10-C8-C7 |
| 22 | b | 606 | CLA | C11-C12-C13-C15 |
| 22 | b | 612 | CLA | C12-C13-C15-C16 |
| 22 | c | 505 | CLA | C6-C7-C8-C10 |
| 22 | c | 511 | CLA | C11-C12-C13-C15 |
| 22 | d | 405 | CLA | C11-C12-C13-C15 |
| 28 | l | 101 | LHG | O6-C4-C5-O7 |
| 26 | B | 620 | LMG | C36-C37-C38-C39 |
| 26 | D | 412 | LMG | C15-C16-C17-C18 |
| 31 | b | 627 | STE | C5-C6-C7-C8 |
| 25 | D | 407 | PL9 | C2-C3-C7-C8 |
| 22 | b | 611 | CLA | C5-C6-C7-C8 |
| 22 | c | 512 | CLA | C10-C11-C12-C13 |
| 28 | b | 623 | LHG | C17-C18-C19-C20 |
| 29 | C | 516 | DGD | C5A-C6A-C7A-C8A |
| 29 | C | 516 | DGD | CDA-CEA-CFA-CGA |
| 22 | B | 601 | CLA | C16-C17-C18-C19 |
| 26 | M | 101 | LMG | O7-C8-C9-O8 |
| 26 | a | 414 | LMG | O1-C7-C8-O7 |
| 27 | L | 101 | SQD | O6-C44-C45-O47 |
| 27 | L | 101 | SQD | O47-C45-C46-O48 |
| 27 | t | 102 | SQD | O47-C45-C46-O48 |
| 29 | C | 516 | DGD | O1G-C1G-C2G-O2G |
| 28 | l | 101 | LHG | C33-C34-C35-C36 |
| 28 | D | 410 | LHG | C26-C27-C28-C29 |
| 29 | A | 413 | DGD | CFB-CGB-CHB-CIB |
| 29 | C | 517 | DGD | C3A-C4A-C5A-C6A |
| 29 | C | 517 | DGD | C5D-C6D-O5D-C1E |
| 22 | B | 602 | CLA | C16-C17-C18-C20 |
| 22 | b | 615 | CLA | C16-C17-C18-C20 |
| 28 | d | 409 | LHG | C26-C27-C28-C29 |
| 22 | c | 507 | CLA | O1D-CGD-O2D-CED |
| 26 | d | 410 | LMG | C12-C13-C14-C15 |
| 22 | B | 608 | CLA | C4-C3-C5-C6 |
| 26 | m | 101 | LMG | C29-C28-O8-C9 |
| 27 | L | 101 | SQD | C29-C30-C31-C32 |
| 28 | a | 411 | LHG | C28-C29-C30-C31 |
| 22 | A | 403 | CLA | C11-C12-C13-C14 |
| 22 | B | 603 | CLA | C11-C12-C13-C14 |
| 22 | B | 608 | CLA | C14-C13-C15-C16 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | D | 403 | CLA | C11-C12-C13-C14 |
| 22 | b | 613 | CLA | C11-C10-C8-C9 |
| 22 | c | 501 | CLA | C11-C12-C13-C14 |
| 22 | c | 511 | CLA | C11-C10-C8-C9 |
| 22 | c | 511 | CLA | C11-C12-C13-C14 |
| 22 | b | 607 | CLA | C16-C17-C18-C19 |
| 22 | b | 610 | CLA | C16-C17-C18-C19 |
| 28 | D | 411 | LHG | C9-C10-C11-C12 |
| 25 | A | 408 | PL9 | C19-C21-C22-C23 |
| 26 | b | 622 | LMG | C28-C29-C30-C31 |
| 26 | m | 101 | LMG | C37-C38-C39-C40 |
| 22 | B | 606 | CLA | C13-C15-C16-C17 |
| 22 | b | 601 | CLA | C13-C15-C16-C17 |
| 26 | D | 408 | LMG | C12-C13-C14-C15 |
| 29 | H | 103 | DGD | C9A-CAA-CBA-CCA |
| 23 | d | 401 | PHO | O1D-CGD-O2D-CED |
| 26 | c | 518 | LMG | C32-C33-C34-C35 |
| 28 | A | 411 | LHG | C11-C10-C9-C8 |
| 31 | t | 103 | STE | C7-C8-C9-C10 |
| 26 | D | 408 | LMG | C21-C22-C23-C24 |
| 29 | c | 515 | DGD | C9B-CAB-CBB-CCB |
| 22 | B | 612 | CLA | C13-C15-C16-C17 |
| 28 | D | 411 | LHG | C31-C32-C33-C34 |
| 29 | C | 516 | DGD | C2A-C3A-C4A-C5A |
| 28 | A | 411 | LHG | C17-C18-C19-C20 |
| 29 | c | 517 | DGD | CAA-CBA-CCA-CDA |
| 22 | b | 603 | CLA | C13-C15-C16-C17 |
| 26 | D | 412 | LMG | C9-C8-O7-C10 |
| 29 | C | 518 | DGD | O1A-C1A-O1G-C1G |
| 22 | B | 603 | CLA | C2-C1-O2A-CGA |
| 22 | B | 615 | CLA | C2-C1-O2A-CGA |
| 22 | C | 506 | CLA | C2-C1-O2A-CGA |
| 26 | c | 518 | LMG | C34-C35-C36-C37 |
| 22 | B | 601 | CLA | C16-C17-C18-C20 |
| 31 | d | 411 | STE | C3-C4-C5-C6 |
| 22 | c | 502 | CLA | O1D-CGD-O2D-CED |
| 30 | b | 617 | BCR | C5-C6-C7-C8 |
| 22 | c | 507 | CLA | C2-C3-C5-C6 |
| 25 | A | 408 | PL9 | C13-C14-C16-C17 |
| 28 | b | 623 | LHG | C30-C31-C32-C33 |
| 31 | b | 624 | STE | C11-C12-C13-C14 |
| 28 | d | 408 | LHG | C28-C29-C30-C31 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | B | 618 | BCR | C20-C21-C22-C23 |
| 30 | C | 514 | BCR | C11-C10-C9-C8 |
| 30 | b | 618 | BCR | C12-C13-C14-C15 |
| 30 | d | 406 | BCR | C12-C13-C14-C15 |
| 22 | b | 604 | CLA | C13-C15-C16-C17 |
| 28 | d | 409 | LHG | C31-C32-C33-C34 |
| 27 | B | 621 | SQD | C31-C32-C33-C34 |
| 29 | c | 515 | DGD | O6D-C5D-C6D-O5D |
| 28 | L | 102 | LHG | C29-C30-C31-C32 |
| 23 | d | 401 | PHO | CHA-CBD-CGD-O1D |
| 23 | d | 401 | PHO | CHA-CBD-CGD-O2D |
| 26 | b | 622 | LMG | O1-C7-C8-C9 |
| 27 | a | 410 | SQD | C44-C45-C46-O48 |
| 22 | c | 512 | CLA | C4-C3-C5-C6 |
| 31 | B | 623 | STE | C2-C3-C4-C5 |
| 31 | b | 625 | STE | C11-C10-C9-C8 |
| 22 | C | 505 | CLA | C12-C13-C15-C16 |
| 22 | C | 506 | CLA | C11-C12-C13-C15 |
| 22 | C | 510 | CLA | C11-C10-C8-C7 |
| 22 | C | 513 | CLA | C12-C13-C15-C16 |
| 22 | B | 603 | CLA | C14-C13-C15-C16 |
| 22 | C | 509 | CLA | C14-C13-C15-C16 |
| 22 | a | 403 | CLA | C14-C13-C15-C16 |
| 22 | b | 608 | CLA | C11-C10-C8-C9 |
| 22 | b | 615 | CLA | C11-C12-C13-C14 |
| 30 | c | 514 | BCR | C13-C14-C15-C16 |
| 30 | k | 101 | BCR | C9-C10-C11-C12 |
| 25 | a | 409 | PL9 | C41-C42-C43-C44 |
| 31 | b | 626 | STE | C14-C15-C16-C17 |
| 31 | t | 103 | STE | C11-C10-C9-C8 |
| 30 | b | 618 | BCR | C7-C8-C9-C34 |
| 30 | k | 102 | BCR | C36-C18-C19-C20 |
| 27 | B | 621 | SQD | C30-C31-C32-C33 |
| 31 | x | 102 | STE | C14-C15-C16-C17 |
| 28 | D | 411 | LHG | O9-C7-O7-C5 |
| 28 | b | 623 | LHG | C28-C29-C30-C31 |
| 28 | d | 408 | LHG | C17-C18-C19-C20 |
| 22 | A | 402 | CLA | C15-C16-C17-C18 |
| 22 | B | 604 | CLA | C10-C11-C12-C13 |
| 22 | c | 510 | CLA | C15-C16-C17-C18 |
| 28 | A | 411 | LHG | C23-C24-C25-C26 |
| 28 | a | 411 | LHG | C16-C17-C18-C19 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 29 | C | 517 | DGD | CCB-CDB-CEB-CFB |
| 30 | t | 101 | BCR | C13-C14-C15-C16 |
| 28 | A | 411 | LHG | C27-C28-C29-C30 |
| 28 | a | 411 | LHG | C15-C16-C17-C18 |
| 22 | A | 402 | CLA | C13-C15-C16-C17 |
| 22 | b | 614 | CLA | C5-C6-C7-C8 |
| 31 | B | 623 | STE | C11-C12-C13-C14 |
| 28 | L | 102 | LHG | C11-C12-C13-C14 |
| 22 | C | 508 | CLA | C16-C17-C18-C20 |
| 26 | a | 414 | LMG | O8-C28-C29-C30 |
| 26 | M | 101 | LMG | C17-C18-C19-C20 |
| 31 | t | 104 | STE | C4-C5-C6-C7 |
| 22 | c | 510 | CLA | C8-C10-C11-C12 |
| 22 | B | 608 | CLA | C2-C3-C5-C6 |
| 27 | t | 102 | SQD | C24-C25-C26-C27 |
| 31 | M | 102 | STE | O1-C1-C2-C3 |
| 31 | d | 411 | STE | O1-C1-C2-C3 |
| 29 | c | 515 | DGD | O1G-C1A-C2A-C3A |
| 22 | a | 405 | CLA | C15-C16-C17-C18 |
| 22 | D | 403 | CLA | C16-C17-C18-C20 |
| 31 | d | 411 | STE | C12-C13-C14-C15 |
| 22 | B | 613 | CLA | C2A-CAA-CBA-CGA |
| 26 | m | 101 | LMG | O7-C8-C9-O8 |
| 26 | M | 101 | LMG | C33-C34-C35-C36 |
| 27 | A | 410 | SQD | C9-C10-C11-C12 |
| 27 | A | 412 | SQD | C31-C32-C33-C34 |
| 23 | D | 401 | PHO | C3A-C2A-CAA-CBA |
| 31 | B | 622 | STE | O1-C1-C2-C3 |
| 31 | b | 626 | STE | O2-C1-C2-C3 |
| 30 | C | 515 | BCR | C9-C10-C11-C12 |
| 22 | C | 501 | CLA | C2C-C3C-CAC-CBC |
| 28 | b | 623 | LHG | C24-C25-C26-C27 |
| 28 | d | 408 | LHG | C24-C25-C26-C27 |
| 25 | A | 408 | PL9 | C4-C3-C7-C8 |
| 22 | A | 402 | CLA | C14-C13-C15-C16 |
| 22 | B | 609 | CLA | C14-C13-C15-C16 |
| 22 | a | 403 | CLA | C11-C12-C13-C14 |
| 22 | b | 601 | CLA | C14-C13-C15-C16 |
| 22 | b | 604 | CLA | C11-C10-C8-C9 |
| 22 | c | 502 | CLA | C14-C13-C15-C16 |
| 22 | d | 403 | CLA | C11-C10-C8-C9 |
| 23 | d | 401 | PHO | C6-C7-C8-C9 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | C | 501 | CLA | C4C-C3C-CAC-CBC |
| 26 | D | 408 | LMG | C32-C33-C34-C35 |
| 31 | B | 619 | STE | C12-C13-C14-C15 |
| 31 | X | 101 | STE | C13-C14-C15-C16 |
| 29 | c | 516 | DGD | C4E-C5E-C6E-O5E |
| 31 | C | 521 | STE | C5-C6-C7-C8 |
| 28 | L | 102 | LHG | C10-C11-C12-C13 |
| 29 | C | 516 | DGD | C2B-C3B-C4B-C5B |
| 22 | b | 610 | CLA | C16-C17-C18-C20 |
| 29 | c | 516 | DGD | O6D-C1D-O3G-C3G |
| 28 | D | 410 | LHG | C9-C10-C11-C12 |
| 31 | a | 413 | STE | C12-C13-C14-C15 |
| 30 | t | 101 | BCR | C11-C12-C13-C35 |
| 31 | b | 626 | STE | O1-C1-C2-C3 |
| 30 | B | 617 | BCR | C14-C15-C16-C17 |
| 26 | m | 101 | LMG | C14-C15-C16-C17 |
| 31 | b | 626 | STE | C2-C3-C4-C5 |
| 22 | d | 403 | CLA | C3-C5-C6-C7 |
| 26 | M | 101 | LMG | C39-C40-C41-C42 |
| 29 | h | 101 | DGD | CBB-CCB-CDB-CEB |
| 26 | a | 414 | LMG | C9-C8-O7-C10 |
| 22 | C | 506 | CLA | C1A-C2A-CAA-CBA |
| 22 | C | 508 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 511 | CLA | C1A-C2A-CAA-CBA |
| 22 | B | 614 | CLA | C6-C7-C8-C10 |
| 22 | D | 405 | CLA | C12-C13-C15-C16 |
| 22 | c | 503 | CLA | C11-C12-C13-C15 |
| 31 | b | 621 | STE | O1-C1-C2-C3 |
| 29 | H | 103 | DGD | C9B-CAB-CBB-CCB |
| 22 | b | 612 | CLA | C15-C16-C17-C18 |
| 31 | d | 411 | STE | O2-C1-C2-C3 |
| 34 | f | 101 | HEC | CAD-CBD-CGD-O1D |
| 26 | c | 520 | LMG | C29-C30-C31-C32 |
| 22 | B | 613 | CLA | C13-C15-C16-C17 |
| 22 | B | 614 | CLA | C13-C15-C16-C17 |
| 29 | C | 518 | DGD | C8B-C9B-CAB-CBB |
| 22 | C | 507 | CLA | C13-C15-C16-C17 |
| 22 | b | 603 | CLA | C8-C10-C11-C12 |
| 34 | f | 101 | HEC | CAD-CBD-CGD-O2D |
| 27 | A | 410 | SQD | C31-C32-C33-C34 |
| 22 | D | 404 | CLA | C8-C10-C11-C12 |
| 28 | A | 411 | LHG | C33-C34-C35-C36 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 29 | C | 516 | DGD | O6D-C5D-C6D-O5D |
| 31 | M | 102 | STE | O2-C1-C2-C3 |
| 29 | h | 101 | DGD | C9B-CAB-CBB-CCB |
| 31 | x | 102 | STE | C10-C11-C12-C13 |
| 29 | C | 518 | DGD | CDA-CEA-CFA-CGA |
| 31 | X | 101 | STE | O1-C1-C2-C3 |
| 22 | B | 608 | CLA | C13-C15-C16-C17 |
| 22 | c | 505 | CLA | C10-C11-C12-C13 |
| 25 | A | 408 | PL9 | C47-C48-C49-C51 |
| 27 | A | 410 | SQD | O49-C7-O47-C45 |
| 26 | b | 622 | LMG | C14-C15-C16-C17 |
| 30 | C | 515 | BCR | C13-C14-C15-C16 |
| 30 | k | 101 | BCR | C13-C14-C15-C16 |
| 22 | c | 504 | CLA | C11-C12-C13-C14 |
| 26 | M | 101 | LMG | C18-C19-C20-C21 |
| 25 | a | 409 | PL9 | C29-C31-C32-C33 |
| 31 | X | 101 | STE | O2-C1-C2-C3 |
| 22 | B | 607 | CLA | C4-C3-C5-C6 |
| 26 | D | 408 | LMG | C22-C23-C24-C25 |
| 22 | d | 403 | CLA | C2-C1-O2A-CGA |
| 27 | A | 412 | SQD | C35-C36-C37-C38 |
| 30 | K | 101 | BCR | C18-C19-C20-C21 |
| 28 | b | 623 | LHG | C26-C27-C28-C29 |
| 29 | C | 516 | DGD | C8A-C9A-CAA-CBA |
| 31 | M | 104 | STE | C11-C12-C13-C14 |
| 31 | c | 519 | STE | C14-C15-C16-C17 |
| 22 | b | 602 | CLA | C11-C10-C8-C9 |
| 22 | c | 504 | CLA | C11-C10-C8-C9 |
| 22 | c | 505 | CLA | C11-C10-C8-C9 |
| 22 | c | 505 | CLA | O1A-CGA-O2A-C1 |
| 22 | C | 506 | CLA | C3-C5-C6-C7 |
| 31 | B | 622 | STE | O2-C1-C2-C3 |
| 26 | c | 520 | LMG | C39-C40-C41-C42 |
| 29 | c | 515 | DGD | C6A-C7A-C8A-C9A |
| 31 | j | 101 | STE | C5-C6-C7-C8 |
| 22 | d | 403 | CLA | C2C-C3C-CAC-CBC |
| 30 | b | 617 | BCR | C1-C6-C7-C8 |
| 30 | b | 617 | BCR | C23-C24-C25-C30 |
| 30 | b | 618 | BCR | C23-C24-C25-C30 |
| 30 | d | 406 | BCR | C23-C24-C25-C30 |
| 30 | k | 103 | BCR | C23-C24-C25-C30 |
| 30 | t | 101 | BCR | C1-C6-C7-C8 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 30 | t | 101 | BCR | C5-C6-C7-C8 |
| 22 | c | 513 | CLA | C13-C15-C16-C17 |
| 22 | A | 402 | CLA | C4C-C3C-CAC-CBC |
| 27 | D | 409 | SQD | C45-C46-O48-C23 |
| 30 | k | 103 | BCR | C9-C10-C11-C12 |
| 22 | b | 615 | CLA | C4-C3-C5-C6 |
| 30 | H | 102 | BCR | C17-C18-C19-C20 |
| 30 | H | 102 | BCR | C21-C22-C23-C24 |
| 29 | c | 517 | DGD | C5A-C6A-C7A-C8A |
| 22 | c | 512 | CLA | C2-C3-C5-C6 |
| 25 | a | 409 | PL9 | C43-C44-C46-C47 |
| 29 | c | 516 | DGD | C5D-C6D-O5D-C1E |
| 26 | M | 101 | LMG | O6-C5-C6-O5 |
| 31 | J | 101 | STE | C7-C8-C9-C10 |
| 27 | B | 621 | SQD | C34-C35-C36-C37 |
| 28 | D | 413 | LHG | C29-C30-C31-C32 |
| 22 | c | 513 | CLA | C8-C10-C11-C12 |
| 28 | D | 413 | LHG | O6-C4-C5-O7 |
| 31 | C | 519 | STE | O2-C1-C2-C3 |
| 29 | C | 518 | DGD | CDB-CEB-CFB-CGB |
| 26 | b | 622 | LMG | C40-C41-C42-C43 |
| 31 | b | 625 | STE | C11-C12-C13-C14 |
| 22 | c | 508 | CLA | C4-C3-C5-C6 |
| 25 | D | 407 | PL9 | C33-C34-C36-C37 |
| 31 | B | 624 | STE | C13-C14-C15-C16 |
| 29 | h | 101 | DGD | O2G-C1B-C2B-C3B |
| 26 | b | 622 | LMG | O1-C7-C8-O7 |
| 26 | c | 518 | LMG | C36-C37-C38-C39 |
| 28 | A | 411 | LHG | C29-C30-C31-C32 |
| 22 | c | 505 | CLA | CBA-CGA-O2A-C1 |
| 30 | x | 101 | BCR | C35-C13-C14-C15 |
| 31 | B | 622 | STE | C5-C6-C7-C8 |
| 22 | b | 601 | CLA | CAA-CBA-CGA-O2A |
| 22 | A | 405 | CLA | C4-C3-C5-C6 |
| 22 | d | 403 | CLA | C4-C3-C5-C6 |
| 25 | a | 409 | PL9 | C18-C19-C21-C22 |
| 22 | B | 612 | CLA | C14-C13-C15-C16 |
| 22 | b | 606 | CLA | C11-C12-C13-C14 |
| 22 | b | 612 | CLA | C14-C13-C15-C16 |
| 22 | c | 503 | CLA | C11-C10-C8-C9 |
| 28 | D | 410 | LHG | C33-C34-C35-C36 |
| 31 | b | 624 | STE | O1-C1-C2-C3 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 34 | F | 101 | HEC | CAD-CBD-CGD-O1D |
| 34 | F | 101 | HEC | C2A-CAA-CBA-CGA |
| 26 | d | 410 | LMG | O7-C10-C11-C12 |
| 31 | x | 102 | STE | O1-C1-C2-C3 |
| 22 | B | 603 | CLA | CAD-CBD-CGD-O2D |
| 22 | C | 502 | CLA | CAD-CBD-CGD-O2D |
| 22 | C | 503 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 607 | CLA | CAD-CBD-CGD-O2D |
| 22 | b | 609 | CLA | CAD-CBD-CGD-O2D |
| 22 | c | 503 | CLA | CAD-CBD-CGD-O2D |
| 22 | c | 504 | CLA | CAD-CBD-CGD-O2D |
| 22 | c | 510 | CLA | CAD-CBD-CGD-O2D |
| 22 | c | 512 | CLA | CAD-CBD-CGD-O2D |
| 22 | c | 513 | CLA | CAD-CBD-CGD-O2D |
| 23 | D | 401 | PHO | CAD-CBD-CGD-O2D |
| 26 | A | 409 | LMG | C7-C8-O7-C10 |
| 29 | C | 516 | DGD | C4E-C5E-C6E-O5E |
| 22 | B | 609 | CLA | C2A-CAA-CBA-CGA |
| 22 | c | 507 | CLA | C2A-CAA-CBA-CGA |
| 28 | d | 408 | LHG | O9-C7-O7-C5 |
| 28 | L | 102 | LHG | C11-C10-C9-C8 |
| 30 | B | 618 | BCR | C6-C7-C8-C9 |
| 30 | B | 618 | BCR | C22-C23-C24-C25 |
| 22 | c | 502 | CLA | O1A-CGA-O2A-C1 |
| 31 | C | 519 | STE | O1-C1-C2-C3 |
| 34 | V | 201 | HEC | CAD-CBD-CGD-O2D |
| 34 | v | 201 | HEC | CAD-CBD-CGD-O2D |
| 26 | A | 409 | LMG | C39-C40-C41-C42 |
| 31 | C | 519 | STE | C6-C7-C8-C9 |
| 22 | B | 607 | CLA | C2-C3-C5-C6 |
| 28 | a | 411 | LHG | O8-C23-C24-C25 |
| 29 | C | 517 | DGD | O2G-C1B-C2B-C3B |
| 29 | c | 516 | DGD | O2G-C1B-C2B-C3B |
| 22 | C | 507 | CLA | CBD-CGD-O2D-CED |
| 30 | K | 101 | BCR | C7-C8-C9-C10 |
| 30 | b | 617 | BCR | C11-C12-C13-C14 |
| 30 | d | 406 | BCR | C21-C22-C23-C24 |
| 30 | k | 102 | BCR | C11-C12-C13-C14 |
| 31 | H | 104 | STE | C14-C15-C16-C17 |
| 31 | b | 626 | STE | C11-C10-C9-C8 |
| 23 | d | 401 | PHO | C2C-C3C-CAC-CBC |
| 26 | A | 409 | LMG | C7-C8-C9-O8 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 29 | h | 101 | DGD | C1G-C2G-C3G-O3G |
| 26 | B | 620 | LMG | C17-C18-C19-C20 |
| 29 | c | 516 | DGD | C9B-CAB-CBB-CCB |
| 26 | B | 620 | LMG | O10-C28-C29-C30 |
| 31 | b | 621 | STE | O2-C1-C2-C3 |
| 34 | V | 201 | HEC | CAD-CBD-CGD-O1D |
| 22 | H | 101 | CLA | O2A-C1-C2-C3 |
| 23 | a | 404 | PHO | O2A-C1-C2-C3 |
| 29 | A | 413 | DGD | C3B-C4B-C5B-C6B |
| 31 | d | 411 | STE | C6-C7-C8-C9 |
| 31 | t | 103 | STE | O1-C1-C2-C3 |
| 31 | t | 103 | STE | O2-C1-C2-C3 |
| 22 | c | 502 | CLA | C13-C15-C16-C17 |
| 22 | b | 616 | CLA | C11-C12-C13-C15 |
| 31 | B | 623 | STE | C13-C14-C15-C16 |
| 22 | B | 601 | CLA | CHA-CBD-CGD-O1D |
| 22 | B | 601 | CLA | CHA-CBD-CGD-O2D |
| 22 | B | 604 | CLA | CHA-CBD-CGD-O2D |
| 22 | C | 506 | CLA | CHA-CBD-CGD-O2D |
| 22 | C | 507 | CLA | CHA-CBD-CGD-O1D |
| 22 | C | 507 | CLA | CHA-CBD-CGD-O2D |
| 22 | D | 404 | CLA | CHA-CBD-CGD-O1D |
| 22 | b | 611 | CLA | CHA-CBD-CGD-O2D |
| 22 | c | 507 | CLA | CHA-CBD-CGD-O2D |
| 30 | C | 515 | BCR | C15-C16-C17-C18 |
| 31 | x | 102 | STE | O2-C1-C2-C3 |
| 34 | F | 101 | HEC | CAD-CBD-CGD-O2D |
| 22 | c | 502 | CLA | CBA-CGA-O2A-C1 |
| 22 | b | 615 | CLA | C2-C3-C5-C6 |
| 22 | b | 605 | CLA | C10-C11-C12-C13 |
| 28 | b | 623 | LHG | O6-C4-C5-C6 |
| 31 | b | 624 | STE | O2-C1-C2-C3 |
| 29 | C | 516 | DGD | C9B-CAB-CBB-CCB |
| 29 | c | 515 | DGD | C9A-CAA-CBA-CCA |
| 27 | D | 409 | SQD | C44-C45-C46-O48 |
| 22 | B | 601 | CLA | C15-C16-C17-C18 |
| 26 | m | 101 | LMG | O8-C28-C29-C30 |
| 34 | v | 201 | HEC | CAD-CBD-CGD-O1D |
| 22 | B | 601 | CLA | C10-C11-C12-C13 |
| 22 | B | 607 | CLA | C13-C15-C16-C17 |
| 26 | B | 620 | LMG | C16-C17-C18-C19 |
| 22 | c | 509 | CLA | CAA-CBA-CGA-O1A |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 28 | D | 413 | LHG | O10-C23-C24-C25 |
| 22 | C | 511 | CLA | C3-C5-C6-C7 |
| 31 | L | 103 | STE | C4-C5-C6-C7 |
| 22 | B | 602 | CLA | C11-C10-C8-C7 |
| 23 | a | 404 | PHO | C6-C7-C8-C10 |
| 29 | C | 518 | DGD | CAB-CBB-CCB-CDB |
| 31 | a | 413 | STE | C9-C10-C11-C12 |
| 31 | H | 104 | STE | C15-C16-C17-C18 |
| 22 | C | 505 | CLA | C6-C7-C8-C9 |
| 22 | b | 612 | CLA | C11-C10-C8-C9 |
| 22 | c | 505 | CLA | C6-C7-C8-C9 |
| 22 | c | 508 | CLA | C11-C12-C13-C14 |
| 30 | b | 619 | BCR | C9-C10-C11-C12 |
| 30 | c | 514 | BCR | C15-C16-C17-C18 |
| 26 | M | 101 | LMG | C20-C21-C22-C23 |
| 27 | B | 621 | SQD | C27-C28-C29-C30 |
| 27 | D | 409 | SQD | C32-C33-C34-C35 |
| 26 | B | 620 | LMG | O7-C10-C11-C12 |
| 22 | C | 503 | CLA | C10-C11-C12-C13 |
| 27 | L | 101 | SQD | C5-C6-S-O8 |
| 31 | C | 521 | STE | C3-C4-C5-C6 |
| 22 | B | 612 | CLA | CAA-CBA-CGA-O2A |
| 28 | L | 102 | LHG | O7-C7-C8-C9 |
| 31 | X | 101 | STE | C15-C16-C17-C18 |
| 28 | d | 409 | LHG | C9-C10-C11-C12 |
| 29 | c | 517 | DGD | O1G-C1A-C2A-C3A |
| 22 | c | 505 | CLA | CBD-CGD-O2D-CED |
| 30 | C | 514 | BCR | C11-C12-C13-C14 |
| 22 | c | 507 | CLA | CBA-CGA-O2A-C1 |
| 22 | b | 604 | CLA | C8-C10-C11-C12 |
| 22 | b | 601 | CLA | O1A-CGA-O2A-C1 |
| 22 | B | 601 | CLA | C1A-C2A-CAA-CBA |
| 22 | b | 602 | CLA | C1A-C2A-CAA-CBA |
| 22 | b | 604 | CLA | C1A-C2A-CAA-CBA |
| 22 | c | 506 | CLA | C1A-C2A-CAA-CBA |
| 31 | M | 103 | STE | C1-C2-C3-C4 |
| 31 | M | 104 | STE | C7-C8-C9-C10 |
| 22 | C | 501 | CLA | C16-C17-C18-C20 |
| 26 | d | 410 | LMG | O9-C10-C11-C12 |
| 28 | A | 411 | LHG | C30-C31-C32-C33 |
| 22 | B | 612 | CLA | C2-C1-O2A-CGA |
| 22 | c | 512 | CLA | C2-C1-O2A-CGA |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 22 | B | 612 | CLA | CAA-CBA-CGA-O1A |
| 26 | Y | 101 | LMG | O9-C10-C11-C12 |
| 27 | a | 410 | SQD | O49-C7-C8-C9 |
| 29 | c | 515 | DGD | O1B-C1B-C2B-C3B |
| 29 | c | 515 | DGD | C1G-C2G-C3G-O3G |
| 22 | b | 601 | CLA | C2C-C3C-CAC-CBC |
| 31 | I | 102 | STE | C7-C8-C9-C10 |
| 22 | b | 601 | CLA | CAA-CBA-CGA-O1A |
| 22 | B | 605 | CLA | C10-C11-C12-C13 |
| 22 | c | 503 | CLA | C8-C10-C11-C12 |
| 22 | c | 512 | CLA | C5-C6-C7-C8 |
| 28 | D | 411 | LHG | C2-C3-O3-P |
| 31 | B | 625 | STE | C2-C3-C4-C5 |
| 28 | d | 409 | LHG | C32-C33-C34-C35 |
| 22 | c | 507 | CLA | O1A-CGA-O2A-C1 |
| 31 | b | 626 | STE | C15-C16-C17-C18 |
| 28 | D | 410 | LHG | C4-O6-P-O5 |
| 28 | L | 102 | LHG | C3-O3-P-O5 |
| 28 | L | 102 | LHG | C4-O6-P-O5 |
| 28 | d | 408 | LHG | C4-O6-P-O5 |
| 26 | b | 622 | LMG | O10-C28-C29-C30 |
| 27 | A | 410 | SQD | O49-C7-C8-C9 |
| 30 | K | 102 | BCR | C23-C24-C25-C26 |
| 30 | b | 617 | BCR | C23-C24-C25-C26 |
| 22 | b | 603 | CLA | C16-C17-C18-C20 |
| 30 | H | 102 | BCR | C10-C11-C12-C13 |
| 30 | K | 102 | BCR | C10-C11-C12-C13 |
| 22 | B | 602 | CLA | C2A-CAA-CBA-CGA |
| 22 | b | 614 | CLA | C2A-CAA-CBA-CGA |
| 31 | b | 624 | STE | C5-C6-C7-C8 |
| 22 | C | 506 | CLA | C13-C15-C16-C17 |
| 26 | Y | 101 | LMG | C30-C31-C32-C33 |
| 28 | d | 409 | LHG | O10-C23-C24-C25 |
| 25 | A | 408 | PL9 | C21-C22-C23-C24 |
| 22 | B | 608 | CLA | CAD-CBD-CGD-O1D |
| 27 | B | 621 | SQD | C5-C6-S-O9 |
| 28 | b | 623 | LHG | O10-C23-O8-C6 |
| 28 | a | 411 | LHG | O10-C23-C24-C25 |
| 28 | b | 623 | LHG | O8-C23-C24-C25 |
| 22 | B | 602 | CLA | C11-C10-C8-C9 |
| 22 | B | 612 | CLA | C6-C7-C8-C9 |
| 22 | c | 505 | CLA | C14-C13-C15-C16 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 23 | a | 404 | PHO | C6-C7-C8-C9 |
| 28 | d | 408 | LHG | C13-C14-C15-C16 |
| 31 | B | 623 | STE | C9-C10-C11-C12 |
| 31 | R | 101 | STE | O1-C1-C2-C3 |
| 31 | j | 101 | STE | O1-C1-C2-C3 |
| 26 | c | 521 | LMG | C16-C17-C18-C19 |
| 26 | b | 622 | LMG | O7-C10-C11-C12 |
| 26 | b | 622 | LMG | O8-C28-C29-C30 |
| 29 | C | 517 | DGD | O1G-C1A-C2A-C3A |
| 29 | c | 515 | DGD | O2G-C1B-C2B-C3B |
| 31 | C | 520 | STE | C15-C16-C17-C18 |
| 26 | c | 520 | LMG | C38-C39-C40-C41 |
| 26 | A | 409 | LMG | C40-C41-C42-C43 |
| 31 | d | 411 | STE | C11-C10-C9-C8 |
| 22 | A | 402 | CLA | C12-C13-C15-C16 |
| 22 | A | 405 | CLA | C2-C3-C5-C6 |
| 22 | B | 608 | CLA | C11-C12-C13-C15 |
| 22 | B | 612 | CLA | C6-C7-C8-C10 |
| 22 | B | 613 | CLA | C11-C10-C8-C7 |
| 22 | C | 505 | CLA | C6-C7-C8-C10 |
| 22 | H | 101 | CLA | C3A-C2A-CAA-CBA |
| 22 | a | 405 | CLA | C12-C13-C15-C16 |
| 22 | b | 612 | CLA | C11-C10-C8-C7 |
| 22 | c | 504 | CLA | C11-C10-C8-C7 |
| 22 | c | 505 | CLA | C12-C13-C15-C16 |
| 22 | c | 508 | CLA | C11-C12-C13-C15 |
| 22 | c | 511 | CLA | C6-C7-C8-C10 |
| 22 | c | 512 | CLA | C11-C10-C8-C7 |
| 25 | a | 409 | PL9 | C23-C24-C26-C27 |
| 28 | D | 411 | LHG | O10-C23-C24-C25 |
| 28 | a | 411 | LHG | O9-C7-C8-C9 |
| 22 | H | 101 | CLA | CAA-CBA-CGA-O2A |
| 22 | c | 510 | CLA | CAA-CBA-CGA-O2A |
| 27 | A | 410 | SQD | O47-C7-C8-C9 |
| 30 | B | 616 | BCR | C11-C12-C13-C14 |
| 29 | h | 101 | DGD | O1A-C1A-C2A-C3A |
| 27 | L | 101 | SQD | C15-C16-C17-C18 |
| 22 | b | 613 | CLA | CAA-CBA-CGA-O2A |
| 22 | B | 615 | CLA | C4C-C3C-CAC-CBC |
| 31 | R | 101 | STE | O2-C1-C2-C3 |
| 27 | L | 101 | SQD | C10-C11-C12-C13 |
| 22 | b | 614 | CLA | CAA-CBA-CGA-O2A |

Continued on next page...

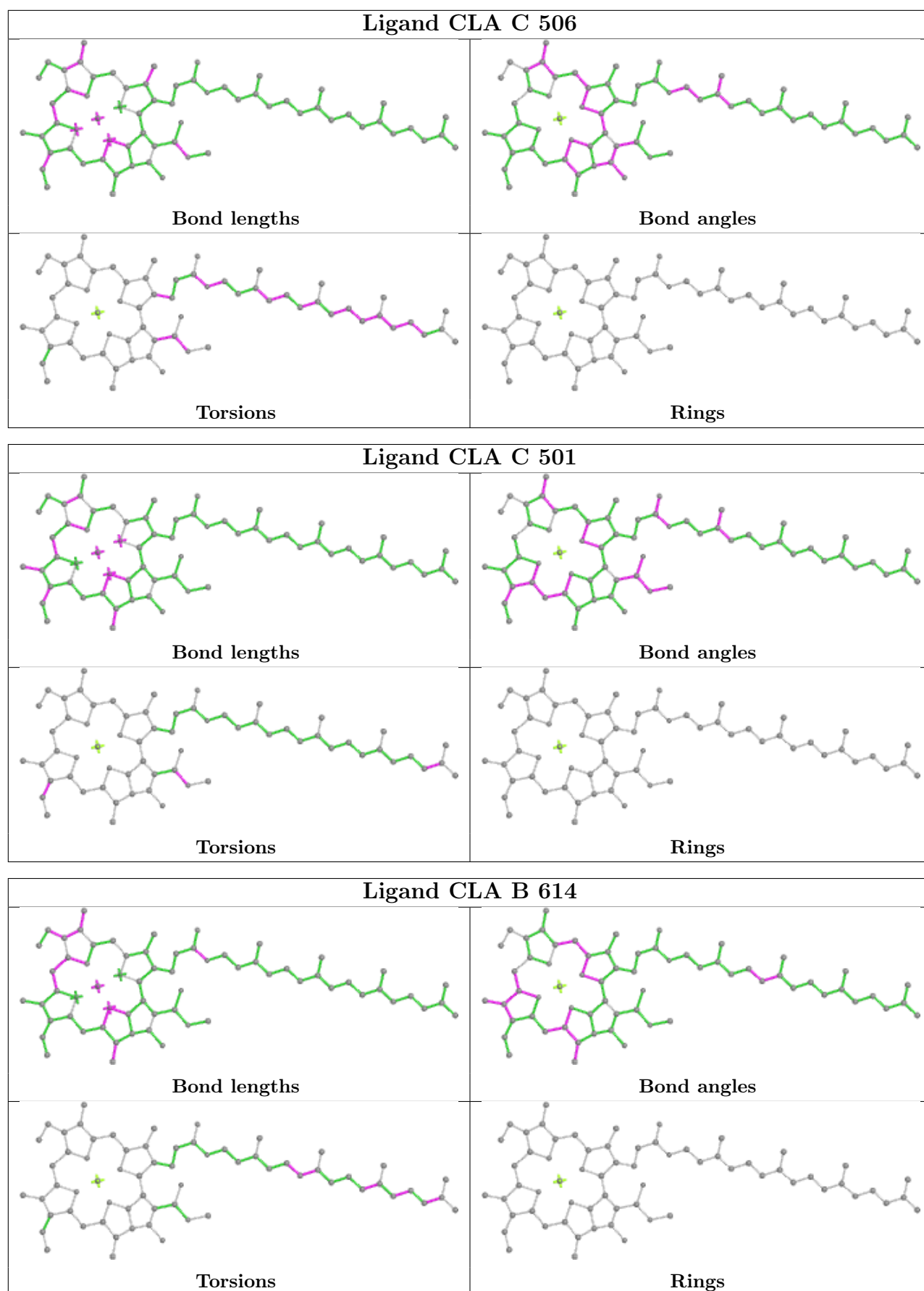
Continued from previous page...

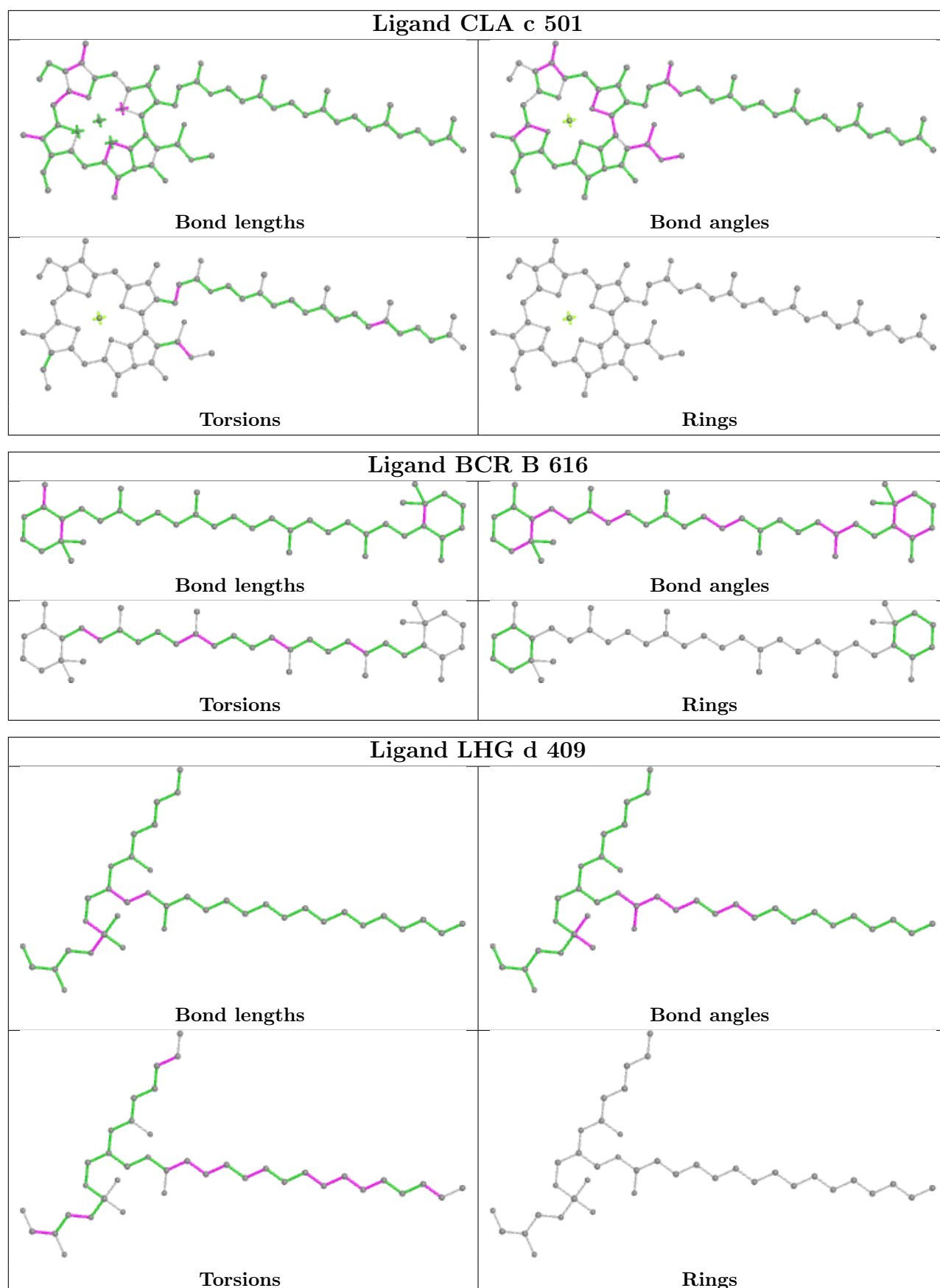
| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 27 | B | 621 | SQD | O47-C7-C8-C9 |
| 25 | d | 407 | PL9 | C37-C38-C39-C40 |
| 31 | j | 101 | STE | O2-C1-C2-C3 |
| 27 | B | 621 | SQD | C26-C27-C28-C29 |
| 22 | C | 509 | CLA | C5-C6-C7-C8 |
| 26 | c | 518 | LMG | C29-C28-O8-C9 |
| 22 | D | 404 | CLA | C4C-C3C-CAC-CBC |
| 22 | b | 608 | CLA | C4C-C3C-CAC-CBC |
| 28 | b | 623 | LHG | C25-C26-C27-C28 |
| 22 | H | 101 | CLA | CAA-CBA-CGA-O1A |
| 22 | B | 611 | CLA | CAA-CBA-CGA-O2A |
| 22 | c | 505 | CLA | CAA-CBA-CGA-O2A |
| 22 | C | 509 | CLA | C8-C10-C11-C12 |

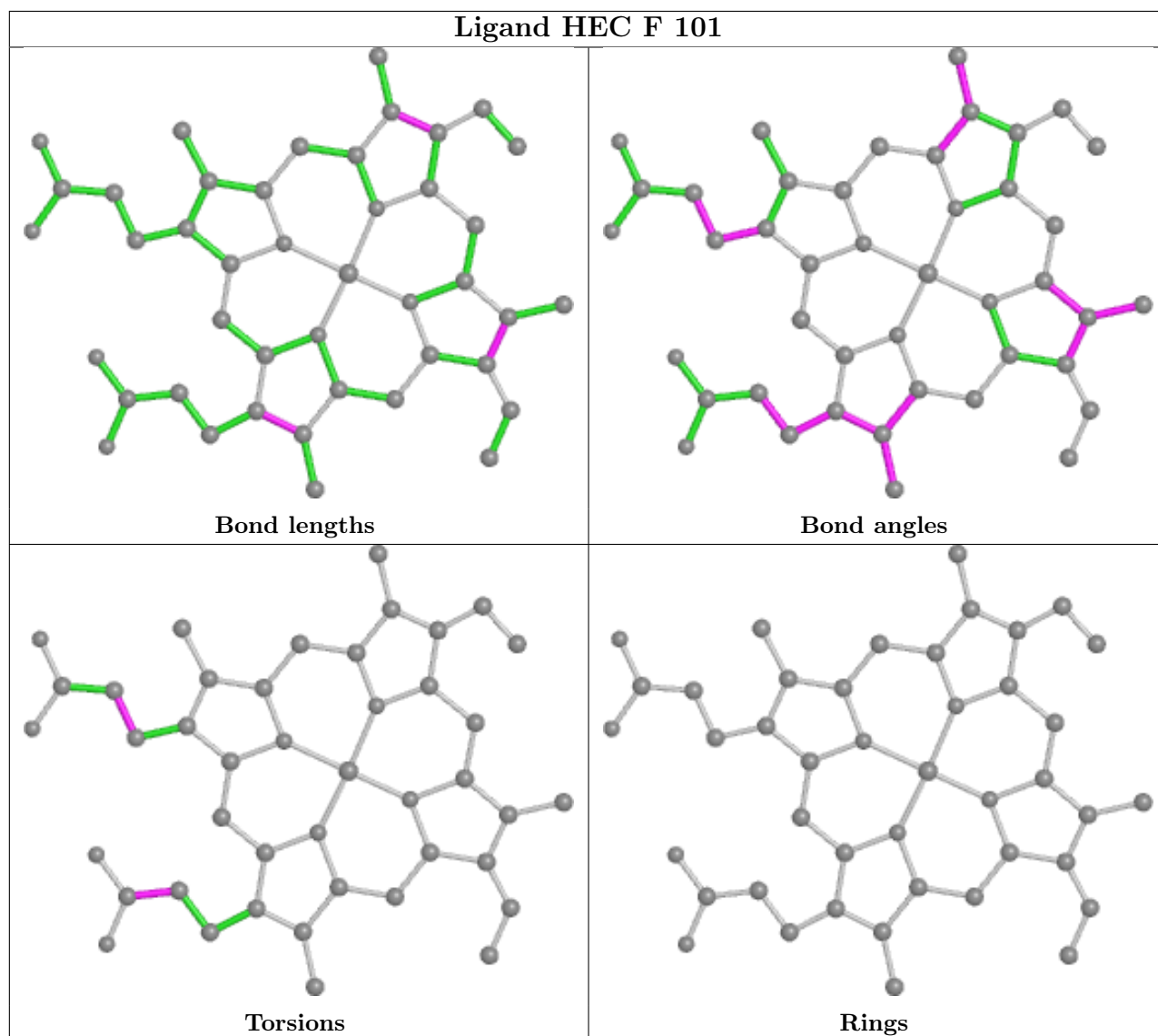
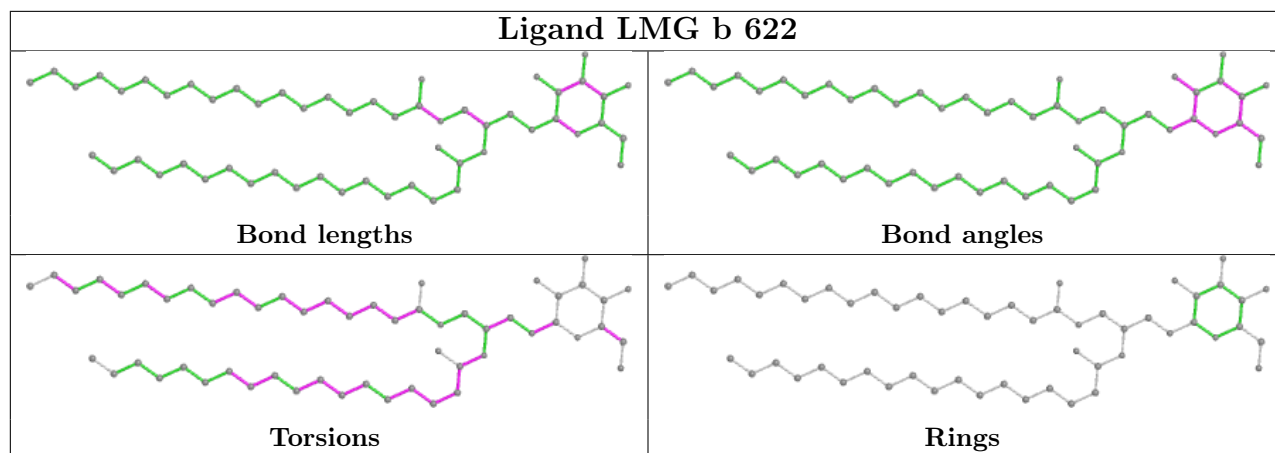
There are no ring outliers.

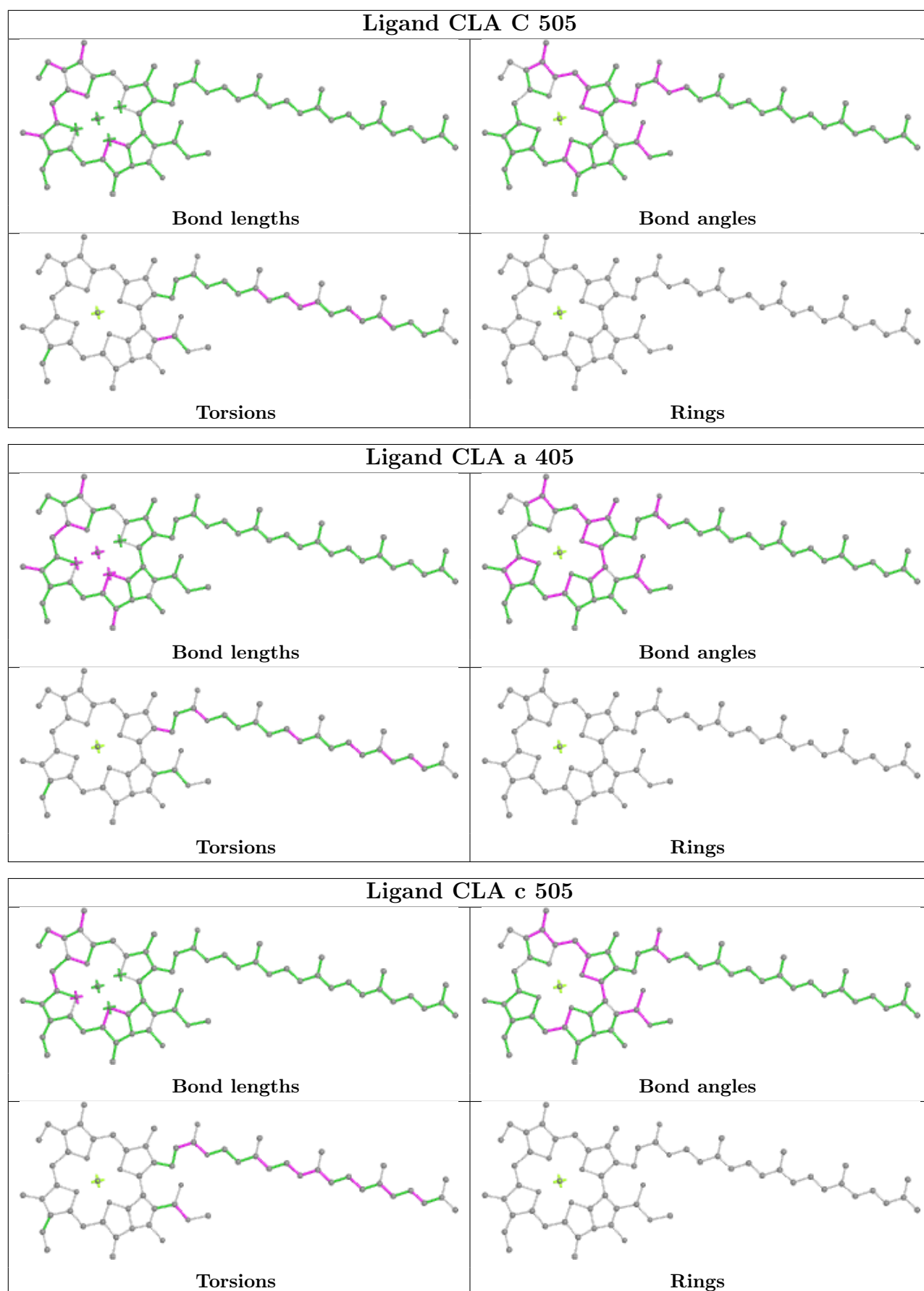
No monomer is involved in short contacts.

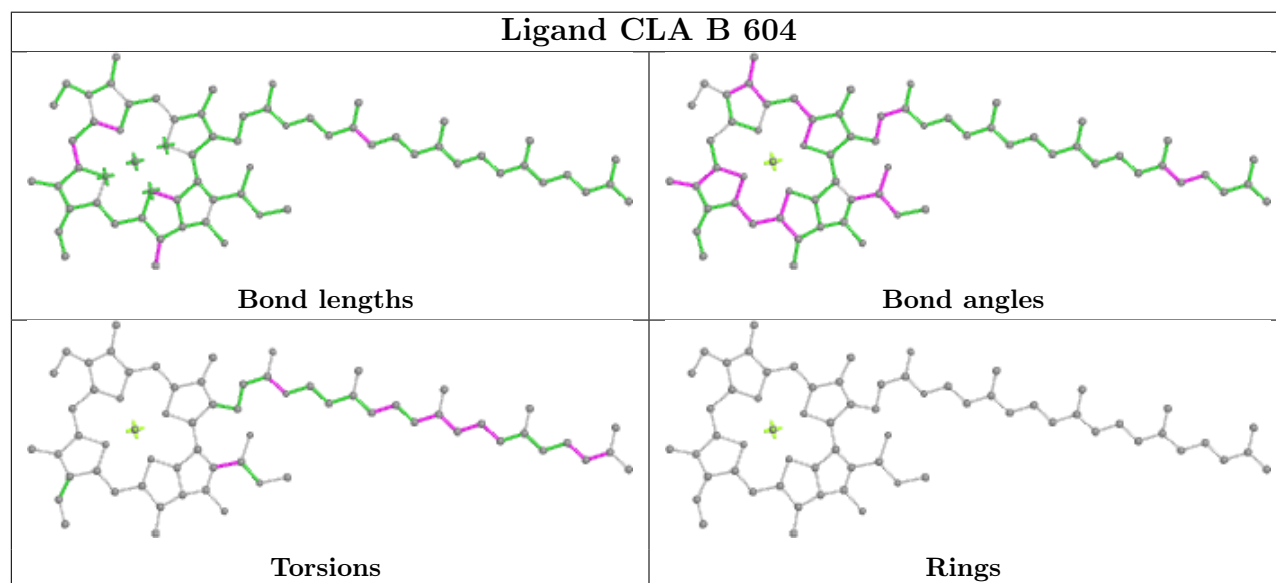
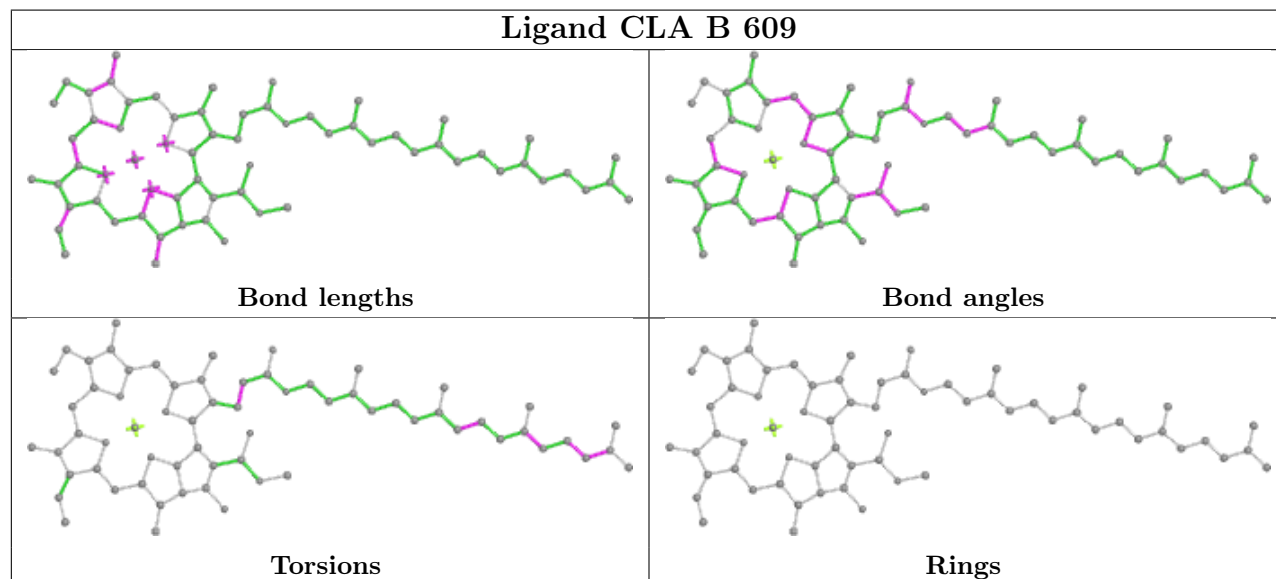
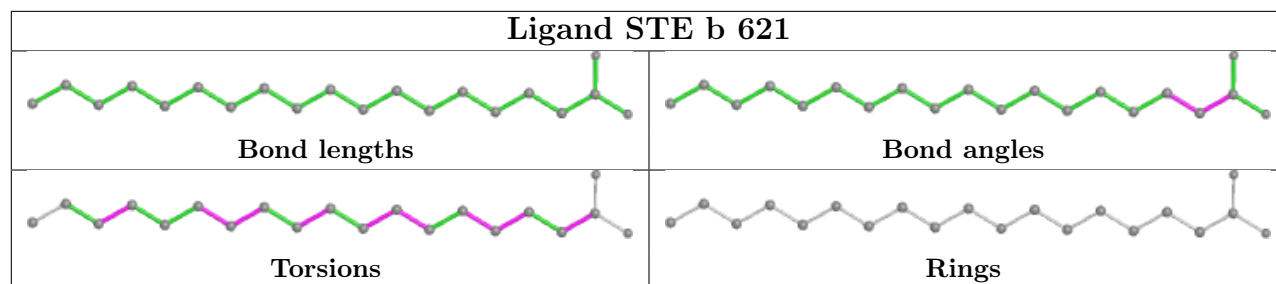
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

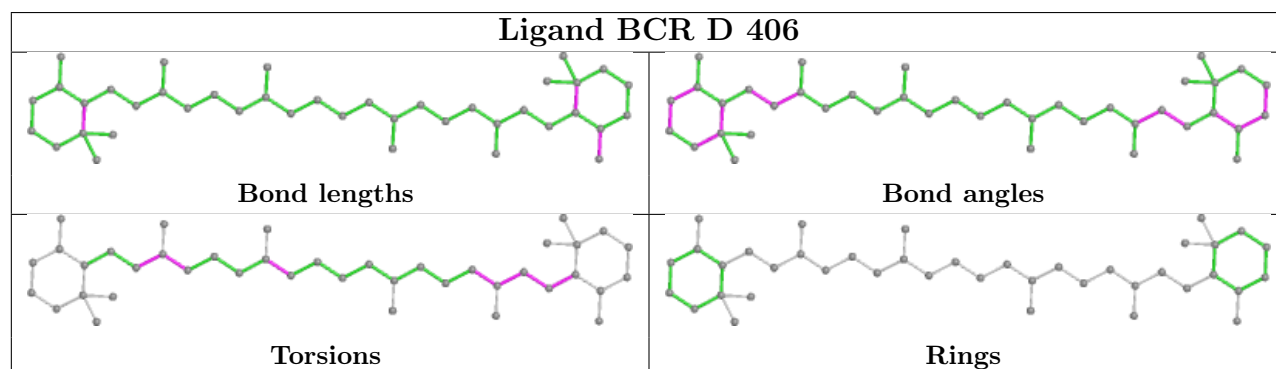
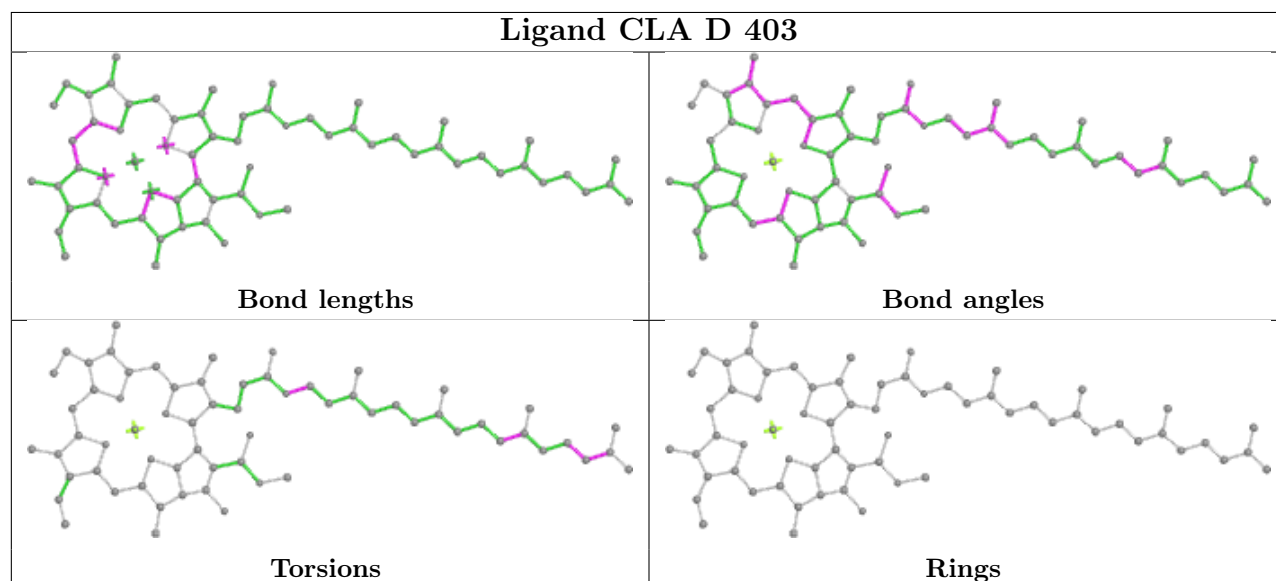
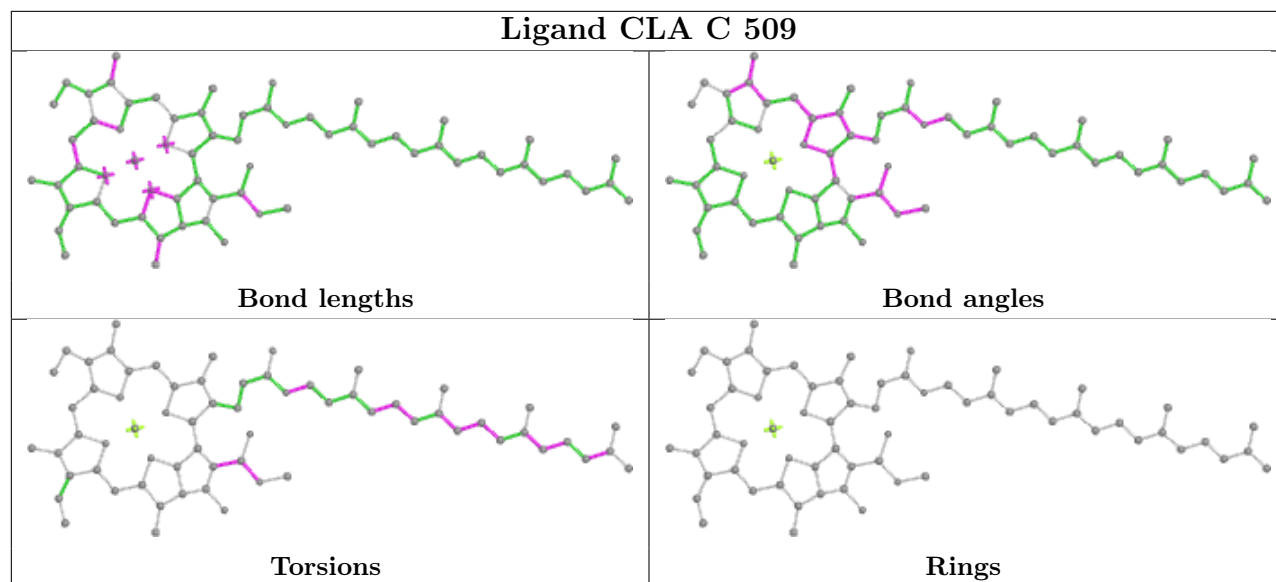


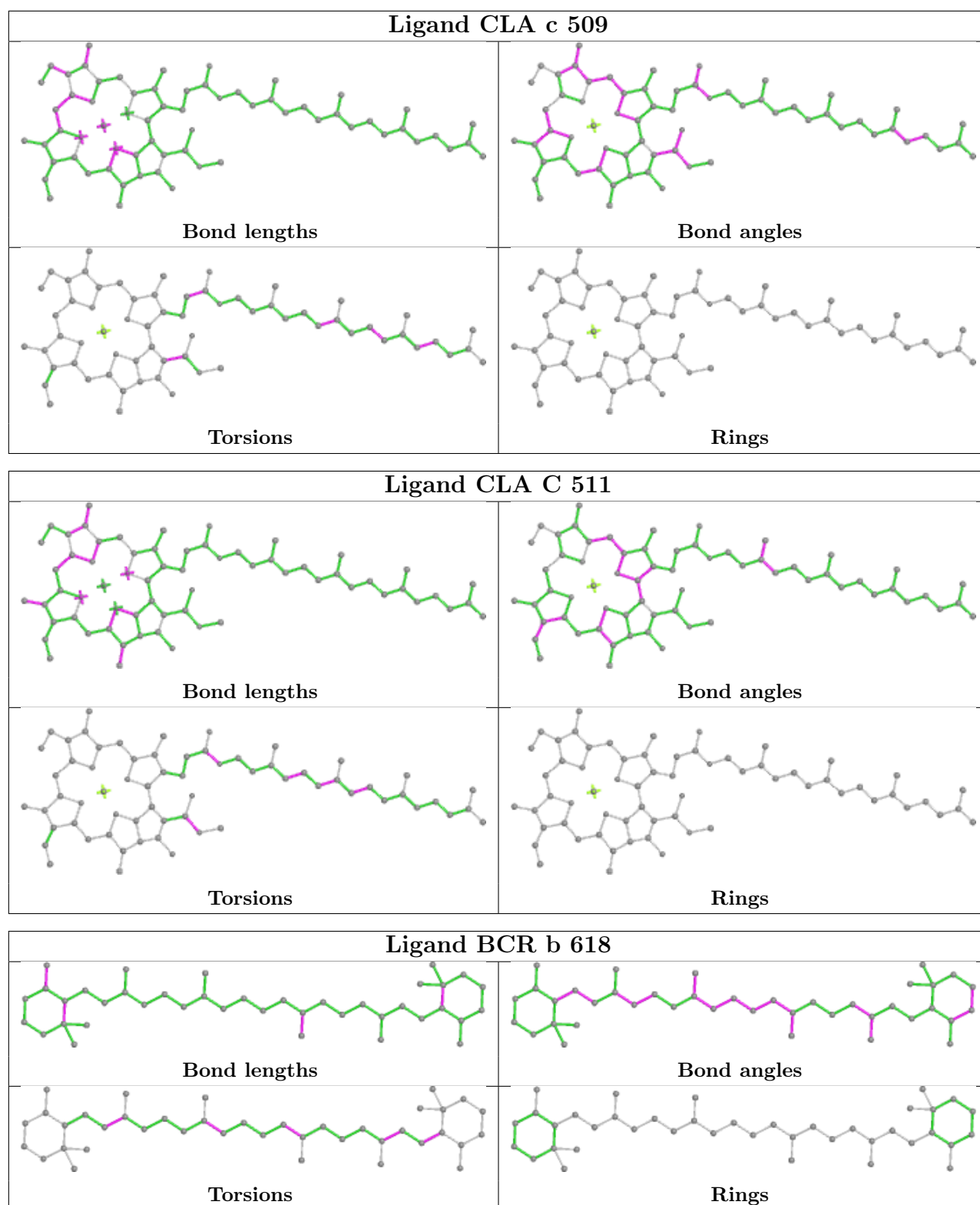


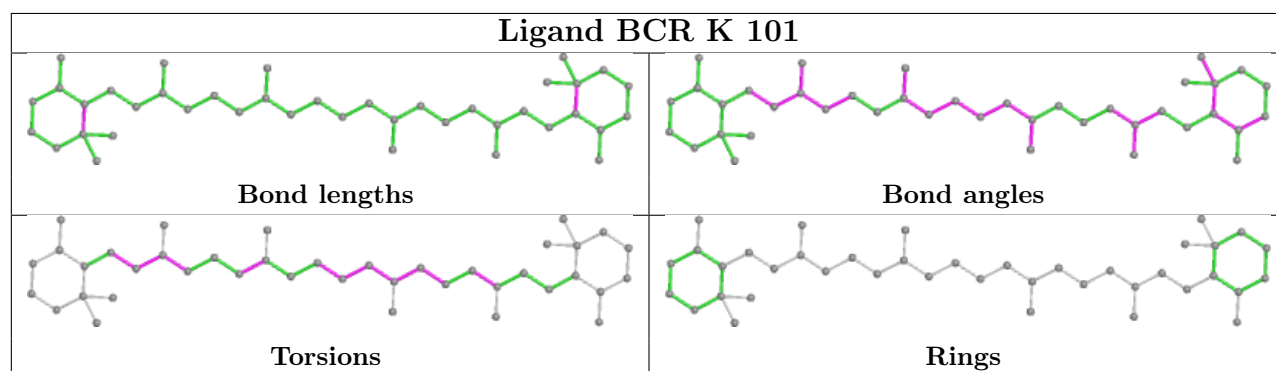
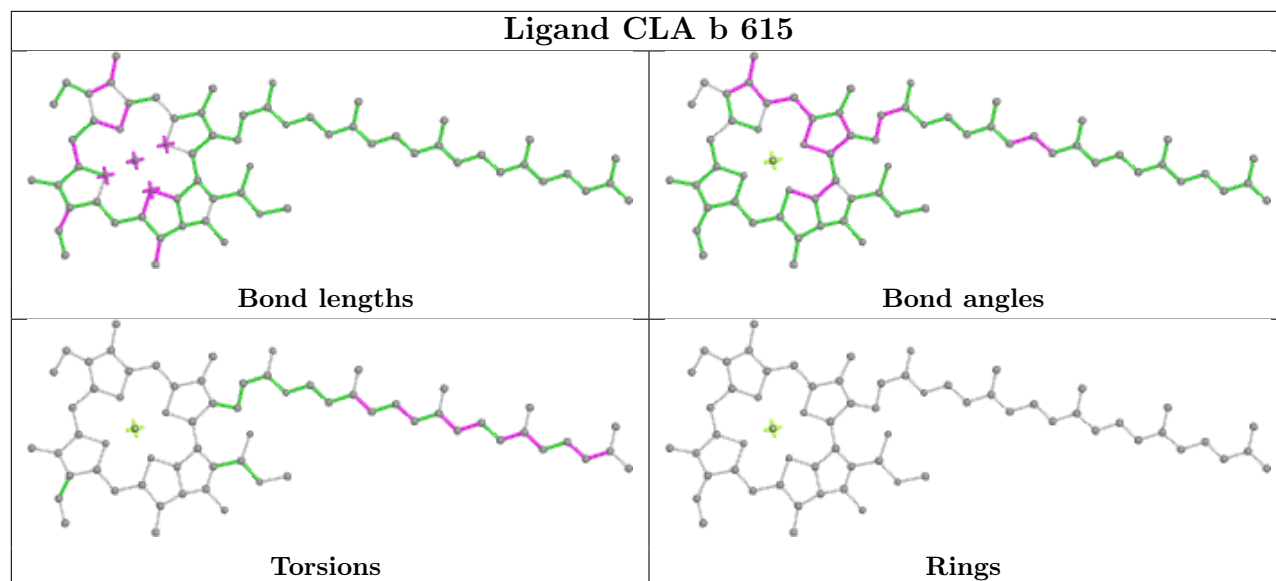
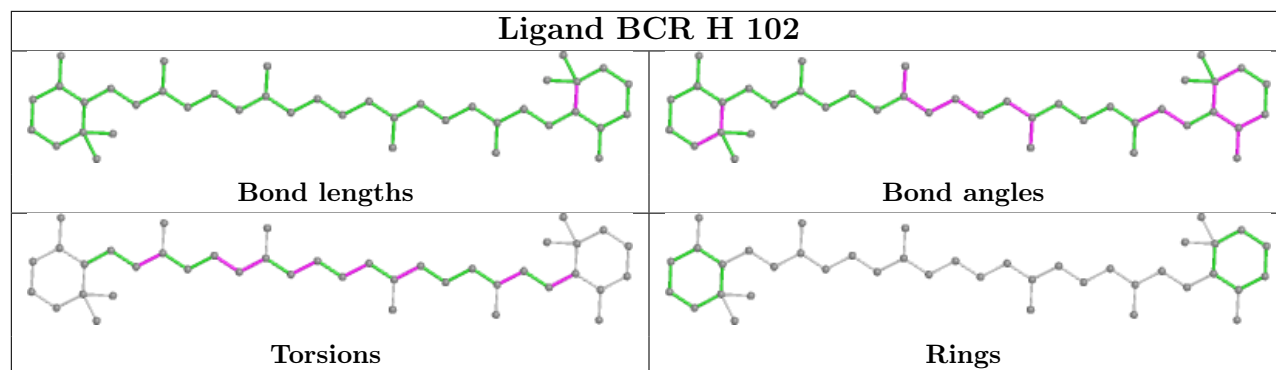


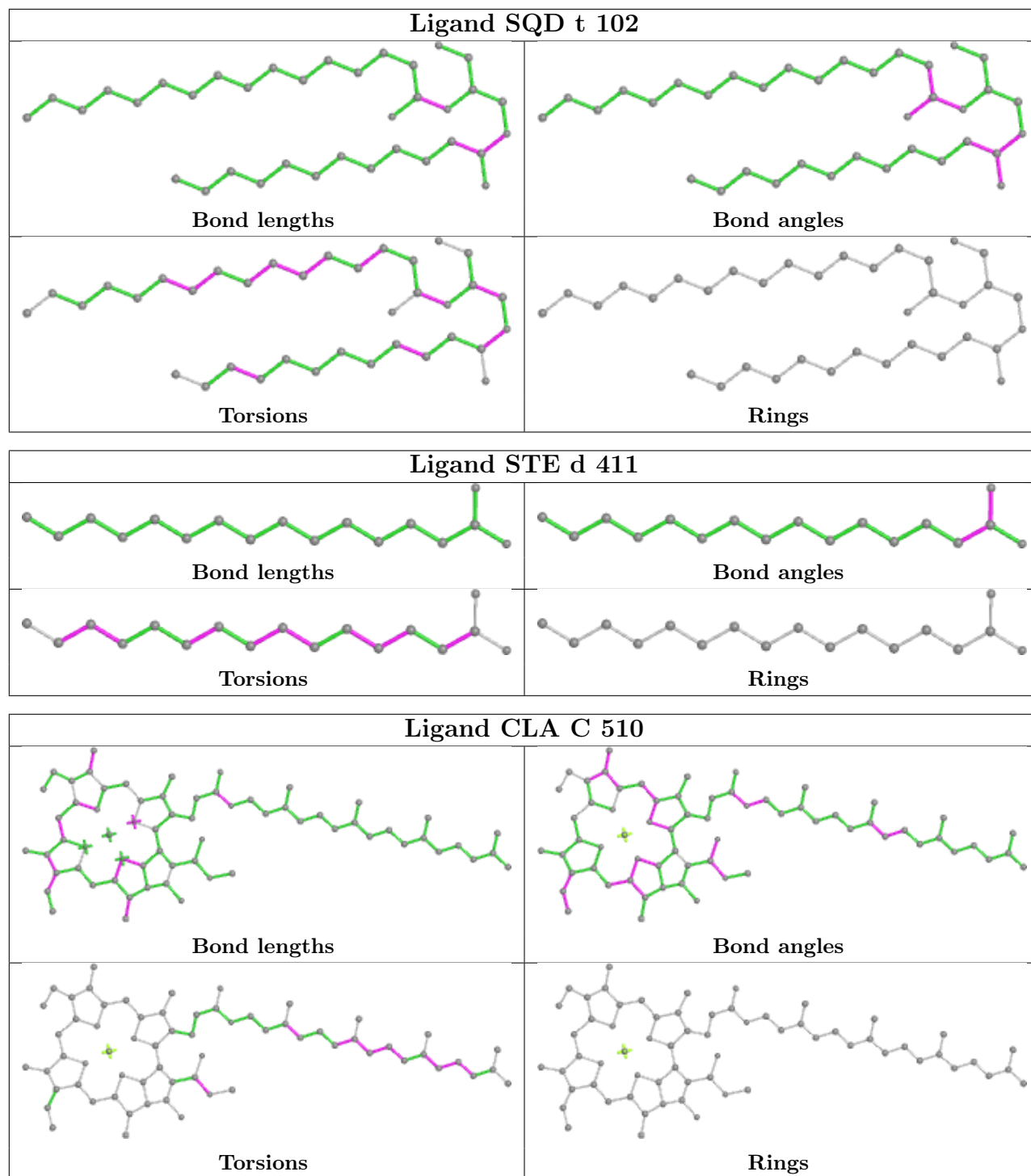


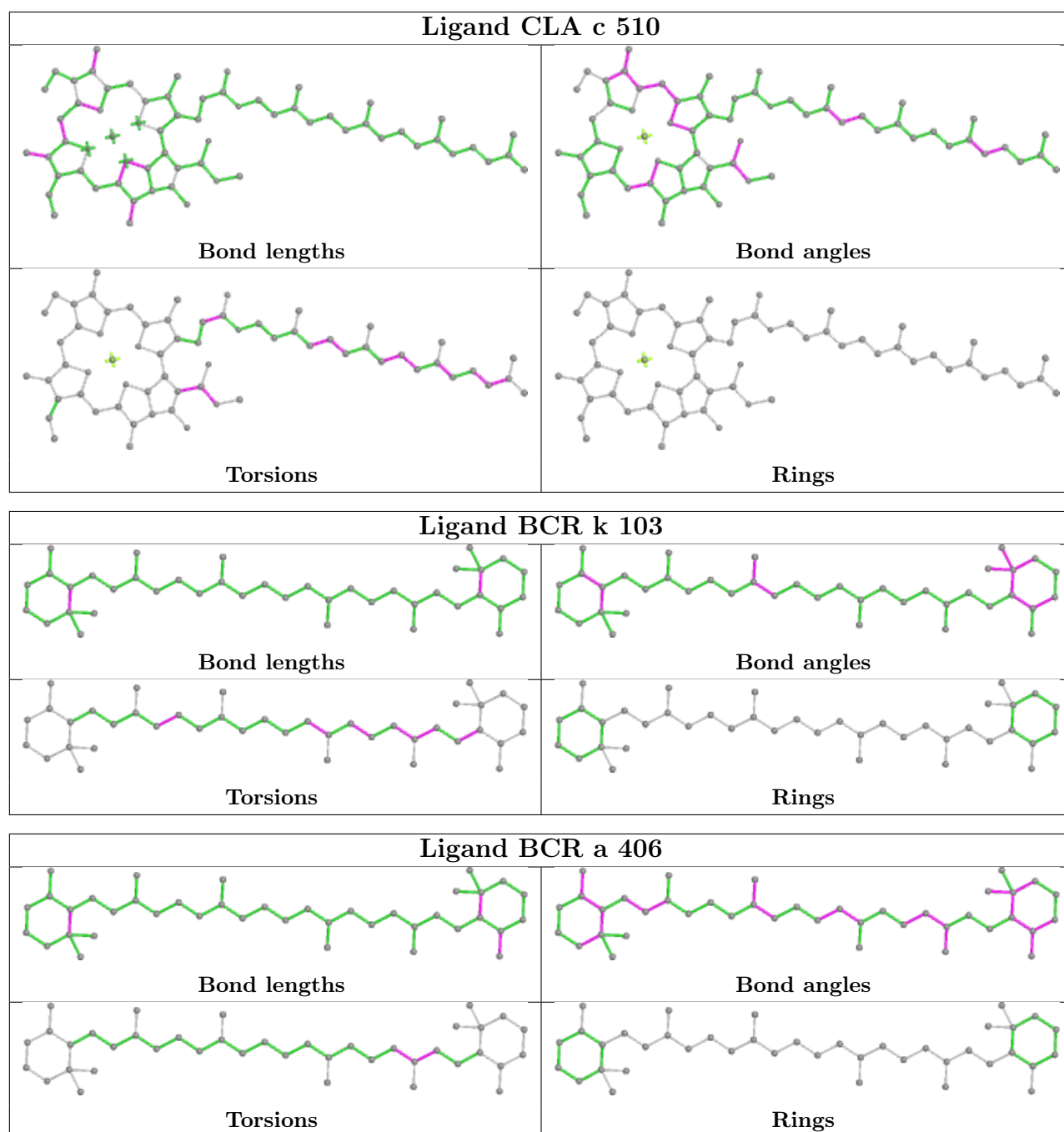


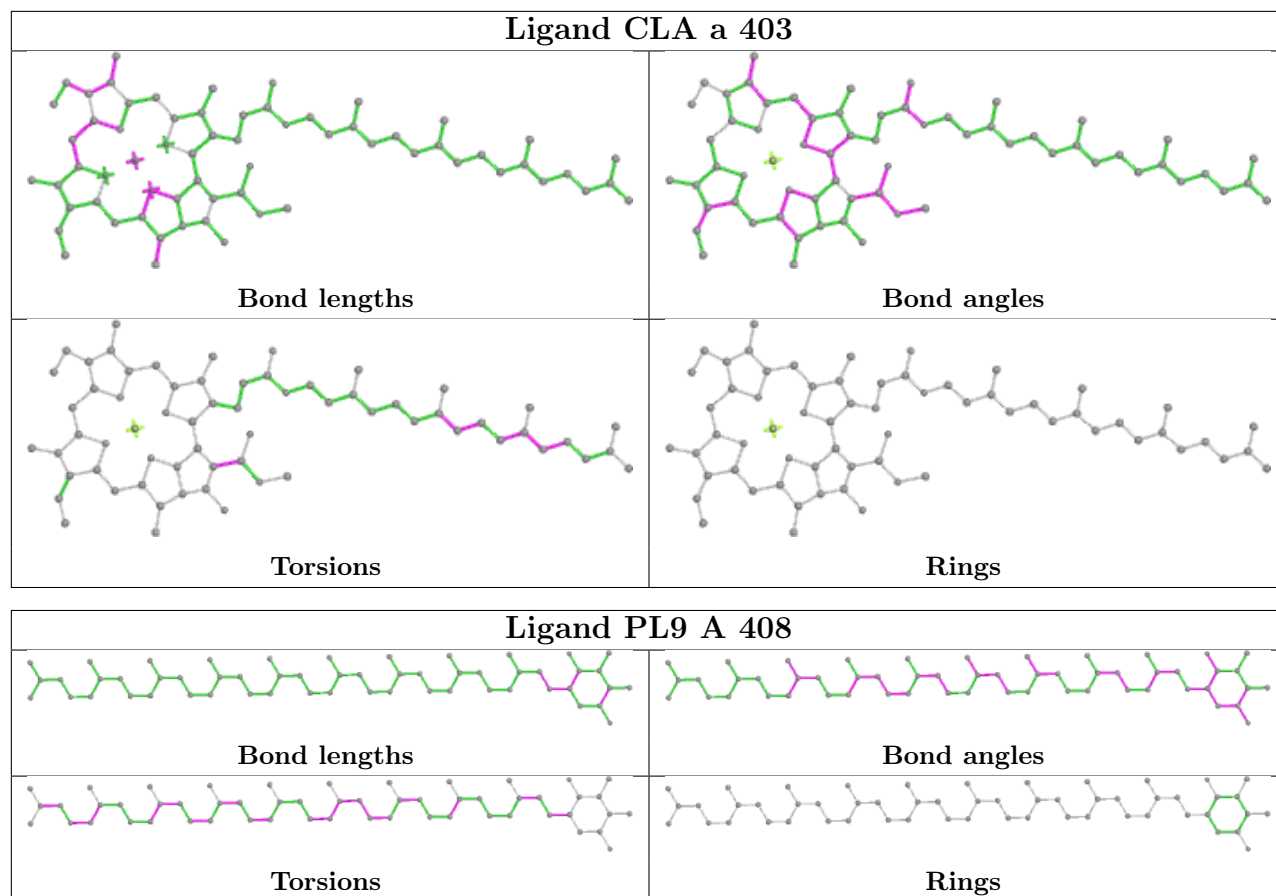


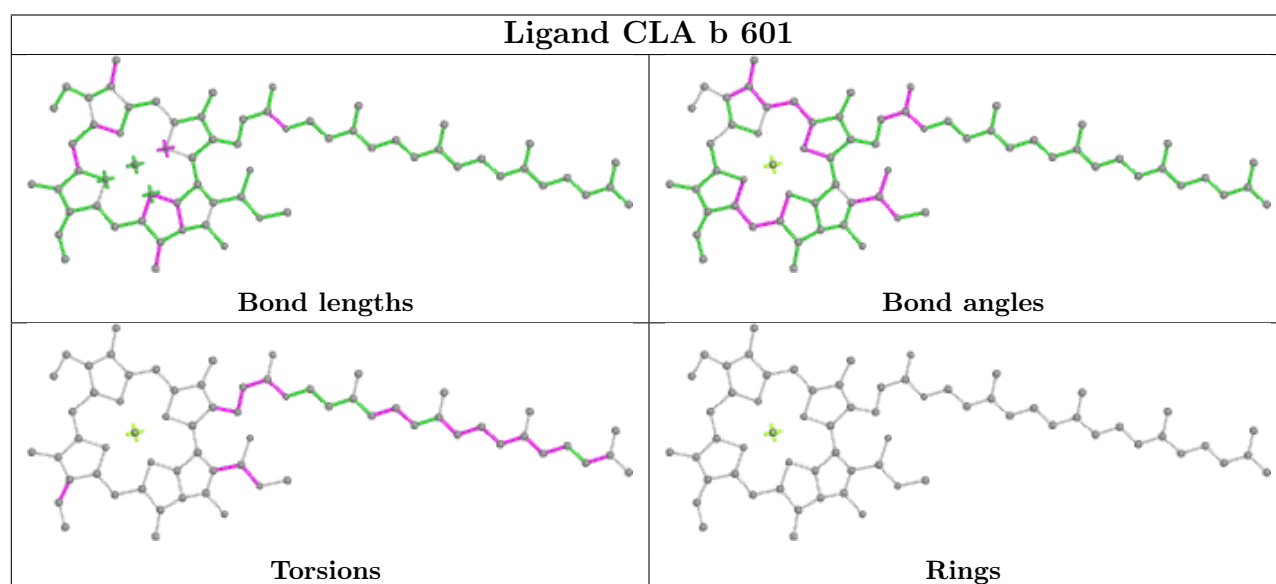
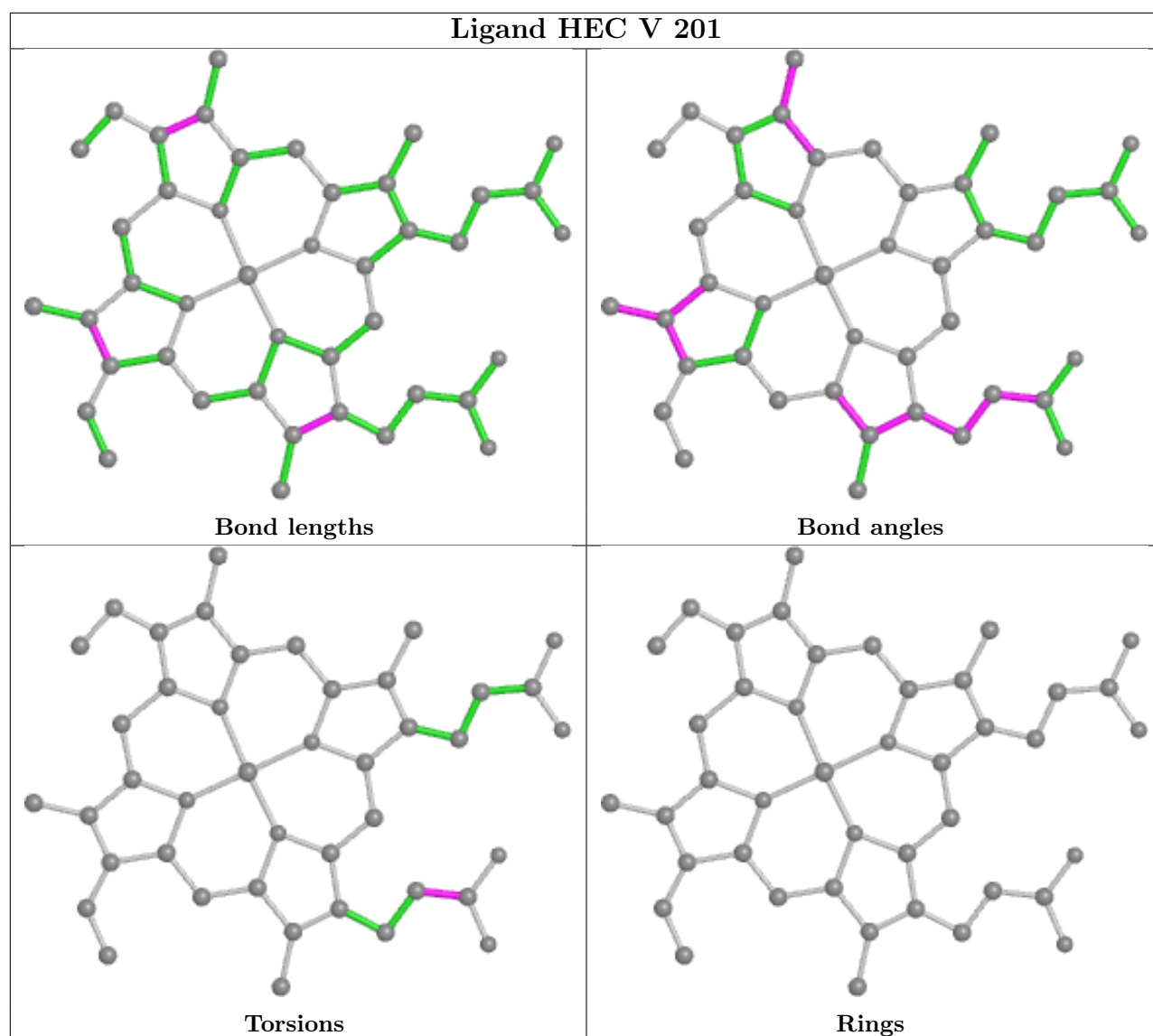


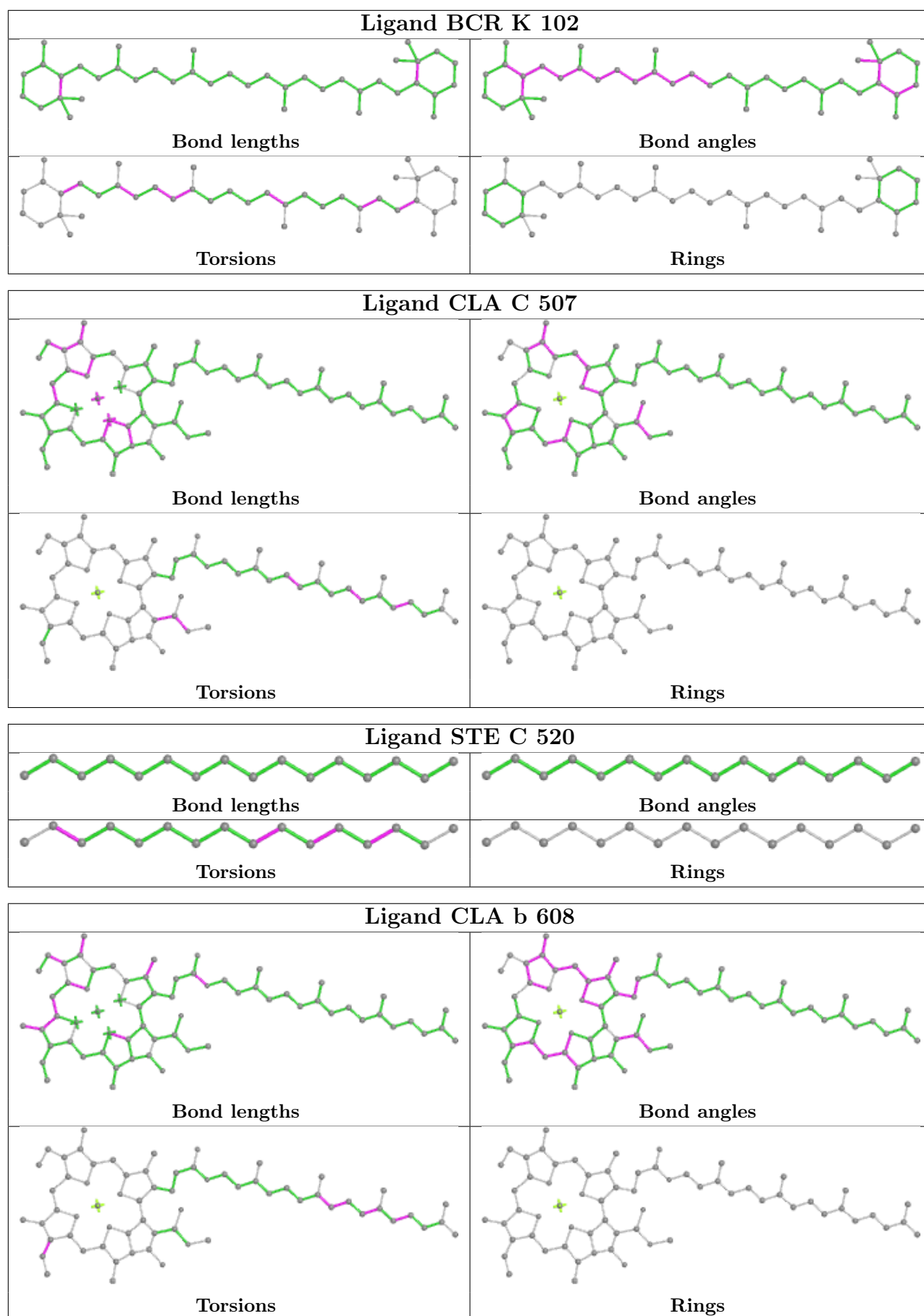


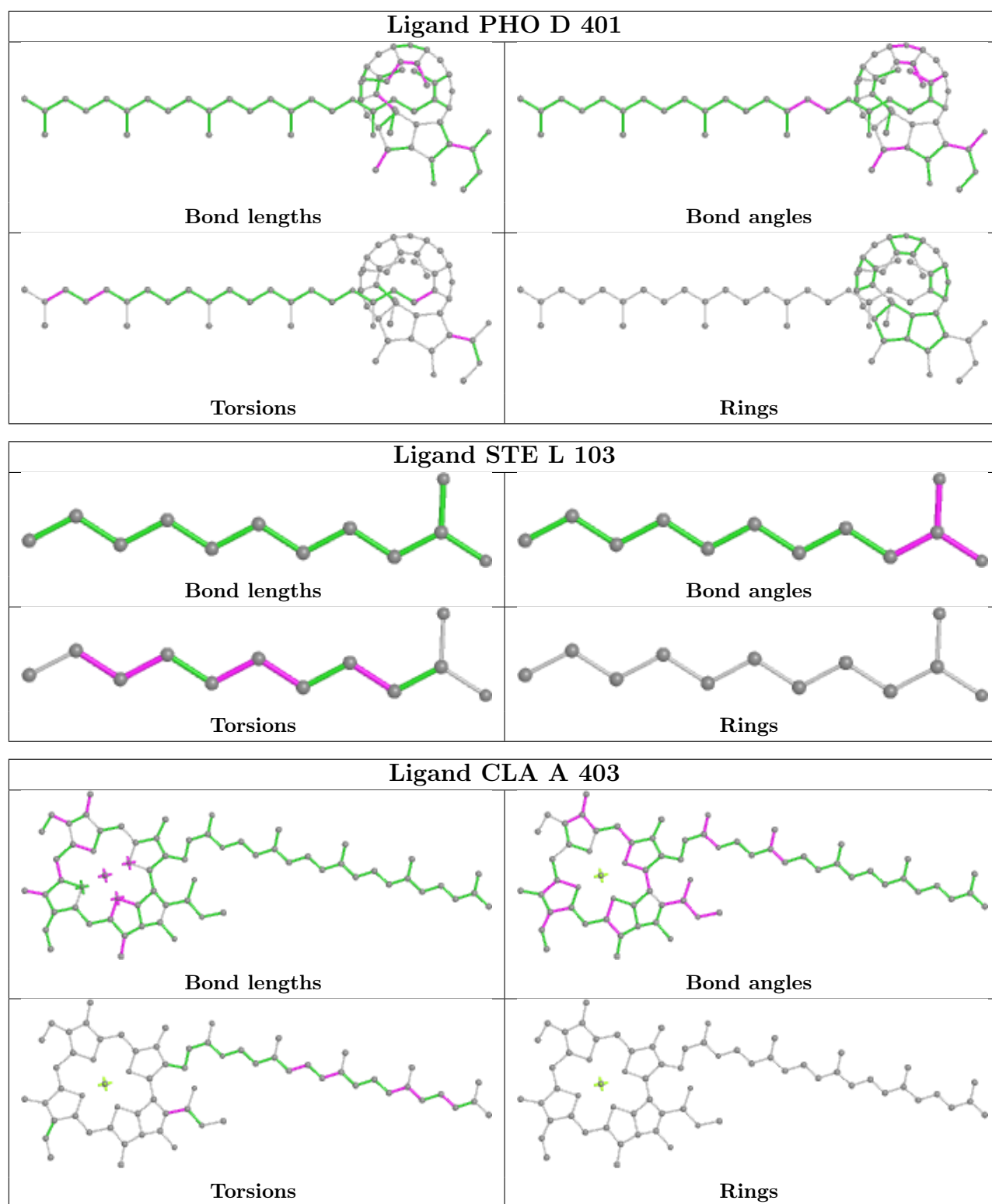


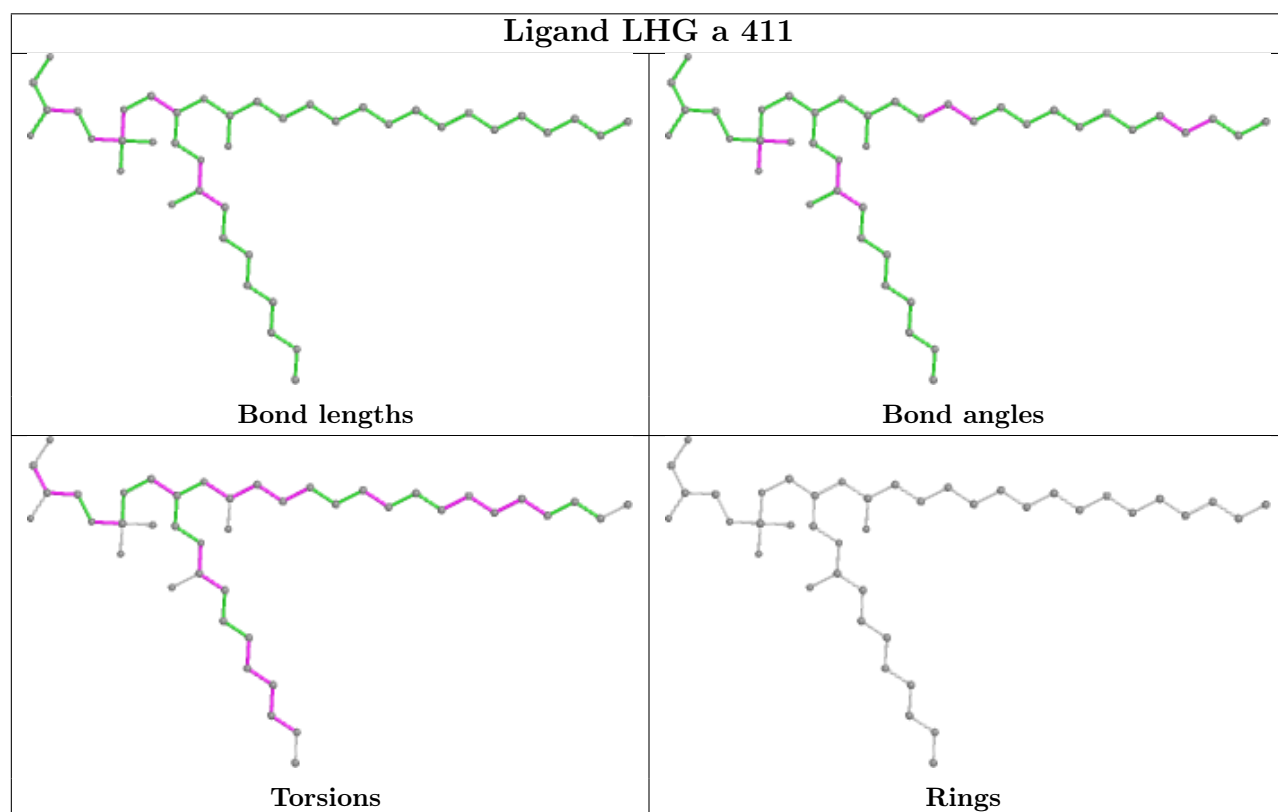
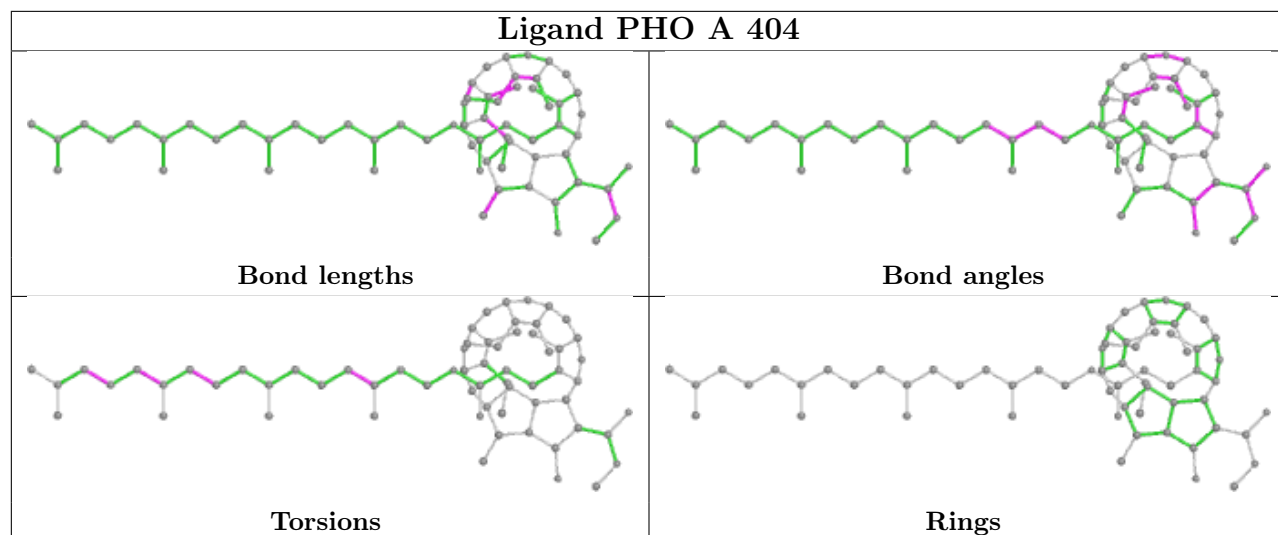


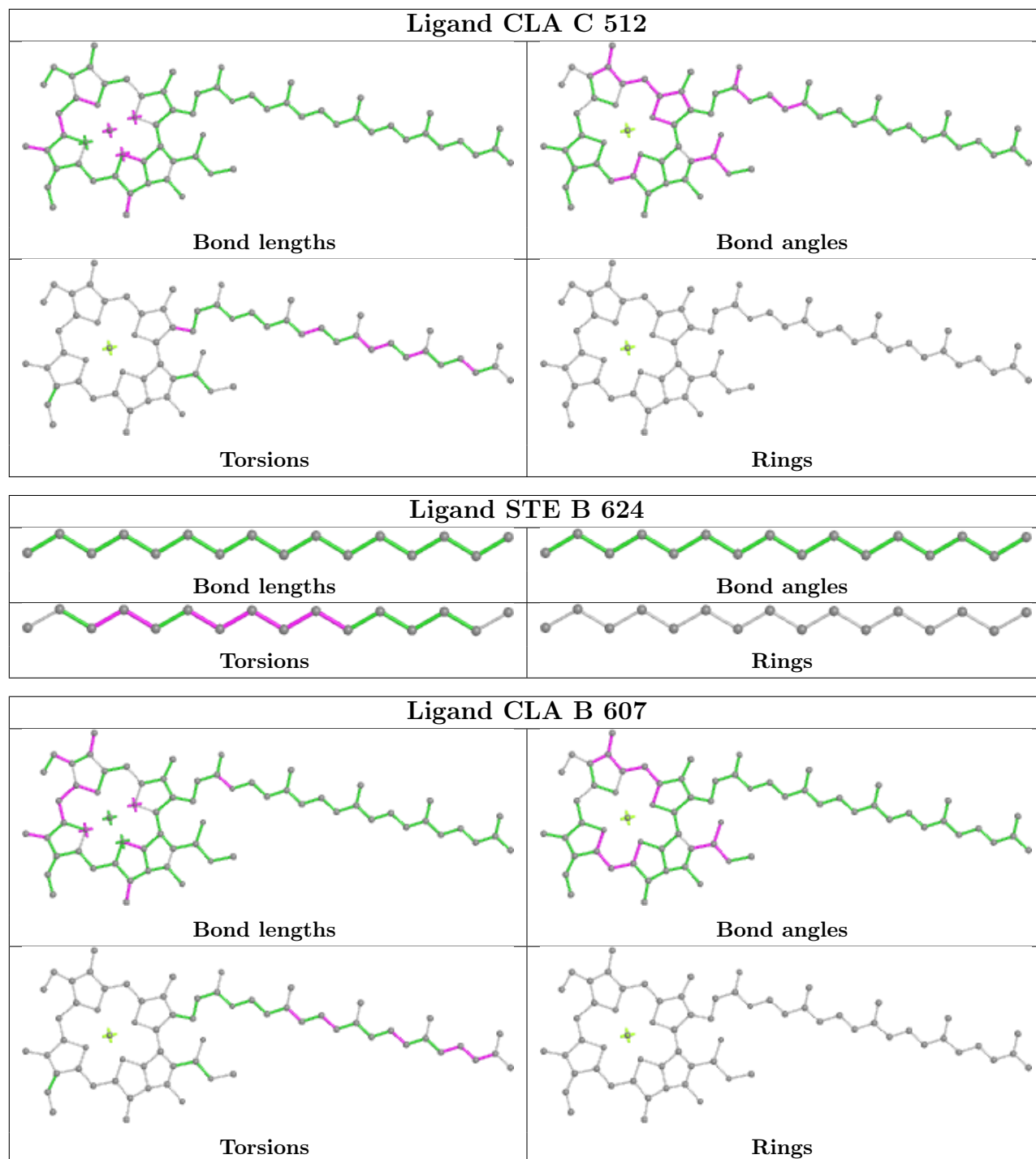


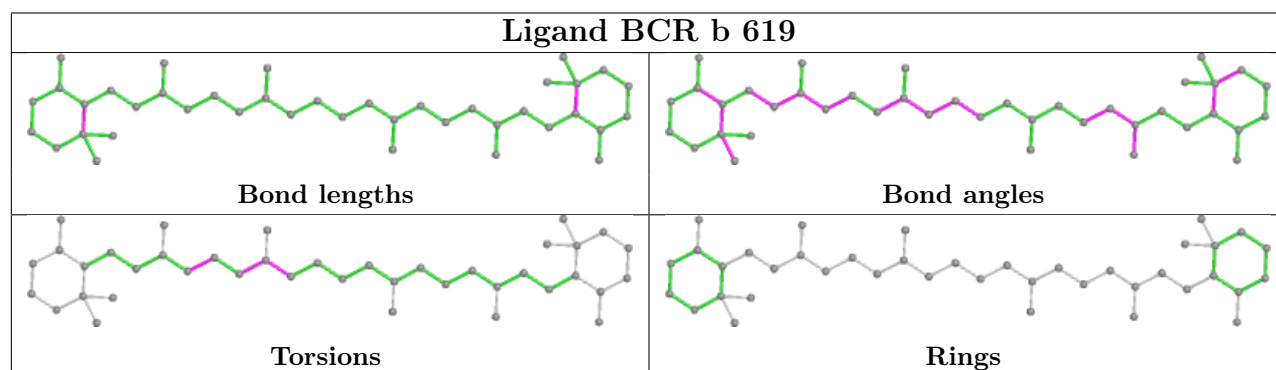
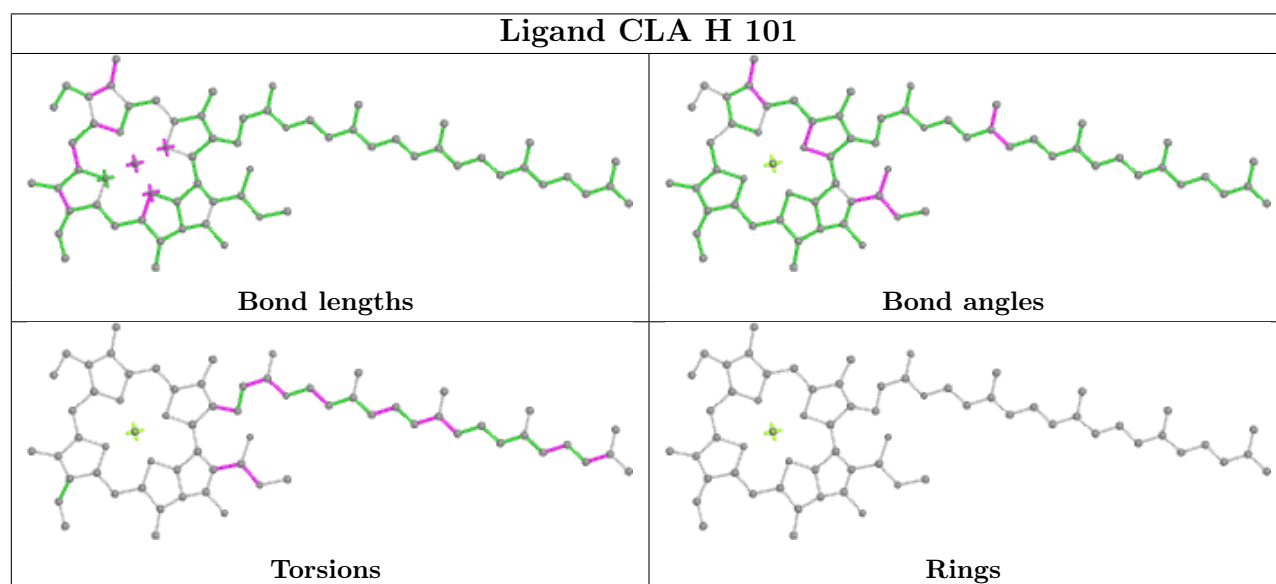
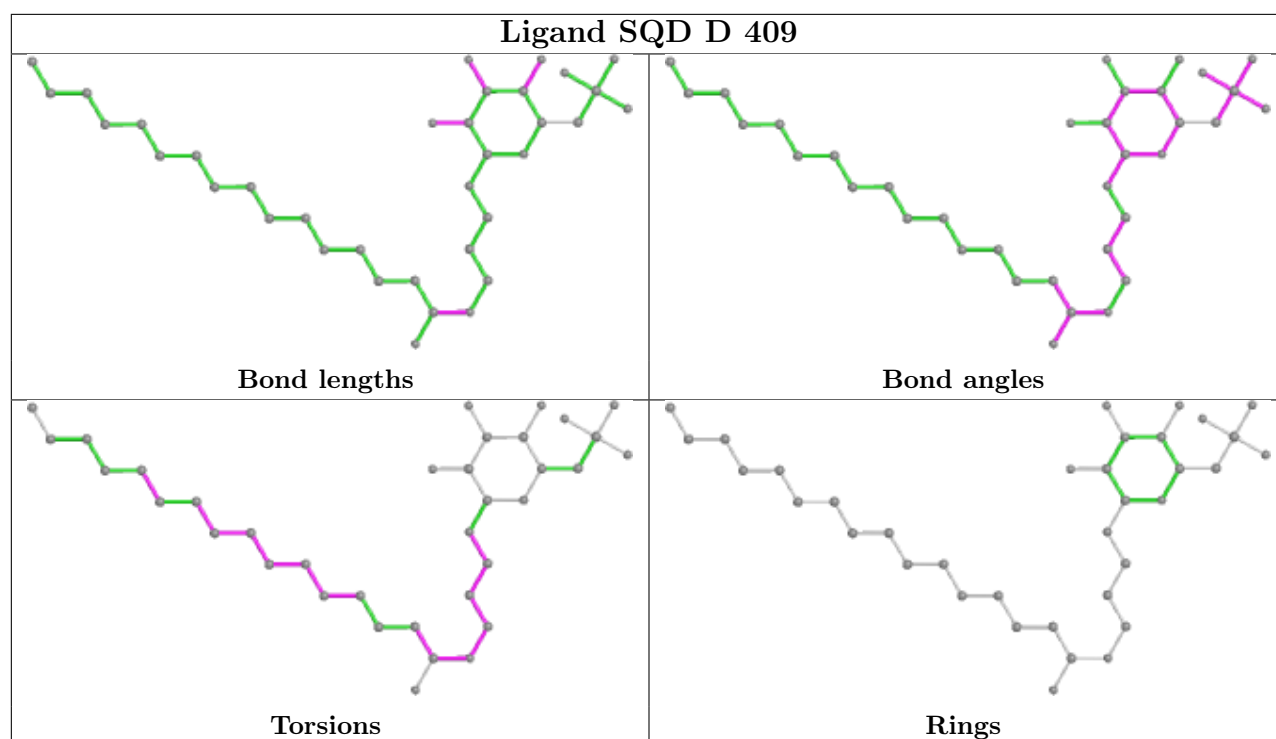


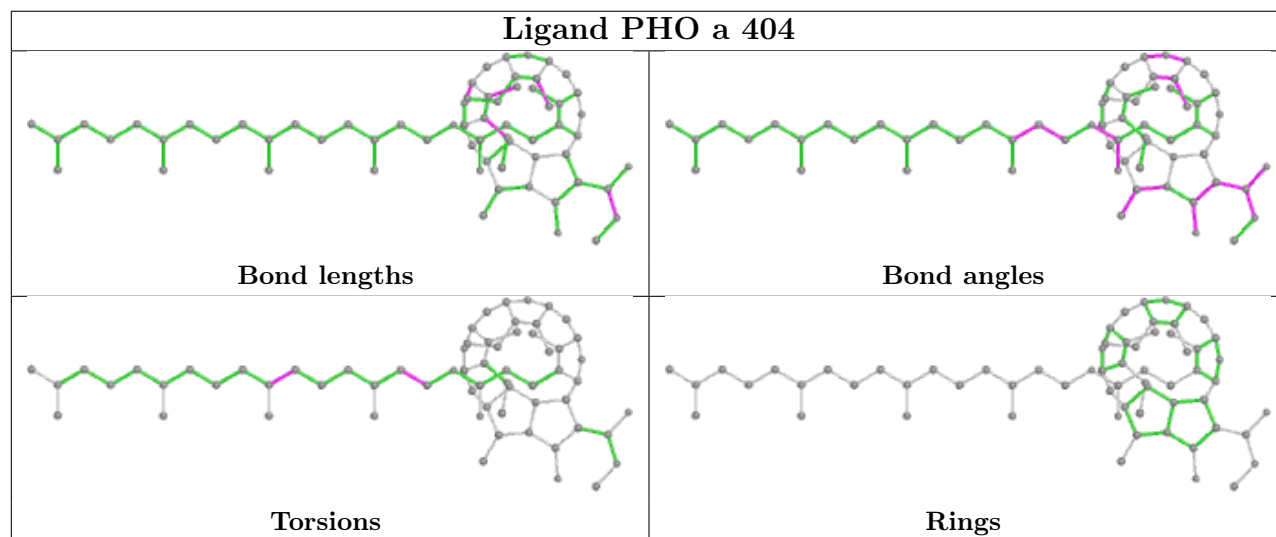
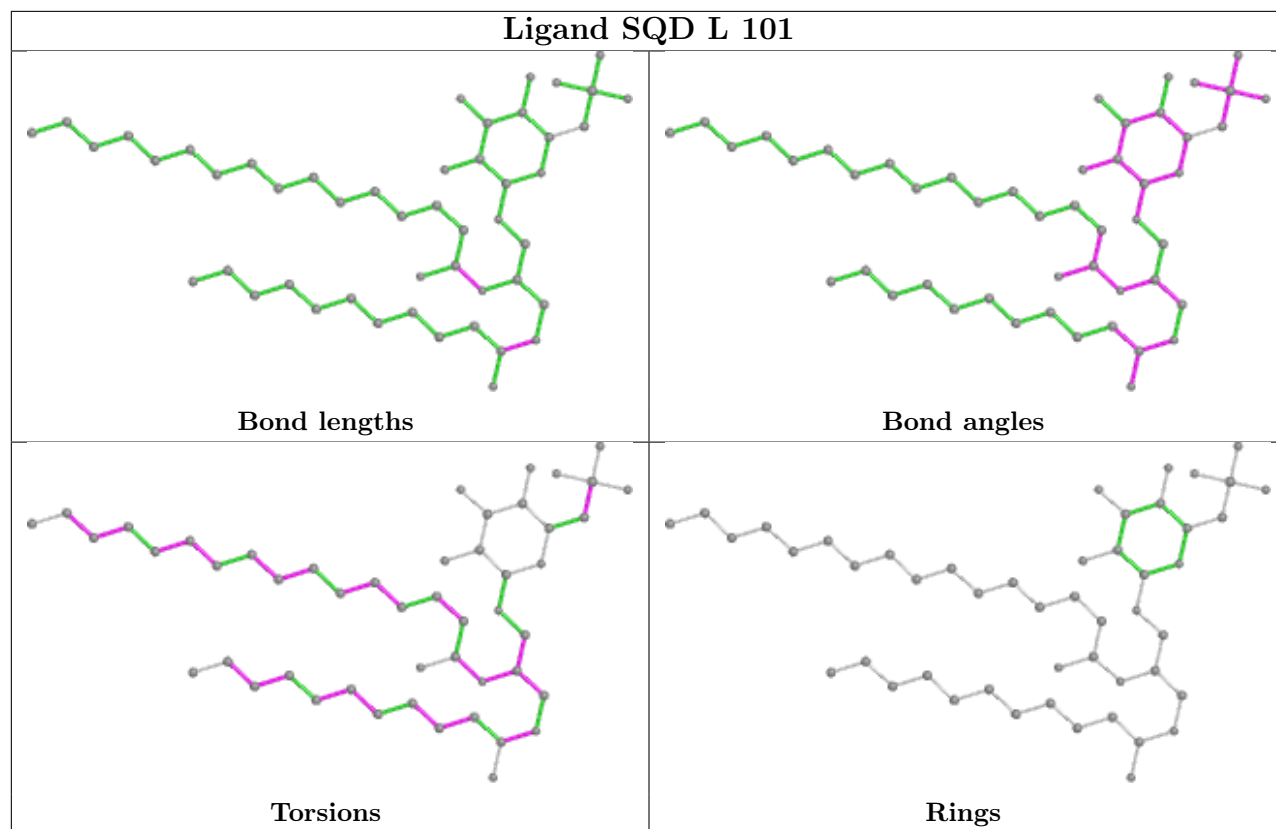


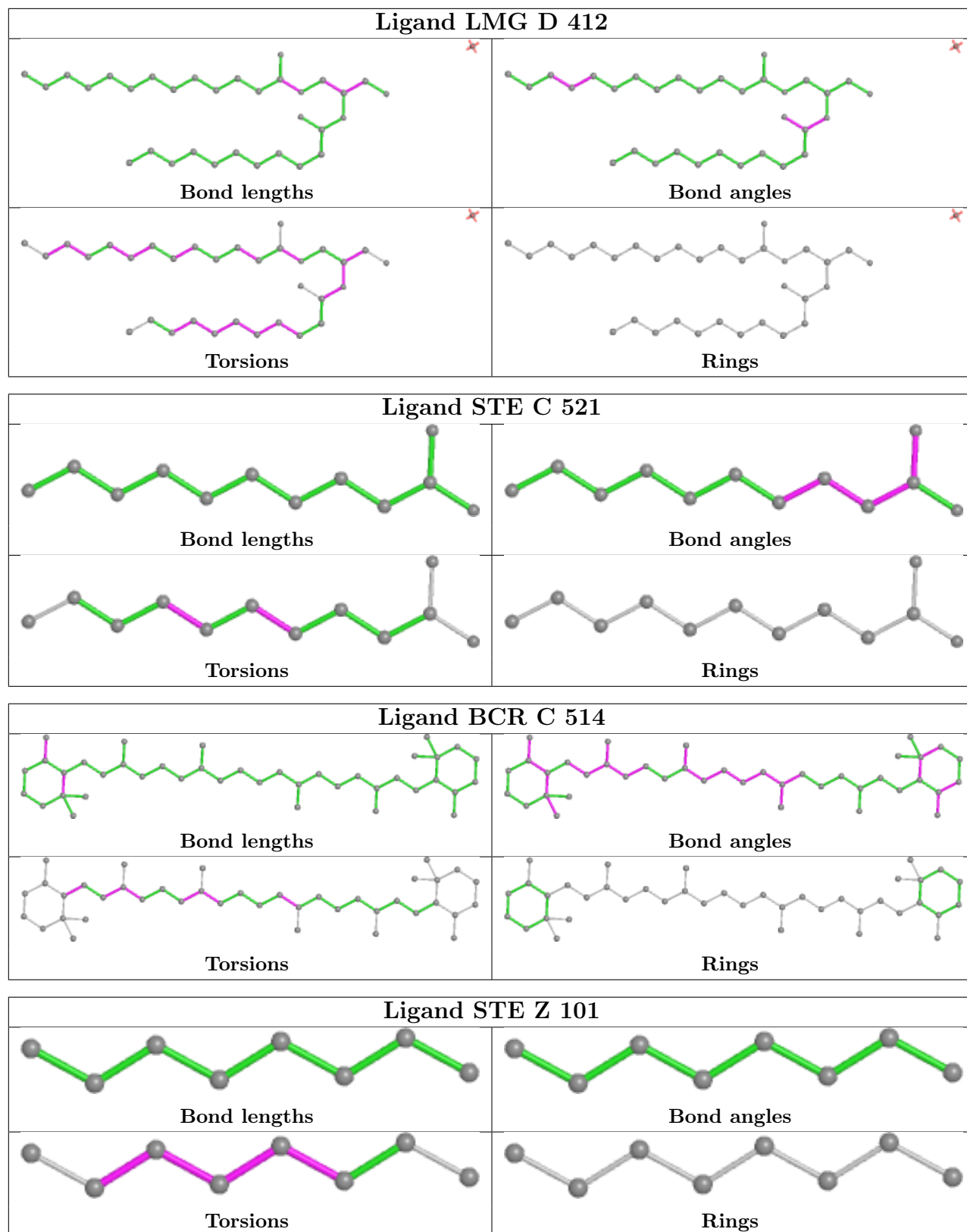


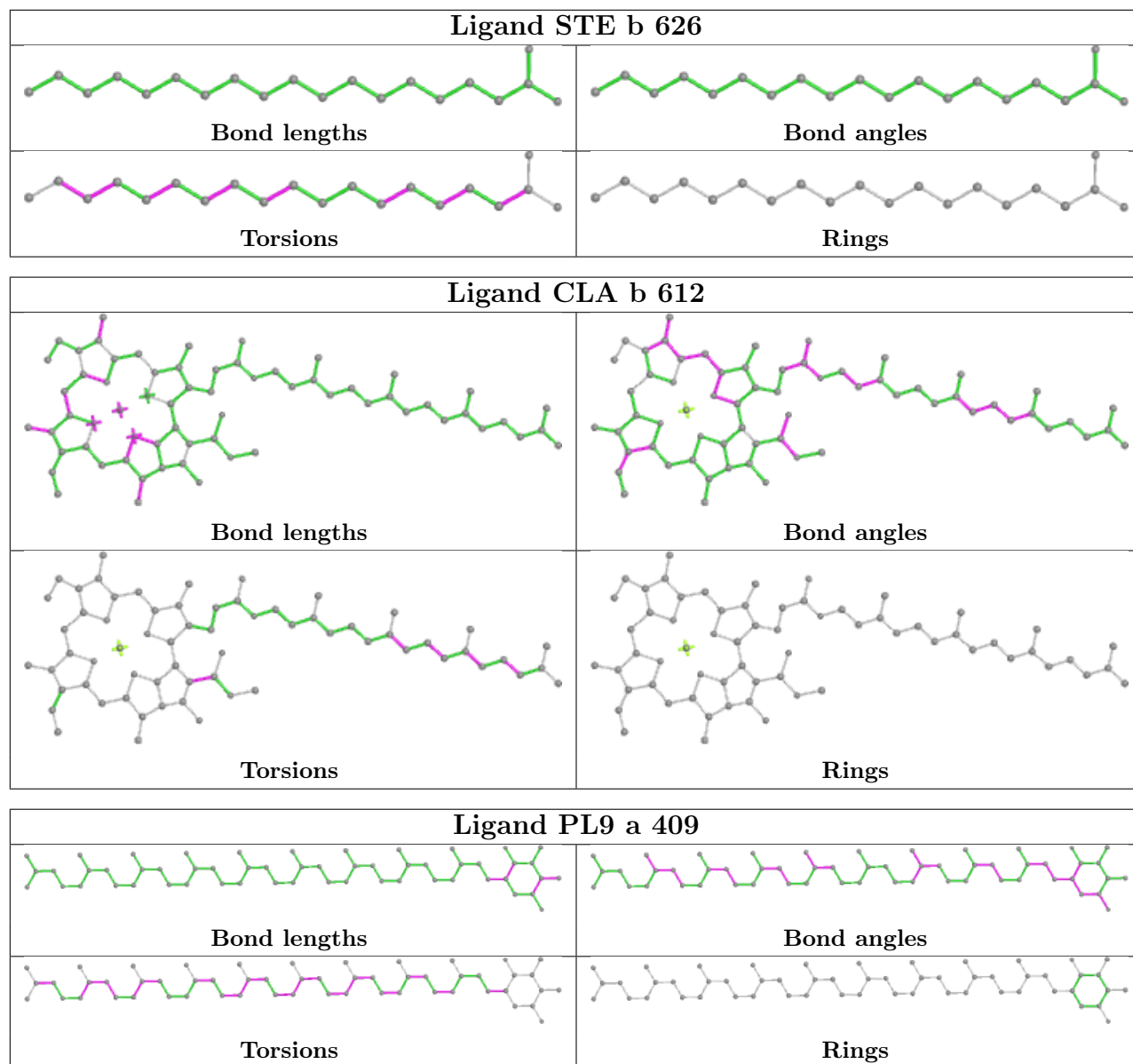


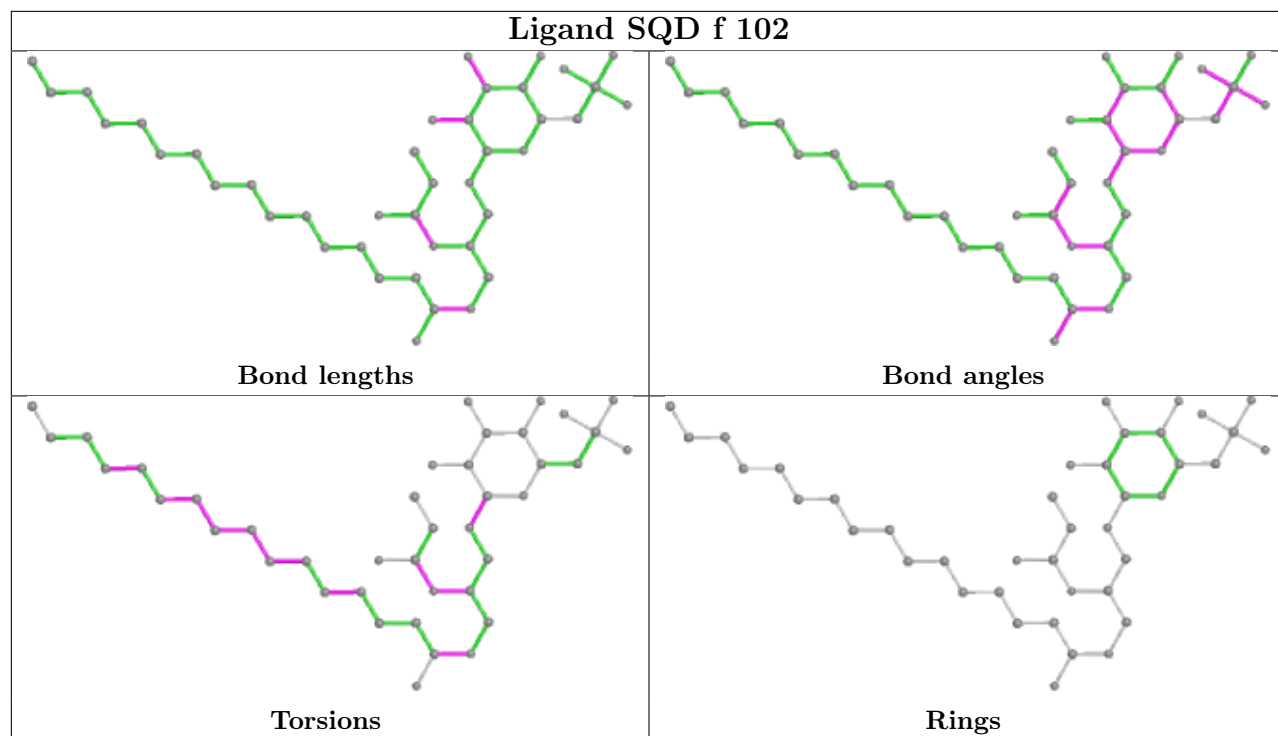


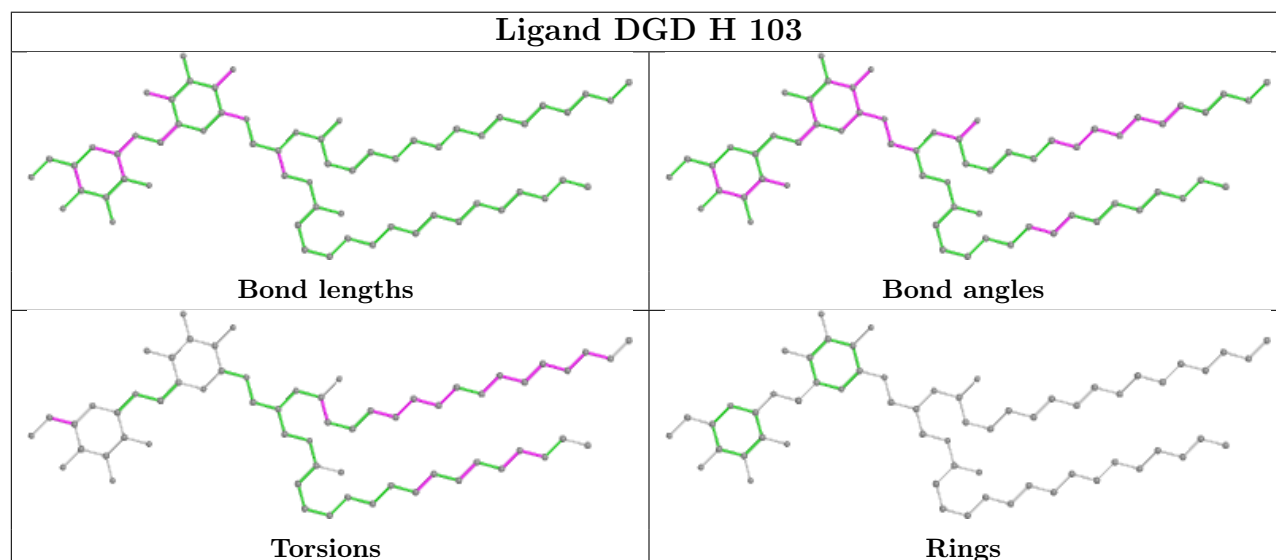
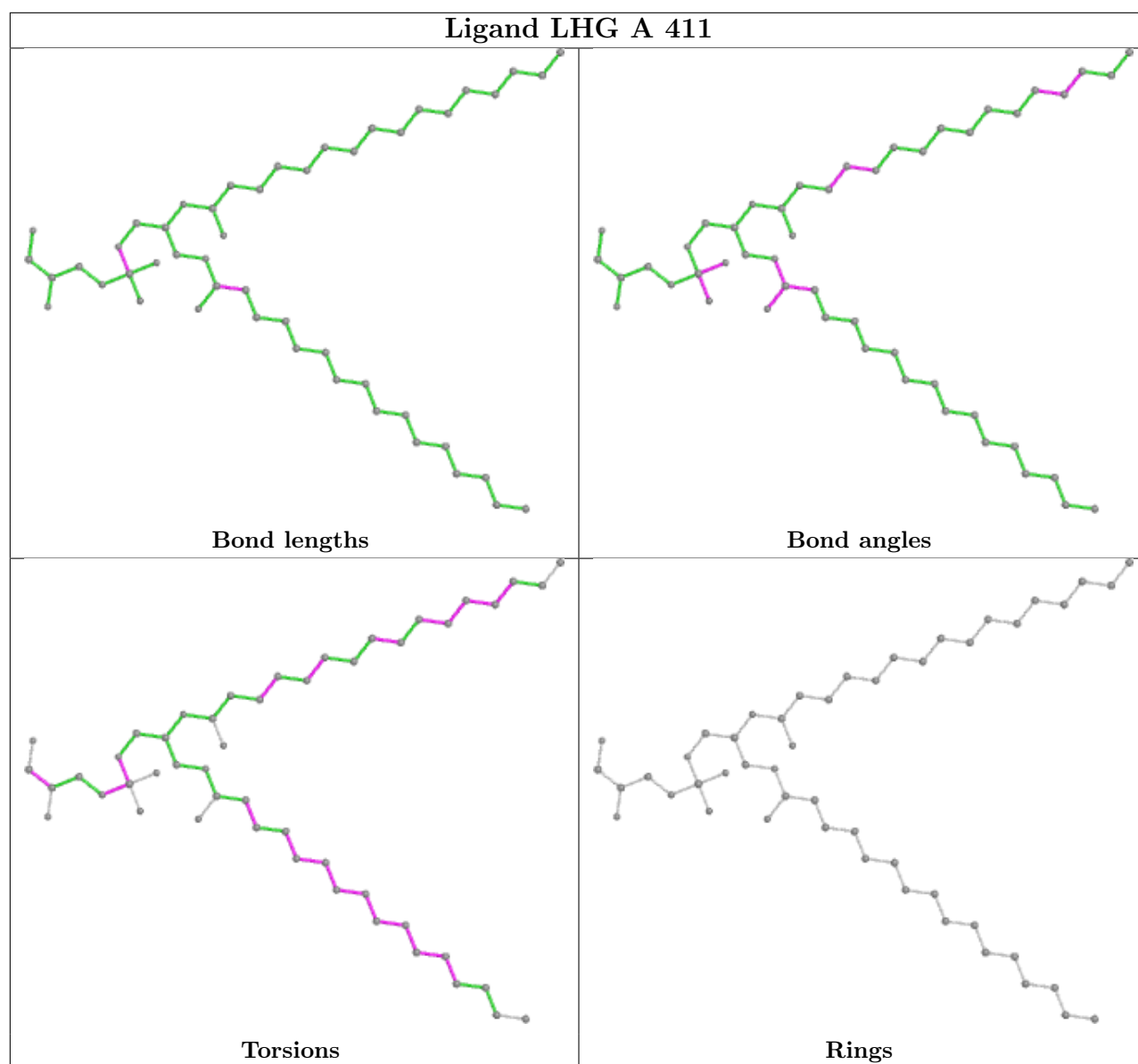


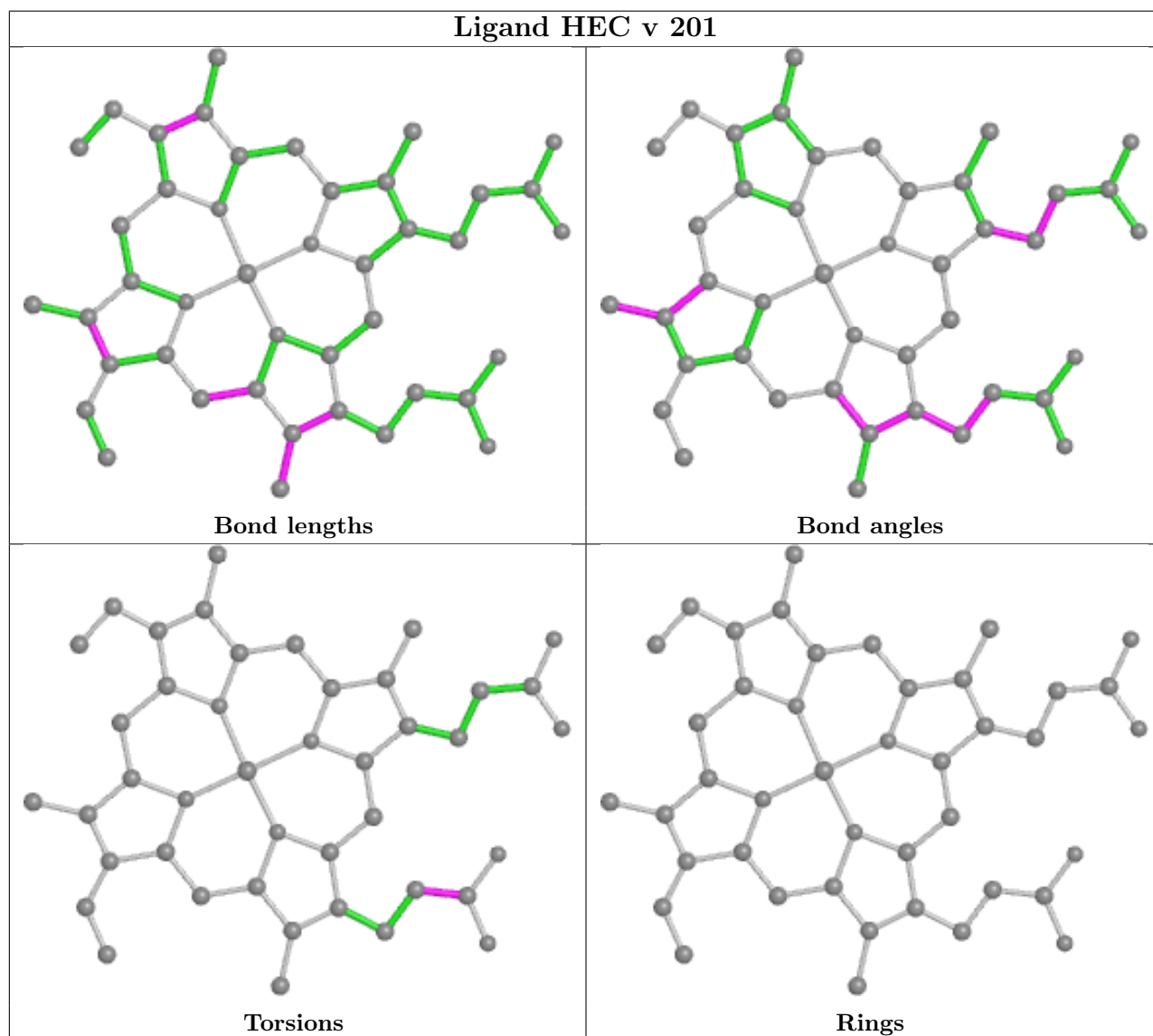
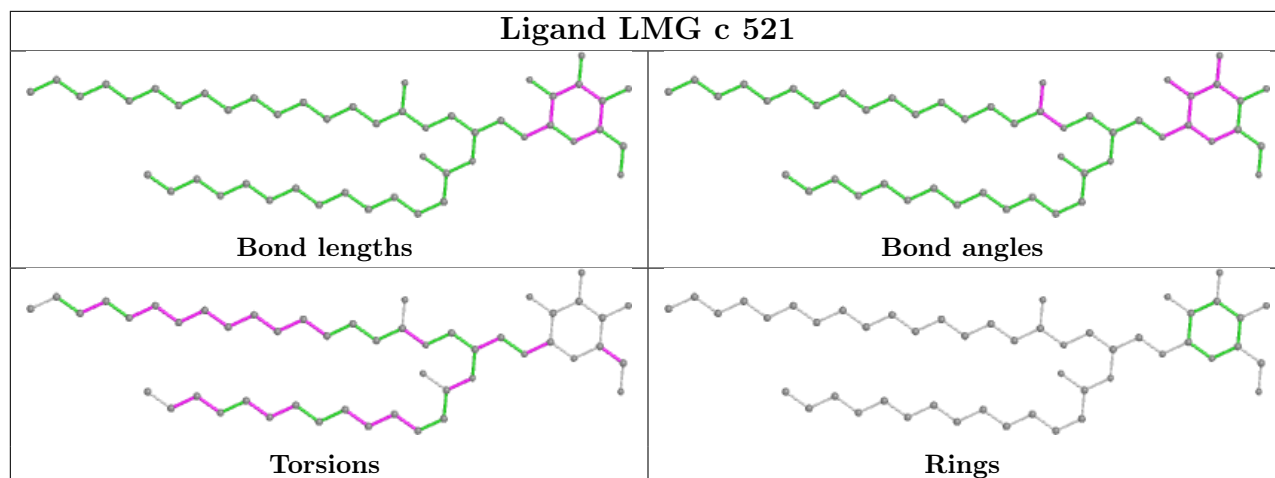


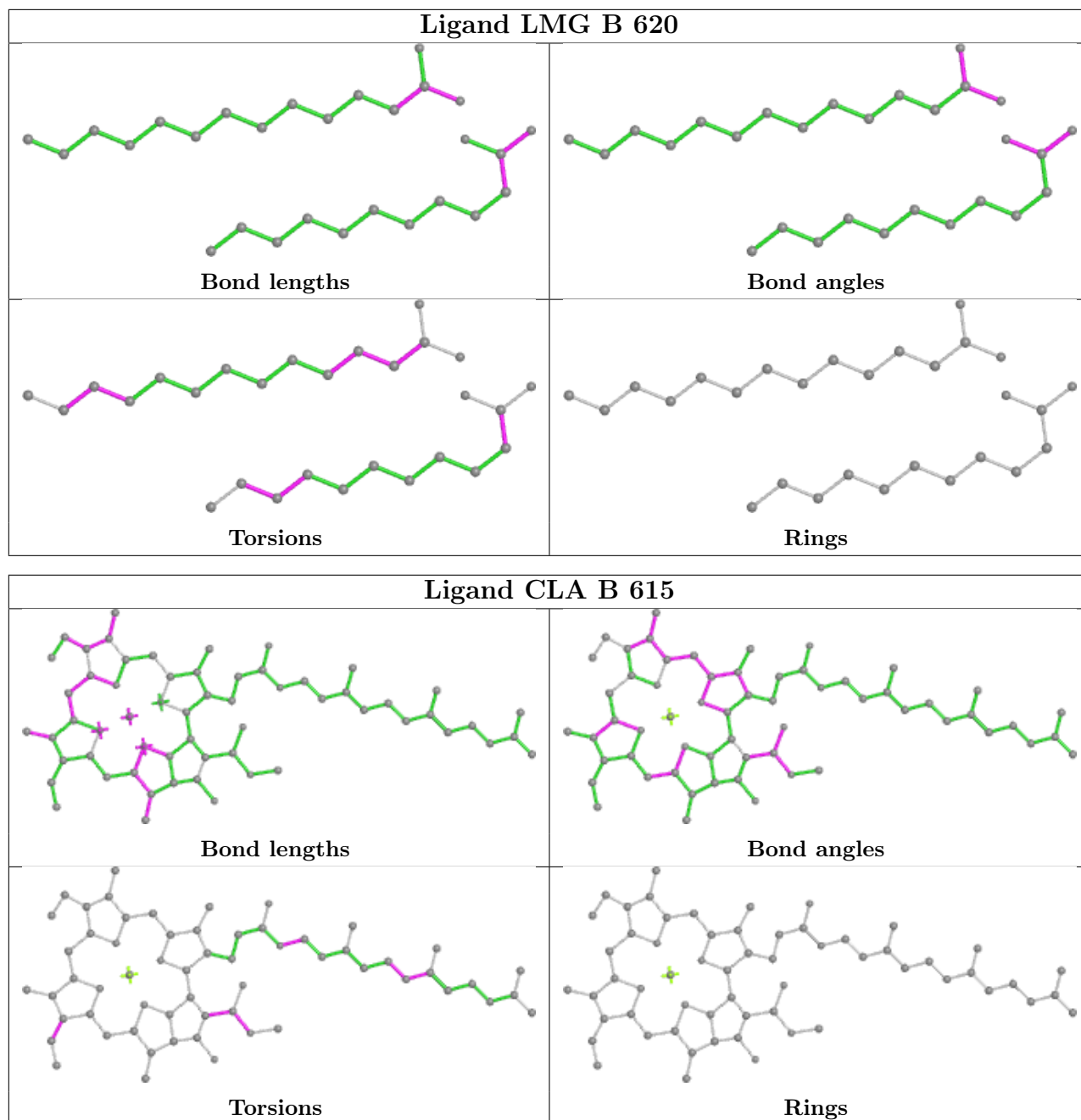


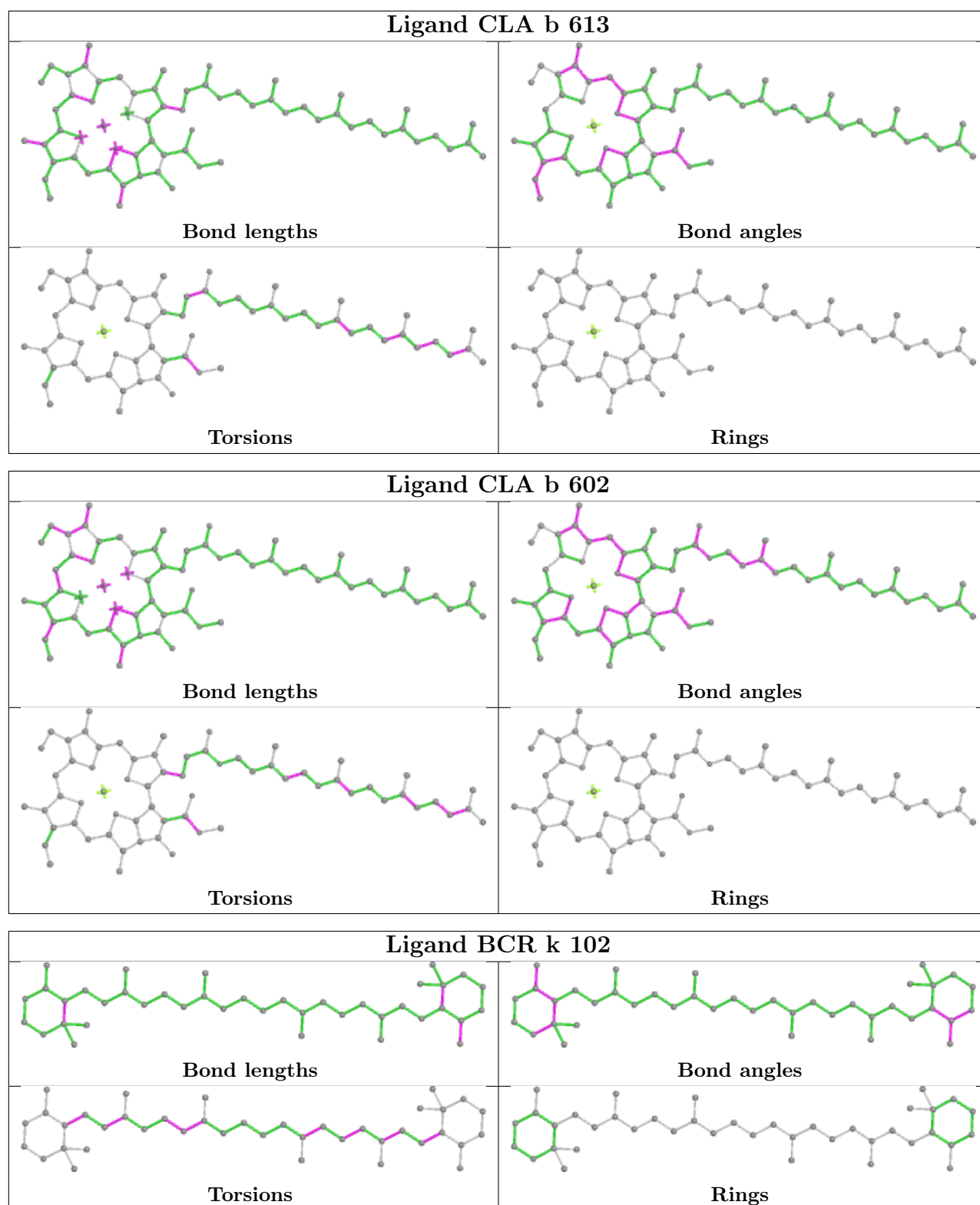


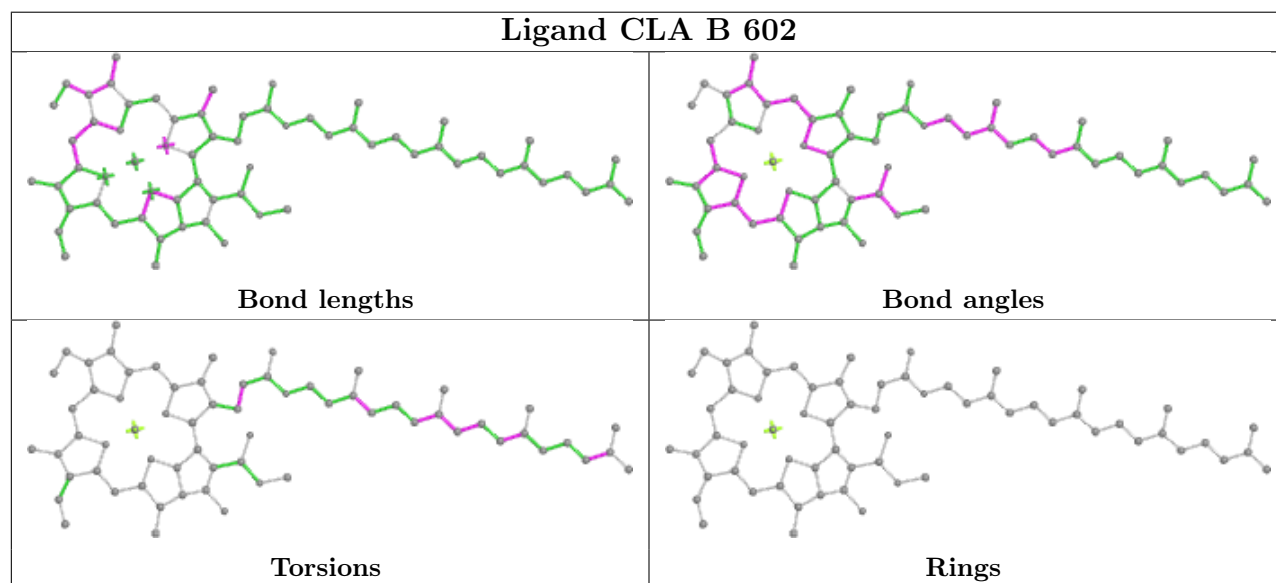
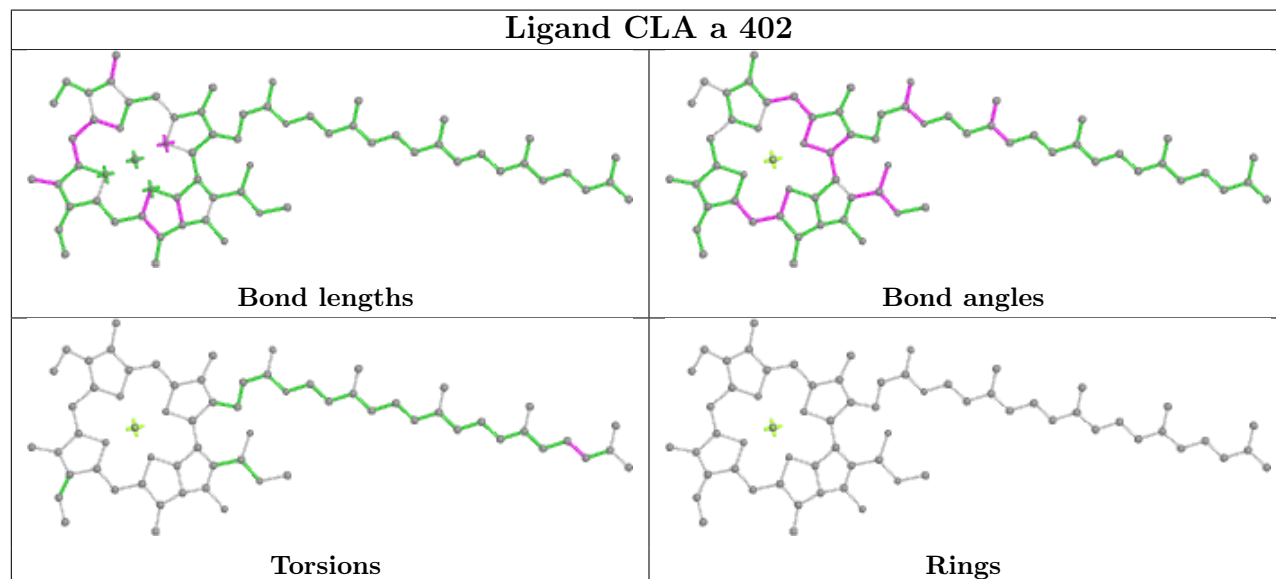
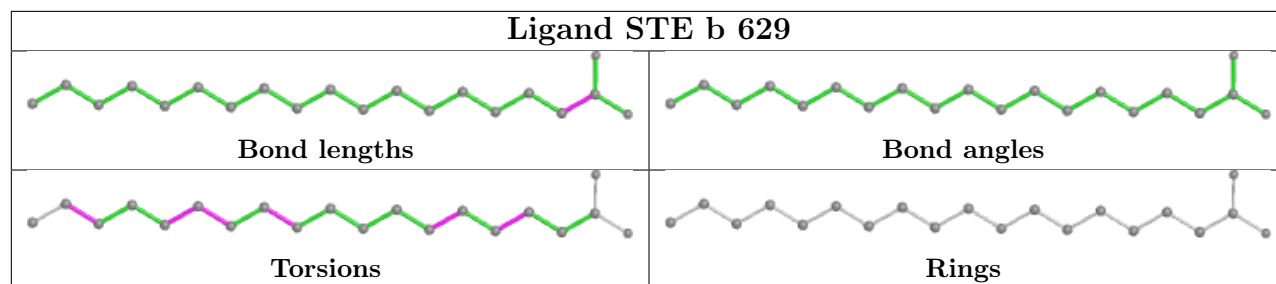


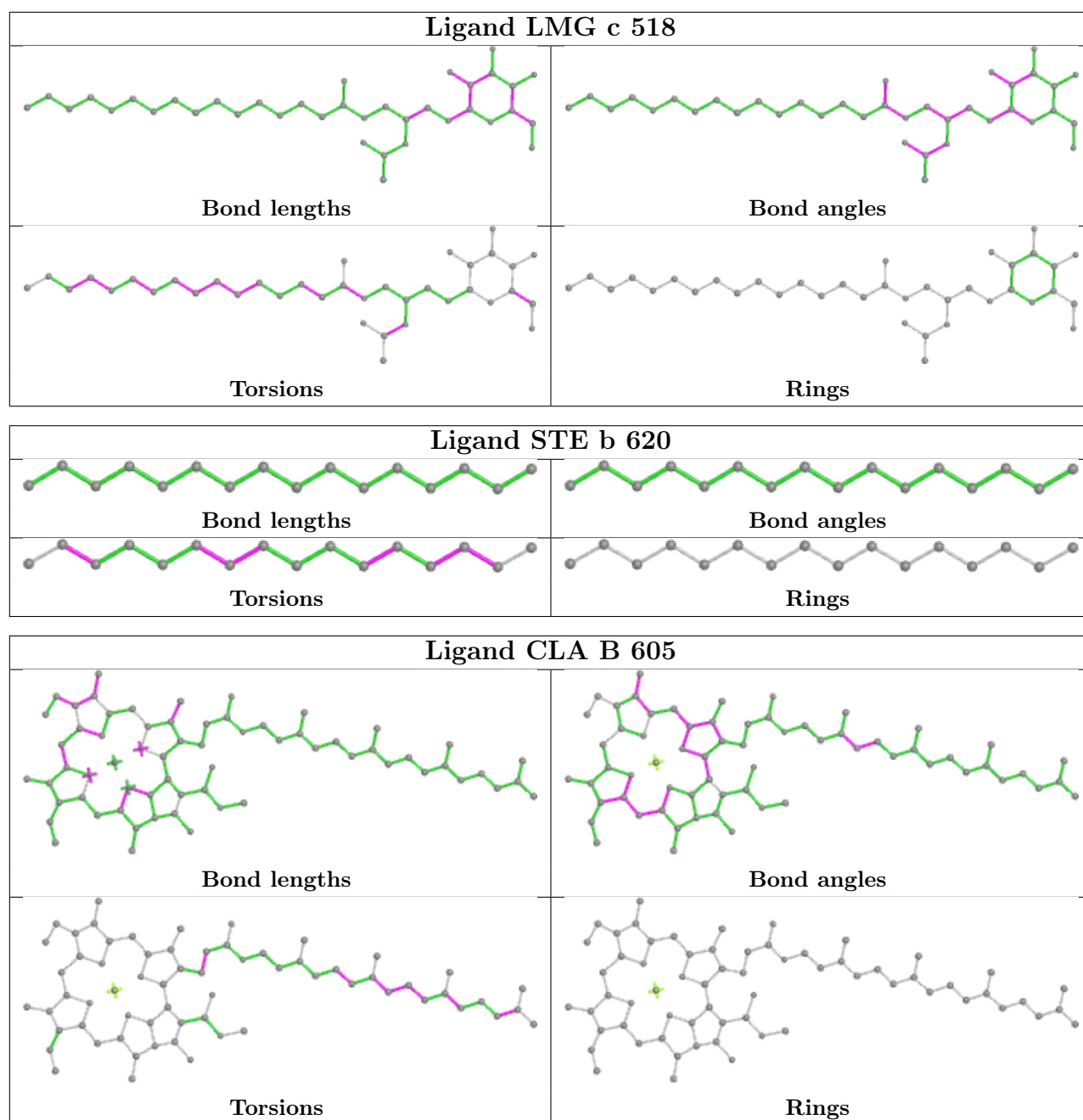


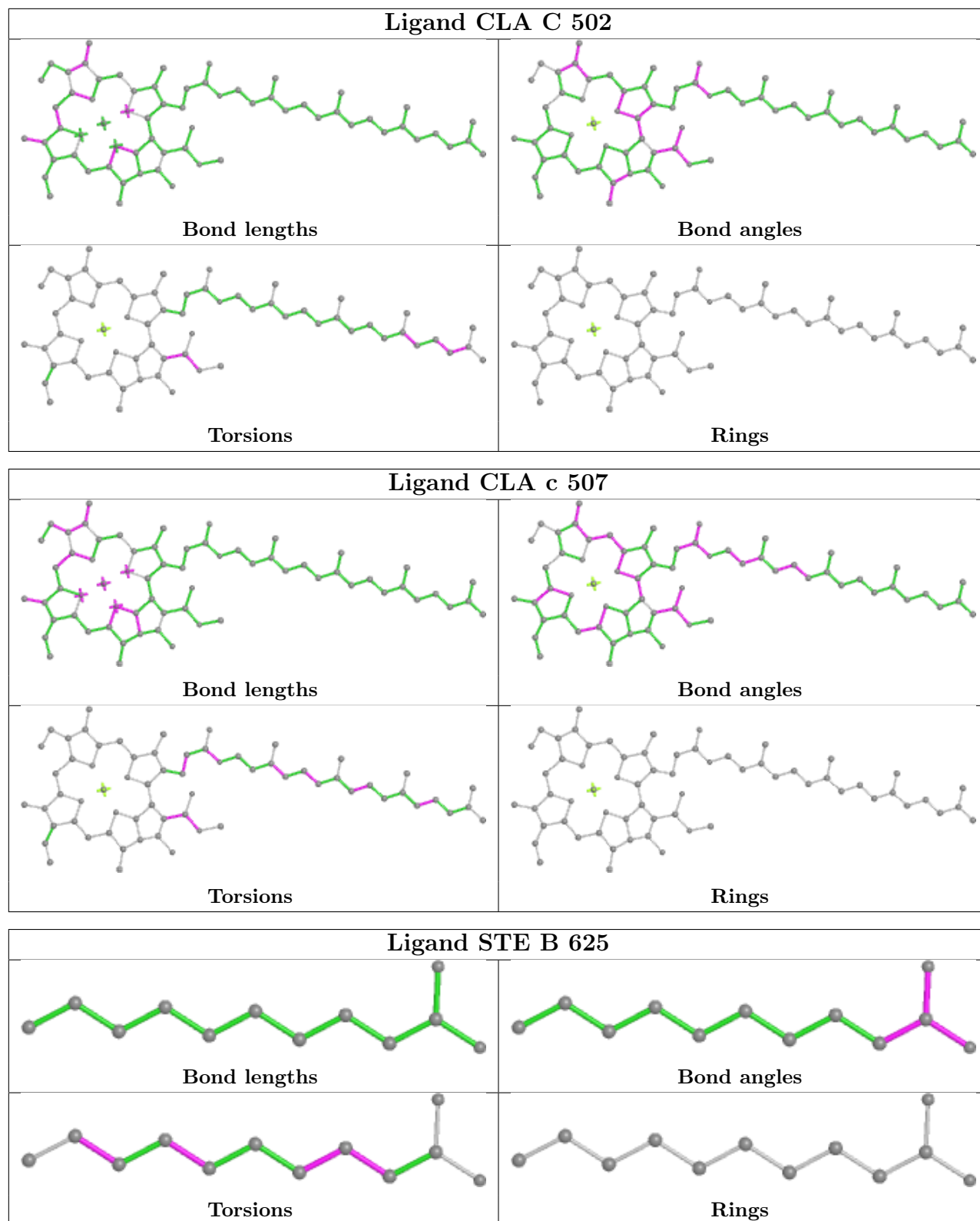


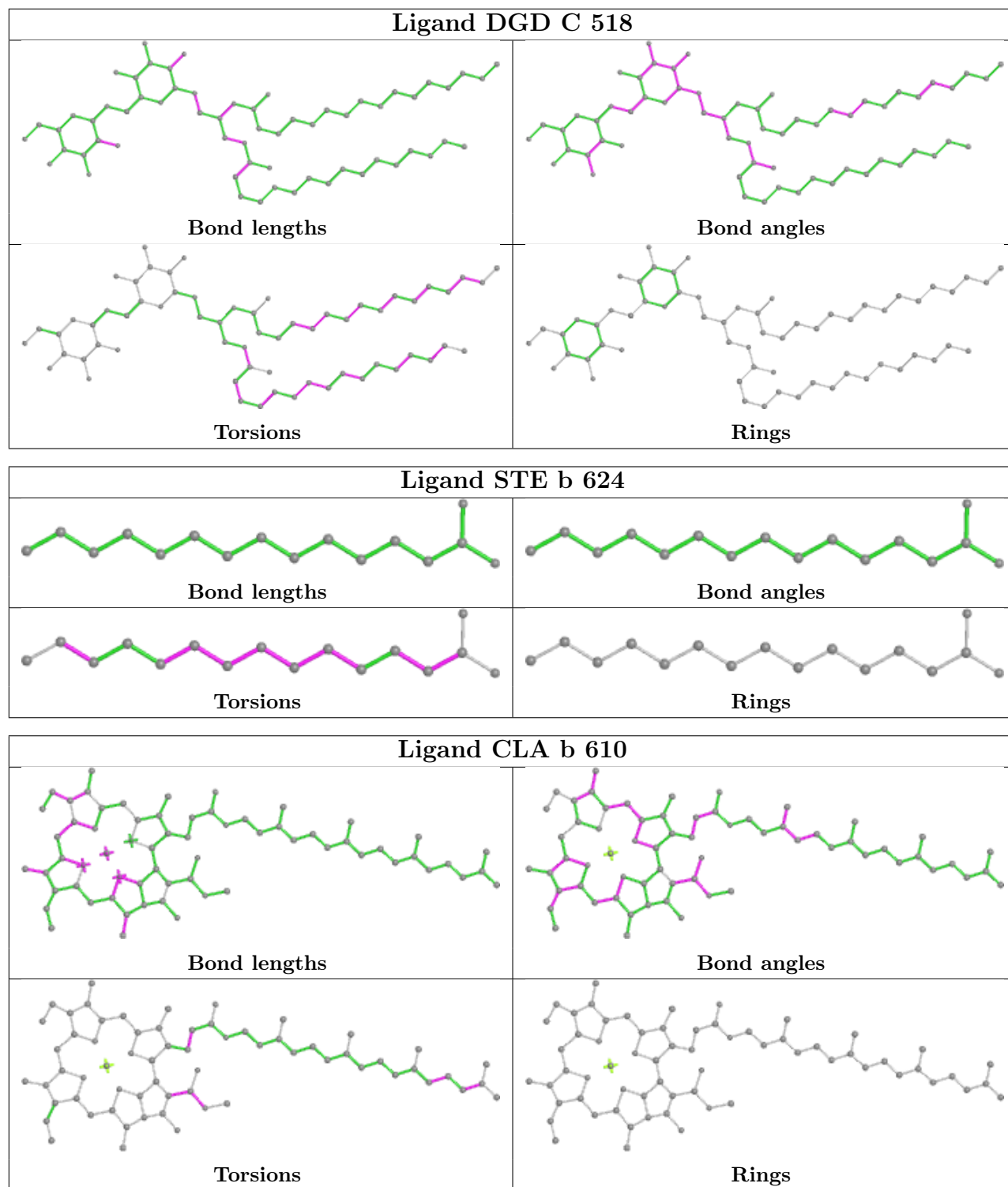


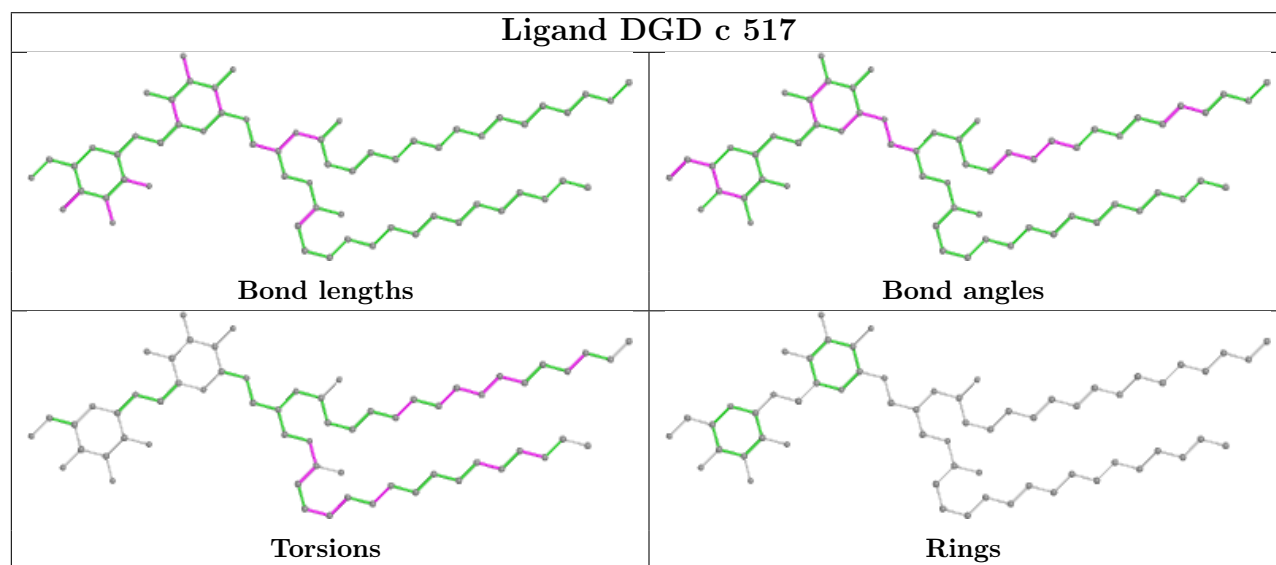
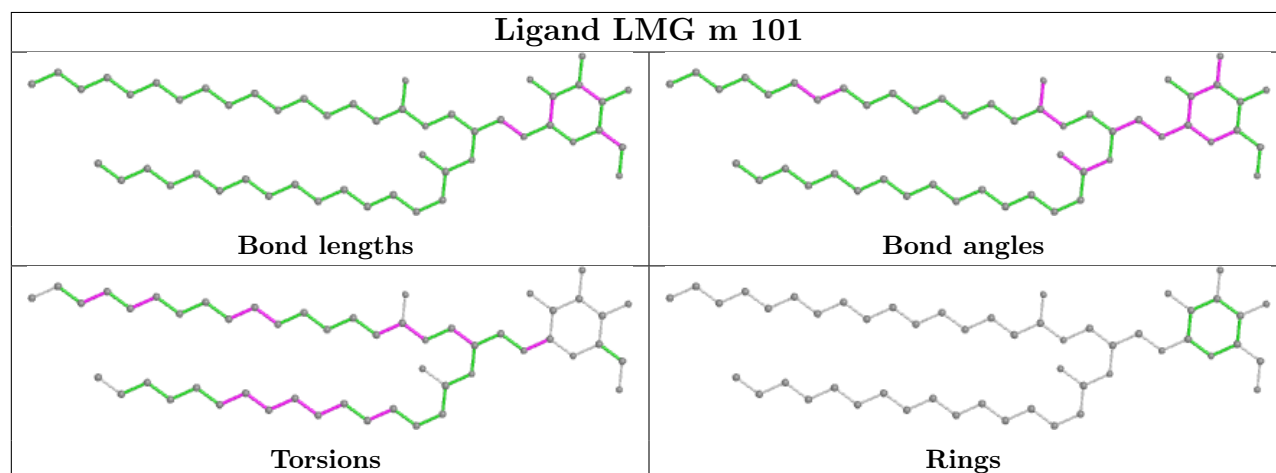
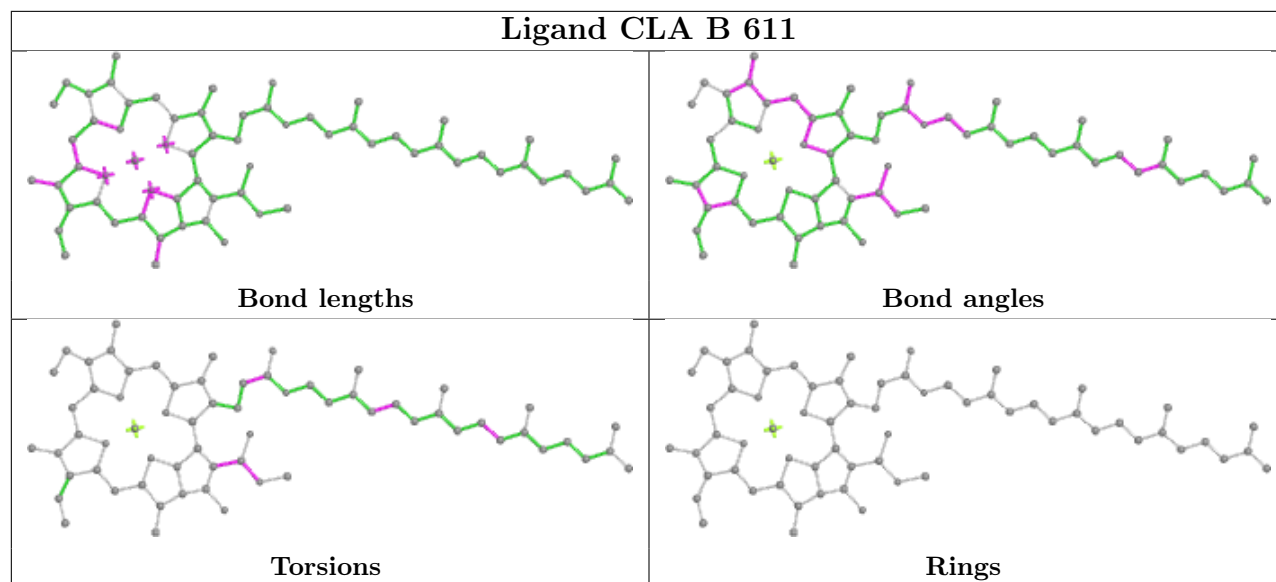


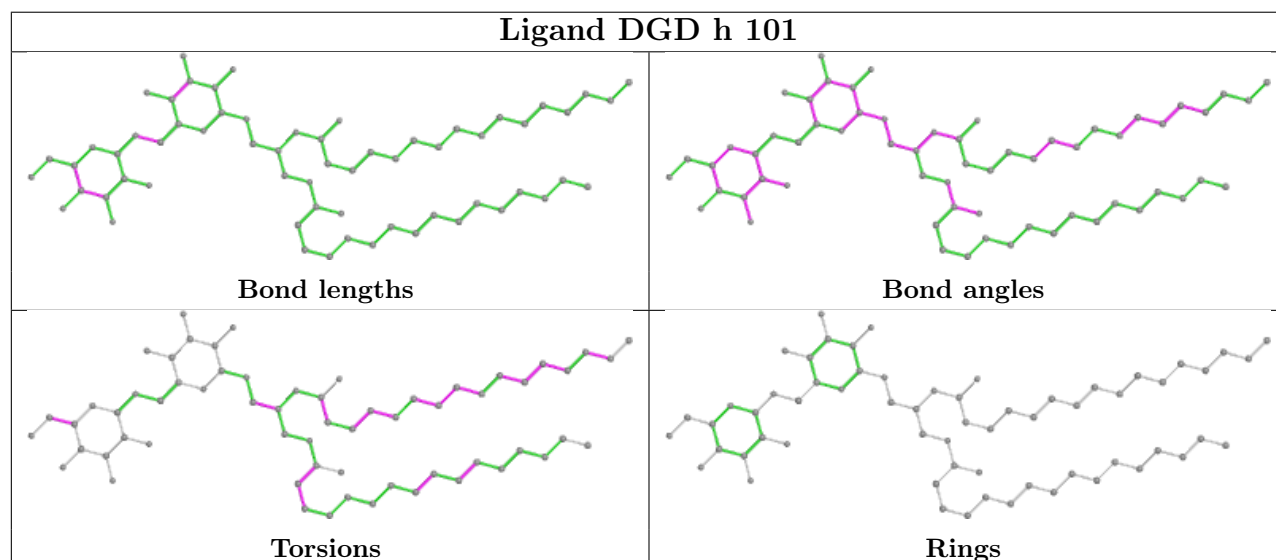
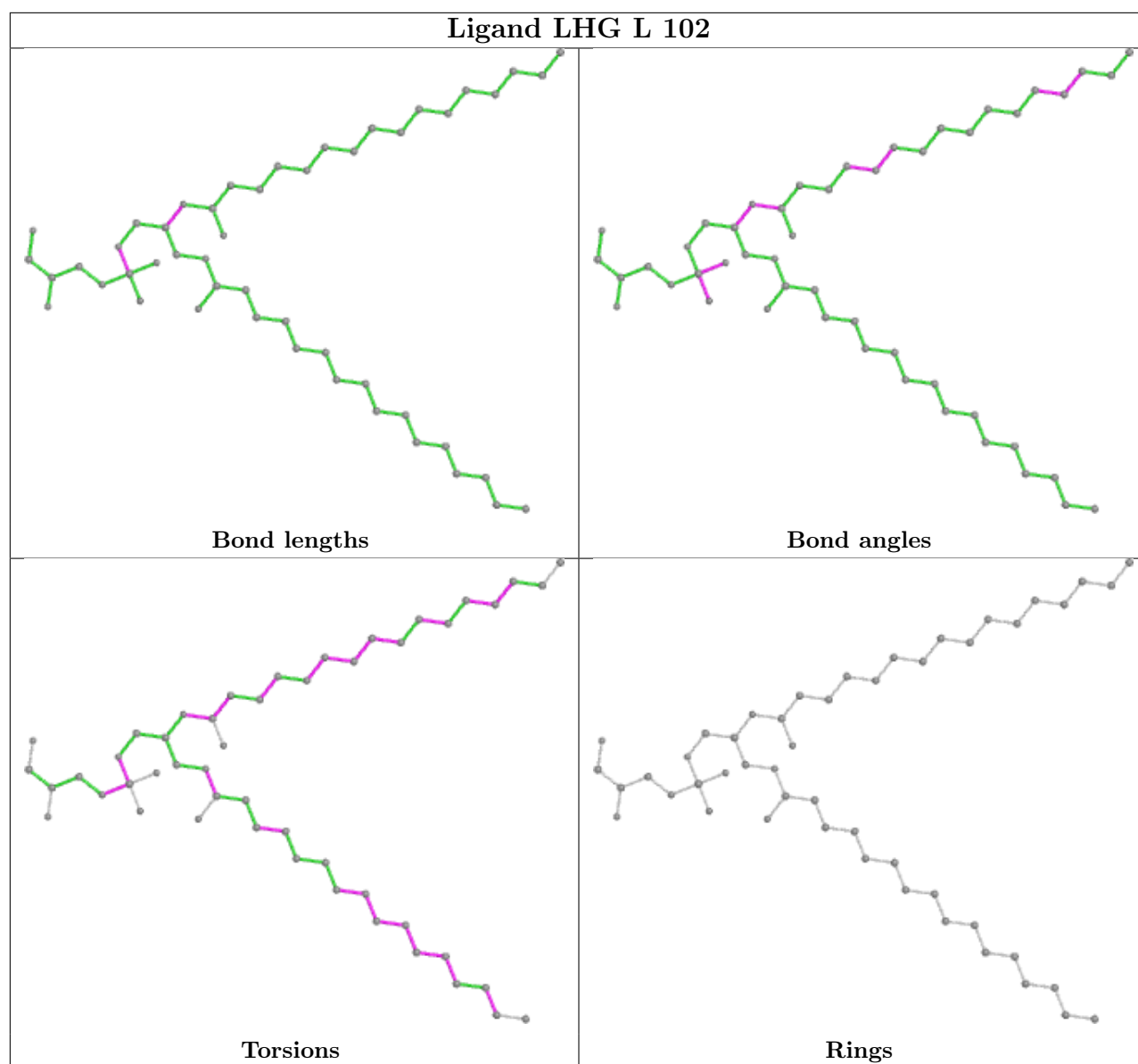


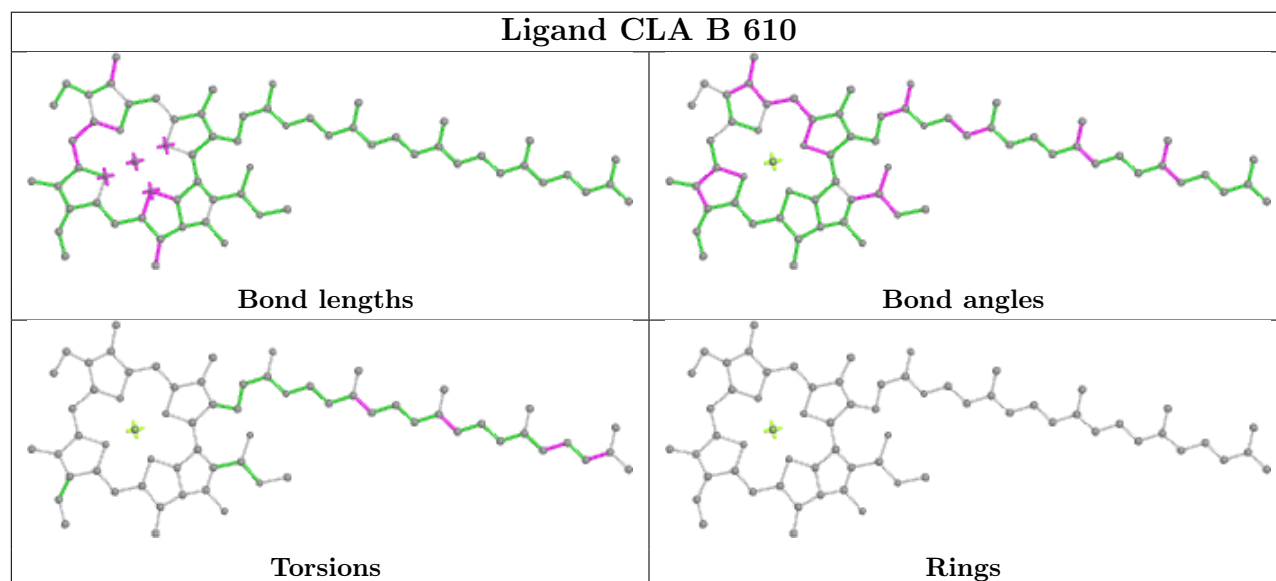
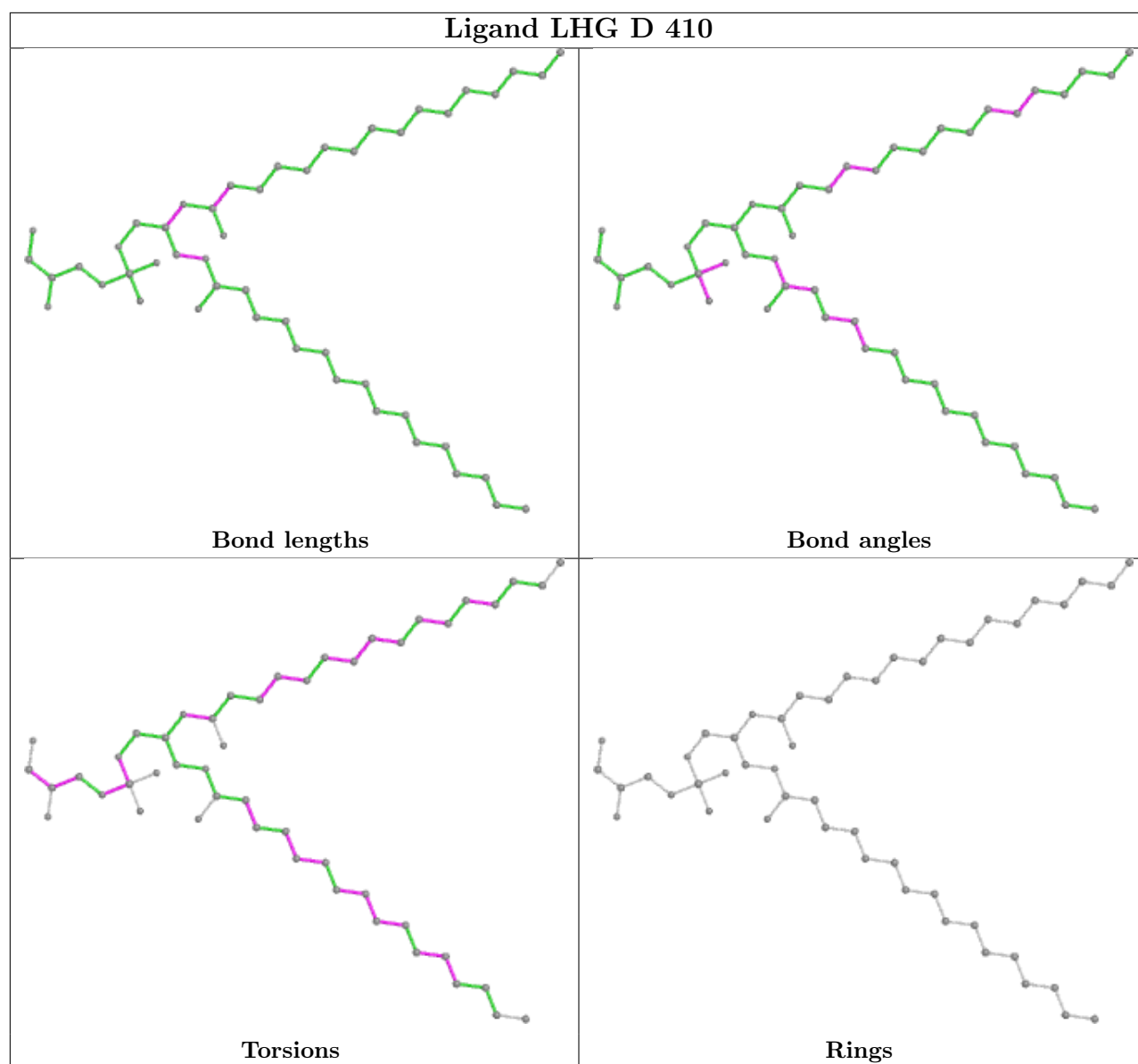


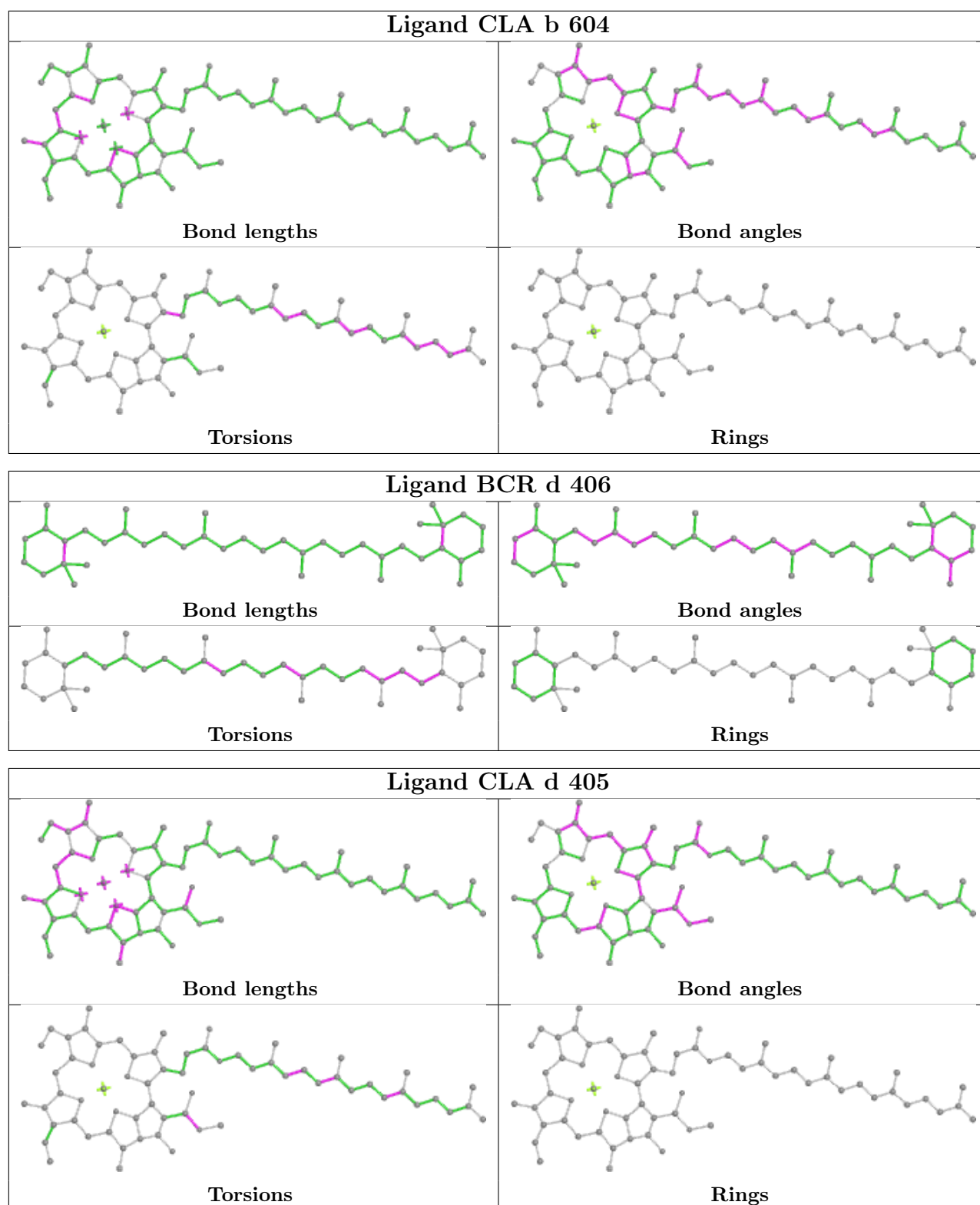


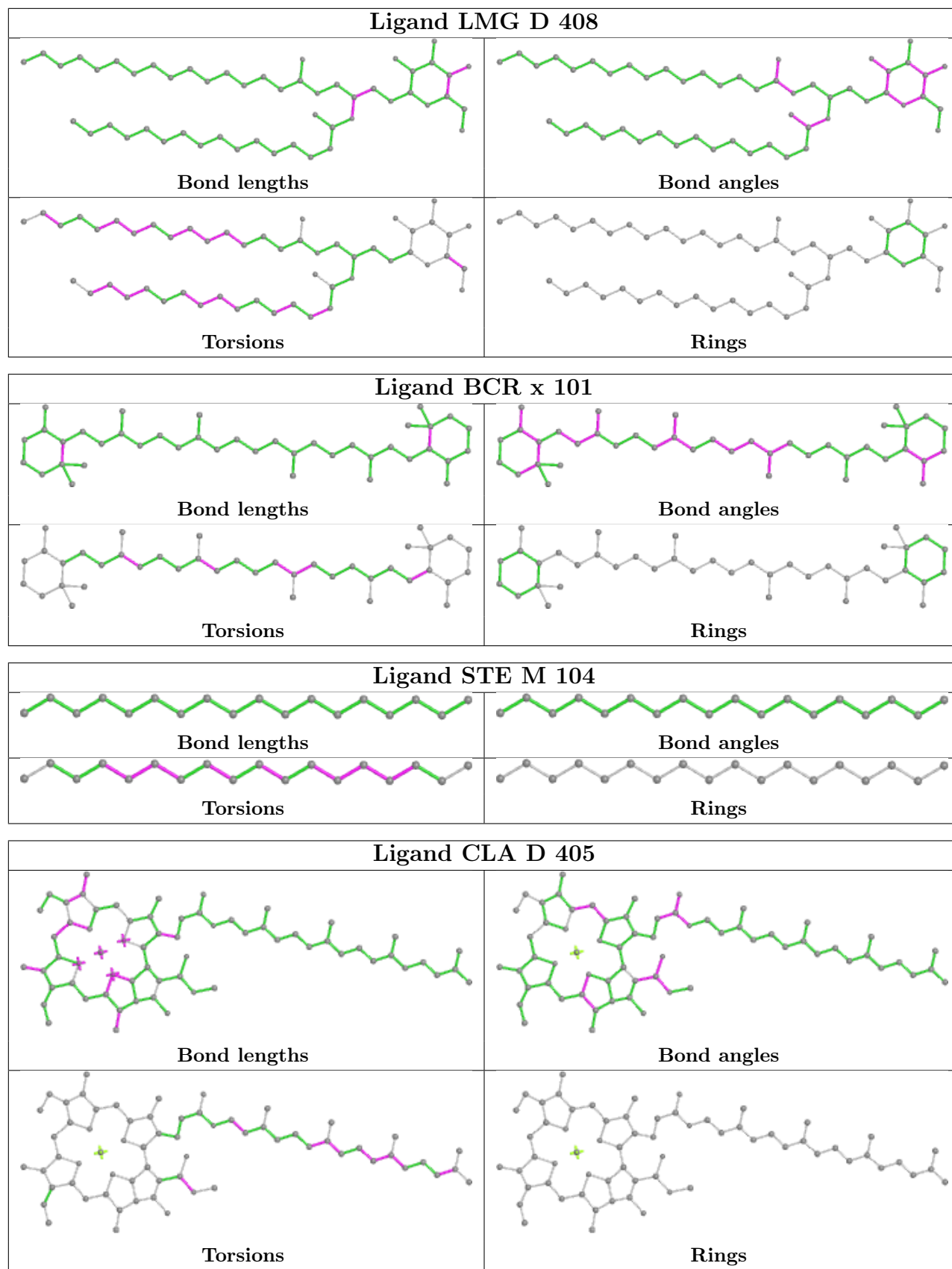


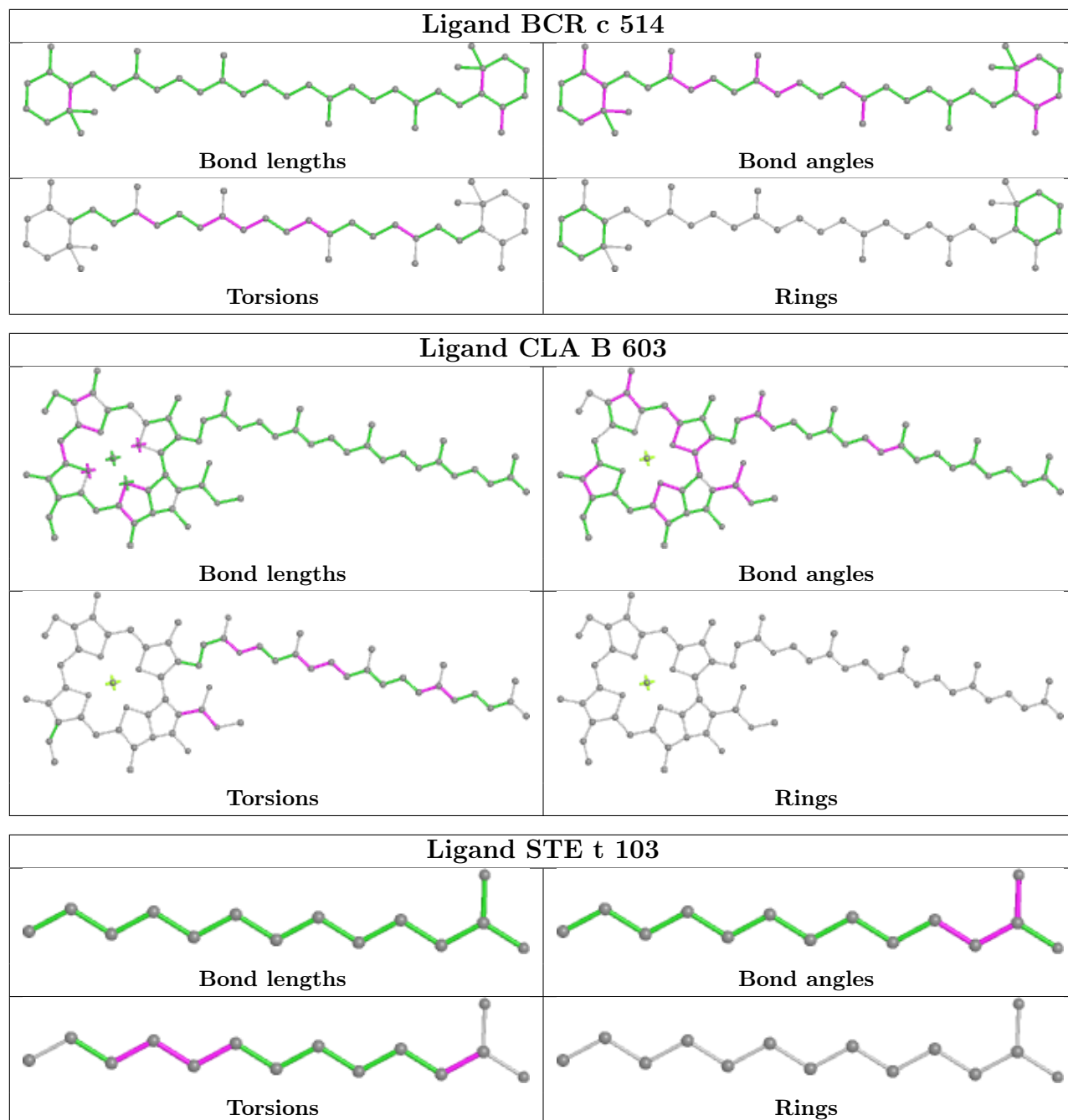


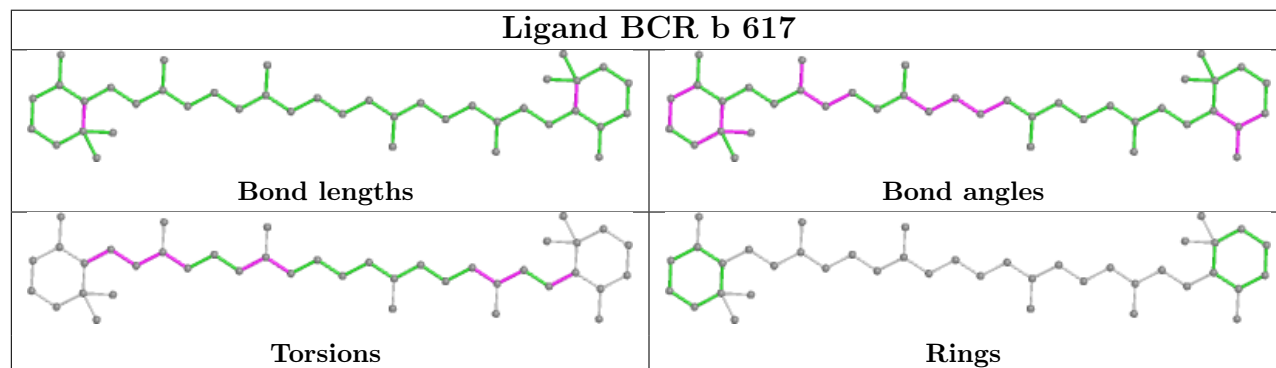
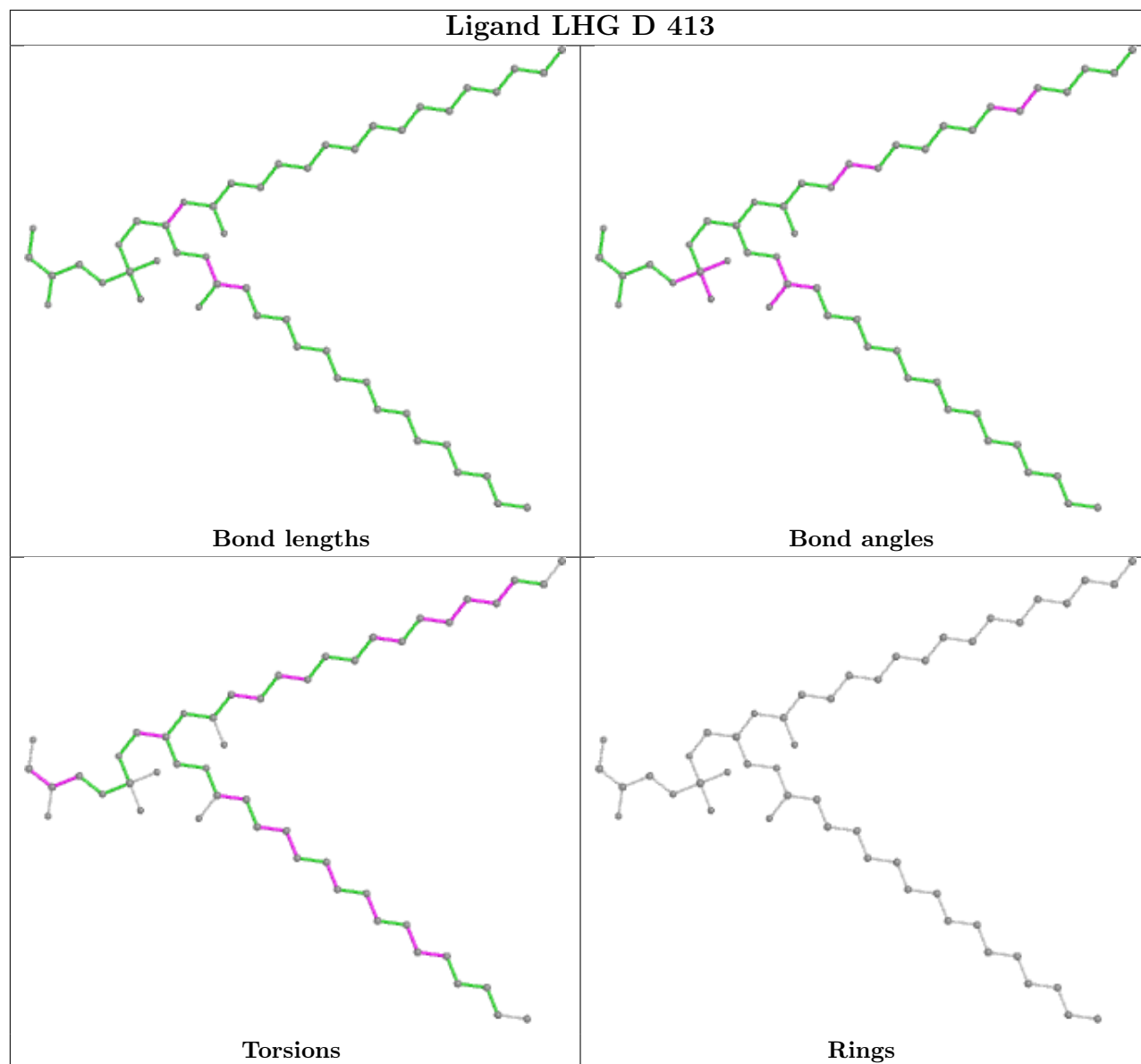


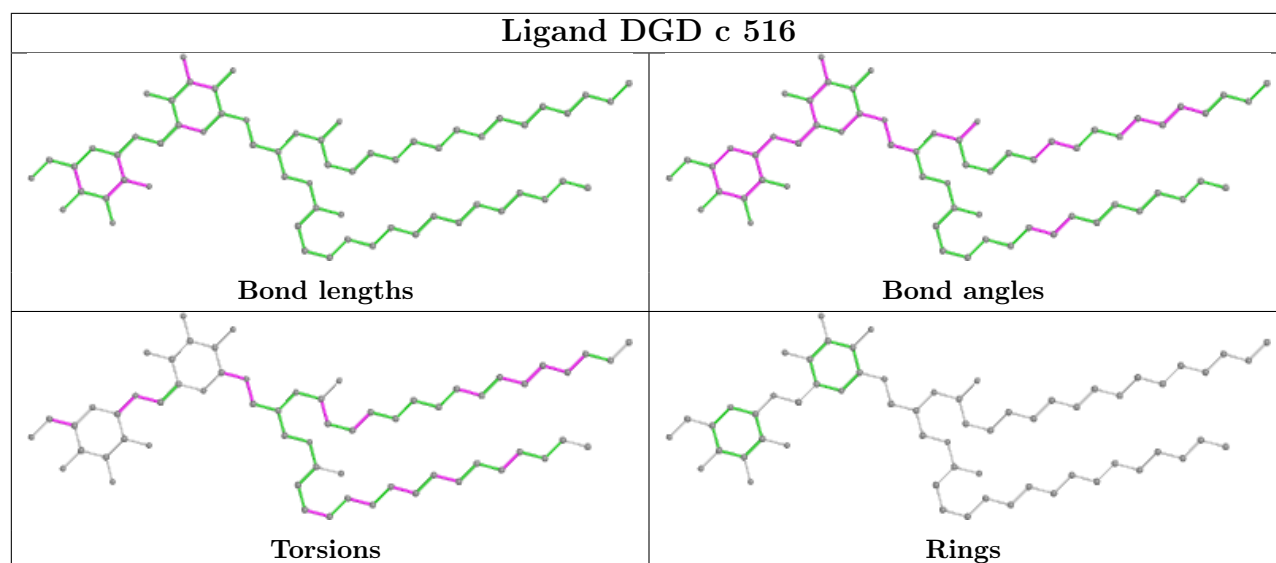
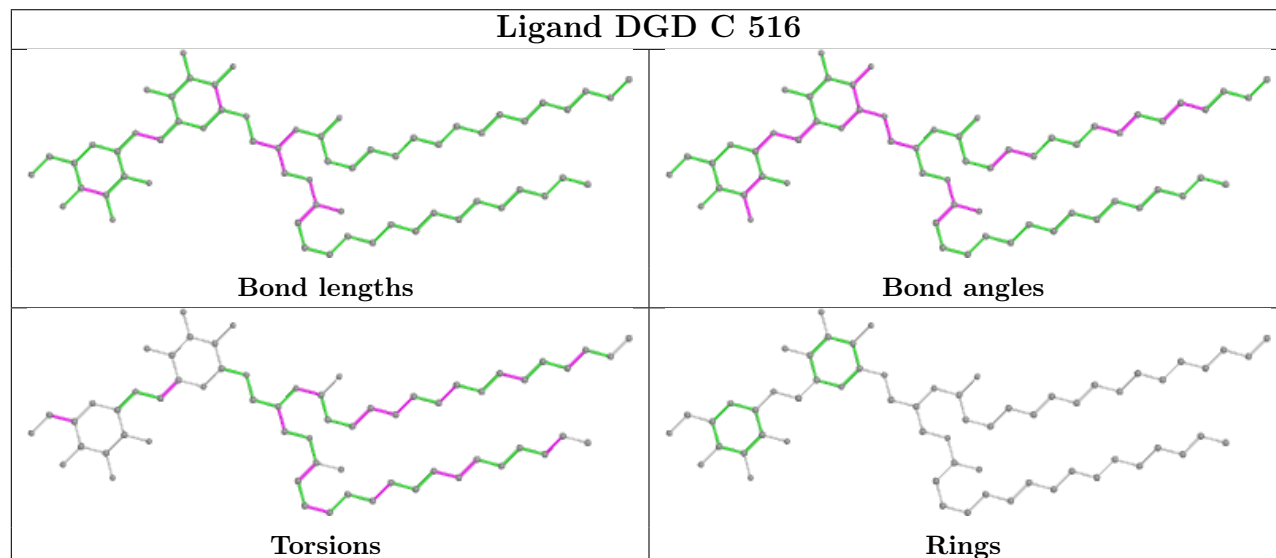
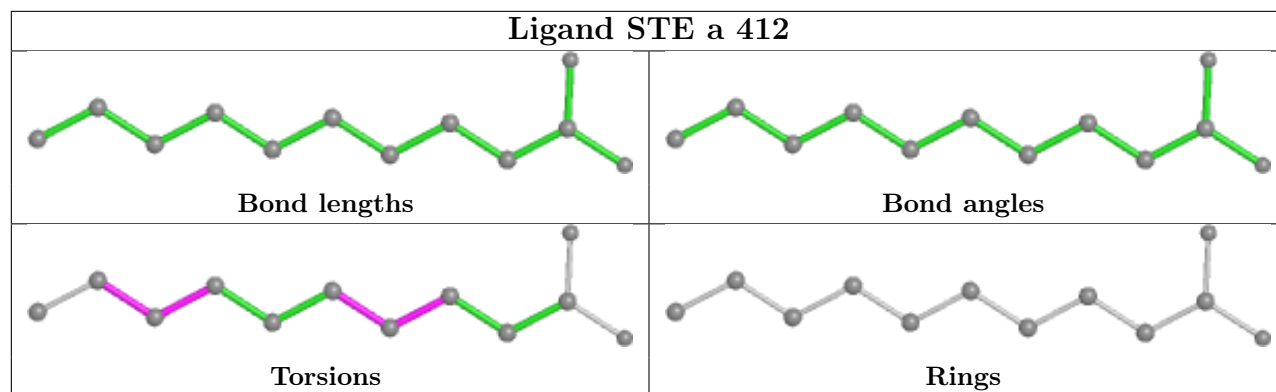


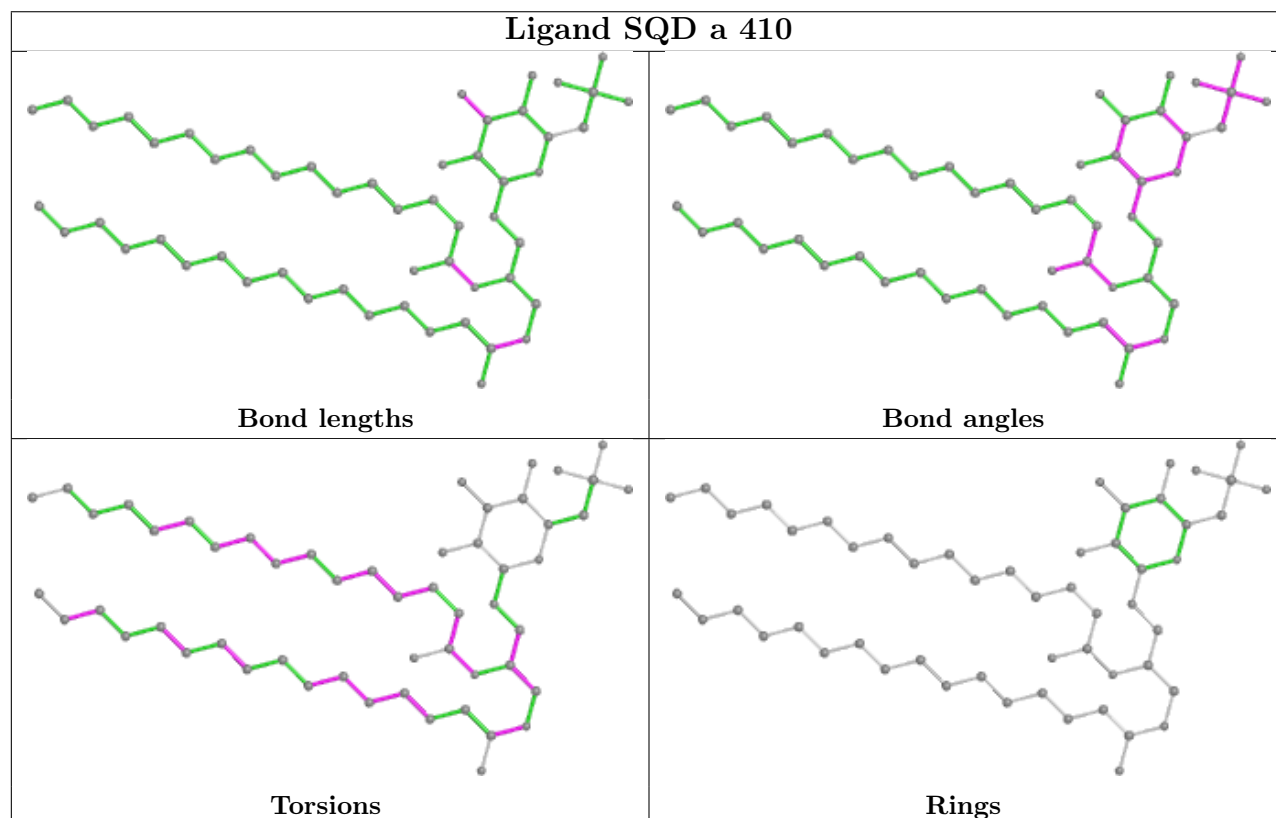
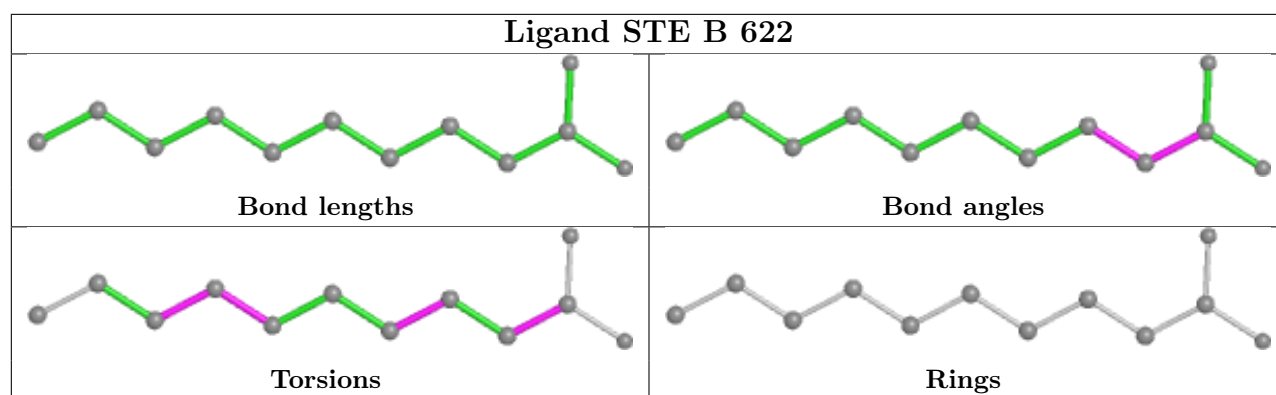


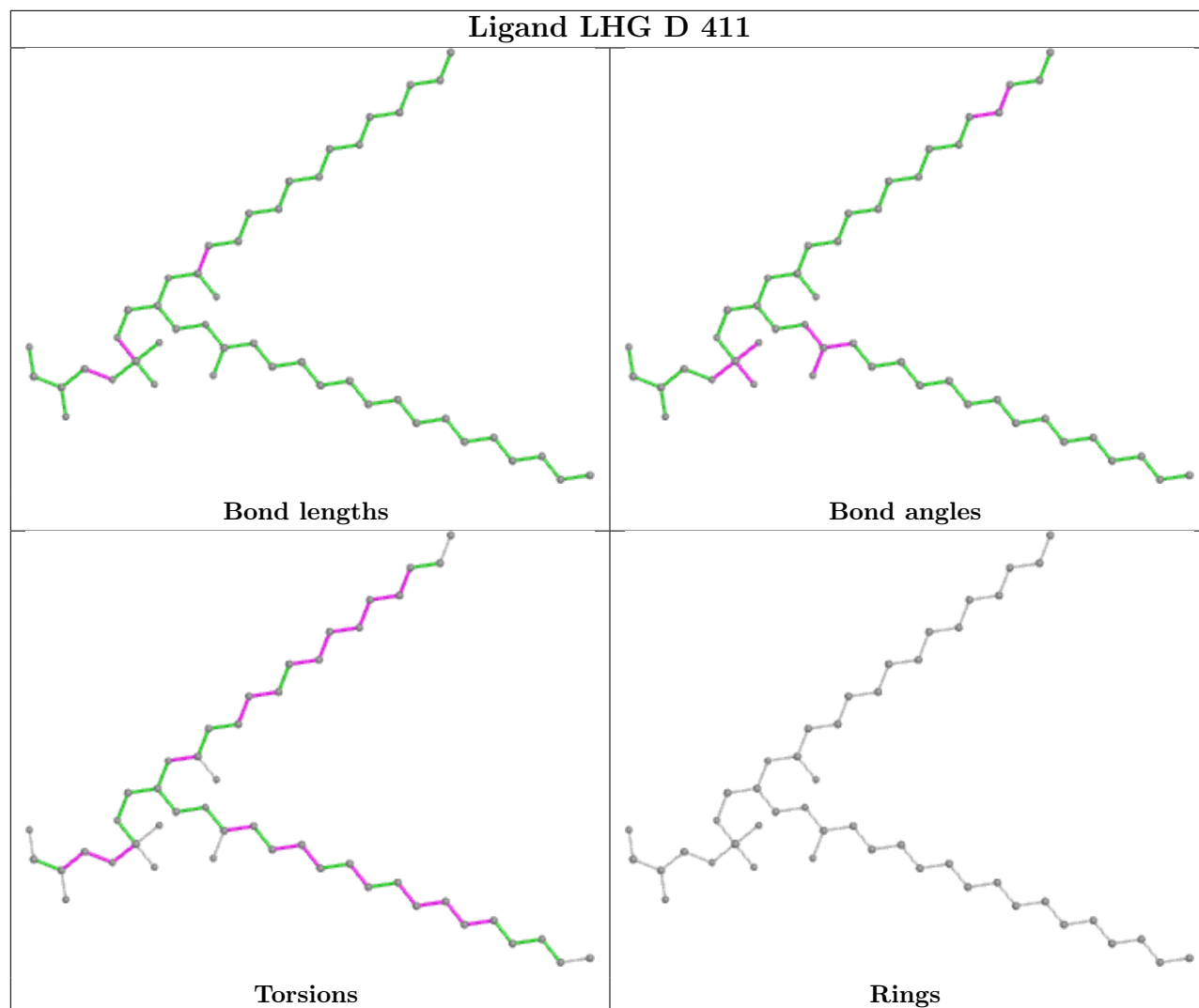


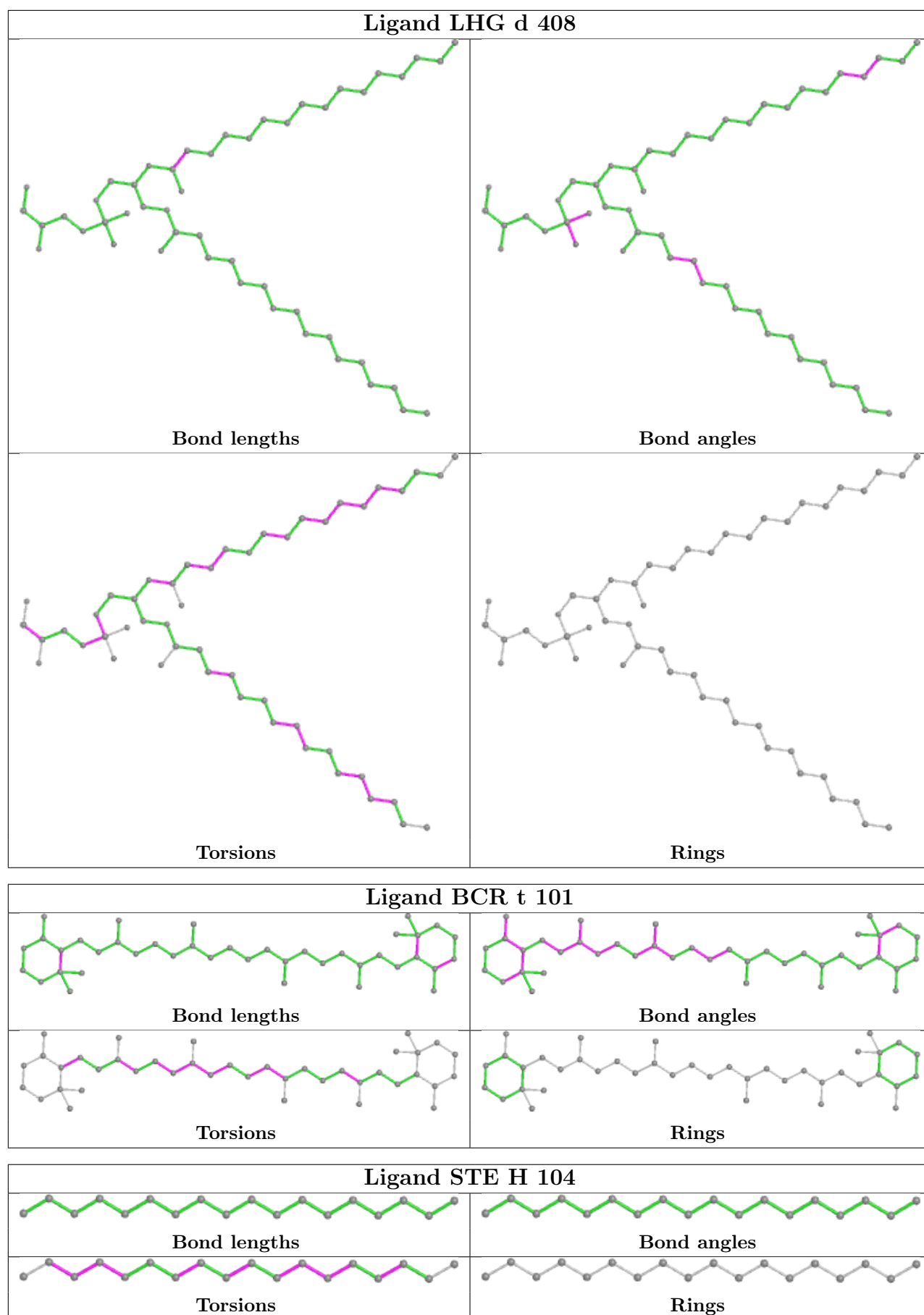


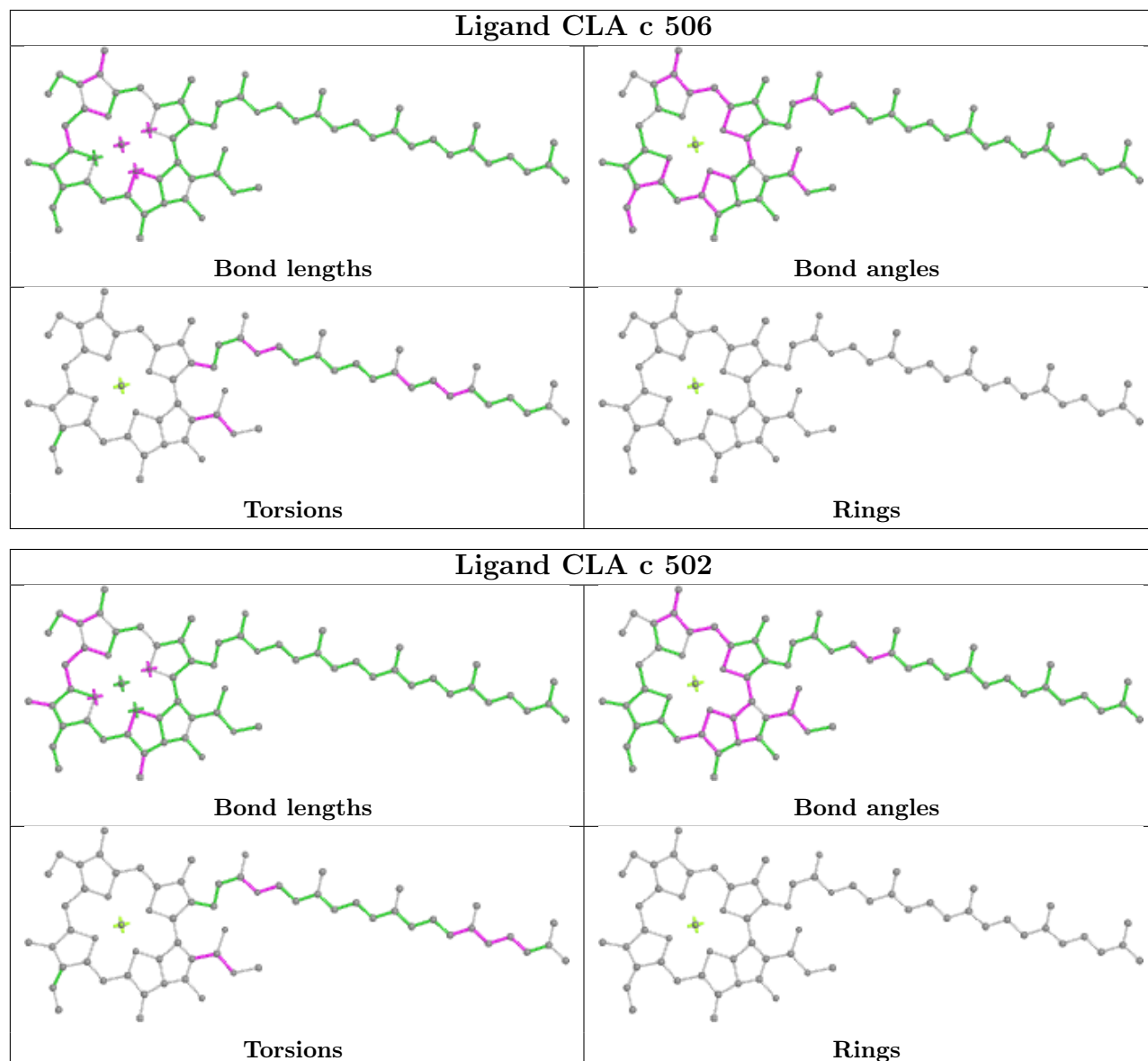


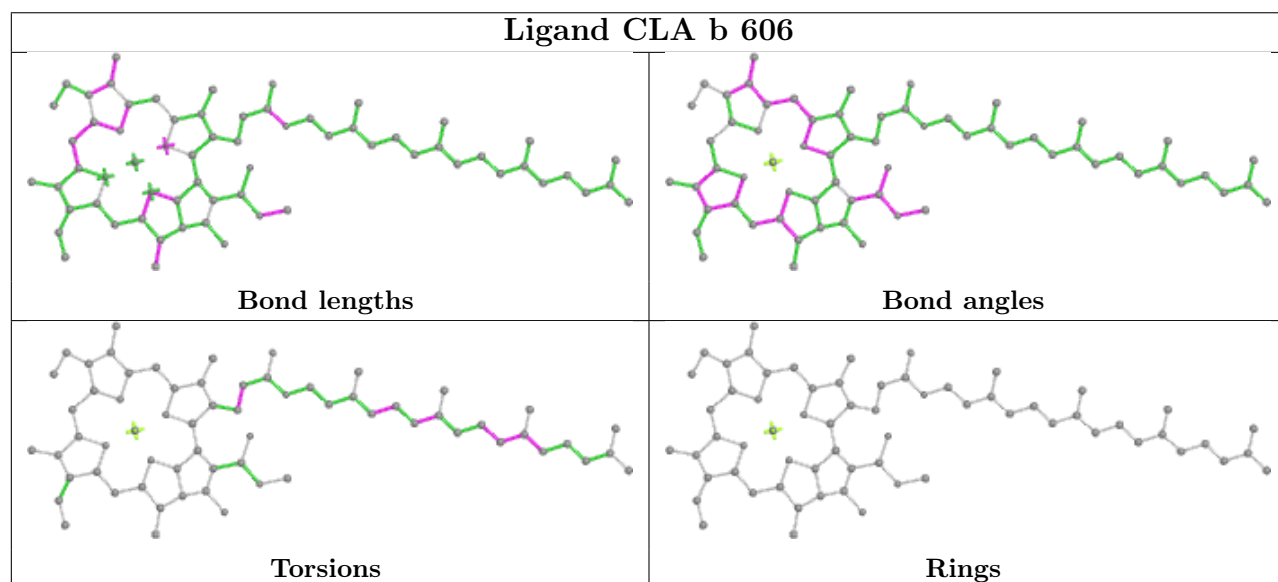
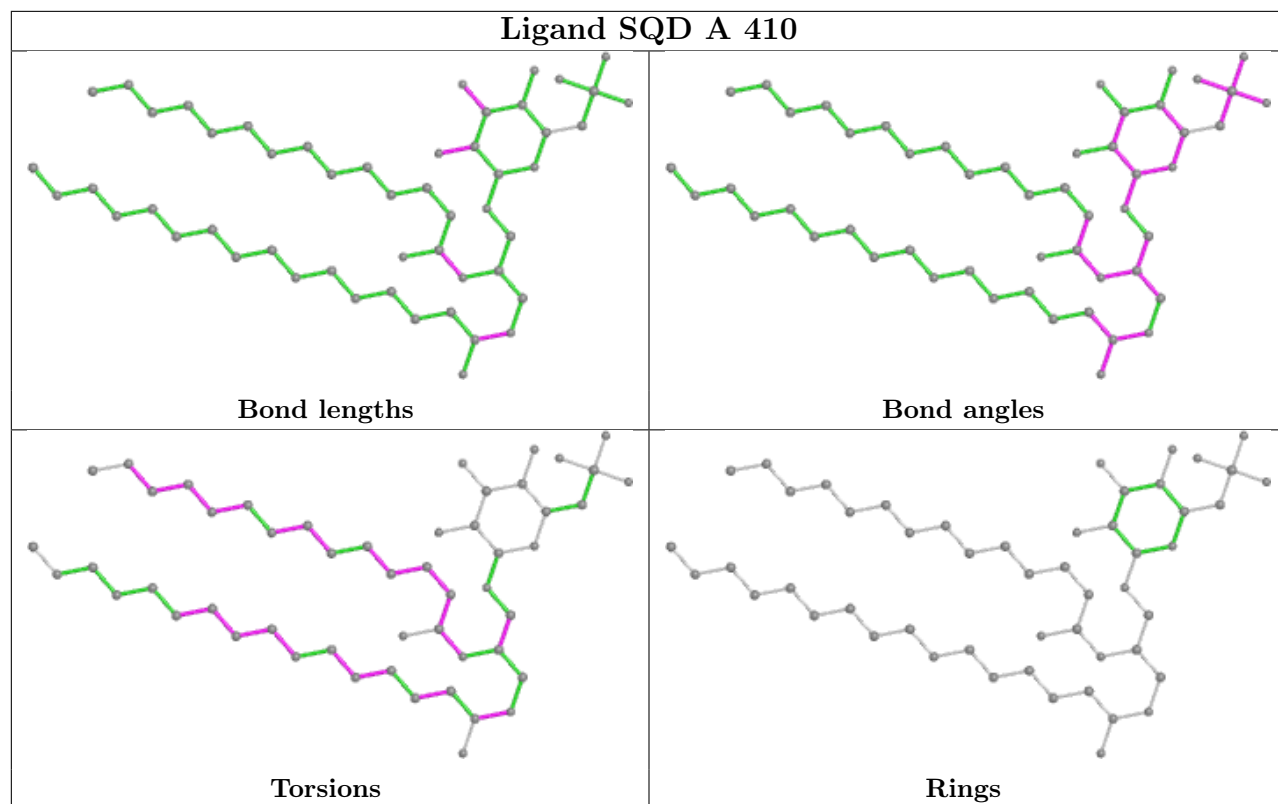


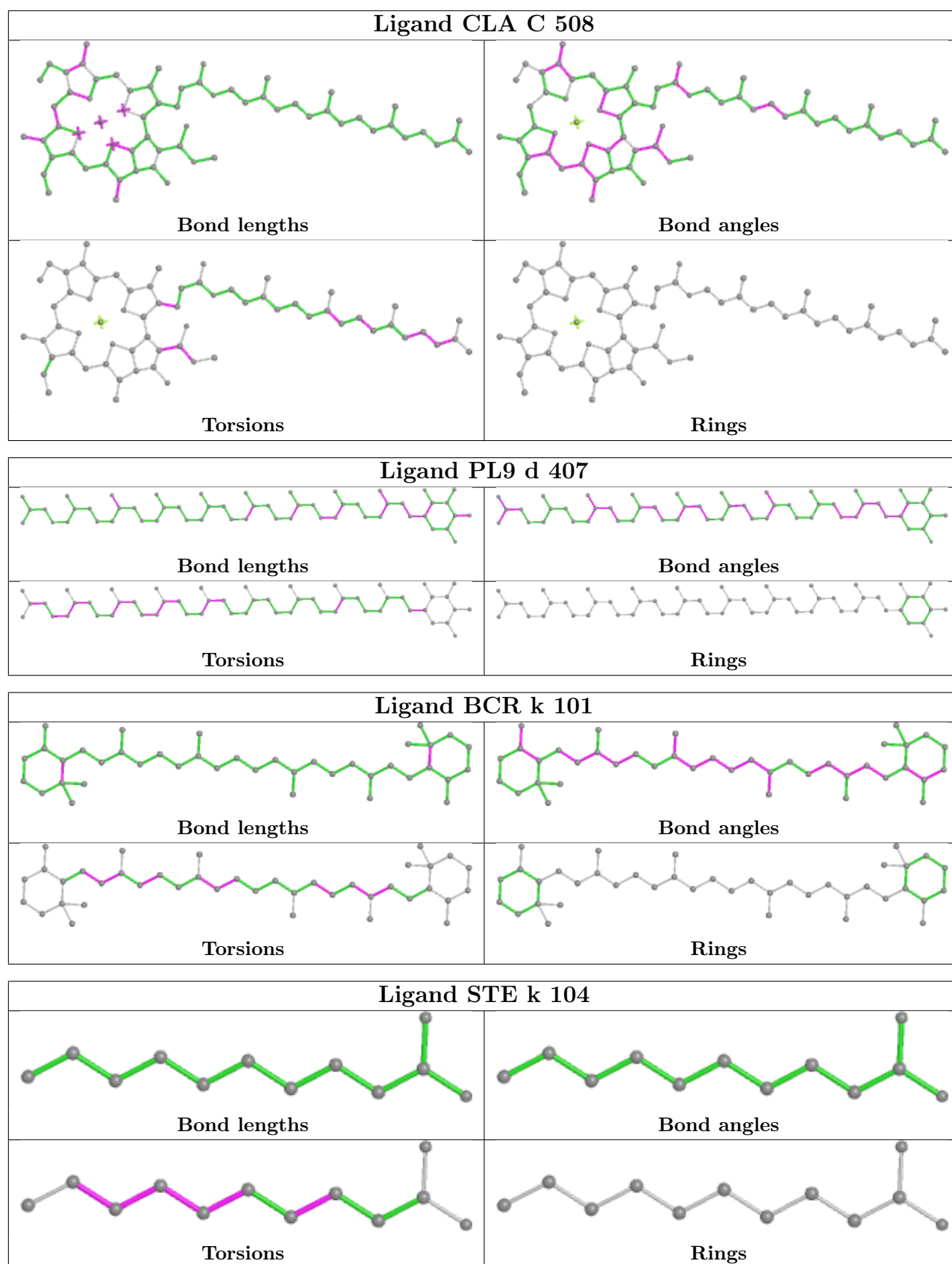


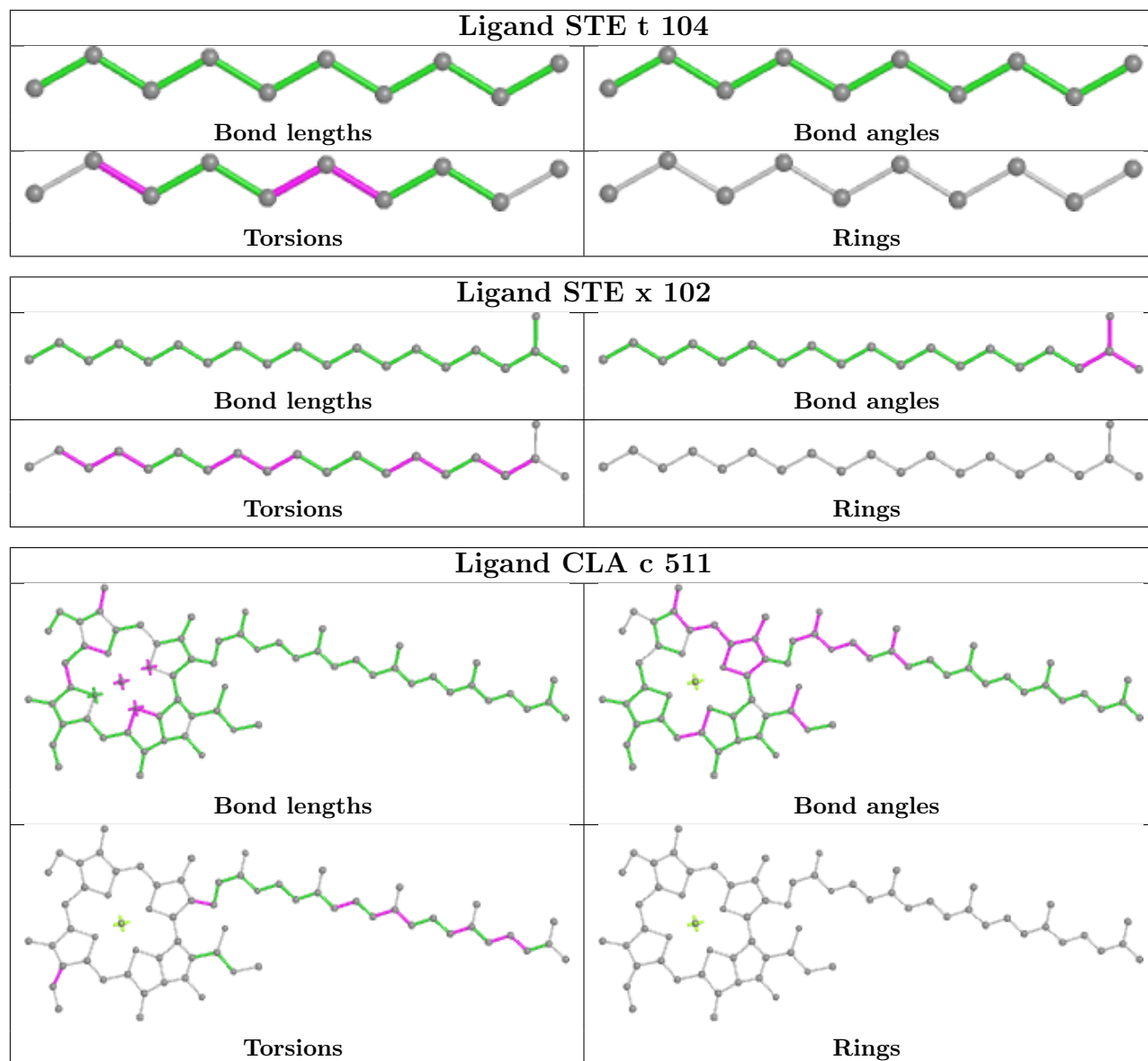


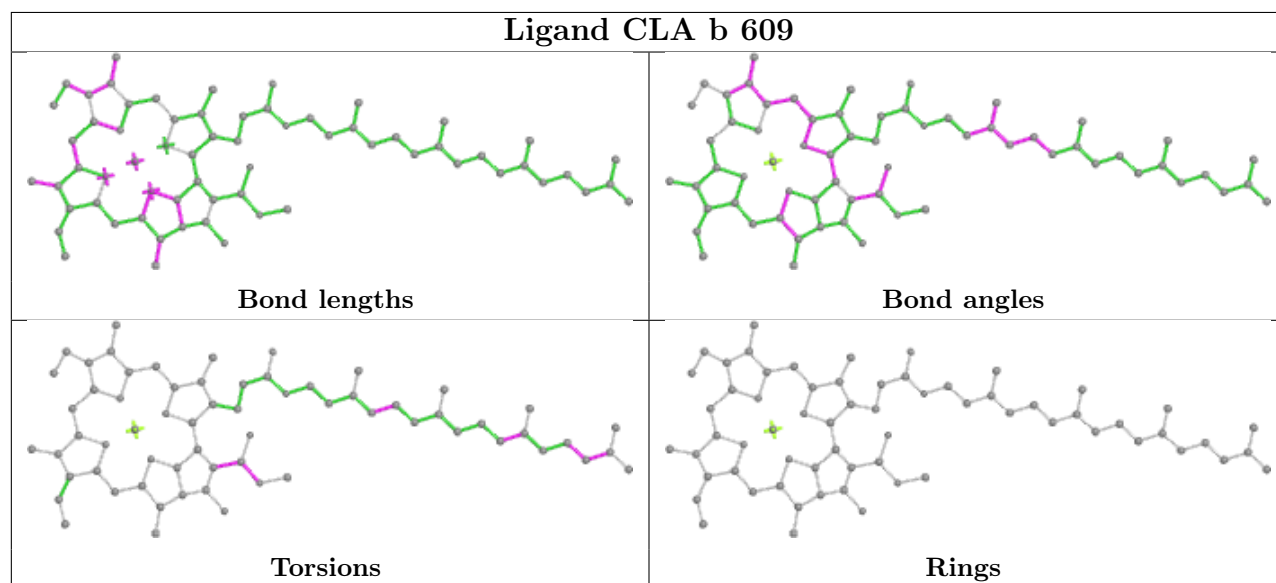
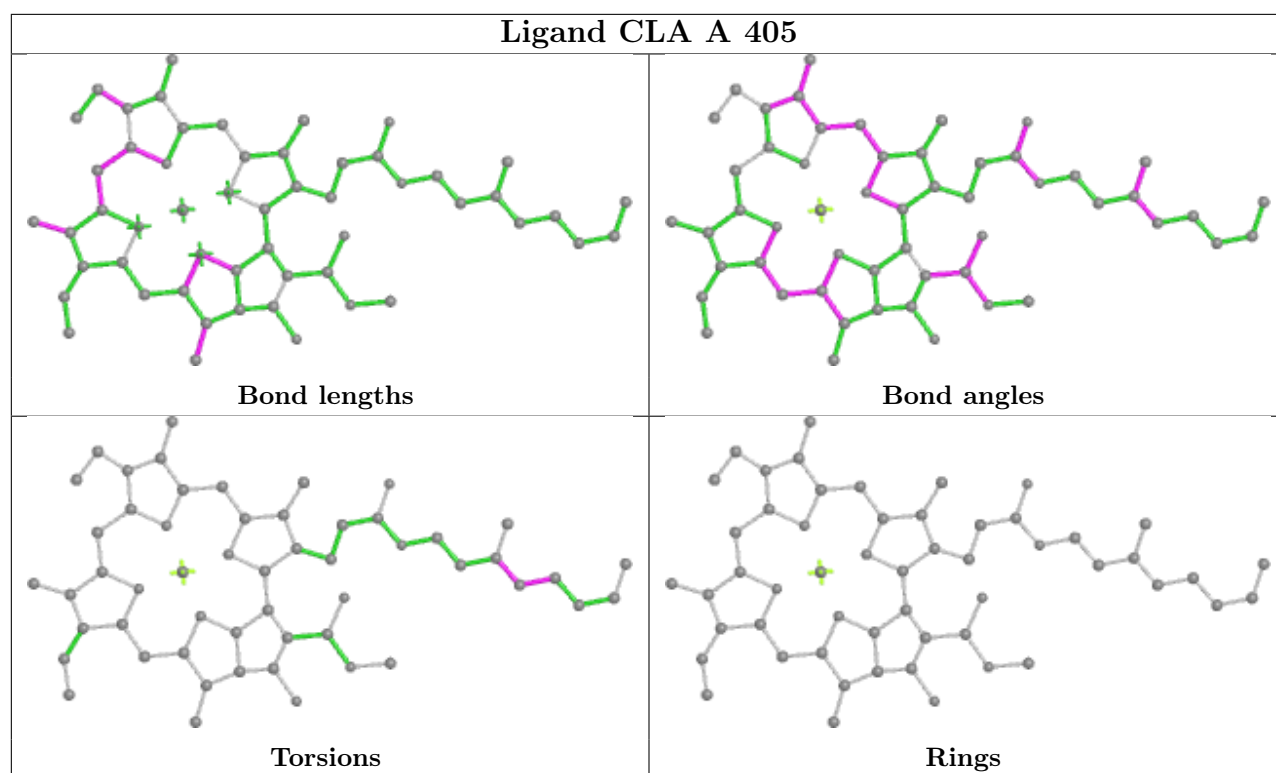


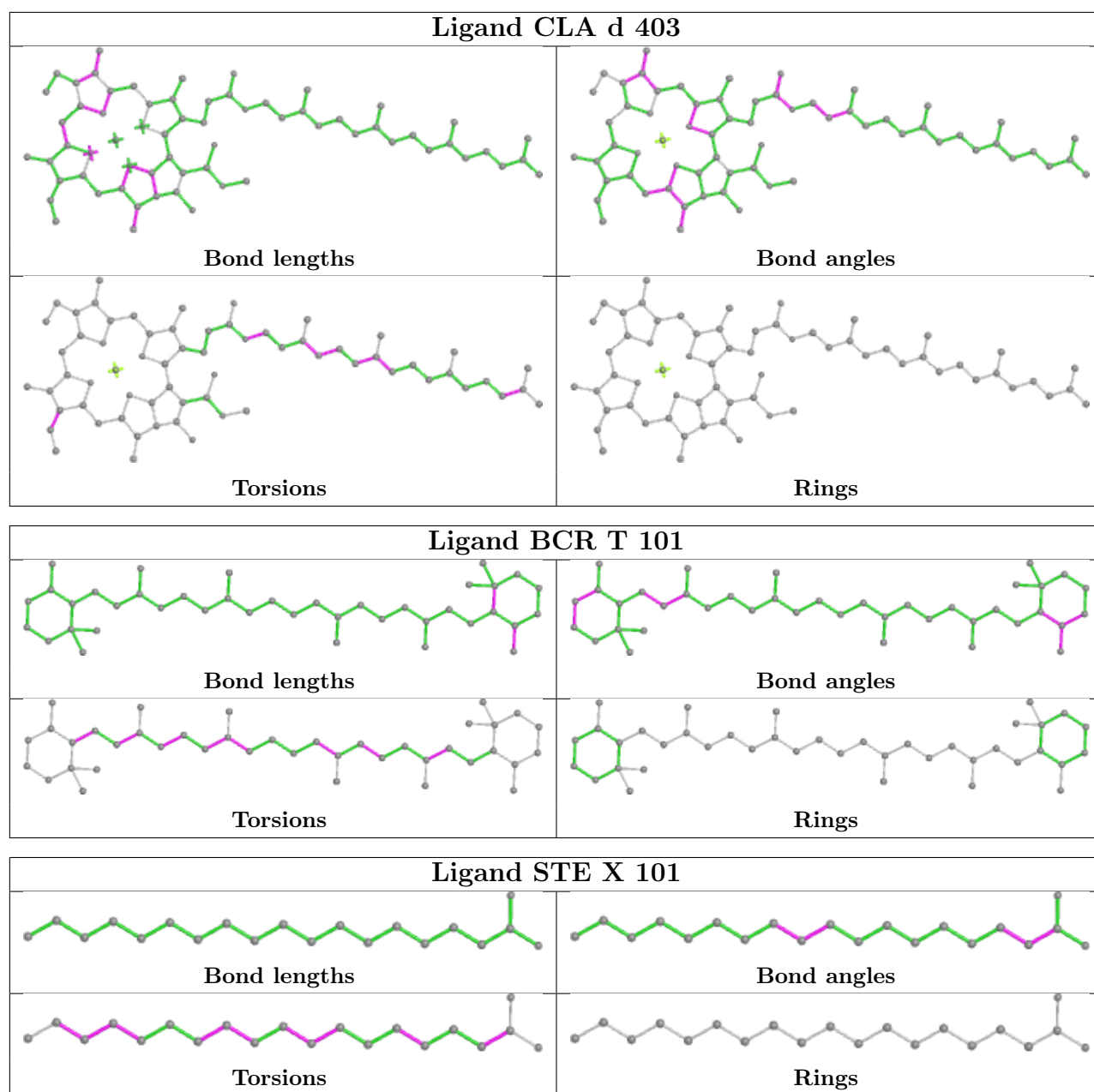


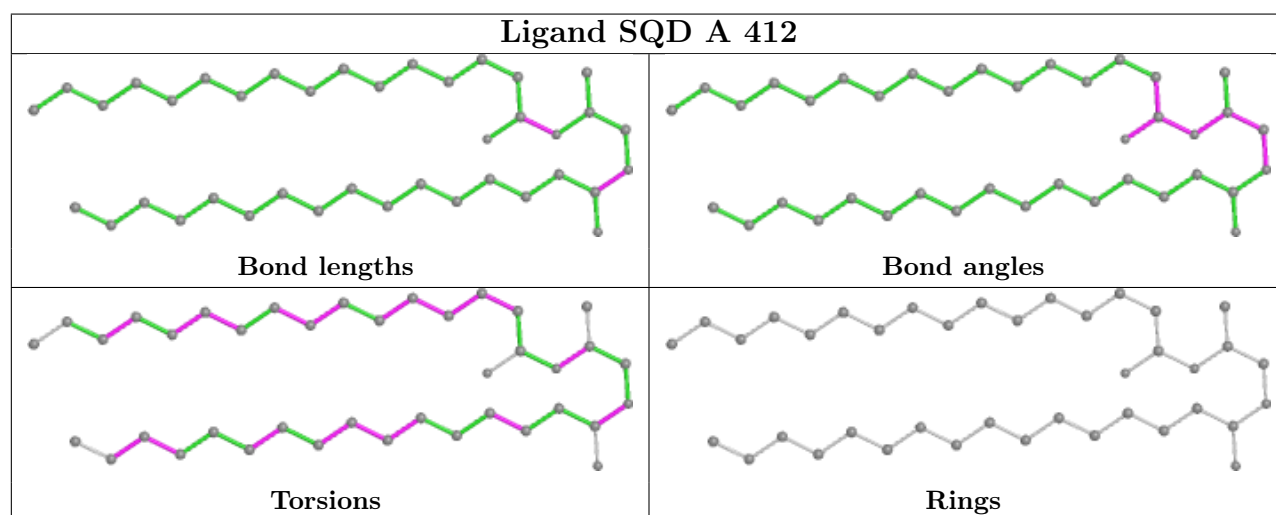
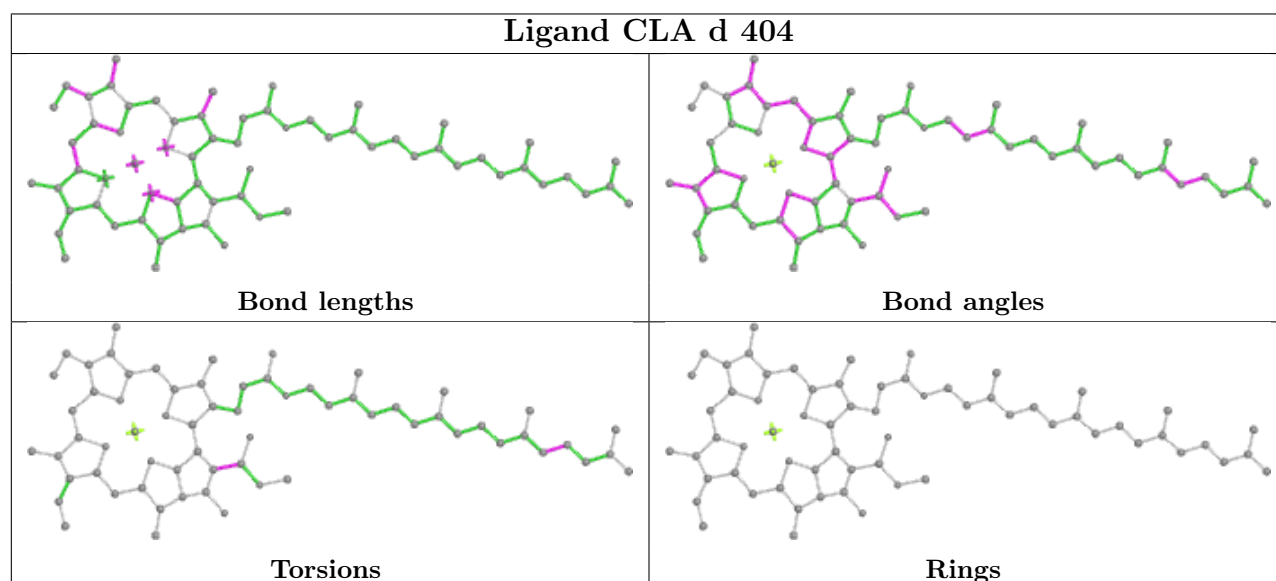
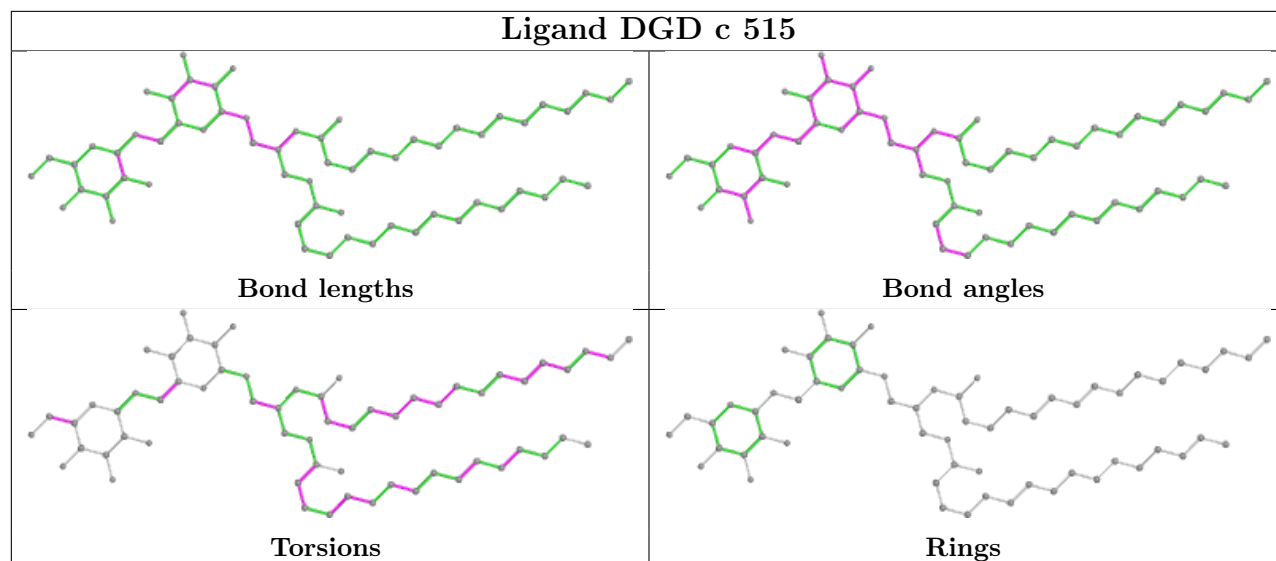


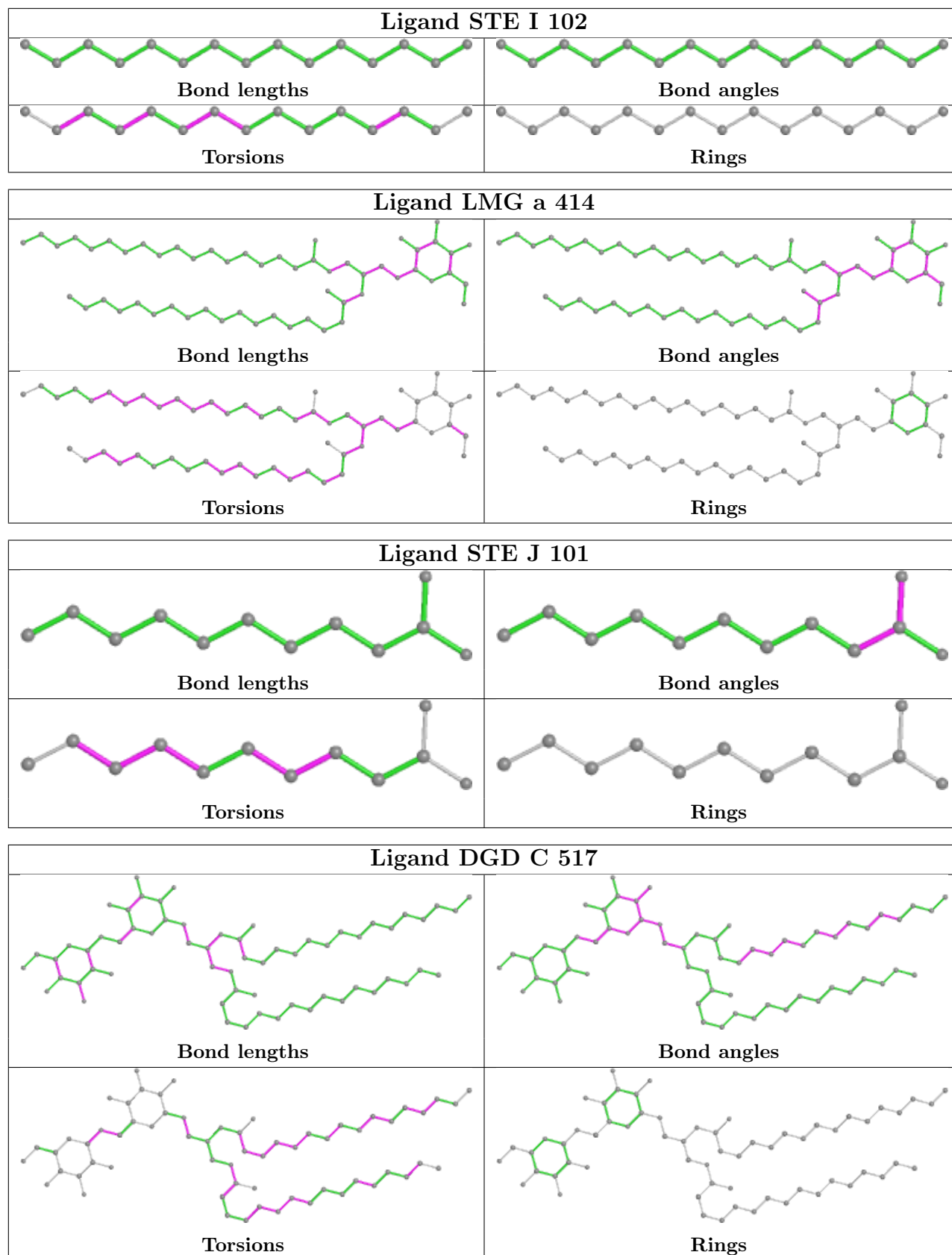


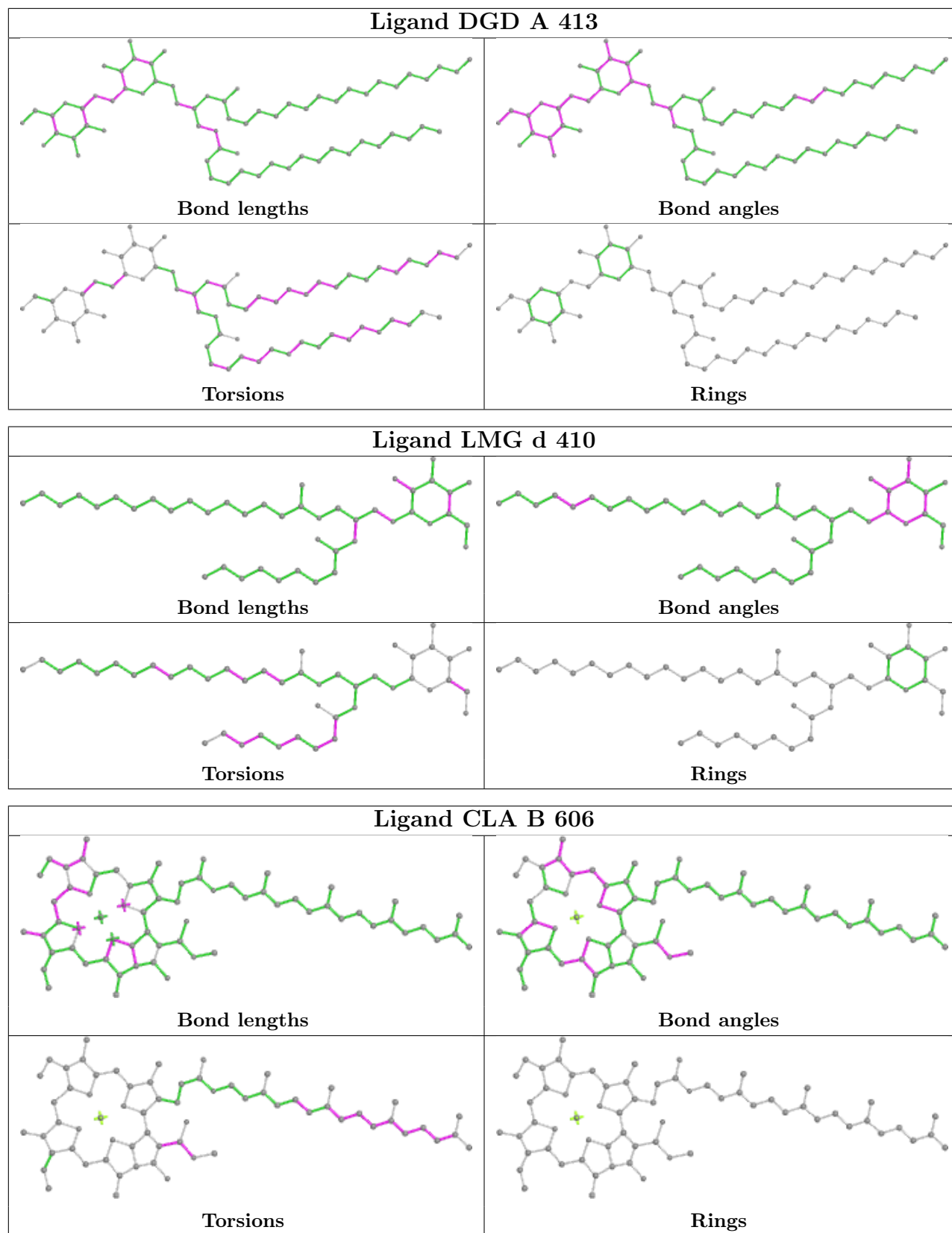


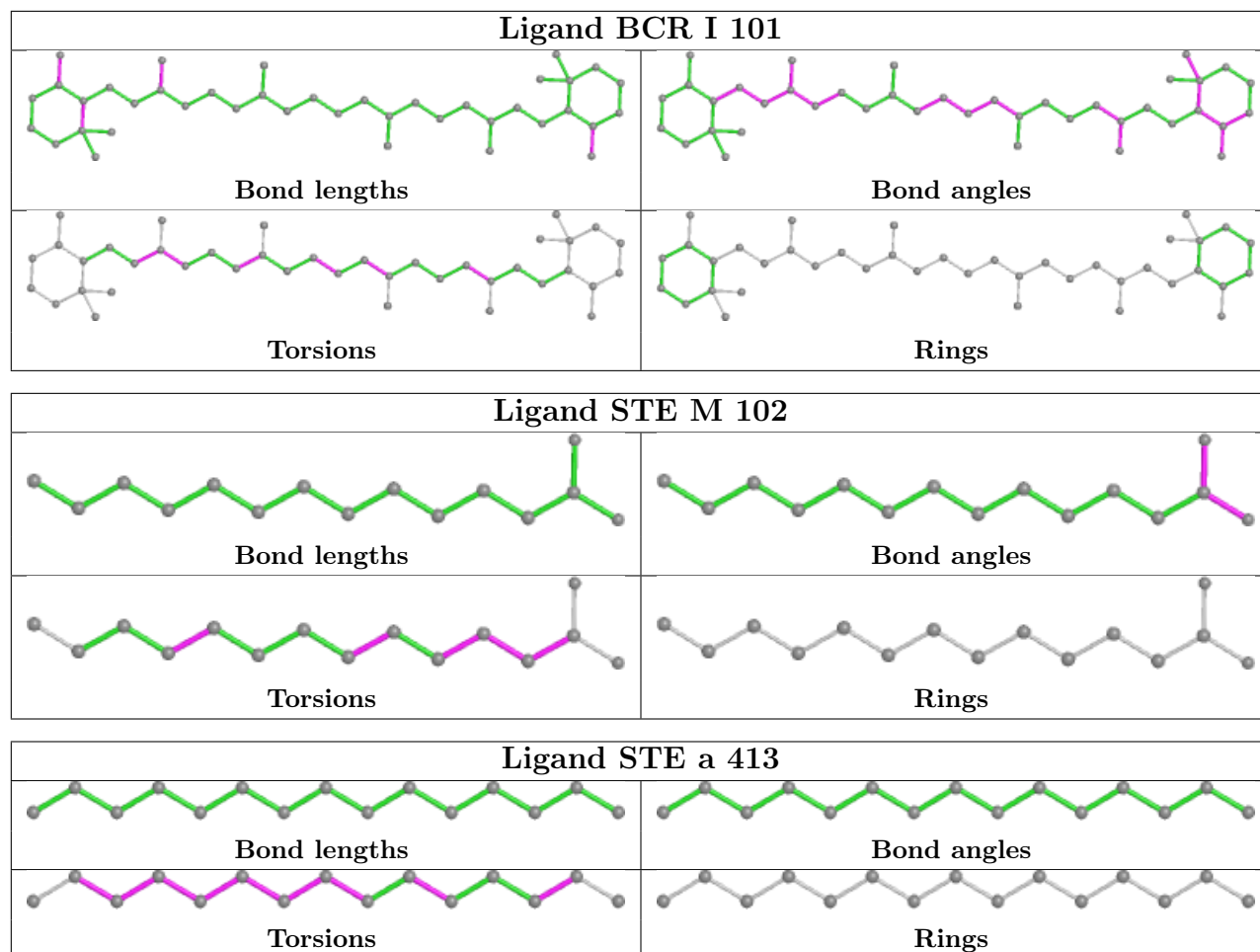


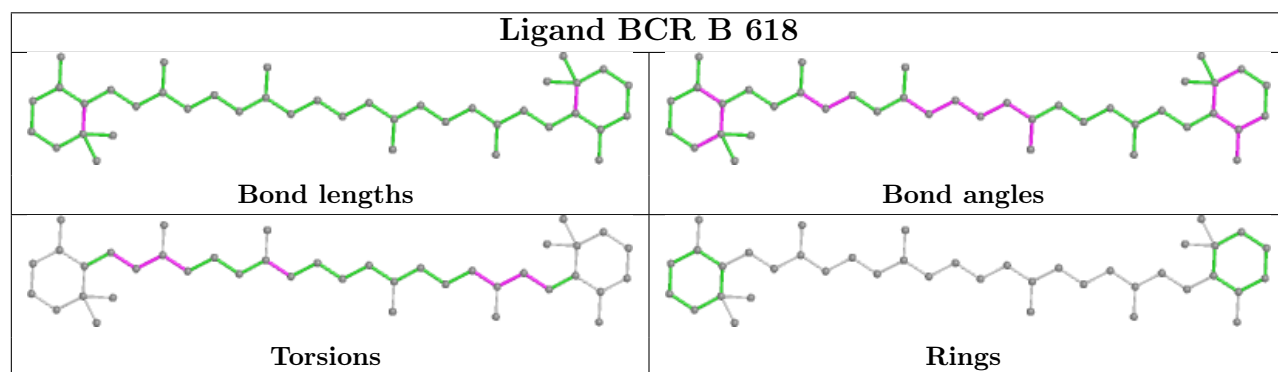
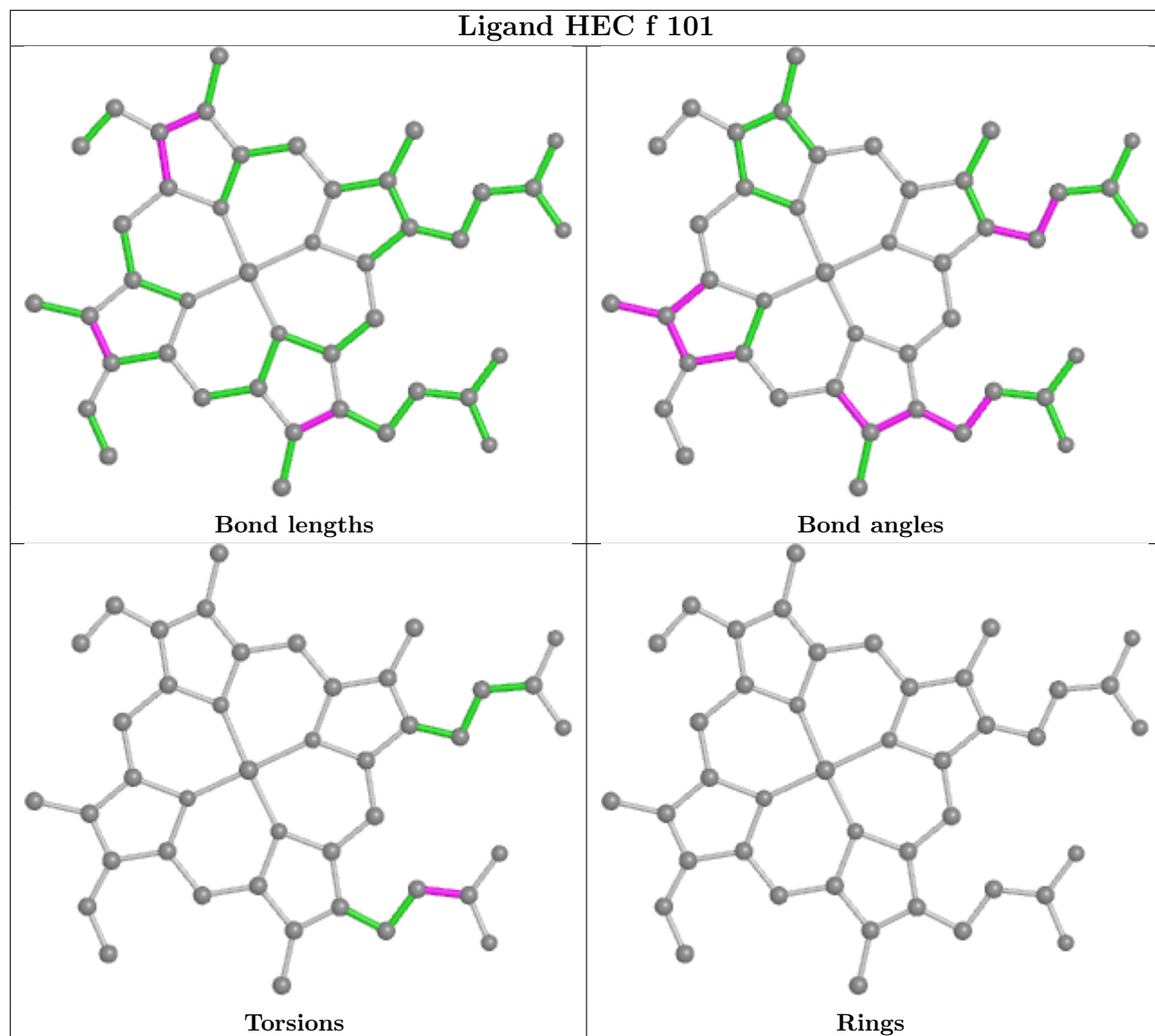


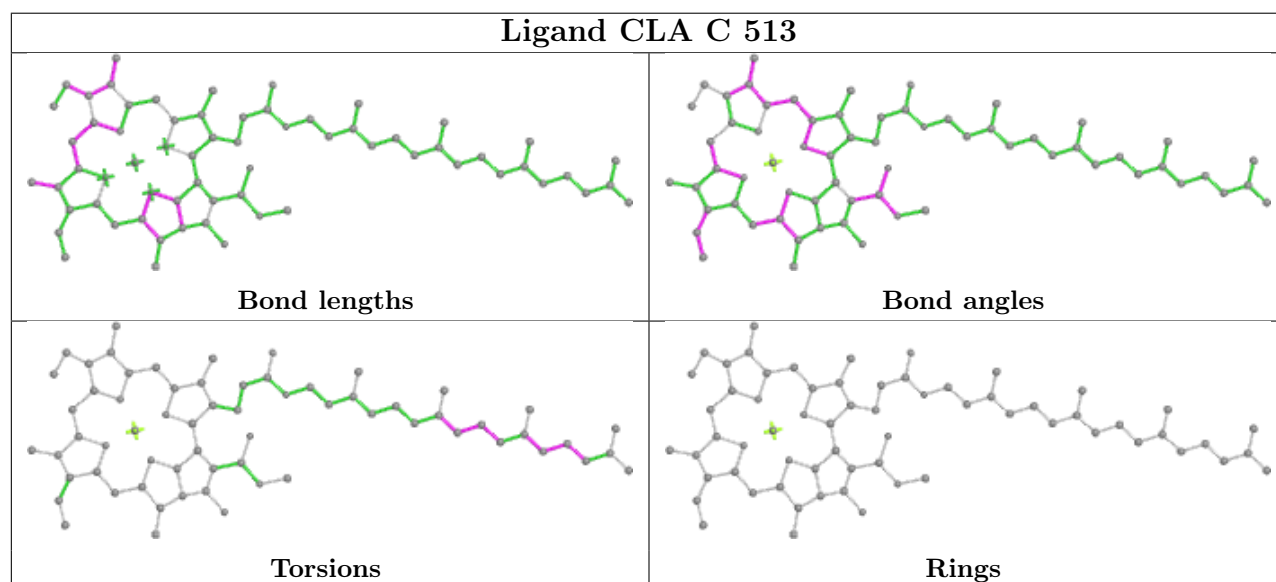
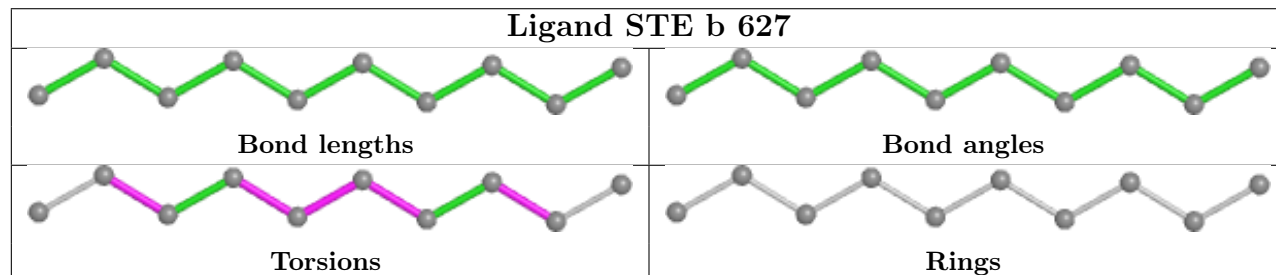
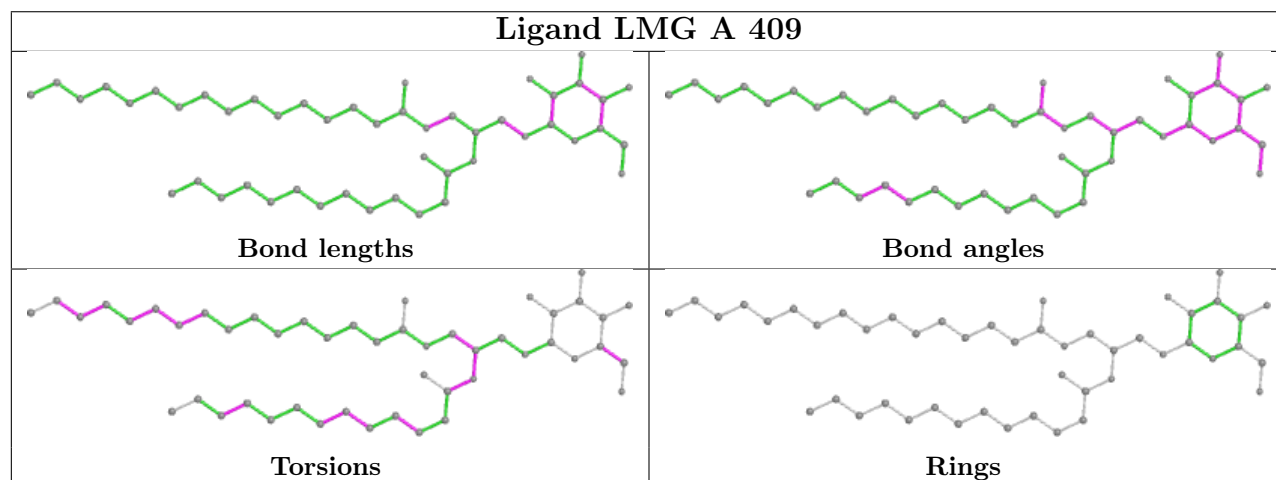
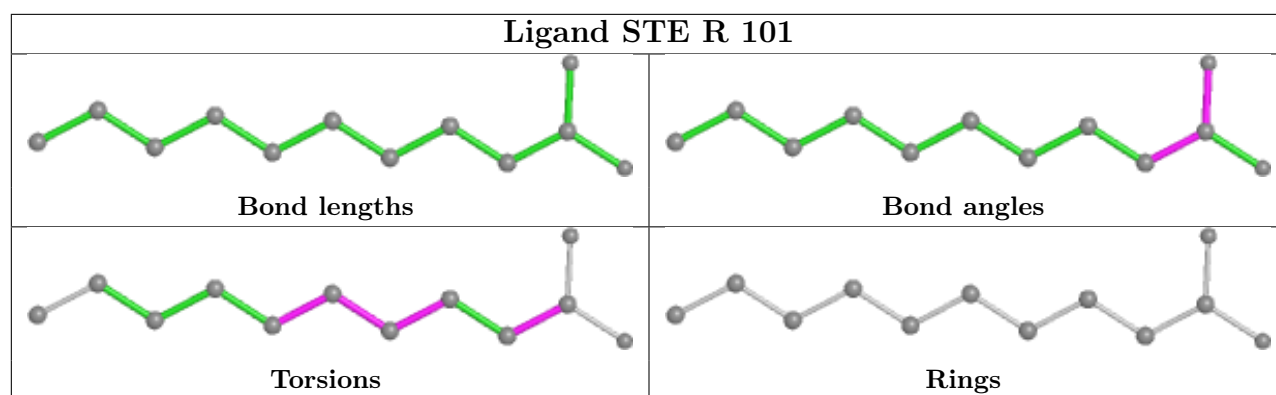


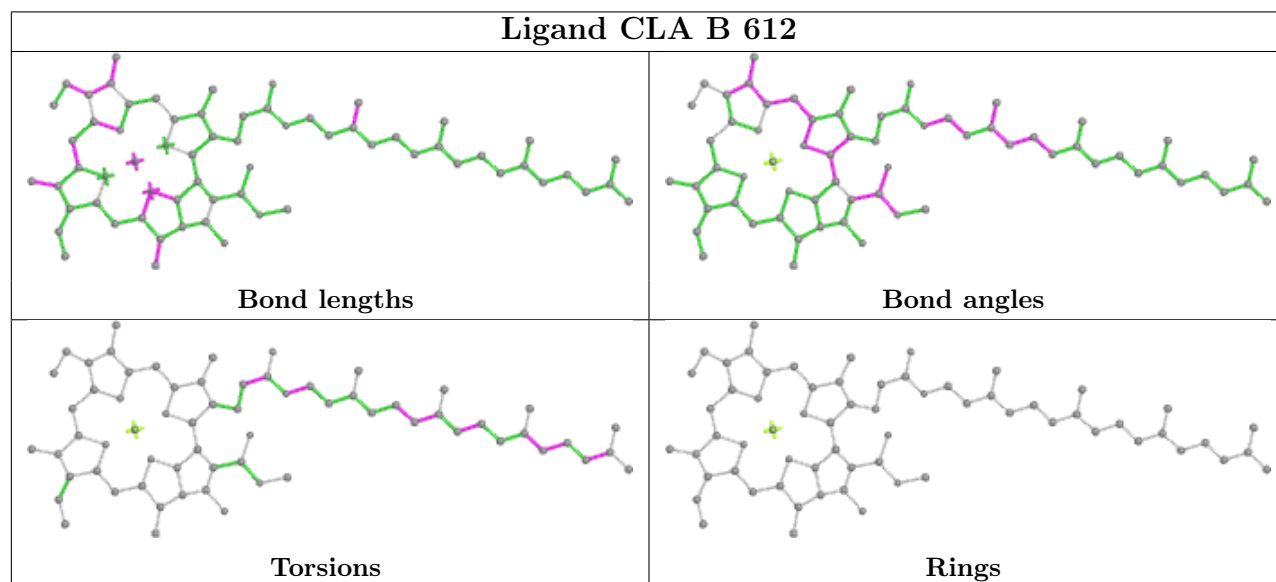
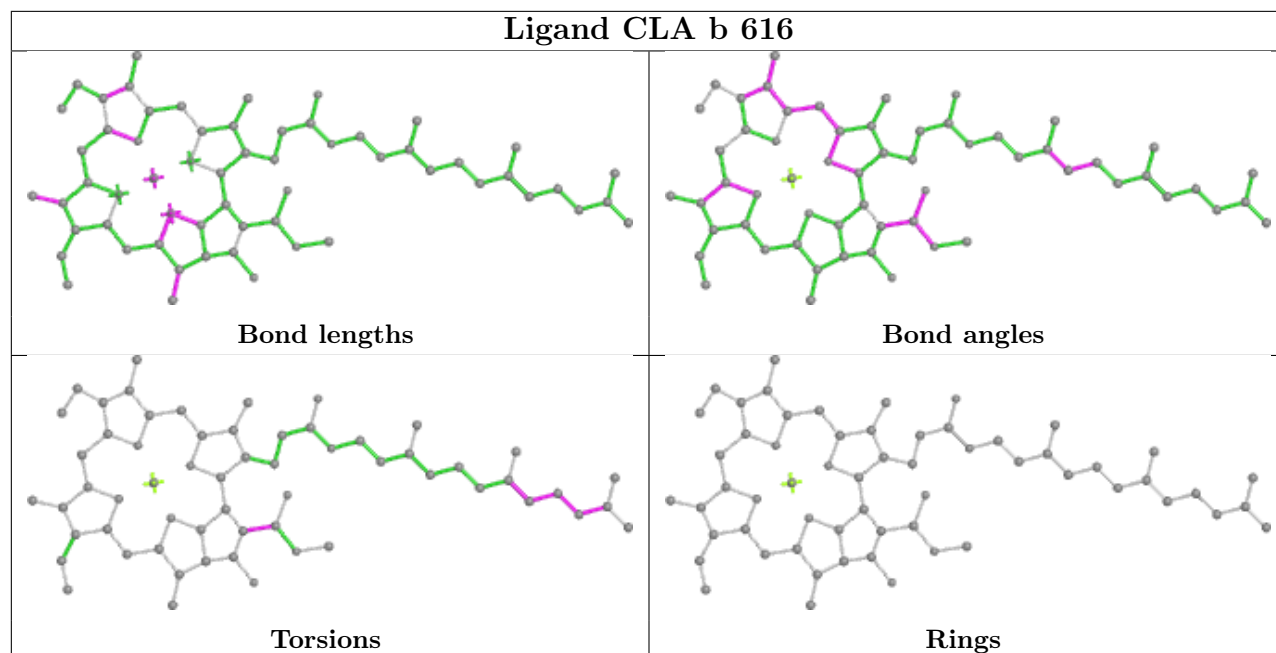


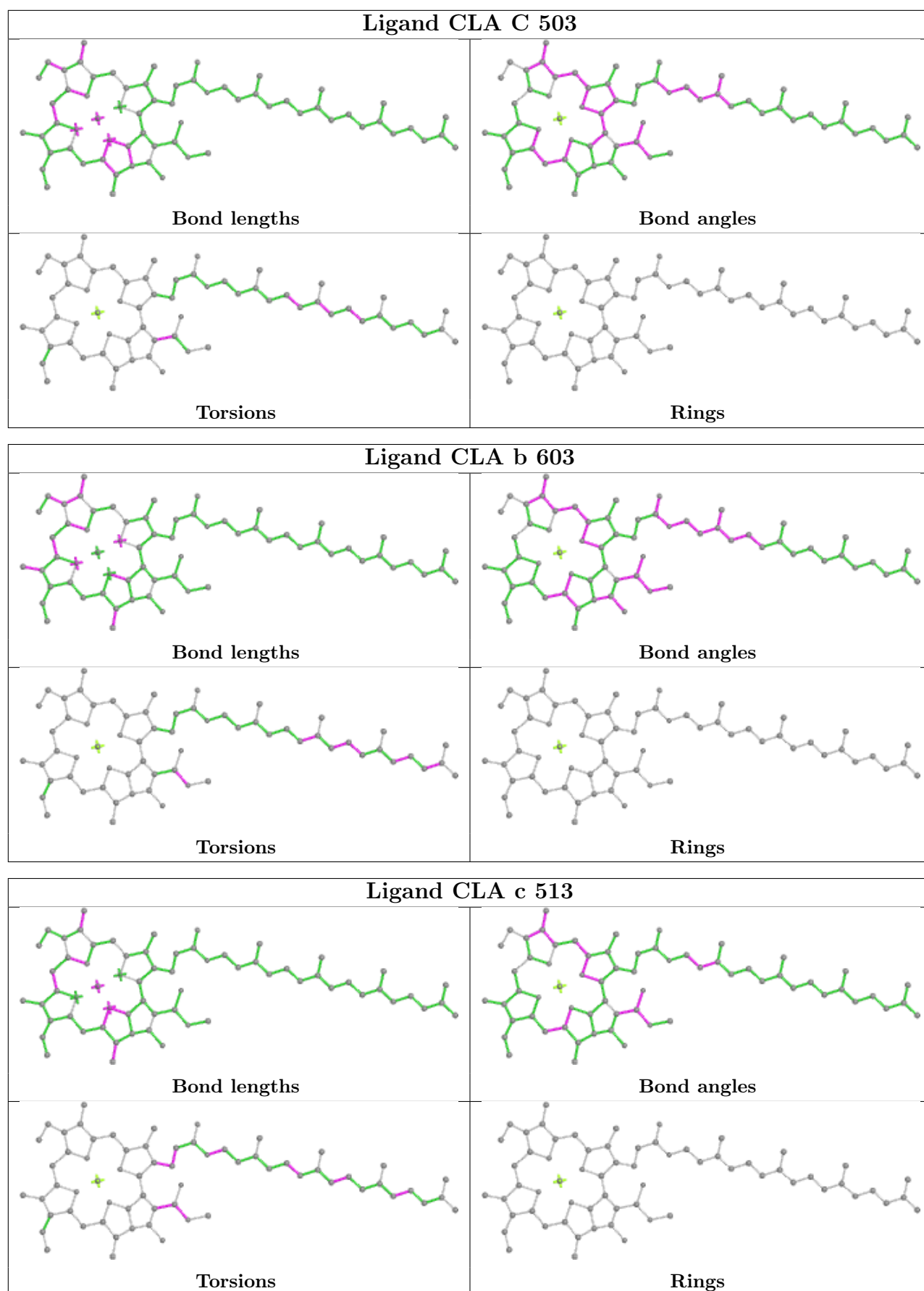


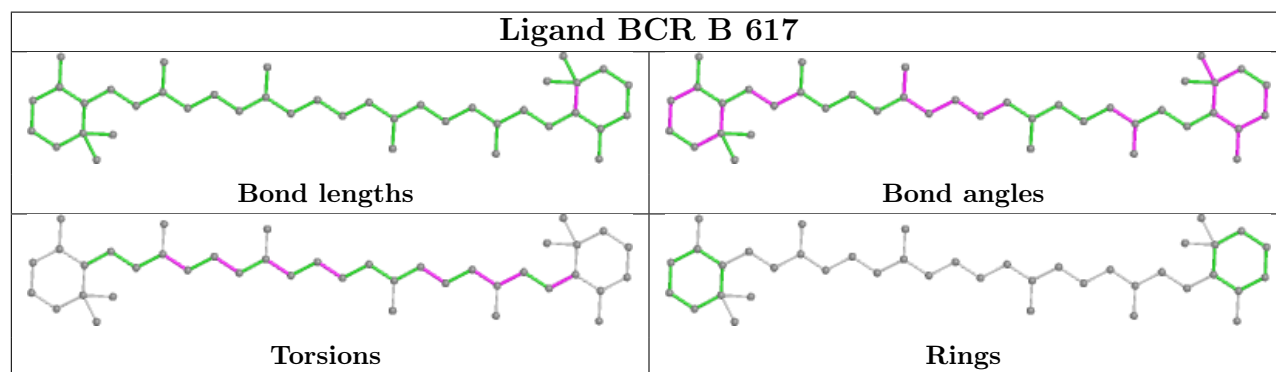
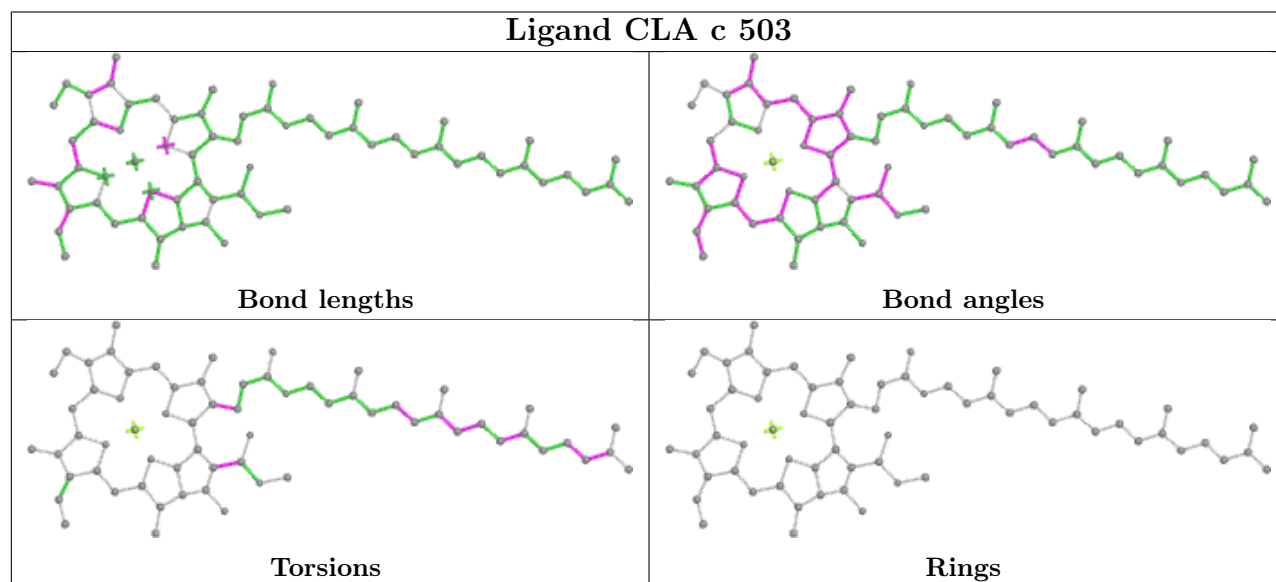
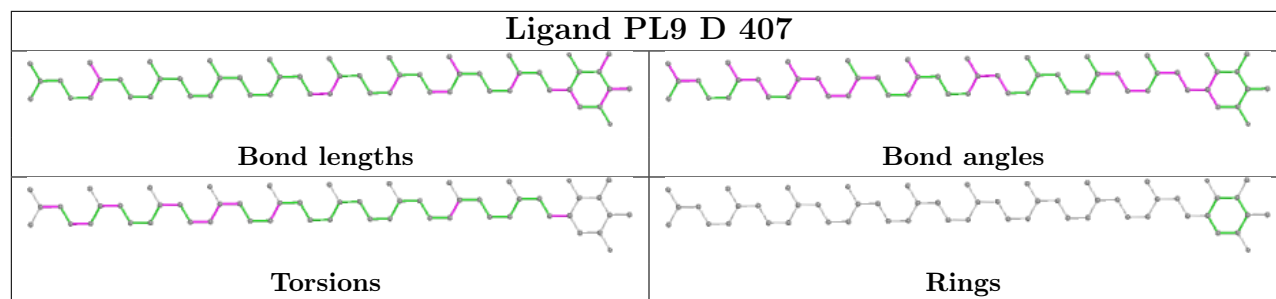


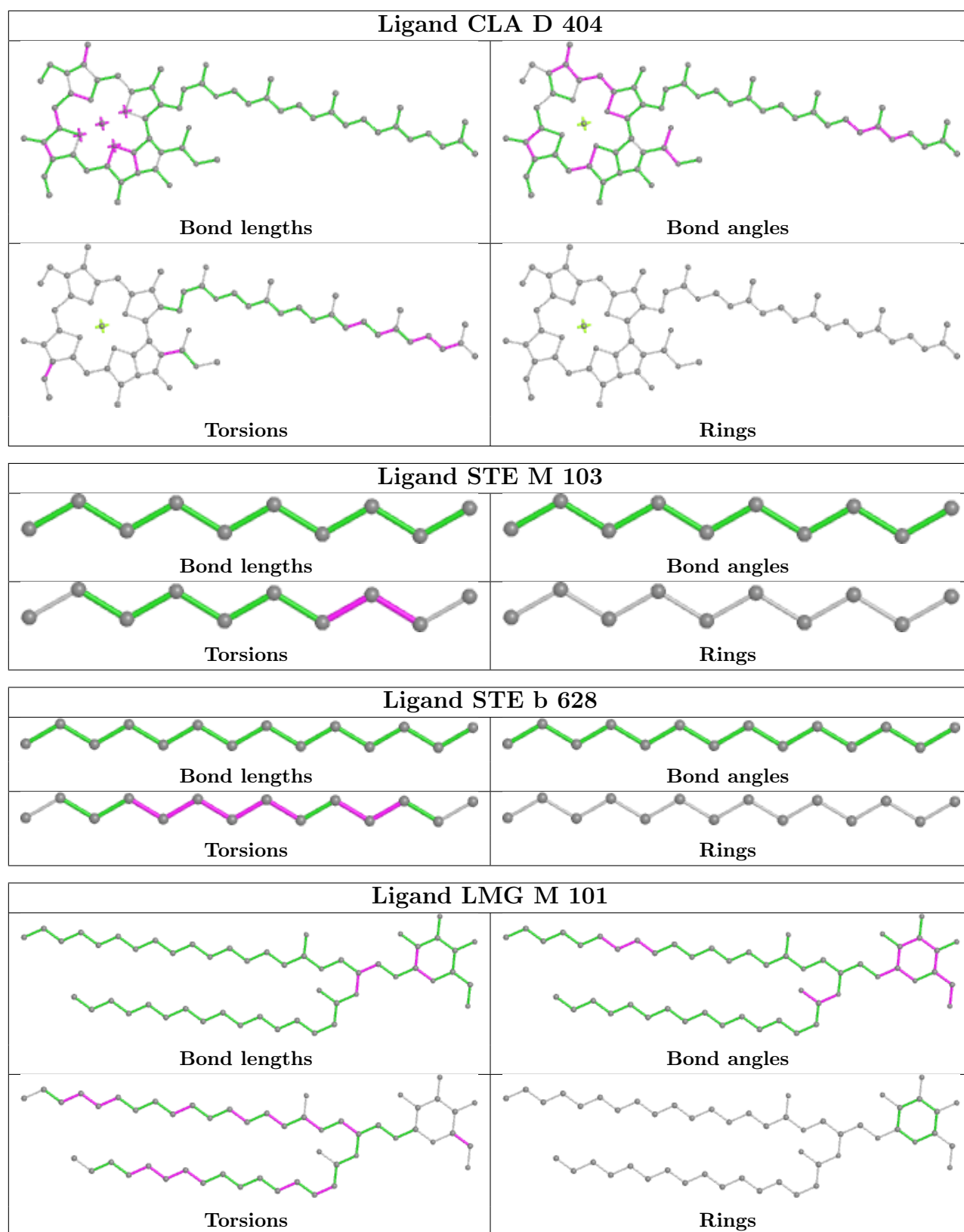


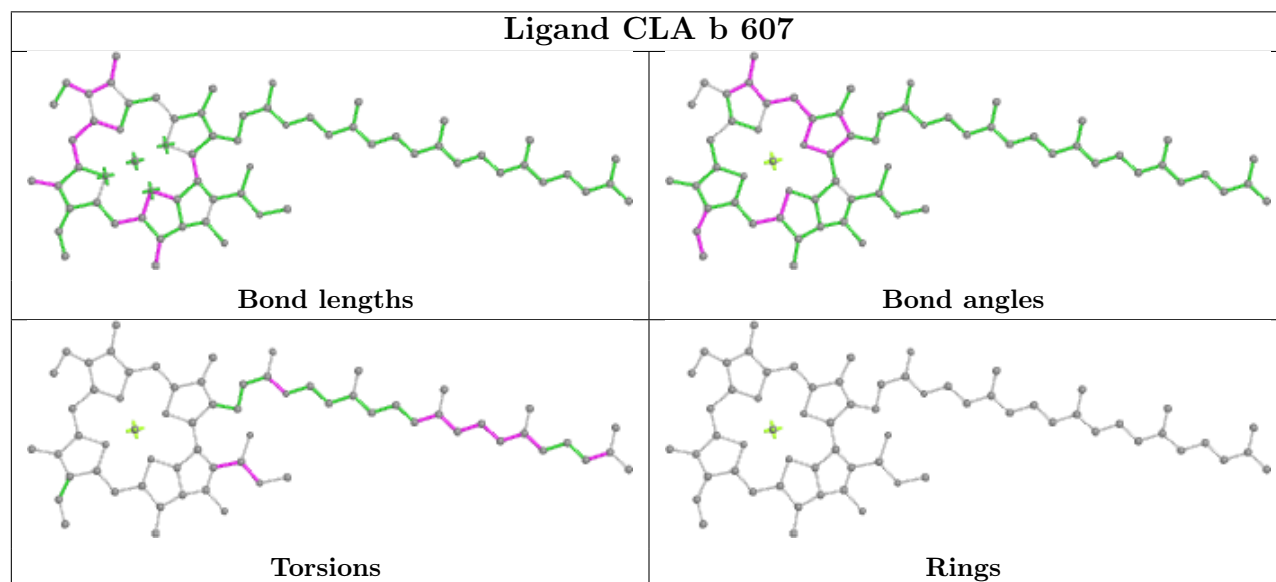
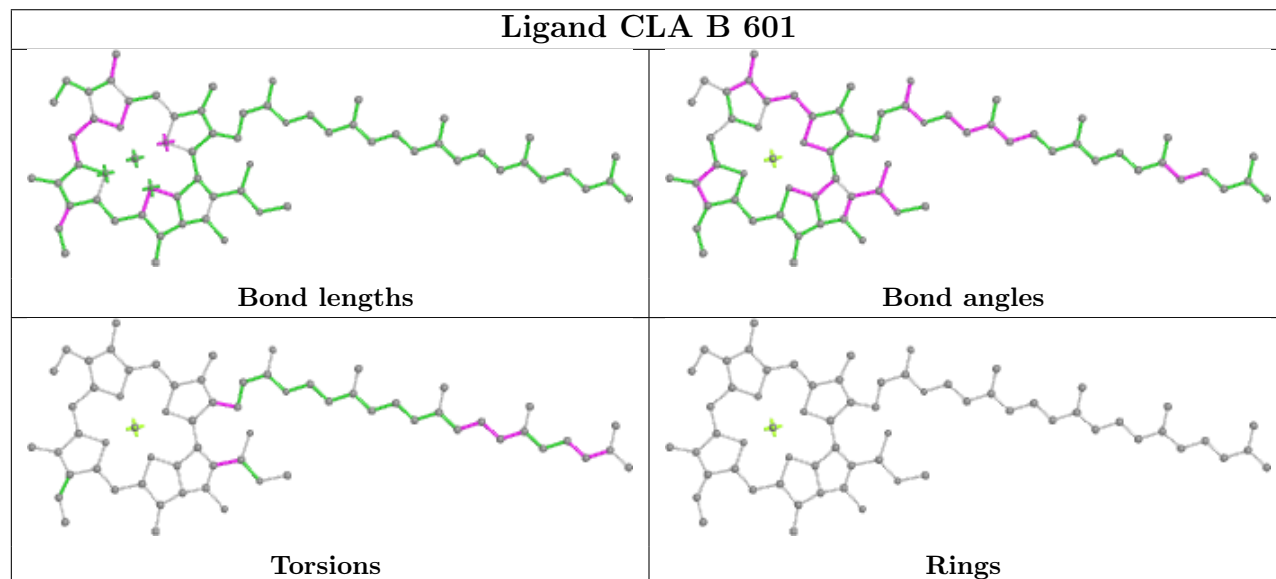
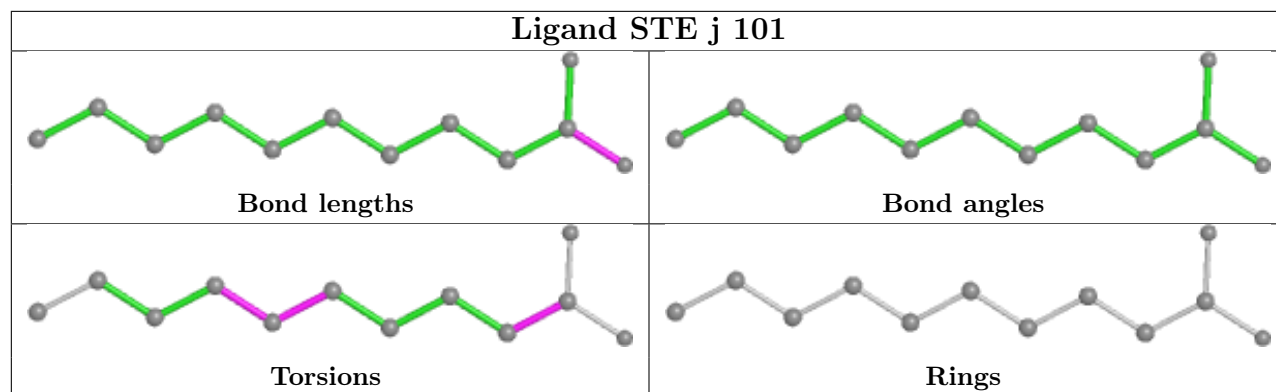


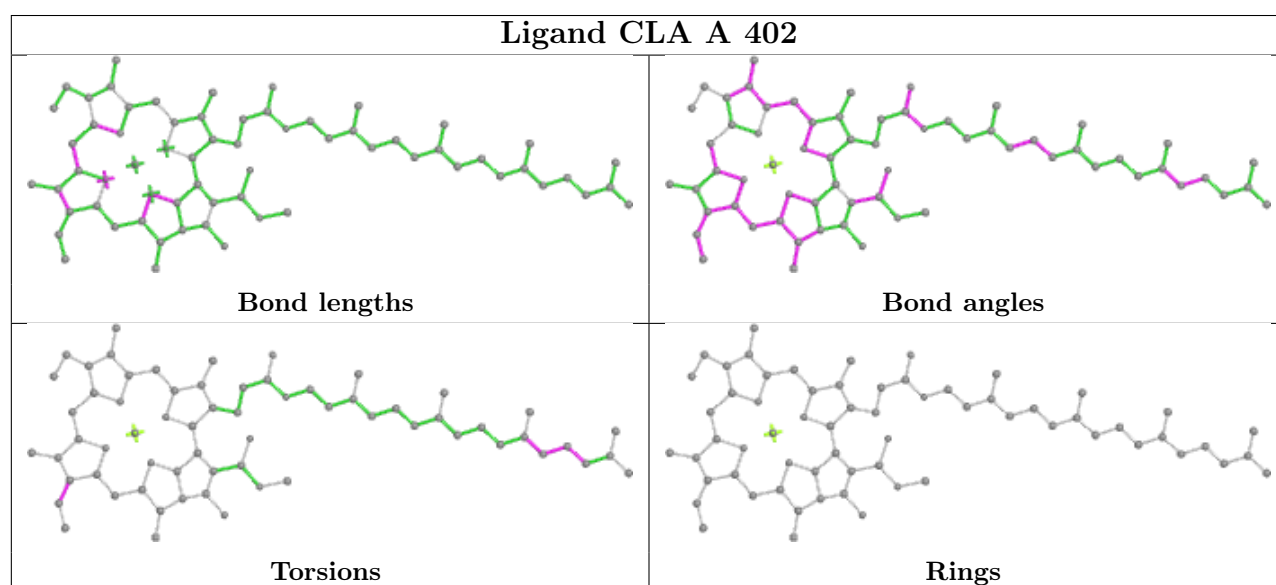
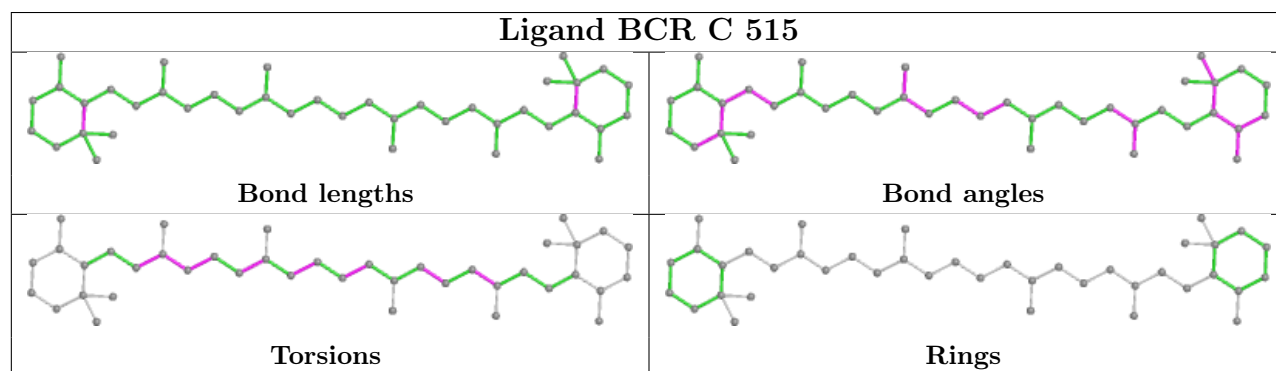
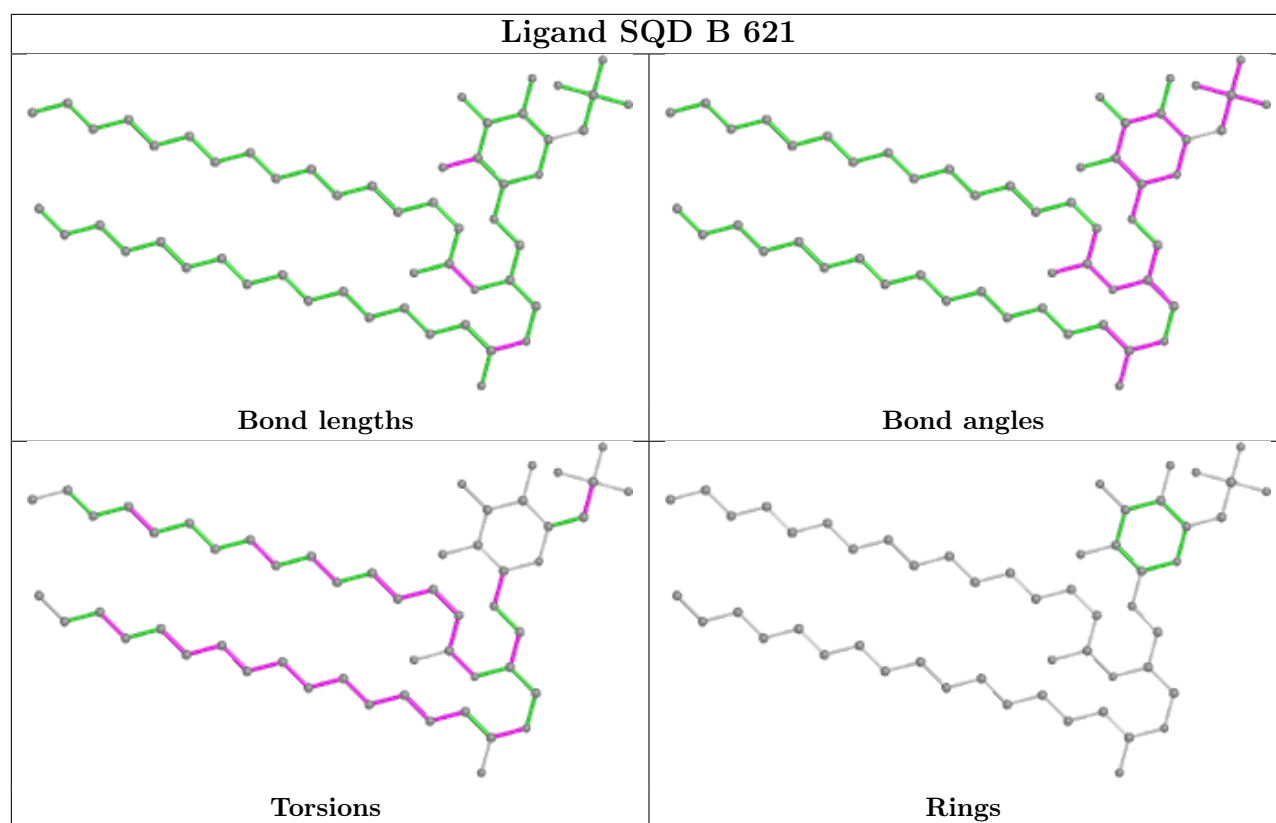


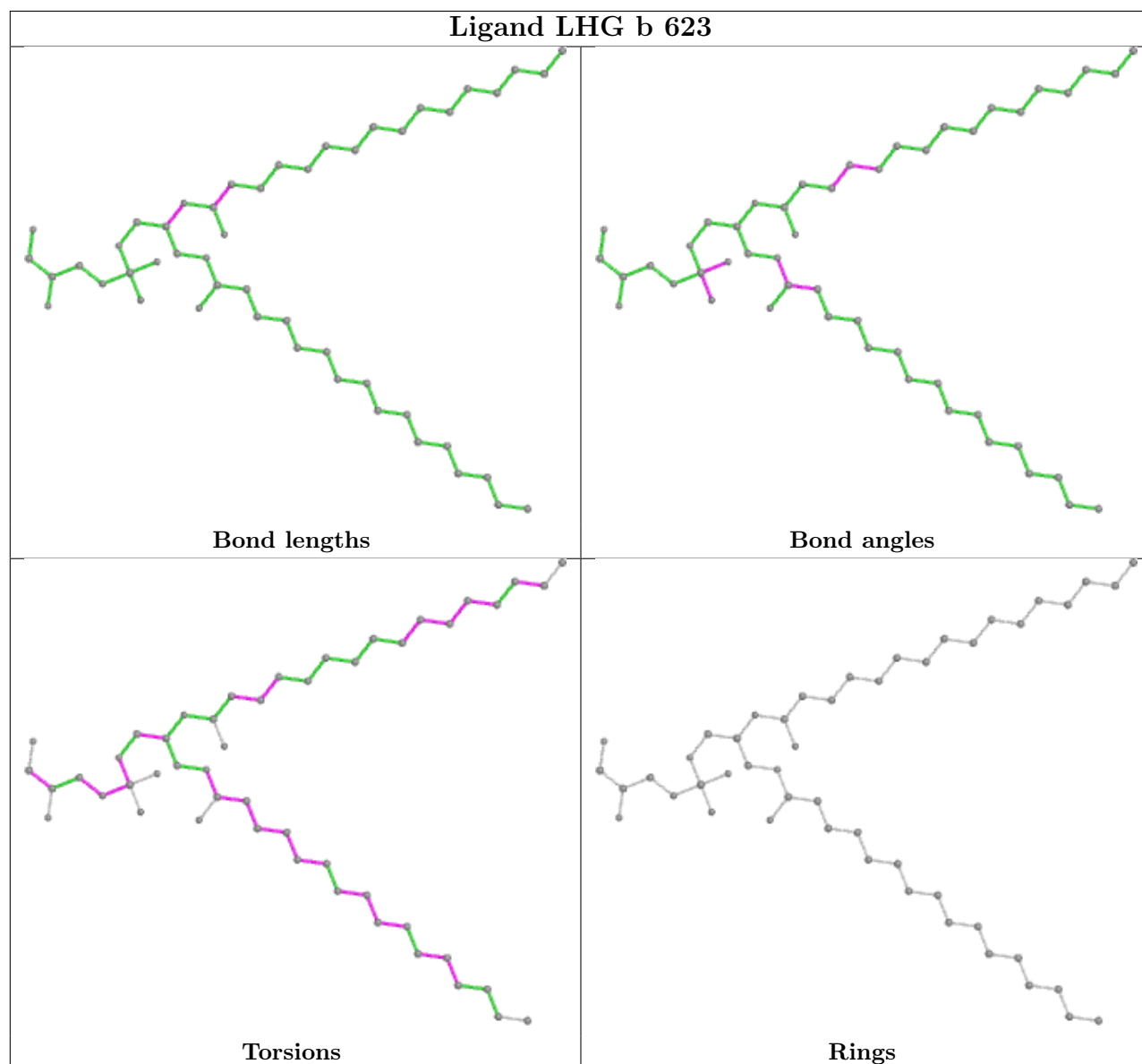
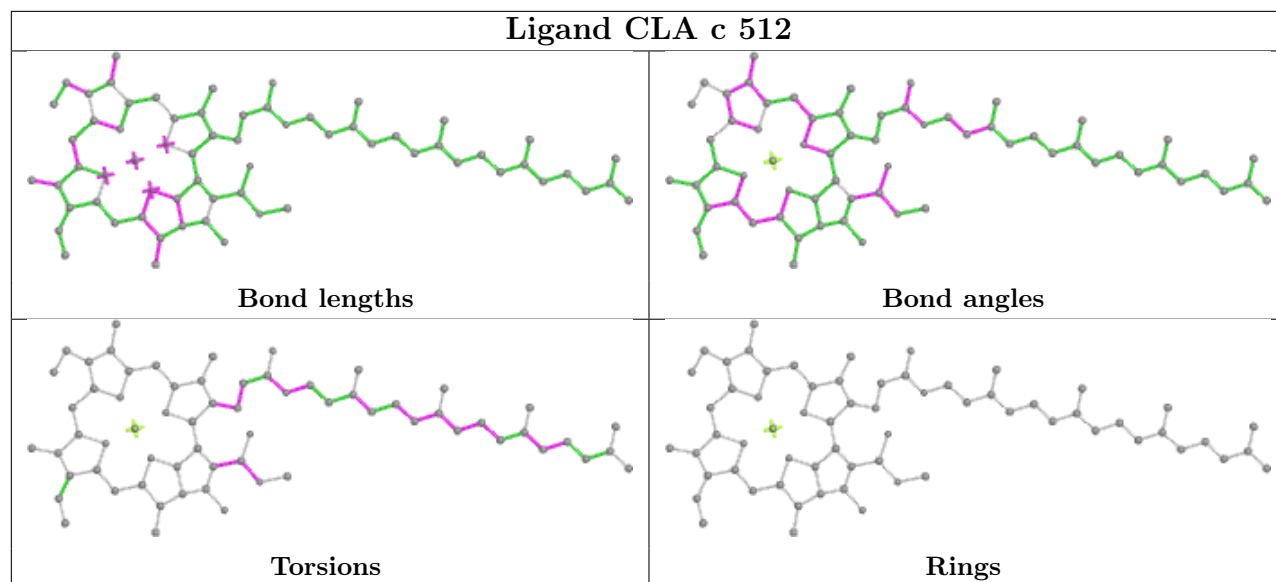


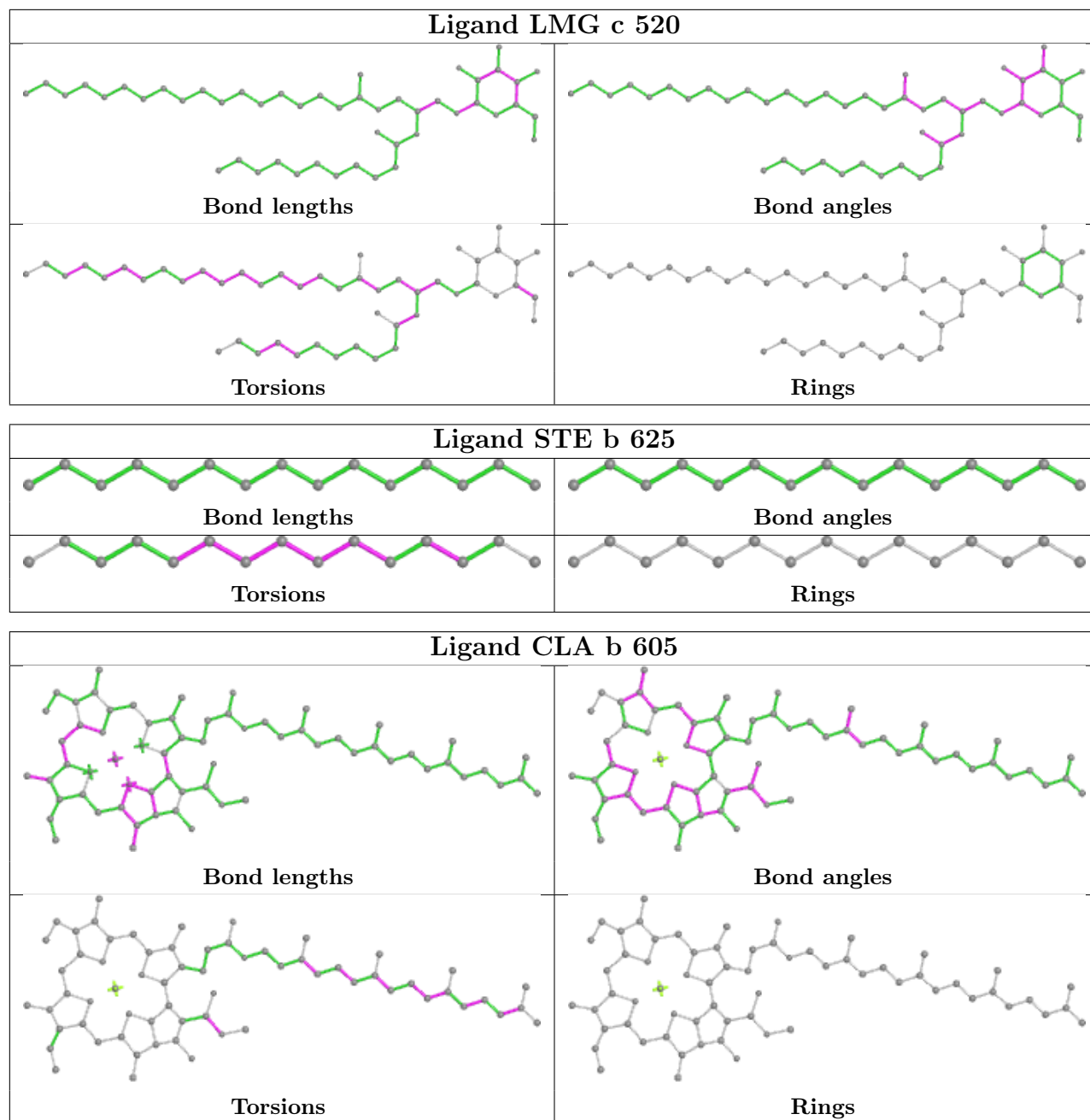


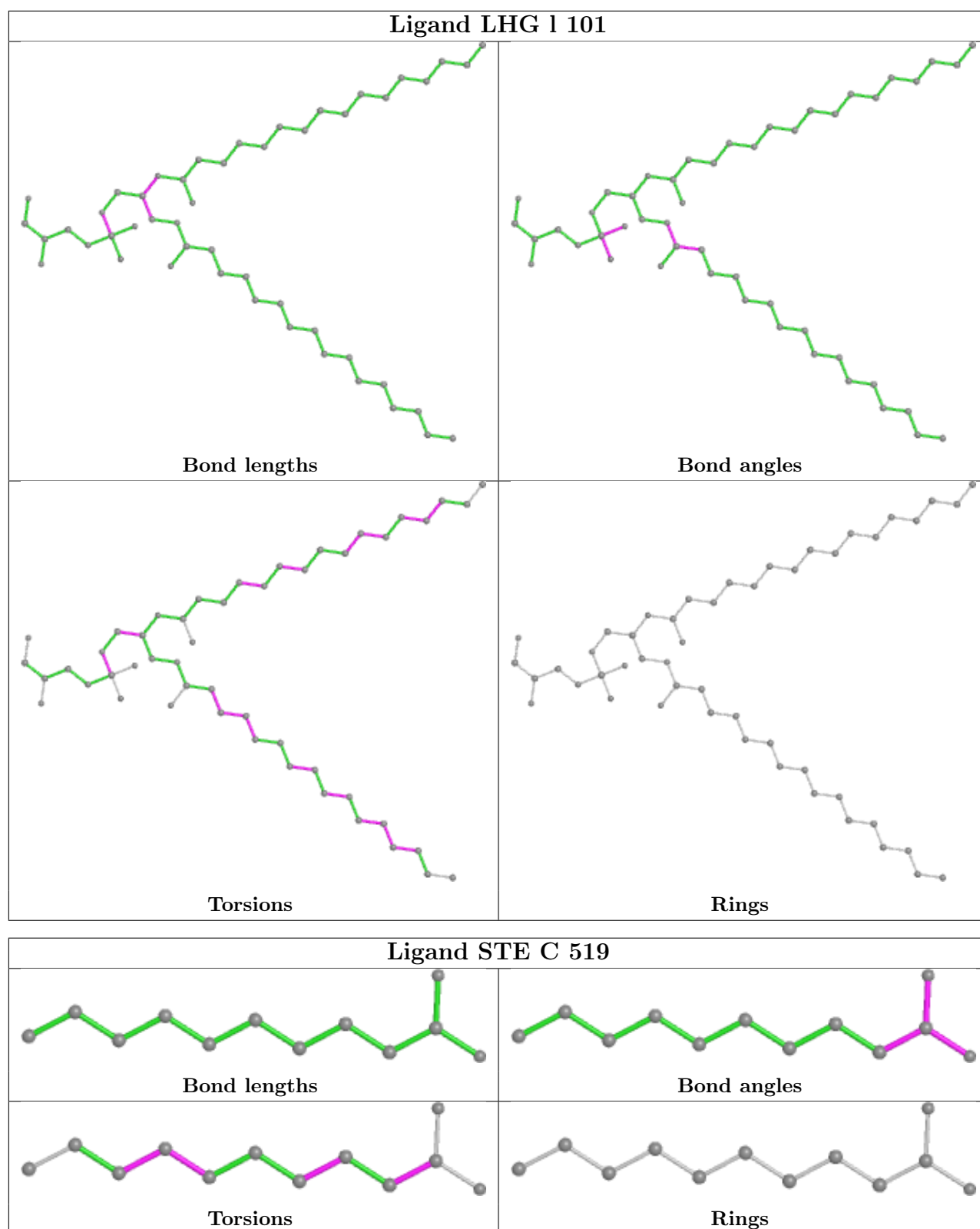


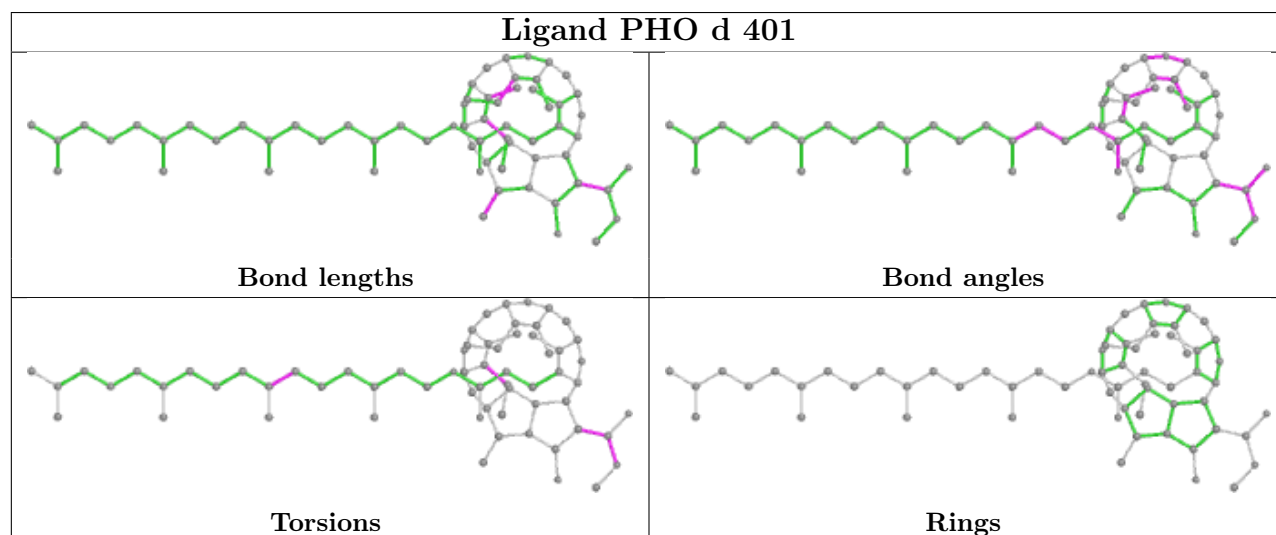
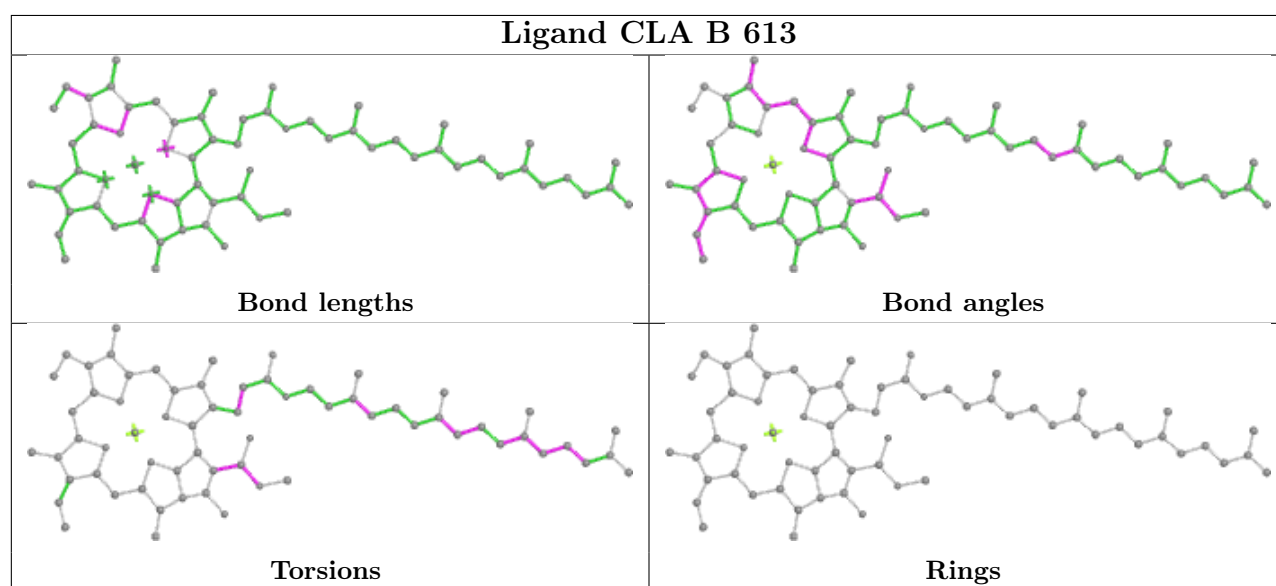
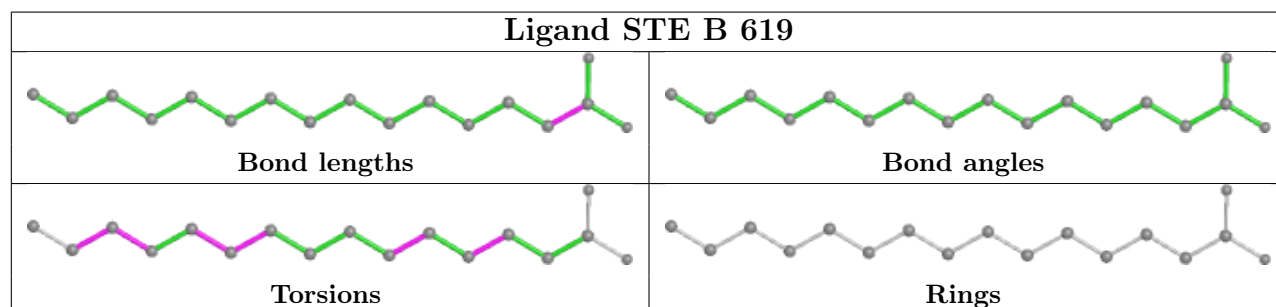
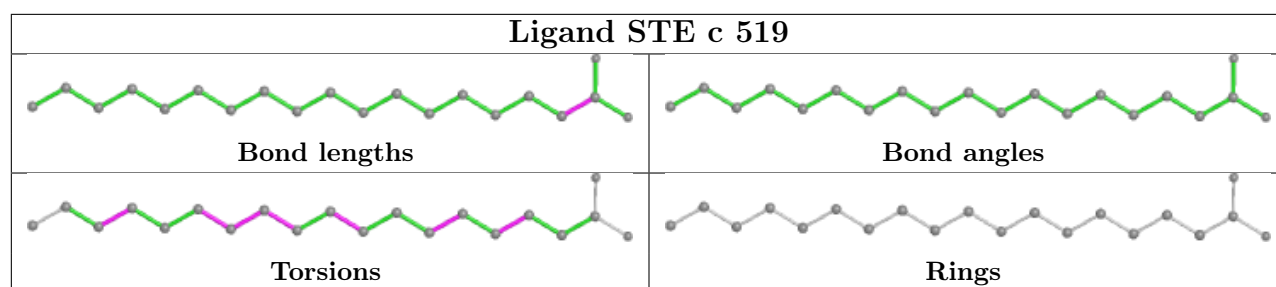


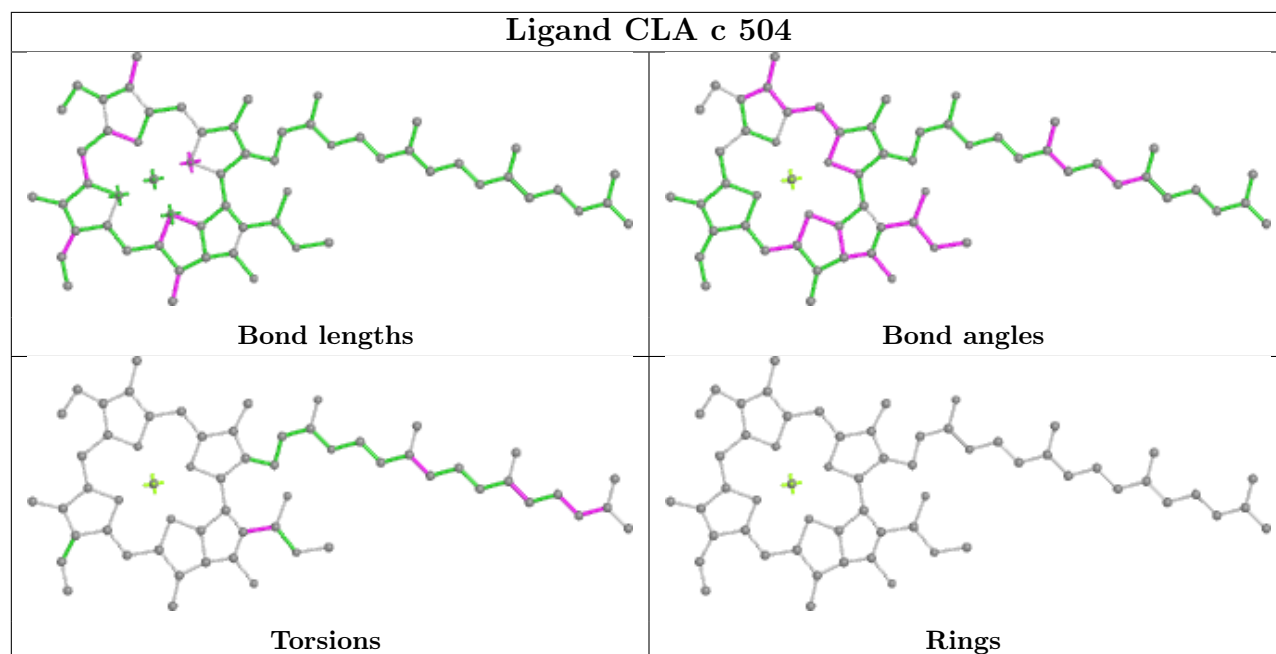
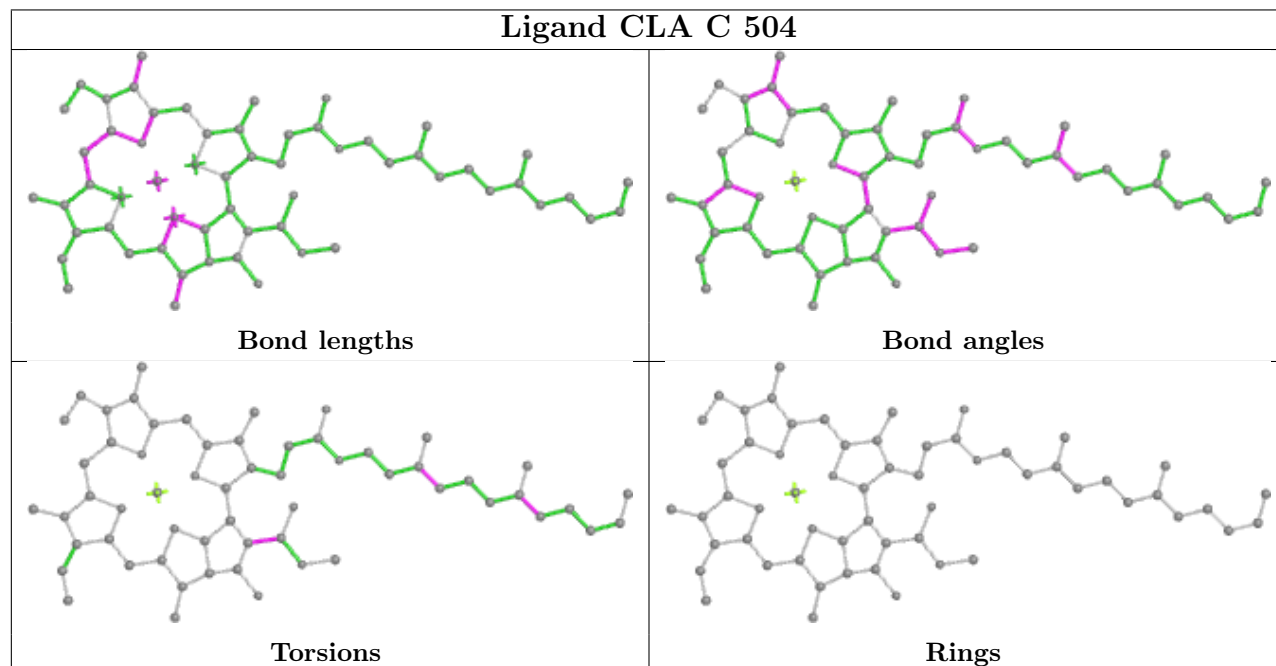
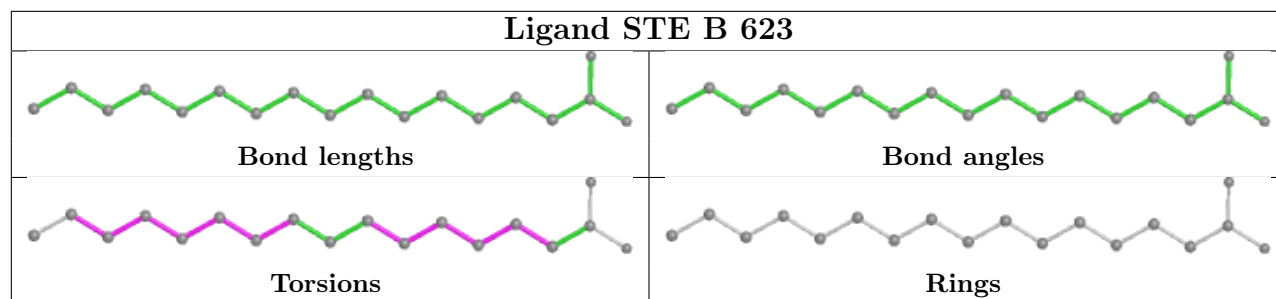


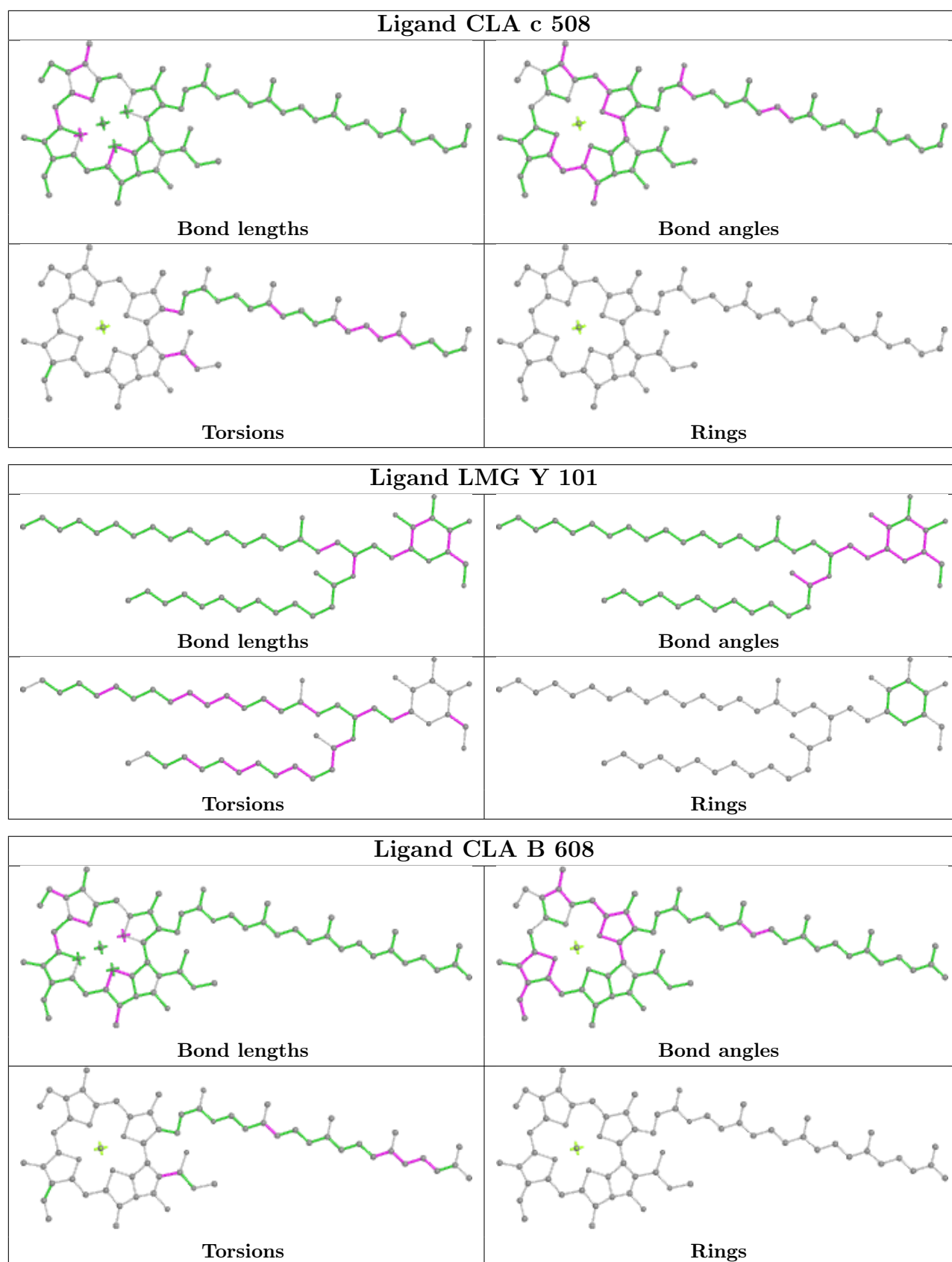


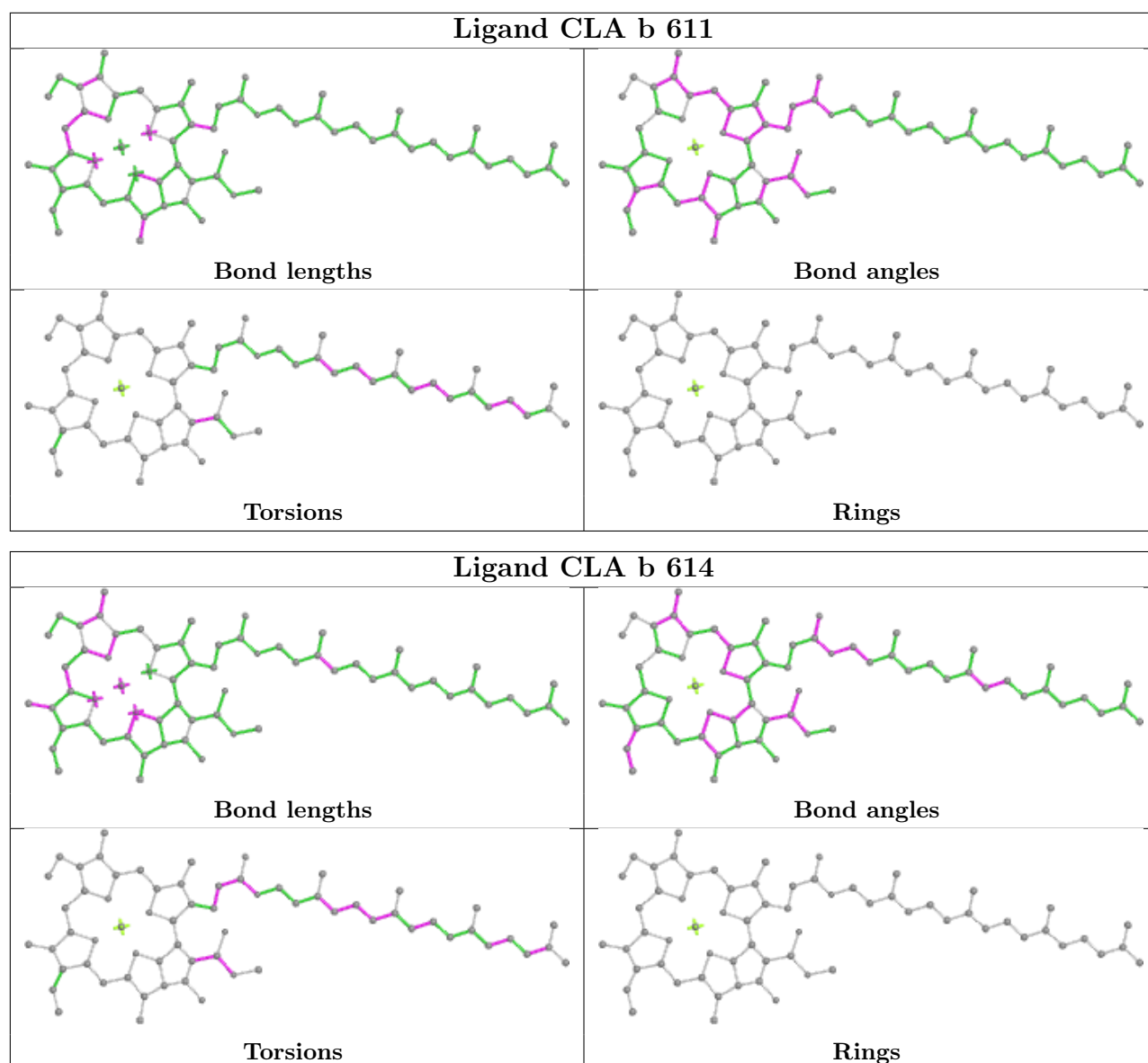












5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [\(i\)](#)

The following chains have linkage breaks:

| Mol | Chain | Number of breaks |
|-----|-------|------------------|
| 3 | C | 1 |

All chain breaks are listed below:

| Model | Chain | Residue-1 | Atom-1 | Residue-2 | Atom-2 | Distance (Å) |
|-------|-------|-----------|--------|-----------|--------|--------------|
| 1 | C | 468:SER | C | 469:MET | N | 1.17 |

6 Fit of model and data [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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

| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|---------------|--------|---------------|-----------------------|-------|
| 1 | A | 334/344 (97%) | -0.37 | 5 (1%) 73 78 | 26, 34, 53, 79 | 0 |
| 1 | a | 334/344 (97%) | -0.42 | 1 (0%) 94 95 | 27, 36, 63, 80 | 0 |
| 2 | B | 505/506 (99%) | -0.37 | 6 (1%) 79 82 | 27, 38, 68, 94 | 0 |
| 2 | b | 505/506 (99%) | -0.19 | 16 (3%) 47 53 | 29, 42, 75, 105 | 0 |
| 3 | C | 442/461 (95%) | -0.27 | 10 (2%) 60 66 | 29, 41, 59, 85 | 0 |
| 3 | c | 451/461 (97%) | -0.19 | 11 (2%) 59 65 | 31, 45, 67, 103 | 0 |
| 4 | D | 341/352 (96%) | -0.36 | 1 (0%) 94 95 | 27, 36, 54, 84 | 0 |
| 4 | d | 341/352 (96%) | -0.25 | 1 (0%) 94 95 | 27, 39, 63, 84 | 0 |
| 5 | E | 82/84 (97%) | -0.11 | 3 (3%) 41 47 | 38, 57, 76, 81 | 0 |
| 5 | e | 82/84 (97%) | 0.18 | 8 (9%) 7 9 | 44, 66, 84, 88 | 0 |
| 6 | F | 34/45 (75%) | -0.49 | 0 100 100 | 40, 49, 66, 82 | 0 |
| 6 | f | 34/45 (75%) | -0.27 | 1 (2%) 51 57 | 46, 54, 79, 96 | 0 |
| 7 | H | 65/66 (98%) | -0.09 | 1 (1%) 73 78 | 36, 46, 65, 72 | 0 |
| 7 | h | 63/66 (95%) | 0.23 | 6 (9%) 8 10 | 45, 56, 67, 76 | 0 |
| 8 | I | 35/38 (92%) | -0.28 | 1 (2%) 51 57 | 36, 45, 74, 84 | 0 |
| 8 | i | 35/38 (92%) | -0.09 | 3 (8%) 10 13 | 34, 46, 76, 88 | 0 |
| 9 | J | 36/40 (90%) | -0.10 | 3 (8%) 11 14 | 40, 54, 80, 89 | 0 |
| 9 | j | 36/40 (90%) | 0.14 | 4 (11%) 5 7 | 44, 58, 93, 106 | 0 |
| 10 | K | 37/46 (80%) | 0.09 | 3 (8%) 12 15 | 47, 58, 72, 76 | 0 |
| 10 | k | 37/46 (80%) | -0.07 | 0 100 100 | 53, 61, 77, 83 | 0 |
| 11 | L | 37/37 (100%) | -0.41 | 0 100 100 | 30, 34, 68, 78 | 0 |
| 11 | l | 36/37 (97%) | -0.34 | 3 (8%) 11 14 | 29, 36, 78, 85 | 0 |
| 12 | M | 32/36 (88%) | -0.00 | 1 (3%) 49 54 | 34, 39, 69, 76 | 0 |
| 12 | m | 31/36 (86%) | -0.05 | 0 100 100 | 32, 39, 59, 78 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|-----------------|--------|----------------|-----------------------|-------|
| 13 | O | 244/272 (89%) | -0.05 | 12 (4%) 29 35 | 32, 47, 87, 132 | 0 |
| 13 | o | 244/272 (89%) | -0.21 | 12 (4%) 29 35 | 28, 46, 83, 132 | 0 |
| 14 | R | 34/41 (82%) | 1.47 | 11 (32%) 0 0 | 67, 76, 92, 100 | 0 |
| 14 | r | 31/41 (75%) | 3.37 | 25 (80%) 0 0 | 83, 99, 116, 127 | 0 |
| 15 | T | 29/30 (96%) | -0.48 | 1 (3%) 45 50 | 31, 36, 67, 87 | 0 |
| 15 | t | 29/30 (96%) | -0.37 | 2 (6%) 16 21 | 32, 36, 85, 92 | 0 |
| 16 | U | 97/134 (72%) | -0.20 | 2 (2%) 63 69 | 35, 49, 74, 97 | 0 |
| 16 | u | 97/134 (72%) | -0.45 | 0 100 100 | 37, 46, 64, 79 | 0 |
| 17 | V | 137/163 (84%) | -0.53 | 0 100 100 | 31, 46, 60, 84 | 0 |
| 17 | v | 137/163 (84%) | -0.22 | 2 (1%) 73 78 | 36, 52, 76, 87 | 0 |
| 18 | X | 38/41 (92%) | 0.06 | 2 (5%) 26 31 | 46, 56, 77, 87 | 0 |
| 18 | x | 39/41 (95%) | 0.15 | 4 (10%) 6 8 | 53, 62, 92, 107 | 0 |
| 19 | Y | 27/46 (58%) | 1.15 | 10 (37%) 0 0 | 60, 79, 96, 101 | 0 |
| 19 | y | 30/46 (65%) | 0.55 | 2 (6%) 17 22 | 67, 79, 92, 104 | 0 |
| 20 | Z | 62/62 (100%) | 0.74 | 14 (22%) 0 1 | 59, 73, 116, 128 | 0 |
| 20 | z | 62/62 (100%) | 0.77 | 10 (16%) 1 2 | 62, 79, 114, 123 | 0 |
| All | All | 5302/5688 (93%) | -0.18 | 197 (3%) 41 47 | 26, 43, 79, 132 | 0 |

All (197) RSRZ outliers are listed below:

| Mol | Chain | Res | Type | RSRZ |
|-----|-------|-----|------|------|
| 13 | o | 58 | ASN | 9.2 |
| 14 | r | 14 | LEU | 7.1 |
| 14 | r | 28 | VAL | 6.4 |
| 20 | z | 33 | TRP | 6.3 |
| 14 | r | 10 | LEU | 6.2 |
| 20 | Z | 62 | VAL | 6.2 |
| 20 | Z | 1 | MET | 6.1 |
| 1 | A | 13 | LEU | 6.1 |
| 14 | r | 9 | LEU | 5.8 |
| 13 | o | 3 | GLN | 5.8 |
| 14 | r | 3 | TRP | 5.6 |
| 18 | X | 2 | THR | 5.4 |
| 13 | O | 4 | THR | 5.3 |
| 13 | O | 60 | ARG | 5.3 |
| 14 | R | 3 | TRP | 5.1 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | RSRZ |
|------------|--------------|------------|-------------|-------------|
| 14 | r | 25 | PRO | 4.9 |
| 13 | O | 3 | GLN | 4.9 |
| 3 | c | 143 | TYR | 4.9 |
| 7 | h | 21 | VAL | 4.8 |
| 5 | e | 79 | PHE | 4.8 |
| 14 | r | 29 | LYS | 4.7 |
| 18 | x | 40 | SER | 4.7 |
| 14 | r | 6 | LEU | 4.6 |
| 14 | r | 13 | LEU | 4.6 |
| 13 | o | 4 | THR | 4.6 |
| 13 | O | 56 | PRO | 4.6 |
| 3 | c | 23 | ALA | 4.5 |
| 13 | o | 57 | LYS | 4.5 |
| 2 | b | 127 | ARG | 4.5 |
| 2 | b | 495 | PHE | 4.5 |
| 2 | b | 486 | LEU | 4.3 |
| 13 | o | 62 | GLU | 4.2 |
| 9 | j | 7 | ARG | 4.1 |
| 14 | R | 6 | LEU | 4.1 |
| 9 | j | 8 | ILE | 4.1 |
| 20 | Z | 35 | ARG | 4.0 |
| 14 | r | 5 | VAL | 4.0 |
| 6 | f | 12 | SER | 3.9 |
| 1 | A | 11 | ALA | 3.9 |
| 2 | b | 502 | VAL | 3.8 |
| 13 | o | 56 | PRO | 3.8 |
| 13 | o | 59 | LYS | 3.8 |
| 3 | c | 146 | PHE | 3.7 |
| 13 | o | 60 | ARG | 3.7 |
| 19 | Y | 40 | ALA | 3.7 |
| 9 | j | 5 | GLY | 3.7 |
| 5 | E | 79 | PHE | 3.6 |
| 3 | C | 143 | TYR | 3.6 |
| 13 | o | 61 | GLN | 3.5 |
| 2 | b | 505 | ARG | 3.5 |
| 19 | Y | 20 | ALA | 3.5 |
| 8 | i | 36 | ASP | 3.5 |
| 13 | O | 62 | GLU | 3.5 |
| 13 | O | 59 | LYS | 3.4 |
| 14 | r | 23 | ILE | 3.4 |
| 14 | R | 21 | ARG | 3.4 |
| 19 | y | 43 | ARG | 3.4 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | RSRZ |
|------------|--------------|------------|-------------|-------------|
| 14 | r | 27 | ALA | 3.4 |
| 20 | Z | 61 | VAL | 3.4 |
| 14 | r | 26 | TYR | 3.4 |
| 14 | r | 8 | VAL | 3.3 |
| 2 | B | 295 | GLY | 3.3 |
| 20 | z | 3 | ILE | 3.3 |
| 9 | J | 5 | GLY | 3.3 |
| 13 | O | 63 | ALA | 3.2 |
| 14 | r | 24 | LEU | 3.2 |
| 19 | Y | 43 | ARG | 3.2 |
| 2 | b | 494 | GLY | 3.2 |
| 20 | z | 30 | PRO | 3.2 |
| 20 | z | 36 | SER | 3.1 |
| 20 | Z | 33 | TRP | 3.1 |
| 14 | r | 19 | ALA | 3.1 |
| 14 | r | 4 | ARG | 3.1 |
| 5 | E | 3 | GLY | 3.1 |
| 19 | y | 19 | ILE | 3.1 |
| 18 | x | 38 | GLN | 3.0 |
| 19 | Y | 42 | ARG | 3.0 |
| 12 | M | 33 | GLN | 3.0 |
| 14 | R | 2 | ASP | 3.0 |
| 2 | b | 496 | TYR | 3.0 |
| 5 | e | 82 | GLN | 3.0 |
| 14 | r | 31 | VAL | 2.9 |
| 14 | r | 18 | TRP | 2.9 |
| 14 | R | 25 | PRO | 2.9 |
| 19 | Y | 37 | PHE | 2.9 |
| 5 | e | 61 | ARG | 2.9 |
| 14 | R | 32 | GLN | 2.9 |
| 19 | Y | 25 | ILE | 2.8 |
| 11 | l | 7 | ARG | 2.8 |
| 13 | O | 61 | GLN | 2.8 |
| 18 | x | 2 | THR | 2.8 |
| 20 | z | 35 | ARG | 2.8 |
| 20 | z | 1 | MET | 2.8 |
| 14 | r | 21 | ARG | 2.8 |
| 20 | Z | 3 | ILE | 2.8 |
| 20 | Z | 41 | PHE | 2.8 |
| 9 | J | 7 | ARG | 2.8 |
| 20 | Z | 42 | LEU | 2.7 |
| 13 | O | 32 | ILE | 2.7 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | RSRZ |
|-----|-------|--------|------|------|
| 20 | z | 31 | GLN | 2.7 |
| 13 | o | 246 | ALA | 2.7 |
| 20 | Z | 7 | LEU | 2.7 |
| 14 | r | 2 | ASP | 2.7 |
| 3 | c | 24 | THR | 2.7 |
| 20 | Z | 38 | GLN | 2.6 |
| 3 | C | 62 | PHE | 2.6 |
| 13 | O | 246 | ALA | 2.6 |
| 7 | h | 10 | ILE | 2.6 |
| 18 | X | 3 | ILE | 2.6 |
| 9 | j | 6 | GLY | 2.6 |
| 3 | C | 57 | ALA | 2.6 |
| 20 | z | 41 | PHE | 2.6 |
| 19 | Y | 21 | GLN | 2.6 |
| 8 | i | 35 | LYS | 2.5 |
| 2 | b | 374 | ASN | 2.5 |
| 3 | C | 146 | PHE | 2.5 |
| 20 | z | 60 | PHE | 2.5 |
| 20 | Z | 34 | ASP | 2.5 |
| 2 | b | 295 | GLY | 2.5 |
| 20 | Z | 32 | ASP | 2.5 |
| 14 | R | 26 | TYR | 2.4 |
| 2 | b | 489 | GLU | 2.4 |
| 7 | h | 6 | TRP | 2.4 |
| 15 | t | 29 | ILE | 2.4 |
| 2 | B | 127 | ARG | 2.4 |
| 3 | c | 262 | ARG | 2.4 |
| 13 | O | 5 | LEU | 2.4 |
| 1 | A | 15 | GLU | 2.4 |
| 19 | Y | 45 | ASN | 2.4 |
| 3 | C | 60 | ILE | 2.4 |
| 9 | J | 6 | GLY | 2.4 |
| 2 | B | 293 | ALA | 2.4 |
| 3 | c | 147 | PHE | 2.4 |
| 7 | h | 20 | LYS | 2.3 |
| 2 | B | 486 | LEU | 2.3 |
| 4 | D | 227 | GLU | 2.3 |
| 4 | d | 227[A] | GLU | 2.3 |
| 19 | Y | 46 | LEU | 2.3 |
| 5 | e | 60 | GLN | 2.3 |
| 3 | c | 55 | ALA | 2.3 |
| 14 | r | 16 | ALA | 2.3 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | RSRZ |
|------------|--------------|------------|-------------|-------------|
| 2 | b | 289 | GLN | 2.3 |
| 3 | C | 119 | LEU | 2.3 |
| 1 | A | 12 | ASN | 2.3 |
| 20 | z | 59 | PHE | 2.3 |
| 10 | K | 17 | ILE | 2.3 |
| 2 | b | 128 | THR | 2.2 |
| 3 | C | 61 | VAL | 2.2 |
| 14 | R | 28 | VAL | 2.2 |
| 10 | K | 12 | PRO | 2.2 |
| 11 | l | 2 | GLU | 2.2 |
| 13 | O | 54 | GLU | 2.2 |
| 8 | i | 34 | ARG | 2.2 |
| 3 | c | 25 | ASN | 2.2 |
| 14 | r | 12 | VAL | 2.2 |
| 5 | E | 84 | LYS | 2.2 |
| 10 | K | 10 | LYS | 2.2 |
| 3 | C | 65 | GLY | 2.2 |
| 15 | T | 30 | THR | 2.2 |
| 18 | x | 34 | ILE | 2.2 |
| 5 | e | 74 | GLN | 2.2 |
| 3 | C | 122 | SER | 2.2 |
| 20 | Z | 60 | PHE | 2.2 |
| 16 | U | 8 | GLU | 2.2 |
| 20 | Z | 31 | GLN | 2.2 |
| 2 | b | 490 | GLN | 2.2 |
| 1 | a | 11 | ALA | 2.2 |
| 2 | b | 503 | THR | 2.2 |
| 15 | t | 28 | ARG | 2.2 |
| 7 | H | 6 | TRP | 2.2 |
| 5 | e | 71 | GLU | 2.2 |
| 8 | I | 34 | ARG | 2.1 |
| 14 | r | 32 | GLN | 2.1 |
| 19 | Y | 41 | VAL | 2.1 |
| 11 | l | 3 | PRO | 2.1 |
| 3 | c | 261 | ARG | 2.1 |
| 2 | b | 218 | LEU | 2.1 |
| 5 | e | 17 | VAL | 2.1 |
| 3 | c | 142 | GLU | 2.1 |
| 17 | v | 21 | LEU | 2.1 |
| 14 | R | 30 | GLN | 2.1 |
| 1 | A | 16 | ARG | 2.1 |
| 2 | B | 502 | VAL | 2.1 |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type | RSRZ |
|-----|-------|-----|------|------|
| 7 | h | 18 | TYR | 2.1 |
| 14 | R | 10 | LEU | 2.1 |
| 13 | o | 207 | ARG | 2.1 |
| 2 | b | 219 | VAL | 2.1 |
| 14 | r | 7 | VAL | 2.0 |
| 5 | e | 84 | LYS | 2.0 |
| 3 | C | 275 | SER | 2.0 |
| 13 | o | 63 | ALA | 2.0 |
| 14 | R | 29 | LYS | 2.0 |
| 17 | v | 17 | LYS | 2.0 |
| 16 | U | 67 | LEU | 2.0 |
| 2 | B | 289 | GLN | 2.0 |
| 7 | h | 56 | ASP | 2.0 |
| 3 | c | 57 | ALA | 2.0 |

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

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

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|----------------------------|-------|
| 15 | FME | T | 1 | 10/11 | 0.94 | 0.11 | 30,62,79,79 | 0 |
| 15 | FME | t | 1 | 10/11 | 0.94 | 0.10 | 33,54,70,73 | 0 |
| 12 | FME | m | 1 | 10/11 | 0.95 | 0.14 | 46,57,89,91 | 0 |
| 8 | FME | I | 1 | 10/11 | 0.96 | 0.20 | 46,62,75,90 | 0 |
| 12 | FME | M | 1 | 10/11 | 0.97 | 0.13 | 44,61,78,87 | 0 |
| 8 | FME | i | 1 | 10/11 | 0.97 | 0.15 | 45,59,72,78 | 0 |

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|----------------------------|-------|
| 31 | STE | B | 623 | 18/20 | 0.76 | 0.22 | 54,72,94,94 | 0 |
| 31 | STE | b | 626 | 20/20 | 0.76 | 0.24 | 43,74,97,100 | 0 |
| 31 | STE | c | 519 | 20/20 | 0.77 | 0.25 | 43,66,97,102 | 0 |
| 31 | STE | x | 102 | 20/20 | 0.78 | 0.22 | 51,68,91,94 | 0 |
| 28 | LHG | a | 411 | 42/49 | 0.79 | 0.27 | 66,95,118,141 | 0 |
| 31 | STE | B | 624 | 16/20 | 0.79 | 0.29 | 43,71,87,89 | 0 |
| 31 | STE | a | 412 | 12/20 | 0.79 | 0.42 | 46,79,97,98 | 0 |
| 31 | STE | k | 104 | 12/20 | 0.81 | 0.23 | 56,73,85,89 | 0 |
| 31 | STE | b | 628 | 14/20 | 0.81 | 0.39 | 57,77,110,110 | 0 |
| 26 | LMG | D | 412 | 33/55 | 0.82 | 0.20 | 36,63,101,106 | 0 |
| 30 | BCR | H | 102 | 40/40 | 0.82 | 0.17 | 35,51,67,75 | 0 |
| 26 | LMG | c | 520 | 48/55 | 0.83 | 0.24 | 35,83,112,118 | 0 |
| 31 | STE | B | 625 | 12/20 | 0.83 | 0.40 | 47,69,89,93 | 0 |
| 31 | STE | R | 101 | 12/20 | 0.83 | 0.29 | 59,80,103,104 | 0 |
| 22 | CLA | C | 512 | 65/65 | 0.84 | 0.19 | 40,61,96,105 | 0 |
| 31 | STE | M | 104 | 18/20 | 0.84 | 0.19 | 38,53,75,86 | 0 |
| 30 | BCR | x | 101 | 40/40 | 0.84 | 0.16 | 40,59,76,81 | 0 |
| 22 | CLA | c | 512 | 65/65 | 0.85 | 0.18 | 44,62,97,112 | 0 |
| 28 | LHG | A | 411 | 49/49 | 0.85 | 0.22 | 50,86,108,119 | 0 |
| 22 | CLA | b | 601 | 65/65 | 0.85 | 0.18 | 51,74,102,106 | 0 |
| 31 | STE | b | 624 | 16/20 | 0.85 | 0.17 | 53,74,88,95 | 0 |
| 31 | STE | b | 625 | 15/20 | 0.85 | 0.21 | 52,68,93,94 | 0 |
| 26 | LMG | a | 414 | 55/55 | 0.85 | 0.17 | 40,67,93,105 | 0 |
| 31 | STE | I | 102 | 15/20 | 0.85 | 0.17 | 40,58,82,84 | 0 |
| 31 | STE | b | 629 | 20/20 | 0.85 | 0.18 | 40,71,89,93 | 0 |
| 31 | STE | J | 101 | 12/20 | 0.85 | 0.17 | 51,71,80,81 | 0 |
| 31 | STE | L | 103 | 12/20 | 0.85 | 0.19 | 49,66,79,86 | 0 |
| 31 | STE | M | 103 | 10/20 | 0.85 | 0.16 | 35,56,69,69 | 0 |
| 27 | SQD | A | 412 | 39/54 | 0.86 | 0.20 | 47,69,107,111 | 0 |
| 31 | STE | b | 621 | 20/20 | 0.86 | 0.26 | 44,63,85,87 | 0 |
| 26 | LMG | b | 622 | 55/55 | 0.86 | 0.27 | 48,80,110,117 | 0 |
| 31 | STE | B | 619 | 17/20 | 0.86 | 0.18 | 37,58,76,80 | 0 |
| 25 | PL9 | a | 409 | 55/55 | 0.86 | 0.23 | 42,77,102,105 | 0 |
| 31 | STE | H | 104 | 18/20 | 0.87 | 0.30 | 49,76,90,93 | 0 |
| 27 | SQD | t | 102 | 36/54 | 0.87 | 0.16 | 31,69,96,103 | 0 |
| 31 | STE | a | 413 | 15/20 | 0.87 | 0.17 | 35,65,81,92 | 0 |
| 25 | PL9 | A | 408 | 55/55 | 0.88 | 0.22 | 34,70,94,98 | 0 |
| 22 | CLA | C | 513 | 65/65 | 0.88 | 0.20 | 43,65,107,118 | 0 |
| 29 | DGD | A | 413 | 66/66 | 0.88 | 0.14 | 41,65,89,95 | 0 |
| 22 | CLA | H | 101 | 65/65 | 0.88 | 0.17 | 36,70,99,108 | 0 |
| 30 | BCR | K | 102 | 40/40 | 0.88 | 0.14 | 37,57,74,74 | 0 |
| 27 | SQD | L | 101 | 49/54 | 0.88 | 0.16 | 40,66,106,121 | 0 |
| 31 | STE | t | 104 | 10/20 | 0.88 | 0.28 | 45,59,73,73 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|-----------------------------|-------|
| 22 | CLA | c | 513 | 65/65 | 0.88 | 0.21 | 44,80,112,121 | 0 |
| 22 | CLA | c | 502 | 65/65 | 0.89 | 0.17 | 30,49,69,76 | 0 |
| 27 | SQD | B | 621 | 54/54 | 0.89 | 0.17 | 40,67,93,104 | 0 |
| 26 | LMG | M | 101 | 51/55 | 0.89 | 0.14 | 37,56,84,88 | 0 |
| 31 | STE | C | 519 | 12/20 | 0.89 | 0.14 | 41,55,68,73 | 0 |
| 31 | STE | C | 520 | 16/20 | 0.89 | 0.16 | 43,63,75,79 | 0 |
| 27 | SQD | f | 102 | 41/54 | 0.89 | 0.18 | 61,87,110,127 | 0 |
| 26 | LMG | Y | 101 | 48/55 | 0.89 | 0.18 | 54,76,95,104 | 0 |
| 26 | LMG | c | 521 | 49/55 | 0.89 | 0.15 | 32,66,98,113 | 0 |
| 22 | CLA | a | 405 | 65/65 | 0.90 | 0.16 | 20,44,90,104 | 0 |
| 26 | LMG | c | 518 | 37/55 | 0.90 | 0.18 | 49,72,93,98 | 0 |
| 22 | CLA | c | 508 | 64/65 | 0.90 | 0.17 | 36,56,98,124 | 0 |
| 26 | LMG | A | 409 | 48/55 | 0.90 | 0.17 | 36,63,86,104 | 0 |
| 30 | BCR | d | 406 | 40/40 | 0.90 | 0.13 | 30,58,103,111 | 0 |
| 31 | STE | X | 101 | 20/20 | 0.90 | 0.17 | 40,60,81,91 | 0 |
| 30 | BCR | k | 102 | 40/40 | 0.90 | 0.14 | 46,67,84,86 | 0 |
| 30 | BCR | k | 103 | 40/40 | 0.90 | 0.20 | 45,63,78,85 | 0 |
| 26 | LMG | B | 620 | 28/55 | 0.90 | 0.16 | 35,52,67,71 | 0 |
| 31 | STE | b | 627 | 10/20 | 0.91 | 0.29 | 45,58,65,68 | 0 |
| 31 | STE | C | 521 | 12/20 | 0.91 | 0.10 | 37,48,59,64 | 0 |
| 31 | STE | b | 620 | 16/20 | 0.91 | 0.22 | 42,55,83,100 | 0 |
| 30 | BCR | k | 101 | 40/40 | 0.91 | 0.16 | 48,67,82,91 | 0 |
| 31 | STE | d | 411 | 17/20 | 0.91 | 0.14 | 49,65,73,79 | 0 |
| 26 | LMG | m | 101 | 51/55 | 0.91 | 0.15 | 40,61,86,96 | 0 |
| 31 | STE | B | 622 | 12/20 | 0.91 | 0.09 | 36,57,72,72 | 0 |
| 26 | LMG | D | 408 | 51/55 | 0.91 | 0.20 | 34,66,92,114 | 0 |
| 26 | LMG | d | 410 | 44/55 | 0.92 | 0.15 | 41,61,90,108 | 0 |
| 22 | CLA | b | 616 | 60/65 | 0.92 | 0.15 | 31,48,93,99 | 0 |
| 22 | CLA | D | 405 | 65/65 | 0.92 | 0.15 | 26,50,132,139 | 0 |
| 22 | CLA | d | 405 | 65/65 | 0.92 | 0.15 | 32,56,101,116 | 0 |
| 31 | STE | Z | 101 | 8/20 | 0.92 | 0.14 | 38,65,78,78 | 0 |
| 27 | SQD | D | 409 | 36/54 | 0.92 | 0.17 | 50,78,97,114 | 0 |
| 29 | DGD | c | 517 | 62/66 | 0.92 | 0.17 | 36,64,94,109 | 0 |
| 31 | STE | j | 101 | 12/20 | 0.92 | 0.14 | 50,63,72,76 | 0 |
| 30 | BCR | C | 514 | 40/40 | 0.92 | 0.14 | 30,47,58,76 | 0 |
| 31 | STE | t | 103 | 14/20 | 0.92 | 0.14 | 41,59,67,71 | 0 |
| 22 | CLA | B | 605 | 65/65 | 0.92 | 0.13 | 29,45,82,98 | 0 |
| 30 | BCR | K | 101 | 40/40 | 0.92 | 0.13 | 45,63,82,83 | 0 |
| 22 | CLA | c | 510 | 65/65 | 0.93 | 0.15 | 36,51,66,92 | 0 |
| 22 | CLA | c | 511 | 65/65 | 0.93 | 0.16 | 41,62,80,90 | 0 |
| 22 | CLA | B | 615 | 60/65 | 0.93 | 0.15 | 23,43,96,105 | 0 |
| 29 | DGD | c | 516 | 62/66 | 0.93 | 0.14 | 36,61,97,110 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|-----------------------------|-------|
| 22 | CLA | C | 502 | 65/65 | 0.93 | 0.14 | 29,48,70,79 | 0 |
| 30 | BCR | B | 618 | 40/40 | 0.93 | 0.12 | 24,48,68,80 | 0 |
| 22 | CLA | C | 507 | 65/65 | 0.93 | 0.15 | 25,46,67,73 | 0 |
| 22 | CLA | C | 508 | 65/65 | 0.93 | 0.13 | 29,48,112,124 | 0 |
| 22 | CLA | b | 609 | 65/65 | 0.93 | 0.14 | 31,54,74,77 | 0 |
| 22 | CLA | b | 615 | 65/65 | 0.93 | 0.14 | 27,47,67,74 | 0 |
| 22 | CLA | C | 509 | 65/65 | 0.93 | 0.18 | 31,51,68,77 | 0 |
| 31 | STE | M | 102 | 15/20 | 0.93 | 0.13 | 37,54,63,69 | 0 |
| 22 | CLA | B | 601 | 65/65 | 0.93 | 0.17 | 26,42,63,67 | 0 |
| 22 | CLA | c | 506 | 65/65 | 0.93 | 0.14 | 34,56,106,111 | 0 |
| 27 | SQD | a | 410 | 54/54 | 0.93 | 0.16 | 44,70,104,112 | 0 |
| 22 | CLA | B | 614 | 65/65 | 0.93 | 0.13 | 26,42,69,86 | 0 |
| 22 | CLA | c | 509 | 65/65 | 0.93 | 0.20 | 32,54,74,84 | 0 |
| 30 | BCR | B | 616 | 40/40 | 0.94 | 0.12 | 30,46,69,72 | 0 |
| 30 | BCR | B | 617 | 40/40 | 0.94 | 0.11 | 29,44,57,64 | 0 |
| 22 | CLA | C | 506 | 65/65 | 0.94 | 0.13 | 28,50,90,108 | 0 |
| 25 | PL9 | D | 407 | 55/55 | 0.94 | 0.11 | 26,39,57,63 | 0 |
| 30 | BCR | C | 515 | 40/40 | 0.94 | 0.17 | 42,60,73,75 | 0 |
| 30 | BCR | D | 406 | 40/40 | 0.94 | 0.11 | 35,50,88,108 | 0 |
| 22 | CLA | c | 503 | 65/65 | 0.94 | 0.16 | 34,50,62,68 | 0 |
| 22 | CLA | c | 504 | 60/65 | 0.94 | 0.12 | 36,51,85,99 | 0 |
| 22 | CLA | c | 505 | 65/65 | 0.94 | 0.17 | 30,47,73,77 | 0 |
| 30 | BCR | b | 617 | 40/40 | 0.94 | 0.12 | 34,48,64,67 | 0 |
| 30 | BCR | b | 619 | 40/40 | 0.94 | 0.12 | 24,55,73,87 | 0 |
| 30 | BCR | c | 514 | 40/40 | 0.94 | 0.14 | 35,51,69,74 | 0 |
| 22 | CLA | b | 602 | 65/65 | 0.94 | 0.16 | 31,48,68,71 | 0 |
| 22 | CLA | c | 507 | 65/65 | 0.94 | 0.14 | 31,50,65,78 | 0 |
| 22 | CLA | b | 606 | 65/65 | 0.94 | 0.12 | 29,47,83,90 | 0 |
| 22 | CLA | B | 613 | 65/65 | 0.94 | 0.16 | 26,45,87,104 | 0 |
| 22 | CLA | b | 611 | 65/65 | 0.94 | 0.14 | 25,41,55,66 | 0 |
| 22 | CLA | b | 613 | 65/65 | 0.94 | 0.16 | 21,41,83,97 | 0 |
| 22 | CLA | b | 614 | 65/65 | 0.94 | 0.14 | 26,43,87,93 | 0 |
| 29 | DGD | C | 516 | 62/66 | 0.94 | 0.14 | 28,48,85,107 | 0 |
| 29 | DGD | C | 517 | 62/66 | 0.94 | 0.14 | 30,57,112,139 | 0 |
| 29 | DGD | C | 518 | 62/66 | 0.94 | 0.13 | 33,57,77,94 | 0 |
| 29 | DGD | H | 103 | 62/66 | 0.94 | 0.11 | 34,51,67,75 | 0 |
| 22 | CLA | a | 403 | 65/65 | 0.94 | 0.15 | 29,47,106,117 | 0 |
| 22 | CLA | B | 603 | 65/65 | 0.94 | 0.14 | 25,40,97,105 | 0 |
| 29 | DGD | h | 101 | 62/66 | 0.94 | 0.14 | 35,53,70,78 | 0 |
| 22 | CLA | D | 403 | 65/65 | 0.95 | 0.12 | 22,36,53,65 | 0 |
| 22 | CLA | D | 404 | 65/65 | 0.95 | 0.12 | 22,35,57,66 | 0 |
| 22 | CLA | c | 501 | 65/65 | 0.95 | 0.14 | 30,50,65,68 | 0 |

Continued on next page...

Continued from previous page...

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|-----------------------------|-------|
| 22 | CLA | C | 503 | 65/65 | 0.95 | 0.14 | 31,49,59,63 | 0 |
| 22 | CLA | C | 504 | 59/65 | 0.95 | 0.13 | 30,49,95,100 | 0 |
| 22 | CLA | a | 402 | 65/65 | 0.95 | 0.12 | 24,36,51,59 | 0 |
| 22 | CLA | C | 505 | 65/65 | 0.95 | 0.16 | 27,47,75,82 | 0 |
| 22 | CLA | B | 611 | 65/65 | 0.95 | 0.16 | 22,37,50,60 | 0 |
| 22 | CLA | B | 612 | 65/65 | 0.95 | 0.15 | 21,40,75,84 | 0 |
| 22 | CLA | B | 602 | 65/65 | 0.95 | 0.16 | 23,38,67,75 | 0 |
| 22 | CLA | b | 604 | 65/65 | 0.95 | 0.14 | 24,45,87,105 | 0 |
| 22 | CLA | b | 605 | 65/65 | 0.95 | 0.14 | 24,39,59,63 | 0 |
| 27 | SQD | A | 410 | 52/54 | 0.95 | 0.16 | 39,68,101,103 | 0 |
| 22 | CLA | A | 405 | 54/65 | 0.95 | 0.12 | 22,36,72,78 | 0 |
| 30 | BCR | T | 101 | 40/40 | 0.95 | 0.09 | 30,46,61,66 | 0 |
| 30 | BCR | a | 406 | 40/40 | 0.95 | 0.11 | 24,38,59,64 | 0 |
| 22 | CLA | b | 608 | 65/65 | 0.95 | 0.14 | 30,48,73,79 | 0 |
| 30 | BCR | b | 618 | 40/40 | 0.95 | 0.11 | 29,44,61,68 | 0 |
| 22 | CLA | C | 510 | 65/65 | 0.95 | 0.15 | 30,50,68,81 | 0 |
| 22 | CLA | d | 403 | 65/65 | 0.95 | 0.14 | 25,41,70,83 | 0 |
| 22 | CLA | d | 404 | 65/65 | 0.95 | 0.12 | 22,37,47,53 | 0 |
| 22 | CLA | b | 610 | 65/65 | 0.95 | 0.18 | 28,43,58,69 | 0 |
| 23 | PHO | a | 404 | 64/64 | 0.95 | 0.14 | 24,37,46,47 | 0 |
| 22 | CLA | C | 511 | 65/65 | 0.95 | 0.13 | 34,59,80,85 | 0 |
| 22 | CLA | b | 612 | 65/65 | 0.95 | 0.17 | 27,40,54,58 | 0 |
| 28 | LHG | b | 623 | 49/49 | 0.95 | 0.15 | 38,58,85,104 | 0 |
| 28 | LHG | d | 409 | 39/49 | 0.95 | 0.12 | 37,55,73,83 | 0 |
| 22 | CLA | A | 403 | 65/65 | 0.95 | 0.15 | 23,42,94,109 | 0 |
| 25 | PL9 | d | 407 | 55/55 | 0.95 | 0.11 | 25,40,54,60 | 0 |
| 22 | CLA | B | 608 | 65/65 | 0.95 | 0.12 | 27,43,60,65 | 0 |
| 22 | CLA | C | 501 | 65/65 | 0.96 | 0.12 | 25,43,59,65 | 0 |
| 22 | CLA | b | 607 | 65/65 | 0.96 | 0.12 | 26,42,86,96 | 0 |
| 22 | CLA | A | 402 | 65/65 | 0.96 | 0.11 | 19,33,52,62 | 0 |
| 28 | LHG | l | 101 | 49/49 | 0.96 | 0.12 | 34,50,65,71 | 0 |
| 30 | BCR | I | 101 | 40/40 | 0.96 | 0.09 | 22,40,52,54 | 0 |
| 23 | PHO | A | 404 | 64/64 | 0.96 | 0.12 | 15,35,45,47 | 0 |
| 23 | PHO | D | 401 | 64/64 | 0.96 | 0.12 | 26,39,51,54 | 0 |
| 22 | CLA | B | 607 | 65/65 | 0.96 | 0.13 | 27,43,71,75 | 0 |
| 23 | PHO | d | 401 | 64/64 | 0.96 | 0.12 | 25,43,55,67 | 0 |
| 22 | CLA | B | 604 | 65/65 | 0.96 | 0.14 | 21,38,53,63 | 0 |
| 29 | DGD | c | 515 | 62/66 | 0.96 | 0.11 | 31,49,85,92 | 0 |
| 22 | CLA | b | 603 | 65/65 | 0.96 | 0.15 | 26,43,82,91 | 0 |
| 22 | CLA | B | 609 | 65/65 | 0.96 | 0.14 | 25,39,49,58 | 0 |
| 22 | CLA | B | 610 | 65/65 | 0.96 | 0.15 | 19,38,54,62 | 0 |
| 28 | LHG | D | 410 | 49/49 | 0.96 | 0.11 | 31,47,58,65 | 0 |

Continued on next page...

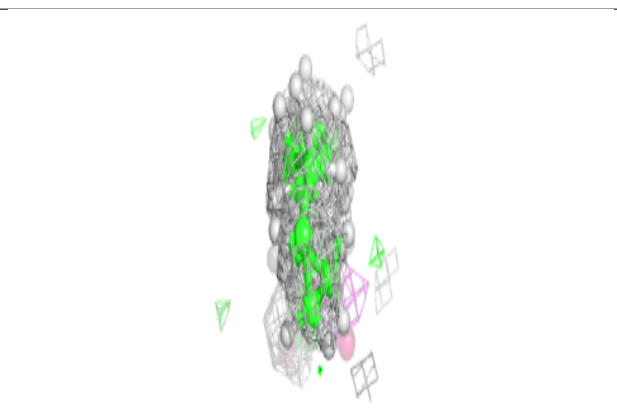
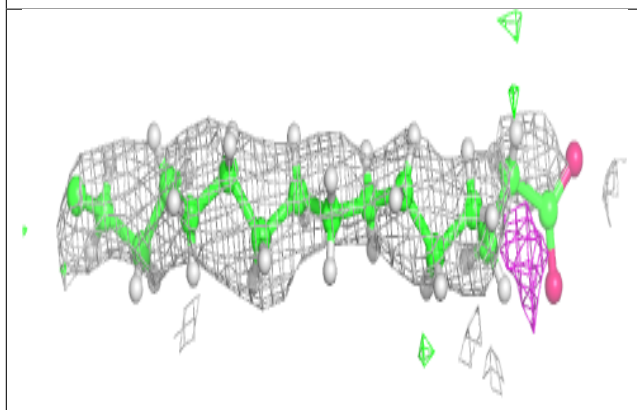
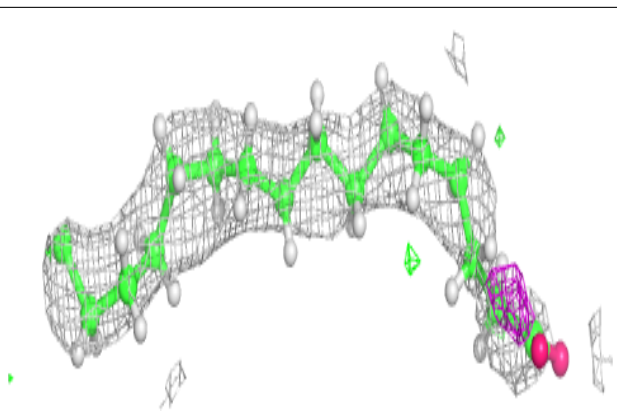
Continued from previous page...

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|-----|-------|------|------|-----------------------------|-------|
| 28 | LHG | D | 411 | 47/49 | 0.96 | 0.13 | 27,54,84,95 | 0 |
| 28 | LHG | D | 413 | 49/49 | 0.96 | 0.12 | 32,48,80,93 | 0 |
| 30 | BCR | t | 101 | 40/40 | 0.96 | 0.09 | 28,44,55,63 | 0 |
| 33 | BCT | d | 402 | 4/4 | 0.96 | 0.17 | 35,40,52,62 | 0 |
| 34 | HEC | F | 101 | 43/43 | 0.96 | 0.12 | 37,54,73,76 | 0 |
| 34 | HEC | f | 101 | 43/43 | 0.96 | 0.14 | 44,62,87,99 | 0 |
| 35 | NA | V | 202 | 1/1 | 0.96 | 0.22 | 61,61,61,61 | 0 |
| 28 | LHG | L | 102 | 49/49 | 0.97 | 0.10 | 30,47,67,80 | 0 |
| 24 | CL | A | 407 | 1/1 | 0.97 | 0.06 | 39,39,39,39 | 0 |
| 34 | HEC | V | 201 | 43/43 | 0.97 | 0.13 | 25,39,48,49 | 0 |
| 22 | CLA | B | 606 | 65/65 | 0.97 | 0.12 | 18,39,81,92 | 0 |
| 34 | HEC | v | 201 | 43/43 | 0.97 | 0.12 | 31,42,53,61 | 0 |
| 28 | LHG | d | 408 | 49/49 | 0.97 | 0.11 | 28,48,60,65 | 0 |
| 33 | BCT | D | 402 | 4/4 | 0.98 | 0.18 | 28,35,46,55 | 0 |
| 24 | CL | a | 407 | 1/1 | 0.99 | 0.07 | 34,34,34,34 | 0 |
| 24 | CL | a | 408 | 1/1 | 0.99 | 0.04 | 35,35,35,35 | 0 |
| 24 | CL | A | 406 | 1/1 | 0.99 | 0.09 | 35,35,35,35 | 0 |
| 32 | OEX | C | 522 | 10/10 | 0.99 | 0.14 | 26,33,37,38 | 0 |
| 32 | OEX | a | 415 | 10/10 | 0.99 | 0.13 | 26,34,36,40 | 0 |
| 21 | FE2 | A | 401 | 1/1 | 0.99 | 0.10 | 32,32,32,32 | 0 |
| 21 | FE2 | a | 401 | 1/1 | 1.00 | 0.07 | 36,36,36,36 | 0 |

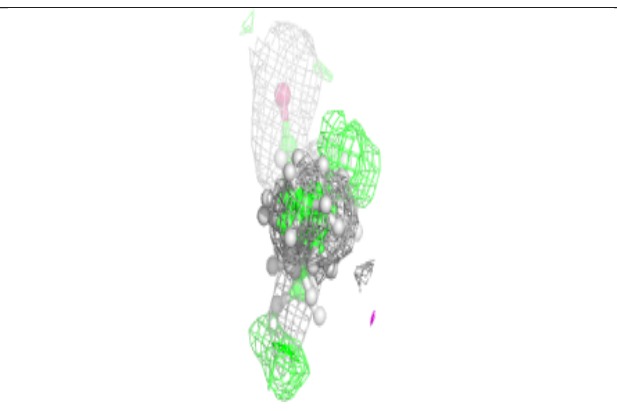
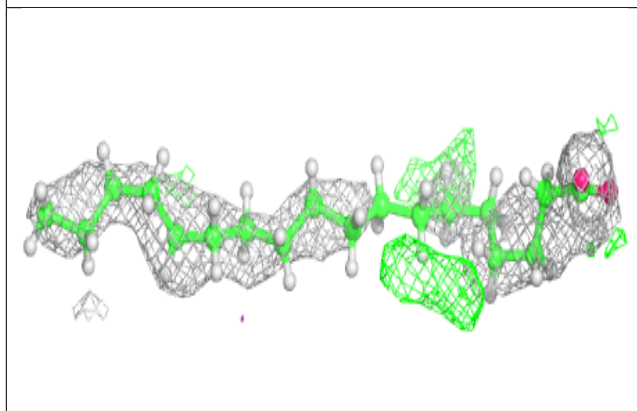
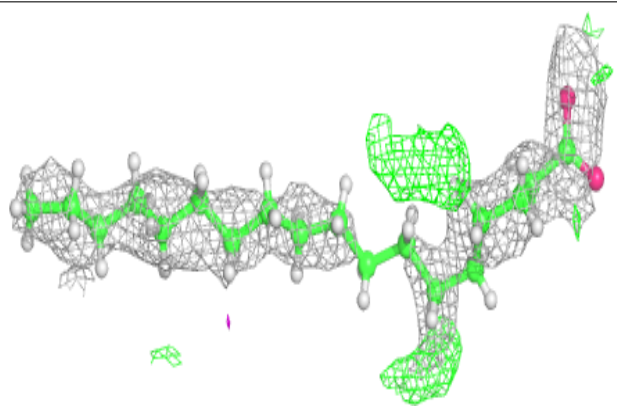
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around STE B 623:

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

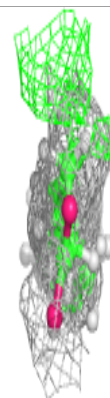
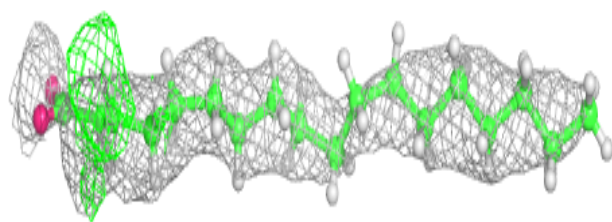
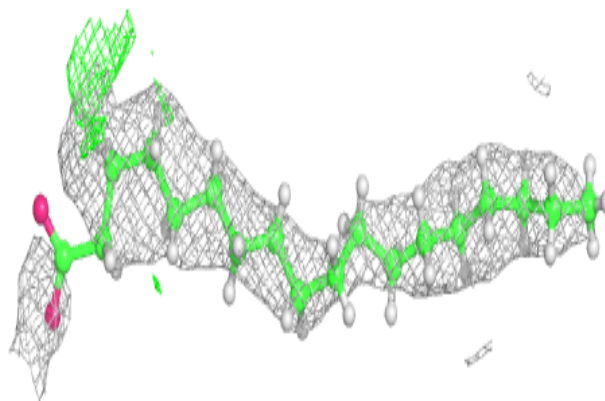
**Electron density around STE b 626:**

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

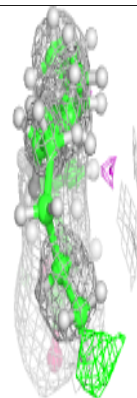
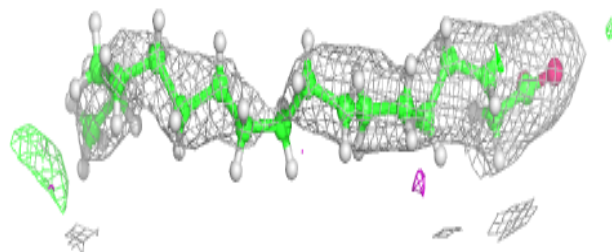
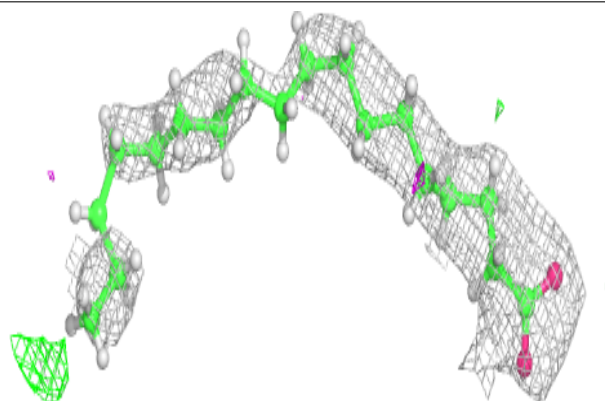


Electron density around STE c 519:

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

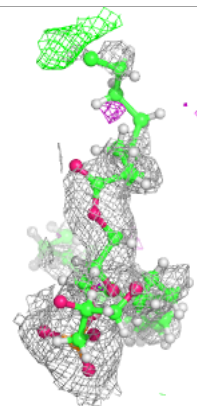
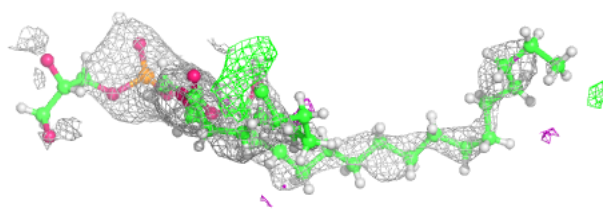
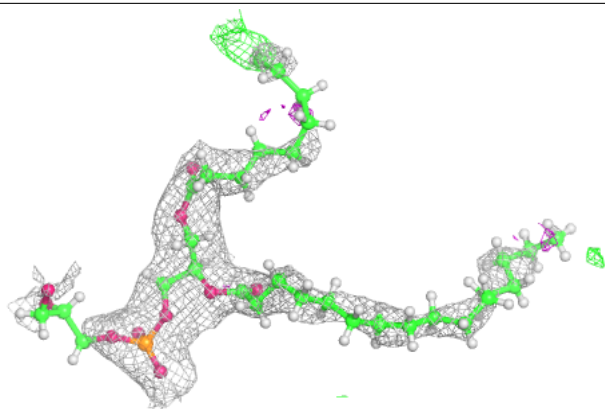
**Electron density around STE x 102:**

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

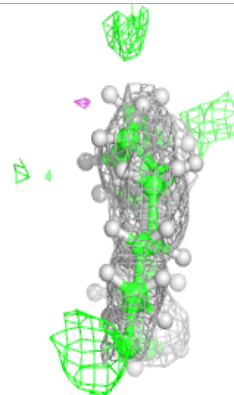
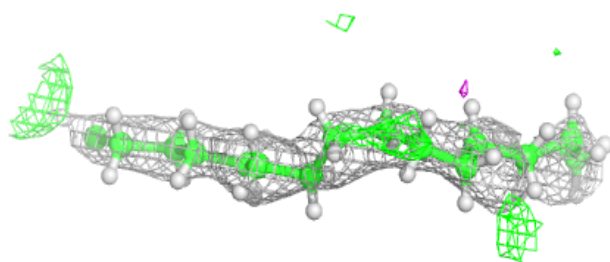
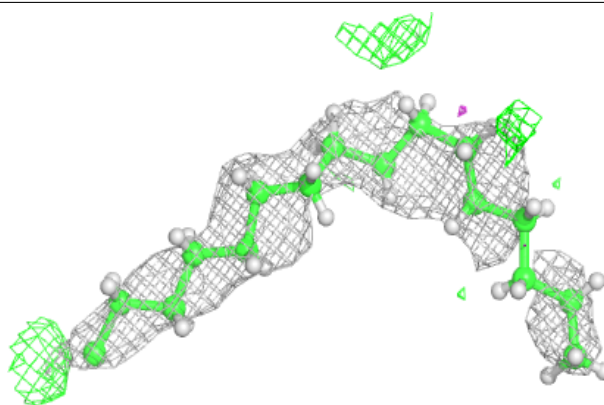


Electron density around LHG a 411:

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

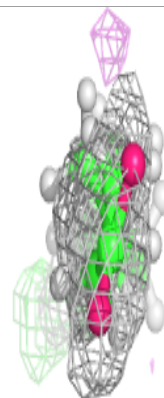
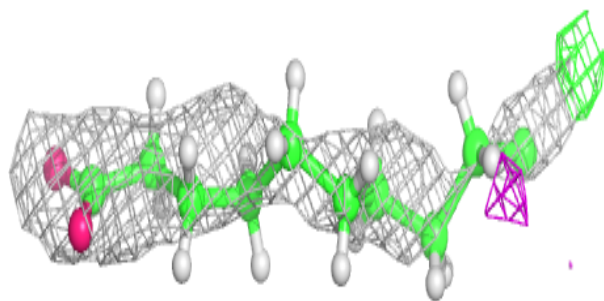
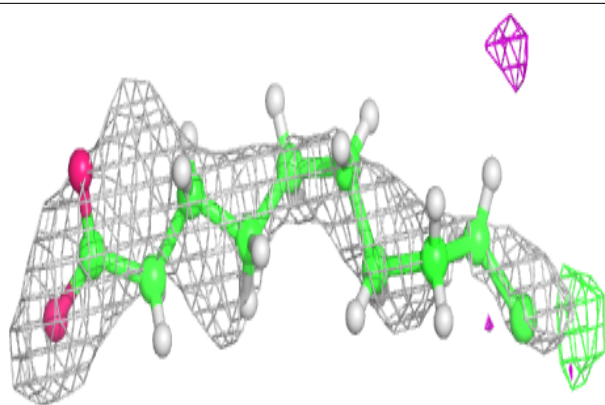
**Electron density around STE B 624:**

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

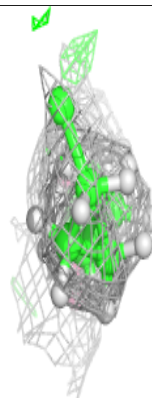
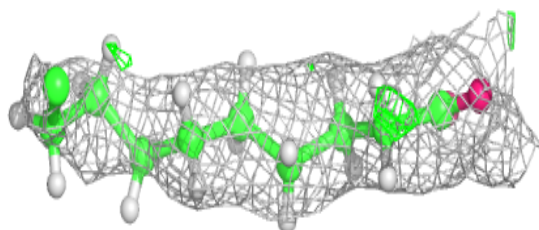
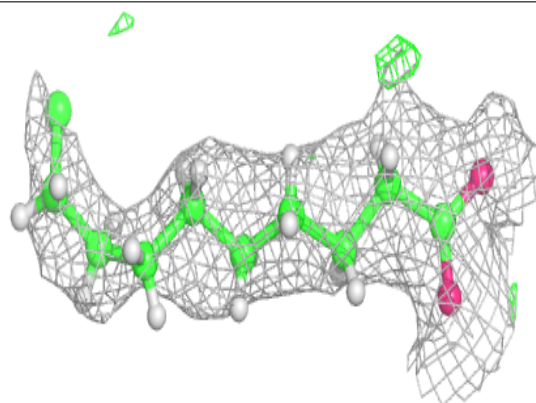


Electron density around STE a 412:

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

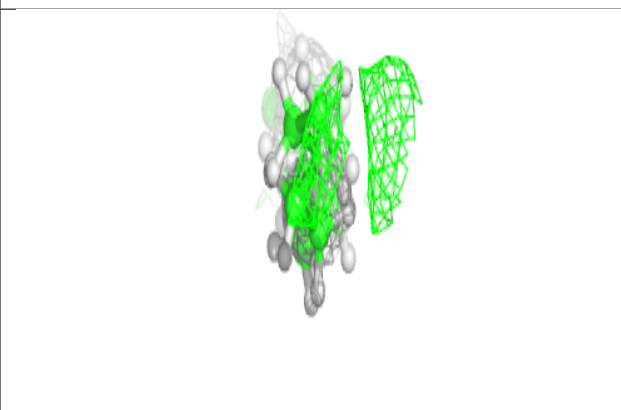
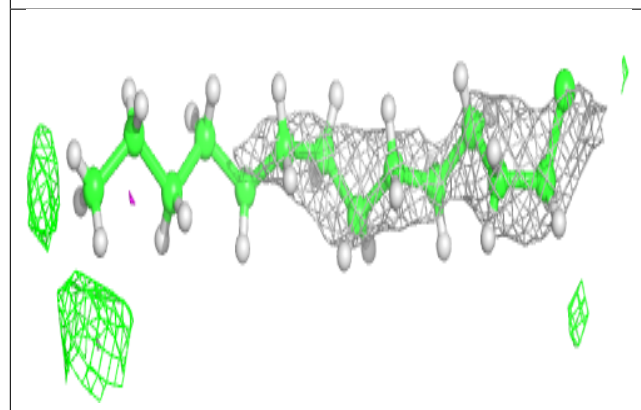
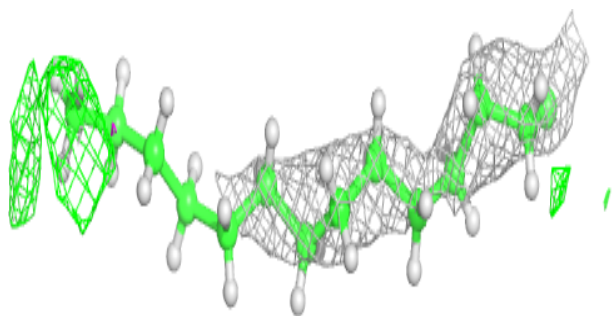
**Electron density around STE k 104:**

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

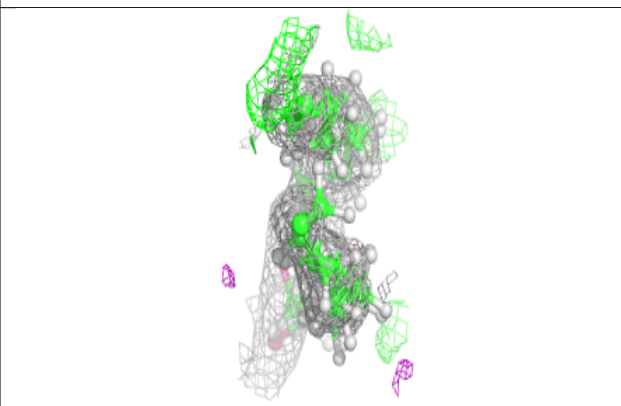
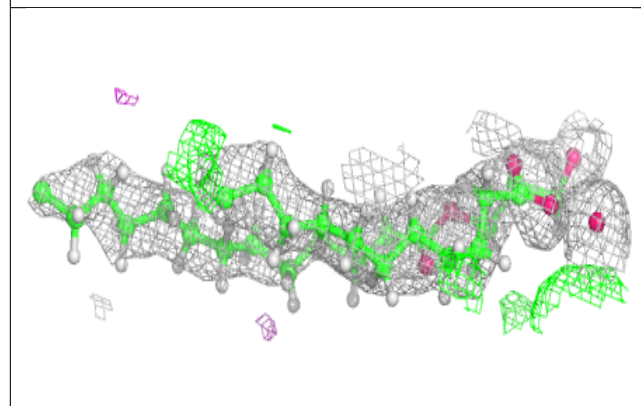
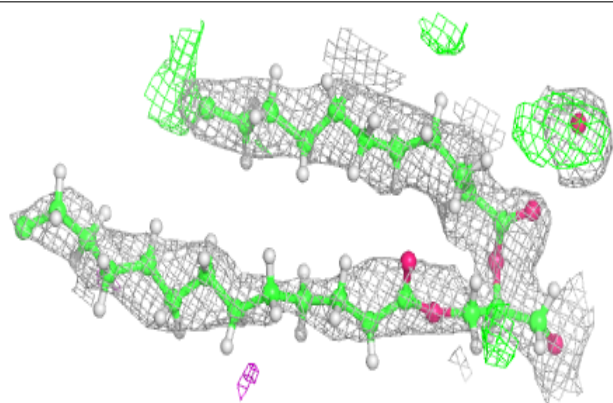


Electron density around STE b 628:

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

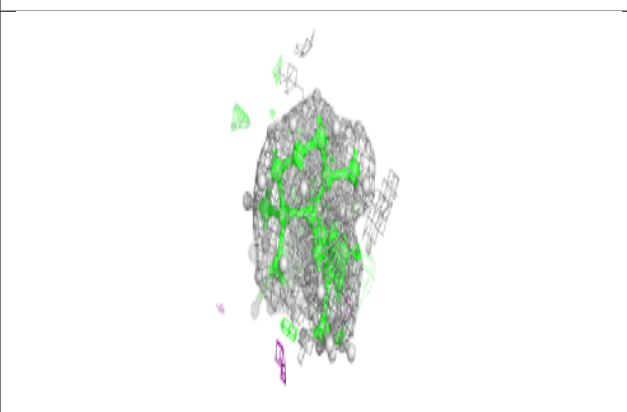
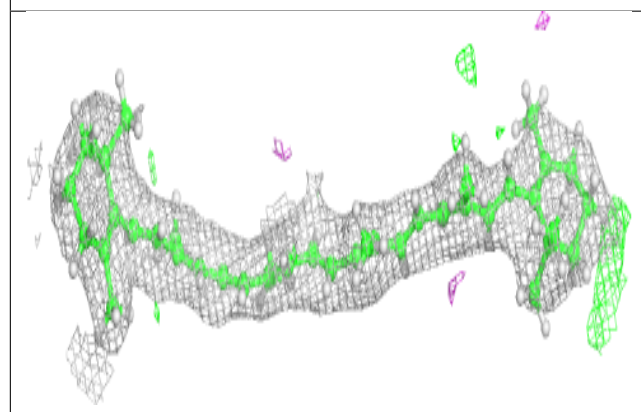
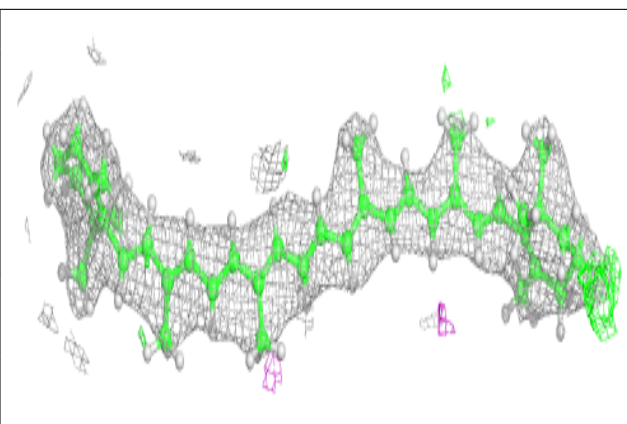
**Electron density around LMG D 412:**

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

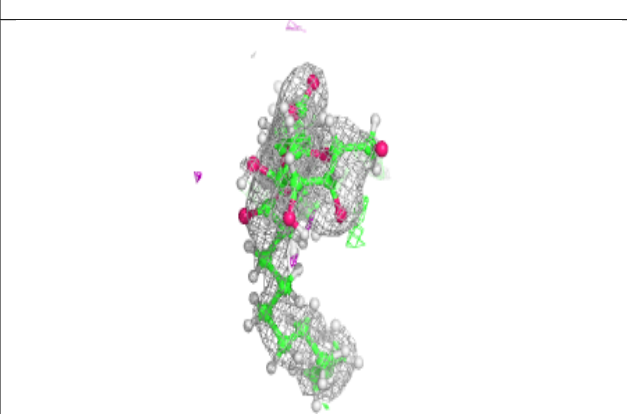
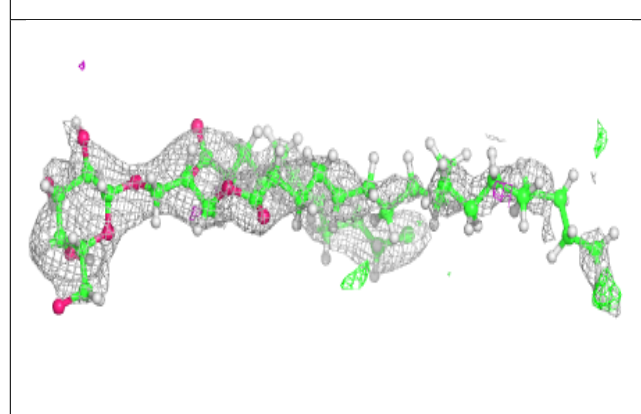
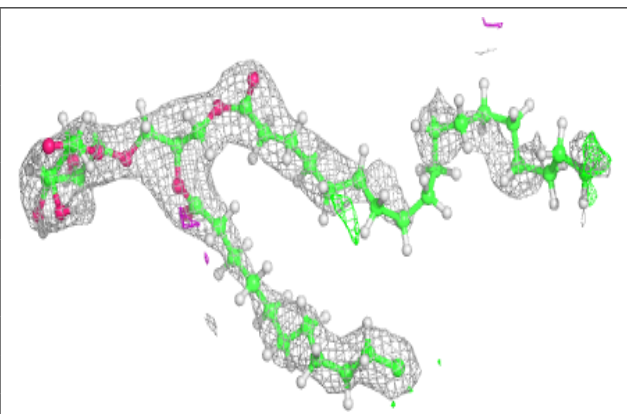


Electron density around BCR H 102:

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

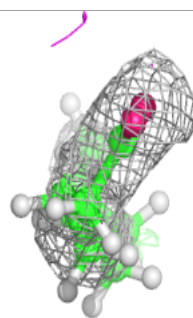
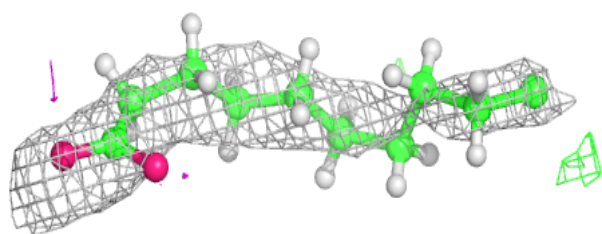
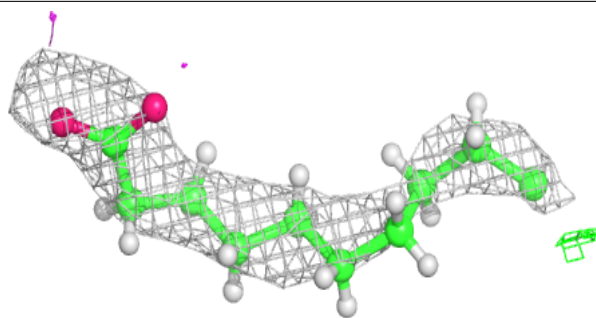
**Electron density around LMG c 520:**

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

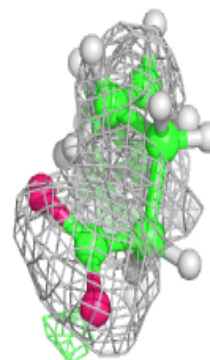
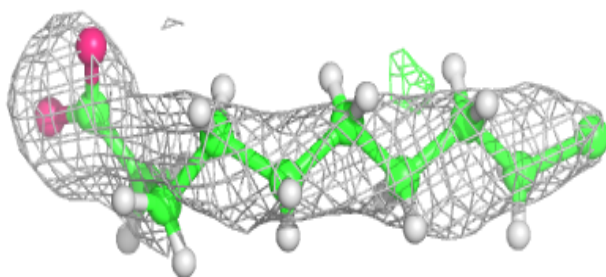
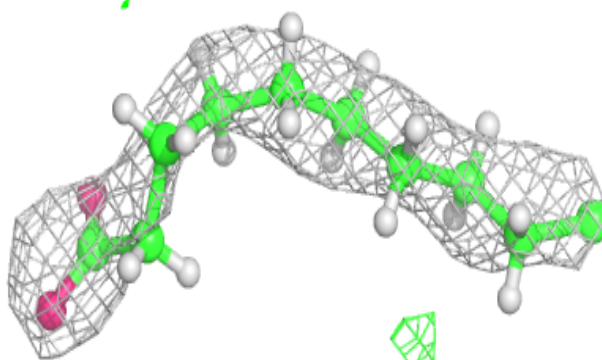


Electron density around STE B 625:

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

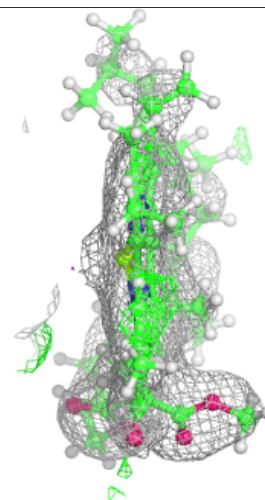
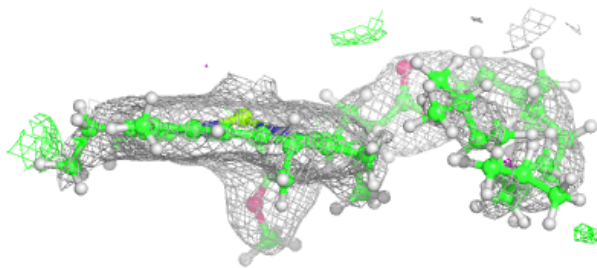
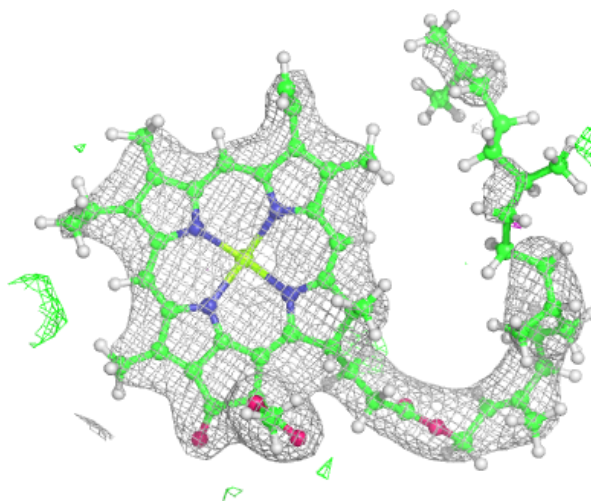
**Electron density around STE R 101:**

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



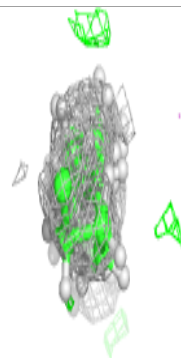
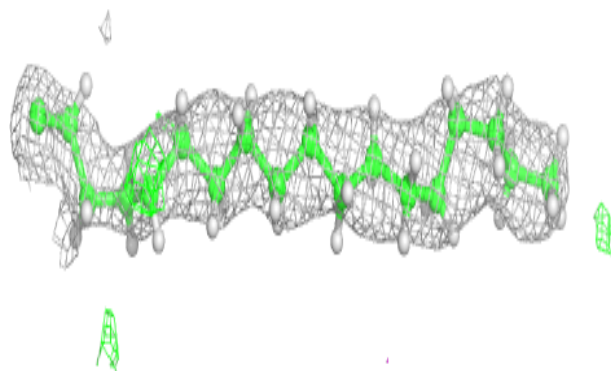
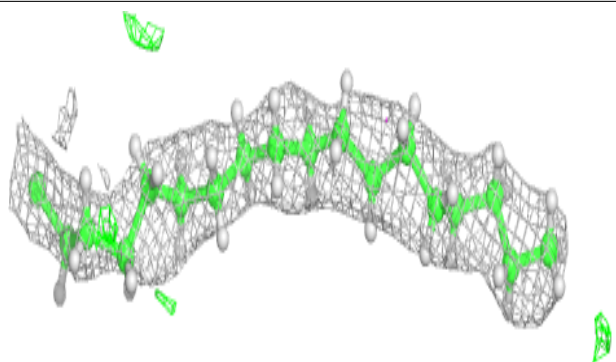
Electron density around CLA C 512:

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

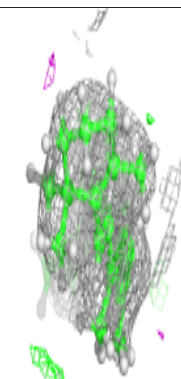
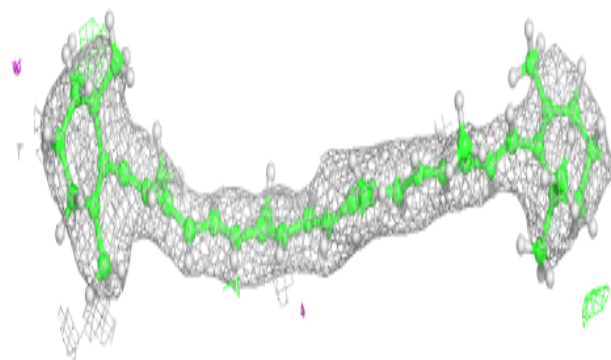
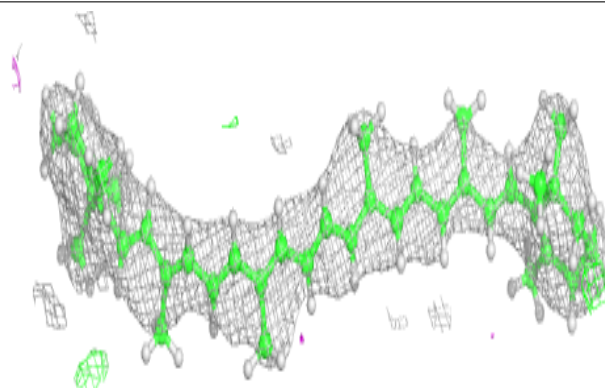


Electron density around STE M 104:

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

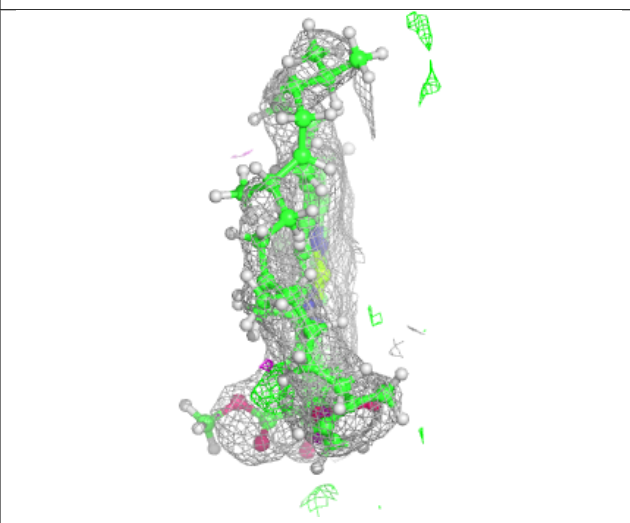
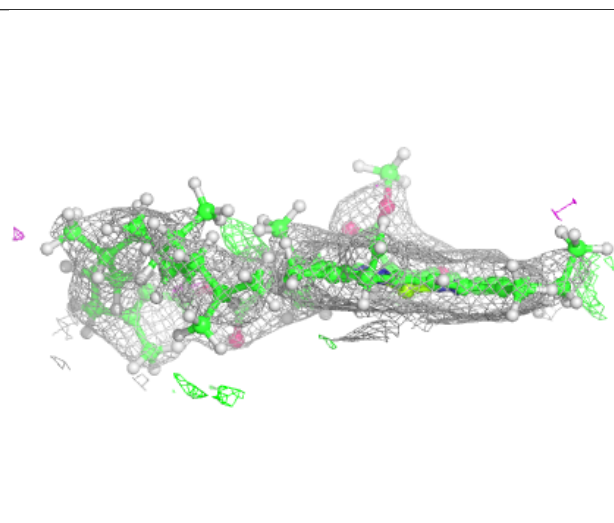
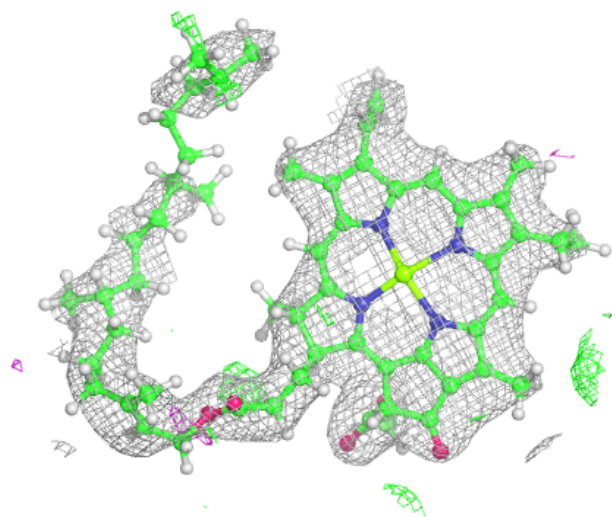
**Electron density around BCR x 101:**

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



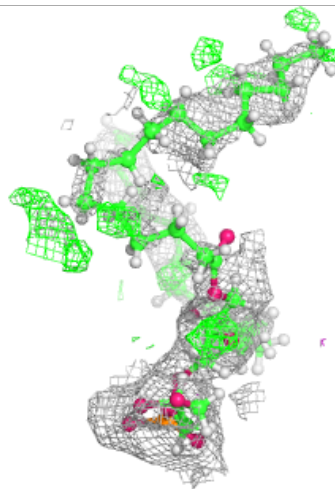
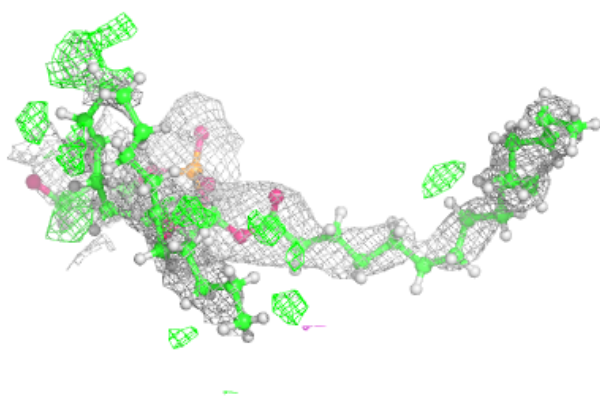
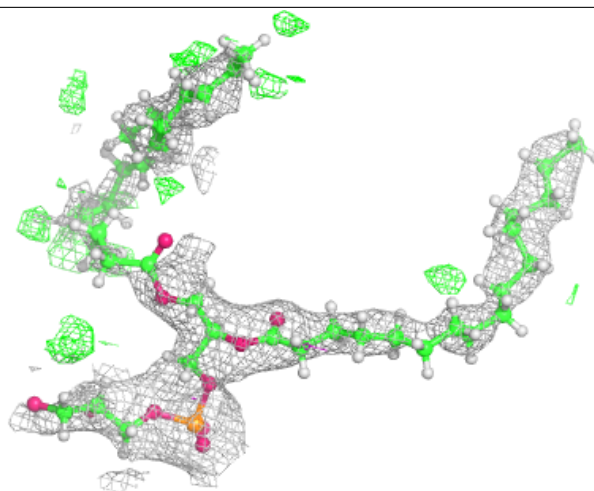
Electron density around CLA c 512:

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



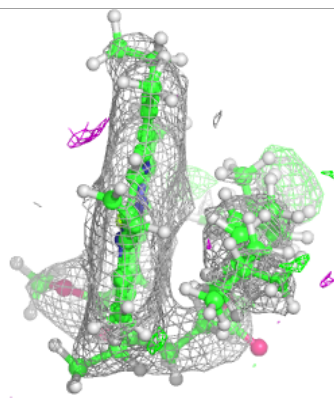
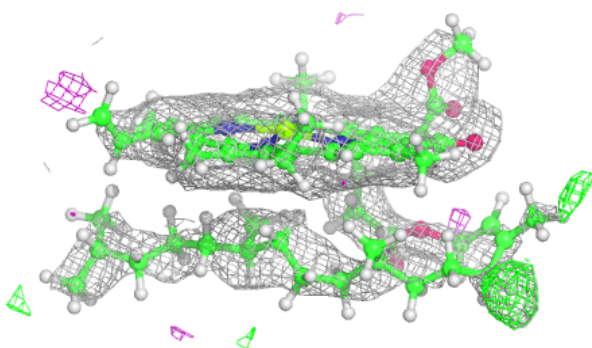
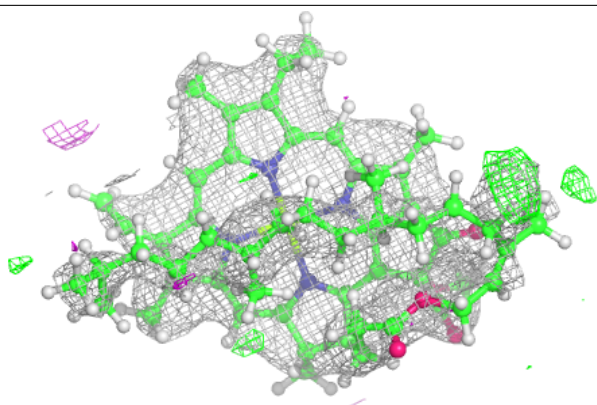
Electron density around LHG A 411:

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

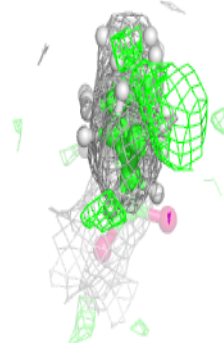
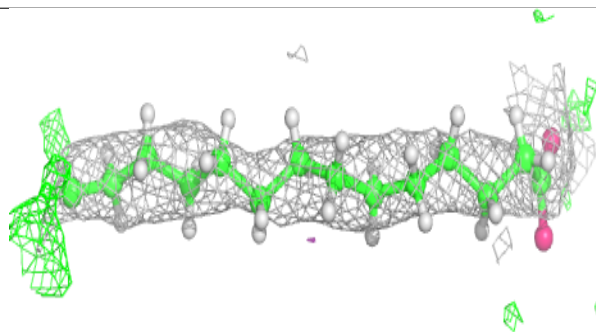
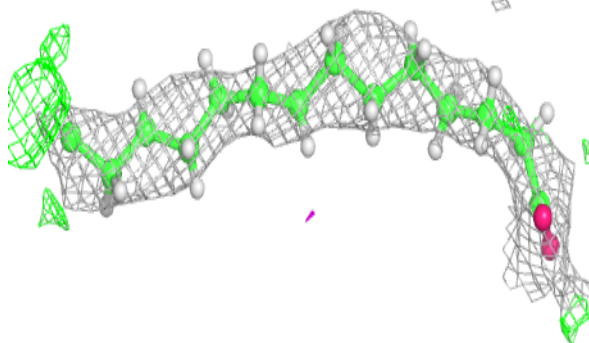


Electron density around CLA b 601:

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

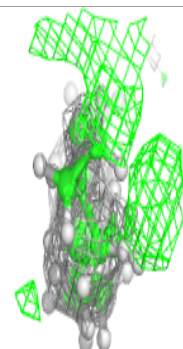
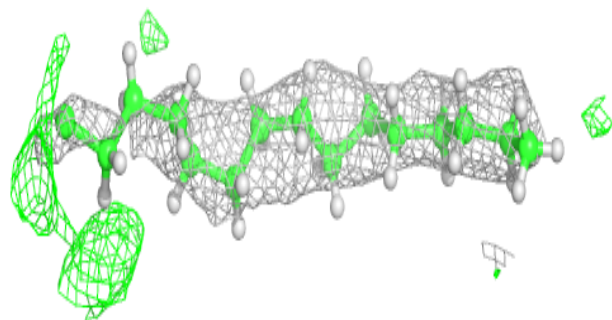
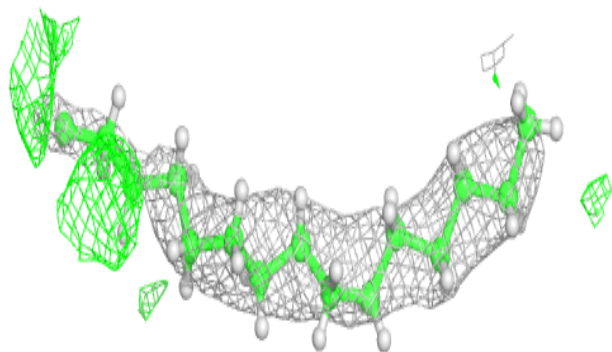
**Electron density around STE b 624:**

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

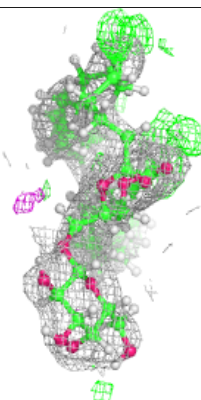
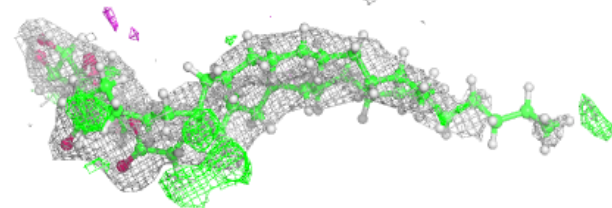
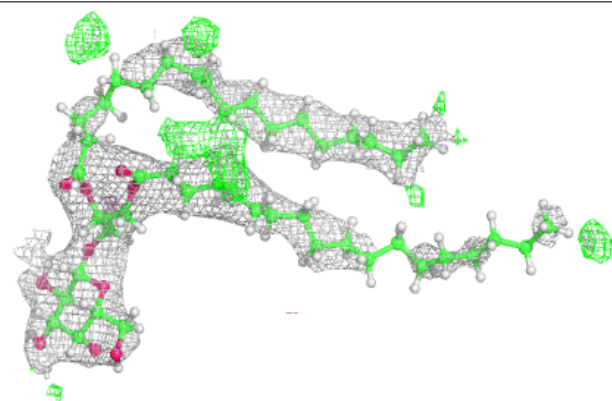


Electron density around STE b 625:

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

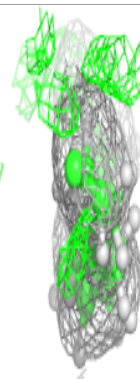
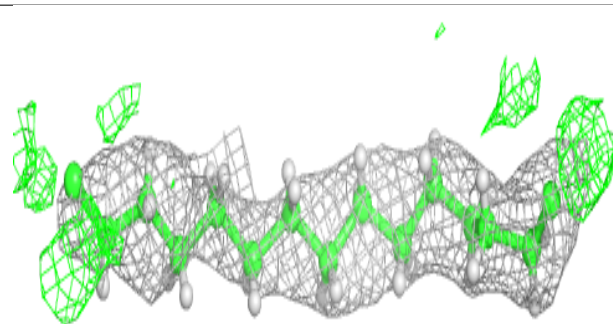
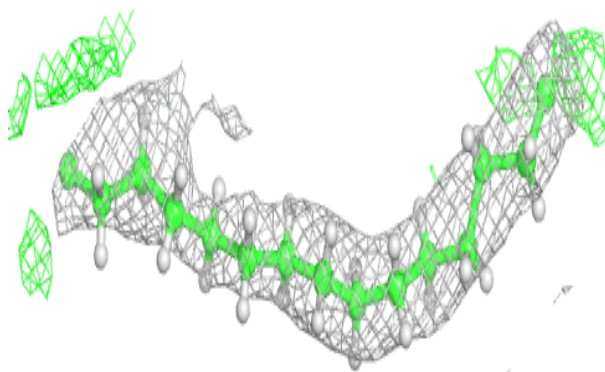
**Electron density around LMG a 414:**

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

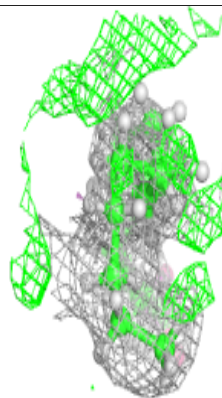
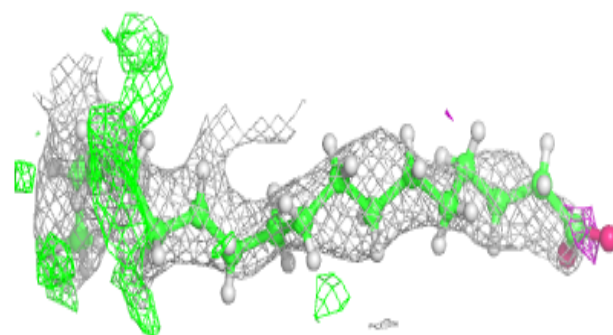
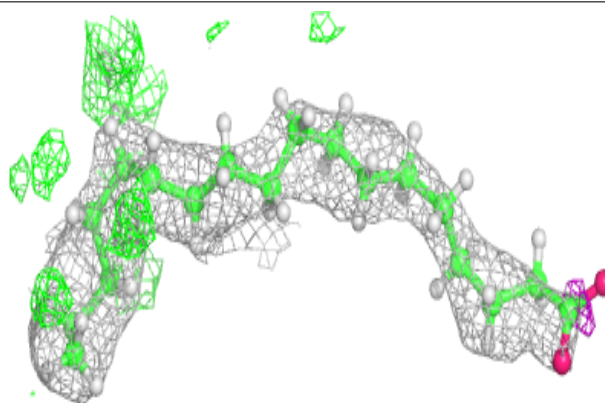


Electron density around STE I 102:

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

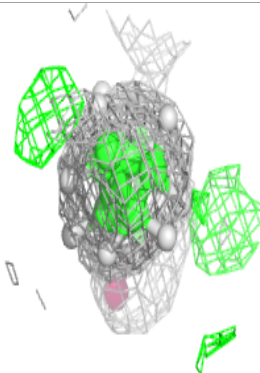
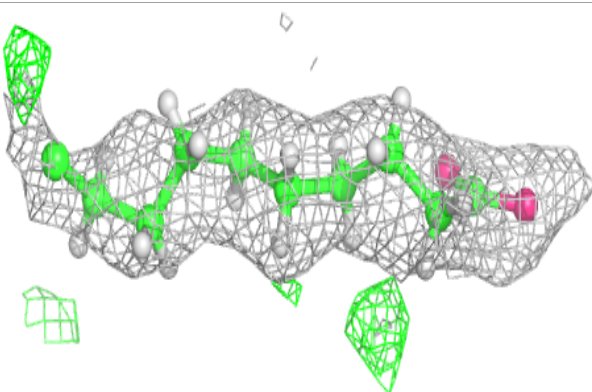
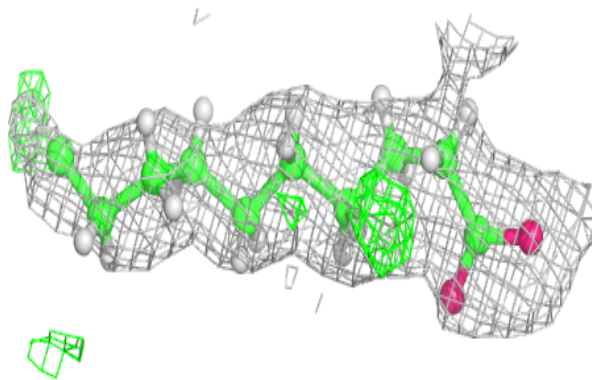
**Electron density around STE b 629:**

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

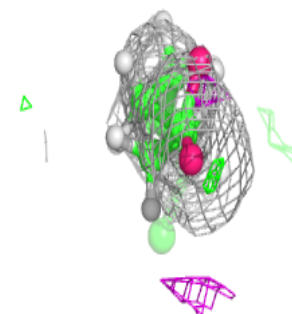
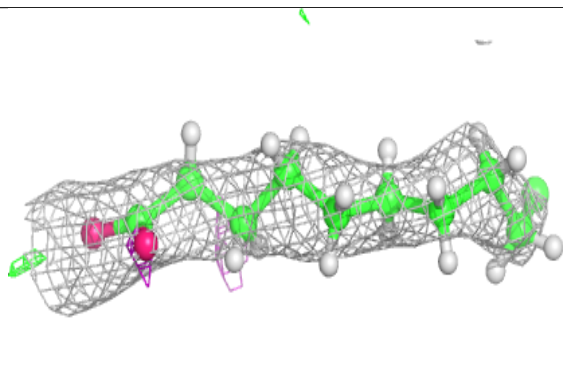
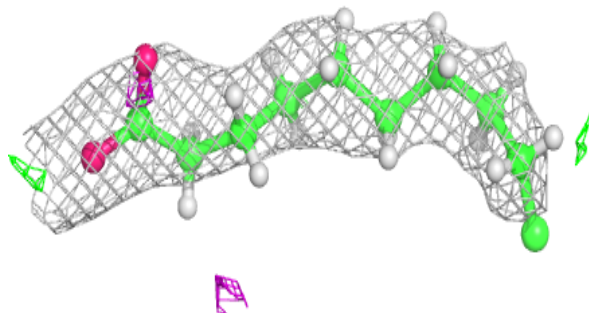


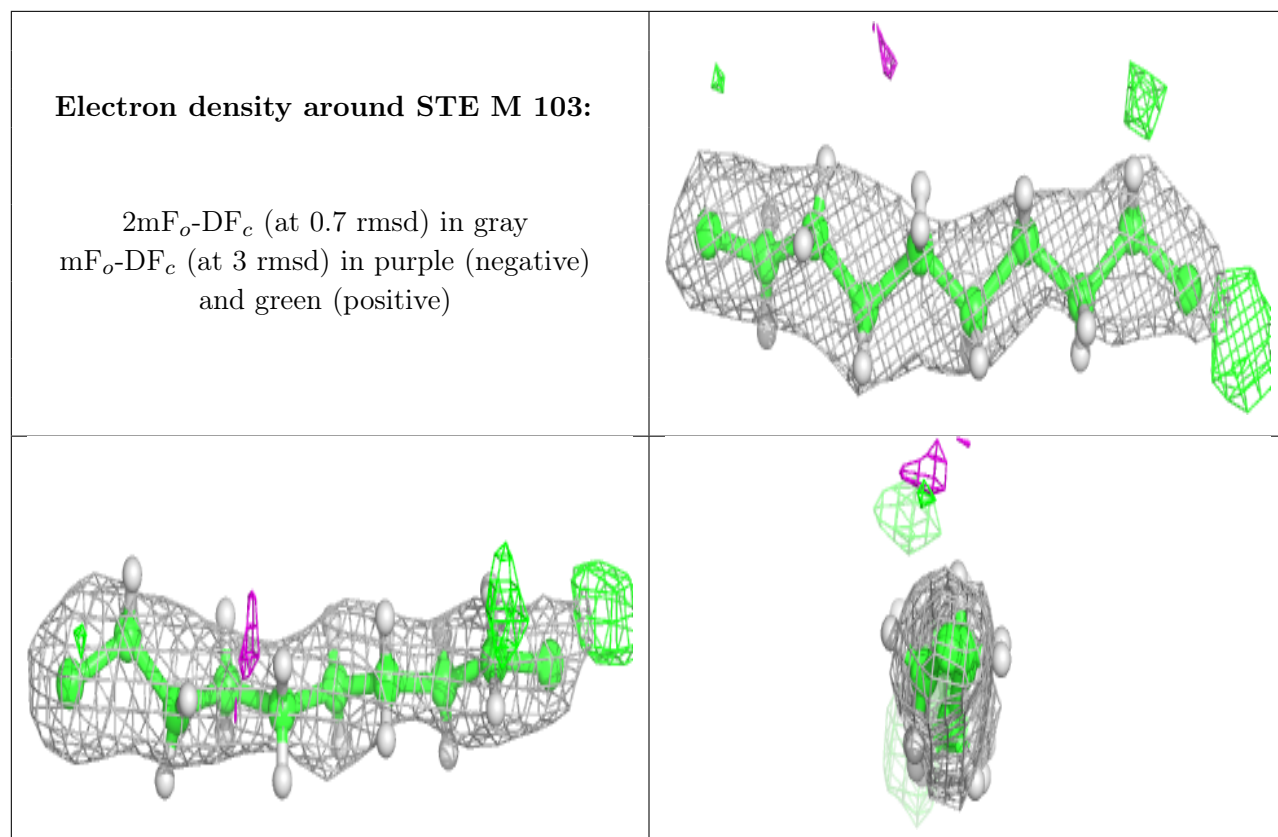
Electron density around STE J 101:

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

**Electron density around STE L 103:**

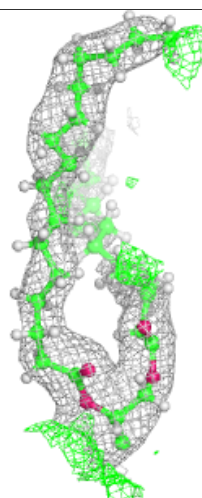
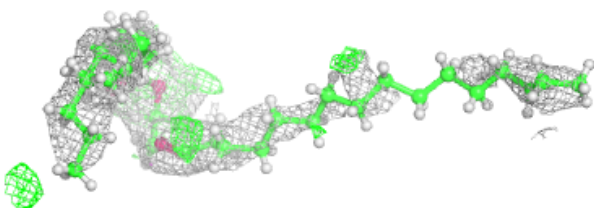
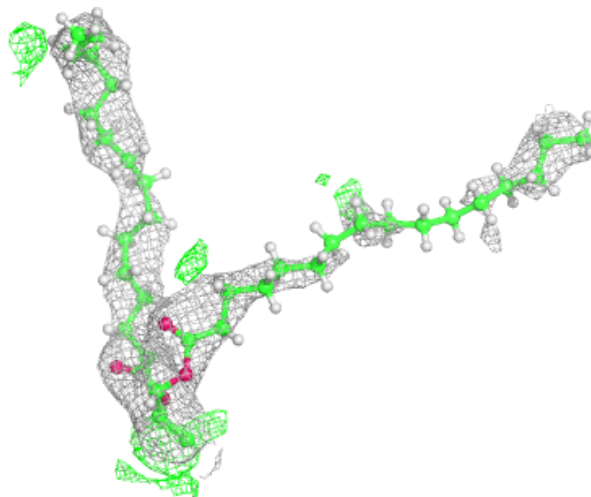
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





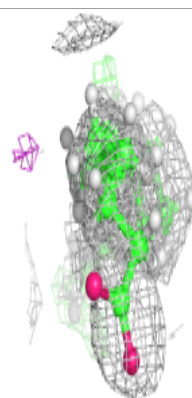
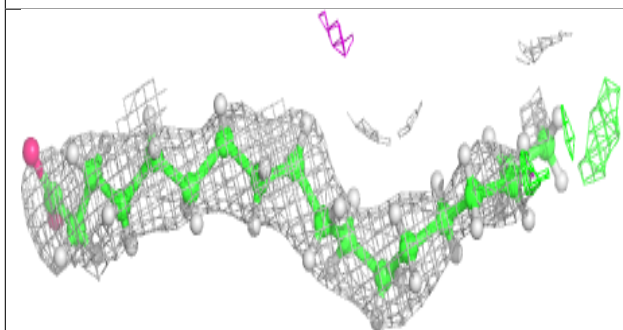
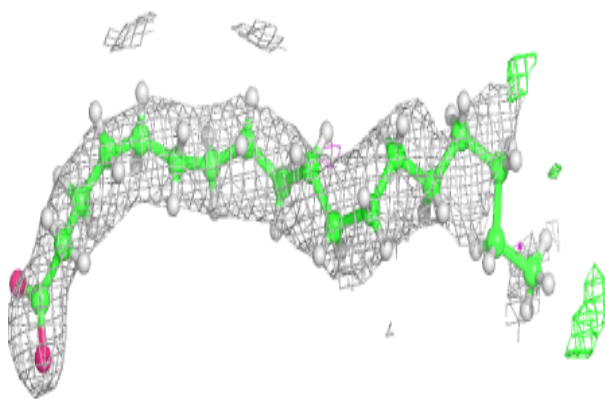
Electron density around SQD A 412:

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

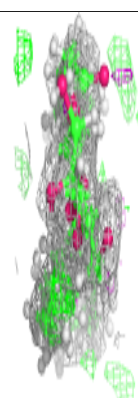
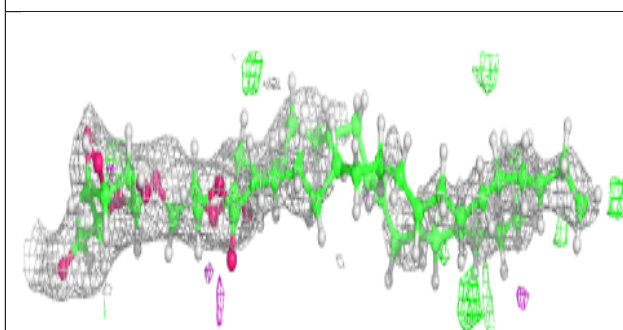
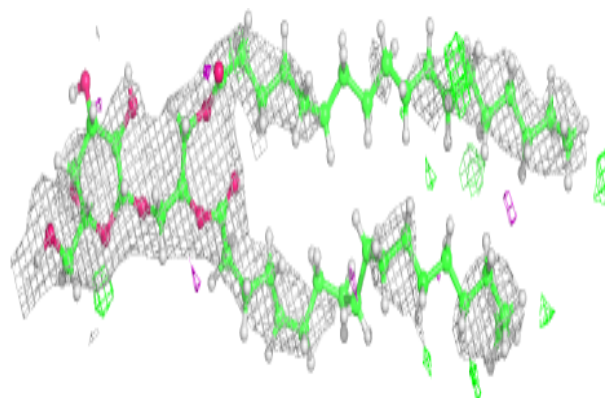


Electron density around STE b 621:

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

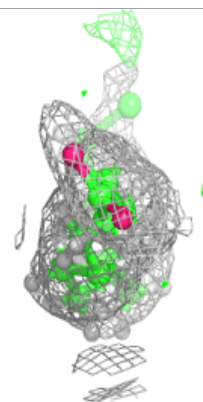
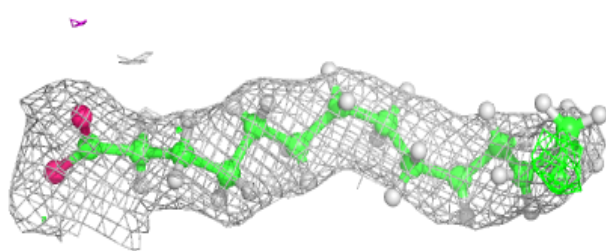
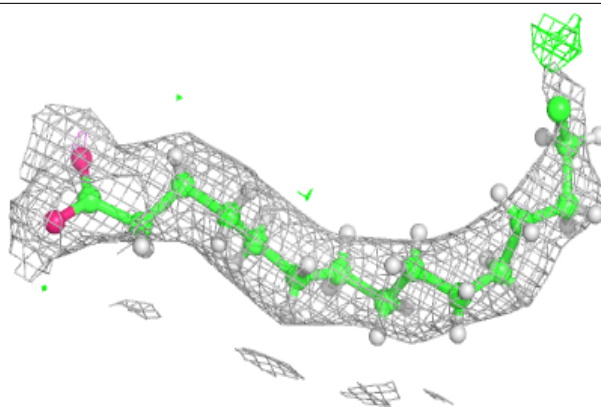
**Electron density around LMG b 622:**

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

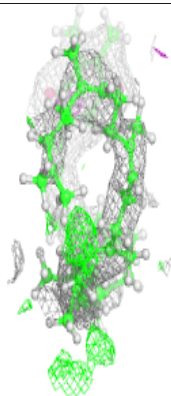
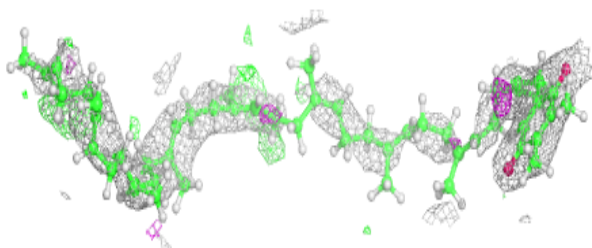
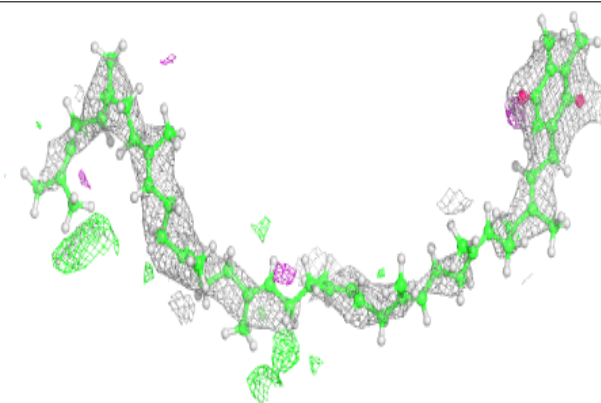


Electron density around STE B 619:

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

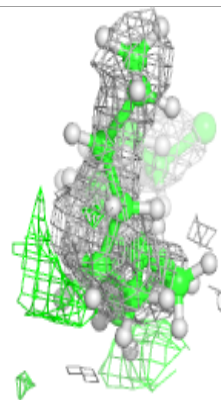
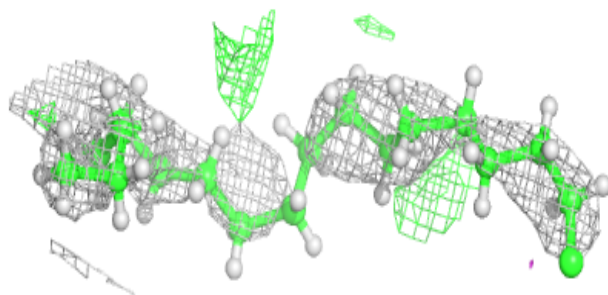
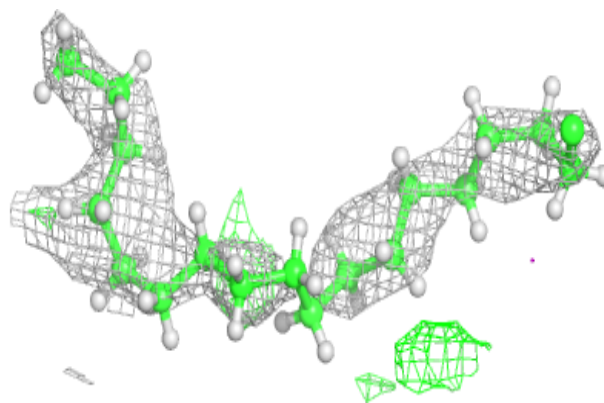
**Electron density around PL9 a 409:**

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



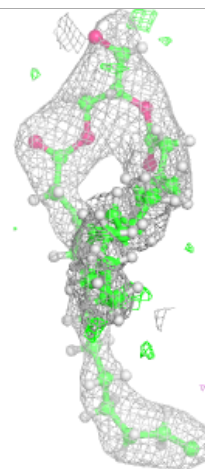
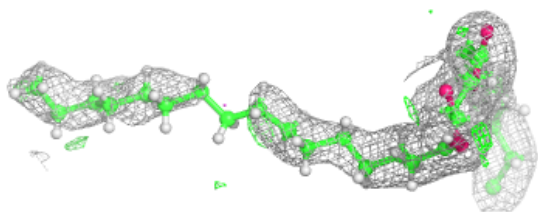
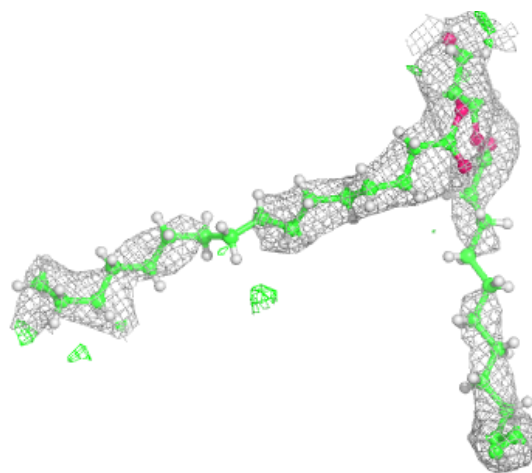
Electron density around STE H 104:

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



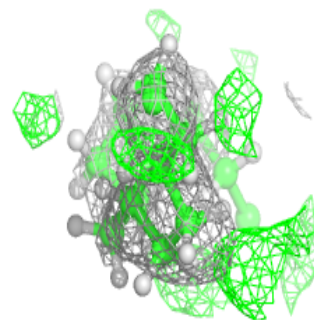
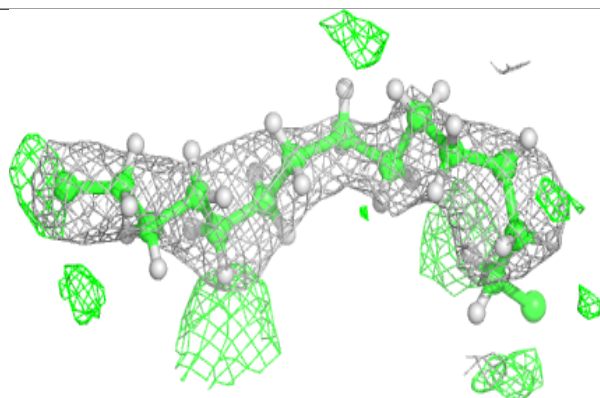
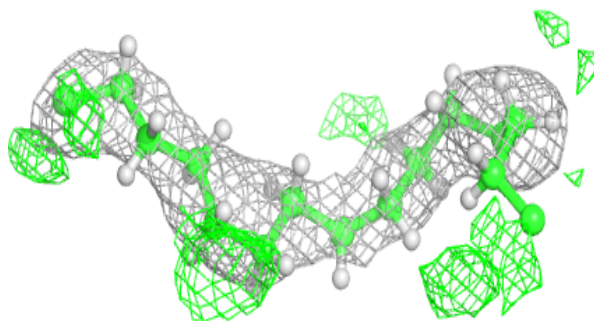
Electron density around SQD † 102:

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

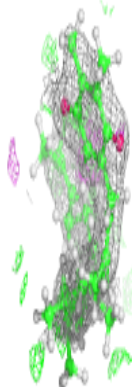
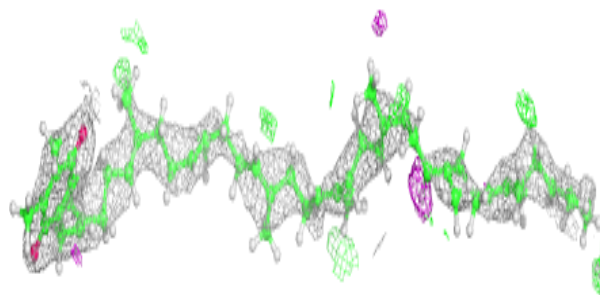
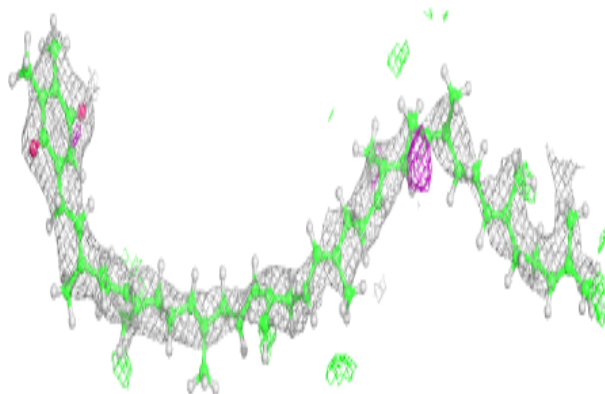


Electron density around STE a 413:

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

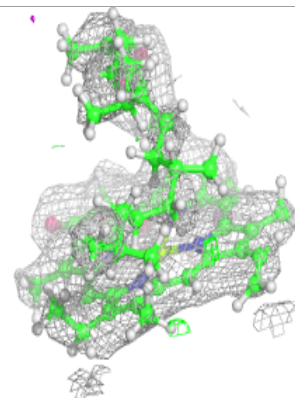
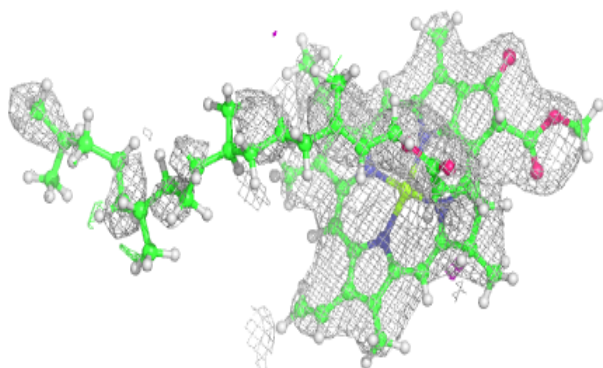
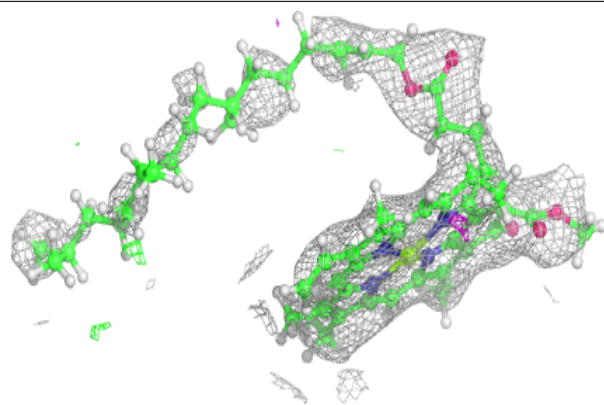
**Electron density around PL9 A 408:**

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

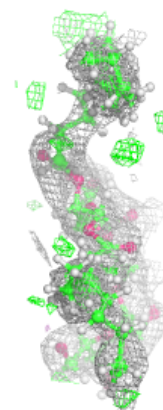
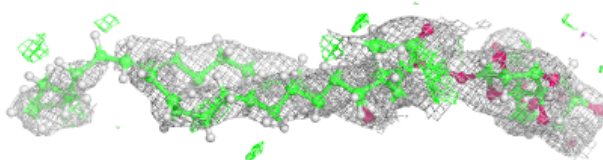
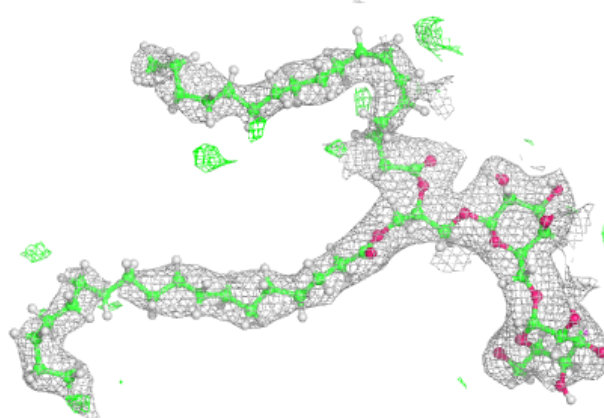


Electron density around CLA C 513:

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

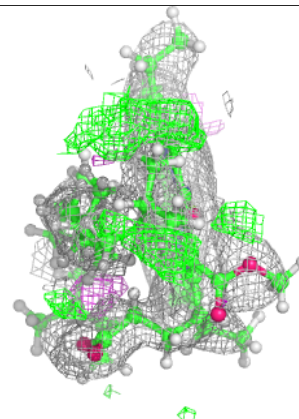
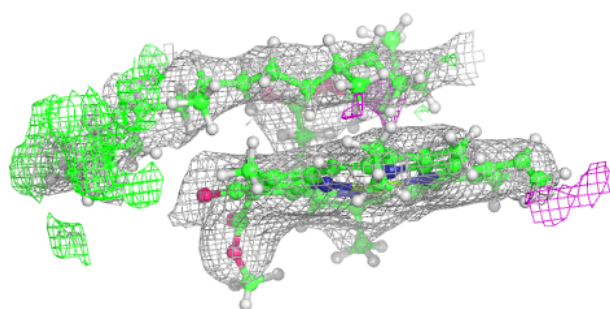
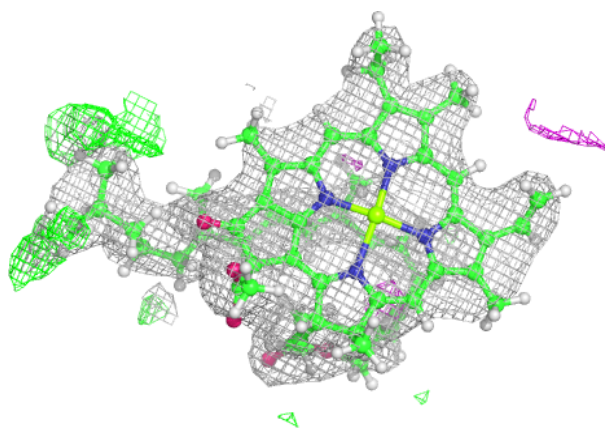
**Electron density around DGD A 413:**

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

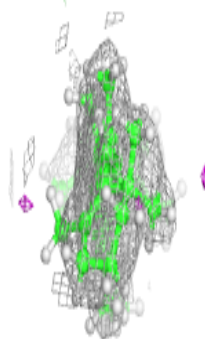
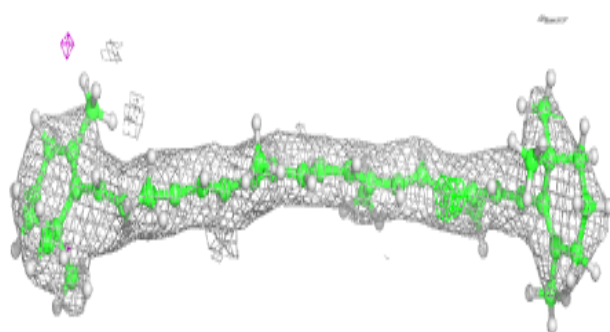
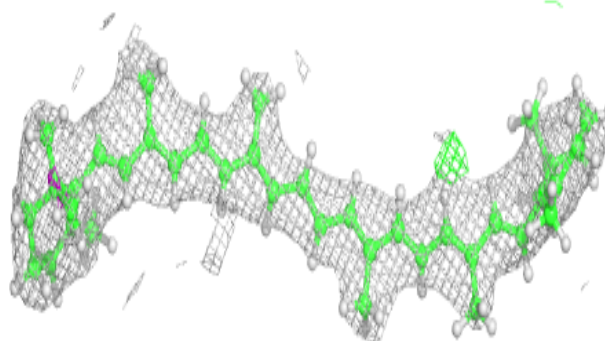


Electron density around CLA H 101:

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

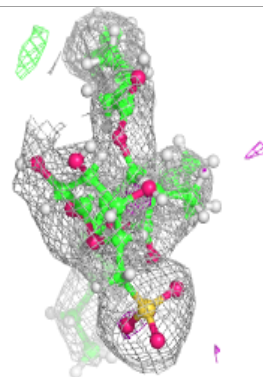
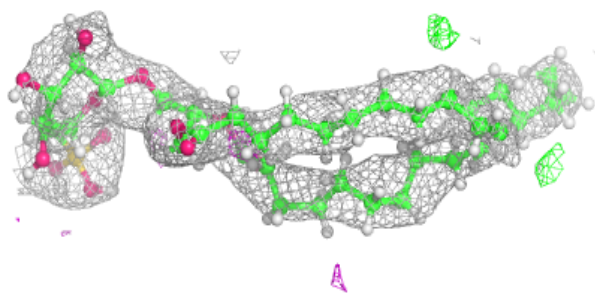
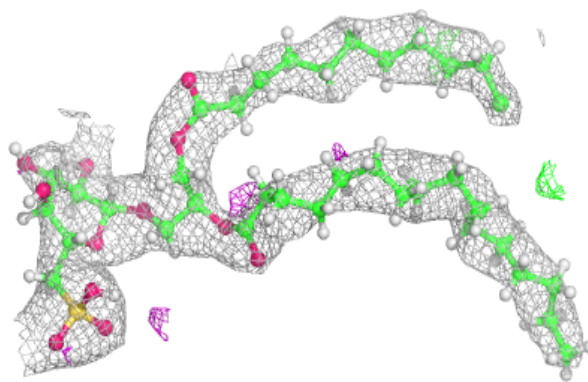
**Electron density around BCR K 102:**

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

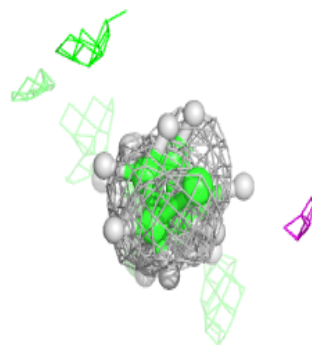
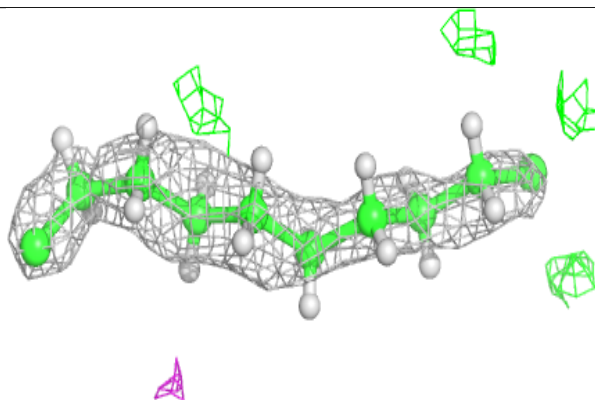
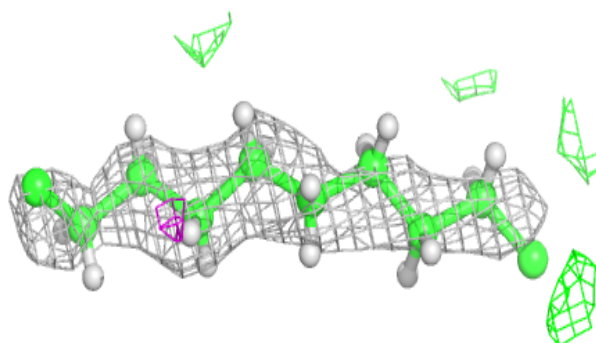


Electron density around SQD L 101:

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

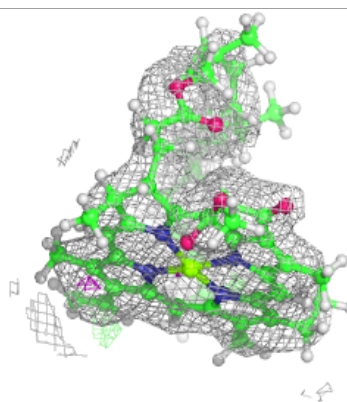
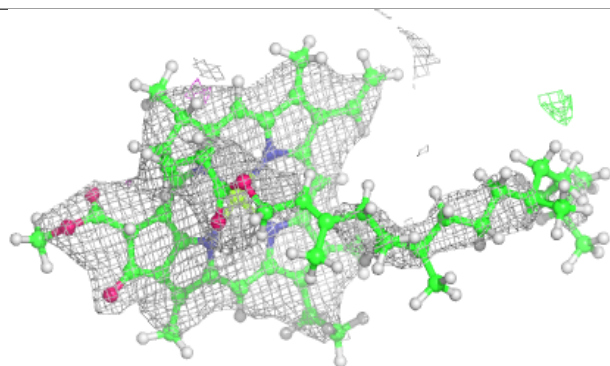
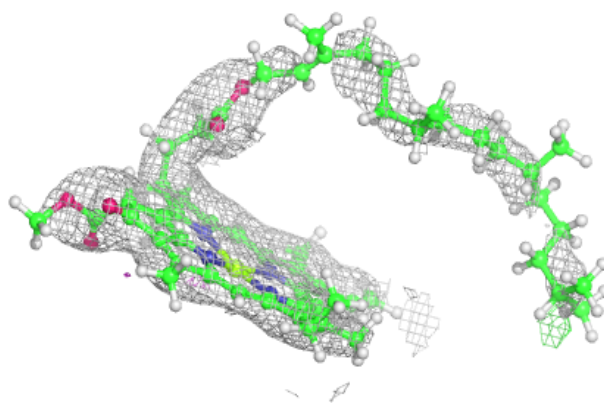
**Electron density around STE t 104:**

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

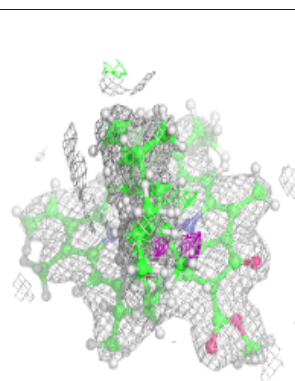
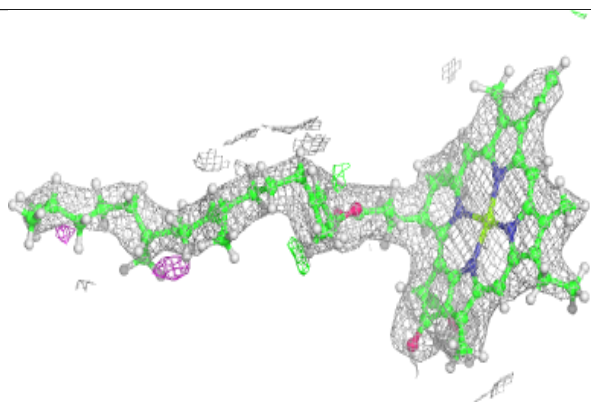
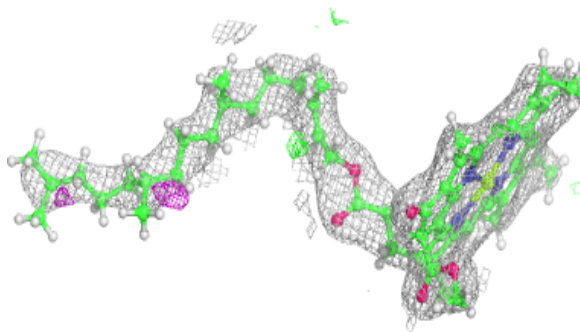


Electron density around CLA c 513:

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

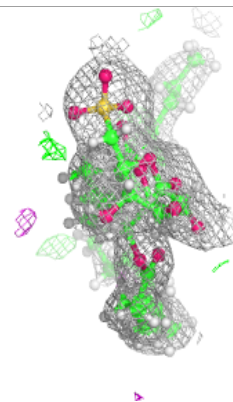
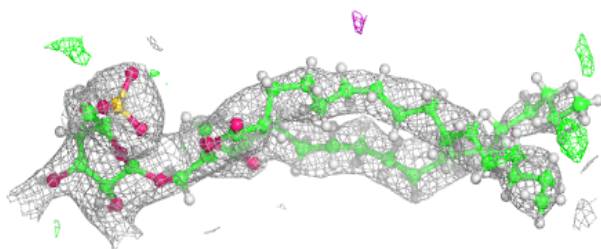
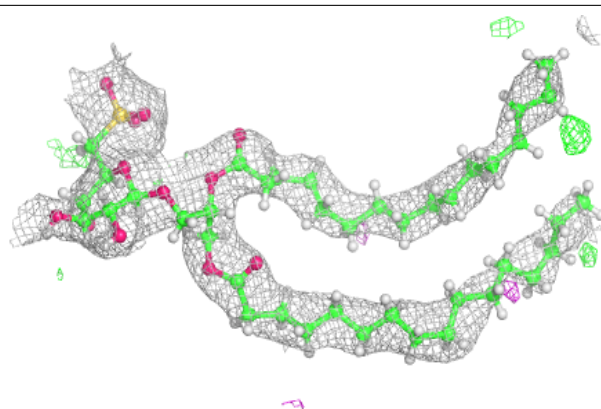
**Electron density around CLA c 502:**

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

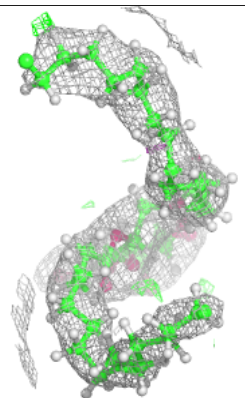
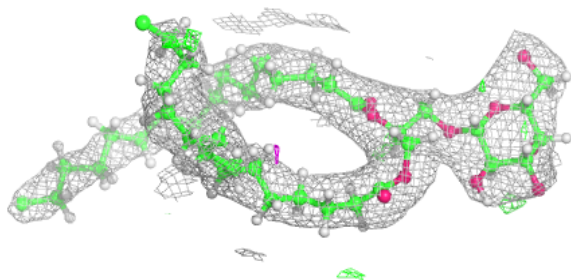
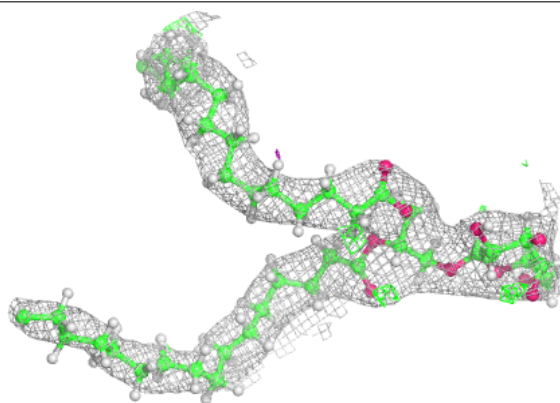


Electron density around SQD B 621:

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

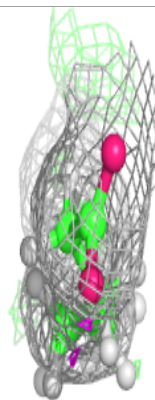
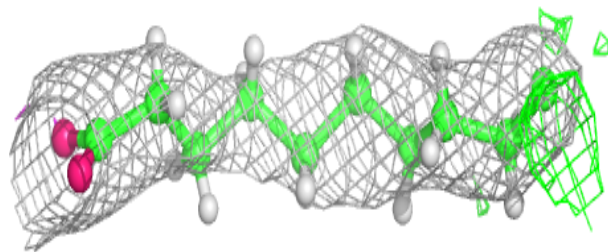
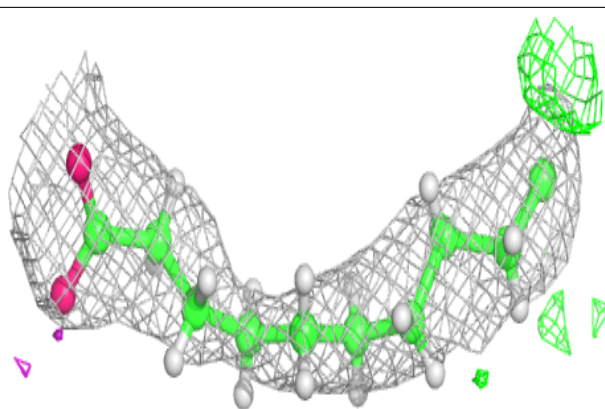
**Electron density around LMG M 101:**

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

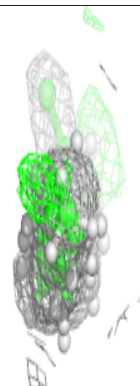
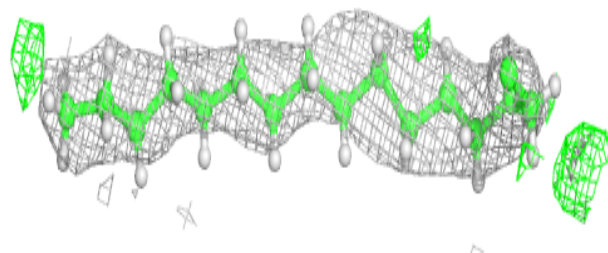
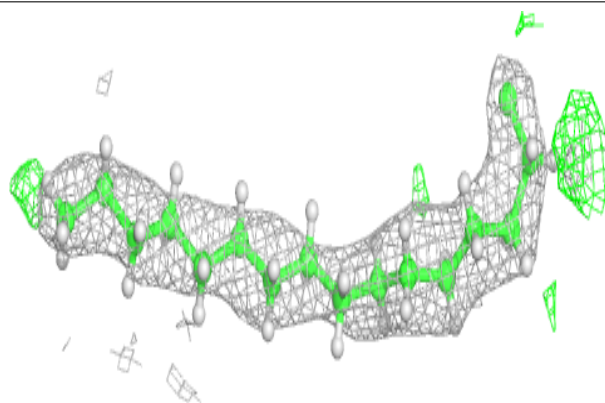


Electron density around STE C 519:

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

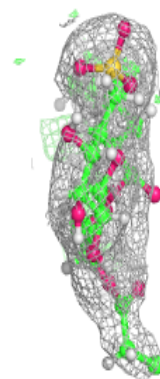
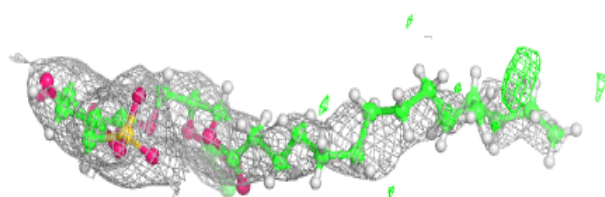
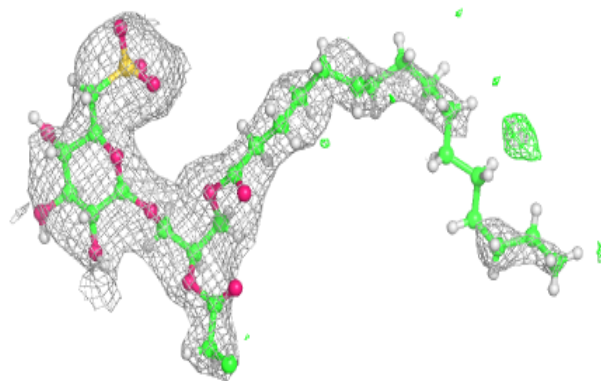
**Electron density around STE C 520:**

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



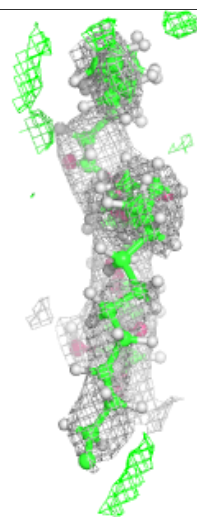
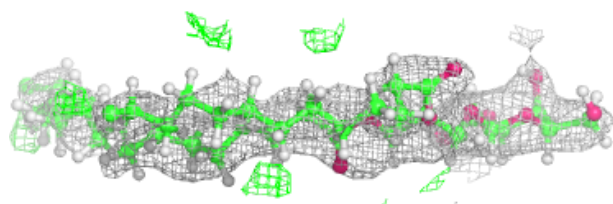
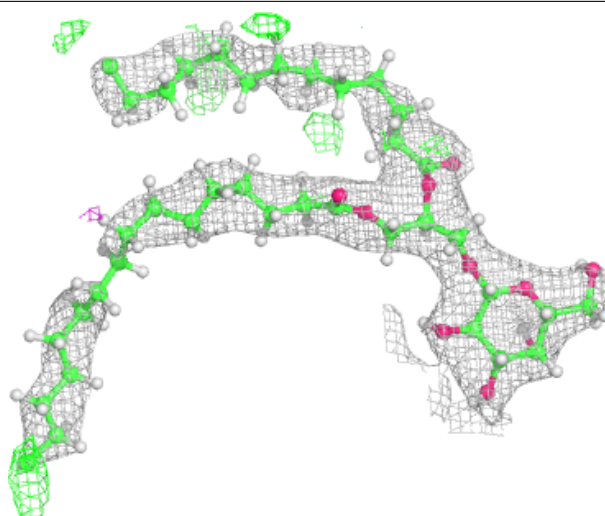
Electron density around SQD f 102:

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



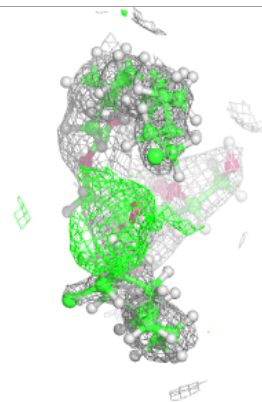
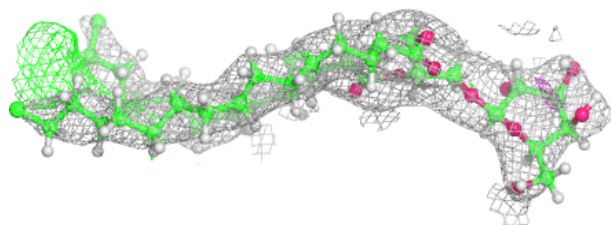
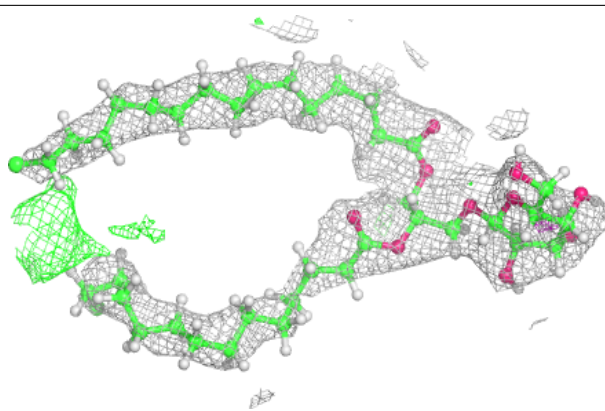
Electron density around LMG Y 101:

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



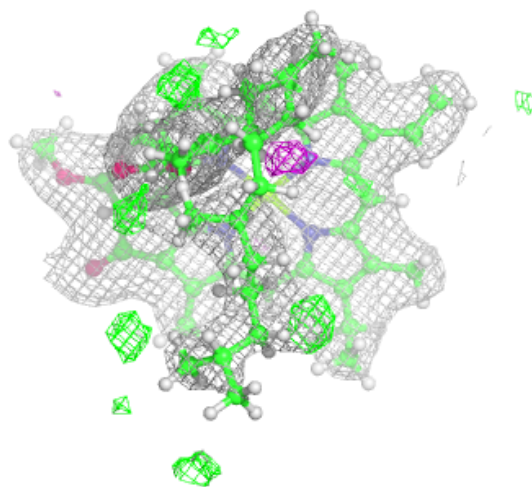
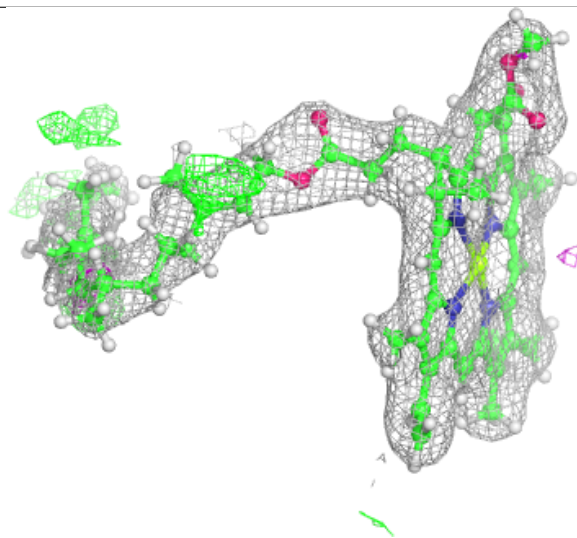
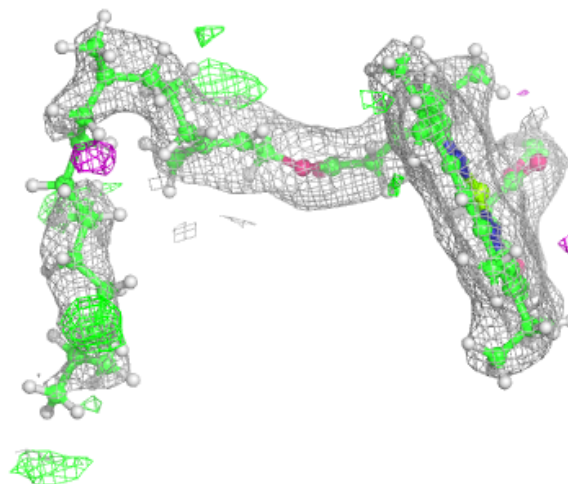
Electron density around LMG c 521:

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



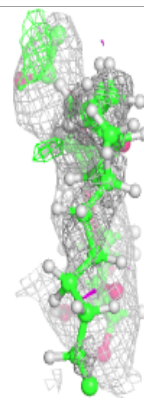
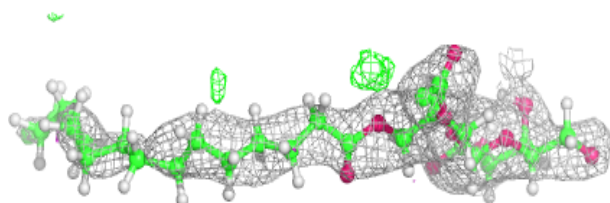
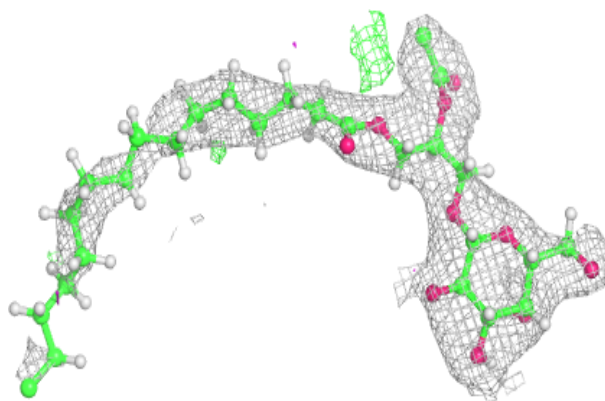
Electron density around CLA a 405:

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

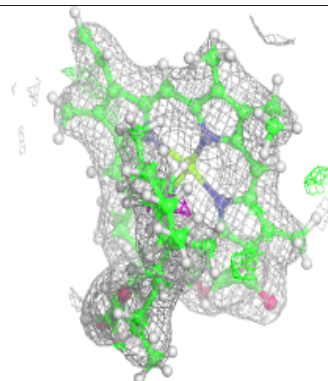
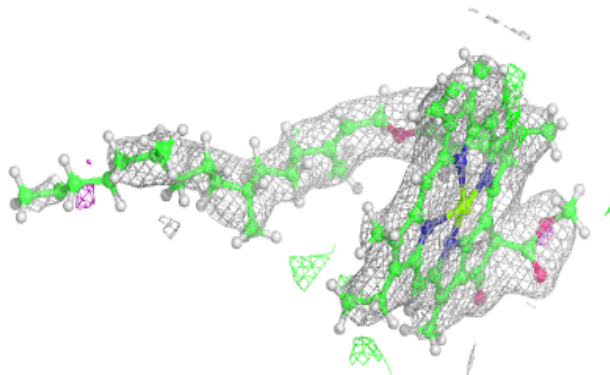
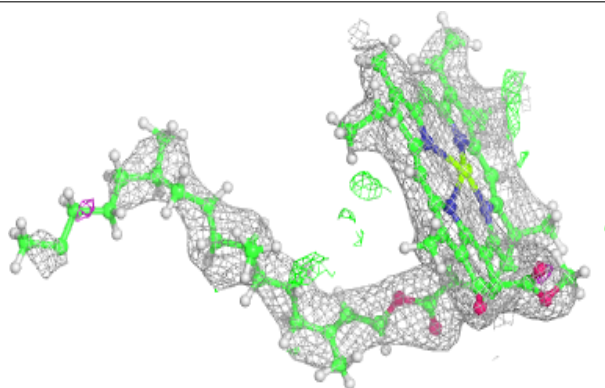


Electron density around LMG c 518:

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

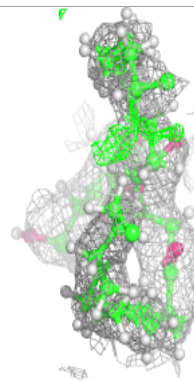
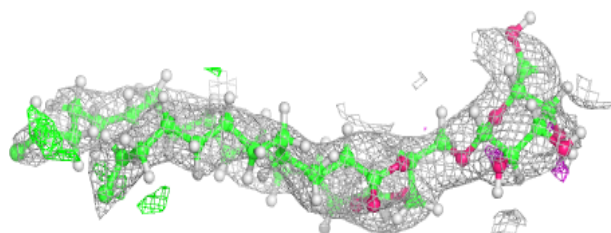
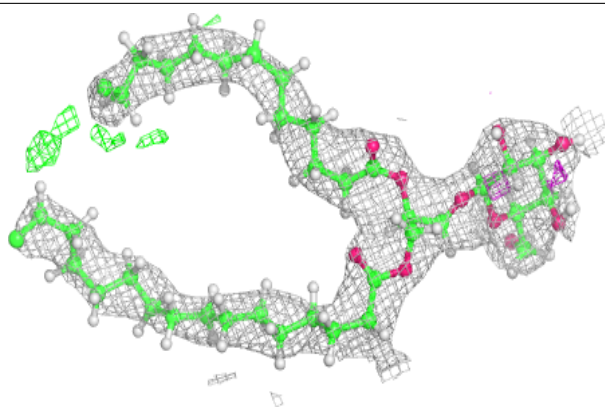
**Electron density around CLA c 508:**

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

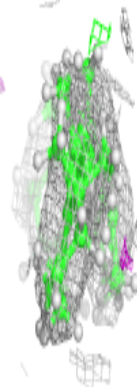
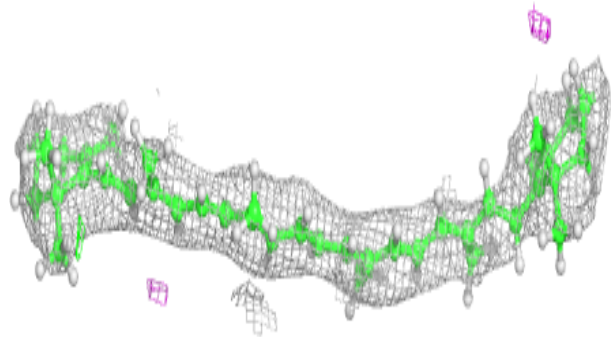
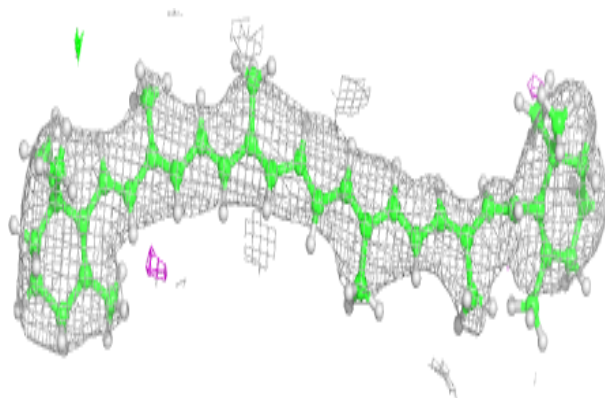


Electron density around LMG A 409:

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

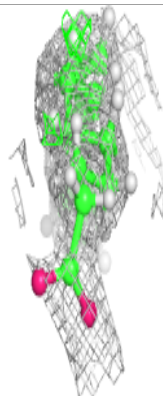
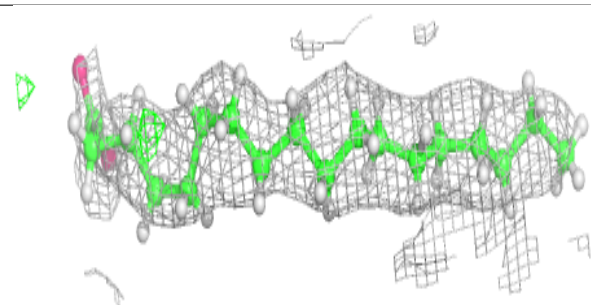
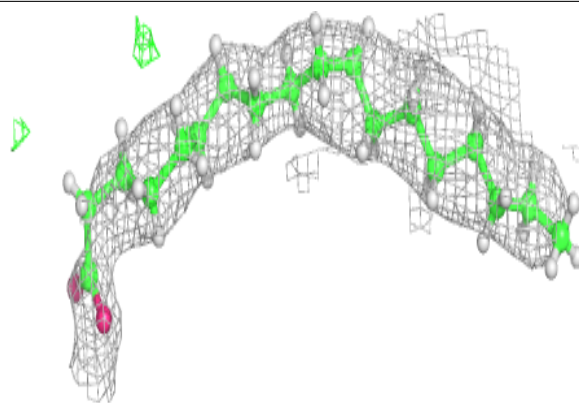
**Electron density around BCR d 406:**

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

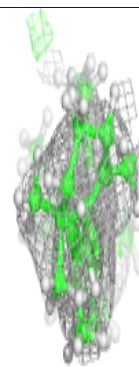
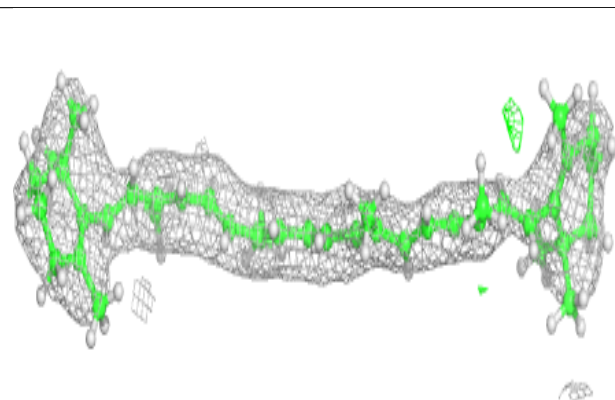
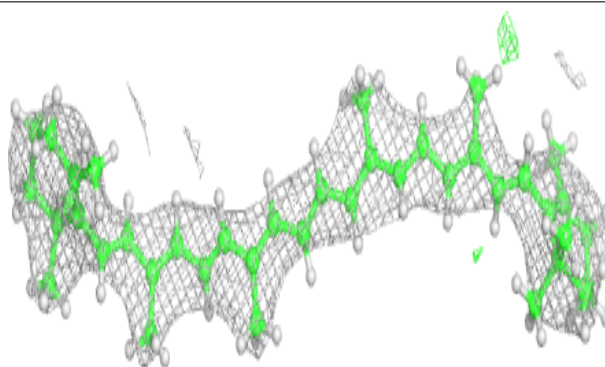


Electron density around STE X 101:

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

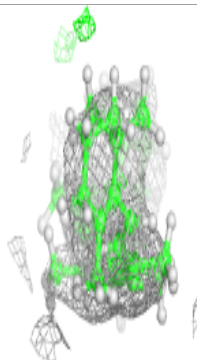
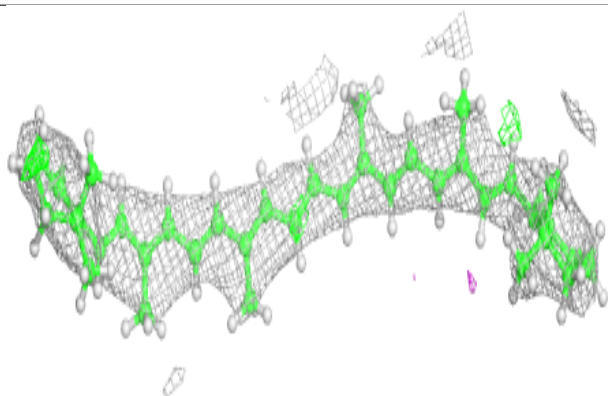
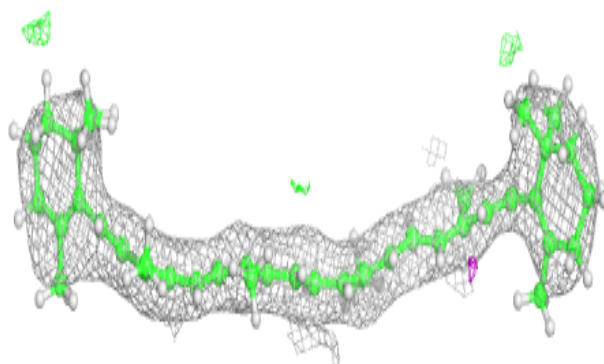
**Electron density around BCR k 102:**

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

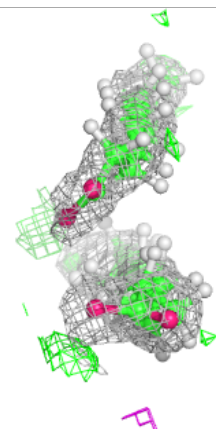
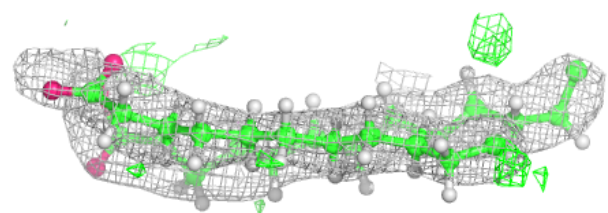
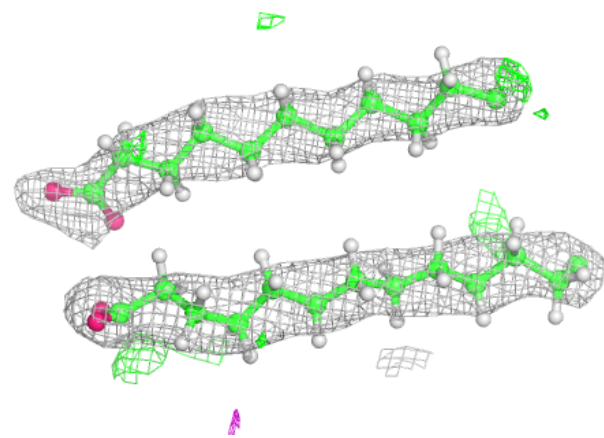


Electron density around BCR k 103:

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

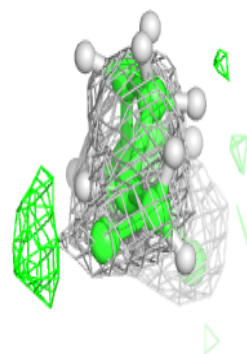
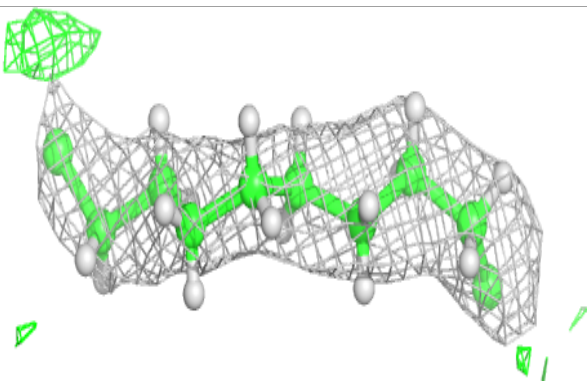
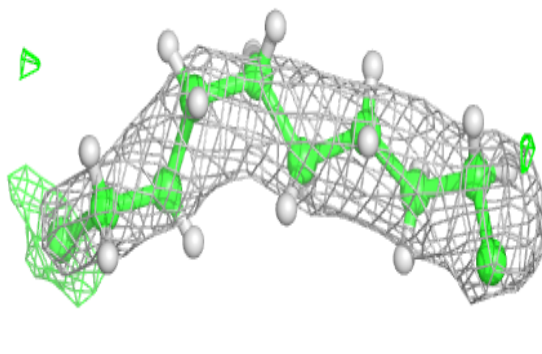
**Electron density around LMG B 620:**

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

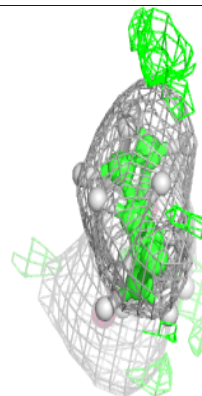
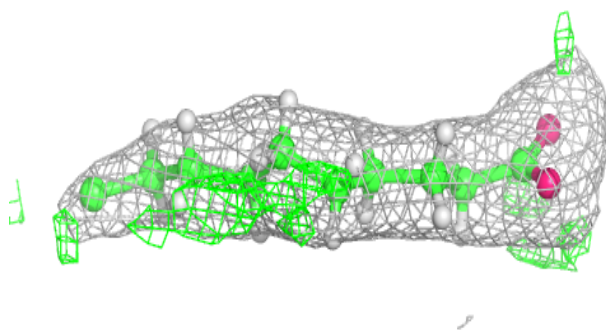
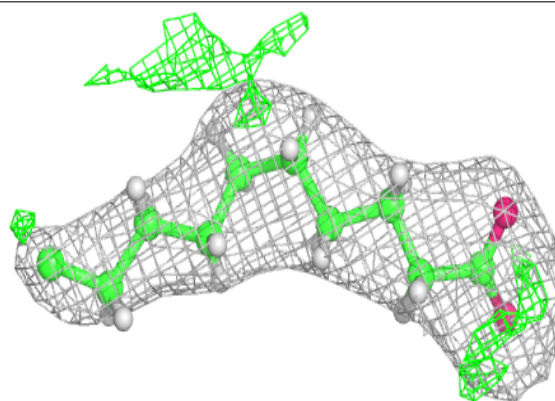


Electron density around STE b 627:

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

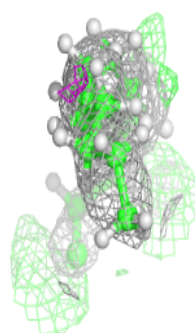
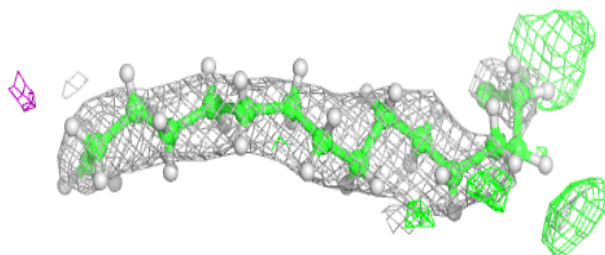
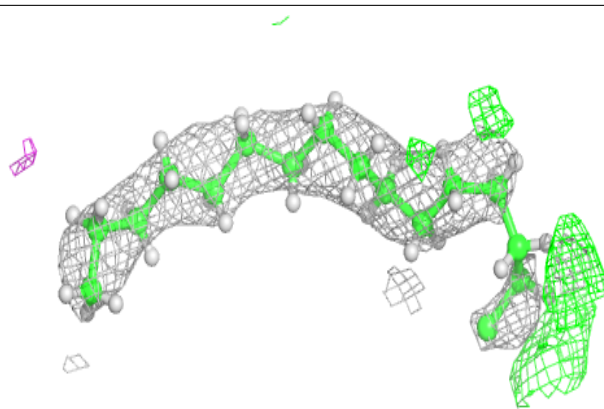
**Electron density around STE C 521:**

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

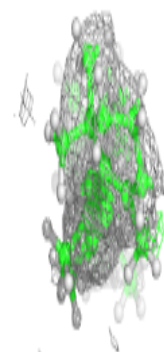
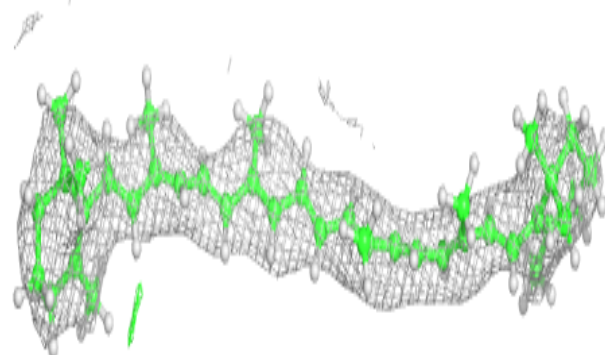
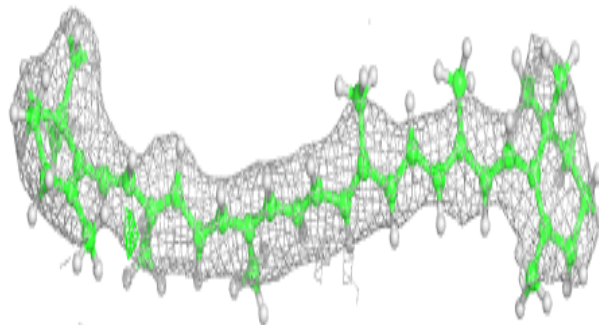


Electron density around STE b 620:

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

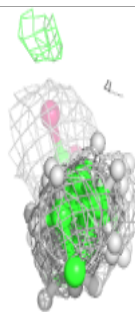
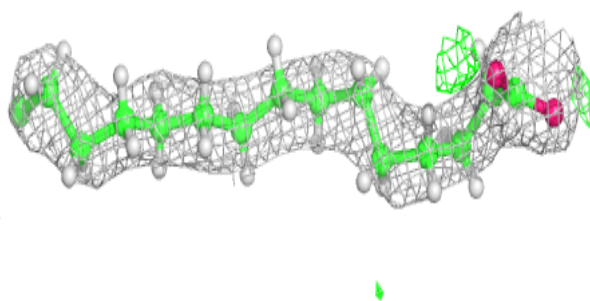
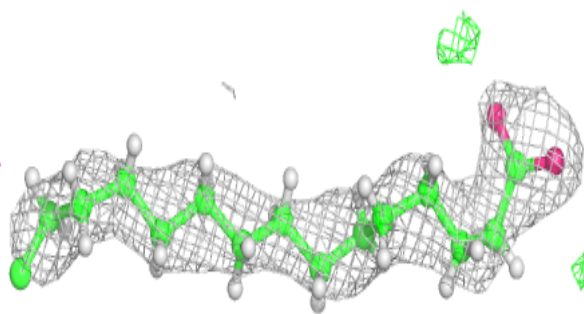
**Electron density around BCR k 101:**

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

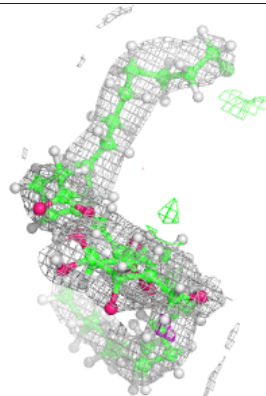
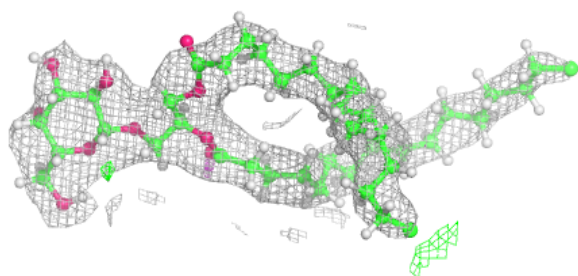
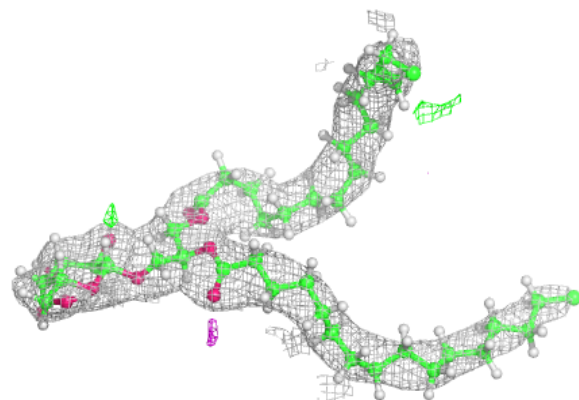


Electron density around STE d 411:

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

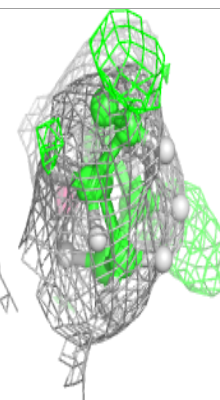
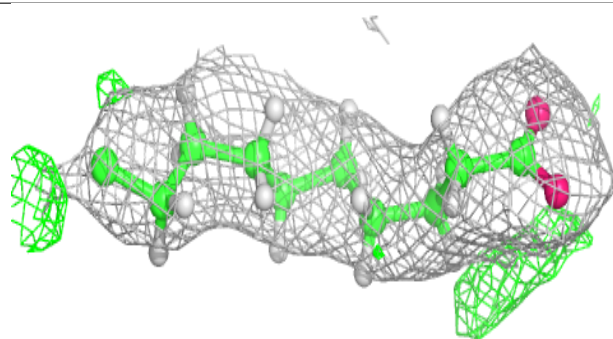
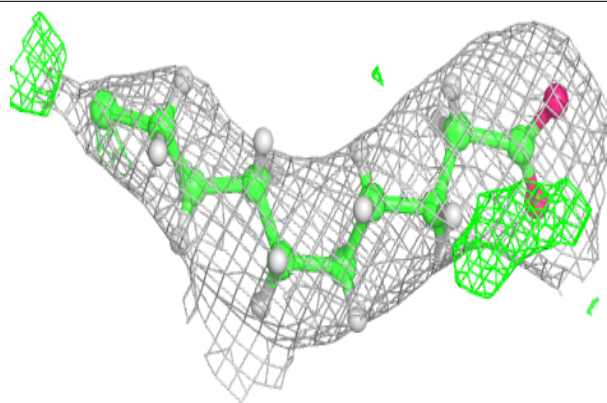
**Electron density around LMG m 101:**

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

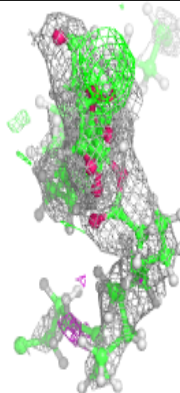
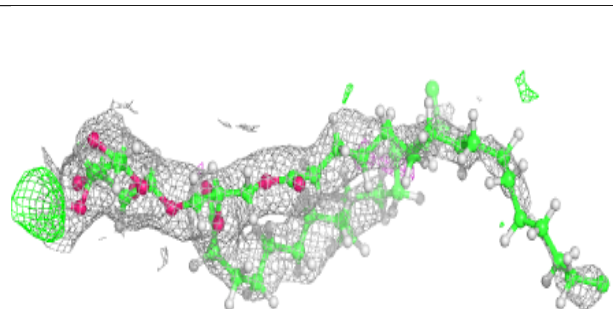
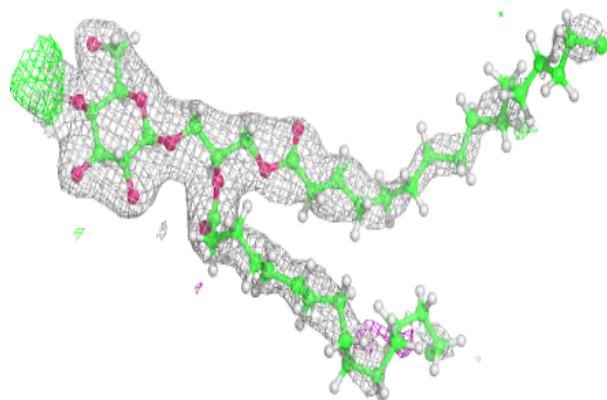


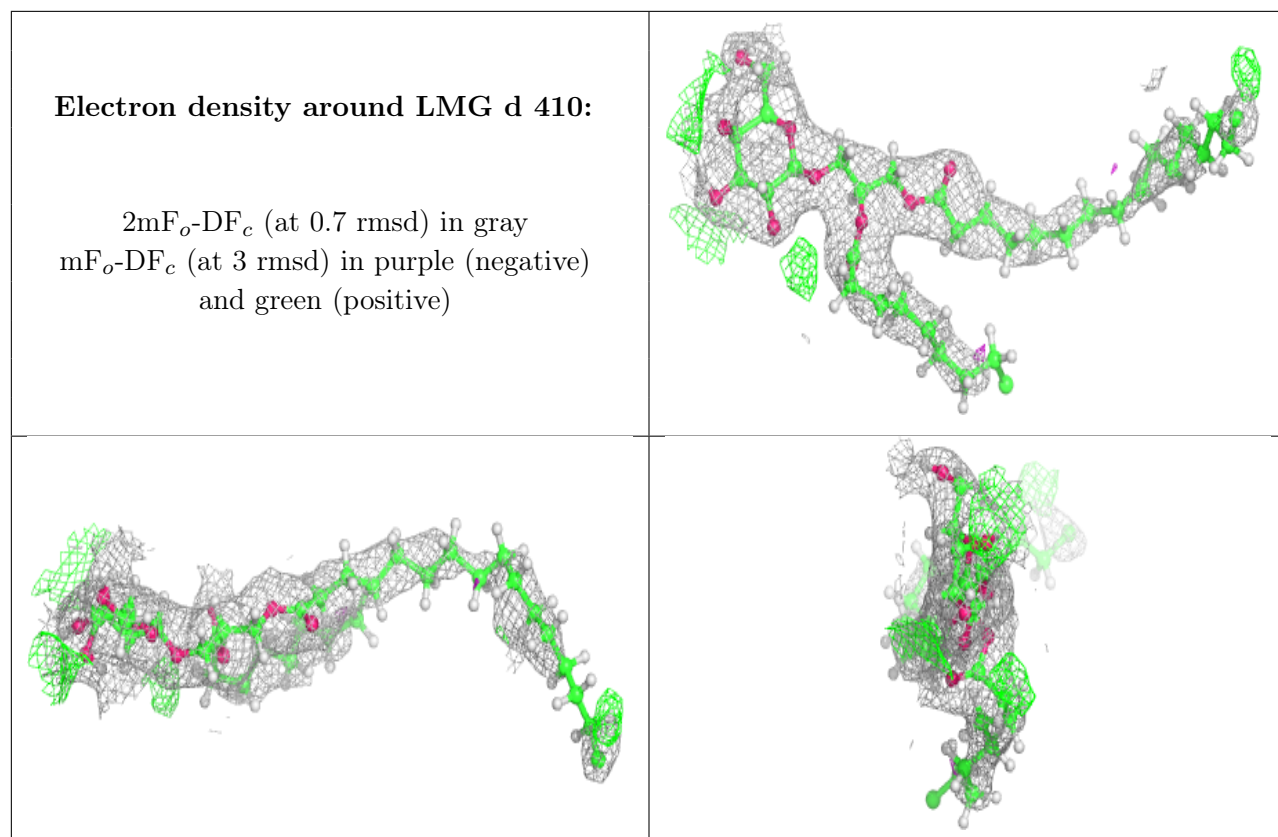
Electron density around STE B 622:

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

**Electron density around LMG D 408:**

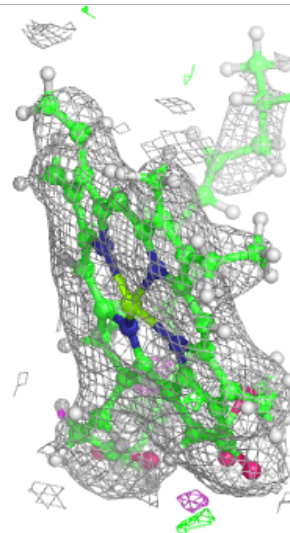
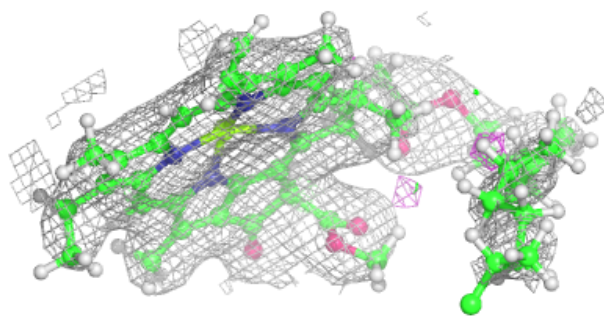
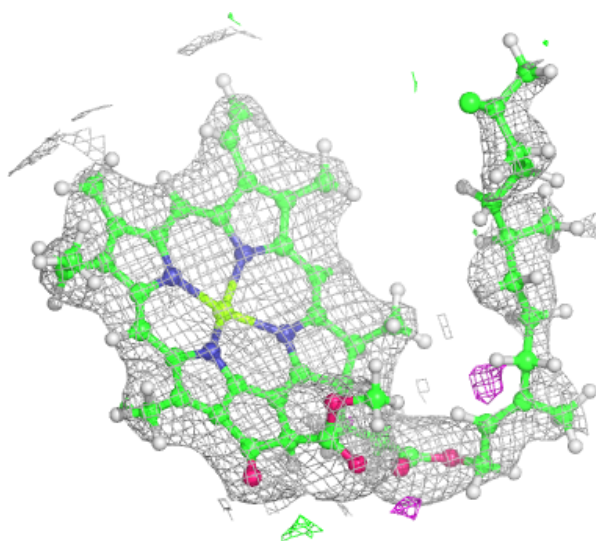
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





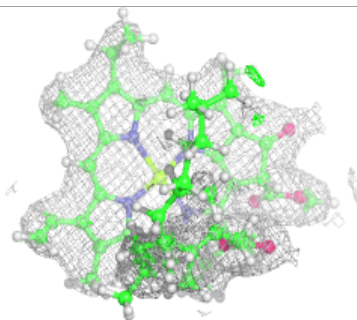
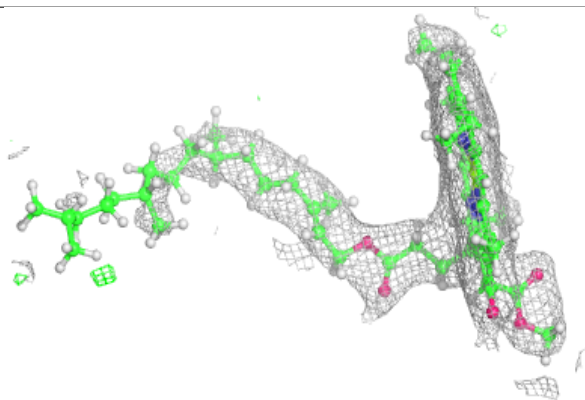
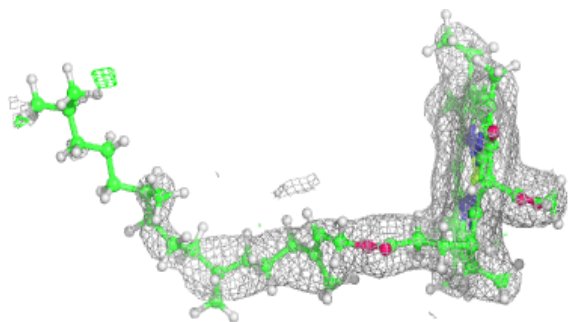
Electron density around CLA b 616:

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

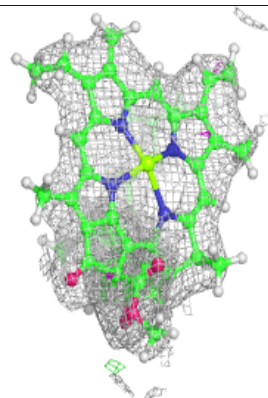
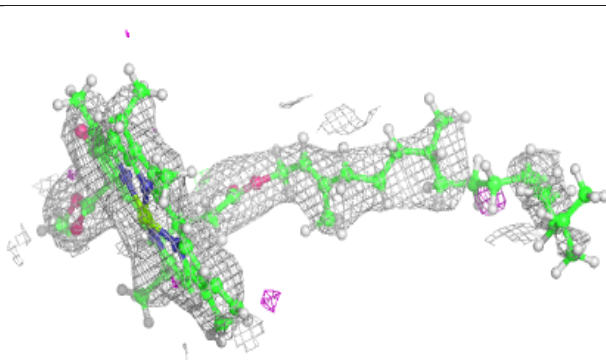
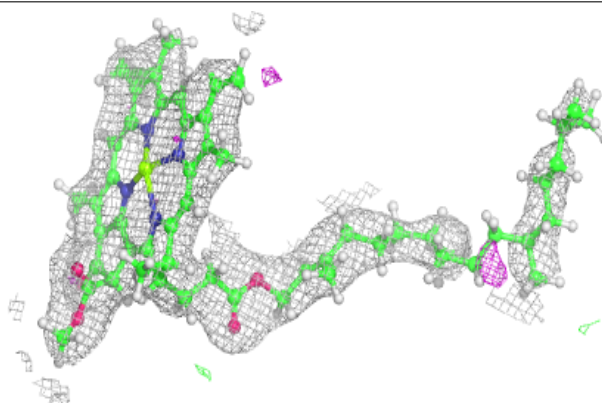


Electron density around CLA D 405:

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

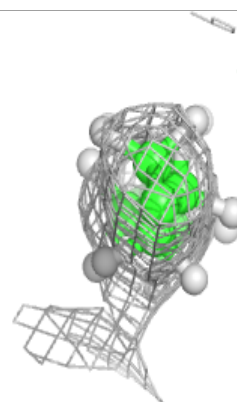
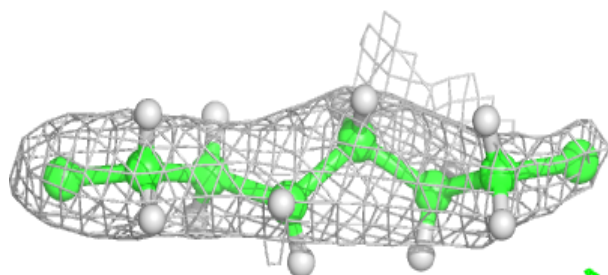
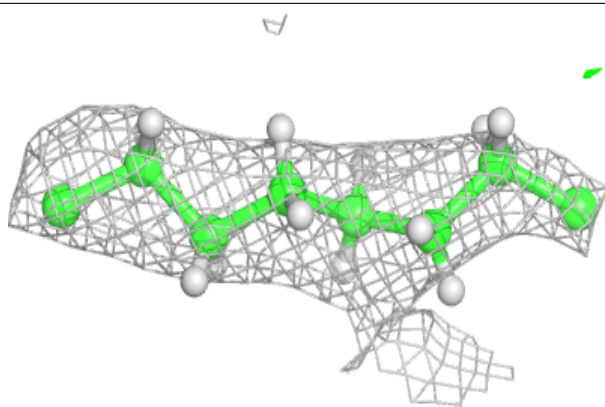
**Electron density around CLA d 405:**

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

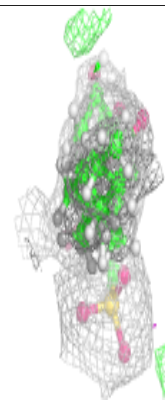
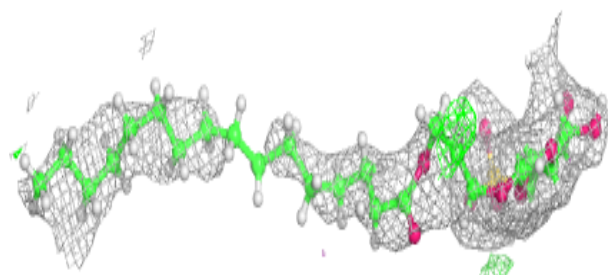
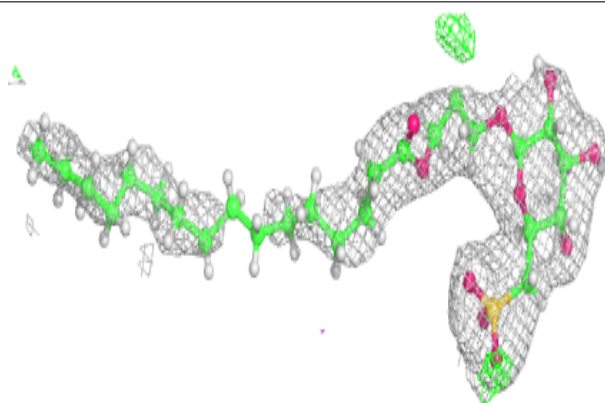


Electron density around STE Z 101:

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

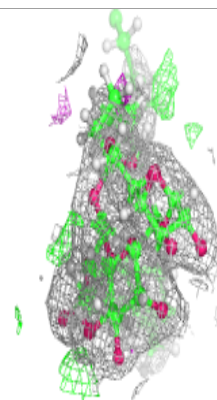
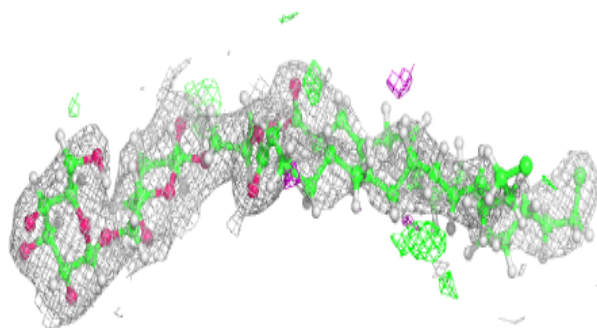
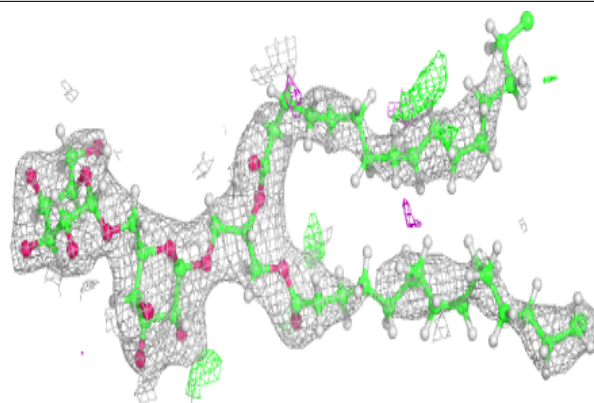
**Electron density around SQD D 409:**

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

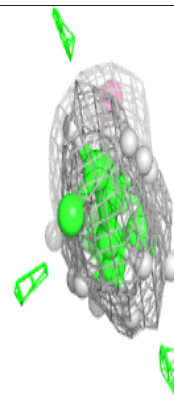
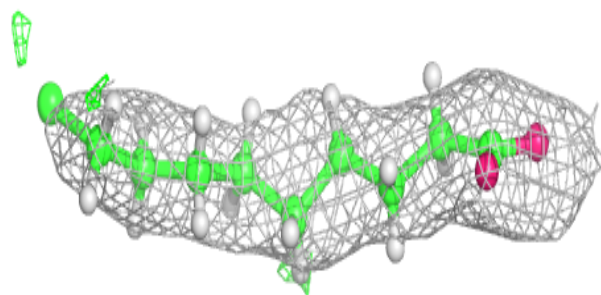
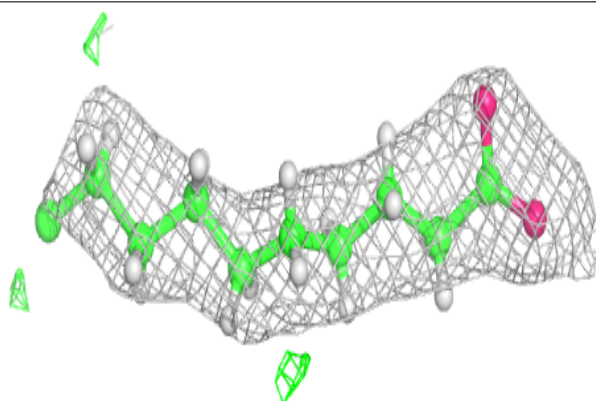


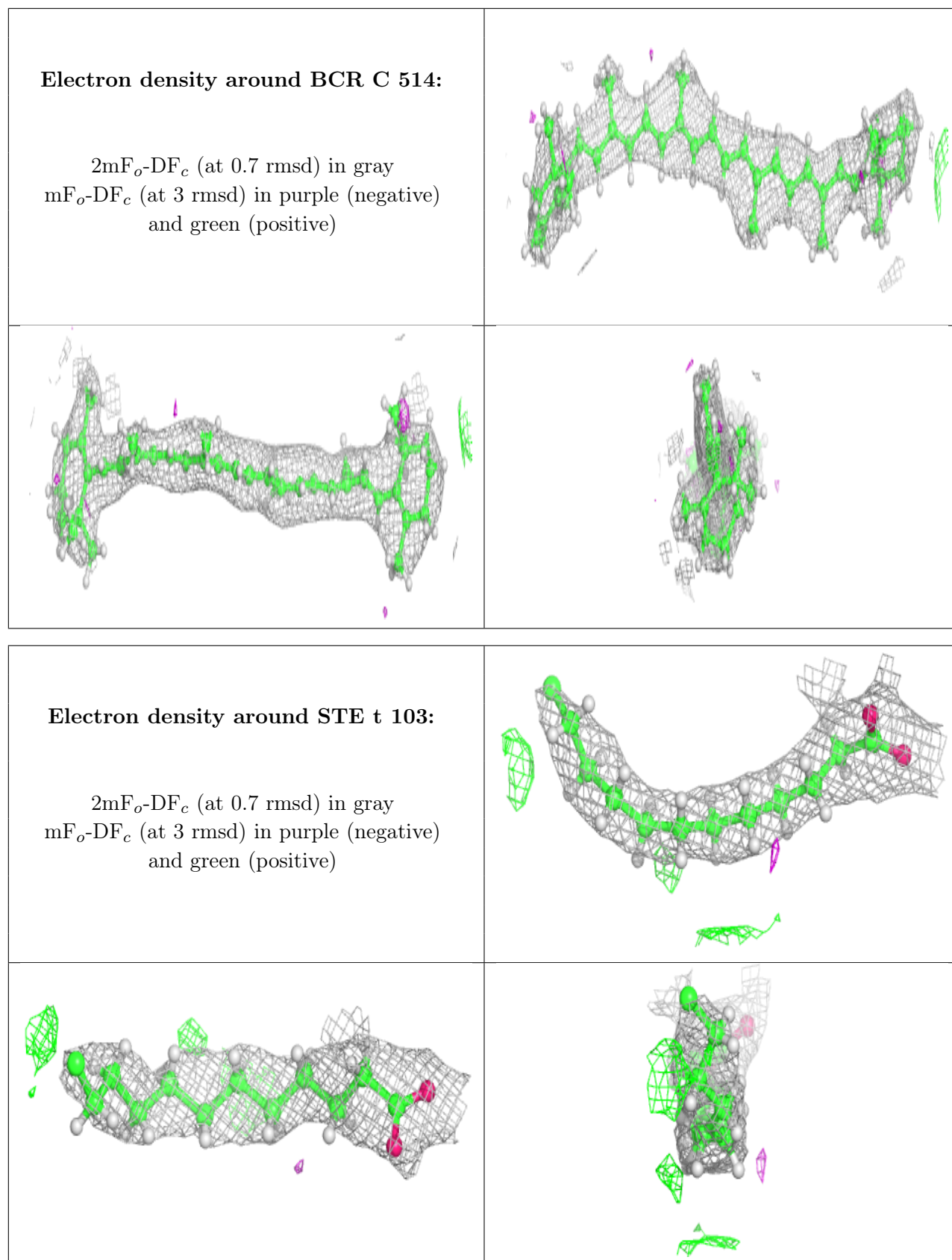
Electron density around DGD c 517:

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

**Electron density around STE j 101:**

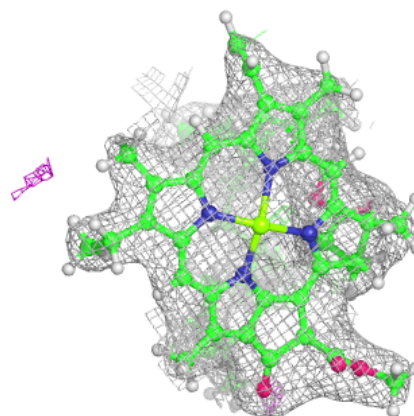
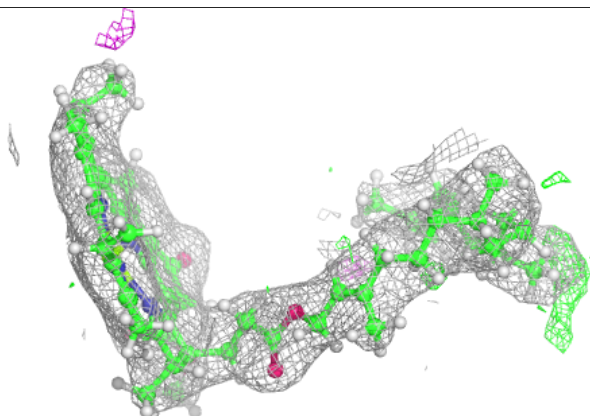
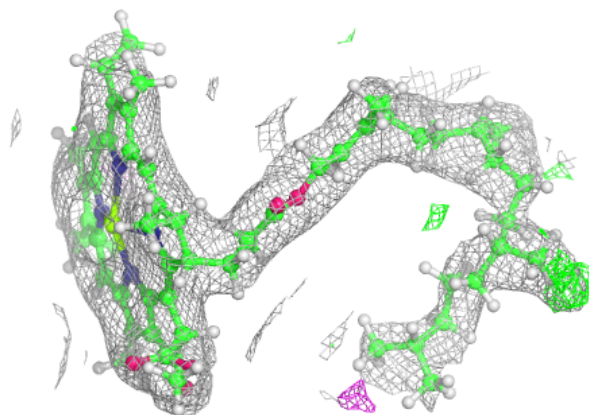
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



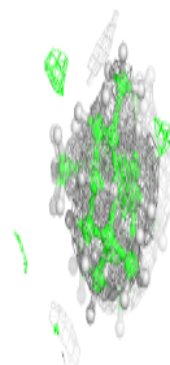
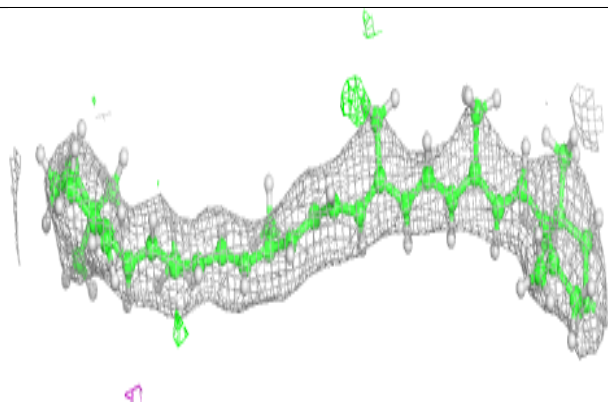
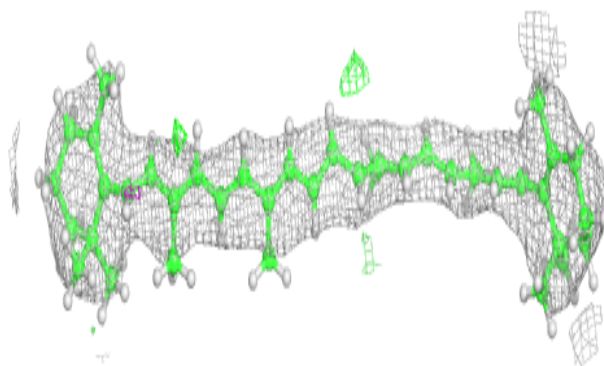


Electron density around CLA B 605:

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

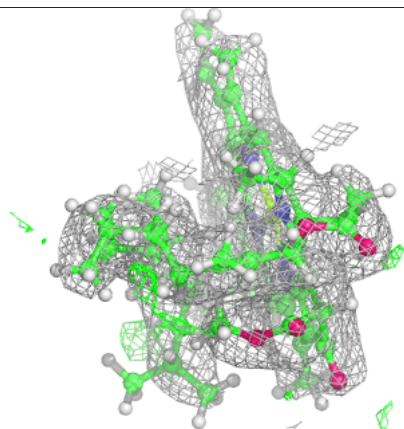
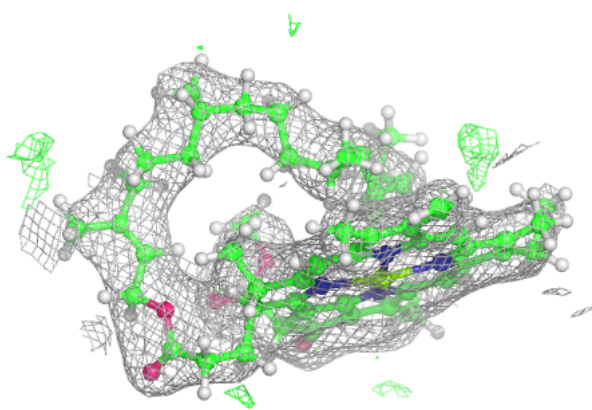
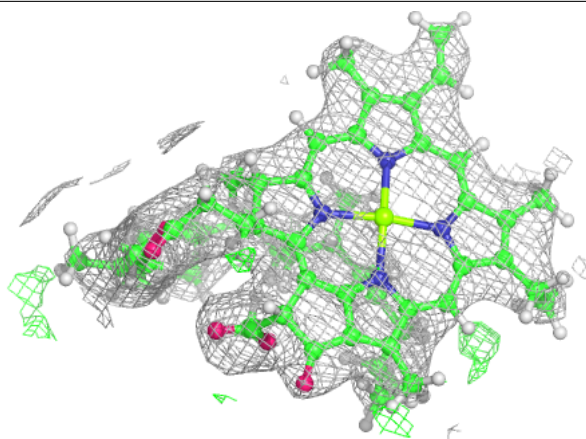
**Electron density around BCR K 101:**

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

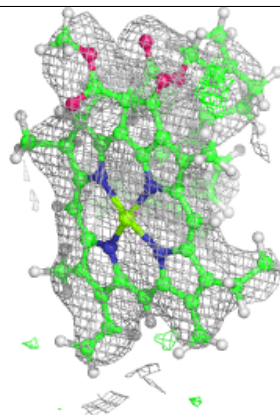
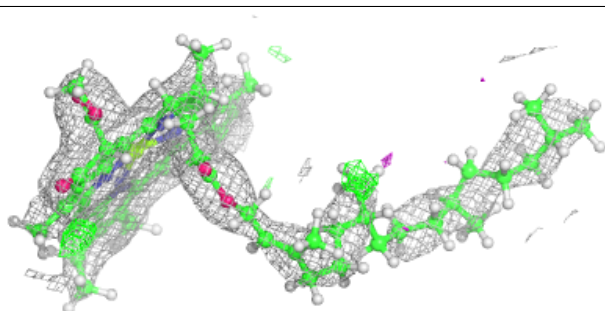
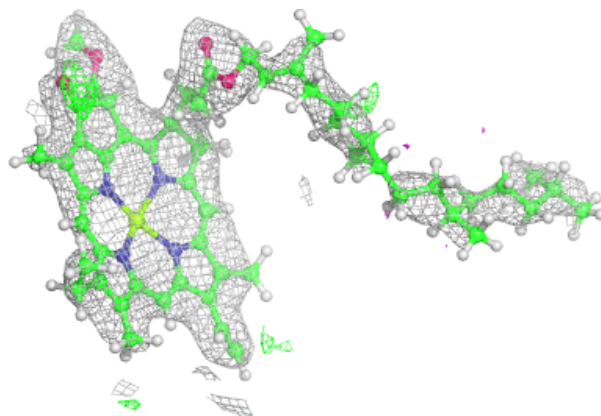


Electron density around CLA c 510:

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

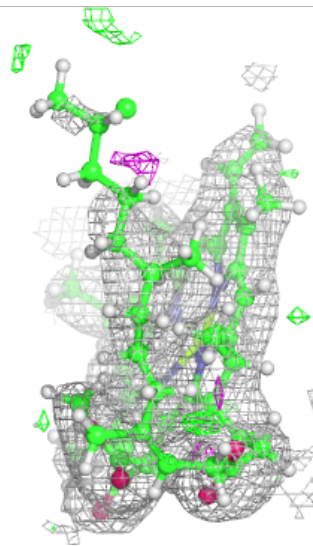
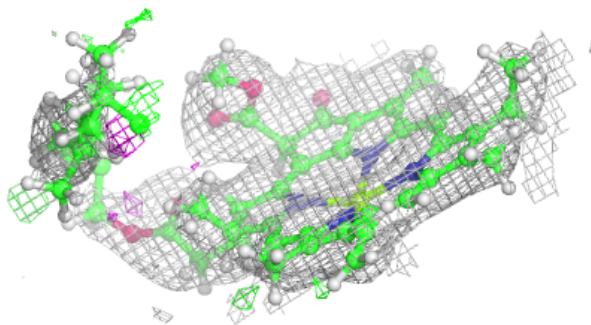
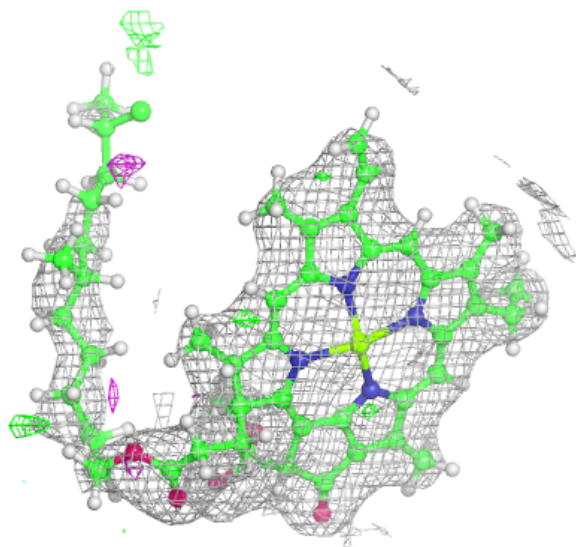
**Electron density around CLA c 511:**

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



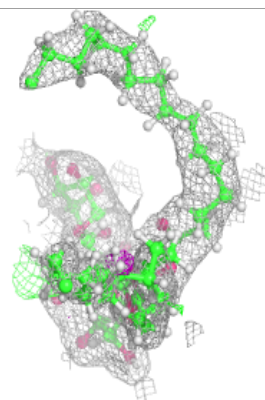
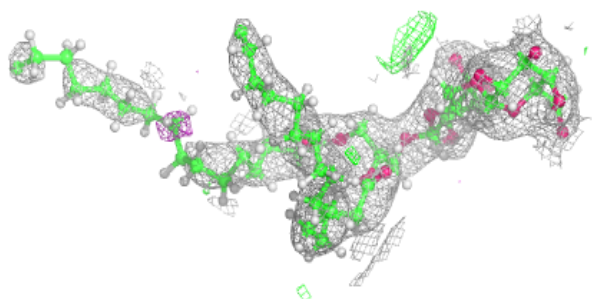
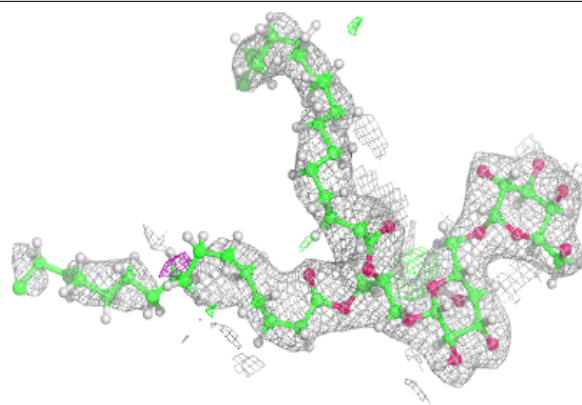
Electron density around CLA B 615:

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

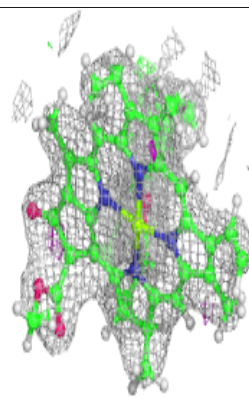
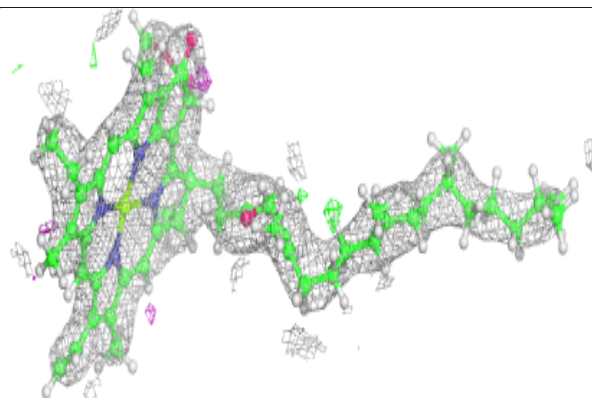
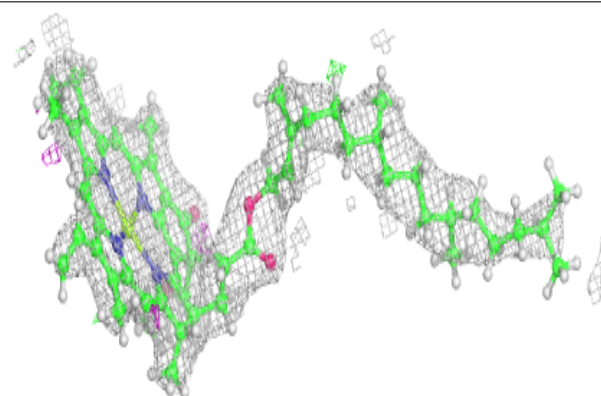


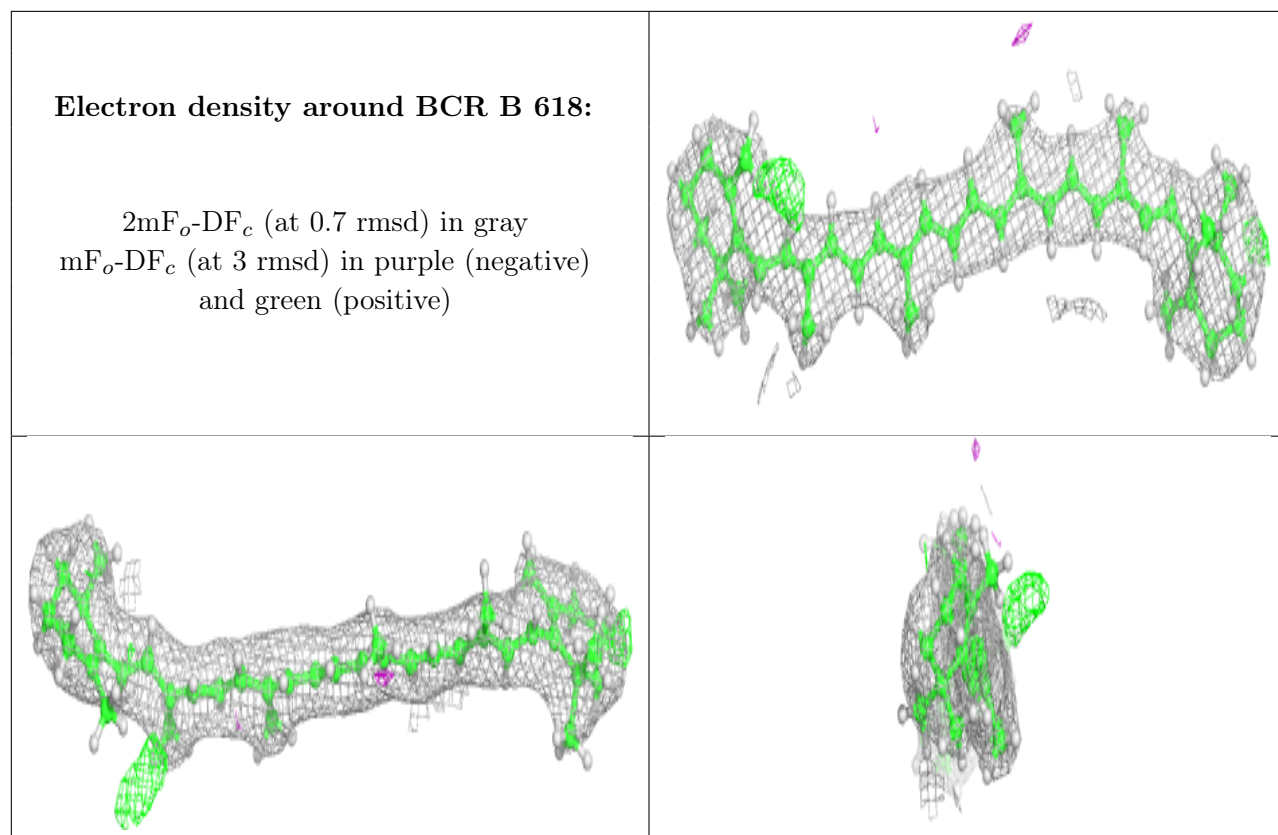
Electron density around DGD c 516:

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

**Electron density around CLA C 502:**

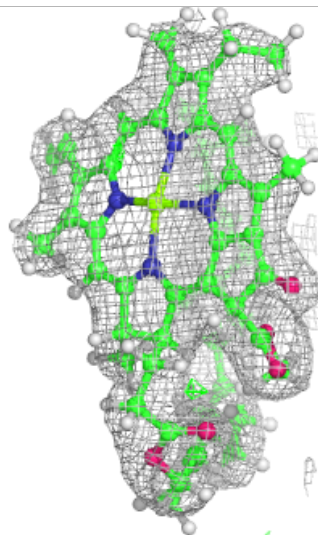
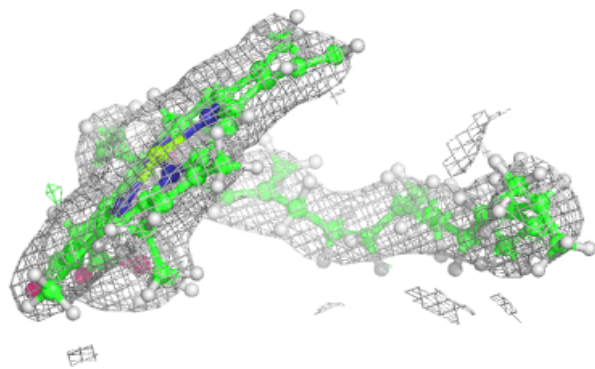
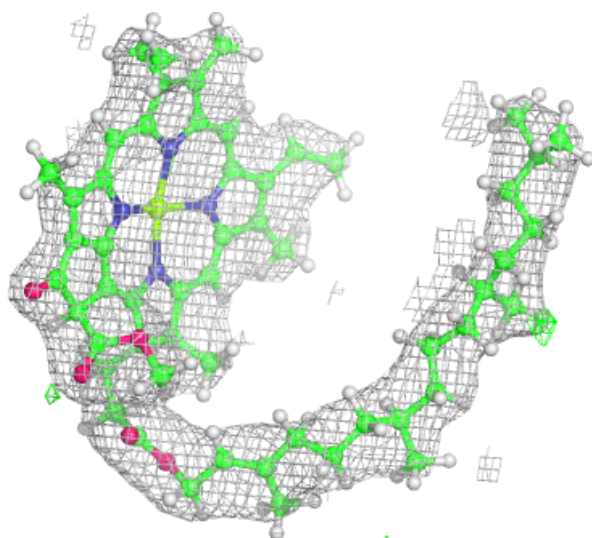
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





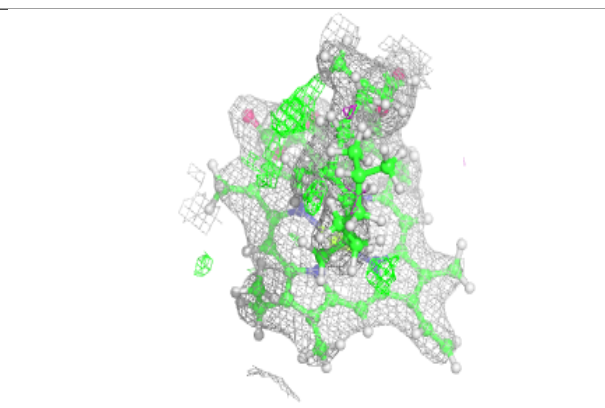
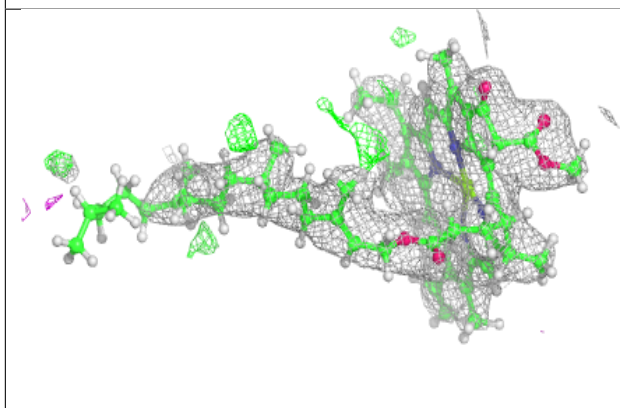
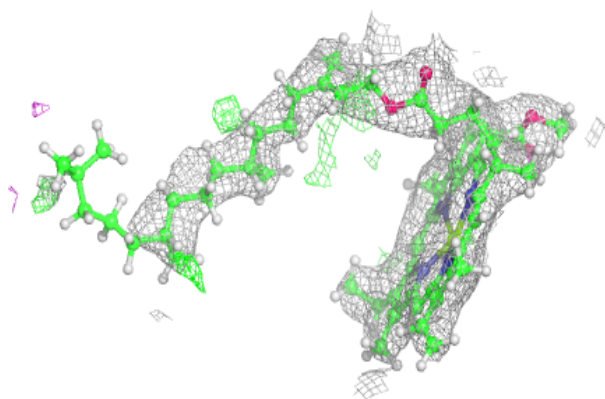
Electron density around CLA C 507:

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

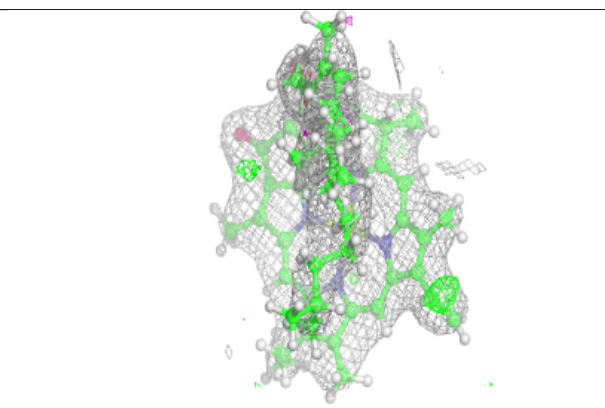
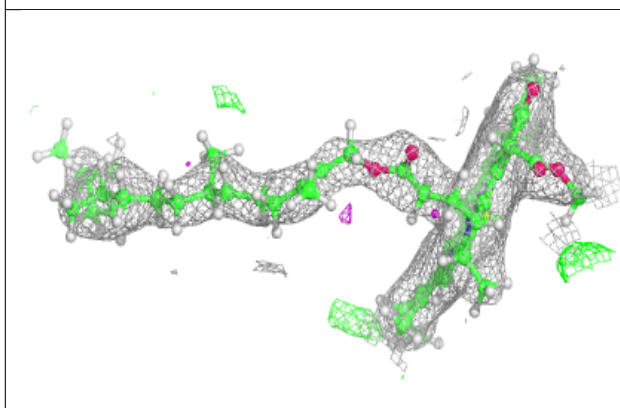
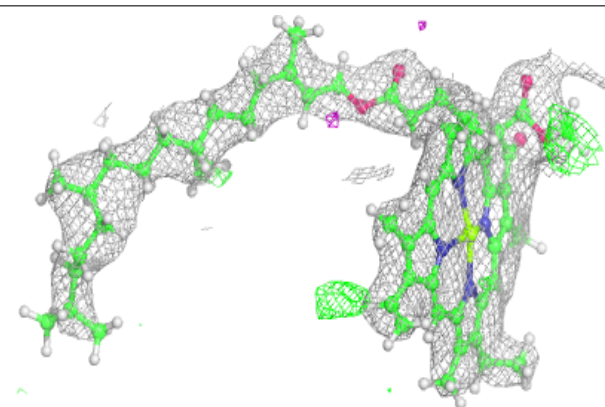


Electron density around CLA C 508:

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

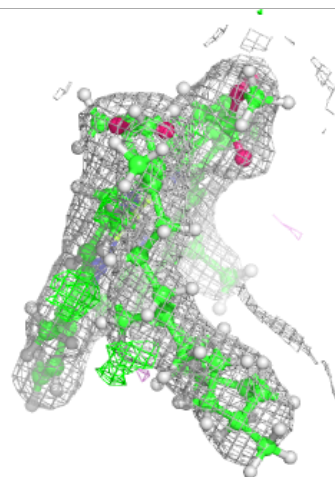
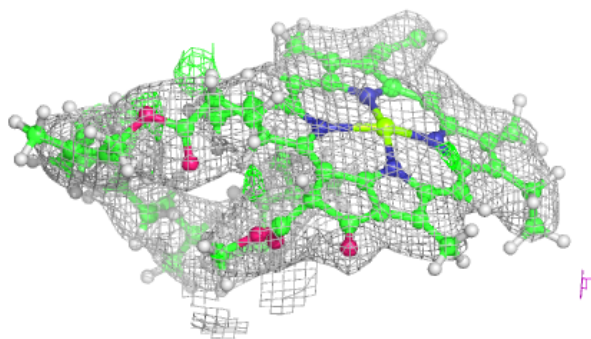
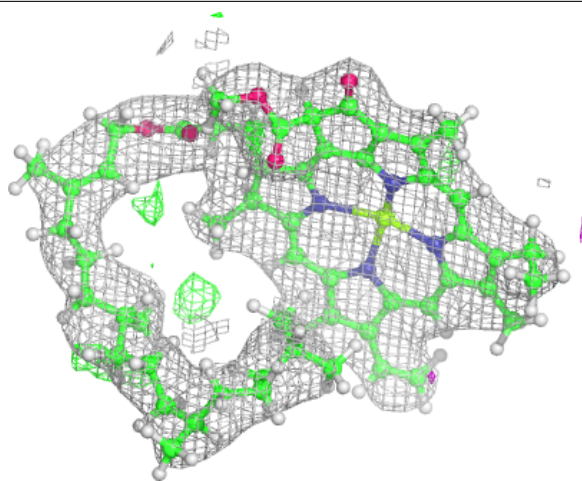
**Electron density around CLA b 609:**

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



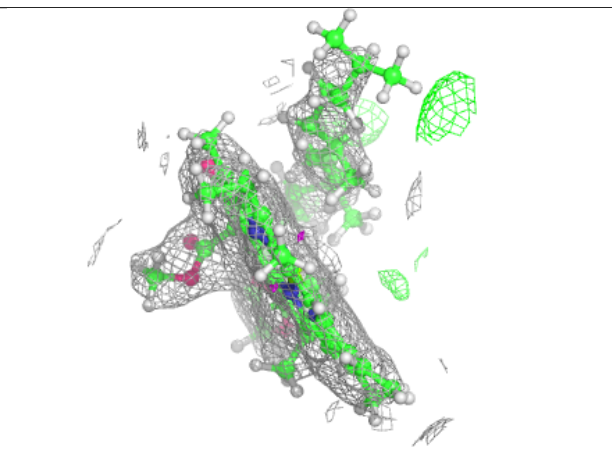
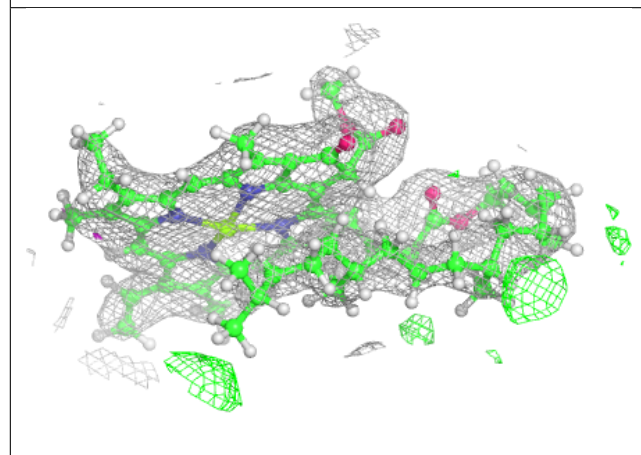
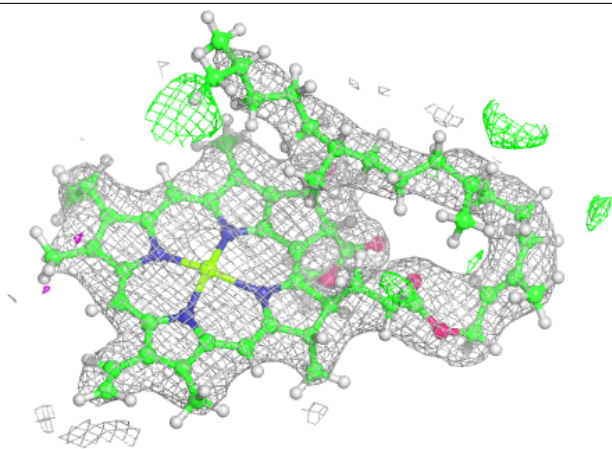
Electron density around CLA b 615:

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

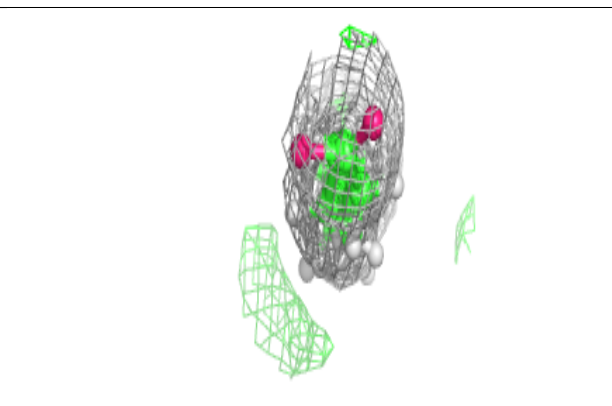
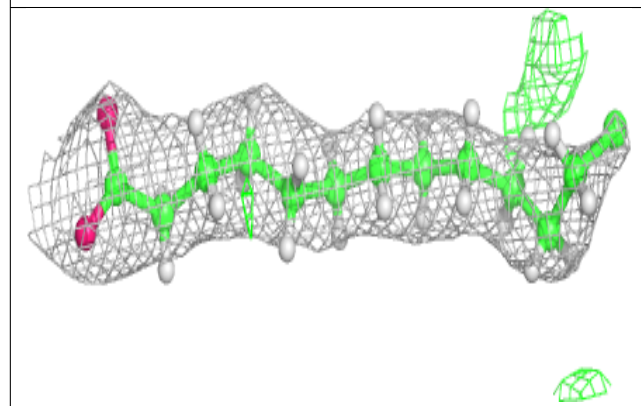
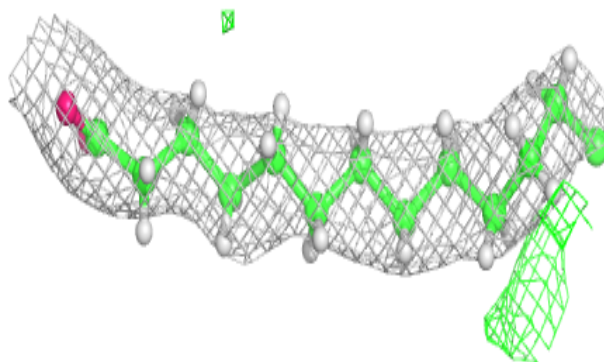


Electron density around CLA C 509:

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

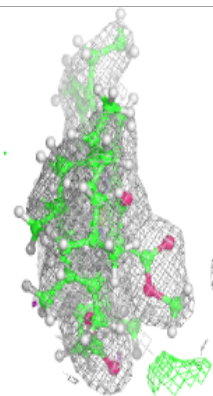
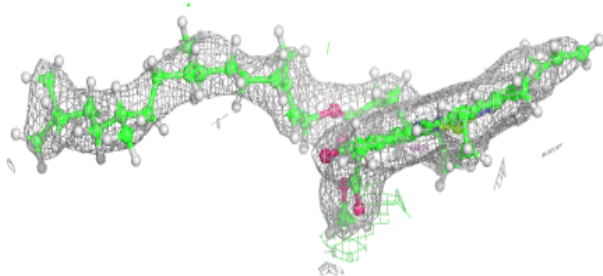
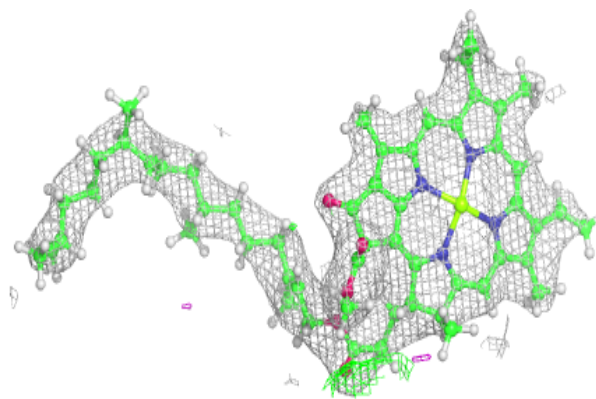
**Electron density around STE M 102:**

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



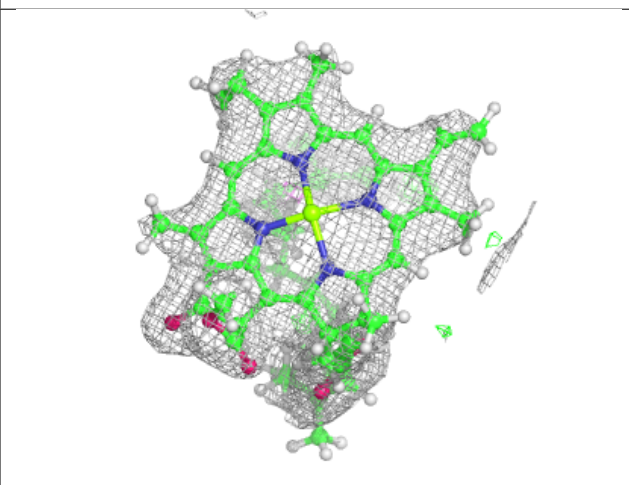
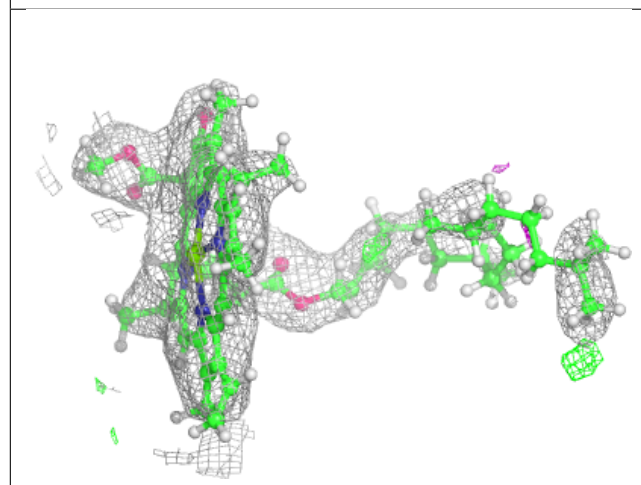
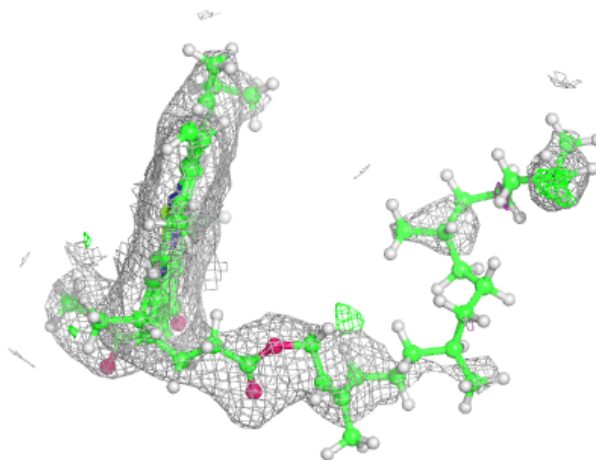
Electron density around CLA B 601:

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



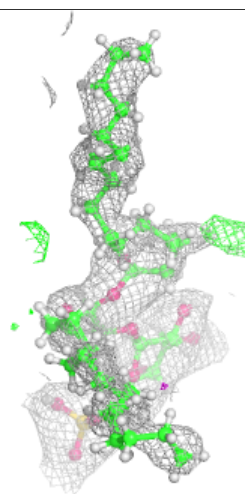
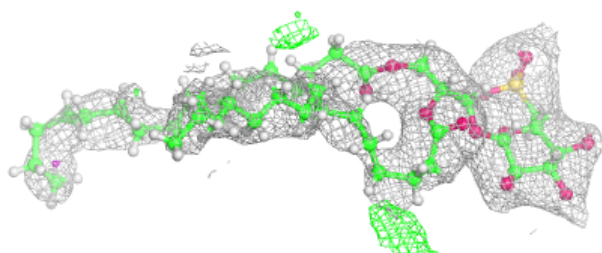
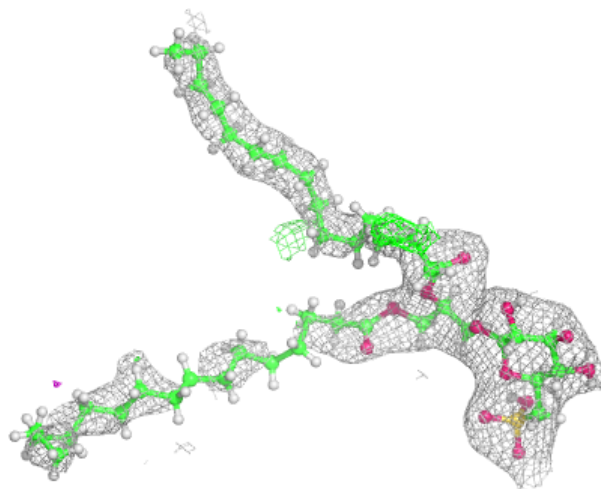
Electron density around CLA c 506:

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



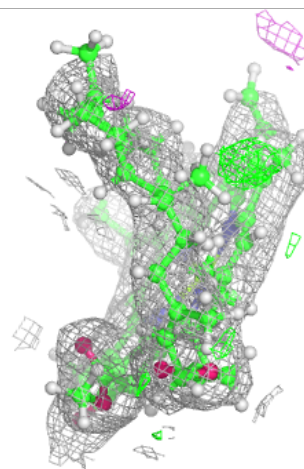
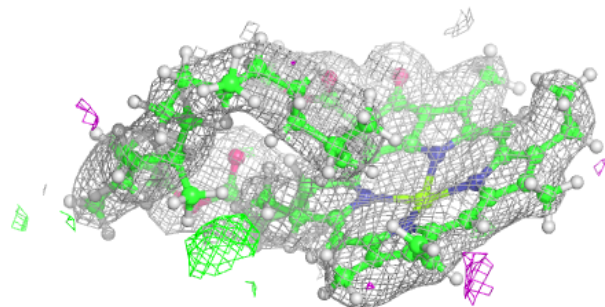
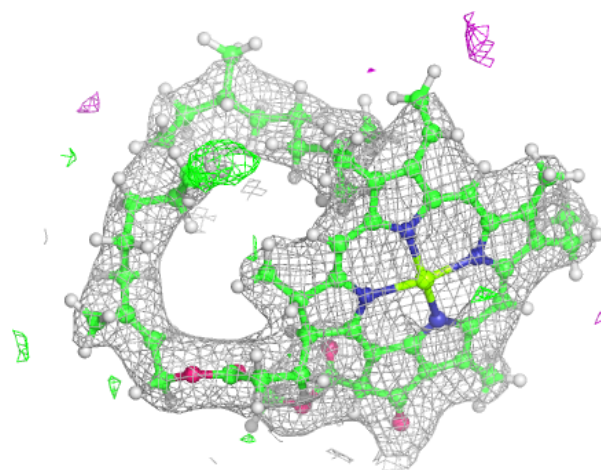
Electron density around SQD a 410:

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



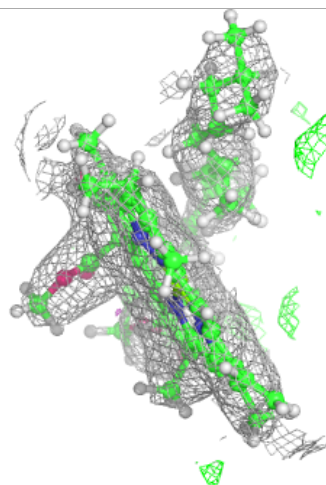
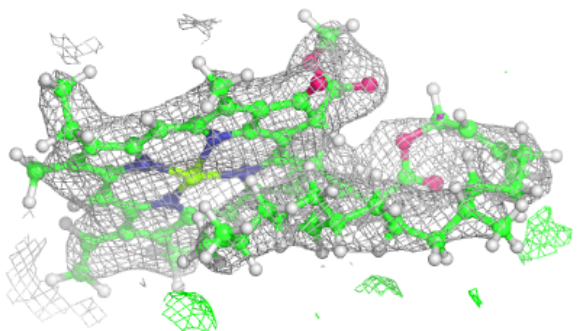
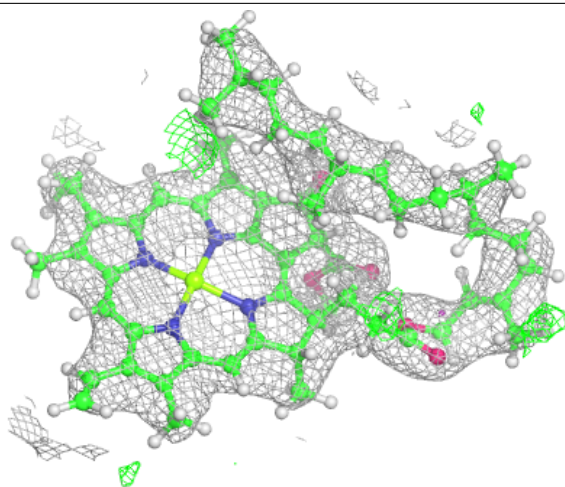
Electron density around CLA B 614:

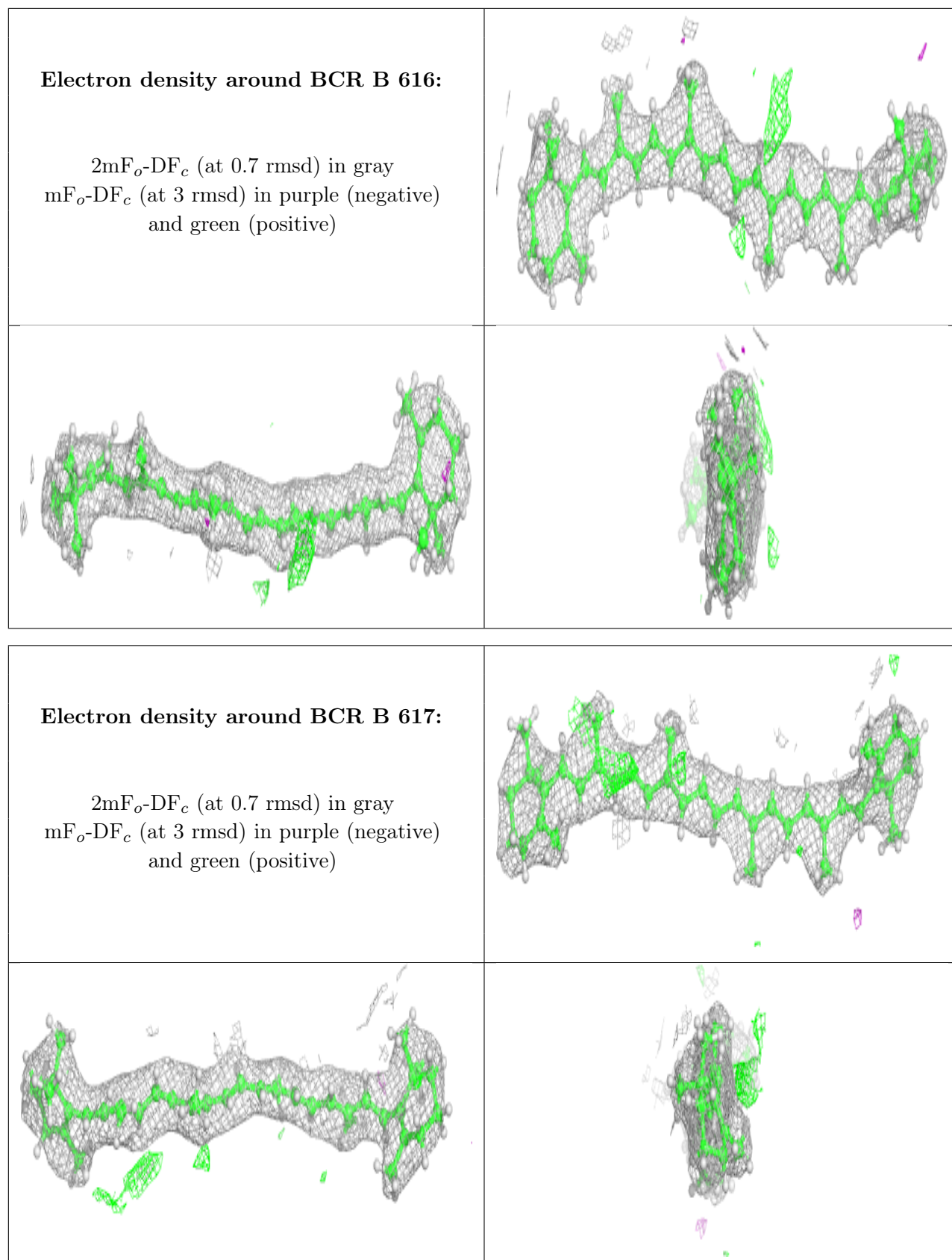
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA c 509:

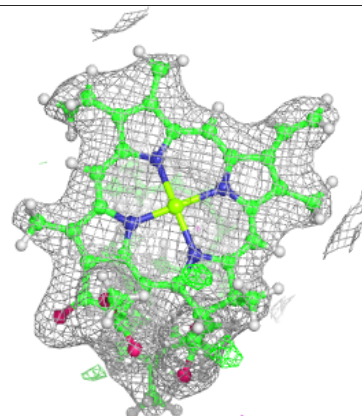
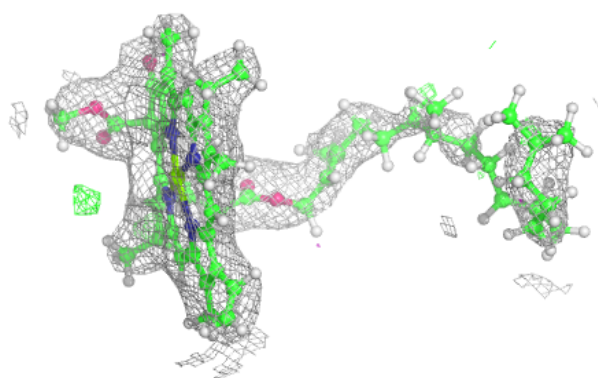
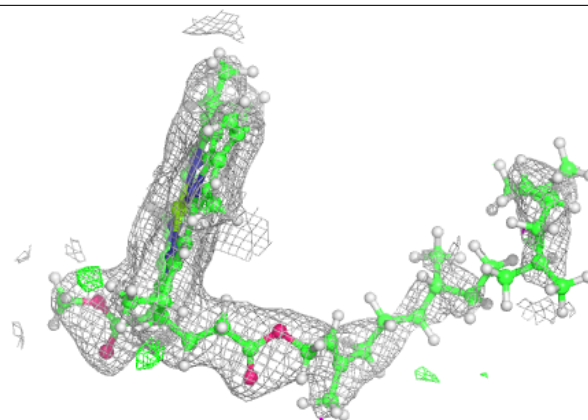
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



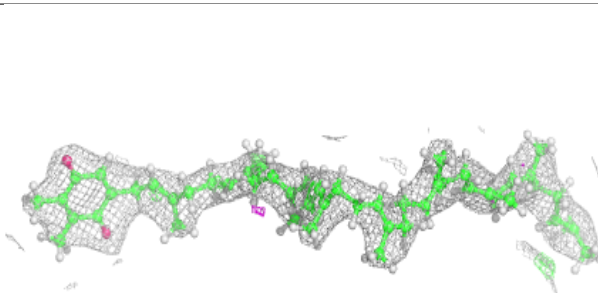
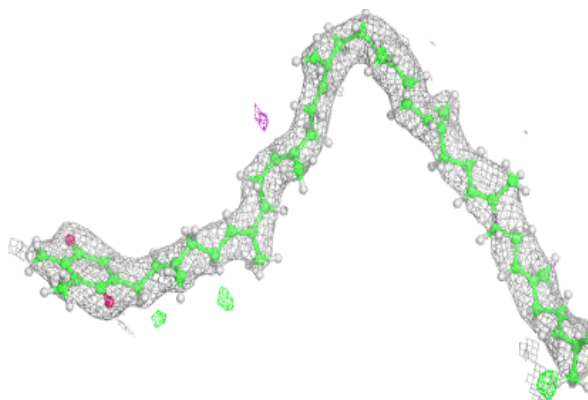


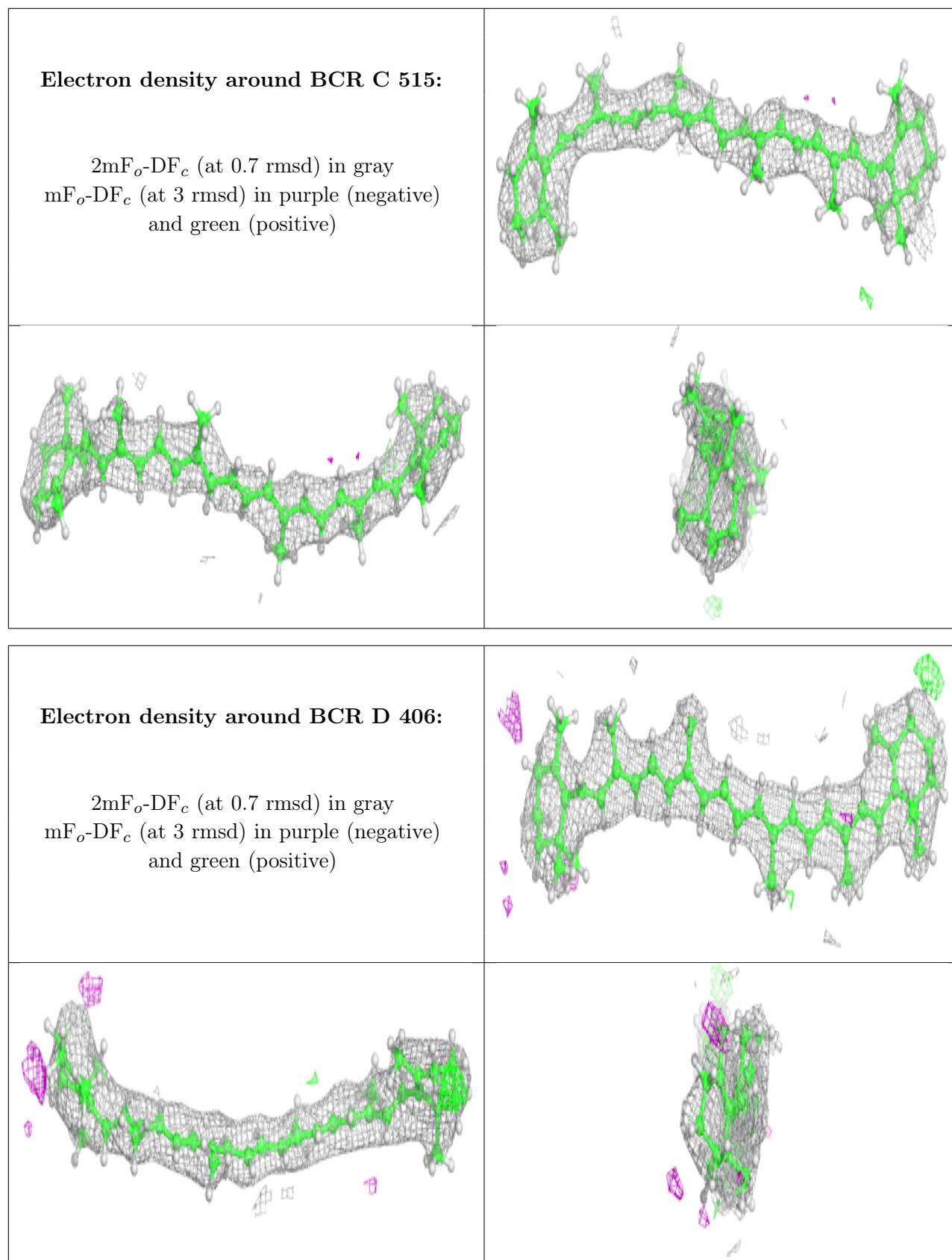
Electron density around CLA C 506:

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

**Electron density around PL9 D 407:**

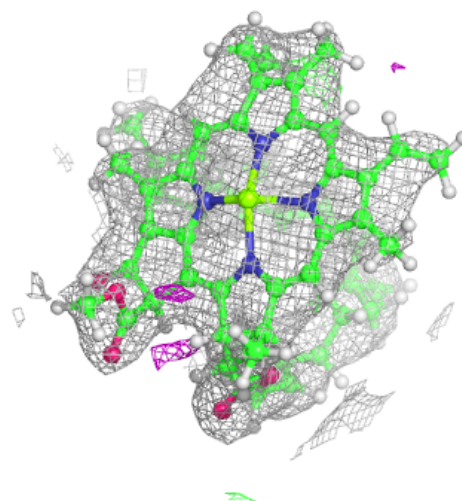
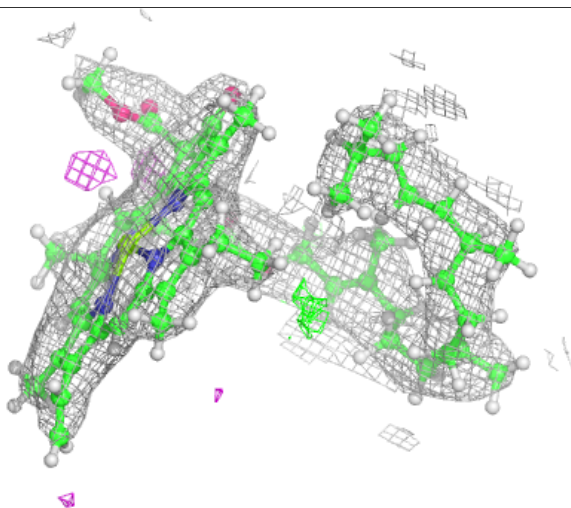
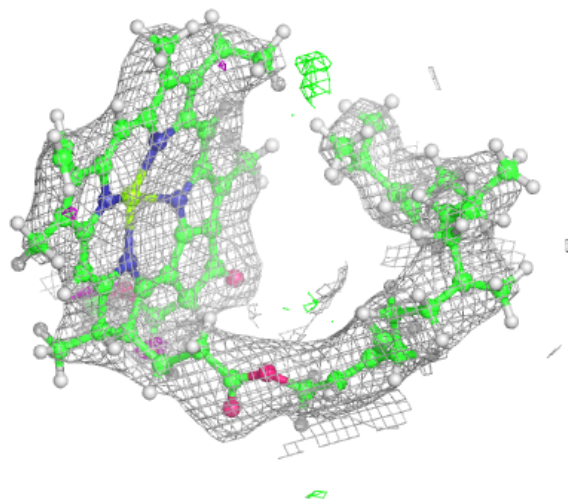
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





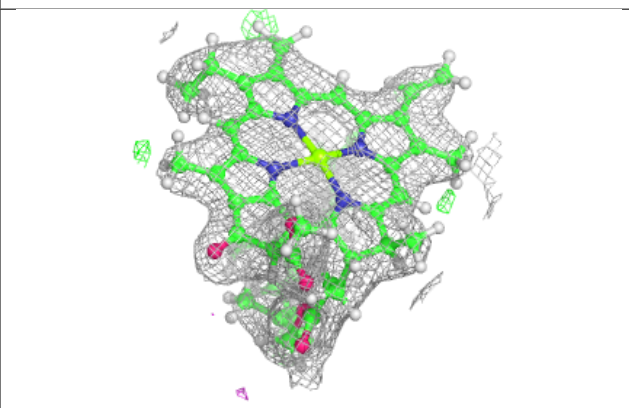
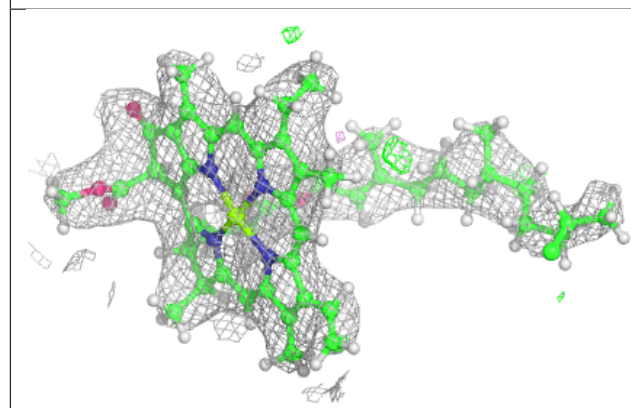
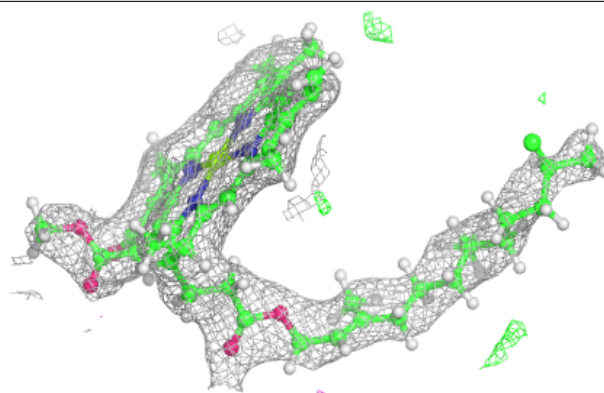
Electron density around CLA c 503:

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

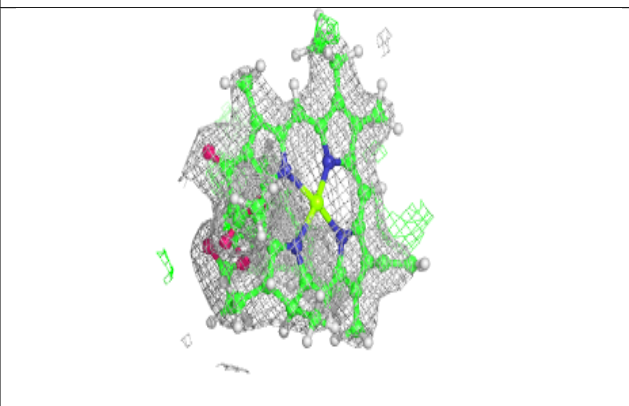
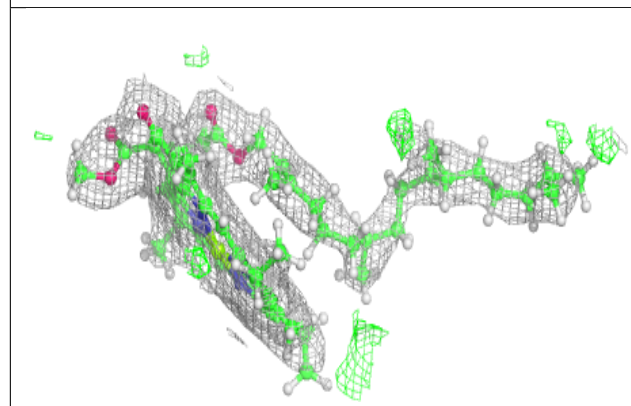
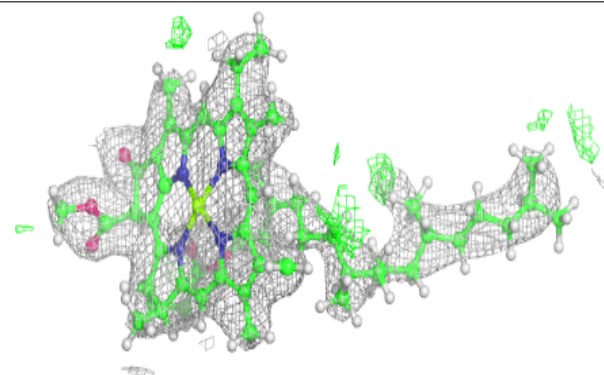


Electron density around CLA c 504:

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

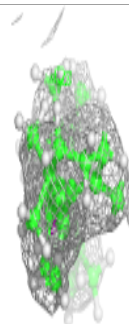
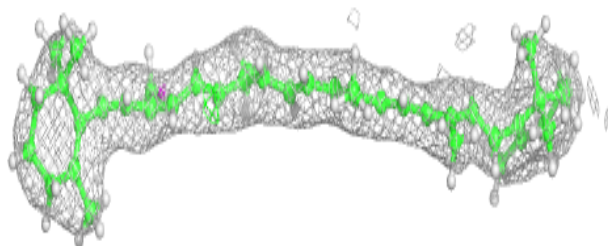
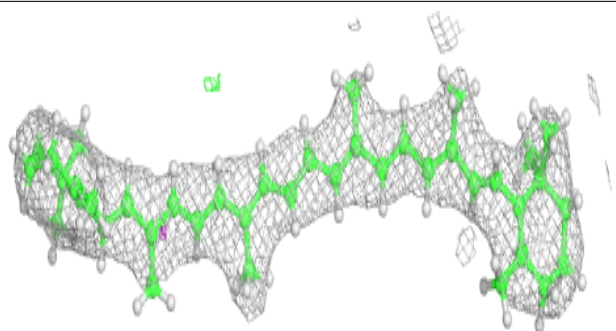
**Electron density around CLA c 505:**

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

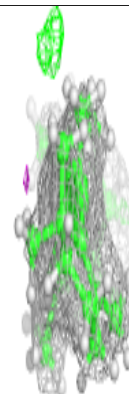
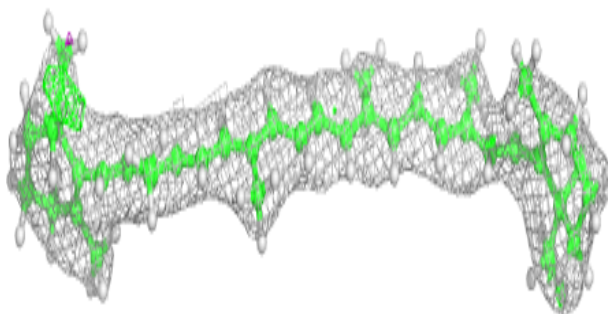
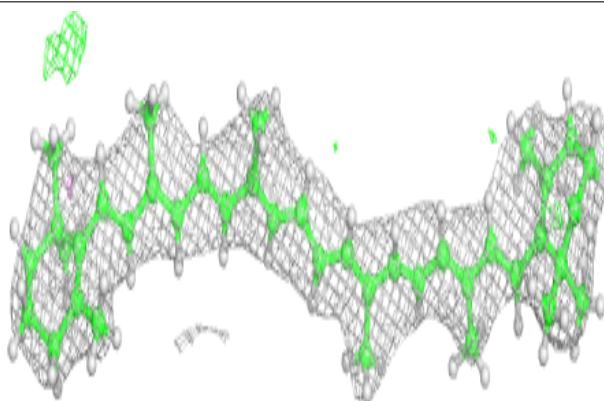


Electron density around BCR b 617:

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

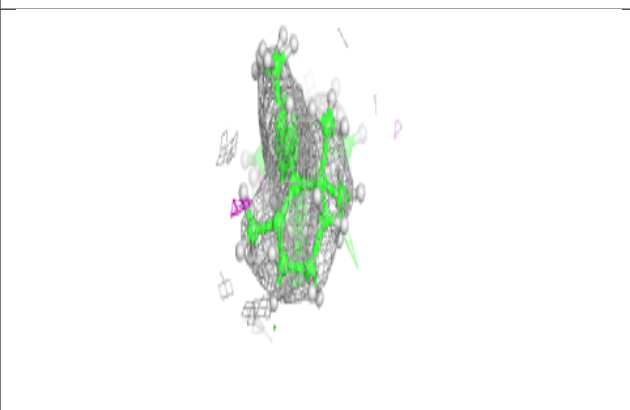
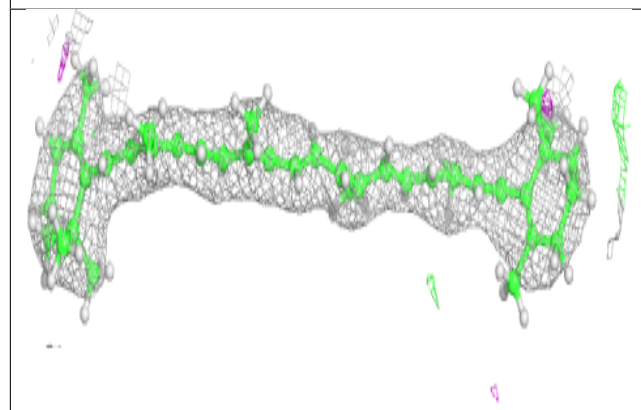
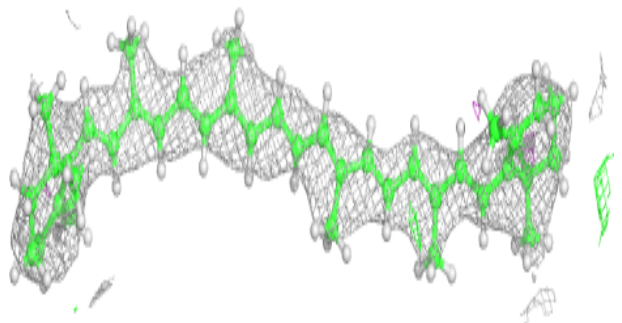
**Electron density around BCR b 619:**

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

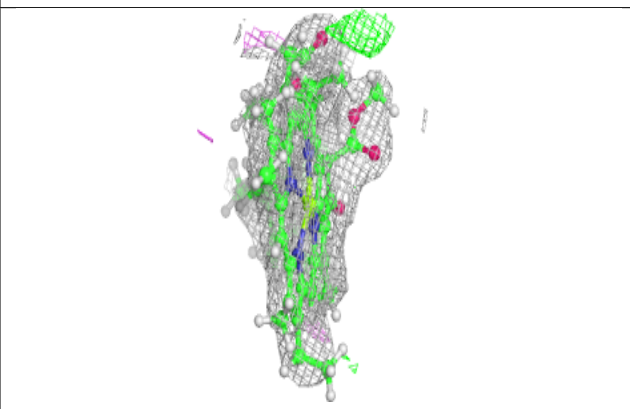
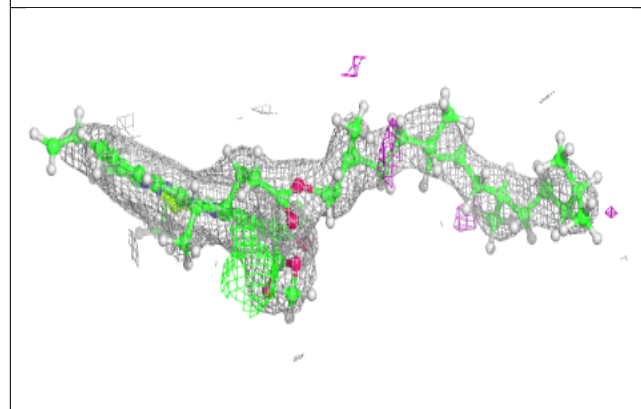
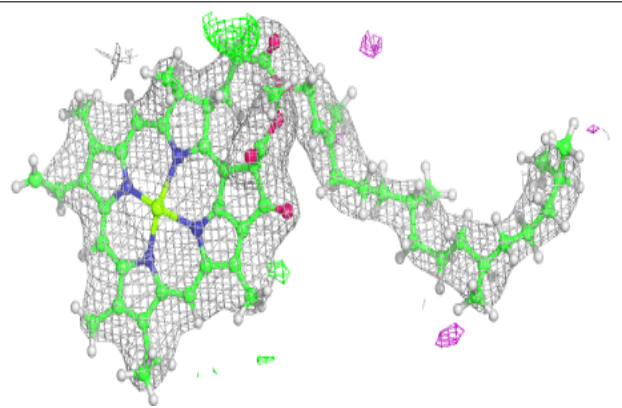


Electron density around BCR c 514:

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

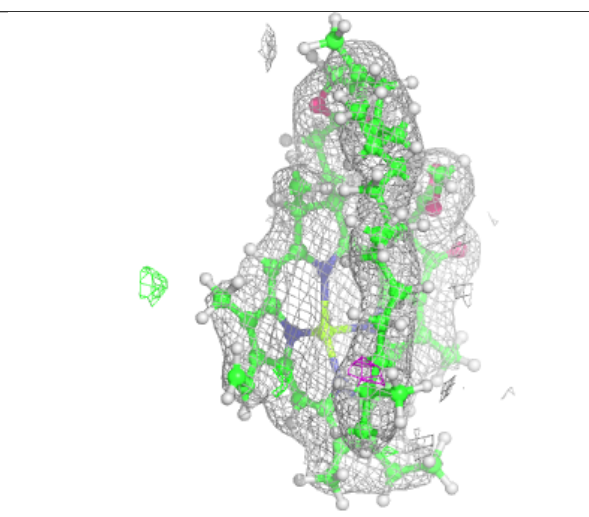
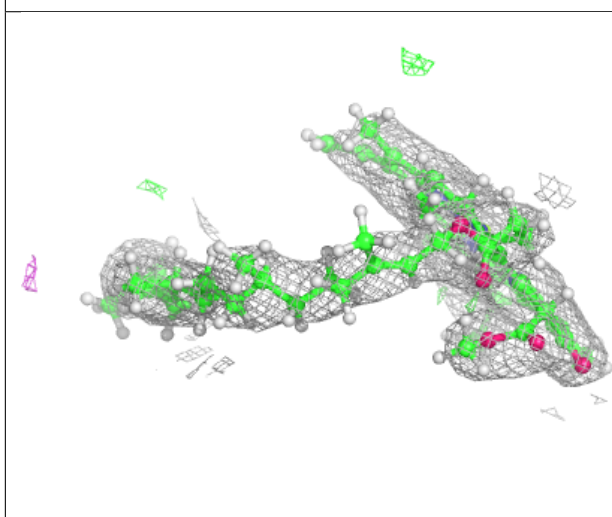
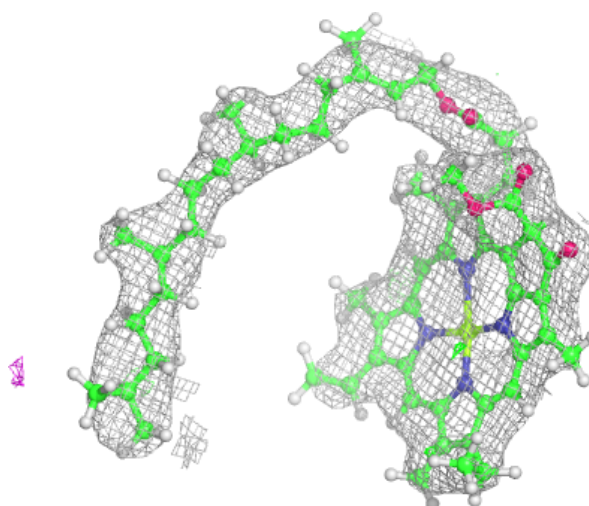
**Electron density around CLA b 602:**

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



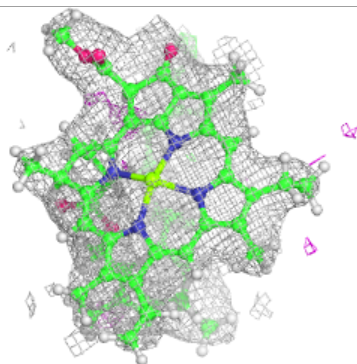
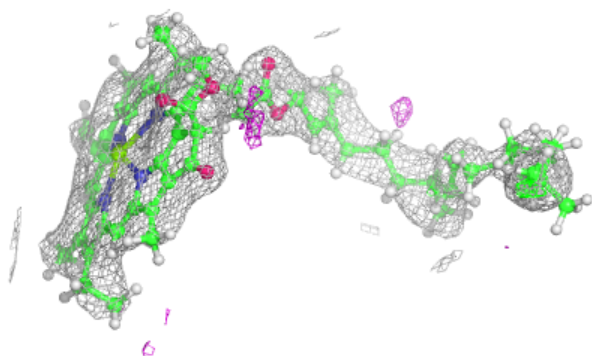
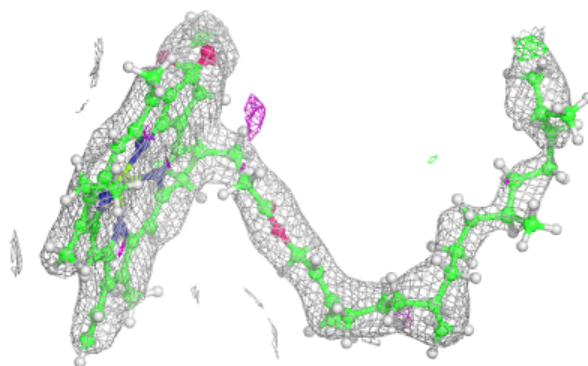
Electron density around CLA c 507:

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

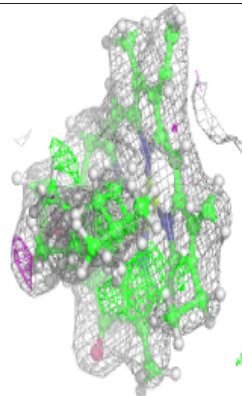
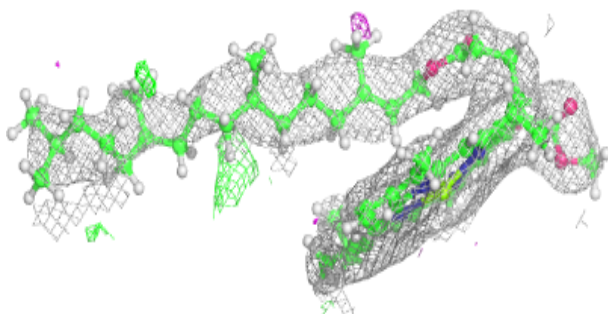
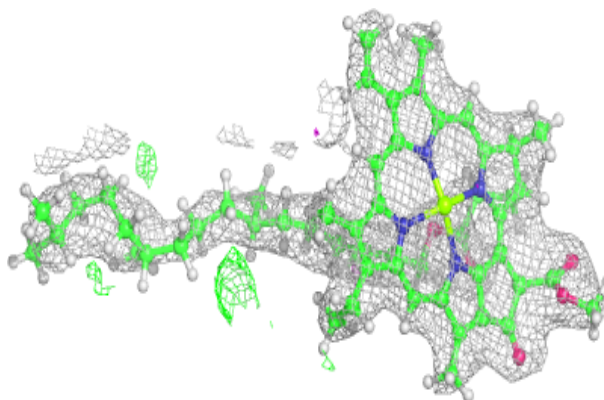


Electron density around CLA b 606:

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

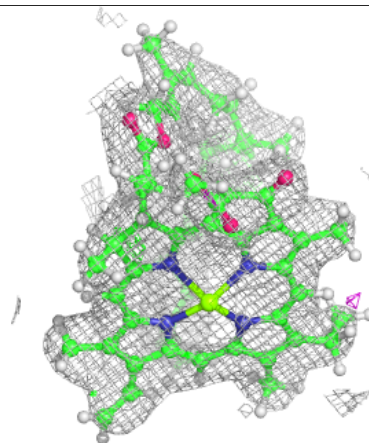
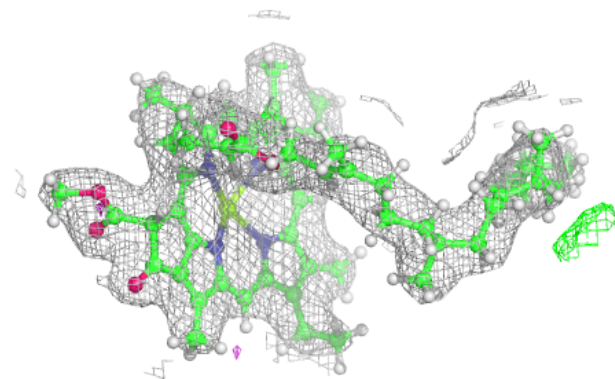
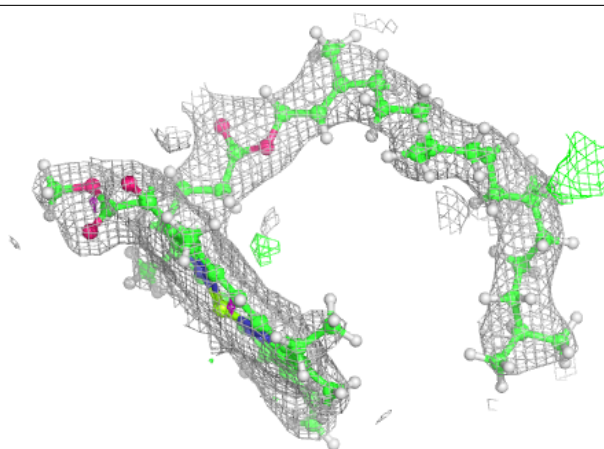
**Electron density around CLA B 613:**

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



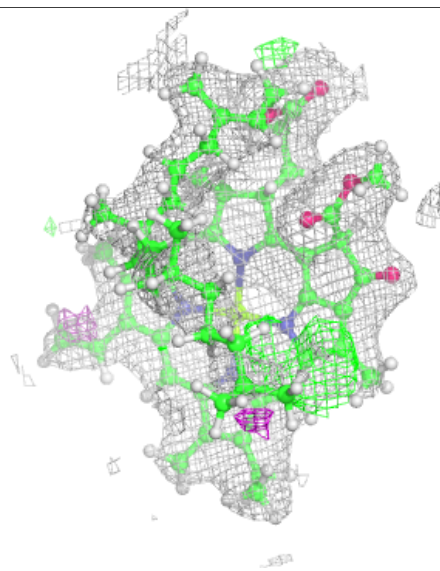
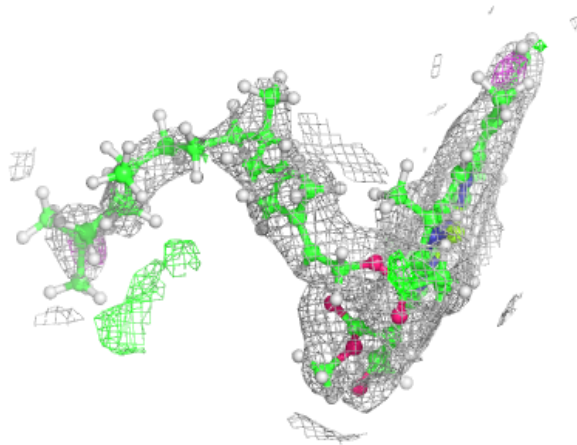
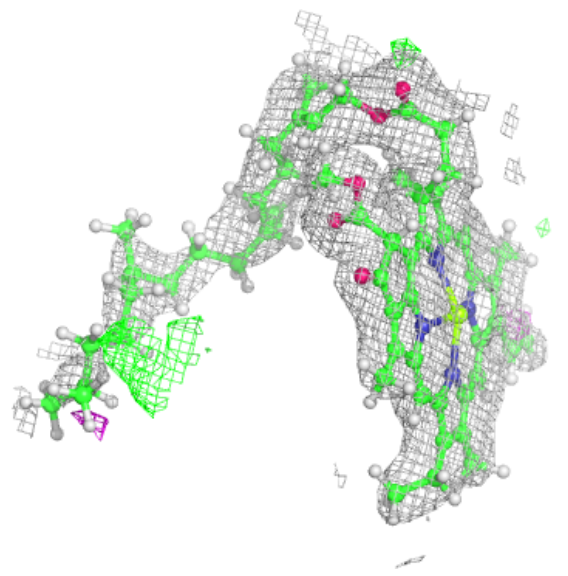
Electron density around CLA b 611:

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



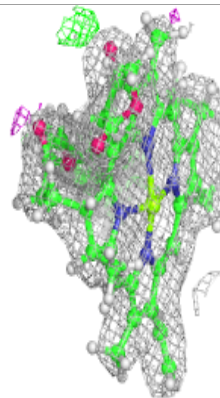
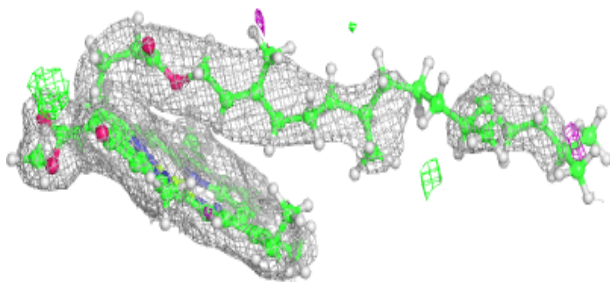
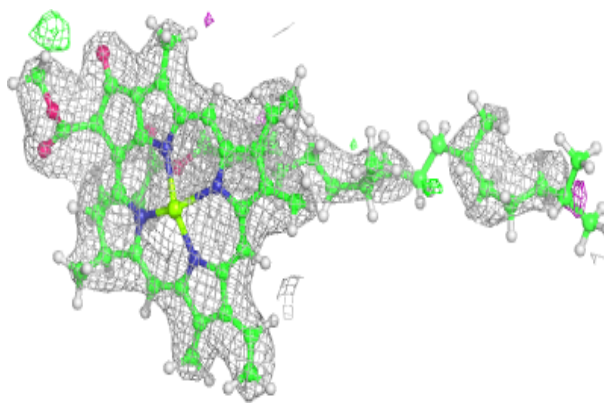
Electron density around CLA b 613:

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

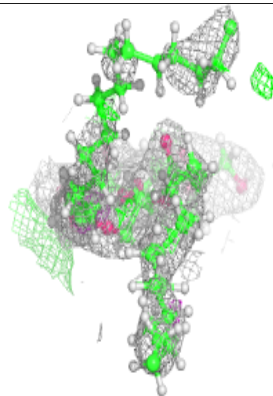
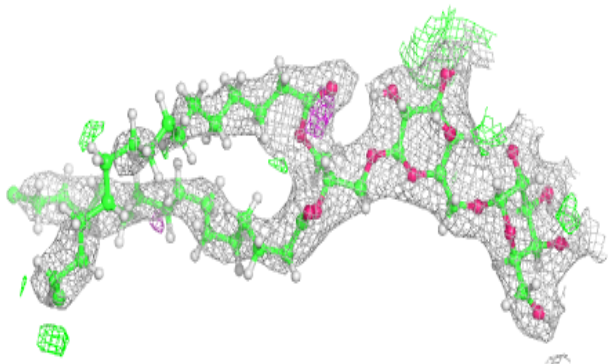
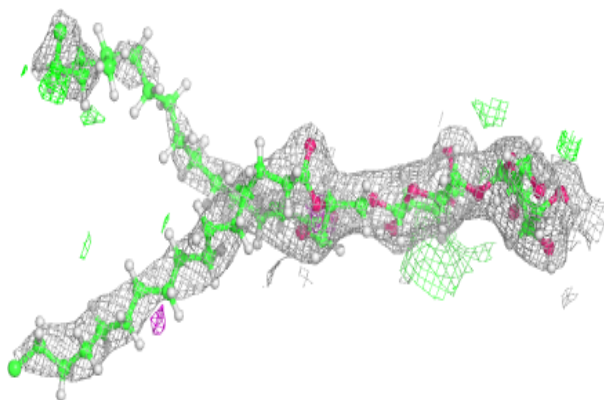


Electron density around CLA b 614:

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

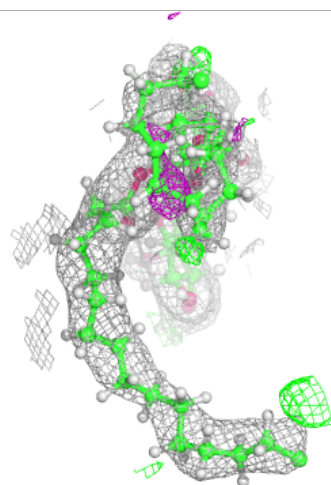
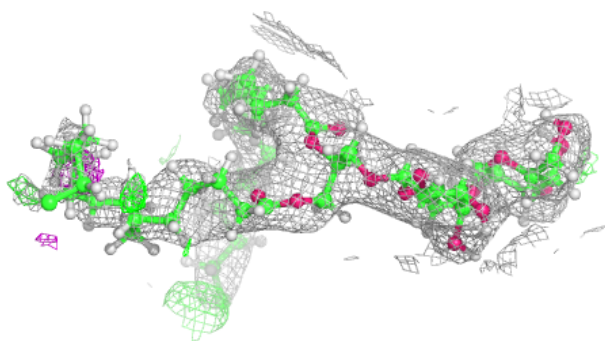
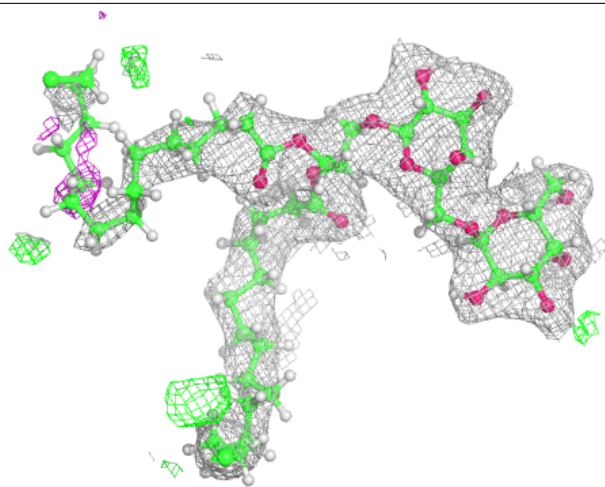
**Electron density around DGD C 516:**

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



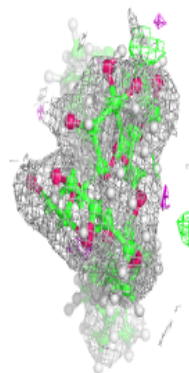
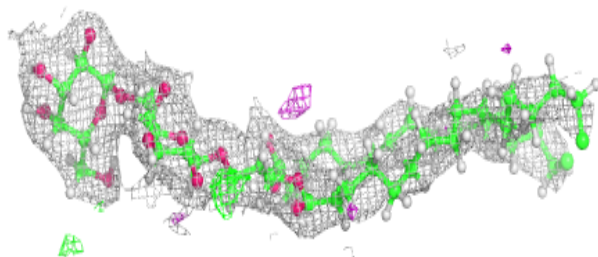
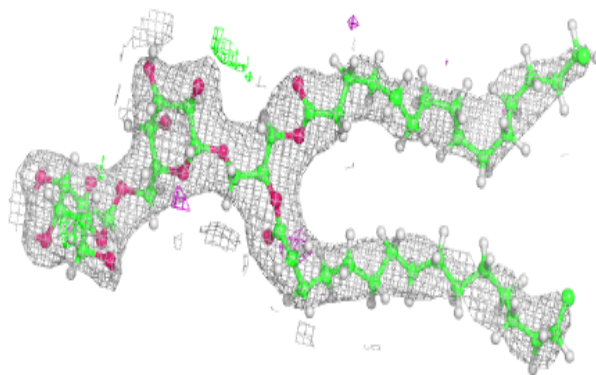
Electron density around DGD C 517:

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

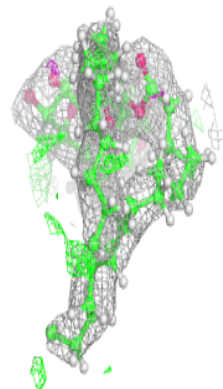
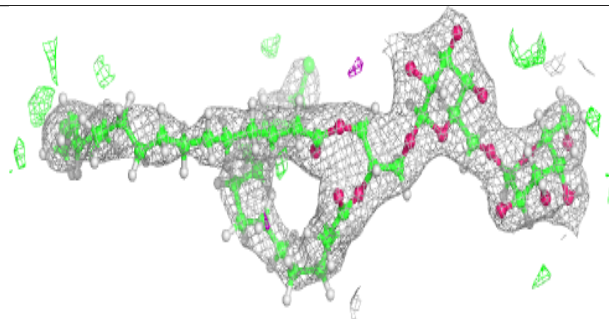
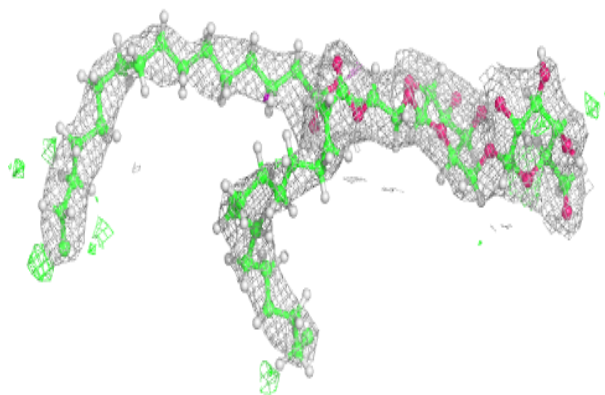


Electron density around DGD C 518:

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

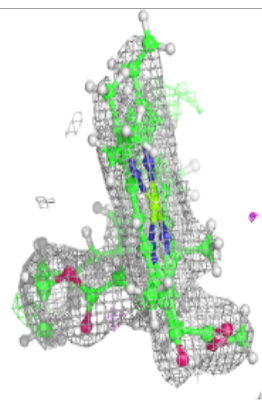
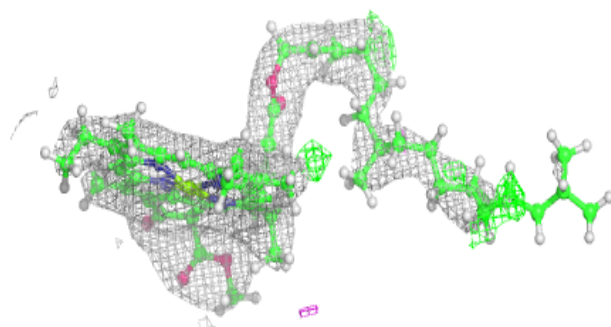
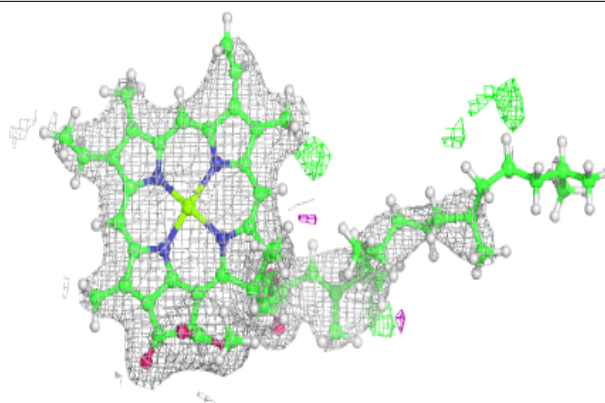
**Electron density around DGD H 103:**

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

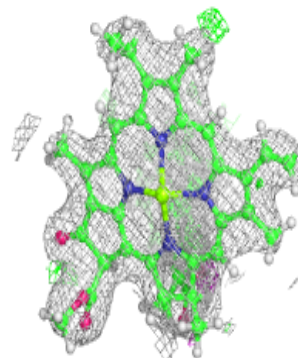
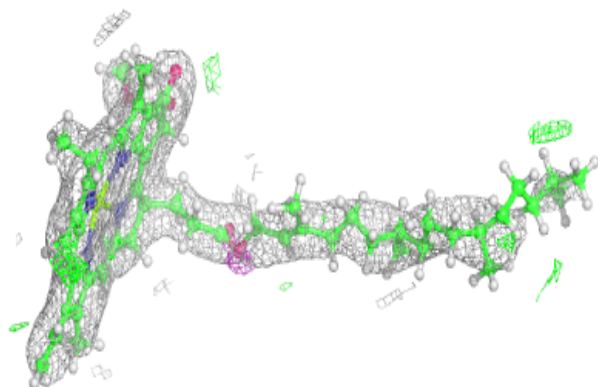
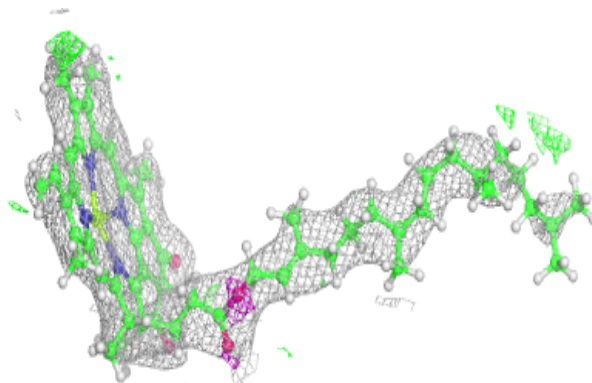


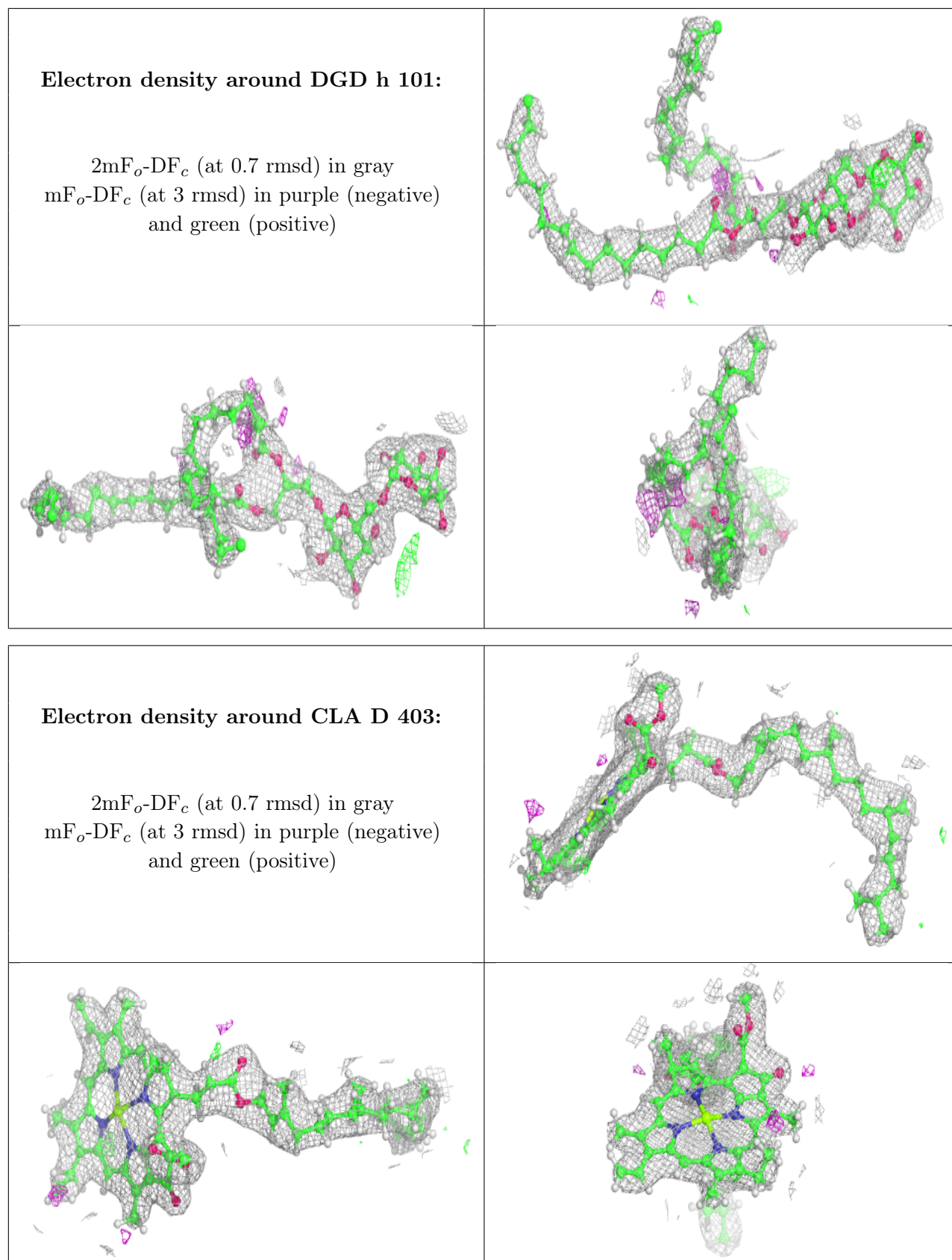
Electron density around CLA a 403:

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

**Electron density around CLA B 603:**

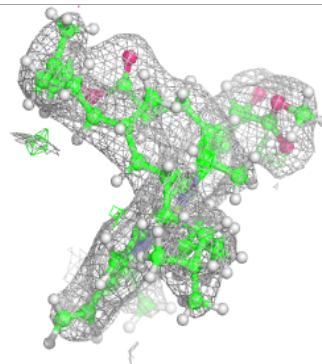
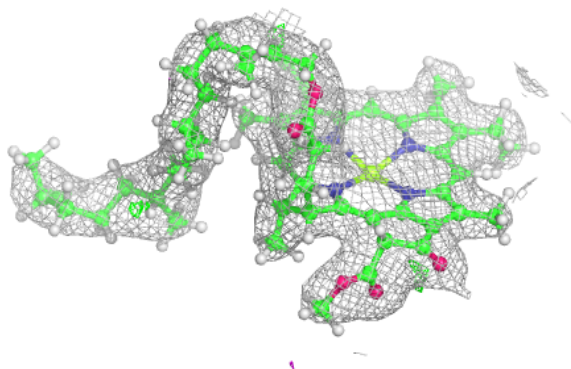
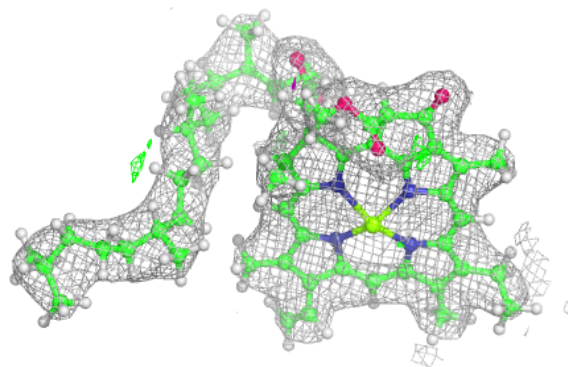
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



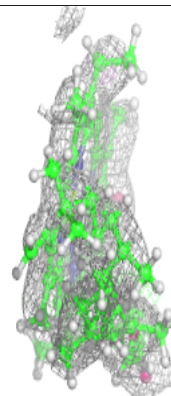
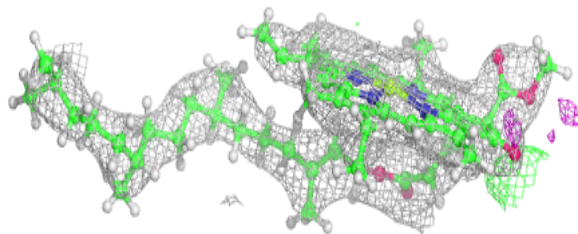
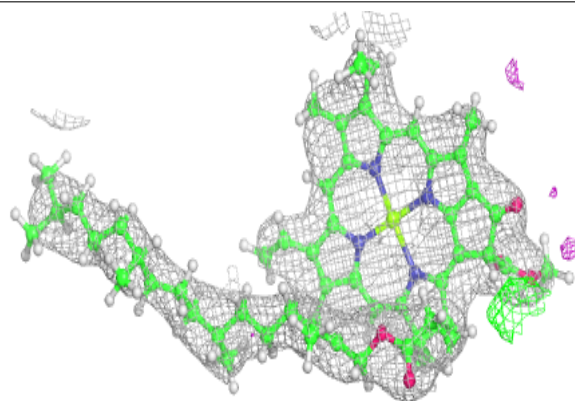


Electron density around CLA D 404:

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

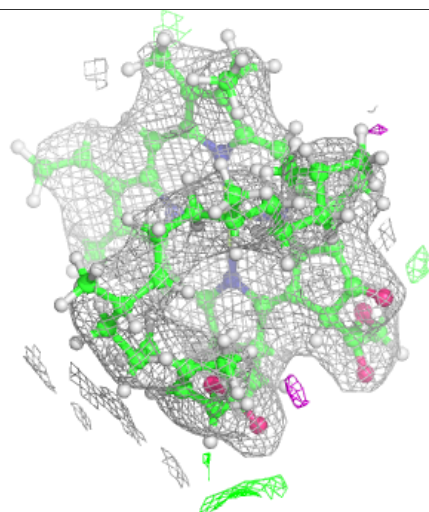
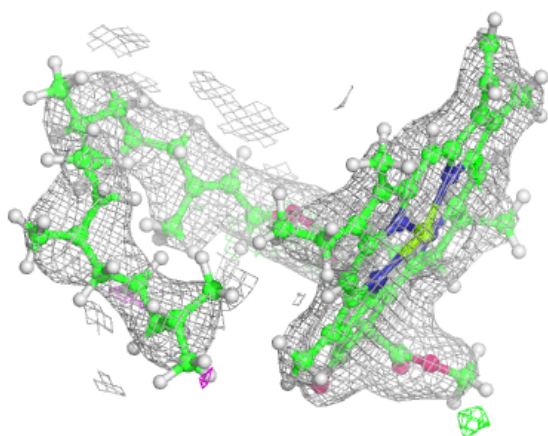
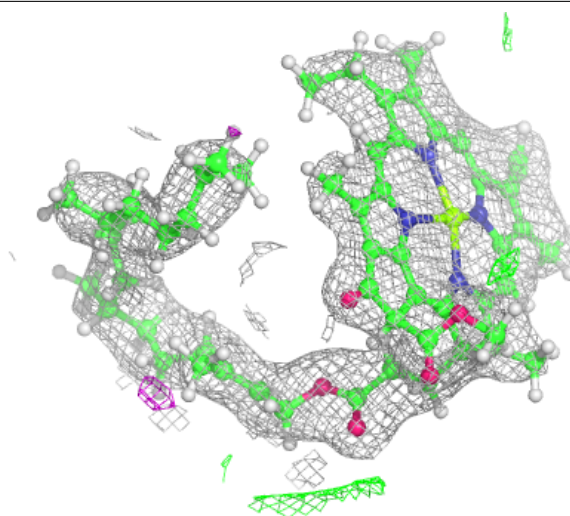
**Electron density around CLA c 501:**

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



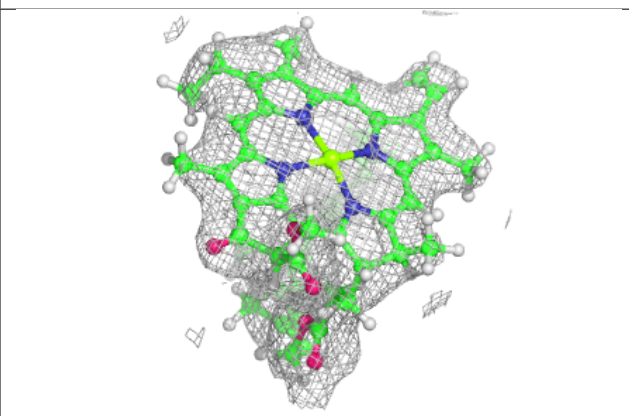
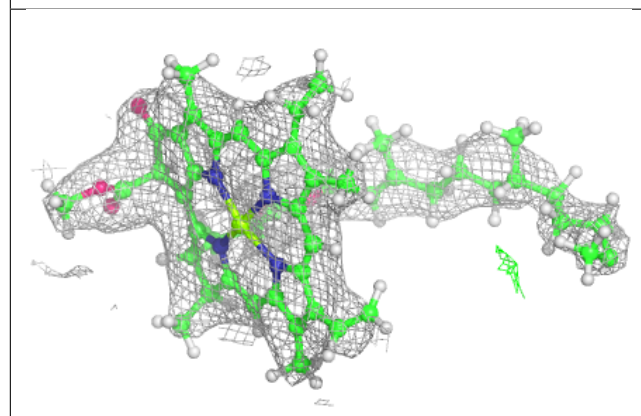
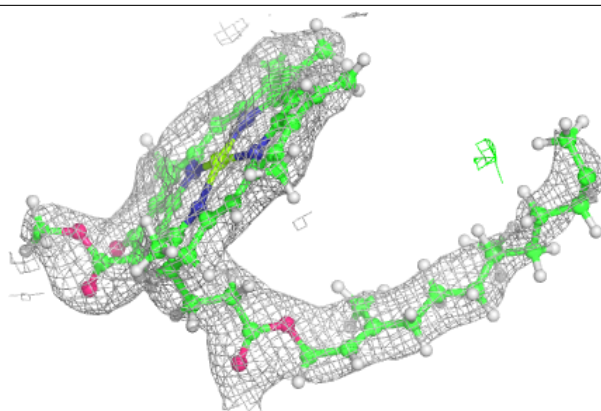
Electron density around CLA C 503:

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

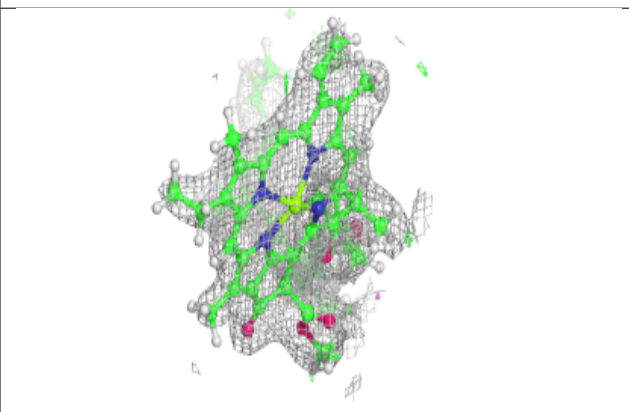
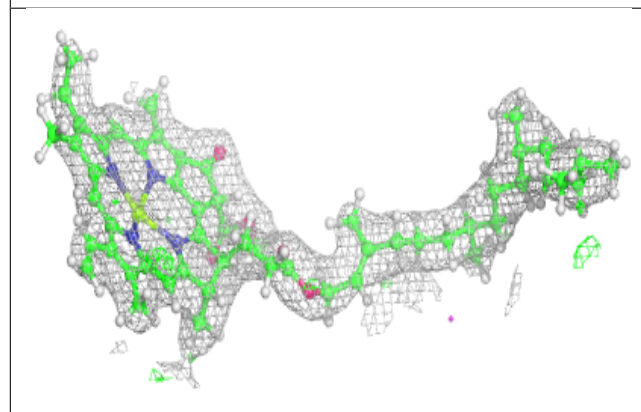
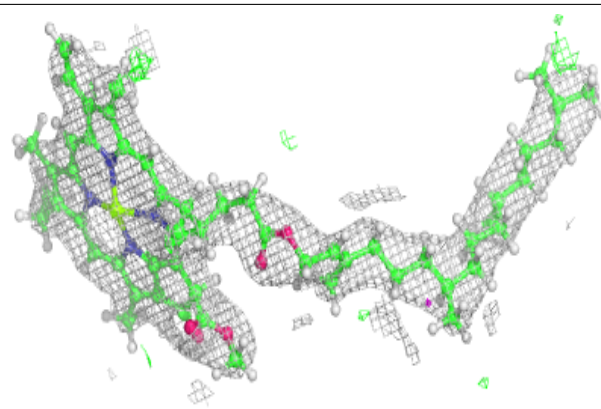


Electron density around CLA C 504:

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

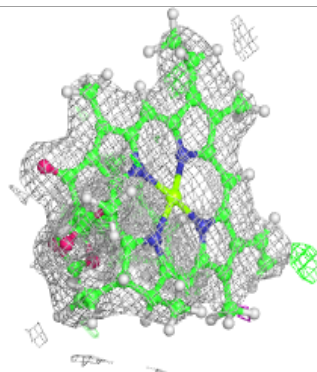
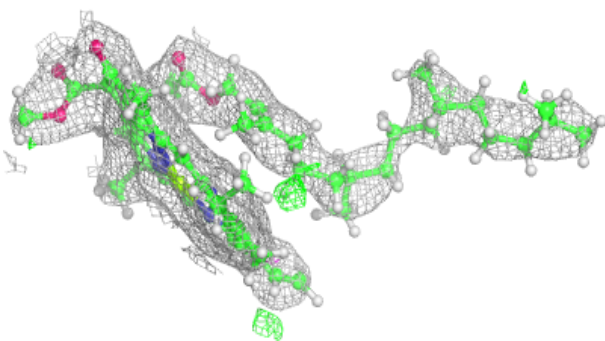
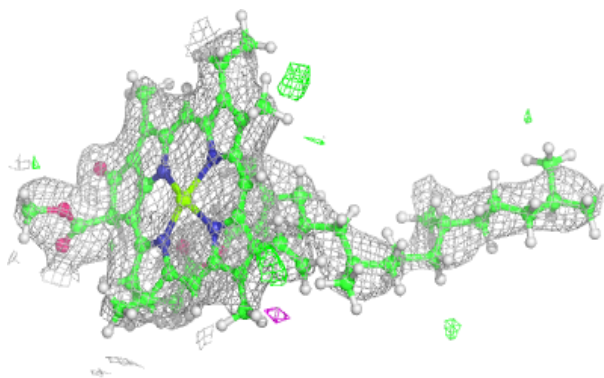
**Electron density around CLA a 402:**

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

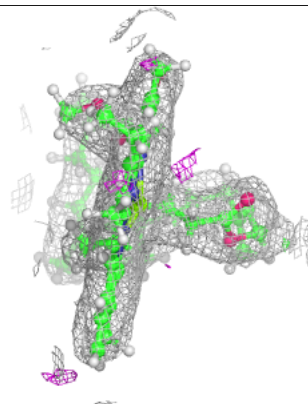
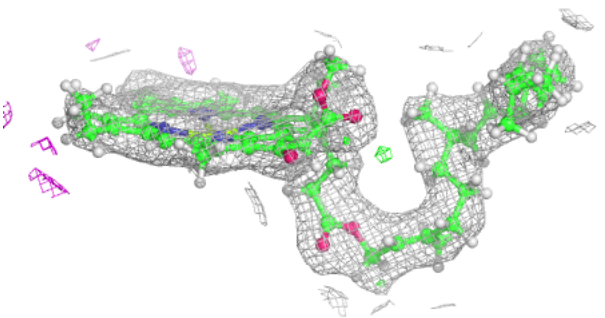
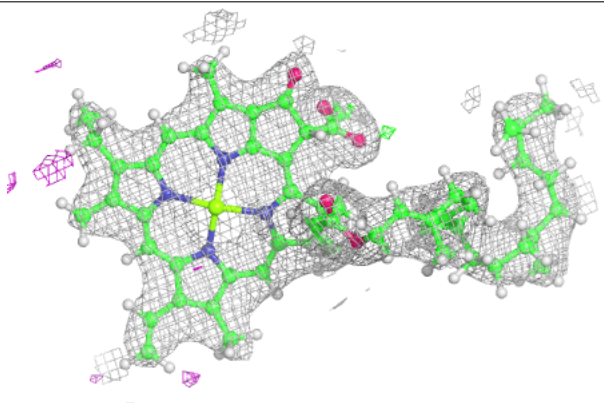


Electron density around CLA C 505:

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

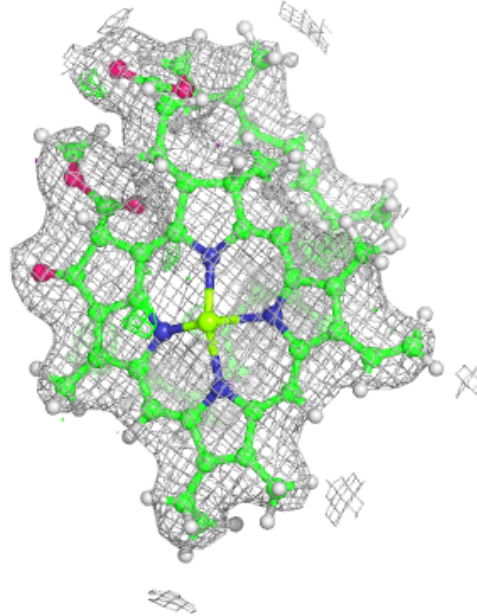
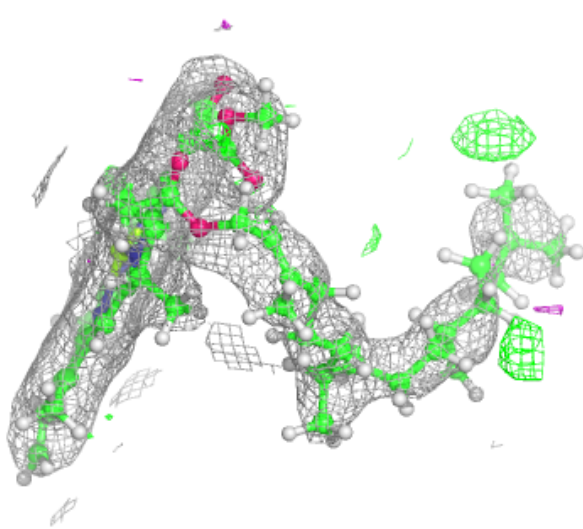
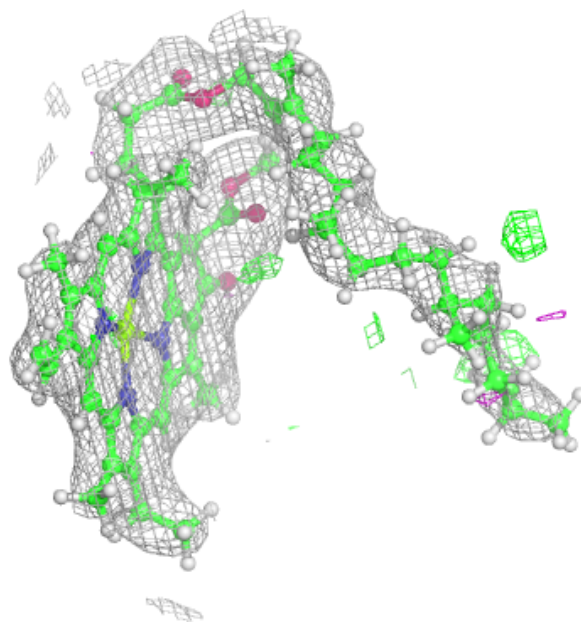
**Electron density around CLA B 611:**

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



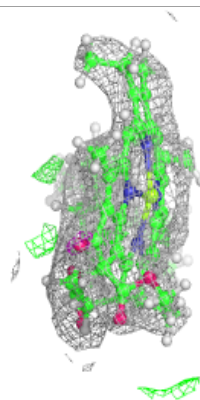
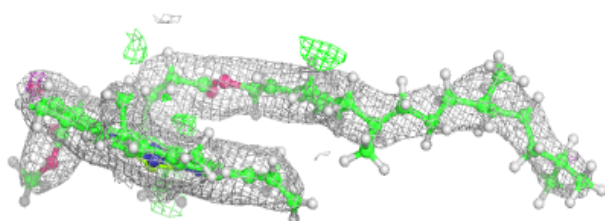
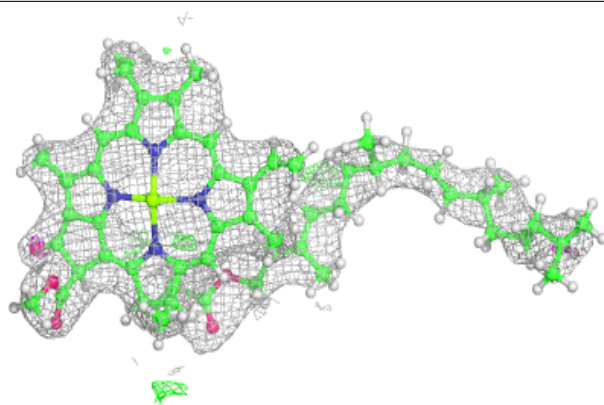
Electron density around CLA B 612:

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

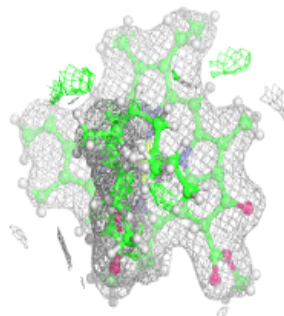
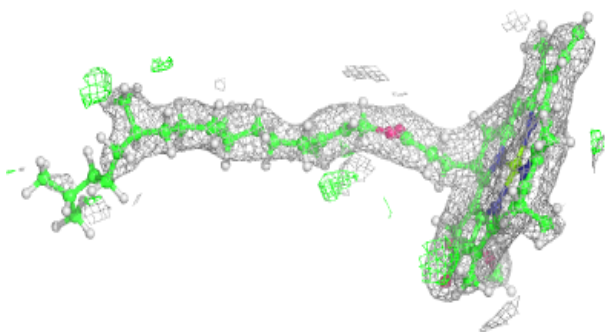
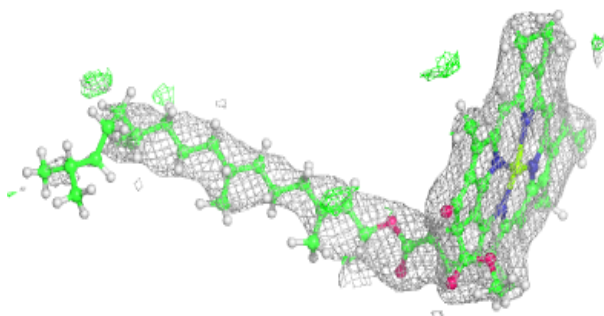


Electron density around CLA B 602:

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

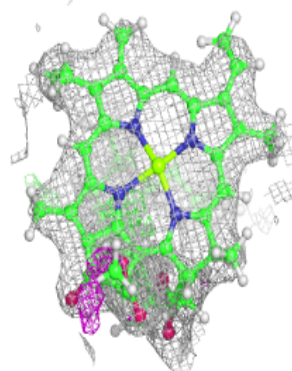
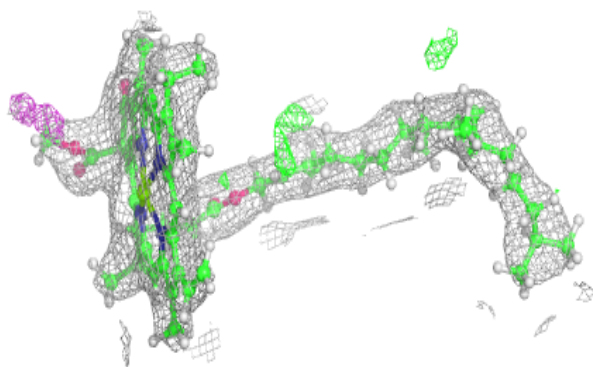
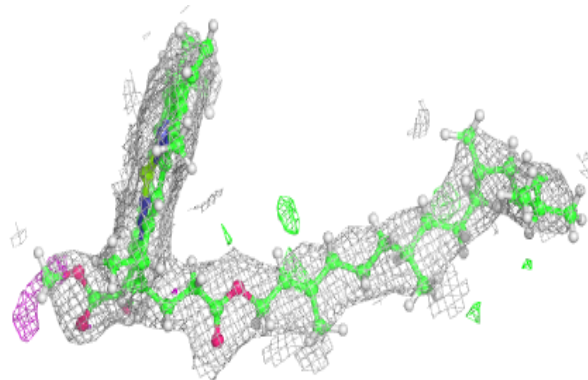
**Electron density around CLA b 604:**

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

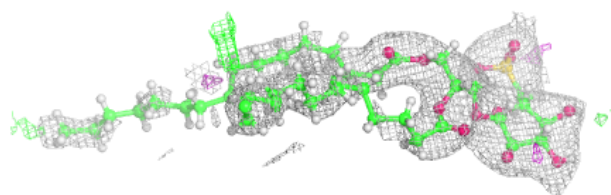
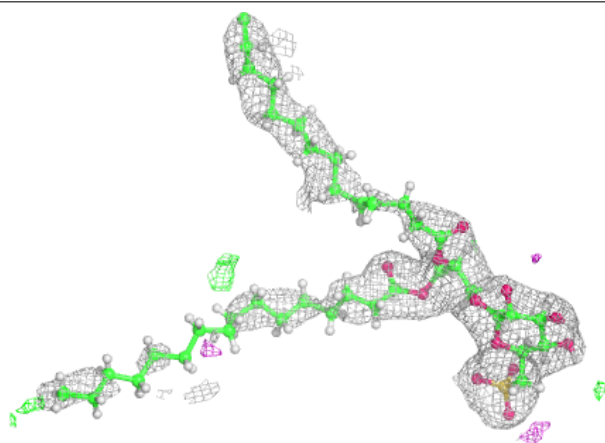


Electron density around CLA b 605:

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

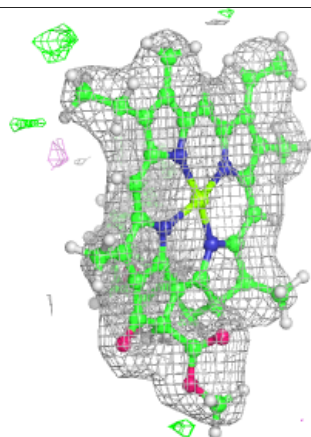
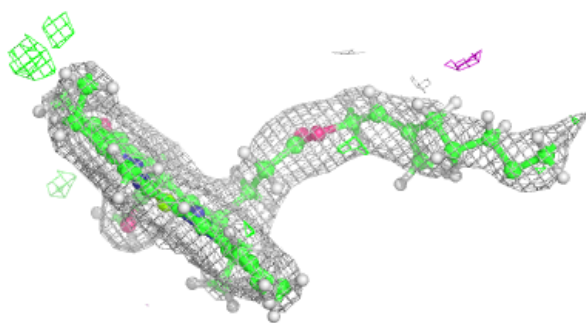
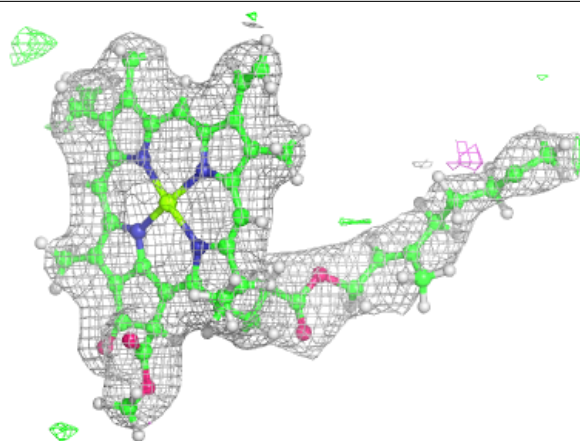
**Electron density around SQD A 410:**

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

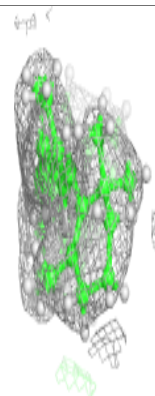
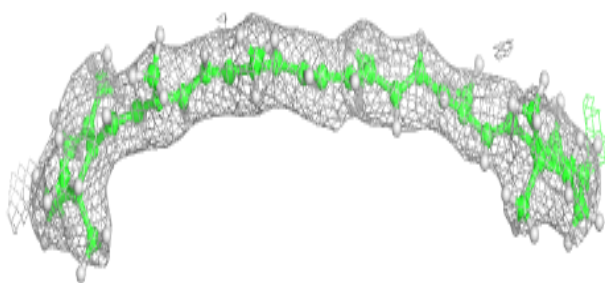
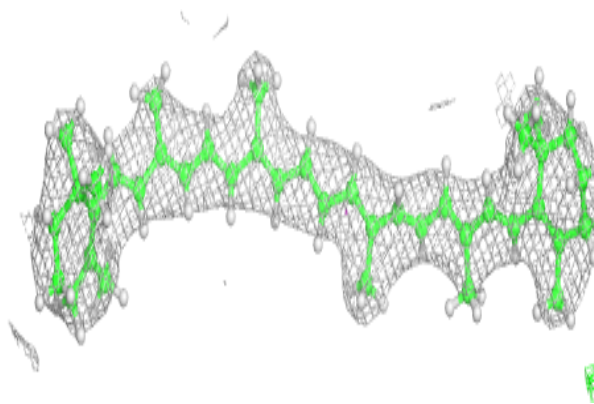


Electron density around CLA A 405:

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

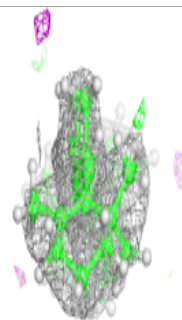
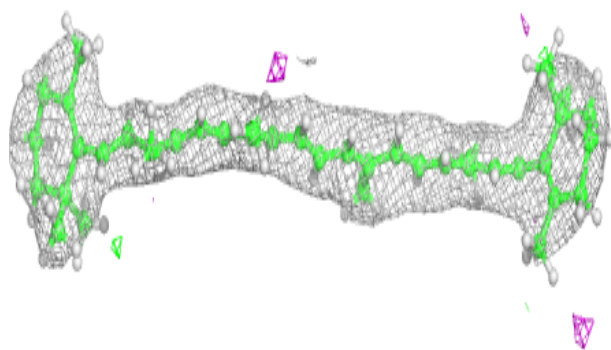
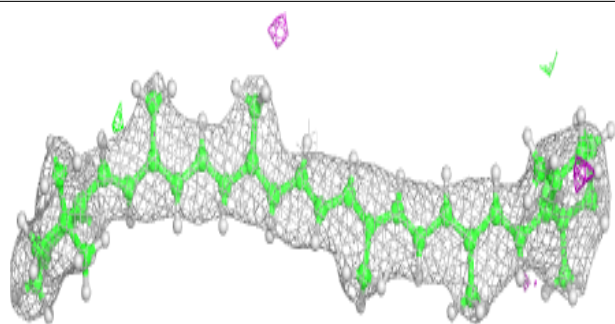
**Electron density around BCR T 101:**

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

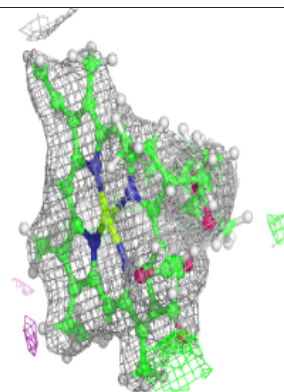
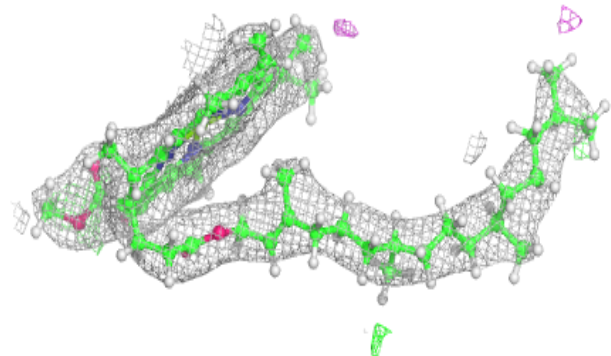
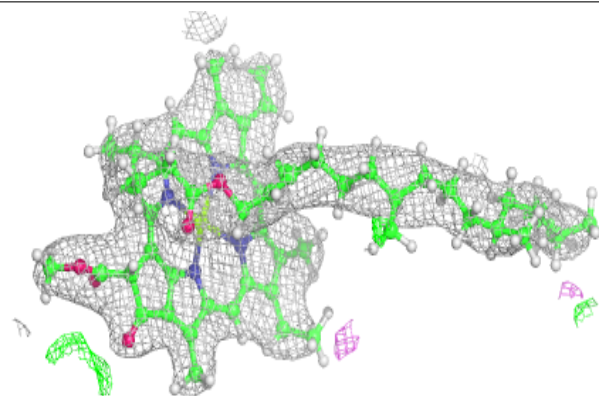


Electron density around BCR a 406:

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

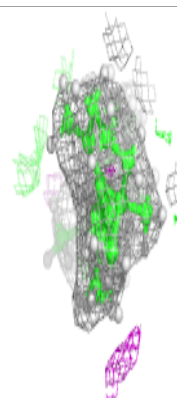
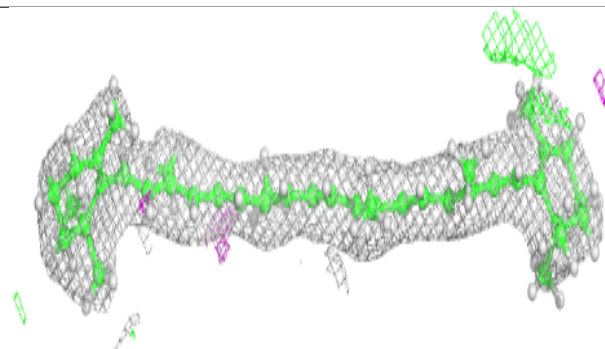
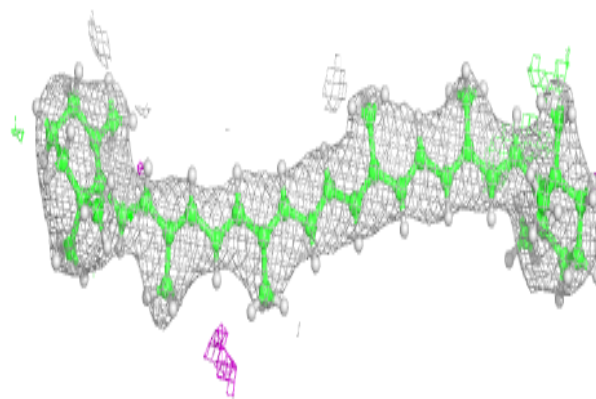
**Electron density around CLA b 608:**

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



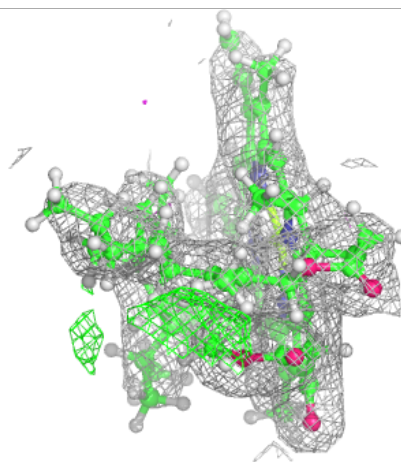
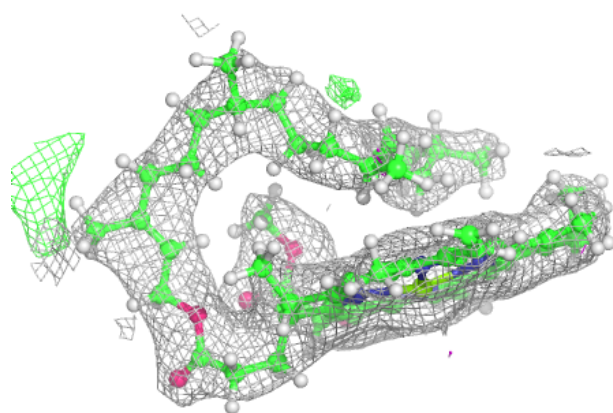
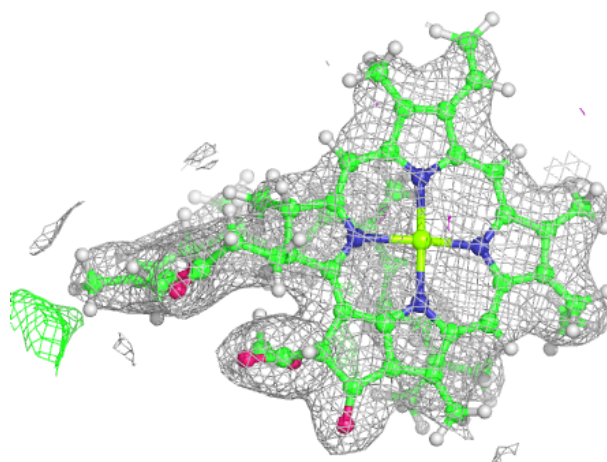
Electron density around BCR b 618:

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



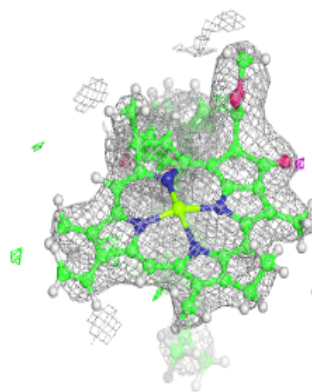
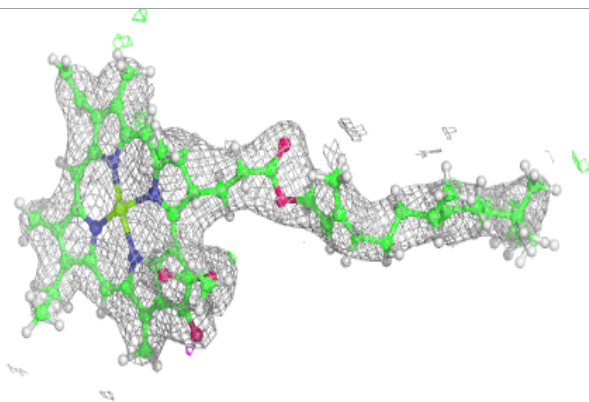
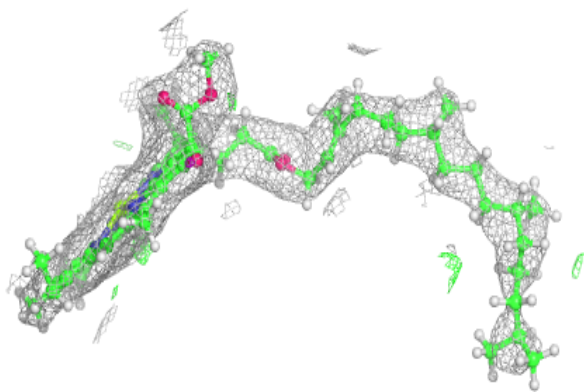
Electron density around CLA C 510:

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

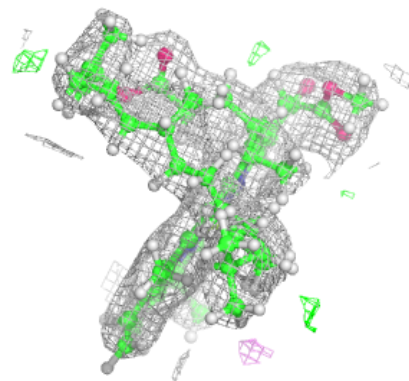
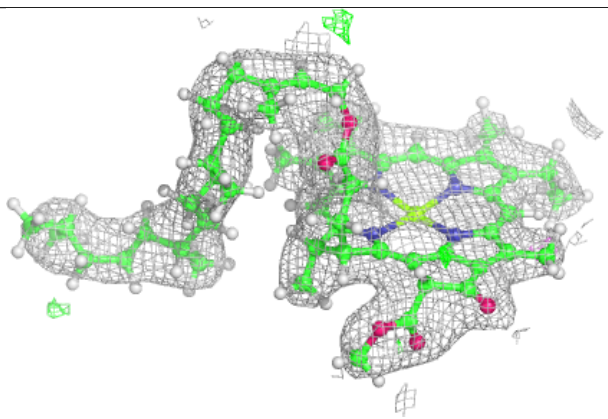
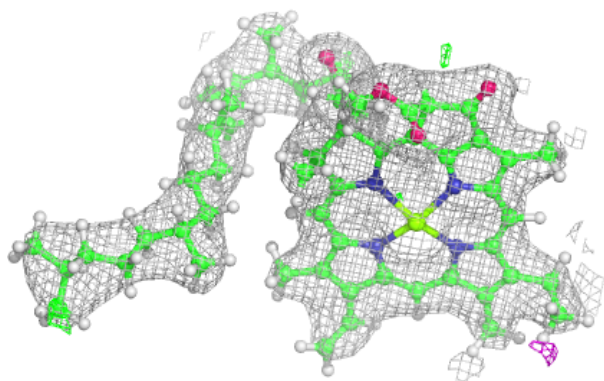


Electron density around CLA d 403:

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

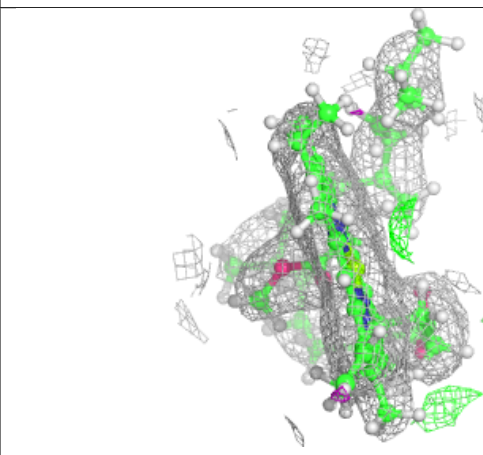
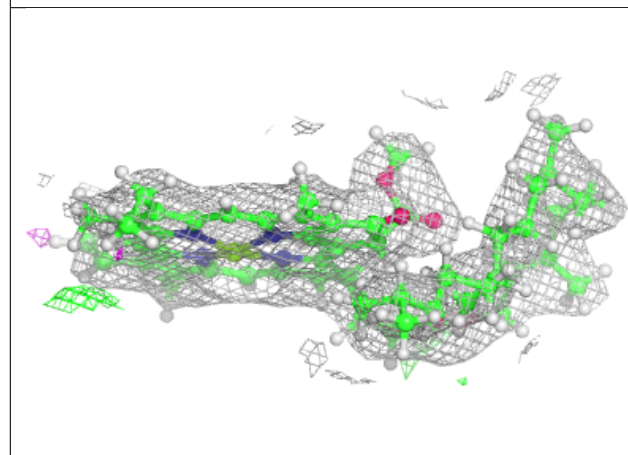
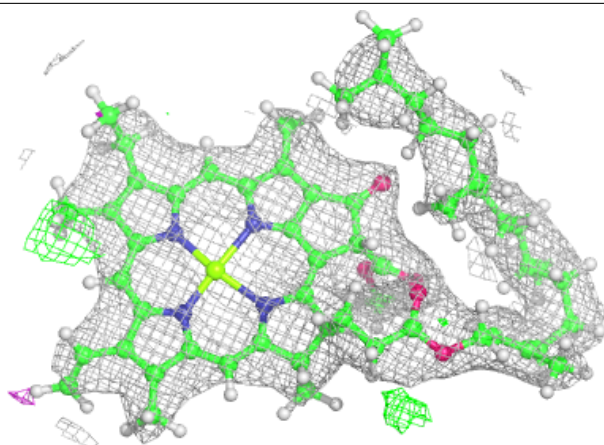
**Electron density around CLA d 404:**

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



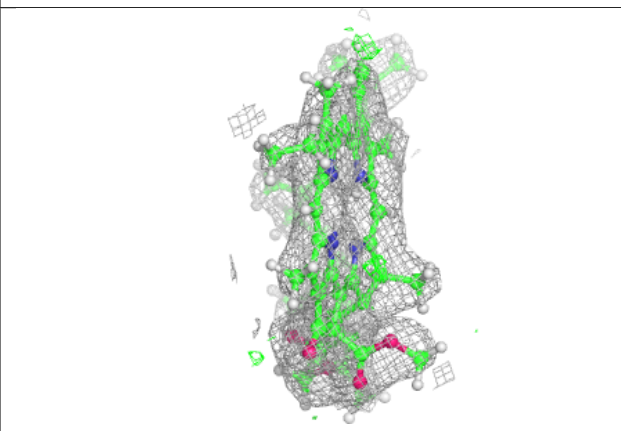
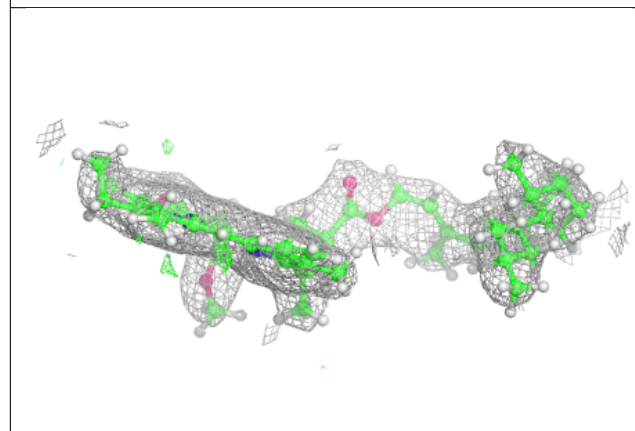
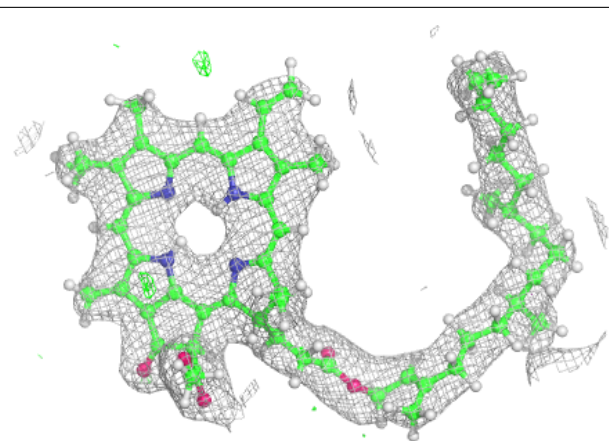
Electron density around CLA b 610:

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

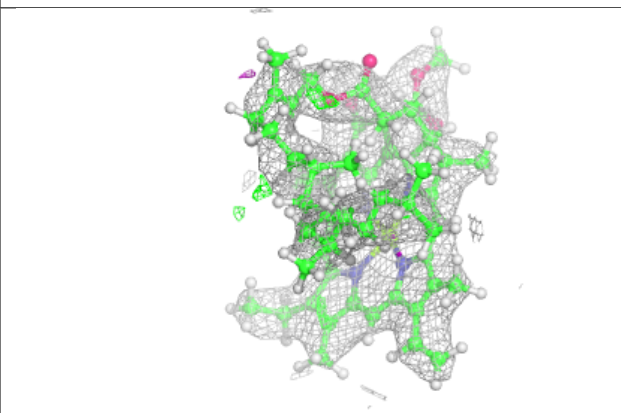
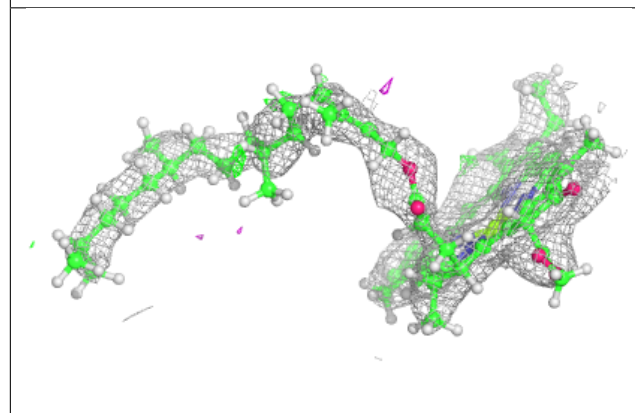
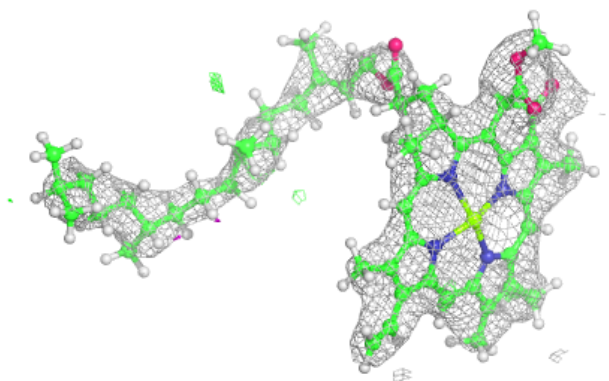


Electron density around PHO a 404:

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

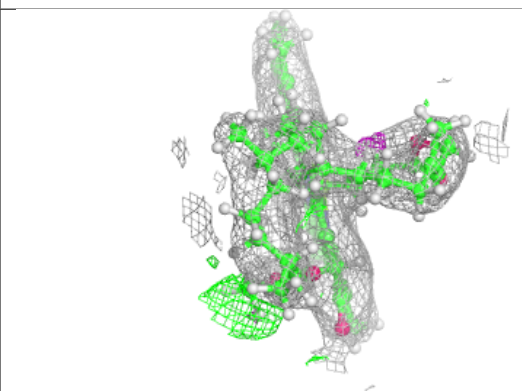
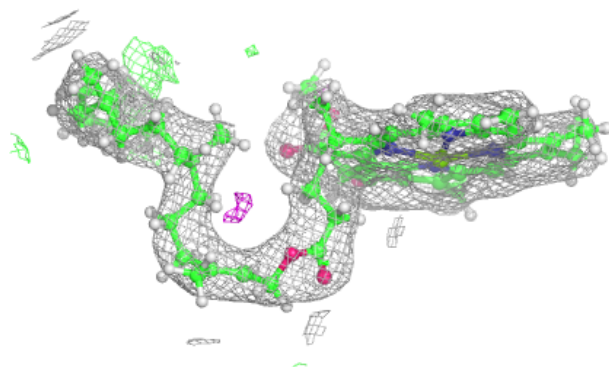
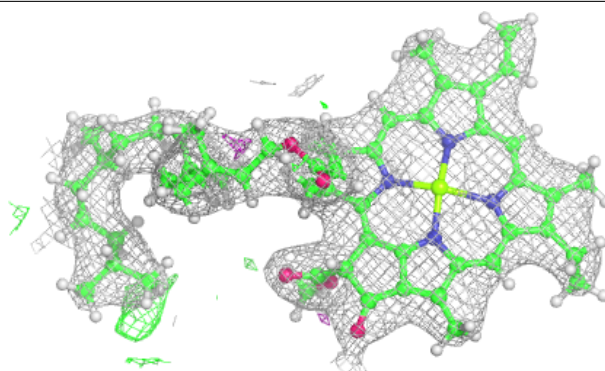
**Electron density around CLA C 511:**

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

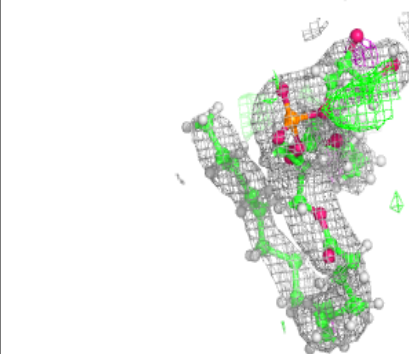
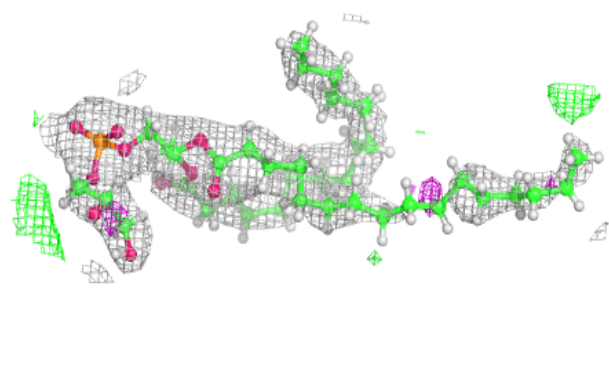
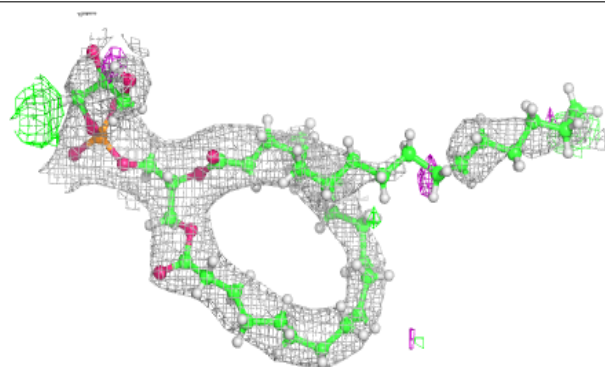


Electron density around CLA b 612:

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

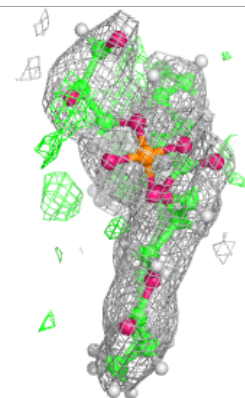
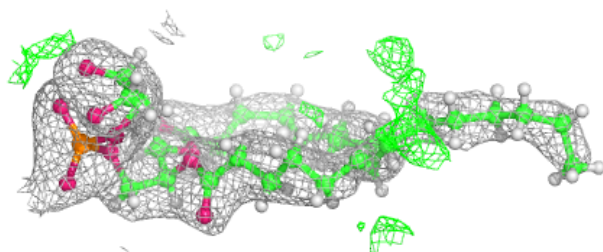
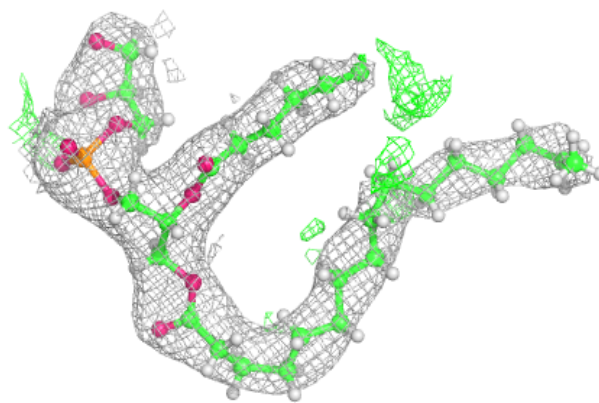
**Electron density around LHG b 623:**

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

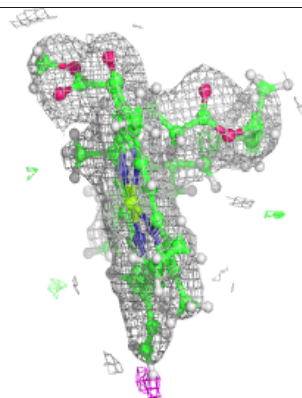
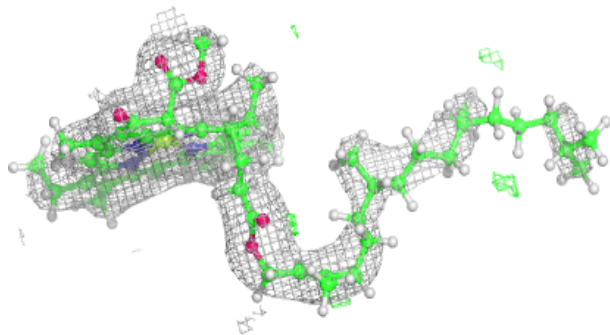
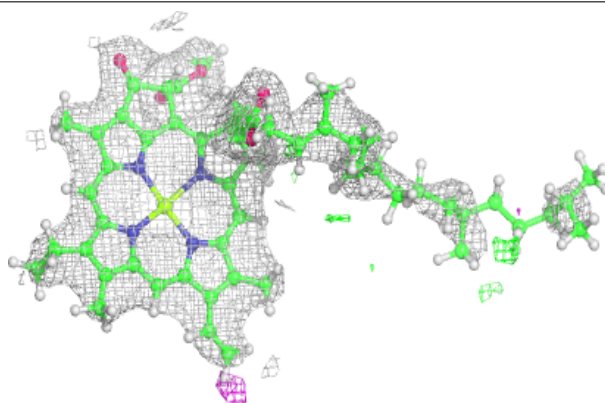


Electron density around LHG d 409:

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

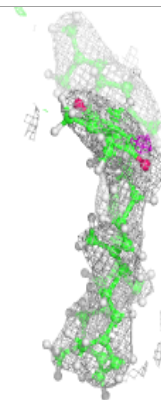
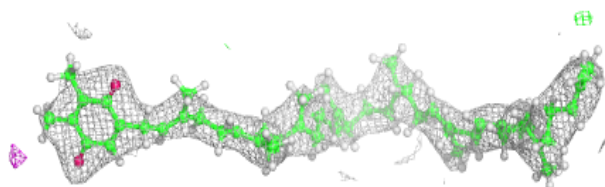
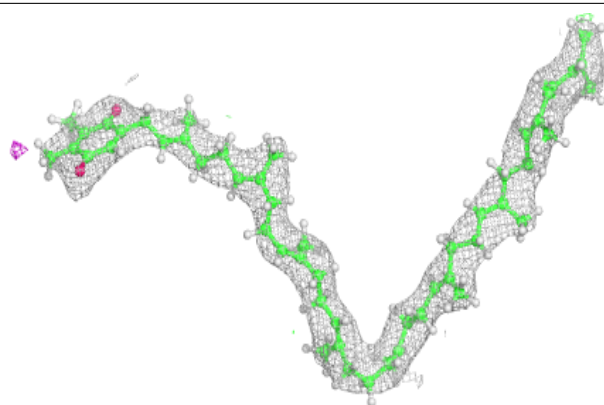
**Electron density around CLA A 403:**

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

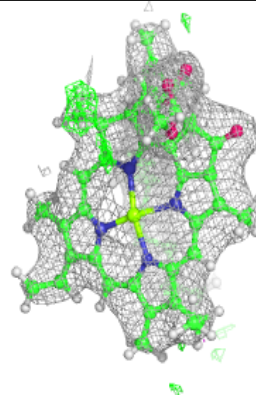
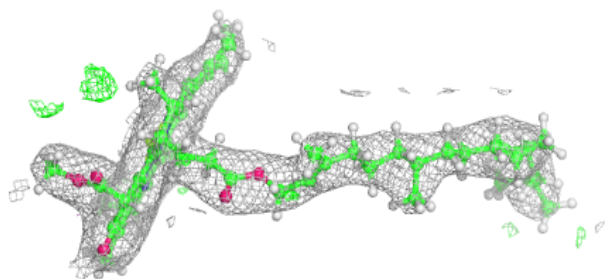
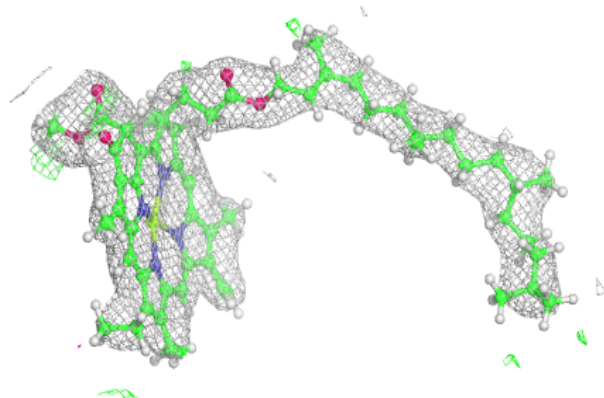


Electron density around PL9 d 407:

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

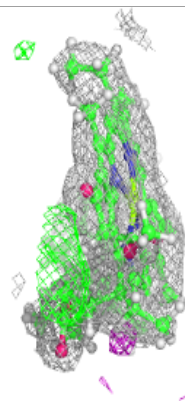
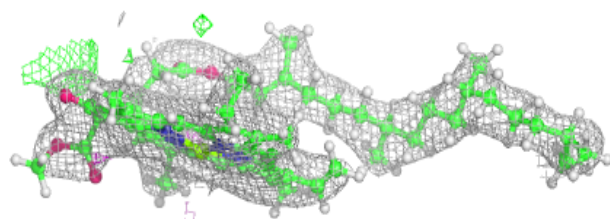
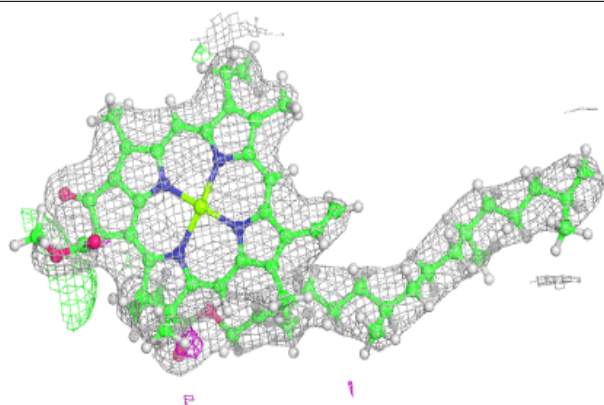
**Electron density around CLA B 608:**

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

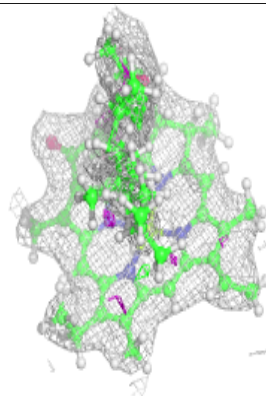
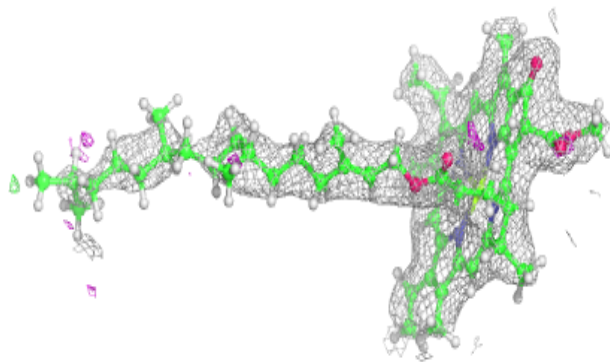
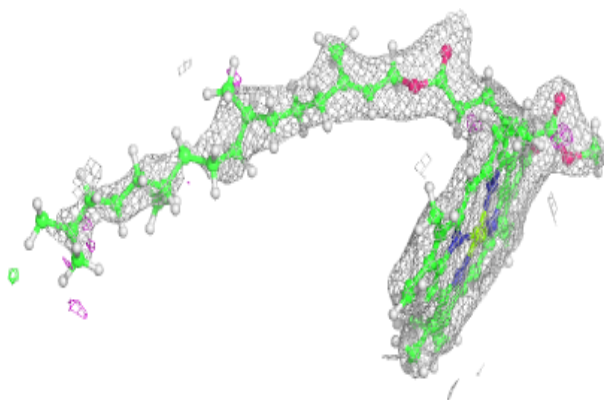


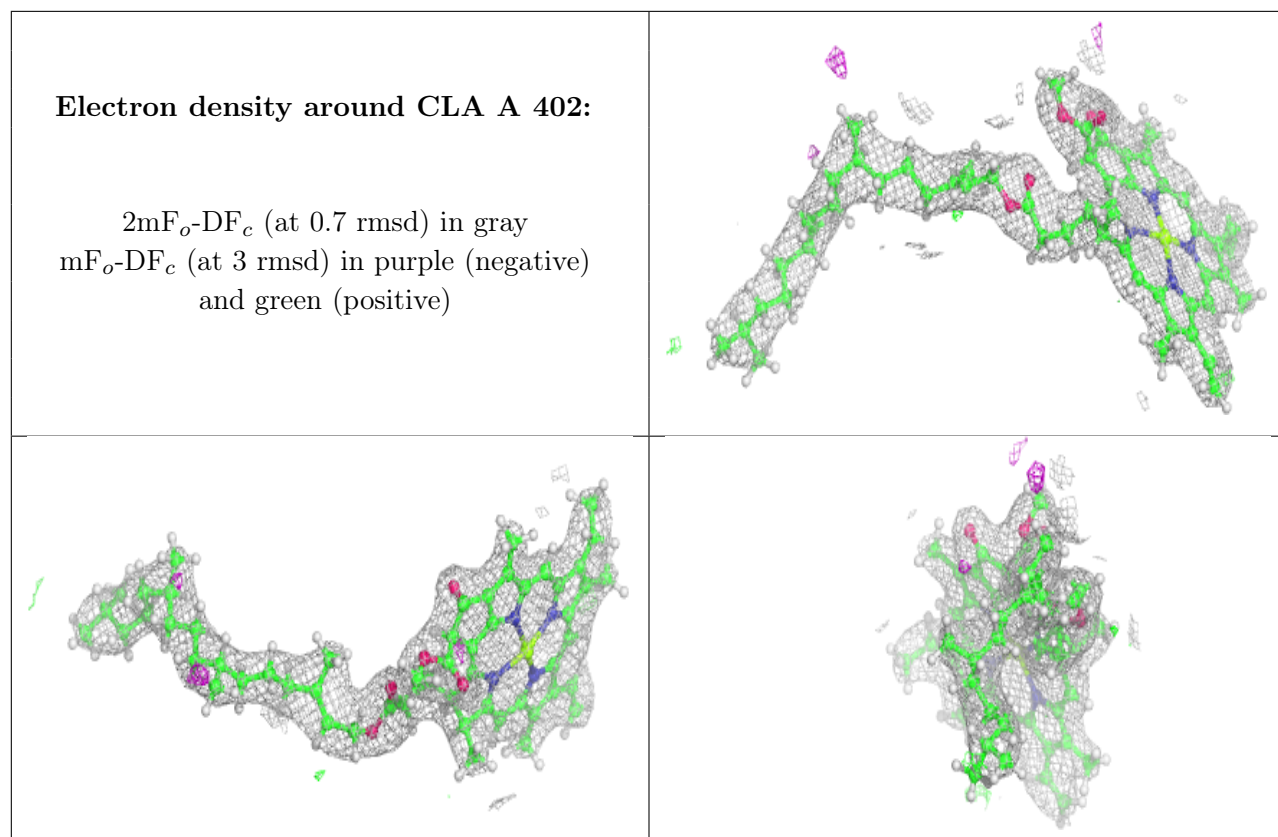
Electron density around CLA C 501:

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

**Electron density around CLA b 607:**

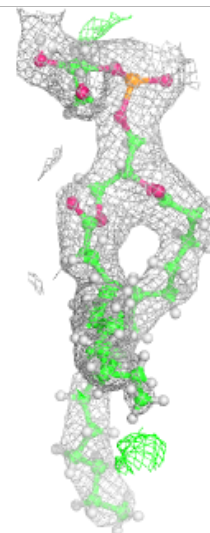
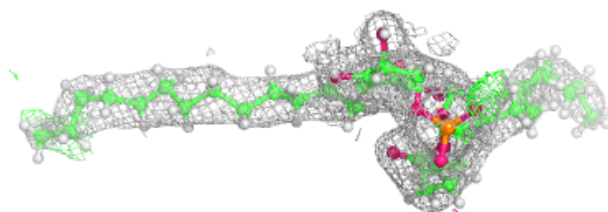
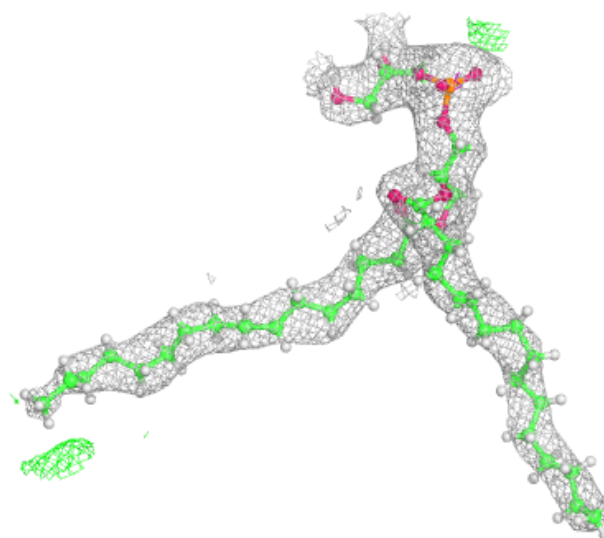
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





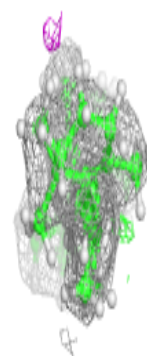
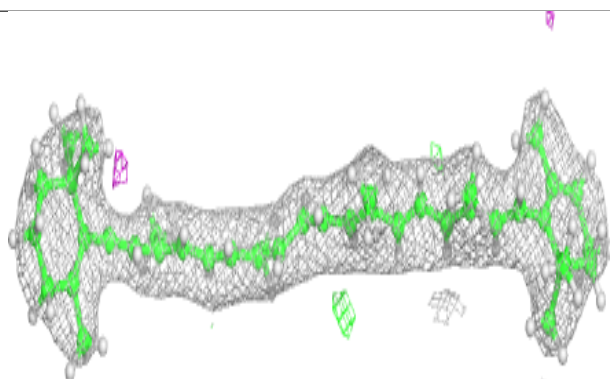
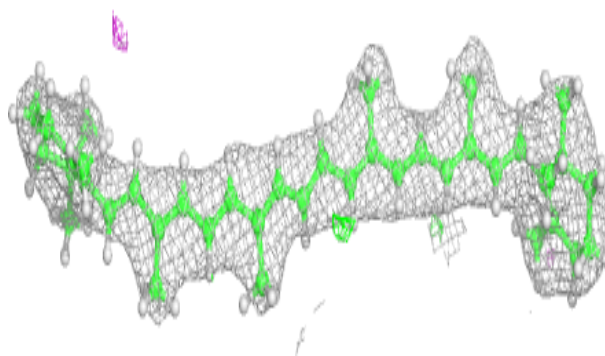
Electron density around LHG 1 101:

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

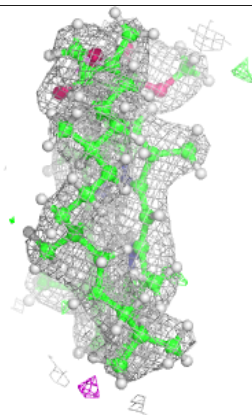
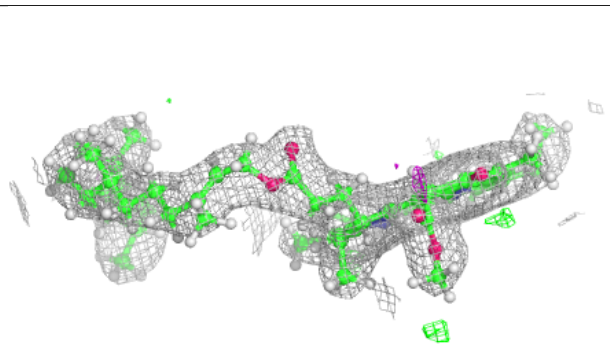
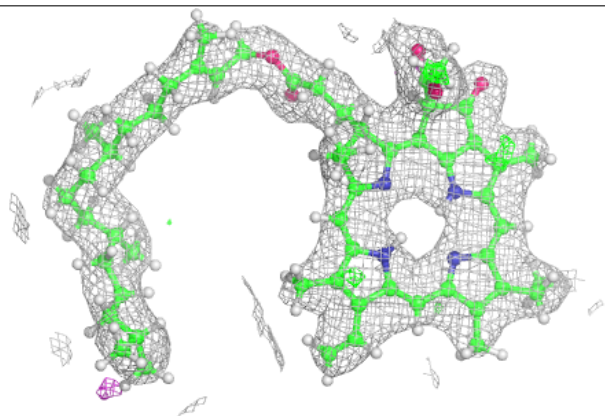


Electron density around BCR I 101:

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

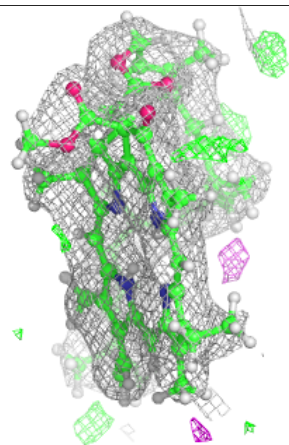
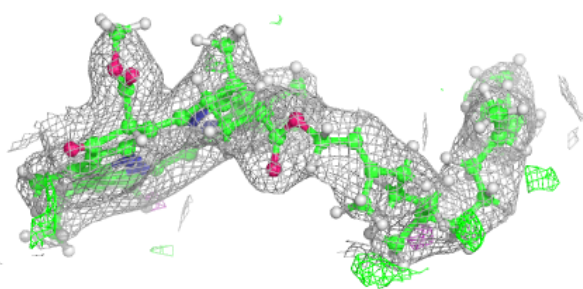
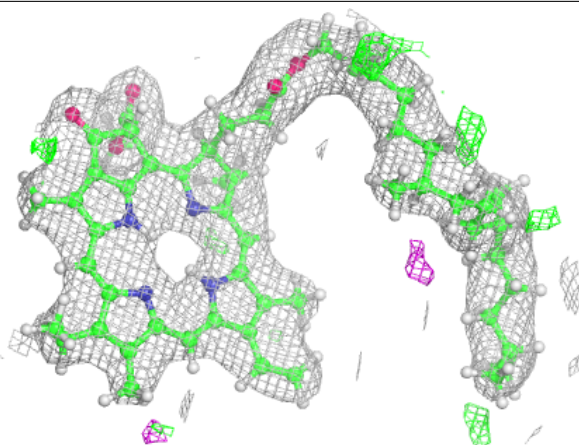
**Electron density around PHO A 404:**

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

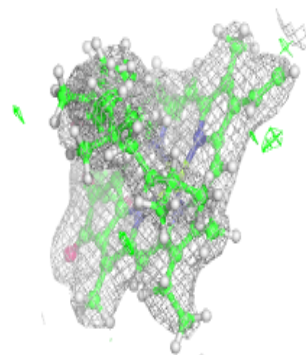
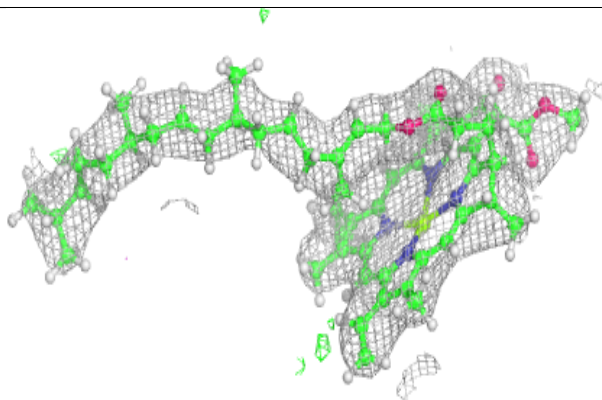
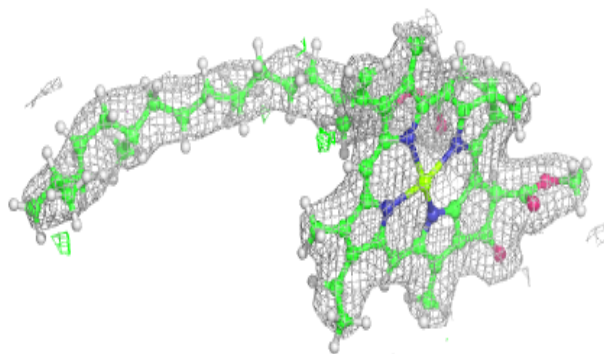


Electron density around PHO D 401:

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

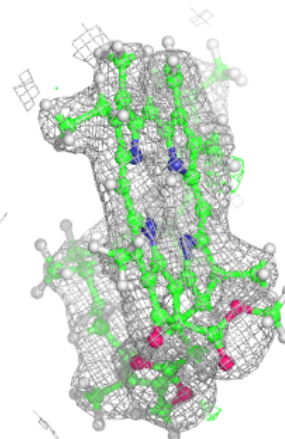
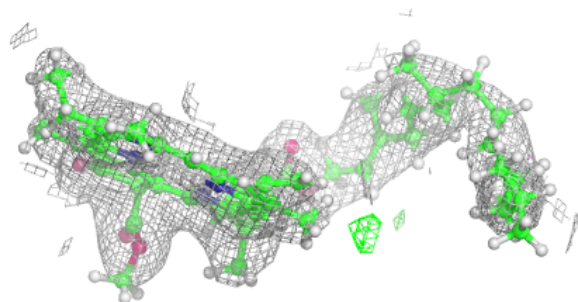
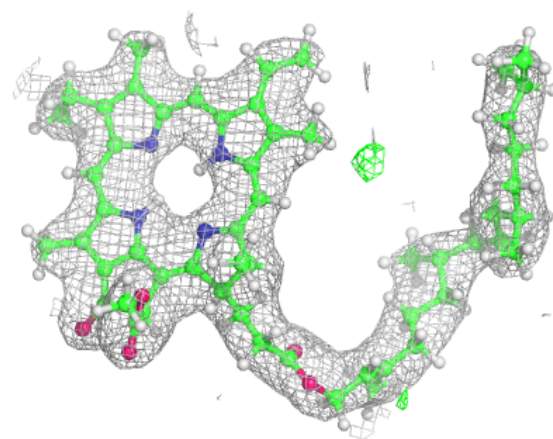
**Electron density around CLA B 607:**

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



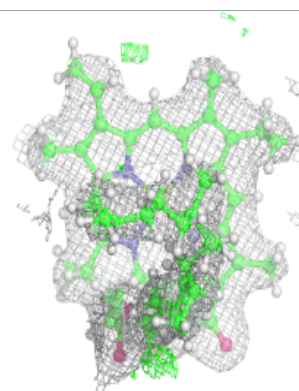
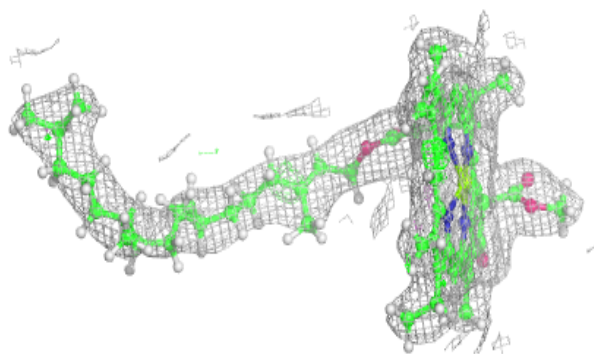
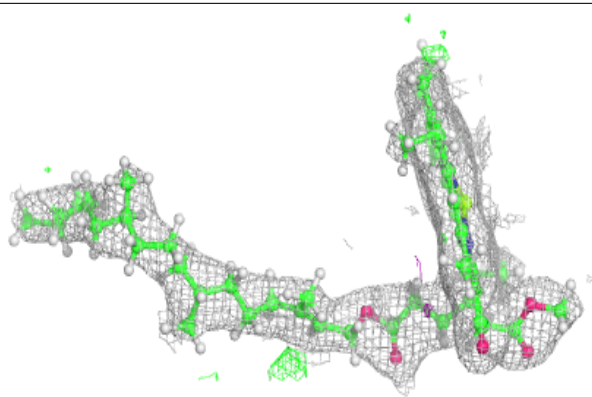
Electron density around PHO d 401:

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

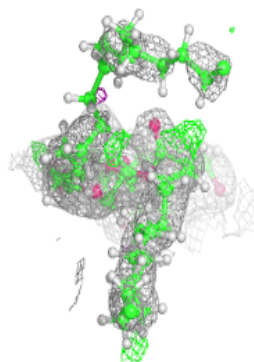
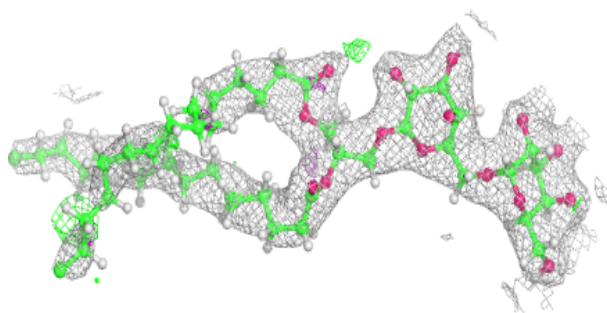
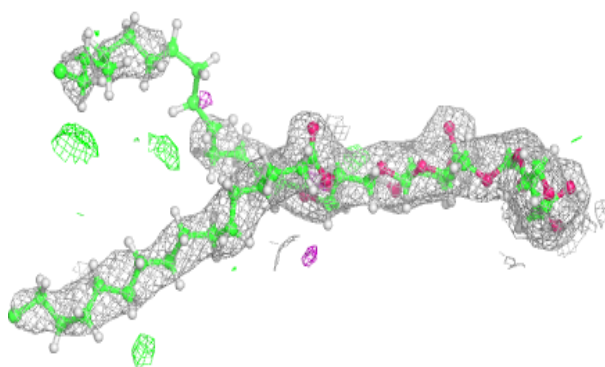


Electron density around CLA B 604:

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

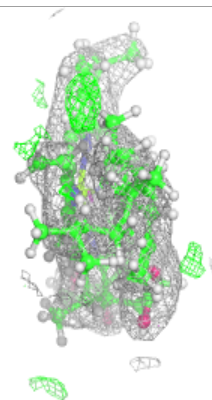
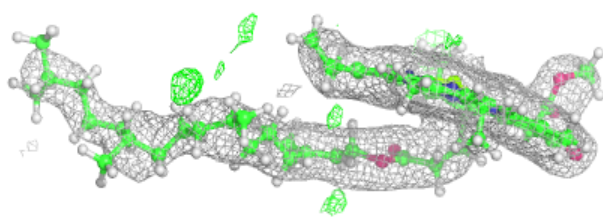
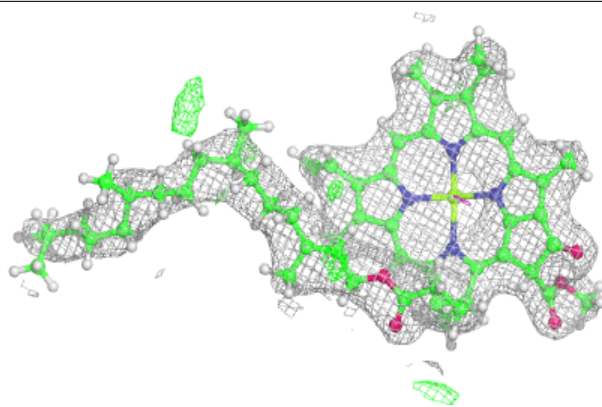
**Electron density around DGD c 515:**

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

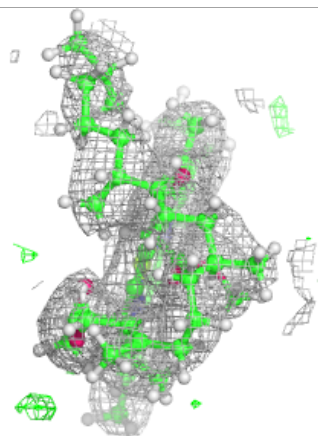
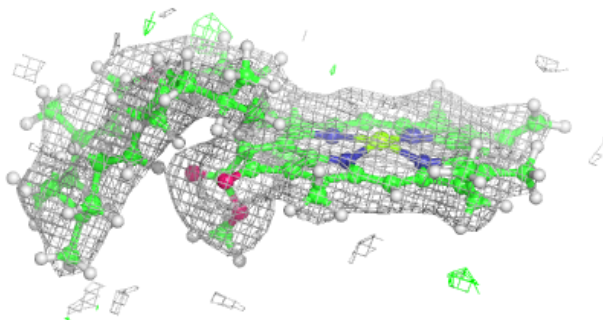
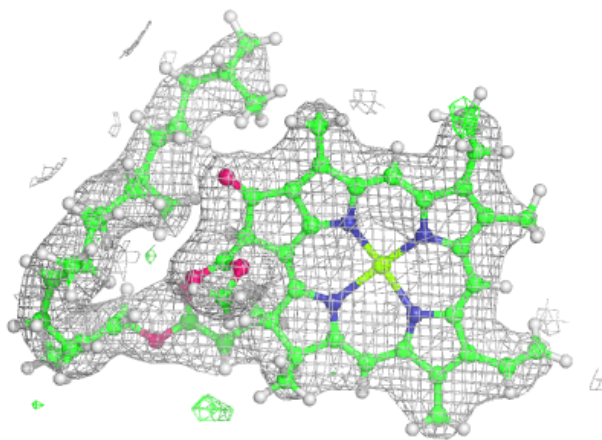


Electron density around CLA b 603:

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

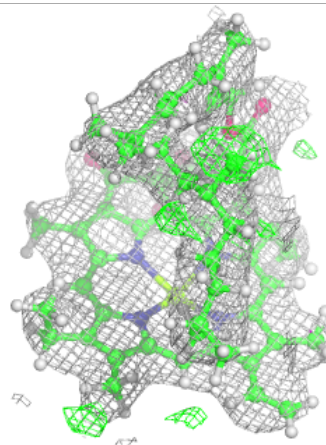
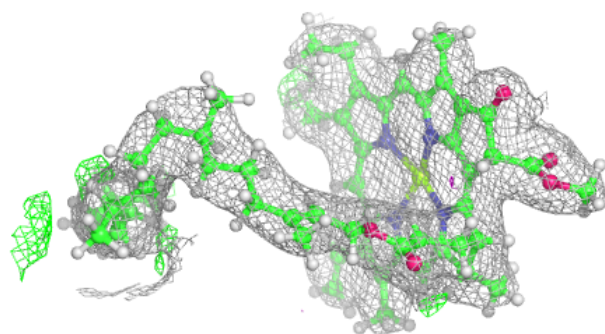
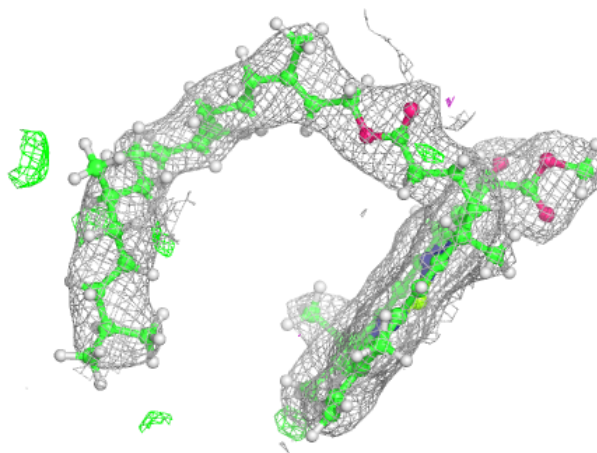
**Electron density around CLA B 609:**

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



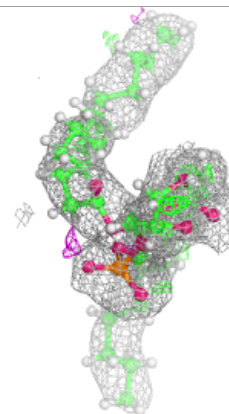
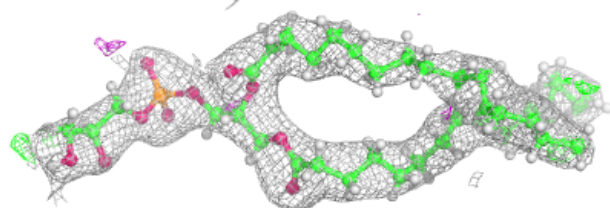
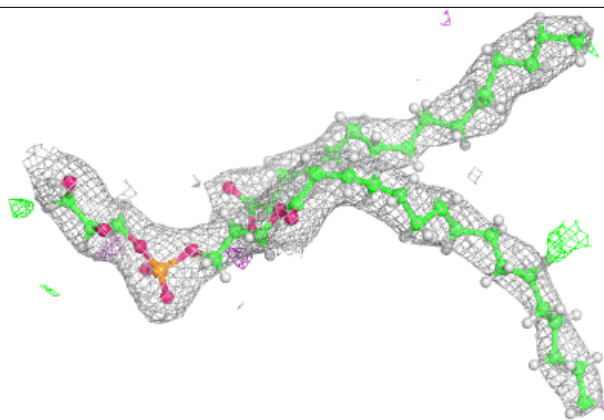
Electron density around CLA B 610:

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

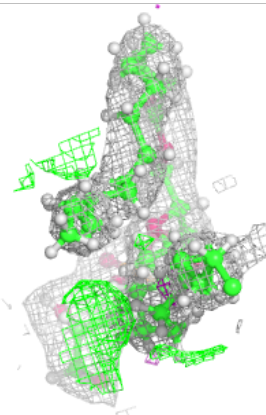
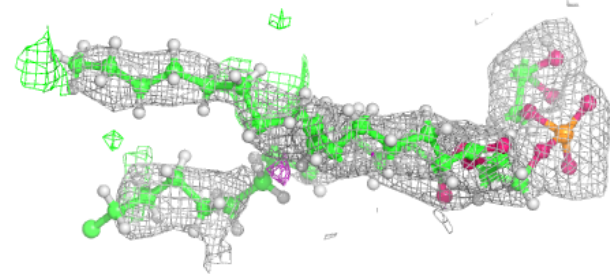
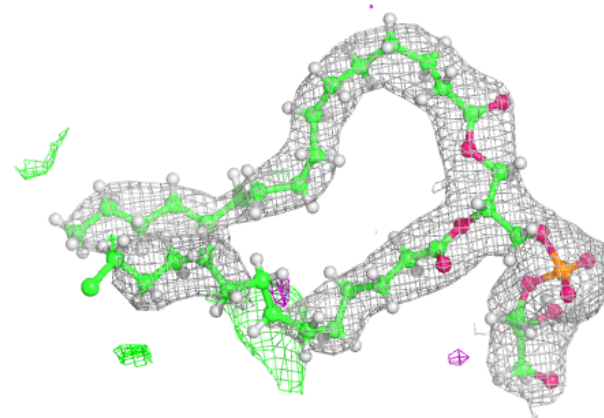


Electron density around LHG D 410:

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

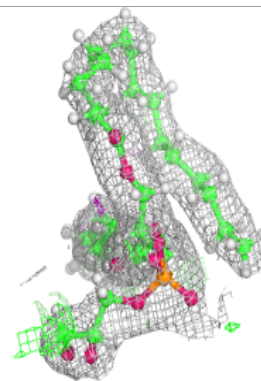
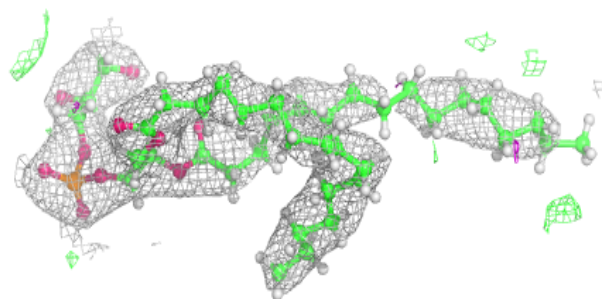
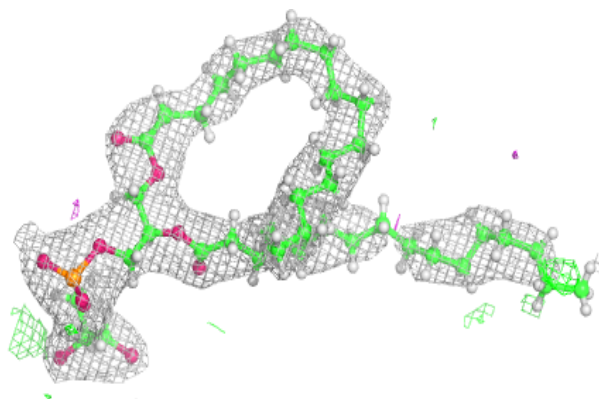
**Electron density around LHG D 411:**

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

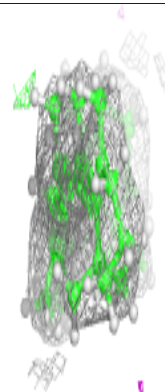
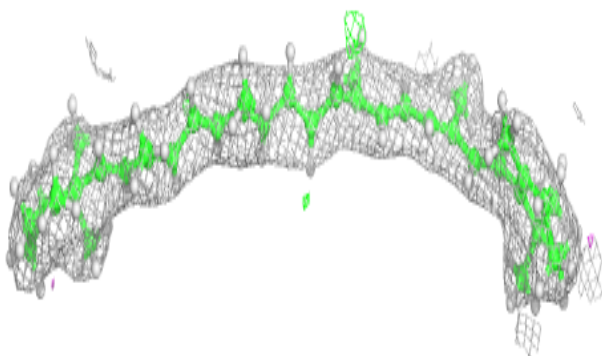
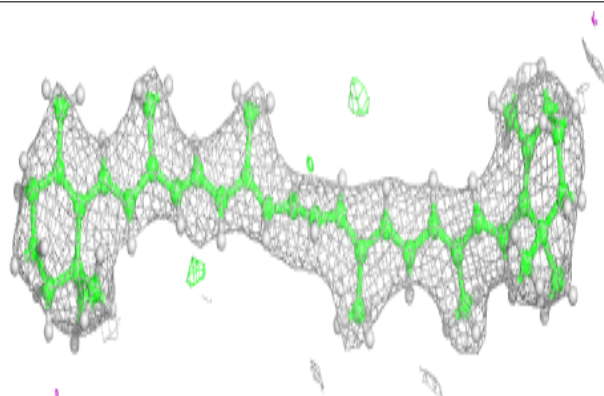


Electron density around LHG D 413:

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

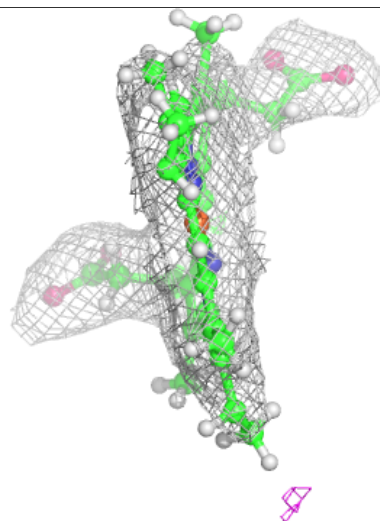
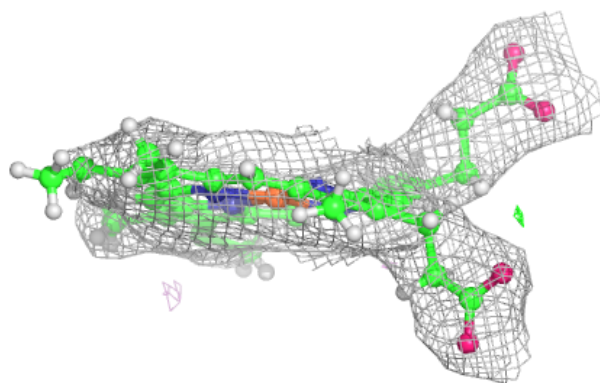
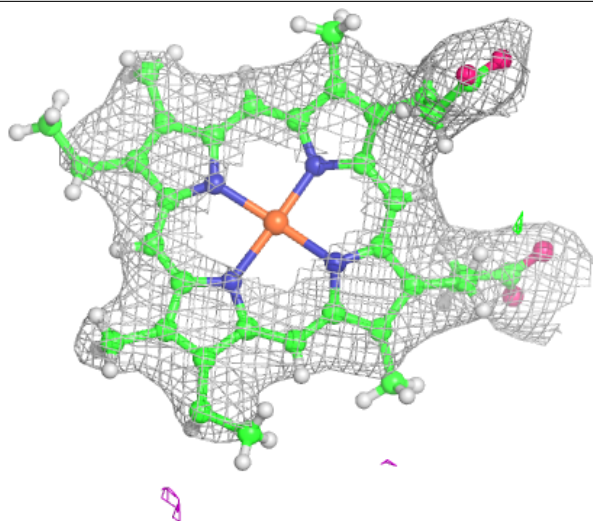
**Electron density around BCR t 101:**

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



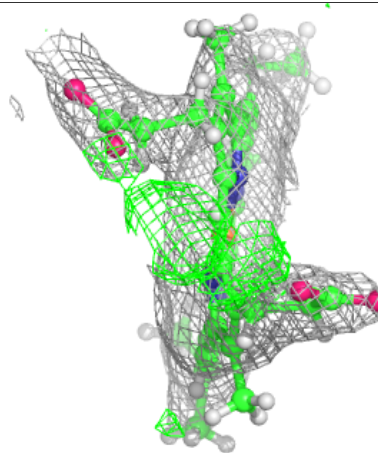
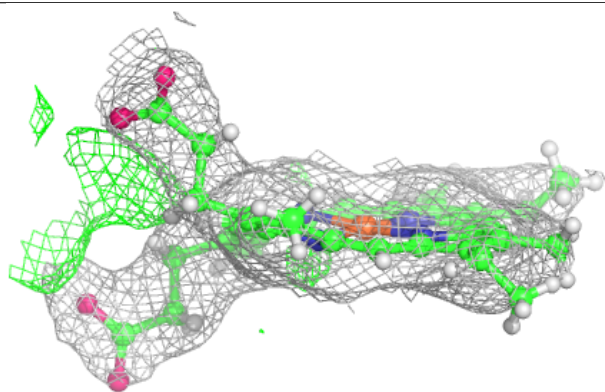
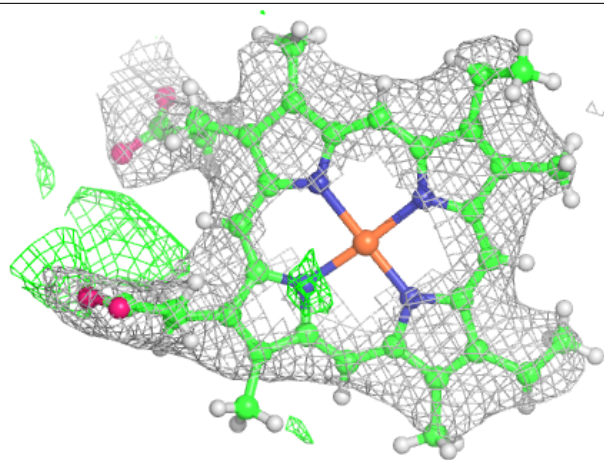
Electron density around HEC F 101:

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



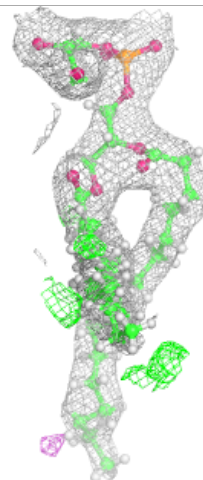
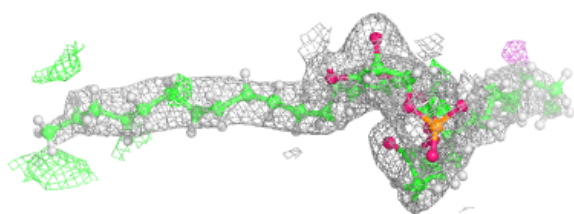
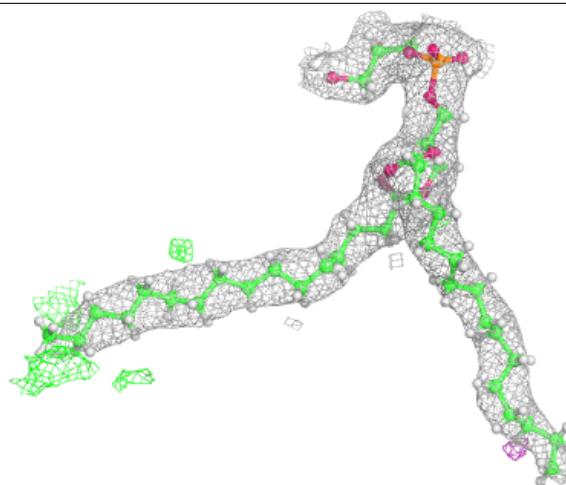
Electron density around HEC f 101:

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



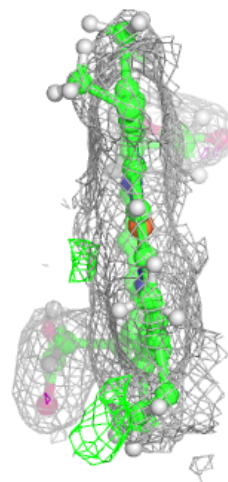
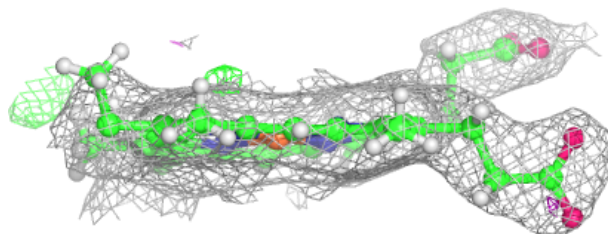
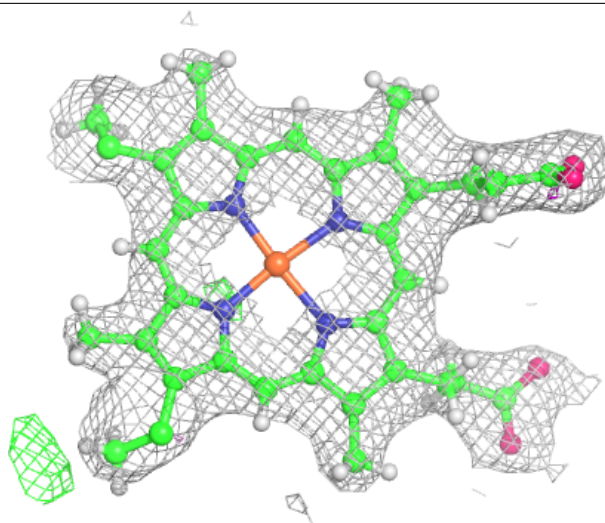
Electron density around LHG L 102:

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



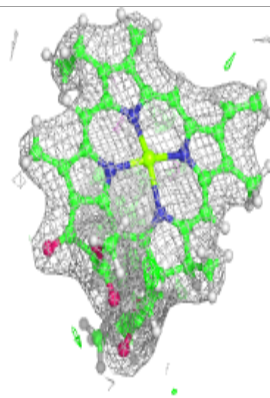
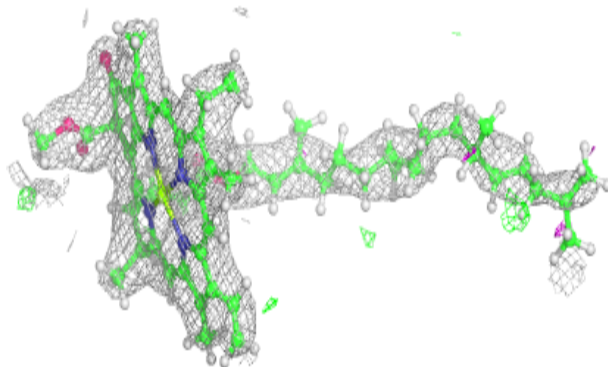
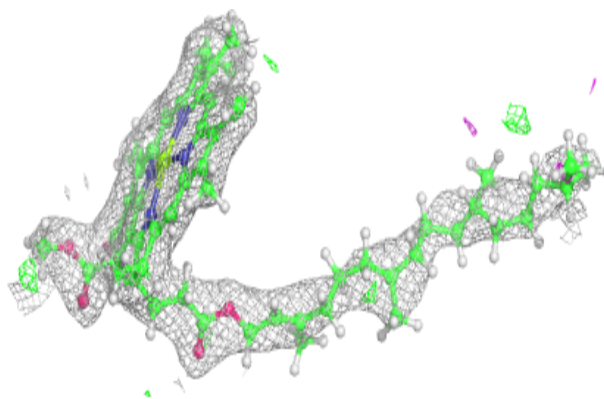
Electron density around HEC V 201:

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



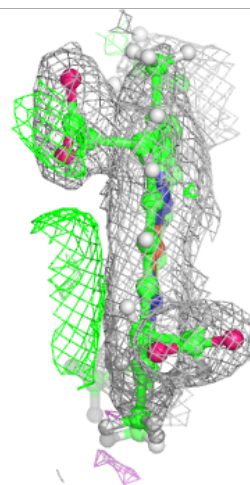
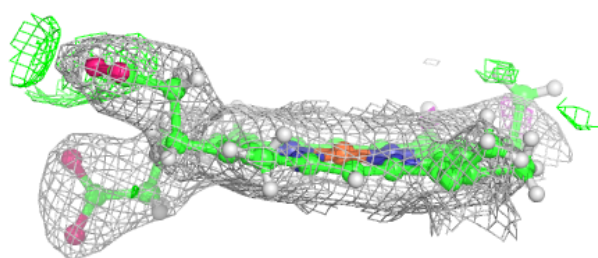
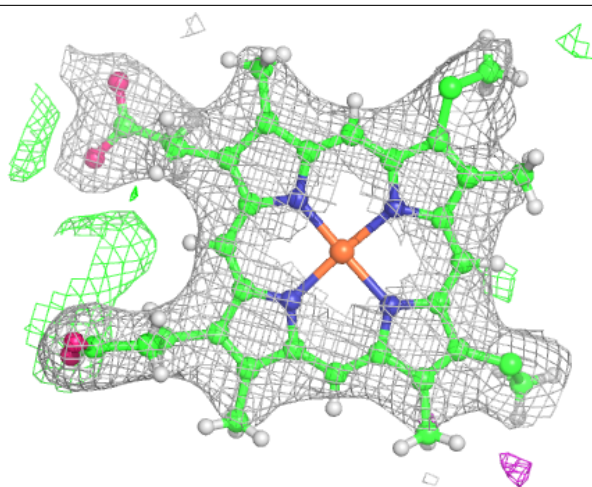
Electron density around CLA B 606:

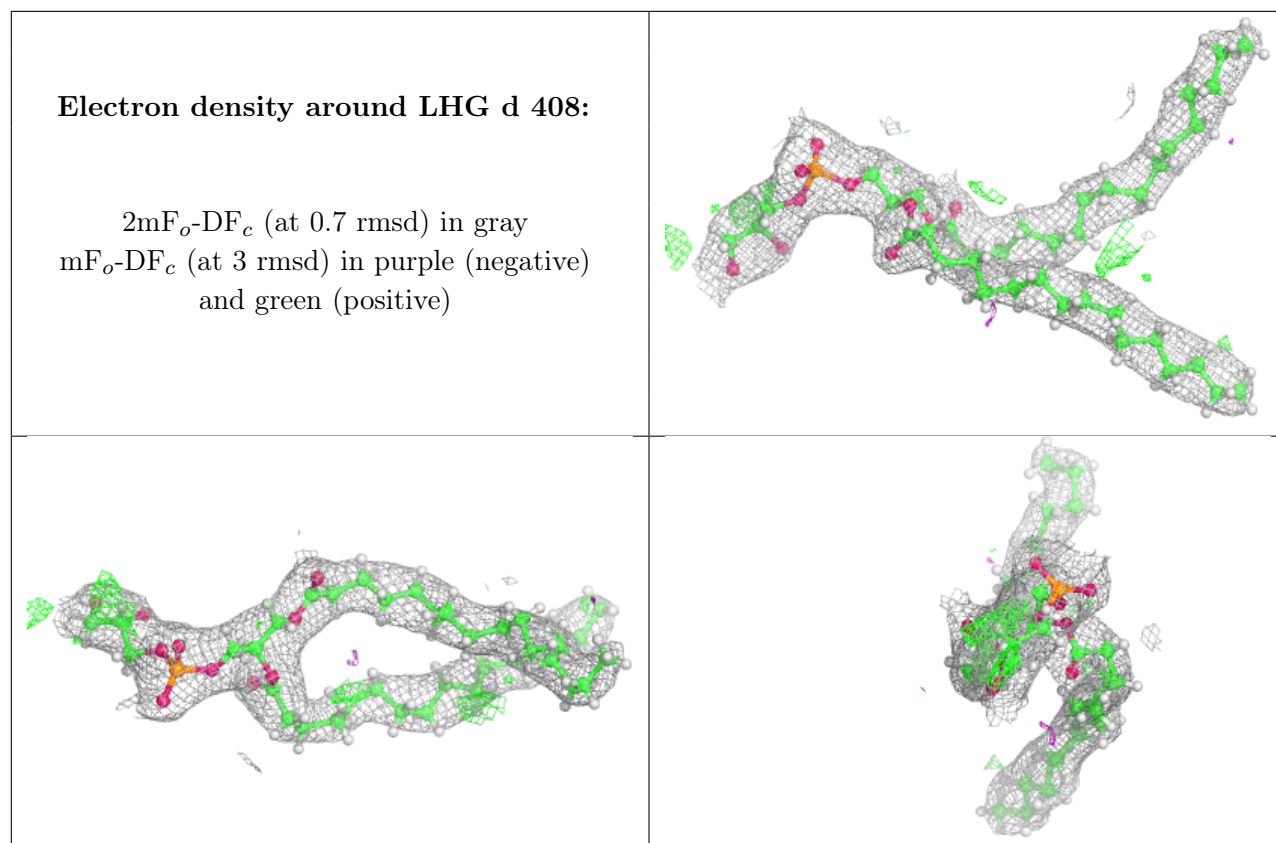
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around HEC v 201:

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





6.5 Other polymers [i](#)

There are no such residues in this entry.