**Distance between first and last residue in protein chains**

Analyzing interactions in Chain A

Distance between first and last residue in Chain A: 37.44847293461029 Å

Analyzing interactions in Chain B

Distance between first and last residue in Chain B: 32.789697071522724 Å

Analyzing interactions in Chain C

Distance between first and last residue in Chain C: 23.158162660056483 Å

Analyzing interactions in Chain D

Distance between first and last residue in Chain D: 56.67282053167698 Å

Analyzing interactions in Chain E

Distance between first and last residue in Chain E: 52.74312511813406 Å

import MDAnalysis as mda

u = mda.Universe('/Users/josephsteward/Downloads/5BRZ\_cleaned.pdb')

from MDAnalysis.lib.distances import distance\_array

# Ensure you have the correct import as shown above

for seg in u.segments:

print(f"Analyzing interactions in Chain {seg.segid}")

residues = seg.atoms.residues

if len(residues) > 1:

distance = distance\_array(

residues[0].atoms.center\_of\_mass(), residues[-1].atoms.center\_of\_mass())

print(f"Distance between first and last residue in Chain {seg.segid}: {distance[0][0]} Å")