

Structure Factor Check

4YXD

Title: CRYSTAL STRUCTURE OF PORCINE HEART MITOCHONDRIAL COMPLEX II
 FLUTOLANIL
 Date: 23-MAR-15
 PDB code: 4YXD

Crystal

Cell parameters:
 a: 70.37 A b: 83.75 A c: 292.63 A
 α : 90.00 β : 90.00 γ : 90.00
 Space group: P 21 21 21

Model

8618 atoms
 Number of chains: 10
 Volume not occupied by model: 57.4 %
 $\langle B \rangle$ (for atomic model): 80.2 A²
 $\sigma(B)$: 13.69 A²
 Matthews coefficient: 3.57
 Corresponding solvent % : 65.31

Refinement

Program: REFMAC 5.7.0029
 Nominal resolution range: 20.0 – 3.00 A
 Reported R-factor: 0.206
 Number of reflections used: 33058
 Reported Rfree: 0.26
 Sigma cut-off: N.A.

Structure Factors

Input

Nominal resolution range: 20.0 – 3.00 A
 Reflections in file: 35482
 Unique reflections above 0: 34645
 above 1 σ : 34197
 above 3 σ : 25410
 Reflections > 0: 837

SFCHECK

Nominal resolution range: 20.0 – 3.00 A
\05max. from input data, min. from author\05
 Used reflections: 34641
 Reflections out of resolution: 4
 Completeness: 97.6 %
 $R_{\text{stand}}(F) = \langle \sigma(F) \rangle / \langle F \rangle$: 0.059
 Anisotropic distribution of Structure Factors
 ratio of eigen values: 0.9543 0.9389 1.0000
 B_{overall} (by Patterson): 52.A²
 Optical resolution: 2.22 A
 Expected opt. resol. for complete data set: 2.22 A
 Estimated minimal error: 0.071 A

Model vs. Structure Factors

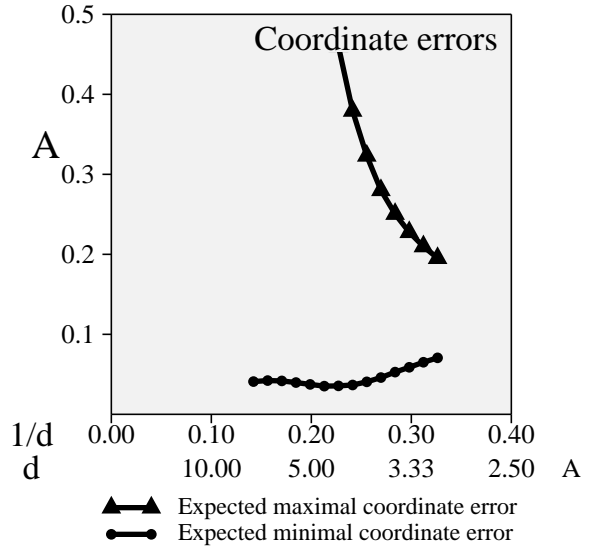
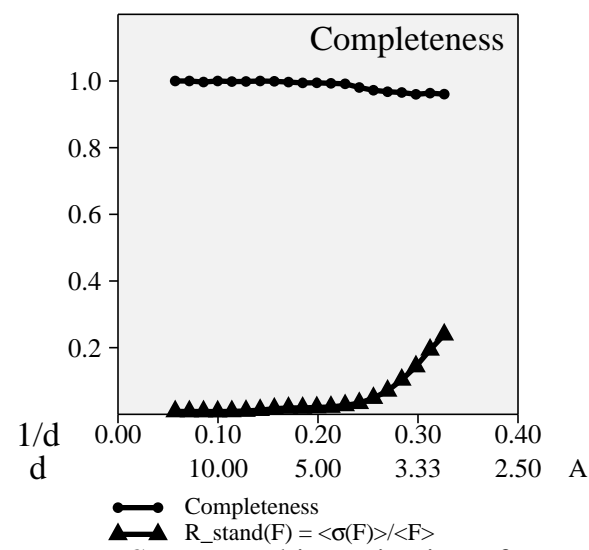
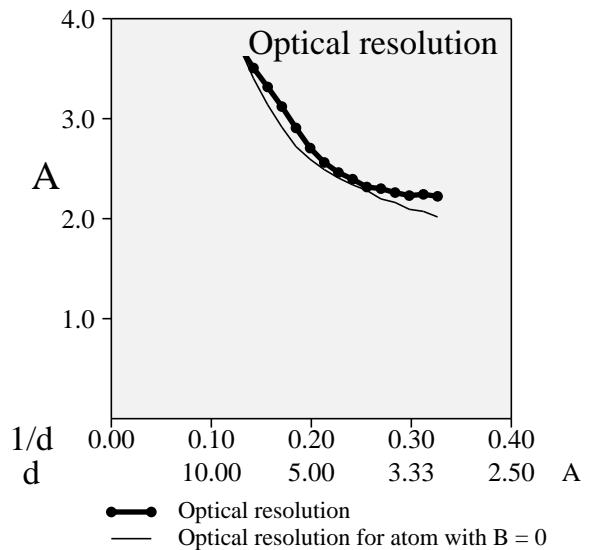
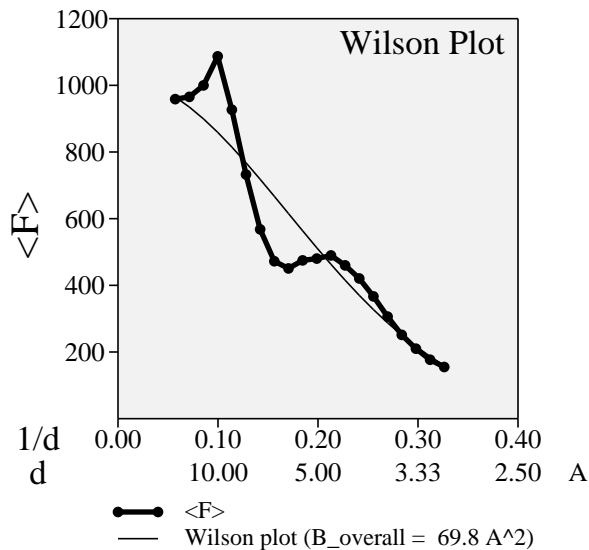
R-factor for all reflections: 0.275
 Correlation factor: 0.833
 R-factor: 0.284
 for $F > 2.0\sigma$
 nom. resolution range: 20.00 – 3.00A
 reflections used: 34193
 Rfree: 0.327
 Nfree: 1708
 R-factor without free-refl.: 0.282
 Non free-reflections: 32485
 $\langle u \rangle$ (error in coords by Luzzati plot): 0.400 A
 Estimated maximal error: 0.195 A
 DPI: 0.389 A

Scaling

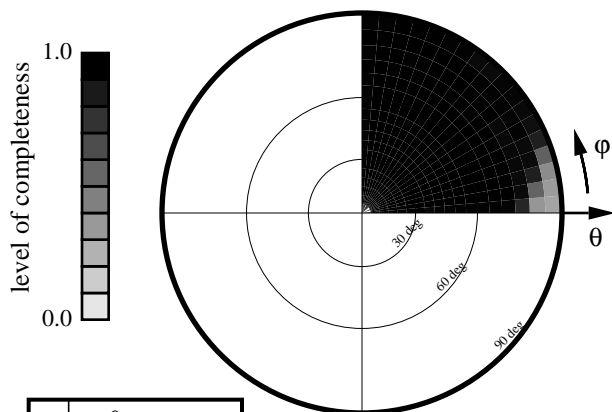
Scale: 0.815
 Bdiff: -8.26
 Anisothermal Scaling (Beta):
 -2.5405 -2.6088 -2.3308 -0.0000 -0.0000 0.0000
 Solvent correction – Ks,Bs: 0.376 249.870

Structure Factor Check

4YXD

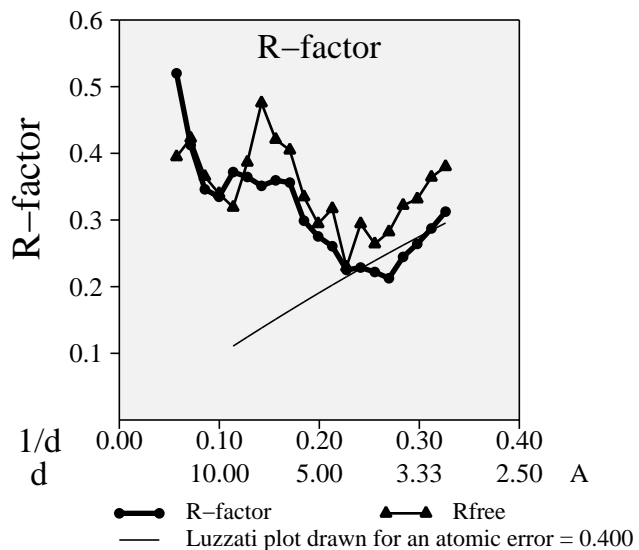


Stereographic projection of the averaged radial completeness



	θ	ϕ
h	90.00	0.00
k	90.00	90.00
l	0.00	0.00

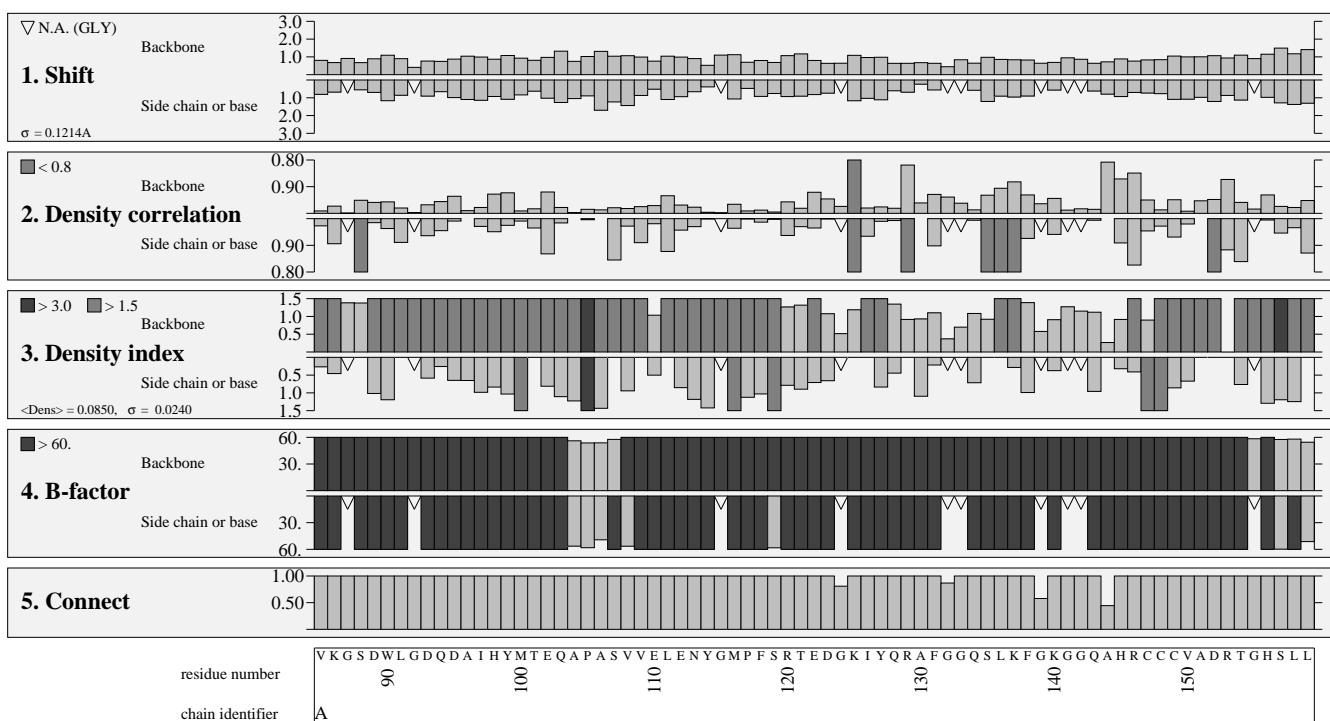
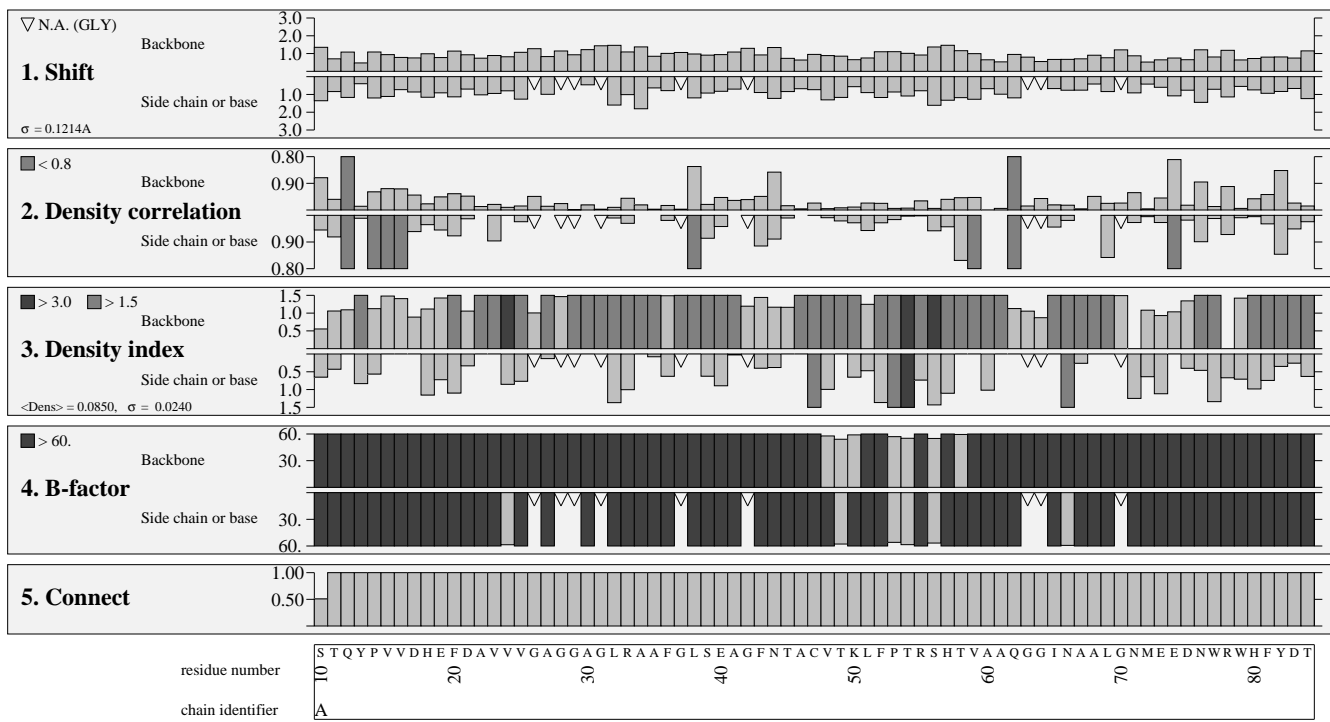
polar coordinates of the crystallographical axes



Structure Factor Check

4YXD

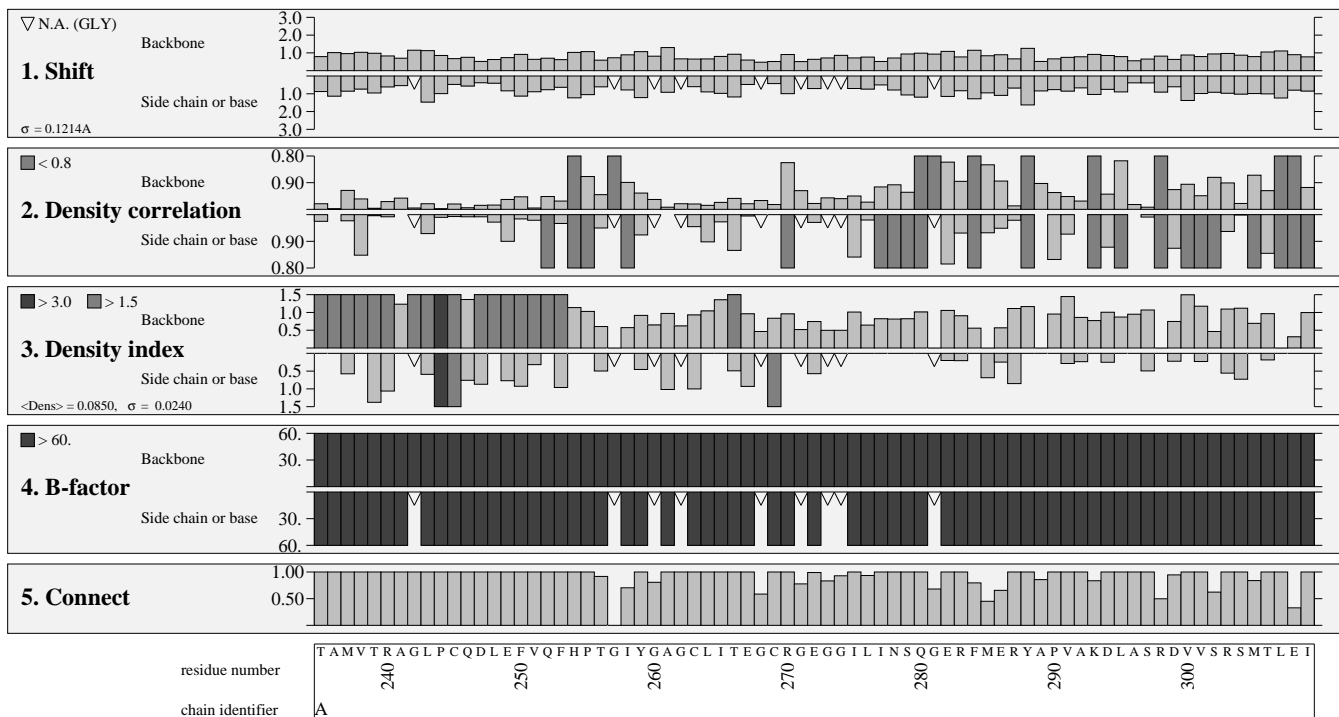
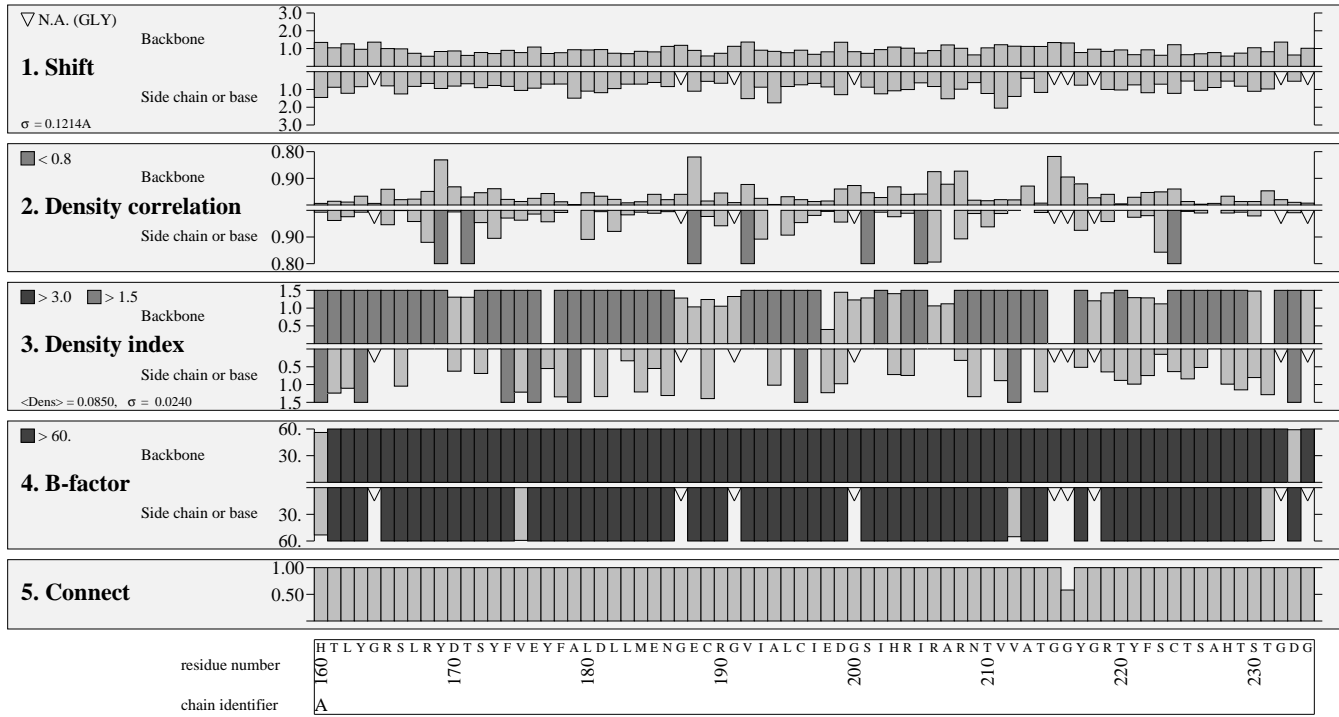
Local estimation



Structure Factor Check

4YXD

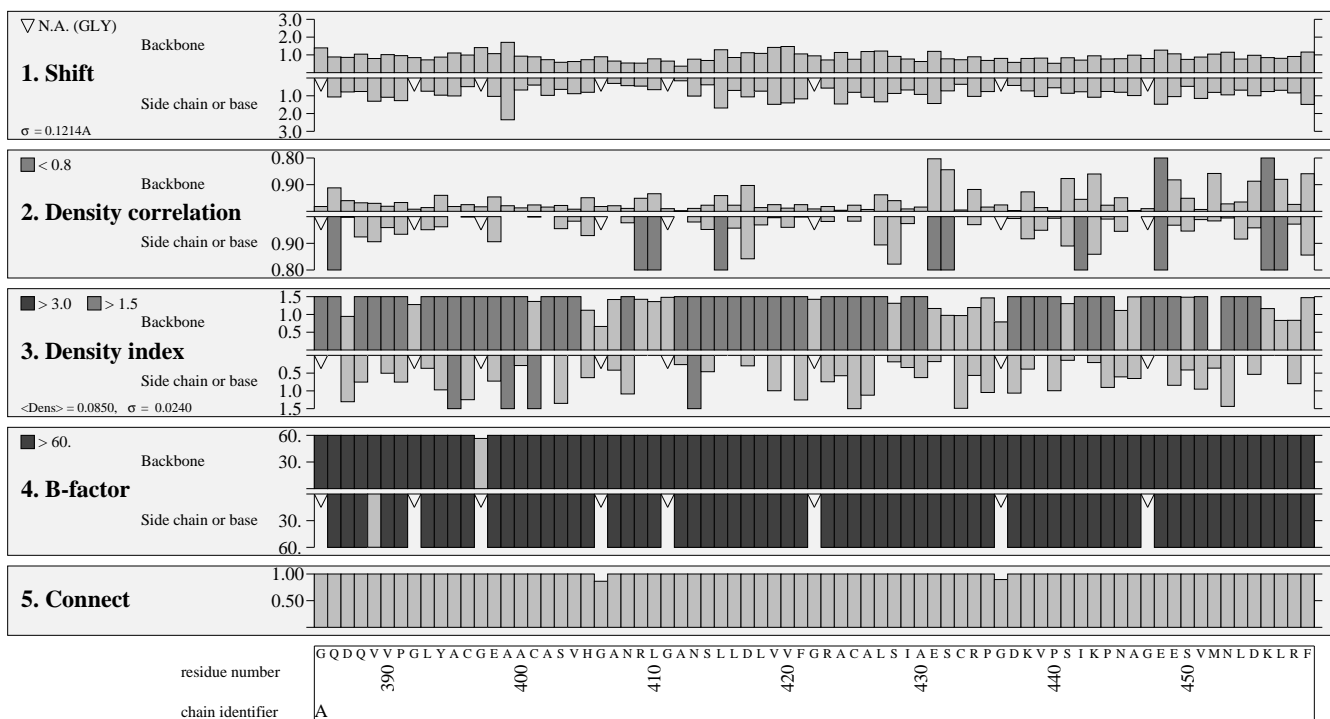
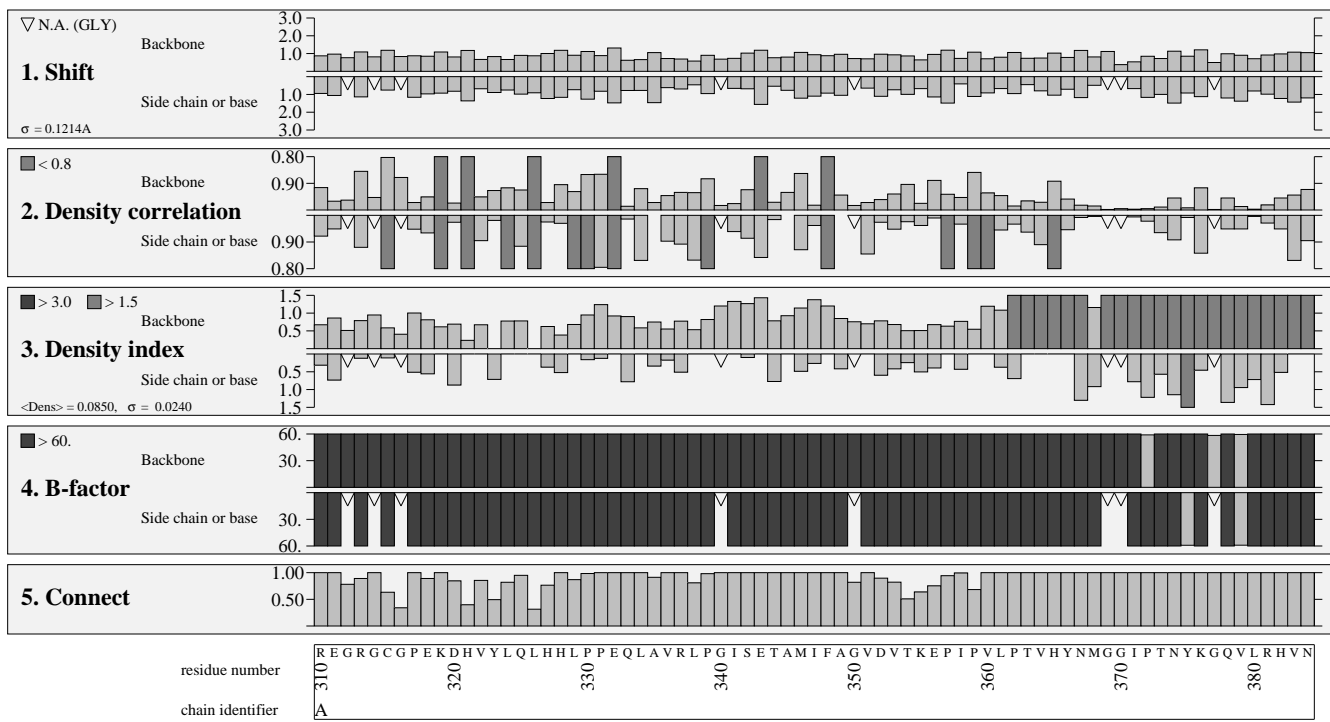
Local estimation (2)



Structure Factor Check

4YXD

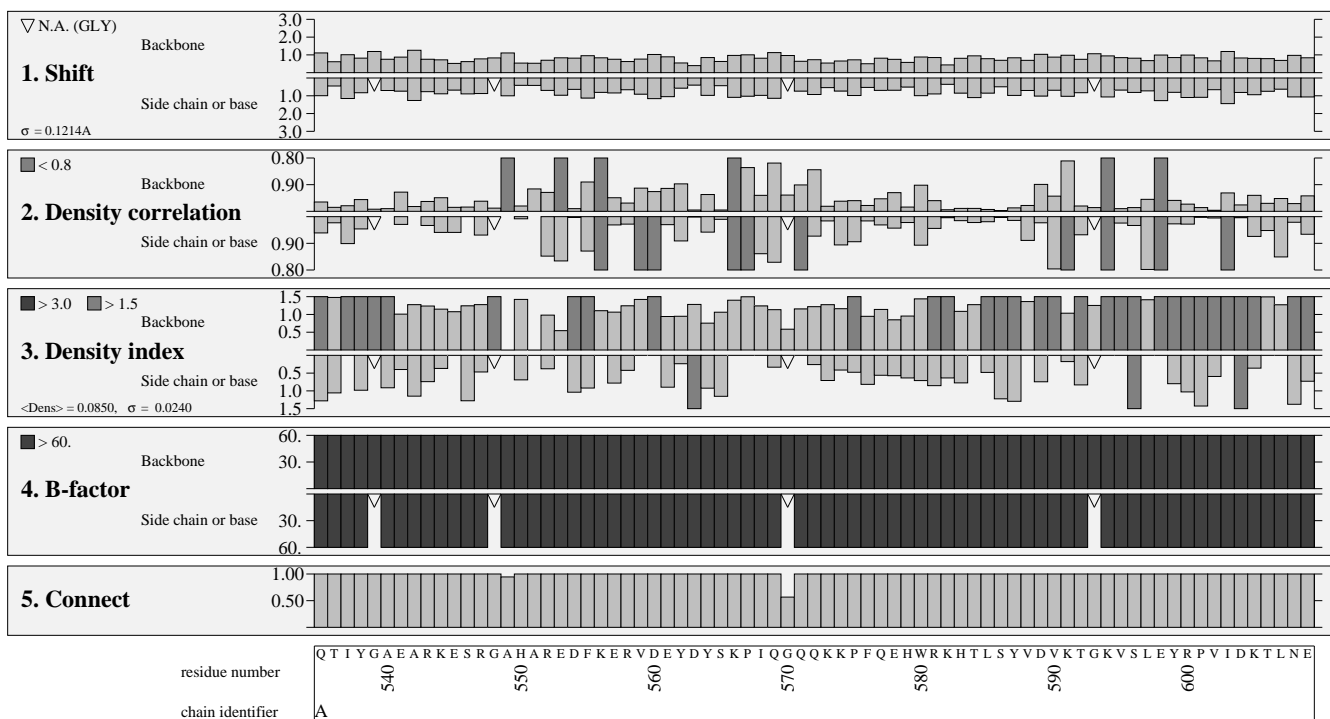
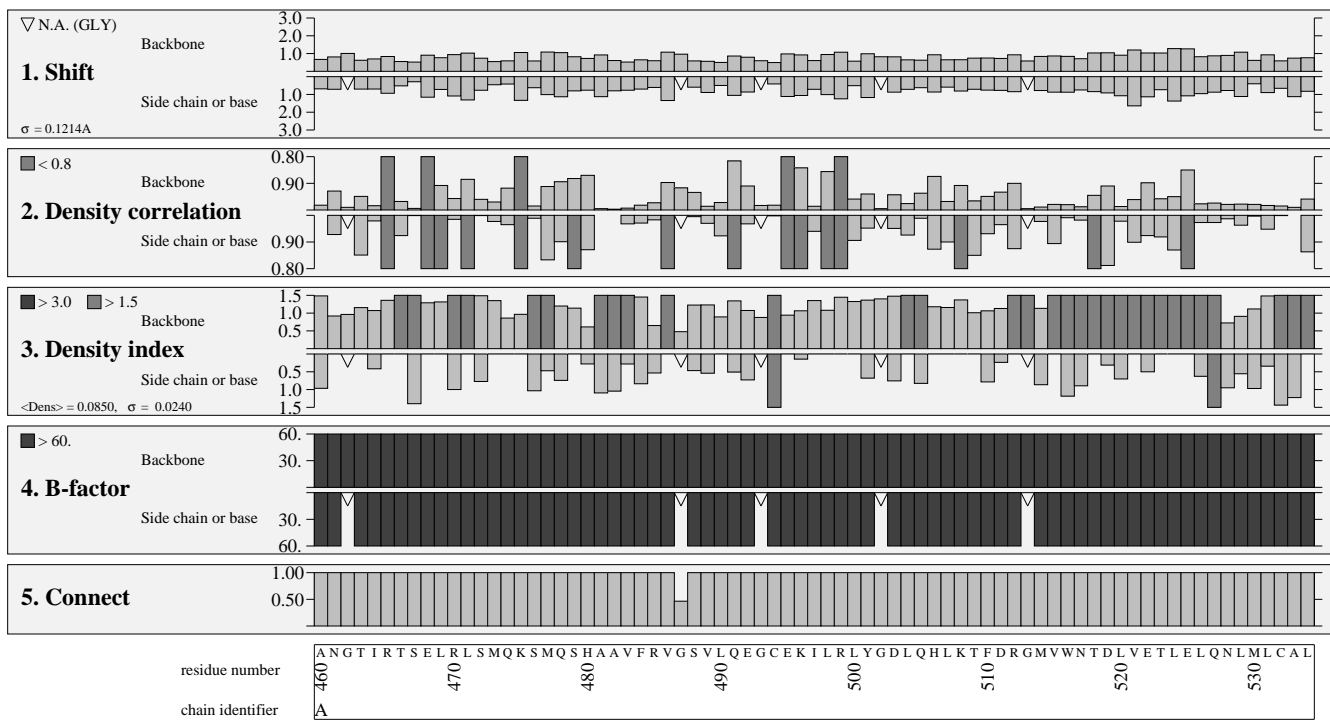
Local estimation (3)



Structure Factor Check

4YXD

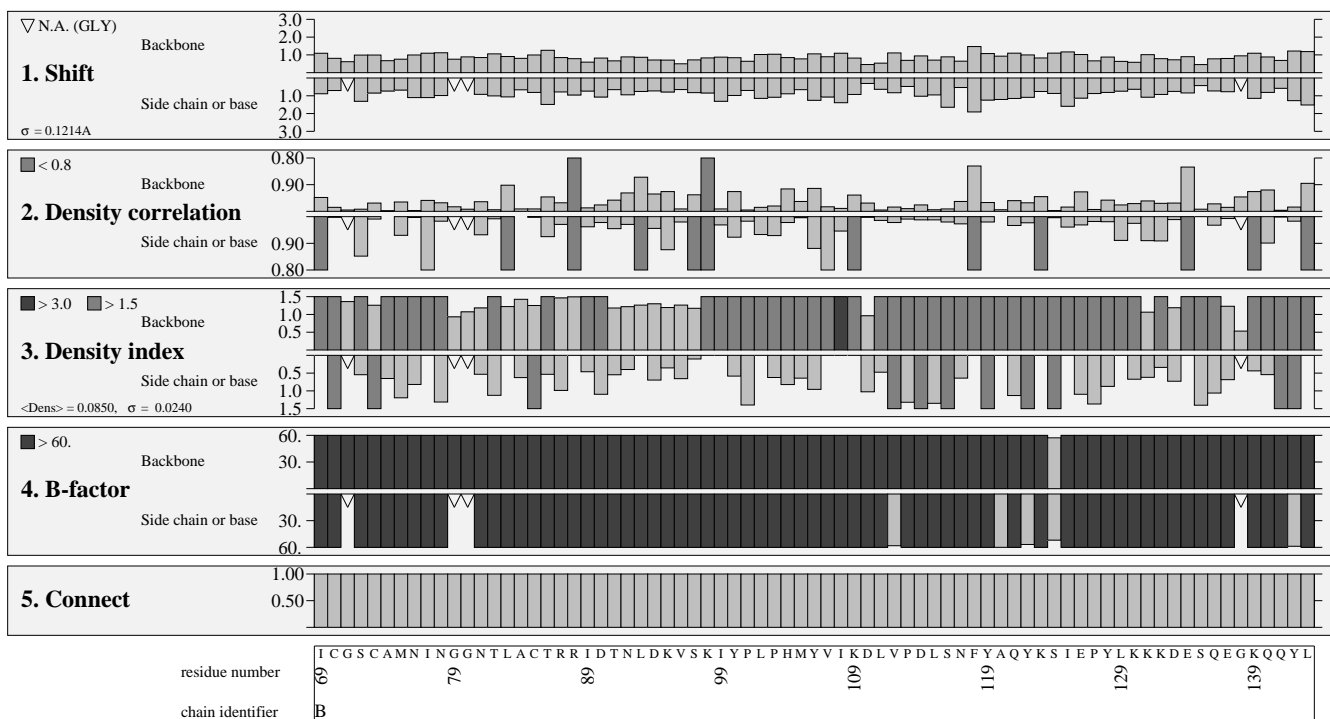
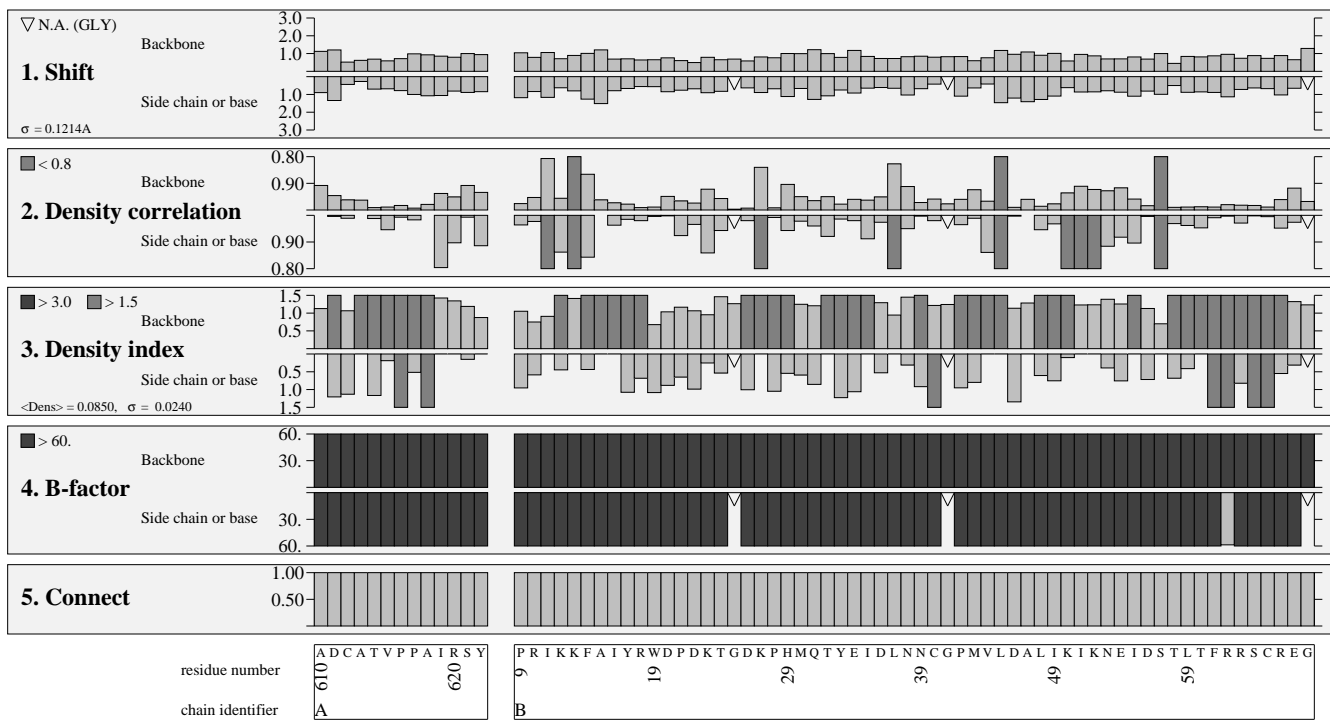
Local estimation (4)



Structure Factor Check

4YXD

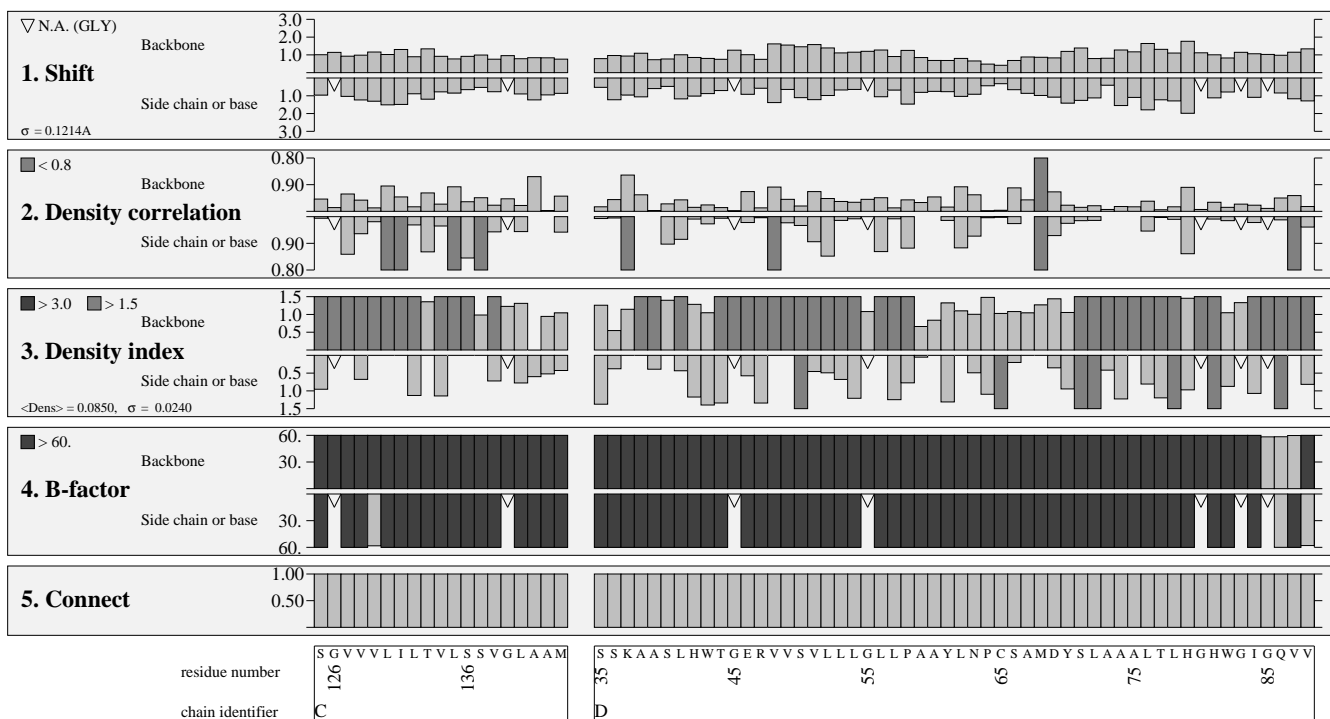
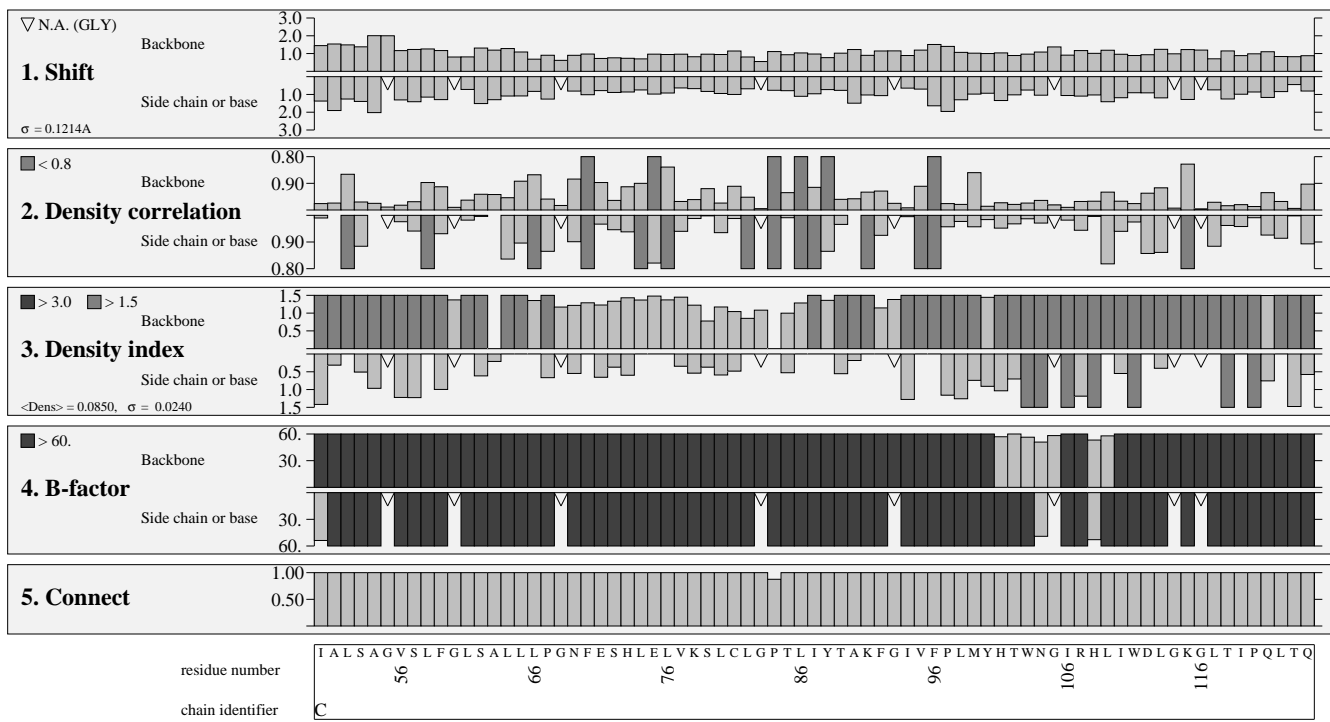
Local estimation (5)



Structure Factor Check

4YXD

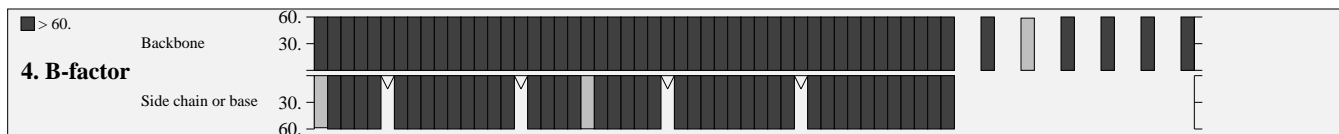
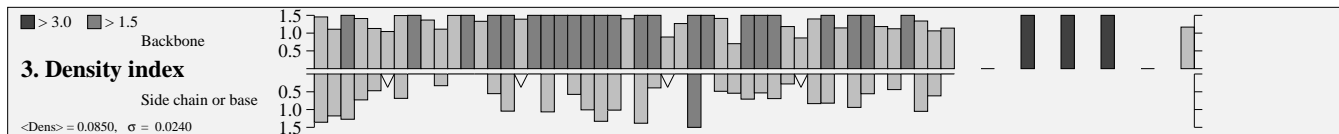
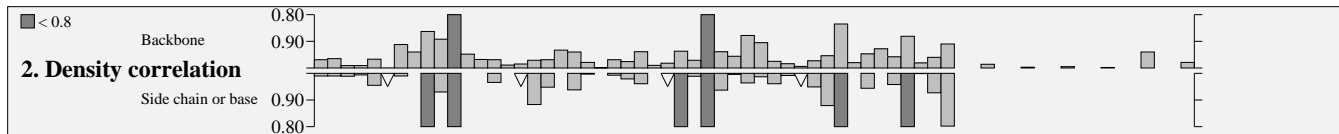
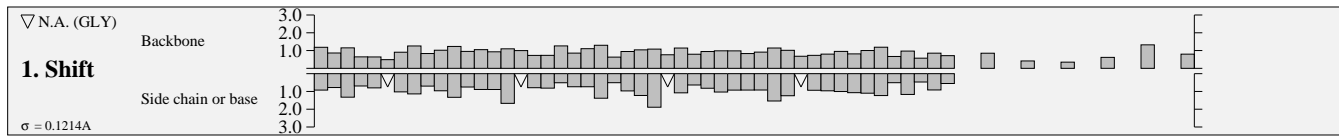
Local estimation (7)



Structure Factor Check

4YXD

Local estimation (8)



residue number TDYVRGDALQKVKAKAGLLALS AFTTFAGLCYFN YHDVGI CKAVAMLWKL

95 105 115 125 135

chain identifier D

A 700 .

B 301 .

B 302 .

B 303 .

C 301 .

C 302 .