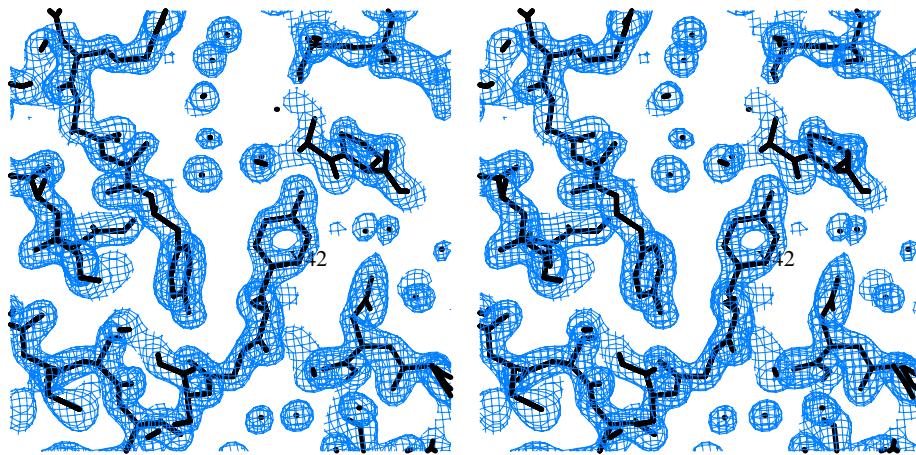
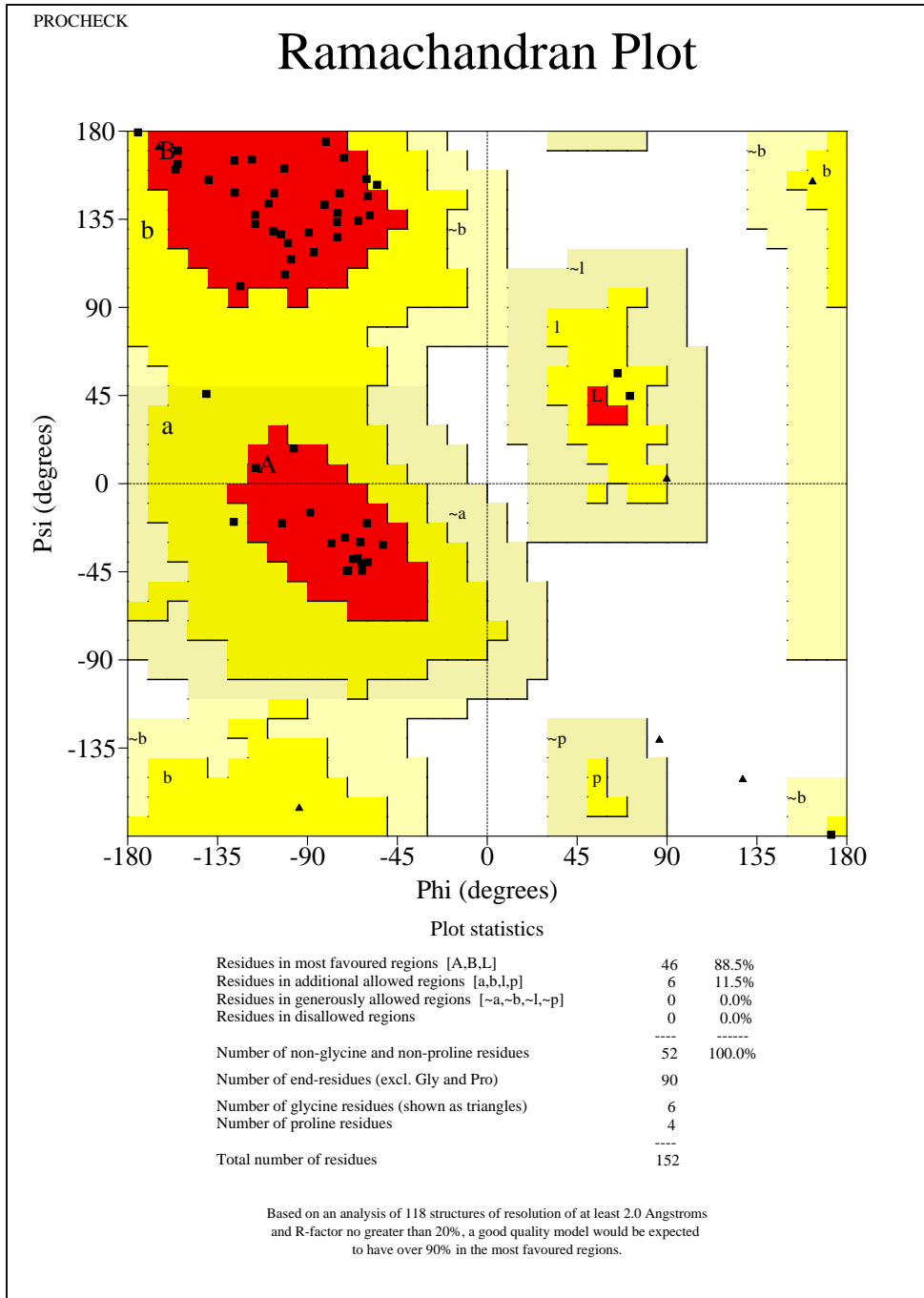


Supplementary material Table S1 Data collection statistics

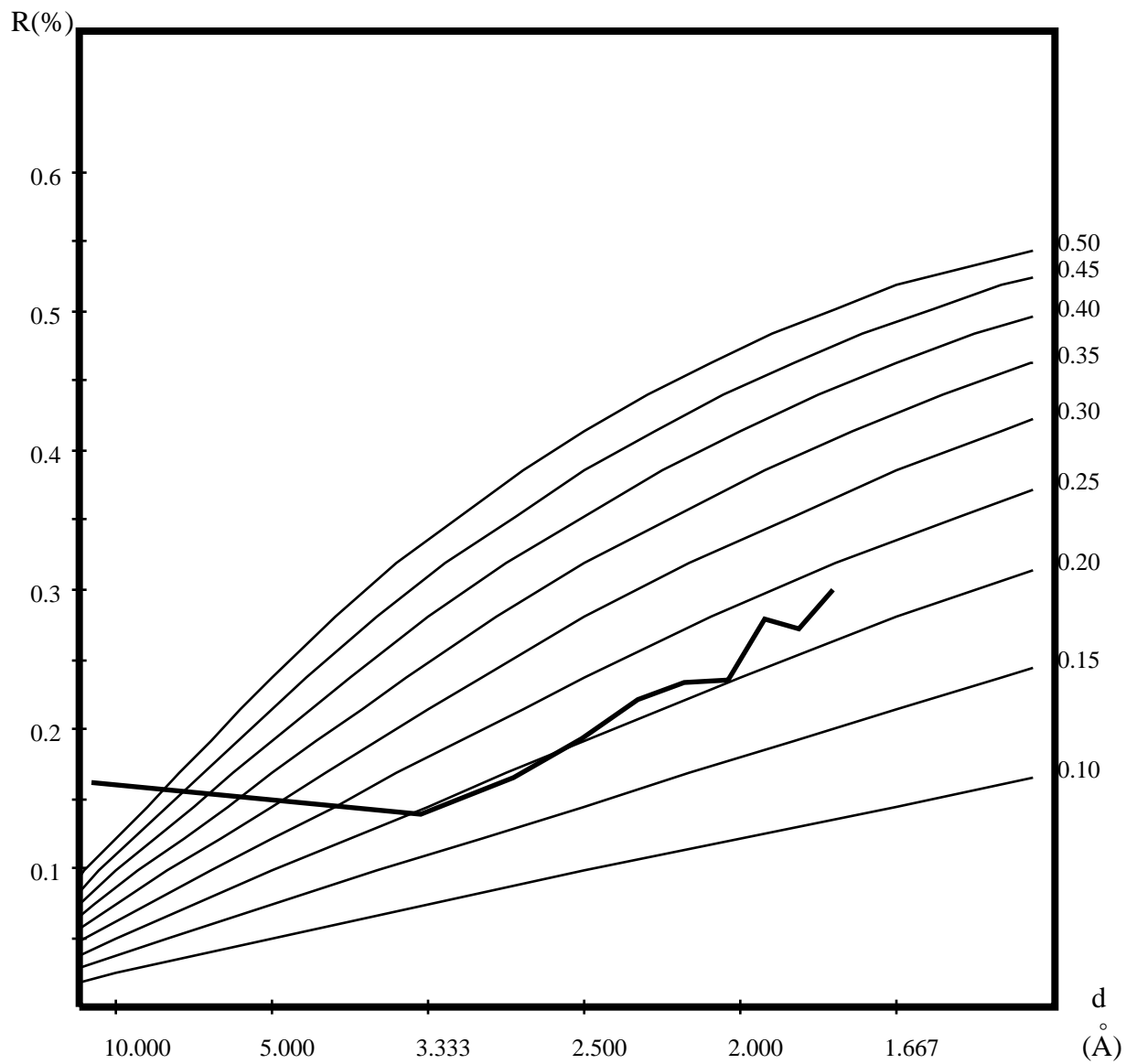
Resolution (Å)	R _{merge}	Completeness	Multiplicity
20.0-3.78	0.053	90.8	3.0
3.78-3.01	0.072	96.5	3.5
3.01-2.63	0.089	94.4	3.8
2.63-2.39	0.116	96.0	2.5
2.39-2.22	0.134	95.4	2.0
2.22-2.09	0.150	94.1	1.7
2.09-1.98	0.201	93.6	1.6
1.98-1.90	0.244	92.6	1.6
1.90-1.82	0.295	89.9	1.6
1.82-1.76	0.339	55.3	1.4
20.0-1.76	0.100	90.0	2.3



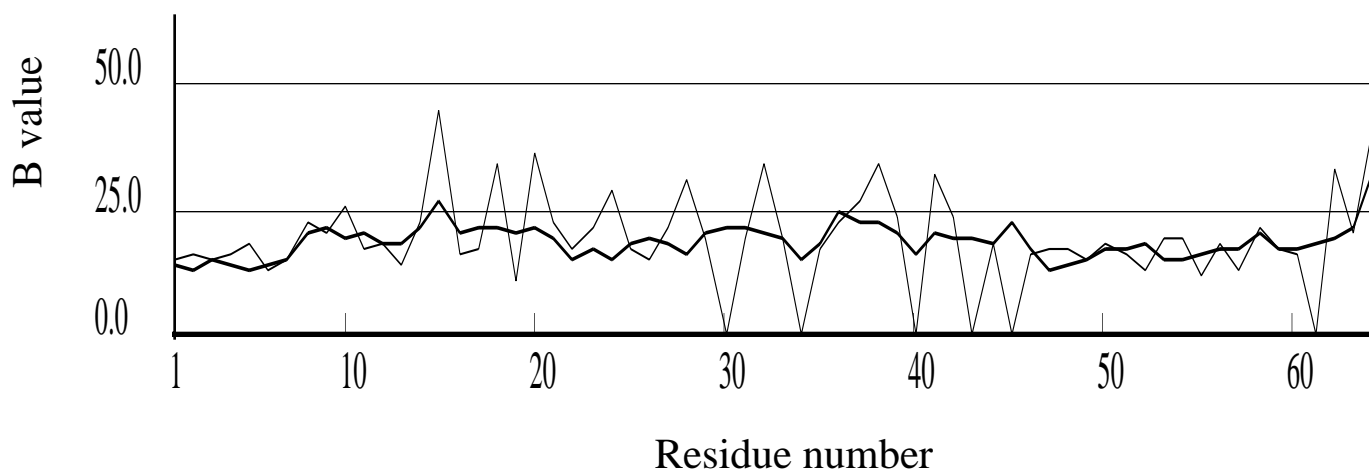
Supplementary material Figure S1. The 2Fo-Fc electron density map around Tyr42 contoured at 1.2 sigma showing the fitting of the model to the electron density.



Supplementary material Figure S2. The Ramachandran plot.



Supplementary material Figure S3, Luzzati plot for the structure of BmK M2



Supplementary material Figure S4. The plot of B factors as a function of residue numbers. Thick line for main chain, thin line for side chains.