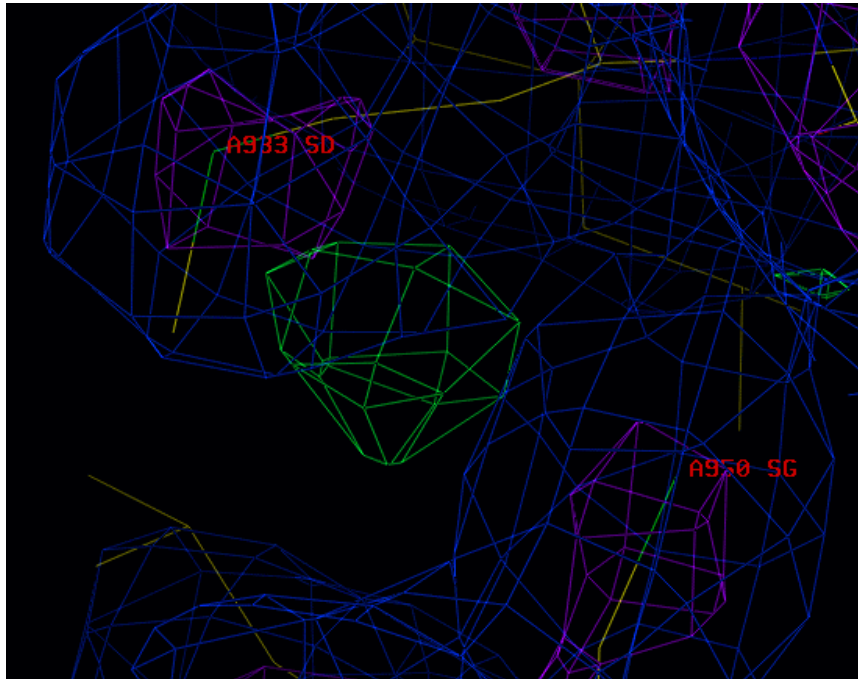


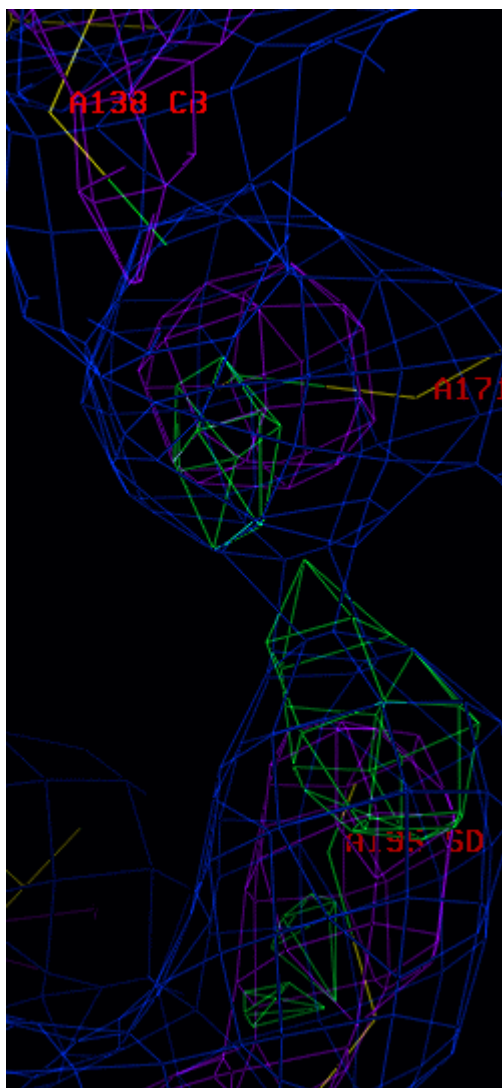
Supplemental Material - I



M933-C950: free-radical quenching?

Maps calculated using methionine model, selenomethionine data. SD-SG distance: 5 Å. Contour levels: blue (2Fo-Fc, 1 sigma), purple (2Fo-Fc, 3 sigma), green (Fo-Fc, 2.5 sigma). Resolution 3.1 Å. Se-Met 933 is very close to Se 930, which is the only buried Se site that could not be located at the substructure solution, perhaps because of specific radiation damage due to its proximity to other Se atoms. However, Se 933 does not appear to be affected. The Fo-Fc peak in the above map, between the Met 933 and Cys 950 residues may indicate that the latter plays some role in protecting nearby Se sites by absorbing ejected electrons.

Supplemental Material – II



M195 – a breaking site?

Contour levels: blue (2Fo-Fc, 1 sigma), purple (2Fo-Fc, 3 sigma), green (Fo-Fc, 3.5 sigma).
Maps calculated using Met model against SeMet data. Resolution 3.1 Å. The site Se 195 appears to be decaying during data collection (see Figure 6 in manuscript).