

**Figure S2.** Stereo view of the eletron density maps. (Upper panel) the  $2|F_o|-|F_c|$  electron density maps (0.7  $\sigma$  in gray maps) with the positive  $|F_o|-|F_c|$  electron density maps (red density) and simulated annealing omit maps (1.2  $\sigma$  in gray maps) showing unbiased electron densities (lower panel) for VPg in the RdRp-VPg(1-73) complex.