

**Supplementary Figure 1**: An  $\eta-\theta$  plot of a 4.5 Å structure of the 30S ribosomal subunit from *T. thermophilus* (PDB file 1I95). The plot looks remarkably similar to a typical  $\eta-\theta$  plot at better resolution, indicating that errors in  $\eta-\theta$  values are small in structures with medium-low resolution.