



**Supplemental Figure 1. DNA Damage Signatures.** The above graphs demonstrate an excess of purines at the genomic coordinates located right before the sequence start. This pattern is indicative of ancient DNA, where post-mortem depurination occurs followed by a subsequent fragmentation (Briggs, Stenzel, Johnson, *et al.* 2007). The Perl script, mapDamage 0.36, measured this pattern globally across the aligned SAM file.