

**Figure S3. Distribution of DASE.** The top panels of the figure display the probability density function of DASE plotted against DASE for a typical sample. It shows a heavy tight-tailed distribution based on SNP-level data (**A**) as well as gene-level data (**B**). The bottom panels of the figure display the quantiles of the estimated gamma distribution of DASE, determined using maximum likelihood methods, plotted against the quantiles of DASE for a typical sample based on SNP-level data (**C**) and gene-level data (**D**).

