

Fig. 11: The relative compression ratio and relative compression speed using Logzip to LogBlock on different block sizes. In each sub-figure, the x axis shows the block sizes (from 16KB to the size of the log file or 32MB) and the y axis refers to the compression performance value (in log-scale) with different compressors. The black box indicates the sizes at which Logzip begins to statistically outperform LogBlock in terms of the compression ratio. The horizontal red line at zero ( $log_2$  1) implies the same relative compression ratio or speed achieved by two preprocessing approaches.