In both tables the frequency is normalized to the maximum error-free frequency for each arithmetic. A significant reduction of MRE can be observed using online arithmetic for all input types. The geometric mean reduction varies from 97.3% to 98.2%. In addition, larger differences of MRE reduction can be achieved in practice, as long chains occur with even smaller probabilities with real data. Similarly from Table $\ref{thm:continuous}$, the differences in SNR are $21.4dB \sim 43.9dB$.