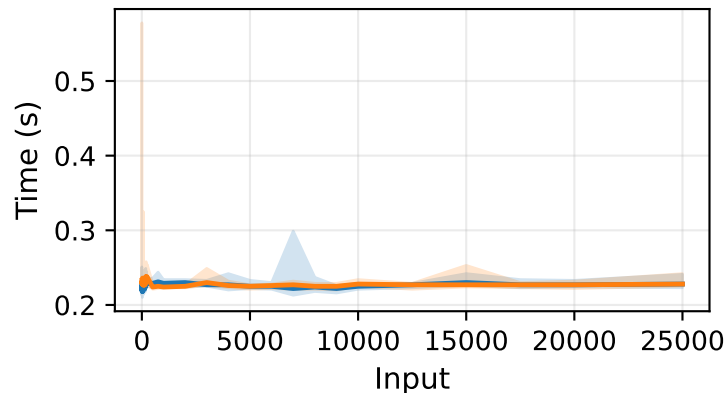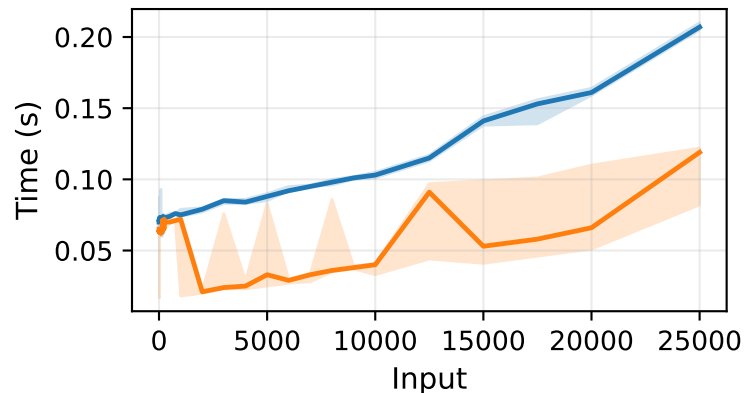**Fibonacci — Phase scaling (full range)**
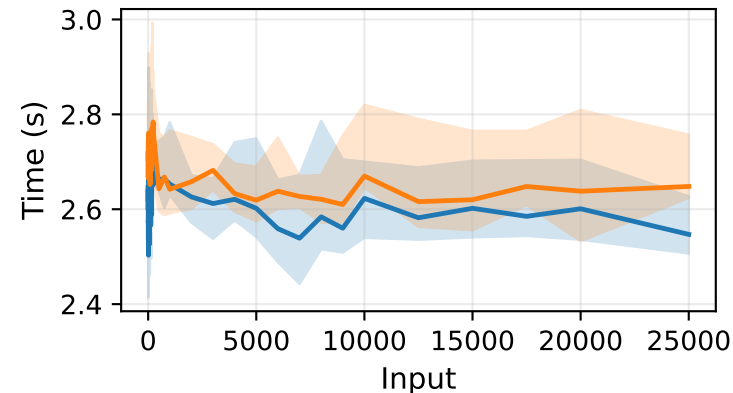
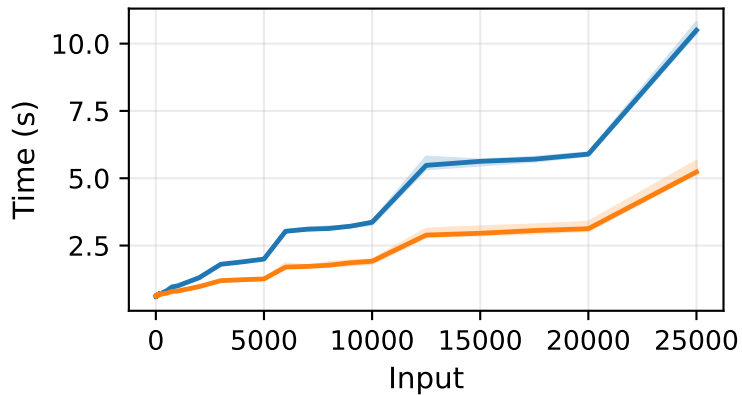decode, trace, preprocess, prove, verify
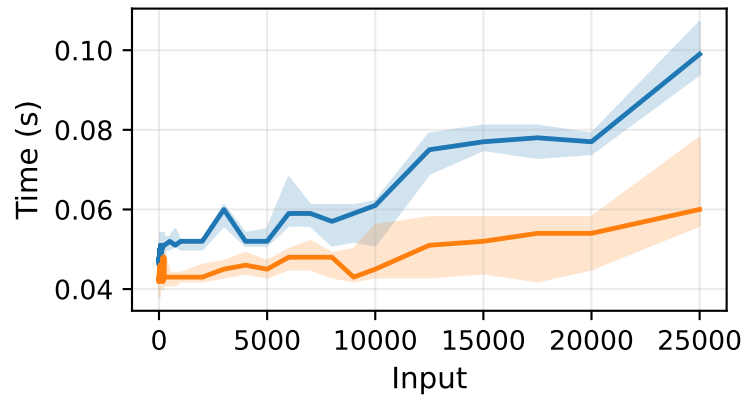
Legend: 32-reg, vanilla