1 Introduction

Each data point represents the median of 30 values, with error bars showing the 95% confidence interval for the median. All transforms are double-precision.

2 Device Specification

2.1 dir0

Host info:

- hostname: hpe-sjc2-08
- cpu info: AMD EPYC 7542 32-Core Processor
- ram: 503.70 GiB
- distro: Ubuntu 18.04.5 LTS
- kernel version: 4.15.0-128-generic
- rocm version: 4.3.0-7235

Device info:

- device: None
- vbios version: 113-D3430401-E35
- vram: 31.98 GiB
- performance level: high
- system clock: 1502Mhz
- memory clock: 1200Mhz

2.2 dir1

Host info:

- hostname: hpe-sjc2-08
- cpu info: AMD EPYC 7542 32-Core Processor
- ram: 503.70 GiB
- distro: Ubuntu 18.04.5 LTS

- `kernel version: 4.15.0-128-generic`
- `rocm version:   4.3.0-7235`

Device info:

- `device:            None`
- `vbios version:     113-D3430401-E35`
- `vram:              31.98 GiB`
- `performance level: high`
- `system clock:      1502Mhz`
- `memory clock:      1200Mhz`

3 Figures

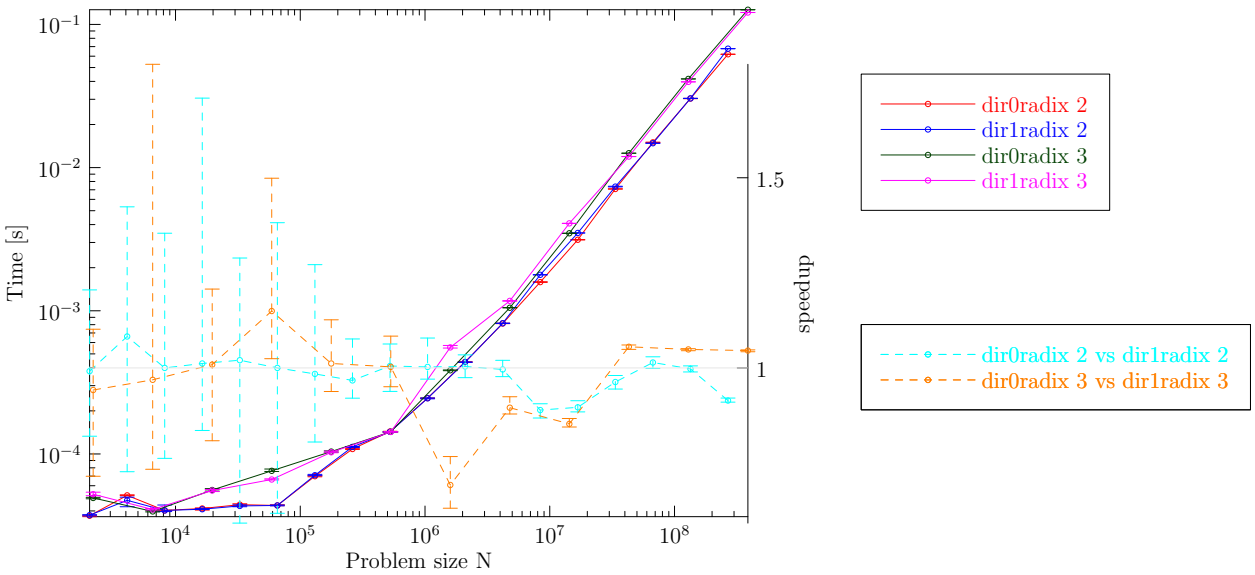

Figure 1: 1D complex transforms in-place

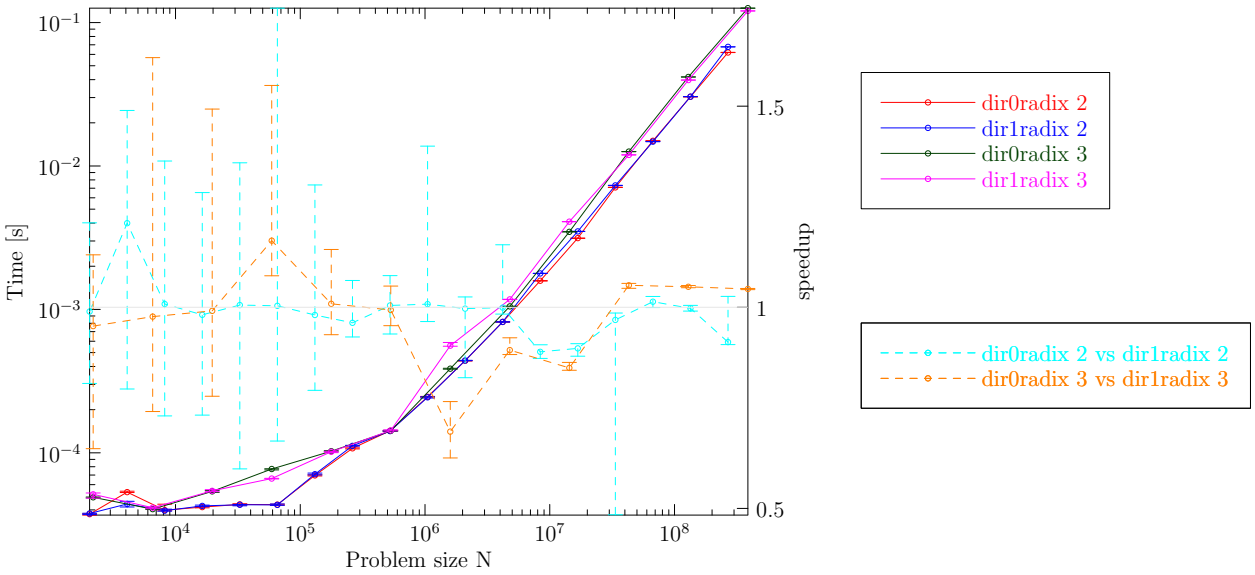

Figure 2: 1D complex transforms out-of-place

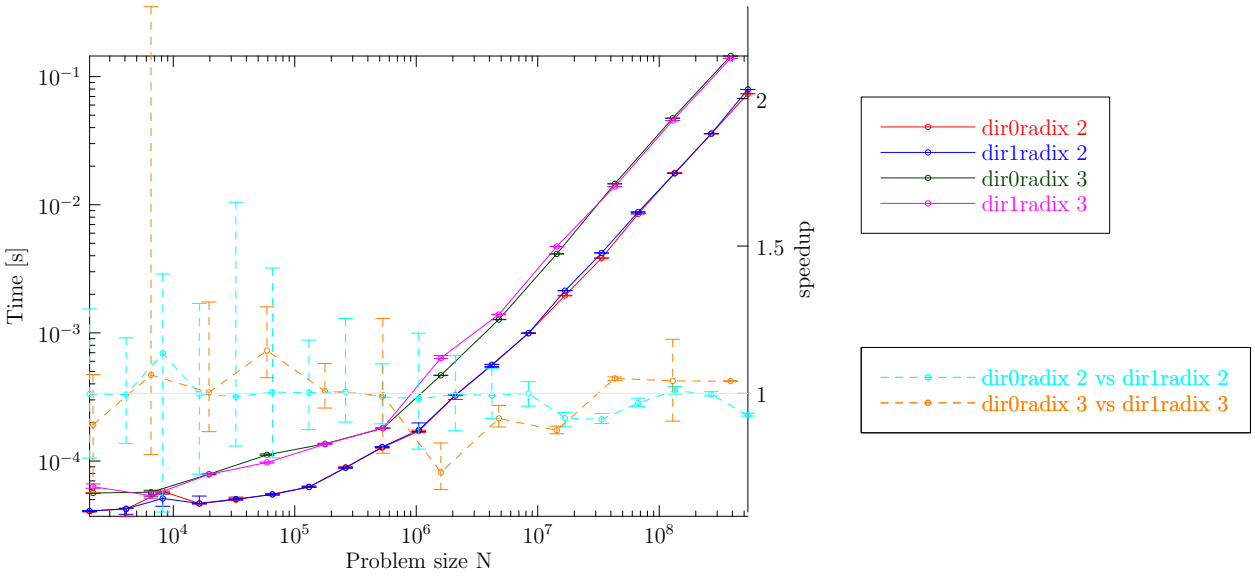

Figure 3: 1D real-to-complex transforms in-place

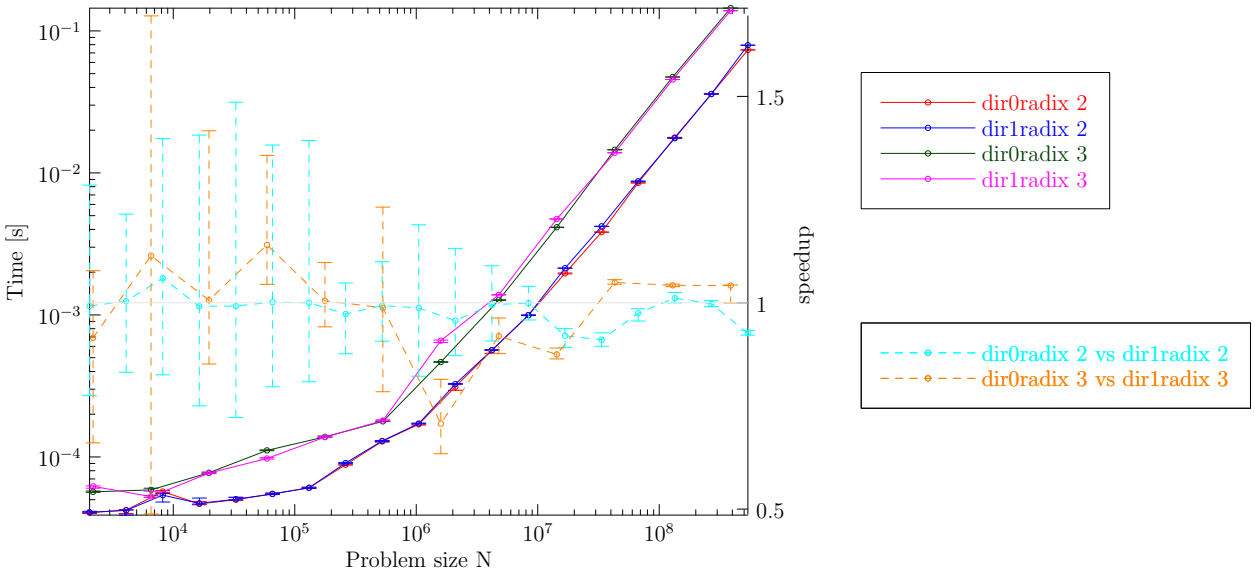

Figure 4: 1D real-to-complex transforms out-of-place

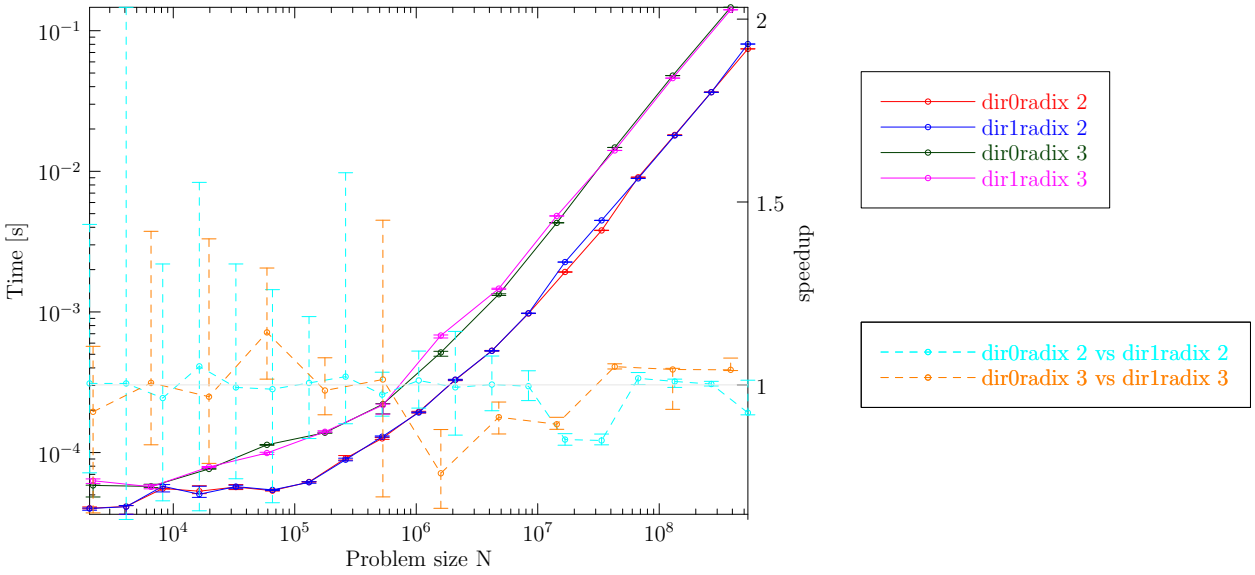

Figure 5: 1D complex-to-real transforms in-place

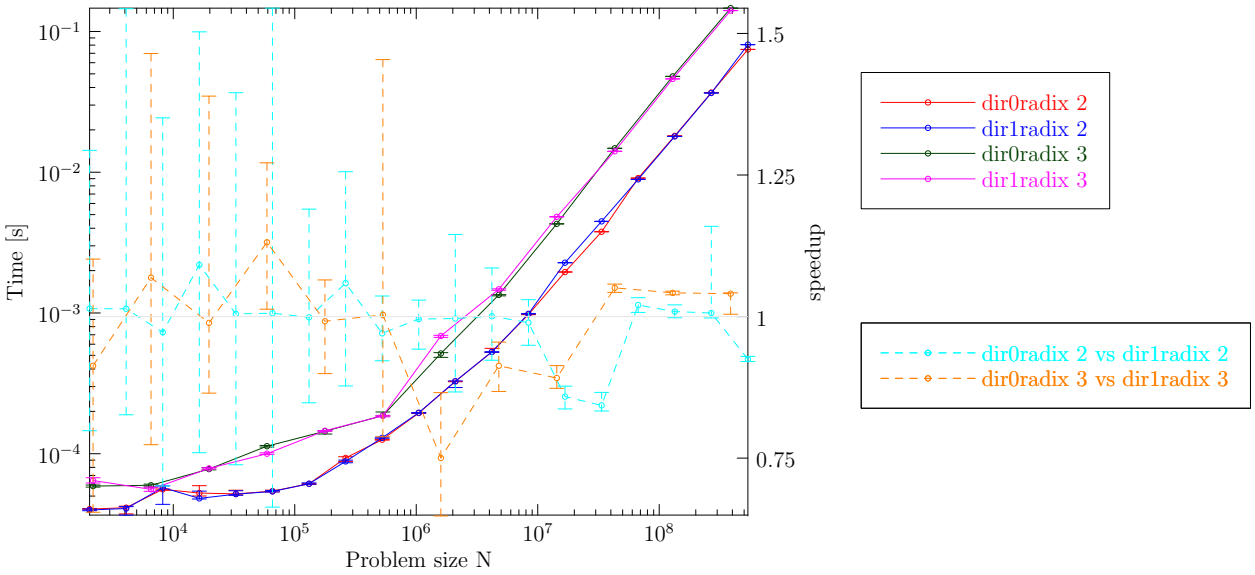

Figure 6: 1D complex-to-real transforms out-of-place

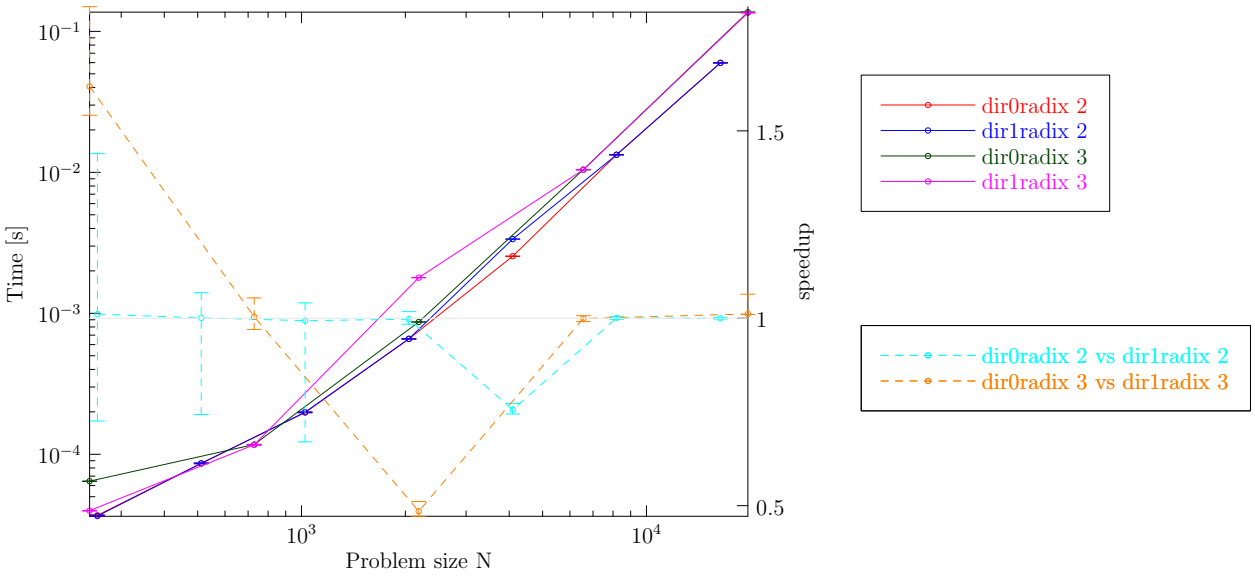

Figure 7: 2D complex transforms in-place

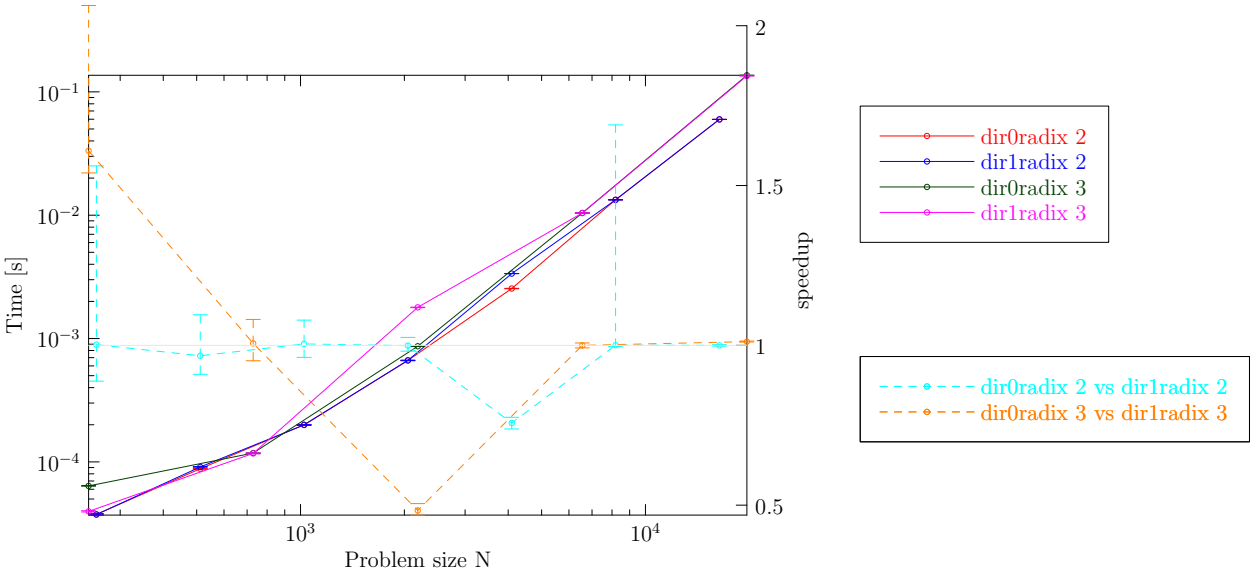

Figure 8: 2D complex transforms out-of-place

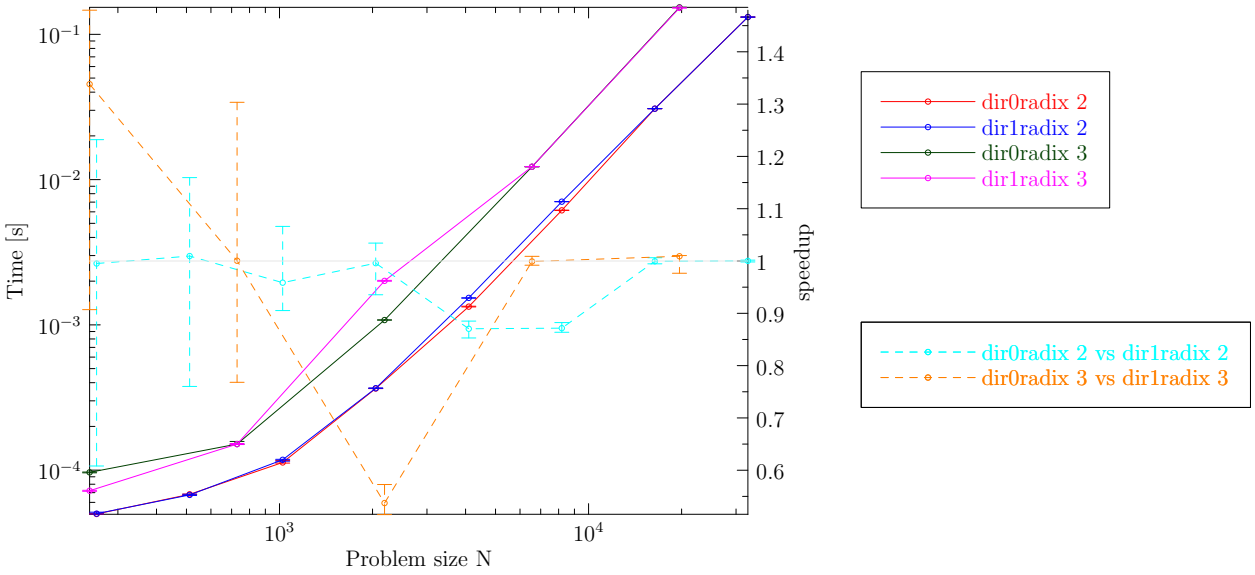

Figure 9: 2D real-to-complex transforms in-place

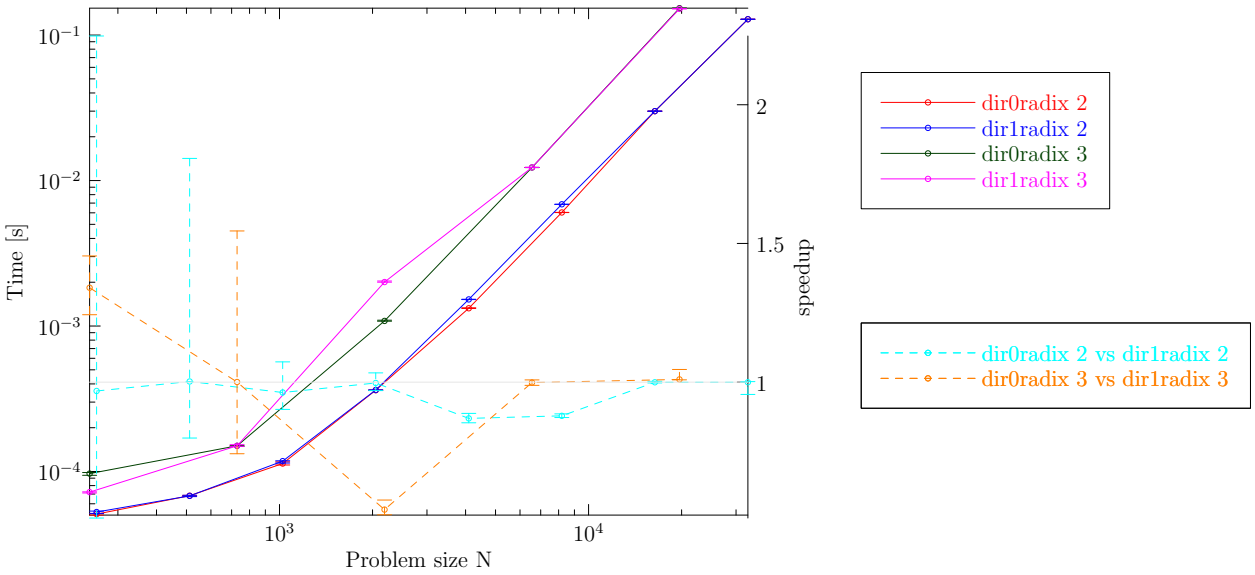

Figure 10: 2D real-to-complex transforms out-of-place

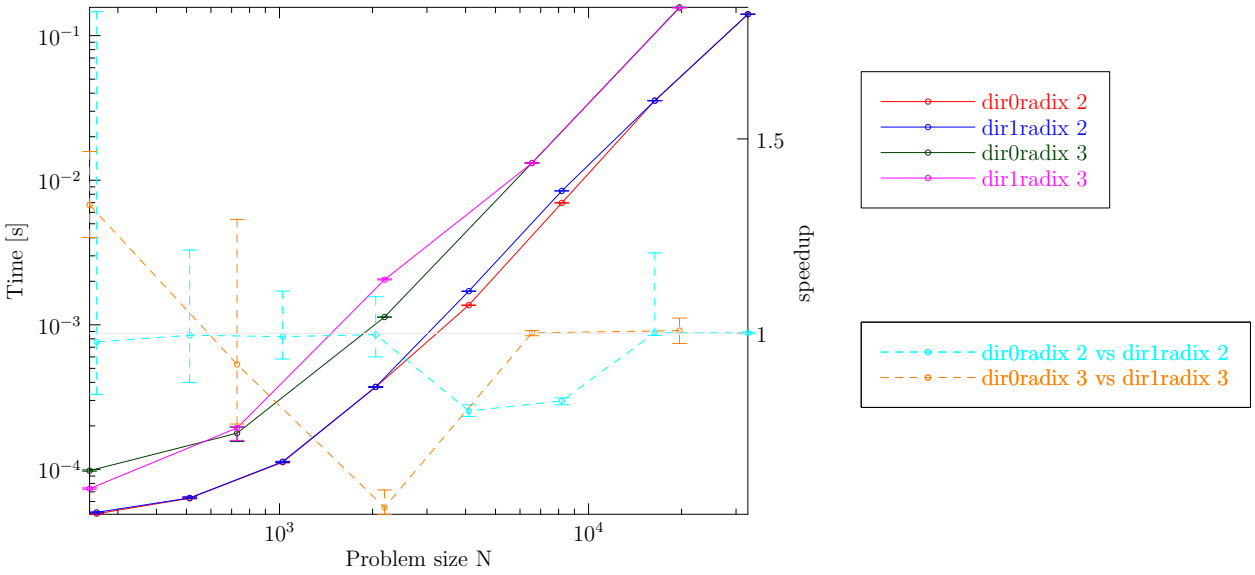

Figure 11: 2D complex-to-real transforms in-place

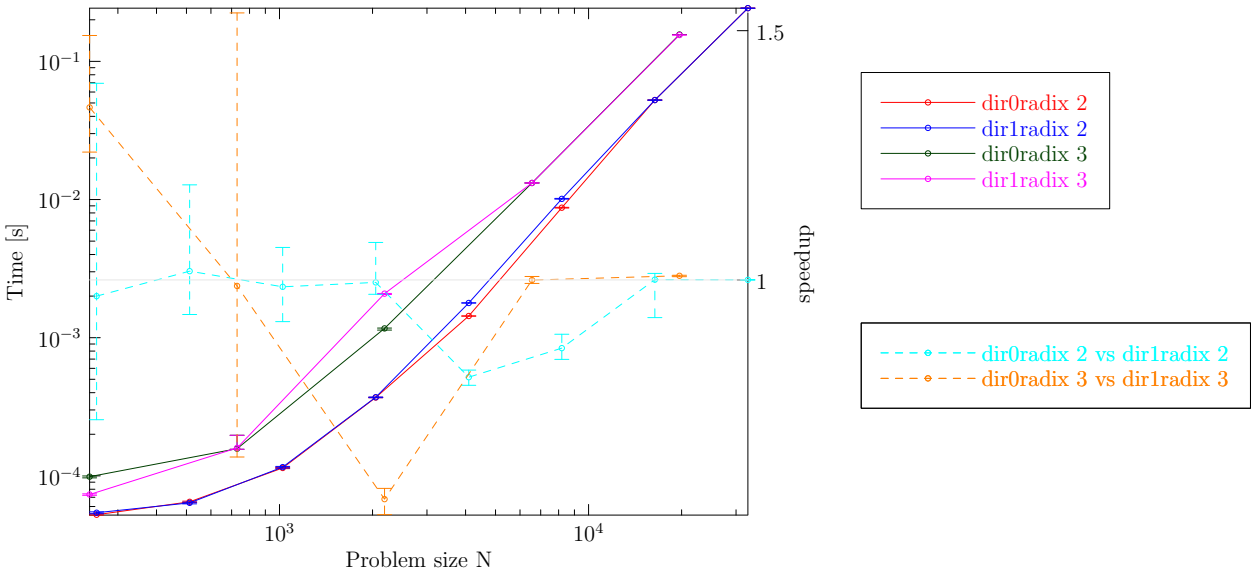

Figure 12: 2D complex-to-real transforms out-of-place

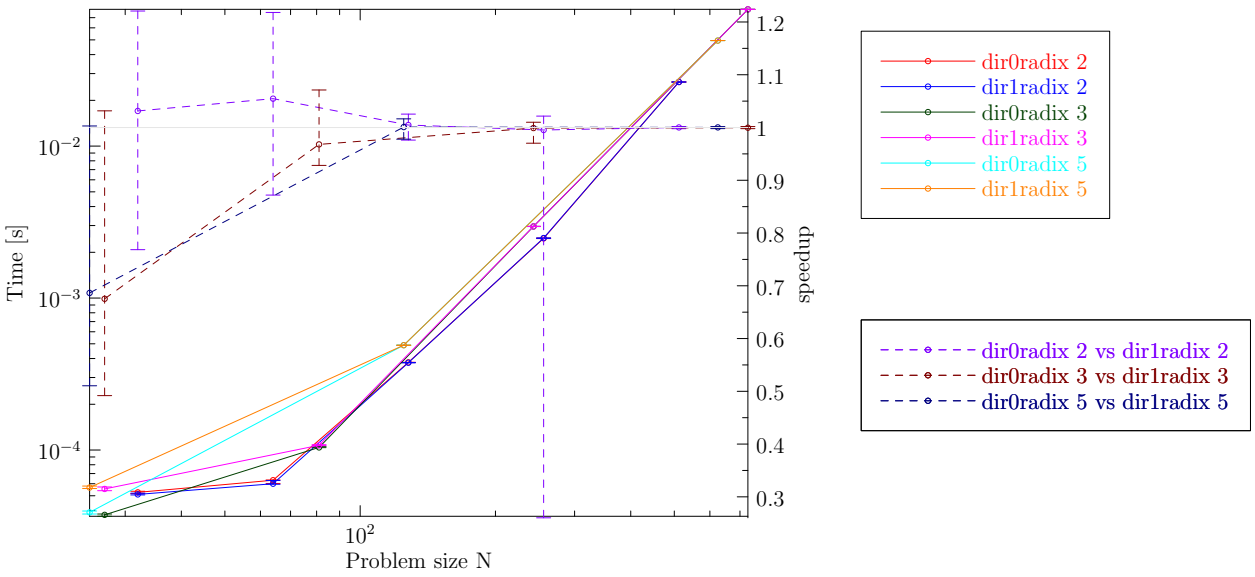

Figure 13: 3D complex transforms in-place

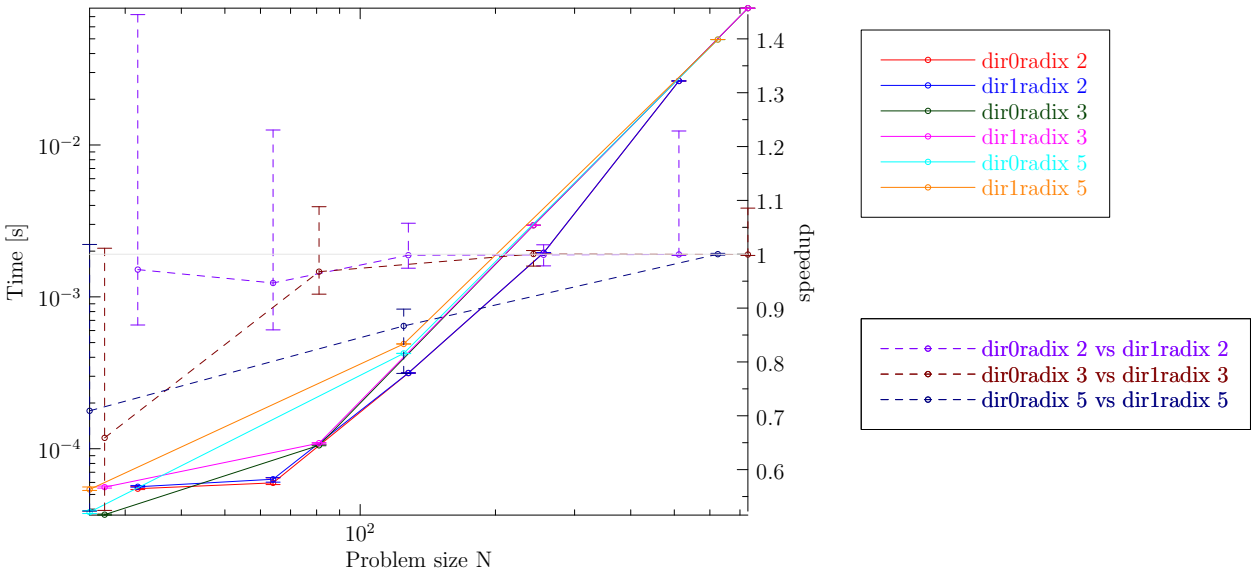

Figure 14: 3D complex transforms out-of-place

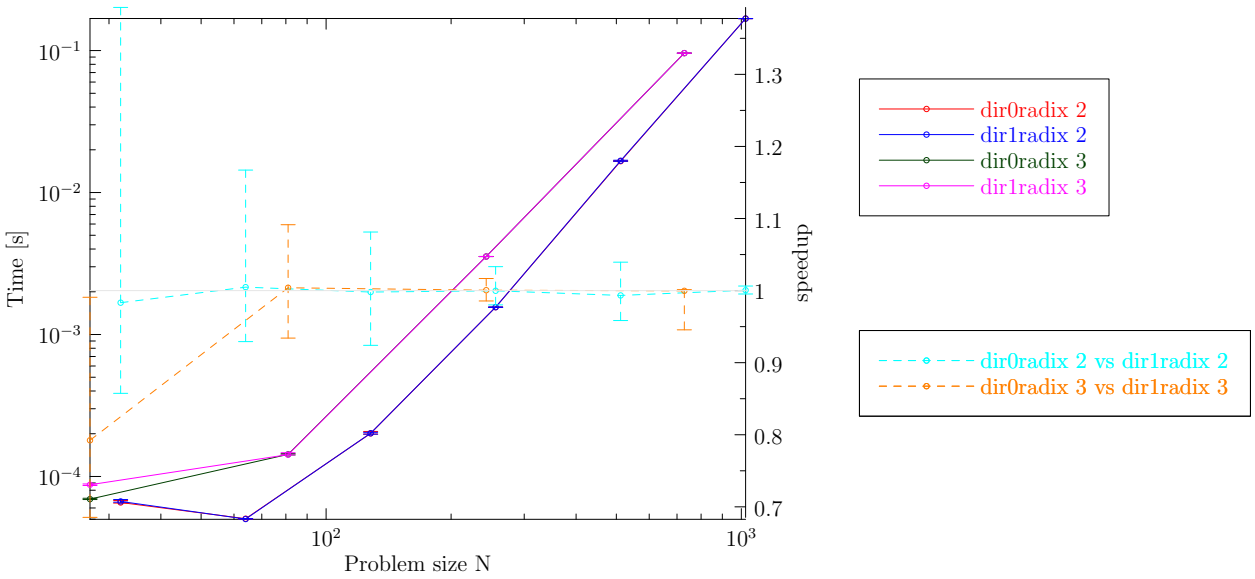

Figure 15: 3D real-to-complex transforms in-place

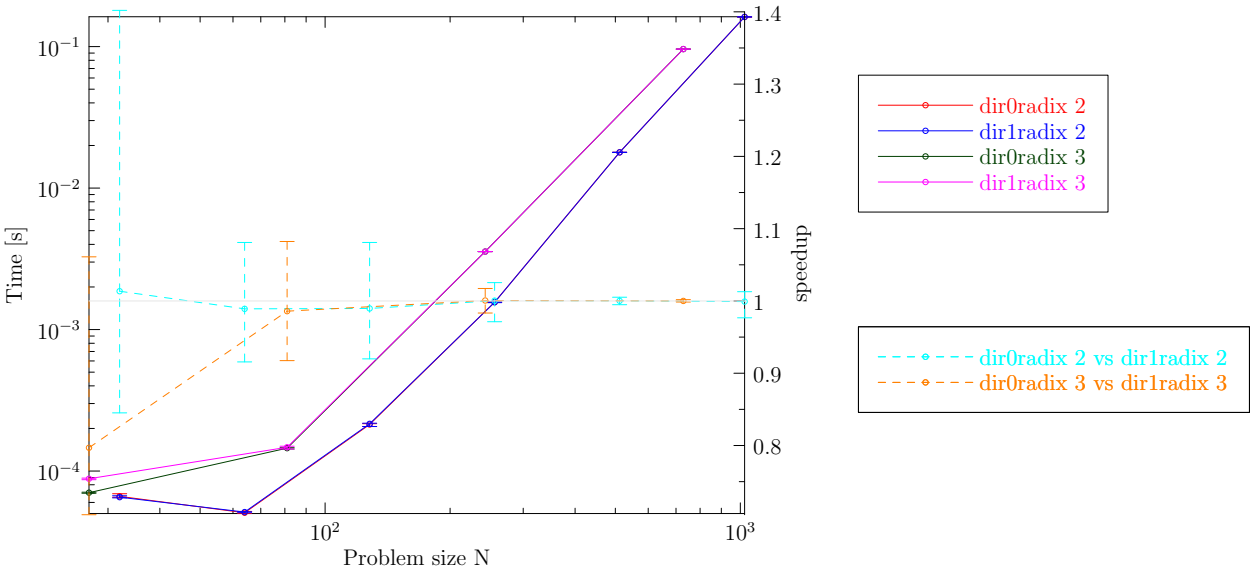

Figure 16: 3D real-to-complex transforms out-of-place

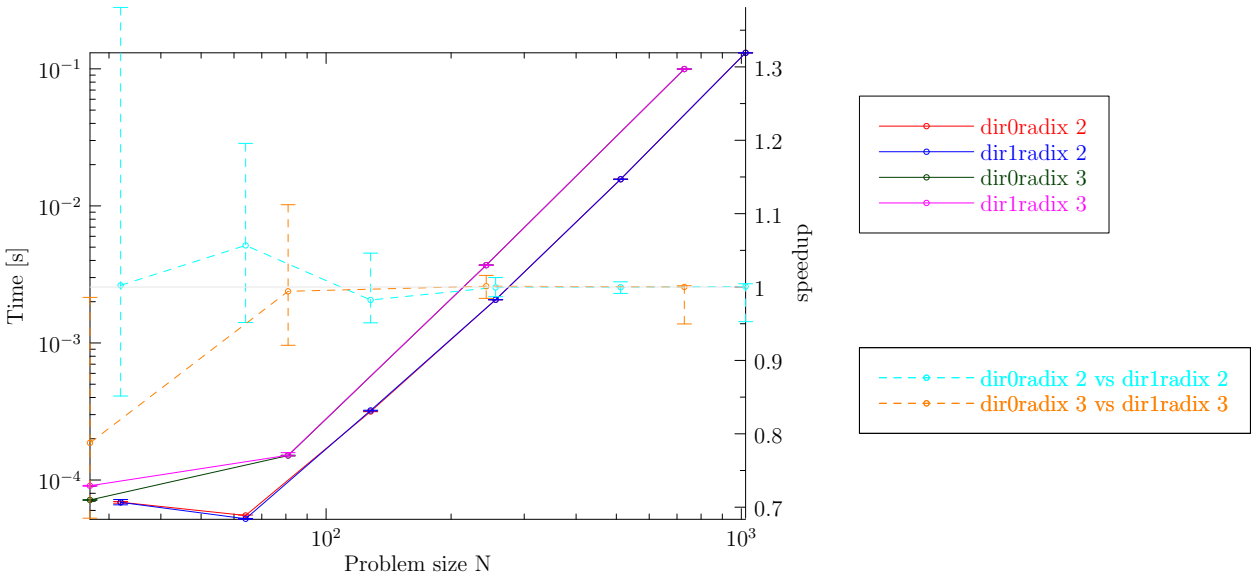

Figure 17: 3D complex-to-real transforms in-place

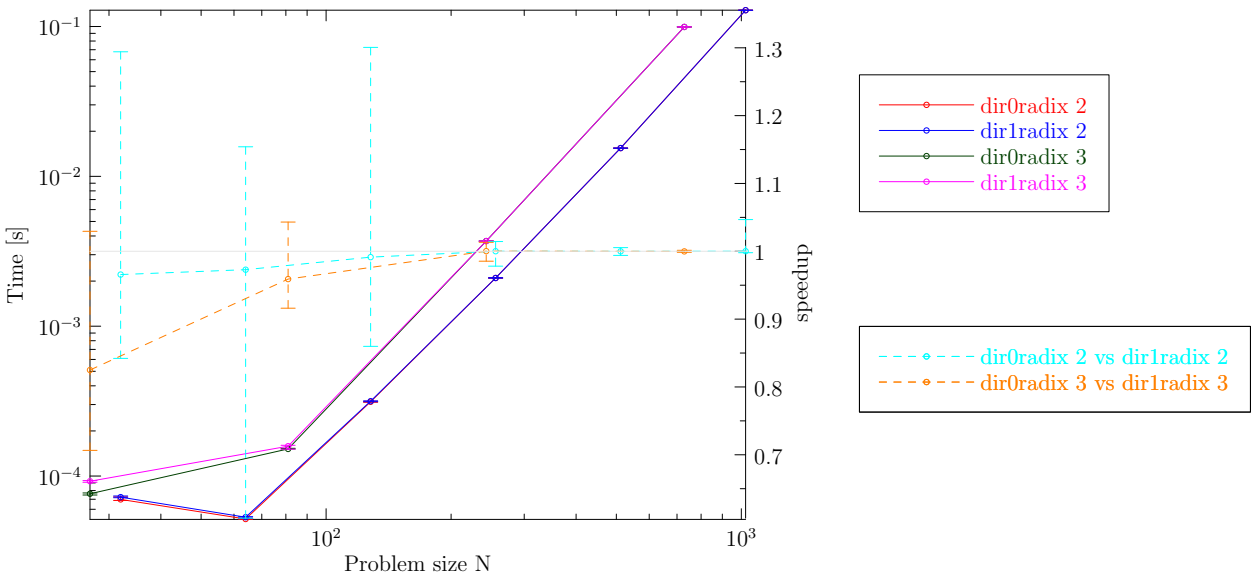

Figure 18: 3D complex-to-real transforms out-of-place