

n_d	3	4	5	10	100	200	300
Classic	1.77×10^{-4}	1.89×10^{-4}	1.97×10^{-4}	2.34×10^{-4}	2.66×10^{-3}	5.70×10^{-3}	8.23×10^{-3}
Quater.	1.15×10^{-4}	1.26×10^{-4}	1.35×10^{-4}	1.67×10^{-4}	2.56×10^{-3}	5.63×10^{-3}	8.15×10^{-3}
Improv	53.76%	50.52%	46.77%	40.24%	4.07%	1.20%	1.08%

Table 1: Improvement percentage in geometric means of **QuaternionBP** in relation to **ClassicBP** considering results of the benchmark.

n_d	400	500	600	700	800
Classic	1.05×10^{-2}	1.07×10^{-2}	1.02×10^{-2}	9.20×10^{-3}	7.56×10^{-3}
Quater.	1.04×10^{-2}	1.10×10^{-2}	1.04×10^{-2}	9.23×10^{-3}	8.18×10^{-3}
Improv	0.83%	-2.24%	-1.74%	-0.32%	-7.55%

Table 2: Improvement percentage in geometric means of **QuaternionBP** in relation to **ClassicBP** considering results of the benchmark.