# QR Size: 50x50, Condition Number: 143.08538294720853

| threads | n | m | cond_num | rank | outer_tol | outer_maxiters | inner_tol | inner_maxiters | als_error | svdt_error | als_svdt_error | converged_als | als_time | svdt_time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Int64 | Int64 | Int64 | Float64 | Int64 | Float64 | Int64 | Float64 | Int64 | Float64 | Float64 | Float64 | Bool | Float64 | Float64 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 25 | 1.0e-6 | 25 | 30.9752 | 30.9222 | 11.2826 | false | 1.1829 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 25 | 1.0e-6 | 50 | 31.0317 | 30.9222 | 12.7439 | false | 0.0107454 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 25 | 1.0e-6 | 75 | 30.9252 | 30.9222 | 2.4887 | false | 0.00606483 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 25 | 1.0e-6 | 100 | 30.9374 | 30.9222 | 5.58593 | false | 0.00606871 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 50 | 1.0e-6 | 25 | 30.936 | 30.9222 | 6.4242 | false | 0.0125665 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 50 | 1.0e-6 | 50 | 30.9225 | 30.9222 | 0.960048 | false | 0.0125234 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 50 | 1.0e-6 | 75 | 30.9224 | 30.9222 | 0.745571 | false | 0.01219 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 50 | 1.0e-6 | 100 | 30.9884 | 30.9222 | 12.3891 | false | 0.0122962 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 75 | 1.0e-6 | 25 | 30.9222 | 30.9222 | 0.257621 | false | 0.0190067 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 75 | 1.0e-6 | 50 | 30.9222 | 30.9222 | 0.109224 | false | 0.0185845 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 75 | 1.0e-6 | 75 | 30.9222 | 30.9222 | 0.021505 | false | 0.0185291 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 75 | 1.0e-6 | 100 | 30.9236 | 30.9222 | 2.01329 | false | 0.0178089 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 100 | 1.0e-6 | 25 | 30.9421 | 30.9222 | 7.7774 | false | 0.0236599 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 100 | 1.0e-6 | 50 | 30.9223 | 30.9222 | 0.348294 | false | 0.0237722 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 100 | 1.0e-6 | 75 | 30.9222 | 30.9222 | 0.00563597 | false | 0.0351965 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 13 | 1.0e-6 | 100 | 1.0e-6 | 100 | 30.9222 | 30.9222 | 0.0979677 | false | 0.0319334 | 0.56719 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 25 | 1.0e-6 | 25 | 16.8495 | 16.849 | 0.587199 | false | 0.0259185 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 25 | 1.0e-6 | 50 | 16.8532 | 16.849 | 1.6023 | false | 0.0255635 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 25 | 1.0e-6 | 75 | 16.852 | 16.849 | 1.15479 | false | 0.0256082 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 25 | 1.0e-6 | 100 | 16.8511 | 16.849 | 1.02818 | false | 0.0258221 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 50 | 1.0e-6 | 25 | 16.849 | 16.849 | 0.0414301 | false | 0.0519724 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 50 | 1.0e-6 | 50 | 16.849 | 16.849 | 0.0394964 | false | 0.0505009 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 50 | 1.0e-6 | 75 | 16.849 | 16.849 | 0.135497 | false | 0.0500792 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 50 | 1.0e-6 | 100 | 16.87 | 16.849 | 3.55016 | false | 0.0214318 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 75 | 1.0e-6 | 25 | 16.849 | 16.849 | 0.0122482 | false | 0.0266396 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 75 | 1.0e-6 | 50 | 16.849 | 16.849 | 0.00678435 | false | 0.0266844 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 75 | 1.0e-6 | 75 | 16.849 | 16.849 | 0.0142657 | false | 0.0274708 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 75 | 1.0e-6 | 100 | 16.849 | 16.849 | 0.000692204 | false | 0.0272179 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 100 | 1.0e-6 | 25 | 16.849 | 16.849 | 0.00102412 | false | 0.0352786 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 100 | 1.0e-6 | 50 | 16.849 | 16.849 | 0.00109401 | false | 0.0355915 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 100 | 1.0e-6 | 75 | 16.849 | 16.849 | 0.000765714 | false | 0.0351643 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 25 | 1.0e-6 | 100 | 1.0e-6 | 100 | 16.849 | 16.849 | 0.000262407 | false | 0.0363172 | 0.000394792 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 25 | 1.0e-6 | 25 | 5.7194 | 5.71936 | 0.0818069 | false | 0.0338228 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 25 | 1.0e-6 | 50 | 5.7257 | 5.71936 | 1.0372 | false | 0.0332591 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 25 | 1.0e-6 | 75 | 5.71949 | 5.71936 | 0.146811 | false | 0.0338453 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 25 | 1.0e-6 | 100 | 5.71937 | 5.71936 | 0.0203054 | false | 0.0328308 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 50 | 1.0e-6 | 25 | 5.71936 | 5.71936 | 0.00244297 | false | 0.0665712 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 50 | 1.0e-6 | 50 | 5.71936 | 5.71936 | 0.0101823 | false | 0.0643222 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 50 | 1.0e-6 | 75 | 5.71936 | 5.71936 | 0.000314164 | false | 0.0641555 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 50 | 1.0e-6 | 100 | 5.7194 | 5.71936 | 0.0811167 | false | 0.0634979 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 75 | 1.0e-6 | 25 | 5.71936 | 5.71936 | 0.000248664 | false | 0.0971359 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 75 | 1.0e-6 | 50 | 5.71936 | 5.71936 | 0.000149172 | false | 0.0974543 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 75 | 1.0e-6 | 75 | 5.71936 | 5.71936 | 0.000237931 | false | 0.096871 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 75 | 1.0e-6 | 100 | 5.71936 | 5.71936 | 9.31034e-6 | false | 0.0969917 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 100 | 1.0e-6 | 25 | 5.71936 | 5.71936 | 2.24083e-5 | false | 0.129171 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 100 | 1.0e-6 | 50 | 5.71936 | 5.71936 | 9.91814e-7 | false | 0.133001 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 100 | 1.0e-6 | 75 | 5.71936 | 5.71936 | 4.0935e-6 | false | 0.131765 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 38 | 1.0e-6 | 100 | 1.0e-6 | 100 | 5.71936 | 5.71936 | 3.59583e-6 | false | 0.131003 | 0.000422167 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 25 | 1.0e-6 | 25 | 0.0 | 1.15522e-13 | 1.27403e-13 | true | 0.011706 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 25 | 1.0e-6 | 50 | 0.0 | 1.15522e-13 | 1.28309e-13 | true | 0.00175529 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 25 | 1.0e-6 | 75 | 0.0 | 1.15522e-13 | 1.26984e-13 | true | 0.00503488 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 25 | 1.0e-6 | 100 | 0.0 | 1.15522e-13 | 1.26433e-13 | true | 0.00172129 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 50 | 1.0e-6 | 25 | 0.0 | 1.15522e-13 | 1.27093e-13 | true | 0.00174129 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 50 | 1.0e-6 | 50 | 0.0 | 1.15522e-13 | 1.27552e-13 | true | 0.00180054 | 0.00033675 |

| threads | n | m | cond_num | rank | outer_tol | outer_maxiters | inner_tol | inner_maxiters | als_error | svdt_error | als_svdt_error | converged_als | als_time | svdt_time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Int64 | Int64 | Int64 | Float64 | Int64 | Float64 | Int64 | Float64 | Int64 | Float64 | Float64 | Float64 | Bool | Float64 | Float64 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 50 | 1.0e-6 | 75 | 0.0 | 1.15522e-13 | 1.28272e-13 | true | 0.00192496 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 50 | 1.0e-6 | 100 | 0.0 | 1.15522e-13 | 1.31033e-13 | true | 0.00517683 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 75 | 1.0e-6 | 25 | 0.0 | 1.15522e-13 | 1.24489e-13 | true | 0.00217604 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 75 | 1.0e-6 | 50 | 0.0 | 1.15522e-13 | 1.27085e-13 | true | 0.00181912 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 75 | 1.0e-6 | 75 | 0.0 | 1.15522e-13 | 1.27553e-13 | true | 0.002341 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 75 | 1.0e-6 | 100 | 0.0 | 1.15522e-13 | 1.27919e-13 | true | 0.00187379 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 100 | 1.0e-6 | 25 | 0.0 | 1.15522e-13 | 1.26711e-13 | true | 0.00185612 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 100 | 1.0e-6 | 50 | 0.0 | 1.15522e-13 | 1.2771e-13 | true | 0.00420112 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 100 | 1.0e-6 | 75 | 0.0 | 1.15522e-13 | 1.30428e-13 | true | 0.00174321 | 0.00033675 |
| 4 | 50 | 50 | 143.085 | 50 | 1.0e-6 | 100 | 1.0e-6 | 100 | 0.0 | 1.15522e-13 | 1.30924e-13 | true | 0.00196746 | 0.00033675 |