

# TOL trade-off metrics (adaptive RK)

| TOL   | runtime [s] | ×      | N steps | ×      | max error | ×     | final error | ×     |
|-------|-------------|--------|---------|--------|-----------|-------|-------------|-------|
| 1e-03 | 0.008313    | ×1.00  | 115     | ×1.00  | 8.015e-02 | ×1.00 | 2.305e-06   | ×1.00 |
| 1e-04 | 0.010390    | ×1.25  | 137     | ×1.19  | 3.264e-02 | ×0.41 | 4.114e-07   | ×0.18 |
| 1e-05 | 0.016975    | ×2.04  | 191     | ×1.66  | 1.187e-02 | ×0.15 | 7.921e-08   | ×0.03 |
| 1e-06 | 0.024945    | ×3.00  | 314     | ×2.73  | 3.901e-03 | ×0.05 | 1.729e-08   | ×0.01 |
| 1e-07 | 0.041135    | ×4.95  | 598     | ×5.20  | 1.088e-03 | ×0.01 | 7.149e-09   | ×0.00 |
| 1e-08 | 0.083519    | ×10.05 | 1244    | ×10.82 | 1.777e-04 | ×0.00 | 4.398e-09   | ×0.00 |