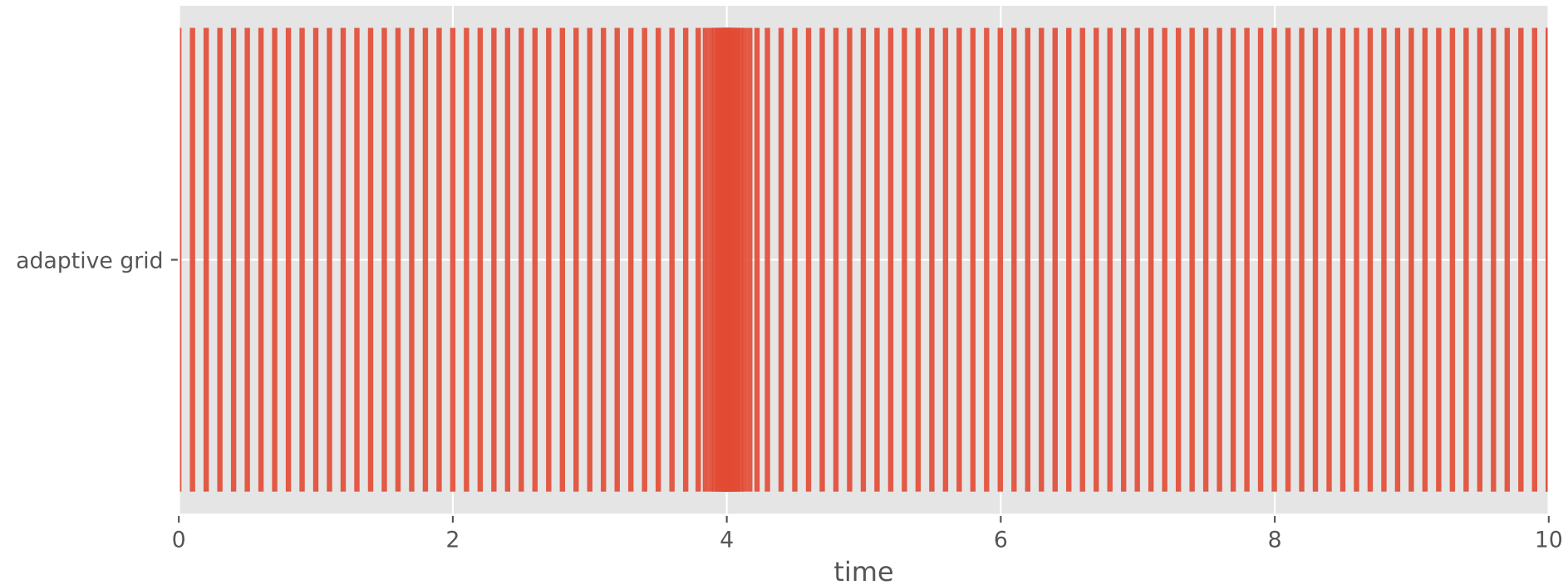


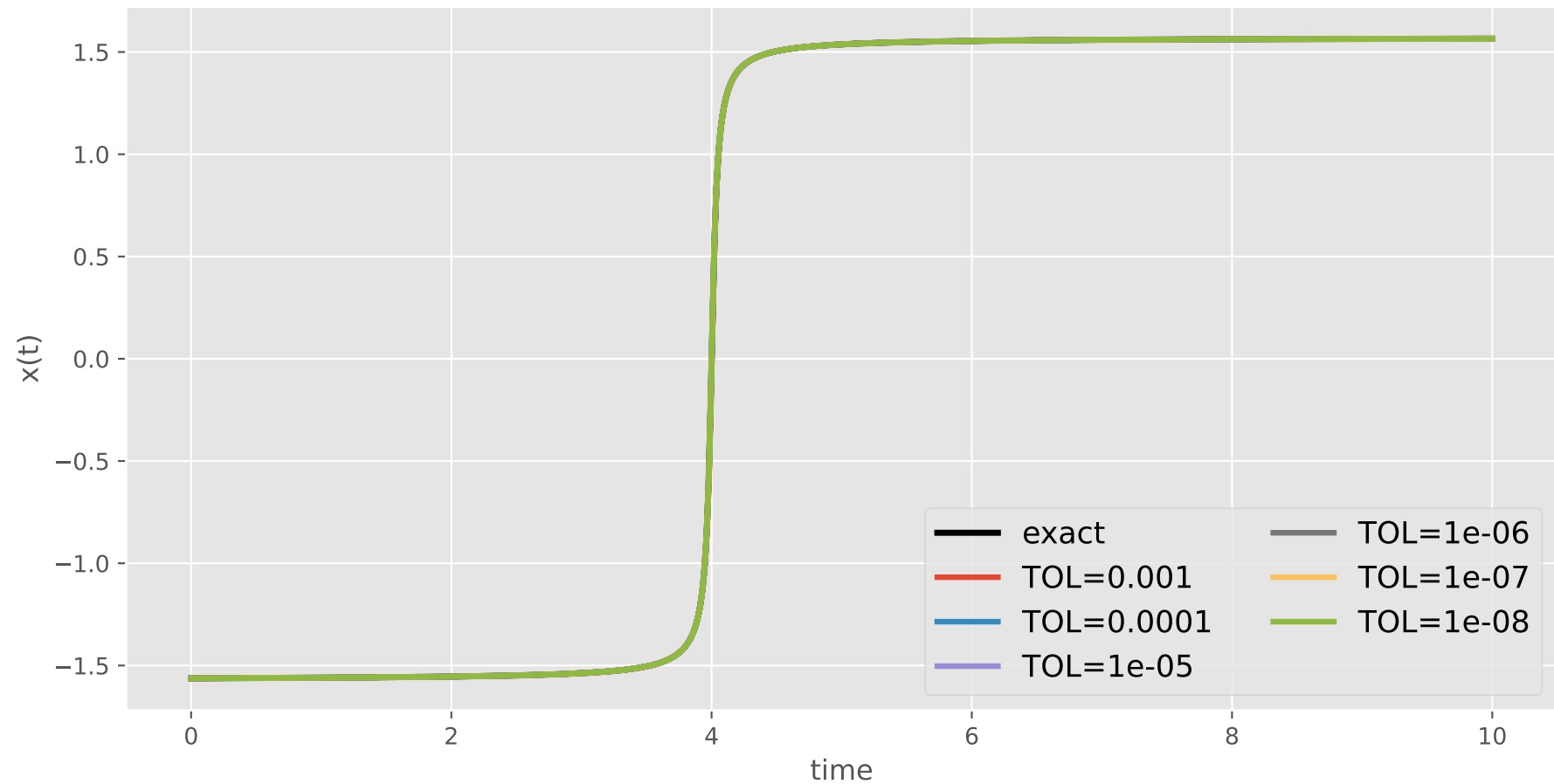
Arctan problem: adaptive BS23 vs references



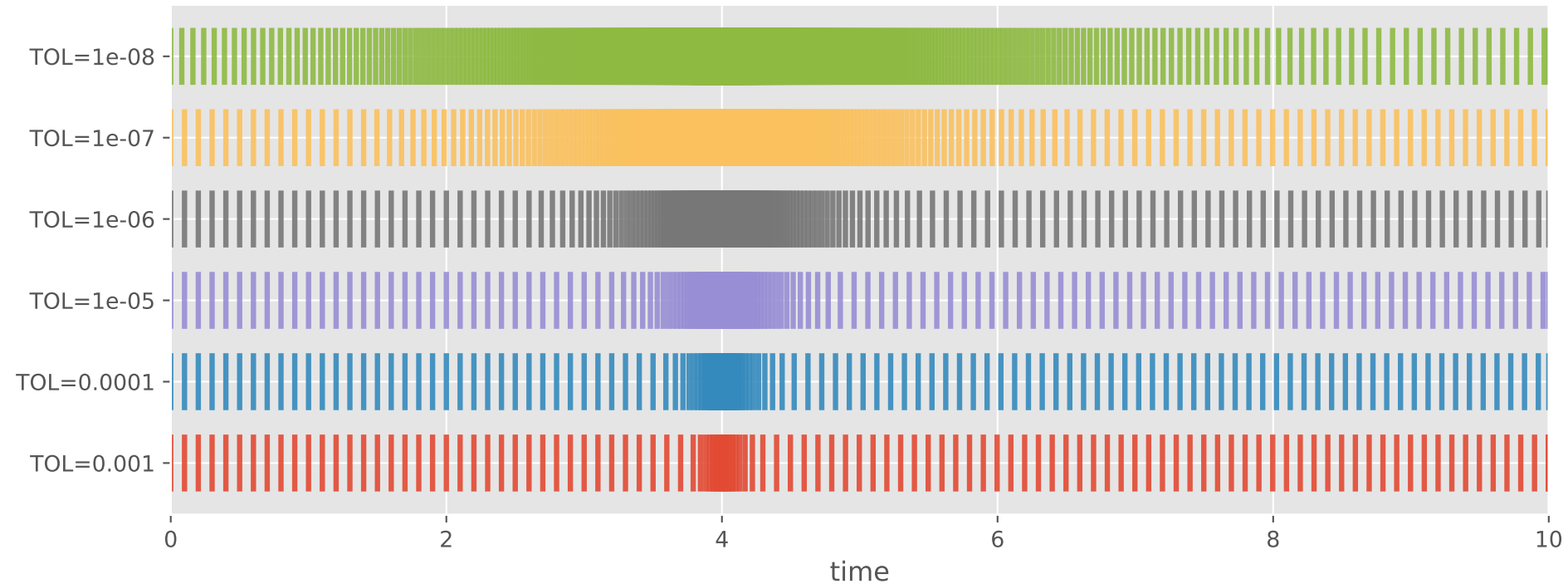
Adaptive discretization points (BS23)



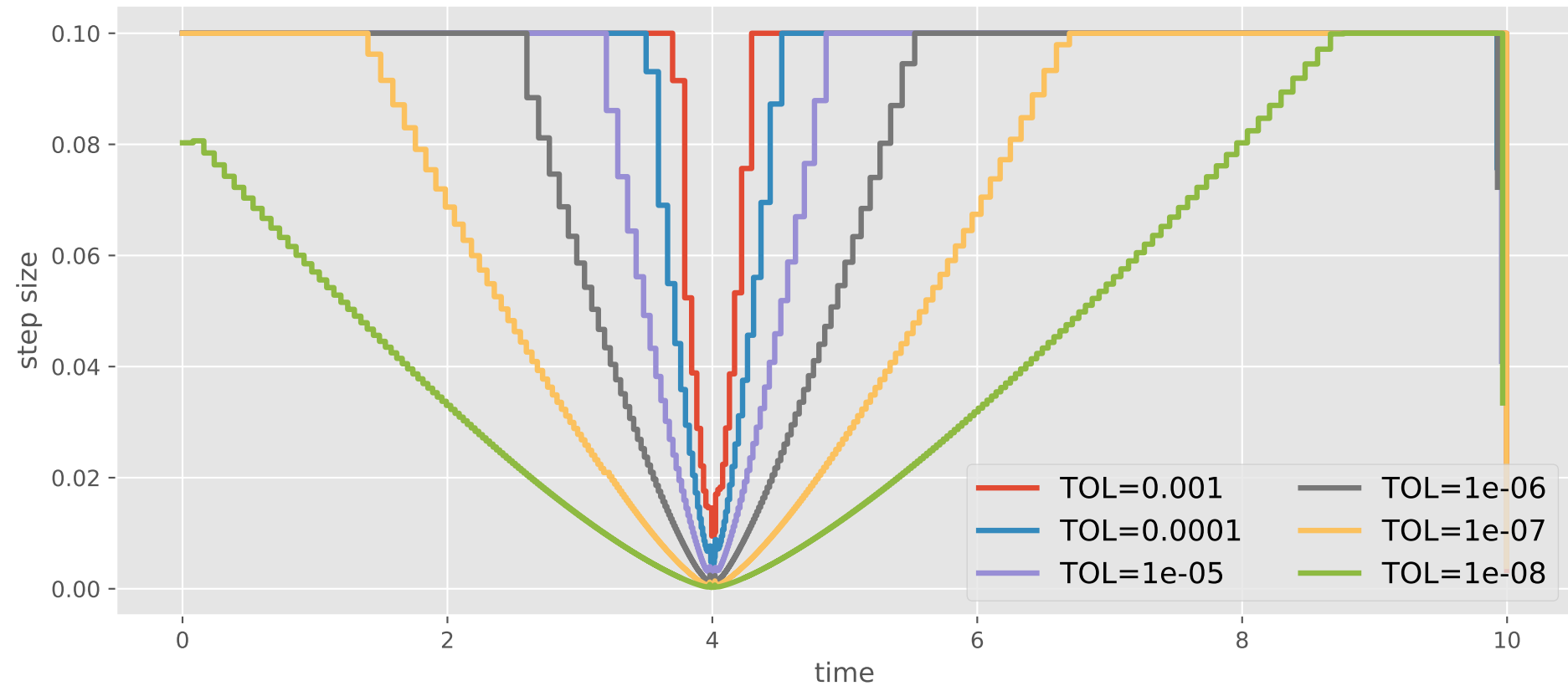
Approximations for various TOL



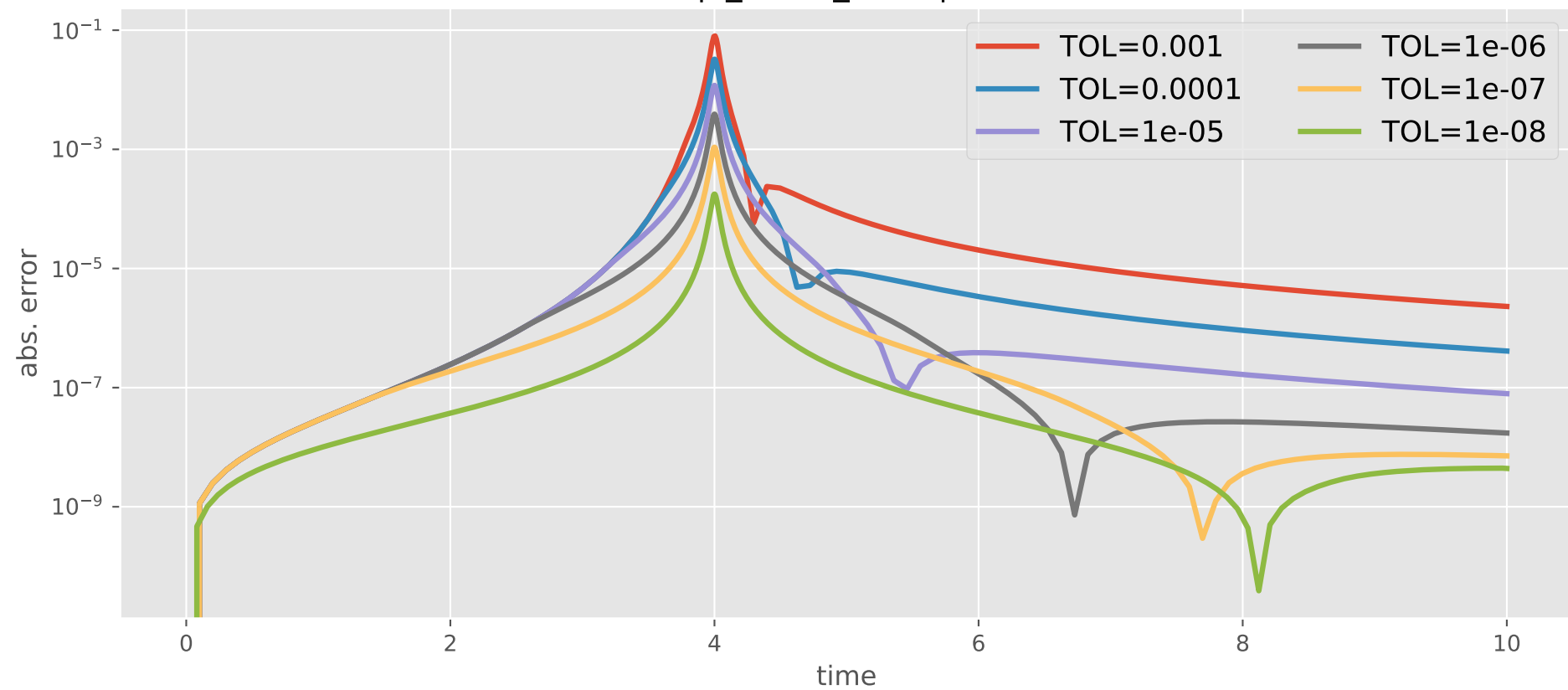
Adaptive grids for different tolerances



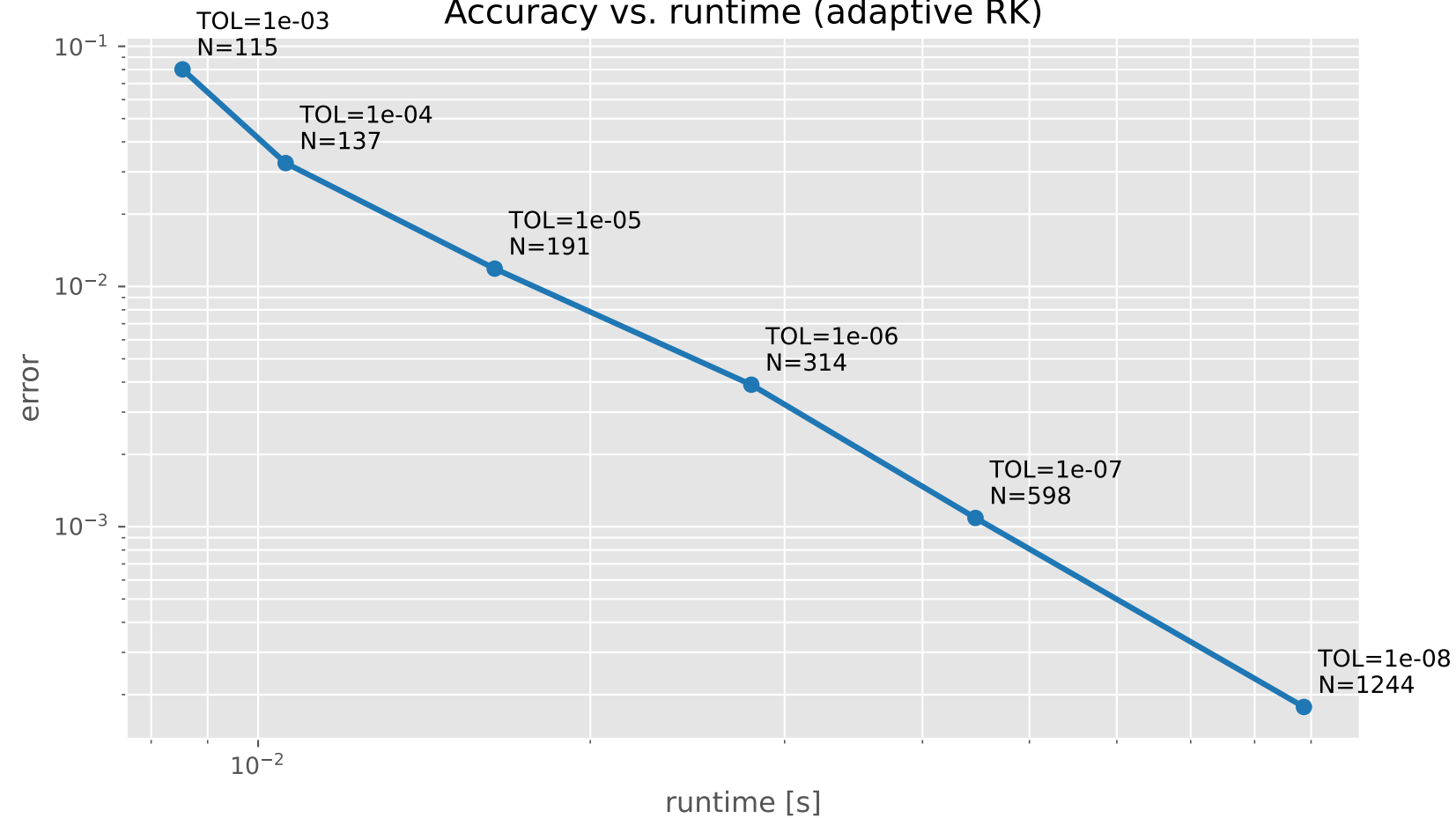
Step sizes over time for different TOL



Grid error $|x_{ad} - x_{exact}|$ for each TOL



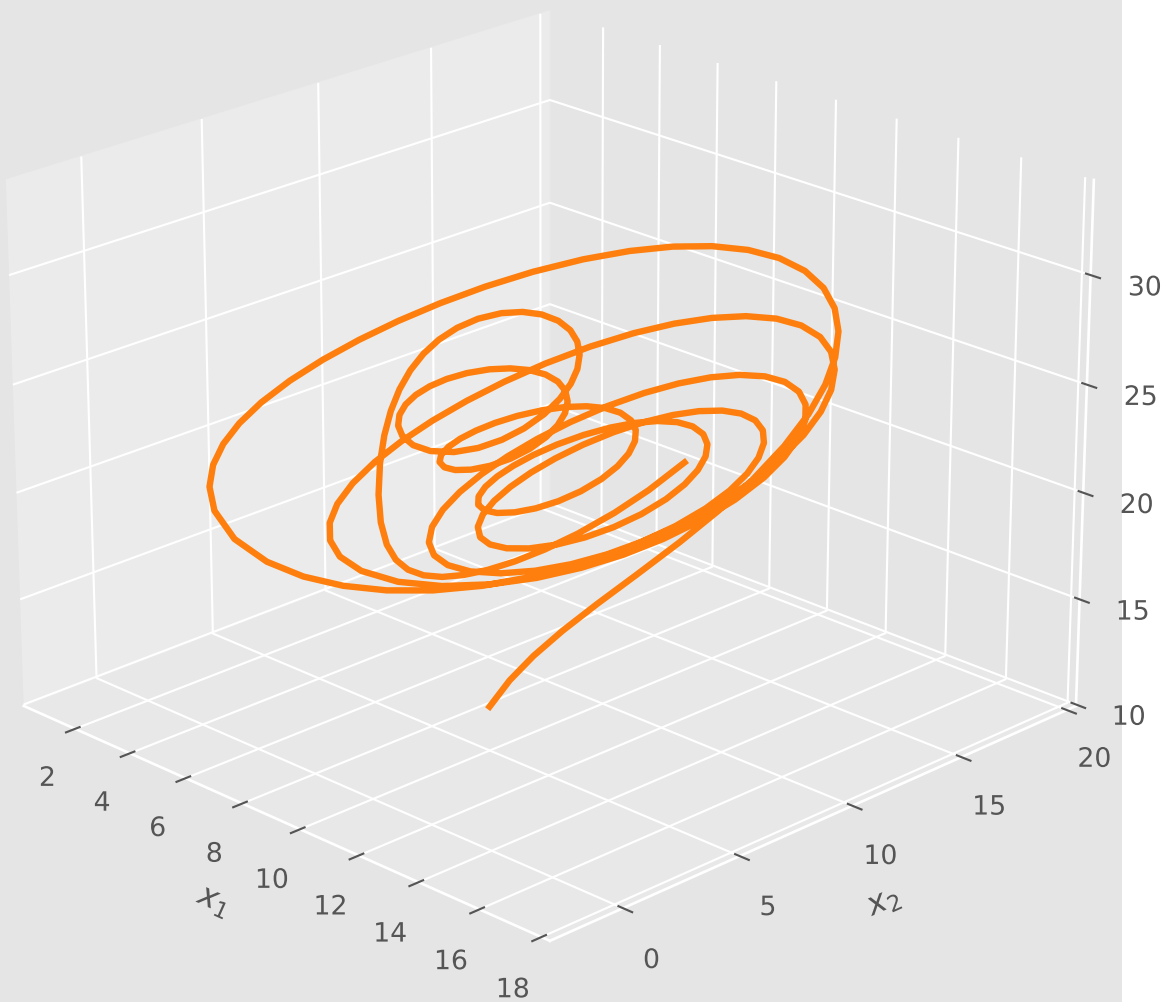
Accuracy vs. runtime (adaptive RK)



TOL trade-off metrics (adaptive RK)

TOL	runtime [s]	N steps	max error	final error
1e-03	0.008541	115	8.015e-02	2.305e-06
1e-04	0.010592	137	3.264e-02	4.114e-07
1e-05	0.016383	191	1.187e-02	7.921e-08
1e-06	0.027986	314	3.901e-03	1.729e-08
1e-07	0.044678	598	1.088e-03	7.149e-09
1e-08	0.088659	1244	1.777e-04	4.398e-09

Forced Lorenz (adaptive BS23)



Adaptive step sizes (Lorenz)

