Testing other times and other modes to fix the discrepancies by chosing the right starting index by hand

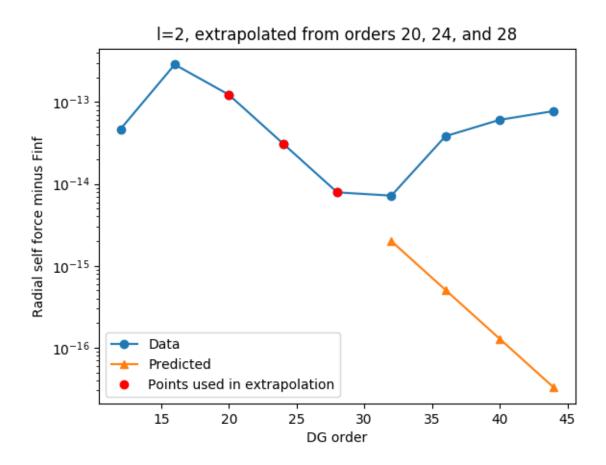
Steven Dorsher
July 21, 2017

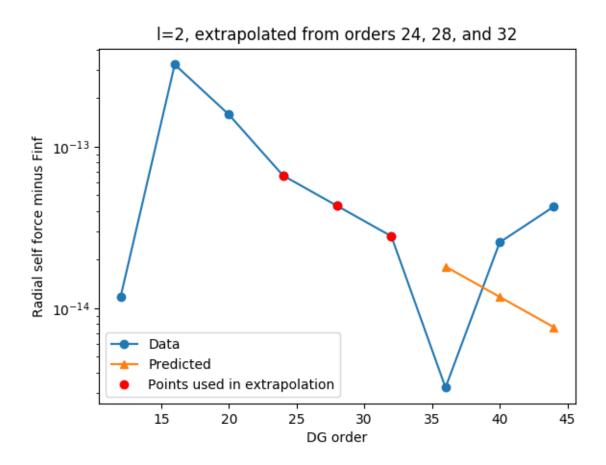
1 l=2

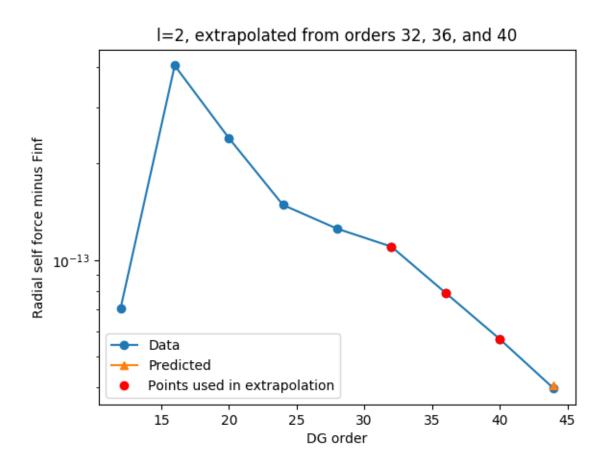
Last two data points seem to have been fixed by some nice happenstance. I checked and it is repeatable, so not a memory error. I should check that this is replicable with other modes. Confirm that it is still selected as best index on second run (or wait to improve best index finder).

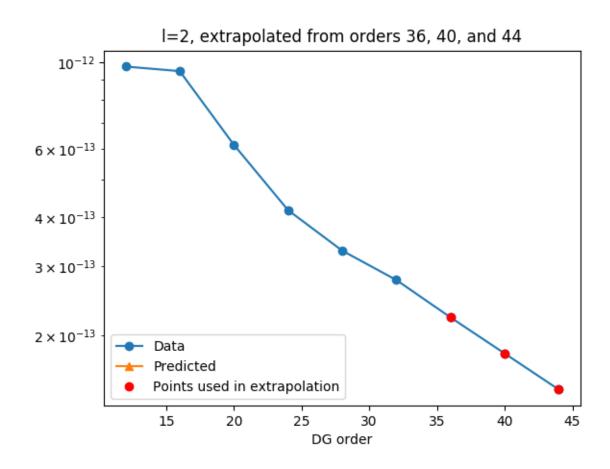
It is strange that mode 6 is being selected even when mode 0 fails, then it acts like mode 0 is being selected. Could something have changed between subsequent runs of the code? Try rerunning at some point, but maybe more important to implement a better algorithm first. Suggest fit to straight line, with some factor to make more degrees of freedom more favorable.











632 0 mode failed 632 1 2.40975299617e-05 632 2 2.40975300465e-05 632 3 2.40975300114e-05 632 4 mode failed 632 5 2.40975299291e-05 632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990697765e-05 634 4 mode failed 634 5 2.39990697065e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05 636 6 2.39104739079e-05	$_{ m time}$	starting order	finf
632 2 2.40975300465e-05 632 3 2.40975300114e-05 632 4 mode failed 632 5 2.40975299291e-05 632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.3999069758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	632	0	mode failed
632 3 2.40975300114e-05 632 4 mode failed 632 5 2.40975299291e-05 632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	632	1	2.40975299617e-05
632 4 mode failed 632 5 2.40975299291e-05 632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	632	2	2.40975300465e-05
632 5 2.40975299291e-05 632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	632	3	2.40975300114e-05
632 6 2.40975299148e-05 634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.3999069758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	632	4	mode failed
634 0 mode failed (however, 6 selected) 634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 636 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	632	5	2.40975299291e-05
634 1 2.39990698129e-05 634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	632	6	2.40975299148e-05
634 2 2.39990699318e-05 634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	634	0	mode failed (however, 6 selected)
634 3 2.39990698774e-05 634 4 mode failed 634 5 2.39990697065e-05 634 6 2.3999069758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	634	1	2.39990698129e-05
634 4 mode failed 634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104737911e-05 636 5 2.39104739924e-05	634	2	2.39990699318e-05
634 5 2.39990697065e-05 634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	634	3	2.39990698774e-05
634 6 2.39990696758e-05 636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	634	4	mode failed
636 0 mode failed (however, 6 selected) 636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	634	5	2.39990697065e-05
636 1 2.391047416e-05 636 2 2.39104742806e-05 636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	634	6	2.39990696758e-05
636 2 2.39104742806e-05 636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	636	0	mode failed (however, 6 selected)
636 3 2.39104742249e-05 636 4 2.39104737911e-05 636 5 2.39104739924e-05	636	1	2.391047416e-05
636 4 2.39104737911e-05 636 5 2.39104739924e-05	636	2	2.39104742806e-05
636 5 2.39104739924e-05	636	3	2.39104742249e-05
	636	4	2.39104737911e-05
636 6 2.39104739079e-05	636	5	2.39104739924e-05
	636	6	2.39104739079e-05

