

h	$f(k + h)$	$f(k - h)$	Δf	fw	cen
10^{-1}	0.002486989751	0.004553655896	-0.0008731806482	-0.0087318065	-0.010333331
10^{-2}	0.003260089744	0.00346344186	-0.0001000806548	-0.010008065	-0.010167606
10^{-3}	0.003350021081	0.003370352945	-1.014931845e-05	-0.010149318	-0.010165932
10^{-4}	0.00335915404	0.003361187223	-1.016359067e-06	-0.010163591	-0.010165913
10^{-5}	0.003360068749	0.003360272067	-1.016501862e-07	-0.010165019	-0.010165912
10^{-6}	0.003360160234	0.003360180566	-1.016516009e-08	-0.01016516	-0.010165912
10^{-7}	0.003360169382	0.003360171416	-1.016514899e-09	-0.010165149	-0.010165927
10^{-8}	0.003360170297	0.003360170501	-1.016513193e-10	-0.010165132	-0.010166151
10^{-9}	0.003360170389	0.003360170409	-1.01582835e-11	-0.010158284	-0.010163805
10^{-10}	0.003360170398	0.0033601704	-1.017098732e-12	-0.010170987	-0.01019752
10^{-11}	0.003360170399	0.003360170399	-9.64363138e-14	-0.0096436314	-0.010377224
10^{-12}	0.003360170399	0.003360170399	-8.901299836e-15	-0.0089012998	-0.0082778836
10^{-13}	0.003360170399	0.003360170399	3.1441863e-16	0.0031441863	0.00089555099
10^{-14}	0.003360170399	0.003360170399	-2.294171797e-16	-0.022941718	-0.017238815
10^{-15}	0.003360170399	0.003360170399	-4.527628272e-16	-0.45276283	-0.22638141
10^{-16}	0.003360170399	0.003360170399	0	0	0
10^{-17}	0.003360170399	0.003360170399	0	0	0
10^{-18}	0.003360170399	0.003360170399	0	0	0
10^{-19}	0.003360170399	0.003360170399	0	0	0
10^{-20}	0.003360170399	0.003360170399	0	0	0
10^{-21}	0.003360170399	0.003360170399	0	0	0
10^{-22}	0.003360170399	0.003360170399	0	0	0

Table 1: Step size study for c_M w.r.t. ki