

$h$	$f(k+h)$	$f(k-h)$	$\Delta f$	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