h	$f(k+h)$	$f(k-h)$	Δf	fw	cen
10^{-1}	0.003486837509	0.003233294586	0.00012666711	0.0012666711	0.0012677146
10^{-2}	0.003372849792	0.003347488911	1.267939332e-05	0.0012679393	0.001268044
10^{-3}	0.003361438436	0.003358902341	1.268036874e-06	0.0012680369	0.0012680473
10^{-4}	0.003360297204	0.003360043594	1.268046393e-07	0.0012680464	0.0012680474
10^{-5}	0.003360183079	0.003360157718	1.268047674e-08	0.0012680477	0.0012680477
10^{-6}	0.003360171667	0.003360169131	1.268052615e-09	0.0012680526	0.0012680479
10^{-7}	0.003360170526	0.003360170272	1.268034852e-10	0.0012680349	0.0012680218
10^{-8}	0.003360170412	0.003360170386	1.268200128e-11	0.0012682001	0.0012680205
10^{-9}	0.0033601704	0.003360170398	1.272212804e-12	0.0012722128	0.0012685423
10^{-10}	0.003360170399	0.003360170399	1.295595575e-13	0.0012955956	0.0012673543
10^{-11}	0.003360170399	0.003360170399	1.042568809e-14	0.0010425688	0.0010715387
10^{-12}	0.003360170399	0.003360170399	4.80084722e-16	0.00048008472	0.00059479331
10^{-13}	0.003360170399	0.003360170399	1.162264729e-16	0.0011622647	0.0034282473
10^{-14}	0.003360170399	0.003360170399	-2.255140519e-16	-0.022551405	-0.022573089
10^{-15}	0.003360170399	0.003360170399	0	0	0
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. kp