h	$f(k+h)$	$f(k-h)$	Δf	$\partial f/\partial Kd\_th(fw)$	$\partial f/\partial Kd\_th(cen)$
10^{-1}	3.183381246	4.60294623	0.1724481753	1.724481753	-7.097824919
10^{-2}	3.030477952	2.991597102	0.01954488114	1.954488114	1.944042501
10^{-3}	3.012905028	3.008713574	0.001971957256	1.971957256	2.095726792
10^{-4}	3.010887908	3.010621009	-4.516223915e-05	-0.4516223915	1.334494903
10^{-5}	3.010749057	3.010731399	-0.0001840139132	-18.40139132	0.8828657269
10^{-6}	3.010914827	3.010951286	-1.824339377e-05	-18.24339377	-18.22957964
10^{-7}	3.010931247	3.010934894	-1.823397521e-06	-18.23397521	-18.23233565
10^{-8}	3.010932888	3.010933253	-1.823220721e-07	-18.23220721	-18.23221587
10^{-9}	3.010933052	3.010933089	-1.823356355e-08	-18.23356355	-18.23115836
10^{-10}	3.010933069	3.010933072	-1.824396634e-09	-18.24396634	-18.24450369
10^{-11}	3.01093307	3.010933071	-1.804467686e-10	-18.04467686	-18.04647543
10^{-12}	3.010933071	3.010933071	-1.402122862e-11	-14.02122862	-25.10924801
10^{-13}	3.010933071	3.010933071	1.372235658e-13	1.372235658	0.8348877145
10^{-14}	3.010933076	3.010933071	5.60581892e-09	560581.892	280040.946
10^{-15}	3.010933071	3.010933071	-5.773159728e-15	-5.773159728	9.103828802
10^{-16}	3.010933071	3.010933071	0	0	0
10^{-17}	3.010933071	3.010933071	0	0	0
10^{-18}	3.010933071	3.010933071	0	0	0
10^{-19}	3.010933071	3.010933071	0	0	0
10^{-20}	3.010933071	3.010933071	0	0	0
10^{-21}	3.010933071	3.010933071	0	0	0
10^{-22}	3.010933071	3.010933071	0	0	0

Table 1: Step size study for Kd_th, gains `Kph0.0544697_Kih0.0076355_Kpth1.6802_Kith2.01171_Kdth-1.64786_KpV2.0588`