

Slope 1 and Slope 2 Side by Side

For each function/algorithm pair, the value of slope 1 and slope 2 is shown below.
(The value shown is the average over 30 samples)

	SLOPE 1	SLOPE 2
ackley		
bb:	-6.38988	-0.00542
bba:	-7.49235	-0.00976
gbest:	-6.22861	-0.00554
gbestgc:	-6.38772	-0.00616
lbest:	-4.95779	-0.02128
lbestgc:	-4.89588	-0.02089
spsa:	-8.03486	-0.00425
vn:	-5.84891	-0.01189
vngc:	-6.03270	-0.01274
alpine		
bb:	-1.41751	-0.00325
bba:	-0.84372	-0.00460
gbest:	-1.82658	-0.00162
gbestgc:	-1.90024	-0.00220
lbest:	-0.93282	-0.00969
lbestgc:	-0.89356	-0.00779
spsa:	-3.99623	-0.00131
vn:	-0.92882	-0.00928
vngc:	-0.96776	-0.00874
eggholder		
bb:	-40.12856	-1.10477
bba:	-6.23378	-2.04937
gbest:	-42.59518	-0.49591
gbestgc:	-39.51540	-0.66946
lbest:	-12.87576	-0.01617
lbestgc:	-6.31413	-0.02921
spsa:	-154.01050	-0.26430
vn:	-10.85672	-1.05146
vngc:	-12.35237	-1.00208
elliptic		
bb:	-21.77388	-0.01872
bba:	-25.20717	-0.03014
gbest:	-15.99245	-0.01794
gbestgc:	-14.64784	-0.02164
lbest:	-17.17249	-0.05283
lbestgc:	-16.53341	-0.05850
spsa:	-41.93075	-0.04293
vn:	-19.08107	-0.03844
vngc:	-19.04688	-0.04454
goldsteinprice		
bb:	-0.32762	-0.00001
bba:	-0.21449	-0.00011
gbest:	-0.21370	-0.00002
gbestgc:	-0.18916	-0.00009
lbest:	-0.26073	-0.00003
lbestgc:	-0.25665	-0.00010
spsa:	-0.30991	-0.00002
vn:	-0.25351	-0.00003
vngc:	-0.24538	-0.00011

griewank		
bb:	-134.28960	-0.11455
bba:	-141.71030	-0.14482
gbest:	-118.70340	-0.10354
gbestgc:	-116.31800	-0.09176
lbest:	-94.49554	-0.26817
lbestgc:	-95.43230	-0.26958
sps0:	-158.27500	-0.10713
vn:	-107.89710	-0.18809
vngc:	-114.41440	-0.18976

levy		
bb:	-1.40917	-0.00223
bba:	-1.69359	-0.00364
gbest:	-1.15217	-0.00218
gbestgc:	-0.86884	-0.00332
lbest:	-1.17876	-0.01895
lbestgc:	-1.29571	-0.02066
sps0:	-1.83680	-0.00159
vn:	-1.08521	-0.00884
vngc:	-1.08653	-0.00995

michalewicz		
bb:	-0.19911	-0.00133
bba:	-0.06912	-0.00459
gbest:	-0.19737	-0.00064
gbestgc:	-0.14035	-0.00085
lbest:	-0.04178	-0.00155
lbestgc:	-0.04081	-0.00171
sps0:	-0.63107	-0.00020
vn:	-0.06760	-0.00307
vngc:	-0.06387	-0.00258

quadric		
bb:	-8.51969	-0.22725
bba:	-3.65476	-0.56688
gbest:	-11.82193	-0.12410
gbestgc:	-14.17077	-0.13054
lbest:	-3.77952	-0.57130
lbestgc:	-3.25332	-0.52296
sps0:	-37.57147	-0.02506
vn:	-8.08097	-0.23807
vngc:	-7.66788	-0.22890

quartic		
bb:	-0.17883	-0.00038
bba:	-0.21934	-0.00048
gbest:	-0.17943	-0.00028
gbestgc:	-0.17193	-0.00034
lbest:	-0.15914	-0.00086
lbestgc:	-0.14656	-0.00103
sps0:	-0.29204	-0.00031
vn:	-0.19082	-0.00057
vngc:	-0.16268	-0.00071

rastrigin		
bb:	-0.52905	-0.00251
bba:	-0.22776	-0.01977
gbest:	-0.64732	-0.00133
gbestgc:	-0.67734	-0.00167

lbest:	-0.28385	-0.00486
lbestgc:	-0.34420	-0.00411
sps0:	-2.12805	-0.00059
vn:	-0.28461	-0.00719
vngc:	-0.34844	-0.00856

rosenbrock

bb:	-0.32771	0.00198
bba:	-0.30771	0.00149
gbest:	-0.34648	0.00487
gbestgc:	-0.24909	0.00410
lbest:	-0.23673	-0.00204
lbestgc:	-0.20945	-0.00229
sps0:	-0.56146	-0.00045
vn:	-0.31776	-0.00062
vngc:	-0.27392	-0.00074

salomon

bb:	-10.69106	-0.08154
bba:	-13.78878	-0.11312
gbest:	-13.66249	-0.05295
gbestgc:	-15.05031	-0.05530
lbest:	-11.01129	-0.14609
lbestgc:	-11.98526	-0.14498
sps0:	-28.91695	-0.01505
vn:	-14.10790	-0.09062
vngc:	-14.46834	-0.09411

schwefel1_2

bb:	-7.06873	-0.24261
bba:	-3.81353	-0.54902
gbest:	-11.02192	-0.11915
gbestgc:	-14.90151	-0.12816
lbest:	-3.67727	-0.63328
lbestgc:	-3.40973	-0.57182
sps0:	-38.96408	-0.02657
vn:	-6.45226	-0.23262
vngc:	-6.84053	-0.22248

schwefel2_22

bb:	-3.46940	-0.00141
bba:	-3.35101	-0.00198
gbest:	-2.61528	-0.00155
gbestgc:	-2.49011	-0.00184
lbest:	-1.89142	-0.00407
lbestgc:	-1.79573	-0.00420
sps0:	-3.17644	-0.00179
vn:	-2.22109	-0.00292
vngc:	-2.31228	-0.00344

schwefel2_26

bb:	-71.93259	-0.17783
bba:	-32.74562	-0.46838
gbest:	-84.52622	-0.14984
gbestgc:	-95.73381	-0.12625
lbest:	-12.19062	-0.14771
lbestgc:	-9.84919	-0.11679
sps0:	-166.75700	-0.05326
vn:	-31.08517	-0.87210
vngc:	-31.03175	-1.01763

sixhump		
bb:	-0.61738	-0.00008
bba:	-0.63593	-0.00009
gbest:	-0.36226	-0.00030
gbestgc:	-0.48923	-0.00039
lbest:	-0.60119	-0.00008
lbestgc:	-0.45050	-0.00021
spso:	-0.80695	-0.00007
vn:	-0.37140	-0.00047
vngc:	-0.32414	-0.00047

spherical		
bb:	-20.09865	-0.01640
bba:	-21.94623	-0.02475
gbest:	-19.83587	-0.01631
gbestgc:	-20.32886	-0.01626
lbest:	-15.71725	-0.04712
lbestgc:	-15.64463	-0.04448
spso:	-24.87882	-0.01836
vn:	-19.49416	-0.03331
vngc:	-19.45193	-0.03437

step		
bb:	-5.47826	-0.00433
bba:	-5.72849	-0.00522
gbest:	-5.07164	-0.00357
gbestgc:	-5.45440	-0.00426
lbest:	-4.05952	-0.01235
lbestgc:	-4.13876	-0.01216
spso:	-6.14099	-0.00278
vn:	-4.66374	-0.00702
vngc:	-4.84221	-0.00716

zakharov		
bb:	-0.18124	-0.03370
bba:	-0.17361	-0.05848
gbest:	-0.31911	-0.01005
gbestgc:	-0.29649	-0.00999
lbest:	-0.23670	-0.04590
lbestgc:	-0.21992	-0.04316
spso:	-3.36677	-0.00242
vn:	-0.31673	-0.02436
vngc:	-0.31277	-0.02406