

Alpine_Stacionary

Iteracion	Tiempo_ms	Sol	Iter_sol	Dimension
1	20.42	1.13	3	10
2	17.91	1.62	7	10
3	16.71	1.15	4	10
4	17.65	3.43	7	10
5	17.18	3.17	6	10
6	21.01	2.28	6	10
7	18.5	1.73	6	10
8	19.85	1.3	0	10
9	17.22	1.92	7	10
10	16.99	1.9	4	10
11	17.57	2.11	7	10
12	23.92	0.6	8	10
13	29.3	0.71	5	10
14	19.13	1.83	7	10
15	19.21	2.21	3	10
16	16.68	1.98	7	10
17	19.17	1.2	5	10
18	16.69	0.76	7	10
19	16.86	1.55	1	10
20	18.38	1.76	8	10
1	16.76	3.8	7	30
2	16.68	3.54	6	30
3	28.06	2.97	6	30
4	17.5	2.45	7	30
5	18.09	1.78	7	30
6	44.61	2.43	8	30
7	52.14	3.75	2	30
8	42.95	1.66	3	30
9	38.9	4.02	7	30
10	19.28	0.51	8	30
11	22.18	2.37	5	30
12	16.87	1.14	1	30
13	19.32	2.56	6	30
14	43.17	3.57	8	30

Alpine_Stacionary

15	41.01	1.62	5	30
16	45.09	1.91	5	30
17	44.05	2.57	8	30
18	42.18	4.22	8	30
19	41.3	4.59	0	30
20	44.82	3.03	8	30

Dixon_Gen

Iteracion	Tiempo_ms	Gen_sol	Iter_gen	Sol_gen	Sol	Iter_sol	Dimension
1	135.13	98	8	23.54	597.63	7	10
2	127.14	42	9	18.43	536.05	5	10
3	137.73	86	2	27.47	703.33	9	10
4	141.64	69	5	42.68	207.93	8	10
5	132.94	72	4	39.14	641.17	8	10
6	143.35	2	8	36.52	444.55	7	10
7	130.45	26	2	32.29	647.79	3	10
8	132.26	21	5	55.12	841.43	9	10
9	131.34	60	6	56.76	464.37	8	10
10	137.36	17	5	64.09	626.86	9	10
11	130.87	25	4	31.41	253.29	3	10
12	130.83	2	2	16.12	361.99	1	10
13	145.54	27	5	53.81	427.46	9	10
14	101.39	96	4	39.05	166.09	8	10
15	100	6	2	29.81	240.14	9	10
16	116.73	68	9	32.93	160.84	1	10
17	131.08	44	8	17.73	462.35	8	10
18	134.25	2	3	17.52	717.08	7	10
19	133.82	55	1	42.22	558.18	5	10
20	138.97	42	5	75.06	428.7	7	10
1	151.34	82	5	37.81	829.62	6	30
2	128.54	90	6	15.11	549.14	3	30
3	131.7	66	5	31.11	565.83	7	30
4	134.79	57	4	19.69	731.16	6	30
5	145.98	52	8	36.36	142.3	8	30
6	138.04	33	8	27.68	101.99	0	30
7	135.95	51	7	41.55	322.69	4	30
8	145.57	48	6	24.87	145.52	6	30
9	181.91	56	1	36.01	145.46	7	30
10	139.06	24	0	42.16	516.94	0	30
11	95.28	61	4	39.97	690.03	3	30
12	78.74	57	8	25.4	474.93	2	30
13	67.17	69	2	38.28	363.38	5	30
14	63.89	40	8	34.95	685.89	5	30

Dixon_Gen

15	48.86	52	8	43.99	290.5	3	30
16	52.61	3	4	70.08	694.25	9	30
17	55.9	88	9	49.22	222.98	3	30
18	69.53	79	4	22.95	527.9	6	30
19	121.55	37	1	33.32	888.88	8	30
20	139.16	1	0	50.13	608.36	7	30

Quintic_Stacionary

Iteracion	Tiempo_ms	Sol	Iter_sol	Dimension
1	23.04	0.51	7	10
2	20.94	0.54	9	10
3	12.56	0.47	7	10
4	8.33	0.46	7	10
5	9.03	0.71	4	10
6	18.3	0.51	6	10
7	19.03	0.66	3	10
8	12.87	0.51	9	10
9	9.82	0.51	8	10
10	11.23	0.73	8	10
11	8.43	0.78	8	10
12	22.67	0.66	8	10
13	21.99	0.53	8	10
14	22.58	0.47	6	10
15	19.98	0.47	8	10
16	16.61	0.46	7	10
17	19.63	0.58	4	10
18	20.88	0.48	8	10
19	20.81	0.55	9	10
20	19.5	0.49	8	10
1	20.2	0.52	9	30
2	20.08	0.8	8	30
3	26.66	0.52	8	30
4	13.26	0.55	2	30
5	8.85	0.49	8	30
6	12.92	0.55	6	30
7	14.2	0.38	4	30
8	10.43	0.78	3	30
9	10.94	0.53	9	30
10	10.16	0.85	6	30
11	20.76	0.41	9	30
12	21.5	0.55	4	30
13	19.54	0.66	6	30
14	21.21	0.67	6	30

Quintic_Stacionary

15	22.28	0.46	7	30
16	26.69	0.55	9	30
17	23.54	0.49	3	30
18	15.82	0.62	9	30
19	18.57	0.75	9	30
20	29.77	0.52	5	30

Schwefel_Gen

Iteracion	Tiempo_ms	Gen_sol	Iter_gen	Sol_gen	Sol	Iter_sol	Dimension
1	80.67	19	8	0	102.04	2	10
2	111.73	94	7	0	185260954.6	8	10
3	158.64	67	3	0	329952192.7	2	10
4	159.52	75	1	0.25	26313178.07	4	10
5	162.11	51	8	0	217575734.4	2	10
6	98.47	22	2	0	6386169.26	5	10
7	147.66	43	0	0.01	2.59	0	10
8	151.28	86	6	0.01	126.64	3	10
9	158.43	12	4	0	46316.54	3	10
10	154.41	0	2	0	16241590.18	6	10
11	156.45	47	7	0	58921292.42	0	10
12	189.14	44	3	0	5.83	2	10
13	178.07	66	2	0	1153715703	2	10
14	159.85	78	8	0	61755015.7	7	10
15	190.19	66	6	0	256500629.5	5	10
16	127.71	15	1	0	38796.52	7	10
17	157.62	22	0	0	973342444.6	4	10
18	198.18	12	1	0	30164313.98	7	10
19	154.46	97	5	0	90786.85	8	10
20	143.79	2	4	0.04	525595.02	6	10
1	161.72	94	0	0	145889575.2	1	30
2	138.97	80	0	0	73078.6	6	30
3	138.88	37	6	0	11800870.53	5	30
4	130.47	41	4	0.12	8776616.16	4	30
5	163.79	52	5	0	2169191.33	7	30
6	171.21	92	2	0	544630014.3	2	30
7	184.32	89	3	0	3931923.7	8	30
8	134.63	8	2	0	99604749.29	1	30
9	123.12	10	3	0	408841845.2	6	30
10	153.81	69	7	0.01	1561133116	6	30
11	175.53	3	1	0.08	1978934.63	8	30
12	168.47	82	4	0	34755432.21	8	30
13	167.69	93	8	0	581191134.9	2	30
14	171.89	67	5	0	490118829.2	7	30

Schwefel_Gen

15	159.89	33	4	0	2.38	4	30
16	157.12	13	0	0	1147559.97	1	30
17	195.57	56	7	0	258434246.8	4	30
18	171.87	52	3	0	1941643.1	5	30
19	134.3	22	4	0	5179305.96	4	30
20	140.31	3	7	0	73623862.39	5	30

Stretched_Stacionary

Iteracion	Tiempo_ms	Sol	Iter_sol	Dimension
1	21.28	0.78	9	10
2	19.04	1.23	4	10
3	19.92	1.02	9	10
4	19.96	1.06	7	10
5	20.76	1.46	9	10
6	19.96	1.04	9	10
7	18.96	1.2	4	10
8	19.74	1.36	1	10
9	18.98	0.92	7	10
10	19.18	1.33	9	10
11	19.54	0.9	8	10
12	19.79	0.83	5	10
13	18.79	1.29	9	10
14	21.09	1	9	10
15	23.23	1.36	8	10
16	23.42	1.26	3	10
17	22.83	1.54	7	10
18	21.55	0.94	9	10
19	17.45	1.16	9	10
20	20.37	1.18	4	10
1	18.51	1.35	4	30
2	18.98	0.9	6	30
3	18.13	1.09	8	30
4	19.32	0.89	9	30
5	18.99	1.02	9	30
6	19.8	1.35	8	30
7	18.94	1.39	9	30
8	20	1.17	9	30
9	19.67	1.11	7	30
10	20.99	1.14	8	30
11	22.21	1.5	9	30
12	19.4	0.94	6	30
13	19.5	0.83	9	30
14	19.99	1.45	9	30

Stretched_Stacionary

15	21.34	1.28	4	30
16	22.95	1.3	9	30
17	18.67	1.61	7	30
18	19.35	1.18	4	30
19	19.19	0.99	6	30
20	21.12	1.34	8	30

Sum_Squares_Gen

Iteracion	Tiempo_ms	Gen_sol	Iter_gen	Sol_gen	Sol	Iter_sol	Dimension
1	158.84	56	5	15.32	732.41	5	10
2	150.86	90	6	7.12	813.63	5	10
3	103.15	89	8	26.59	280.72	5	10
4	104.54	1	9	2.55	928.88	4	10
5	139.15	28	7	14.93	655.99	4	10
6	150.39	47	5	0.07	474.02	1	10
7	188.07	53	7	0.05	477.98	8	10
8	108.57	0	8	24.49	222.17	8	10
9	61.17	6	5	0.02	690.33	6	10
10	78.54	89	2	7.13	1163.59	2	10
11	59.02	64	5	0.05	262.19	9	10
12	127.98	46	8	16.13	758.09	3	10
13	157.95	79	7	0.06	195.86	8	10
14	63.84	31	5	1.88	677.67	7	10
15	100.39	23	8	14.21	396.74	6	10
16	107.3	66	2	0.03	714.74	5	10
17	79.33	70	4	0.08	682.58	9	10
18	72.68	85	8	10.39	1222.71	3	10
19	60.74	42	5	0.21	108.66	9	10
20	48.02	60	9	0.03	1213.3	0	10
1	62.41	45	9	5.4	247.35	8	30
2	70.35	66	8	37.98	1143.69	3	30
3	117.28	0	4	0.07	295.92	6	30
4	132.06	9	3	0.11	1107.76	6	30
5	138.92	9	9	1.57	192.7	7	30
6	126.38	40	3	0.14	711.25	6	30
7	129.21	92	7	0.05	703.25	3	30
8	180.53	43	9	0.59	501.25	8	30
9	144.99	43	2	32.53	166.77	8	30
10	136.46	85	5	0.05	296.77	6	30
11	132.2	78	3	21.86	707.27	4	30
12	144.99	36	4	0.08	530.3	8	30
13	148.76	32	7	2.21	709.33	3	30
14	126.46	80	4	0.08	577.36	9	30

Sum_Squares_Gen

15	145.25	45	3	9.46	209.36	9	30
16	145.72	45	1	0.03	409.31	7	30
17	109.22	59	9	13.57	1211.83	2	30
18	130.54	61	9	0.03	126.45	9	30
19	146.64	15	4	0.03	409.52	9	30
20	121.77	87	4	0.08	50.61	3	30

Analysis

D=10	Evaluación					Tiempo ms				
Función	Mejor	Peor	Promedio	Mediana	Desviación estandar	Mejor	Peor	Promedio	Mediana	Desviación estandar
Alpine	0.6	3.43	1.717	1.745	0.715570401847365	16.68	29.3	19.0175	18.145	2.94883176020607
Dixon	2	98	43	42	30.5794048339728	100	145.54	130.641	132.6	11.6651347613304
Quintic	0.46	0.78	0.554	0.51	0.096560861636587	8.33	23.04	16.9115	19.265	5.15444107057206
Schewel	0	97	45.9	45.5	30.7048856047372	80.67	198.18	151.919	157.035	28.522703921613
Stretched	0.78	1.54	1.143	1.17	0.208305064748796	17.45	23.42	20.292	19.94	1.52302199590157
Sum Squares	0	90	51.25	54.5	28.4374313185984	48.02	188.07	106.0265	103.845	39.888168957098
Promedio	0.64	48.46	23.927	24.2375	15.1236930142569	45.192	101.258	74.134583	75.13833	14.9503837444535

D=30	Evaluación					Tiempo ms				
Función	Mejor	Peor	Promedio	Mediana	Desviación estandar	Mejor	Peor	Promedio	Mediana	Desviación estandar
Alpine	0.51	4.59	2.7245	2.565	1.06767726865378	16.68	52.14	32.748	39.955	12.5141526281247
Dixon	1	90	52.3	54	24.0127049704943	48.86	181.91	111.2785	130.12	39.2905133938207
Quintic	0.38	0.85	0.5825	0.55	0.126999015744217	8.85	29.77	18.369	19.81	5.90410441980831
Schewel	3	94	49.8	52	31.7499606298968	123.12	195.57	157.178	160.805	19.1750401824872
Stretched	0.83	1.61	1.1915	1.175	0.215459392925906	18.13	22.95	19.8525	19.45	1.2278349848412
Sum Squares	0	92	48.5	45	26.7721870604551	62.41	180.53	129.507	132.13	25.5451872375209
Promedio	0.9533	47.18	25.84975	25.88166667	13.990831389695	46.342	110.478	78.1555	83.71167	17.2761388077672