

# DTLZStudy

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## 1 Tables

Table 1: EP. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$1.01e+01_{4.7e+00}$	$4.05e-01_{2.9e-01}$	$1.71e+00_{5.1e-01}$
DTLZ2	$1.88e-01_{2.2e-02}$	$1.09e-01_{2.7e-02}$	$1.86e-01_{5.9e-02}$
DTLZ3	$1.21e+02_{2.8e+00}$	$2.41e+01_{7.7e+00}$	$1.36e+01_{2.3e+00}$

Table 2: EP. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$9.48e + 00_{9.4e+00}$	$2.39e - 01_{5.0e-01}$	$1.82e + 00_{1.0e+00}$
DTLZ2	$1.92e - 01_{4.3e-02}$	$1.17e - 01_{5.3e-02}$	$1.84e - 01_{1.2e-01}$
DTLZ3	$1.20e + 02_{5.1e+00}$	$2.37e + 01_{1.5e+01}$	$1.37e + 01_{4.6e+00}$

Table 3: SPREAD. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$9.23e - 01_{7.7e-02}$	$1.11e + 00_{1.3e-01}$	$9.50e - 01_{2.3e-01}$
DTLZ2	$7.13e - 01_{1.9e-02}$	$5.74e - 01_{4.1e-02}$	$1.10e + 00_{2.5e-01}$
DTLZ3	$8.13e - 01_{6.4e-02}$	$1.03e + 00_{7.2e-02}$	$1.35e + 00_{3.0e-01}$

Table 4: SPREAD. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$9.10e - 01_{1.5e-01}$	$1.13e + 00_{2.5e-01}$	$9.24e - 01_{4.5e-01}$
DTLZ2	$7.11e - 01_{3.9e-02}$	$5.80e - 01_{8.1e-02}$	$9.72e - 01_{4.4e-01}$
DTLZ3	$8.07e - 01_{1.3e-01}$	$1.06e + 00_{1.3e-01}$	$1.20e + 00_{5.3e-01}$

Table 5: GD. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$1.63e + 01_{6.0e+00}$	$8.36e - 01_{1.5e-01}$	$6.32e - 01_{1.5e-01}$
DTLZ2	$8.37e - 03_{1.6e-03}$	$1.86e - 03_{2.0e-04}$	$1.23e - 02_{2.4e-03}$
DTLZ3	$5.87e + 01_{2.7e+00}$	$1.11e + 01_{3.7e+00}$	$2.44e + 01_{1.4e+01}$

Table 6: GD. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$1.37e + 01_{1.1e+01}$	$8.00e - 01_{2.9e-01}$	$7.00e - 01_{2.8e-01}$
DTLZ2	$8.05e - 03_{3.1e-03}$	$1.84e - 03_{4.0e-04}$	$1.27e - 02_{4.7e-03}$
DTLZ3	$5.77e + 01_{5.1e+00}$	$9.98e + 00_{7.1e+00}$	$2.79e + 01_{2.7e+01}$

Table 7: HV. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$0.00e + 00_{0.0e+00}$	$4.44e - 01_{3.6e-01}$	$0.00e + 00_{0.0e+00}$
DTLZ2	$3.06e - 01_{1.0e-03}$	$3.82e - 01_{8.5e-03}$	$3.19e - 01_{5.1e-02}$
DTLZ3	$0.00e + 00_{0.0e+00}$	$0.00e + 00_{0.0e+00}$	$0.00e + 00_{0.0e+00}$

Table 8: HV. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$0.00e + 00_{0.0e+00}$	$6.43e - 01_{6.4e-01}$	$0.00e + 00_{0.0e+00}$
DTLZ2	$3.05e - 01_{1.9e-03}$	$3.82e - 01_{1.7e-02}$	$3.00e - 01_{9.6e-02}$
DTLZ3	$0.00e + 00_{0.0e+00}$	$0.00e + 00_{0.0e+00}$	$0.00e + 00_{0.0e+00}$

Table 9: IGD. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$1.18e - 01_{8.2e-02}$	$3.49e - 03_{3.5e-03}$	$1.34e - 02_{4.5e-03}$
DTLZ2	$1.11e - 03_{3.0e-05}$	$6.27e - 04_{1.8e-05}$	$1.46e - 03_{5.2e-04}$
DTLZ3	$2.08e + 00_{2.5e-01}$	$3.80e - 01_{1.2e-01}$	$2.07e - 01_{3.7e-02}$

Table 10: IGD. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$9.25e - 02_{1.6e-01}$	$1.59e - 03_{6.2e-03}$	$1.43e - 02_{8.8e-03}$
DTLZ2	$1.09e - 03_{5.2e-05}$	$6.27e - 04_{3.6e-05}$	$1.42e - 03_{1.0e-03}$
DTLZ3	$1.99e + 00_{4.8e-01}$	$3.89e - 01_{2.5e-01}$	$2.07e - 01_{7.4e-02}$

Table 11: IGD+. Mean and Standard Deviation

	NSGAII	SPEA2	EMAS
DTLZ1	$1.18e+01_{8.2e+00}$	$3.20e-01_{3.7e-01}$	$1.21e+00_{5.1e-01}$
DTLZ2	$7.45e-02_{1.9e-03}$	$3.75e-02_{3.7e-03}$	$5.40e-02_{1.6e-02}$
DTLZ3	$1.32e+02_{1.6e+01}$	$2.40e+01_{7.8e+00}$	$1.31e+01_{2.3e+00}$

Table 12: IGD+. Median and Interquartile Range

	NSGAII	SPEA2	EMAS
DTLZ1	$9.24e+00_{1.6e+01}$	$1.14e-01_{6.6e-01}$	$1.32e+00_{1.0e+00}$
DTLZ2	$7.50e-02_{3.7e-03}$	$3.70e-02_{7.3e-03}$	$5.81e-02_{3.1e-02}$
DTLZ3	$1.26e+02_{3.0e+01}$	$2.46e+01_{1.6e+01}$	$1.31e+01_{4.7e+00}$