General Tuning of Weights in MOEA/D

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This document contains all the graphs for the paper with the same name submitted to CEC 2016. The first three figures are convergence graphs for the experiments with the maximization of hypervolume, the last three figures contain graphs regarding the experiments with equal spread of solutions.

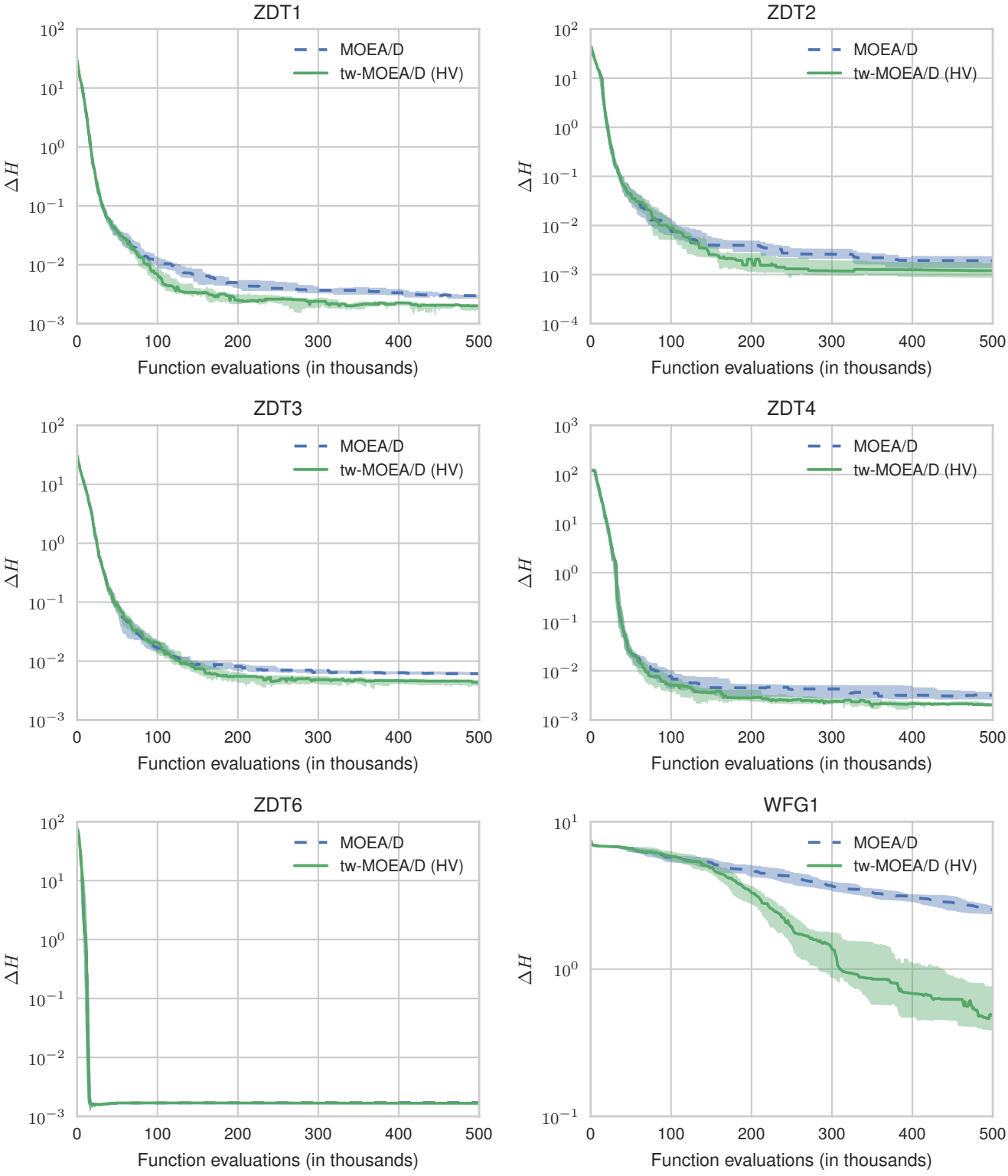

Fig. 1. The convergence of the algorithm. The ΔH is measured after each generation. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs.

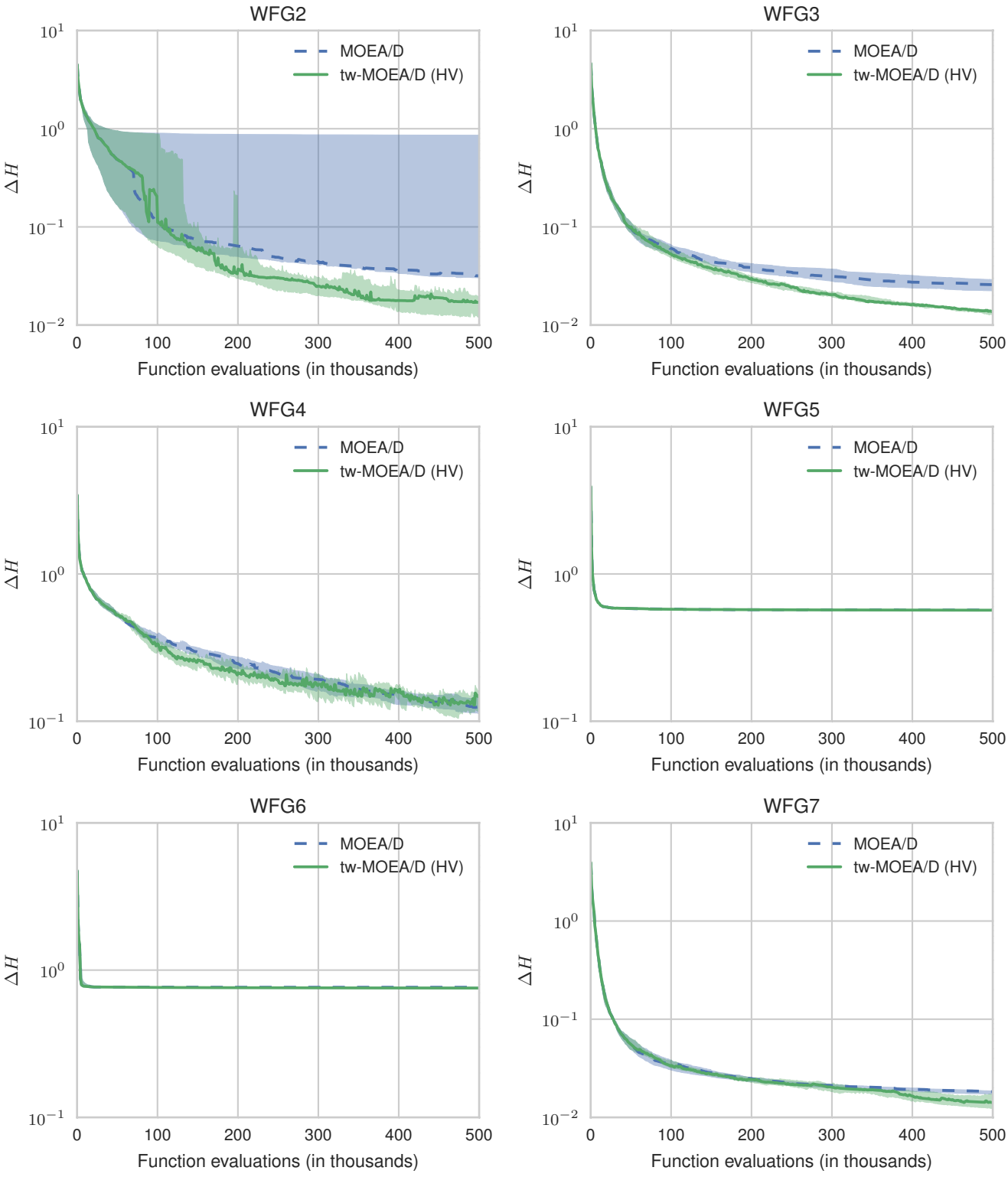

Fig. 2. The convergence of the algorithm. The ΔH is measured after each generation. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs.

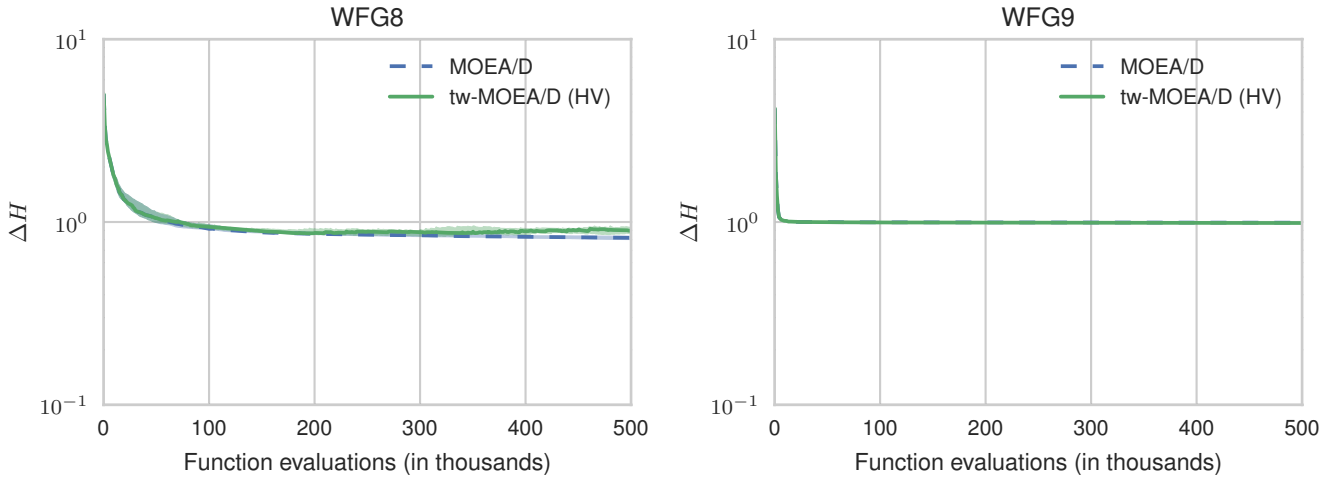

Fig. 3. The convergence of the algorithm. The ΔH is measured after each generation. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs.

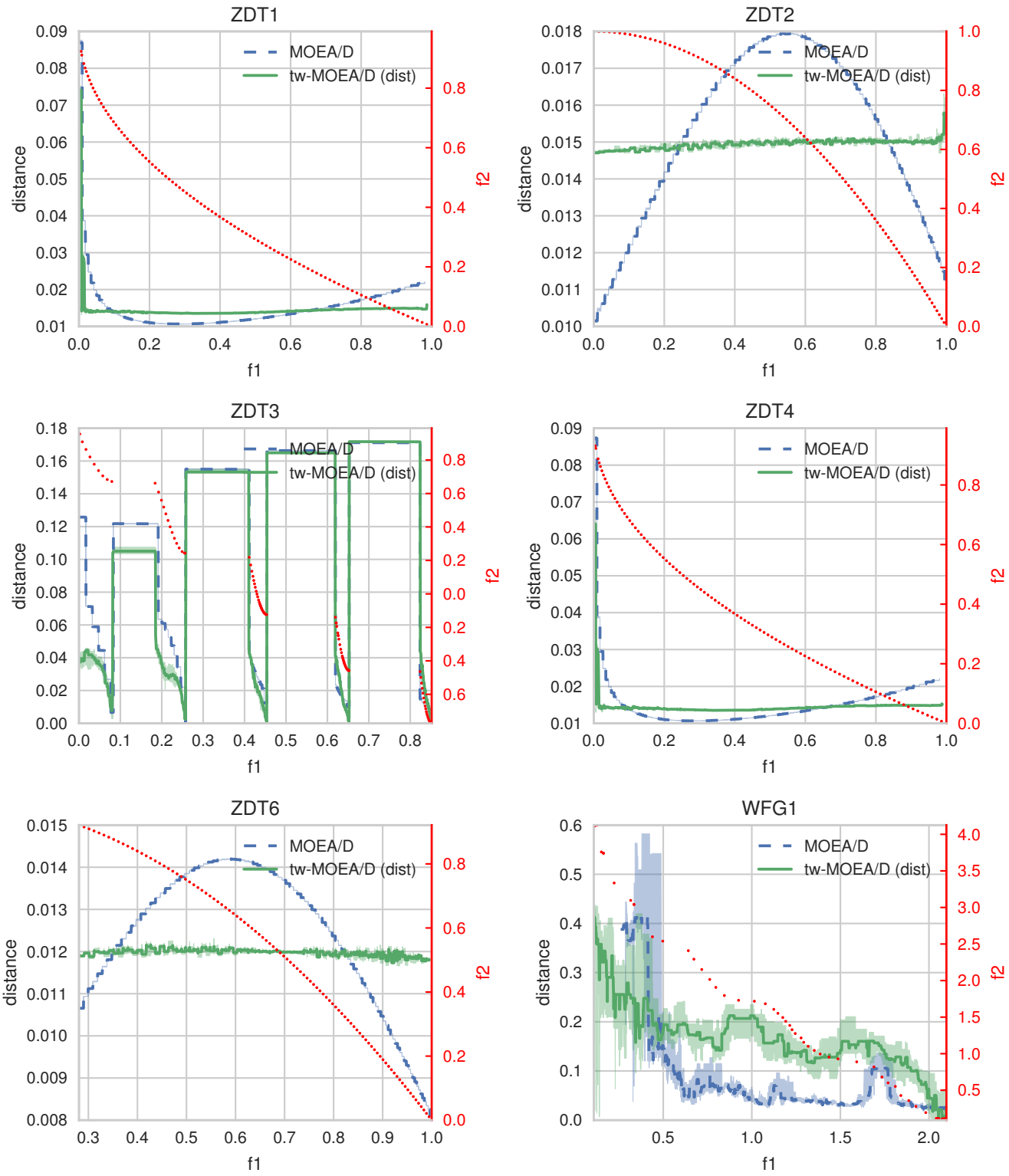

Fig. 4. The equality of distances between solutions after 500,000 evaluations. The distance of neighboring points is measured and plotted as a function of the values of the first objective. If all the distances are the same, the line should be horizontal. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs. The red points show the set of solutions obtained during the first run with this objective.

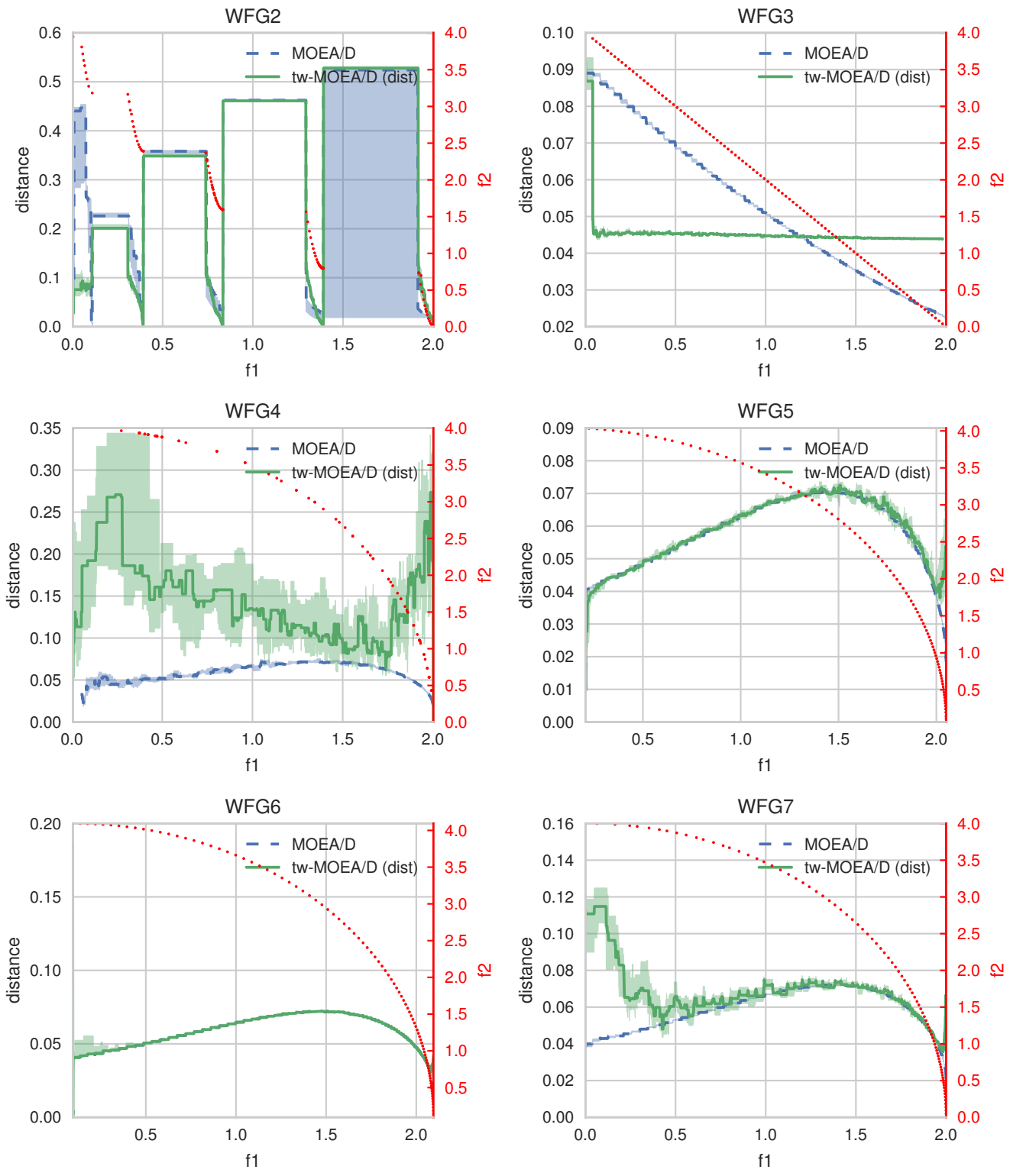

Fig. 5. The equality of distances between solutions after 500,000 evaluations. The distance of neighboring points is measured and plotted as a function of the values of the first objective. If all the distances are the same, the line should be horizontal. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs. The red points show the set of solutions obtained during the first run with this objective.

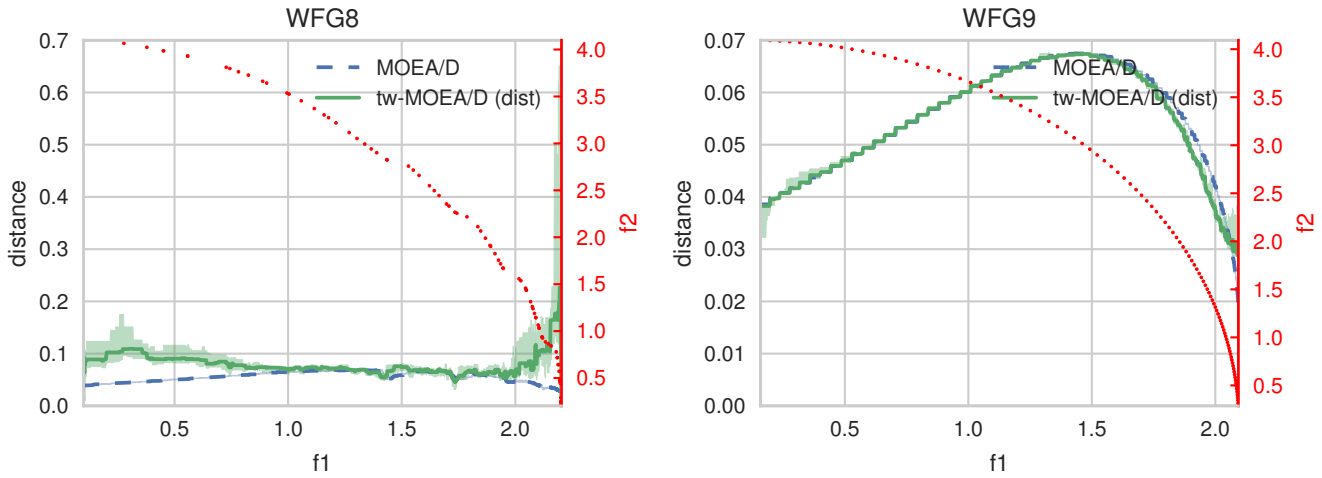

Fig. 6. The equality of distances between solutions after 500,000 evaluations. The distance of neighboring points is measured and plotted as a function of the values of the first objective. If all the distances are the same, the line should be horizontal. The line is the median of 15 runs and the shaded areas express the first and third quartile of the runs. The red points show the set of solutions obtained during the first run with this objective.