Comparison of ASCALCG, SCALCG and CONMIN conjugate gradient algorithms

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Figure 1 presents the Dolan-Moré CPU time performance profiles of SCALCG and CONMIN by Shanno and Phua conjugate gradient algorithms for unconstrained optimization. On the other hand, Figure 2 presents the Dolan-Moré CPU time performance profiles of ASCALCG and CONMIN by Shanno and Phua conjugate gradient algorithms for unconstrained optimization. The ASCALCG - the accelerated BFGS preconditioned conjugate gradient algorithm - is an acceleration of the SCALCG algorithm.



Fig. 1. Performance profiles of SCALCG and CONMIN. SCALCG is a scaled BFGS preconditioned conjugate gradient algorithm by Andrei. CONMIN is a BFGS preconditioned conjugate gradient algorithm by Shanno-Phua.



Fig. 2. Performance profiles of ASCALCG and CONMIN. ASCALCG is an accelerated, scaled BFGS preconditioned conjugate gradient algorithm by Andrei. CONMIN is a BFGS preconditioned conjugate gradient algorithm by Shanno-Phua.

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