

Römisch, Werner; Schultz, Rüdiger**Stability of solutions for stochastic programs with complete recourse.** (English)[Zbl 0797.90070](#)

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Quantitative continuity of optimal solution sets to convex stochastic programs with (linear) complete recourse and random right-hand sides is investigated when the underlying probability measure varies in a metric space. The central result asserts that, under a strong convexity condition for the expected recourse in the unperturbed problem, optimal tenders behave Hölder-continuous with respect to a Wasserstein metric. For linear stochastic programs this carries over to the Hausdorff distance of optimal solution sets. A general sufficient condition for the crucial strong-convexity assumption is given and verified for recourse problems with separable and nonseparable objectives.

Reviewer: [K.-J.Chung \(Taipei\)](#)**MSC:**[90C15](#) Stochastic programming[90C31](#) Sensitivity, stability, parametric optimizationCited in **19** Documents**Keywords:**[quantitative continuity of optimal solution sets; convex stochastic programs; complete recourse](#)**Full Text:** [DOI](#)