On stability investigation in matroid optimization

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For the last twenty years dozens of articles have been published which were devoted to research of stability in problems of optimization. Thus many results published in domestic scientific journals in the 1970th–1980th years are ignored, and appearing publications are quoted further as basic and original. The purpose of this note is to turn on the attention on one example — stability research in matroid optimization. For the case of Chebyshev norm in the space of parameters perturbation the problem of stability comprehensively developed in 1980's, to which the authors publications in 1990th and later are not invoked. For the case of 11 metrics is technically more complex, so it is not possible to speak of full equivalence of previously published results and emerged later. However, these results are closely related, as shown in this article. The scope theory of matroid is just an example. Similar situations occur for other tasks.

Keywords: matroid optimization problems, theory of stability, radius of stability, spanning tree problem.

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