Robustness in nonsmooth nonlinear multi-objective programming

Moslem Zamani, Majid Soleimani-damaneh, Alireza Kabgani

PII: S0377-2217(15)00545-7
DOI: 10.1016/j.ejor.2015.06.031
Reference: EOR 13038

To appear in: *European Journal of Operational Research*

Received date: 21 May 2014
Revised date: 9 June 2015
Accepted date: 11 June 2015

Please cite this article as: Moslem Zamani, Majid Soleimani-damaneh, Alireza Kabgani, Robustness in nonsmooth nonlinear multi-objective programming, *European Journal of Operational Research* (2015), doi: 10.1016/j.ejor.2015.06.031

Highlight

- Defining robust efficiency for nonlinear multi-objective optimization problems;
- Showing that, robust efficient solutions are proper solutions (under some assumptions);
- Providing a problem for calculating a robustness radius;
- Comparing the newly-defined robustness notion with two existing ones;
- Obtaining necessary and sufficient conditions for robustness;
- Studying some alterations of objectives preserving weak/proper/robust efficiency