Detecting vulnerabilities of information resources of unmanned vehicles method based on dynamic evaluation of Markov sequences properties.

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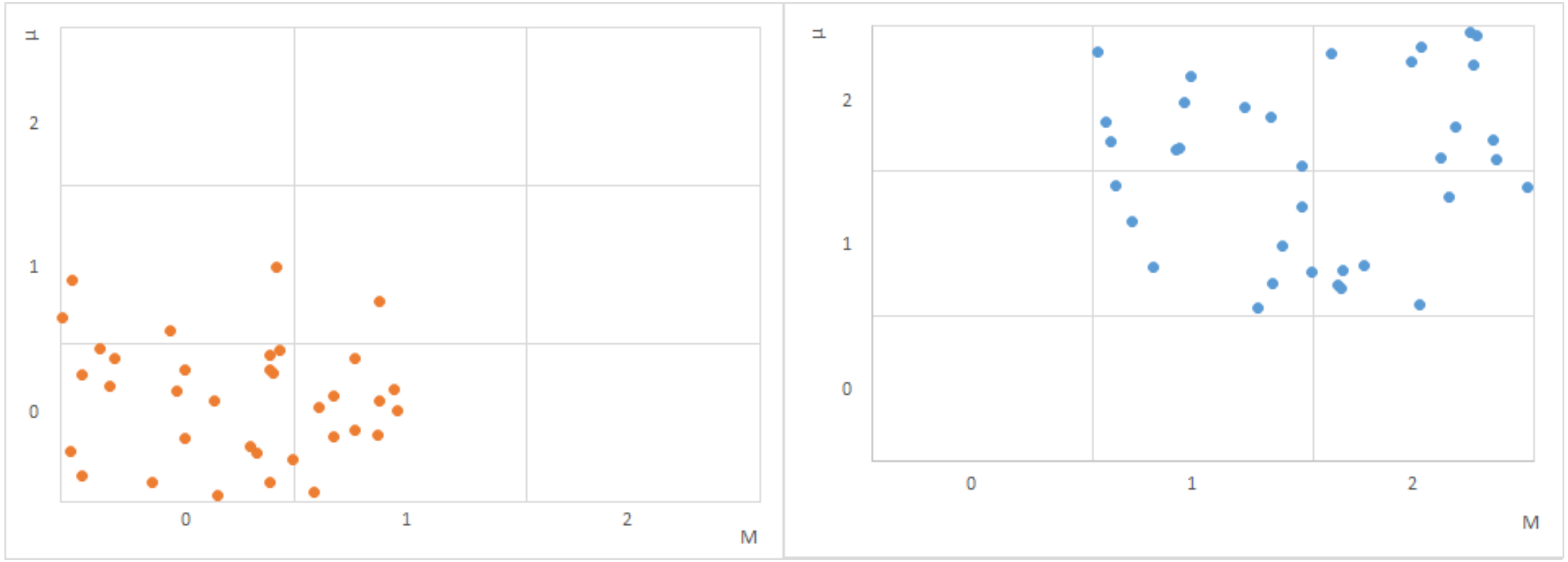
Abstract.

- Related to the development and research of methods for ensuring computer security of unmanned vehicles in the information infrastructure of a smart city approaches are considered. The approaches are based on nonparametric statistics methods for evaluating changes in the information states of controlled UMV resources, which include communication channel, processor, and memory. It is proposed to evaluate the changes for each of these resources in such characteristics as the degree of resource loading and its rate of change. State recognition is performed under conditions of a lack of a priori information about the properties of the intrusion source and the stochastic nature of the recognized events. The presented approach is based on dynamic estimation of information States of UMV resources using Markov sequences. Introduction

State of UMV resources: load of the communication channel and processor (a) in the absence of attacks, (b) in case of external influence.



Changing the load state of UMV resources when exposed to attacks