

In this work we introduce some basic concepts from the theory of spatial point processes and two methods of estimation of the parameters for Thomas process. Firstly the method of minimum contrast, that is used for situations when we do not know the position of parent points and secondly our proposed method using information about the parent points location. Using simulations in program R, we find out that our method estimated mentioned parameters better considering the relative bias and relative mean squared error. Subsequently, we estimate the parameters of the real data using both methods. Finally we test by Global Envelope Test, whether our data match Thomas process with parameters estimated from data with mentioned methods. For the combinations of parameters obtained by discussed methods we do not reject the hypothesis.