



CONSTRUCTION OF GM (1, 1) POWER MODEL

Yong-Mei Ma and Shu-Chao Wang

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Abstract

First, the solution of the whitening equation of GM (1, 1) power model is obtained by using the constant variation method of the first order non-homogeneous linear equation, which is the time response sequence. Then the solution formula of parameter gamma is obtained by using the information covering principle of grey system, and the optimum value is further deduced. Then, the least squares method is used to get the formulas of development coefficient a and grey action quantity b , and the power model of GM (1, 1) is constructed.

Keywords and phrases: GM (1, 1) power model, whitening equation, parameter optimization, prediction.

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