短文

区间灰数的标准化及其预测模型的构建与应用研究

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摘要：

由于区间灰数运算体系不完善, 灰数间的代数运算将导致结果灰度增加, 难以有效构建基于"区间灰数"的灰色预测模型. 对此, 通过将区间灰数进行标准化处理, 分解成基于实数形式的"白部"和"灰部"两个部分; 然后分别对"白部"和"灰部"建立模型, 再推导并还原得到区间灰数预测模型; 最后, 将该模型应用于城市外来工数量的预测,预测效果验证了所提出模型的有效性及实用性.

关键词： 灰色系统理论 区间灰数预测模型 区间灰数的标准化 城市外来工数量预测

Standardization of interval grey number and research on its prediction modeling and application

Abstract:

With the limitations of algorithm rule of interval grey numbers, the algebraic operations between interval grey
numbers will lead the results to be more and more greyer, so it is difficult to effectively build a grey prediction model based on interval grey numbers. Therefore, the interval grey number is divided into "white part" and "grey part" based on real number form by standardizing interval grey numbers, and grey prediction models are established. Then the prediction model of the primary interval grey number is deduced and reverted. Finally, this model is used to forecast the number of urban migrant workers and obtain an excellent effect, and the results show the effectiveness and practicability of the proposed model.

Keywords: Grey system theory Prediction model of interval grey number Standardization of interval grey number Prediction of the number of urban migrant workers

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