Indexing   View Papers   Aims & Scope   Editorial Board   Guideline   Article Processing Charges

OPEN ACCESS

Atmospheric Environmental Quality Assessment RBF Model Based on the MATLAB

Author(s)

Zhonghua Fei, Dinggui Luo, Zhefei He, Bo Li

ABSTRACT

A new method-RBF model is found to assess the atmospheric quality by use of the PREMNMX function in MATLAB to pretreat the original data and the RAND function to construct enough training samples, checking samples and outputs of their targets through linear interpolation between grades of the atmospheric quality evaluation standard. A favorable assessment result is achieved by applying this method to assess atmospheric environmental quality in a city, which shows this new method is meaningful in improving the precision and scientificity of atmospheric environmental quality assessment.

KEYWORDS

Cite this paper

Z. Fei, D. Luo, Z. He and B. Li, "Atmospheric Environmental Quality Assessment RBF Model Based on the MATLAB," *Journal of Environmental Protection*, Vol. 3 No. 7, 2012, pp. 689-693. doi: 10.4236/jep.2012.37081.

References

[1]   P. D. Wasserman, " Advanced Methods in Neural Computting," Van Norstrand Reinhold, New York, 1993.

[2]   S. Cong, " The Function Analysis and Application Study of Radial Basis Function Network," Computer Engineering and Applications, Vol. 38, No. 3, 2002, pp. 85-87.

[3]   W. D. Yang and H. I. Cheng, " The Applied Research of Neuro-Network in Evaluation of Air Quality," Industrial Safety and Environmental Protection, Vol. 27, No. 9, 2001, pp. 31-33.

[4]   D. Xu and Z. Wu, " The System Analysis and Design Based on MATLAB6.X Neural Network," Xidian University Press, Xi' an, 2002.