

Huang X. M. 2014. Ordinary Differential Equation Model and its Application in the Prediction Control of Population. *Applied Mechanics and Materials*. 631-632: 714-717.

<https://www.scientific.net/AMM.631-632.714> . Accessed 29 March 2023.

Abstract: Ordinary differential equation is an important branch of modern mathematics, and is a powerful tool to study the function change rules. Nowadays, the ordinary differential equation models have been widely used in various fields such as science, technology, engineering, economics, ecology, environment, population and transportation. In this paper, we study two kinds of ordinary differential equation models, i.e., Malthus model and Logistic model, and discuss their applications in the prediction control of population. We also use the population prediction of Huanggang City as an application example, and get satisfactory prediction results.

Keywords: Logistic Model, Malthus Model, Ordinary Differential Equation Model, Population Prediction Control