套话：

# 灵敏性分析

Some inputs of our model may be hard to obtain or there may be some deviation in our inputs. So it's possible that these kinds of situation will influence the solution of our model. To understand the situations above, we implement a sensitivity analysis to test the robustness of our model. The analysis results show that our model does not exhibit a chaotic behavior and show good sensitivity.Our sensitivity analysis will be based on factor variation method, in order to see how the result of the model changes when the input parameters change. We will analyze the following parameters:

我们模型的一些输入可能很难获得，或者我们的输入可能存在一些偏差。所以这些情况可能会影响我们模型的解。为了理解上述情况，我们实施了一个灵敏度分析来测试我们模型的鲁棒性。分析结果表明，该模型不表现出混沌行为，具有良好的灵敏度。我们的敏感性分析将基于因子变异法，以观察模型的结果如何随着输入参数的变化而变化。我们将分析以下参数:

In our model, some inputs are not precise enough for the lack of actual data about Zambezi basin and some parameters are difficult to obtain directly. Those inputs or parameters may influence the result of our calculation, so we implement a sensitive analysis to test the robustness of our model.In fact, we cannot obtain the real value of the inputs Q1, Hio, hio and parameter a with the data we have. Sensitivity Analysis is primarily conducted on these inputs and parameters.

在我们的模型中，由于缺乏赞比西河流域的实际数据，有些输入不够精确，有些参数难以直接获得。这些输入或参数可能会影响我们的计算结果，因此我们实现了一个敏感分析来测试我们的模型的稳健性。实际上，我们无法通过已有的数据得到输入Q1、Hio、Hio和参数a的真实值。灵敏度分析主要是对这些输入和参数进行的。