1. 通过二次材积模型和有采伐情况下的logistic模型，我们能够计算10000公顷的森林及其产品在0-100年内的碳封存总量，在轮伐期为3年的情况下，当采伐率为0.03时，第100年的碳封存总量最多，为每公顷封存256.83吨二氧化碳；
2. 在其他条件保持不变的情况下，碳分解率越慢的产品在总生产产品中占比越多，碳分解率越快的产品在总生产产品中占比越少，第100年的累计碳封存量就越多。反之，碳封存量越少；
3. 利用建立的FCSME模型对美国地区四种森林类型：亚热带常绿阔叶林，亚寒带针叶林，北方针叶林以及针阔混交林的生态价值和文化价值进行打分并按照4.123:1的权重进行加权求和并进行排名，在砍伐与不砍伐两种情况下，其排名均如下：亚热带常绿阔叶林>亚寒带针叶林>针阔混交林>北方针叶林，在砍伐的情况下，分数分别为0.993638，0.863477，0.832925，0.58902，不砍伐的情况下排名不变，其中除了亚热带常绿阔叶林的得分下降之外，其他森林得分均有提升。
4. 我们做了100年内碳封存量关于轮伐期的敏感性测试，得到当轮伐期分别延长为1,3,5,10年时，第100年累积得到的最高碳封存量对应的采伐率会相应增加，分别为0.02,0.1,0.22,0.29。

1. Through Binary Timber Volume Carbon Sequestration Regression Model and logistic model with harvesting, we can calculate the total carbon sequestration of 10000 hectares of forests and their products from 0 to 100 years. In the case of 3-year rotation, when the harvest rate is 0.03, the total carbon sequestration in the 100th year is the highest, which is 256.83 tons of carbon dioxide sequestration per hectare.

2. While other conditions remain the same, the products with slower carbon decomposition rate account for more in the total products, and the products with faster carbon decomposition rate account for less, and the accumulated carbon sequestration in the 100th year will be more, Conversely, the less the carbon sequestration is;

3. The established FCSME model was used to evaluate the cological cultural value of the following four forest types in the United States: Subtropical Evergreen Broad-Leaved Forest, Subboreal Coniferous Forest, Boreal Forest and Theropencedrymion, and weighted and ranked according to the weight of 4.123:1, In both cases of cutting and no cutting, Its rankings are as follows: subtropical evergreen broad-leaved forest> Subboreal Coniferous Forest> Theropencedrymion> Boreal Forest. In the case of harvesting, scores were 0.993638, 0.863477, 0.832925, 0.58902, the ranking remained unchanged without harvesting, and the scores of other forests increased except that of subtropical evergreen broad-leaved forest.

4、We tested the sensitivity of carbon sequestration in 100 years to rotations, and found that when the rotation year were extended to 1,3,5 and 10 years respectively, the harvest rate corresponding to the highest carbon sequestration in the 100th year would increase correspondingly, which were 0.02,0.1,0.22 and 0.29, respectively.