1. INTRODUCTION

TWO TYPES OF CATCHMENT-SCALE AGE DISTRIBUTIONS

Introduction of the age mass density:

\[ \phi(t, x) = \frac{1}{c_63} \int_0^t \left( \frac{\partial C(x,t)}{\partial t} + \frac{1}{Pe} \nabla \cdot (D \nabla C(x,t)) \right) dt \]

Quantify age mixing through AGE FUNCTIONS

\[ \psi = c_6 \int_0^t \phi(t, x) dt \]

2. ADEPTION-DISPERSION MODELS

AGE DISTRIBUTIONS AND MIXING IN AD MODELS

3. APPLICATION TO 1-D SIMPLIFIED SETTING

BREAKTHROUGH CURVES

4. DISCUSSION

5. CONCLUSIONS

6. ESSENTIAL REFERENCE