

SOLUTAL CONVECTION INDUCED BY DISSOLUTION

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- Geophysical context: erosion by dissolution of a solid
- Local erosion rate is controlled by the concentration at the interface:

$$\rho_s V_n = \alpha(C_i - C_{\text{sat}})$$

- Even in the absence of an external flow, advection can drive the dissolution, due to buoyancy effects

500 μm



1.005

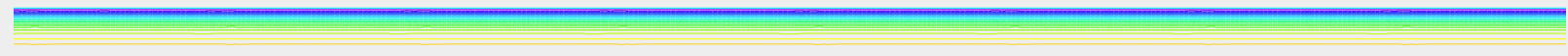
1.05

1.1

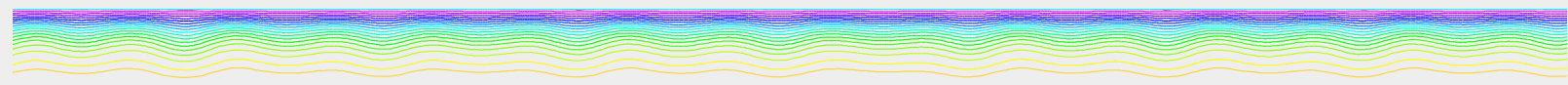
1.2



I.



II.



III.

