***Important information to accompany* the**

***Seafloor Spreading and Marine Magnetic Anomalies,   
Set of Six Movies.***

This is a set of movies depicting sea floor spreading on three spreading centers connected by transform faults, with a front-cut cross section. They were constructed to demonstrate spreading, transform faulting, magnetic polarity reversals, and the Vine-Matthews hypothesis for the formation of seafloor magnetic stripes.

These are conceptual presentations. They are shown occurring at a gently rifted spreading center (i.e., a slow-medium rate spreading center). In the first three movies, the topographic lineations are a stylized version of the linear fault blocks that are formed as the sea floor spreads, illuminated by light from the upper right. The fourth movie demonstrates the last few million years of the Earth's polarity reversal time scale. In the fifth and sixth movies, each strip of the sea floor is colored to show the polarity its magnetization.

Made by Tanya Atwater using Photoshop, Morph and FinalCut Pro with useful comments from Ken MacDonald and Doug Burbank. The work was partially supportedby a National Science Foundation Director's Award for Distinguished Teaching Scholars, and by grants and services from the U.C.S.B. Office of Instructional Development.

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