HOTSPOTS - N. PACIFIC OCEAN

PACIFIC HOTSPOTS

HOTSPOT FORMATION

OLDER YOUNGEST ACTIVE

HOTSPOT PLUMES

LITHOSPHERE ASTHENOSPHERE OXIDE CORE INNER CORE

DEVELOPMENT OF CORAL ATOLLS ON SINKING HOTSPOT VOLCANOES

A - AXIAL VOLCANO
COBB - EICKENBERG SEAMOUNTS

DETERMINING PLATE MOTIONS OVER HOTSPOT:
- DIRECTION
- RATE = \frac{DISTANCE}{TIME}
STRUCTURE OF THE SEA FLOOR

TYPES OF SEDIMENTS

a) Named for Area of Deposit

b) Named for Origin

CASE STUDY: Caribbean

LITHOGENOUS

BILOGENOUS

HYDROGENOUS

Sediment Yield (metric tons per year)