Department of the Interior

United States Geological Survey

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Plate 1

84 82 80 78 76 74

40 38 36 34 32 30

EXPLANATION

Cretaceous-Cenozoic fault
Mapped faults plotted to scale, showing dip, dashed where uncertain; isolated fault exposures plotted as strike and dip symbols; localities where strike unknown shown by dot

Strike and dip of preferred focal plane of selected earthquakes and composite groups of earthquakes; dip of reverse fault shown to be active by modern earthquake focal mechanisms

Fault that offsets early Mesozoic rocks

Early Mesozoic sedimentary basin, exposed in the Piedmont, buried and only approximately delineated beneath Cretaceous and Cenozoic rocks of the Coastal Plain

Inner margin of Coastal Plain sedimentary rocks

Eastern margin of continental crust

East Coast Magnetic Anomaly, inferred to mark the western boundary of oceanic crust

Oceanic fracture zone

Boundary of Appalachian highland

APPALACHIAN HIGHLAND

BLUE RIDGE

PIEDMONT

COASTAL PLAIN

CAROLINA TROUGH

CAROLINA PLATFORM

BALTIMORE CANYON TROUGH

RAMAPO F.

NEWARK B.

GETTYSBURG B.

CULPEPER B.

STAFFORD F.

BRANDYWINE F.

MONOCLINE

NORTH ANNA RES.

SCOTTSVILLE B.

FARMVILLE B.

RICHMOND B.

DAN RIVER B.

DURHAM B.

DEEP RIVER

GRAINGERS F.

WADESBORO B.

JOCASSEE RES.

MONTICELLO RES.

FLORENCE B.

CLARK HILL RES.

BELAIR F.

DUNBARTON B.

CHARLESTON MEIZOSEISMAL AREA

HELENA BANKS F.

ANDERSONVILLE F.

BLAKE SPUR FRACTURE ZONE

0 100 200 km

Compilation Sources

Isolated Cretaceous-Cenozoic faults from Prowell, 1981.

Stafford and Brandywine fault zones from Mixon and Newell, 1977, and Seiders and Mixon, 1980.

Belair fault zone from Prowell and O'Conner, 1978.

Monocline in Virginia Coastal Plain from Newell, written communication, 1979.

Cooke fault from Behrendt and others, 1981a.

Coastal Plain boundary and exposed early Mesozoic basins and faults from King and Beikman, 1974; buried basins from Popenoe and Zeitz, 1977, Daniels and Zeitz, 1978 and 1981, and Klitgord and Behrendt, 1979.

Marginal basins, East-Coast Magnetic Anomaly, and oceanic fracture zones from Klitgord and Behrendt, 1979.

Focal mechanisms and 1886 isoseismal from Tarr and Rhea, 1981, Tarr, written communication, 1977, Dames and Moore, 1976, Sbar and others, 1975, Aggarwal and Sykes, 1978, and Rollinger, 1977.

Appalachian highland and its boundaries interpretad from Godson, 1981.

CRETACEOUS-CENOZOIC REVERSE FAULTS IN THE SOUTHEASTERN UNITED STATES AND THEIR GEOLOGIC SETTING

1981

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