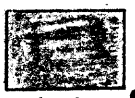
EXPLANATION

METAMORPHIC ROCKS

Paleozoic metamorphic rocks
Chiefly of low metamorphic grade, but locally of medium grade

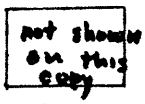
Metamorphic rocks of uncertain age
Chiefly of medium or high metamorphic grade. Mostly metasedimentary and metavolcanic, but may include some metamorphosed intrusive rocks

Upper Precambrian metamorphic rocks
Sedimentary and volcanic rocks of low metamorphic grade along northwestern edge of the Blue Ridge belt and of medium or high grade elsewhere



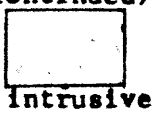
Precambrian basement rocks
Plutonic gneiss and associated metamorphic rocks

IGNEOUS ROCKS

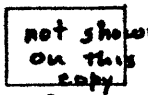


Mesozoic igneous rocks
Dikes, sills and stocks of diabase of Triassic or later age

IGNEOUS ROCKS (continued)



Alkalic intrusive rocks
Syenite ring dike in central North Carolina and alkalic dikes in western Virginia. Probably of Paleozoic age



Ultramafic rocks
Peridotite, dunite, serpentinite and related rocks mostly of Paleozoic age

Mafic intrusive rocks
Chiefly gabbro and related rocks of Paleozoic age. Includes Roseland anorthosite of Precambrian age in Virginia

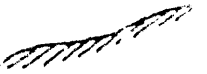
Granitic rocks
Includes granite gneiss and intrusive granite in the Piedmont. Largely of Paleozoic age in the Piedmont; includes upper Precambrian intrusive granites in the Blue Ridge

SEDIMENTARY ROCKS

Triassic basin deposits
Chiefly shale, arkose and conglomerate

GEOLOGIC BOUNDARIES

Base of Eocene sedimentary rocks of the Atlantic and Gulf Coastal Plains

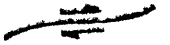


Base of Cretaceous sedimentary rocks of the Atlantic and Gulf Coastal Plains

STRUCTURAL FEATURES

Thrust fault

Saw teeth on upper plate. K, klippe; w, window



Strike slip fault

Arrows show direction of movement

Normal fault

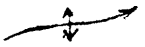
Teeth on downthrown side

Unclassified fault

Elongate, closely compressed anticline

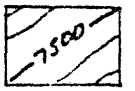
Width of line suggests height, steepness or size of fold

Strike and dip of beds



Anticlinal axis

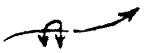
Arrow shows direction of plunge



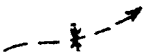
(in brown)

Structure contours

Datum is mean sea level. Horizon contoured and contour interval indicated in each area. Boundary between areas contoured shown by dotted lines. Where contours are superimposed, those on the lower horizon are dashed



Axis of overturned anticline



Synclinal axis

Arrow shows direction of plunge

United States (Appalachian area). Structure. 1:2,500,000. 1968.

sheet 4, cop. 1.

PRINCIPAL SOURCES OF DATA

USED IN REVISION

New York: Geologic map of New York, Lower Hudson sheet, scale 1:250,000 (New York Geological Survey, 1962)

Pennsylvania: Geologic map of Pennsylvania, scale 1:250,000 (Pa. Bureau of Topographic and Geologic Survey, 1960) and unpublished data from A. A. Drake, Jr., G. H. Wood, Jr., and V. E. Gwinn

New Jersey: Unpublished data from A. A. Drake Jr

Maryland: Geologic map of Maryland, scale 1:250,000 (Maryland Geological Survey, 1968) and unpublished data from C. A. Hopson, G. W. Fisher and D. L. Southwick

Virginia: Geologic map of Virginia, scale 1:500,000 (Va. Division of Mineral Resources, 1963) and unpublished data from D. L. Southwick, S. K. Neuschel, W. R. Brown, G. H. Espenshade, D. W. Rankin, J. F. Conley and A. V. Heyl

North Carolina: Geologic map of North Carolina, scale 1:500,000 (N.C. Dept. of Conservation and Development, 1958) and unpublished data from D. W. Rankin, G. H. Espenshade, J. B. Hadley, A. E. Nelson, D. E. Dunn, J. R. Butler, H. W. Sundelius and A. A. Stromquist

Tennessee: Geologic map of Tennessee, scale 1:250,000 (Tenn. Div. of Geology, 1966) and unpublished data by J. B. Hadley and D. W. Rankin

South Carolina: Geologic map of the crystalline rocks of South Carolina, scale 1:250,000 (U.S. Geol. Survey Misc. Geol. Investigations Map 413, 1965)

Georgia: Unpublished data from V. J. Hurst and M. W. Higgins

Alabama: Alabama Geological Society 2d annual field trip guidebook, 1964