

EXPLANATION

QUATERNARY

Gal
Flood-plain deposits
Floor-plain and valley-bottom alluvium, including low-level terraces. Locally overlain by colluvial deposits

Gf
Alluvial fan deposits
Alluvial fan, talus, and boulder-train deposits. Locally may include deposits of Tertiary age.

Gg
High-level gravels
Terrace and pediment deposits, deeply dissected and locally thoroughly weathered. Generally overlain by red colluvial clay. Locally may include deposits of Tertiary age.

Pleistocene(?) and Recent

BLUE RIDGE THRUST SHEET

GRANDFATHER MOUNTAIN WINDOW

BREVARD FAULT ZONE

INNER PIEDMONT BELT

UPPER PALEOZOIC(?)

Rb
Blastomylonite and phyllonite
Fine-grained to aphanitic, gray to buff, locally silicified feldspathic blastomylonite locally containing porphyroclasts of potassium feldspar, and gray to silvery gray phyllonite and phyllonitic mica schist containing porphyroclasts of muscovite

Lower Cambrian

Es
Shady Dolomite
Thick-bedded to massive, white, light gray, blue-gray or buff-gray crystalline dolomite containing thin light-gray or greenish phyllitic partings

Chilhowee Group

ecuq
ecp
eciq
Chilhowee Group
ecuq, upper quartzite unit, thin- to thick-bedded medium- to fine-grained, white, greenish-gray or bluish-gray sugary quartzite and arkosic quartzite containing partings and thin interbeds of blue phyllite.
ecp, phyllite unit, lustrous blue phyllite, containing interbeds of fine-grained light gray or blue-gray quartzite.
eciq, lower quartzite unit, thick- to thin-bedded, fine- to medium-grained white, gray, or greenish quartzite and arkosic quartzite, containing interbeds of green sericite phyllite.

Lower Cambrian(?) and Lower Cambrian

PCW
Wilson Creek Gneiss
pcw, medium- to coarse-grained cataclastic granitic gneiss, strongly foliated and commonly phyllonitic. Ranges in composition from granite to quartz diorite, but is most commonly quartz monzonite.

PRECAMBRIAN

pc
Cranberry Gneiss
Layered cataclastic granodiorite and quartz monzonite gneiss, generally interlayered with dark biotite gneiss and fine-grained biotite schist, and containing occasional layers, lenses, and pods of amphibole gneiss and amphibolite. Also includes some well-foliated nonlayered granite and quartz monzonite

pcgn
Gneiss southeast of the Grandfather Mountain window
Fine- to coarse-grained layered garnet-biotite-muscovite gneiss and schist, and white plagioclase-quartz gneiss containing pods, layers, and lenses of pegmatite and granitic rock

Rpcu
Undifferentiated gneiss and schist
Fine-grained, well layered, light-, medium-, and dark-gray biotite-quartz-plagioclase gneiss and muscovite- and biotite-muscovite schist containing some interlayered amphibolite and amphibole gneiss and pods of muscovite pegmatite. Schist contains altered muscovite porphyroclasts. Blue dashes indicate layers and lenses of impure marble

PLANAR STRUCTURES

Contact
Dashed where approximately located, gradational, or inferred, dotted where concealed

Thrust fault
Dashed where approximately located or inferred, dotted where concealed; teeth on upper plate; cross bars where vertical or overturned; arrows show inferred direction of latest movement

Fault
Dashed where approximately located or inferred, dotted where concealed, questioned where doubtful; arrows show inferred direction of movement

PLANAR STRUCTURES

interpreted as right side up
interpreted as overturned
Strike and dip of bedding in rocks containing relict sedimentary textures

PLANAR STRUCTURES

inclined generalized
Strike and dip of crystallization foliation in medium grade metamorphosed rocks, cataclastic foliation in low grade metamorphosed rocks, and cleavage in bedded rocks

PLANAR STRUCTURES

inclined generalized vertical
Strike and dip of compositional layering

PLANAR STRUCTURES

Strike and dip of axial plane of medium- or small-scale fold

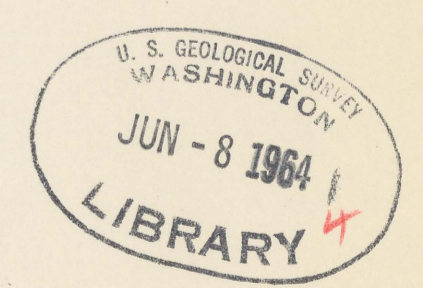
LINEAR STRUCTURES
May be combined with any of the above planar structures

Bearing and plunge of minor fold or crementation

Bearing and plunge of mineral alignment, stretching, streaking or grooving

Legend to accompany sheet 2.

North Carolina (Grandfather Mountain window). Geol. 1:48,000. 1964. sheet 4 of 4 app. 1.



M(200)
R29c
no. 64-132
Sheet 4 of 4
c. 1

