

EXPLANATION

Mapped area of each unit described may contain minor areas of other units too small to represent at scale of map. Unlabeled brackets indicate equivalency.

Quaternary

- Qa** Unconsolidated sedimentary deposits
Alluvium, colluvium, and glacial deposits mapped by photogeologic methods, include some Holocene ash and lapilli
- Qb** Edgecumbe Volcanism
Andesitic and basaltic flows, rhyolitic plugs, and siliceous ash and lapilli erupted from several vents on Kruzof Island
- Qc** Lamprophyric basalt on Lisianski Island

Tertiary

- Tm** Intrusive igneous rocks at Ot Bay, Baranof Island
Areas with abundant inclusions shown by stipple pattern
Tm1, hornblende-biotite granodiorite with abundant schlieren of hornblende monzonite and masses of hornblende gabbro as much as 500 feet across
Tm2, hornblende-biotite tonalite plain south of Ot Bay
- Tt** Intrusive igneous rocks on Baranof and Kruzof Islands
Areas with abundant inclusions and septa of metamorphic rock shown by stipple pattern
Tt1, hornblende-biotite tonalite, subordinate biotite tonalite and hornblende-biotite granodiorite
Tt2, hornblende-biotite granodiorite and subordinate hornblende-biotite tonalite
Tt3, hornblende-biotite tonalite and hornblende-biotite granodiorite in subvolcanic areas
Tt4, hornblende-biotite tonalite, subordinate hornblende-biotite granodiorite, and garnet-muscovite-biotite trondhjemite
- Ty** Intrusive igneous rocks on Chichagof and Yakobi Islands
Areas of abundant inclusions and septa of metamorphic rock shown by stipple pattern
Ty1, white granite northwest of Khas Bay
Ty2, biotite granodiorite at Ot Bay and at Khas Bay
Ty3, hornblende (?) biotite tonalite at Lake Elendak and biotite (?) hornblende tonalite on other bays on northwest Chichagof Island
Ty4, biotite monzonite trondhjemite southeast of Lisianski Island
Ty5, north of Bakoma Bay and at Division Bay
Ty6, hornblende gabbro and hornblende diorite on Yakobi Island and at Division Bay
Ty7, biotite hornblende tonalite on Yakobi Island and northwest Chichagof Island
Ty8, Ty9, and Ty10 may be younger than the other units listed here
- Tk** Intrusive igneous rocks near head of Tenakee Inlet, Chichagof Island
Hornblende monzonite, hornblende leucogabbro, and trondhjemite
- Kg** Actinolite-bearing gabbro on Baranof Island
- Kad, Kgd, Kt, Kd, Kg** Intrusive igneous rocks on Chichagof and Yakobi Islands
Areas of abundant inclusions and septa of metamorphic rock shown by stipple pattern
Kad, hornblende-biotite adamellite northeast of Freshwater Bay
Kgd, biotite-hornblende granodiorite, hornblende-biotite granodiorite, and biotite monzonite
Kt, biotite-hornblende diorite and hornblende tonalite
Kd, hornblende diorite and biotite hornblende diorite
Kg, hornblende gabbro and hornblende leucogabbro
- Ks** Ultramafic rocks on Baranof Island
Serpentinized and partially serpentinized peridotite
- K3p, K3s, K3h** Sika Graywacke
K3p, graywacke and argillite, minor conglomerate and limestone
K3s, volcanic rocks
K3h, breccia in contact aureole
- K3a** Limestone and schistose Sika Graywacke
K3a1, limestoned schistose and arenaceous graywacke and slate derived from K3s with by diagenetic metamorphism
K3a2, greenstone and greenish lenses

Jurassic

- Jad, Jd, Jt, Jg** Intrusive igneous rocks on Chichagof and Baranof Islands
Jad, hornblende adamellite, biotite diorite, and hornblende monzonite southeast of Freshwater Bay
Jd, biotite-hornblende diorite, biotite hornblende monzonite, and hornblende monzonite of same body
Jt, biotite-hornblende diorite and hornblende-biotite diorite north and south of Ford Strait, area of abundant inclusions shown by stipple pattern
Jg, hornblende gabbro associated with west of north of Ford Strait
- Jka** Khas Formation
Greenstone, graywacke, metachert, phyllite, and minor limestone
- Jkb** Kely Bay Group
Phyllite, quartzite, green schist, greenstone, graywacke, and graywacke semischist. Areas characterized by intense schistosity shown by stipple pattern
- Jk** Schist unit on northwest Chichagof Island
Jk1, massive and schistose greenstone, graphitic schist, phyllite, and graywacke
Jk2, limestone
- Jk3** Schist, gneiss, amphibolite, and green schist
Jk3a, amphibolite and green schist, minor phyllite and schist, areas characterized by intense schistosity shown by stipple pattern
Jk3b, biotite schist and gneiss, some amphibolite, quartzite, phyllite, and hornfels, well restricted to contact aureole of igneous complex centered at Warm Spring Bay, Baranof Island (Orange Point) and vicinity

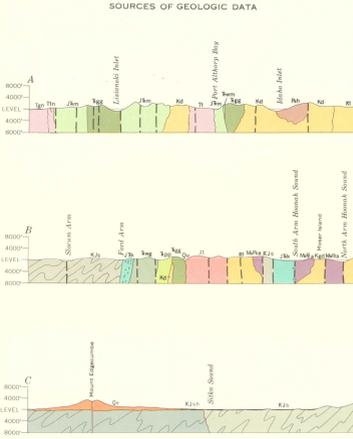
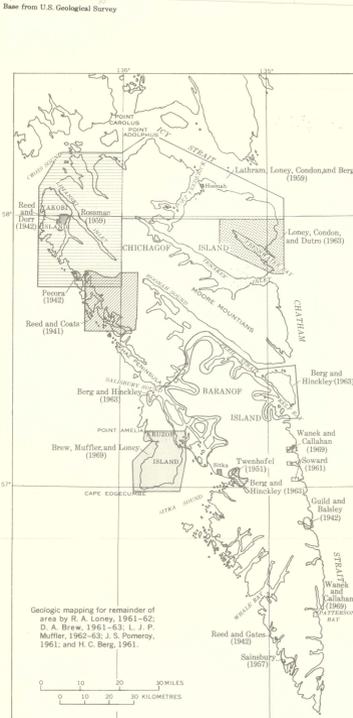
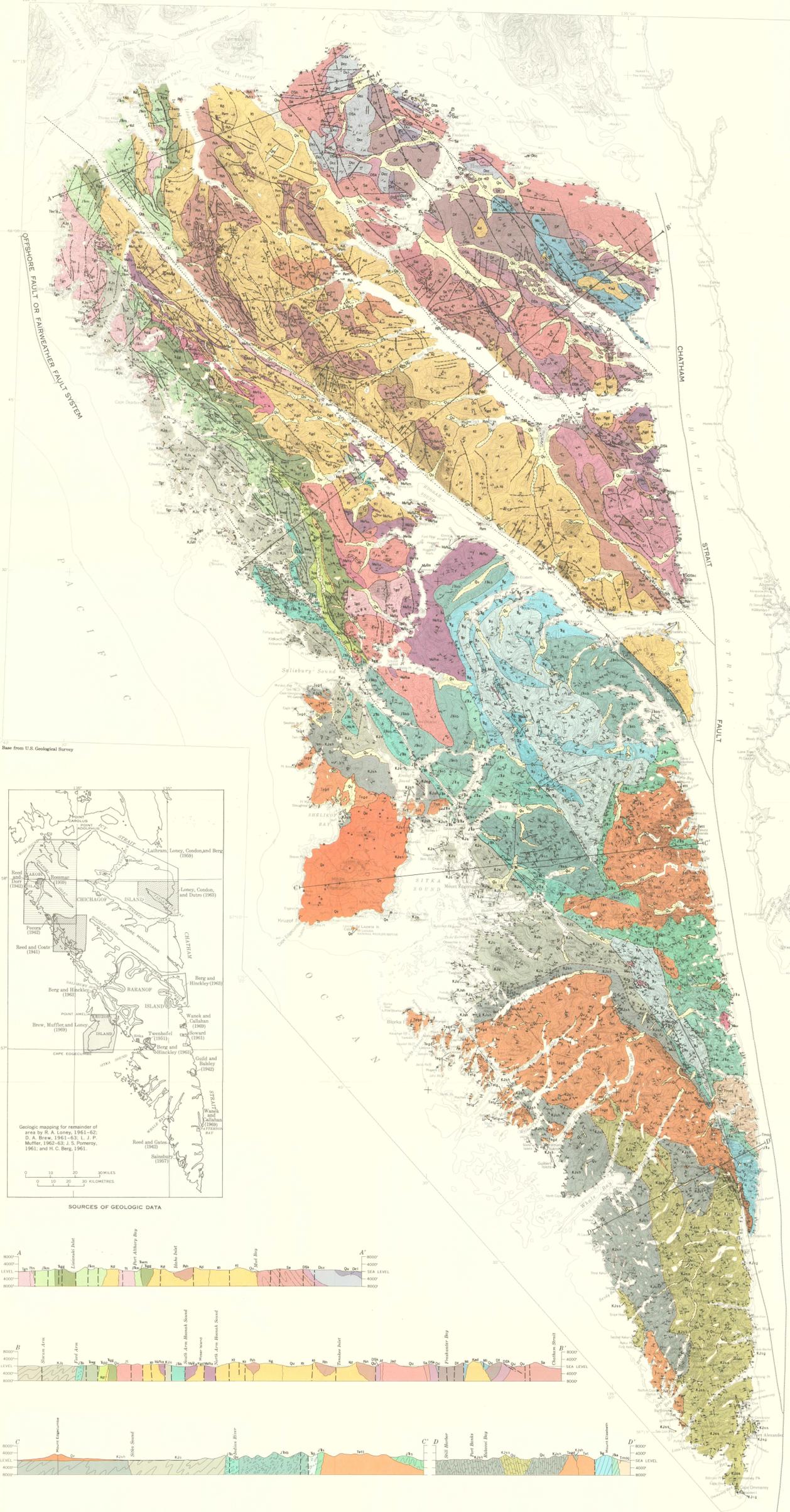
Triassic and Older

- Mh** Chert, limestone, sandstone, and greenstone
Thin-bedded chert with interbedded limestone at top, thin-bedded limestone in middle, sandstone and siltstone at base, changes southward into chert and greenstone. Locally intruded by mafic sills
- Mh1, Mh2** Amphibolite, gneiss, schist, and marble
Mh1, amphibolite, gneiss, schist, and marble
Mh2, marble
- M** Iyukwee Formation
Cherty fossiliferous limestone of upper half overlies fossiliferous shale with minor limestone
- D** Freshwater Bay Formation
Andesite and basaltic flows, volcanic breccia, tuff, minor graywacke, and limestone
- Dc, Dc1, Dc2** Cedar Cove Formation
Dc, Oolite Cove Formation, undivided
Dc1, limestone member of Late Devonian age at northwest of Point Frederick
Dc2, oolite member, composed of conglomerate, graywacke, argillite, and minor limestone
- Dsk, Dsk1, Dsk2** Kennel Creek Limestone
Dsk, limestone, minor dolomite, limestone breccia, shale, and siltstone
Dsk1, conglomerate
- Sa, Sa1** Point Augusta Formation
Sa, graywacke, argillite, minor conglomerate, siltstone, and limestone
Sa1, limestone and marble
- Ss, Ss1, Ss2, Ss3** Intrusive igneous rocks
Ss, biotite syenite and hornblende syenite
Ss1, sodalite syenite and biotite nepheline syenite
Ss2, hornblende-biotite syenite
Ss3, hornblende-biotite trondhjemite, hornblende monzonite, and biotite monzonite

Geologic Symbols

(Planar and linear symbols may be combined)

- Contact, showing dip: Long dashed where approximately located, short dashed where inferred or gradational, dotted where concealed
- Fault, showing relative movement and dip: Long dashed where approximately located, short dashed where inferred, dotted where concealed, U, upthrown side, D, downthrown side
- Thrust (or reverse) fault, showing dip: Dashed where inferred, dotted where concealed, smooth on upper plate
- Mylonite in major fault zones
- Anticline: Showing trace of axial plane and plunge of axis. Dashed where approximately located
- Overtorned anticline: Showing trace of axial plane, direction of dip of limbs, and bearing and plunge of axis
- Syncline: Showing trace of axial plane. Dashed where approximately located
- Overtorned syncline: Showing trace of axial plane, direction of dip of limbs, and bearing and plunge of axis
- Plunge of minor anticline
- Plunge of minor syncline
- Boundary of metamorphic aureole: Text as aureole side, may or may not coincide with contact
- Inclined: Top of beds unknown
- Vertical: Top of beds unknown
- Horizontal: Top of beds unknown
- Inclined: Top of beds determined by outcrops (structures) in direction marked by dot on cross bar
- Vertical: Strike and dip of beds
- Horizontal: Strike and dip of foliation in layered rocks. Flow tapering to Qe
- Inclined: Strike and dip of foliation in intrusive rocks
- Vertical: Strike and dip of cleavage
- Horizontal: Strike and dip of foliation in intrusive rocks
- Inclined: Strike and dip of joint or joint set
- Vertical: Strike and dip of dike
- Horizontal: Strike and dip of axial plane of small fold
- Inclined: Bearing and plunge of lineation
- Vertical: Bearing and plunge of fold axes. Beds too tightly folded to show individual folds
- Horizontal: Locus of volcanic eruption. On Kruzof Island
- Pointed locality
- Trace of conspicuous marker bed



RECONNAISSANCE GEOLOGIC MAP OF CHICHAGOF, BARANOF, AND KRUFZOF ISLANDS, SOUTHEASTERN ALASKA

