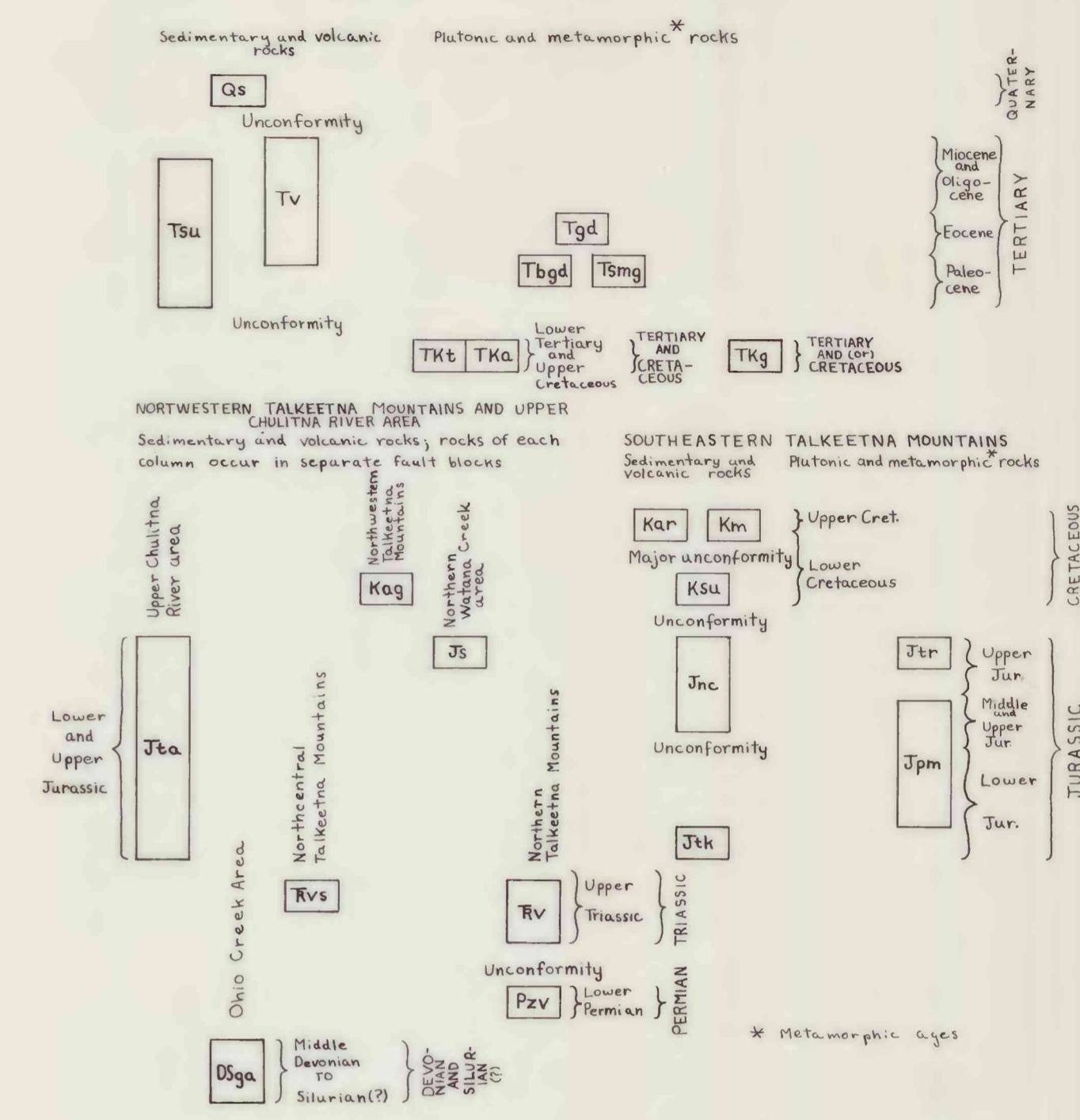


CORRELATION OF MAP UNITS

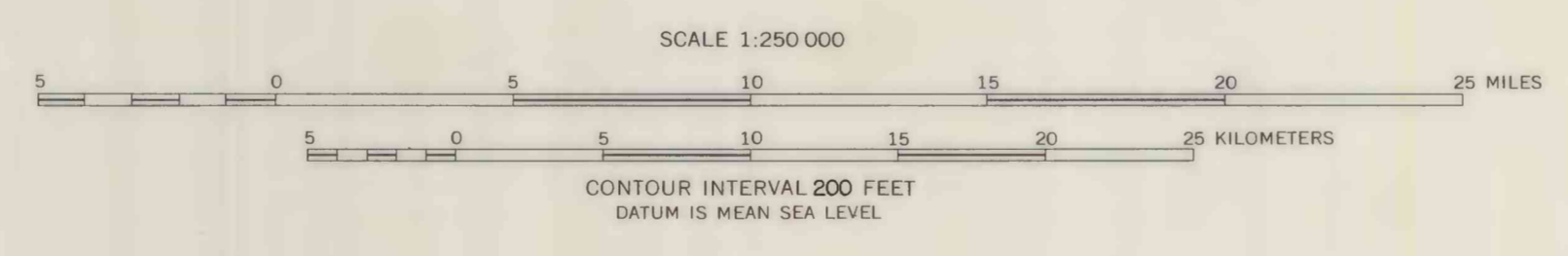
Geology generalized after Csejtey and others, 1978



DESCRIPTION OF MAP UNITS

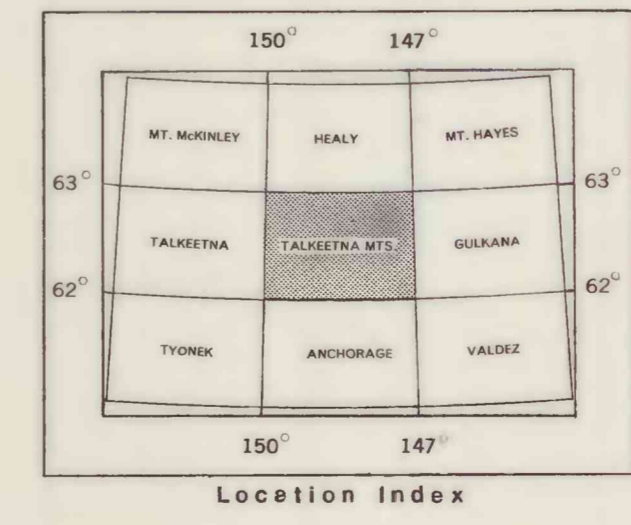
- Qs SURFICIAL DEPOSITS, UNDIFFERENTIATED (Quaternary).
- Tv VOLCANIC ROCKS, UNDIVIDED (Pleistocene(?) to Pleistocene(?))--Felsic and mafic subaerial volcanic rocks and related shallow intrusions.
- Tsu TERTIARY SEDIMENTARY ROCKS, UNDIFFERENTIATED (Paleocene to Miocene)--Terrestrial, mostly fluvial-lacustrine strata with a few lignite interbeds.
- Tgd GRANDIORITE (Eocene).
- Tbgd BIOTITE AND HORNBLENDE GRANDIORITE (Paleocene, in part early Eocene).
- Tsmg SCHIST, MICA-SCHIST, AND GRANITE (Paleocene intrusive and metamorphic ages)--Migmatitic border zone of biotite and hornblende granodiorite.
- TKt TONALITE (Upper Cretaceous and lower Paleocene).
- Tka ADAMELLITE (Upper Cretaceous and lower Paleocene).
- TKg GRANITIC ROCKS, UNDIVIDED (Cretaceous and (or) Tertiary).
- Kar ARKOSE RIDGE FORMATION (Lower and (or) Upper Cretaceous).
- Km MATANUSKA FORMATION (Lower and Upper Cretaceous).
- Ksu SEDIMENTARY ROCKS, UNDIVIDED (Lower Cretaceous)--Shallow marine sequence of calcareous sandstone, claystone, and massive clastic limestone.
- Kag ARGILLITE AND LITHIC GRAYWACKE (Lower Cretaceous)--Intercalated, marine, flyschlike sequence.
- Js SEDIMENTARY AND VOLCANIC ROCKS, UNDIVIDED (Upper Jurassic)--Marine sequence of argillite, graywacke, conglomerate, and andesitic to latitic feldspar porphyry dikes and intercalated flows.
- Jtr TRONDHJEMITE (Upper Jurassic).
- Jnc JURASSIC SEDIMENTARY ROCKS, UNDIVIDED (Middle and Upper Jurassic)--Includes Neknek and Chinitna Formations, and Tuxedni Group.
- Jta CRYSTAL TUFF, ARGILLITE, CHERT, GRAYWACKE, AND LIMESTONE (Lower to Upper Jurassic)--Shallow to moderately deep marine, intercalated sequence.
- Jpm FLUTONIC AND METAMORPHIC ROCKS, UNDIFFERENTIATED (Lower to Upper Jurassic)--Mainly quartz diorite, granodiorite, amphibolite, and greenschist.
- Jtk TALKEETNA FORMATION (Lower Jurassic).
- Jtsv METABASALT AND SLATE (Upper Triassic)--intercalated, shallow-water marine sequence.
- Jtw BASALTIC METAVOLCANIC ROCKS (Upper Triassic)--Mainly shallow water marine metabasalt flows.
- Pzv BASALTIC AND ANDESITIC METAVOLCANOGENIC ROCKS (Pennsylvanian(?) and Early Permian)--Metamorphosed marine sequence of inter-layered basaltic to andesitic flows, tuffs, coarse volcanoclastic rocks, and subordinate mudstone and limestone.
- DSga GRAYWACKE, ARGILLITE, SHALE, AND LIMESTONE (Siderian(?) to Middle Devonian)--Intercalated marine sequence, probably continental margin deposits.

Base map from U.S. Geological Survey, 1:250,000 Talkeetna Mountains Quadrangle, Alaska, 1955



EXPLANATION

- Line separating aeromagnetically dissimilar northwestern and southeastern portions of the quadrangle.
- Magnetic anomaly or anomaly pattern area discussed in text.
- APPROXIMATE MEAN DECLINATION, 1951



EXPLANATION OF GEOLOGIC MAP SYMBOLS

- Contact, approximately located
- Approximate contact of surficial deposits
- Fault
 - Long dashed where approximately located; short dashed where inferred; dotted where concealed. U indicates upthrown side where direction of displacement is known. Arrows indicate relative lateral movement
 - Thrust fault
 - Long dashed where approximately located, dotted where concealed. Teeth indicate upthrown side.
 - Approximate axis of intense shear zone of variable width, possibly marking a thrust fault
 - Dotted where concealed; teeth indicate possible upthrown side of postulated thrust

PRELIMINARY AEROMAGNETIC INTERPRETIVE MAP OF THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA

BY
BÉLA CSEJTEY, JR., AND ANDREW GRISCOM

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.