

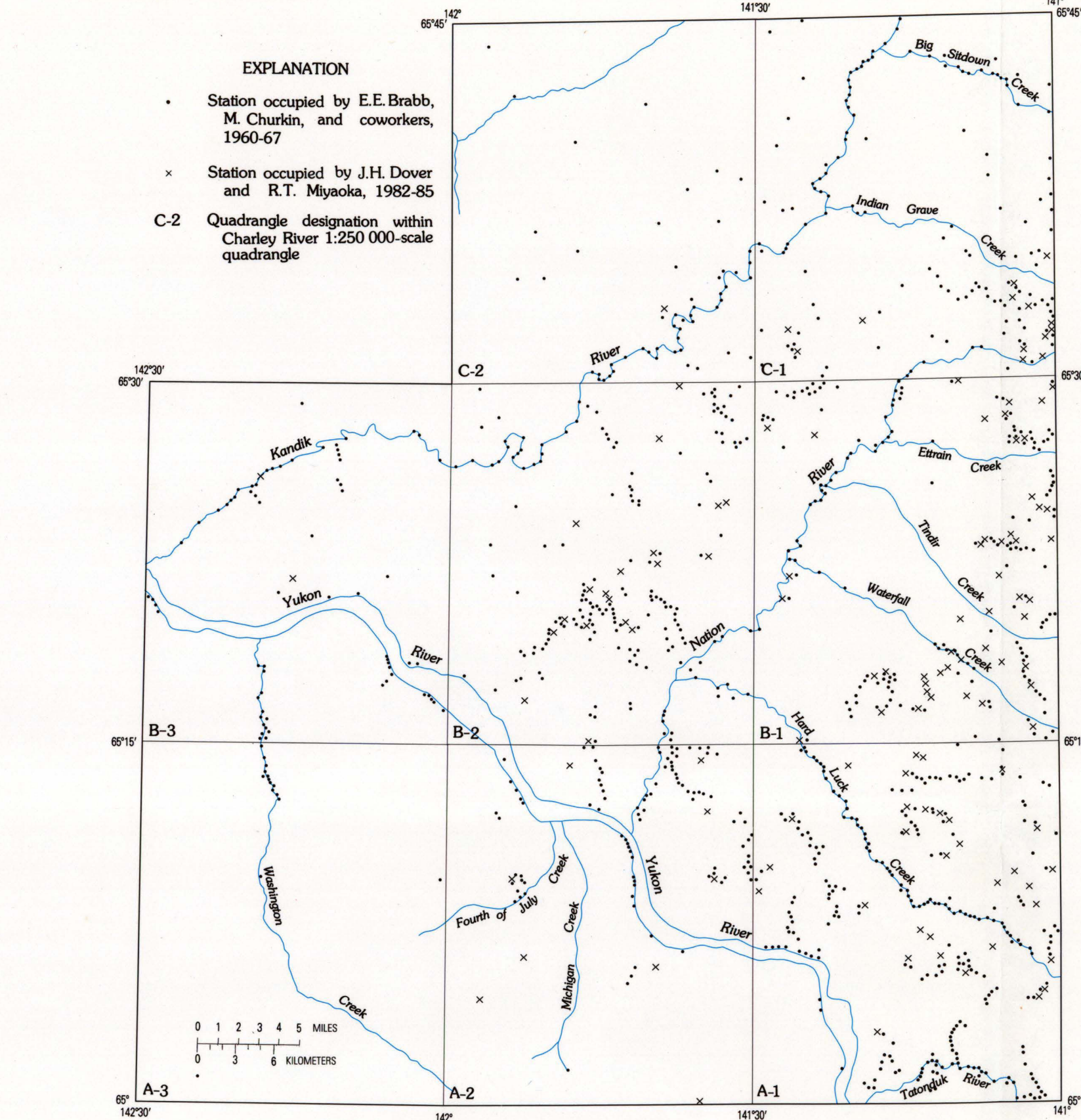
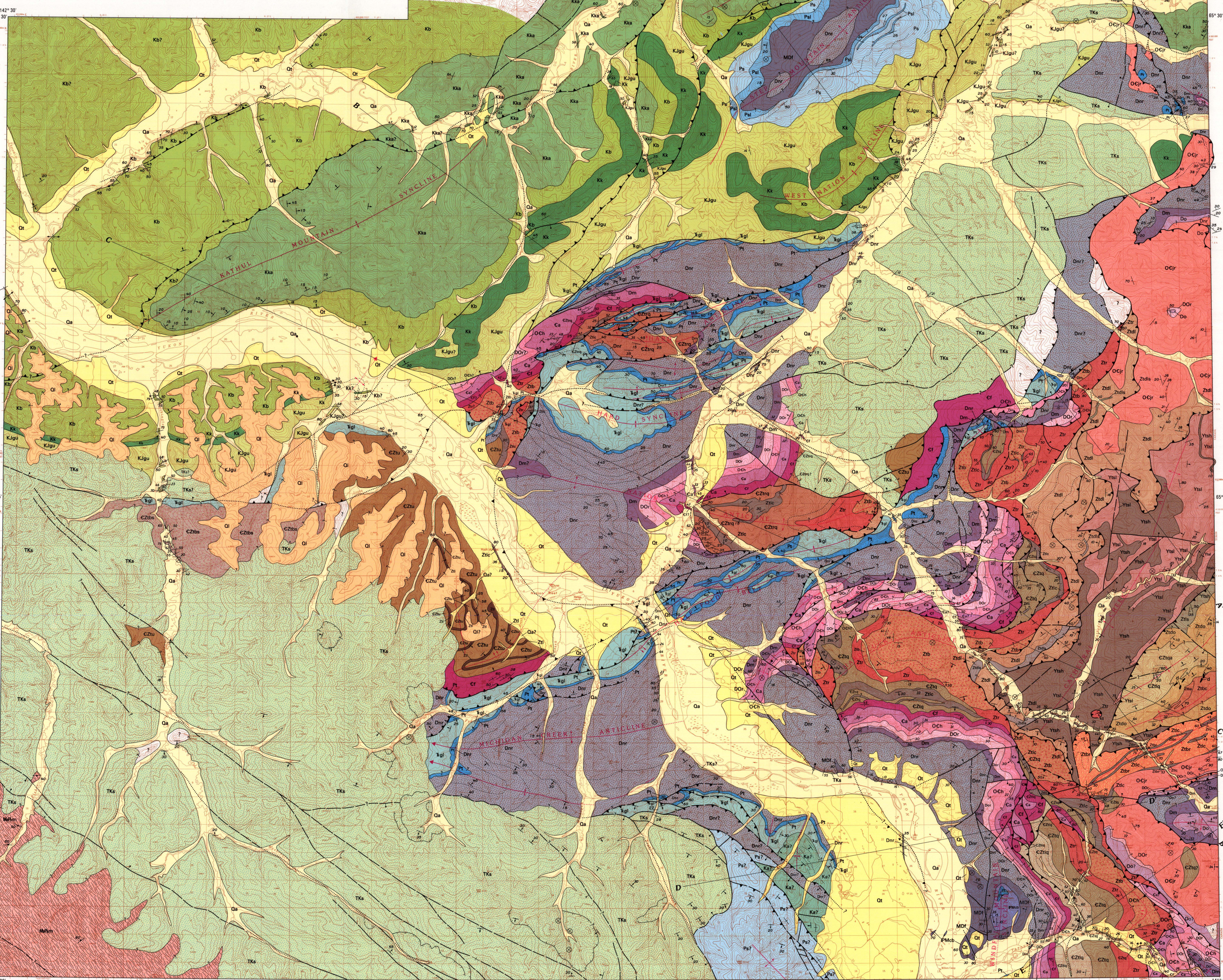
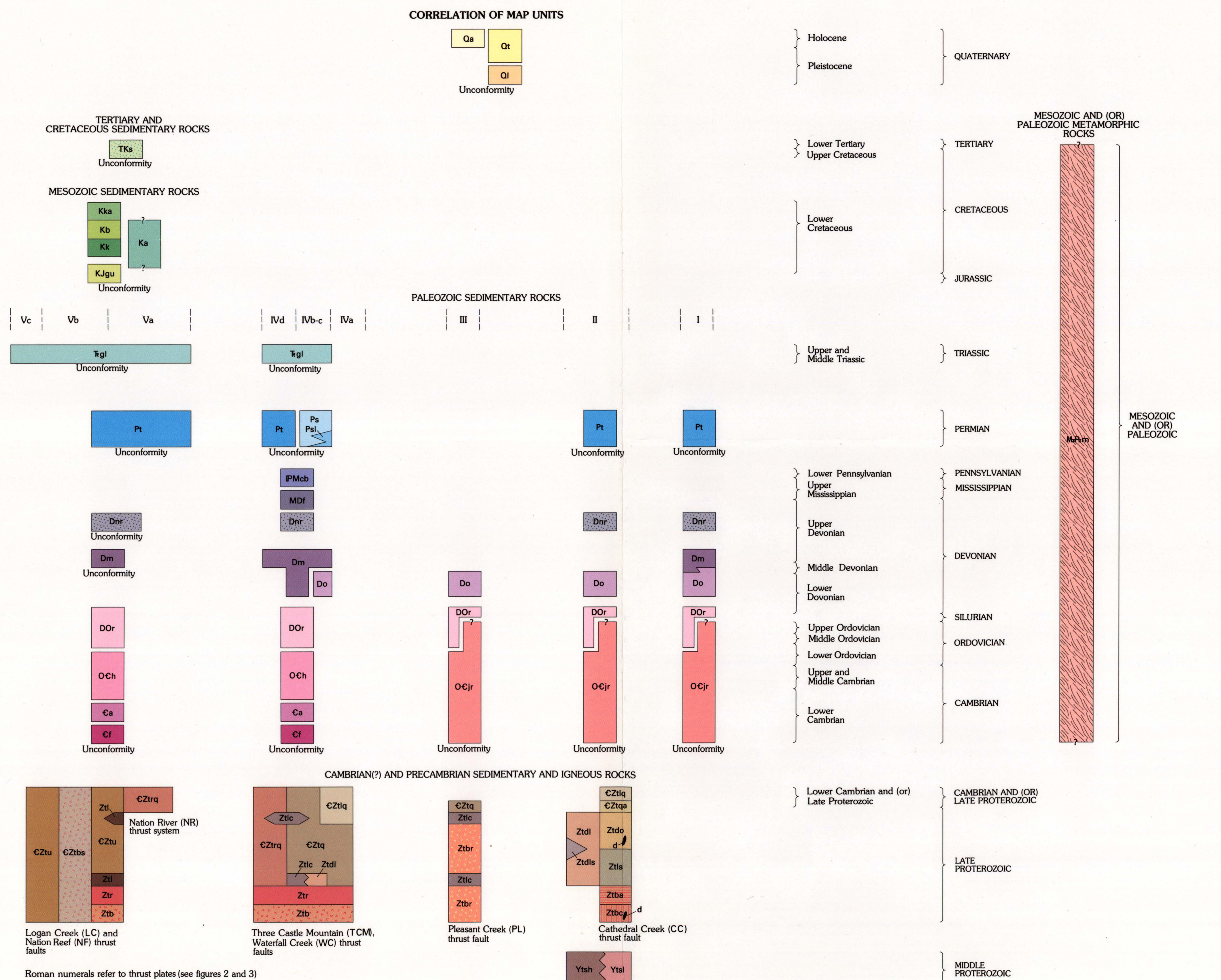


Figure 1. Location of field stations used in compilation of geologic map



GEOLOGIC MAP AND FOLD- AND THRUST-BELT INTERPRETATION OF THE SOUTHEASTERN PART OF THE CHARLEY RIVER QUADRANGLE, EAST-CENTRAL ALASKA

By
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1992



LIST OF MAP UNITS (See pamphlet for complete description of map units)

- QUATERNARY SURFICIAL DEPOSITS**
 - Qa Alluvium (Holocene)
 - Qt Terrace deposits (Holocene and Pleistocene)
 - Ql Loess(?) (Pleistocene)
- TERTIARY AND CRETACEOUS SEDIMENTARY ROCKS**
 - TKs Sandstone, conglomerate, and mudstone (lower Tertiary and Upper Cretaceous)
- MESOZOIC SEDIMENTARY ROCKS**
 - Ka Kasilof Group (Lower Cretaceous)
 - Kb Biederman Argillite (Lower Cretaceous)
 - Kc Keenan Quartzite (Lower Cretaceous)
 - Kd Argillite (Lower Cretaceous)
 - Ke Olsen Shale (Lower Cretaceous to Middle Triassic)
 - Kf Upper part (Lower Cretaceous and Jurassic)
 - Tg Lower part (Upper and Middle Triassic)
- MESOZOIC AND (OR) PALEOZOIC METAMORPHIC ROCKS**
 - MP Metamorphic rocks, undivided (Mesozoic and (or) Paleozoic)
- PALEOZOIC SEDIMENTARY ROCKS**
 - Pt Tabular Limestone (Permian)
 - Ps Step Conglomerate (Permian)
 - PMs Limestone (Permian)
 - PMc Calico Bluff Formation (Lower Pennsylvanian and Upper Mississippian)
 - DMc First Lake Shale (Upper Mississippian to Upper Devonian)
 - DMc Nation River Formation (Upper Devonian)
 - DMc McCann Hill Chert (Upper to Lower Devonian)
 - DOc Ogilvie Formation of Clough (1980) (Middle and Lower Ordovician)
 - DOc Jones Ridge Limestone (Upper or Middle Ordovician to Lower Cambrian)
 - OCc Hillard Limestone (Lower Ordovician to Lower Cambrian)
 - Ca Adams Argillite (Lower Cambrian)
 - CF Fossil Creek Limestone (Lower Cambrian)
- CAMBRIAN(?) AND PRECAMBRIAN SEDIMENTARY AND IGNEOUS ROCKS**
 - CZu Upper part, undivided (Lower Cambrian? and Late Proterozoic)
 - CZu Limestone (Lower Cambrian? and Late Proterozoic)
 - CZu Quartzite and quartzite (Lower Cambrian? and Late Proterozoic)
 - CZu Quartzite and argillite (Lower Cambrian? and Late Proterozoic)
 - CZu Red beds and quartzite (Lower Cambrian? and Late Proterozoic)
 - CZu Basalt and sedimentary rocks of Washington Creek (Lower Cambrian? and Late Proterozoic)

- Dolomite and limestone (Late Proterozoic)**
 - ZdL Shale
 - ZdL Laminated limestone (Late Proterozoic)
 - ZdL Limestone and conglomerate rocks (Late Proterozoic)
 - ZdL Dolomite (Late Proterozoic) - Dike, d
 - ZdL Basalt and red beds, undivided (Late Proterozoic)
 - ZdL Red beds
 - ZdL Basalt and argillite (Late Proterozoic)
 - ZdL Basalt and clastic rocks (Late Proterozoic) - Dike, d
 - ZdL Lower part
 - ZdL Shale and diatomite (Middle Proterozoic)
 - ZdL Stromatolite limestone (Middle Proterozoic)

- Geological Symbols**
 - Contact—Approximately located, queried where uncertain
 - Bedding trace or marker bed
 - High-angle fault (including listric normal fault)—Dashed where approximately located, dotted where concealed; queried where uncertain. Bar and ball on downthrown side. Arrows on cross sections show relative movement.
 - Thrust fault—Dashed where approximately located, dotted where concealed; queried where uncertain. Southwest on upper plate.
 - Landslide—Hiccup lines point into slide mass.
 - Strike and dip of beds—Bar and ball point toward stratigraphic top as determined from sedimentary structures.
 - Inclined
 - Horizontal
 - Vertical
 - Overturned
 - Determined from aerial photographs or estimated from a distance
 - Strike and dip of axial plane cleavage
 - Inclined
 - Vertical
 - Strike and dip of inclined metamorphic foliation
 - Major fold axis—Shows direction of plunge, where known; dotted where concealed.
 - Anticline
 - Overturned anticline
 - Syncline
 - Overturned syncline
 - Minor fold axis—Shows direction of plunge where known.
 - Anticline
 - Syncline
 - Overturned
 - Crenulations or group of minor folds

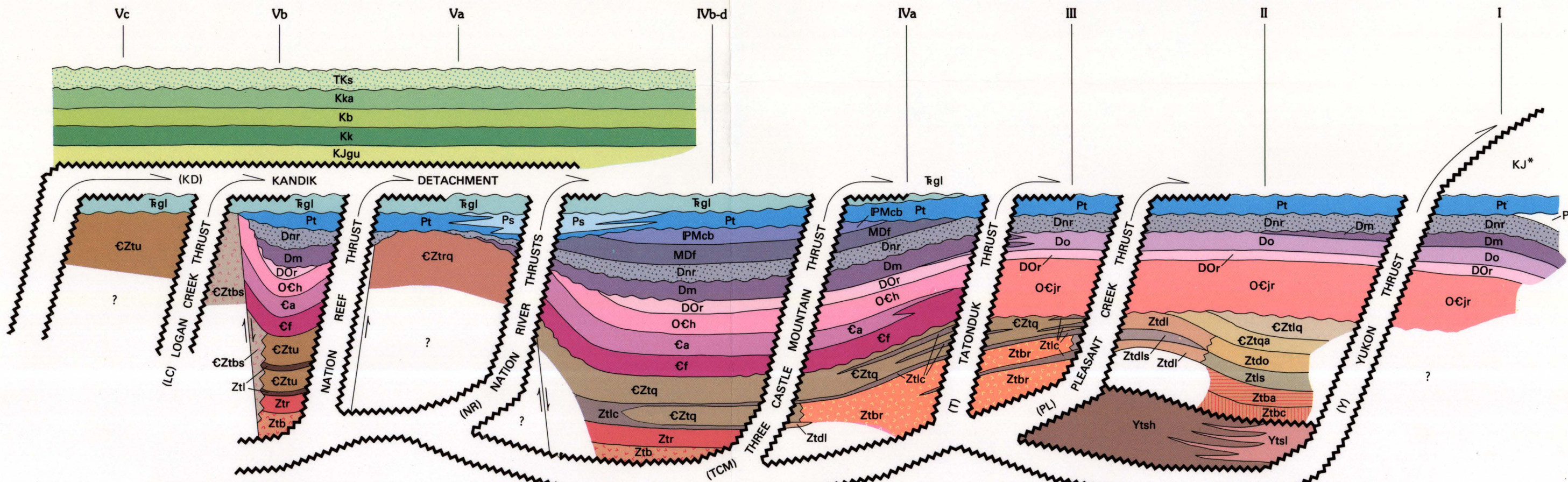
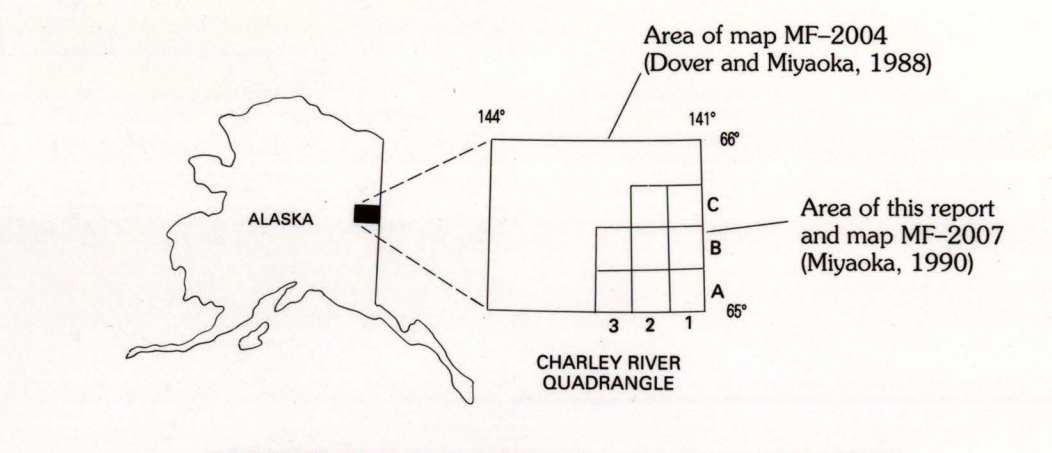
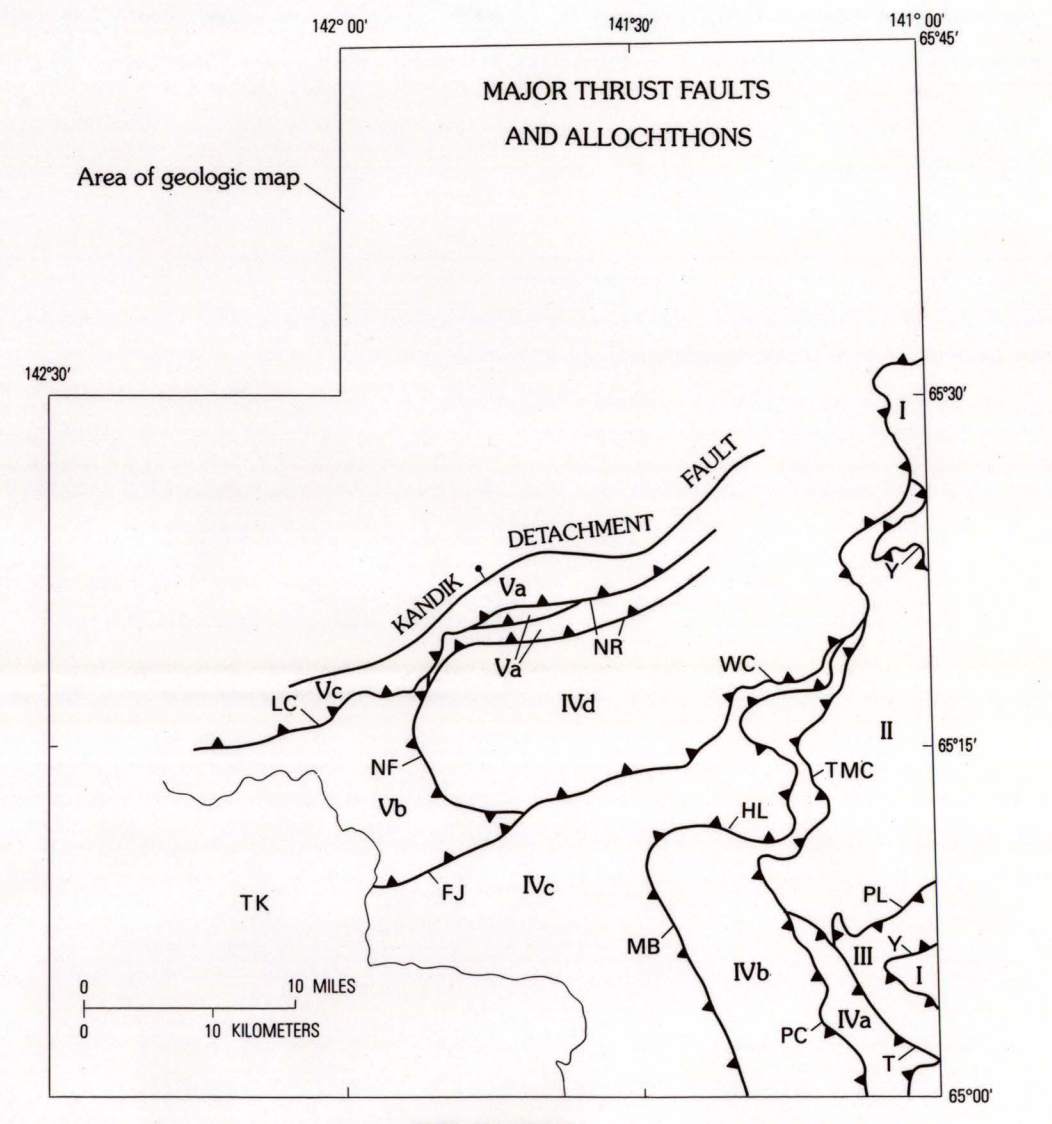


Figure 2. Schematic reconstruction of pre-Jurassic stratigraphic relations in the southeastern part of the Charley River quadrangle interpreted from restored thrust plates (Roman numerals; see fig. 3 and correlation of map units). Suspected unconformity between Jurassic and Triassic rocks restored to horizontal. Asterisk (*) indicates units present in adjacent Ogilvie River quadrangle (Norris, 1982), but not present in Charley River quadrangle. See list of map units and symbols above.



LOCATION MAP AND INDEX TO 1:63,360 QUADRANGLES



EXPLANATION

- Geological Symbols**
 - Contact
 - Fault—Ball and bar on downthrown side
 - Thrust fault—Southwest on upper plate, thrust thrusts
 - LC Logan Creek
 - NF Nation Reef
 - FJ Fourth of July Creek
 - WC Waterfall Creek
 - HL Handlick Creek
 - MS Montook Bluff
 - PC Pass Creek
 - T Tansil Creek
 - TCM Three Castle Mountain
 - PL Pleasant Creek
 - Y Yukon

Figure 3. Major thrust faults and thrust plates in the southeastern part of the Charley River quadrangle, east-central Alaska. See figure 2 and correlation of map units.