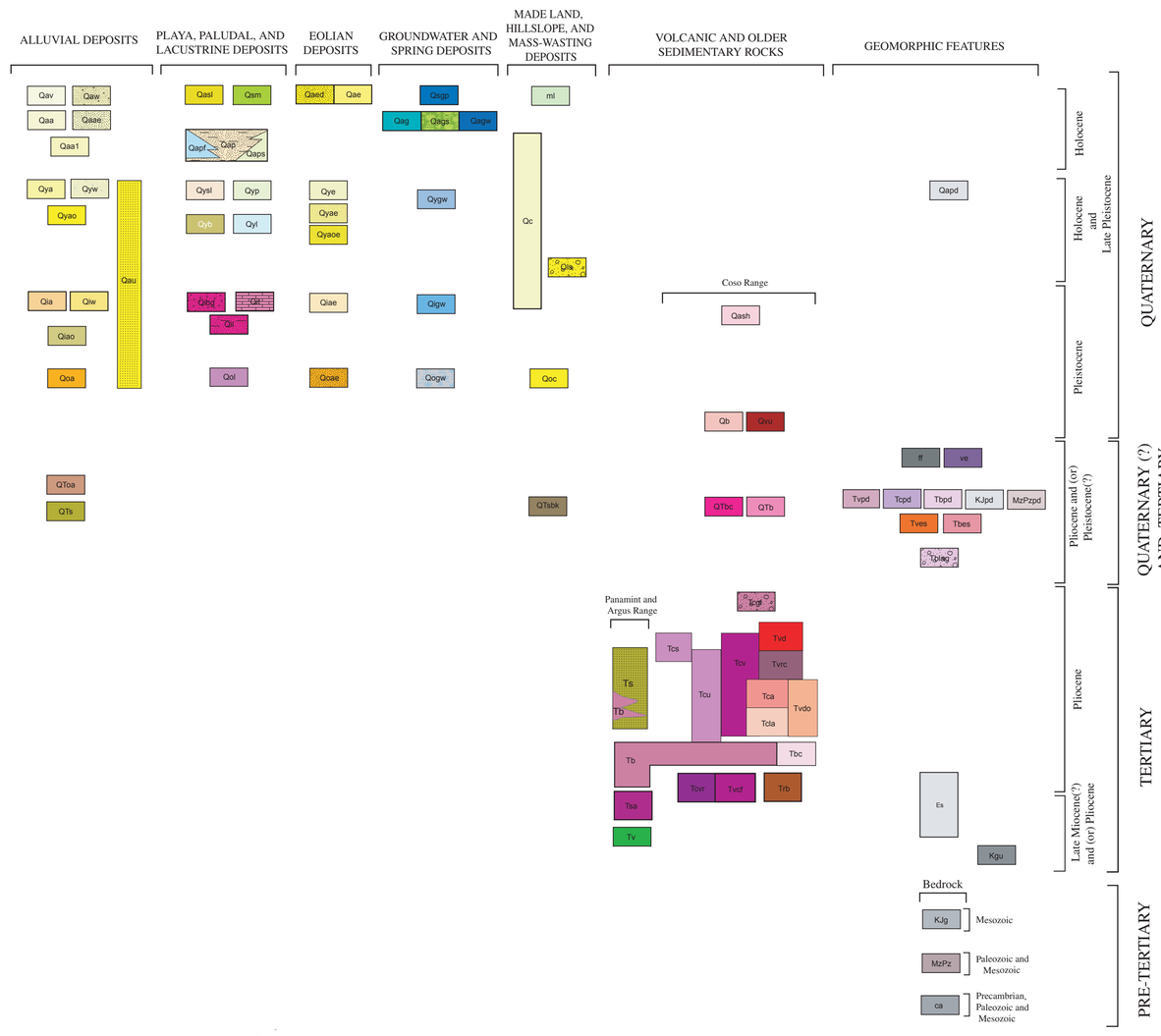
CORRELATION OF MAP UNITS

SURFICIAL DEPOSITS



LIST OF MAP UNITS

[Some unit exposures on the printed or plotted map are too small to distinguish the color for unit identification. These units are labeled where possible, and unlabeled units are attributed in the data base.]

SURFICIAL DEPOSITS

ALLUVIAL DEPOSITS

- **Qaw** — Active wash deposit (Holocene)
- **Qav** — Active valley-axis deposit (Holocene)
- **Qaa** — Active alluvial fan deposit (Holocene)
- **Qaae** — Active alluvial fan deposit (Holocene)
- **Qaa1** — Active alluvial fan deposit (Holocene)
- **Qyw** — Young wash deposit (Holocene and late Pleistocene)
- **Qya** — Young alluvial fan deposit (Holocene and late Pleistocene)
- **Qyao** — Young alluvial fan deposit (Holocene and late Pleistocene)
- **Qiw** — Intermediate wash deposit (late to middle Pleistocene)
- **Qia** — Intermediate alluvial fan deposit (late to middle Pleistocene)
- **Qiao** — Intermediate alluvial fan deposit, older (late to middle Pleistocene)
- **Qoa** — Old alluvial fan deposit (middle to early Pleistocene)
- **Qau** — Alluvial fan deposit undifferentiated (Quaternary)
- **QToa** — Extremely old alluvial fan deposit (early Pleistocene to Pliocene)
- **QTs** — Sedimentary rocks (early Pleistocene and (or) late Pliocene)

PLAYA, PALUDAL, AND LACUSTRINE DEPOSITS

- **Qasl** — Active saline lake deposit (Holocene)
- **Qsm** — Active saline marsh deposit (Holocene)
- **Qap** — Active playa deposit (Holocene)
- **Qaps** — Active playa deposit (Holocene), sandy facies
- **Qapf** — Active playa deposit (Holocene), mixed eolian, lacustrine, playa, alluvial
- **Qyp** — Young playa deposit (Holocene and late Pleistocene)
- **Qysl** — Playa fringe saline facies (Holocene and late Pleistocene)
- **Qyb** — Young lacustrine beach deposit (Holocene to late Pleistocene)
- **Qyl** — Young lacustrine deposit (Holocene to late Pleistocene)
- **Qibg** — Intermediate lacustrine beach deposit (late to middle Pleistocene)
- **Qit** — Intermediate nearshore tufa deposit (late to middle Pleistocene)
- **Qil** — Intermediate lacustrine and deltaic deposits (late to middle Pleistocene)
- **Qol** — Intermediate lacustrine, wetlands and playa deposits (late(?) or middle early Pleistocene)

EOLIAN DEPOSITS

- **Qae** — Active eolian dune deposit (Holocene)
- **Qaed** — Active eolian dune deposit (Holocene)
- **Qye** — Young eolian deposit (Holocene and latest Pleistocene)
- **Qyae** — Young mixed alluvial and eolian deposit (Holocene and latest Pleistocene)
- **Qyaoe** — Young mixed alluvial and eolian deposit (Holocene and latest Pleistocene)
- **Qiae** — Intermediate alluvial and mixed eolian deposit (late to middle Pleistocene)
- **Qoae** — Old mixed alluvial and eolian deposit (late to middle Pleistocene)

GROUNDWATER AND SPRING DEPOSITS

- **Qsgp** — Sag pond (Holocene)
- **Qag** — Active groundwater discharge deposit (Holocene)
- **Qags** — Spring mound deposits (Holocene)
- **Qagw** — Wetland deposits (Holocene)
- **Qygw** — Young groundwater discharge deposit (Holocene and latest Pleistocene)
- **Qigw** — Intermediate groundwater discharge deposit (late to middle Pleistocene)
- **Qogw** — Old groundwater discharge deposit (middle Pleistocene or older)

MADE LAND, HILLSLOPE, AND MASS WASTING DEPOSITS

- **ml** — Made land (Recent)
- **Qc** — Colluvial deposits (Holocene and Pleistocene)
- **Qls** — Mass-movement deposits (Holocene and Pleistocene)
- **Qoc** — Older colluvial deposits (Pleistocene ?)
- **QTsbk** — Block slide deposits (Pleistocene and or late Pliocene)

VOLCANIC AND OLDER SEDIMENTARY ROCKS

- **Qash** — Volcanic ash (Quaternary)
- **Qb** — Basalt and other mafic volcanic rocks (mainly Quaternary)
- **Qvu** — Volcanic rocks (Quaternary)
- **QTbc** — Volcanic center, basalt and other mafic volcanic rocks (Quaternary and or late Pliocene)
- **QTb** — Basalt and other mafic volcanic rocks (Quaternary and or late Pliocene)
- **Tcgl** — Conglomerate (Pliocene ?)
- **Ts** — Sedimentary Rocks (Pliocene)

Coso Formation (Pliocene)—Divided informally into :

- **Tvd** — Rhyodacite (Pliocene)
- **Tcs** — Mainly sedimentary rocks (Pliocene)
- **Tcu** — Coso Formation, undifferentiated (Pliocene)
- **Tcv** — Coso Formation, undifferentiated volcanic rocks (Pliocene)
- **Tvrc** — Red weathering rhyodacitic volcanic rock (Pliocene)
- **Tca** — Mainly volcanic ash and tephra (Pliocene)
- **Tcla** — Lower volcanic ash and tephra (Pliocene)
- **Tvdo** — Older dacitic volcanic rock (Pliocene)
- **Tb** — Mainly flood-like basalt flows and other mafic volcanic rocks (Pliocene)
- **Tbc** — Eruptive centers for basalt flows and other mafic volcanic rocks (Pliocene)
- **Tcvr** — Volcanic ash flow and ash (early Pliocene and (or) late Miocene)
- **Tvcf** — Volcanic ash flow and ash(early Pliocene and (or) late Miocene)
- **Trb** — Sedimentary rocks (early Pliocene and (or) late Miocene)
- **Tsa** — Sedimentary rocks (late Miocene ?)
- **Tv** — Volcanic rock (early Pliocene to late middle Miocene)

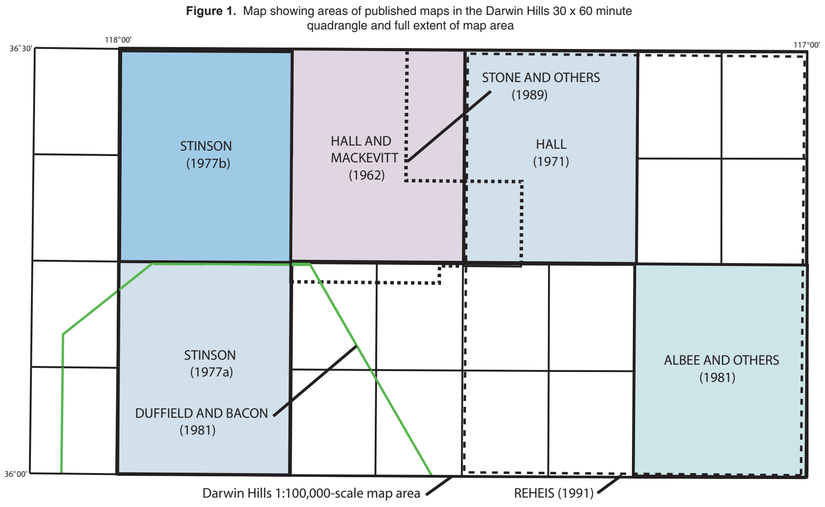
GEOMORPHIC FEATURES

- **Qapd** — Pediment surfaces (middle and late Quaternary)
- **ff** — Faceted bedrock spur (Pleistocene and (or) late Pliocene)
- **ve** — Volcanic vent area (Quaternary and (or) late Pliocene)
- **Tvpd** — Pediment inset onto (Quaternary and (or) late Pliocene)
- **Tcpd** — Pediment inset onto Coso Formation (Quaternary and (or) late Pliocene)
- **Tbpd** — Pediment inset onto basalt (Quaternary and (or) late Pliocene)
- **KJpd** — Pediment developed on granitic substrate (Quaternary and (or) late Pliocene)
- **MzPzpd** — Pediment developed on Paleozoic and (or) Mesozoic substrate (Quaternary and (or) late Pliocene)
- **Tves** — Pediment developed on Tv (Quaternary and (or) late Pliocene)
- **Tbes** — Old erosion surface developed on top of basalt (early or middle Pliocene)
- **Es** — Old erosion surface on bedrock (late Miocene and early Pliocene)
- **Tblag** — Cobble lag deposit (late Miocene and early Pliocene)
- **Kgu** — Old relief above Es (late Miocene and early Pliocene)

BEDROCK LITHOLOGIES

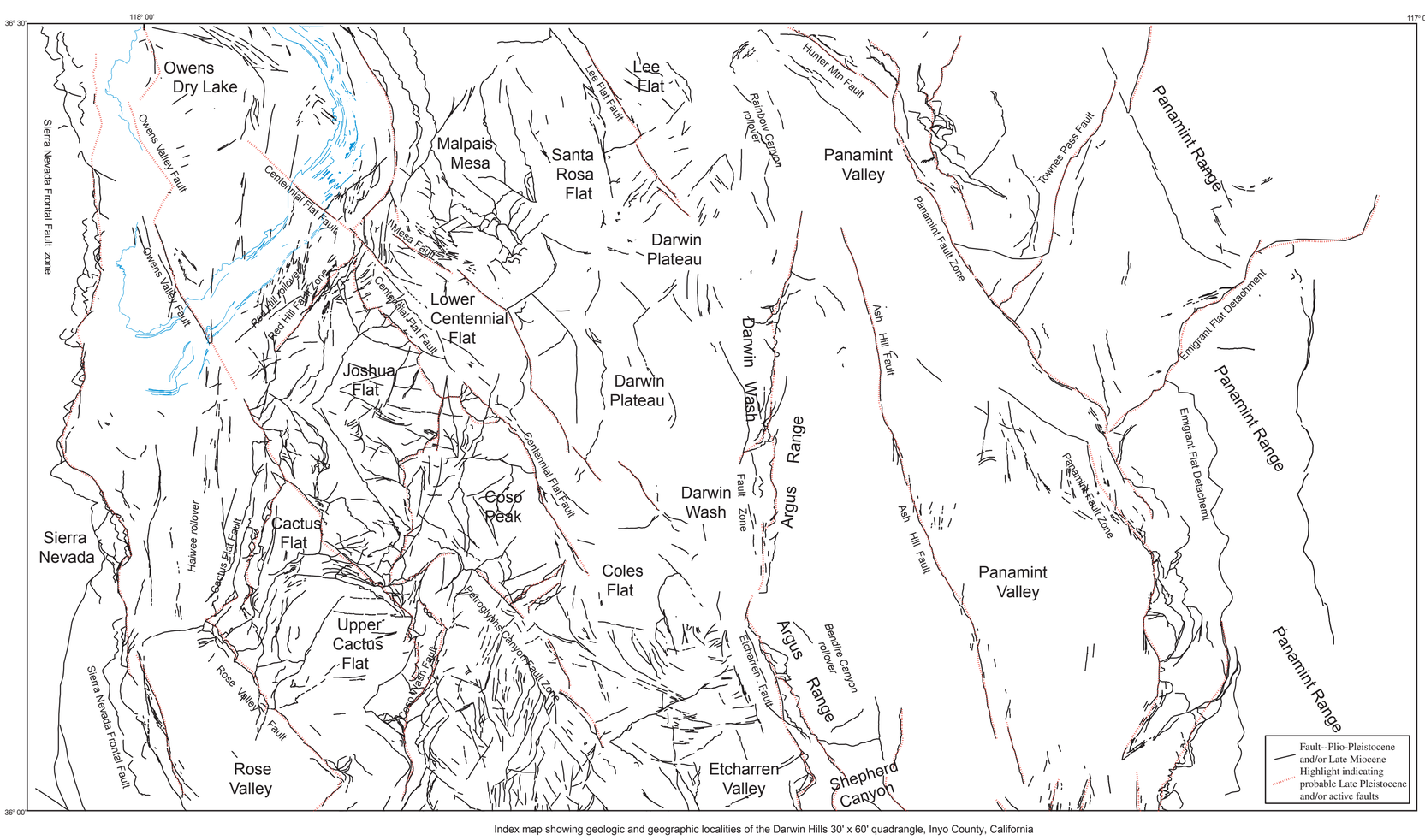
- **KJg** — Plutonic rocks (Cretaceous and (or) Jurassic)
- **MzPz** — Sedimentary and metamorphic rocks
- **ca** — Meta-sedimentary, Metamorphic, and Plutonic Rocks of the Panamint Range (Mesozoic, Paleozoic, and Precambrian)

Figure 1. Map showing areas of published maps in the Darwin Hills 30 x 60 minute quadrangle and full extent of map area



EXPLANATION

- **Contact**--Dashed where inferred, dotted where concealed
- **Fault**--Dashed where inferred, dotted where concealed
- **Fault**--Concealed, queried
- **Fault**--inferred, queried
- **Normal fault**--Dashed where inferred, dotted where concealed
- **Strike slip fault**--Dashed where inferred, dotted where concealed
- **Attenuation fault**--Dashed where inferred
- **Syncline**
- **Anticline**
- **Monocline**
- **Scarp**
- **Landslide headscarp**
- **Shoreline**
- **Surface**
- **Fluvial terrace riser**



Index map showing geologic and geographic localities of the Darwin Hills 30' x 60' quadrangle, Inyo County, California

Surficial Geologic Map of the Darwin Hills 30' X 60' Quadrangle
Inyo County, California

By
A. S. Jayko
2009

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