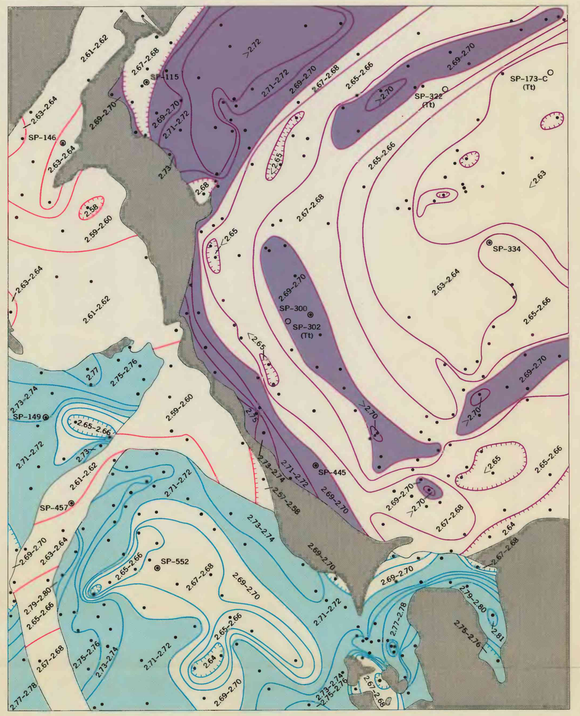
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY



SCALE 1:125 000

1 0 1 2 3 4 5 MILES

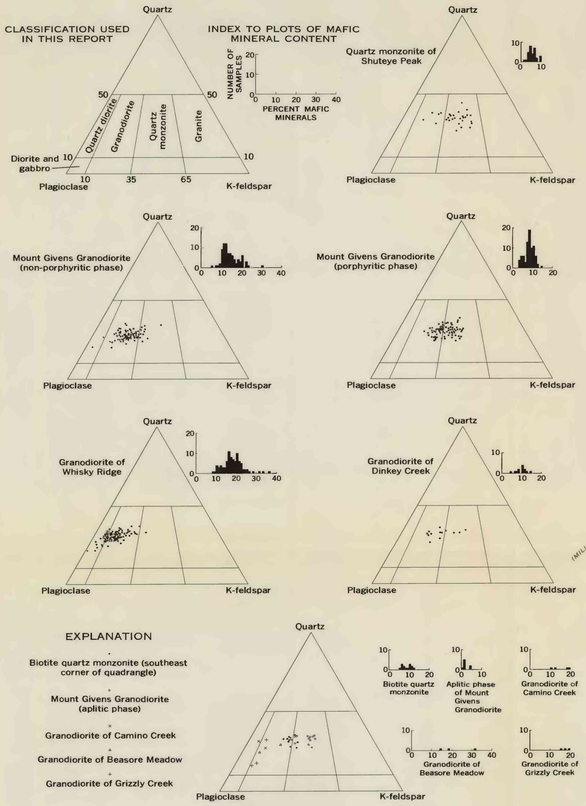
1 0 1 2 3 4 5 KILOMETERS

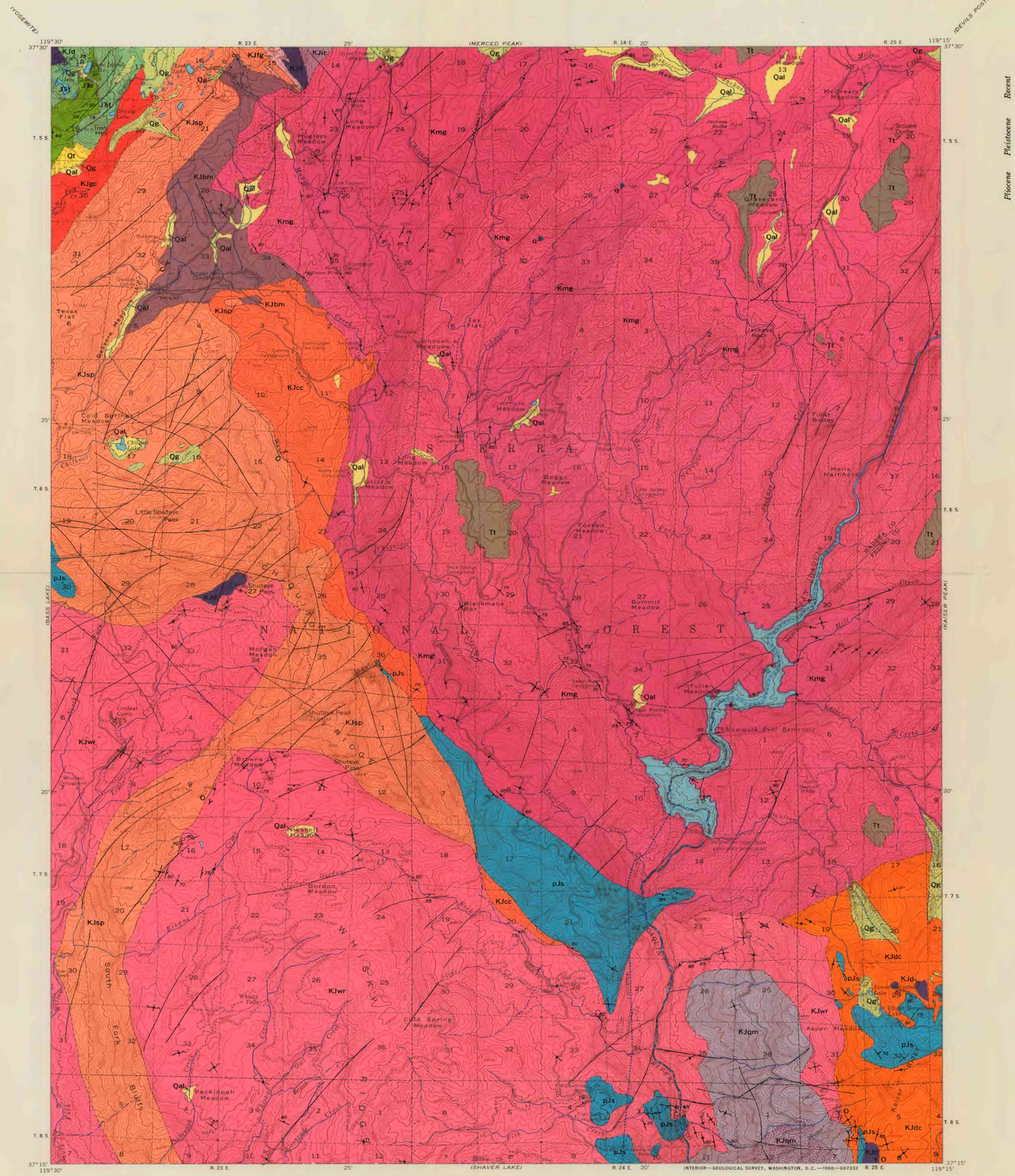
SPECIFIC GRAVITY MAP SHOWING VARIATION WITHIN MAJOR PLUTONIC UNITS AND LOCATION OF SAMPLES

Dots indicate locations of specific gravity determinations; open circles indicate locations of chemically analyzed samples, including trachybasalt (Tt). Specific gravity contour interval is 0.02. Purple contours lie within the Mount Givens Granodiorite, blue within the granodiorite of Whisky Ridge, and red within the quartz monzonite of Shuteye Peak.

Purple-colored areas emphasize trends of specific gravity highs that roughly coincide with the nonporphyritic phase of the Mount Givens Granodiorite. Blue-colored areas emphasize the generally higher specific gravity values near the margins of the granodiorite of Whisky Ridge.

PLOTS OF MODES





Base by U.S. Geological Survey, 1953

APPROXIMATE MEAN DECLINATION, 1968

SCALE 1:62 500

1 ½ 0 1 2 3 MILES

1 .5 0 1 2 3 KILOMETERS

CONTOUR INTERVAL 80 FEET
DATUM IS MEAN SEA LEVEL

QUADRANGLE LOCATION

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1968—G67332

Geology by: N. King Huber, 1962–66.
Assisted by: F. J. Humphrey, 1962;
J. A. Van Couvering, 1963;
R. W. Tracy, 1964

GEOLOGIC MAP OF THE SHUTEYE PEAK QUADRANGLE, SIERRA NEVADA, CALIFORNIA

By
N. King Huber
1968

GEOLOGIC QUADRANGLE MAP
SHUTEYE PEAK QUADRANGLE, CALIFORNIA
GQ–728

EXPLANATION

QUATERNARY

Recent

Qal — Alluvial deposits

Qt — Talus

Pleistocene

Qg — Glacial deposits
Crests of morainal ridges shown by dot pattern

TERTIARY

Pliocene

Tt — Trachybasalt

CRETACEOUS

GRANITIC ROCKS

Kmg (q) — Mount Givens Granodiorite
Coarse pattern indicates porphyritic phase; fine pattern aplitic phase.
q, *quartz mass*

JURASSIC OR CRETACEOUS

KJwr — Granodiorite of Whisky Ridge

KJcc — Granodiorite of Camino Creek

KJgc — Granodiorite of Grizzly Creek
Age uncertain relative to granodiorites of Camino Creek and Beasore Meadow

KJbm — Granodiorite of Beasore Meadow

KJsp — Quartz monzonite of Shuteye Peak

KJqm — Biotite quartz monzonite and granodiorite
In southeast corner of quadrangle. Finer-grained phase shown by pattern

KJdc — Granodiorite of Dinkey Creek

Age uncertain relative to granitic units older than Mount Givens Granodiorite

SMALL INTRUSIVE MASSES OF UNCERTAIN AGES RELATIVE TO OTHER GRANITIC UNITS

KJic — Granodiorite of Illilouette Creek

KJfg — Fine-grained quartz monzonite
In north edge of quadrangle

KJd — Dark granodiorite and other mafic plutonic rocks

PRE-TRIASSIC OR JURASSIC

METAMORPHIC ROCKS

JTrt — Metatuff and metatuff breccia

JTrr — Metarhyolite

pJs — Metasedimentary rocks
Quartzite, quartz mica schist, calc-silicate hornfels, and tactite

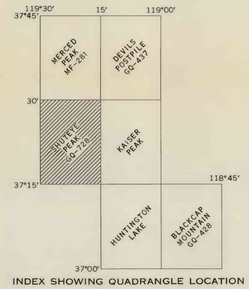
Y / O — Contact
Dashed where approximately located. Y and O indicate younger and older rock at localities where intrusive relationships are apparent

Boundary between textural variants within plutons

Lineament mapped from aerial photographs; probably joints or faults with small displacements

Inclined — Vertical
Strike and dip of beds
Arrow on dip bar indicates direction of top of bed when known from sedimentary structures

Inclined — Vertical — Inclined, strike variable — Near vertical, dip variable or uncertain — Near vertical, strike variable and dip variable or uncertain
Strike and dip of foliation
Primary foliation in plutonic rocks, secondary foliation in metamorphic rocks



INDEX SHOWING QUADRANGLE LOCATION

For sale by U.S. Geological Survey, price $1.00