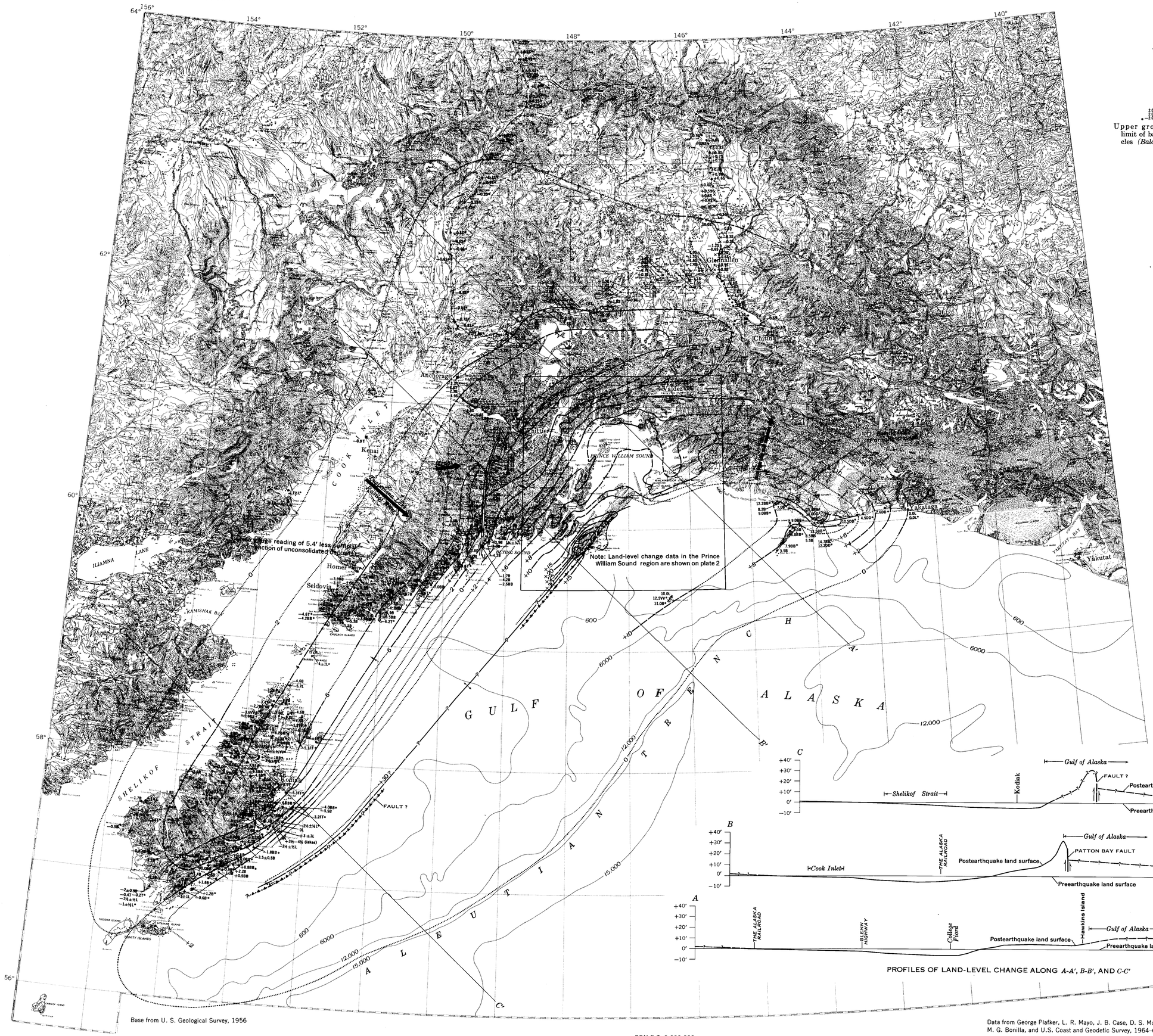


EXPLANATION

Upper growth limit of barnacles (*Balanus*) — 2.0B* / 2.0B / −2.0B

Upper growth limit of marine algae (*Fucus*) — 2.0F* / 2.0F / −2.0F

Height of tidal bench mark — 2.0TBM / −2.0TBM

Vertical tectonic displacement, in feet, measured along shore with tide level as a datum.
Asterisk indicates 1965 measurement; all others are 1964

Upper growth limit of barnacles (*Balanus*) — 2.0BB* / 2.0BB / −2.0BB

Upper growth limit of marine algae (*Fucus*) — 2.0FF* / 2.0FF / −2.0FF

Lower growth limit of terrestrial vegetation — 5.0VV* / 5.0VV / −5.0VV

Upper limit of storm tide driftwood. (In uplifted area only) — 10.0DD

Vertical tectonic displacement, in feet, from measured difference between pre- and postearthquake shoreline features
Asterisk indicates 1965 measurement; all others are 1964

5½±½L* / 5½±½L / −5½±½L

Vertical tectonic displacement, in feet, estimated by local resident
Asterisk indicates 1965 estimate; all others are 1964

−3.0TP* / −3.0TP

Vertical tectonic displacement, in feet, measured at standard U.S. Coast and Geodetic Survey tide-gage station
Asterisk indicates 1965 measurement; all others are 1964

−3.0T* / −3.0T

Vertical tectonic displacement, in feet, measured at temporary U.S. Coast and Geodetic Survey tide-gage station
Preearthquake observations were made between 1906 and 1957; postearthquake measurements were made in 1964 and 1965 (asterisk). Most of the displacement occurred during the earthquake

2.25* / 2.25 / −2.25

Vertical tectonic displacement, in feet, measured at U.S. Coast and Geodetic Survey bench mark
Preearthquake observations were made between 1922 and 1958; postearthquake measurements were made in 1964 and 1965 (asterisk). Most of the displacement occurred during the earthquake

−2 ——— −2

Isobase of tectonic land-level change
Contour interval is 2 feet from −8 to +10 feet; 5 feet from +10 to +35 feet. Solid where estimated precision is ± ½ contour interval; dashed where ± 1 contour interval; dotted where inferred

? ——— ?

Axis of tectonic uplift
Dashed where approximately located; queried where inferred

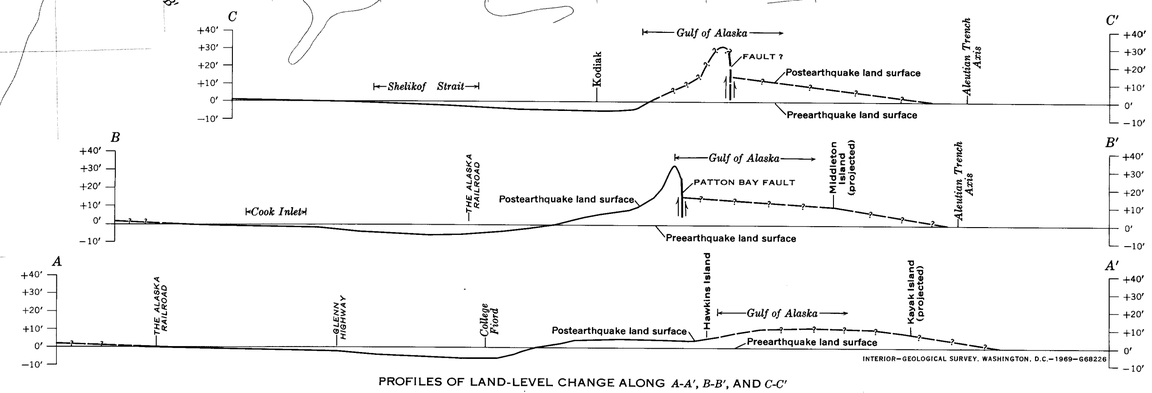
Axis of tectonic subsidence
Dashed where approximately located

Reverse fault
Dashed where approximately located; dotted where inferred. Barbs on upthrown side

U

Kenai lineament
Zone of possible earthquake-related surface faulting or concentrated warping and distortion. U, upthrown side. Arrows indicate sense of horizontal displacement suggested by retriangulation across the zone

Major drainage affected by tectonic warping
Dashed where uncertain. Arrow points in direction of tilt



PROFILES OF LAND-LEVEL CHANGE ALONG *A-A′*, *B-B′*, AND *C-C′*

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1969—G68226

Data from George Plafker, L. R. Mayo, J. B. Case, D. S. McCulloch, M. G. Bonilla, and U.S. Coast and Geodetic Survey, 1964–65

SCALE 1:2 000 000

50 0 50 100 150 MILES

50 0 50 100 150 KILOMETERS

CONTOUR INTERVAL 200 FEET
DATUM IS MEAN SEA LEVEL
SUBMARINE CONTOURS IN FEET

MAP SHOWING GROUND DEFORMATION RESULTING FROM THE 1964 ALASKA EARTHQUAKE IN SOUTH-CENTRAL ALASKA