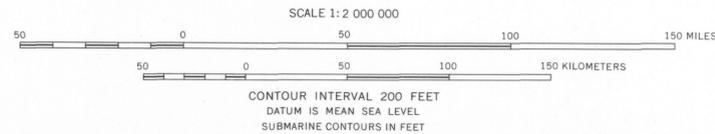


- EXPLANATION**
- Upper growth limit of barnacles (*Balanus*)
  - Upper growth limit of marine algae (*Fucus*)
  - Height of tidal bench mark
  - Vertical tectonic displacement, in feet, measured along shore with tide level as a datum. Asterisk indicates 1965 measurement; all others are 1964.
  - Upper growth limit of barnacles (*Balanus*)
  - Upper growth limit of marine algae (*Fucus*)
  - Lower growth limit of terrestrial vegetation
  - Upper limit of storm tide driftwood. (In uplifted area only)
  - Vertical tectonic displacement, in feet, from measured difference between pre- and postearthquake shoreline features. Asterisk indicates 1965 measurement; all others are 1964.
  - Vertical tectonic displacement, in feet, estimated by local resident. Asterisk indicates 1965 estimate; all others are 1964.
  - 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.
  - 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.
  - Vertical tectonic displacement, in feet, measured at U.S. Coast and Geodetic Survey bench mark. Preearthquake observations were made between 1922 and 1952; postearthquake measurements were made in 1964 and 1965 (asterisk). Most of the displacement occurred during the earthquake.
  - 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  $\pm 1/2$  contour interval; dashed where  $\pm 1$  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.
  - 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.

Base from U. S. Geological Survey, 1956

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



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