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**DIGITIZED FAULTS OF THE NEOTECTONIC MAP OF ALASKA
(PLAFKER AND OTHERS, 1994)**

by

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Abstract

The *Neotectonic Map of Alaska* (Plafker and others, 1994) represents the first comprehensive compilation of tectonic faults and folds in Alaska and outlines the relative activity of post-Oligocene structures. Commonly referred to as “the Plafker map,” this publication is out of print and was used as baseline information for the creation of the *Quaternary fault and fold database for Alaska* (Koehler and others, 2012).

The fault and fold database published by Koehler and others (2012) incorporates research carried out over the 20 years since publication of the original Plafker map and makes the results available in digital form. Koehler and others (2012) digitized Quaternary faults and folds from original sources at their original scales; their publication thus represents a more accurate depiction of the Quaternary traces shown on the Plafker map. Sheet 1 of Koehler and others (2012) includes the pre-Quaternary traces from the Plafker map as a background layer to show the distribution of faults throughout the state.

To assist the user community and encourage more detailed mapping and paleoseismic research, we digitized the fault and fold traces from the Plafker map and made two vector shapefiles of these structures. These files are available for download. This package includes (1) a shapefile of all structures from the Plafker map, and (2) a shapefile of only pre-Quaternary structures. Ancillary features from the Plafker map that were not digitized include volcanic rocks, active thermal springs, bathymetric contours, focal regions and epicenters of major earthquakes, and depth contours of the Pacific Plate beneath the margin of southern Alaska. The scale of the Plafker map is 1:2,500,000, thus the data are not intended for depiction on large-scale maps. For the most accurate depiction of the locations of faults and folds in Alaska, users are referred to sheet 1 of Koehler and others (2012), which presents a combined dataset of the pre-Quaternary structures of the Plafker map (this publication) and the Quaternary structures of Koehler and others (2012).

References

- Plafker, George, Gilpin, L.M., and Lahr, J.C., 1994, Neotectonic map of Alaska, *in* Plafker, George, and Berg, H.C., eds., *The Geology of Alaska: Geological Society of America Decade of North American Geology*, v. G-1, 2 sheets, scale 1:2,500,000. Out of print; copy available online, <http://dggs.alaska.gov/pubs/id/22261>.
- Koehler, R.D., Farrell, R.-E., Burns, P.A.C., and Combellick, R.A., 2012, Quaternary faults and folds of Alaska—A digital database: Alaska Division of Geological & Geophysical Surveys, Miscellaneous Publication 141, <http://www.dggs.dnr.state.ak.us/pubs/id/23944>.