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Relation of Recent Seismicity (1988-Present) to the 1958 Huslia, Alaska Earthquake Sequence

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We have examined how recent seismicity in the Huslia region of central Alaska is related to active faults and the 1958 earthquake sequence (with at least 3 events of magnitude >6). Most of this region is swampy lowland dominated by alluvial material deposited by the Koyukuk River, making surficial identification of active faults difficult. This portion of Alaska is also of interest because it appears to be a region in transition between the strike-slip faulting of the Salcha-Fairbanks-Minto Flats seismic zone and normal faulting of western Alaska (Norton Sound/Seward Peninsula). Researchers have suggested this change in the nature of faulting is due to the rotation of western Alaska away from central Alaska and the formation of a new microplate called the Bering Block. The eastern edge of the Bering Block is postulated to be located just east of Huslia. Our eventual goal is to combine information on recent seismicity, geology and geophysics with a careful analysis of the waveforms of the 1958 sequence in order to better understand the seismic hazards and tectonic processes of the area.