

Development of a young pull-apart basin in the California Continental Borderland: High-resolution seismic reflection profiling of San Pedro Basin

Robert D. Francis

Mapping using seismic reflection data suggests that the San Pedro Basin and Palos Verdes faults may be related, possibly dynamically. The two faults converge toward the southern end of San Pedro Basin, each has an associated set of subparallel folds, and one or more small faults link them. It is possible that the San Pedro Basin fault is accommodating displacement that is inhibited by a restraining bend on the Palos Verdes fault. San Pedro Basin appears to be a remnant of a former much larger basin that has in places been inverted by pop-up or restraining bend structures along strike slip faults such as the Palos Verdes fault.

