APPENDIX A

Field Data From the Josephine Peridotite

Structural data was collected from a large region of the Josephine Peridotite in northern California. Figure A1 (from Evans, 1987) shows the extent of the Josephine Peridotite over the relevant 15 minute quadrangles in northern California and southern Oregon. Plates A-D are 7.5 minute quadrangles with structural data collected from selected quadrangles during this project. Each quadrangle on which the "detachment" shear zone was located are shown. Figure A2 is the key for the structural data on these maps. Note that these maps display structural data almost exclusively, since lithologic contacts were not mapped during this project as they have been previously determined.

Plate A is the Gasquet 7.5 minute quadrangle, which is the southwest quarter of the Gasquet 15 minute quadrangle. Plate B is the High Plateau 7.5 minute quadrangle, which is the northwest quarter of the Gasquet 15 minute quadrangle. Plate C is the Klamath Glen 7.5 minute quadrangle, which is the southwest quarter of the Ship Mountain 15 minute quadrangle. Plate D is the Cant Hook Mountain quadrangle, which is the northwest quarter of the Ship Mountain 15 minute quadrangle.

KEY

Plates A-D

Plastic shear zone, solid lines where observed, dashed where approximate, and dash-dot where inferred Cataclastic shear zone, solid lines where observed, dashed where approximate, and dash-dot where inferred Thrust contact, may have also experienced strike-slip displacement Strike and dip of mylonitic foliation Strike and dip of incohesive cleavage Strike and dip of mantle flow foliation Trend and plunge of stretching lineation in plastic shear zones, also used on Plate C for stretching lineation in mantle tectonites Trend and plunge of stretching lineation in mantle tectonites

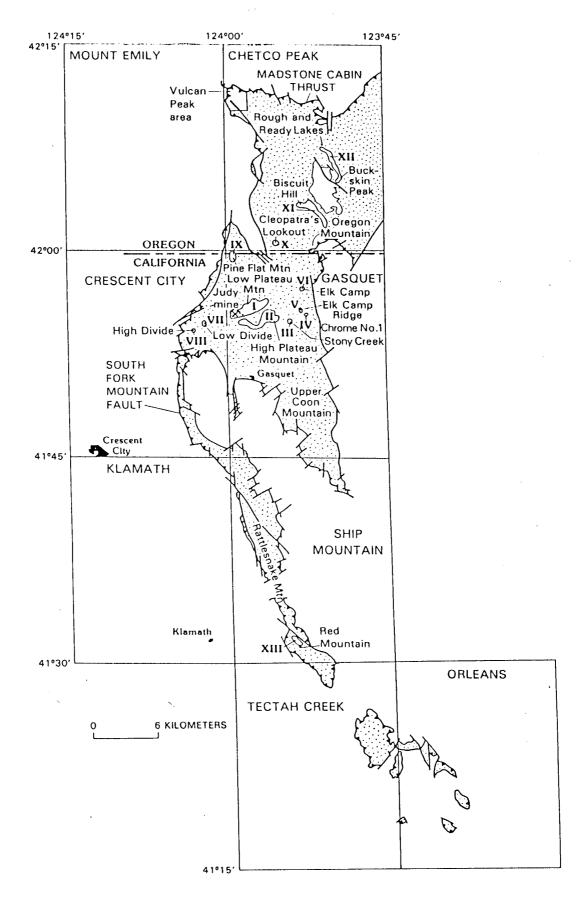


Fig. A1. Relevant 15 minute quadrangles in northern California and southern Oregon. From Evans, 1987.