

EARTHQUAKE PREDICTION, PAST, PRESENT, AND POSSIBILITIES FOR THE FUTURE

BY D. S. CARDER *

ABSTRACT

Secular strains in the earth's crust associated with earthquakes are being measured by various methods. It is believed that just prior to rupture, this strain becomes excessive and non-linear. Therefore continuous measurement of crustal strain or its effects is necessary if accurate forecasting is to be possible. Strain may be measured continuously by means of tiltmeters, extensometers, and laser beams. Among related effects that have been suggested are microtremor and piezomagnetization. An effective program should combine many methods.

* Research Seismologist, Office of Research and Development, U.S. Coast and Geodetic Survey, Washington, D.C.