Study of Periodic, Chaotic and Doubled Earthquake Recurrence Intervals

Earthquake recurrence histories, according to a recent communication in Science (11th June 201, p.1385), provide clues to the timing of future events, but long intervals between large events obscure full recurrence variability. In contrast, small earthquakes occur frequently, and recurrence intervals are quantifiable on a much slower time scale. An examination of 8.5 year sequence of more than 900 recurring low-frequency earthquake bursts composing tremor beneath the San Andreas fault near Parkfield, California. These events exhibit tightly clustered recurrence intervals that, at times, oscillate between -3 and -6 days, but the patterns sometimes change abruptly. Although the environment of large and low-frequency earthquakes are different, these observations suggest that similar complexity might underlie sequences of large earthquakes."

The region of Koyna in the state of Maharashtra, India would offer the best opportunity for carrying out similar studies by seismologists in India. -BPR