

Seismic activity in and around the inferred locked zone in the Tokai area (No.5:Activity change beneath Lake Hamana)

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The crustal activity in the Tokai area shows unusual changes since the latter half of 1990, where a next Tokai earthquake is feared to occur. Two kinds of such signs were detected. One is seismic quiescence appeared in and around the inferred locked zone, which progressed since the end of 1996. The other is GPS movement observed around Lake Hamana since the beginning of 2001. The latter phenomenon is interpreted to be due to a slow slip progressing along the plate interface just beneath Lake Hamana. Kimata(2001), based on the laser ranging proposed that the same phenomena took place in the similar location at least two times during the past two decades. This can be supported also from the seismic activity changes beneath Lake Hamana. We have an image that the location where the slip takes place must be the western edge of the locked zone, so easy to slip. However, the degree of the present unusualness seems extraordinary compared with the past two cases. We must pay much attention to a coming stage.