



A retrospective strain time-pointer of the 2008 Wenchuan earthquake

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Anomalous changes recorded by the borehole strainmeter at Guza station before the Wenchuan earthquake are characterized by pulses or steps of much contraction and little expansion with respect to areal strain. The relative weight of contraction to expansion does not appear evenly nor randomly during the time but seemingly reflects the preparation process of the seismic event and, after the first increasing stage, goes in a convergent trend toward the normal level at the main shock instant. Upon on the concepts of Overrun Rates both for number and strength of overrun points of standard deviation, some tentative approaches are tested in order to build a time-pointer for retrospectively forecasting the disastrous earthquake according to the trend. The results are fairly promising with proper working cutoff period of high-pass filter.