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Analysis of the time-scaling behaviour in the sequence of the aftershocks of Al-Hoceima (Morocco) February 24, 2004 earthquake

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Analysis of the temporal fluctuations in the sequence of aftershocks of the Al-Hoceima (Morocco) earthquake of February 24, 2004 has been performed, using fractal methods (Fano Factor, Allan Factor, Count-based Periodogram) suited for detecting time-scaling behaviour in point processes. The sequence of the occurrence times of the aftershocks is characterised by a scale-invariant behaviour, indicating the presence of fluctuations on many timescales and therefore of fractal clustering. This work has been performed in the frame of the scientific bilateral agreement CNR/CNRST.