Accepted Manuscript

Self-affinity and self-organized criticality applied to the relationship between the economic arrangements and the dengue fever spread in Bahia

A.S. Nascimento Filho, M.L.V. Araújo, J.G.V. Miranda, T.B. Murari, H. Saba, M.A. Moret

PII: S0378-4371(18)30343-1
DOI: https://doi.org/10.1016/j.physa.2018.03.024
Reference: PHYSA 19358

To appear in: *Physica A*

Received date : 18 September 2017
Revised date : 9 March 2018

Please cite this article as: A.S.N. Filho, M.L.V. Araújo, J.G.V. Miranda, T.B. Murari, H. Saba, M.A. Moret, Self-affinity and self-organized criticality applied to the relationship between the economic arrangements and the dengue fever spread in Bahia, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.03.024

HIGHLIGHTS

We studied dengue fever spread in the economic regions of Bahia-Brazil.

- We studied self-affinity in a disease diffusion process.
- We compare the spread disease for differents regional arrangements.
- We finding two self-affinity behavior in the time series.
- We suggest that dengue fever behavior follow a complex adpative system.