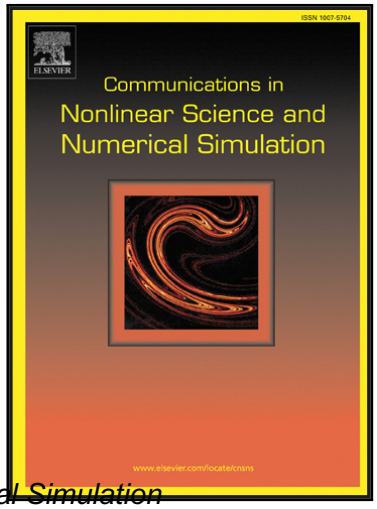

A network landscape model: stability analysis and numerical tests

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Highlights

- A network mathematical model for an environmental system is proposed.
- Each node represents a Landscape Unit (LU), described by a system of ODEs.
- Evolution of bio-energy production and percentage of green areas is investigated.
- Existence, stability and bifurcations of equilibrium states are studied.
- Network dynamics follows from qualitative analysis of a proper reduced 2D system.