

CHEBAN, David, Mammana, Cristiana **Invariant manifolds, global attractors and almost periodic solutions of nonautonomous difference equations.** In: [Nonlinear Analysis: Theory, Methods & Applications](#). 2004, **Volume 56, Issue 4**, pp. 465 – 484. ISSN 0362-546X.

The article is devoted to the study of quasi-linear nonautonomous difference equations: invariant manifolds, compact global attractors, almost periodic and recurrent solutions and chaotic sets. First, we prove that such equations admit an invariant continuous section (an invariant manifold). Then, we obtain the conditions for the existence of a compact global attractor and characterize its structure. Third, we derive a criterion for the existence of almost periodic and recurrent solutions of the quasi-linear nonautonomous difference equations. Finally, we prove that quasi-linear maps with chaotic base admit a chaotic compact invariant set. The obtained results are applied while studying triangular maps: invariant manifolds, compact global attractors, almost periodic and recurrent solutions and chaotic sets.