Scott W. Williams, Haoxuan Zhou
Order-like structure of monotonically normal spaces

Comment.Math.Univ.Carolinae 39,1 (1998) 207-217.

Abstract: For a compact monotonically normal space X we prove: (1) X has a dense set of points with a well-ordered neighborhood base (and so X is co-absolute with a compact orderable space); (2) each point of X has a well-ordered neighborhood π-base (answering a question of Arhangel'skii); (3) X is hereditarily paracompact iff X has countable tightness. In the process we introduce weak-tightness, a notion key to the results above and yielding some cardinal function results on monotonically normal spaces.

Keywords: monotonically normal, compactness, linear ordered spaces
AMS Subject Classification: 54D15, 54D30, 54F05