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On Manes' countably compact, countably tight, non-compact spaces

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Abstract: We give a straightforward topological description of a class of spaces that are separable, countably compact, countably tight and Urysohn, but not compact or sequential. We then show that this is the same class of spaces constructed by Manes [*Monads in topology*, Topology Appl. **157** (2010), 961–989] using a category-theoretical framework.

Keywords: countably compact, countably tight, p-compact, p-sequential
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References

[1] Manes E., *Monads in topology*, Topology Appl. **157** (2010), 961–989.
[2] Nyikos P., *Classic problems - 25 years later (part 2)*, Topology Proc. **27** (2003), 365–378.
[3] Nyikos P., Vaughn J., *The Scarborough-Stone problem for Hausdorff spaces*, Topology Appl. **44** (1992), 309–316.
[4] Dow A., *A countably compact, countably tight, non-sequential space*, Proceedings of the 1988 Northeast Conference on General Topology and Applications, Dekker, New York, 1990, pp. 71–80.
[5] Kombarov A., *Compactness and sequentiallity with respect to a set of ultrafilters*, Moscow Univ. Math. Bull. **40** (1985), 15–18.
[6] van Mill J., *An introduction to $\beta\omega$*, Handbook of Set-Theoretic Topology, North-Holland, Amsterdam, 1984, pp. 503–567.
[7] Mac Lane S., *Categories for the working mathematician*, Graduate Texts in Mathematics, 5, Springer, New York-Berlin, 1971.