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A short note on nearly perfect maps of locales. (English) [Zbl 1436.06027](#)
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Summary: We characterise compact locales in terms of nearly perfect maps. We show in particular that these maps are the natural pointfree version of Bourbaki's proper maps – when defined via any ultrafilter – and that they extend *H. Herrlich's* notion of nearly closed sublocales [*Appl. Categ. Struct.* 1, No. 1, 111–132 (1993; [Zbl 0796.54034](#))].

MSC:

[06D22](#) Frames, locales
[06A15](#) Galois correspondences, closure operators (in relation to ordered sets)
[18F60](#) Categories of topological spaces and continuous mappings
[54D30](#) Compactness

Keywords:

locales; frames; nearly perfect maps; nearly closed sublocales; compactness; nucleus

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