Functorial maximal spectra

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Usually, maximal spectra (of one kind or another) are not expected to be functorial, in notable contrast with the corresponding prime spectra, but there are some cases in which the particular nature of the structures concerned make them so. Here, we consider this in the setting of *compact normal frames*, establishing the more fundamental functoriality of their saturation quotients and showing this to be the root of results concerning f-rings (Isbell 1965), Gelfand rings (Mulvey 1979), and the maximal ideals of $C(X)$ (Gelfand-Kolmogoroff 1939). The picture will be augmented by appropriate counterexamples.