We show a few results about the existence of absolutely continuous invariant measure (acim) for random maps both with constant probabilities and with probabilities dependent on position. Then, we discuss some properties of the acim's. In particular we show an example of a random map satisfying Pelikan's condition with the support of acim consisting of infinite number of disjoint intervals and with the density of acim not separated from 0. This is in contrast with the properties of acim's for individual piecewise expanding maps.

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