1120-37-148 Chris Bose* (cbose@uvic.ca), Department of Mathematics and Statistics, University of Victoria, PO Box 1700 STN CSC, Victoria, BC V8W 2Y2, Canada, and Wael Bahsoun. Limit theorems for random intermittent maps.

It is well known that non-uniformly expanding, nonsingular maps in one and higher dimensions can exhibit a wide variety of interesting higher-order asymptotics such as sub-exponential rate of correlation decay, central limit theorem, or not, stable laws or not, depending on the strength of the intermittency. We study random maps constructed from a parameterized family of such intermittent maps, drawing two interesting conclusions. 1. Rates of correlation decay are completely determined by the map with the fastest mixing rate, independent of the randomizing process and 2. In cases where correlation decay fails to be square summable, establishing a CLT or stable law (as appropriate) is dependent on both the maps and the randomizing process. We will describe these results and discuss some of the ideas behind the proofs. (Received February 19, 2016)