Use of the topographic ring model to identify candidate taxa for ring diversification around a focal barrier in the Iberian Peninsula (southern Europe) that is topographically similar to the reference barrier for the Drakensberg Massif (South Africa), which has promoted ring diversification in a tree species, *Acacia karroo* [1]. Extensive field-based studies in Iberia – particularly in reptiles and amphibians – have generated considerable distributional [2,3] and phylogeographic [4] data that can be used to evaluate whether the focal barrier has promoted continuous levels of differentiation typical of ring divergence. The focal barrier (top panel, map) is a long-standing geographic barrier for terrestrial organisms, serving as a steep ecotone between the main climatic regions of Iberia [5]. As a result of its particular topography, a central arid and warmer plateau is surrounded by moister and colder habitat. These climatic conditions have shaped the distribution of many Atlantic species on the peninsula [5], including the fire salamanders *Salamandra salamandra* [6], and also Schreiber's green lizard *Lacerta schreiberi* [7], which forms a nearly complete ring distribution around the barrier (map). Extensive genetic data (in both mitochondrial and nuclear DNA) have been collected to reconstruct its phylogeographic history [7]. In agreement with our model prediction, multi-locus data suggest that the focal barrier has strongly influenced non-adaptive divergence among currently contiguous populations of *L. schreiberi*, showing evidence of continuous levels of genetic differentiation around the barrier and no evidence of historical gene flow across it (bottom panel, phylogenetic network; thick branches are supported by >0.95 posterior probability). Although the species in this example lacks terminal overlap, it illustrates how the topographic ring model may be used to properly identify and evaluate new instances of ring diversification. Genetic data and sampling locations adapted from Godinho et al. [7]. Geographic range map obtained from IUCN [8].

References