Each method provides slightly different insights into seabird distribution. Occupancy models indicate the area of occurrence for a species, with the map values representing the probability of occurrence (ψ). N-mixture models aim to model abundance predicting the expected number of individuals in each grid cells. However, in our case, geographical closure of sites is not independent as individuals can easily travel from one site to another. Then, N-mixture estimation \lambda does not capture the expected number of individuals, but reflect an averaged number of individuals using the site when it is surveyed (ref). Similarly, the predicted occurrence probability is more a measure of the probability that the species is using the sites when it is surveyed, than the true occurrence probability of the species at each   
site. Consequently, occupancy and N-mixture models do not directly measure occurrence and abundance but rather provide a relative intensity of space use by seabirds [45]. Besides, the intercept of the RSF is not meaningful (see specific section), and the output reflects relative habitat selection, indicating areas of higher or lower use. Overall, we interpreted our models outputs as relative space use, which is consistent across different data sources and modelling approaches, and will use the term ”relative space-use” to describe the results obtained from each method, despite subtle differences in what each method specifically measures.