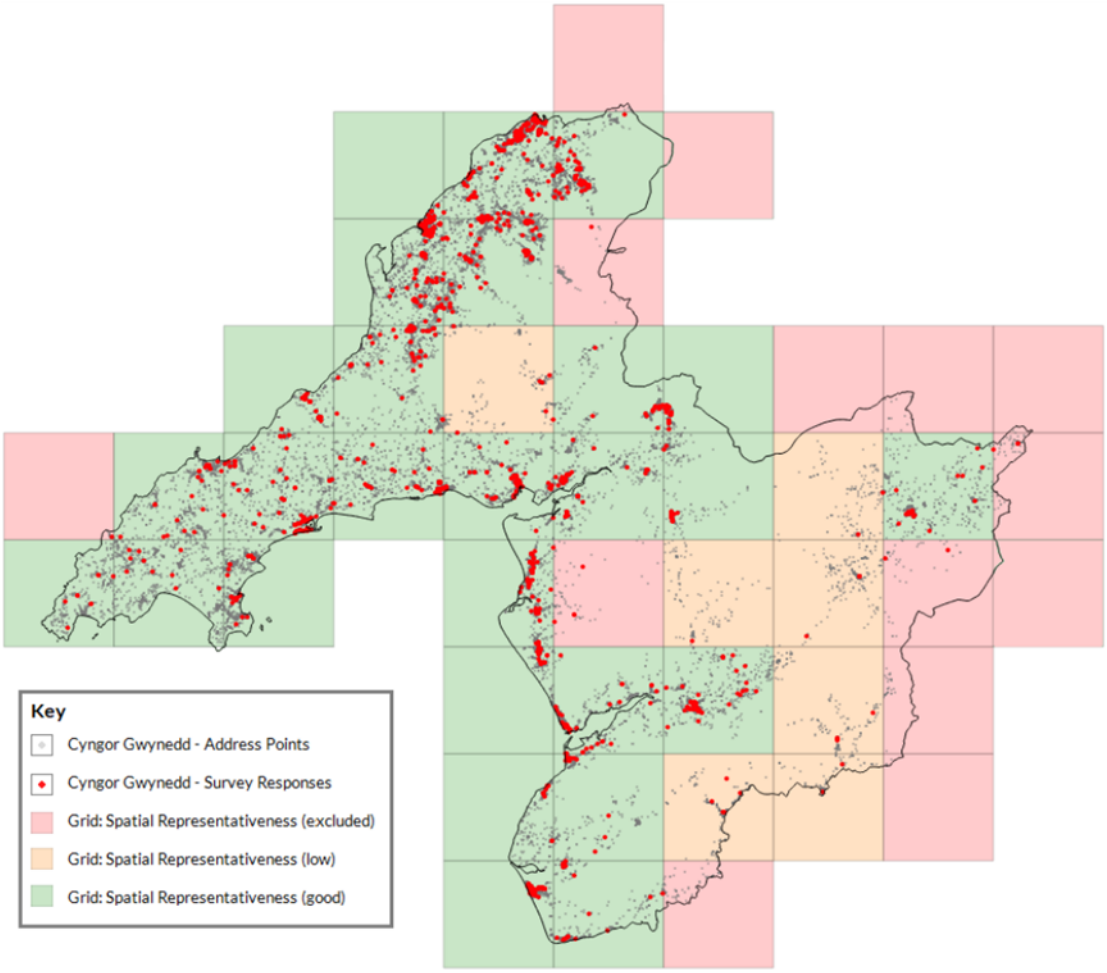
Appendix 3: Spatial Representativeness



The spatial representativeness of survey respondents was assessed by comparing the observed spatial distribution of respondents against the underlying household population using a grid-based analysis. Household and respondent counts were aggregated to a grid, and proportional differences were mapped and tested using a chi-square goodness-of-fit test. The test is used to analyse categorical data to determine if there is a significant relationship between variables or if observed frequencies differ from expected frequencies. The chi-square test was used to check whether the survey responses are spread across the area in roughly the same way as all households, or whether some places responded much more or less than expected.

The grid overlayed on to all CG address points and survey response address points. Some grid squares had populations too low to include in the analysis (shown in red). Of the remaining grid squares 27 (green) indicated no statistically significant spatial bias ($p > 0.05$), and 7 (amber) showed a small amount of statistically significant spatial bias ($p \leq 0.05$). Overall, this demonstrates that the respondent sample was generally geographically representative of the household population with some bias in some areas.