1 Introduction

The `MRSea` package was developed for analysing data that was collected for assessing potential impacts of renewable developments on marine wildlife, although the methods are applicable to other studies as well. This vignette gives an updated example of the code for version 0.2.0. For additional information regarding methods, see Mackenzie, et al. (2013) and Scott-Hayward, et al. (2013). The user should be familiar with generalised linear models and their assumptions and model selection. The `MRSea` package primarily allows spatially adaptive model selection for both one and two dimensional covariates using the functions `runSALSA1D_withremoval` and `runSALSA2D`, which implement the methods of Walker, et al. (2010) and Scott-Hayward, et al. (2013). Other functions include diagnostics (to assess residual correlation: `runACF`, smooth relationships: `runPartialPlots` and model selection (ANOVA) for a Generalised Estimating Equation used when residual correlation is present: `getPvalues`) and inference (`do.bootstrap.cress`).

2 References:

[1] M. Mackenzie, L. Scott-Hayward, C.S., Oedekoven, H., Skov, E. Humphreys and E. Rexstad. $_{S}tatistical Modelling of Seabird and Cetacean data : Guidance Document. University of St. Andrews contract for Mar$
$Hayward, C. Oedekoven, M. Mackenzie, C. Walker and E. Rexstad._{U}serGuide for the MRSea Package v0.1.2 :$
$Statistical Modelling of bird and cetacean distributions in offshore renewables development areas. University of St. Andrew$
$A Spatially Adaptive Local Smoothing Algorithm". In :_{J}ournal of Statistical Computation and Simulation_{8}1.2(2010), pp.1$
191.

```
## Error:  argument 1 (type 'list') cannot be handled by 'cat'
```