

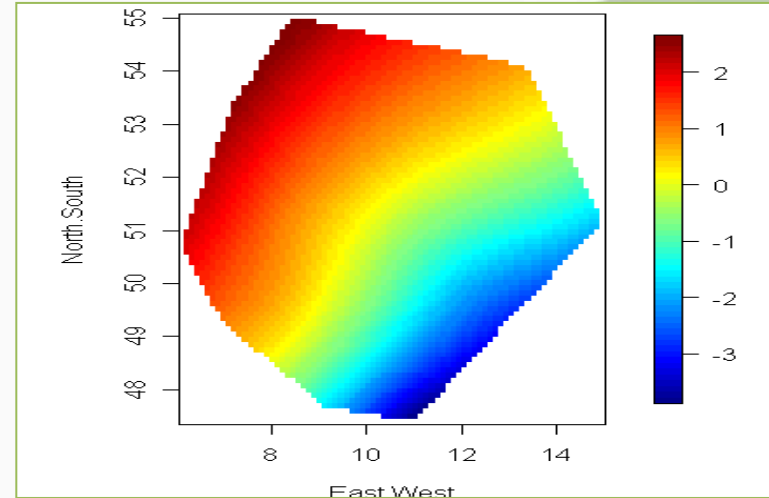


Climate Modelling for Prediction

My name is Daniel Brown and I'm a PhD student funded by EPSRC through the National Centre for Statistical Ecology.

The two main strands of work are:

- Using local weather covariates to explain the survival of wild animals with applications to Blackbirds (*Turdus Merula*) and Brent Geese (*Branta bernicla*).
- Applying a variable selection technique, the lasso, to ring-recovery data to aid the difficult task of covariate selection.



One particular application of local weather covariates examines the survival of blackbirds in Germany.

Weather maps (see figure) are produced, using thin plate splines, to estimate the temperature and rainfall at specific locations. This produces an individual local weather covariate.