## A new spatial model for points above a threshold $_{\mbox{\scriptsize June }19,\,2014}$

MVN results: The distribution of  $\mathbf{x}_1$  conditional on  $\mathbf{x}_2 = a$  is  $N(\mu^*, \Sigma^*)$  where 3

$$\mu^* = \mu_1 + \Sigma_{12} \Sigma_{22}^{-1} (a - \mu_2)$$
  
$$\Sigma^* = \Sigma_{11} - \Sigma_{12} \Sigma_{22}^{-1} \Sigma_{21}$$