

Beta Regression in the Presence of Outliers - a wieldy Bayesian solution

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JAGS code for the RB-BRM with variable dispersion

```
model
{
  for( i in 1 : N ) {
    y[i]~dbeta(a[i],b[i]);
    a[i]<-mu[i]*phi[i];
    b[i]<-phi[i]*(1-mu[i]);
    for( j in 1:T1){
      c[i,j]<-x[i,j]*beta[j];
    }
    logit(mu[i])<-beta0+sum(c[i,]);
    for( k in 1:S){
      d[i,k]<--z[i,k]*gam[k];
    }
    log(phi[i])<--gam0+sum(d[i,]);
  }
  dofb0~dunif(2,100);
  beta0~dt(0,1000,dofb0);
  for( j in 1:T1){
    dofb[j]~dunif(2,100);
    beta[j]~dt(0,1000,dofb[j]);
  }
  dofg0~dunif(2,100);
  gam0~dt(0,1000,dofg0);
  for( j in 1:S){
    dofg[j]~dunif(2,100);
    gam[j]~dt(0,1000,dofg[j]);
  }
}
```

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