R Notebook

```r
library("faraway")
require(nlme)
```

```
## Loading required package: nlme
```

```r
glmod <- gls(nhtemp ~ wusa + jasper + westgreen + chesapeake +
tornetrask + urals + mongolia + tasman, correlation=corAR1(form=~year), data=na.omit(globwarm))
summary(glmod)
```

```
## Generalized least squares fit by REML
##   Model: nhtemp ~ wusa + jasper + westgreen + chesapeake + tornetrask +     urals + mongolia + tasman
##   Data: na.omit(globwarm)
##         AIC       BIC   logLik
##   -108.2074 -76.16822 65.10371
##
## Correlation Structure: AR(1)
##  Formula: ~year
##  Parameter estimate(s):
##       Phi
## 0.7109922
##
## Coefficients:
##                  Value  Std.Error    t-value p-value
## (Intercept) -0.23010624 0.06702406 -3.433188  0.0008
## wusa         0.06673819 0.09877211  0.675678  0.5004
## jasper      -0.20244335 0.18802773 -1.076668  0.2835
## westgreen   -0.00440299 0.08985321 -0.049002  0.9610
## chesapeake  -0.00735289 0.07349791 -0.100042  0.9205
## tornetrask   0.03835169 0.09482515  0.404446  0.6865
## urals        0.24142199 0.22871028  1.055580  0.2930
## mongolia     0.05694978 0.10489786  0.542907  0.5881
## tasman       0.12034918 0.07456983  1.613913  0.1089
##
##  Correlation:
##            (Intr) wusa   jasper wstgrn chespk trntrs urals  mongol
## wusa       -0.517
## jasper     -0.058 -0.299
## westgreen   0.330 -0.533  0.121
## chesapeake  0.090 -0.314  0.230  0.147
## tornetrask -0.430  0.499 -0.197 -0.328 -0.441
## urals      -0.110 -0.142 -0.265  0.075 -0.064 -0.346
## mongolia    0.459 -0.437 -0.205  0.217  0.449 -0.343 -0.371
## tasman      0.037 -0.322  0.065  0.134  0.116 -0.434  0.416 -0.017
##
## Standardized residuals:
##         Min          Q1         Med          Q3         Max
## -2.31122523 -0.53484054  0.02342908  0.50015642  2.97224724
##
## Residual standard error: 0.204572
## Degrees of freedom: 145 total; 136 residual
```