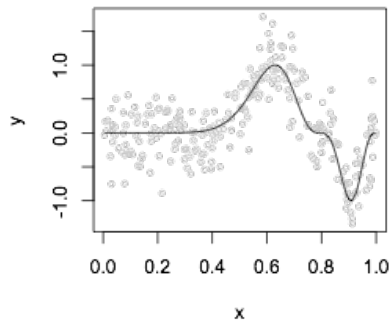## This example is taken from "Extending the Linear Model with R" by Faraway
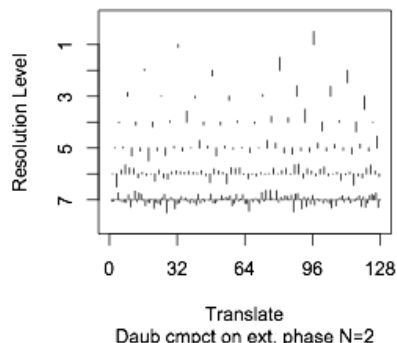
```
> library(faraway)
> data(exa)
> plot(y~x,exa,col="gray",cex=0.6,main = "Example A from Faraway")
> lines(m ~ x, exa) # the true function sin^3(2*pi*x^3)
```

Example A from Faraway


```
> library(wavethresh)
> wds = wd(exa$y)
> plot(wds) # this shows all the coefficients; you could also >draw(wds)
```

Wavelet Decomposition Coefficients


```
> wtd = threshold(wds)  # remove the small coefficients
>  fd = wr(wtd) # and reconstruct the original function, using wr

> lines(fd ~ x, exa, col="red", lty=5)  # after making the 1st plot active
```

Example A from Faraway