```
## m3  3 111.4823
```

```
bm = m3
```

Again, the best model is model 3, which includes *light* only.

```
summary(bm)
```

```
##
## Family: gaussian
## Link function: identity
##
## Formula:
## logst(val) ~ light
##
## Parametric coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.6449     0.1365  -4.723  1.8e-05 ***
## light         0.5859     0.1802   3.251  0.00202 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## R-sq.(adj) =  0.153   Deviance explained = 16.9%
## GCV = 0.44529  Scale est. = 0.4288    n = 54
```

Here there is one main effect of *light*, and the model indicates that maximum standardized peak bird densities were $10^{0.58} = 3.9$ times higher during illuminated periods, on average.

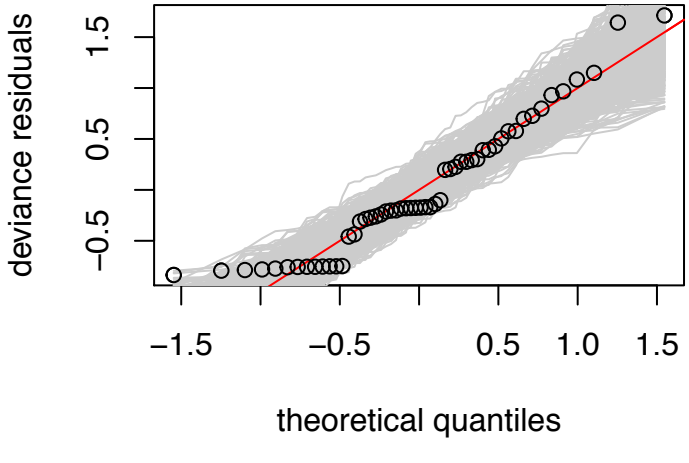
Results for the main text:

```
res = summary(bm)$p.table
res = cbind(res,Factor=10^(res[,"Estimate"]))
# Effect of light after exponentiating the coefficient to get multiplicative factor
print.model.summary(res[2,5],res[2,3],res[2,4],units="x",effect.word="factor")
```

```
## [1] "factor = 3.9x, t = 3.25, P = 0.0020"
```

All points are within the gray simluated lines.

```
qq.gam(bm,rep=1000,pch=1,level=1)
```



The Tukey-Anscombe plot suggests that the variance may be increasing, but the difference is not extreme.