Calibration

Goals

Many scientific phenomena are studied via mathematical (i.e., computer) models and field experiments, simultaneously.

Kennedy and O'Hagan

Kennedy and O'Hagan (2001) (http://onlinelibrary.wiley.com/doi/10.1111/1467-9868.00294/abstract) proposed a framework for coupling and .

KOH represent a real process as

-

The result is too wigly, and involves high uncertainty in the gap.

```
plot(ball, xlab="height", ylab="time"); lin
```

Getting

Lets run back through some of the calculations to get out the estimated bias (`gpi` reference) with the value we found.

- Provide `clean=FALSE`

Cross-validation

```
b <- mean(- (ball$time - m)^2/s2 - log(s2))
nb <- mean(- (ball$time - mnb)^2/s2nb - log(s2nb))
scores <- c(biased=b, unbiased=nb)
scores
```

```
##   biased unbiased
## 4.216665 3.977722
```

- Higher is better: biased wins!

Don't forget that the comput$