

Exer 5.13

[A/AC134]

The graphs below show models of the Old Faithful geyser; the waiting time until the next eruption is modeled as a function of the duration of the eruption that just occurred.

In each case, judge from the shape of the graph which model is being presented. Note that the variable `biggerThan3` is a categorical variable that indicates simply whether the duration was longer than 3 minutes.

(A) `waiting ~ duration`

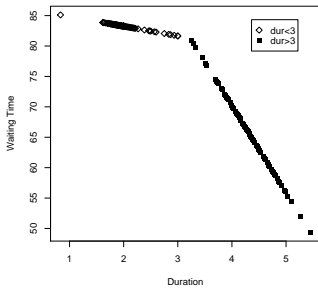
(B) `waiting ~ duration + biggerThan3`

(C) `waiting ~ duration*biggerThan3`

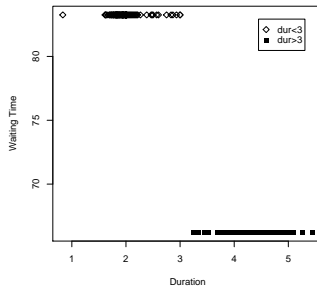
(D) `waiting ~ biggerThan3`

(E) `waiting ~ poly(duration,2)`

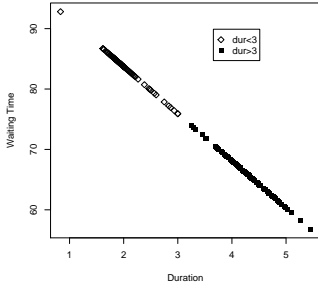
(F) `waiting ~ poly(duration,2)*biggerThan3`



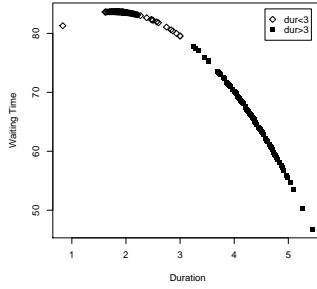
1. A B C D E F Exer 5.13-1



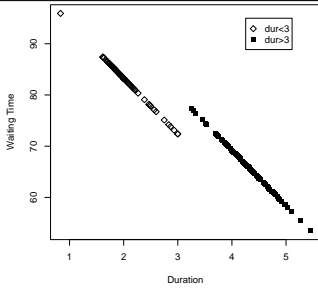
2. A B C D E F Exer 5.13-2



3. A B C D E F Exer 5.13-3



4. A B C D E F Exer 5.13-4



5. A B C D E F Exer 5.13-5