OLD FAITHFUL GEYSER

Data consists of 299 successive observations
- August 1985
- Each observation is (waiting time to eruption, length of eruption)
- Stored in R data frame geyser with columns ‘waiting’ and ‘duration’
World Geyser Distribution
50% of world’s geysers are in Yellowstone Park
How does NPS predict the waiting time to the next eruption?

- If an eruption is < 2.5 min, predict next eruption in 65 min
- If an eruption is > 2.5 min, predict next eruption in 92 min

In our data set there are:
- 97 eruptions < 2.5 minutes
- 200 eruptions > 2.5 minutes
- 1 eruption on borderline (2.5 minutes)
The Park Service believes that shorter eruptions empties the top chamber (to depth approximately 35 feet); longer eruptions empty both chambers.

However the behavior of Old Faithful changed in 1998 due to a local earthquake. Our data is from 1985, so current prediction rules might not apply.