

Addendum to “Human or Cylon? Group testing on Battlestar Galactica” by Christopher R. Bilder

At the beginning of the “Cylon Detection” section on p. 48, it is said that

Battlestar Galactica fans now know there were most likely seven Cylons out of the 47,905 individuals in the fleet Taking this seven as the true count, the overall prevalence becomes approximately 0.0001461.

These seven Cylons were Saul Tigh, Ellen Tigh, Galen Tyrol, Tory Foster, Sharon "Boomer" Valerii (Number Eight), John Cavil (Number One), and D'Anna Biers (Number Three). By the time Baltar was to start general testing in the fleet (“Tigh Me Up, Tigh Me Down” episode), the Cylons Leoben Conoy (Number Two), Shelley Godfrey (Number Six), and Aaron Doral (Number Five), who were all originally in the fleet, had died.

After the series ended, the movie “Battlestar Galactica: The Plan” was released on October 27, 2009, to DVD and will appear in 2010 on Syfy. The movie explored what the Cylons were doing from two weeks prior to their attack on the colonies to 281 days after their attack. It was revealed that there were actually two other Cylons in the fleet at the time of Baltar’s testing. These Cylons were a married Simon (Number Four) and another Number Six (referred to as “Tough Six”). Therefore, the number of Cylons becomes nine (prevalence of 0.0001879). New Figures 1 and 2 are at the end of this document. The minimum expected number of tests would be 256.06 (117 days) using halving and a maximum group size of 500. Incorporating the variability in the number of tests, we have a range of 97.33 to 414.78 tests (44.61 to 190.11 days) for halving with a group size of 500. As would be expected, there are no changes to the overall conclusions that group testing would be very useful!

Figure 1.

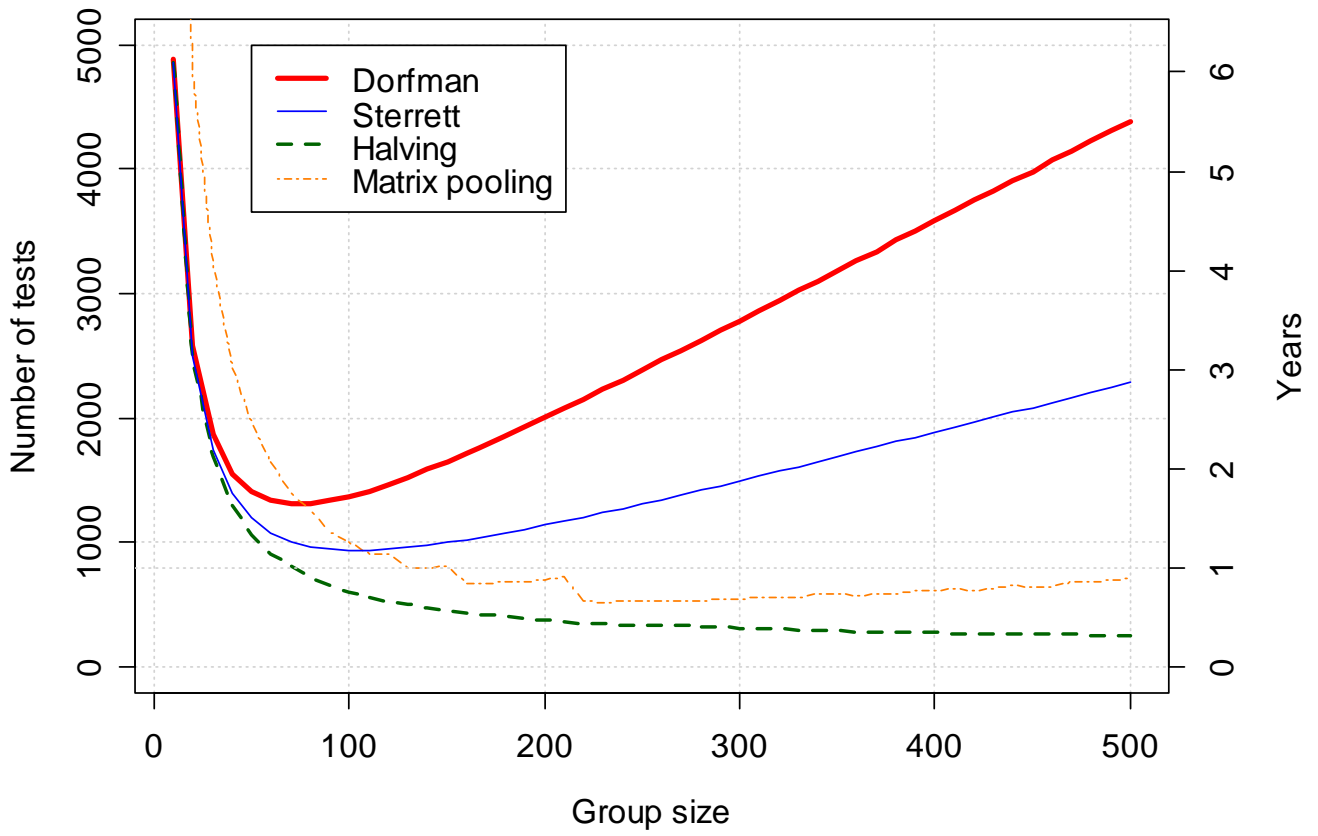


Figure 2.

