When we take a sample from a population the mean of the sample may be quite different from the mean of the population (aka sampling error).

• If I take two samples, and work out the mean of these two samples, I should have a better estimate of the population mean than if I just looked at the mean of one of the samples.

 If I take three samples, work out the mean of these three samples etc. etc.

- The more samples (each with their own mean) we draw from the population, the closer we get to the true mean of the population. As sampling increases, the 95% CI bands around the mean narrow.
- So, animation can be used not just to communicate information, but also principles...

Moving average gets closer to the population mean (blue line) and CI bands narrow as sampling increases.

