Stephen Kim

Project 5

Information gathered includes:

1. Date
2. Total number of infected people
3. Daily number of confirmed cases
4. Daily number of tests administered
5. Susceptible people – daily confirmed cases/daily number of tests administered
6. Daily active cases
7. Daily active cases/total number of infected
8. Daily recovered cases
9. Daily recovered cases/total number of infected
10. Daily death cases
11. Daily death cases/total number of infected



Assume sample population of 2000

x1 = x2 =

as1 = s2 🡪 a2000 = 1996 🡪 a = 1996/2000 = 0.998

c = 1 – d – e 🡪 c = 1 – (-0.084) – (-0.009) = 1.093

bs1 + ci1 = i2 🡪 b2000 + c227 = 252 🡪 b2000 + (1.093)227 = 252 🡪 b = 3.889/2000 = 0.002

di1 + r1 = r2 🡪 d227 + 48 = 29 🡪 d = -19/227 = -0.084

ei1 + d1 = d2 🡪 e227 + 5 = 3 🡪 e = -2/227 = -0.009

a + b = 1 🡪 0.998 + 0.002 = 1

c + d + e = 1 🡪 1.093 – 0.009 – 0.084 = 1

A =