Random Rounding

What does this method do?

We can protect information in counts tables by random rounding to base 3 (RR3). The counts are randomly rounded to base three in a consistent manner. This is to disguise small counts, but all cells in the table are randomly rounded. The effect is to make the output more confidential, by generally preventing individuals' data from being released.

How does this affect the final data?

For small numbers, where there is the most risk that individuals could be identified, there are larger percentage changes compared with larger numbers. For example, a cell with a one changed to a three has been changed by 200 percent, but a cell with 1,001 changed to 1,002 has been changed by only 0.1 percent. When analysing data, small counts need to be treated with caution but for the larger values the percentage changes in these cells do not cause a problem.