

Extra Zeros in Count Data

A.H. Welsh

The Australian National University

Centre for Mathematics and its Applications

The Australian National University, Canberra, ACT 0200, AUSTRALIA

`ALan.Welsh@anu.edu.au`

Abstract

A simple way to model count data with extra zeros is to include an extra spike at the origin, forming effectively a mixture distribution with a degenerate component. There are at least two different ways of forming the mixture. It seems not to be as widely appreciated as it should be that, at least when covariates are included, two different models result. In this talk we will describe the two models, make a detailed comparison of them and discuss the implications for data analysis.