## ANALYSIS OF DATA SET 3

## R. MEAD

The first point to consider for this data set is the nature of the information about the response pattern of the skin conductance variable with time. Since for many of the observations (81/144) the onset value is also the peak value it is clear that there must be a general tendency for skin conductance to decline. Do the cases with peak > onset arise from a gradual increase or from a secondary mode after an initial decline? Do other cases have a secondary peak below the onset value? For a proper understanding and analysis of the effects of predictability and control of anxiety it would be necessary to have more information about the skin conductance response pattern, the onset and peak statistics being clearly not sufficient.

Given the presented data the dominant feature is the high proportion of zero differences for (peak – onset). The rather variable set of non-zero values is only to be expected for such a variable, given the effective censoring at zero for most of the values. Effectively we are looking at only half a distribution and tests for outliers will be most unreliable. The initial stage of the analysis is the tabulation of difference and peak values (Table 1).

The 24 subjects' response patterns of skin conductances over short term time periods and between successive time periods can be summarised in several ways. The most striking aspect of the data is the distribution of zero values for (peak – onset). In each group the number of zero values increases through the six time periods:

- 3, 6, 6, 9, 10, 9 for Group 1
- 2, 5, 9, 7, 7, 9 for Group 2.