

Four field examples, all of which have a dominant current gathering $t^{5/2}$ 'late' time decay and a scale model data set will be used to illustrate interpretation techniques which are based on the insights from previous sections. Of the four field examples, two are over world class orebodies, one is over a lithological conductor which shows superficial similarities with responses over the two orebodies and a fourth is a complex response which may contain a worthwhile exploration target. No second derivatives are actually calculated for reasons discussed in the following section. However to follow the logic of the arguments it is sufficient to know that the locations of

the peaks in the second derivative can be estimated as points corresponding to the maximum change in the slope of the raw data, and that zeroes occur where the slope of the raw data does not change over some profile length. The examples are used not so much to give a recipe for the interpretation technique but rather to demonstrate the general principles on which an interpretation can be based so that a plausible explanation for the EM processes and for the shape of conductive bodies can be obtained. Both the qualitative technique and the present limitations to the quantitative approach will be discussed.

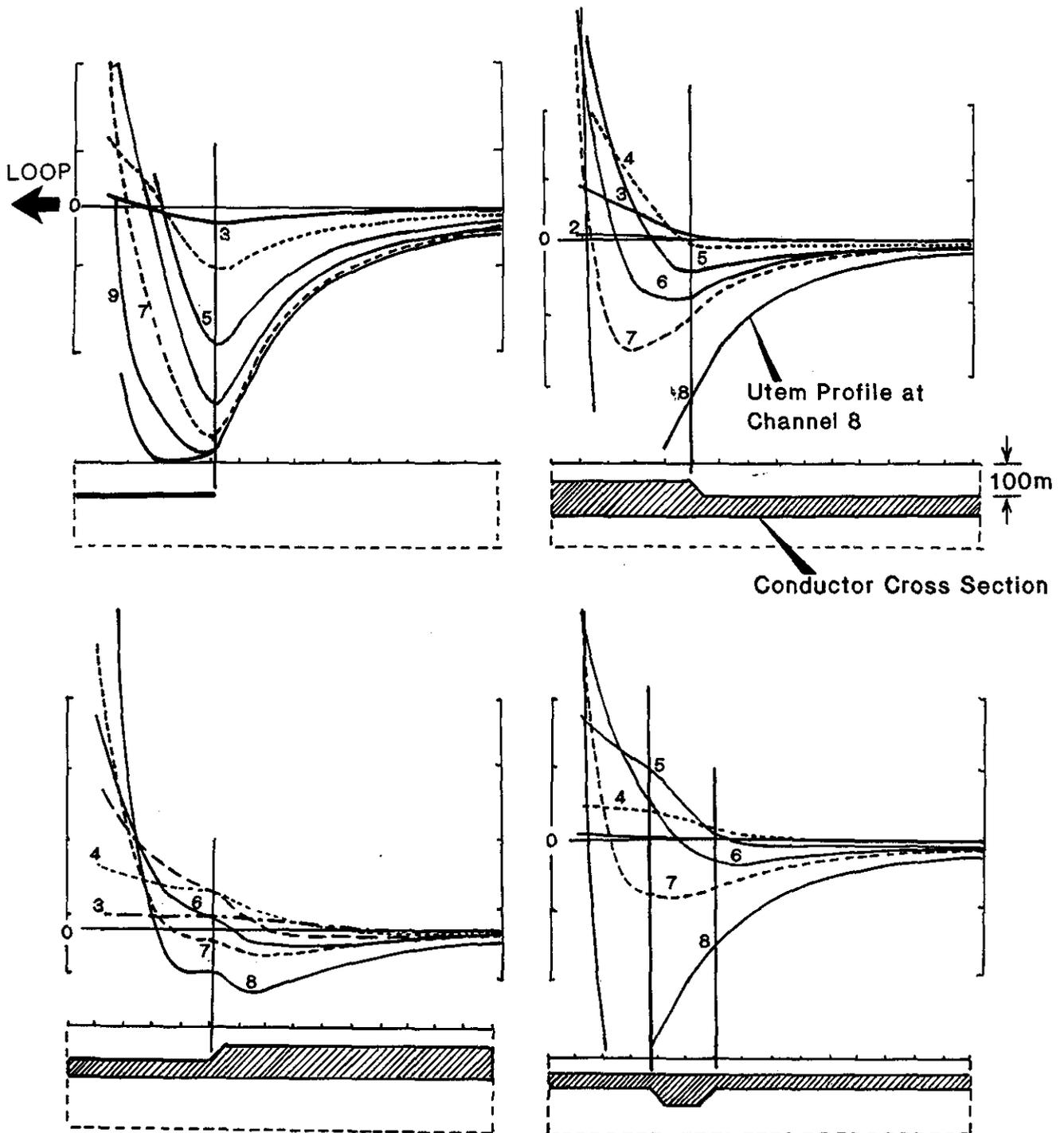


FIGURE 2
 UTEM (Hz) scale models over disruptions in a thin layer adapted from MacNae *et al.* (1983). Every disruption within the layer corresponds to one of the maximum changes in the slope of the profile. Additional maximum changes in the slope are due to normal thin layer moveout.