

Sampling the transient decay

David Annetts¹, Juerg Hauser²,

1. CSIRO, 26 Dick Perry Avenue, KENSINGTON Australia, 6151, david.annetts@csiro.au
2. CSIRO, 26 Dick Perry Avenue, KENSINGTON Australia, 6151, juerg.hauser@csiro.au

ABSTRACT

Typically, airborne electromagnetic (AEM) prospecting systems employ a standard number of windows to sample the transient electromagnetic decay. The number and definition of these windows is a function of the system's noise characteristics and the structure to be imaged. Using 1D models with application to groundwater and to minerals exploration, we show that model parameter resolution can depend on the nature of the windows used to sample the decay and suggest that there may be value in optimising window parameters to suit particular transient decays.

Key words: time-domain, airborne, electromagnetic, exploration