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Interactive comment

Interactive comment on "Suppression of very low frequency radio noise in transient electromagnetic data with semi-tapered gates" *by* Jakob Juul Larsen et al.

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In a TEM system, the gates are stacked with alternating signs, to ccount for the alternating transmitter waveform. In this case, the frequency domain response of the windowing scheme comes from taking the Fourier transform of a series of alternating sign gates (numerically an fft of a pair of alternated gates). It appears to me that Figure 2 is the transform of a gate (or maybe gates) of positive sign, and thus is unrepresentative of the gating scheme used in tTEM and other geophysical systems. May I suggest the authors look at this issue of repetitive sampling?

While not published in the literature, it is fairly well known that most airborne (e.g.

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Geotech VTEM, CGG Geotem) and some ground geophysical systems (e.g. Smartem) use tapered stacking, which is derived digitally from streamed time series, essentially a version of the semi-tapered gates described here. This paper however, does describe this process and would be a very useful reference for future work.

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