

Wideband Digital Low-frequency Receiver plots for the Sprites imaged from the NEMETODE Ravensmoor node on 23rd July 2013

The University of Bath operates the Wideband Digital Low-frequency Receiver*, a device that is sensitive to the sudden enhancement of background radio noise associated with sprites (and which can therefore be used as a sprite proxy measure). Dr Martin Füllerkrug kindly provided data-plots from this receiver and these can be used to characterise not only the sprite duration but also the time delay between a progenitor lightning discharge event and a sprite. This system detected all four sprites that were imaged from Ravensmoor on 23rd July 2013 and are reproduced, with permission, below. Note that in all cases, the horizontal time axis is mis-labelled and should read “[t] = s” instead of “[t] = ms”

* M. Füllerkrug, 'Wideband digital low-frequency radio receiver', Meas. Sci. Technol., 21, 015901 (2010)





