

# NOVEL ELECTRICAL RESISTIVITY TOMOGRAPHY @ THE UNIVERSITY OF BRADFORD

June 29, 2012 Finnegan Pope-Carter Archaeological Prospection, Day of Archaeology 2012, Digital Archaeology, Survey Bradford, Electrical resistivity tomography, Geophysical imaging, geophysics, Measurement, Medical imaging, Medical tests, Physics, Radiology, Rain, Resistivity, Science, The University of Bradford Today, tomography, UK, University of Bradford

Today, like almost every day between May and September this year I've been working on my MSc research Project. Instead of just explaining what I've been doing today i thought it would be more interesting to describe what is going into my individual research project.

I'm experimented with a new novel way of collecting electrical resistivity tomography data with a zzGeo FlashRes64 which as you might expect involves a significant amount of lab and field data collection.

To allow inversion of these novel techniques far too much of my time has been devoted to developing software to allow analysis of the data, and investigation of different visualisation techniques. Though it does make a nice change from the driving rain outside.

Before going out in the snow and rain its important to know that the data collected will be as good as possible. This means i spend a lot of time visualising different data collection techniques as point clouds as below. I promise they end up being quite relaxing.

Eventually after determining the best collection strategy, standing out in the rain and the cold for hours, extracting, converting and comparing data you do end up with a decent representation of whats beneath the surface.