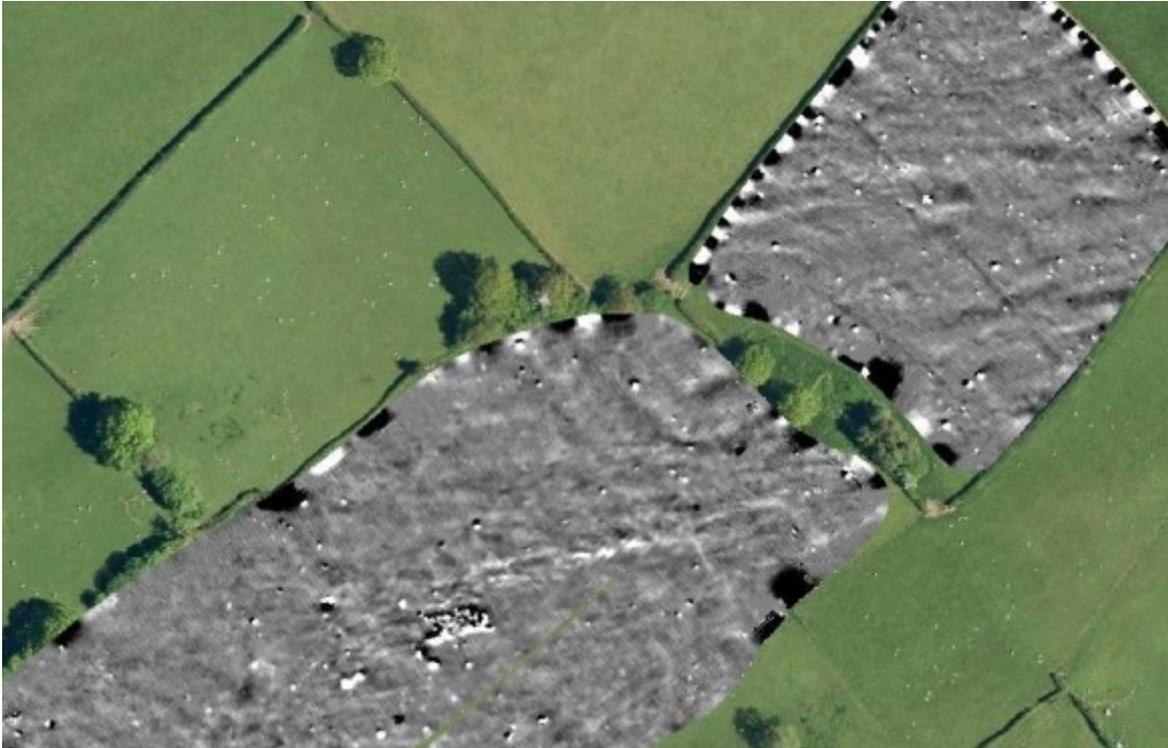


# COMMERCIAL GEOPHYSICS FOR ARCHAEOLOGY – A DAY AT MY DESK

August 1, 2015 Martin Roseveare Archaeological Prospection, Commercial Archaeology, Explore Posts, Landscape Archaeology, Neolithic, Science, Survey 3D survey, ArchaeoPhysica, commercial, Contracting, CRM, ERT, Geophysical survey, geophysics, GIS, landscape, Magnetic, Neolithic, project management, prospection



*Cs vapour magnetic survey around the long cairn*

We are a geophysical survey company working mostly in archaeology with some other shallow geophysical work alongside. This is ArchaeoPhysica's second Day of Archaeology post, this time featuring mostly office work.

I'm Anne Roseveare, the Operations Manager, and I spend much of my time at a desk, make a few field visits and occasionally can be found in the workshop building and mending things. Unsurprisingly, my day involved quite a bit of time on the phone and emailing people about quote requests, ground conditions and schedules. Harvest dates are a hot topic at the moment as often fieldwork is held until the crops are cleared and we're then wanted everywhere in a short time window. Our overall timetabling process has similarities to multi-dimensional tetris, or at least it feels like it.

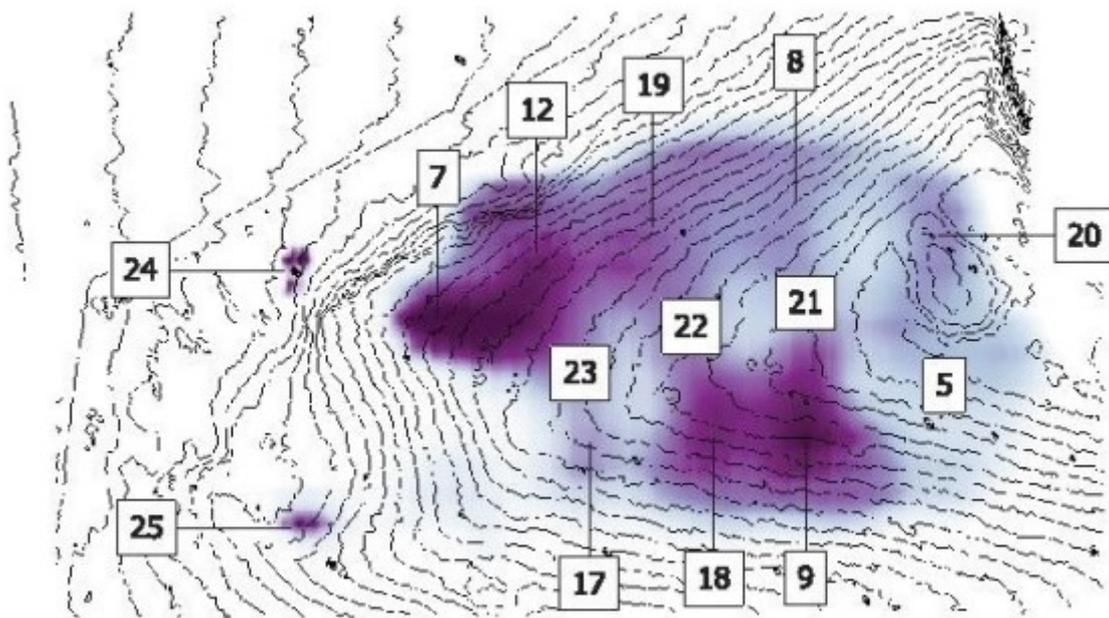
We had fresh batches of data in from the previous couple of days' fieldwork to process, visualise and prepare interim results to send to our archaeological clients. Kathryn's been busy working through these, checking data quality and getting the data sets GIS-ready. I've also been working on the final stage of reporting for a multi-method geophysical survey on a deserted medieval settlement.

One of last week's surveys was a couple of fields of magnetic data collected on a research basis next to a monument we surveyed using ERT (electrical resistance tomography) a few months ago. It's not often

you get to survey a neolithic long cairn and visit the excavation of the damaged part, so we were keen to see what (if anything) there was to see around it. Our work will inform the long term management plan for the monument.



*Our earlier ERT survey in progress*



*Sloping slice across ERT profiles showing some of the mound's internal structure*



*Some of the re-excavated internal structure in the damaged area – useful to compare with ERT results*



*Talking through findings with one of the excavators*

The rest of Friday's workload was as usual completely commercially confidential – most of our work is development-related and is attached to planning applications (so no pictures from these).

I reviewed a WSI (Written Scope of Investigation) prepared by colleagues Daniel & Martin for a large project, updating the sections on soils & geologies. We often produce a WSI for large or complicated projects – sometimes it is required by the Local Authority Archaeologist or the client. It contains a summary of the purpose of the project and background information that will influence our geophysical work, including heritage and environmental information. Next comes the reasoning why our proposal is the most effective way forward and what the limitations are, followed by what the outputs from our work will be.

Another chunk of my time went into preparation for a forthcoming project, where there are multiple areas to survey and strict access arrangements as the site is sensitive. In this case, our project GIS will help us and the client to map out survey & no-go zones, schedule the different work areas (and re-schedule if needed as the work unfolds) as well as be the usual foundation for our reporting. We'll be mapping visible signs of landscaping as the fieldwork goes on, too, to give our geophysical data local context.

Behind the scenes, out of sight of clients, there's always other things happening. For example Martin was preparing a funding proposal to support a research project on a prehistoric mining site and there was

unexciting but important maintenance of our internal project archive. Also, project Pegasus is moving along, with Martin & Benj on 3D design and construction (all will be revealed later this year). We usually have a development project on the go – it's a case of fitting things round the commercial work.

I lost count how many mugs of tea and coffee we got through but this week's Friday cake was carrot cake with particularly squishy icing – important fuel!