**Database Visualiser – Iteration 5 Comments 1 October 2018**

**Most important task**

Get all the graphs showing the right data, all the time.

Example: Load up “AMSC Amperium® Type 8700 cable formulation 2G HTS”. Temperature dependence is shown (good). Choose a field of 0.01T. A “No data to display” message is shown. This is a (barely) acceptable hack, but why does the option exist if there is nothing to show? Instead of employing a hack, don’t provide the user with meaningless options. This will be very off-putting for new users, since it is the first thing they encounter and they will have to hunt for data to display.

Some data sets remain incompatible at the moment. If necessary, reinstate the incompatibility flag (and consider formatting the list as previously noted, with the exclamation mark on the left).

**Trivial tweaks (shouldn’t take long, but I’d like to check these off ready for release)**

It would be neater if the “Publication Date” header spanned both the date and the figshare button columns.

Tidy up the About page and footer (see specific comments in “About page” section below).

Remove the watermark on the graph.

Point info box still flashes (sometimes) when selecting/deselecting curves. Data order (T, B, θ) still varies depending on the type of graph.

Tidy up the sidebar with consistent capitalisation: “Independent Variables” should be “Independent variable”. Heading on “Linear|Logarithmic” saying “Scale”, ideally to the left of the buttons (also in the Dependent variable section). In the “Appearance” section, heading “Colour”, options “Gradient|Colourful”, heading “Line”, options “Straight|Curved”, heading “Points”, options “Circle|Mixed”, heading “Point **s**ize”. Ideally all these headings to the left of the buttons.

**BUG:** When loading a new dataset, the legend appears at the bottom of the graph when it should appear at the side. If you resize the screen slightly, it jumps to the right place.

Implement or remove the smooth curve option.

List the two file export options before print option. Adjust CC-BY logo.

**Second rank issue**

Finalise horizontal and vertical sizing issues outlined in email, in particular extra scrollbar **BUG**.

**General comments**

Agreed not to implement: Filter is good. UI needs a bit of thought. For example, could you include the entry field beside the “Datasets” header of the table? Even in the smallest window size, there is space for it there.

Probably not going to implement: A final tweak at the end of the project would be to make the data selection page and the graph page the same size. In other words, the header and footer would never move, however you click around. Implementation of this would require a bit of thought. It comes down to sizing things (the dataset list on the selection page and the graph on the display page) to the window height, but more basically just keeping both of these two main pages the same vertical height. At the moment the two are independent heights. Fixing them to be equal would increase the cohesiveness of the app as a whole.

**Dataset selection page**

Still to consider: How does this page handle many datasets? If I had 100, would they all appear in one long list, or would they be broken up into pages? (I know you’ve answered this; just leaving it here for reference – you can add it to your “further development” section.)

**About page**

Can we italicise the I and subscript the c in *I*c after SuperCurrent in the “About the measurements” section? (You are aware of the HTML tag <sub></sub>, I’m guessing.)

Can we put the copyright year in the footer as well? Make RRI in the footer the same font size as HTS Database in the header.

**Graphical display page**

Question to consider: are graph images exported as they appear or in some standard size…?

Point label box now almost perfect. It would be nice if the order of the independent parameters could be fixed: temperature, field, angle. At the moment they change places depending on what graph is being viewed.

The gridline at the very top of the graph appears to be missing. We show the label (e.g. 1,000), but we don’t have the line, and it makes the graph look incomplete. Ideally we would use the ever-so-slightly heavier lines we have on the left and bottom of the graph also to frame it on the top and right, but it’s okay if not. Next, is it easy to put a very little space between the labels and the tick marks that extend outside of the graph. At the moment they are exactly touching (y-axis, where the digit is zero) and this makes it look messy. X-axis is better, due to a shorter tick mark being used, but could also benefit from fractionally more space.

The watermark is a great feature, however I see it being difficult. It jumps around when the mouse pointer goes off the graph and then hovers over a data point. I would prefer this to be graphical, but I’m not sure how (if) it’s going to work. I’ll provide a graphic, but if this can’t be done, we may just turn it off. Also, consider positioning it top right to be out of the way on most curves.

For an added challenge, you can attempt to subscript the c in *I*c.

Data export is good. We’re considering the nature of the csv export. It’s helpful to have both save PNG and copy PNG to clipboard (which works via right-click). It would be nice if the print graph was implemented via the browser print function rather than (cleverly, I admit) via a separate page. I think there’s a way with style sheets to specify what gets printed, but maybe this is too much work. Don’t worry too much; the existing functionality is good.

We have some colour options for the graph now. It’s a good example, perhaps I can provide an additional palette. Again, would be nice to have buttons for these simple options.

We need to think what to do about the title of the graph. I don’t really want to see “Angle Dependence”, etc. This is obvious from the fact that the x-axis shows angle. Also “1T Field” is unnecessarily wordy; it can’t be a 1 T anything else. But “1 T” on its own won’t look good. In some ways, “1 T Angle Dependence” is better than what you have, so maybe that’s the easiest change. But some of the feedback was saying when the graph is exported, you don’t know what sample it was from, which is why I suggested a tiny watermark at the bottom with sample name and doi.

**Mobile compatibility**

Still haven’t tried mobile, but the resizing looks like it will work well.

**Queries / Discussion points**

Is the style of the website contained in a simple stylesheet or other easily editable form? For example, if I wanted to change the green colour of the header bar, how easy would that be to do? See above idea, also discussed in the meeting: How about framing the app (middle bit) in a page of regular HTML that I could edit? Then I can even embed the app on other webpages to increase its exposure. I’m thinking of something like a frame, that could be put anywhere. Like Youtube videos can be put on any webpage, for example. That’s the same thing: the webpage server doesn’t run Youtube, that runs on its own server (AWS in your case). But the host webpage can be arbitrarily simple.

**Additional features (just a list so we don’t forget something)**

I want the graph to look good when printed out.

Data export features – copy graph to word document, access *actual* data files.

Metrics (page views, downloads, …).

Admin options: flag to hide incompatible datasets, way to edit stylesheet?

Fit curves instead of point joining (I expect this to be deferred to a future project).

Display DOI and CC BY 4.0 icon?

How to support VUW rebranding…