Contents

Running an experiment part 2 - making cuts and slices

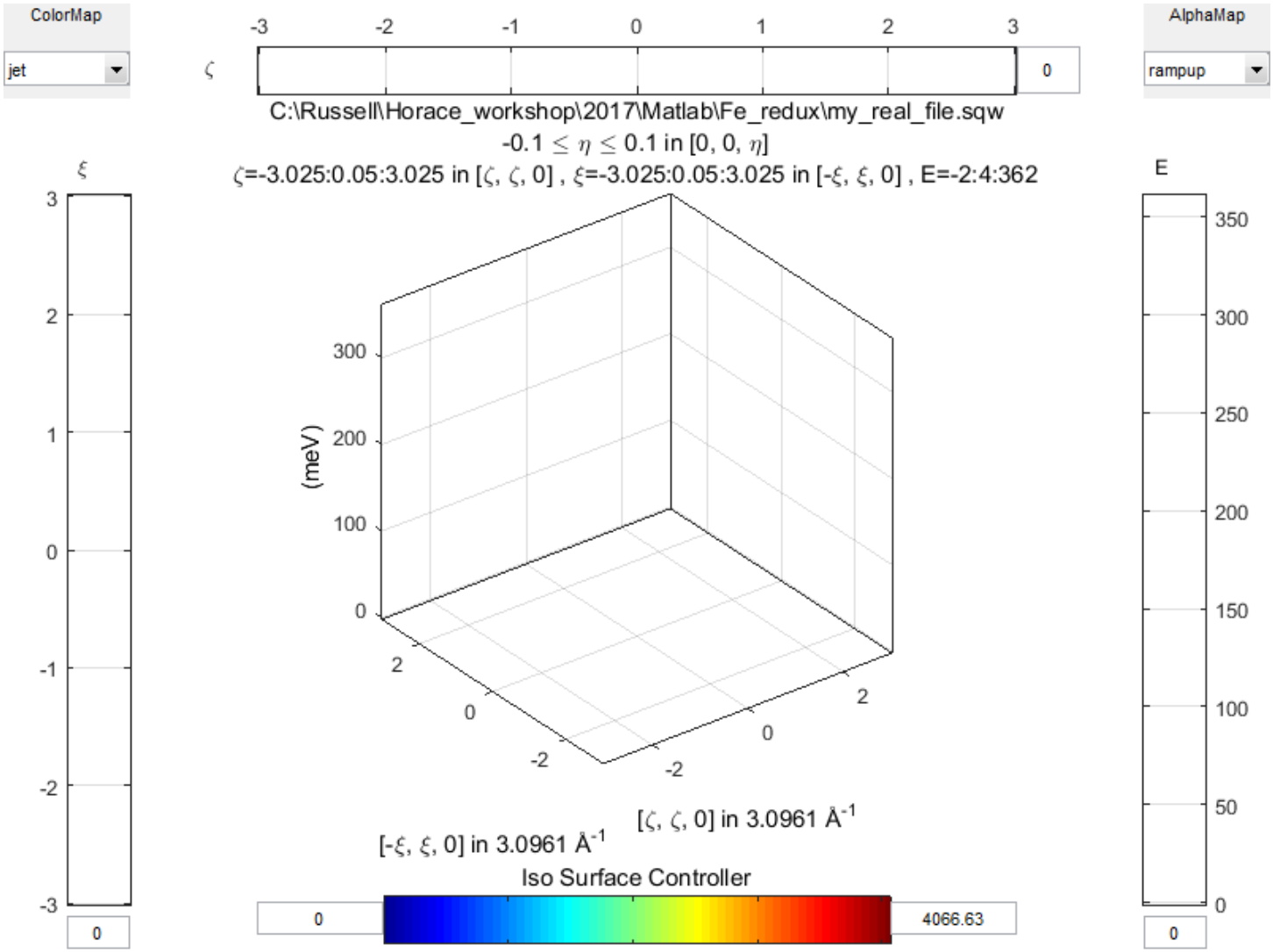
```
%We could use the full Fe dataset, but it is actually rather big, and we do
%not gain much from doing this. In fact reading it is pretty slow!
```

Set viewing axes. These do not need to have any particular relation to the

```
%spectrometer axes
proj.u=[1,1,0]; proj.v=[-1,1,0]; proj.uoffset=[0,0,0,0]; proj.type='rrr';
proj2.u=[1,0,0]; proj2.v=[0,1,0]; proj2.uoffset=[0,0,0,0]; proj2.type='rrr';
proj3.u=[1,1,1]; proj3.v=[-1,1,0]; proj3.uoffset=[0,0,0,0]; proj3.type='rrr';
```

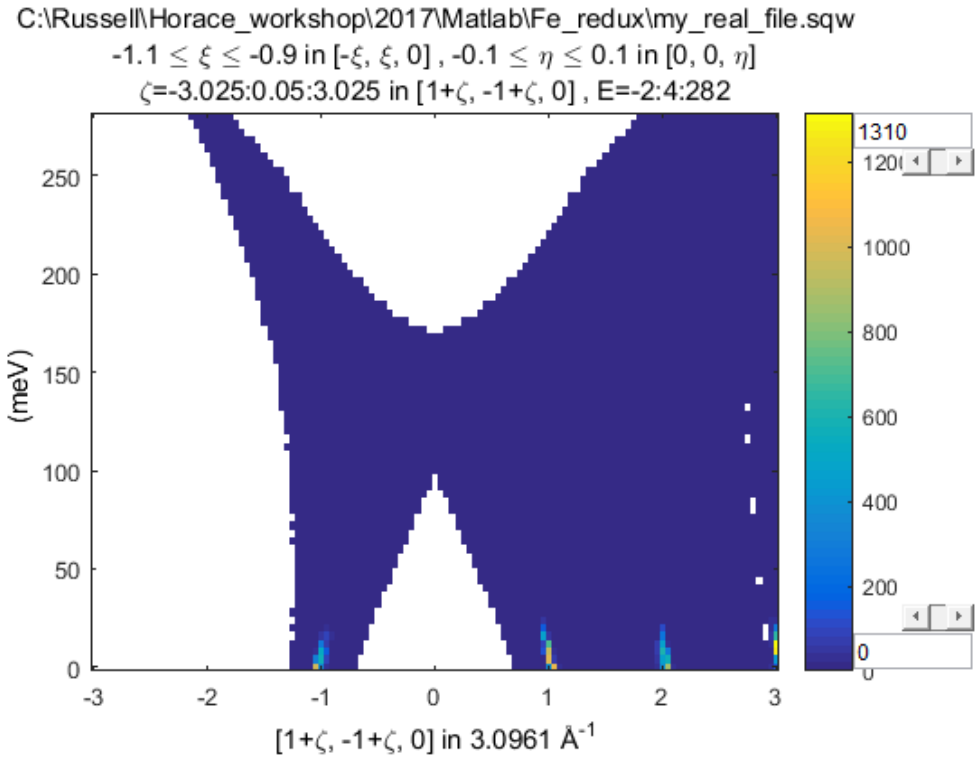
3d volume plots

```
my_vol=cut_sqw(sqw_file,proj,[-3,0.05,3],[-3,0.05,3],[-0.1,0.1],[0,4,360],'-nopix');
plot(my_vol);%this is obv the most sensible choice of proj axes!
```



2d slice

```
my_slice=cut_sqw(sqw_file,proj,[-3,0.05,3],[-1.1,-0.9],[-0.1,0.1],[0,4,280]);
plot(my_slice);
```



1d cut

```
tic
my_cut1=cut_sqw(sqw_file,proj,[-3,0.05,3],[-1.1,-0.9],[-0.1,0.1],[130,150]);
toc

plot(my_cut1);
```

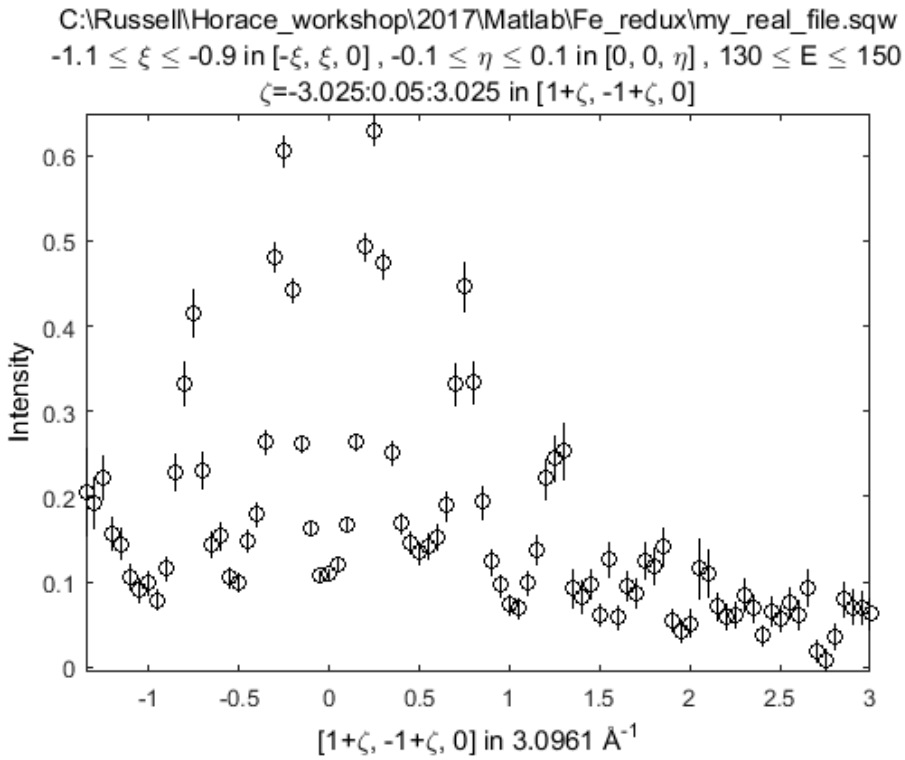
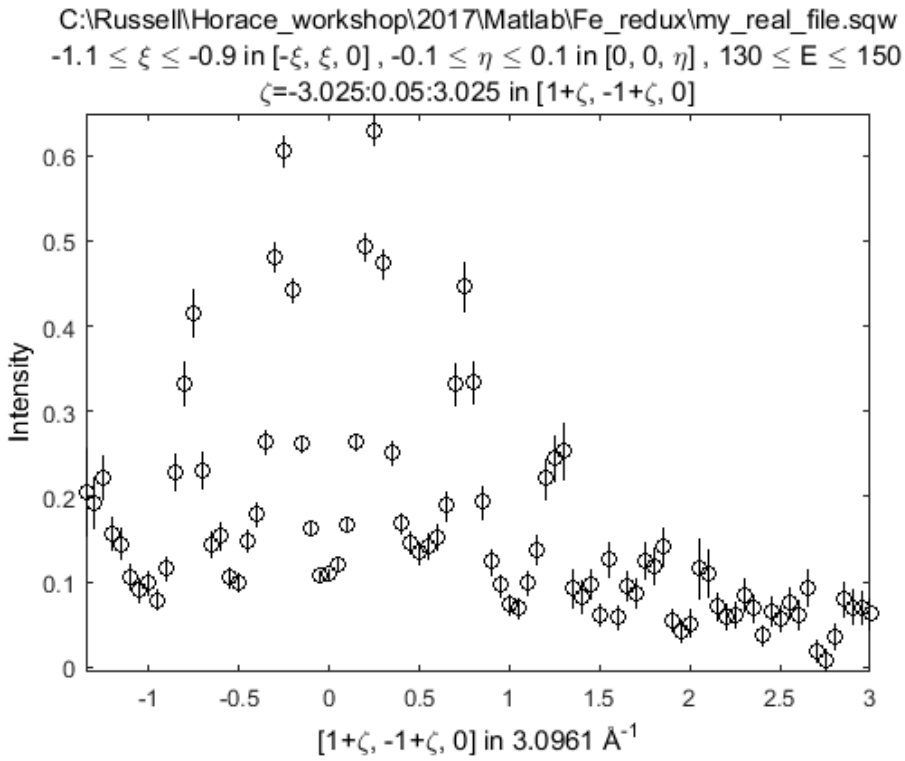


Illustration of cut from a cut:

```
tic
my_cut2=cut(my_slice,[],[130,150]);
toc

plot(my_cut2);%this is identical to my_cut1, but was much faster to create.
%Imagine if you were running a script to take many cuts from the data - it
%is probably quicker to take them from existing data objects, where
%possible!
```



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