Create an observation card

Constants should probably not be hidden, it wouldn’t have been clear that the time sampling / integration time etc would be hidden under something called ‘constants’, maybe call it something like ‘Observing parameters’?

For these parameters, need info buttons for each that gives an explanation of the differences in the selected types. E.g. what is mode type AP vs HP? Maybe not necessary for the truly self explanatory ones like time sampling and integration time

*Setting spatial resolution:*

Variable bins depending on target, how would this be set? By selecting regions and assumed the target would take up a certain number of degrees within the slit? For a card with 34 + 2 spatial bins (34 on target, 1 bin above and below) would this be a minimum of three spatial regions with the middle spatial region set to 34 bins and the above and below regions set to 1 bin?

*Setting regions:* Needing to click ‘create’ to update the set number of regions isn’t immediately obvious, but is fine

The labeled regions do not update after changing the number of regions and you need to select ‘hide’ regions and then ‘show regions’ again to update them, can they be auto updated with changes to regions?

After setting the number of X and Y regions nothing changes, it should be clear how to update the FOV to reflect the changes in the number of assigned X and Y regions

*General unclear*: The locks are confusing, why don’t all of the regions have a lock? Why do some start off unlocked vs. locked? We need a clear explanation of their purpose somewhere

What does +horizontal and +vertical do? Do these extend the range beyond the defined FOV?

Infer defaults replaces card details entered with I think spectral resolution within spectral ranges? Not really clear it would have done that

Accidentally put in ‘258’ under resolution instead of bins, but then this propagated down to the other greyed out regions even though the resolution was set to 0.6 nm after correcting the number of bins on the right hand side, had to go in and manually set the resolution to 0.6 nm for it to propagate down… that doesn’t seem like the right way to handle it, not sure how it would have been more easily reset?

General Q’s:

What are the STIM regions? What does it mean for it to say 2 (regions) 10 (spat) 10 (spec)?

How to relate anticipated angular diameter of Europa to slit FOV? From calculation provided given radius of Europa and observing distance the angular diameter is 1.78 rad or 102 deg? Is there a separate calculation we need to convert from the angular diameter to the projected angular diameter within the slit?

What is the color for?

What are the numbers on the side, it seems like they should correspond to the number of bins but after setting 258 bins to X it shows 1 and setting 34 to the middle region of Y it shows 1 for each of the Y regions…

USER INTERFACE FOR SCIENCE

Just want time ranges?