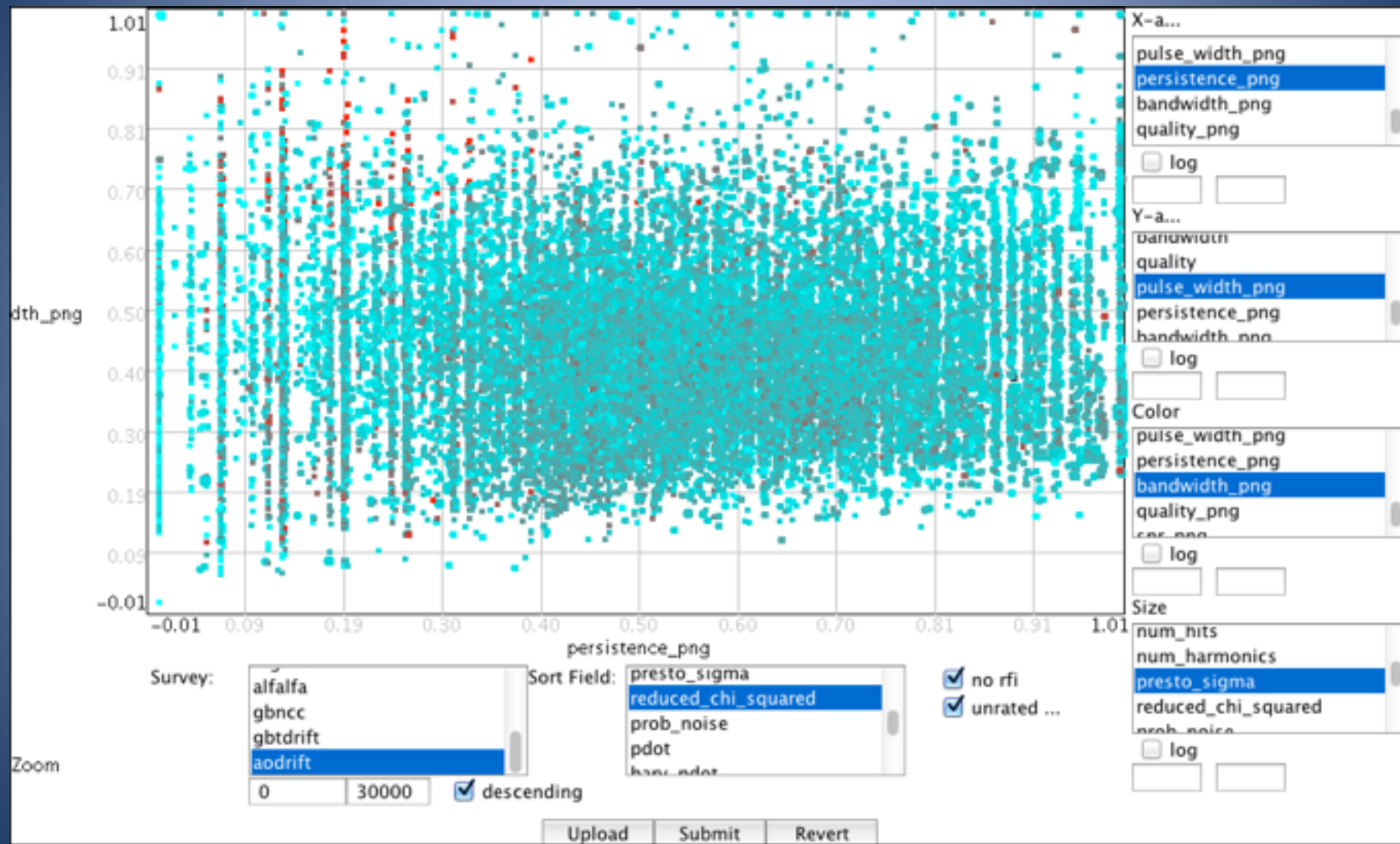
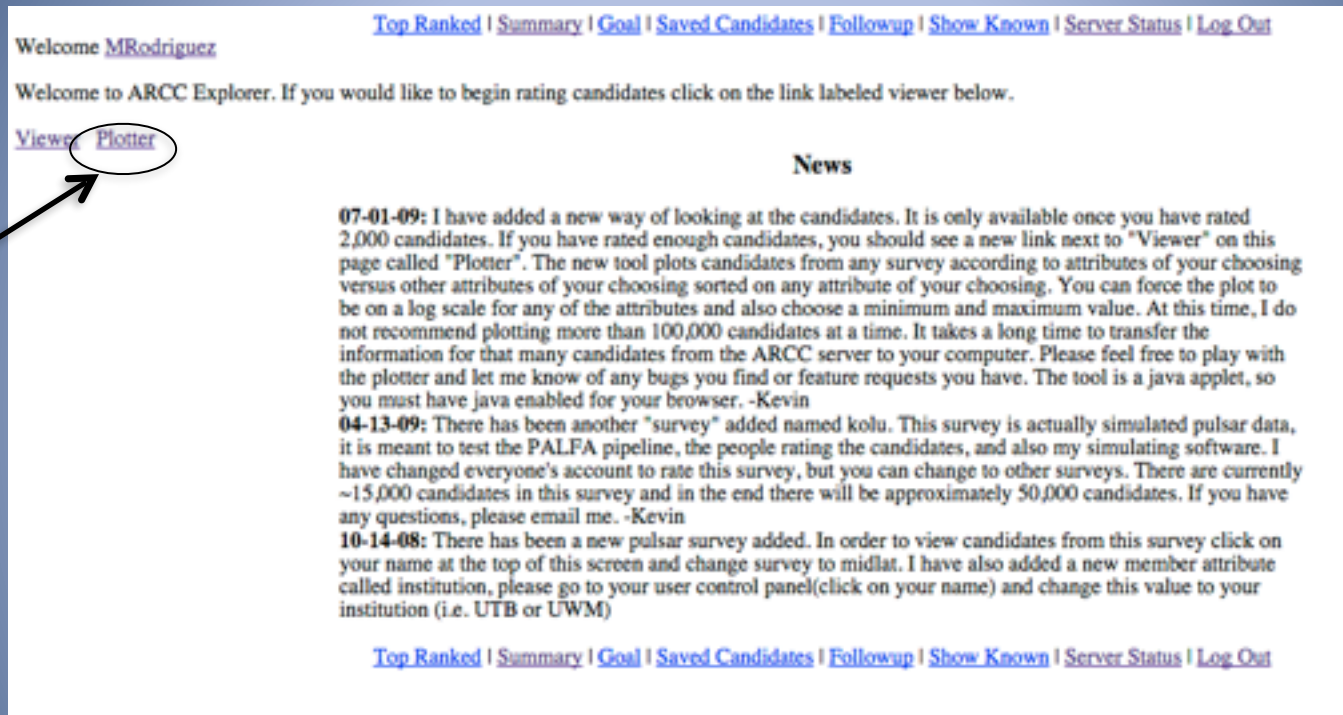


ARCC PLOTTER



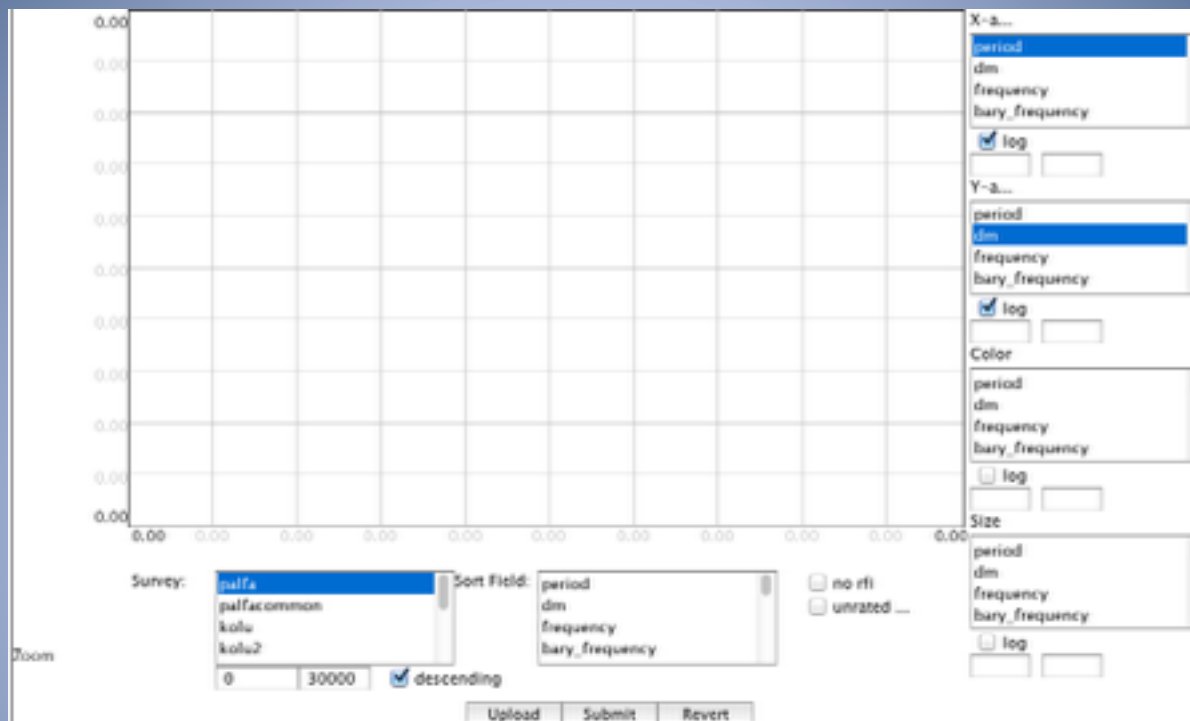
OPEN PLOTTER



The screenshot shows the ARCC Explorer web interface. At the top, there is a navigation bar with links: [Top Ranked](#) | [Summary](#) | [Goal](#) | [Saved Candidates](#) | [Followup](#) | [Show Known](#) | [Server Status](#) | [Log Out](#). Below this, a welcome message reads: "Welcome [MRodriguez](#)". A second line says: "Welcome to ARCC Explorer. If you would like to begin rating candidates click on the link labeled viewer below." Underneath, there are two links: [Viewer](#) and [Plotter](#). The [Plotter](#) link is circled, and a black arrow points to it from the left. To the right of these links is a section titled "News" containing three entries:
07-01-09: I have added a new way of looking at the candidates. It is only available once you have rated 2,000 candidates. If you have rated enough candidates, you should see a new link next to "Viewer" on this page called "Plotter". The new tool plots candidates from any survey according to attributes of your choosing versus other attributes of your choosing sorted on any attribute of your choosing. You can force the plot to be on a log scale for any of the attributes and also choose a minimum and maximum value. At this time, I do not recommend plotting more than 100,000 candidates at a time. It takes a long time to transfer the information for that many candidates from the ARCC server to your computer. Please feel free to play with the plotter and let me know of any bugs you find or feature requests you have. The tool is a java applet, so you must have java enabled for your browser. -Kevin
04-13-09: There has been another "survey" added named kolu. This survey is actually simulated pulsar data, it is meant to test the PALFA pipeline, the people rating the candidates, and also my simulating software. I have changed everyone's account to rate this survey, but you can change to other surveys. There are currently ~15,000 candidates in this survey and in the end there will be approximately 50,000 candidates. If you have any questions, please email me. -Kevin
10-14-08: There has been a new pulsar survey added. In order to view candidates from this survey click on your name at the top of this screen and change survey to midlat. I have also added a new member attribute called institution, please go to your user control panel(click on your name) and change this value to your institution (i.e. UTB or UWM)
At the bottom of the page, there is another navigation bar with the same links as the top: [Top Ranked](#) | [Summary](#) | [Goal](#) | [Saved Candidates](#) | [Followup](#) | [Show Known](#) | [Server Status](#) | [Log Out](#).

- Click on the Plotter link.

THE PLOTTER



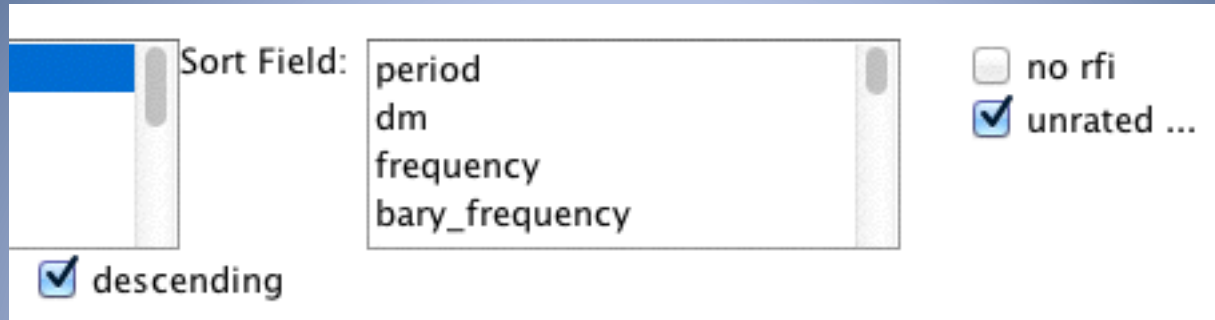
- The plotter allows you to plot candidates using any attribute vs any other attribute of your choice.
- Choose attributes that will allow you to easily and quickly identify possible pulsars.

SURVEY

The screenshot shows a web interface with a header bar containing five '0.00' labels. Below this, the 'Survey:' label is followed by a dropdown menu with four options: 'palfa' (highlighted in blue), 'palfacommon', 'kolu', and 'kolu2'. To the right of the dropdown is the 'Sort Field:' label. Below the dropdown are two text input boxes containing '0' and '30000'. To the right of these boxes is a checked checkbox followed by the text 'descending'. At the bottom right, there is a button labeled 'Upload'.

- On the survey section choose the survey you want to use (e.g. aodrift).
- The text boxes below survey contain the range of the number of candidates you will plot. You can change these values.

SORT FIELD



The screenshot shows a user interface for selecting a sort field. On the left, there is a vertical list box with a blue header bar. To its right, the text 'Sort Field:' is followed by a larger list box containing the following items: 'period', 'dm', 'frequency', and 'bary_frequency'. To the right of this list box are two checkboxes: 'no rfi' (unchecked) and 'unrated ...' (checked). Below the 'Sort Field:' label and the list box, there is a checkbox labeled 'descending' which is also checked.

- The range of candidates plotted will be selected either ascending or descending from the sort field chosen.
- For example: (if you choose 0-30000 candidates, sort field: period, and descending), you will plot the 30000 candidates with the highest period.
- Uncheck [descending] to get the candidates with the lowest values instead.
- Check the [unrated] box to get only candidates that have not yet been rated by anyone.
- Check the [no rfi] box to remove candidates that have been rated as RFI.
- Some choices in sort field are pulse width: ascending, period: ascending, reduced chi squared: descending, and pulse width: ascending.

X – Y AXIS

The image shows a software interface for selecting attributes for X and Y axes. It consists of two main sections: 'X-a...' and 'Y-a...'. Each section has a list of attributes, a 'log' checkbox, and two empty input boxes.

X-a...

- period (selected)
- dm
- frequency
- bary_frequency

☒ log

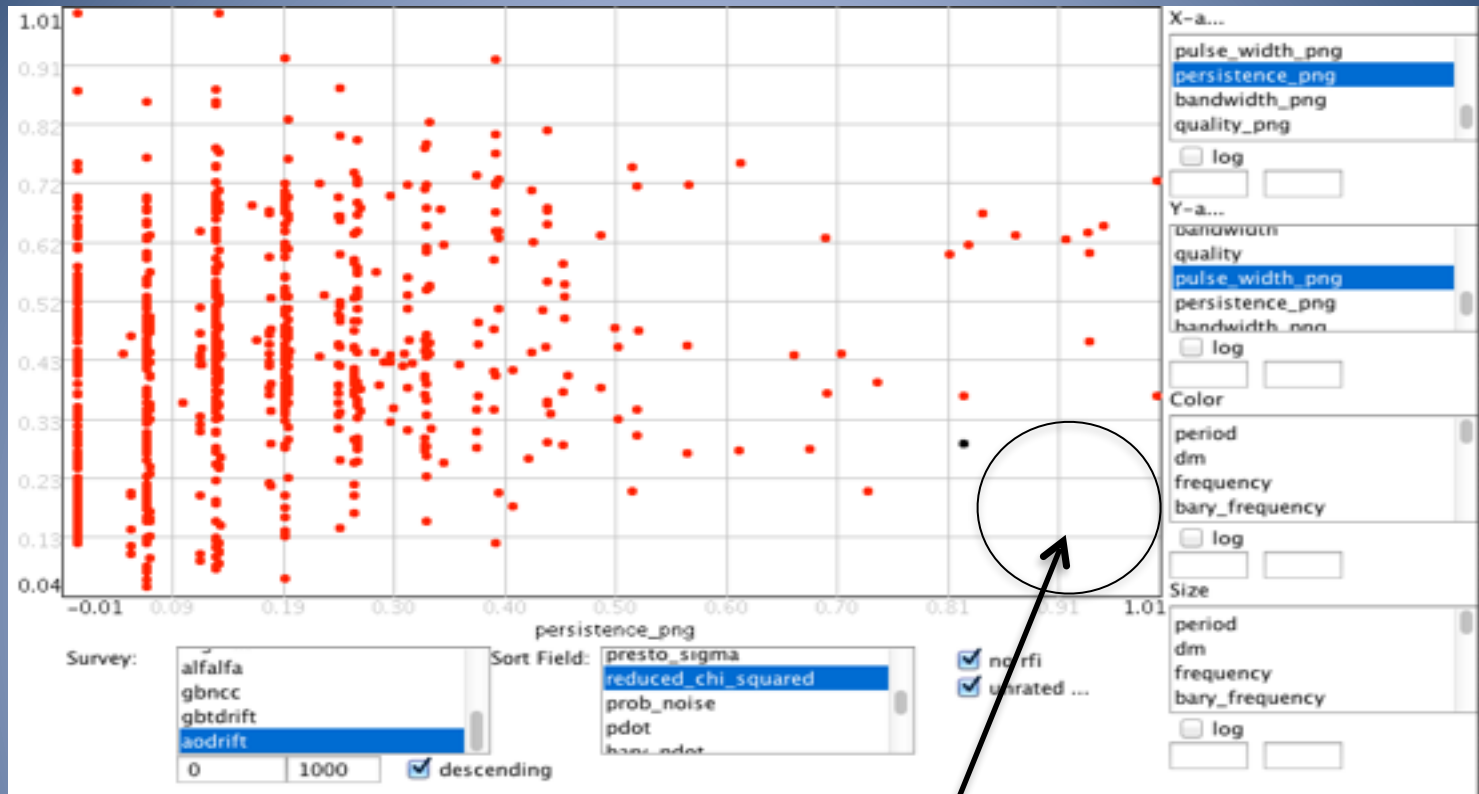
Y-a...

- bary_f_dot
- snr
- coherent_power
- incoherent_power

☒ log

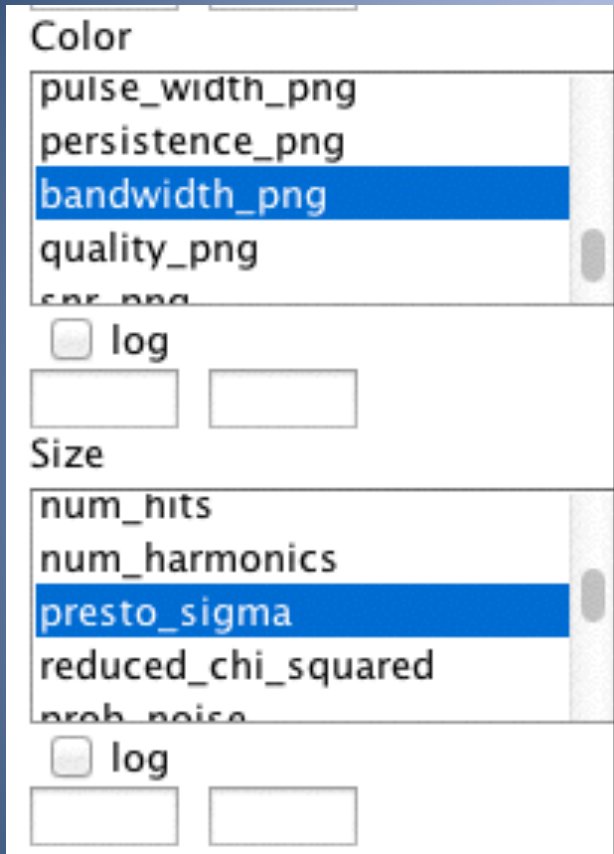
- Select the attributes that will correspond in the x and y axis so that possible pulsars will be located in a desired area of the plot.
- Check [log] if you want the graph to be logarithmically scaled (useful when using attributes with a long range of values).
- Select attributes with _png if available for that attribute.
- For example: choose always persistence_png instead of persistence.

X – Y AXIS



- For example: A useful combination is persistence_png vs pulse_width_png where the best candidates will be in the lower right corner.
- Be creative and create your own combination of attributes using your pulsar knowledge.

COLOR AND SIZE



The image shows a software interface with two main sections: 'Color' and 'Size'. Each section has a list of attributes, a 'log' checkbox, and two empty input boxes.

Color Section:

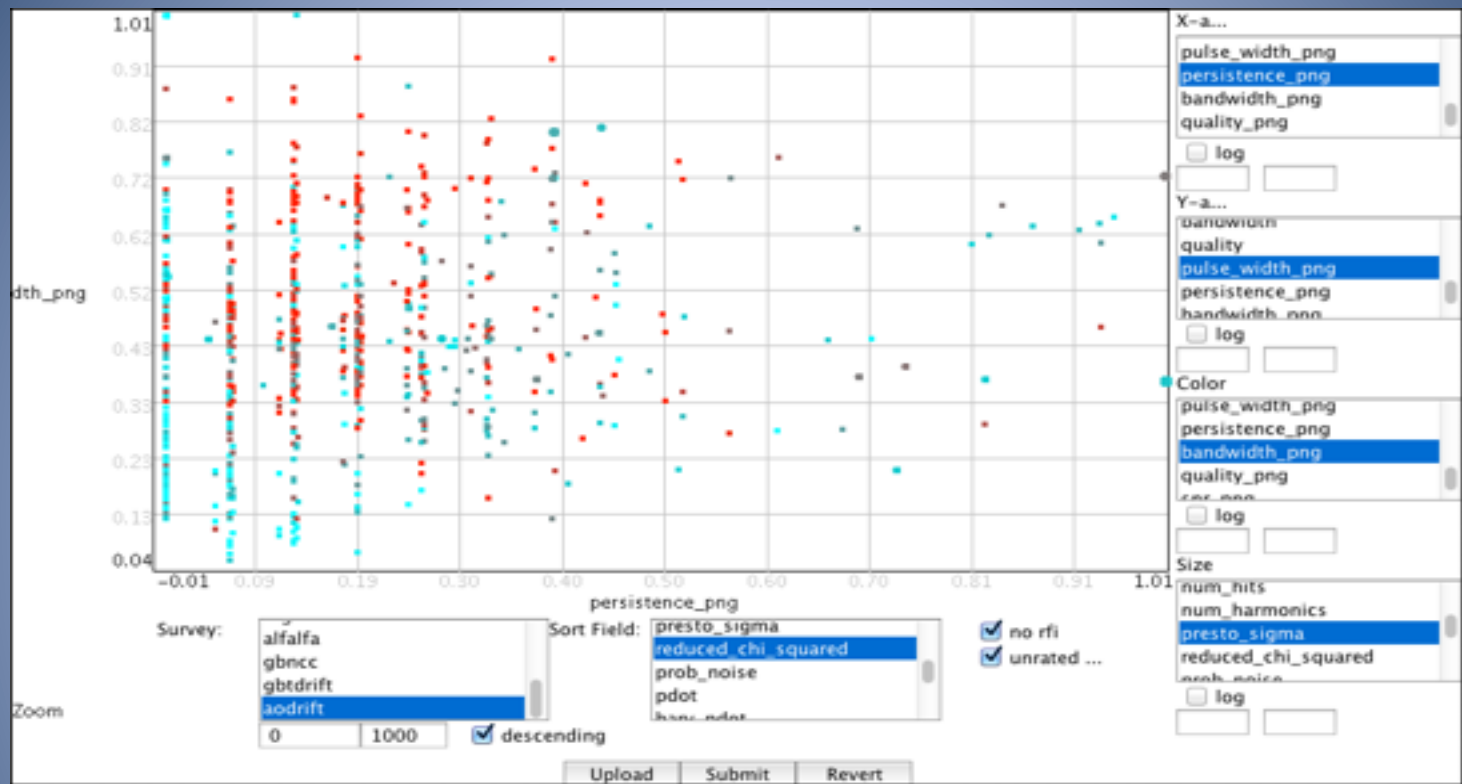
- Attributes: pulse_width_png, persistence_png, bandwidth_png (highlighted), quality_png, and a partially visible one below.
- Checkbox: ☐ log
- Input boxes: Two empty rectangular boxes.

Size Section:

- Attributes: num_hits, num_harmonics, presto_sigma (highlighted), reduced_chi_squared, and a partially visible one below.
- Checkbox: ☐ log
- Input boxes: Two empty rectangular boxes.

- You may assign an attribute to color where a darker color means a higher value for the attribute.
- Color mapping ranges from:
light blue = low value
dark red = high value
- You may assign an attribute to size where a bigger size means a higher value for the attribute.

COLOR AND SIZE



- This is what a plot with color and size attributes looks like.

SUBMIT

Establishing Connection

Survey:

Sort Field:

☐ ascending ☒ descending

☒ no rfi ☒ unrated ...

X-axis:

☐ log

Y-axis:

☐ log

Color:

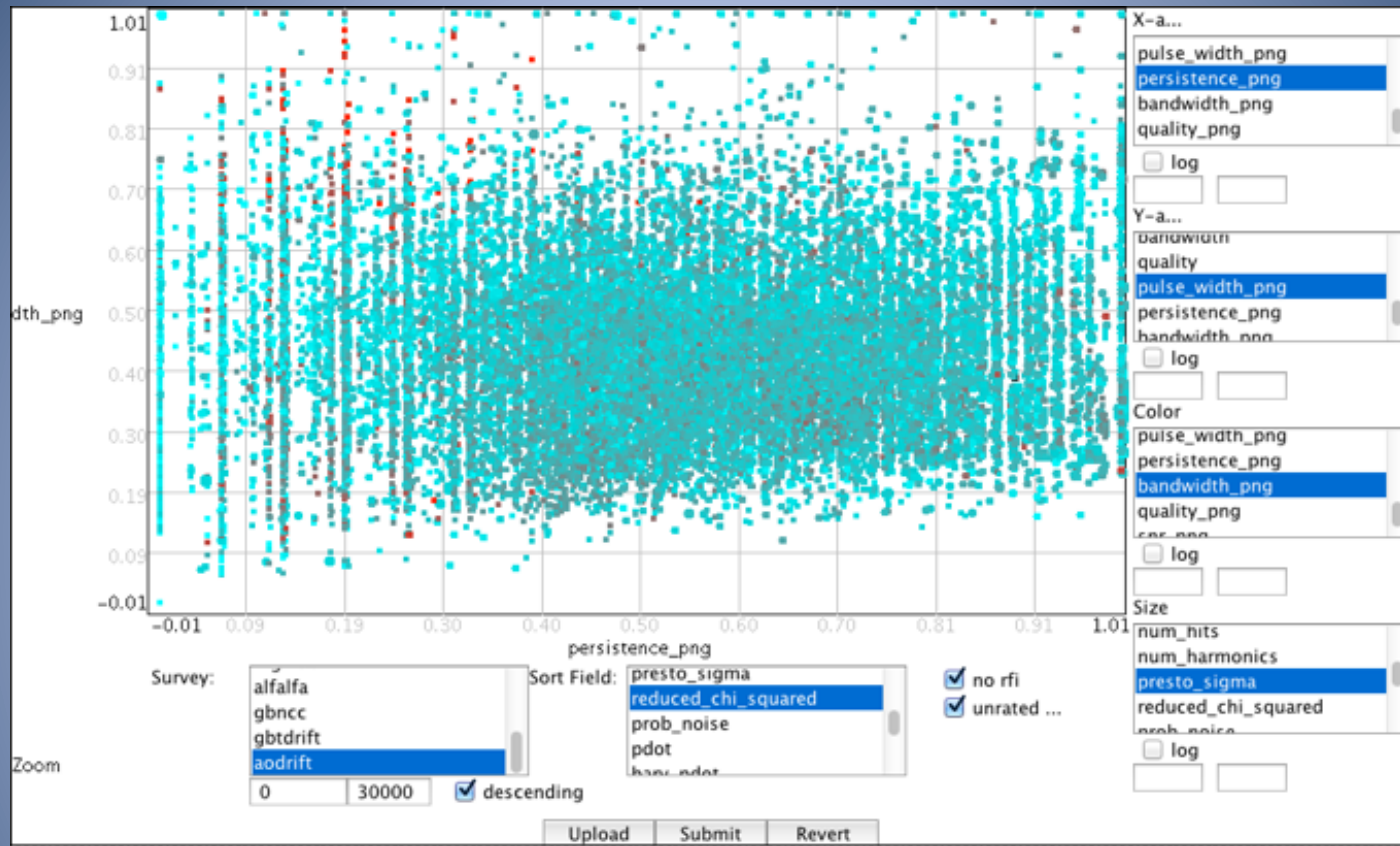
☐ log

Size:

☐ log

- When you have selected your attributes, click the submit button and wait.

SEARCH



- When the plot loads, you can begin searching for pulsars!