

RootSpy GUI

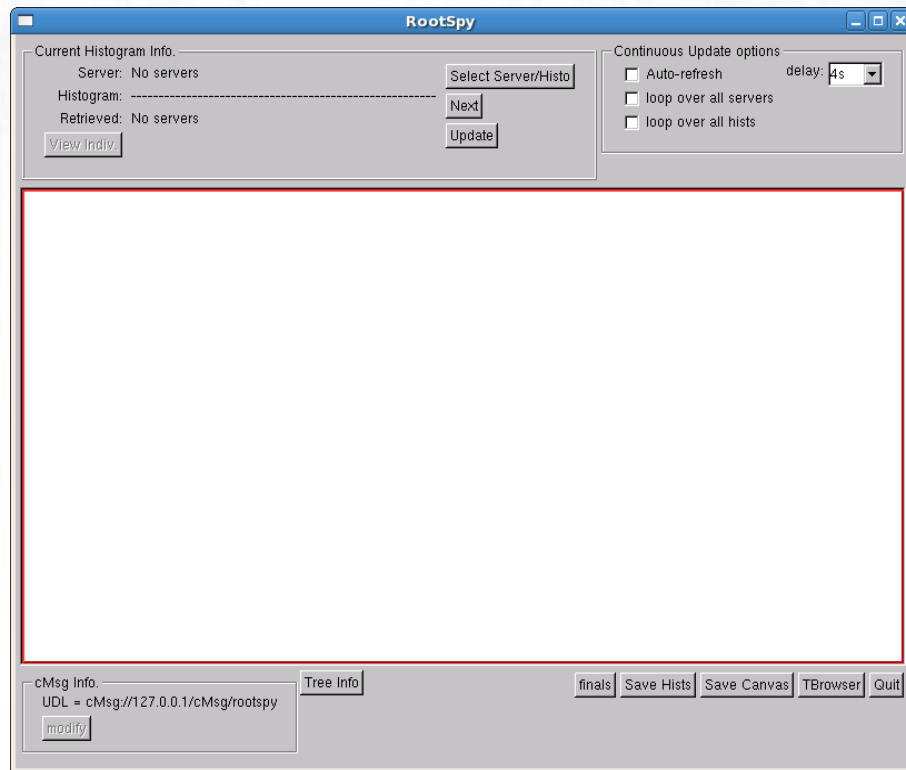
presentation by Justin Barry (CNU)
developers: David Lawrence, Justin Barry,
James Codega
08.16.2010

2. Purpose

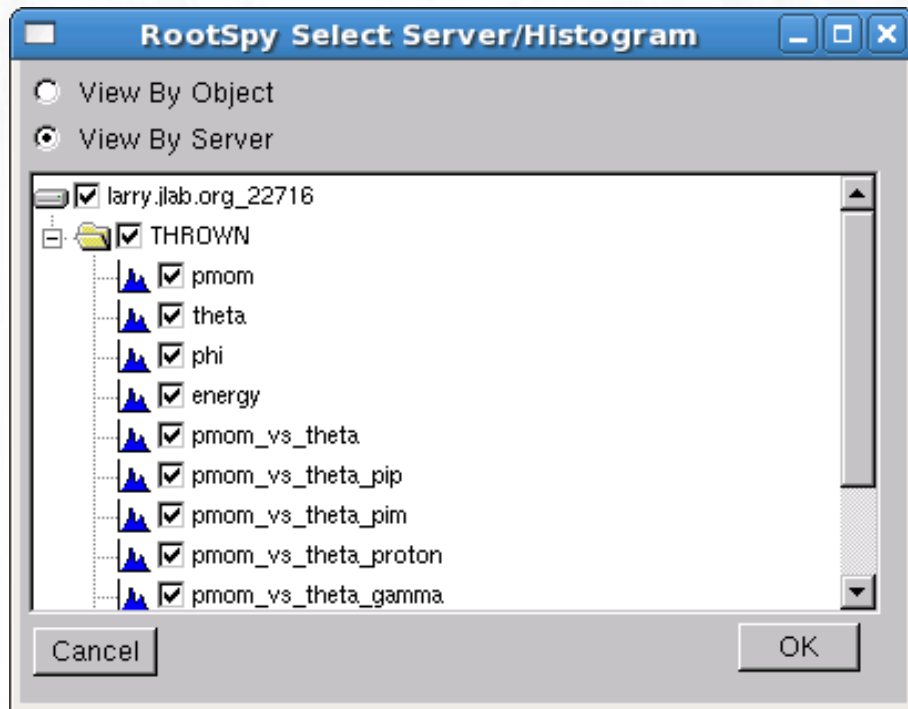
- Provide an easy-to-use way of viewing histograms from an arbitrary number of histogram producers.
- Interact with histogram producers via cMsgServer without them having knowledge of the RootSpy's existence.

3. At Startup

- In the main window click on the “Select Server/Histo” button to open a new window.

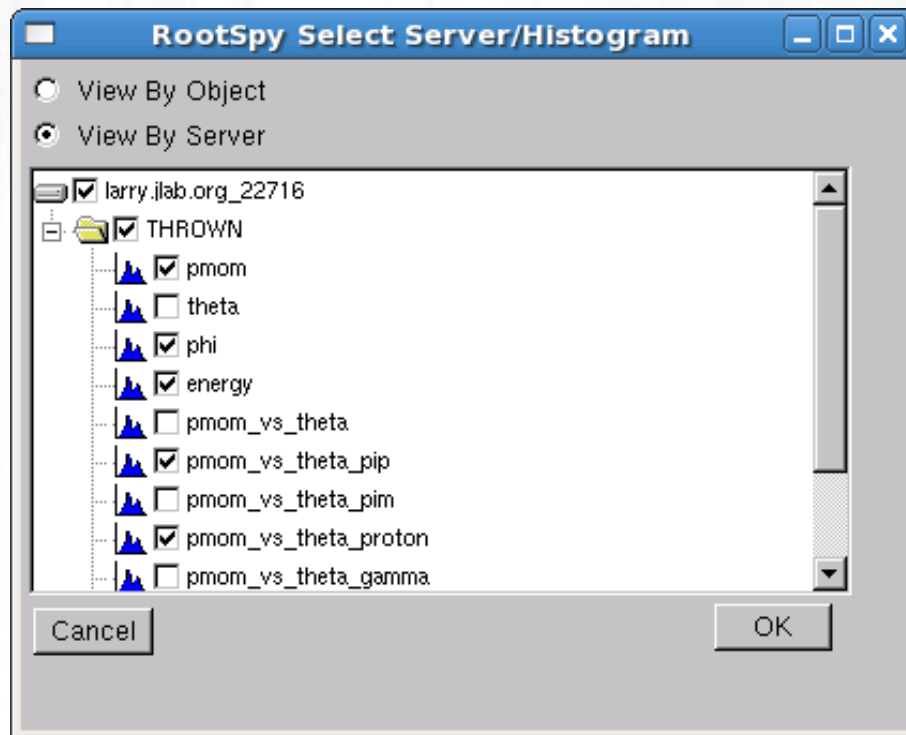


4. Select Server/Histo Dialog



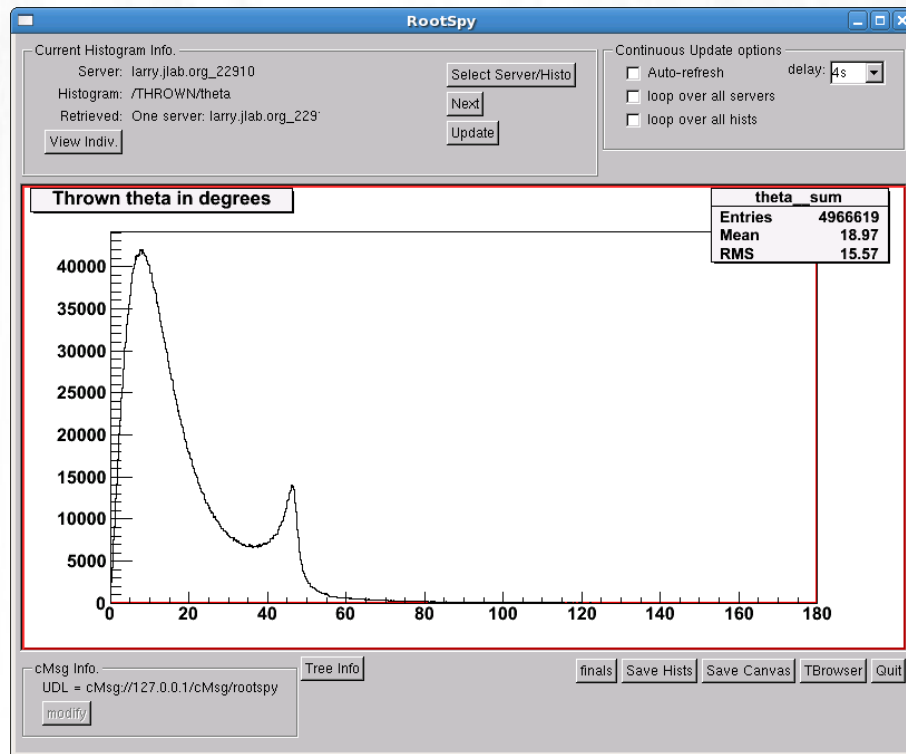
- Select one of the two radio buttons titled “View By Object” and “View By Server”
- “View By Object” - Organizes the histograms by their title as opposed to their producer.
- “View By Server” - Organizes the histograms based on which producer they come from.

5. Select Server/Histo Dialog



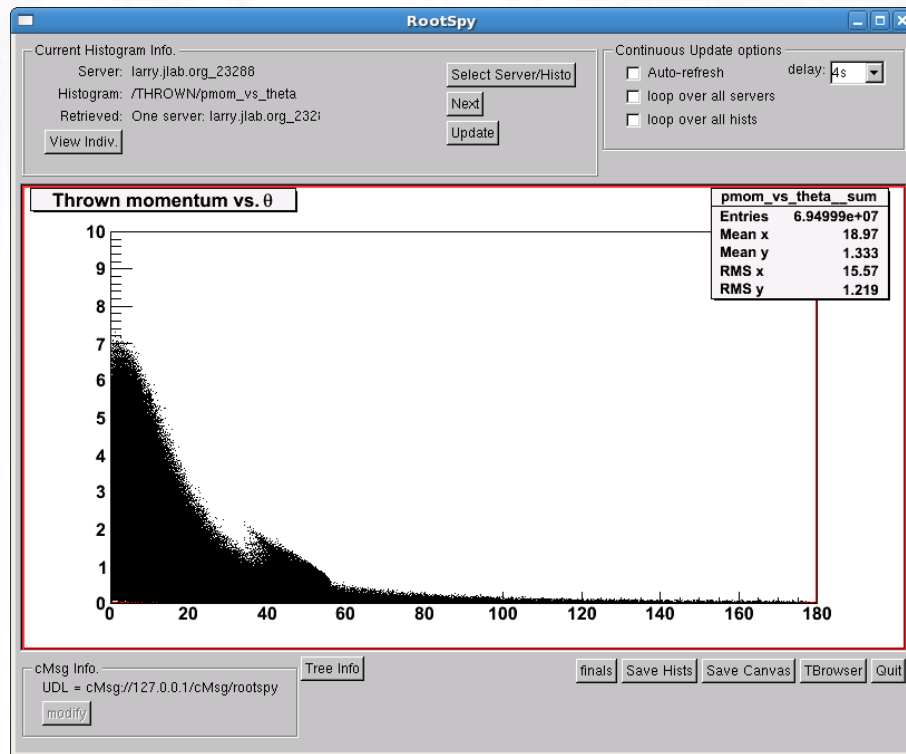
- The check boxes adjacent to the histogram titles indicate which histograms will be requested once this dialog is closed. A message requesting histograms is then sent to the server.

6. Main Window



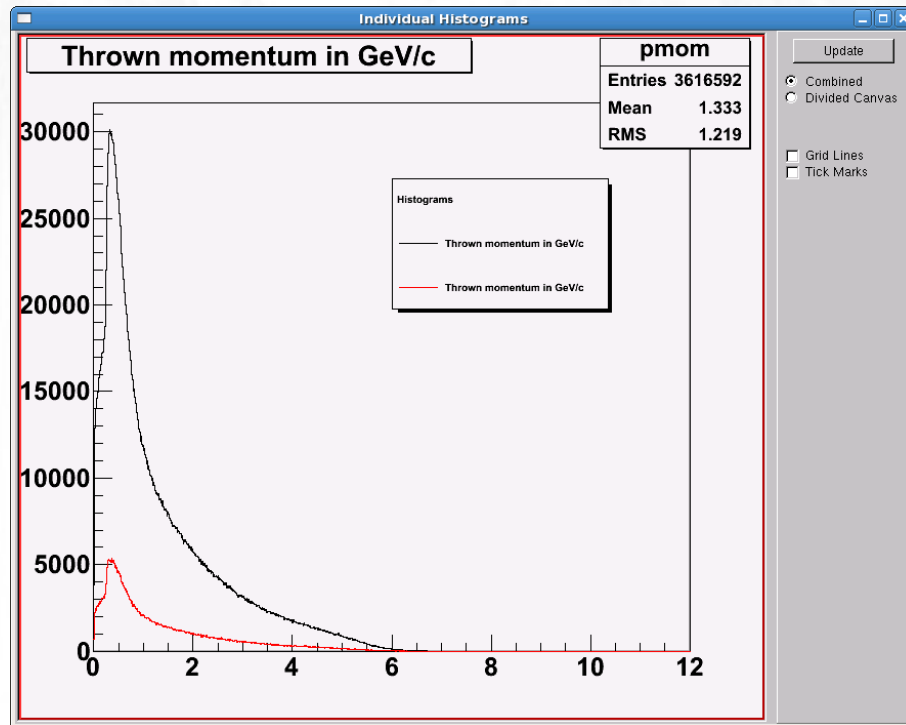
- Update button – displays the most recent histograms.
- Next button – cycles to the next histogram on the list and displays it.

7. Continuous Update Options



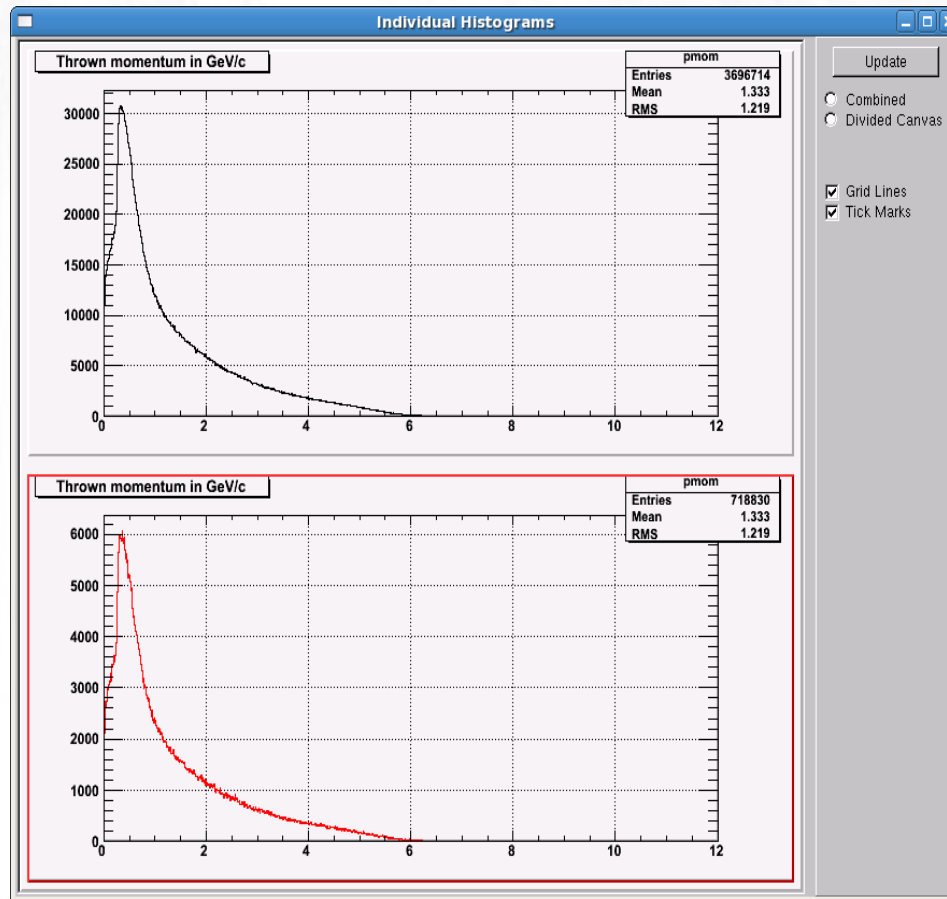
- Auto-refresh – will update and display the histograms continuously based on the time that is set under the “delay” drop box
- loop over all servers– Will display each histogram from each server at a time interval based on “delay”
- loop over all hists – Will display histograms based on their title at a time interval set in the “delay” drop box.

8. View Individual Histograms



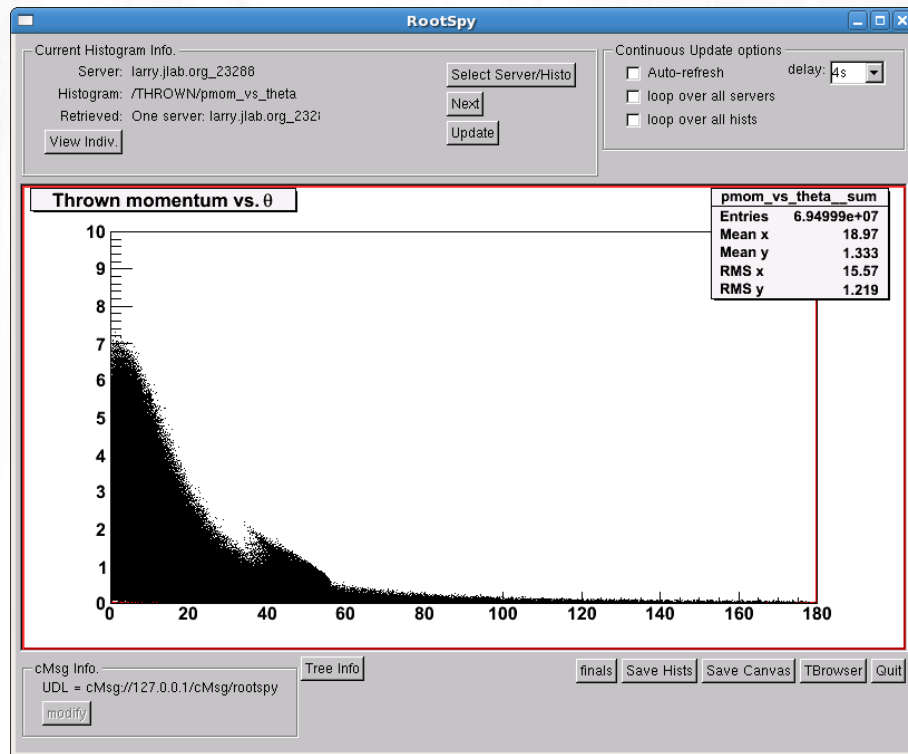
- The “View Individ” Button on the main window will open this dialog.
- Each Histogram from its respective producer is shown individually with a legend indicating its color.

9. Divided Canvas



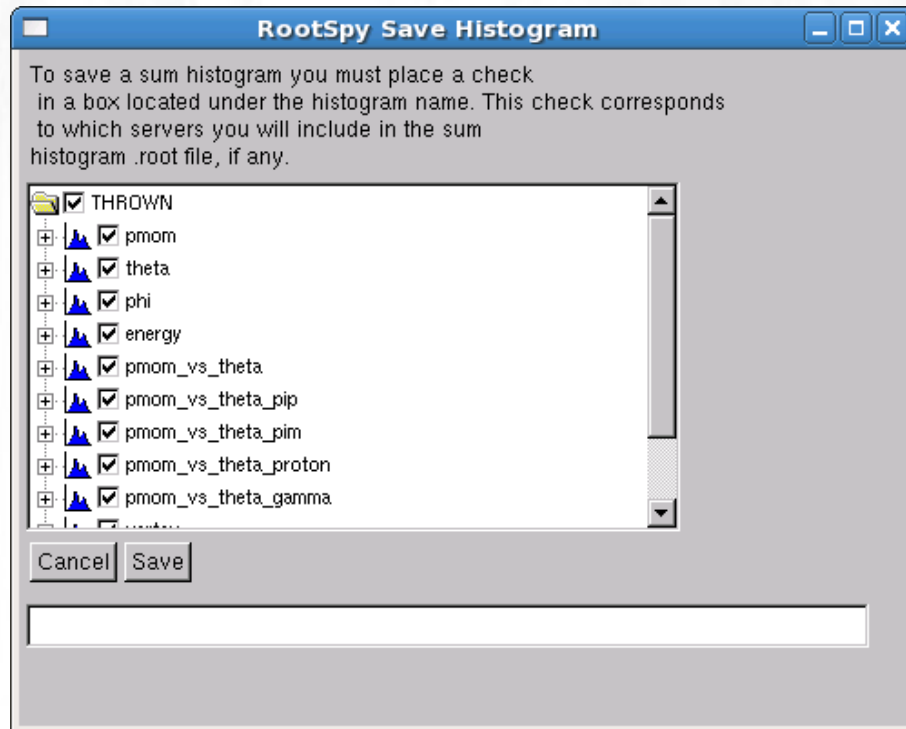
- The “Divide” radio button will divide the canvas into equal parts and show each histogram.
- Grid lines and tick marks can be shown in either view style.

10. Saving Options



- Main Window has a “Save Canvas” Button that will save whatever is displayed on the current canvas as an image file.
- There is also a “Save Hists” button that will bring up a new window providing a more in-depth save feature.

11. Save Histograms



- This dialog is similar to the “Select Server/Histo” dialog.
- The list tree is organized by Histogram producer only.
- Choose which histograms are to be retrieved and saved by using the check boxes adjacent to the histogram names.
- Once the “Save” button is clicked a directory selection dialog will be opened.
- Choose a directory and the Histograms will be saved as a .root file in that directory.

12. Currently working on...

- Supporting Tree structures and the ability tell a server to make a histogram based on data that is stored inside of a root TTree.