

Pop-up Reference

Local Reference

Cosmic Ray e-Lab

Home Library Data Posters Site Index Assessment My Logbook

The Basics Study Guide Resources Big Picture FAQs Site Help

You can: 1) Find some help on this page 2) View a poster created using this study 3) [Try it!](#) Step-by-Step Instructions

Detector Performance Study

This is the analysis path for the performance study. The plot shows how often the [pulse widths](#) were a particular value.

Many, many short pulses with few longer pulses may indicate a noisy [counter](#).

Flowchart: Raw Data -> Find Pulse Times -> Pulse Times -> How Often? -> Frequency Table -> Graph it! -> Plot

Want to [know more?](#)

Inspect the plots below. Which one shows a counter with an enormous number of short pulses? Which two counters have similar performance? What would you do if you owned these four counters?

Milestone: Choose and use appropriate analysis tools.

A clear research question couples your selected data with analysis tools. There are four basic tools; which one you use depends on the information you are seeking. You will execute these analysis routines on the Grid.

The analysis tool bag contains:

- [Performance Study](#) - detector performance check
- [Lifetime Study](#) - the particles in our detector.
- [Flux Study](#) - rate that cosmic rays hit a given area over time.
- [Shower Study](#) - multiple detectors lighting up at the same time.

Log it!

References

[Grid Virtual Data](#) - see the processing flow of your data through the Grid.

[Cosmic Ray Simulation](#) - animation of what a possible shower would look like (need QuickTime plugin)

[Close window](#)

Logbook Entry

Logbook For "Notes on analysis tools to use"

Your New Log Book Entry

Open a plot Add your logbook entry

Off-site Reference

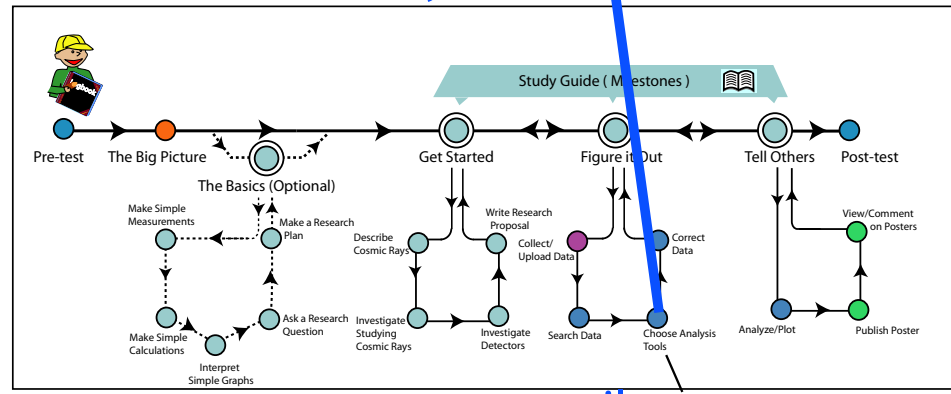
Grid Virtual Data techniques underly web-based analysis tools for students.

Grid Submission Site

Time over Threshold

Analysis Tools: Analyze Data, Plot Data, Publish Data

Study Guide



milestone

Clicking on a Milestone in the Study Guide