

Error Report Check

The *Output/*_ErrReport.txt* files are a very compact source of information. Please check there the *event size* (among 1k and 2k words), *trigger rate* (80 Hz for 3/4 trigger muons on Earth), *track reconstruction rate* (~50 Hz for muons 3/4 trigger), *presence of errors* (pay attention: one ladder T0-TDR18, may give many error. This is known!).

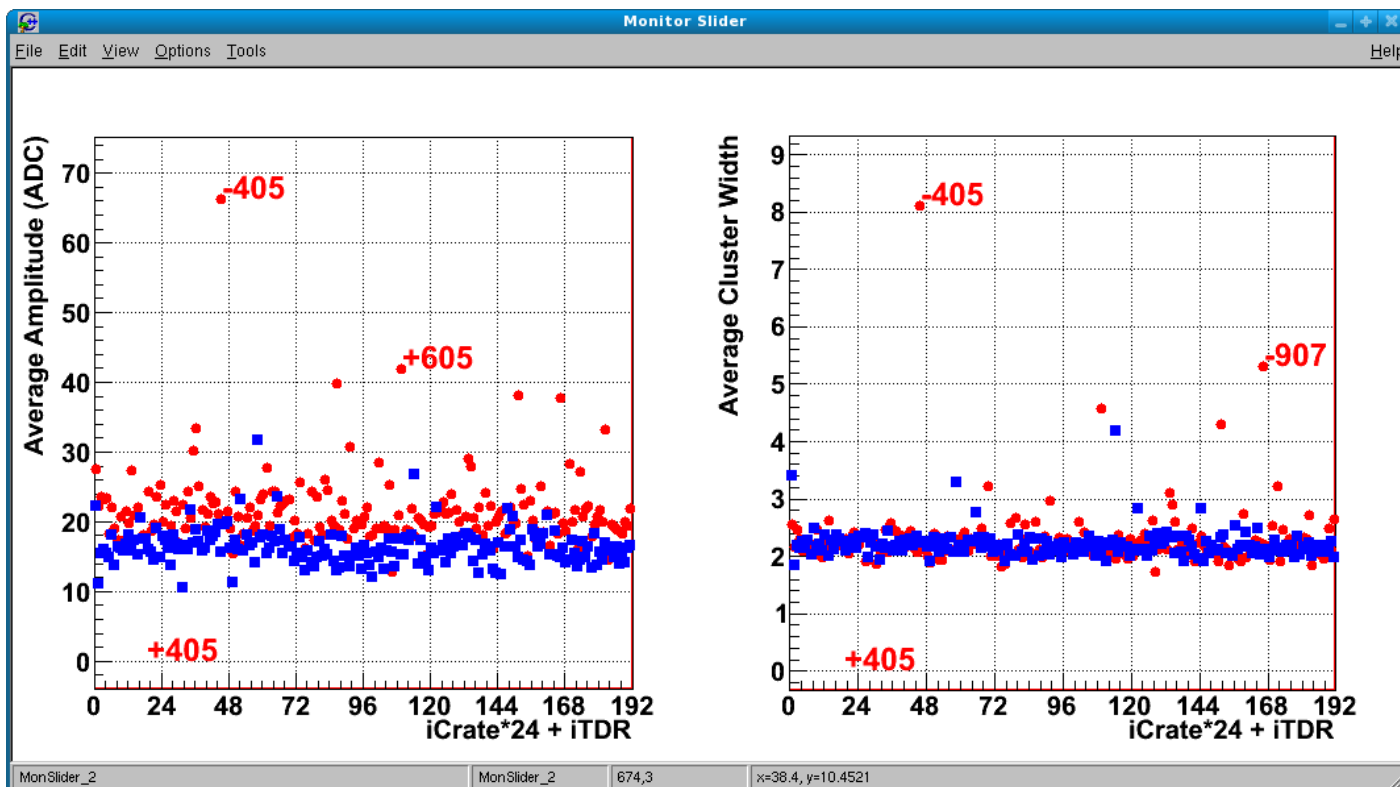
Data Quality Check

You can open the histogram monitoring files **_hmon.root* with the MonitorUI program from everywhere. A typical example of usage is:

MonitorUI Output/0092716_1281323720_hmon.root

From the available histos you can choose:

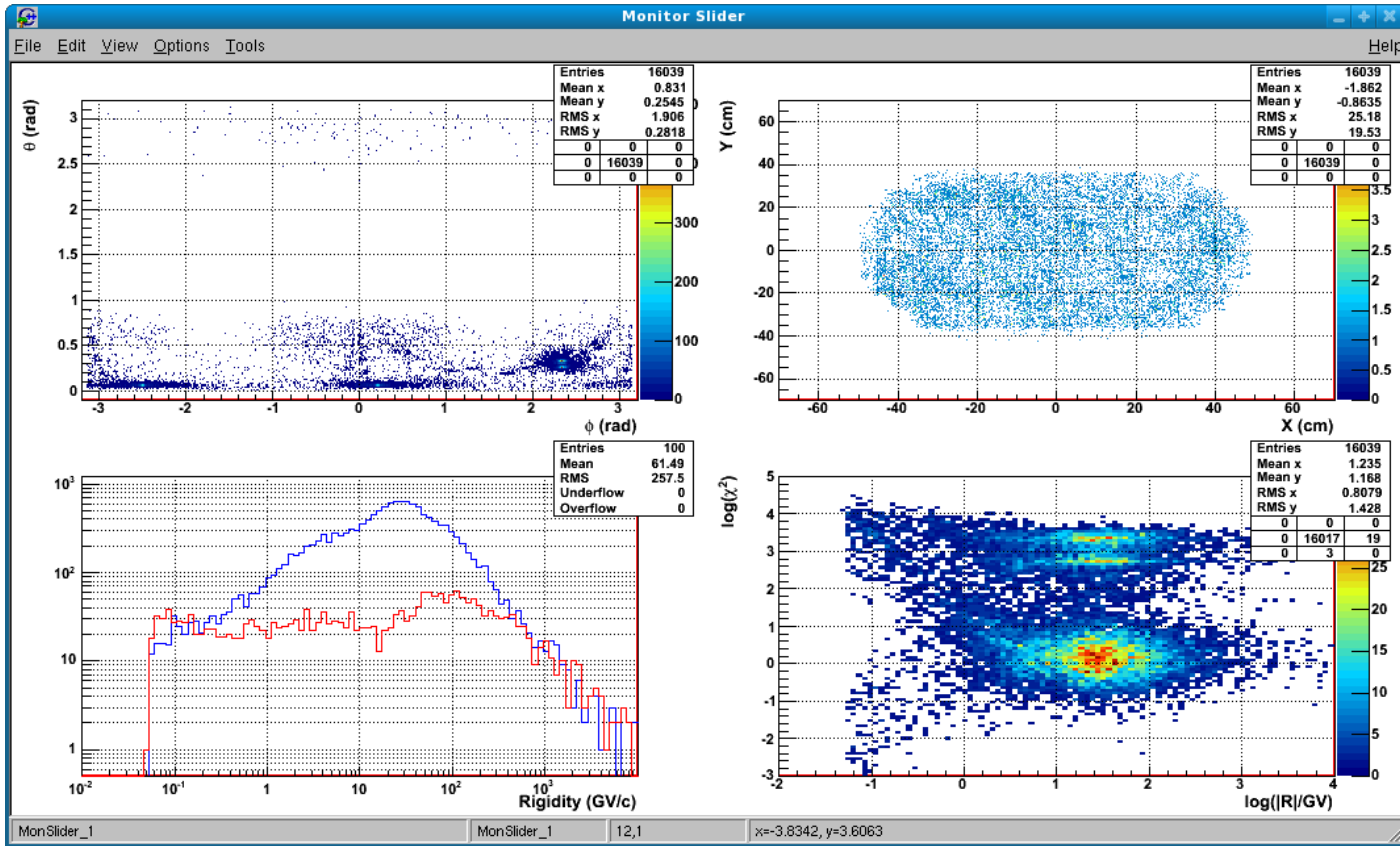
- *Tracker data quality parameters*: ladder average size, signal, tracker size, crates single sizes
- *Data taking quality*: distribution inter-event
- *Ladder-by-ladder informations*: signal, cluster size, seed occupancy, size
- *Reconstruction parameters*: number of cluster, hits and tracks versus event number, rigidity, chisquared, eccetera



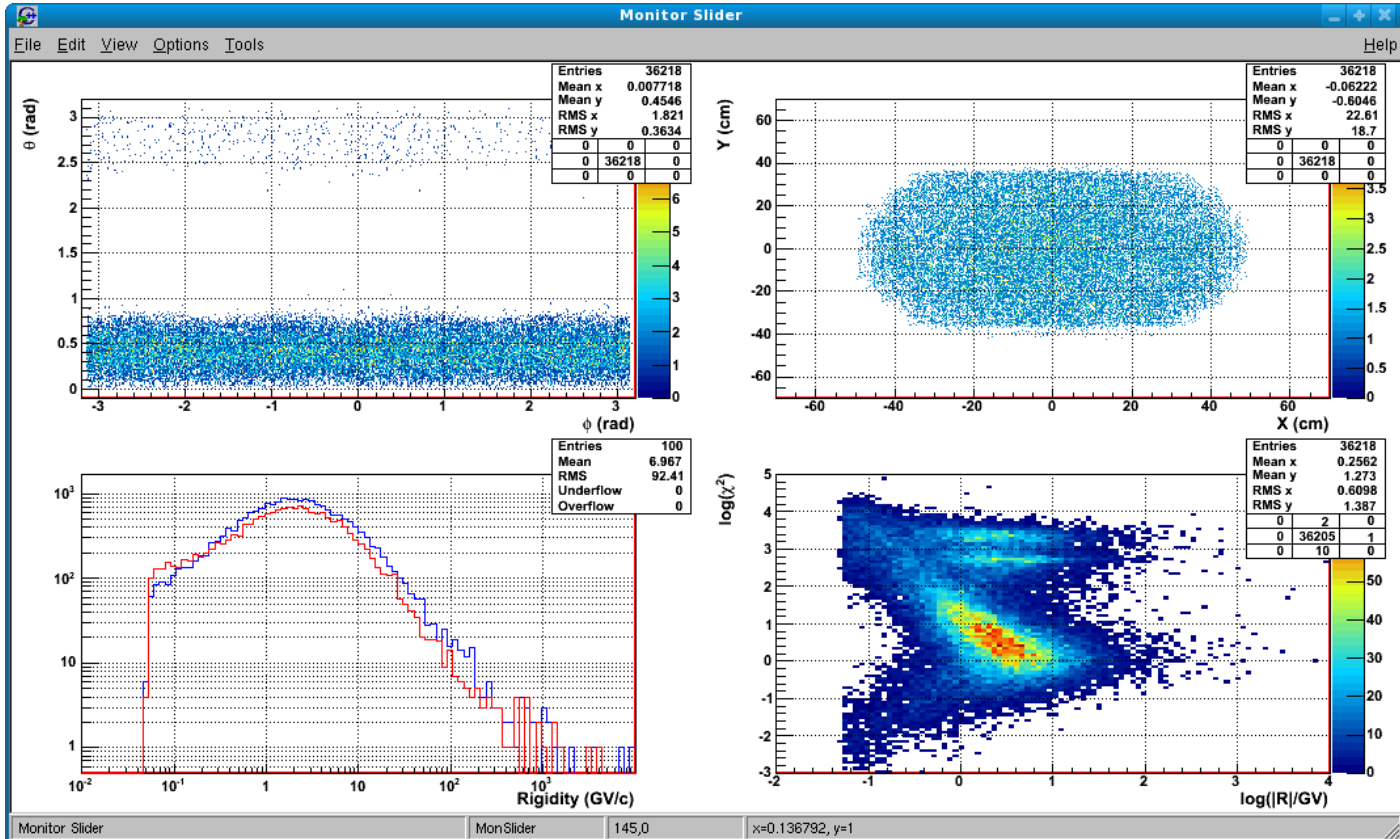
This is the first plot you can see in the monitoring program. From this plot you can immediately see bad ladders from the point of view of gains (average ADC value), or from the point of view of cluster size. The four bad-ladders are known:

- The -405 is a very noisy ladder with both large clusters and large amplitudes.
- The +405 n-side is dead.
- The -907 seems bad only from the point of view of cluster size
- The +605 has a bad VA on the n-side.

The check of this plot is required in order to confirm the quality of the Tracker data taking.

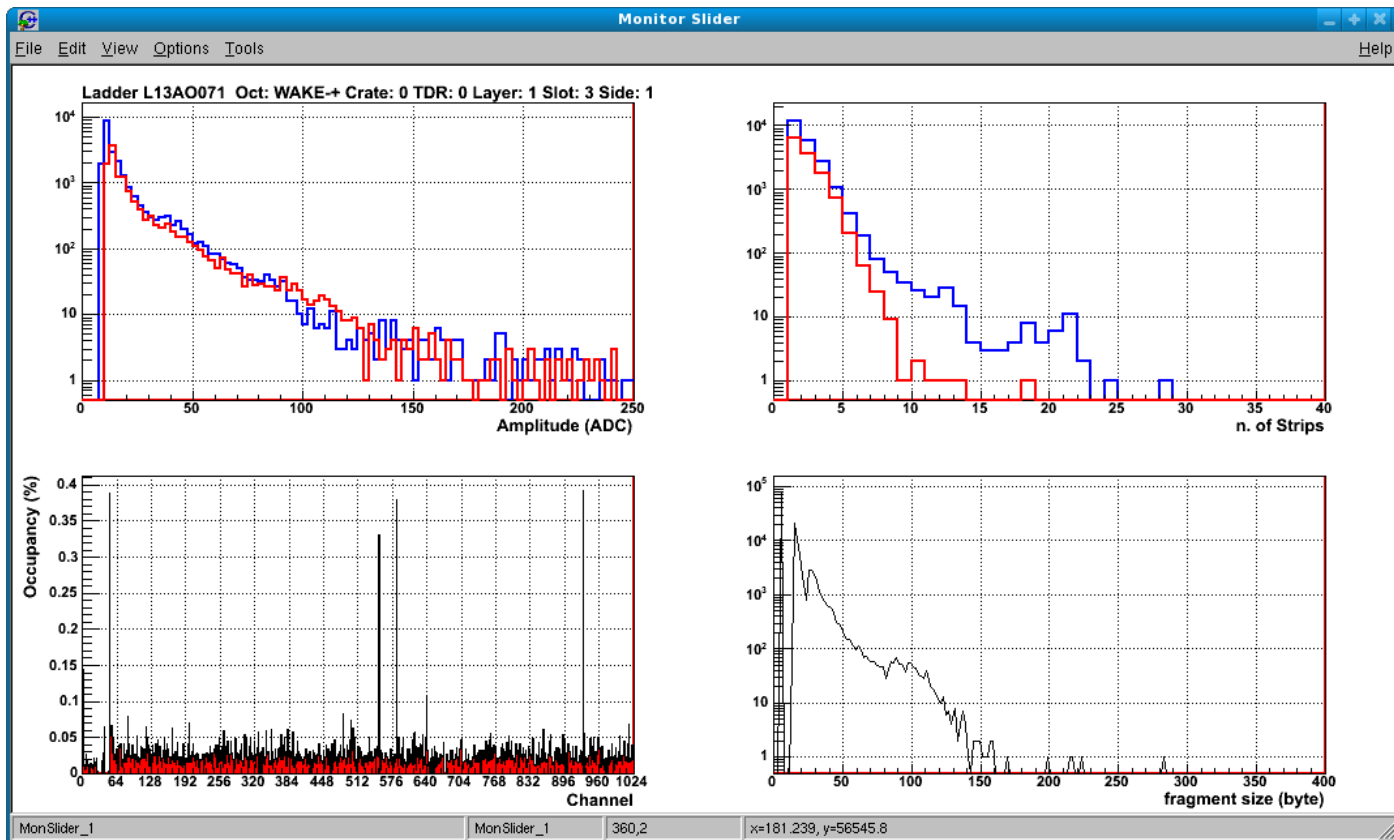


In this plot is represented the very wide beam of secondary protons/pions (80 GeV) at three different inclinations. You can see clearly the 3 different inclination in the theta-phi plot. Since the beam is very wide the X-Y distribution is quite uniform. For the cosmic rays the picture will be:



Ladder by Ladder Check

The ladder by ladder check is not strictly needed but is very useful. Please try to use it. Here an example of the quantities plotted.



This topic: Main > Data

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