

## Additional Information for HAWCmon

as described by Gus Sinnis, Brenda Dingus and Tyce DeYoung

- I. Tracking/Viewing DAQ Errors
  1. L1 full
  2. Buffer overflows
  3. Memory full
  4. Channels affected
  5. TDCs affected
  6. Channels with no PMTs attached
  
- II. N-Channel Plot Distribution
  1. Put an arrow for the number of working PMTs
  
- III. GRB Webpage
  1. Create a similar utility for 2D space
  
- IV. Weather Data
  1. There is no weather data on HAWCmon page
  
- V. UPS Voltages
  1. No data for input
  2. No data for output
  
- VI. High Voltage
  1. There is no high voltage information
  
- VII. Water Level Data
  1. No water level data available for some of the buttons on the HAWCmon page. However, the water level data is available under the "external links"
  
- VIII. Scaler Rate Plots
  1. It is a pain to look through all these scaler rate plots. How about at least putting all PMTs from the same tank on one plot?
  2. Adding a few more default time intervals, e.g. not just 2 days, but also 2 weeks and 2 months, would be useful
  
- IX. GTC Monitoring Page
  1. GTC monitoring page is empty
  2. How do I know we're getting good GPS times?
  3. Are there error bits to monitor?
  4. How about including at least a comparison every so often with the computer clock?

X. Plot Formats

1. Include banner that clearly states time the web page was last updated
2. Include banner that clearly states time for most recent data
3. Remove redundant plots
4. Presenting plots in same format would make them easier to read
5. Providing a description of the plots would be helpful

XI. Monitoring Pages

1. Consider streamlining