

Brenda Dingus' Comments/Requests:

--There is no weather data on HAWC mon page.

--The CH (near ceiling above rack 10) temp cycles every ~10 min with an amplitude peak to peak of ~2 deg C, mean ~20 deg C. FEB crate 1 shows same period, but amplitude is 1/2 deg C, mean 26 deg C.

--At night the Calibration room temp cycles once per hour with amplitude 3-4 deg C, mean ~20 deg. The rise is fast and fall is slow. It looks like the heater is on. The pattern during the day has fewer cycles. I looked at the laser manual and it says operating Temp should be 20-35 deg C. How can we keep the temp more stable in this room? Or maybe just heat the fiber optic table? Does it matter?

--UPS voltages (both input and output) have "No Data".

--There is no HV info either.

--TDC disk is 80% full. I presume Arturo will take it back to UNAM. This is done every week, right?

--No water level data available for some of the buttons on the HAWC mon page. However, the water level data is available under the "external links".

--Water level page says that 118 tanks are monitored. 48 of these are "under watch". It seems like most of these are not read out, i.e. zero depth. H13 has jumps. J16 appears to be leaking, but it may just be jumps in the readout as well.

--Scaler rate plots look mostly good. As noted by Hermes, the tanks that were open show increased rate on the C PMT which calms down after a few hours. M13B does have big jumps in the rate. L11A noisy before HV was shut off, but good sense then. L14D had a funny rate bump up earlier today. O11A took a while to calm down after the HV shutdown yesterday. O12D is noisy.

--It is a pain to look thru all these scaler rate plots. How about at least putting all PMTs from the same tank on one plot? Also a few more default time intervals, e.g. not just 2 days, but also 2 weeks and 2 months, would be useful.

--GTC monitoring page is empty. How do I know we're getting good GPS times? Are there error bits to monitor? How about at least a comparison every so often with the computer clock?

--On the TDC DAQ monitoring page, the plots seem mostly reasonable. One very weird one is the RA and Dec <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/decVsRa.png>. There's a ring of events at what I'd bet is the horizon and there's also a bunch that come out of the earth (i.e. 180 deg off). It seems that the angle fitter should check for these and fix them.

Gus Sinnis' Comments/Requests:

--We should be tracking and viewing the daq errors.

--L1 full

--Buffer overflows

--Memory full.

--The experts should chime in but from discussion with Gerd we need more granularity than gross numbers (which channels and TDCs are affected).

--Also channel hits with no PMTs attached.

--Also on the plot of the Nchannel distribution we should put an arrow at the number of working PMTs.

--Finally I was looking at Tilan's GRB webpage. The ability to pick any two variables and plot correlations is really useful. It is hard to predict in advance what we might want to look at in 2D space. But having a similar utility would be fantastic.

Ty DeYoung's Comments/Requests:

--Two major issues:

~First, the system only covers part of the detector, so that for many tubes one is forced to rely on the "online plots" pages. This is a problem of coordination, not one intrinsic to HAWCMon, but it is a serious issue for the shifters.

~Second, the data provided even by the local instance is apparently coming from off-site, so that during the 15- to 20-minute network outages that happen once or twice an hour, we can't see the current state of the detector. This makes debugging any misbehaving tube at the site quite time-consuming and rather frustrating, since one needs to wait 20 to 30 minutes to see the effect of any action. If I am correct in assuming that the main information is created/stored offsite and periodically pulled to the site by the local instance, it might be better to reverse the set-up and do the processing at the site and then pull it down the mountain periodically to the remote sites. (If I am not correct in that assumption, then I do not understand the lag before data is available in the local HAWCMon.)

--The fact that the logbook is frequently unavailable for 20 minutes at a time is likewise sub-optimal, but that's not really a monitoring issue.