Responding To DAQ Powercycle Requests, Monitoring, and Clearing TOF and MTD Errors

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[see the printed version posted at the TOF station for updates]

For all TOF/MTD alarms or errors, _please make a detailed entry in the shift log_. Be specific so the experts will understand what happened and what action was taken.

Additional information:

1. **Note, most error recovery actions are now automatic.**
   DAQ monitors every event for TOF or MTD data corruption. If corruption is found, an entry is made in the STAR DAQ Monitor webpage. If the corruption persists, the DAQ pauses the run and resets the TOF/MTD electronics. If the corruption persists after several reset attempts, the DAQ pauses the run and power cycles the relevant electronics. If none of the recovery or power cycle procedures fix the corruption, DAQ will stop the run and post a message in the STAR DAQ Monitor webpage. First, simply start a new run. If this does not clear the problem, follow the _TOF Powercycle Procedure_ or _MTD Powercycle Procedure_.

   There are a number of reasons why DAQ will stop the run and request a full powercycle. DAQ might stop the run because it powercycled one or a few trays a number of times and could not fix the problem. In this case the crew should powercycle TOF or MTD as requested. If DAQ stops the run and the log lists many trays or states that there are too many to list, the crew should first try the powercycle procedure and if that does not work, then do the canbus restart procedure and try again.

2. **Please monitor the TOF & MTD online QA plots during data taking.**
   Please monitor the TOF online QA during data taking. If you see electronics errors, incorrect bunch id errors, or tray read out errors that are not also reported in the STAR DAQ Monitor log, please call a TOF/MTD expert.

3. **TOF OR MTD readout 100% DAQ errors** and one of the RDO 1-4 lights on the TOF DAQ receiver is not responding (LED is black instead of blue or purple): The cure is to stop the run, mark it bad, and start a new run. Nothing else is required. Make a note in the shift log.   This works 99% of the time. If TOF is ~50% busy in DAQ: check for errors in procedure 1 above.

4. **If you see the LV off**: i.e. dots are blue. (In the normal situation, the dots are green, indicating the LVs are on), please call the TOF/MTD expert.

5. **TOF or MTD HV GUI not responding**: please leave a note in the shift log, and follow the "HVIOC Restart" procedure in the printed manual to fix it. You might need to repeat this procedure more than once. Call the expert for help in case you cannot fix the problem.

6. The Main TOF and MTD GUIs may be opened with the following commands: 'TOFHV_MEDM' & 'MTDHV_MEDM'

The Anaconda electronics monitoring should always be running in the background on tofcontrol. It monitors and records the status of the TOF/MTD electronics. This information can be useful to TOF/MTD experts to diagnose problems.