## Instructions for BES3 DAQ take data with CGEM

1. **The new version with BES3 DAQ communicated with CGEM operates the same way as before: run daqrun, then select option 1.**  
   If CGEM-related errors appear on the interface, please contact CGEM Experts for resolution.
2. **To switch to running without CGEM, first execute killdaq, then run daqrun\_old, and select option 1.**
3. **Steps to check the CGEM data file:**
   1. **ssh daqs3**
   2. **checkdata\_env**
   3. **vi ~/runs.txt and enter the run number you want to check.**
   4. **test\_cgem\_bin\_file.sh ~/runs.txt to start the check.**
   5. **cd /data/decode to view the check results:**  
      a) Open the folder corresponding to the run number, for example: **cd 84598**.  
      b) Check the unique trigger count: **grep "uniq" total\_trigger\_number\_summary.txt**.  
      c) Check the last trigger number: **grep "Last" total\_trigger\_number\_summary.txt**.  
      d) Check for checkbit errors: **grep "NO checkbit error" checkbit\_summary.txt**. If the output shows 22 lines, there are no checkbit errors. Otherwise, check **checkbit\_summary.txt** to see which GEMROC has errors.
4. **If the trigger count matches BES3, you can proceed with the data file merging and upload the merged file to the tape library. The current merging and uploading steps are as follows:**
   1. **ssh daqs3**
   2. **mergedata\_env**
   3. **merge\_data.sh ~/runs.txt**
   4. **cd /data/cgemdata\_file/84598/ to view the merged data file. Replace 84598 with the run number you want to check.**
   5. **xrdfs $EOS\_MGM\_URL**  
      a) **cd /eos/bes3/run/raw/round18/CGEM/raw/84598** to check if the raw files have been uploaded.  
      b) **cd /eos/bes3/run/raw/round18/CGEM/file/84598** to check if the merged files have been uploaded.

Let me know if you need further assistance!