

# A Brief Marathon Pass 1 Update

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# It's Done and Ready to Go! 😊

- After several setbacks, it's ready to use!
- What were those setbacks?
  - Code errors discovered
  - db\_run errors discovered
  - Farm slowdowns \*grumble, grumble\*

# Where is it?!

- It is all added to tape so that we don't lose it to volatile
- It is located in:
  - /mss/halla/triton/prod/marathon/pass1/
  - From there it is organized by kinematic
- If you need a variable for calibration work, use:
  - /mss/halla/triton/prod/marathon/pass1\_calibration/
  - This has all variables in the TTrees
  - The files are \*significantly\* larger (record is run 2423 being broken into 31 root files)

# How do I use them?

- First, get them on cache
  - Use `jcache get [files in mss]`
  - You can use wildcards
  - To get all pass1 files:
    - `jcache get /mss/halla/triton/prod/marathon/pass1/*/*`
  - `'-e [your_email]'` flag will email you when the files are available in cache
- To ensure compatibility, you need to use the same version of ROOT and Analyzer that was used for replaying:
  - ROOT 6.10/02
  - Analyzer 1.6.0-rc1 (May 08 2018)
  - Can use a source file:
    - `source /work/halla/triton/MARATHON_Replay/sourceme.sh`

# The Tool

- In the pass1 branch of our repository, we have a folder called `batch_farm`
- In there is a script called *genjob*
- This script takes a text file containing a list of run numbers (one per line) and will create a job for each one and submit it to the batch farm
- All you have to do afterward is tell the farm to run the workflow

# The Tool

- The jobs generated will automatically submit the output to tape
  - All of our RootFiles are backed up in the JLab tape system
- When the farm is behaving, we can replay *all* of our data in about 2 hours

# What to do from here?

- Analysis
  - Yay!
- Ideally this code should only be run once per pass
  - The intention behind creating one set of RootFiles is that we all work with data calibrated the same way for consistency
- If files are bad or missing
  - Email me: [tjhague@jlab.org](mailto:tjhague@jlab.org)

# Tyler... This took a while to get here...

## What about pass2?

- All of the known kinks with the batch job generation have been ironed out
- User-friendliness updates have been pushed to GitHub
  - Updating the code for pass2 is as simple as updating a single variable at the top of the file
- The User-friendliness update also makes this code portable for replaying data for other experiments
  - The README documents how to set up the necessary variables and prepare your replay code
  - It should be especially easy for other Tritium experiments to use this code for batch analysis (already done by e'p)



Questions? Comments? Pass 2?