Status Report of May Production Train Campaign

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Production Strategy

Critical Dates:

Cut-off Date for Inclusion in Train Campaigns: Last working day before first Monday of the month- **June 2 and June 30** for next two months.

Discussion of summary of changes, identification of missed targets, and prioritization of sprint goals in compSW meeting: First wednesday of the first working week- **June 7 and July 5** for next two months.

Discussion of validation studies in compSW meeting: Second wednesday of second working week- **June 14 and July 12** for next two months

Week 1: YY.MM.0
Verification and Validation

Last working day of first week: Train 1

Week 2: YY.MM.1
Targeted development

Last working day of the second week: Train 2

Week 3+4: YY.MM.2

Charters and taxis - Requests for charters by DSSs, DSCs, and PWGs, need to be filtered through Technical and Analysis Coordinators

Simulated Data Sets - May Trains 23.05.1 and **23.05.2**

Plan is to simulate all the data sets from the [last campaign](#). A little bit challenging because the time per event has increased (expected with changes in software stack; will be brought down with coordinated dev effort). This means a lot more jobs (~x5) need to be run to achieve similar statistics (number of jobs is calibrated based on expected job time).

The data sets currently queued to run are: DIS NC, DIS CC, and Exclusive. We are running both epic_arches and epic_brycecanyon detector configuration.

For the general campaign, we will only be providing the reconstructed output. But for ~10k events and various beam energy configurations (10x100, 18x275, 5x41), we will provide full simulation output for DIS NC (minQ2=10) datasets to aid algorithm development. We are also planning to provide similar number of events in full sim rootfile for beamgas and synchrotron backgrounds (no reco output for these yet).

Software Change Tracking Document

A document summarizing all the [software changes](#) until April has been created

Plan is to update it each month

How to access campaign output

- The simulation input and output files are stored in 3 folders: EVGEN, FULL, and RECO
- To access the output from the campaign in the S3 storage:
  - Do this ONCE: ./mc config host add S3 https://eics3.sdcc.bnl.gov:9000 eicS3read eicS3read
  - Then you can use ./mc ls S3/eictest/EPIC/FULL/23.05.2 or ./mc tree S3/eictest/EPIC/FULL/23.05.2 to view content
  - To copy to local machine: ./mc cp -r S3/eictest/EPIC/FULL/23.05.2 .
- To run eicrecon on the full output file, you would need to source the exact tagged geometry and define the DETECTOR_CONFIG environment variable while running eicrecon. See example here


```
S3/eictest/EPIC/FULL/23.05.2
├── epic_arches
│   └── DIS
│       └── NC
│           ├── 10x100
│           │   └── minQ2=100
│           ├── 18x275
│           │   └── minQ2=100
│           └── 5x41
│               └── minQ2=100
├── epic_brycecanyon
│   └── DIS
│       └── NC
│           ├── 10x100
│           │   └── minQ2=100
│           ├── 18x275
│           │   └── minQ2=100
│           └── 5x41
│               └── minQ2=100
```

```
S3/eictest/EPIC/RECO/23.05.2
├── epic_arches
│   └── DIS
│       └── NC
│           ├── 10x100
│           │   └── minQ2=100
│           ├── 18x275
│           │   ├── minQ2=1
│           │   ├── minQ2=10
│           │   ├── minQ2=100
│           │   └── minQ2=1000
│           └── 5x41
│               └── minQ2=100
├── epic_brycecanyon
│   └── DIS
│       ├── CC
│       │   ├── 10x100
│       │   │   ├── minQ2=100
│       │   │   └── minQ2=1000
│       │   ├── 18x275
│       │   │   ├── minQ2=100
│       │   │   └── minQ2=1000
│       │   └── 5x41
│       │       └── minQ2=100
│       └── NC
│           ├── 10x100
│           │   ├── minQ2=1
│           │   ├── minQ2=10
│           │   ├── minQ2=100
│           │   └── minQ2=1000
│           ├── 18x275
│           │   ├── minQ2=1
│           │   ├── minQ2=10
│           │   ├── minQ2=100
│           │   └── minQ2=1000
│           ├── 5x100
│           │   ├── minQ2=1
│           │   ├── minQ2=10
│           │   ├── minQ2=100
│           │   └── minQ2=1000
│           └── 5x41
│               ├── minQ2=1
│               ├── minQ2=10
│               └── minQ2=100
```

*Will be available via **XrootD** again (restart mirroring)

Working on production documentation (what has been produced). Mattermost firehose channel provides latest updates. Web page under development.