Run–3 pp Production

CCJ users' meeting

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What is done (not done) and to be done

- done (not done) so far
  - run−2 pp production
    - done by H. Kobayashi and J. Rak
  - filtering & gamma3 test production
    - done by T. Horaguchi and YG
  - run−3 pp PbGl analysis and run−2 pp pi0 A_N analysis
    - not done by O. Zaudtke, S. Bathe, C. Aidala, H. Torii and YG
- to be done
  - run−3 d−Au full production started on RCF
    - CRS + a part of CAS
    - 28,000 file segments / (1,000 file segmens / day) = 28 days !!
    - 1,000 file segments / day = 1.5 TB / 86,000 sec = 17 MB/sec

What is done (not done) and to be done

- to be done
  - run−3 pp full production
    - 20,000 file segments
  - preparation
    - all run−3 pp PRDF ready on HPSS by tape transferring (by O. Jinnouchi)
    - Objy copy Sep.5 version available (to be tested)
    - scripts to be done based on H. Kobayashi's run−2 pp production scripts
    - reconstruction software for spin added and to be added
      - localpol scintillator module done by M. Togawa (to be tested)
      - crossing# shift module (and spin DB ver.1) done by H. Torii (to be tested)
      - CDEV module to be done by M. Kaneta in 10 days

Full production

- 2−pass procedure

- production
  - PRDF from HPSS
  - production outputs
    - DST
    - micro−DST
    - 25(+α) nano−DSTs
  - DST, uDST, and tar−file of 25(+α) nDSTs to HPSS

- aggregation
  - tar−file of nDSTs from HPSS
  - aggregation
    - unarchived nDSTs to disk and HPSS
  - HPSS I/O limitation limits # of nDSTs ≤ 32
    - in run−3 pp production, spin nDSTs and CDEV nDSTs will be made in addition

Questions for the run−3 pp full production

- HPSS I/O limitation
  - 32 ?
- HPSS bandwidth
  - 10 MB / sec = 860 GB / day = 570 segments / day
    - (20,000 / (570/day) = 35 days)
  - maybe CPU bound
    - how many CPU can be used ??
    - all HPSS 10 MB/sec can be available ??
- disk space
  - 6 TB would be enough for nDSTs …
- network bandwidth
  - would be enough to transfer all nDSTs …

Future scope of the CC–J

- pp production ??
  - this is not on the list of original CC–J objectives …
  - HPSS bandwidth would be the most serious issue
    - for production on CC–J
    - for tape transfer on RCF and on CC–J
    - confliction of tape transfer and other HPSS access on CC–J
  - outside users
    - outside users' accounts would be necessary for QA purpose and immediate use of files on CC–J
  - can we continue the pp production on CC–J in the future ??
- Condor batch system
- Objy DB $\rightarrow$ postgreSQL DB