

Release Notes - HPS Java - Version 3.4.0

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Release Date

Sept 10 2015

Jenkins Build

<http://srs.slac.stanford.edu/hudson/view/HPS/job/hps-modules/1936/>

Nexus Download

<http://srs.slac.stanford.edu/nexus/service/local/artifact/maven/redirect?r=lcsim-maven2-releases&g=org.hps&a=hps-distribution&v=3.4.0&e=jar&c=bin>

LCSim Version

3.1.4

Comments

Release for Engineering Run 2015 pass2 reconstruction.

Page 3 in this talk lists major improvements, some of which do not have JIRA items.

<https://confluence.slac.stanford.edu/download/attachments/193773195/hps-pass2-Sept9-2015.pdf>

Bug

- [\[HPSJAVA-516\]](#) - Warning about scatter not found in GBL output driver
- [\[HPSJAVA-559\]](#) - Missing EpicsScalarData collection
- [\[HPSJAVA-564\]](#) - Bias constant times depend on client time zone

Improvement

- [\[HPSJAVA-488\]](#) - Refactor conditions API
- [\[HPSJAVA-517\]](#) - Restructure conditions tag data in the database and add new API classes
- [\[HPSJAVA-548\]](#) - LCIO-Persist x/y Positions Extrapolated from SVT tracking to ECal
- [\[HPSJAVA-554\]](#) - Change conditions import to accept CSV rather than whitespace delimited
- [\[HPSJAVA-562\]](#) - Add scaler data values to lcsim event header parameters
- [\[HPSJAVA-569\]](#) - Improved central sampling fractions from recent monte carlo
- [\[HPSJAVA-570\]](#) - Change start and end dates from Timestamp to Long
- [\[HPSJAVA-572\]](#) - Add tracking strategies that use layers 123, 345 and 456 as seeds
- [\[HPSJAVA-582\]](#) - Modify TrackDataDriver so it's able to process multiple Track collections
- [\[HPSJAVA-584\]](#) - Move Track-Cluster matching out of ReconParticleDriver into it's own utility class and set the cuts that will be used for pass 2
- [\[HPSJAVA-590\]](#) - Modify ReconParticleDriver so it's able to process multiple track collections
- [\[HPSJAVA-594\]](#) - Rewrite scaler data backend in run database
- [\[HPSJAVA-599\]](#) - HpsReconParticleDriver should vertex e-e- tracks
- [\[HPSJAVA-600\]](#) - Use 3D field map when matching tracks to clusters

New Feature

- [\[HPSJAVA-123\]](#) - Implement Data Quality Management module
- [\[HPSJAVA-195\]](#) - ECal time walk correction
- [\[HPSJAVA-196\]](#) - ECal cluster time reconstruction
- [\[HPSJAVA-322\]](#) - Add trigger performance & monitoring plots to Online Monitoring
- [\[HPSJAVA-544\]](#) - Add ECal pulse widths to conditions system
- [\[HPSJAVA-550\]](#) - Add CSV import and export to conditions collection API
- [\[HPSJAVA-558\]](#) - Add API for accessing run summary information
- [\[HPSJAVA-560\]](#) - Add EcalPulseWidth to EcalChannelConstants
- [\[HPSJAVA-565\]](#) - SVT position constants in conditions DB
- [\[HPSJAVA-566\]](#) - Add SvtMotorPosition condition
- [\[HPSJAVA-567\]](#) - Add persistency of EPICS header to LCIO GenericObject
- [\[HPSJAVA-568\]](#) - Add export of EPICS data from EVIO files to CSV
- [\[HPSJAVA-574\]](#) - Add full event scalers to run db
- [\[HPSJAVA-575\]](#) - Add full event EPICS data to the run db
- [\[HPSJAVA-588\]](#) - Use the type of a Track as an identifier for the tracking strategy that was used
- [\[HPSJAVA-589\]](#) - Use TrackDataDriver to set the track type based on the tracking strategy used

Task

- [\[HPSJAVA-518\]](#) - Convert covariance matrix from CL to perigee frame
- [\[HPSJAVA-545\]](#) - Add test of ECal MC readout and recon job chain
- [\[HPSJAVA-556\]](#) - Remove shaded jar from conditions module build
- [\[HPSJAVA-577\]](#) - Remove creation of scaler data header from event builder
- [\[HPSJAVA-581\]](#) - Move DAQ and trigger packages from ecal-recon to record-util
- [\[HPSJAVA-587\]](#) - Remove unused beam conditions package
- [\[HPSJAVA-591\]](#) - Replace EPICS data implementation in run db
- [\[HPSJAVA-595\]](#) - Move run database from record-util to new maven module
- [\[HPSJAVA-596\]](#) - Move crawler from record-util to new maven module
- [\[HPSJAVA-597\]](#) - Remove aida remote dep from monitoring app
- [\[HPSJAVA-598\]](#) - Move datacat module from record-util to new maven module

Sub-task

- [\[HPSJAVA-130\]](#) - Choose DQM quantities for ECal MC monitoring
- [\[HPSJAVA-131\]](#) - Chose DQM quantities for tracking efficiency monitoring
- [\[HPSJAVA-193\]](#) - Create DQM plots for Trigger
- [\[HPSJAVA-243\]](#) - Determine effect of support opening angle misalignments
- [\[HPSJAVA-509\]](#) - Confirm recon output is correct when using database SVT alignments