

# REC and DST formats.

What is missing / superfluous ?

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February 19, 2018



# What are REC and DST formats?

- REC (reconstructed) LCIO file
  - Output LCIO file from standard reconstruction from ILDConfig
  - Contains all collections after reconstruction
    - CaloHit, Reco Particles, SimHits, MCParticle, ...
  - Contains all detailed information for a deep understanding of data
  - Usually heavy files not recombined after reconstruction by the production system
  - New feature for hybrid reconstruction:
    - **the calo hits from the other calorimeters are dropped**
    - ⇒ **file size decreased by ~ 35%**
- DST (Data Summary Tape) LCIO file
  - Output LCIO file from standard reconstruction from ILDConfig
  - Subset of REC file suitable for physics analysis
    - Reco Particles, Clusters, Vertex, Skimmed MC Particles, ...
    - No MCParticle, SimHit, CaloHit, TrackerHit, ...
  - Lighter files recombined after reconstruction by the production system



# Contents of ILD DST files

V0RecoParticles	MCTruthMarlinTrkTracksLink
BuildUpVertex_RP	RecoMCTruthLink
PrimaryVertex_RP	MarlinTrkTracksMCTruthLink
BuildUpVertex_V0_RP	BuildUpVertex
GammaGammaCandidateEtaPrimes	V0Vertices
GammaGammaCandidateEtas	PrimaryVertex
GammaGammaCandidatePi0s	BuildUpVertex_V0
GammaGammaParticles	MarlinTrkTracks
PandoraPFOs	PandoraClusters
DistilledPFOs	MCParticlesSkimmed

■ Reco Particles      ■ LCRelations      ■ Vertex  
■ Tracks      ■ Clusters      ■ MC Particles

- ClusterMCTruthLink ? MCTruthClusterLink ? **MCTruthRecoLink ?**
- PandoraPFANewStartVertices recently dropped
- REC: 96 collections VS DST: 18 collections

