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Status

From Reco to DST merged

- Updating submit scripts to run over DST merged files (copied on disk) instead of Reco files (under /hsm)

- DST merged files contains many events per file.

    - Split jobs using Marlin global parameters: 'SkipNEvents' and 'MaxRecordNumber'.

- Found bug on lcio_event_counter (fails on DST-merged files).

lcio_event_counter (LEC) Fails on DST merged files

- DST-merged files usually contains events from more than 1 stdhep file.
- I have noticed LEC will return just the number of events comming from the first stdhep.

rv01-16-p10_250.sv01-14-01-p00.mILD_o1_v05.E250-TDR_ws.I106605.P2f_z_l.eL.pR-00001-DST.slcio

- Contains 245643 events:
  - 220643 from E250-TDR_ws.P2f_z_l.Gwhizard-1_95.eL.pR.I106605.001.stdhep
  - 25000 from E250-TDR_ws.P2f_z_l.Gwhizard-1_95.eL.pR.I106605.002.stdhep

```
calancha@ccw09:/group/ilc/soft/samples/mc-dbd/ild/dst-merged/250-TDR_ws/2f_Z_leptonic/ILD_o1_v05/v01-16-p10_250
[calancha@ccw09 v01-16-p10_250]$ pwd
/group/ilc/soft/samples/mc-dbd/ild/dst-merged/250-TDR_ws/2f_Z_leptonic/ILD_o1_v05/v01-16-p10_250
[calancha@ccw09 v01-16-p10_250]$ lcio_event_counter rv01-16-p10_250.sv01-14-01-p00.mILD_o1_v05.E250-TDR_ws.I106605.P2f_z_l.eL.pR-00001-DST.slcio
220643
[calancha@ccw09 v01-16-p10_250]$ dumpevent rv01-16-p10_250.sv01-14-01-p00.mILD_o1_v05.E250-TDR_ws.I106605.P2f_z_l.eL.pR-00001-DST.slcio 245644
 less than 245644  events in  file rv01-16-p10_250.sv01-14-01-p00.mILD_o1_v05.E250-TDR_ws.I106605.P2f_z_l.eL.pR-00001-DST.slcio
[calancha@ccw09 v01-16-p10_250]$ dumpevent rv01-16-p10_250.sv01-14-01-p00.mILD_o1_v05.E250-TDR_ws.I106605.P2f_z_l.eL.pR-00001-DST.slcio 245643|head -3

=========================================================================
     Event  : 24999 - run:  51 - timestamp 0 - weight 1
[calancha@ccw09 v01-16-p10_250]$
```

- Bug still present on `ILCSoft` v01-17-05 (latest installed on kekcc).
- Reported to `ILCSoft` team.

$\longrightarrow$ Safe way to counting number of events is running over the sample with a Marlin processor.