

Reprocessing Status

2017 Run 2 bulk reprocessing

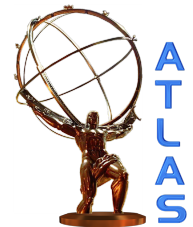
https://twiki.cern.ch/twiki/bin/view/Atlas/Winter2017Run2Reprocessing#Bulk_processing

Other smaller campaigns

<https://twiki.cern.ch/twiki/bin/view/Atlas/Special2017Reprocessing>

David South (DESY)
Michaël Ughetto (Stockholm)

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Current active requests

- > Reprocessing of pPb VdM runs with updated alignment – reopened <https://its.cern.ch/jira/browse/DATREP-85>
 - One run processed with wrong tag (confusion in ticket), now resubmitted and 99% done, expect this to be completed today/tomorrow

- > Missing trigger information in **physics_Background** DAOD_IDNCB <https://its.cern.ch/jira/browse/DATREP-86>
 - The 72 runs from 2016 have been reprocessed **data16_13TeV.*.physics_Background.recon.DAOD_IDNCB.r9653**
 - Was not corrected in MD1 and current Tier-0 configuration still has this problem, so all 2017 runs will need to be reprocessed at some point – probably as part of fast repro?

- > Reprocessing of 2 data runs with low-pt di-tau reconstruction <https://its.cern.ch/jira/browse/DATREP-90>
 - Request is related to similar MC request, <https://its.cern.ch/jira/browse/ATLMCPROD-4842> but is missing essentially all required information

Current active requests

> Reprocessing of Heavy Ion 2015-16 data in release 21

<https://its.cern.ch/jira/browse/DATREP-92>

- This is the start of what will be a significant campaign, only test runs requested so far
- Timeline is to converge with software, configuration and validation by October and to run the reprocessing on the full data set in autumn of 2017
- Last campaign (release 20.7) is detailed here, configuration is tricky
<https://twiki.cern.ch/twiki/bin/view/Atlas/March2016HeavyIonReprocessing>

> Reprocessing of few luminosity data 2016 runs with 2017 configuration

<https://its.cern.ch/jira/browse/DATREP-93>

- Release 21.0.30, output DAOD_IDPIXLUMI only
- First test run submitted but looks like a software problem, where all jobs are crashing in **InDetPixelClusterization**, under investigation

Obsolescence of intermediate datasets: What can go

- > In order to save much space on the grid, intermediate ds are obsoleted
- > The 6 DRAW formats are kept from the RAW reco, otherwise everything else (10 further formats) is merged, so the reco output can be obsoleted:
 - `AOD HIST DAOD_IDTIDE DESDM_SGLEL DESDM_SLTTMU DESDM_MCP`
`DESDM_CALJET DESDM_PHOJET DESDM_EGAMMA DESDM_EXOTHIP`
 - This **partial obsolescence** is currently still done by hand, by sending lists of tids to ADC
 - This means **1560 physics_Main** tids from 2016 and **1060 physics_Main** tids from 2015
- > The 4 DRAW reco tasks produce a total of 3 DESDMs and 4 DAODs, all of which are merged, so all outputs from the DRAW reco tasks are obsoleted
- > And then also the intermediate merges:
 - The first and second steps of the HIST merges, as only the final step merge, single file datasets are needed
 - The first step merge of the DESDMs produced from RAW, as only the final second step merge is needed
 - The first step merge of the DESDMs produced from DRAW, as only the final second step merge is needed
 - The first step merge of the DAODs produced from DRAW, as only the final second step merge is needed
 - **Note:** the first step merge of the only DAOD produced from RAW, namely DAOD_IDTIDE, is **NOT** obsoleted, as in PS2 these tasks look identical to AOD merges, which makes it very difficult to do
- > Nerve wracking stuff...

Obsolescence of intermediate datasets: 22 slices afterwards

5	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: AOD.HIST.DAOD_IDTIDE.DRAW_ZMUMU.DRAW_EGZ.DRAW_TAUMUH.DRAW_EM...	r9264	submitted	edit (saved)
36	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: HIST	r9264 p3084 p3084 p3084	submitted	edit (saved)
67	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: AOD	r9264 p3083	submitted	edit (saved)
98	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_IDTIDE	r9264 p3083 p3083	submitted	edit (saved)
129	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_SGLEL	r9264 p3082 p3082	submitted	edit (saved)
160	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_SLTTMU	r9264 p3082 p3082	submitted	edit (saved)
191	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_MCP	r9264 p3082 p3082	submitted	edit (saved)
222	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_CALJET	r9264 p3082 p3082	submitted	edit (saved)
253	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_PHOJET	r9264 p3082 p3082	submitted	edit (saved)
284	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EGAMMA	r9264 p3082 p3082	submitted	edit (saved)
315	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EXOTHIP	r9264 p3082 p3082	submitted	edit (saved)

Reco task, only partially obsoleted to keep 6 x DRAW

First step DAOD_IDTIDE not obsoleted for fear of deleting the merged AODs

346	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EGZ.DAOD_EGZ	r9264 r9264	submitted	edit (saved)
377	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_ZMUMU.DAOD_ZMUMU	r9264 r9264	submitted	edit (saved)
408	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_TAUMUH	r9264 r9264	submitted	edit (saved)
439	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EMU.DAOD_EMU	r9264 r9264	submitted	edit (saved)
470	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EGZ	r9264 p3082 p3082	submitted	edit (saved)
501	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_EGZ	r9264 p3083 p3083	submitted	edit (saved)
532	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_ZMUMU	r9264 p3082 p3082	submitted	edit (saved)
563	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_ZMUMU	r9264 p3083 p3083	submitted	edit (saved)
594	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_TAUMUH	r9264 p3083 p3083	submitted	edit (saved)
625	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DESDM_EMU	r9264 p3082 p3082	submitted	edit (saved)
656	+ data16_13TeV.00297730.physics_Main.daq_RAW	Slice outputs: DAOD_EMU	r9264 p3083 p3083	submitted	edit (saved)

Physics Containers reminder: 2016 physics_Main

- > AllYear Physics Containers (all contain the final merge step of each format)

`data16_13TeV.periodAllYear.physics_Main.PhysCont.AOD.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DAOD_IDTIDE.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_CALJET.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_EGAMMA.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_EXOTHIP.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_MCP.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_PHOJET.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_SGLEL.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_SLTTMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_EGZ.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_EMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_RPVLL.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_TAUMUH.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_TOPSLMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DRAW_ZMUMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DAOD_EGZ.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DAOD_EMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DAOD_TAUMUH.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DAOD_ZMUMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_EGZ.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_EMU.repro21_v01`

`data16_13TeV.periodAllYear.physics_Main.PhysCont.DESDM_ZMUMU.repro21_v01`

- > Period containers are also available for the merged AODs

`data16_13TeV.periodX.physics_Main.PhysCont.AOD.repro21_v01` where **X**=A,B,C,D,E,F,G,I,K,L