Data streaming

- `p10.11.00` *root-tuples quite large, about* 20 kB *per event*
- *there is about* 9 *million events in post-shutdown data* $\rightarrow$ 180 GB

Event selection

- *events that passed jet triggers, minimum bias, and zero bias triggers*
- *events that passed muon triggers and have at least one jet*
- *number of events is reduced by factor of* 3 (60 GB)

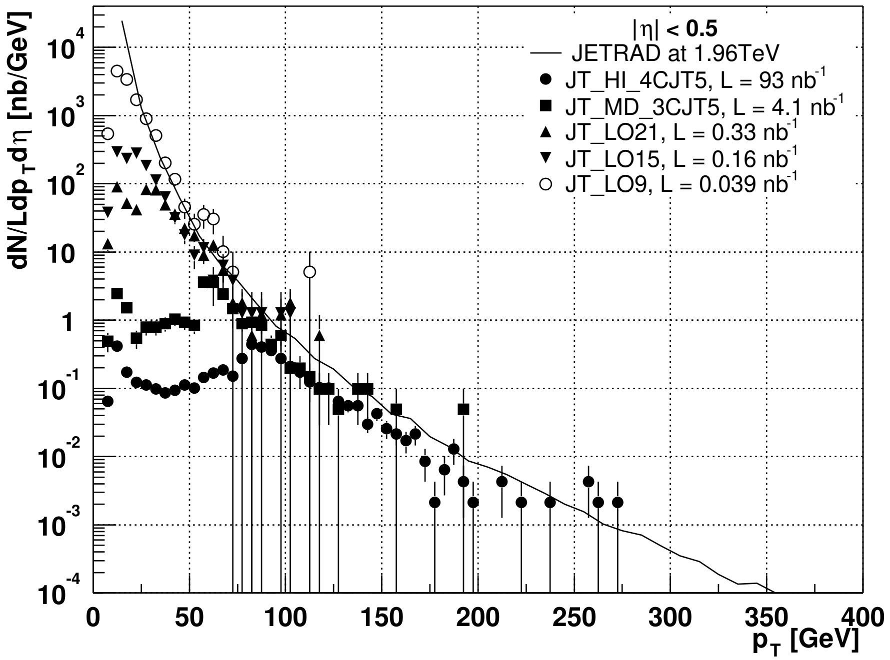
Event size reduction

- *remove all* Branches *from root-tuple that are not necessary for* QCD *analysis*
- *all branches for all jet algorithms,* MET, PVSEL, EVENT
- CAL block - *when removed the size drops by factor of* 6
- JNC1 block - *when removed the size is reduced by another factor of* 2
- *at the end the size of the event is reduced by factor of* 13 (1.5 kB *per event*)

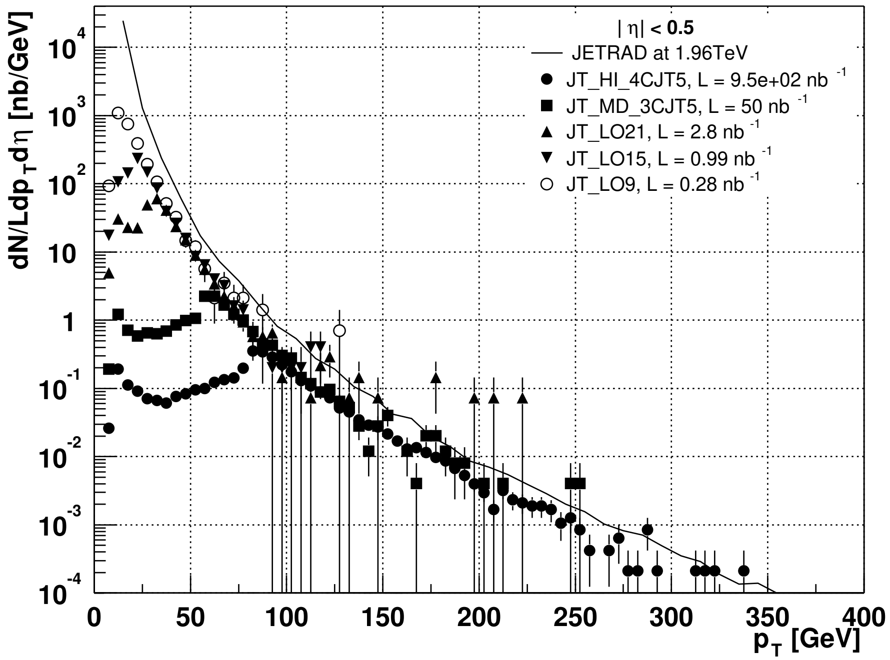
4 GB *for all* Moriond *post-shutdown data*

Trigger matching

trigger version 3.0



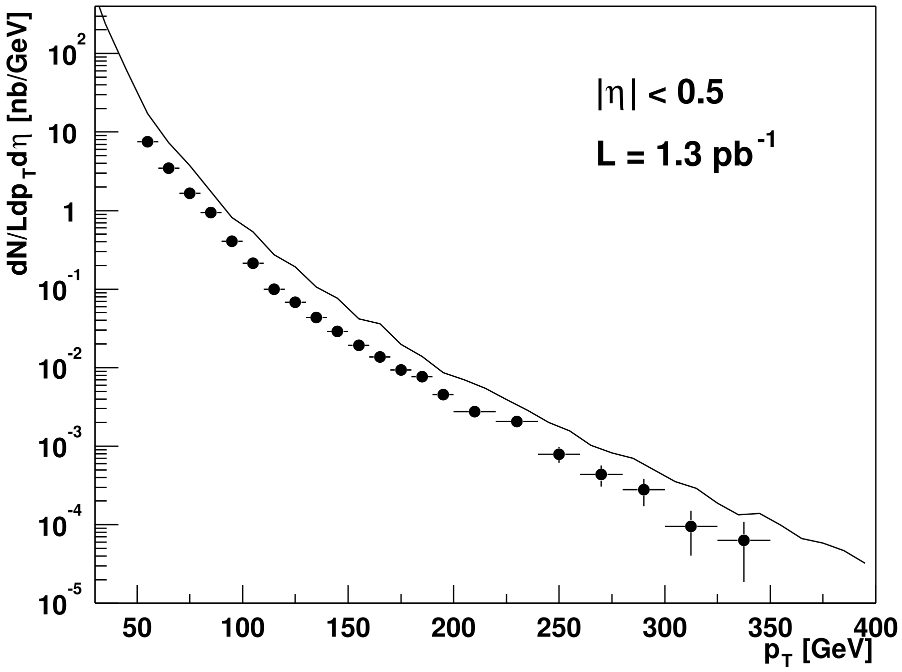
trigger version 3.1

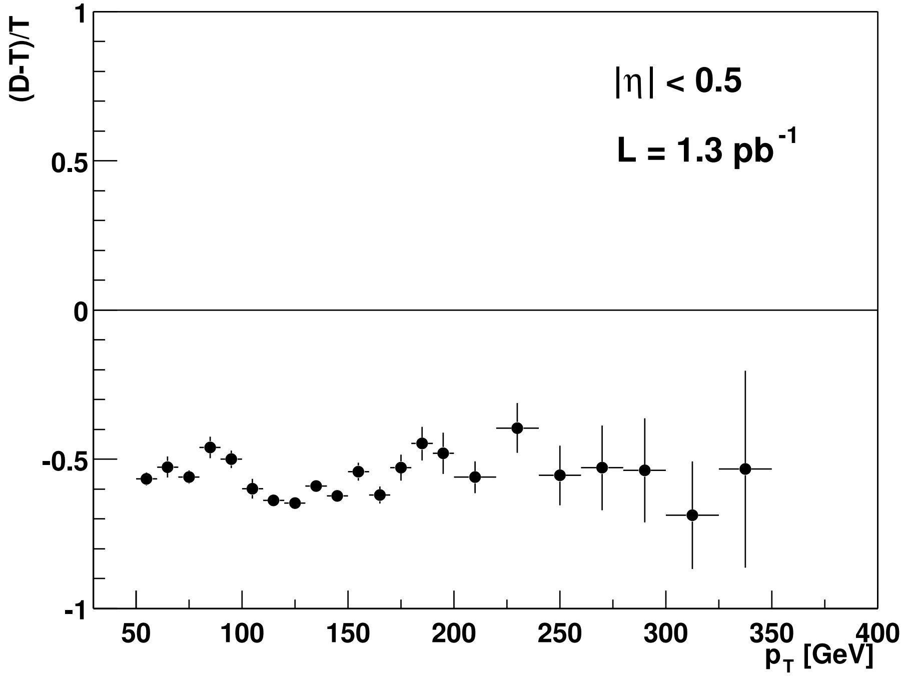


- inclusive pT spectrum for jets in central calorimeter region $|\eta| < 0.5$
- jet quality cuts
- event selection criteria

$$MET < 0.7 p_T^{leading\ jet}, \qquad E100 < 2\,\text{TeV}$$

Inclusive pT spectrum

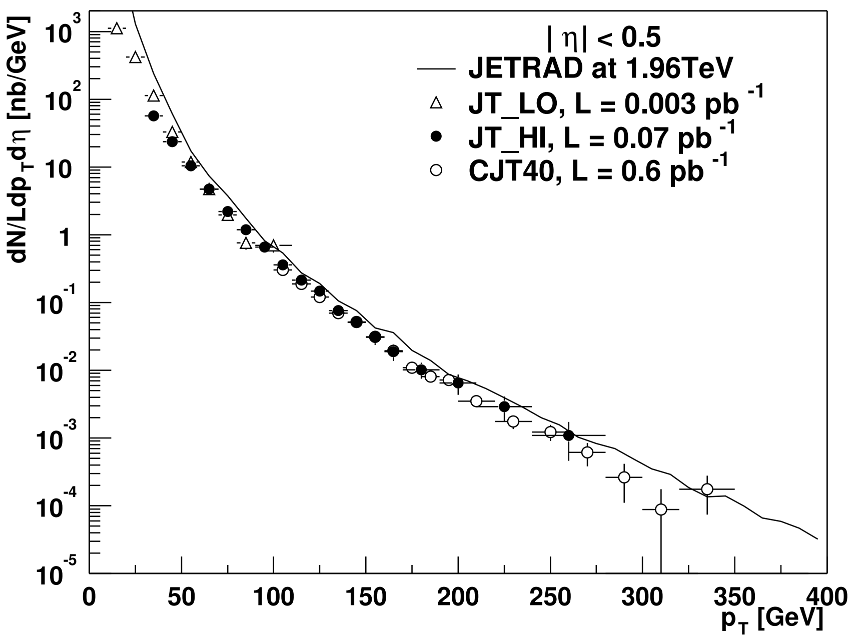


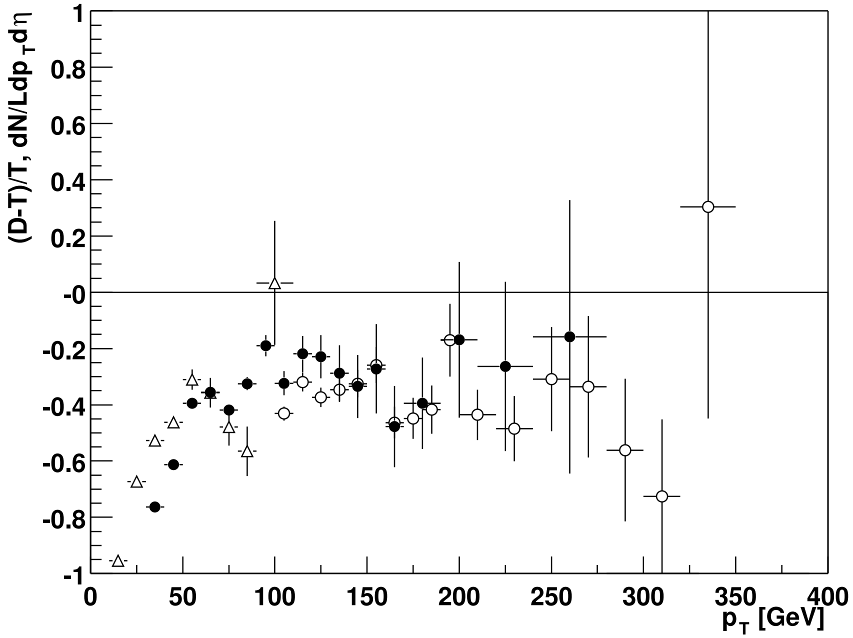


- ▷ *post-shutdown data (trigger version 3), bad runs with weird MEx and MEy removed*
- ▷ *JES correction (v1.1) + no L1 efficiencies applied*
- ▷ *used triggers*
  - `2CJT3_CJT7` (*up to* 70 GeV)
  - `2CJT3_CJT10` (*up to* 90 GeV)
  - `3CJT5` (*up to* 110 GeV)
  - `4CJT5` (110 GeV *and more*)

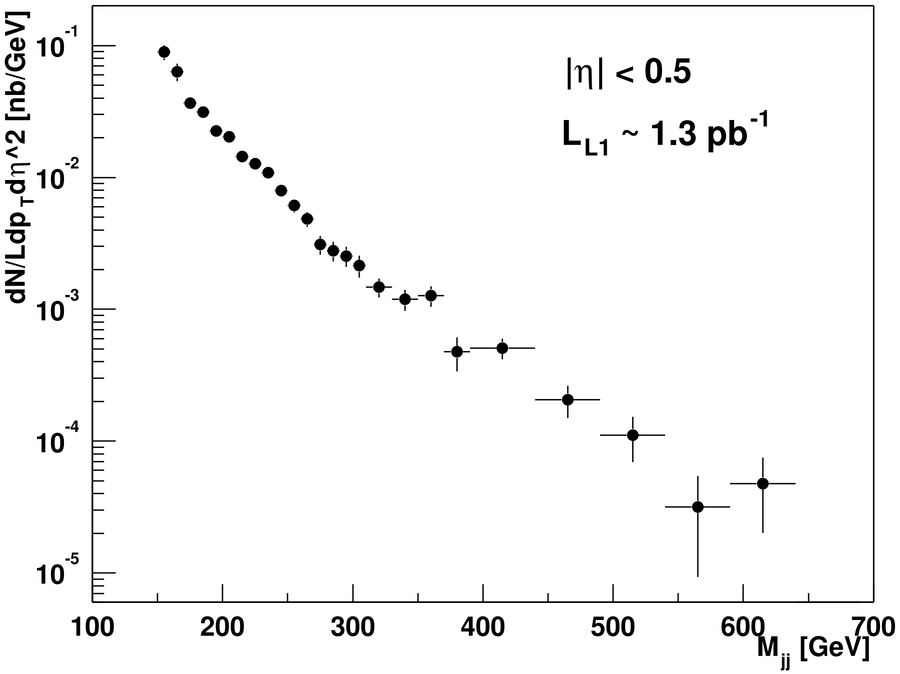
Inclusive spectrum in pre-shutdown data

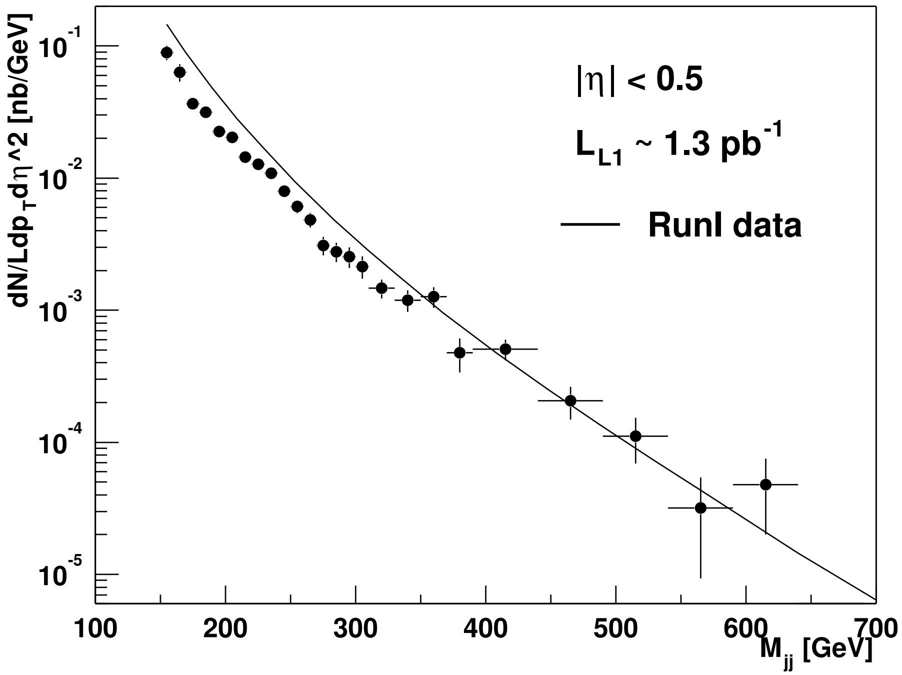
- JES corrections (*v*1.0)
- L1 trigger efficiencies
  - provided by Frank Filthaut (Jet/MET ID meeting in Dec 05, 2001)





Dijet mass spectrum





- *the same data sample as for inclusive pT spectrum*
- *the same jet and event selection criteria*
- *JES correction (v1.1) + no L1 efficiencies applied*
  - `3CJT5` *(from* 150 GeV *up to* 170 GeV)
  - `4CJT5` (170 GeV *and more*)

post-shutdown jet resolutions

Data sample

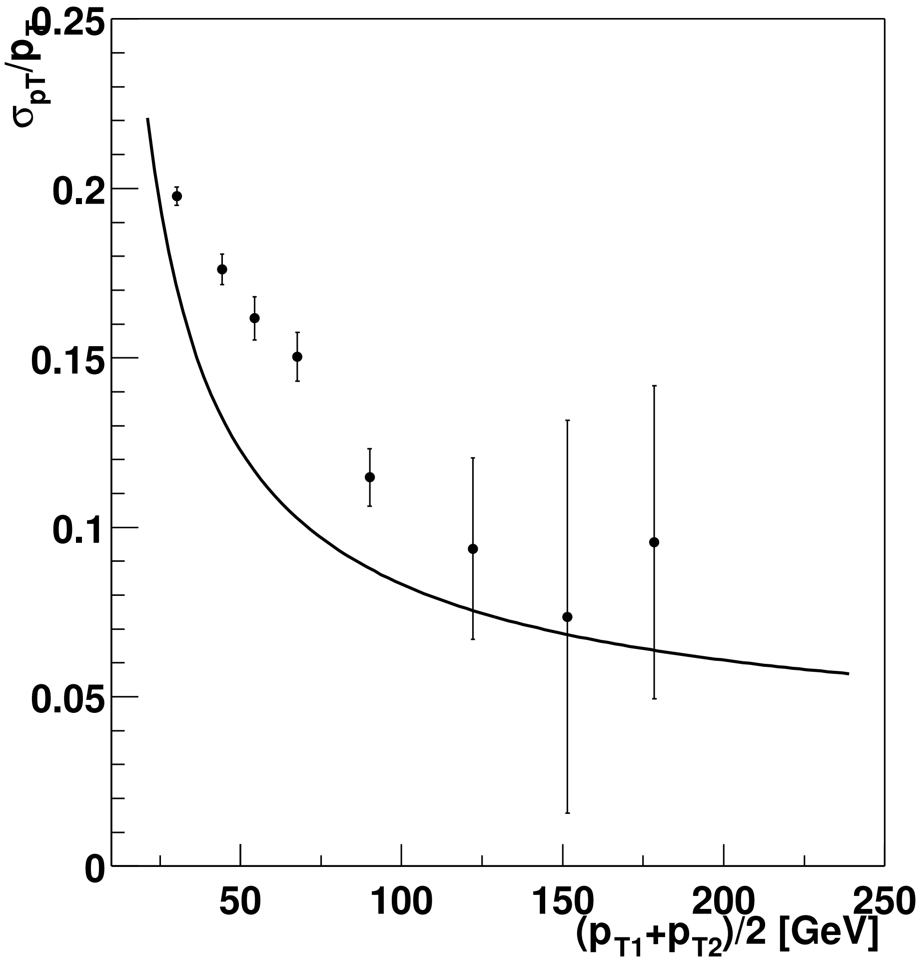
- post-shutdown data (trigger *v*3)
- events that passed jet and/or minimum bias triggers
- cone R=0.7

▷ $|z_{vtx}| < 50\,\mathrm{cm}$

▷ at least 2 tracks pointing to the vertex

▷ no JES corrections

▷ no showering corrections



Plans, questions, and problems

- correct luminosity at L3
  - *data taken after* Feb 9, *has the right information*
  - *changes has to be propagated into* `lm_access` *package*
  - *for* Moriond *data, try to correct using meassured minimum bias cross section*
- L1 *efficiencies*
- *try to understand why, from time to time, the low-pT triggers fire much more than the others*
- `p10.14.00` *reprocessing*
  - *dynamic* NADA
  - *are we going to work with expressed stream*
- *thumbnails*
  - *chunks versus root-tuple (may be both)*
  - *can we vote for root-tuples?*