Weekly Report

CMS DQM-ML4DC
Patomporn (Jab)
5 August 2019

Outline

- Feedback after giving a talk in CMG group

- PromptReco 2018

  - Various bad LS from DC Experts

  - Plot of principal components

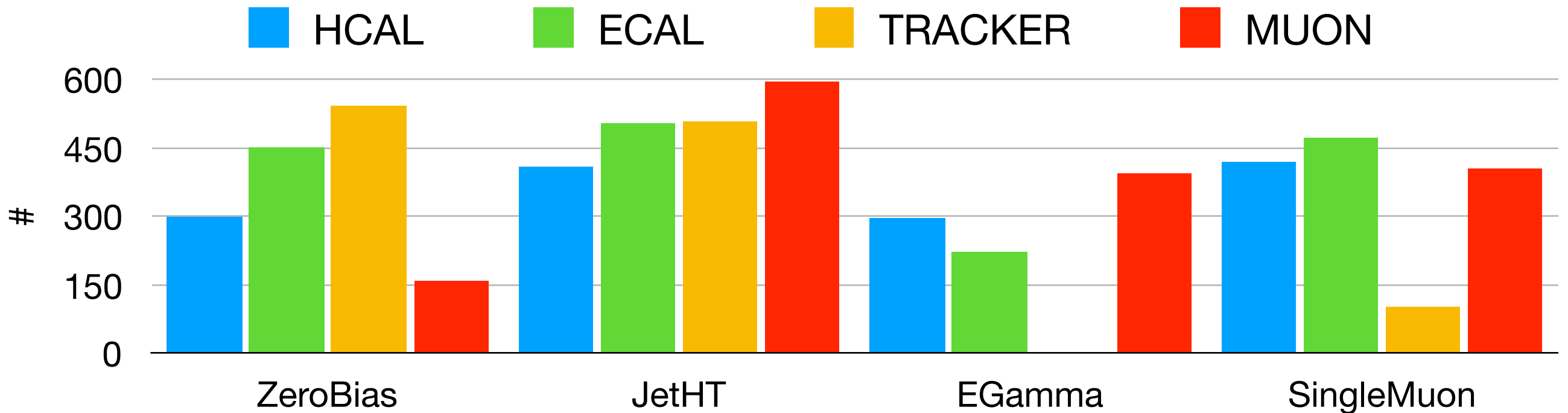- Future work

Feedback

- People spot these two peaks

  - When I zoom in, it's not the same peak

Example of Good and Bad LS

Good LS (Total SE = 4.39)

Bad LS (Total SE = 143.65)

- Some mention that have a look at the square error plot in various bad LS cluster might be useful

Loss from AE data, testing set visual in Principal Basis (JetHT)
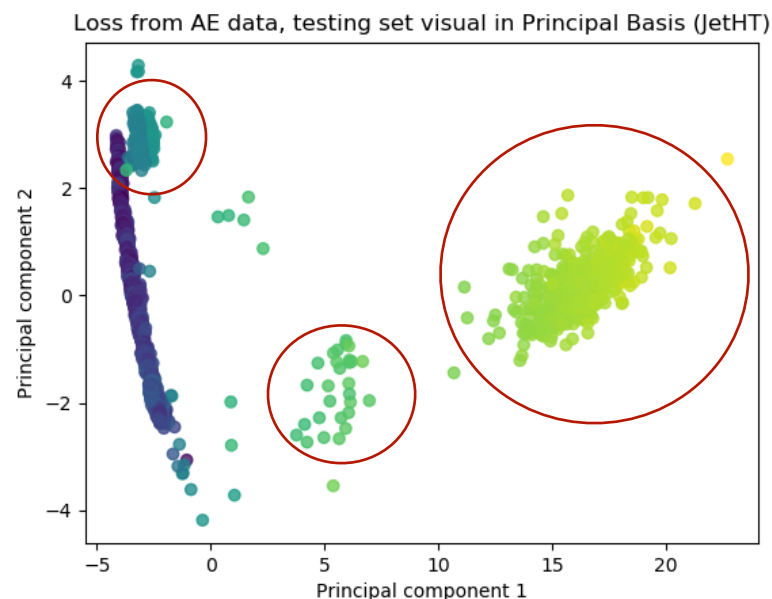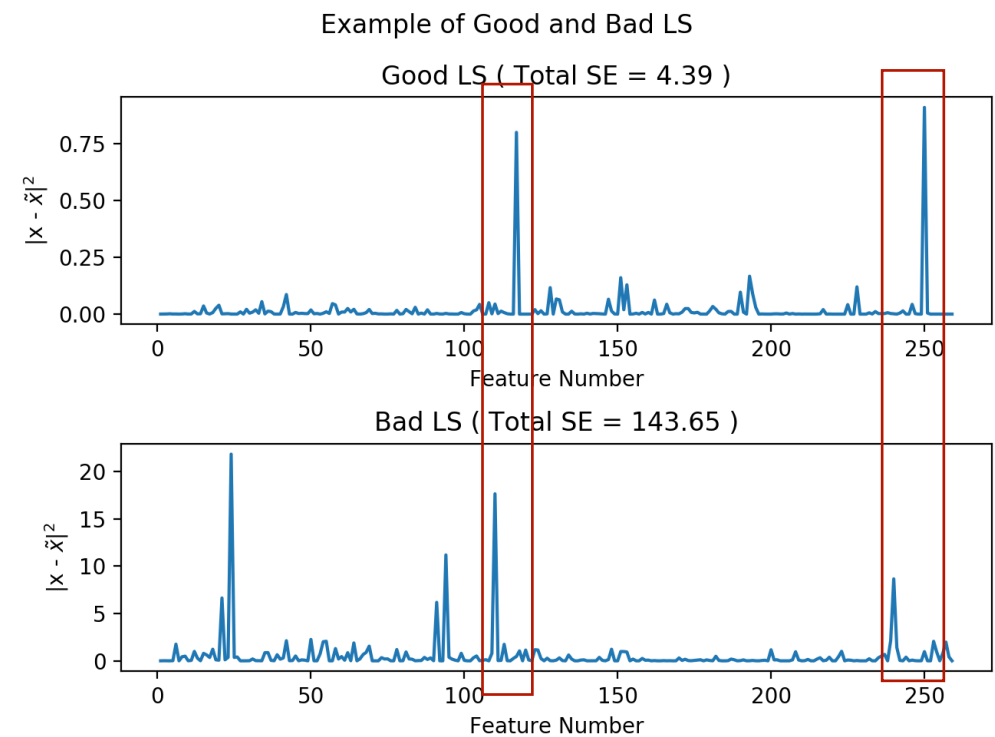
PromptReco 2018

Various bad LS from DC Experts

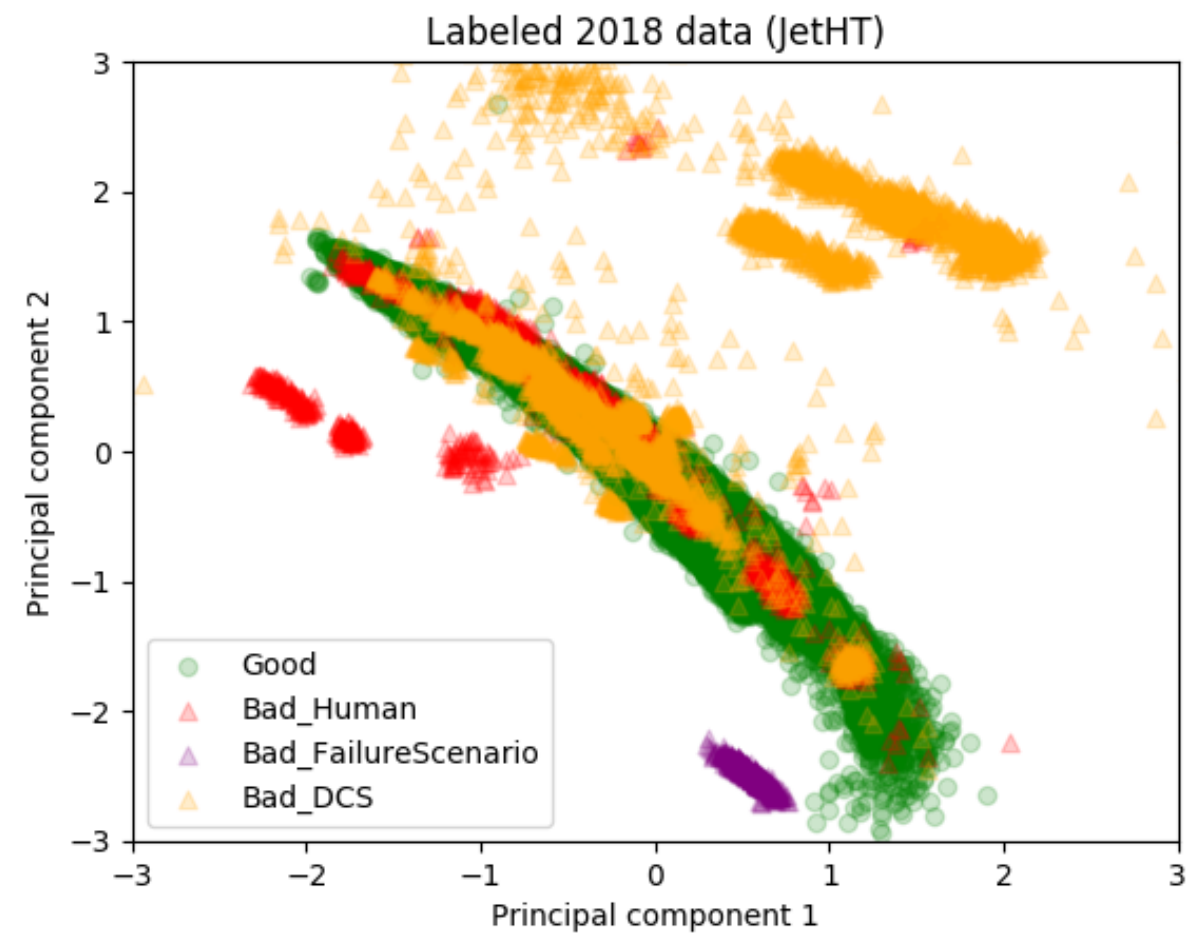| Sub-detector\PD	ZeroBias	JetHT	EGamma	SingleMuon
HCAL	23%	22%	32%	31%
ECAL	36%	27%	24%	**35%**
TRACKER	**43%**	27%	0.3%	8%
MUON	12%	**32%**	**43%**	30%
*Overlap	TRUE	TRUE	-	TRUE

* Compute form "100 - all" if it negative then it would has an overlap of malfunction

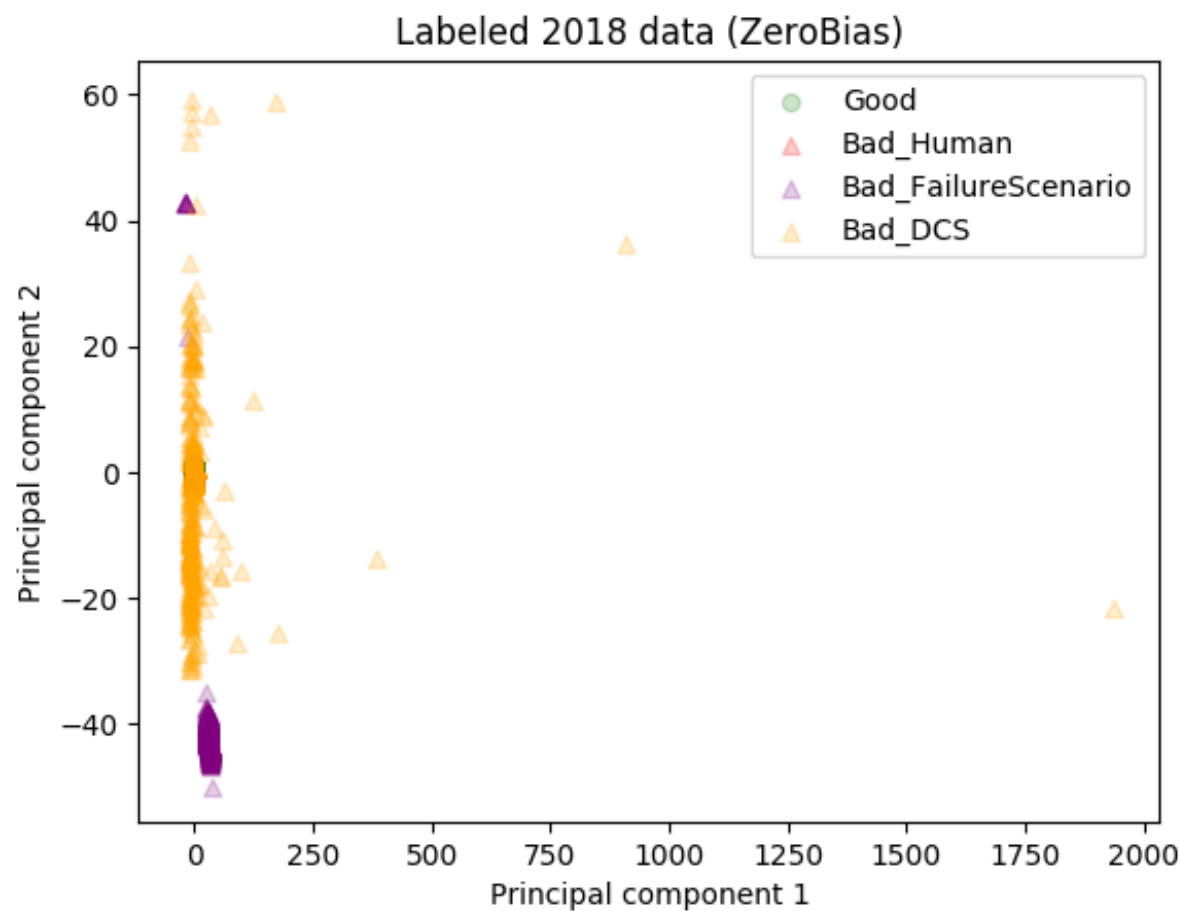# Principal Component (JetHT)
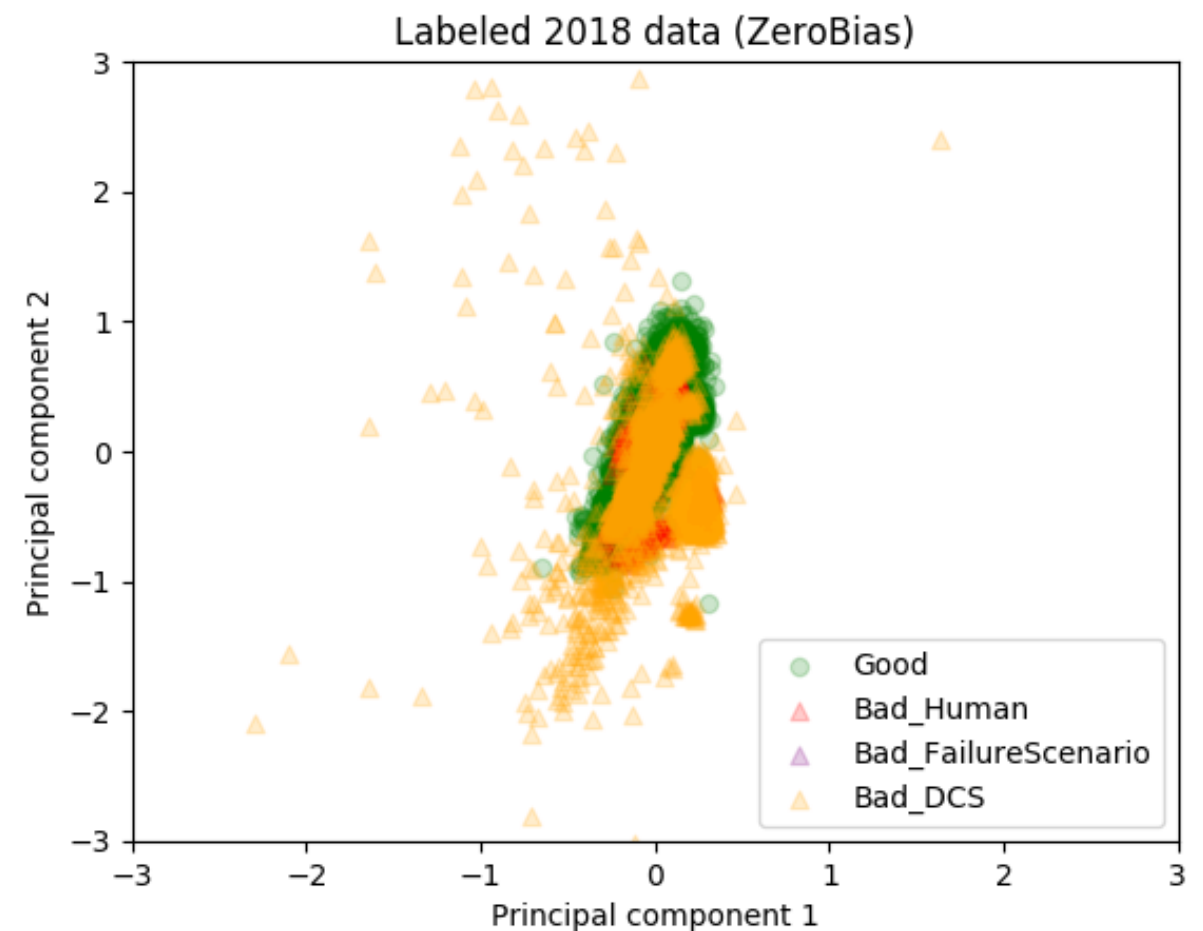
Full plot
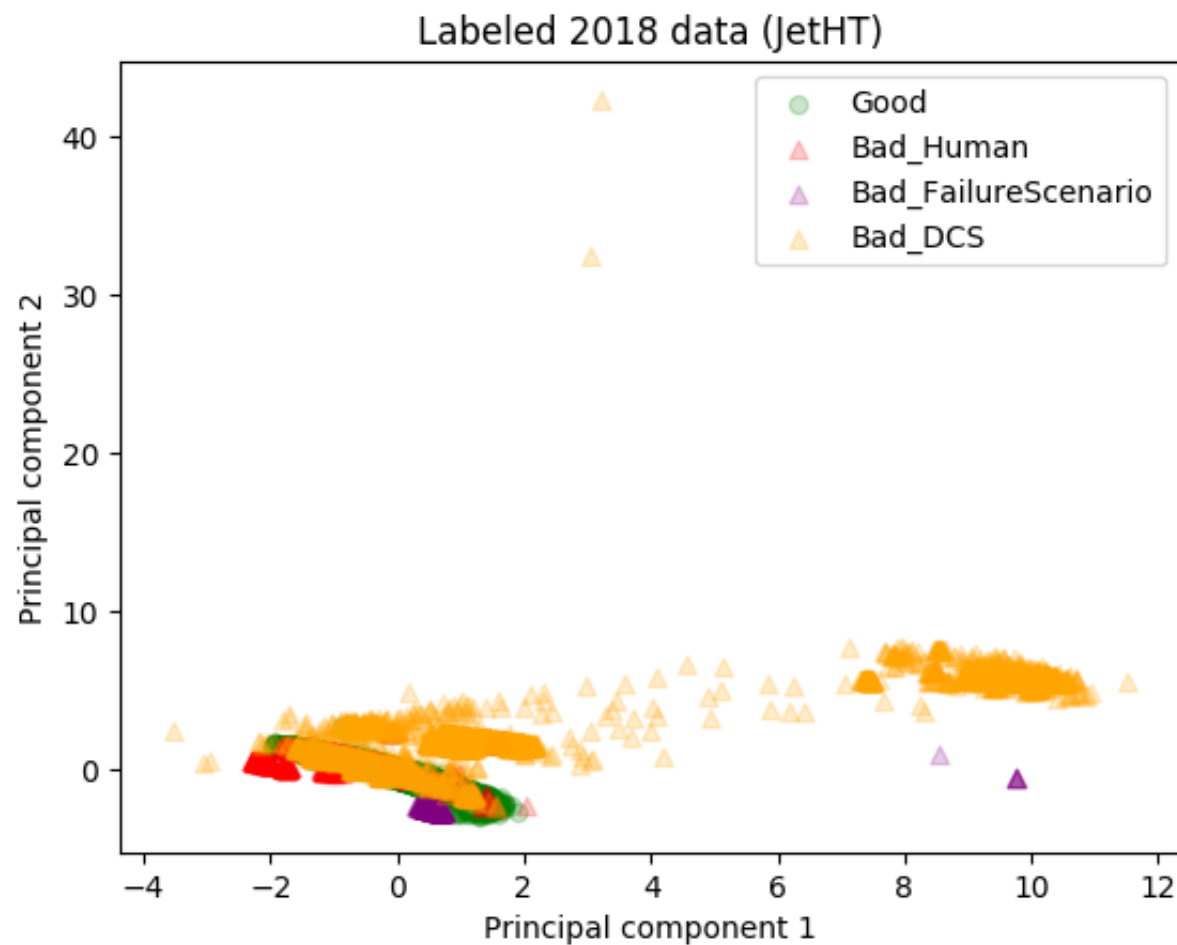
Zoom in

Please note that matrix transform of this plot exclude FailureScenario

Principal Component (ZeroBias)

Full plot

Zoom in

Please note that matrix transform of this plot exclude FailureScenario

Future work

- Just got occupancy map per LS from "/ZeroBias/Run2017F-29Jun2019_UL2017validation-v1/DQMIO"

- Extract and pull label from RR's API

- Do something with it..