

BLD (Beam Line Data)

Beam Line Data (BLD) is smaller data that can be delivered to all hutches (i.e. not associated with the DAQ system in one hutch). This script lives in /sdf/group/clis/ds/ana/tutorials/psana1_examples/bld.py. This example includes some of the more common shot information parameters that experiments use.

```
from psana import *

"""Beam Line Data is smaller data that can be delivered to all hutches
(i.e. not associated with the DAQ system in one hutch). """
from IPython import embed

ds = DataSource('exp=xpptut15:run=59:smd')
ebeamDet = Detector('EBeam')
gasDet = Detector('FEEGasDetEnergy')
for nevent, evt in enumerate(ds.events()):
    ebeam = ebeamDet.get(evt)
    gdet = gasDet.get(evt)
    if ebeam is None or gdet is None: continue
    print('Photon Energy and Charge:',ebeam.ebeamPhotonEnergy(),ebeam.ebeamCharge())
    print('Gas detector energy values, 2 pre-attenuator, 2 post-attenuator:',gdet.f_11_ENRC(),gdet.f_12_ENRC(),
gdet.f_21_ENRC(),gdet.f_22_ENRC())
    break
```