

SmallDataAna - Getting Started

Looking at the event based hdf5 files

Getting names for available fields

This will by list all the available fields:

```
SDana In: ana.Keys()
```

You can pass a string and only field names that match the string will be listed. `ana.Keys2d()` will list only images (2-d arrays).

Looking at variables (1d and 2d plots)

Usage:

```
SDana In: ana.plotVar(varname)
```

This function will make a plot of the variable `varname` which can be a string containing the key-name or a list of strings for 2-d data. You can apply cuts (use `eFilter='SelectionName'`) or specify an ROI to reduce multi-dimensional data when `varname` is a list `['varname_string', [ROI]]`. `asHist=True` will produce a 2-d histogram rather than a scatter plot when supplying two input variables `['varname1','varname2']`. Default is a scatter plot.

ipm2 plot

```
SDana In [3]: ana.plotVar?
Type:          instancemethod
String form:   <bound method SmallDataAna.plotVar of <SmallDataAna.SmallDataAna object at 0x7f87edbed410>>
File:         /reg/d/psdm/xpp/xpptut15/resulrs/smalldata_tools/examples/scripts/SmallDataAna.py
Definition:   ana.plotVar(self, plotvar, numBin=[100], setCuts=None, useFilter=None, limits=[1, 99], fig=None, asHist=False)
Docstring:    <no docstring>

SDana In [4]: ipm2plot = ana.plotVar('ipm2/sum')
plot ipm2/sum from 0.000150301 to 1.00656
```

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```
ana.plotVar(['tt/FLTPOSFWHM','tt/FLTPOSPS']) #on left
ana.plotVar(['tt/FLTPOSFWHM','tt/FLTPOSPS'], asHist=True) # on right
```

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