In [37]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

In [38]:
```
%matplotlib inline
```

In [39]:
```
def RADIUS (row):
   if row['BAND'] == 0 :
      return 'OD'
   if row['BAND'] == 1:
     return 'MD'
   if row['BAND'] == 2 :
      return 'ID'
```

In [40]:
```
# Read in input file and do cleanup
```

In [41]:
```
uniquecols = ['MCW']
commoncols = ['HDDSN', 'PROCID','TESTCODEC', 'PFCODE', 'MFGID','HDDTRIAL', 'QUALIFIER','LH
colstokeep = commoncols + uniquecols
df = pd.read_csv('C:\\Users\\Shay\\Documents\Yari\\Data analysis Python\\Data\\CCB_CI_MCW.
df = df[colstokeep]
#df = df.rename(columns = {'OwValPerp':'OW_PERP','OwValConv':'OW_CONV'})
```

In [42]:
```
# Add a RADIUS column
```

In [43]:
```
df['RADIUS'] = df.apply (lambda row: RADIUS(row), axis=1)
```

In [44]:
```
# Split measurement by Qualifier
```

In [45]:
```
indexcols = ['HDDSN', 'PROCID','TESTCODEC', 'PFCODE', 'MFGID','HDDTRIAL', 'LHD', 'PHD', 'E
splitcols = ['MCW']
splitbycols = ['QUALIFIER']
```

In [46]:
```
df2 = pd.pivot_table(df, index=indexcols,columns=splitbycols, values=splitcols )
df2.columns = list(map("_".join,df2.columns))
```

In [47]:
```
# Save output file
```

In [48]:
```
df2.to_csv('C:\\Users\\Shay\\Documents\Yari\\Data analysis Python\\Data\\MCW_Preprocess.cs
```

In [ ]:
```

```