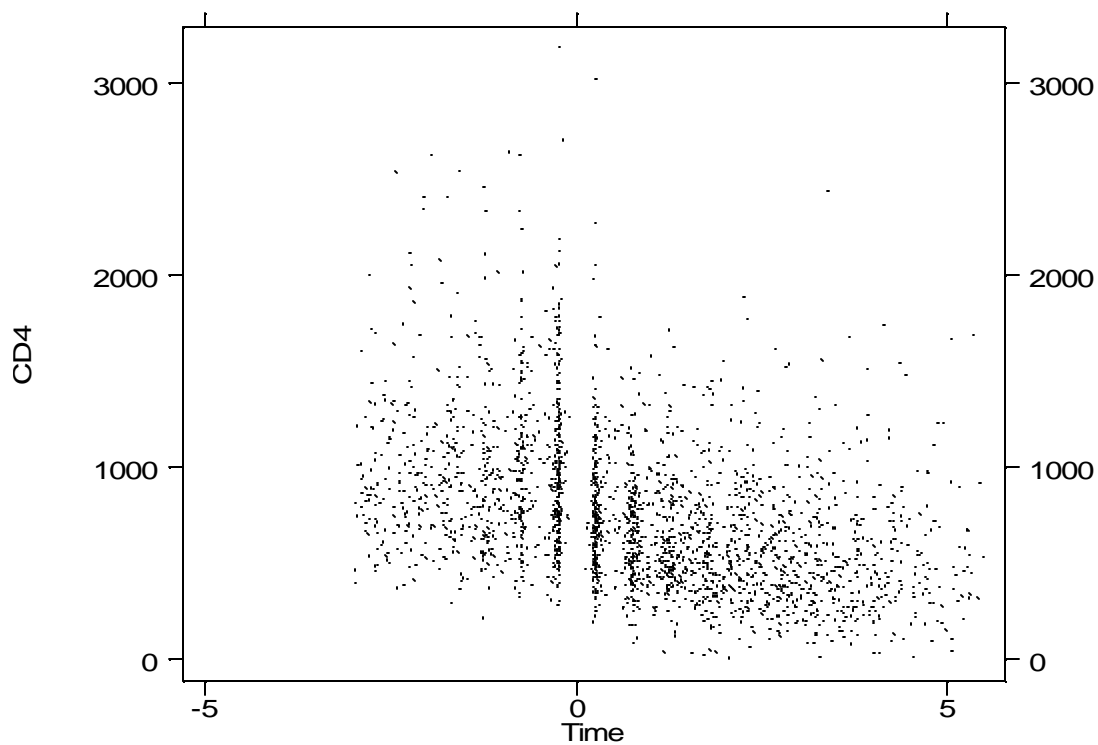


STATA log for EDA Jan 30th 2002

```
sort ID Time
```

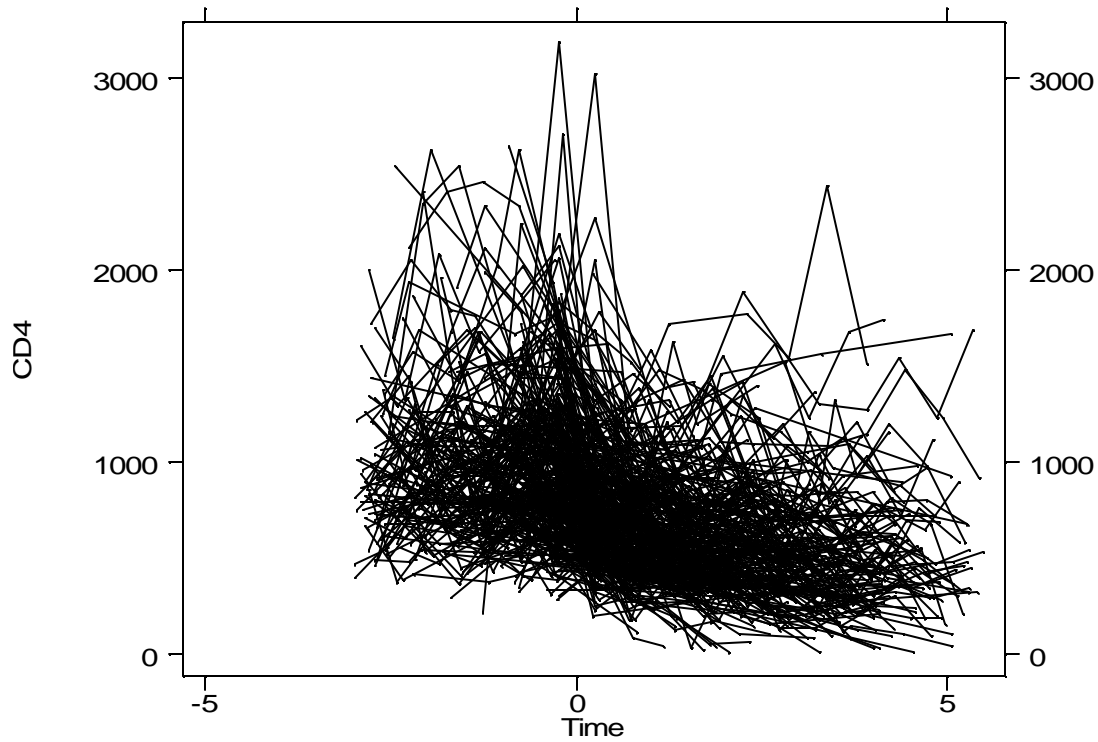
Make a scatter plot

```
. graph CD4 Time, s(.) xlab ylab rlabel
```



Draw a line graph, connect the points for each individual with increasing time

```
. graph CD4 Time, c(L) s(i) xlab ylab
```

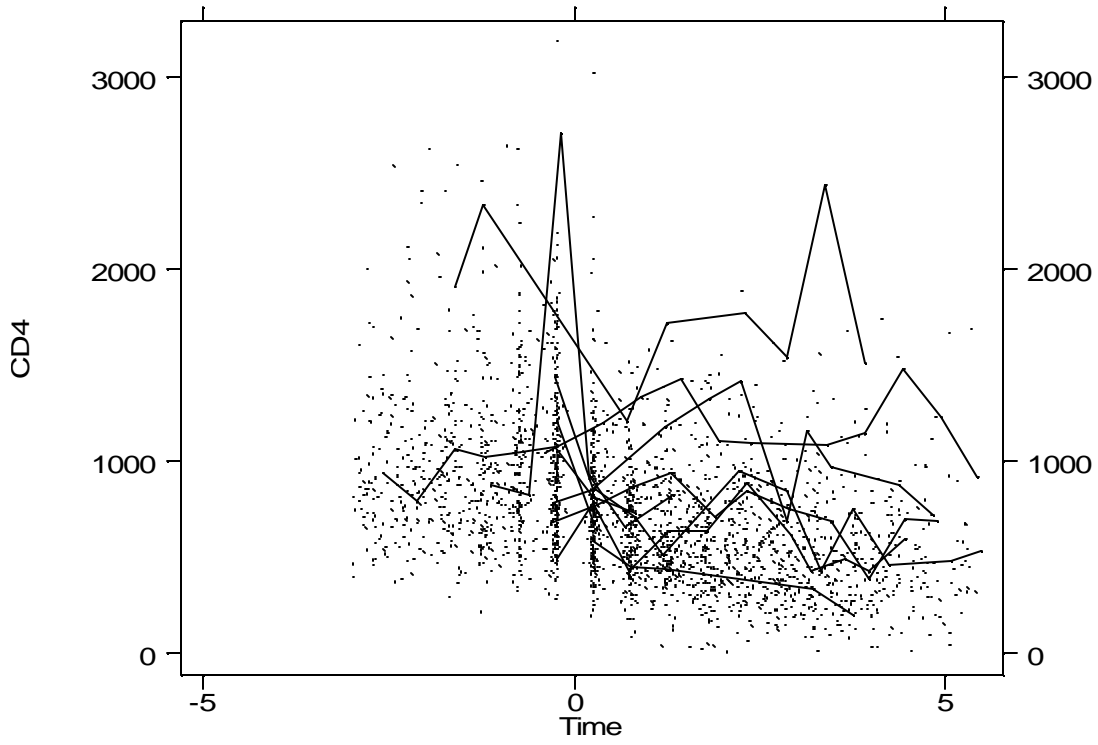


Since the plot looks noisy let's just plot the deciles.

```
. sort ID Time
. gen first = ID != ID[_n-1]
. browse
. gen second = ID != ID[_n-2]
. browse
. sort first CD4
. browse
. gen decile = first & (int(_n/37) ==_n/37)
. sort ID Time
. browse
. drop second
. browse
. replace decile = decil[_n-1] if ID == ID[_n-1]
(73 real changes made)
```

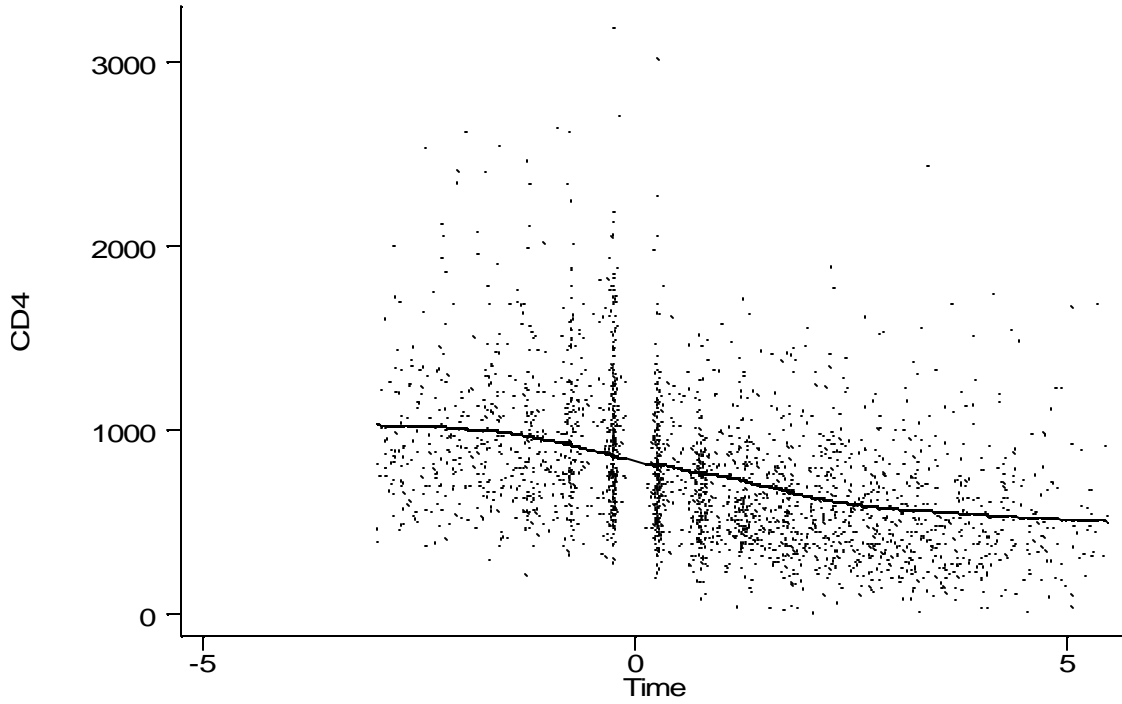
```
. gen count = CD4 if decile  
(2293 missing values generated)
```

```
. graph CD4 count Time, c(.L) s(.i) xlab ylab pen(12)
```



Moving average

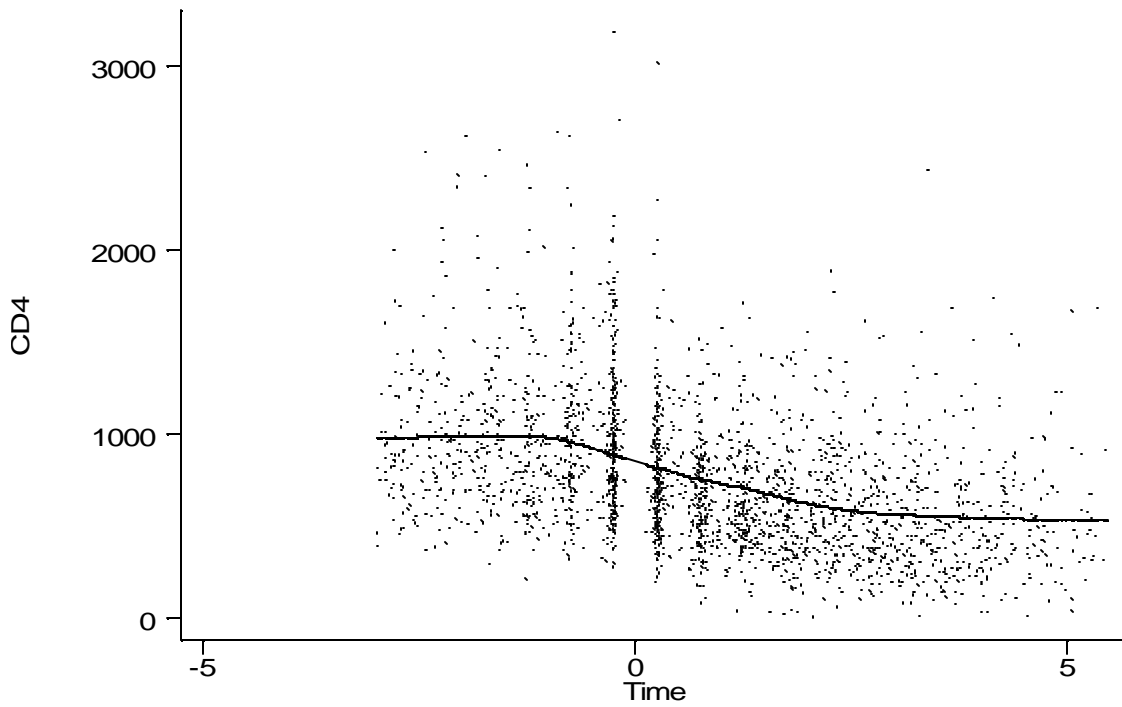
```
. ksm CD4 Time, linear bw(0.8) xlab ylab s(.) pen(12)  
Running line smoother, bandwidth = .8
```



The lowess smoother

```
. ksm CD4 Time, lowess xlab ylab s(.i) pen(12)
```

Lowess smoother, bandwidth = .8



. exit, clear