

# How to calculate robust standard error in SAS

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Stata with clustering:

```
xtreg y x1 x2 x3 , fe i(id) cluster(id)
```

Now the problem is to do robust cluster standard error in SAS

There are three ways to do it:

1. proc surveyreg. Such as:

```
proc surveyreg data=yourdata;  
cluster id;  
model y = x1 x2 x3 /covb;  
run;
```

2. proc genmod

```
proc genmod;  
class id;  
model depvar = x1 x2 x3;  
repeated subject=id / type=ind; run;  
quit;
```

3. proc mixed.

```
proc mixed data=data empirical;  
class id;  
model y = x1 x2 x3 / solution;  
repeated/ subject=id ;  
run;
```