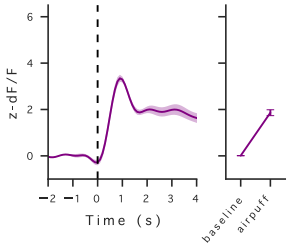
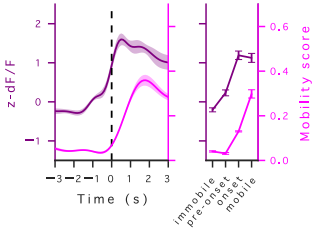
A

```
> apt = FiberPhotometryTest('LHA.h5', 'APT')
> apt.getMeans(auc_frame = {'airpuff-onset': [[-2,-1],[0,1.5]]})
> apt.plotMeans('LHA-DRN','airpuff',color='purple',
                periods=['baseline','airpuff'],
                xlim=[-2,4],ylim=[-1,6.5])
```



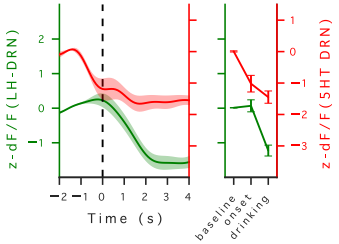
B

```
> tst = FiberPhotometryTest('LHA.h5', 'TST')
> tst.getMeans(auc_frame = {'immobility-offset': [[-3,-1],[-1,0],[0,1],[1,3]]})
> tst.plotMeans('LHA-DRN','immobility','offset',measure='mobility_score',
                color='purple',periods=['immobile','pre-onset','onset','mobile'],
                ylim=[-1.5,2.5],yticks=[-1,0,1,2],xlim=[-3,3],
                ylim1=[0,0.7],yticks1=[0,0.2,0.4,0.6]),ylab1='Mobility score')
```



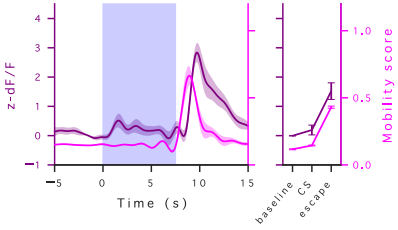
C

```
> sct = FiberPhotometryTest('LHA-5HT.h5', 'SCT')
> sct.getMeans(auc_frame = {'consumpt-offset': [[-2,-1],[-0.5,1],[2,3]]})
> sct.plotMeans('LHA-DRN','consumption','onset',output2='5HT DRN',
                periods=['baseline','onset','drinking'],xlim=[-2,4],
                ylim=[-2,3],yticks=[-1,0,1,2],ylab='z-dF/F (LHA-DRN)',color='green',
                ylim1=[-4,1.5],yticks1=[-3,-2,-1,0,1],ylab1='z-dF/F (5HT DRN)',color1='red')
```



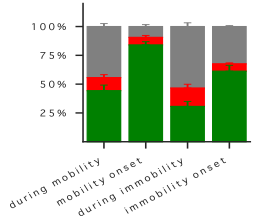
D

```
> atrain = FiberPhotometryTest('LHA.h5', 'Avoidance-Training')
> atrain.getMeans(auc_frame = {'escapeCS-onset': [[-2,-1],[0,8],[8,11]]},
                  perievent_windows = {'escapeCS-onset': [-5,15]})
> atrain.plotMeans('LHA-DRN','escapeCS',measure='mobility_score',
                   color='purple',periods=['baseline','CS','escape'],
                   w=[-5,15],xlim=[-5,15],ylim=[-1,4.5],
                   ylim1=[0,1.2],yticks1=[0,0.5,1.0],ylab1='Mobility score')
```

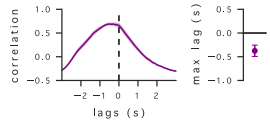


E

```
> tst = FiberPhotometryTest('LHA.h5','TST')
> tst.getMeasurePerieventCorrelation('immobility','movement',win=3)
> tst.plotMeasureCorrelationCounts('movement','LHA-DRN','immobility',
                    event_labels = ['during mobility','mobility onset',
                                    'during immobility','immobility onset'])
```

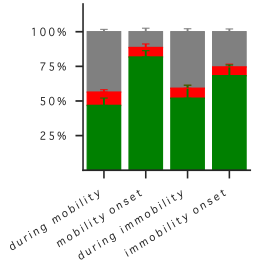



```
> tst.plotMeasureCrossCorrelation('movement','LHA-LHb','immobility','offset',
                    color='red',xticks=[-2,-1,0,1,2],ylim=[-0.5,1],
                    yticks=[-0.5,0,0.5,1],yticks1=[-1,-0.5,0,0.5])
```



F

```
> tst = FiberPhotometryTest('LHA.h5','TST')
> tst.getOutputPerieventCorrelation('LHA-DRN','LHA-LHb','immobility',win=3)
> tst.plotMeasureCorrelationCounts('LHA-DRN','LHA-LHb','immobility',
                    event_labels = ['during mobility','mobility onset',
                                    'during immobility','immobility onset'])
```



G

```
> oft = FiberPhotometryTest('LHA.h5','OFT')
> oft.getMeasureCorrelation('movement')
> tst = FiberPhotometryTest('LHA.h5','TST')
> tst.getMeasureCorrelation('movement')
> exp = FiberPhotometryExperiment('LHA.h5')
> exp.plotRoverTests('LHA-DRN',measure='movement',tests=['OFT','TST'],
                     color='purple',ylabel='Pearson correlation',
                     ylim=[-0.2,0.8],figsize=(2,3))
```