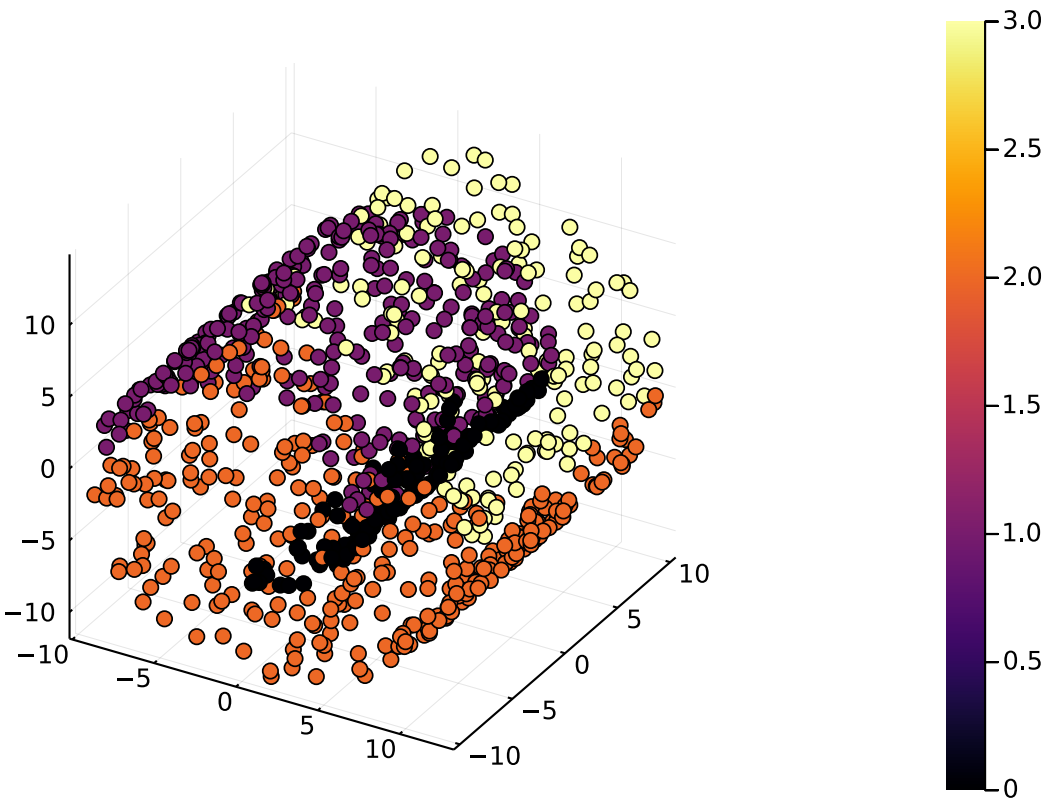
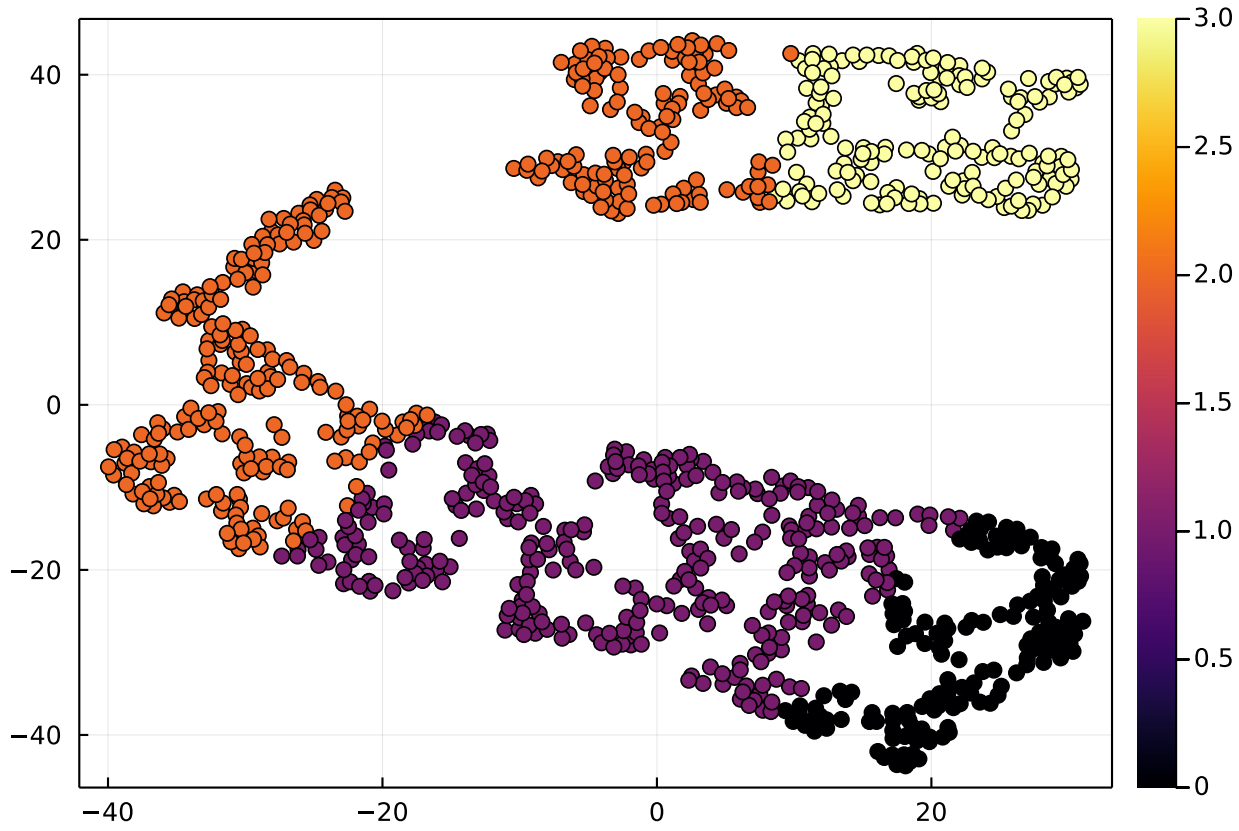
```
begin
    using ManifoldLearning   ,Plots
end
```

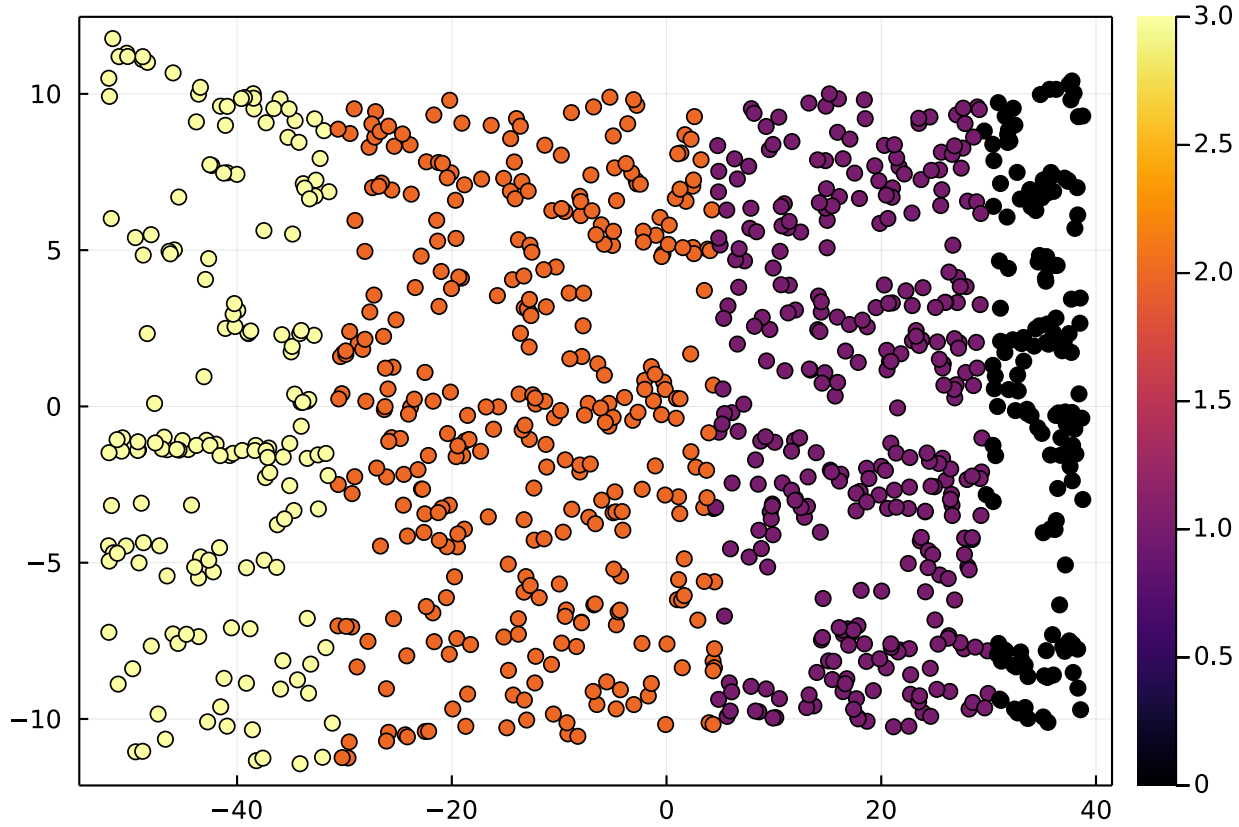
```
X, t = ManifoldLearning.swiss_roll(segments=4); #生成四个类别的瑞士卷数据
```



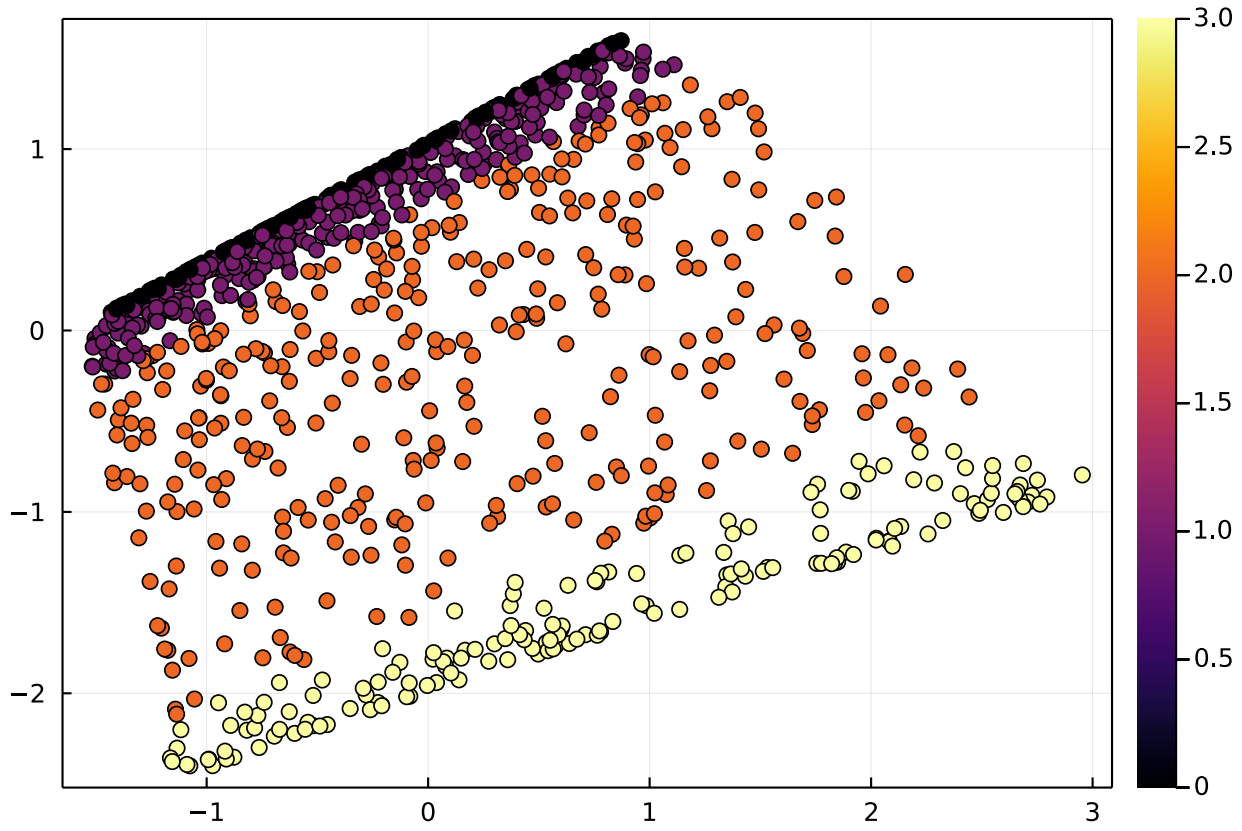

```
begin
    x,y,z=X[1,:]|>vec,X[2,:]|>vec,X[3,:]|>vec
    scatter3d(x,y,z,zcolor=t,label=false )
end
```



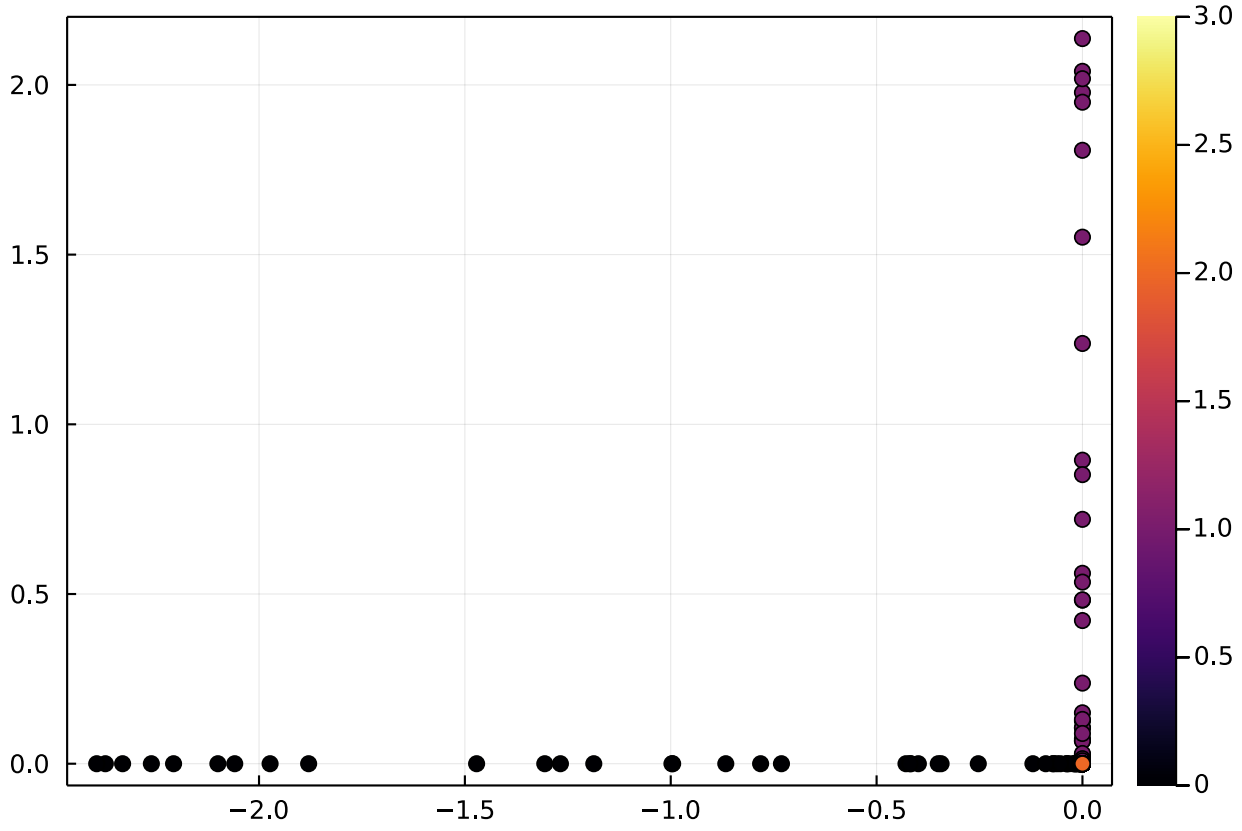

```
fit(TSNE, X;)|>transform|>plot_res  #tsne 速度较慢，其他代码运行完之后再去掉注释运行
```




```
fit(Isomap, X;)|>transform |>plot_res
```




```
fit(HLLE, X;)|>transform |>plot_res
```




```
fit(DiffMap, X;)|>transform |>plot_res
```

```
plot_res (generic function with 1 method)
```

```
plot_res(R)=scatter(R[1,:],R[2,:],zcolor=t,label=false,frame=:box)
```