

```

1 — p=[Temp S pH TUR Chl-a]
2 — %Temp:Water temperature
3 — %S:Salinity
4 — %Turb: Turbidity
5 — [n,m]=size(p);
6 — %Zscore normalize
7 — p=zscore(p);
8 — y=pdist(p,'euclid');
9 — %pdist:Pairwise distance between pairs of observations
10 — z=linkage(y,'ward');
11 — %linkage:Agglomerative hierarchical cluster tree
12 — h=dendrogram(z,0)
13 — xlabel('Station')
14 — ylabel('Distance between clusters')
15 — axis([0 16 0 8])
16 — hold on
17 — plot([0 16],[8 8],'-k')
18 — hold on
19 — plot([16 16],[8 8],'-k')

```

**Figure S1.** The matlab code of agglomerative hierarchical cluster analysis.