

# IMS Biclustering Automated Report: simulated\_datacube\_biclformat

November 18, 2014

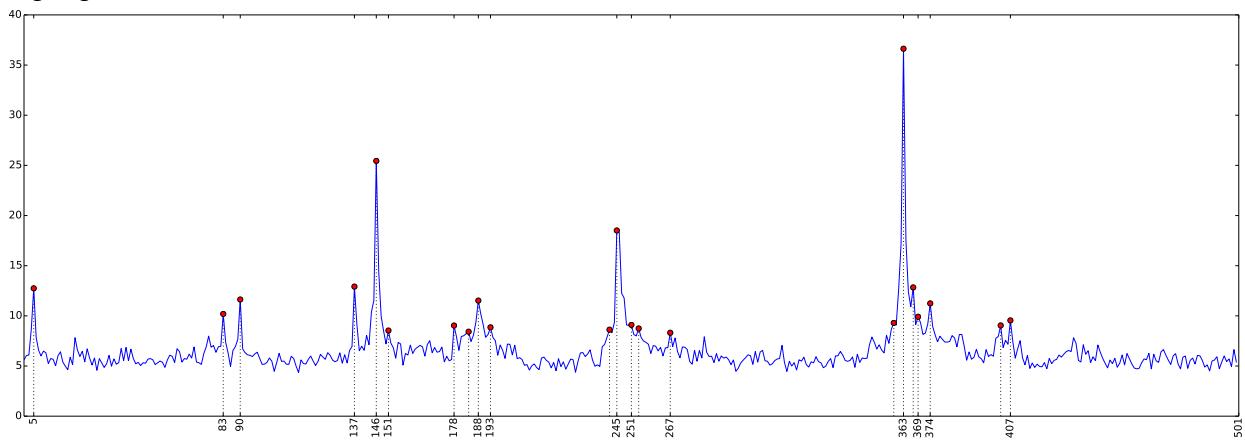
## 1 Dataset stats

Dataset: 7500 total pixels,  $50 \times 150$  image.

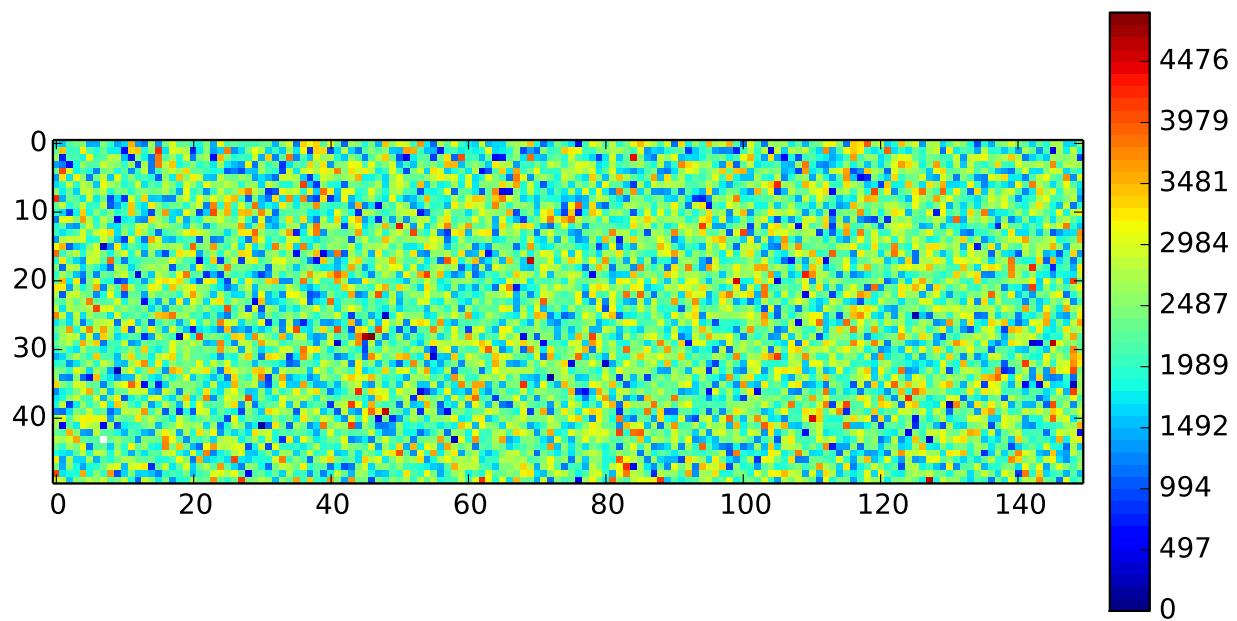
Each spectrum consists of 500 bins ( $m/z$  values).

## 2 Average spectrum

The graph below shows average spectrum across the dataset;  $m/z$  values with maximal intensities are highlighted.



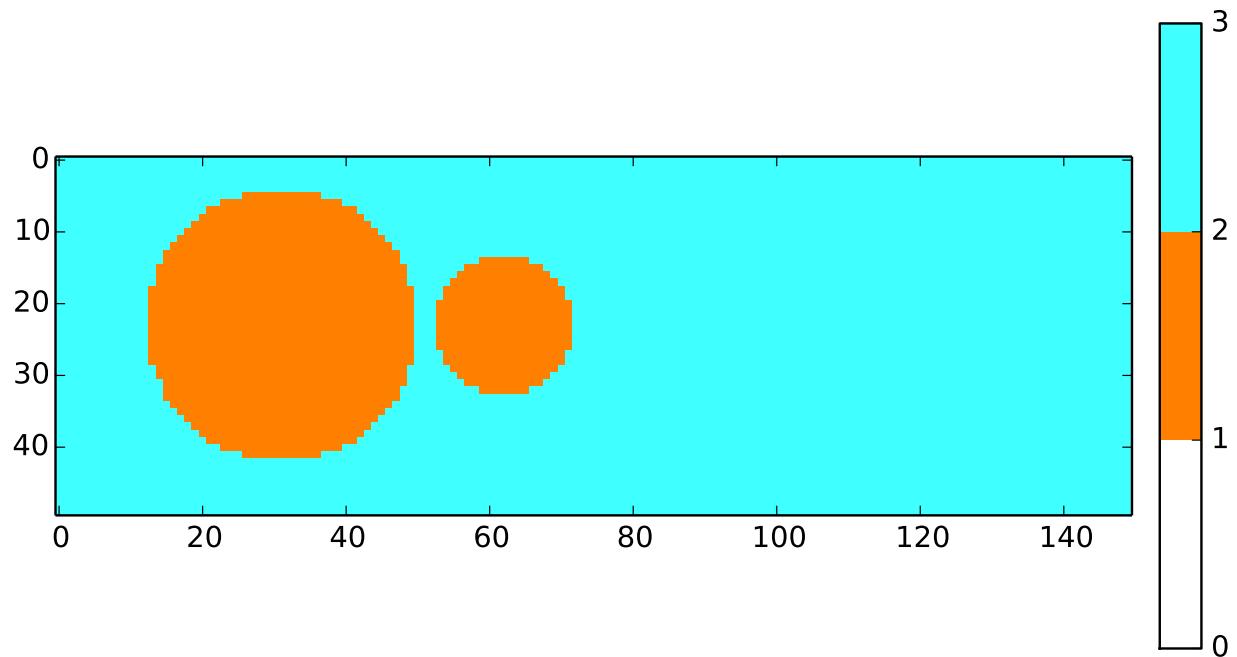
### 3 Total ion count image



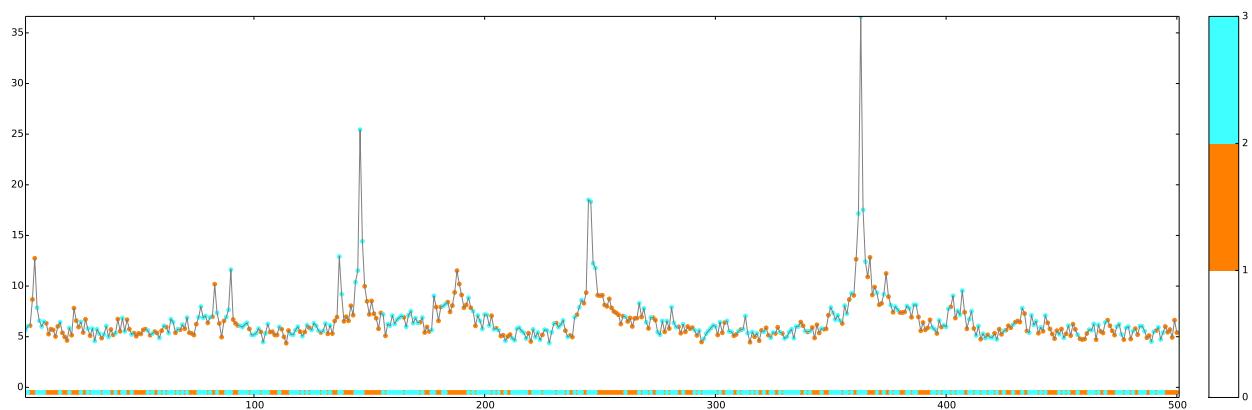
### 4 Biclustering results

## 4.1 2 clusters

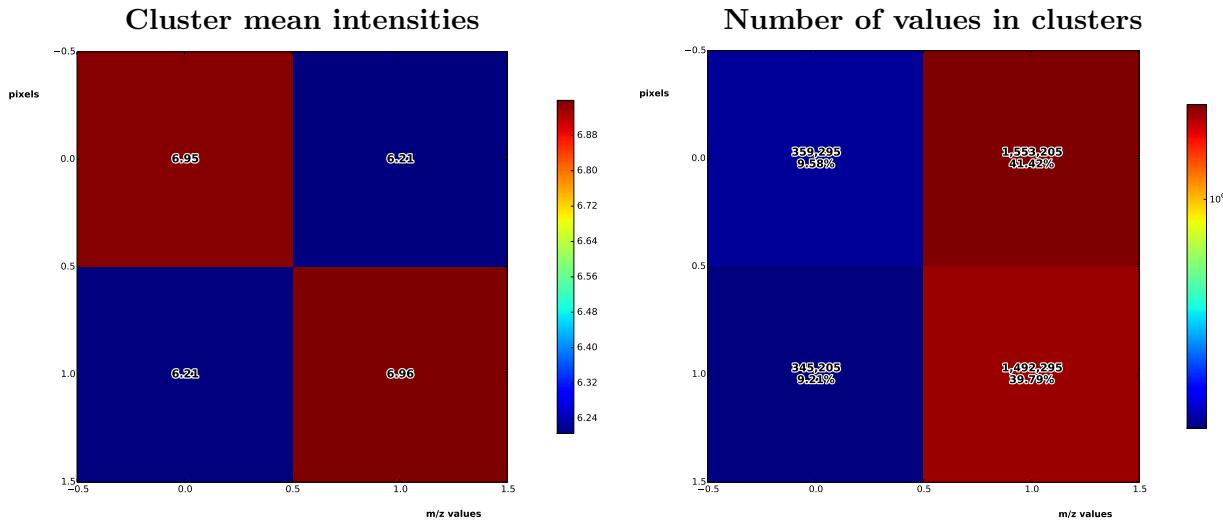
### 4.1.1 Segmentation map, 2 clusters



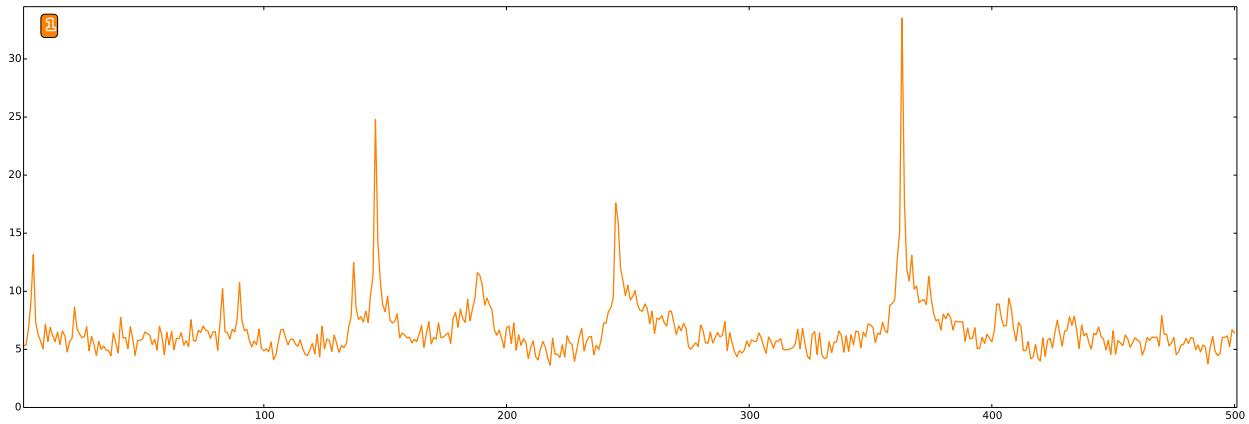
### 4.1.2 Assignments of m/z values to clusters, 2 clusters

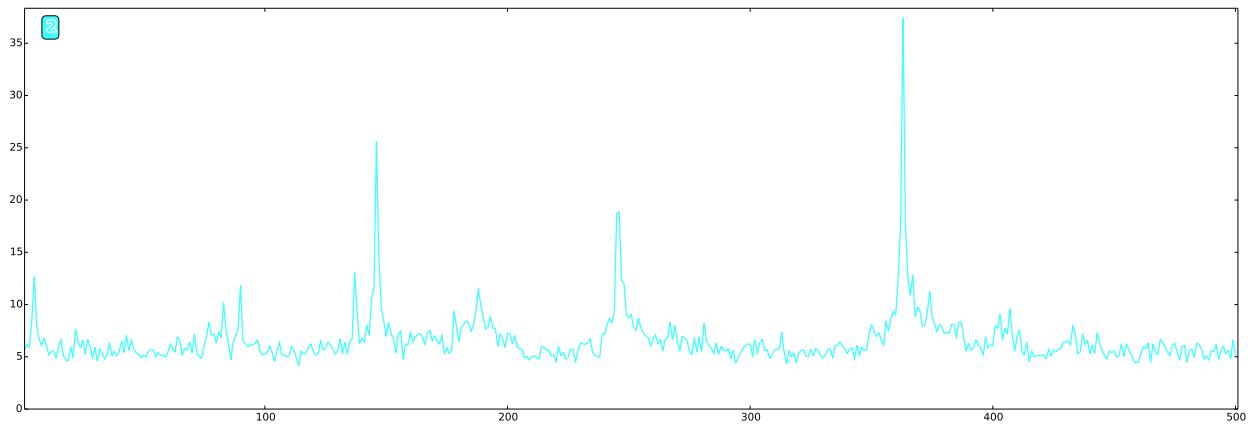


#### 4.1.3 Biclustering stats

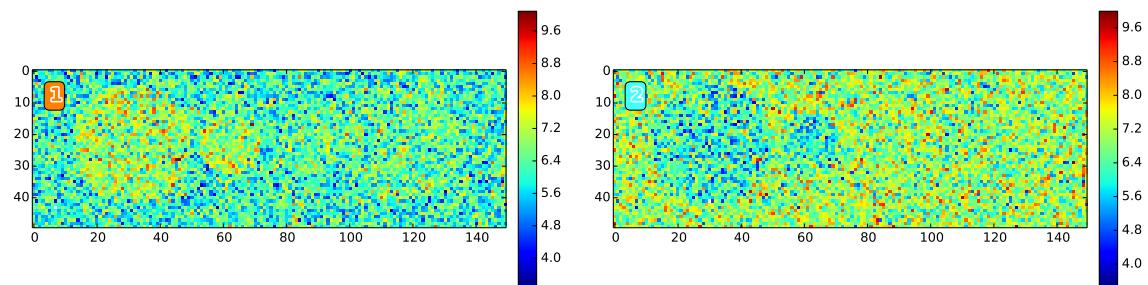


#### 4.1.4 Cluster average spectra, 2 clusters



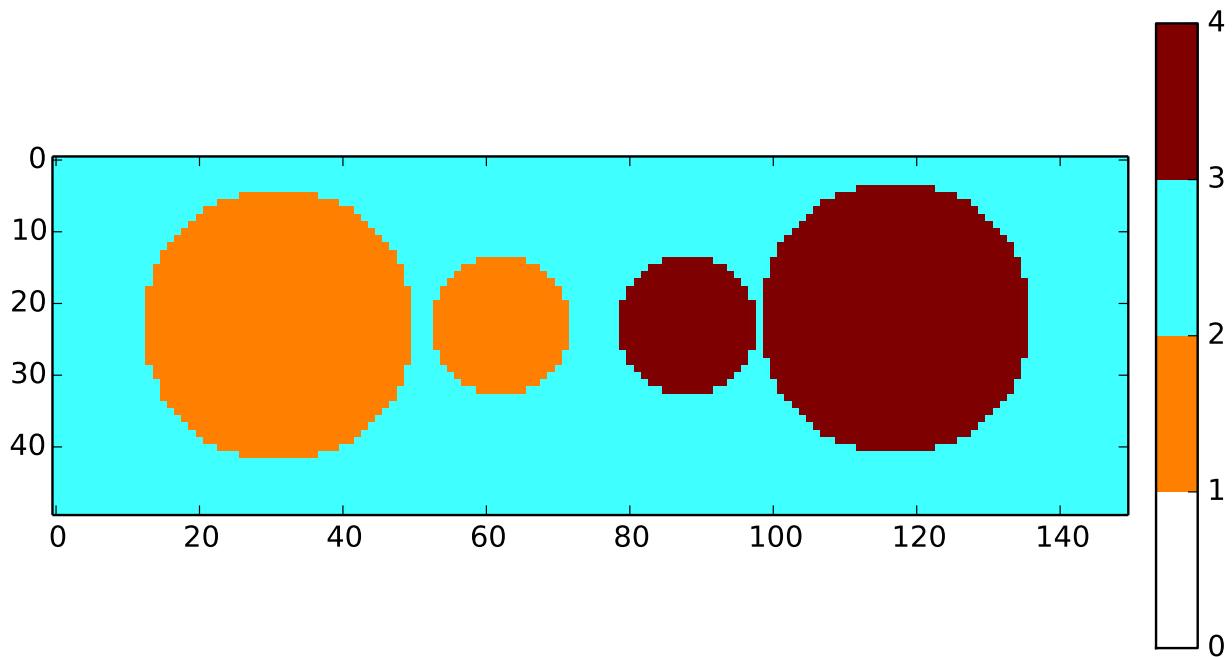


#### 4.1.5 Cluster heat maps, 2 clusters

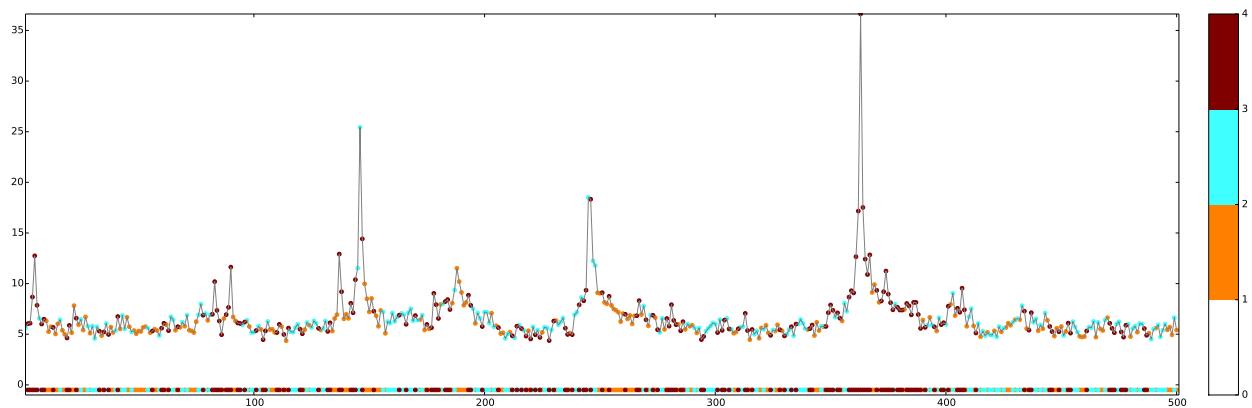


## 4.2 3 clusters

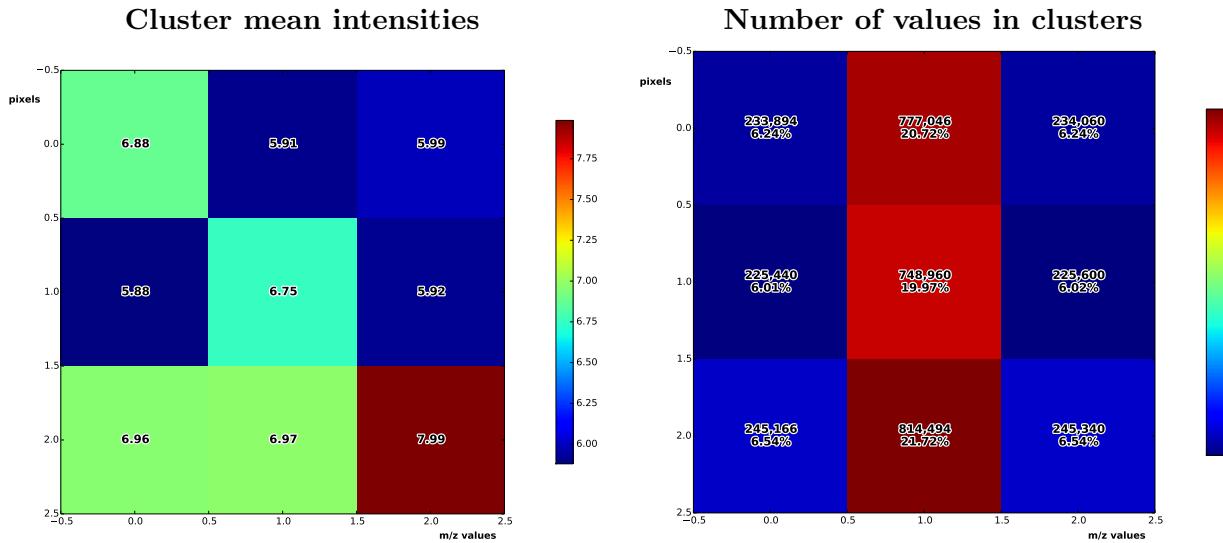
### 4.2.1 Segmentation map, 3 clusters



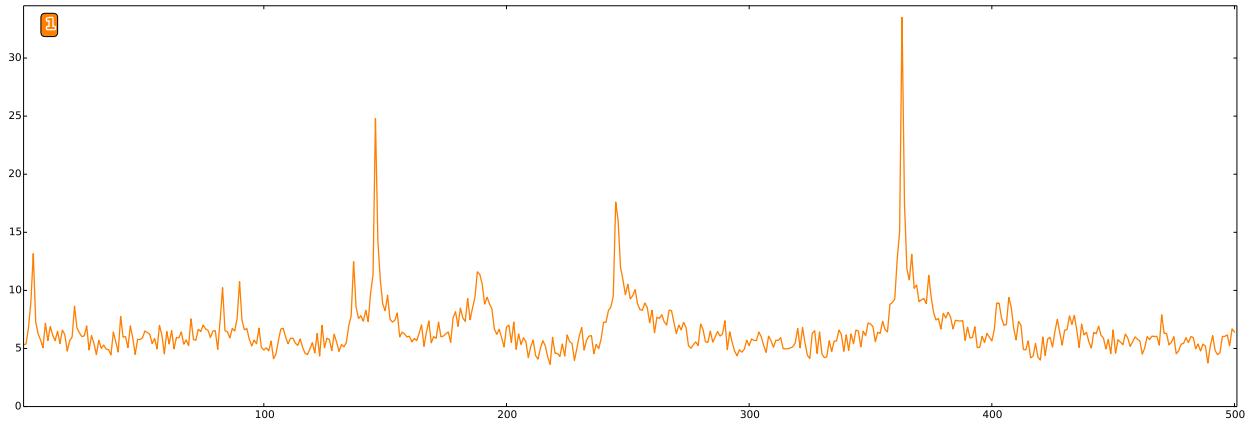
### 4.2.2 Assignments of $m/z$ values to clusters, 3 clusters

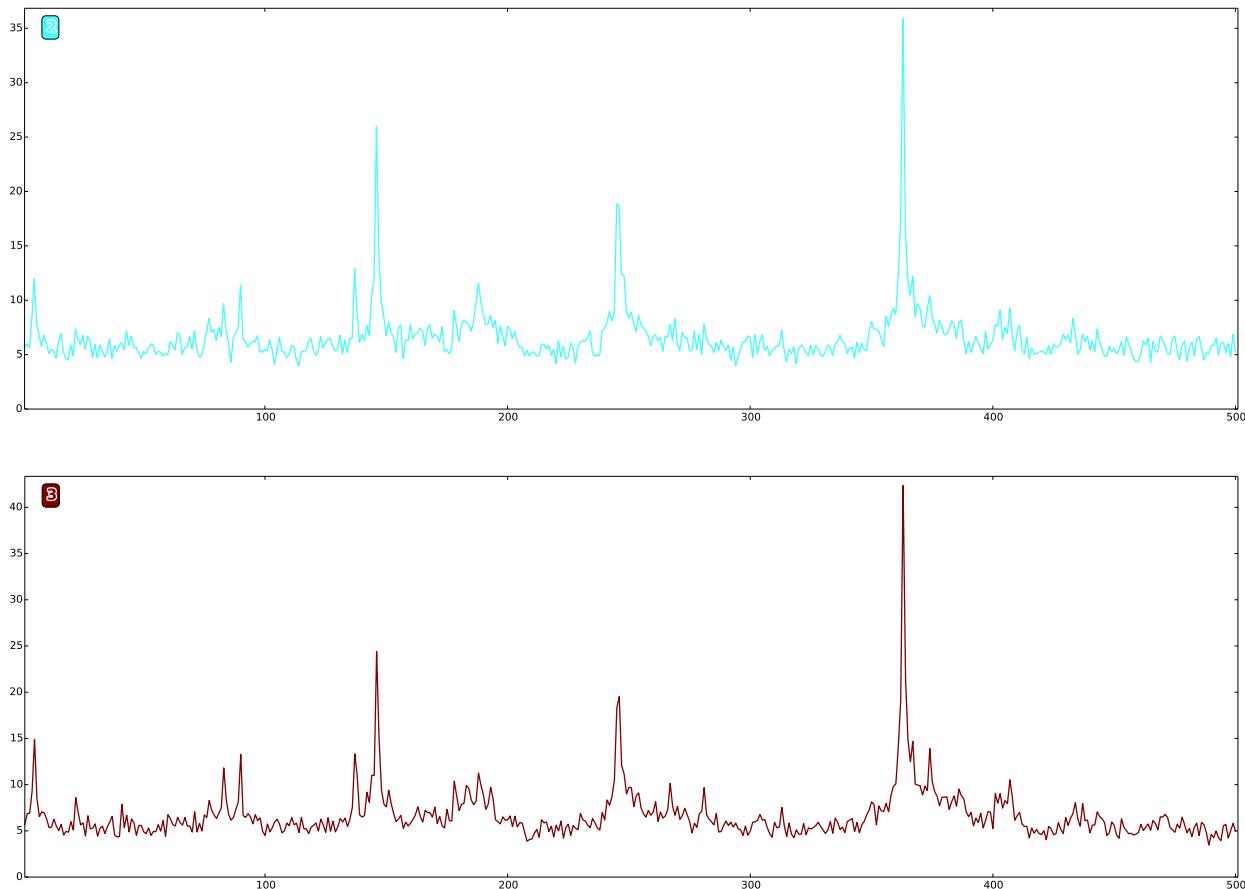


#### 4.2.3 Biclustering stats

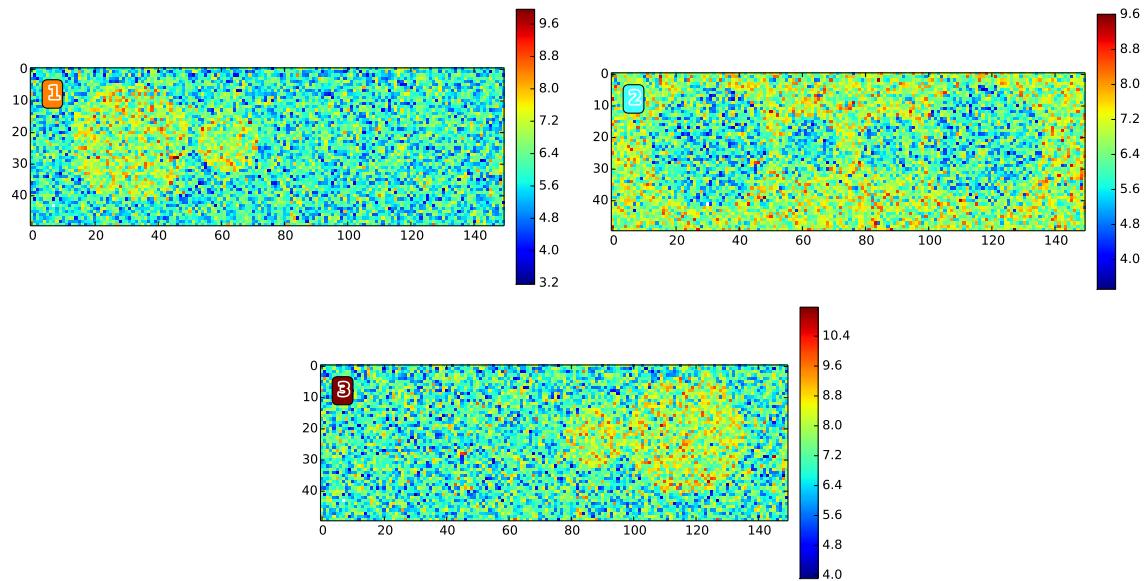


#### 4.2.4 Cluster average spectra, 3 clusters



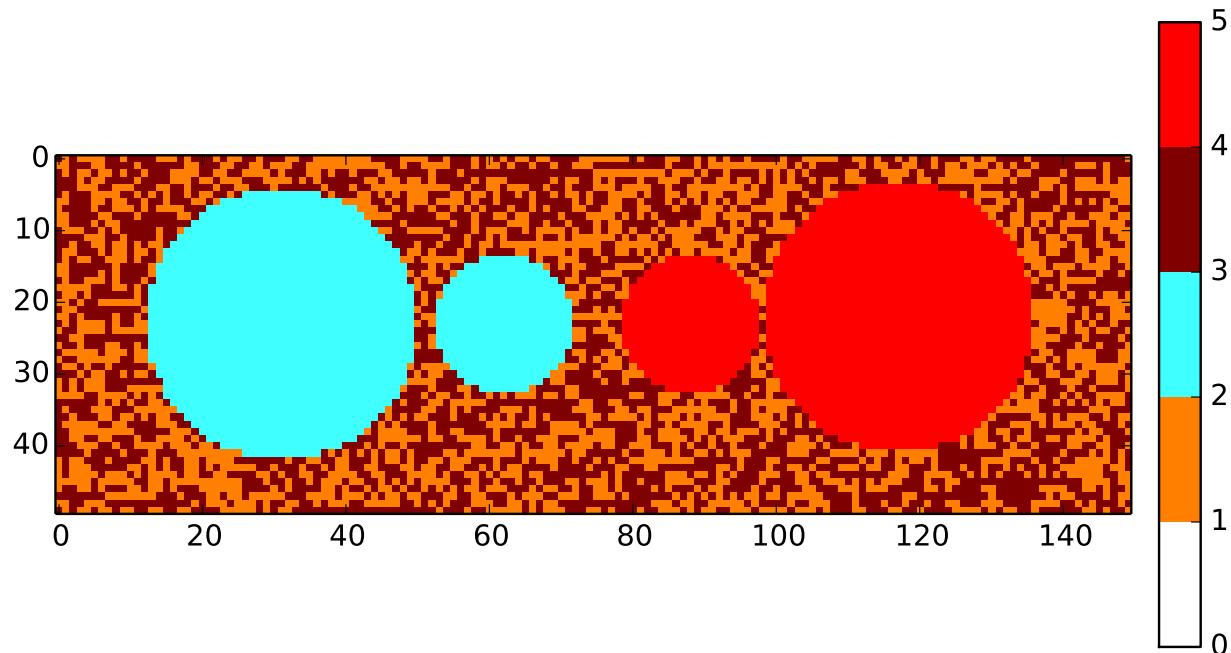


#### 4.2.5 Cluster heat maps, 3 clusters

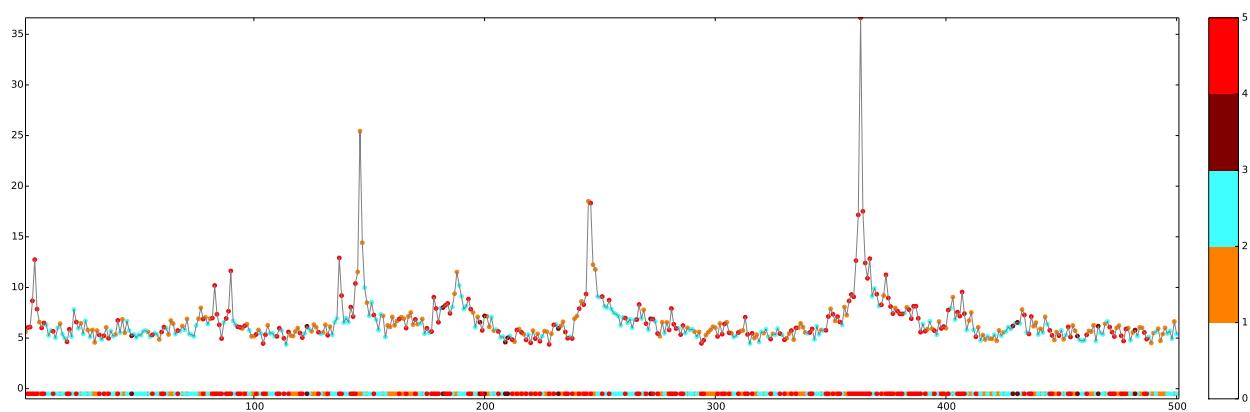


### 4.3 4 clusters

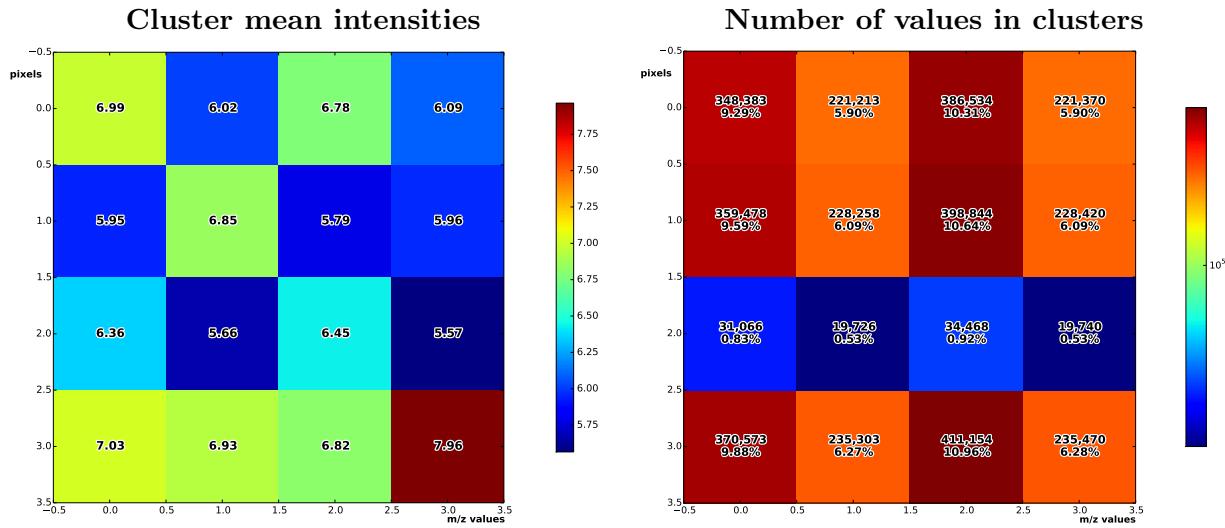
#### 4.3.1 Segmentation map, 4 clusters



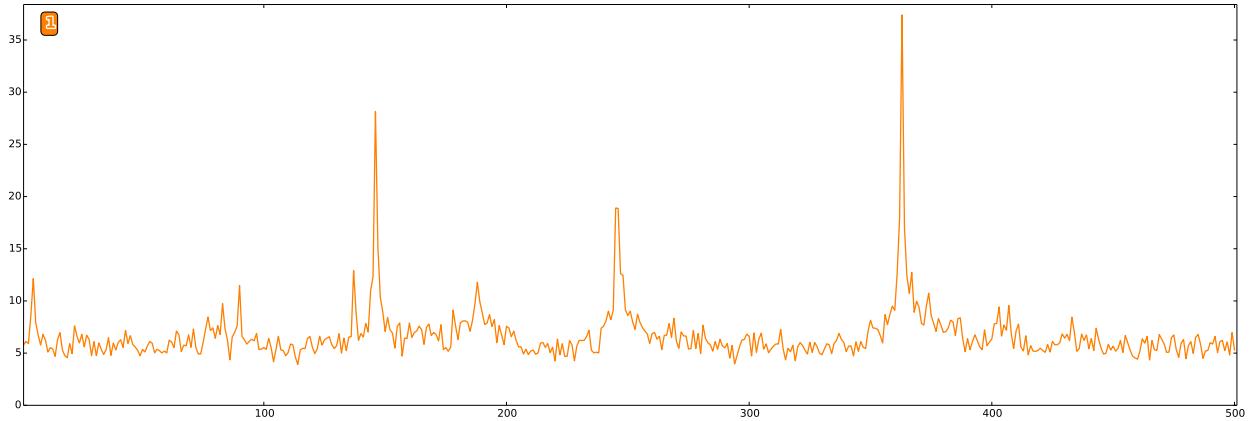
#### 4.3.2 Assignments of m/z values to clusters, 4 clusters

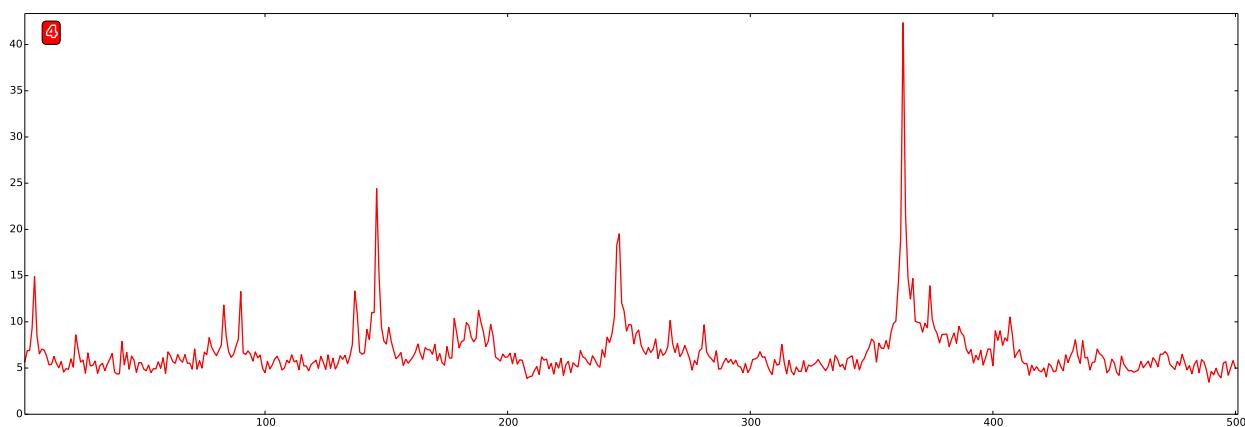
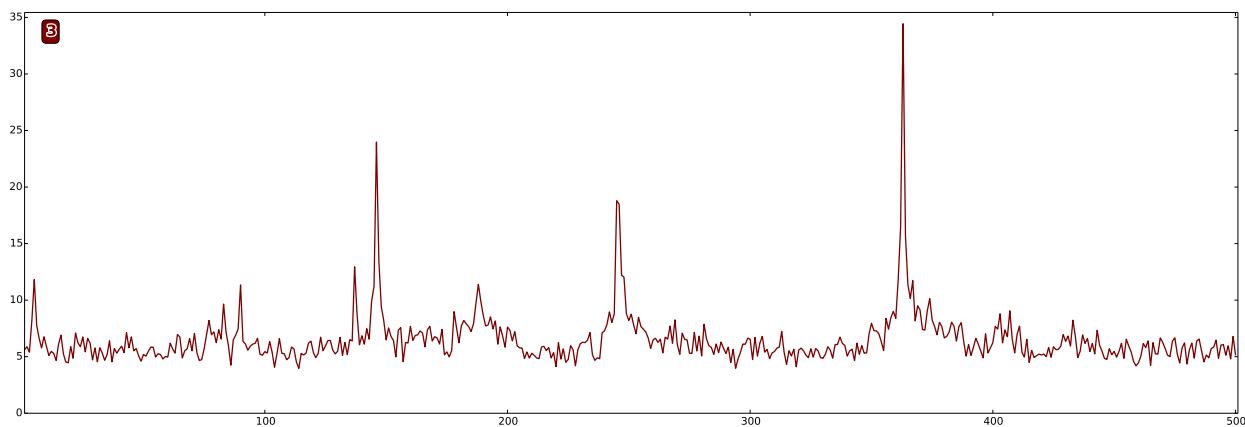
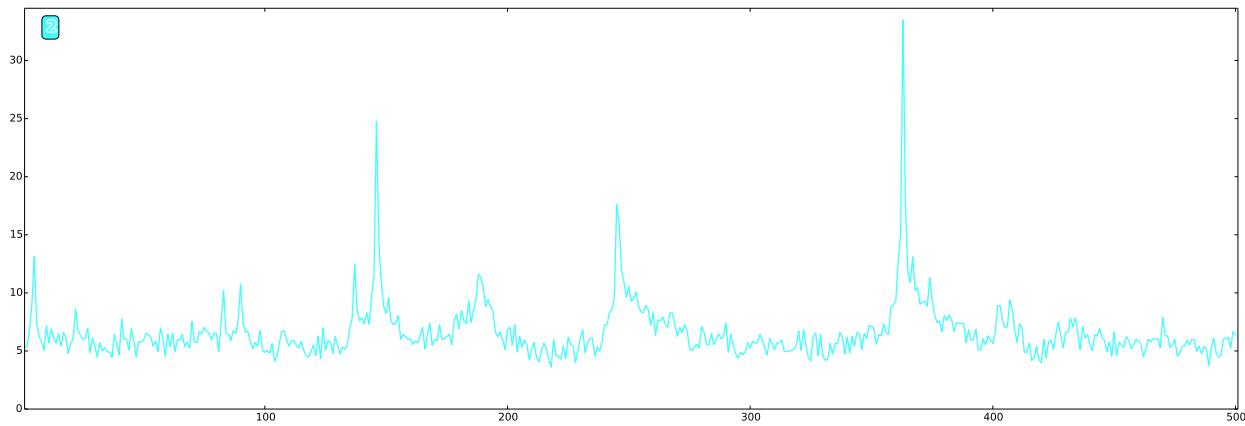


### 4.3.3 Biclustering stats

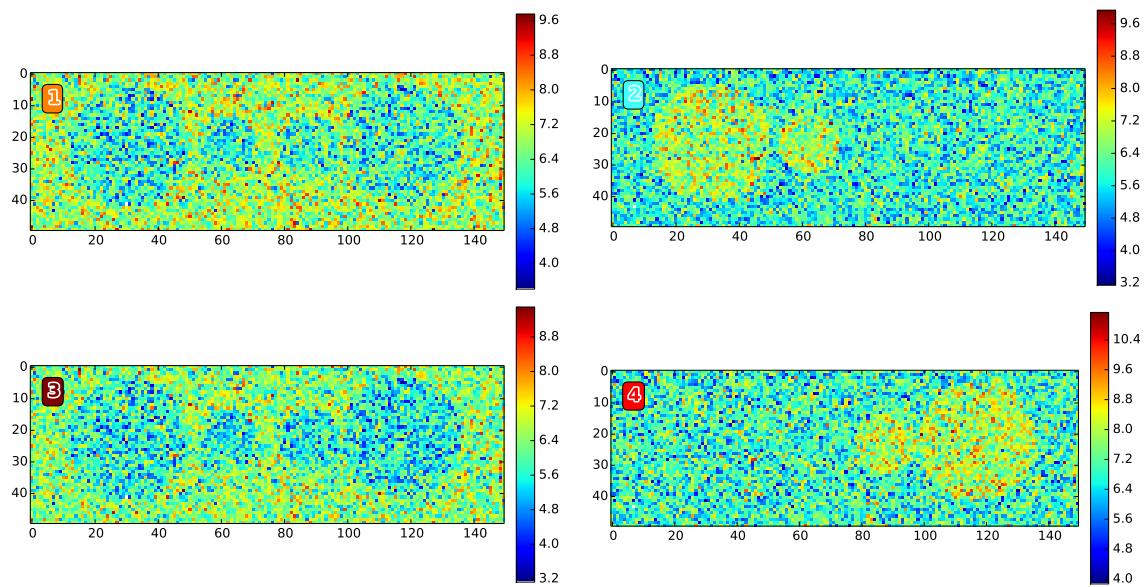


### 4.3.4 Cluster average spectra, 4 clusters



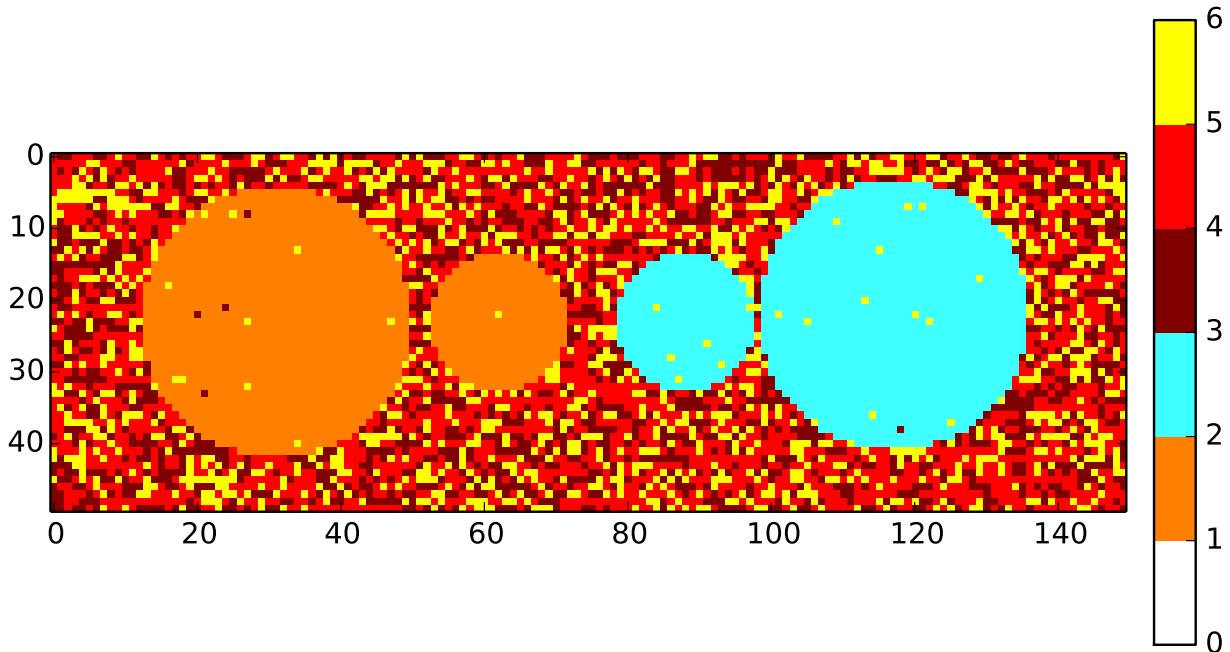


#### 4.3.5 Cluster heat maps, 4 clusters

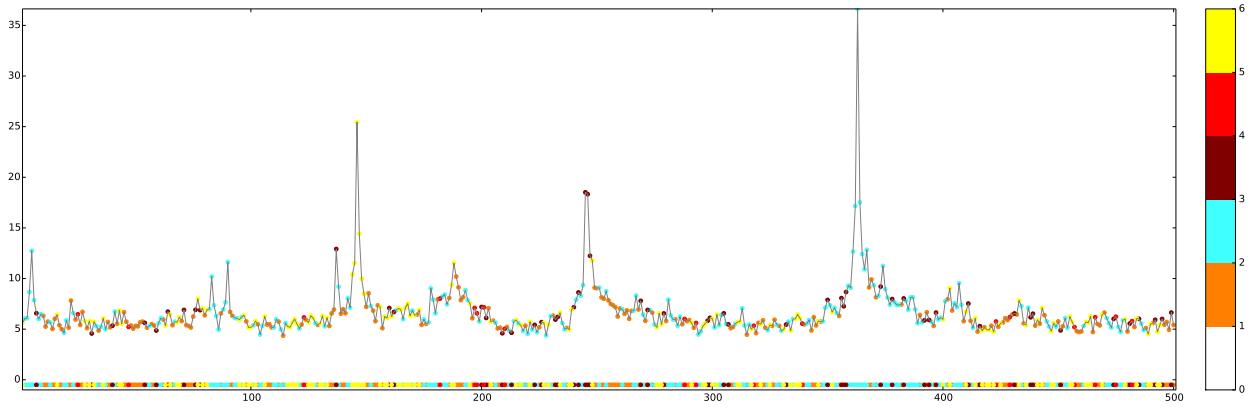


### 4.4 5 clusters

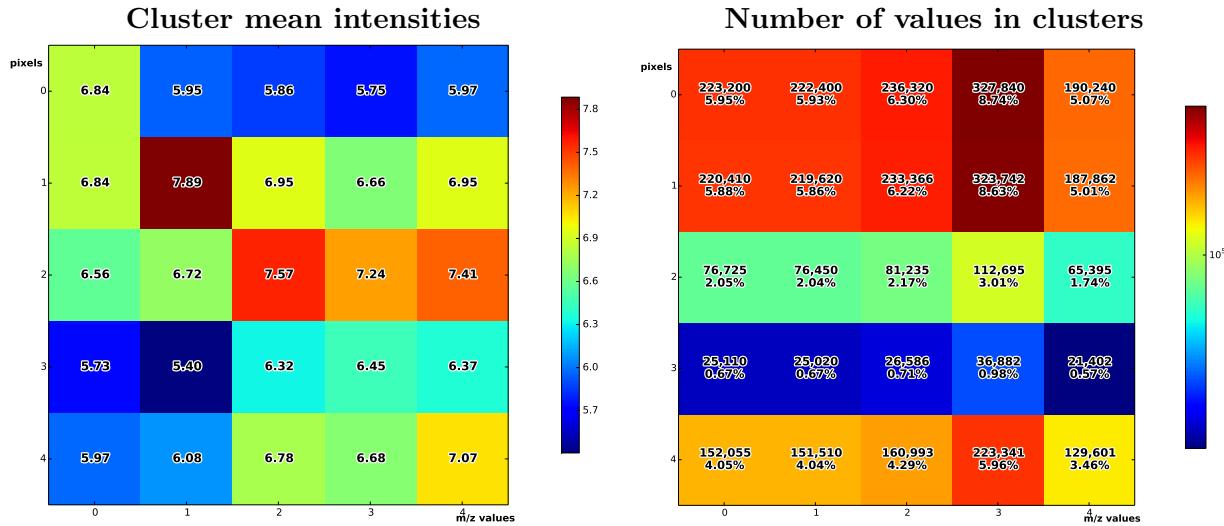
#### 4.4.1 Segmentation map, 5 clusters



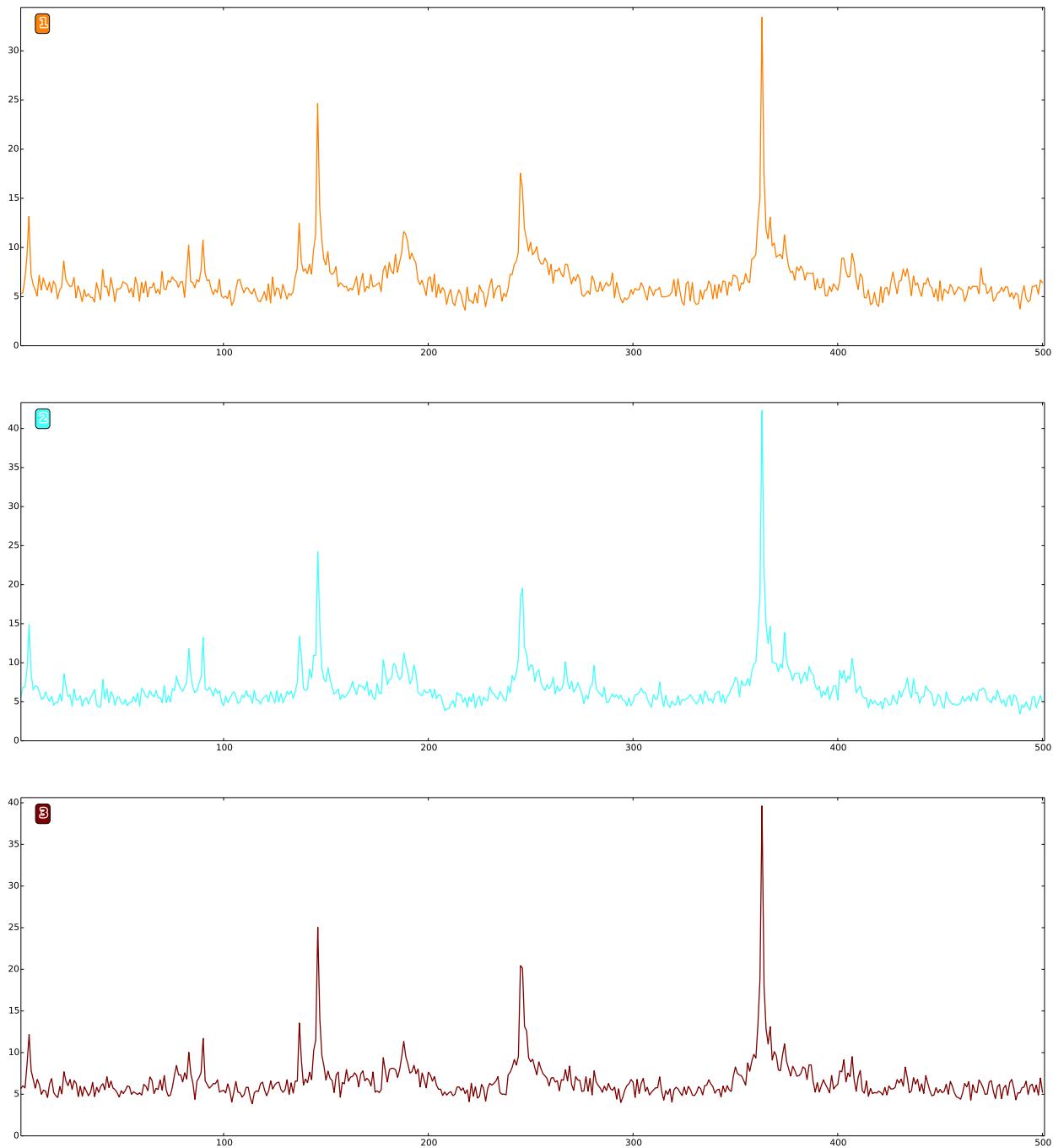
#### 4.4.2 Assignments of m/z values to clusters, 5 clusters

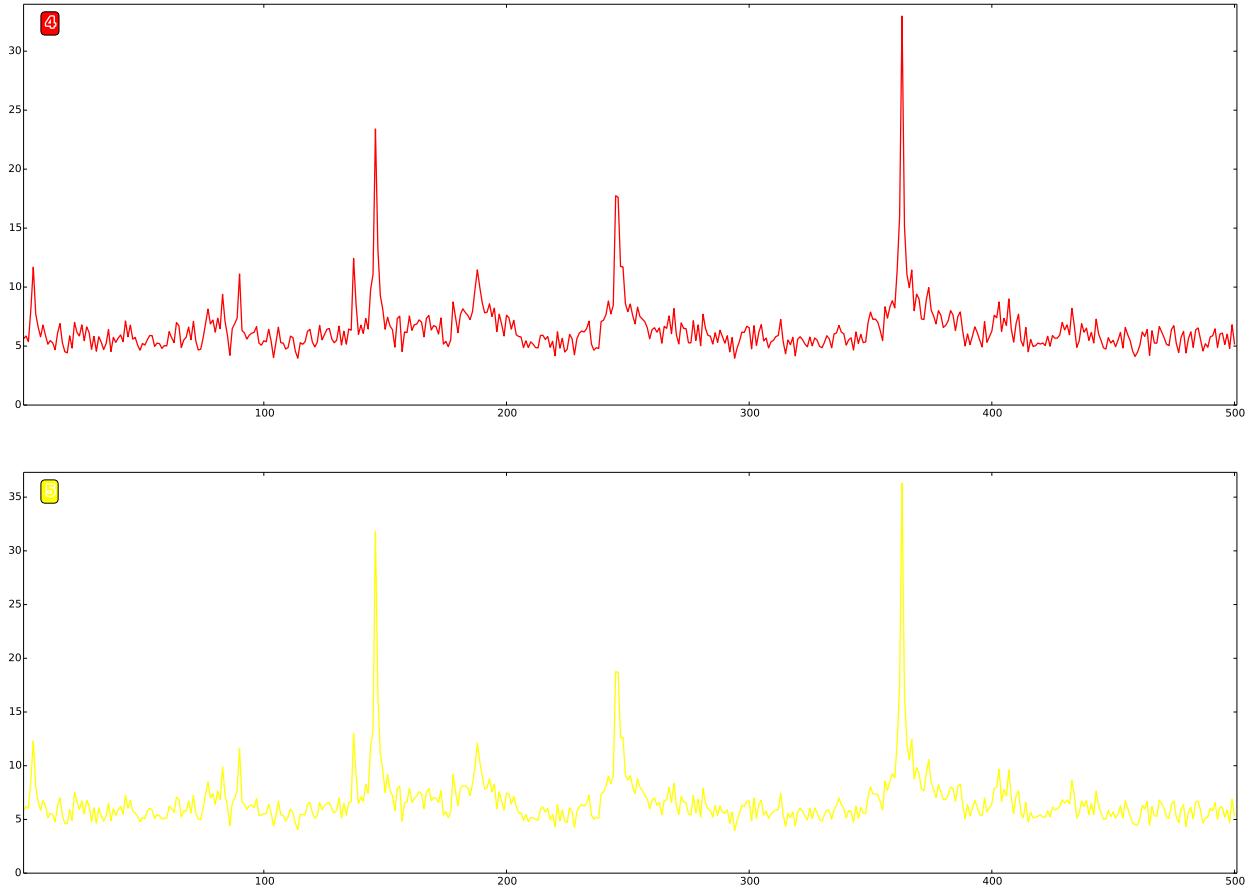


#### 4.4.3 Biclustering stats

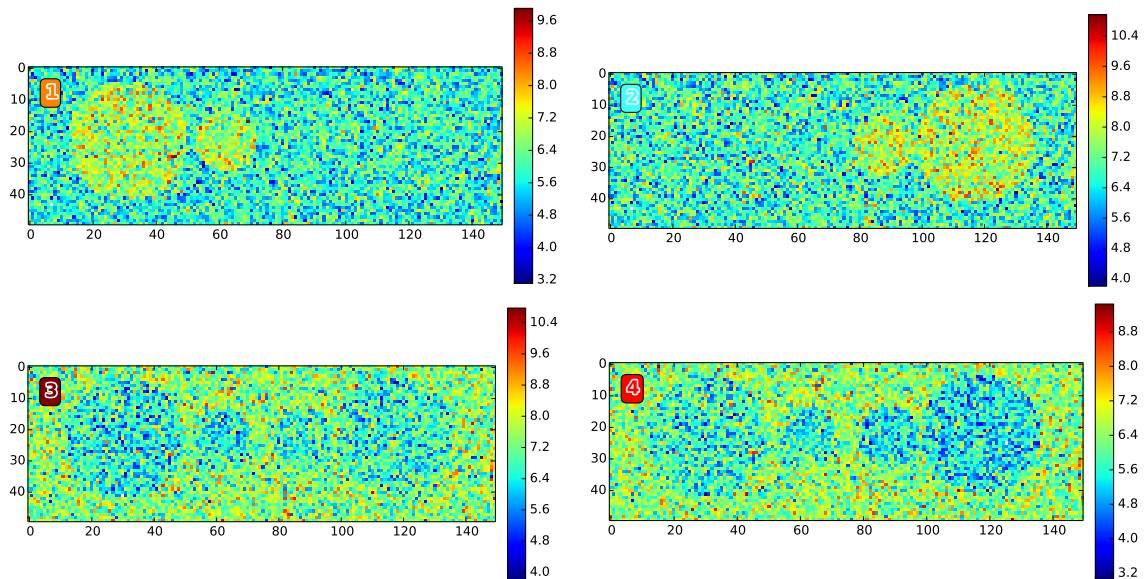


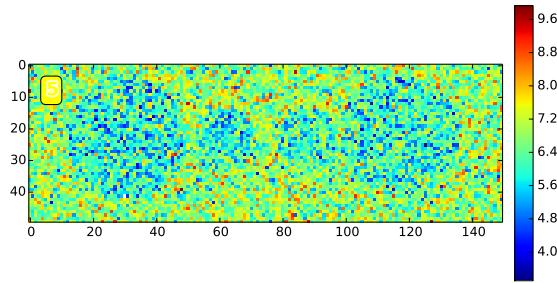
#### 4.4.4 Cluster average spectra, 5 clusters





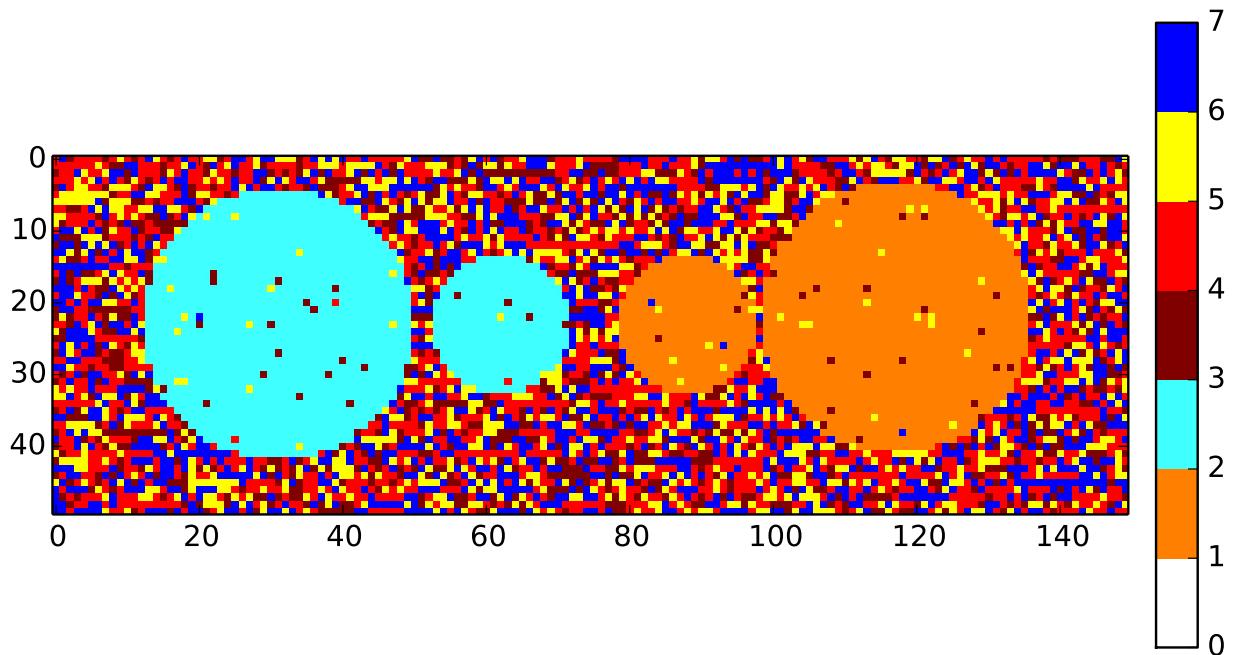
#### 4.4.5 Cluster heat maps, 5 clusters



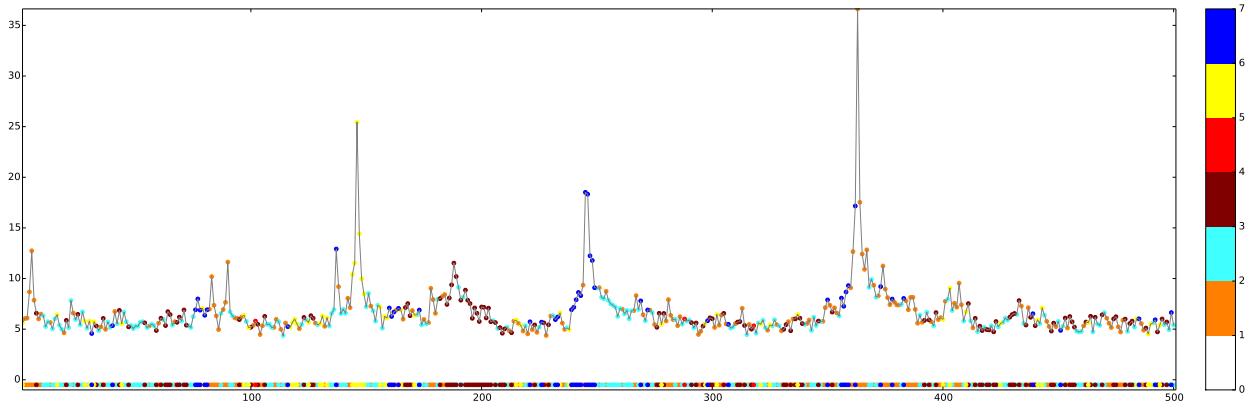


## 4.5 6 clusters

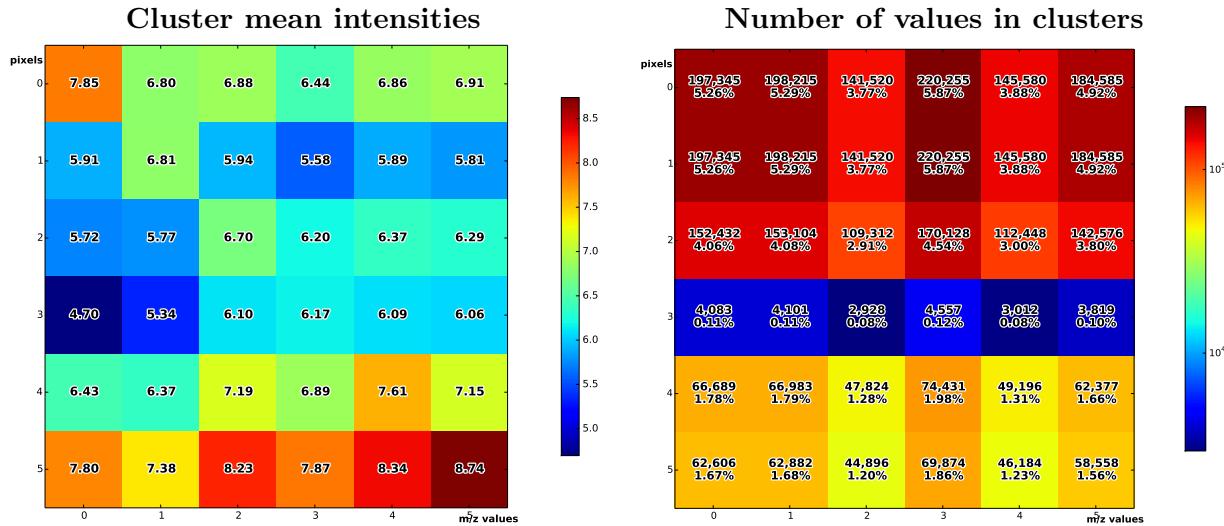
### 4.5.1 Segmentation map, 6 clusters



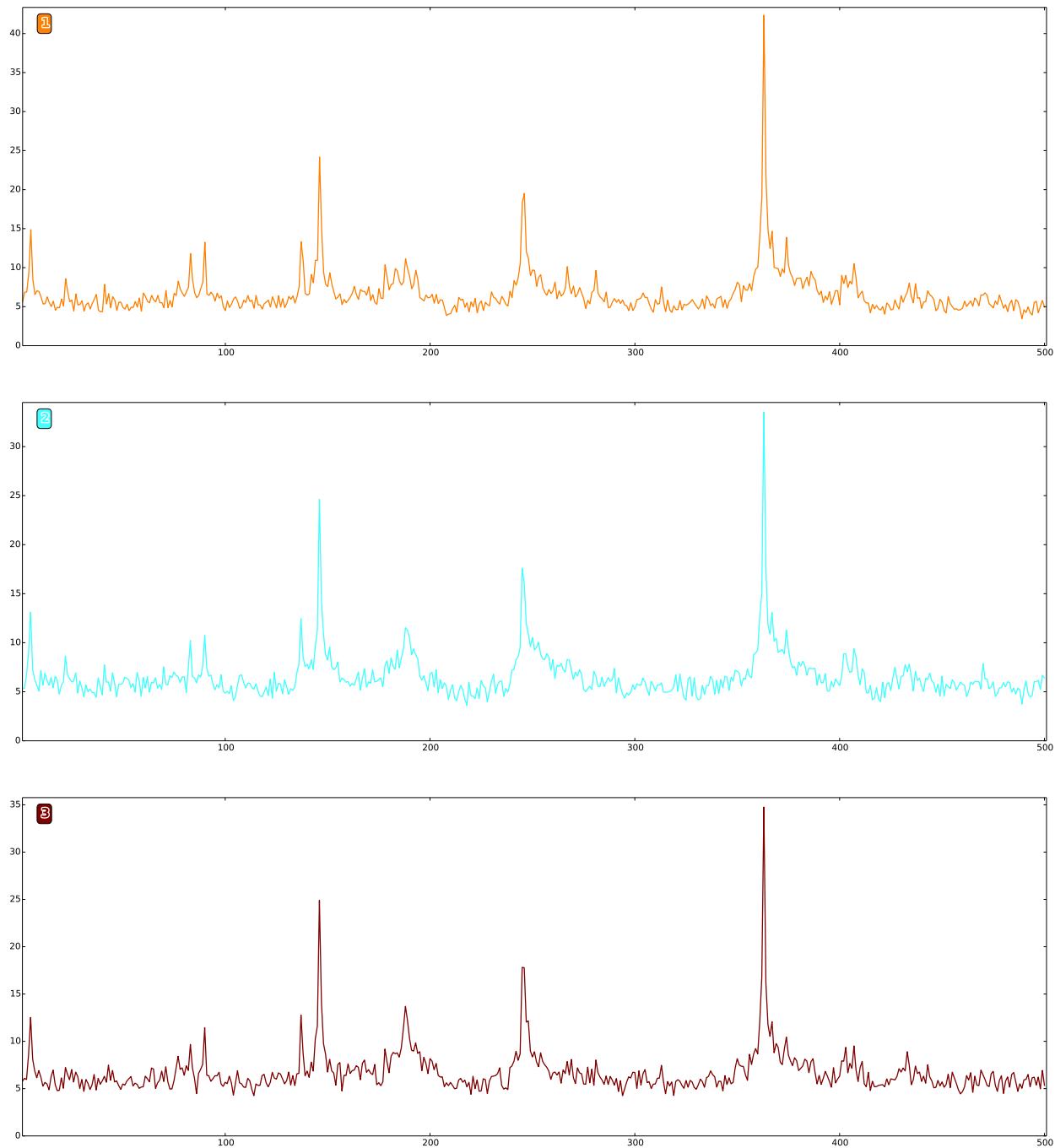
#### 4.5.2 Assignments of $m/z$ values to clusters, 6 clusters

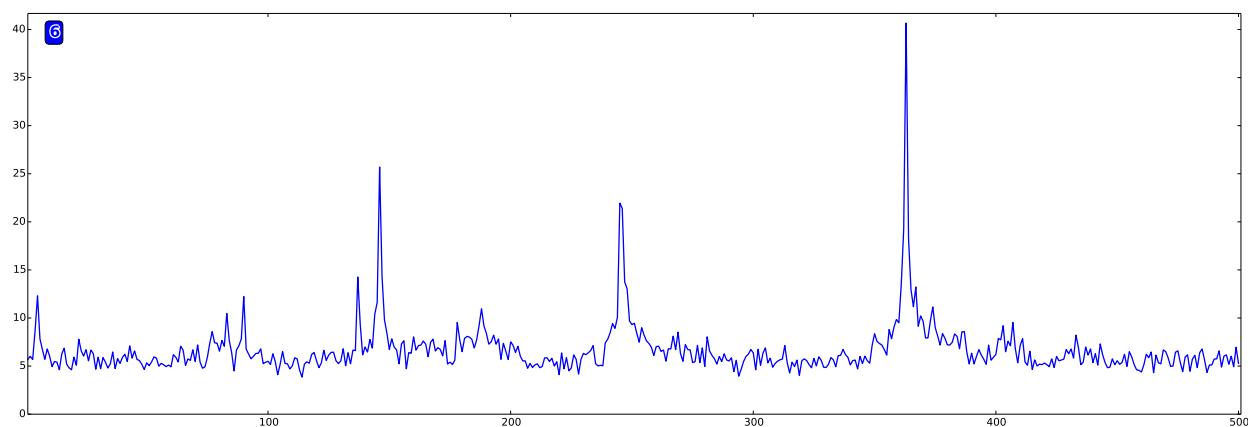
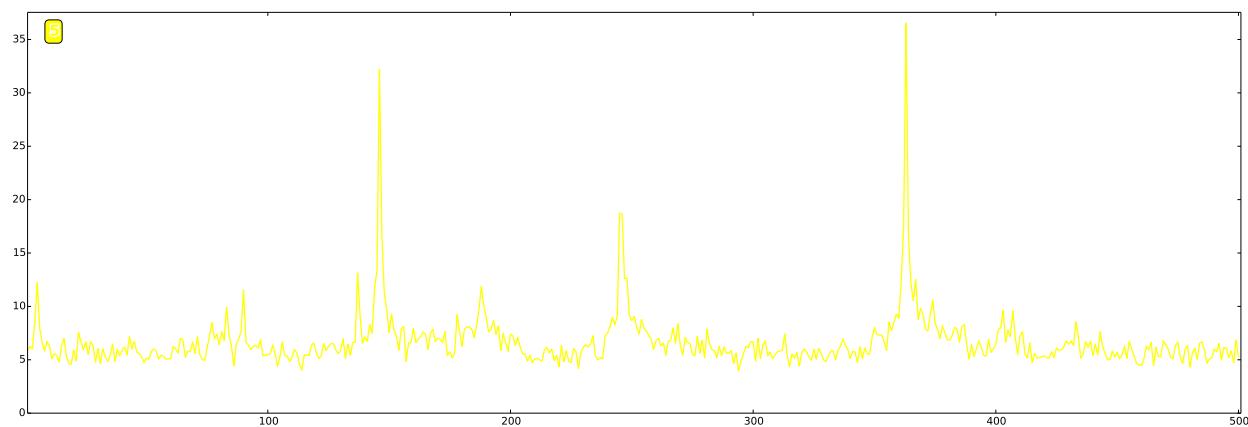
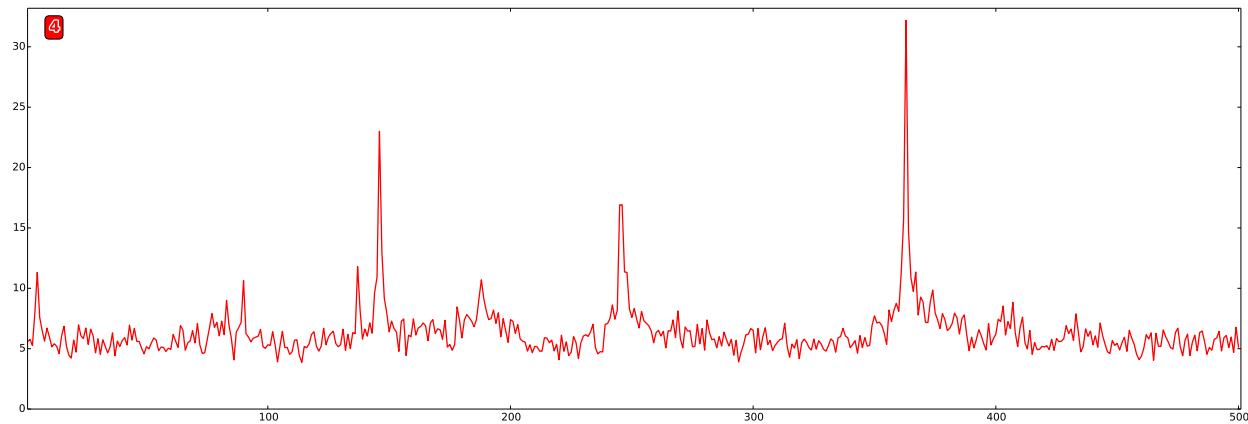


#### 4.5.3 Biclustering stats

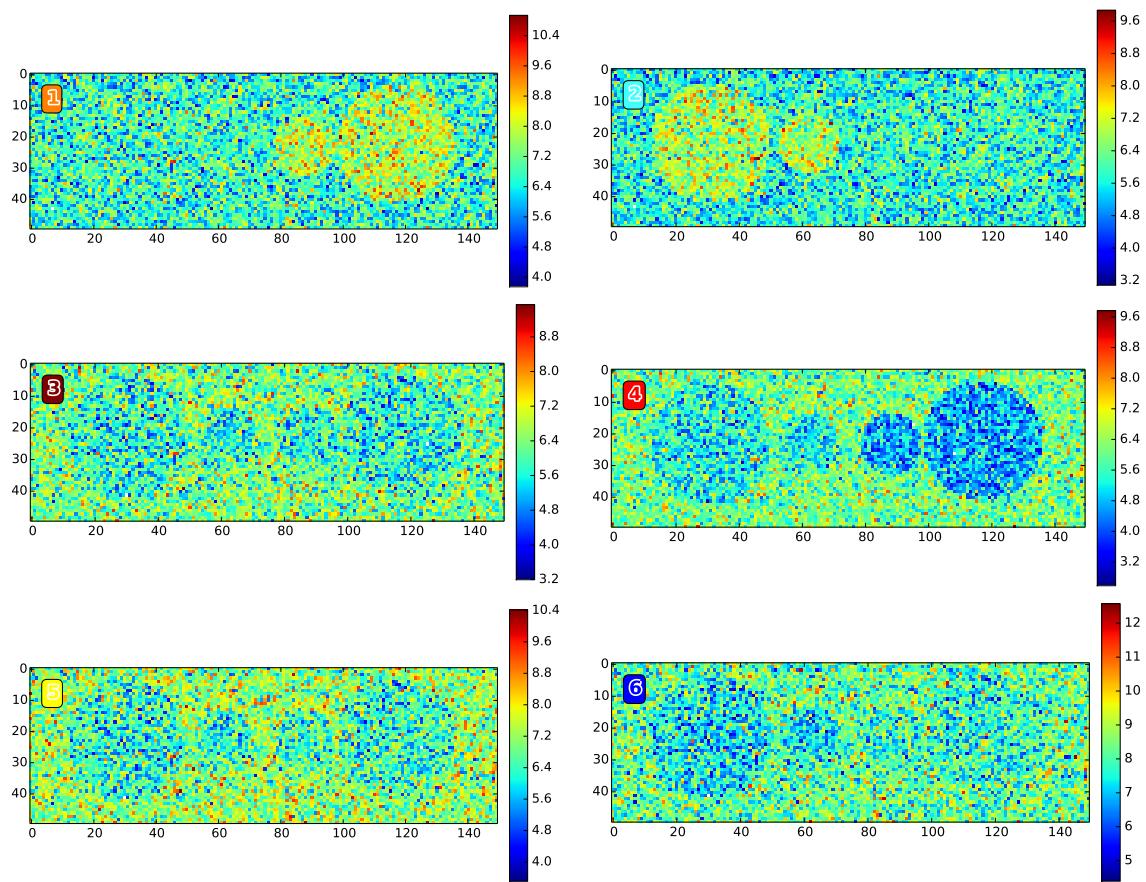


#### 4.5.4 Cluster average spectra, 6 clusters



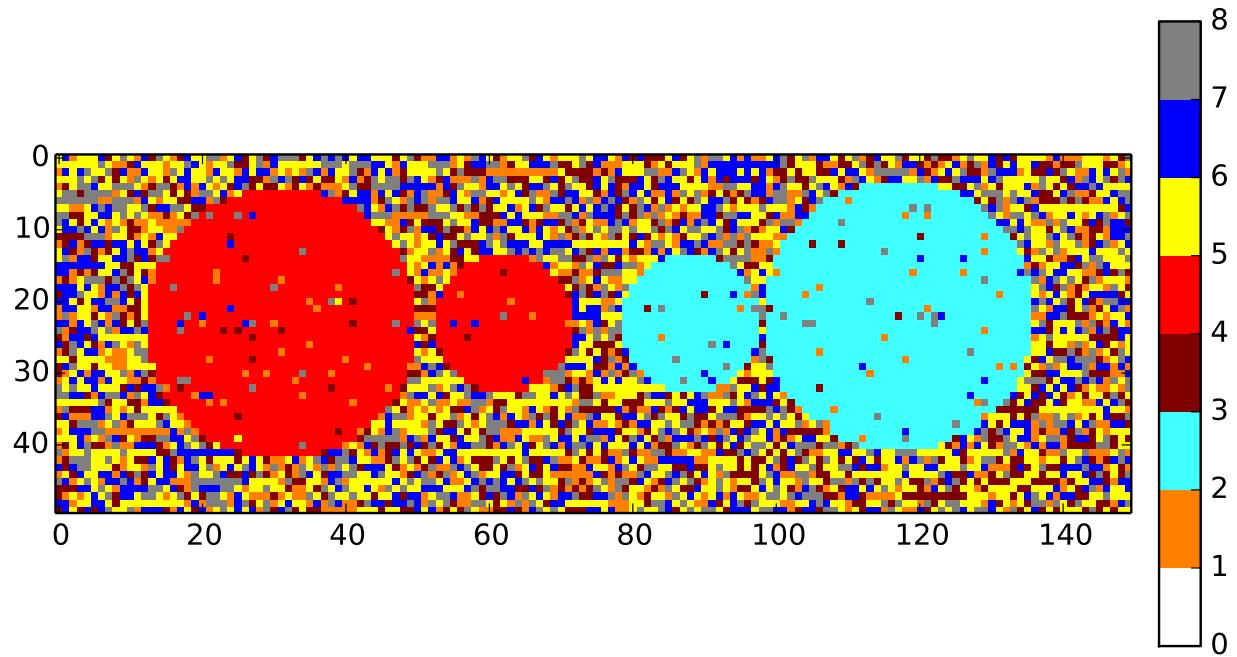


#### 4.5.5 Cluster heat maps, 6 clusters

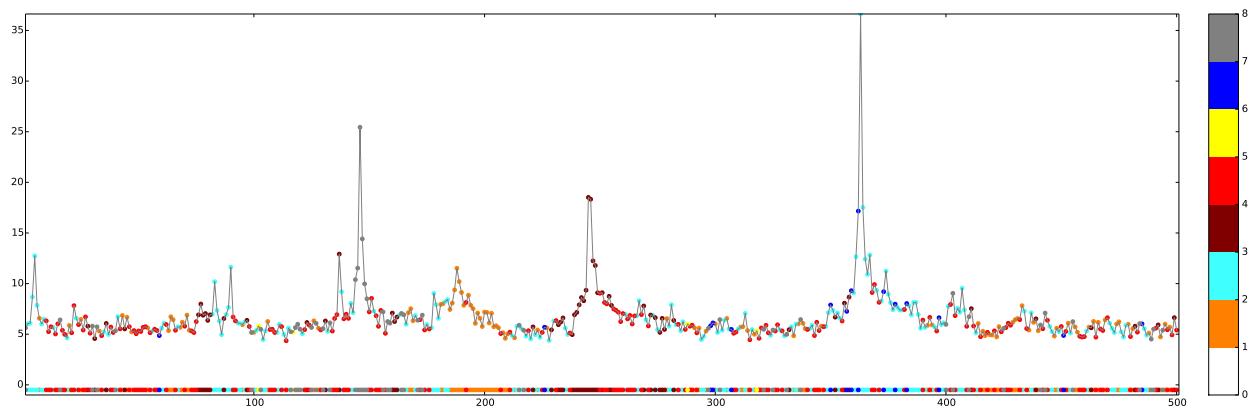


## 4.6 7 clusters

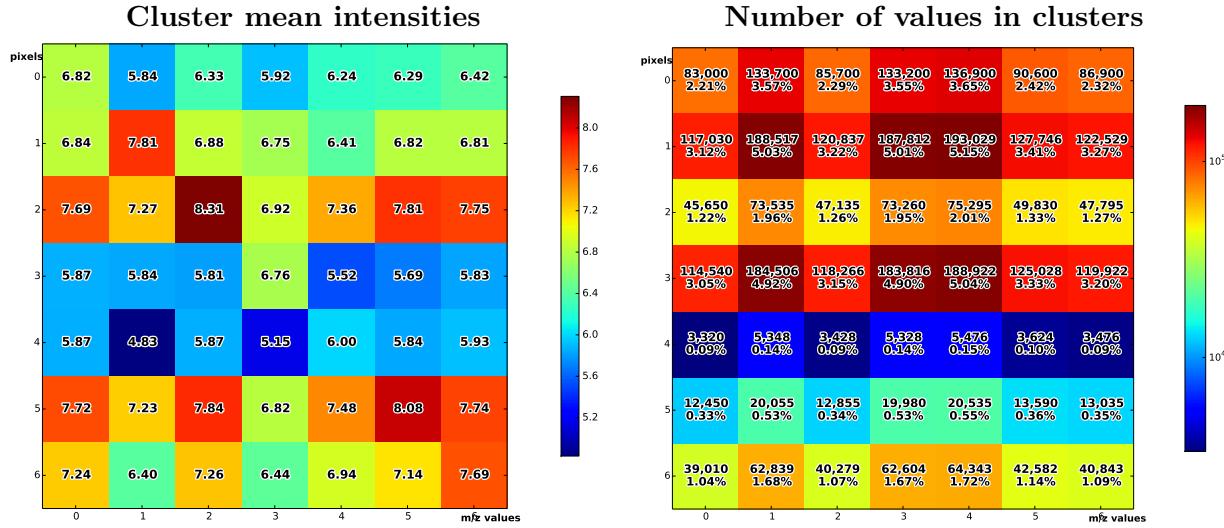
### 4.6.1 Segmentation map, 7 clusters



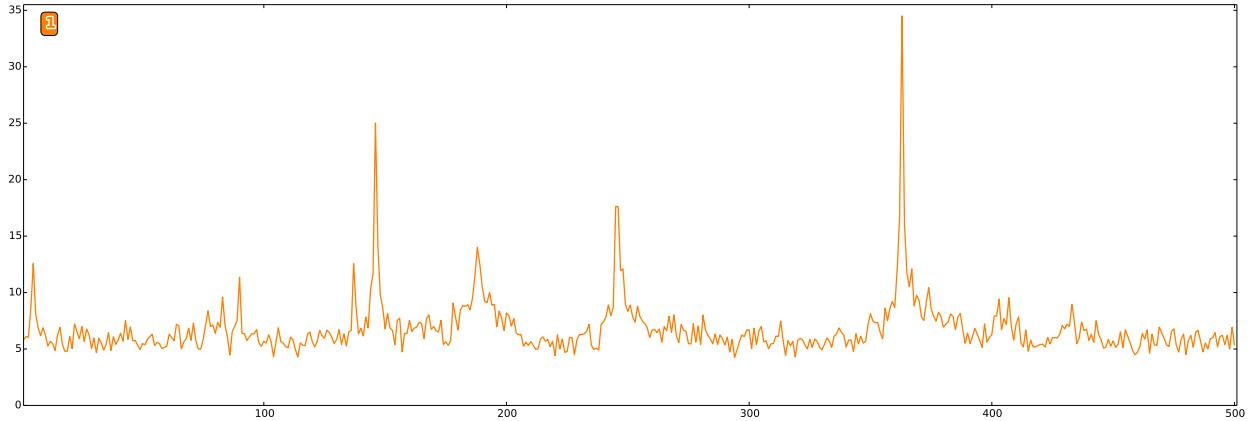
### 4.6.2 Assignments of $m/z$ values to clusters, 7 clusters

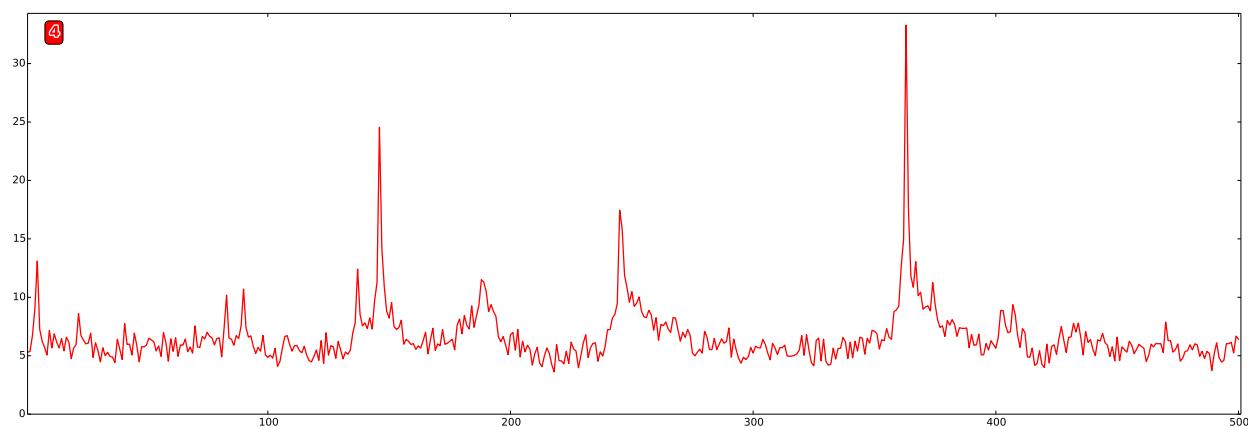
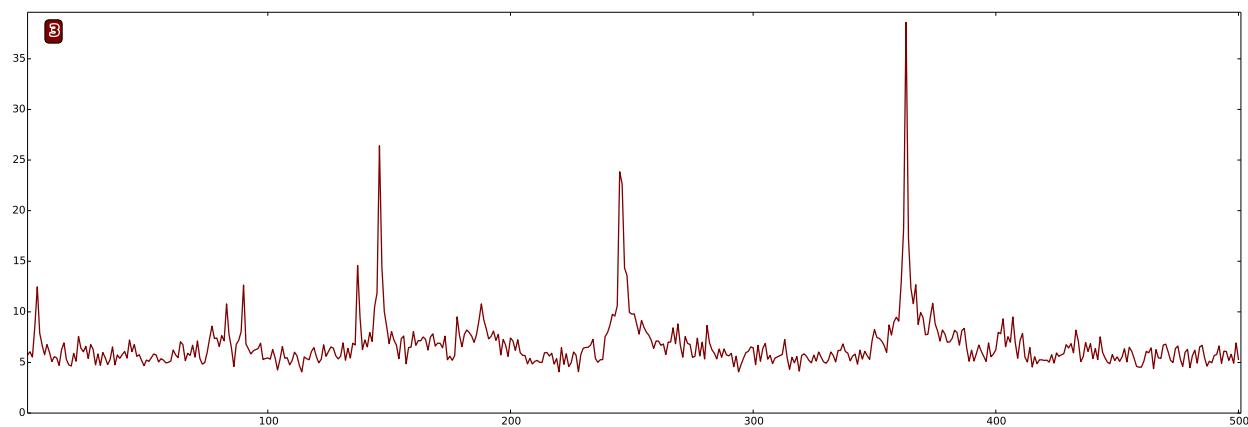
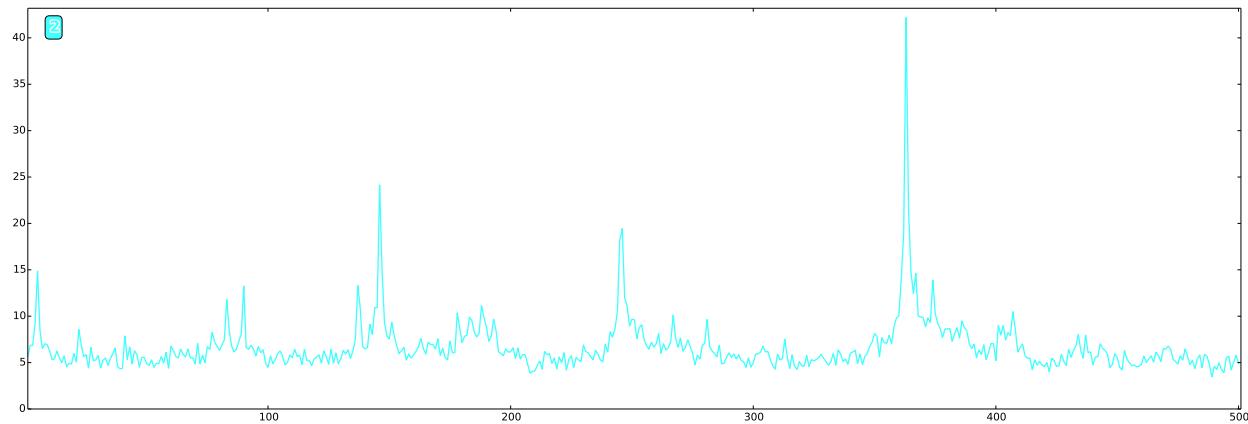


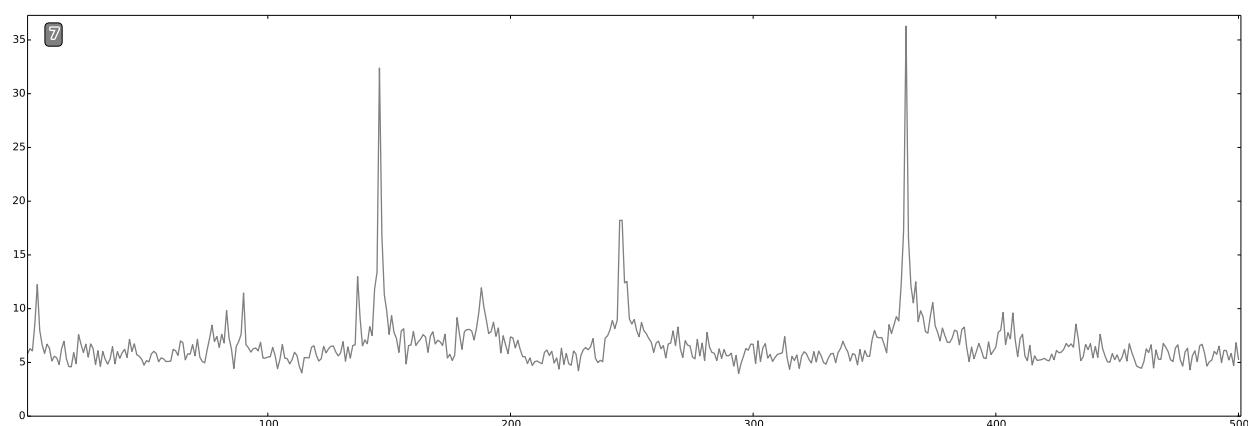
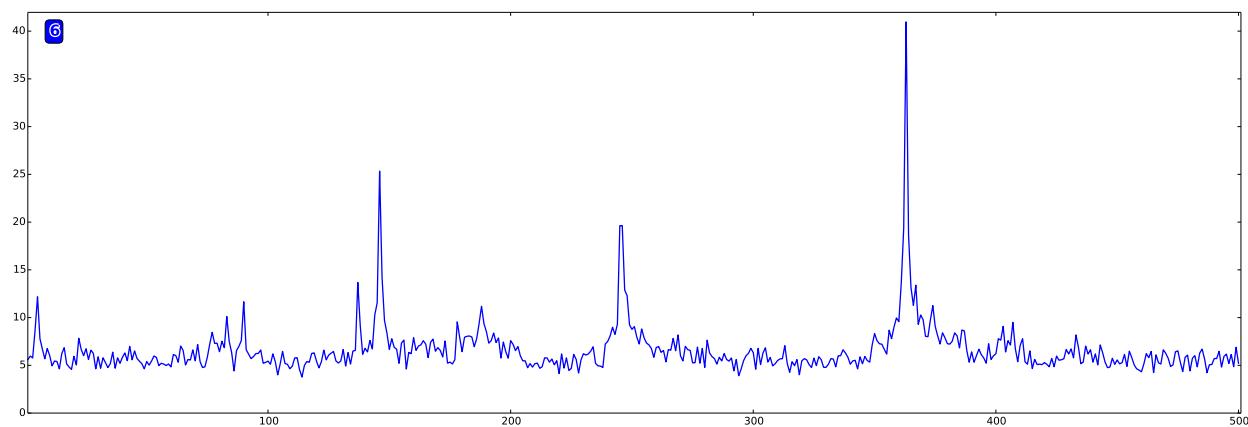
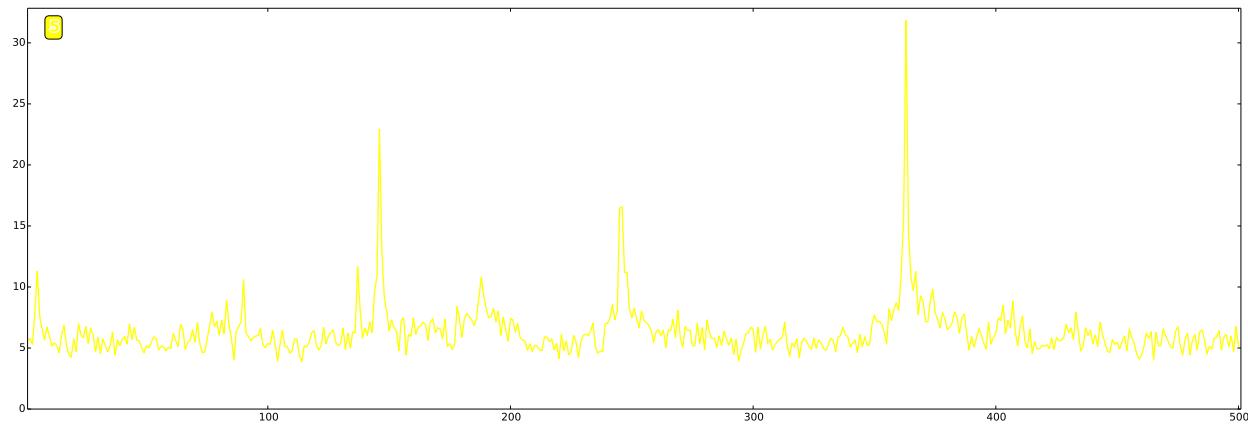
### 4.6.3 Biclustering stats



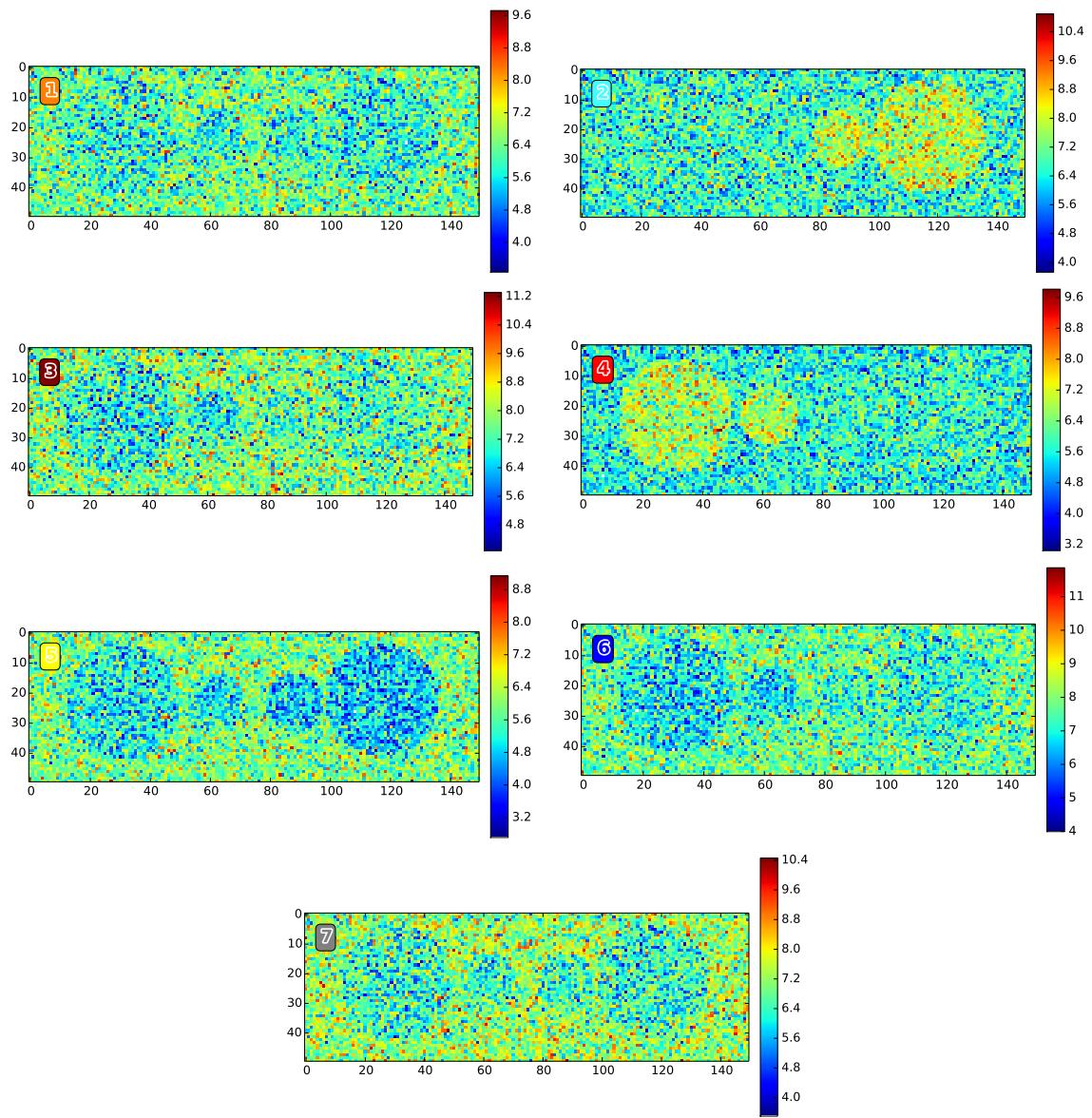
### 4.6.4 Cluster average spectra, 7 clusters





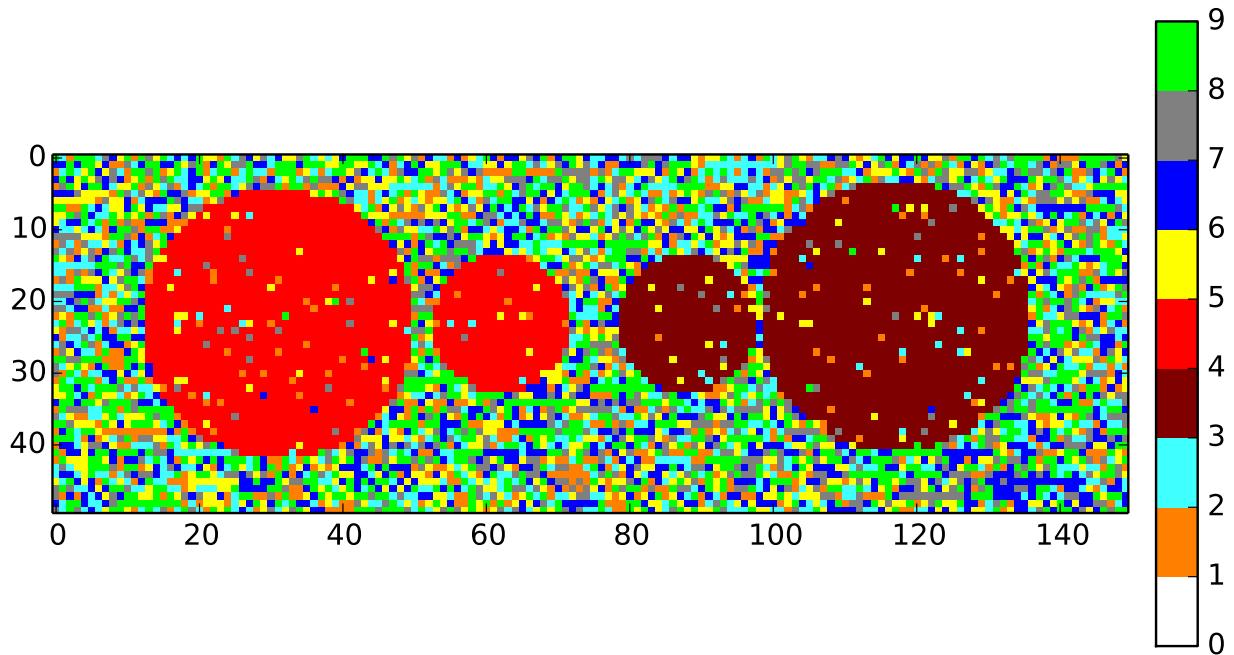


#### 4.6.5 Cluster heat maps, 7 clusters

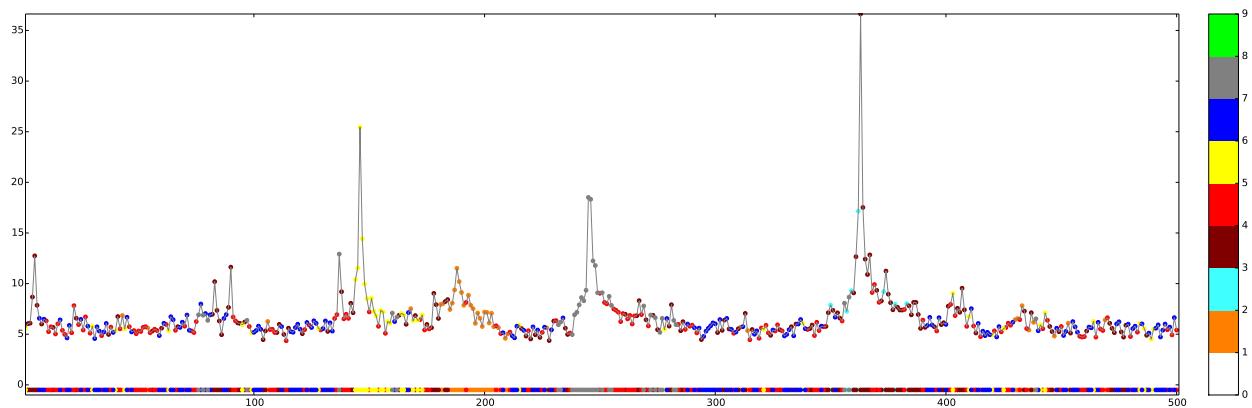


## 4.7 8 clusters

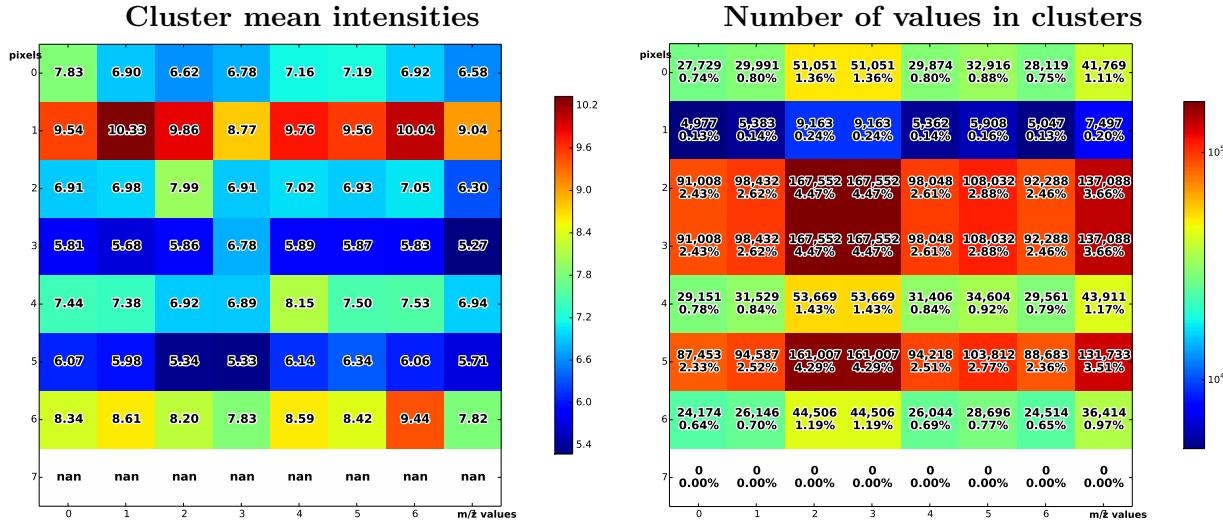
### 4.7.1 Segmentation map, 8 clusters



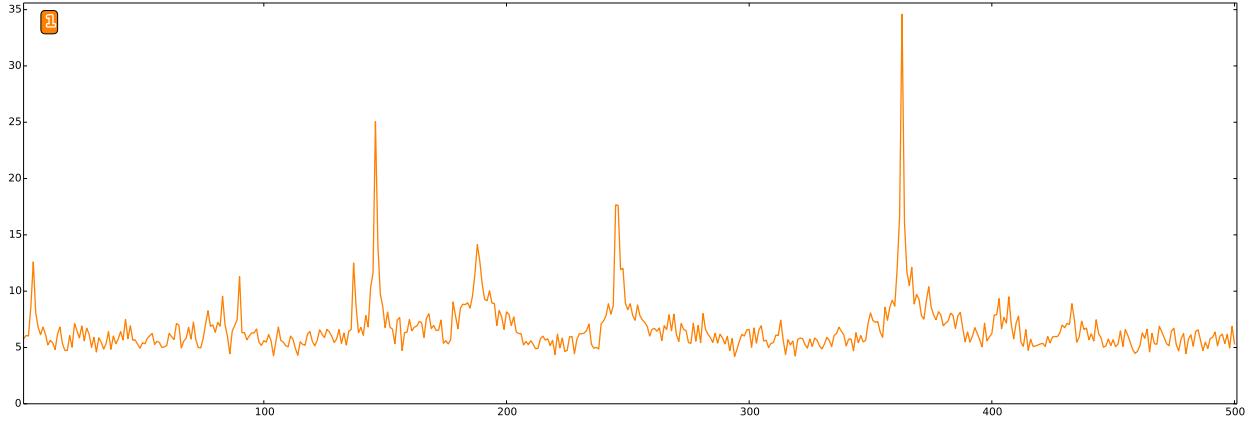
### 4.7.2 Assignments of $m/z$ values to clusters, 8 clusters

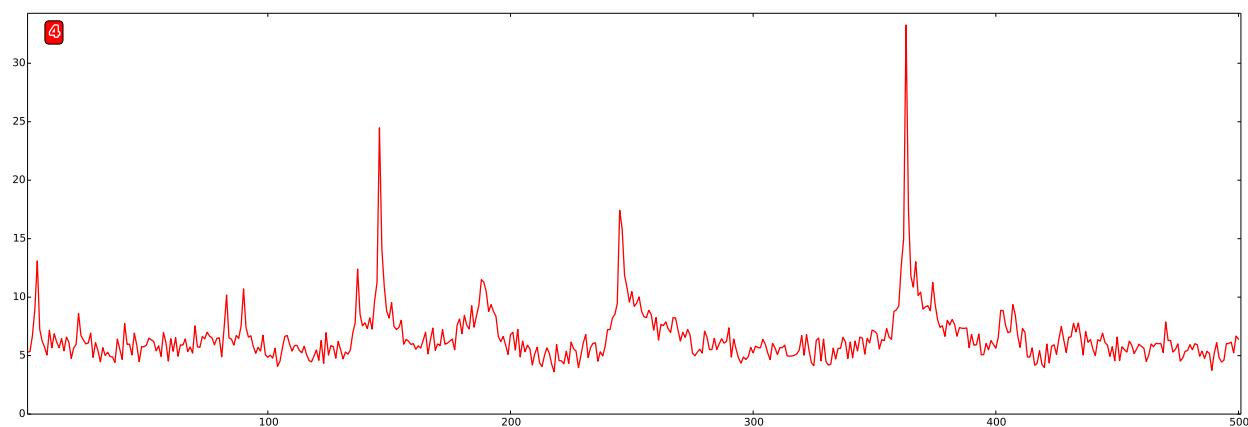
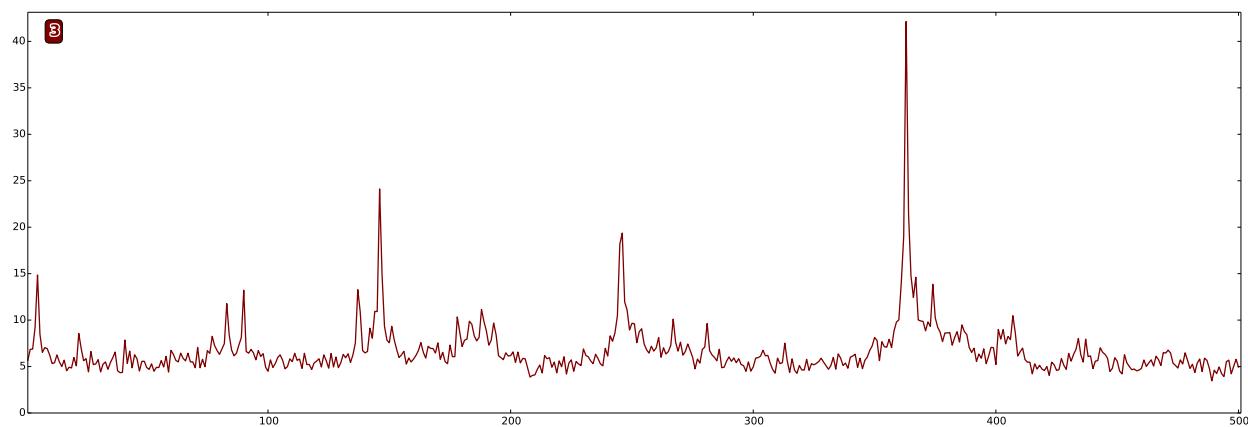
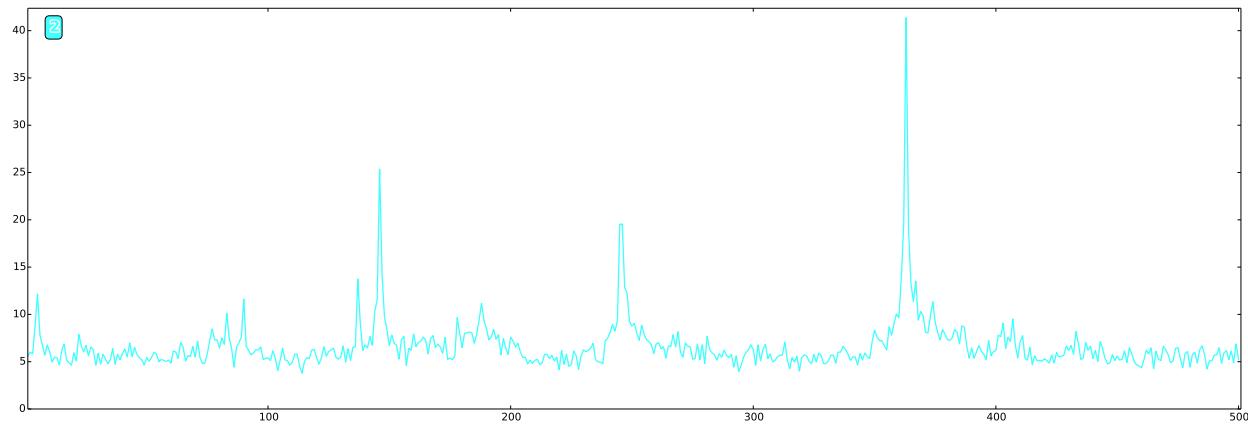


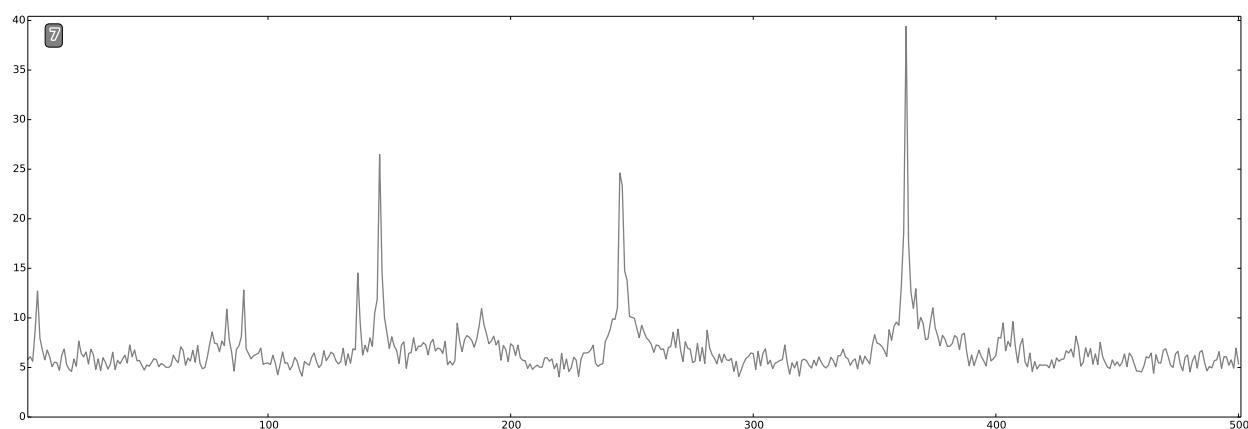
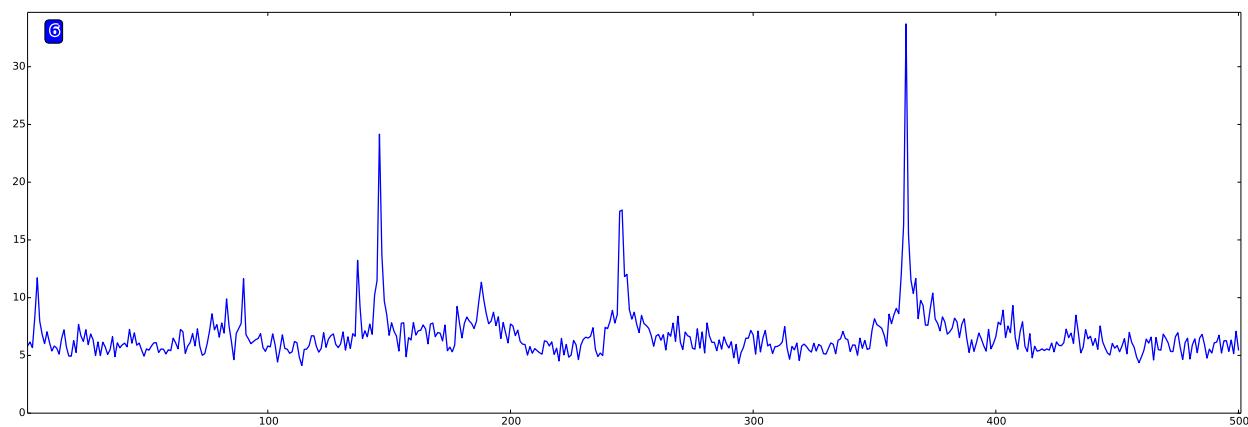
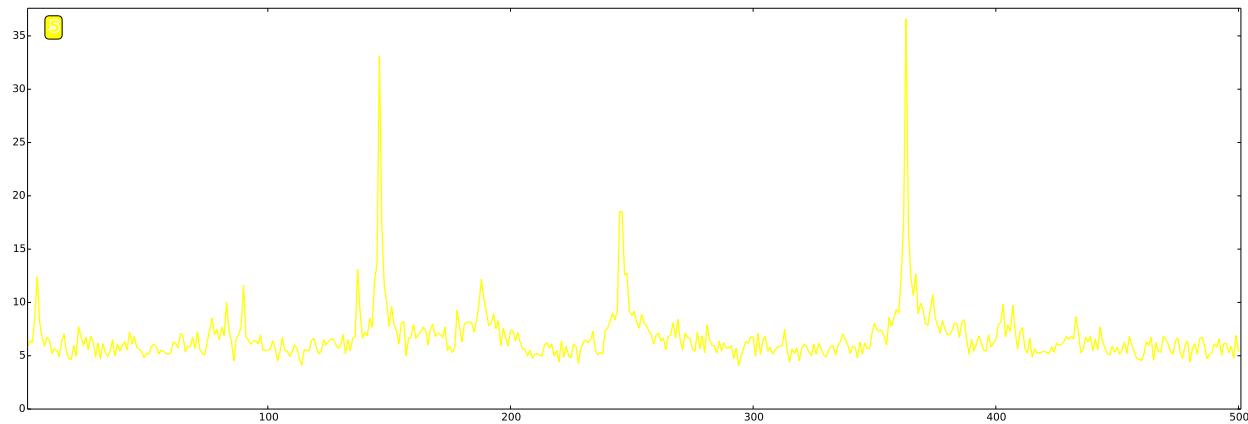
#### 4.7.3 Biclustering stats

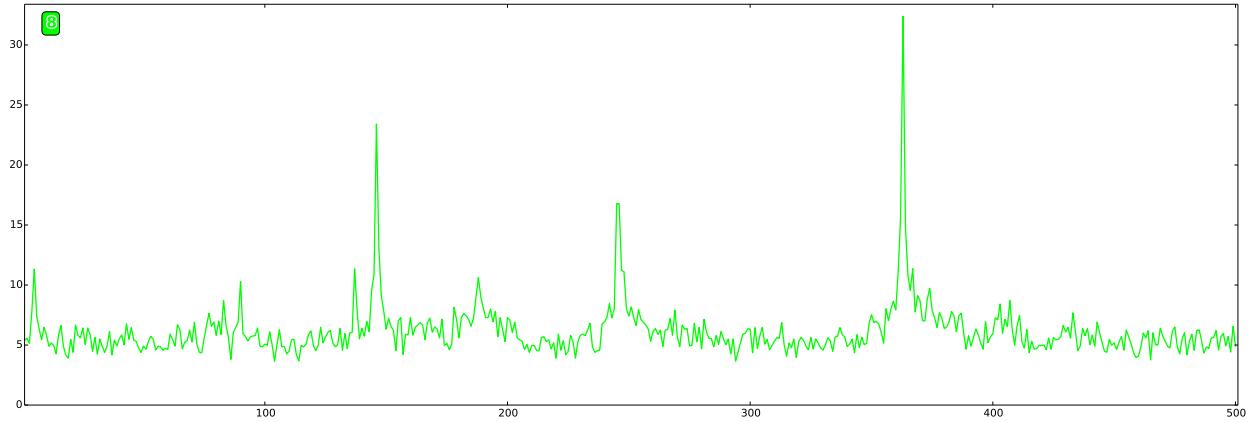


#### 4.7.4 Cluster average spectra, 8 clusters

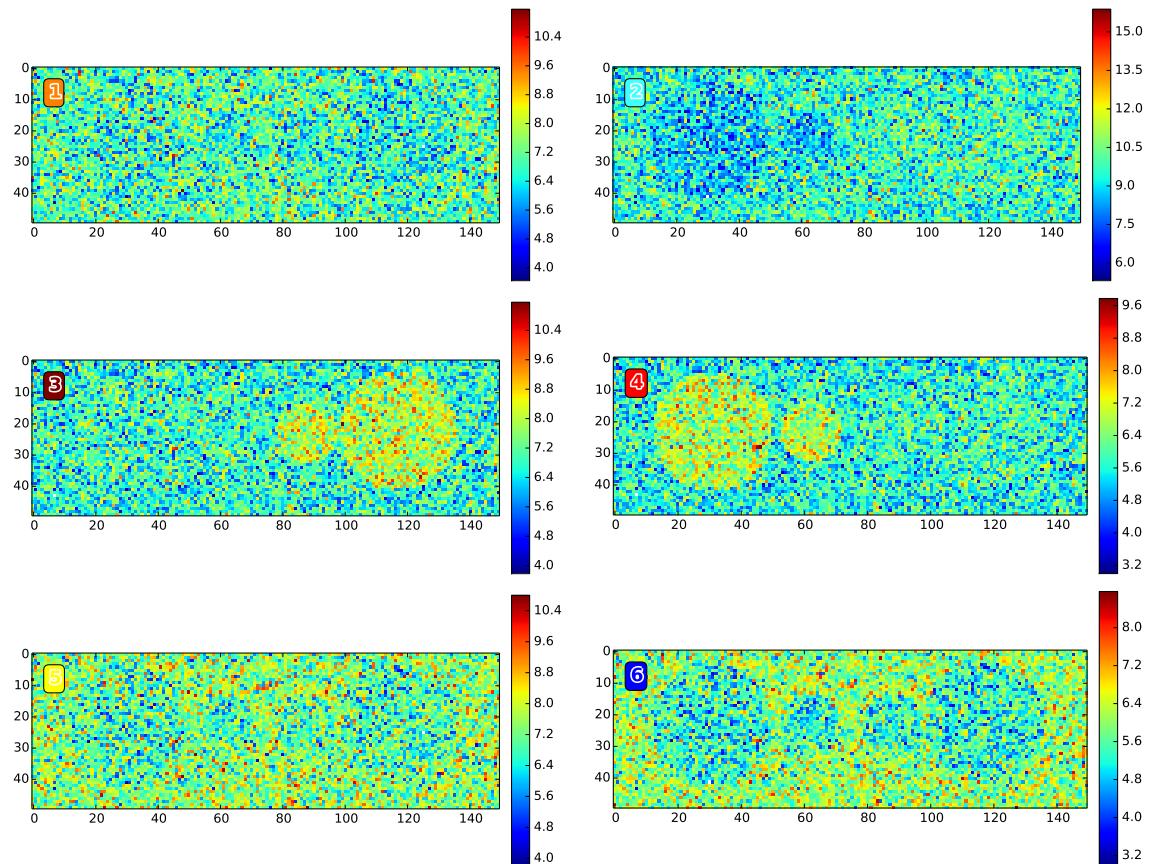


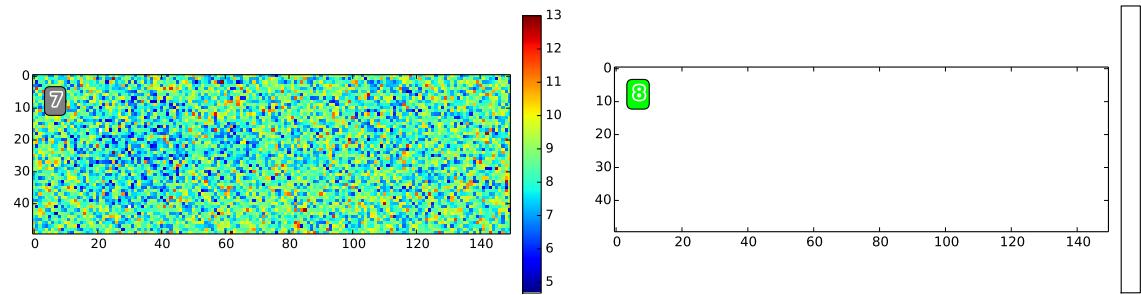






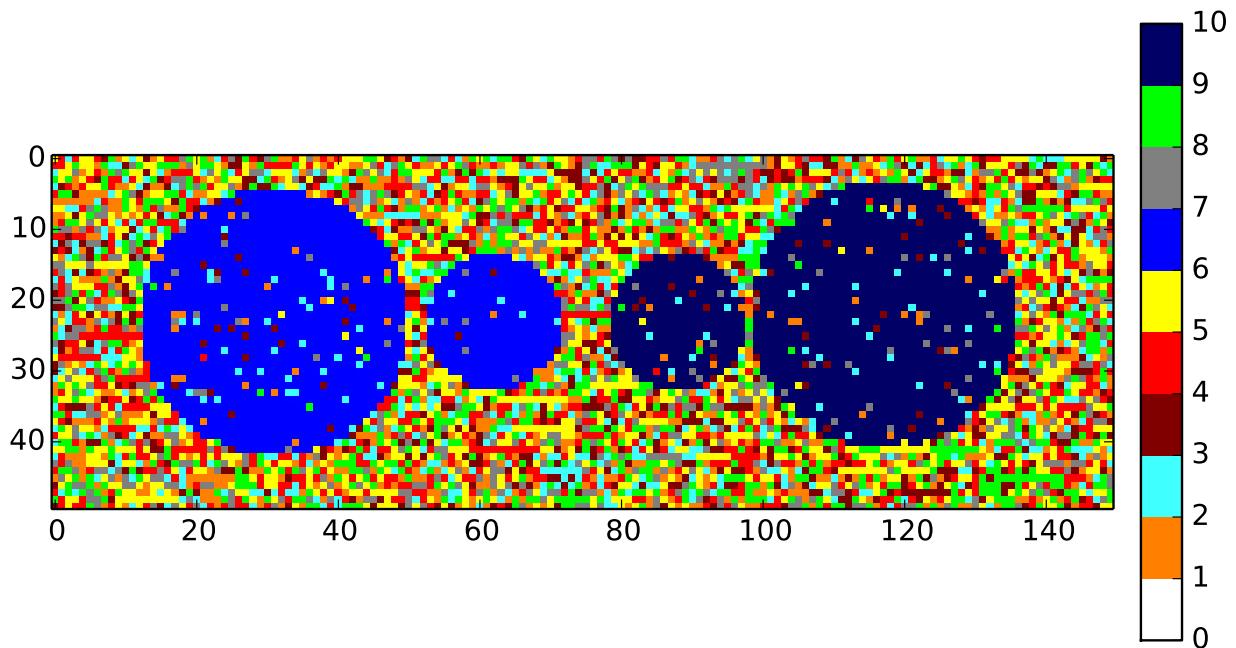
#### 4.7.5 Cluster heat maps, 8 clusters



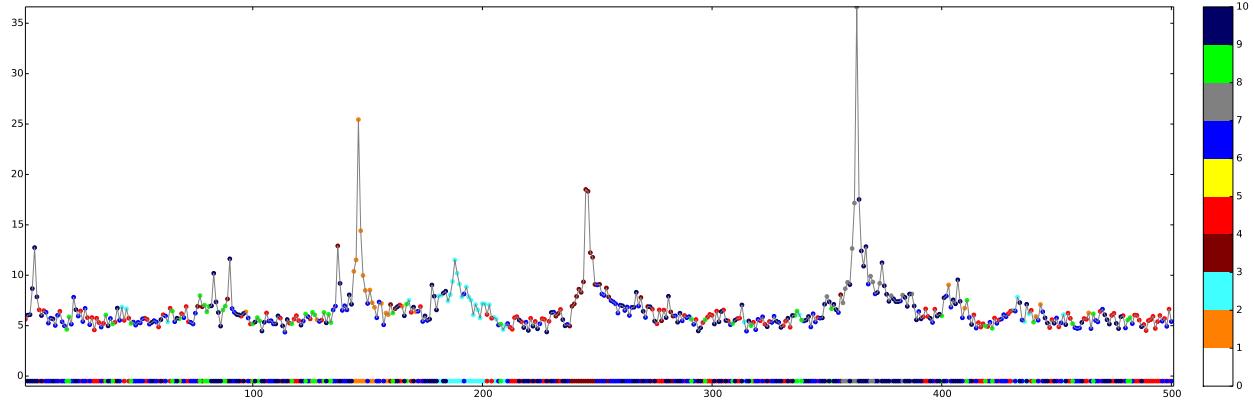


## 4.8 9 clusters

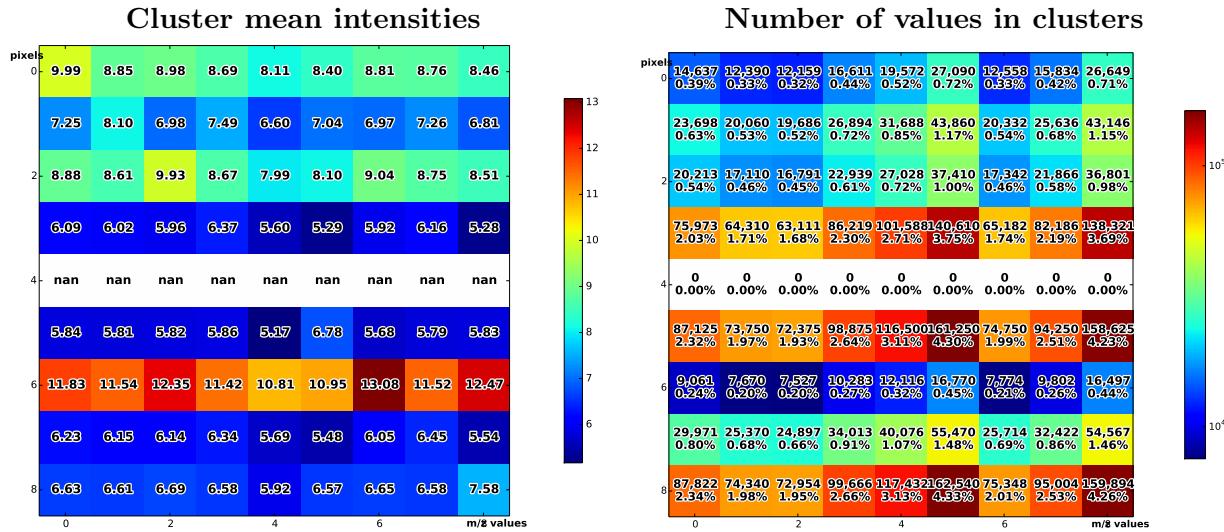
### 4.8.1 Segmentation map, 9 clusters



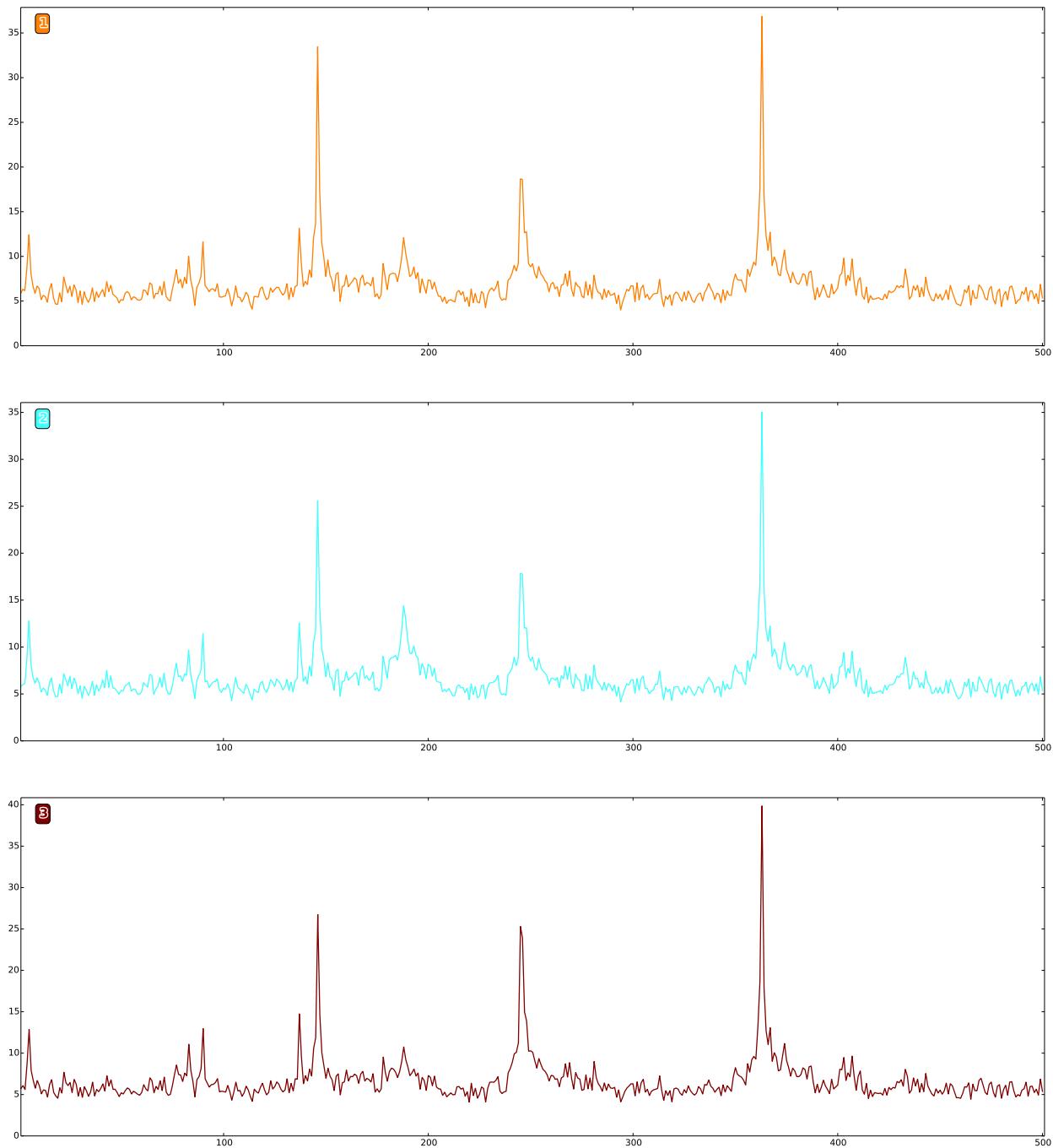
#### 4.8.2 Assignments of m/z values to clusters, 9 clusters

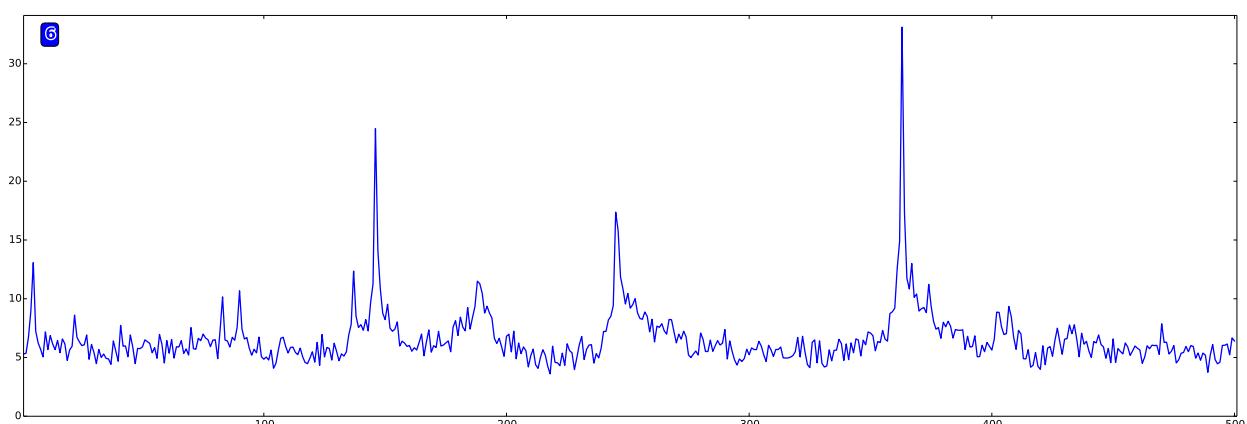
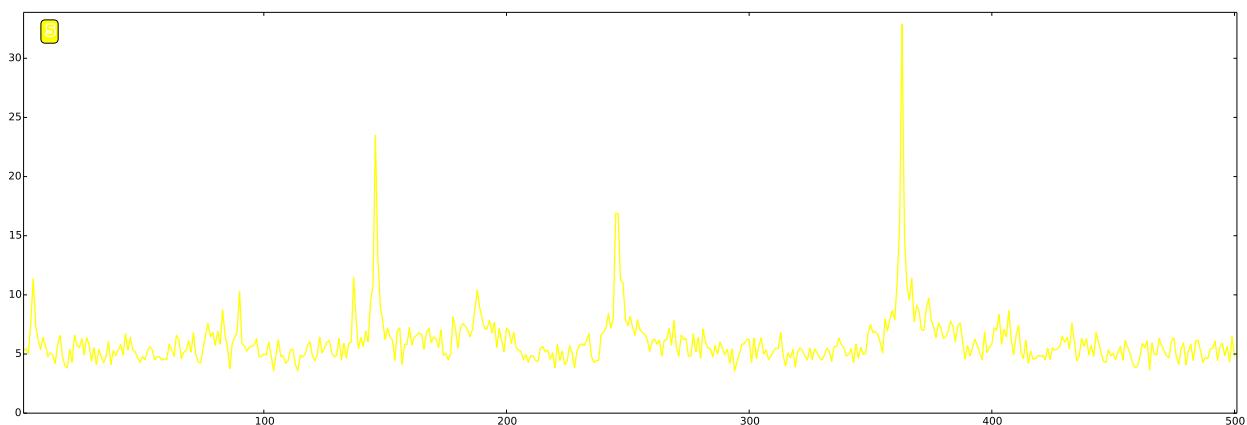
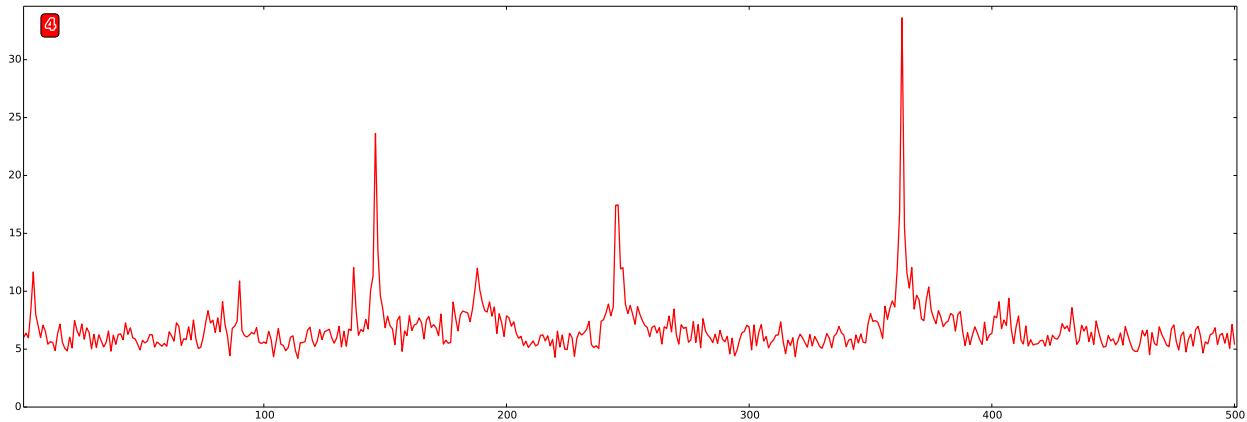


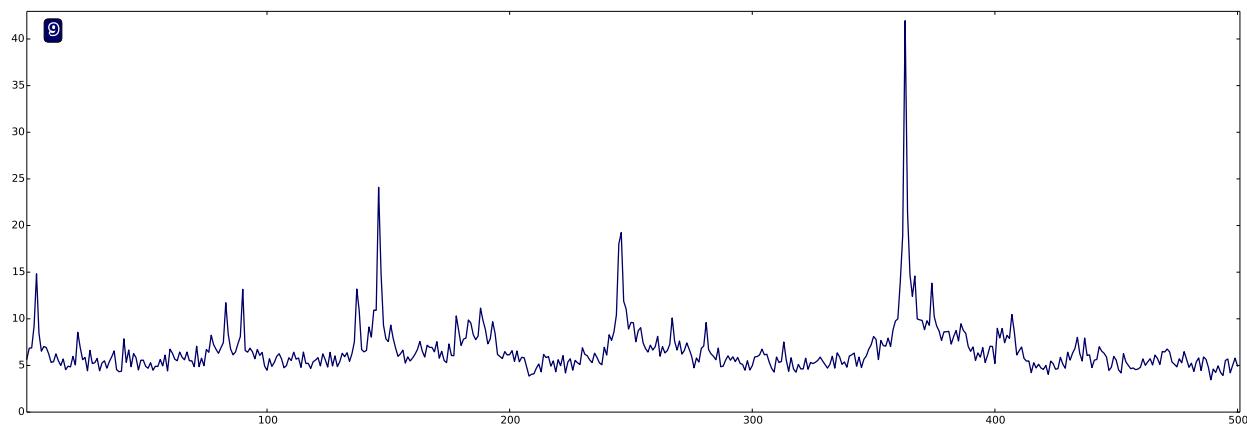
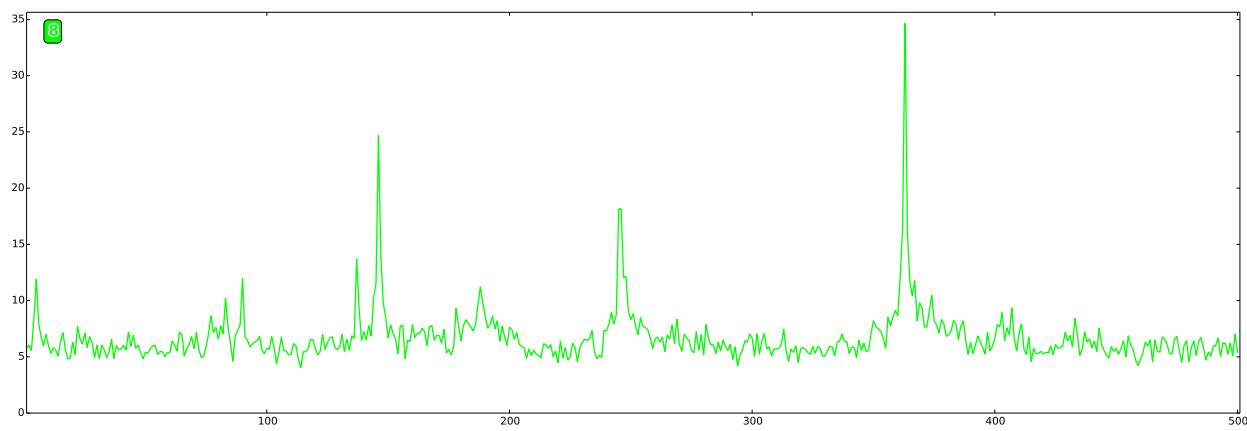
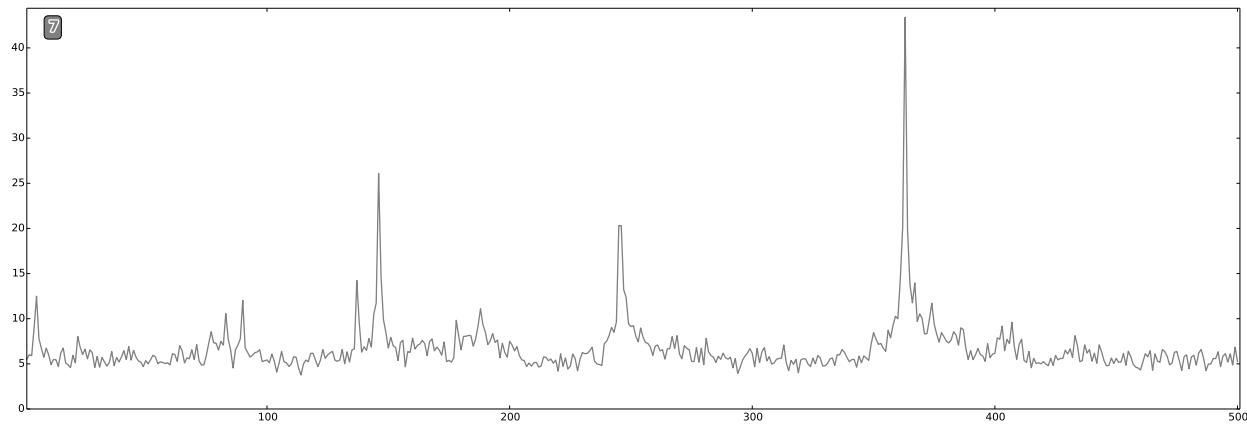
#### 4.8.3 Biclustering stats



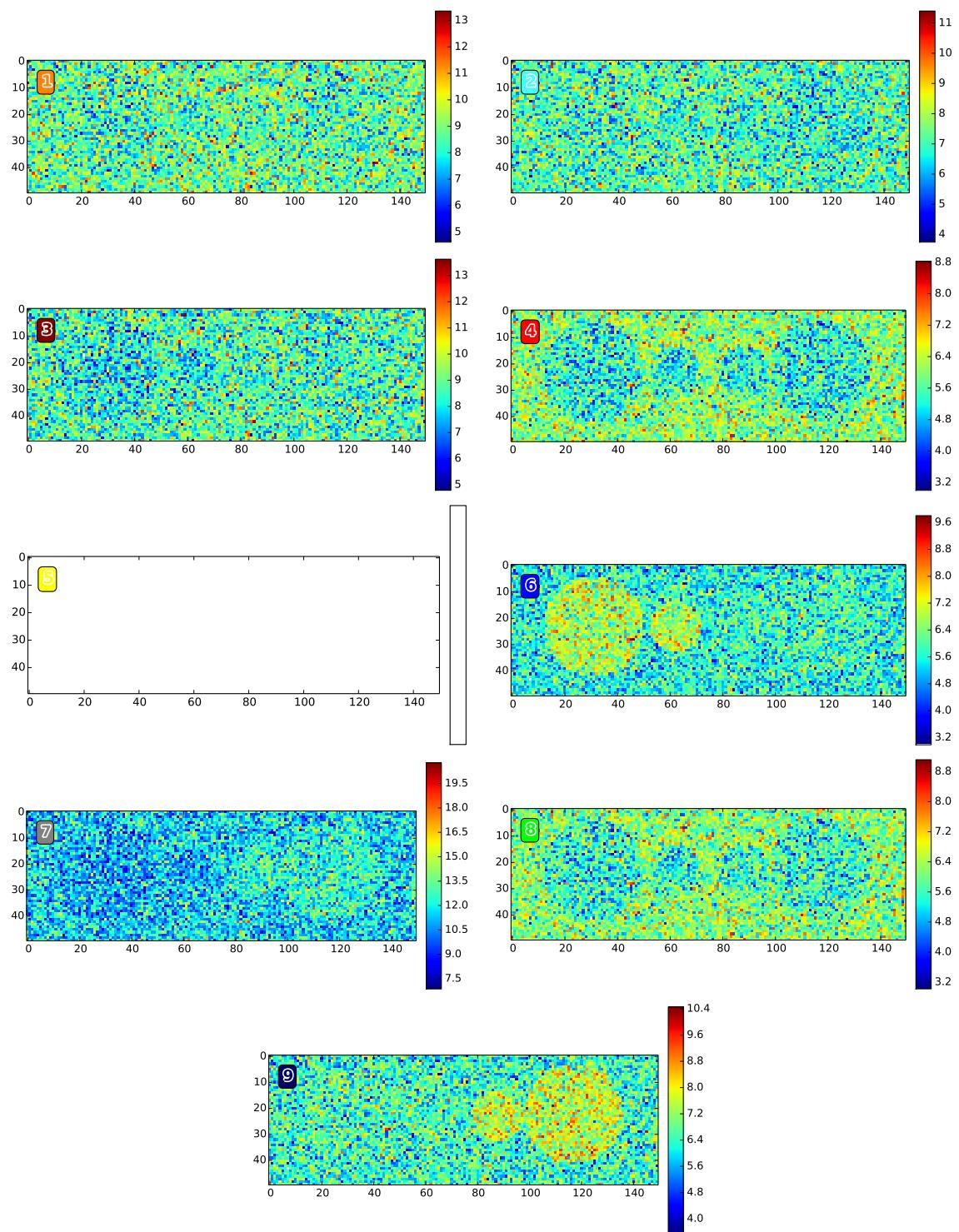
#### 4.8.4 Cluster average spectra, 9 clusters





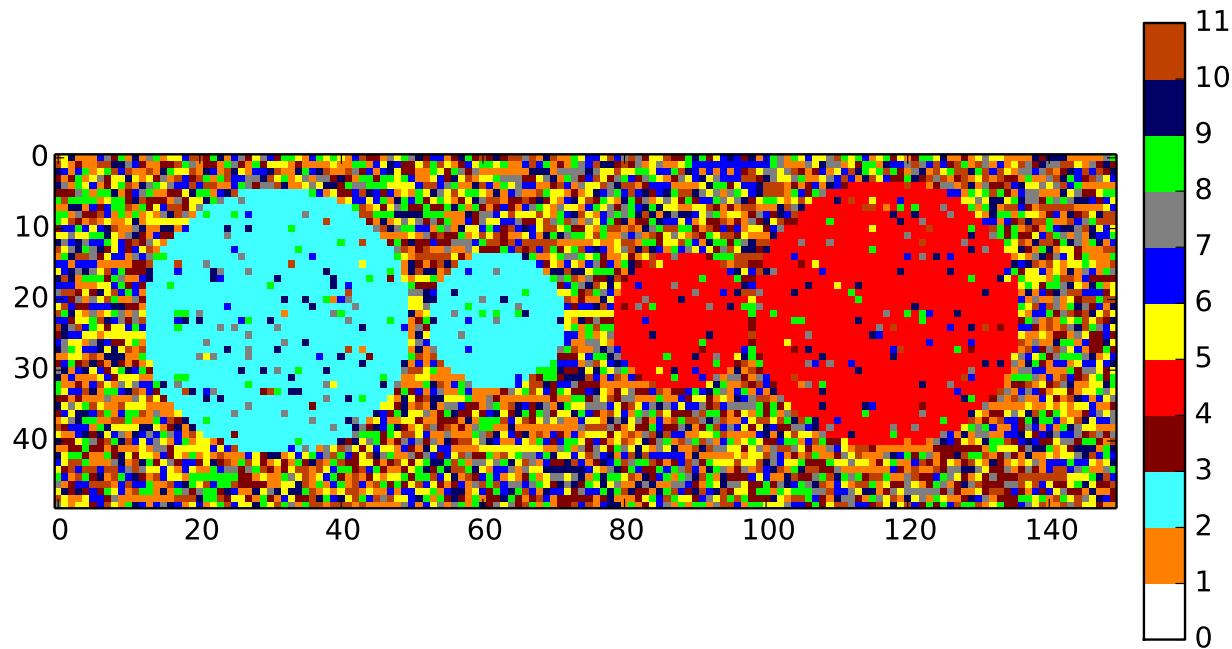


#### 4.8.5 Cluster heat maps, 9 clusters

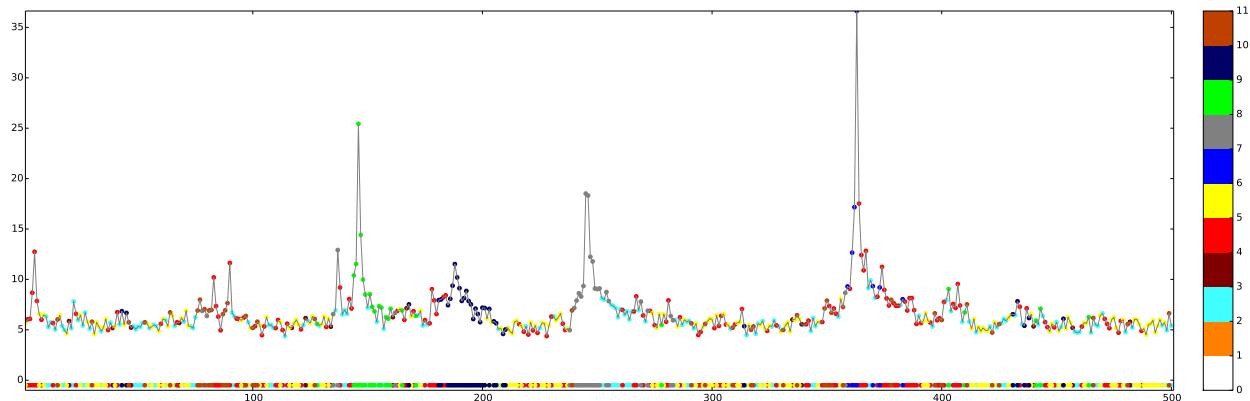


## 4.9 10 clusters

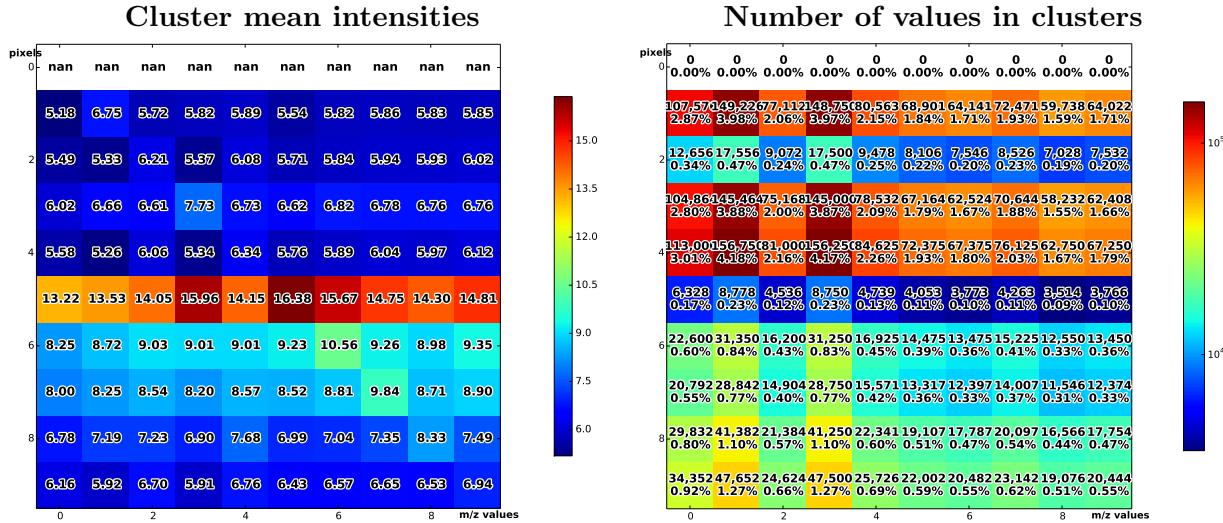
### 4.9.1 Segmentation map, 10 clusters



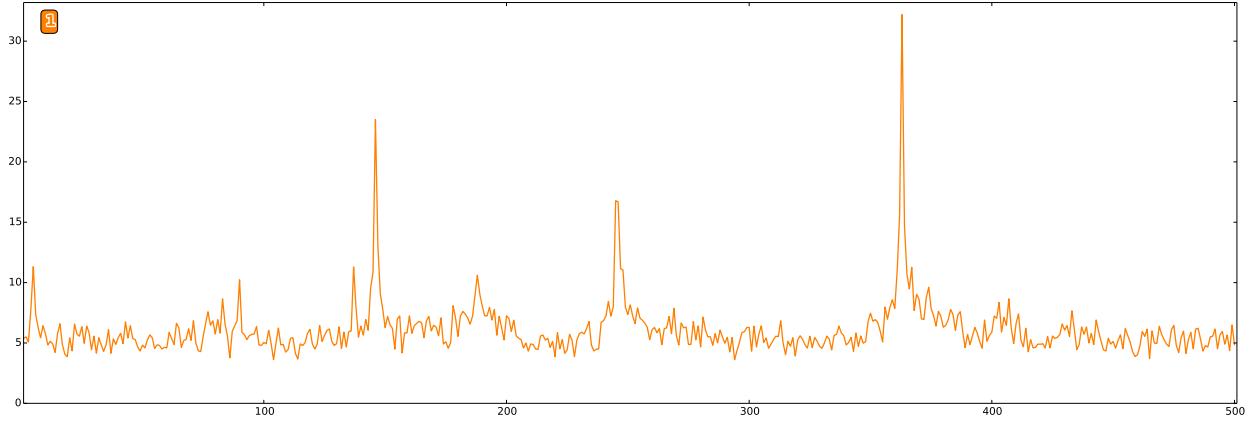
### 4.9.2 Assignments of m/z values to clusters, 10 clusters

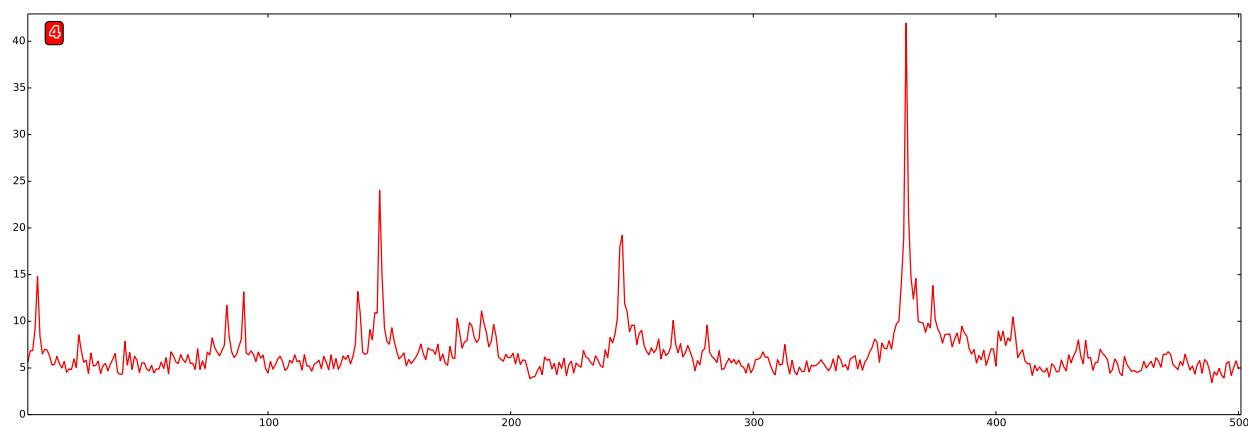
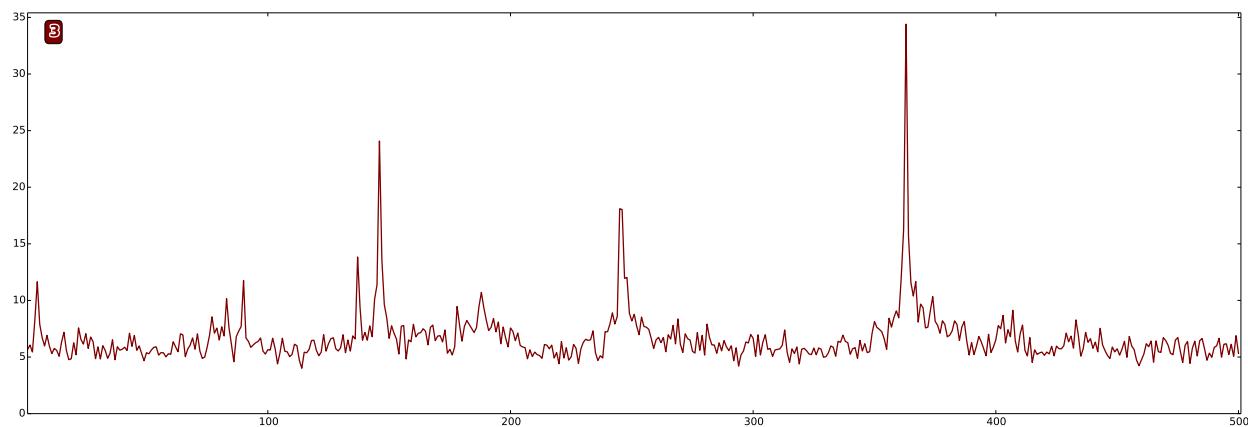
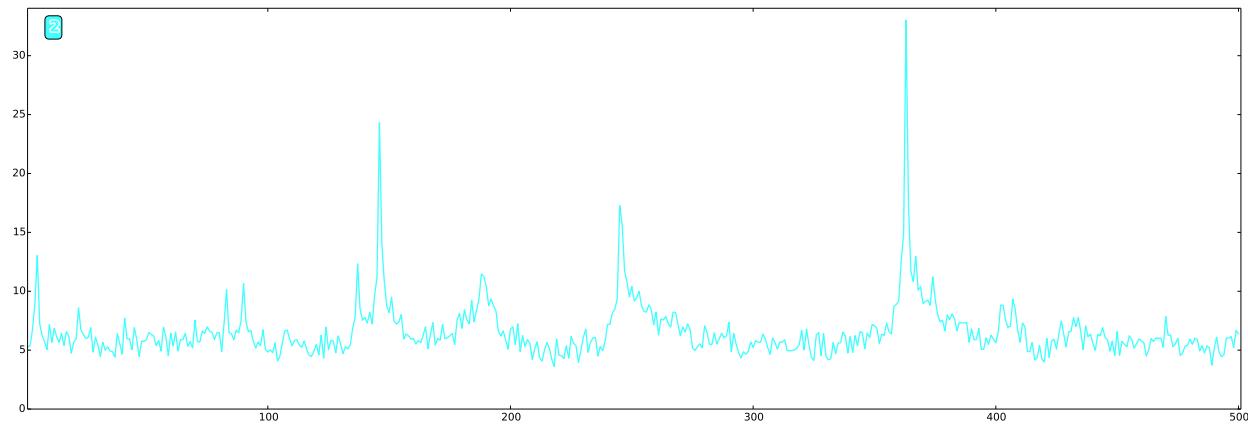


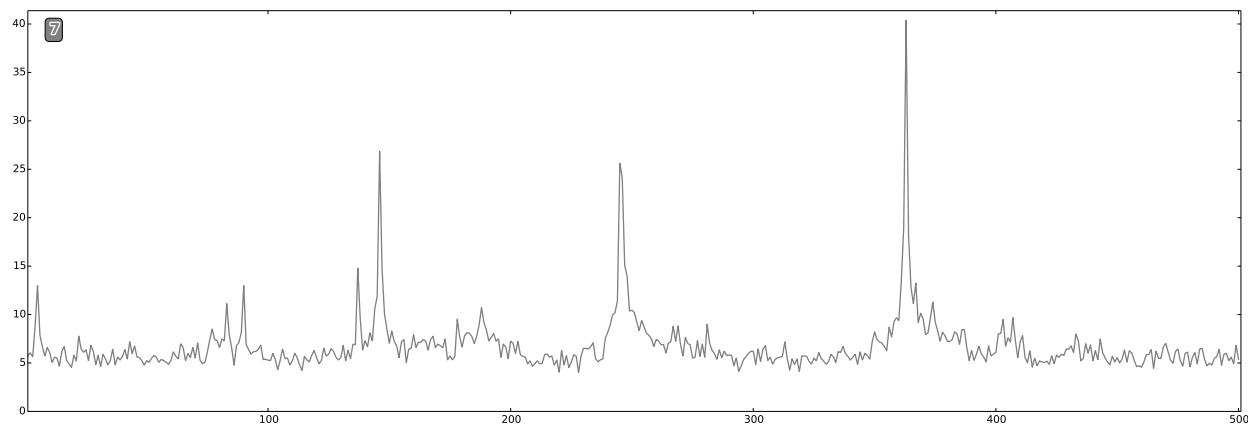
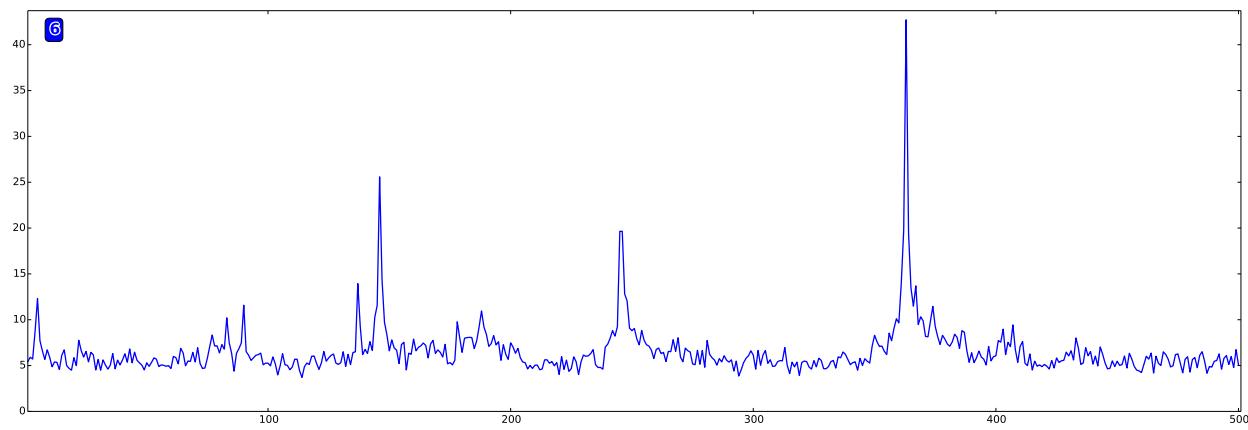
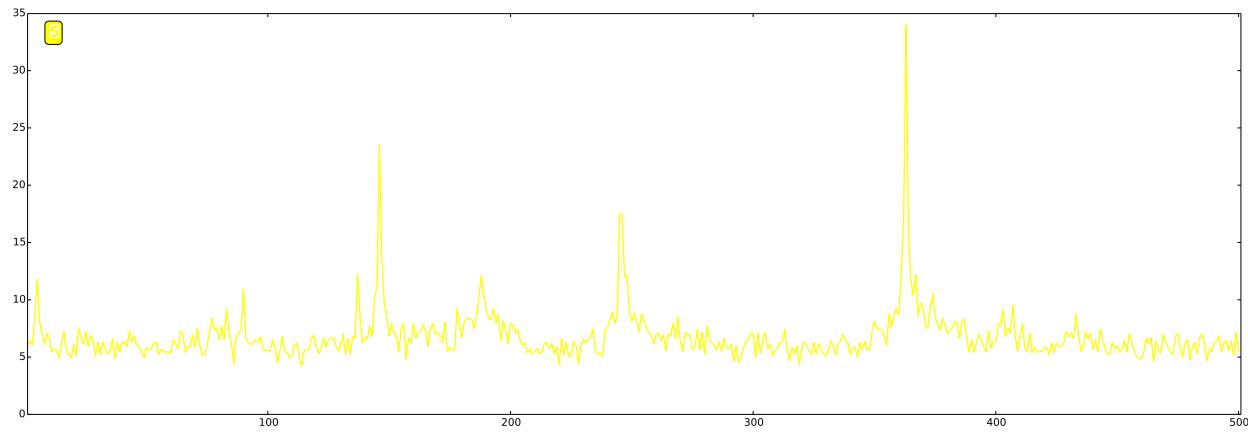
### 4.9.3 Biclustering stats

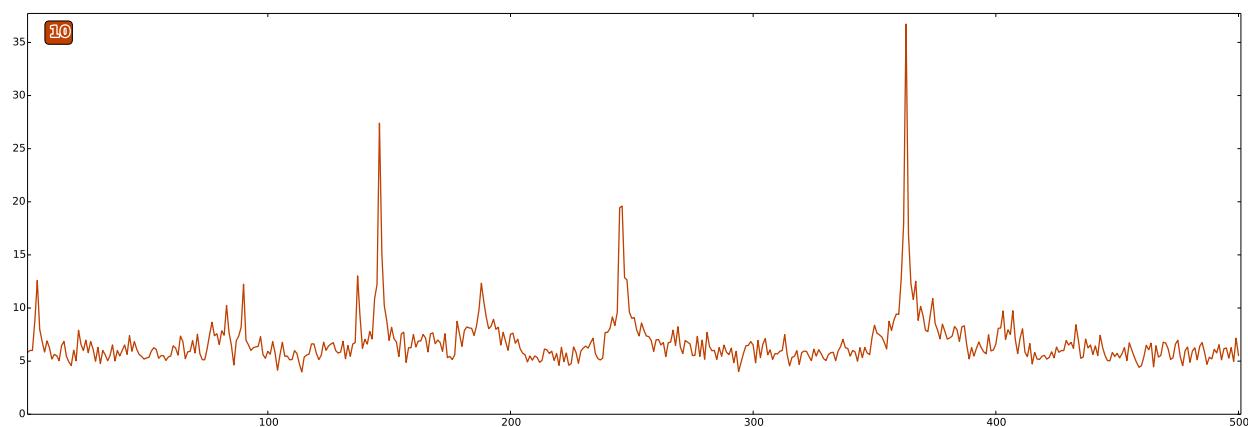
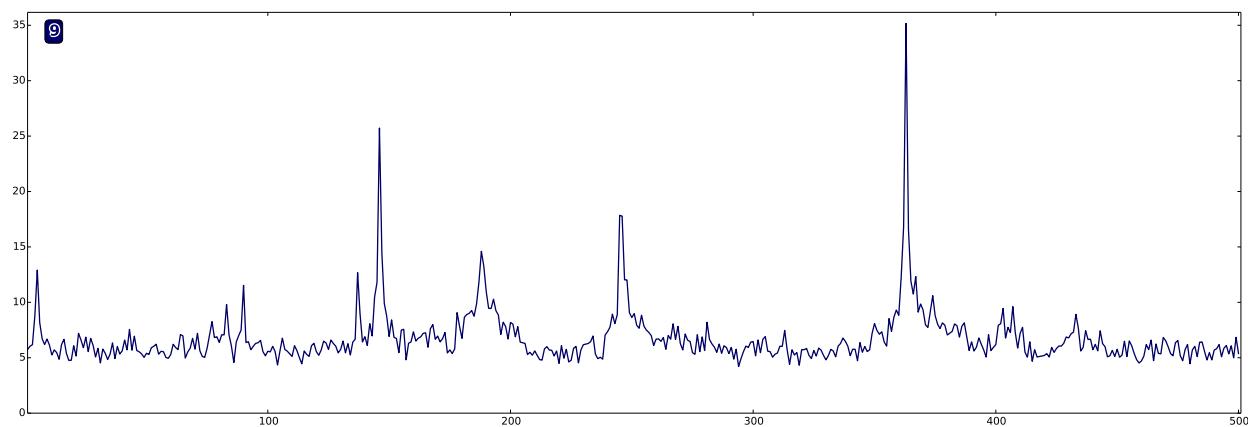
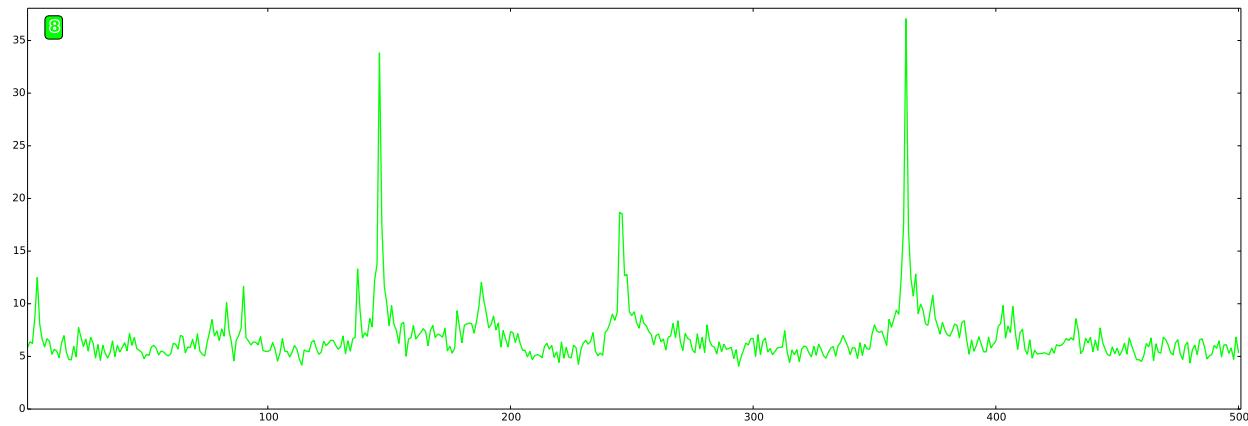


### 4.9.4 Cluster average spectra, 10 clusters









#### 4.9.5 Cluster heat maps, 10 clusters

