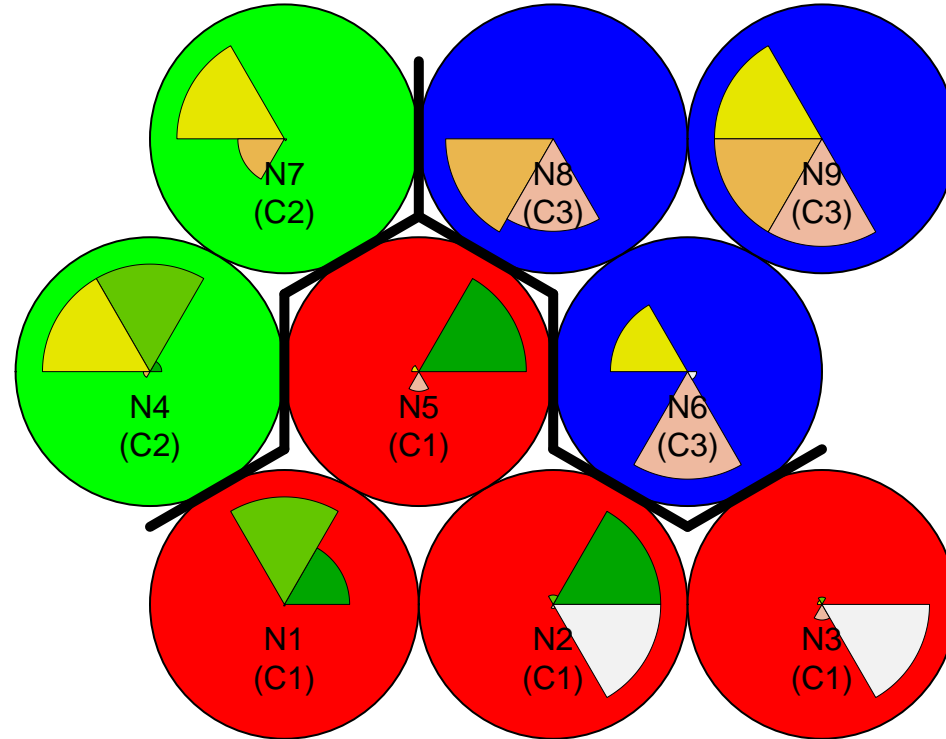
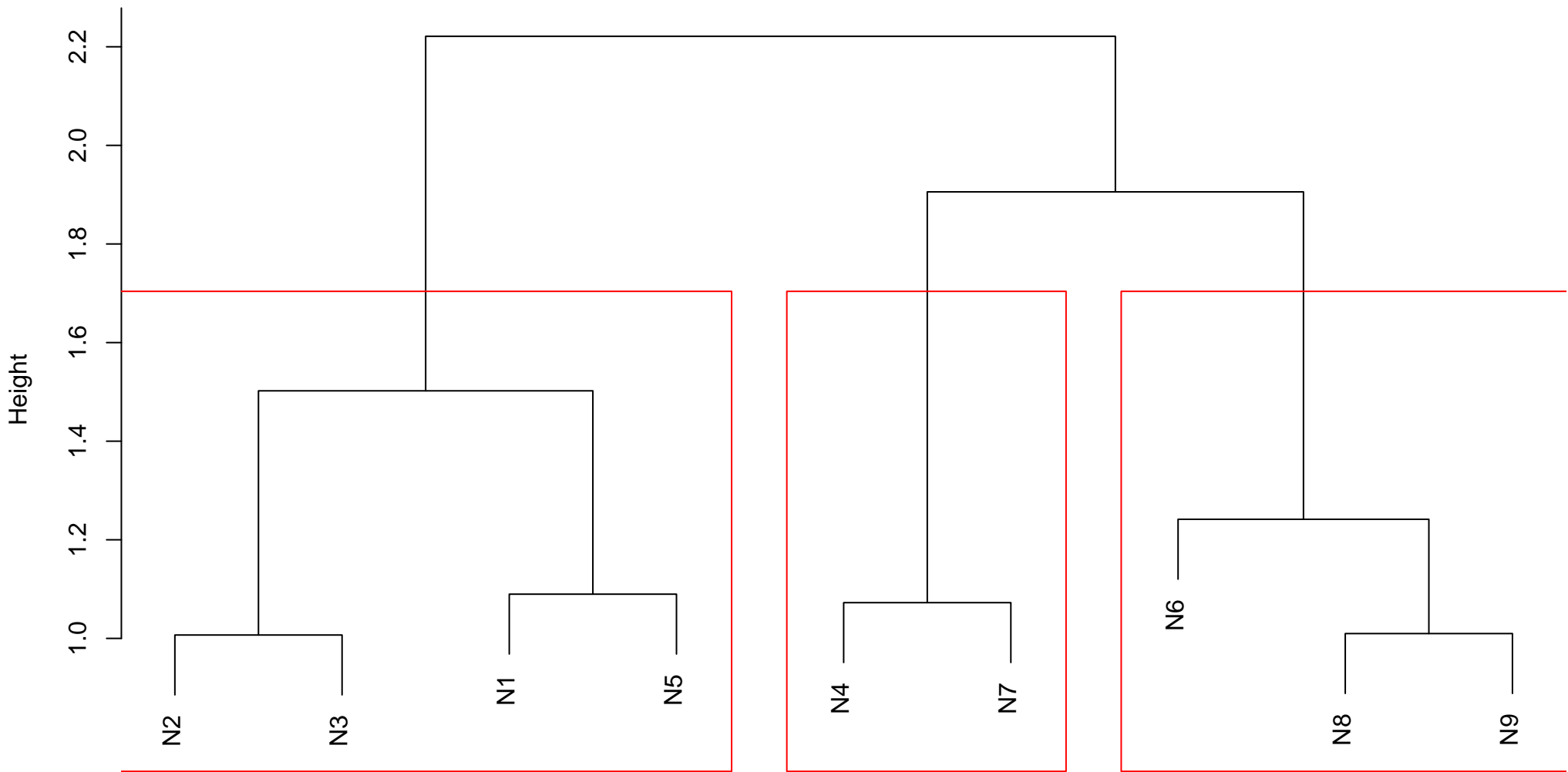


## SOM – Clusters (k = 3 )



|   | neuron | Y.amazed.suprised | Y.happy.pleased | Y.relaxing.calm | Y.quiet.still | Y.sad.lonely | Y.angry.aggressive |
|---|--------|-------------------|-----------------|-----------------|---------------|--------------|--------------------|
| 1 | 1      | 25                | 41              | 0               | 0             | 1            | 0                  |
| 2 | 2      | 61                | 5               | 0               | 0             | 2            | 61                 |
| 3 | 3      | 0                 | 3               | 2               | 0             | 8            | 61                 |
| 4 | 4      | 7                 | 60              | 60              | 4             | 0            | 0                  |
| 5 | 5      | 22                | 0               | 2               | 0             | 4            | 0                  |
| 6 | 6      | 0                 | 0               | 19              | 0             | 27           | 2                  |
| 7 | 7      | 0                 | 0               | 49              | 21            | 0            | 1                  |
| 8 | 8      | 0                 | 0               | 0               | 29            | 25           | 0                  |
| 9 | 9      | 0                 | 0               | 45              | 45            | 45           | 0                  |

Cluster Dendrogram



dist(codebook.matrix.best.result)  
hclust (\*, "complete")

|   | cluster | Y.amazed.suprised | Y.happy.pleased | Y.relaxing.calm | Y.quiet.still | Y.sad.lonely | Y.angry.aggressive |
|---|---------|-------------------|-----------------|-----------------|---------------|--------------|--------------------|
| 1 | 1       | 108               | 49              | 4               | 0             | 15           | 122                |
| 2 | 2       | 7                 | 60              | 109             | 25            | 0            | 1                  |
| 3 | 3       | 0                 | 0               | 64              | 74            | 97           | 2                  |

|    | cluster | combinacao | frequencia |
|----|---------|------------|------------|
| 6  | 1       | 010010     | 1          |
| 3  | 1       | 001001     | 2          |
| 10 | 1       | 100011     | 2          |
| 11 | 1       | 101000     | 2          |
| 5  | 1       | 010001     | 3          |
| 9  | 1       | 100010     | 4          |
| 13 | 1       | 110001     | 5          |
| 2  | 1       | 000011     | 8          |
| 4  | 1       | 010000     | 15         |
| 7  | 1       | 100000     | 16         |
| 12 | 1       | 110000     | 25         |
| 1  | 1       | 000001     | 48         |
| 8  | 1       | 100001     | 54         |

|   | cluster | combinacao | frequencia |
|---|---------|------------|------------|
| 3 | 2       | 001101     | 1          |
| 5 | 2       | 011100     | 4          |
| 6 | 2       | 111000     | 7          |
| 2 | 2       | 001100     | 20         |
| 1 | 2       | 001000     | 28         |
| 4 | 2       | 011000     | 49         |

|   | cluster | combinacao | frequencia |
|---|---------|------------|------------|
| 5 | 3       | 001011     | 2          |
| 2 | 3       | 000100     | 4          |
| 1 | 3       | 000010     | 8          |
| 4 | 3       | 001010     | 17         |
| 3 | 3       | 000110     | 25         |
| 6 | 3       | 001110     | 45         |