

```
In [4]: runfile('/Users/noemi/Documents/Uni/Astrostatistics/working/lec19.py', wdir='/Users/noemi/Documents/Uni/Astrostatistics/working')
```

```
--- Naive Bayes ---
```

```
U-G
Completeness: 0.9233
Contamination: 0.0696
Accuracy: 0.9786
```

```
G-R
Completeness: 0.6131
Contamination: 0.1071
Accuracy: 0.9324
```

```
R-I
Completeness: 0.208
Contamination: 0.1175
Accuracy: 0.8797
```

```
I-Z
Completeness: 0.0045
Contamination: 0.7561
Accuracy: 0.8518
```

```
--- Quadratic Discriminant Analysis ---
```

```
U-G
Completeness: 0.9335
Contamination: 0.0652
Accuracy: 0.9817
```

```
G-R
Completeness: 0.6478
Contamination: 0.1115
Accuracy: 0.9396
```

```
R-I
Completeness: 0.2282
Contamination: 0.1067
Accuracy: 0.8887
```

```
I-Z
Completeness: 0.0057
Contamination: 0.7647
Accuracy: 0.8589
```

```
--- GMM Bayes Classifier ---
```

```
U-G
Completeness: 0.9328
Contamination: 0.068
Accuracy: 0.9804
```

```
G-R
Completeness: 0.7409
Contamination: 0.1566
Accuracy: 0.9425
```

```
R-I
Completeness: 0.5596
Contamination: 0.1561
Accuracy: 0.9212
```

I-Z
 Completeness: 0.4616
 Contamination: 0.2748
 Accuracy: 0.8967

--- K-Nearest Neighbor Classifier ---

U-G
 Completeness: 0.9178
 Contamination: 0.0622
 Accuracy: 0.9795

G-R
 Completeness: 0.7269
 Contamination: 0.1746
 Accuracy: 0.9387

R-I
 Completeness: 0.5653
 Contamination: 0.1946
 Accuracy: 0.918

I-Z
 Completeness: 0.451
 Contamination: 0.2765
 Accuracy: 0.8965

-> What if I train on the whole dataset?

--- GMM Bayes Classifier ---
 Completeness: 0.9321
 Contamination: 0.0586
 Accuracy: 0.9821

--- Naive Bayes ---
 Completeness: 0.9151
 Contamination: 0.1091
 Accuracy: 0.9715

In [5]: |

