In [39]:

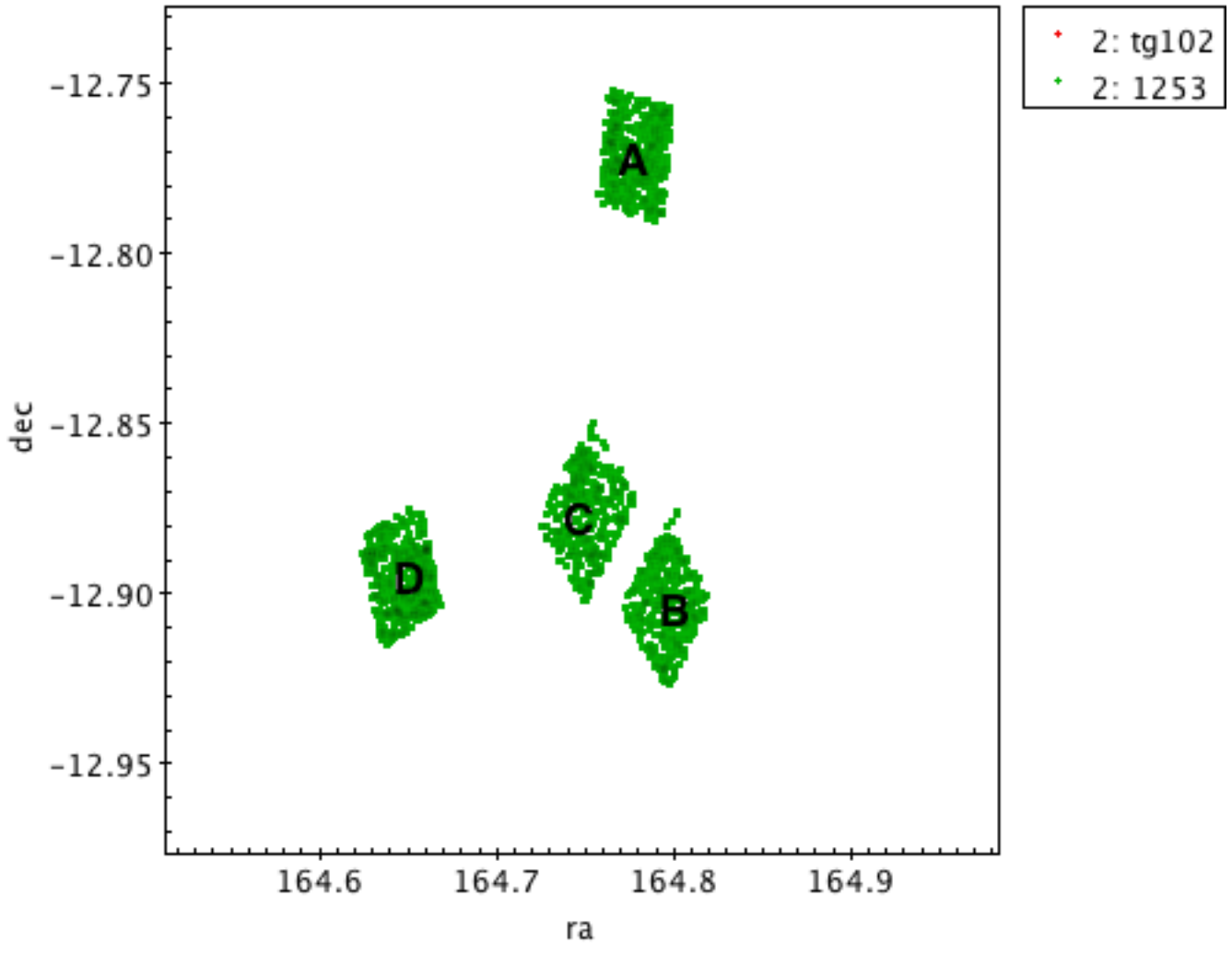
```
import pyfits
import matplotlib.pyplot as plt
import matplotlib.patches as mpatches
import numpy as np
import astropy
from astropy import cosmology
import math as mt
```

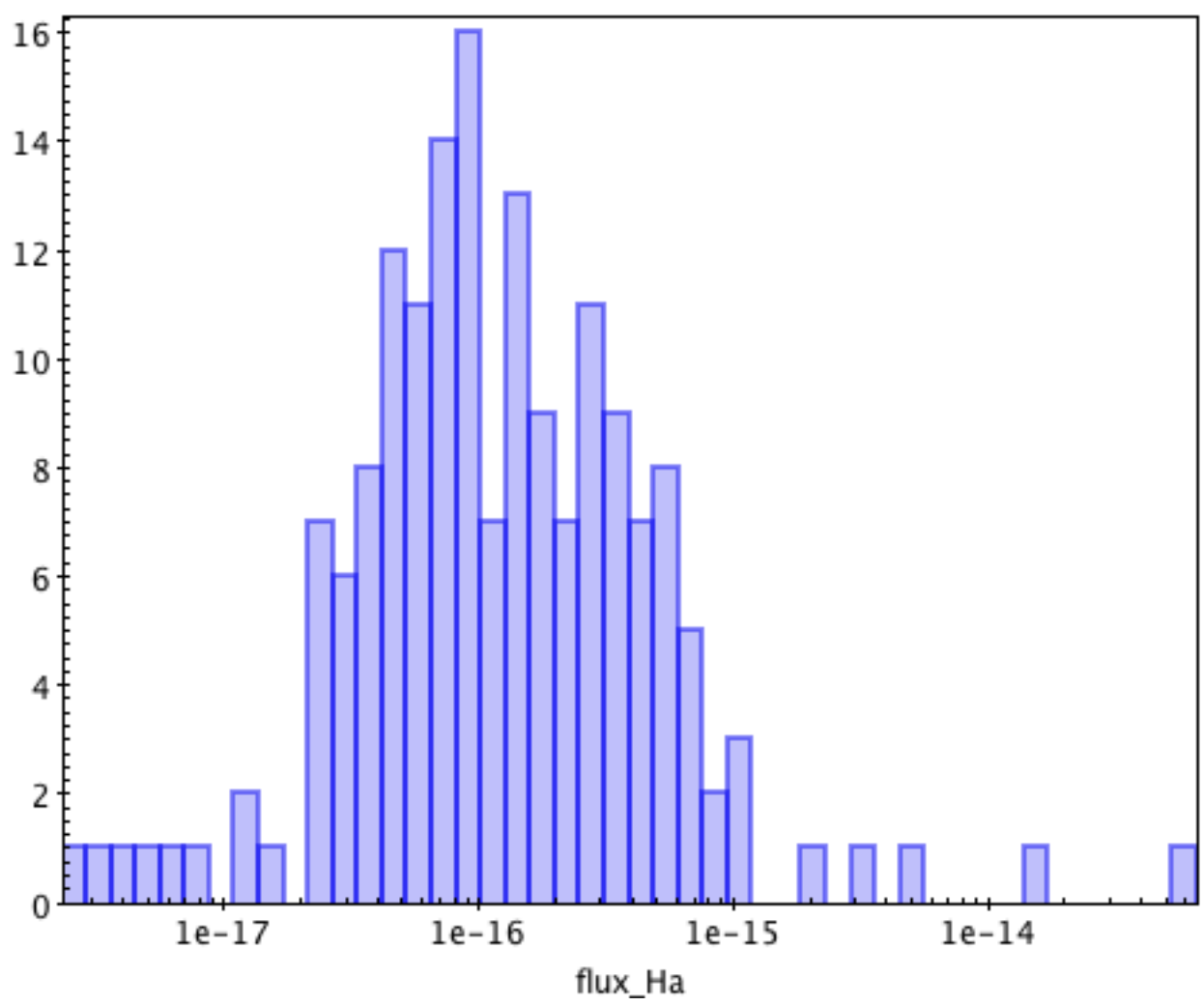
EDisCS UVJ & Halpha

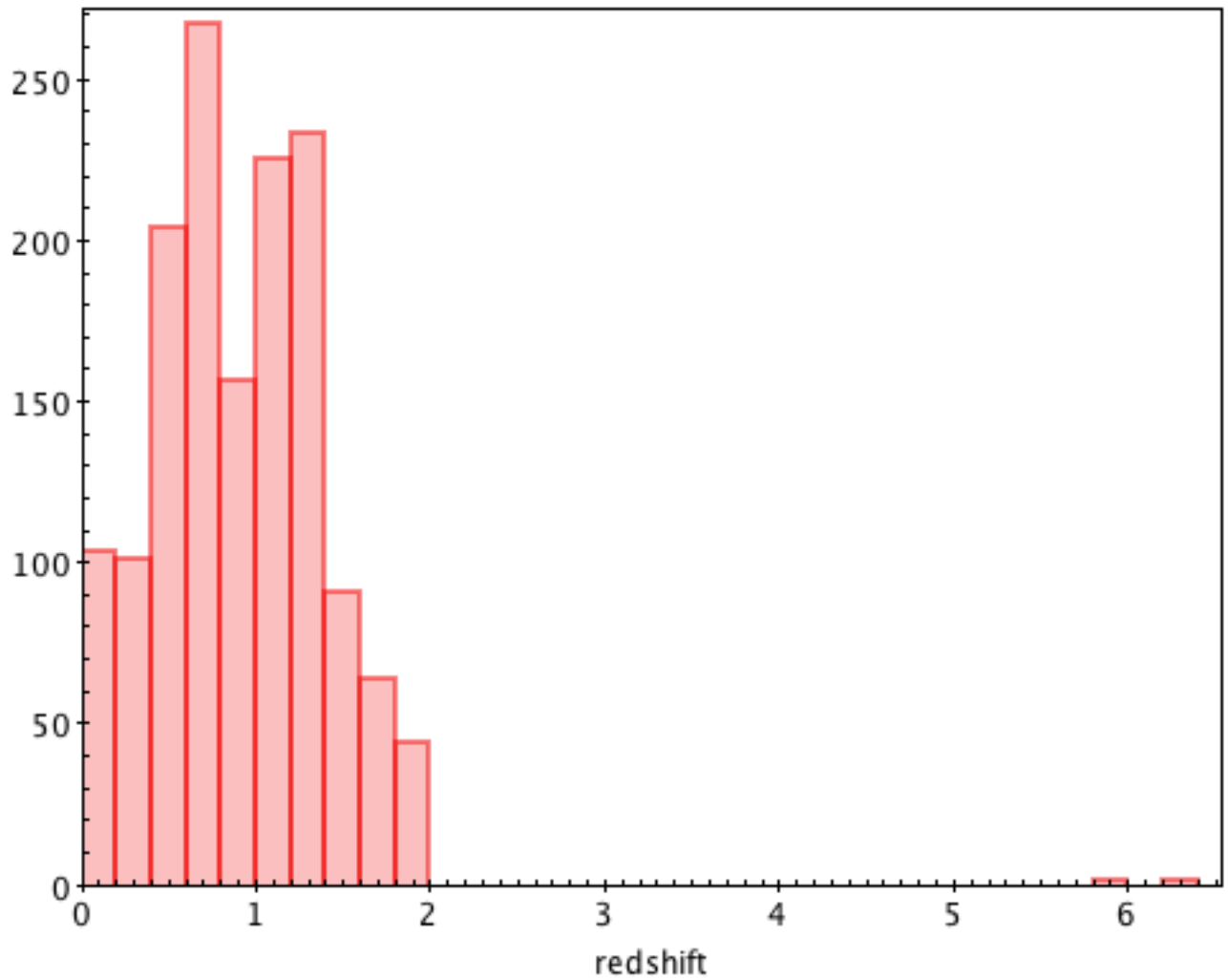
In [70]:

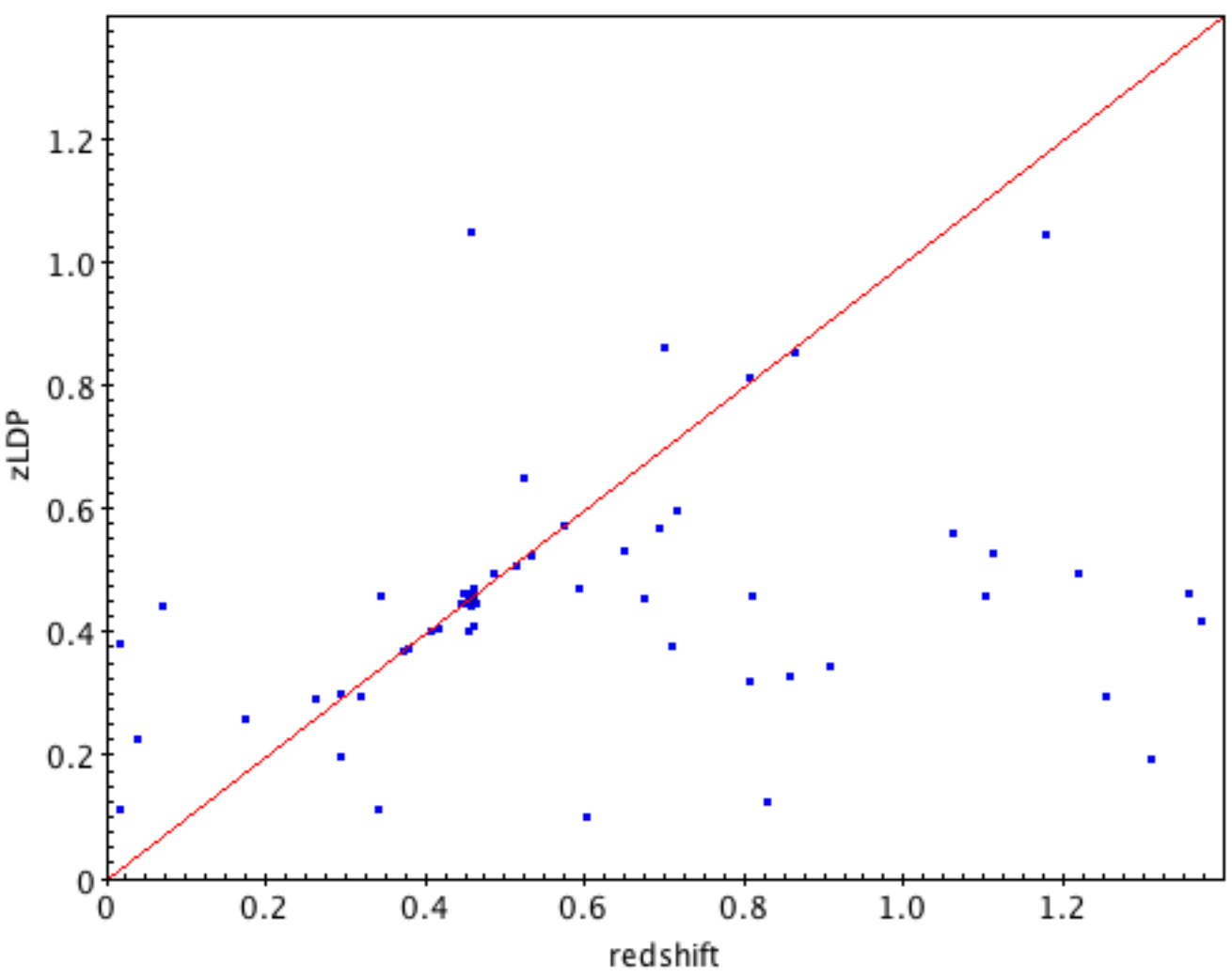
```
run ediscs_uvj.py
```

1059-1253 z = 0.4564

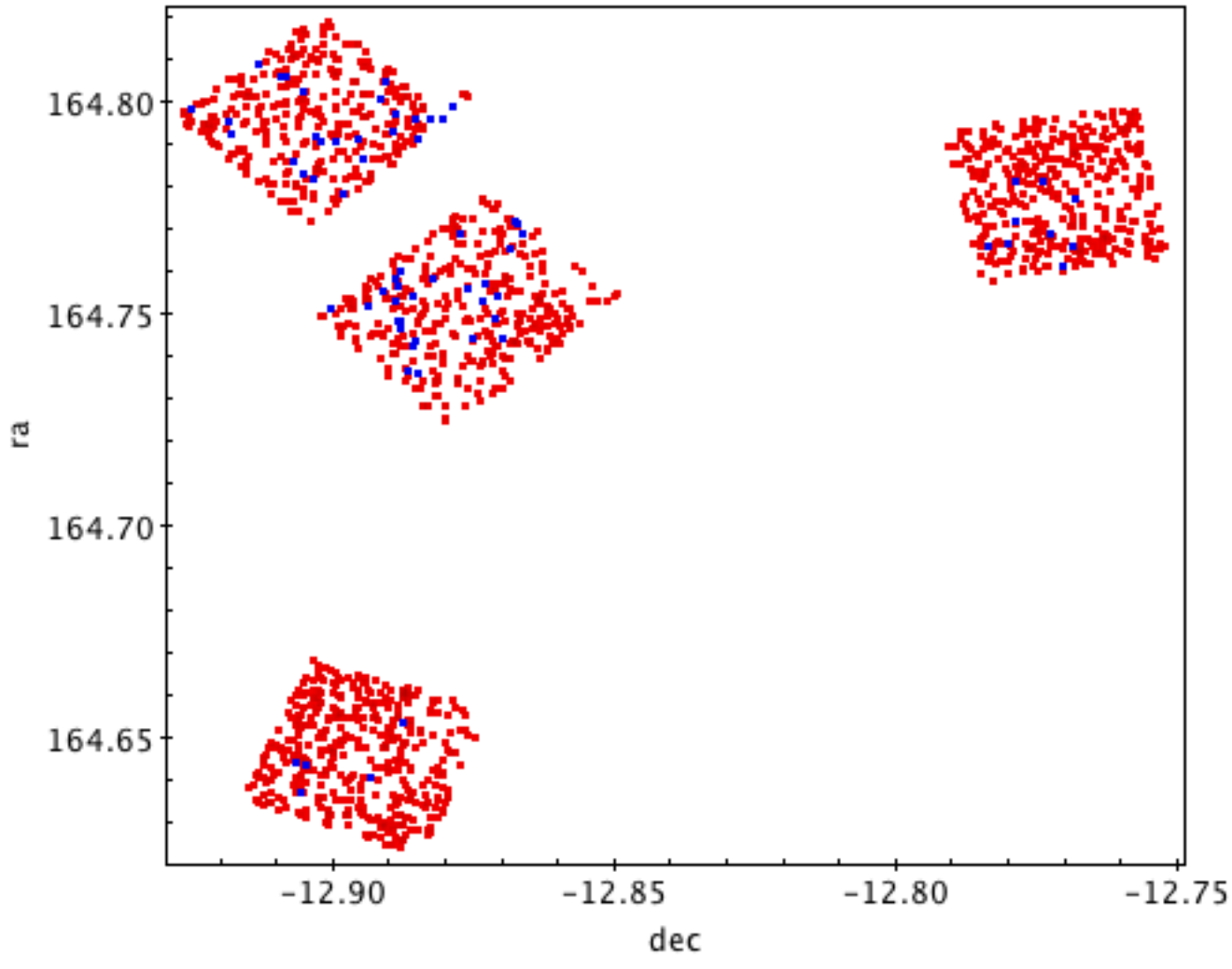



16
14
12
10
8
6
4
2
0
1e-17
1e-16
1e-15
1e-14
flux_Ha


250
200
150
100
50
0
0
1
2
3
4
5
6
redshift


zLDP
redshift
0
0.2
0.4
0.6
0.8
1.0
1.2

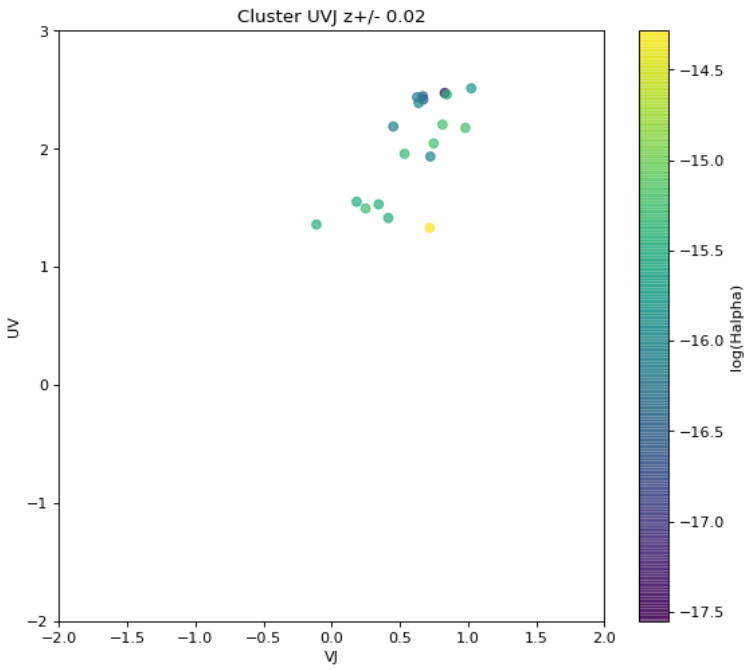
Within 0.02

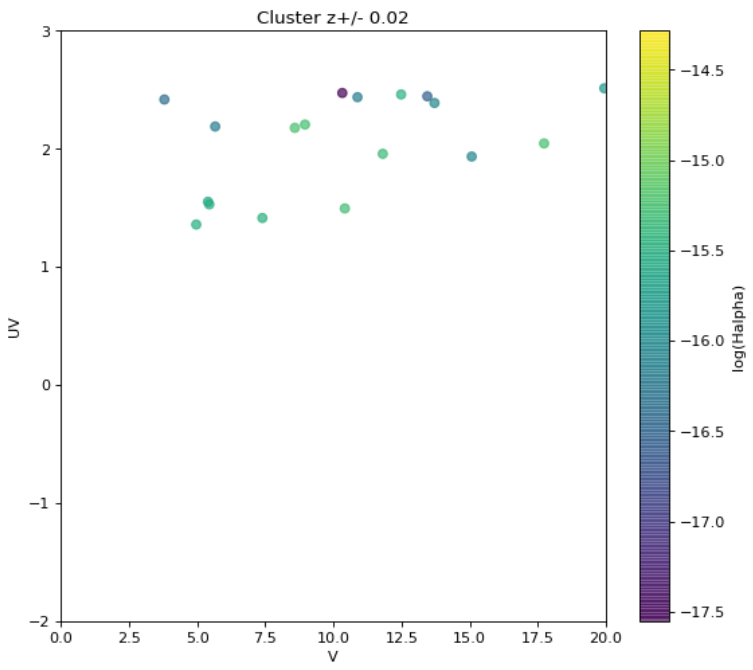

ra
dec
164.80
164.75
164.70
164.65
-12.90
-12.85
-12.80
-12.75

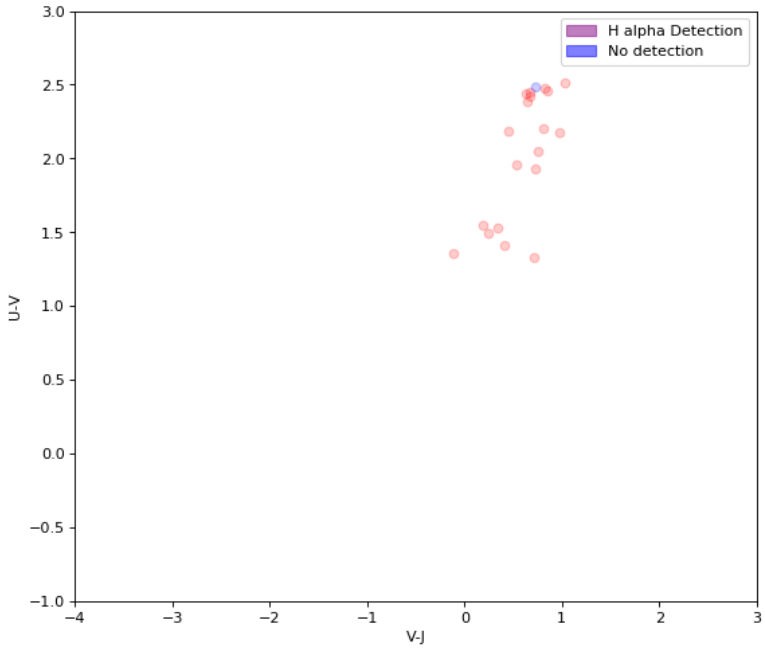
In [51]:

```
c1059(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

```
<string>:241: RuntimeWarning: divide by zero encountered in log10
```





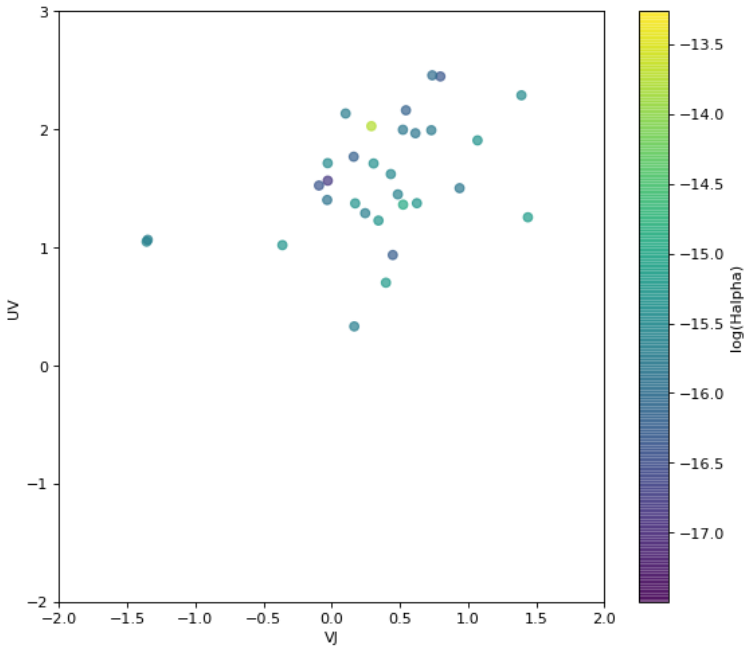


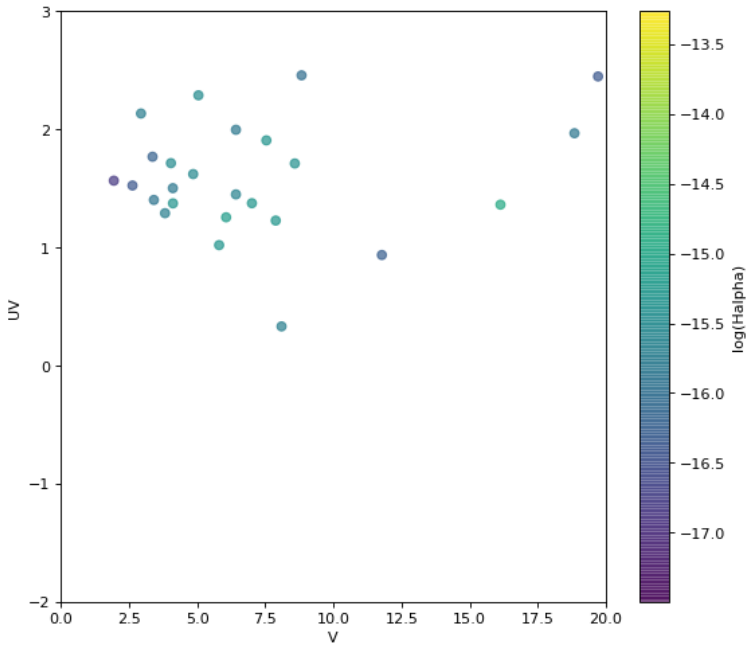
Field

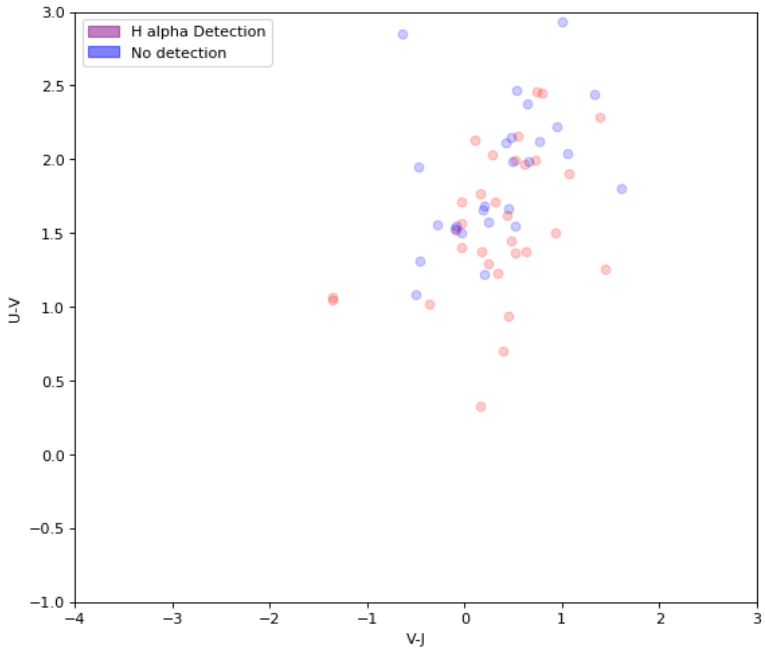
In [62]:

```
f1059(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

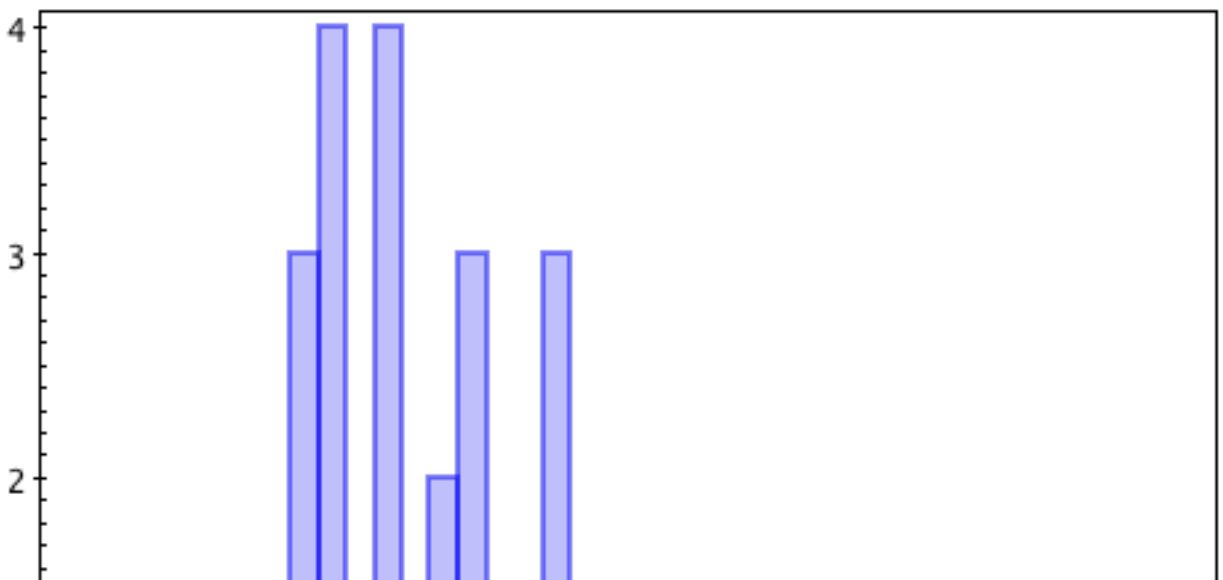
```
<string>:308: RuntimeWarning: divide by zero encountered in log10
```

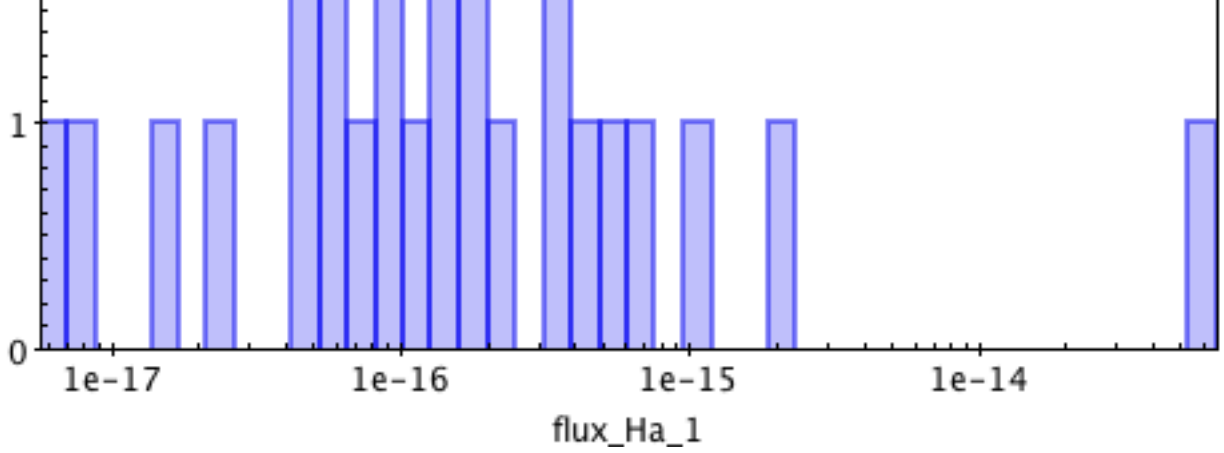




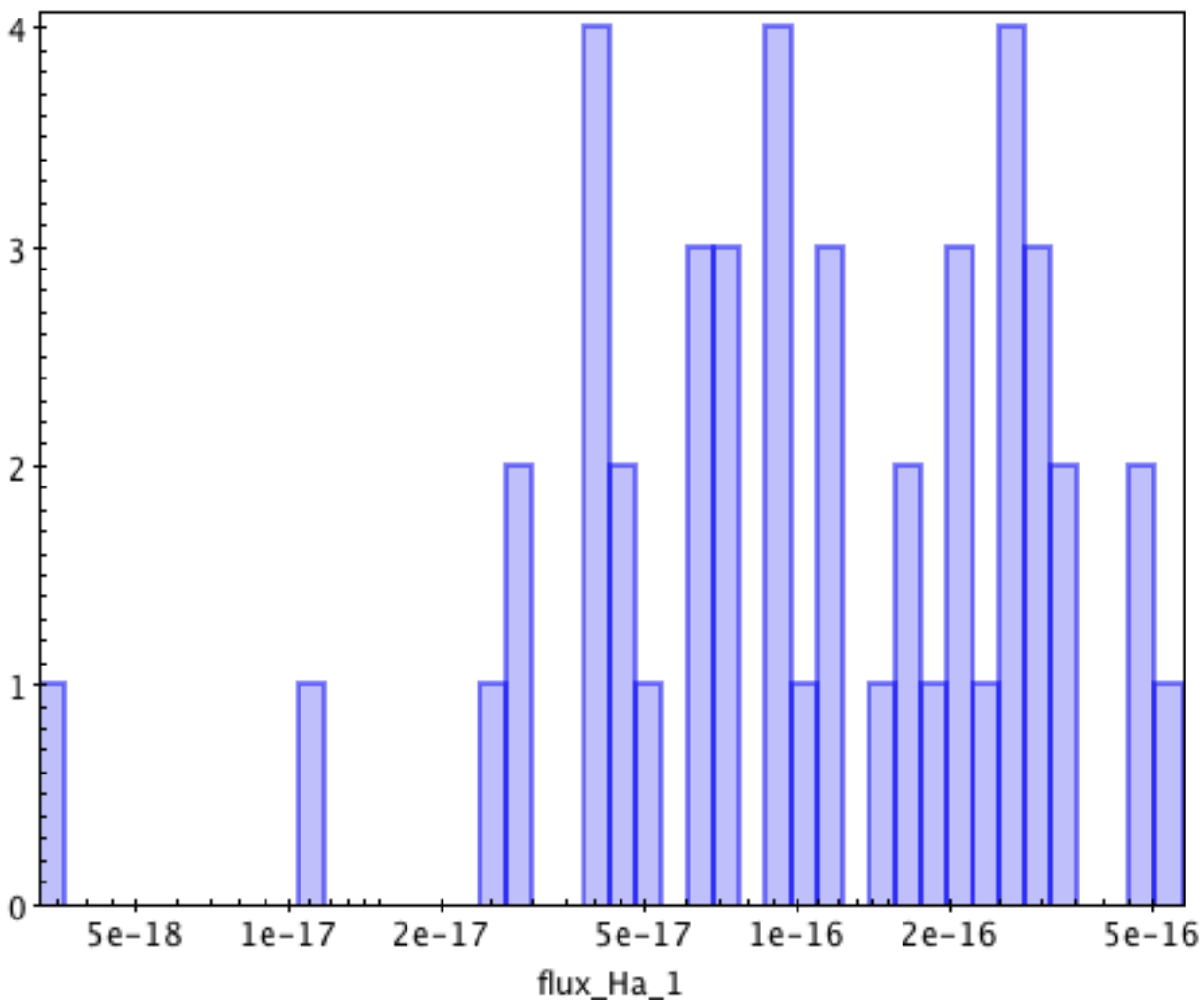


a 1059-1253

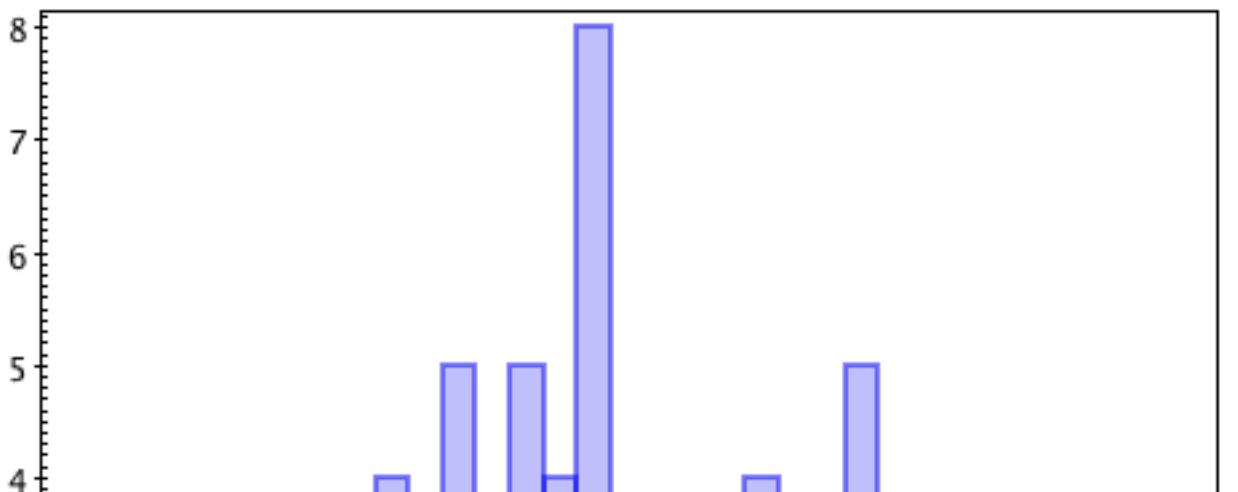


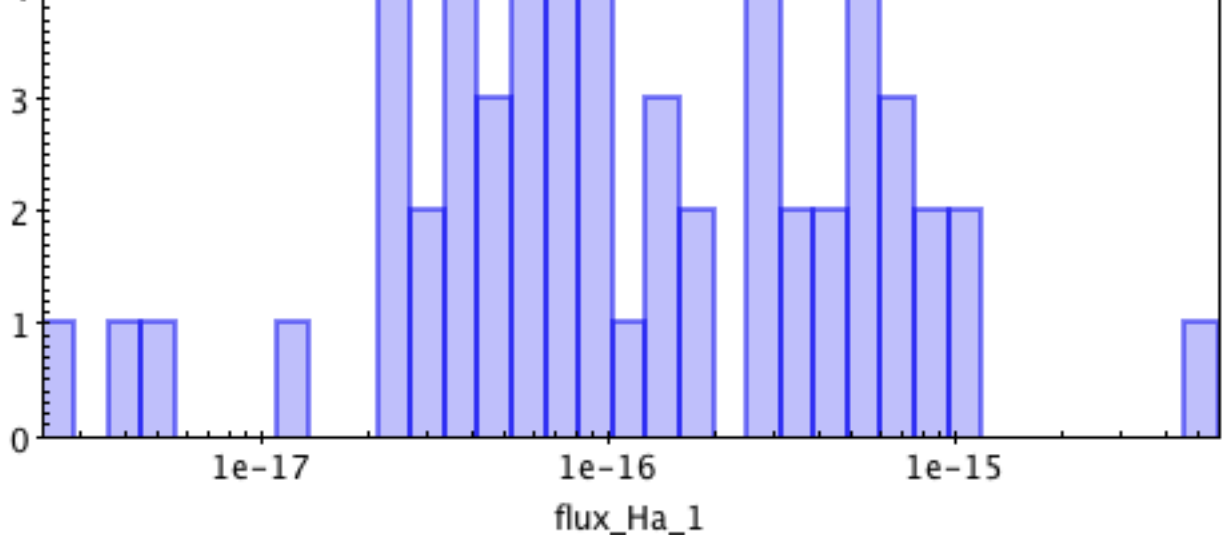


b 1059-1253

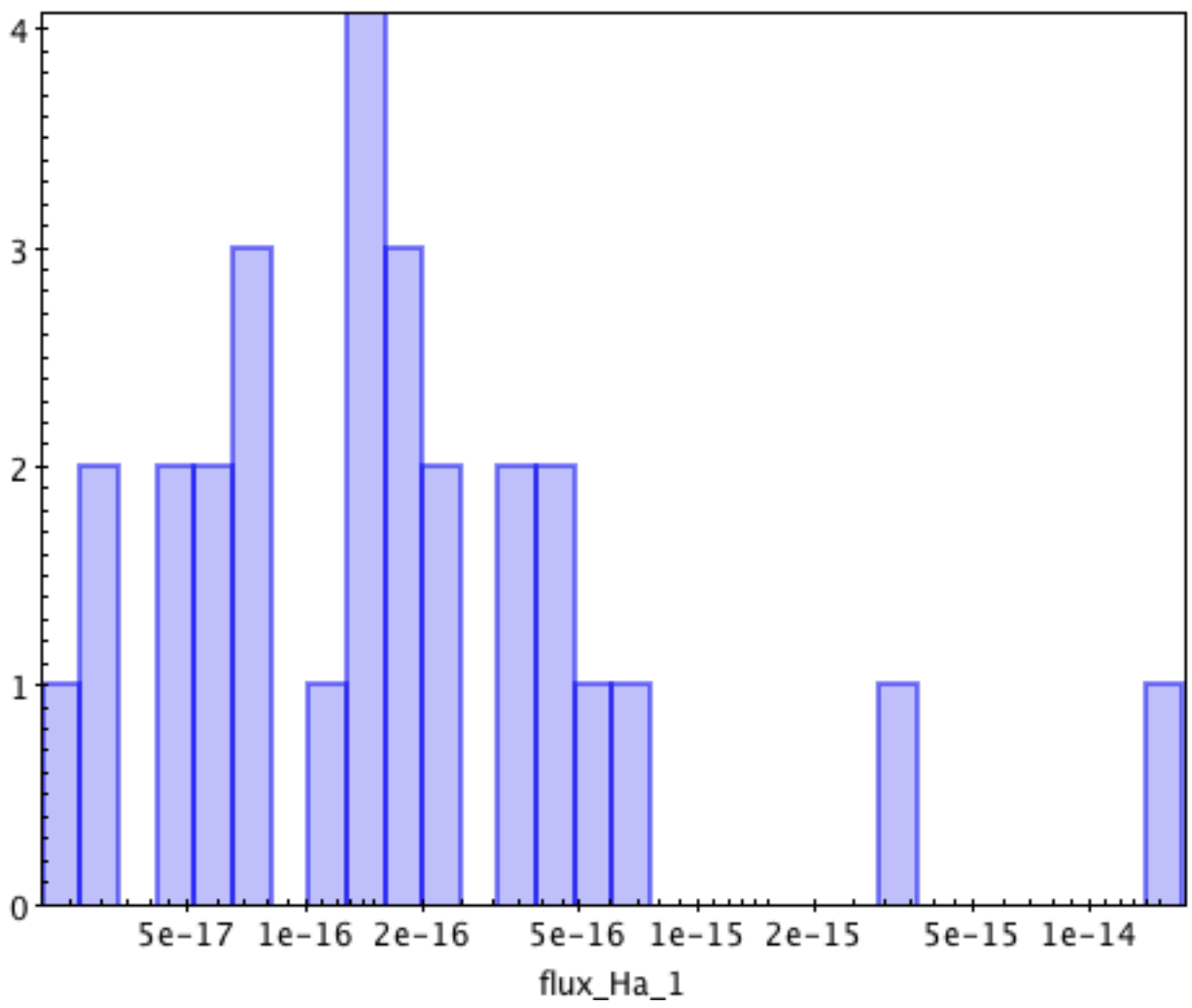


c 1059-1253

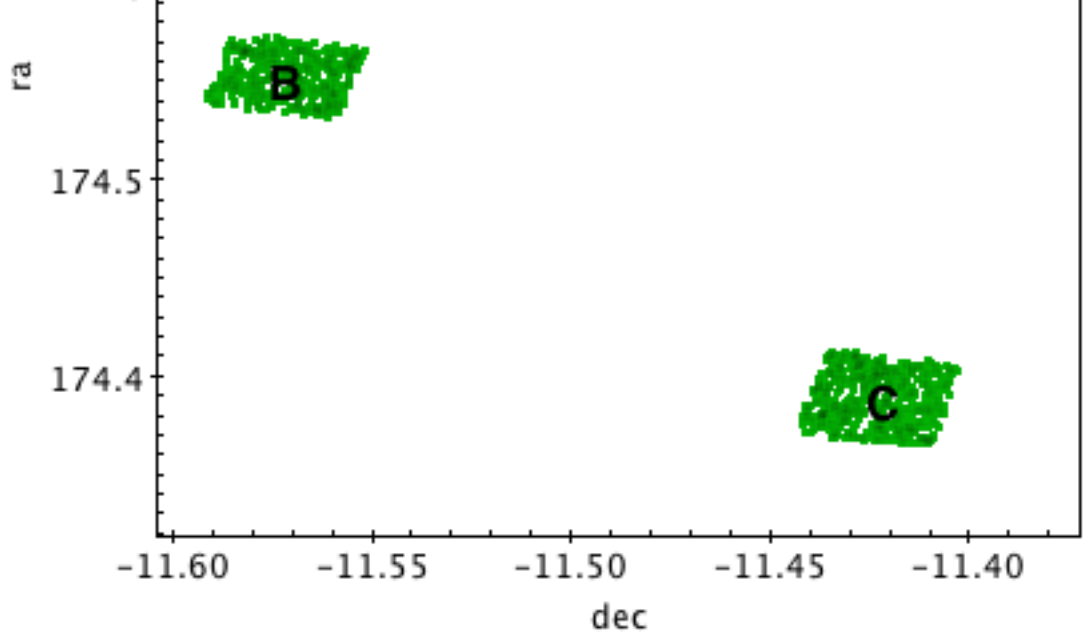


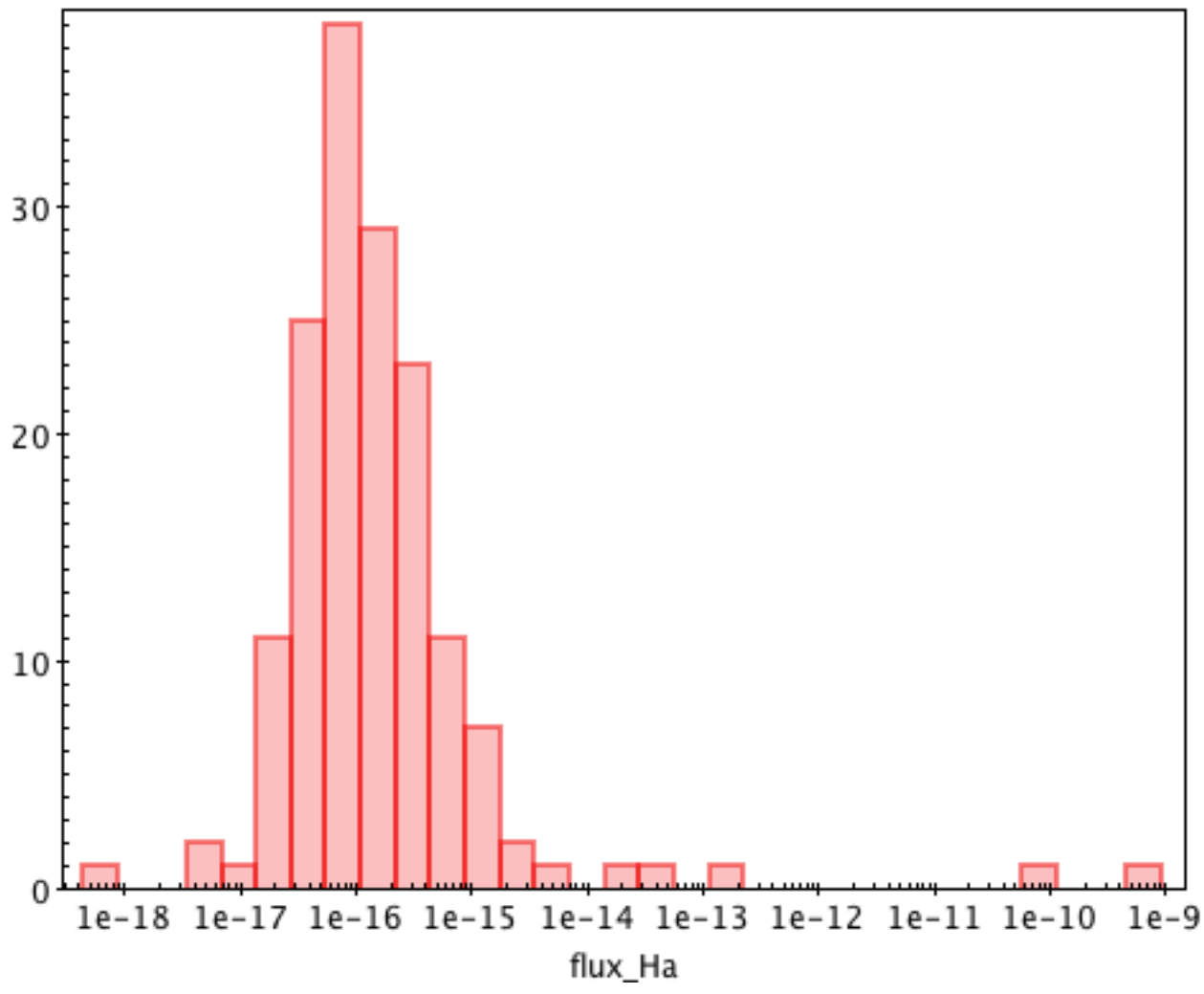


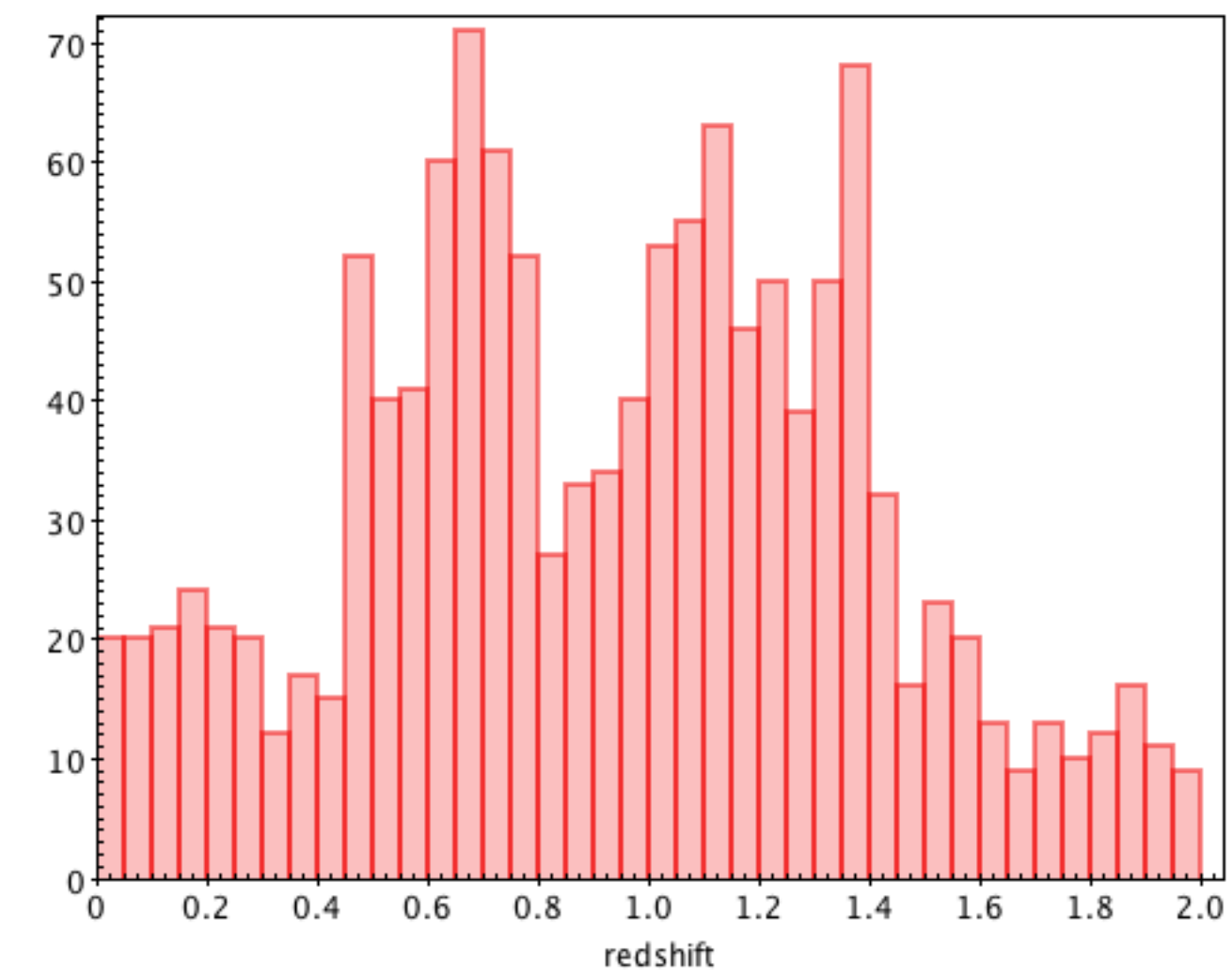
d 1059-1253

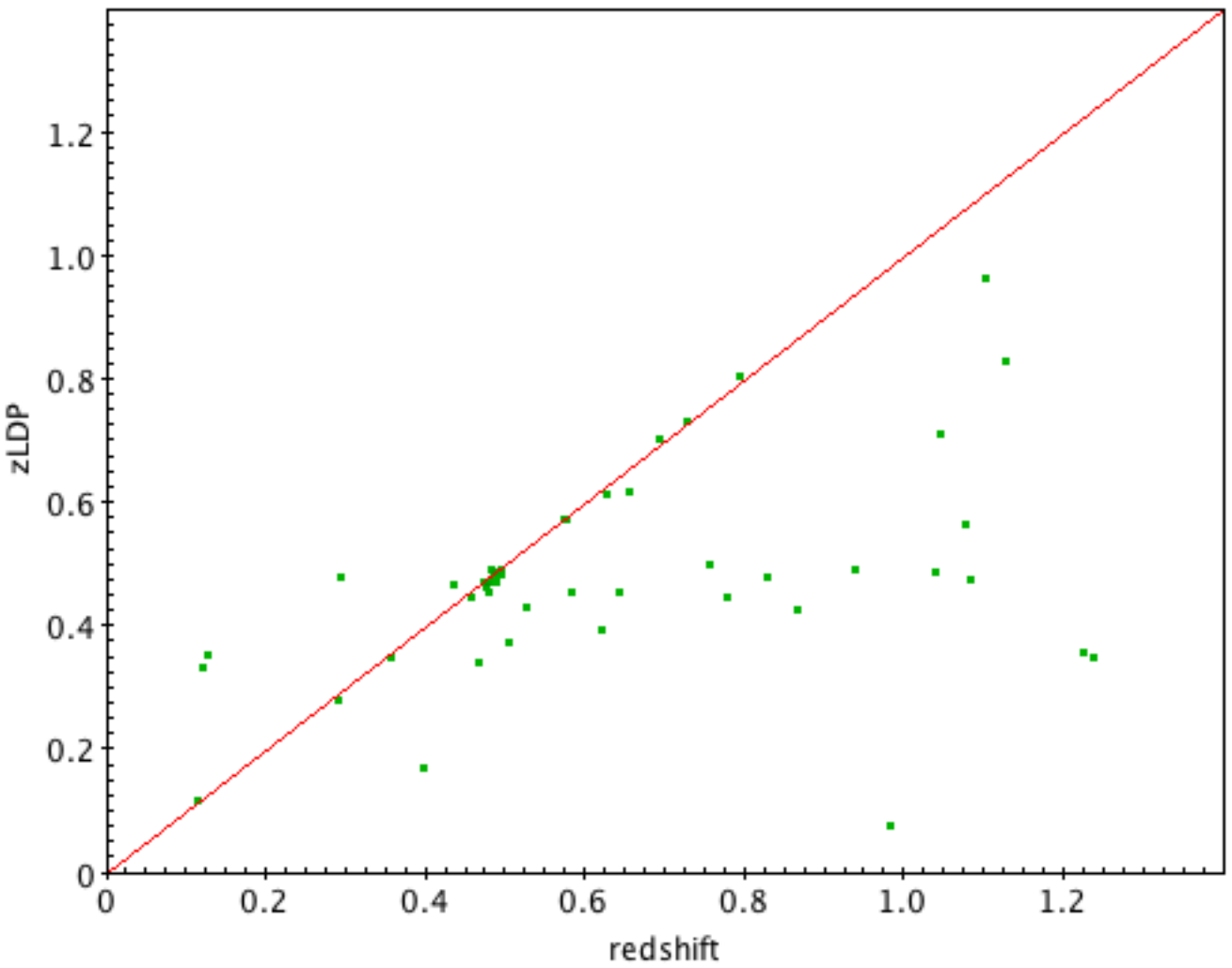


1138-1133 z = 0.4796

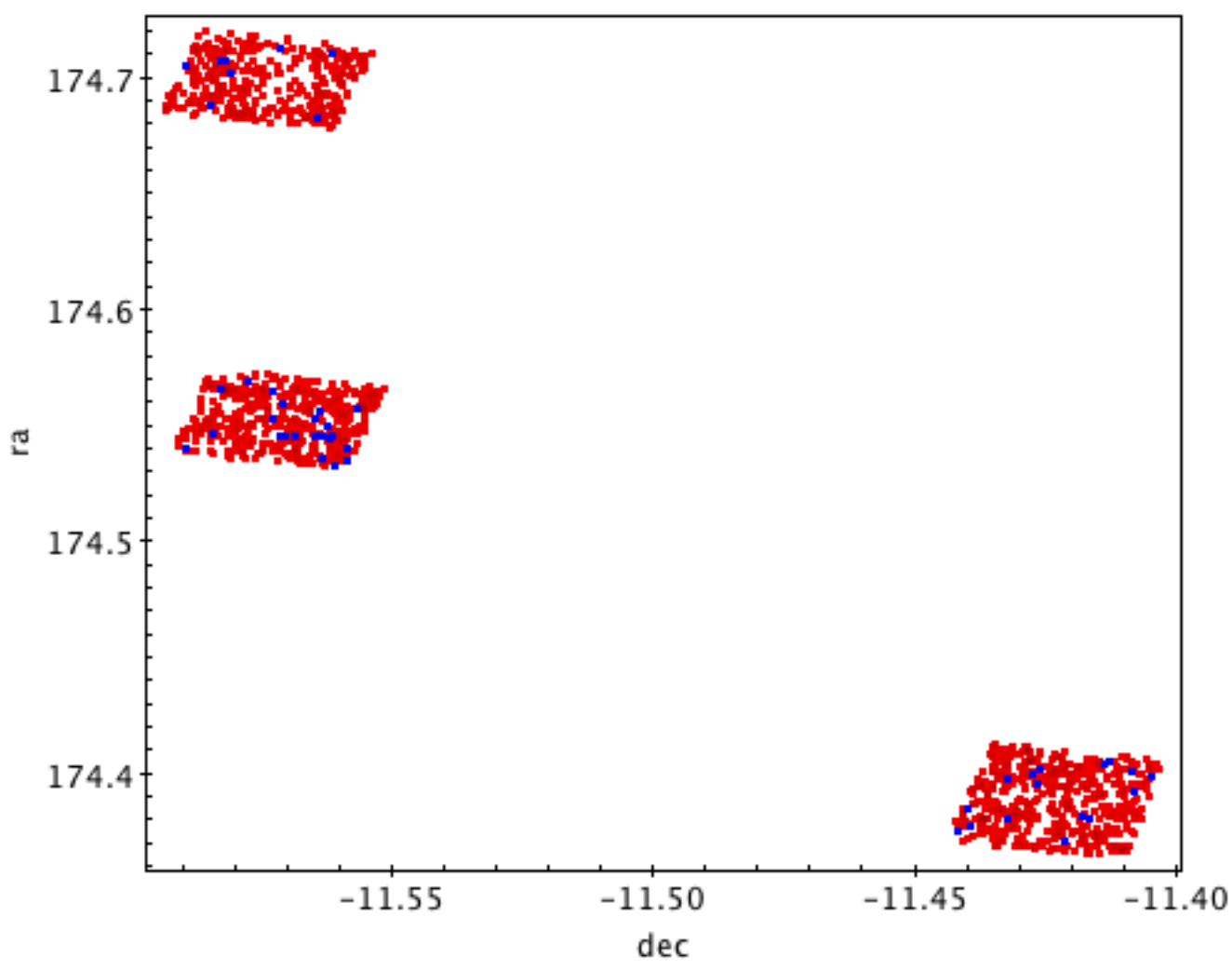

B
C
174.5
174.4
ra
-11.60
-11.55
-11.50
-11.45
-11.40
dec


30
20
10
0
1e-18
1e-17
1e-16
1e-15
1e-14
1e-13
1e-12
1e-11
1e-10
1e-9
flux_Ha


70
60
50
40
30
20
10
0
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
redshift

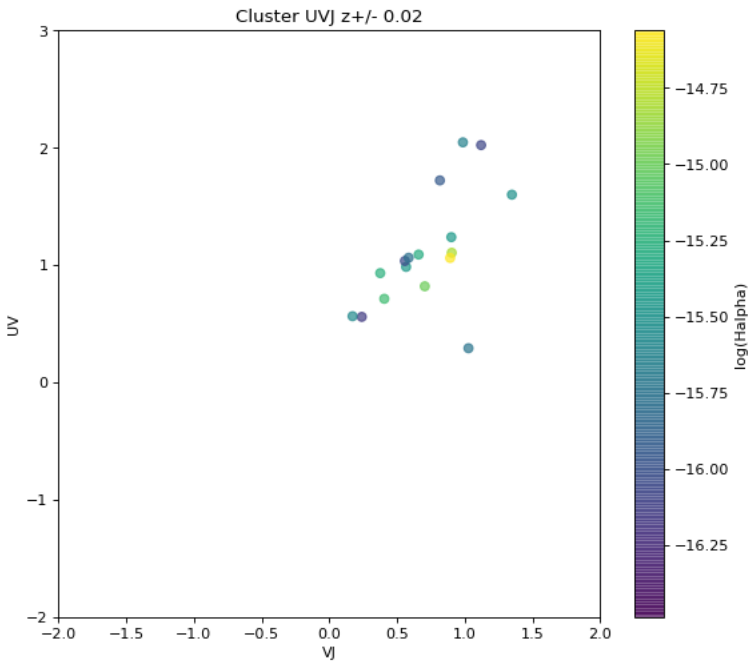

1.2
1.0
0.8
0.6
0.4
0.2
0
zLDP
0
0.2
0.4
0.6
0.8
1.0
1.2
redshift

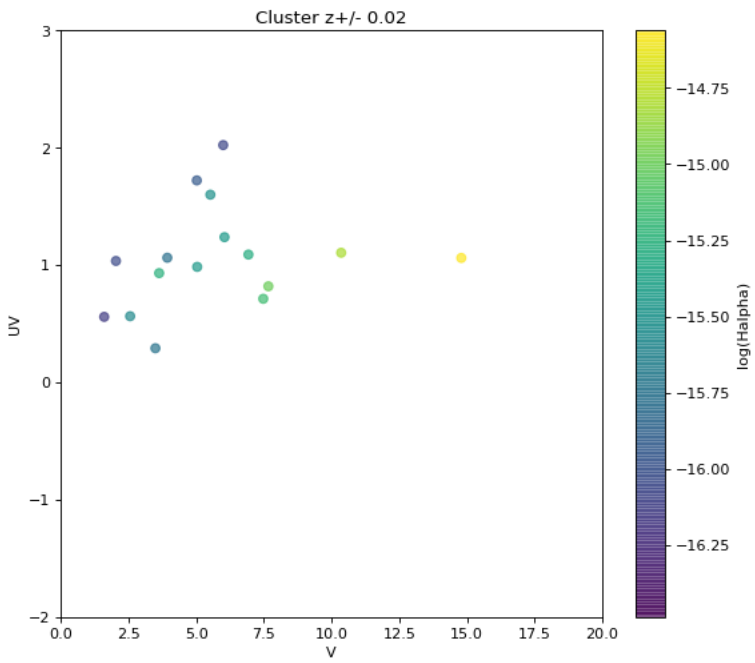
Within 0.02

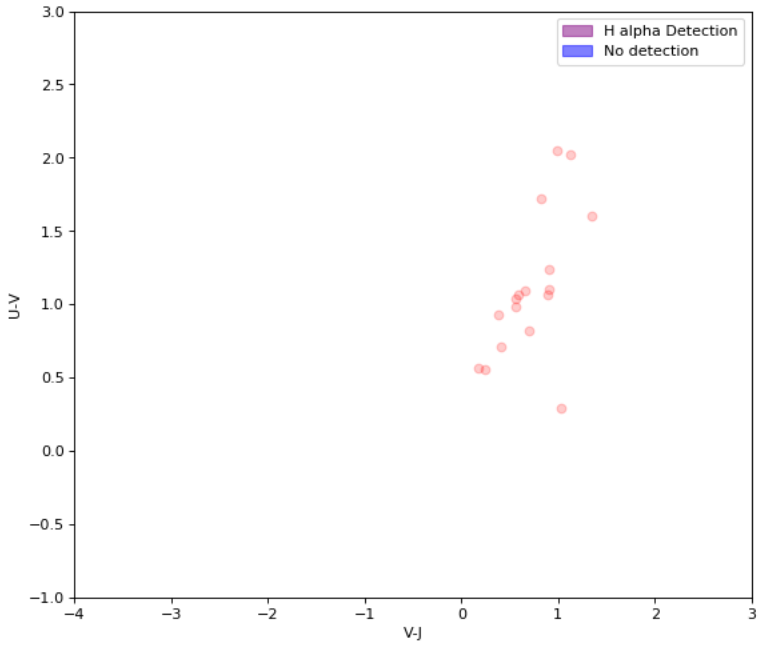

174.7
174.6
174.5
174.4
ra
−11.55
−11.50
−11.45
−11.40
dec

In [55]:

```
c1138(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```



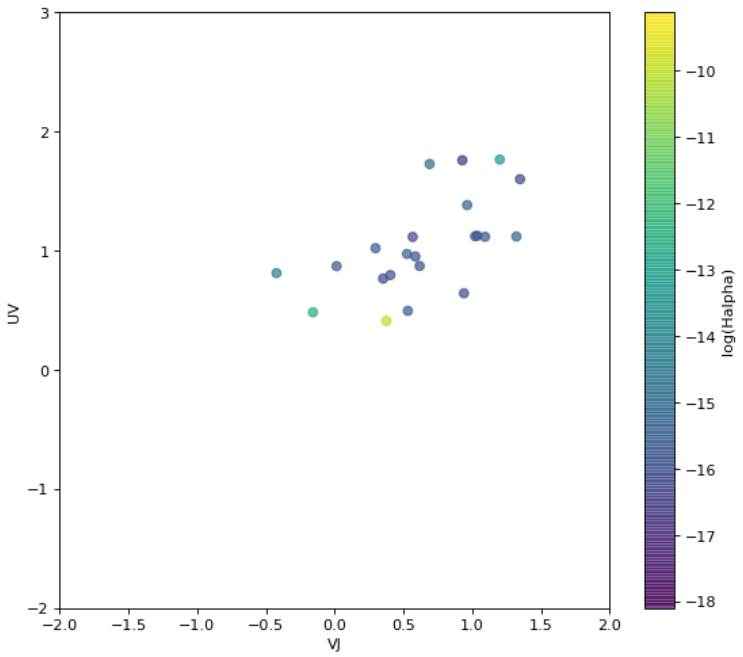


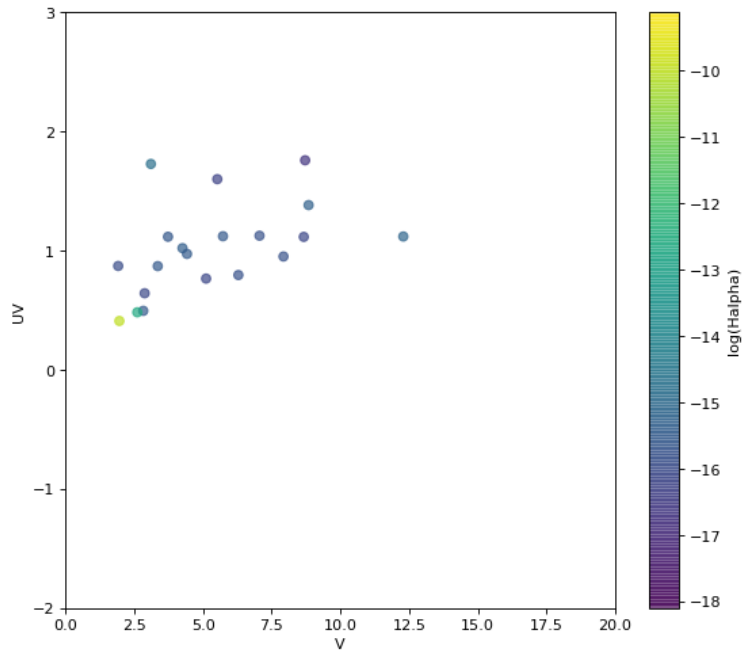


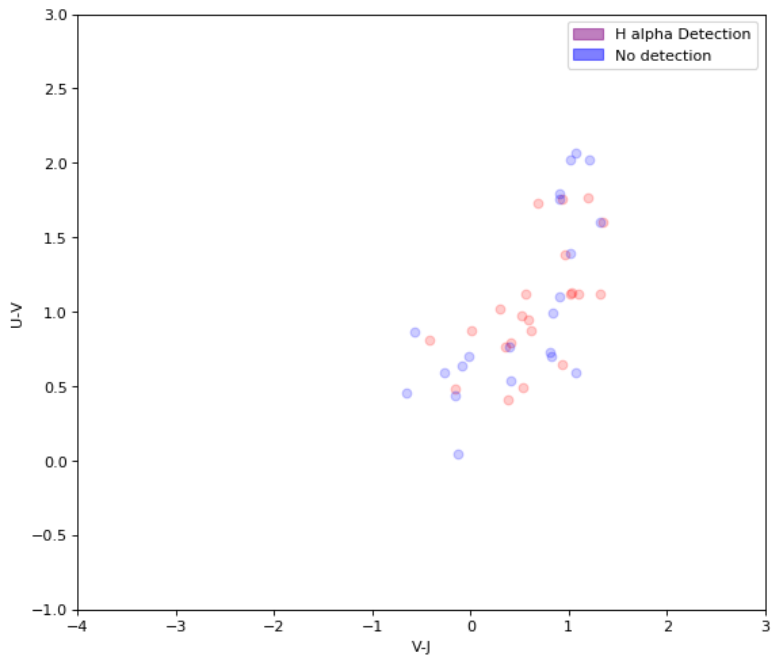
Field

In [67]:

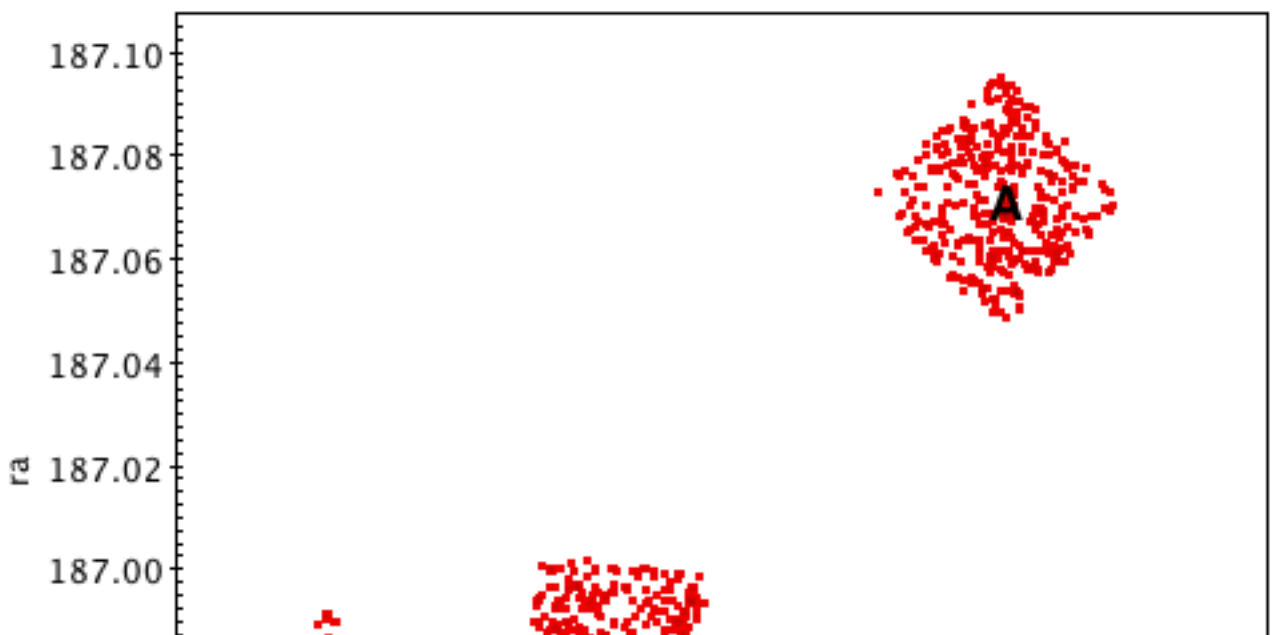
```
f1138(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

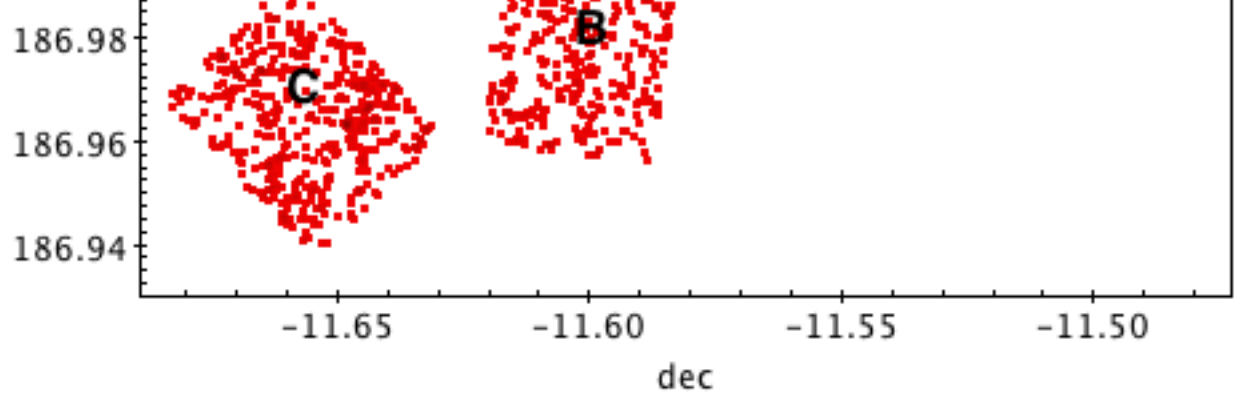


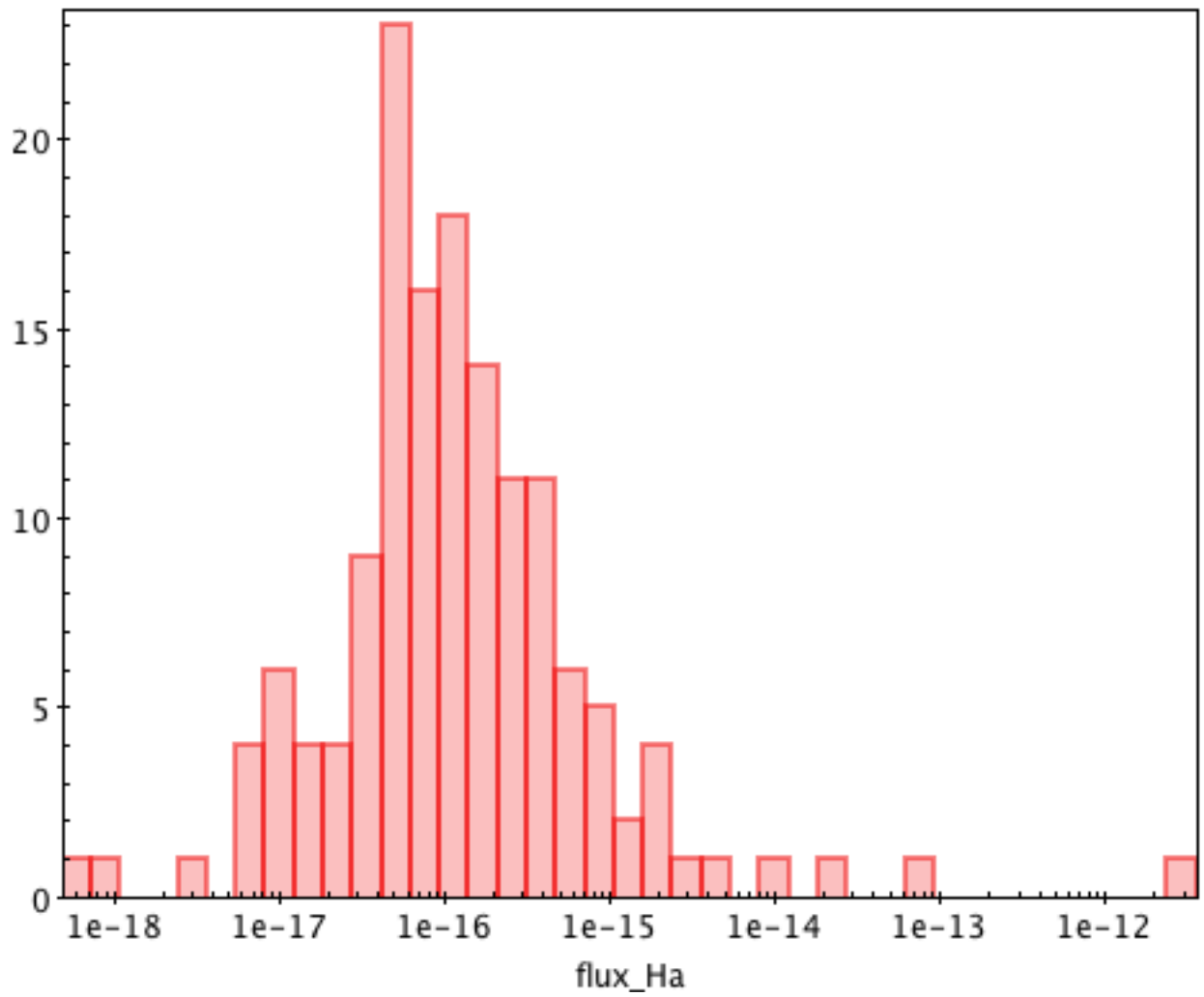


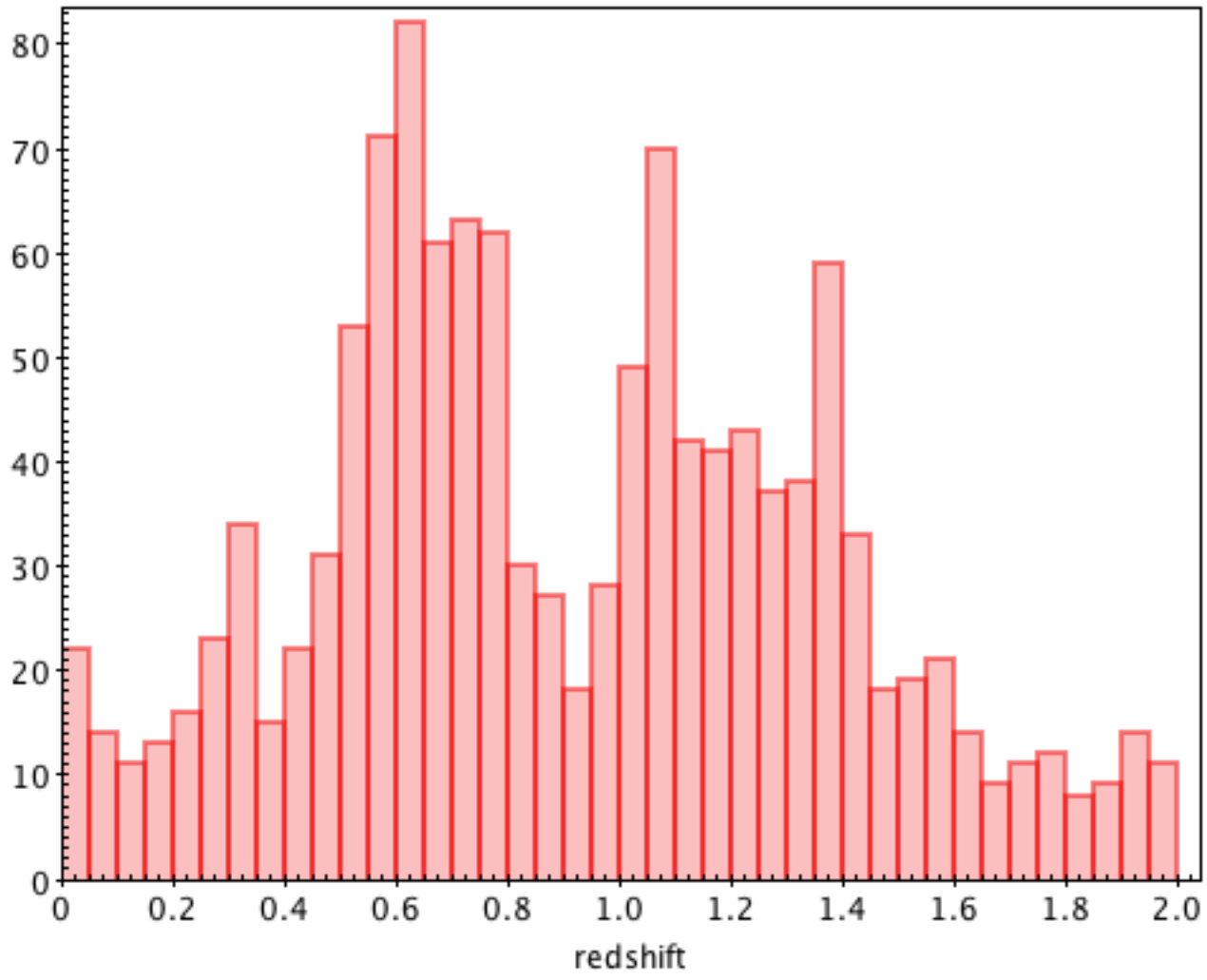


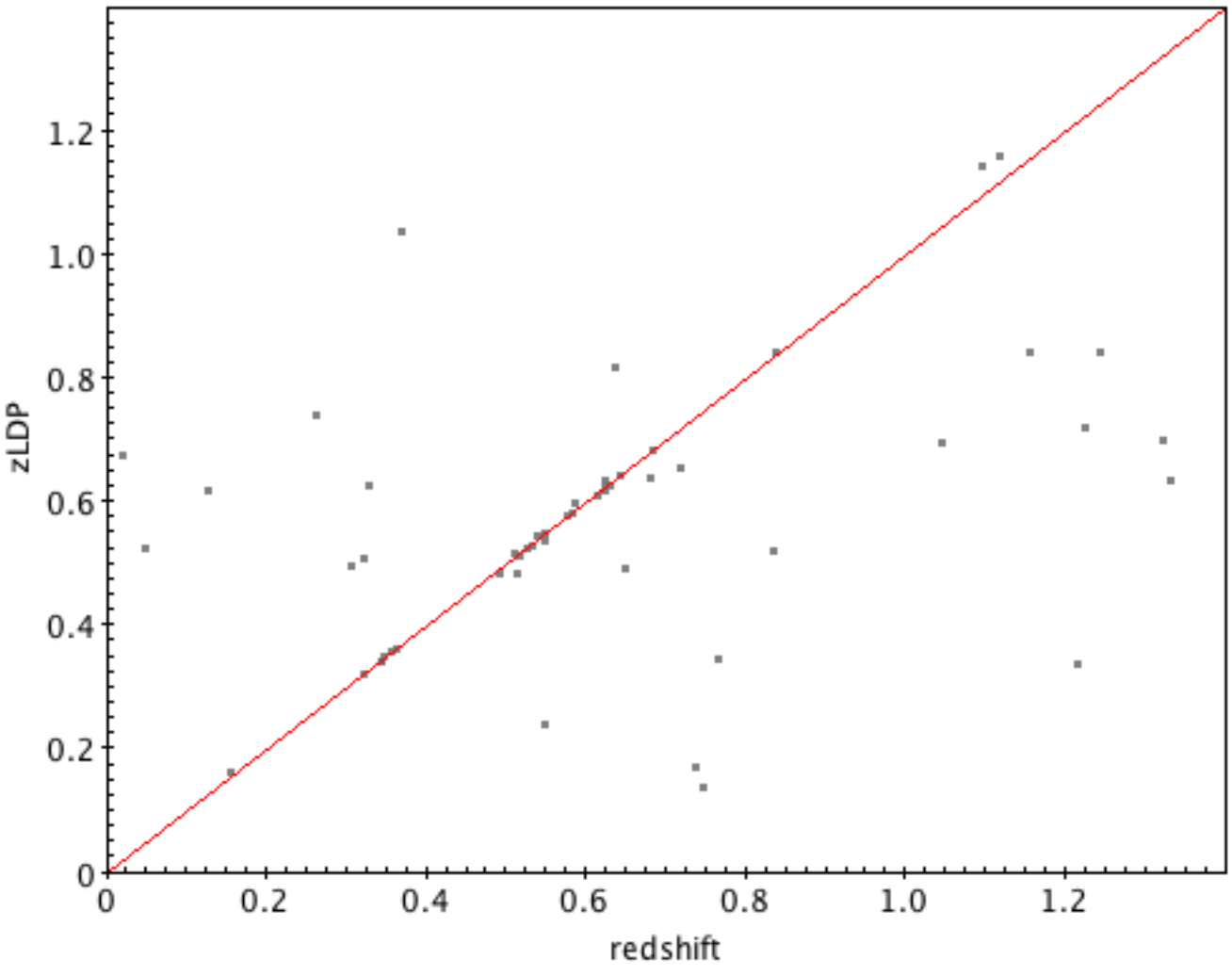
1227-1138 z = 0.6357



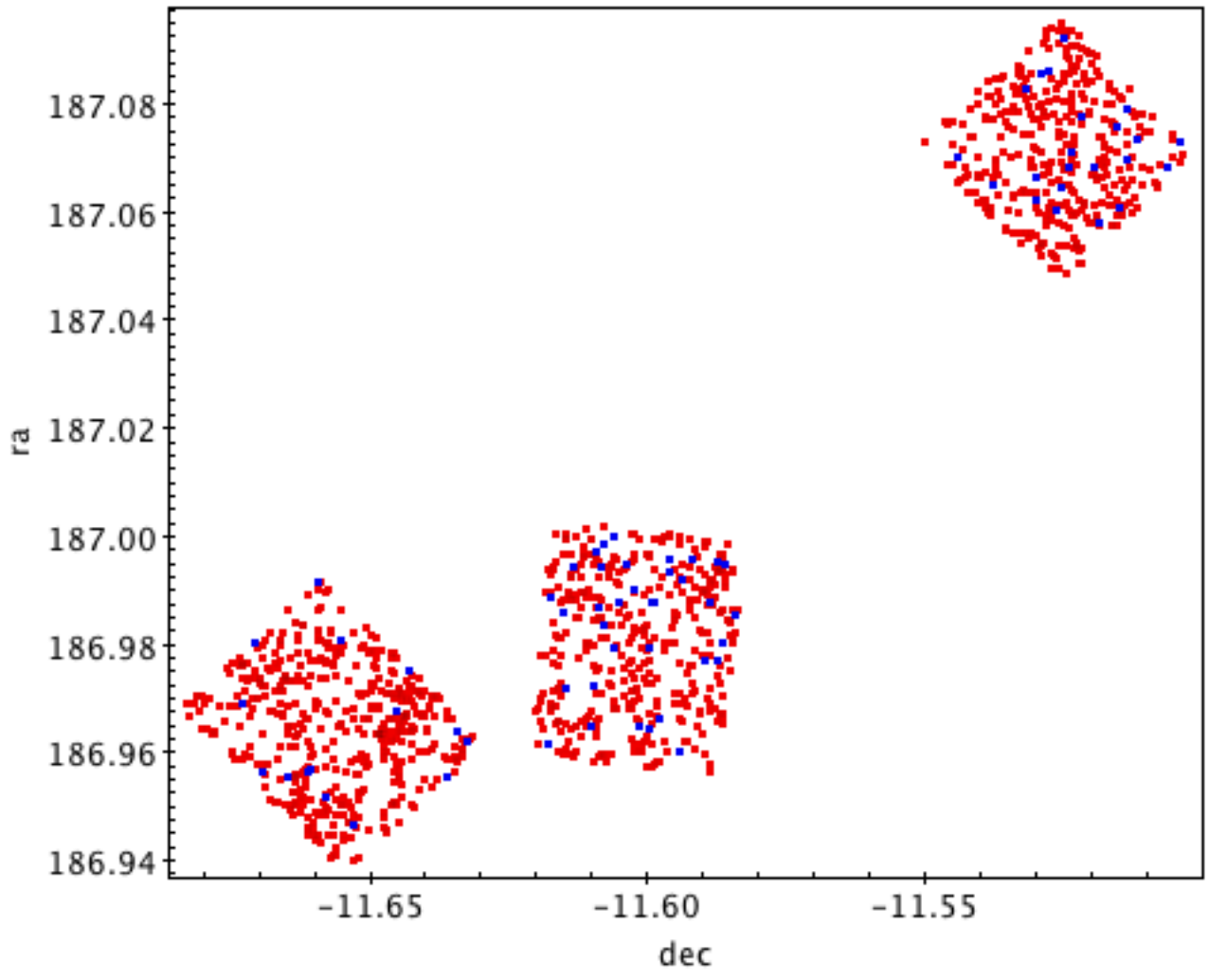

186.98
186.96
186.94
C
B
-11.65
-11.60
-11.55
-11.50
dec


20
15
10
5
0
1e-18
1e-17
1e-16
1e-15
1e-14
1e-13
1e-12
flux_Ha


80
70
60
50
40
30
20
10
0
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
redshift


1.2
1.0
0.8
0.6
0.4
0.2
0
zLDP
0
0.2
0.4
0.6
0.8
1.0
1.2
redshift

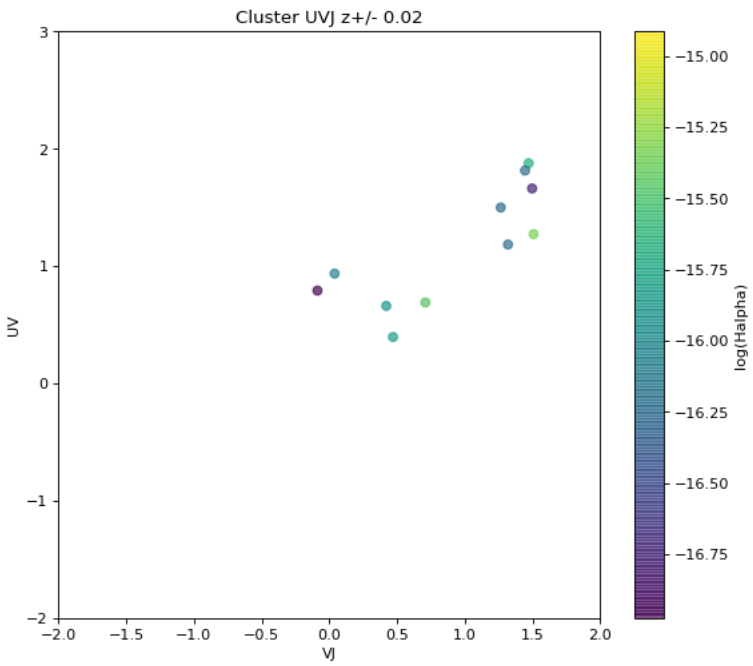
Within 0.02

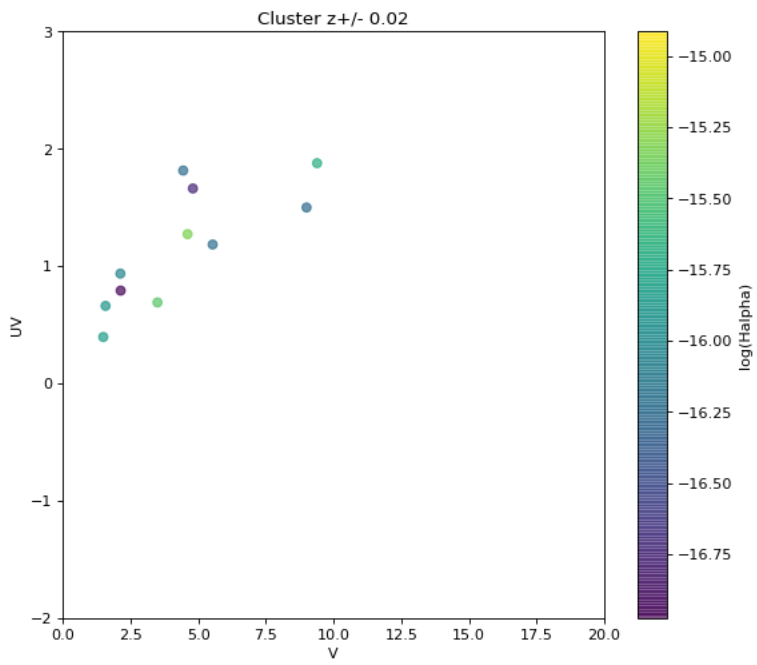

187.08
187.06
187.04
187.02
187.00
186.98
186.96
186.94
ra
−11.65
−11.60
−11.55
dec

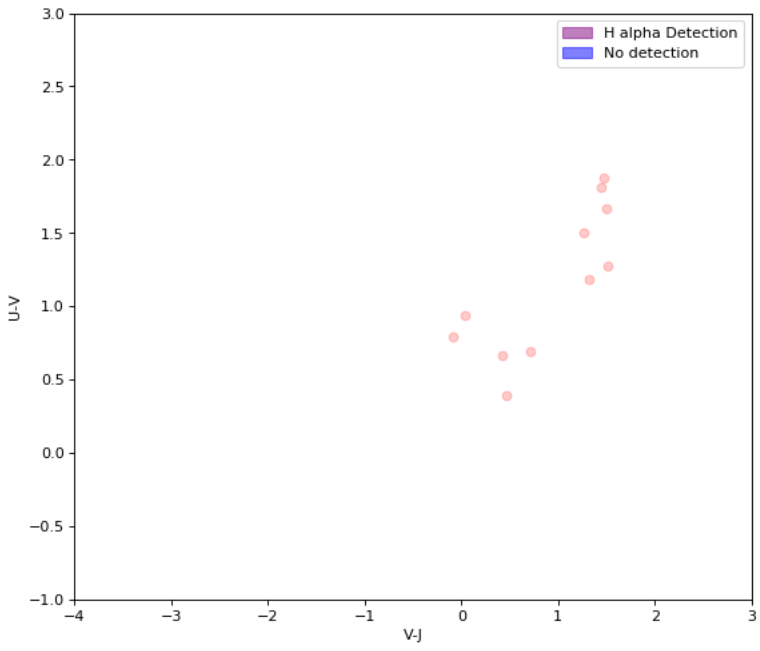
In [47]:

```
c1227(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

```
<string>:106: RuntimeWarning: divide by zero encountered in log10
```





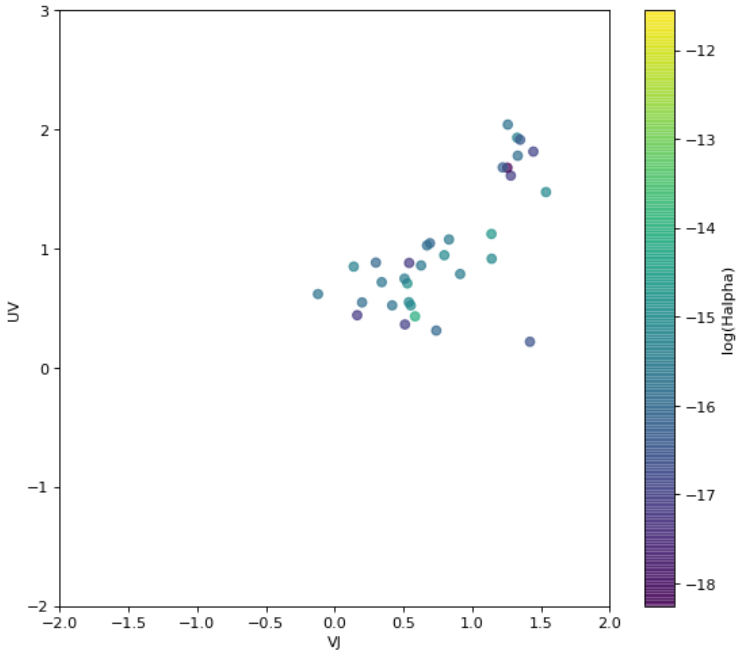


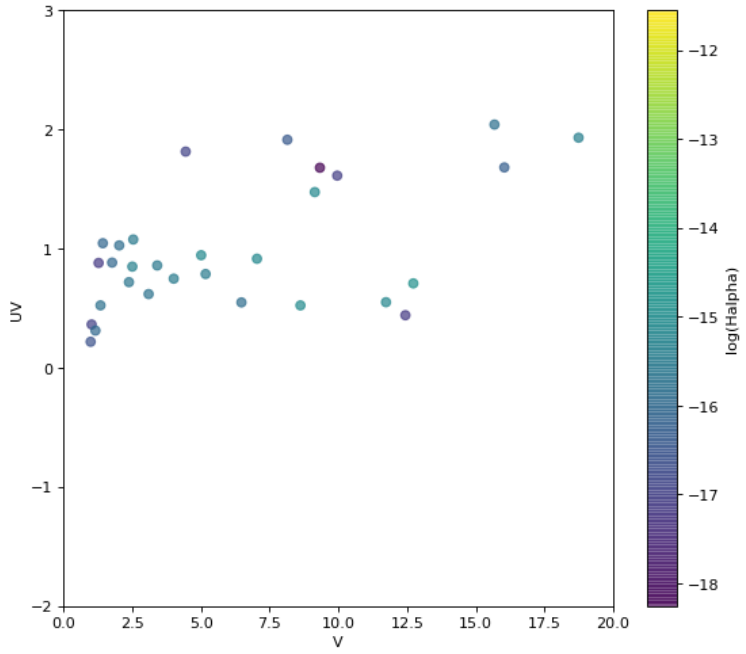
Field

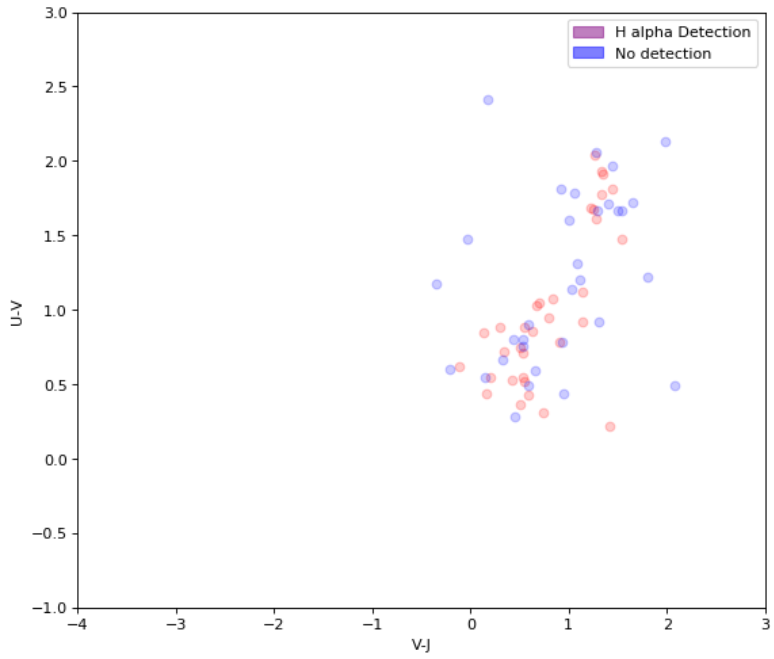
In [69]:

```
f1227(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

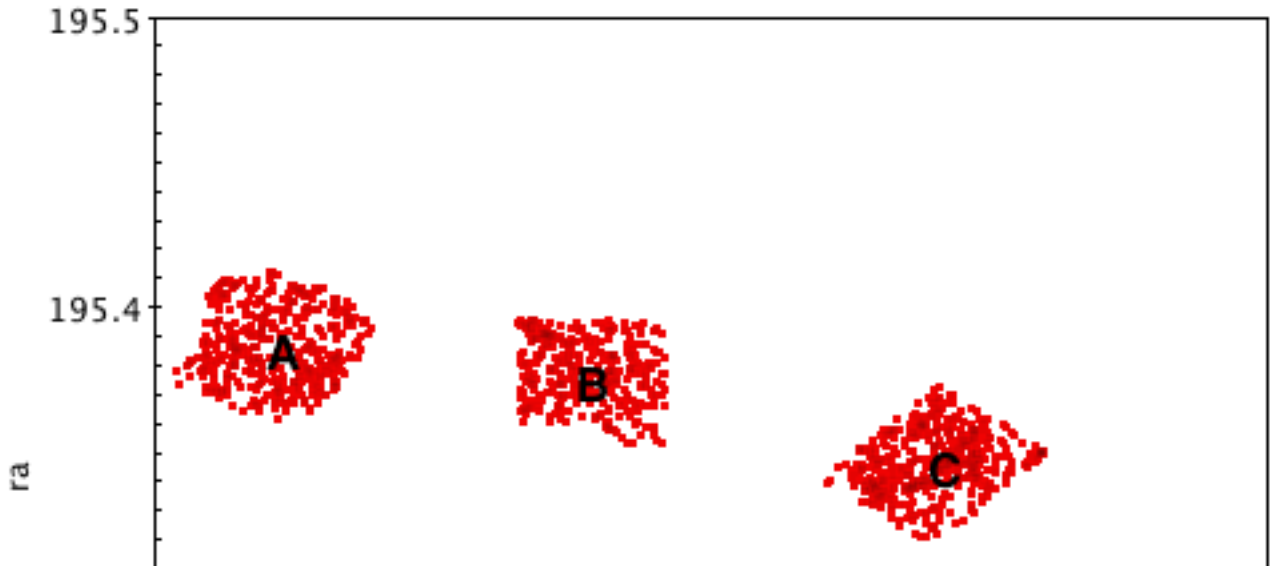
```
<string>:441: RuntimeWarning: divide by zero encountered in log10
```

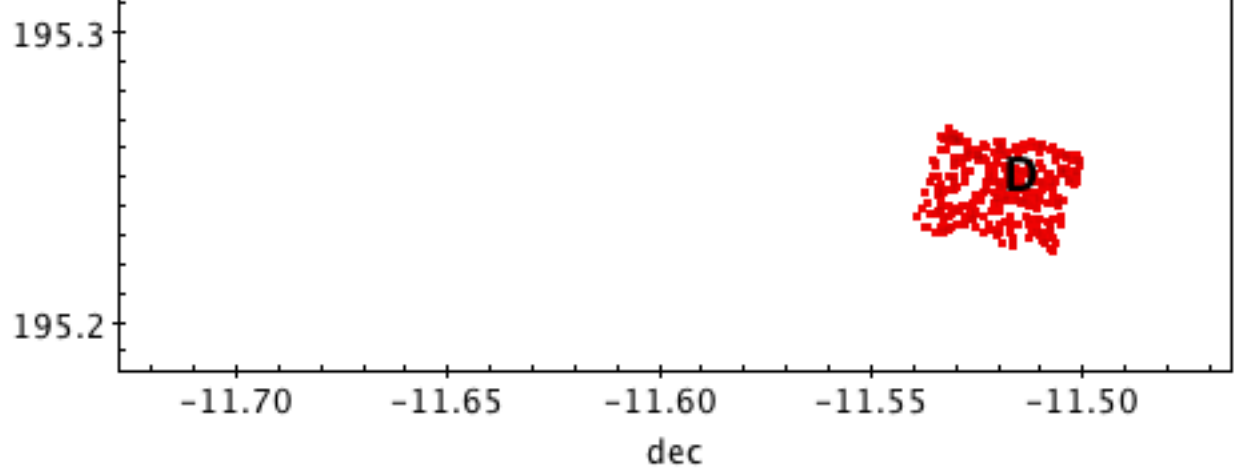


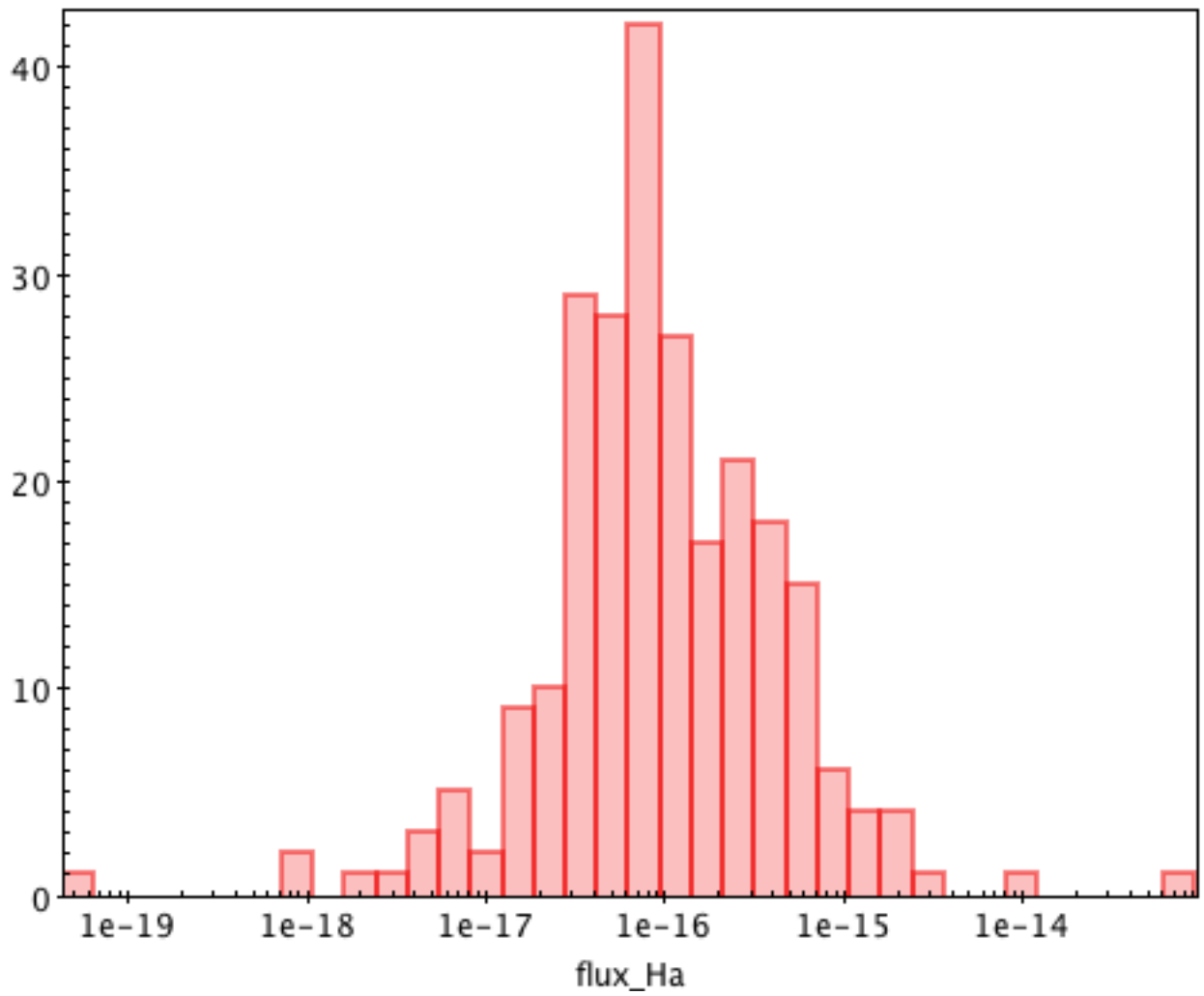


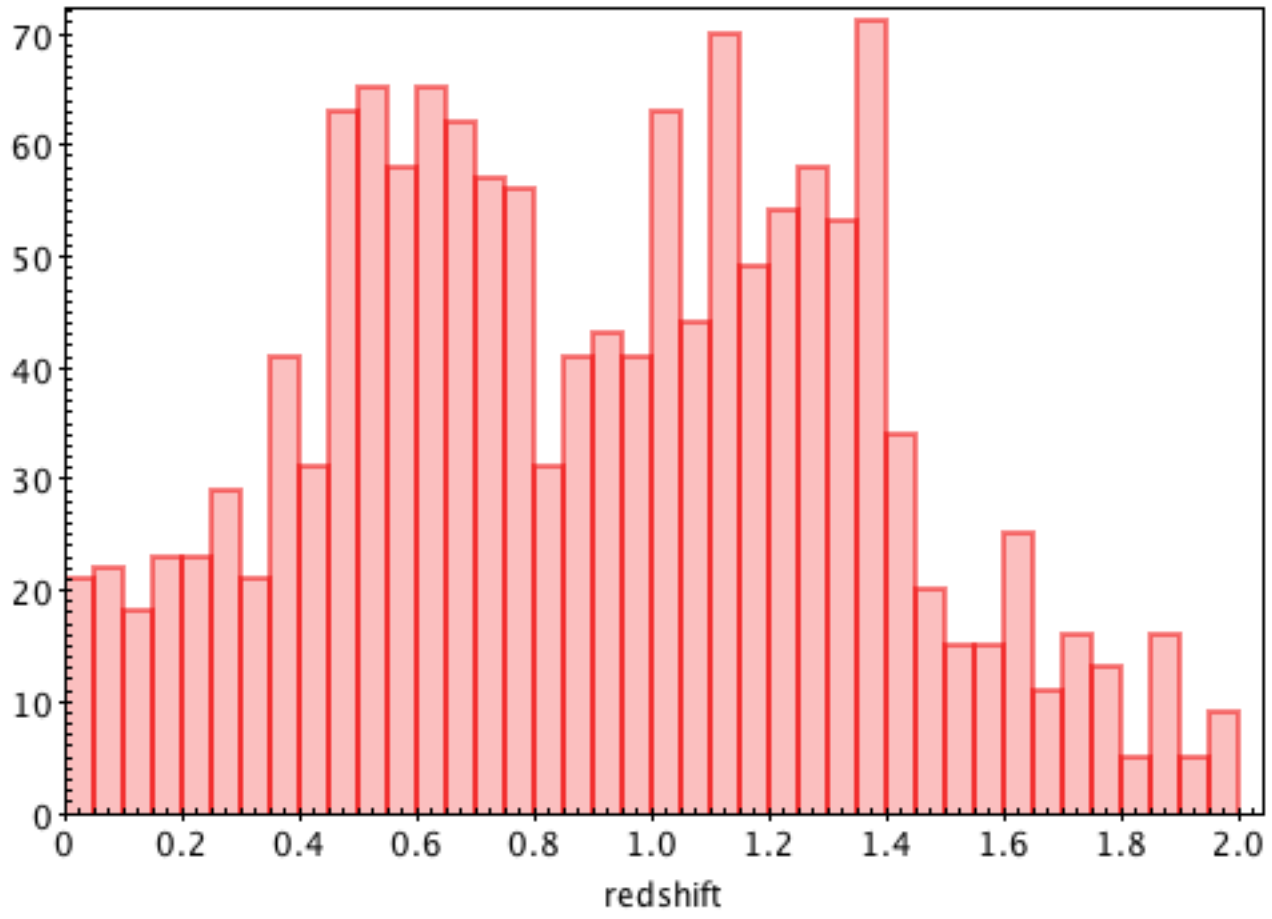


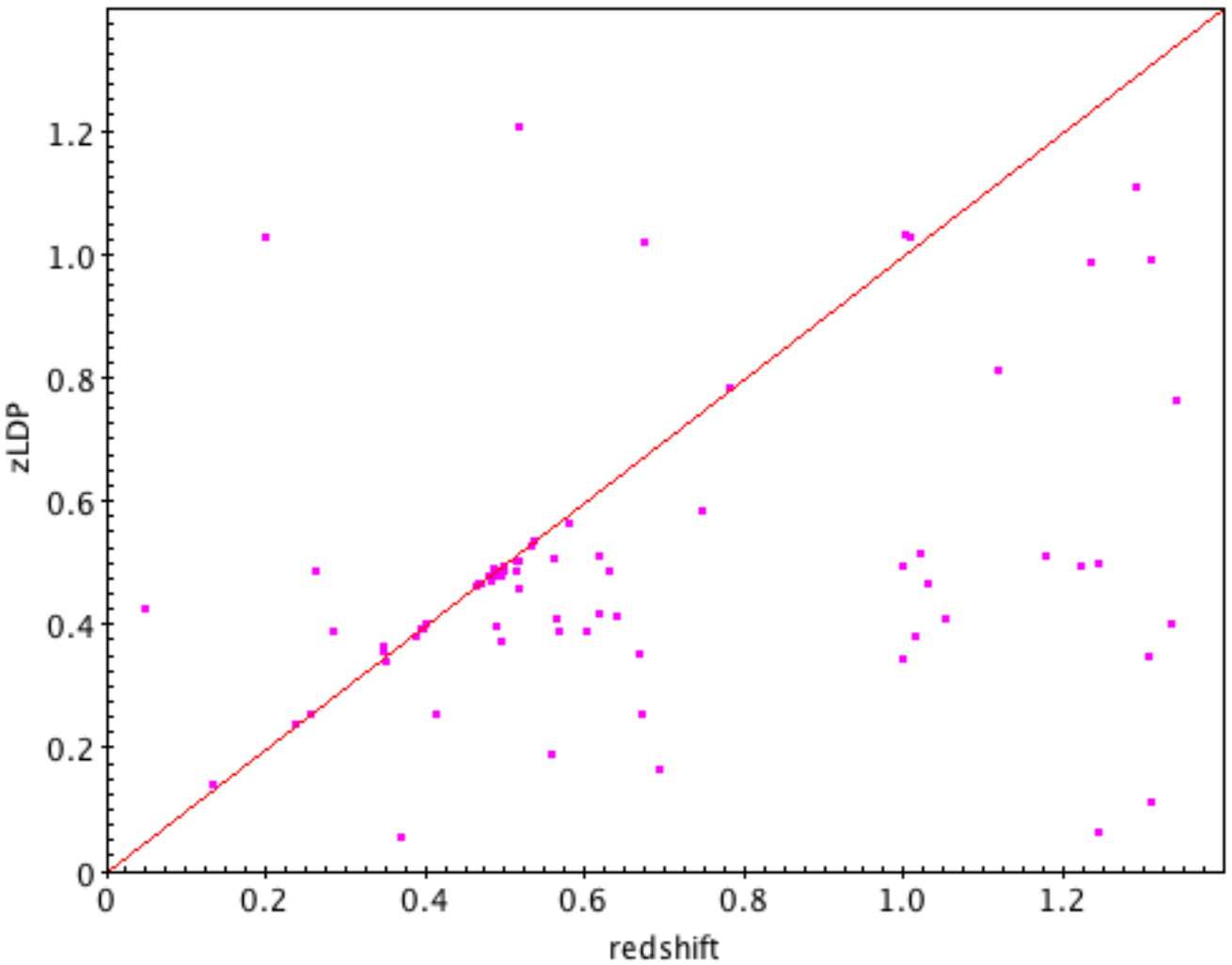
1301-1139 z = 0.4828



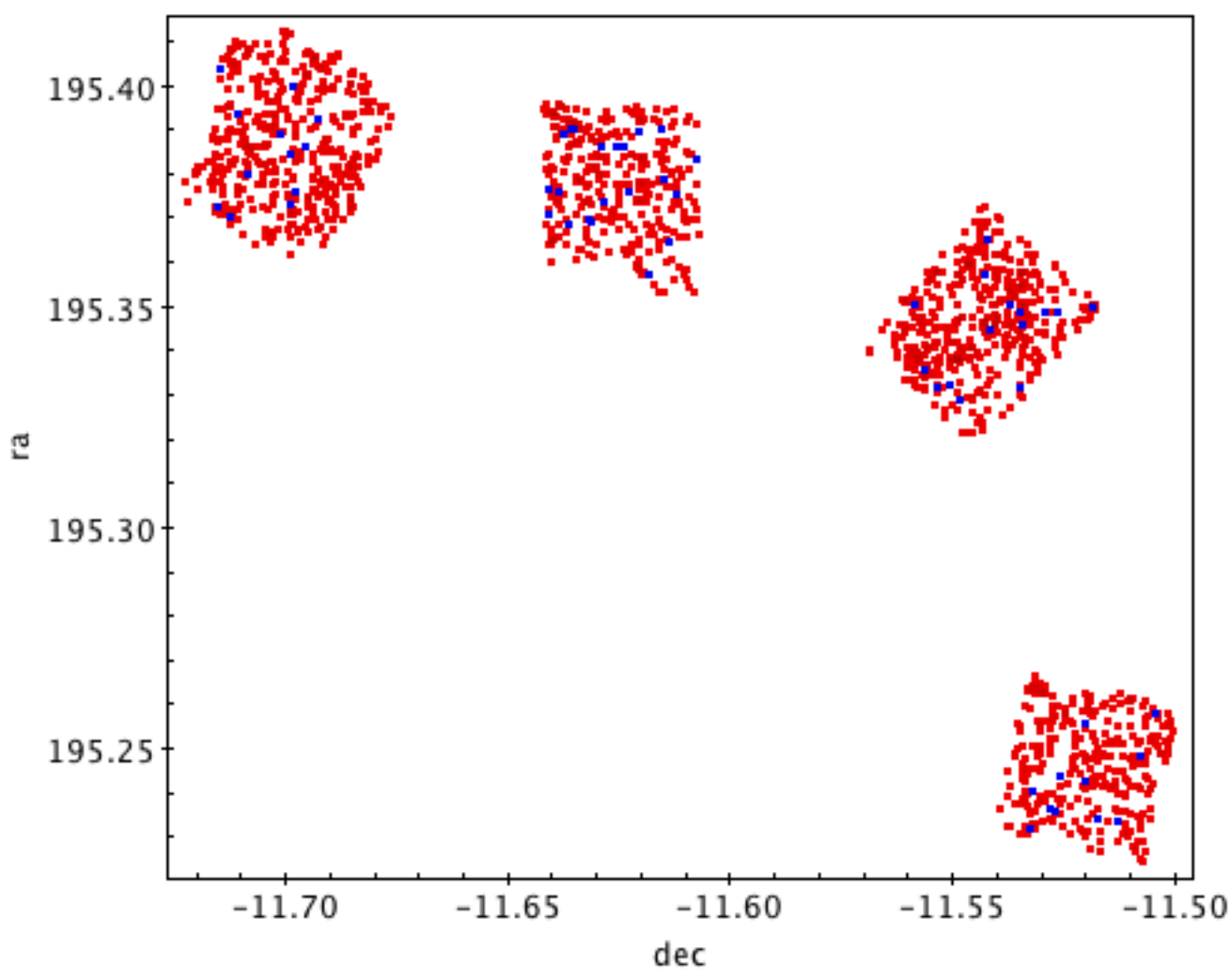

195.3
195.2
D
-11.70
-11.65
-11.60
-11.55
-11.50
dec


40
30
20
10
0
1e-19
1e-18
1e-17
1e-16
1e-15
1e-14
flux_Ha


70
60
50
40
30
20
10
0
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
redshift


1.2
1.0
0.8
0.6
0.4
0.2
0
zLDP
0
0.2
0.4
0.6
0.8
1.0
1.2
redshift

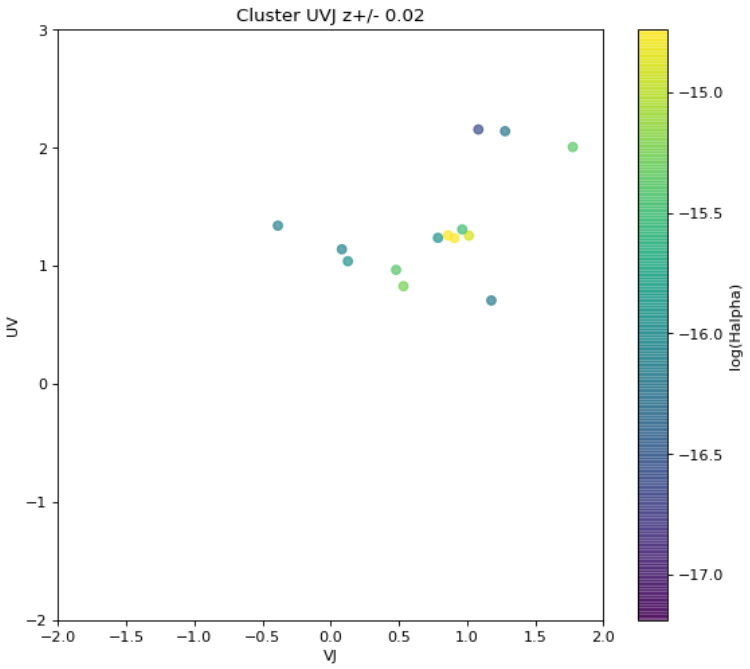
Within 0.02

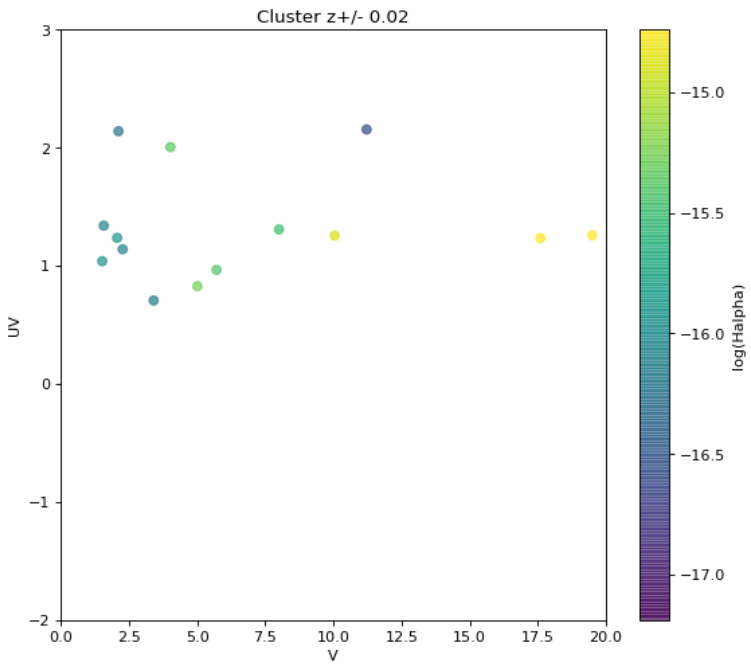

195.40
195.35
195.30
195.25
ra
-11.70
-11.65
-11.60
-11.55
-11.50
dec

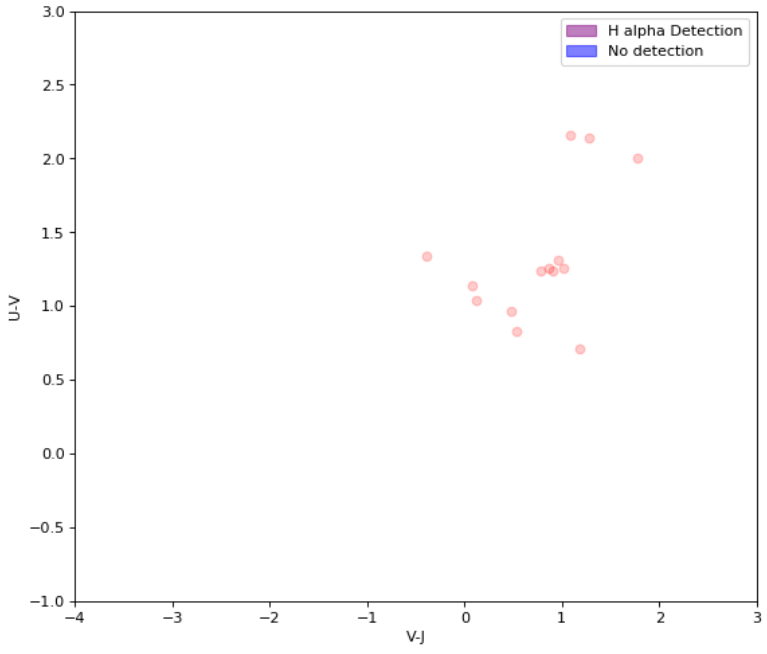
In [44]:

```
c1301(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

```
<string>:38: RuntimeWarning: divide by zero encountered in log10
```





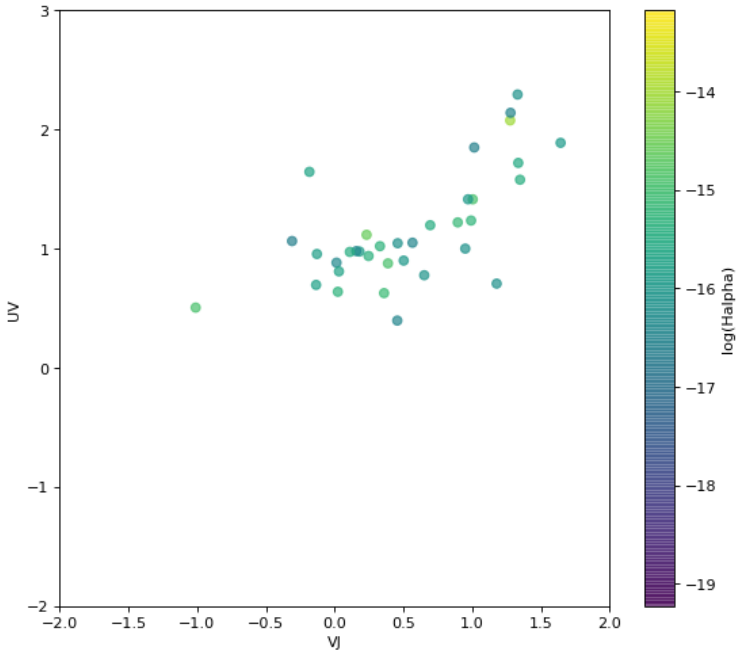


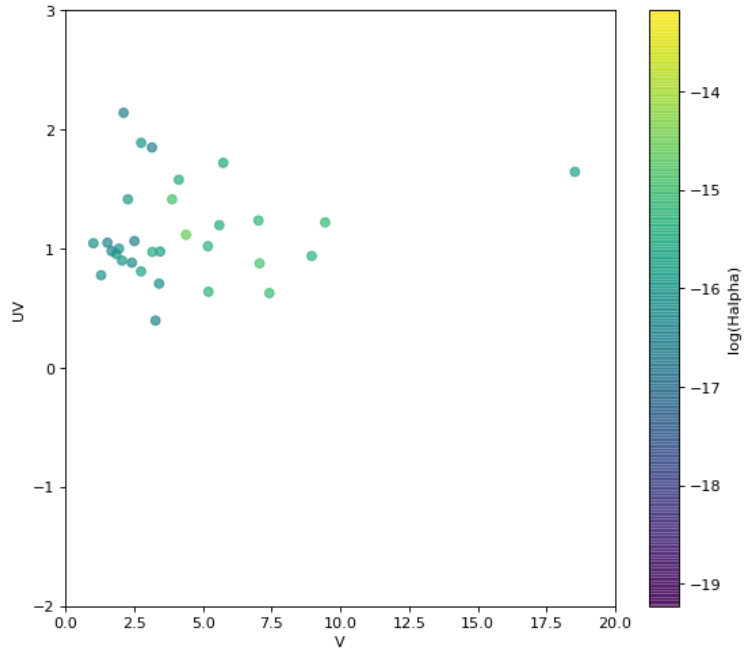
Field

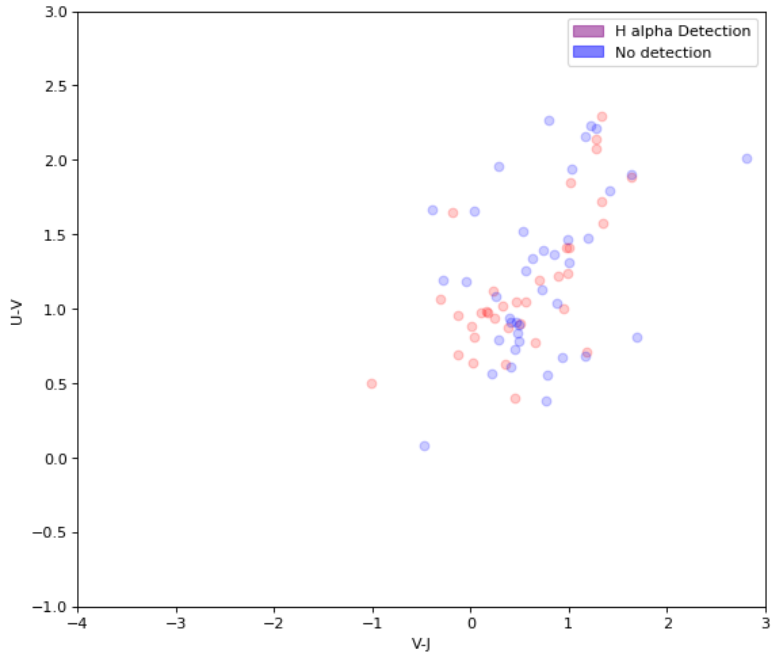
In [71]:

```
f1301(f_Ha,rf_J,rf_U,rf_V,rf_VJ,rf_UV)
```

```
<string>:510: RuntimeWarning: divide by zero encountered in log10
```







TO DO:

Add Williams 2009 lines

In [ ]:

```

```