investigate-KIC11453592

November 29, 2018

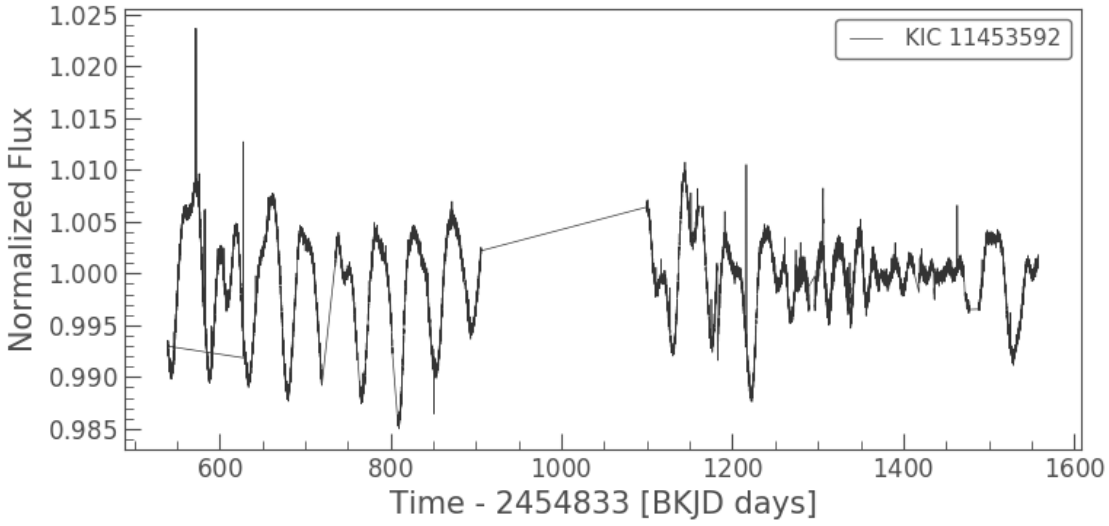
In [1]:
```
from lightkurve import KeplerTargetPixelFile as ktpf
from lightkurve import KeplerLightCurveFile
import lightkurve
from tqdm import tqdm
```

In [2]:
```
target = 'KIC11453592'
lc = lightkurve.search_lightcurvefile(target, quarter=6).download().PDCSAP_FLUX.normali
for q in tqdm(range(6, 17)):
    try:
        lc = lc.append(lightkurve.search_lightcurvefile(target, quarter=q).download().
    except:
        pass
lc = lc.remove_nans()
```

```
 36%|      | 4/11 [00:08<00:14,  2.11s/it]WARNING: NoResultsWarning: No products to download.
 45%|     | 5/11 [00:09<00:11,  1.98s/it]WARNING: NoResultsWarning: No products to download. [a
100%|| 11/11 [00:19<00:00,  1.75s/it]
```

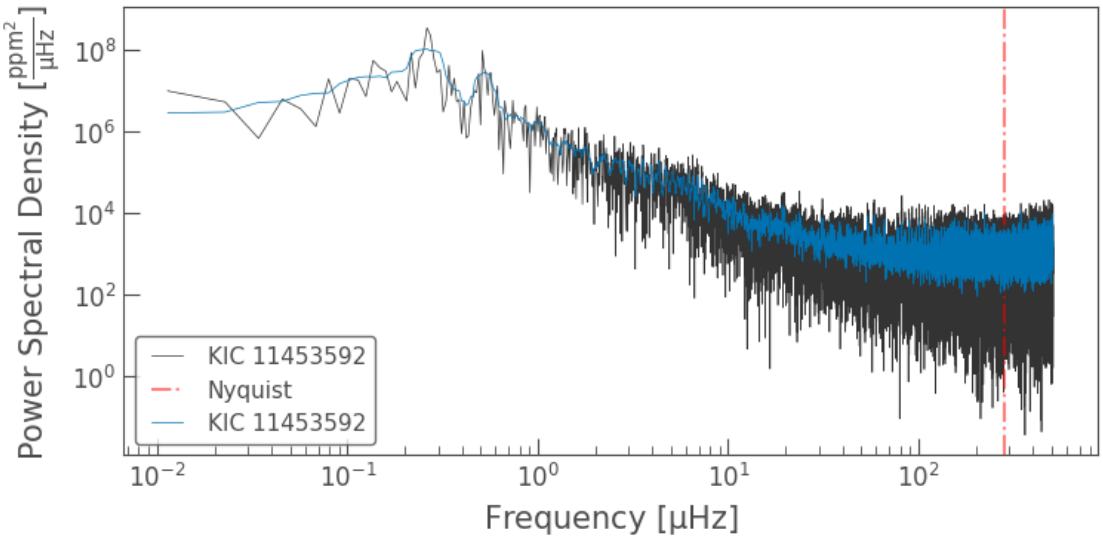
In [3]:
```
lc.plot()
```

Out[3]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x11393d898>
```



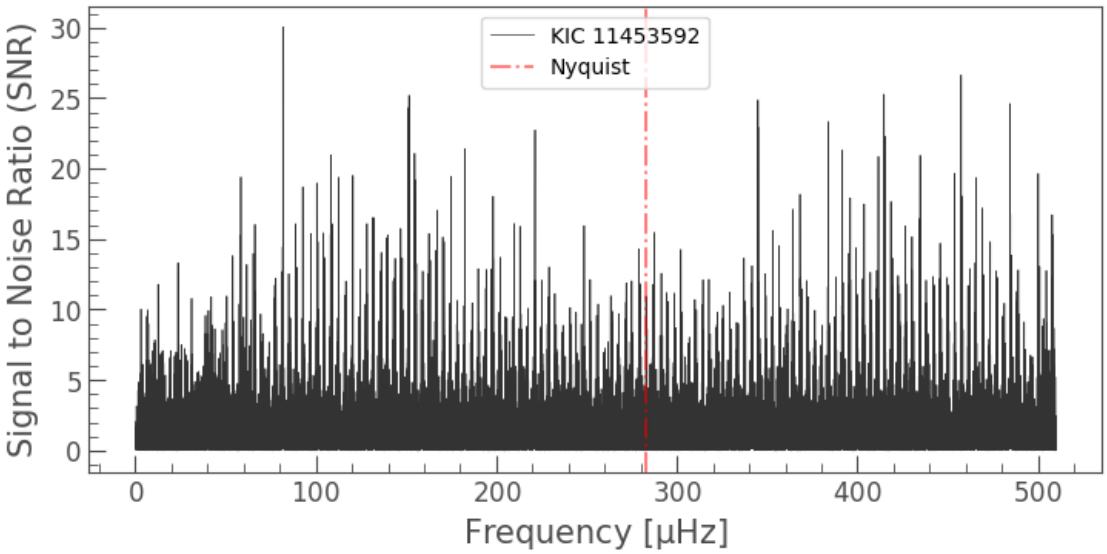
In [21]:
```
from astropy import units as u
pgl = lc.to_periodogram(freq_unit=u.microhertz, nyquist_factor=1.8)
ax = pgl.plot(scale='log')
ax.axvline(pgl.nyquist.value, c='r', linestyle='-.',label='Nyquist', alpha=.5)
pgl.smooth().plot(scale='log', ax=ax)
```

Out[21]: <matplotlib.axes._subplots.AxesSubplot at 0x118317908>



In [22]:
```
snrl = pgl.flatten()
ax = snrl.plot()
ax.axvline(pgl.nyquist.value, c='r', linestyle='-.',label='Nyquist', alpha=.5)
ax.legend()
```

Out[22]: <matplotlib.legend.Legend at 0x11da90d68>


KIC 11453592
Nyquist
Signal to Noise Ratio (SNR)
Frequency [μHz]
0
5
10
15
20
25
30
0
100
200
300
400
500