Algol data reduction

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Python

Heliocentric Correction can be done using PyAstronomy [1]

```
PyAstronomy.pyasl.helcorr(obs_long, obs_lat, obs_alt, ra2000, dec2000, jd, debu
```

Fitting functions

Listing 1: Using polyfit

```python
import numpy as np

data = np.loadtxt("meas.dat")

# calculate polynomial
z = np.polyfit(data[0], data[1], 3)
f = np.poly1d(z)
```

Listing 2: Using curve_fit

```python
import numpy as np

data = np.loadtxt("meas.dat")

def fit_func(x, m, s):
    exp(-(x-m)*(x-m)/s/s)

params = np.curve_fit(fit_func, data[0], data[1])

[a, b] = params[0]
```

Listing 3: Or better

```python
import numpy as np

data = np.loadtxt("meas.dat")
```

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[1] https://github.com/sczesla/PyAstronomy

```
model = np.loadtxt("model.dat")

...
```