



Use the Lomb-Scargle periodogram to convert the signal from the time to the frequency domain



Adjust the bandpass by multiplying the power by 0.85^2



Add instrumental noise from TESS



Remove instrumental noise from *Kepler*



Smooth the data by convolving it with 1D Gaussian with σ =5



Adjust the binwidth for the shorter TESS observations



Use the adjusted bin width to calculate frequency bins for the TESS dataset.

Interpolate the power in each *Kepler* bin to estimate power values at the TESS frequencies.



Add χ^2 2-DOF noise to the power P, using

$$P_{\rm obs} = -P \times \ln(s)$$

where s is a random number from a uniform distribution between 0 and 1