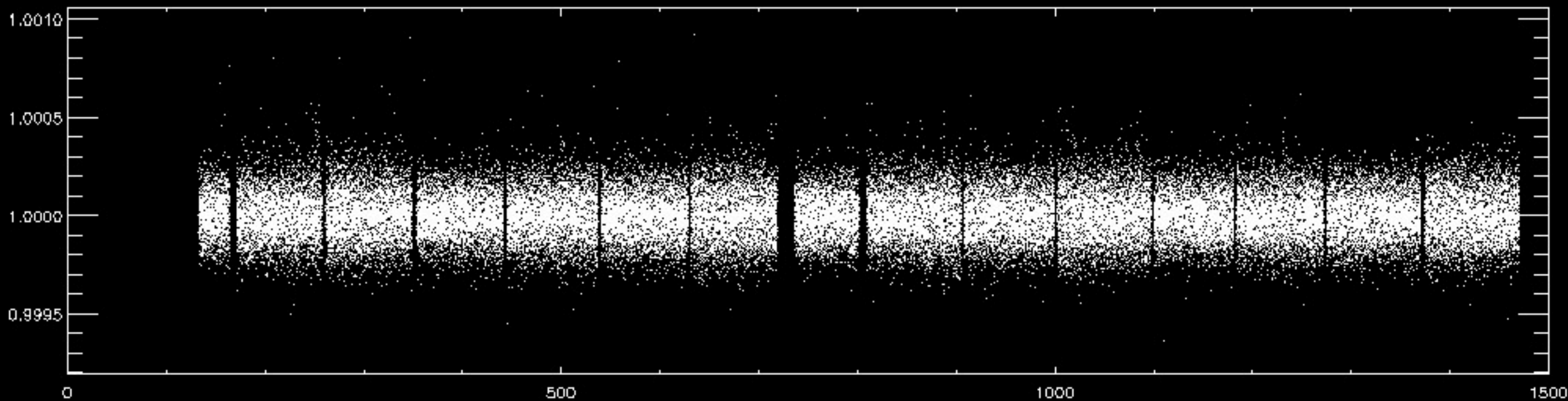


Pound Stars Update

Bekki

KIC 2443393

Detrended flux: PDC SAP, median filter in segments
broken up by data gaps, wavelet interpolation in gaps



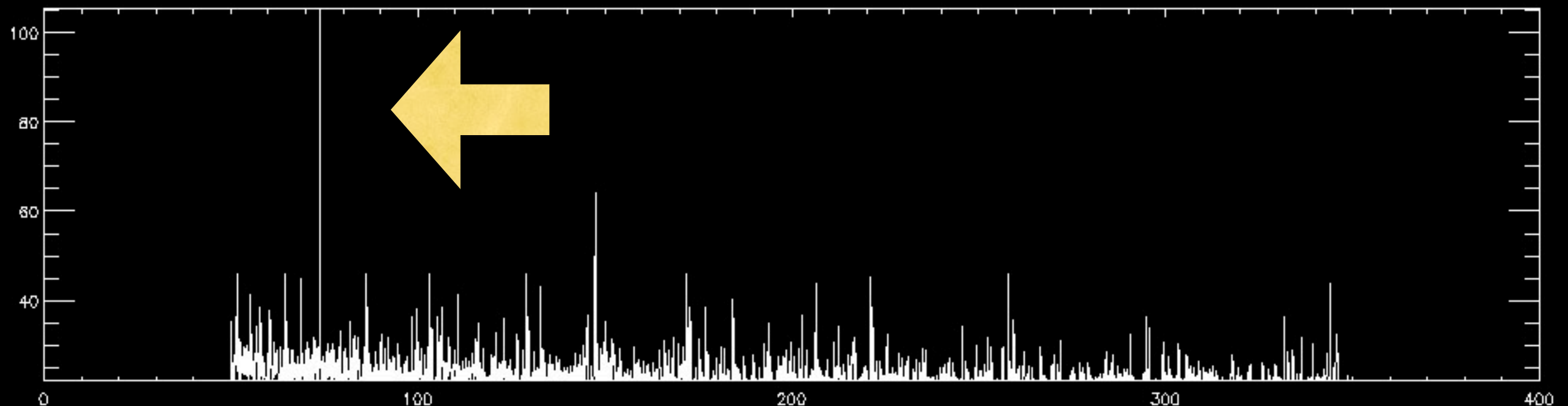
Detecting known KOI

Fix duration (13 hour) and depth (80 ppm) [actual duration 11 hour and depth 113 ppm]

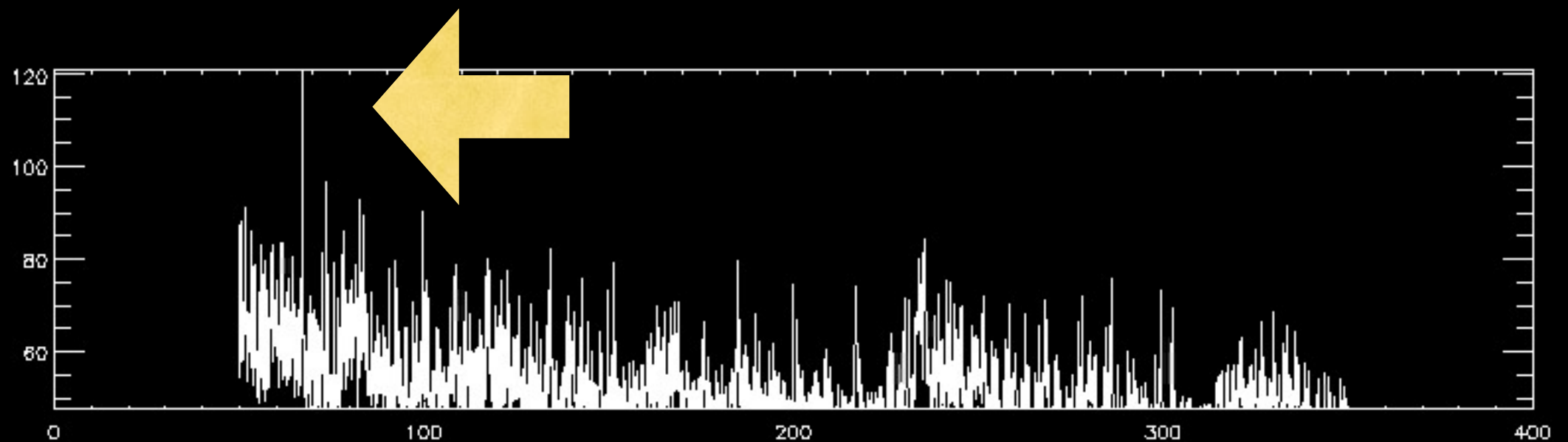
Use χ^2 likelihood

At each point, see if adding transit improves likelihood

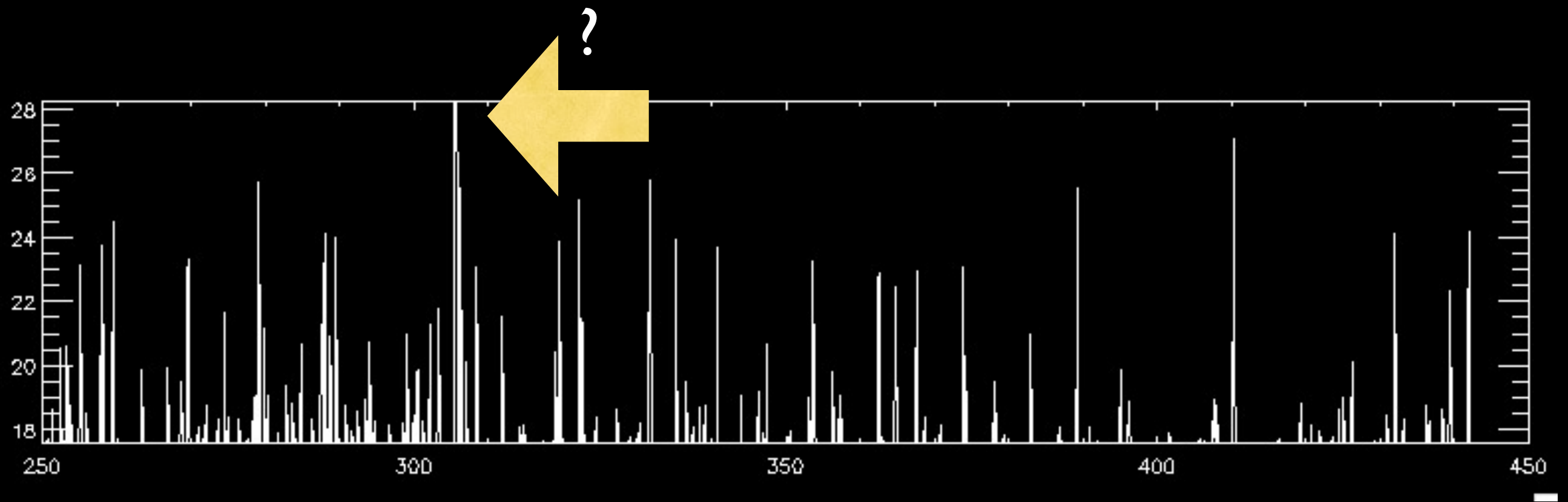
If so, record improvement; if not, no detection and delta likelihood = 0



Using wavelet likelihood



Remove known KOI and search for Earth-like



Next steps

- Other pound stars
- Dan and Tom's injections
- Why isn't wavelet likelihood (instead of χ^2) working better