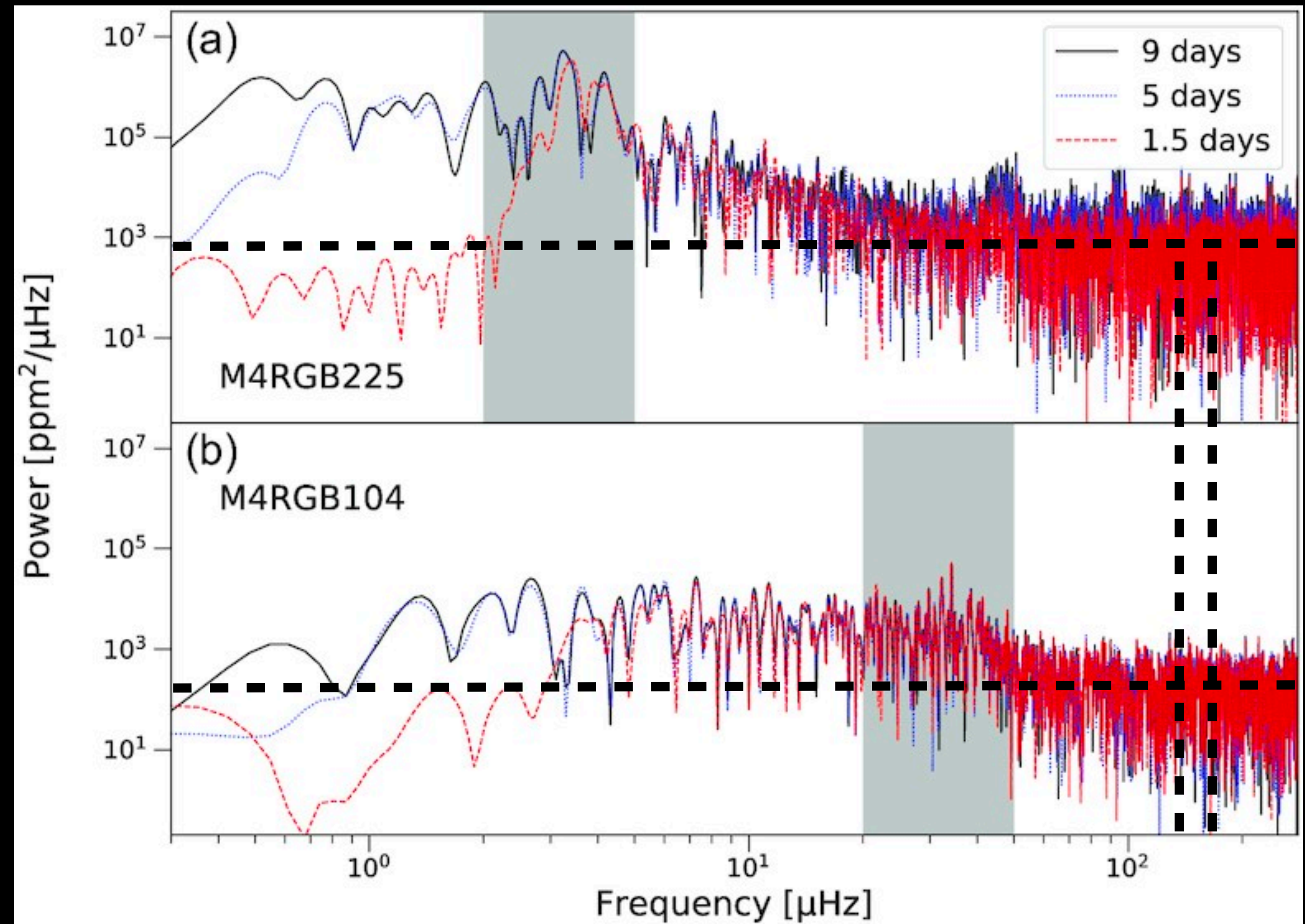


Data Treatment

Aperture mask and de trended

- Due to the large pixel size and the crowd environment , there is evidence of blending between stars
- 3 steps:
 - 1) custom individual mask
(Around peak)
 - 2) A pixel level decorrelation
(instrumental drifts)
 - 3) Self flat fielding corrector
(long terms trends, they pick a time scale of 9 days)

Lomb-Scargle periodograms



Data Treatment

Shape base distance Algorithm (SBD)

- to quantify the similarity between two power spectra.
- A perfect correlation corresponds to a metric of 0 and an Anticorrelation corresponds to a metric of 2.
- They test this for neighbour stars and discard those who had very similar pattern (Contaminated)

(angular distance of $\sim 8''$) a neighbouring star.

