



Rapid and coarse characterisation

An ML cool stars catalogue for Kepler and K2

ML - a
concept



Temperature

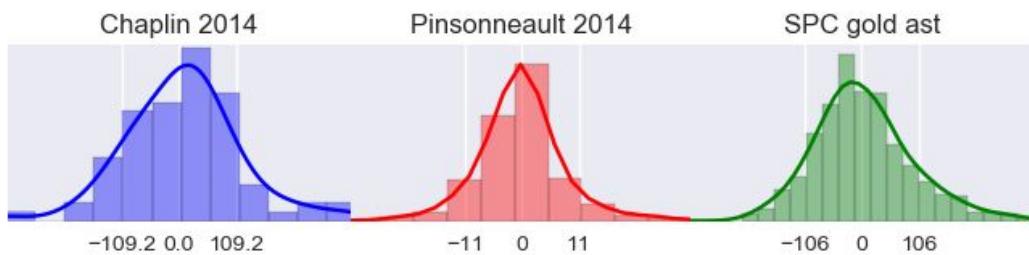
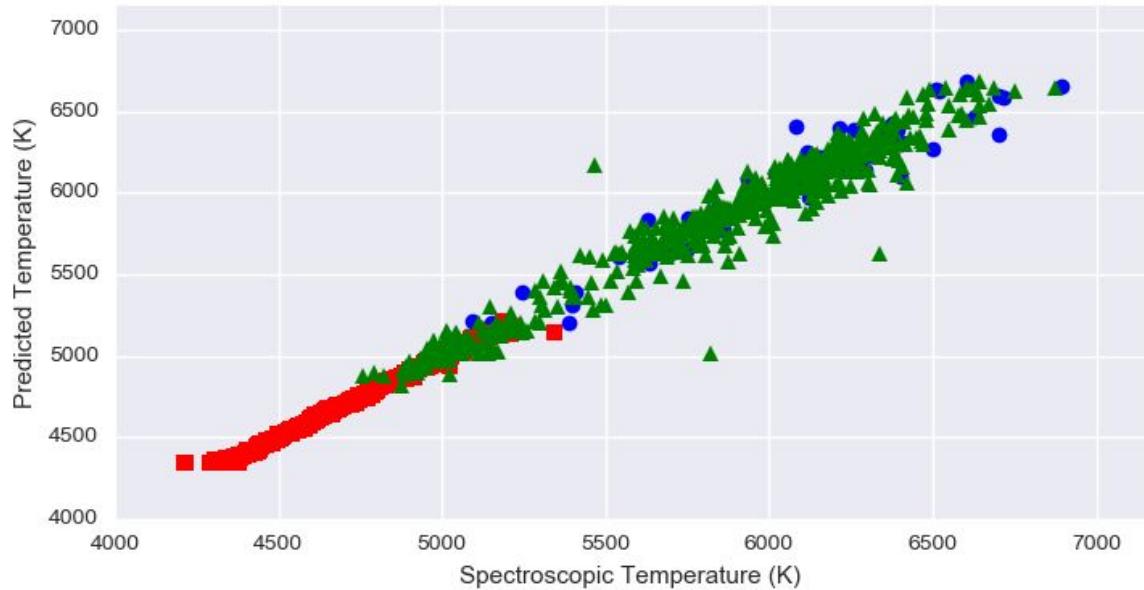
Granulation

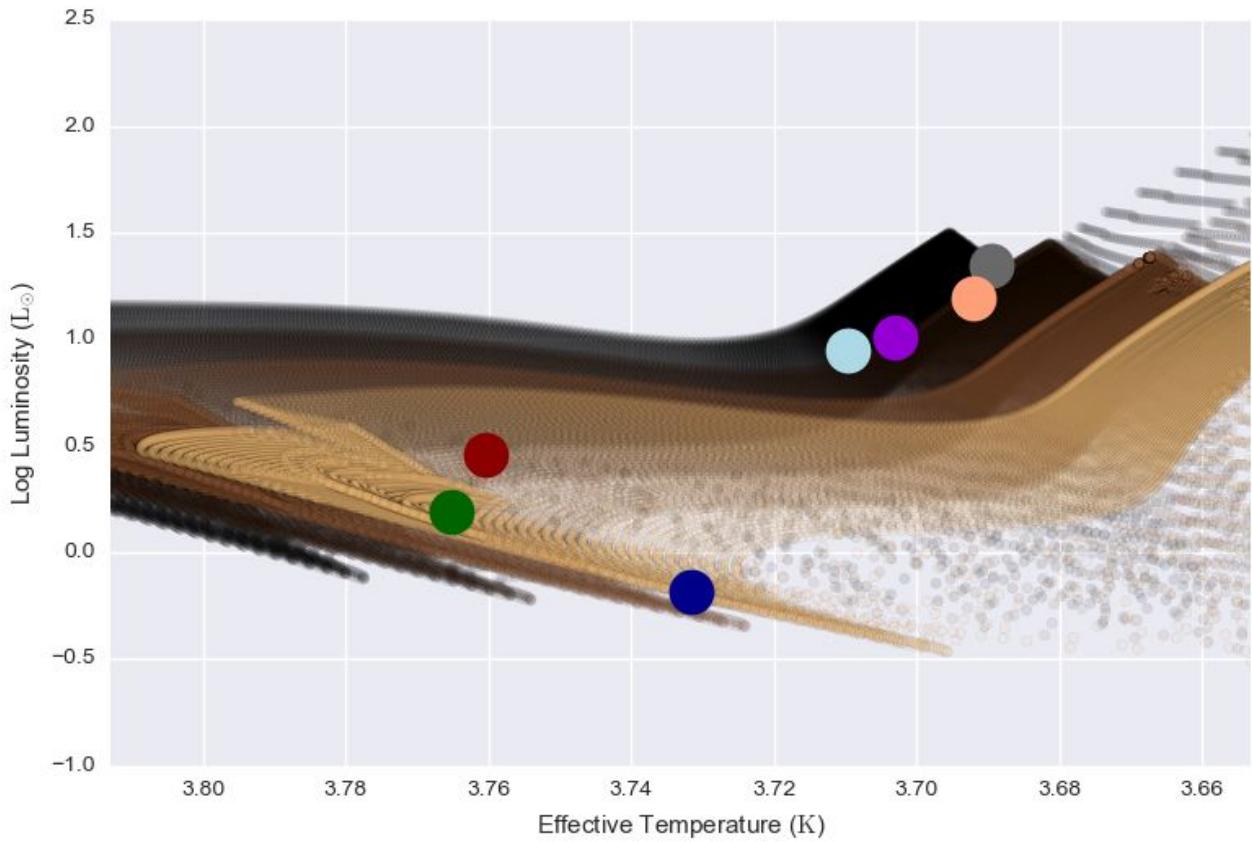
Detecting
oscillations

‘Flicker’

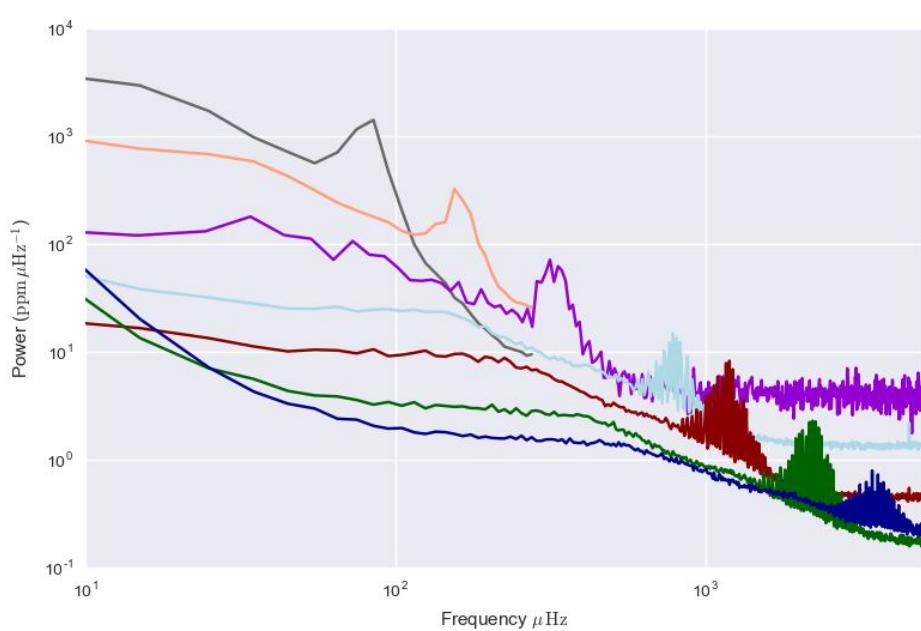
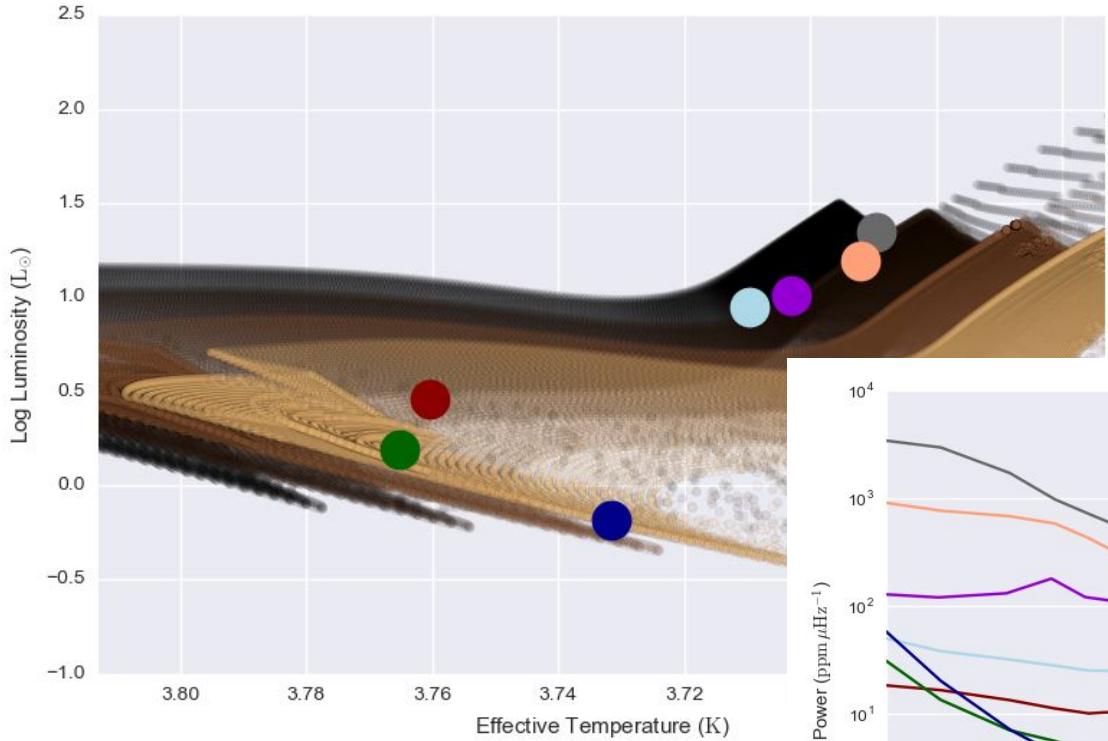
‘Flicker’
uncertainties

[M/H]

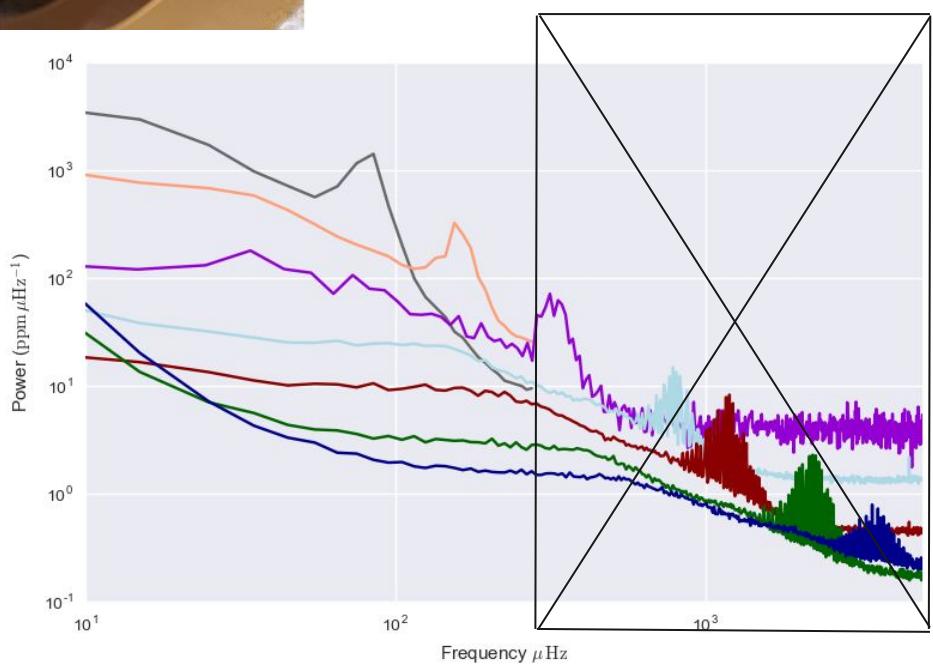
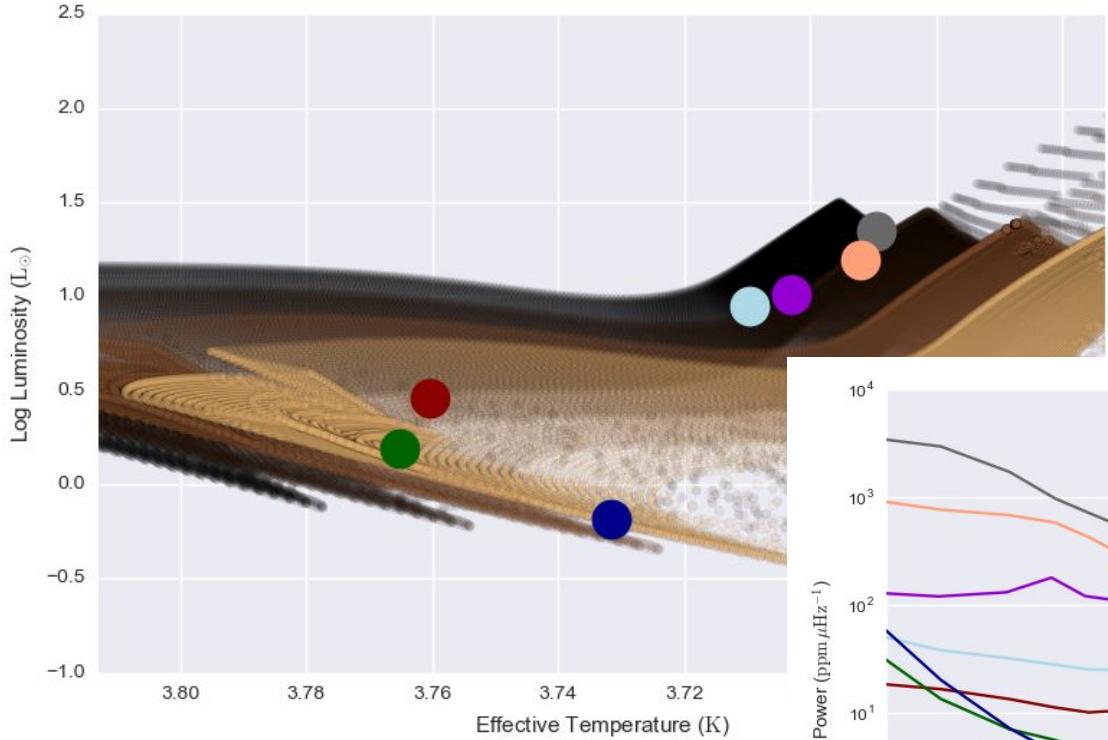




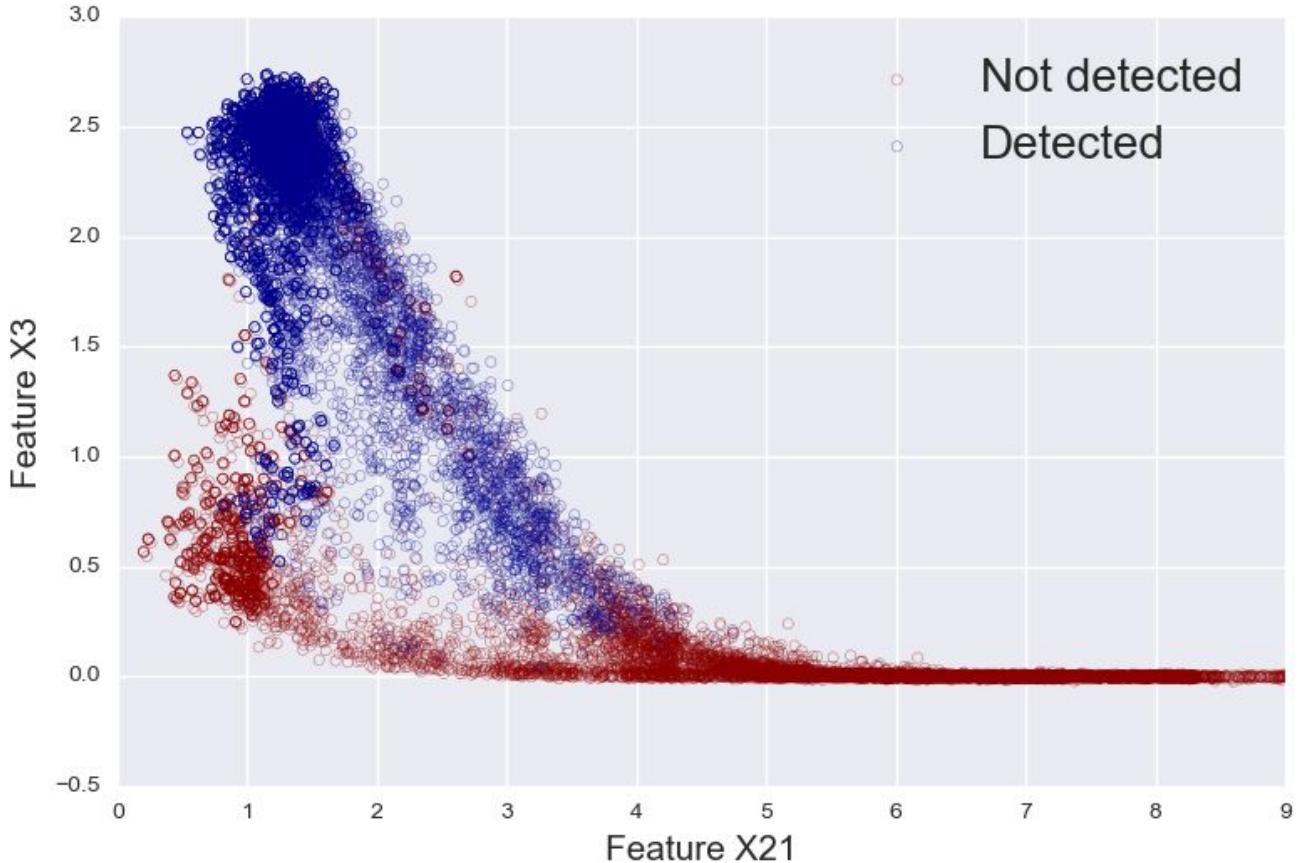
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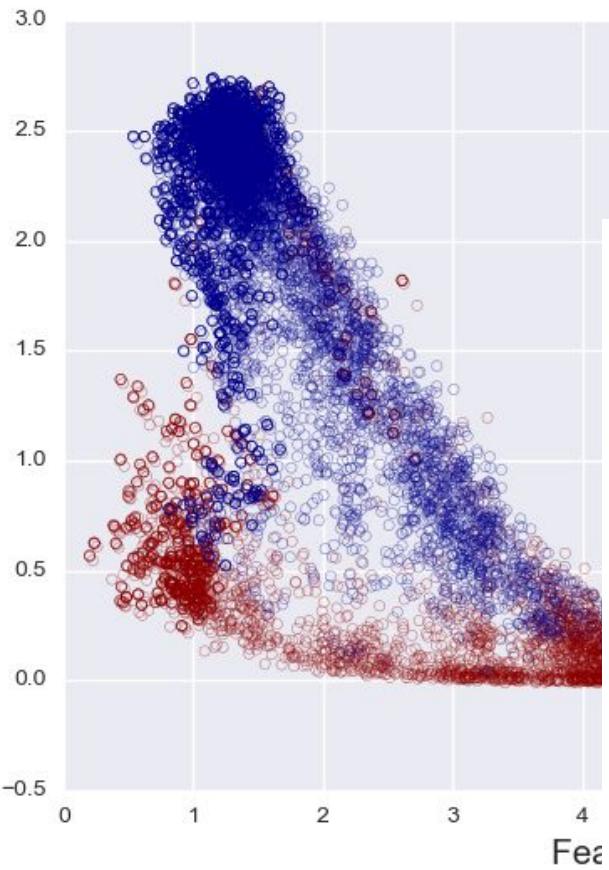
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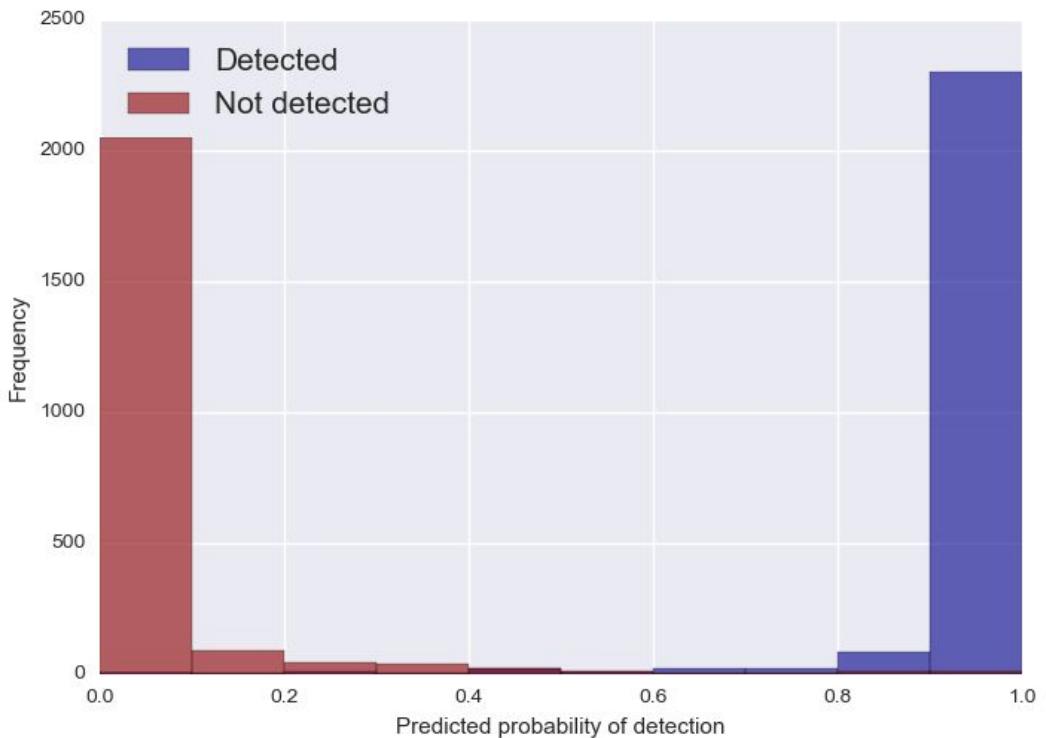
Chaplin 2014
Pinsonneault 2014
+ Added noise



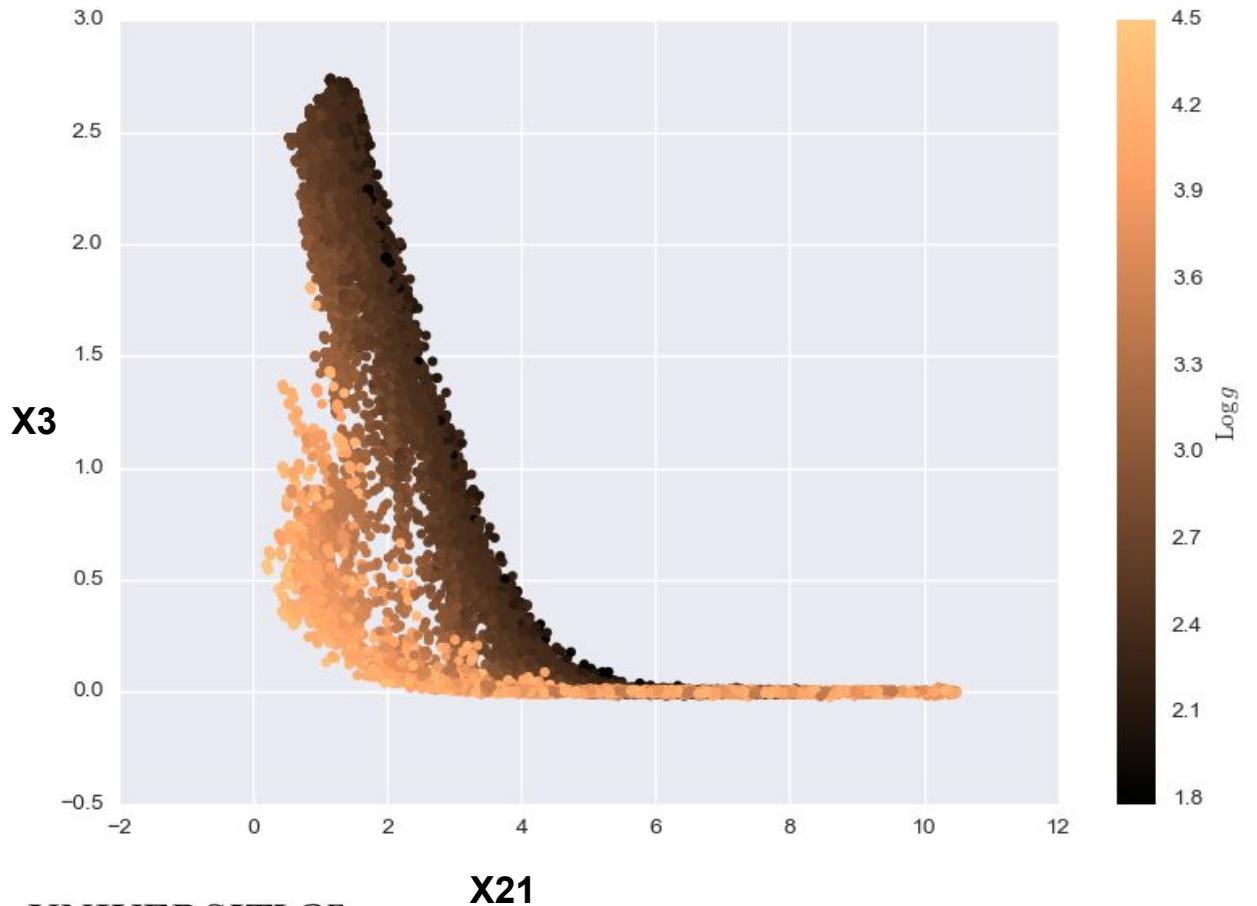
Feature X3



Not detected
Detected

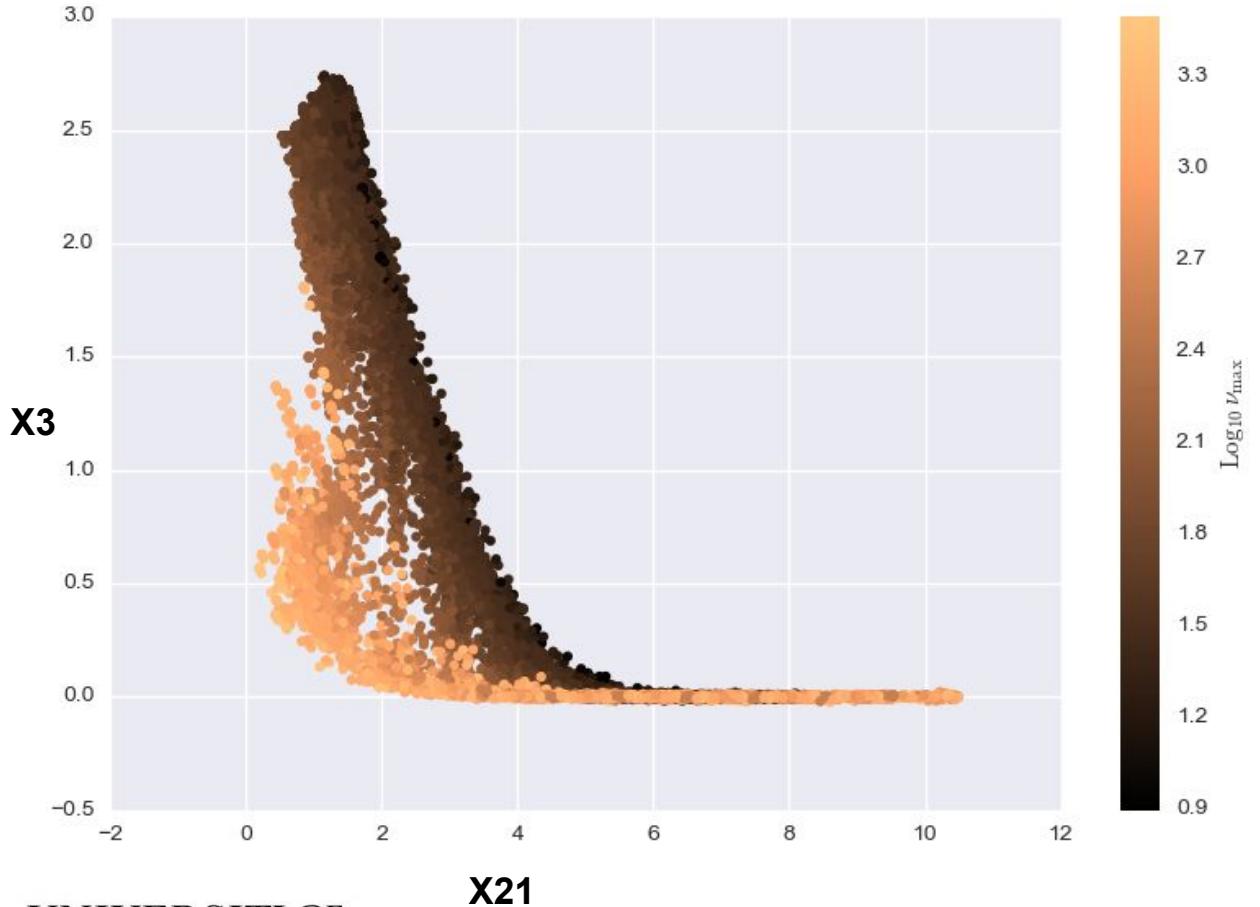


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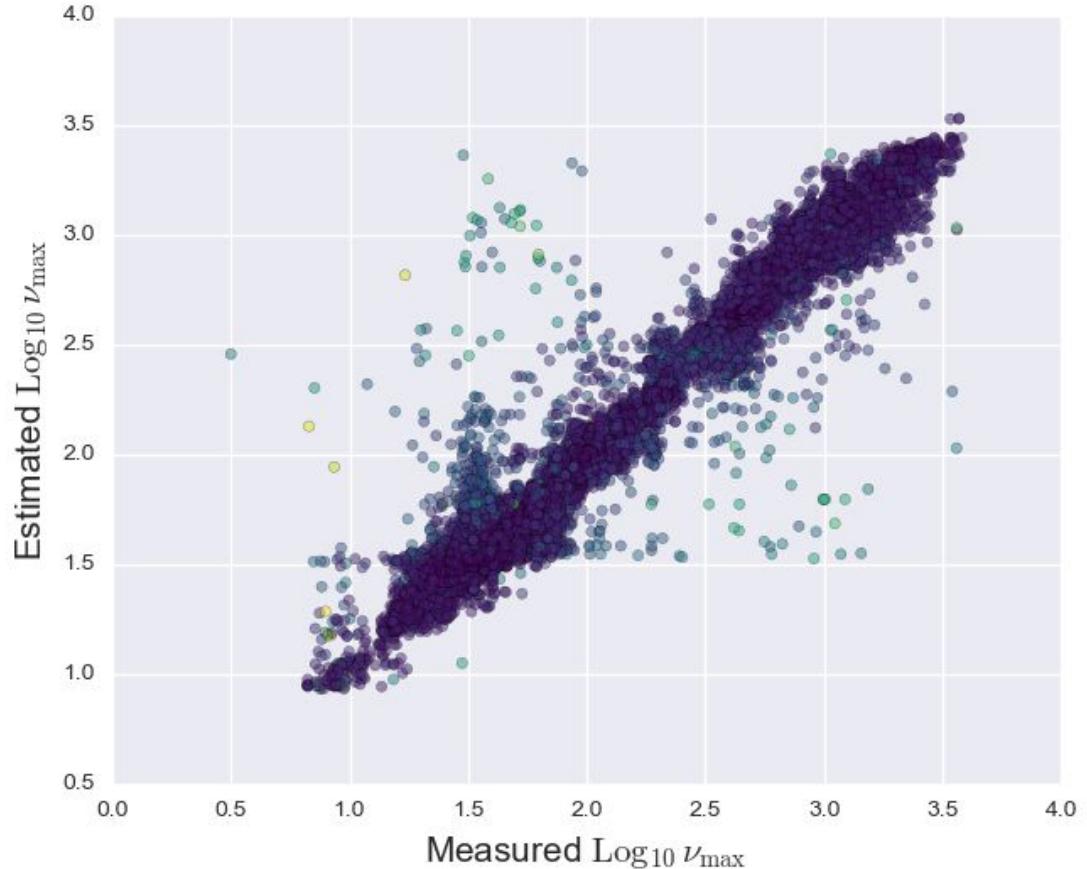


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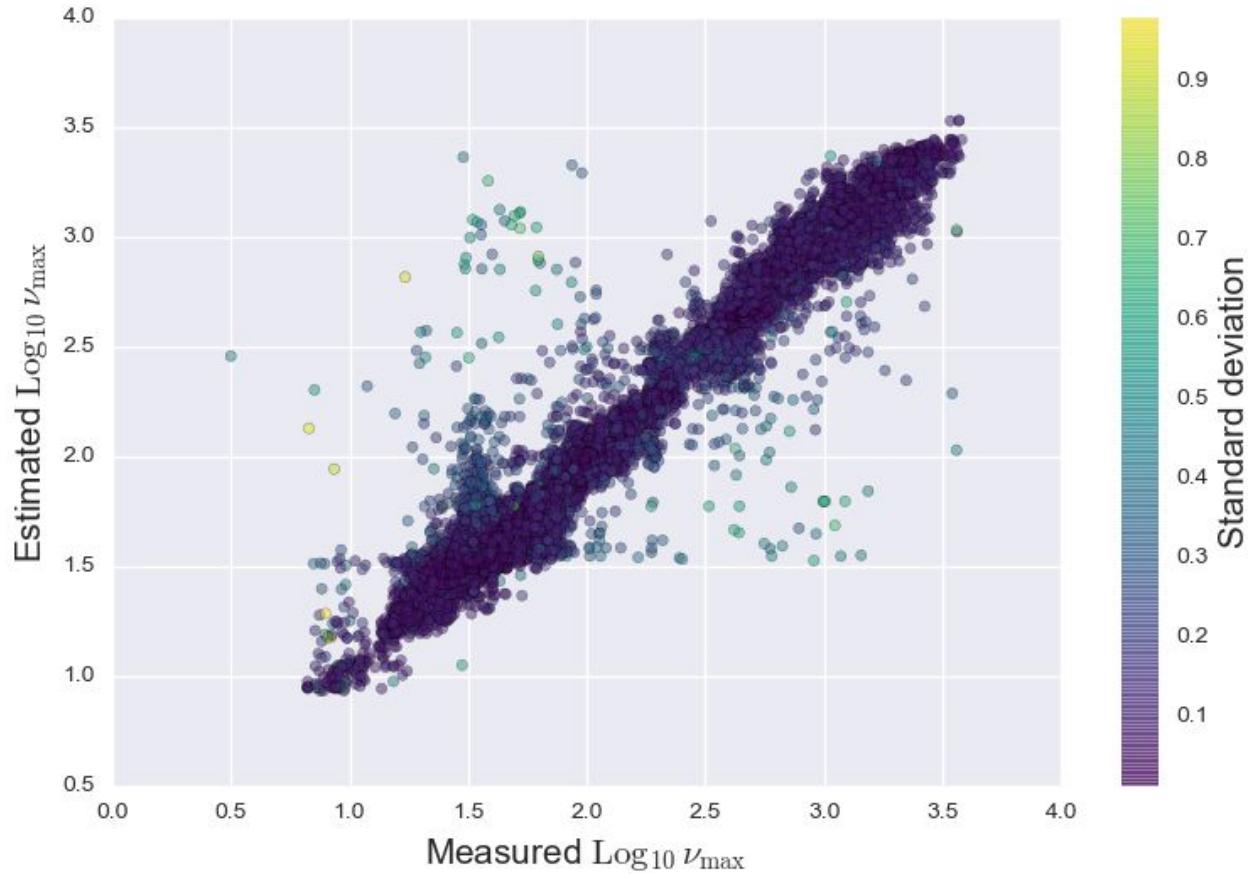
C.f. Flicker -
Hekker+ 2012
Bastien+ 2013 & 2016
Kipping+ 2014
Angus+ 2016



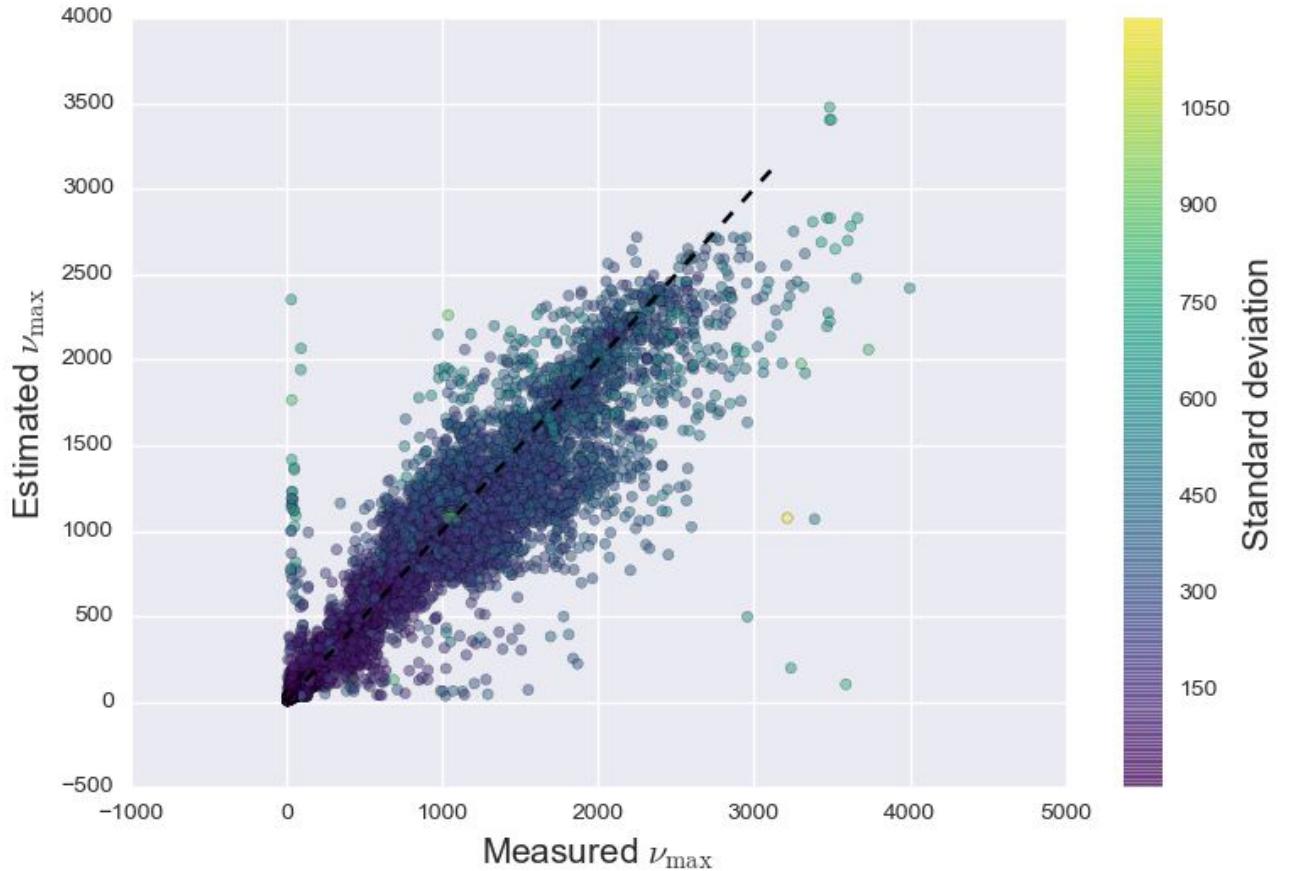
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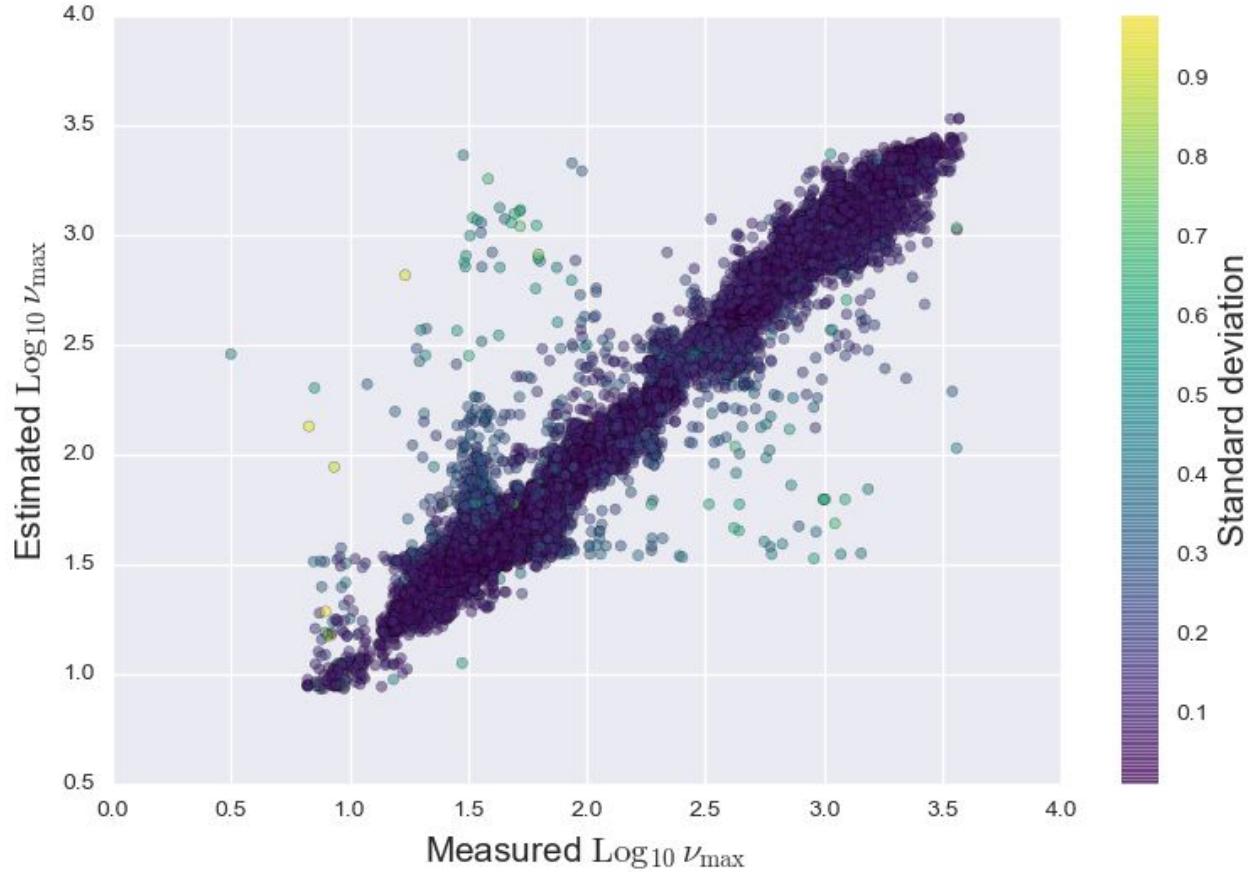
Magnitude limit ~ 14 Kp



Magnitude limit ~ 14 Kp



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Median standard deviation

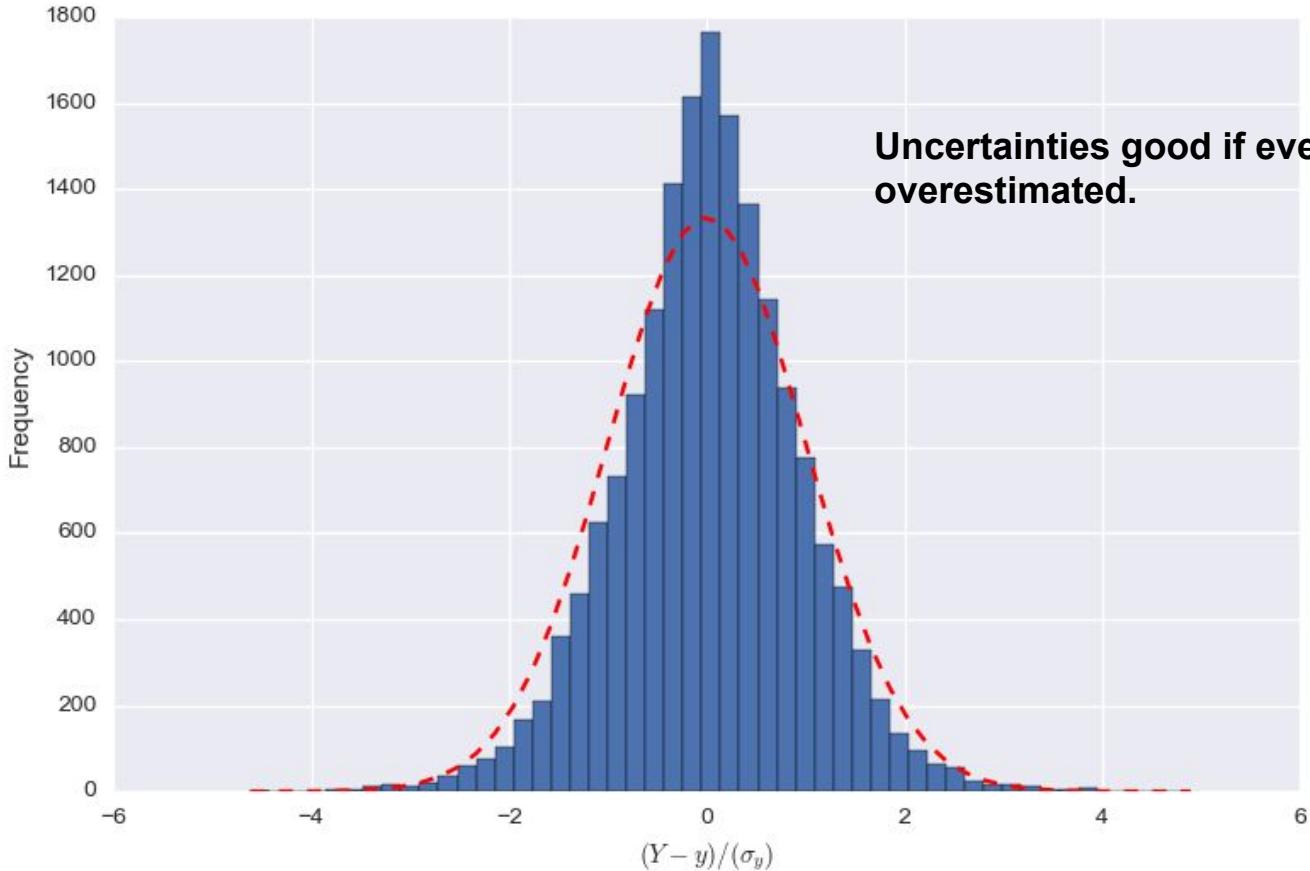
- Bastien+ 2016 ~ 0.058
- This work ~ 0.044 (logg not numax)

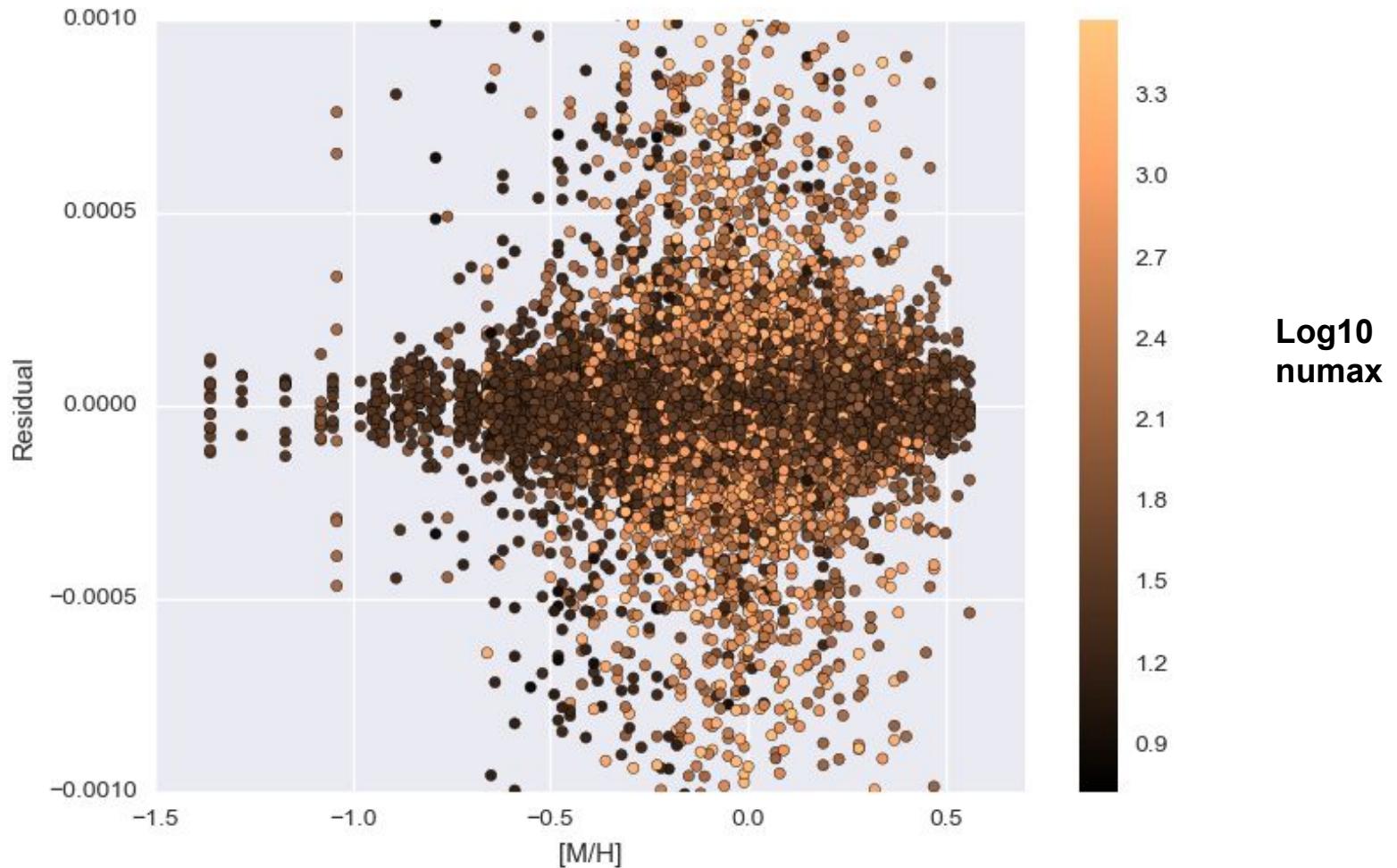
Standard deviation

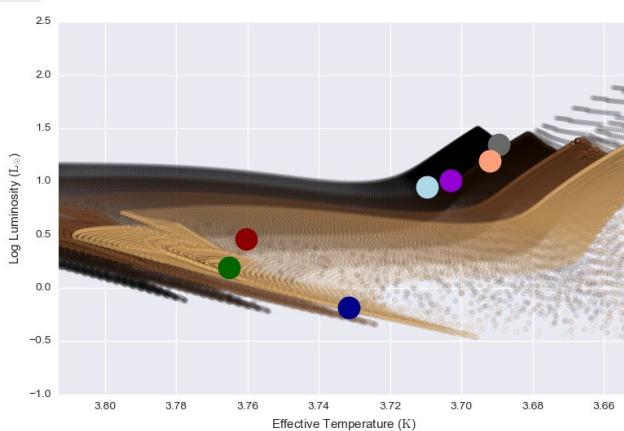
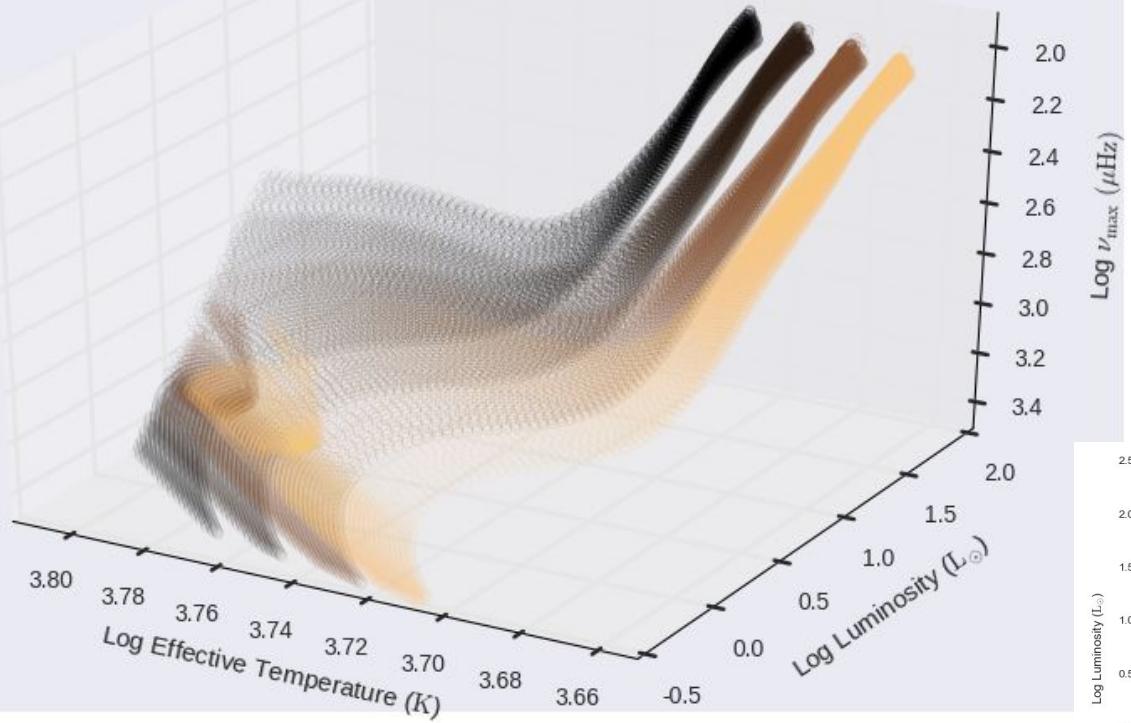
- Bastien+ 2016 ~ 0.096
- This work ~ 0.095 (logg not numax)



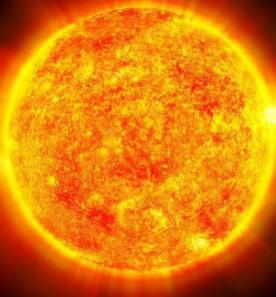
Uncertainties good if ever so slightly overestimated.







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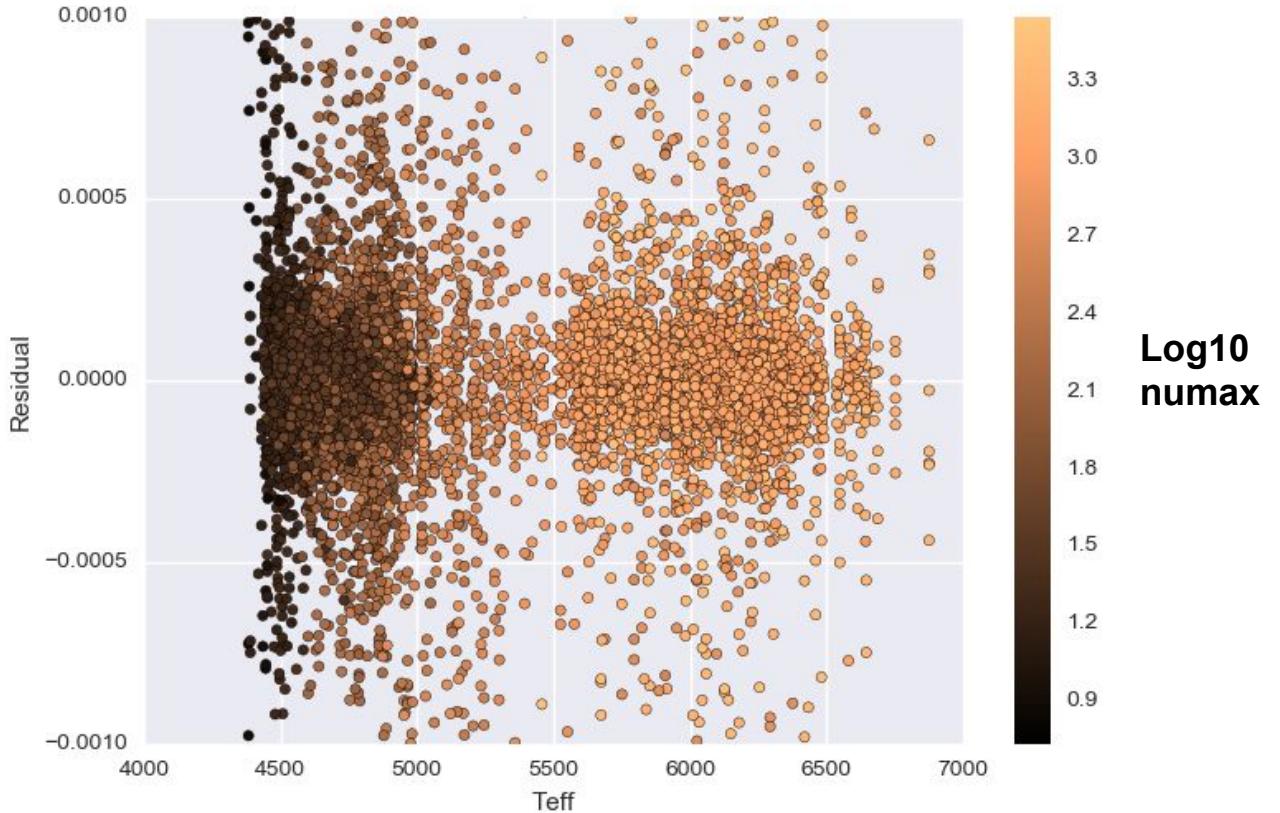
Research Fellow in Solar/Stellar Seismology at the University of Birmingham

Helioseismology and asteroseismology: the Solar-Stellar Connection

For more information chat to *Guy Davies, Andrea Miglio, Yvonne Elsworth* or email *Bill Chaplin*

To apply, search for post 43840 at <http://www.birmingham.ac.uk/staff/jobs/>

Closing date for applications: July 24



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