

# Colour Period Diagrams in the Era of Gaia DR2

*Bringing New Life to Old (Known) Open Clusters*

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September 26, 2019

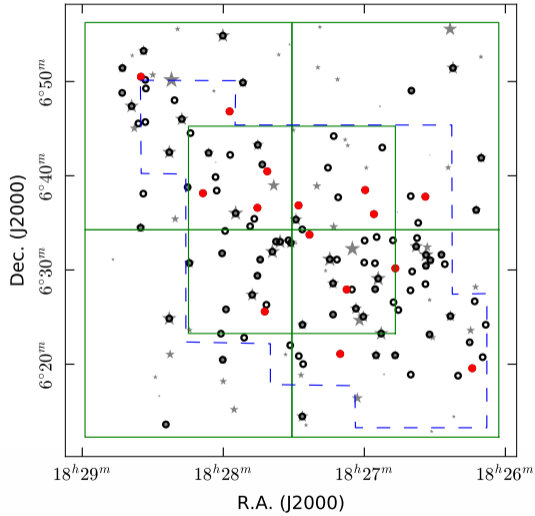


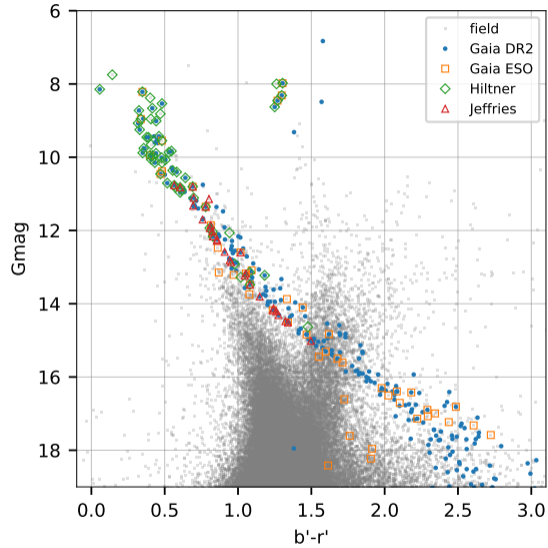


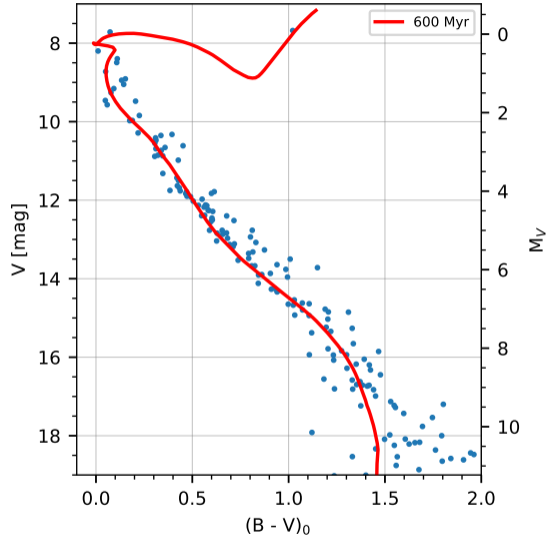
# NGC6633

- ▶ 426 Myrs (Webda)
- ▶ 187 members
- ▶  $r_{50} = 0.36^\circ$
- ▶ 390pc
- ▶ observed with STELLA

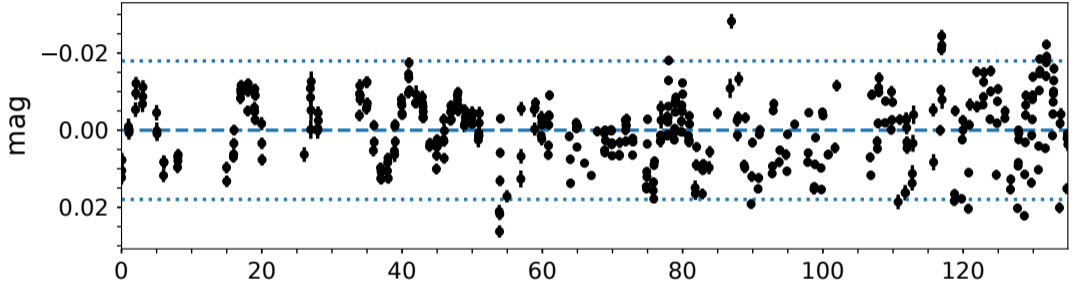






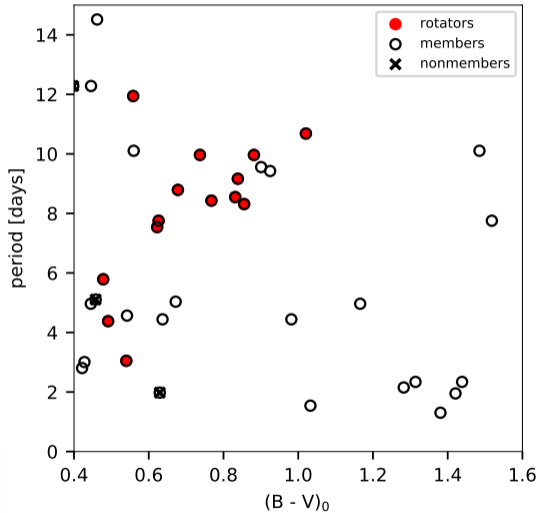


4477215407068775936 (34)  $V = 13.46$   $B-V=0.80$   $S/N = 12.7$

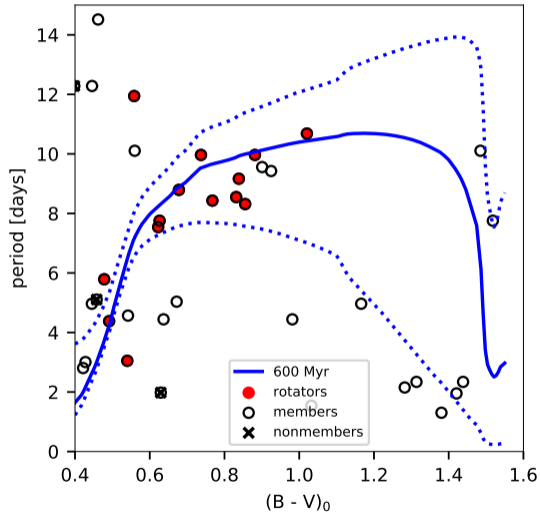




## NGC 6633 Color Period Diagram



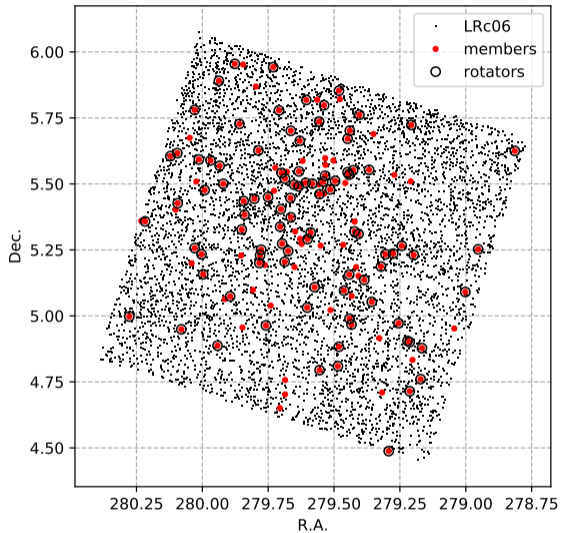
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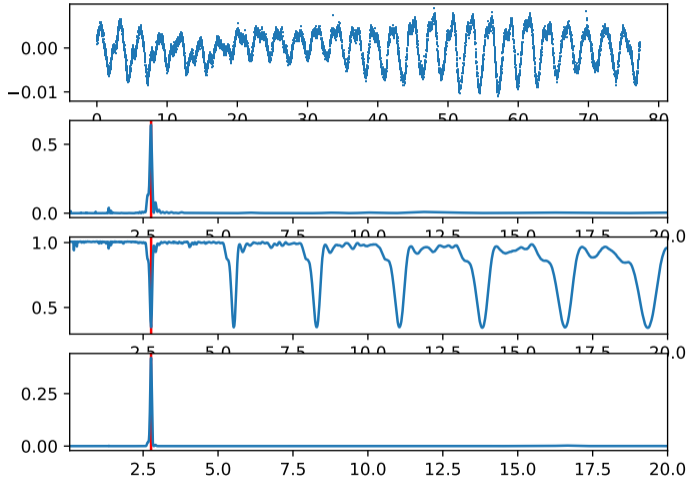
# IC4756

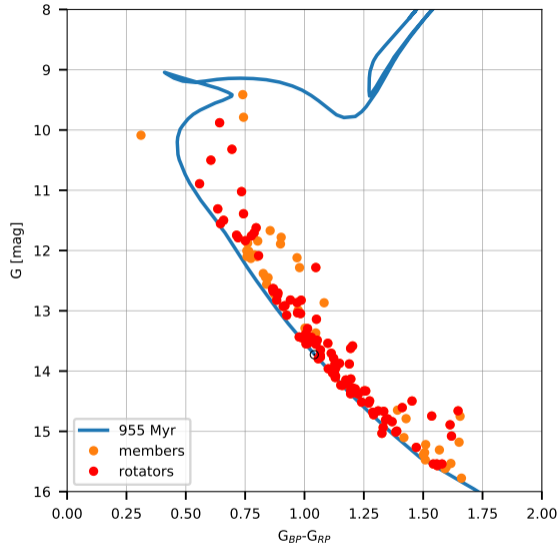
- ▶ 890 Myrs (Strassmeier+2015)
- ▶ 492 members
- ▶  $r_{50} = 0.534^\circ$
- ▶ 470 pc
- ▶ observed by CoRoT



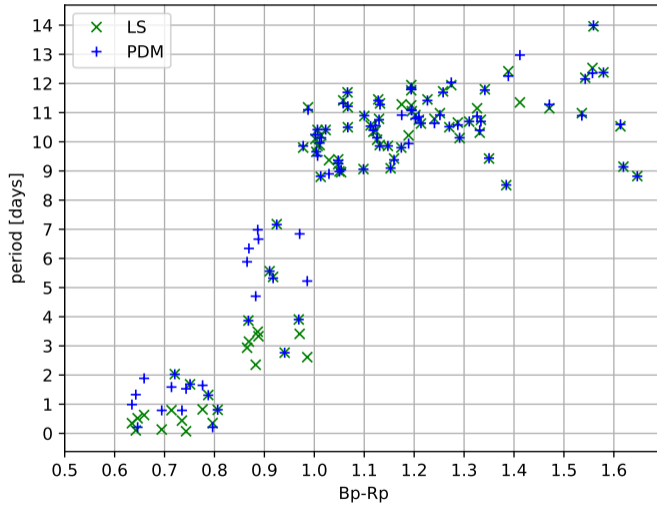


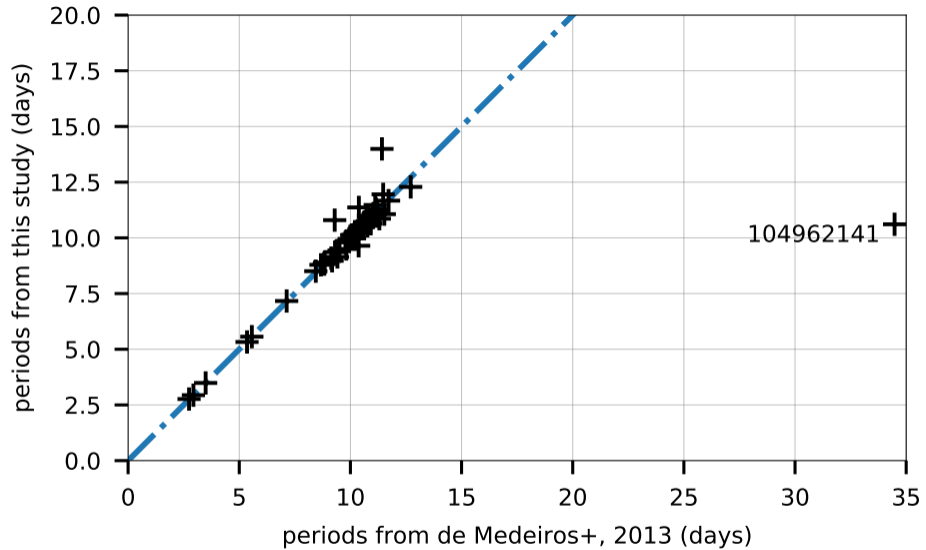
104949706: 12.82mag 0.941mag pwr=0.64 2.77d



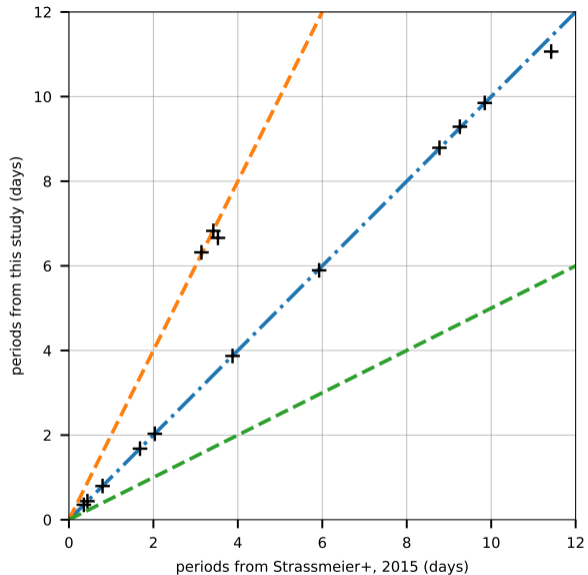
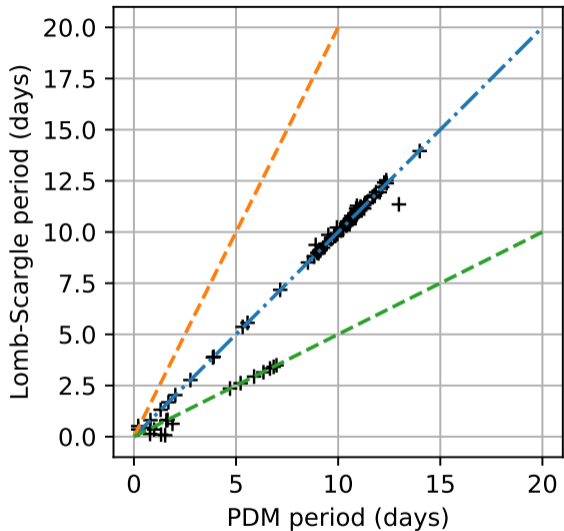


### IC4756 color-period diagram

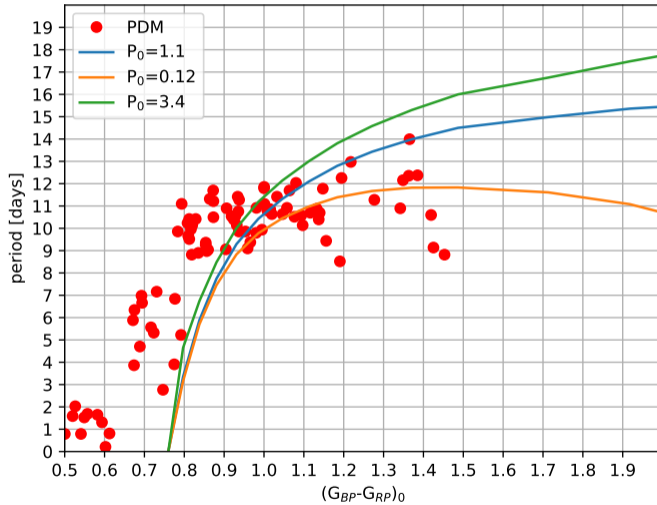








### IC4756 color-period diagram



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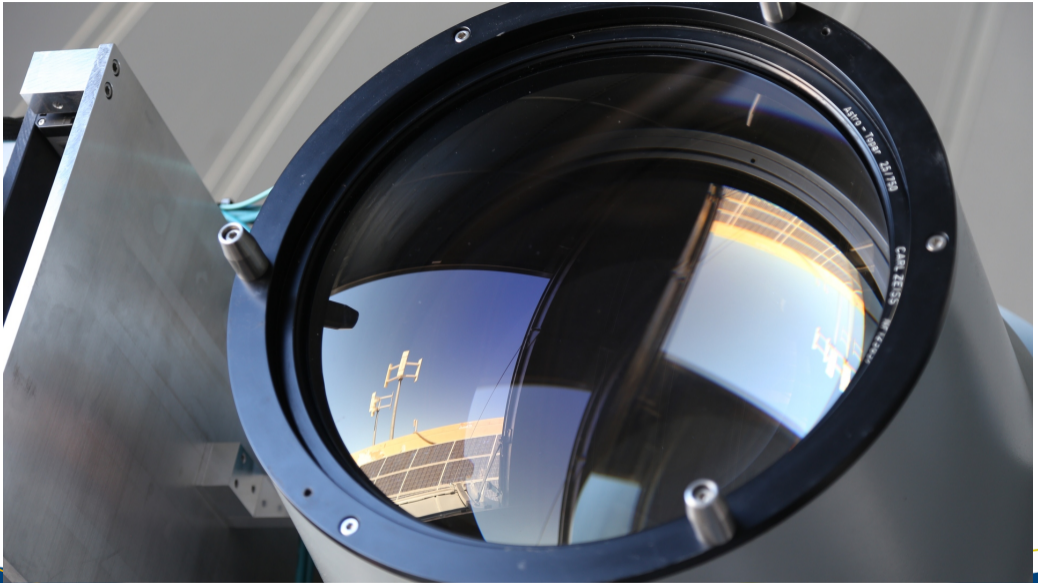


# Conclusions

- ▶ It is worth revisiting observations.
- ▶ NGC6633 keeps getting older (currently 600Myrs)
- ▶ IC4756 suffers from differential reddening.
- ▶ IC4756 could benefit from RV membership.
- ▶ Clusters are bigger than they appear.
- ▶ **Gaia DR2 is great! (Waiting for DR3)**







# References

- ▶ <http://www.jthommes.com>
- ▶ <http://www.alsonwongastro.com>
- ▶ Strassmeier, 2015
- ▶ de Medeiros, 2013
- ▶ Weingrill+, 2019 in prep.
- ▶ Gary Larson