

# Optical albedos of hot Jupiter day sides

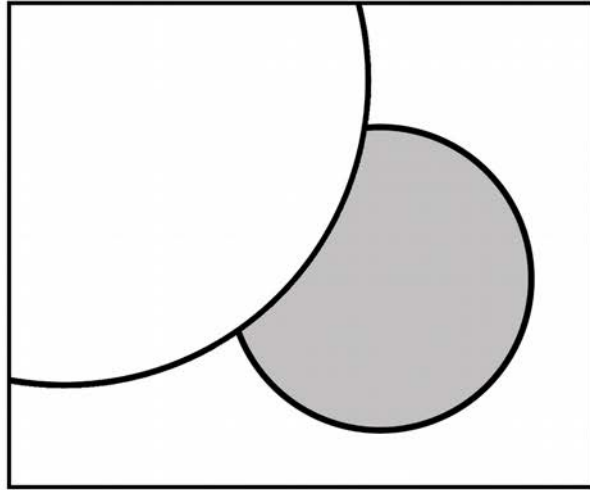
Matthias Mallonn, Carolina von Essen, Enrique Herrero,  
Daniel Kitzmann, Katja Poppenhaeger et al.



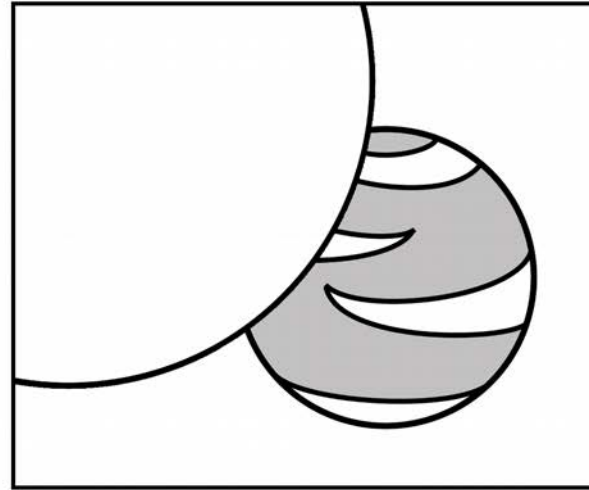
*Leibniz Institute for Astrophysics Potsdam (AIP)*



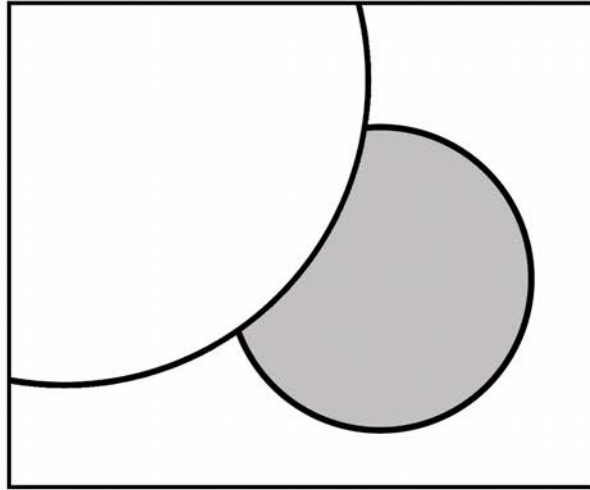
Cloud-free



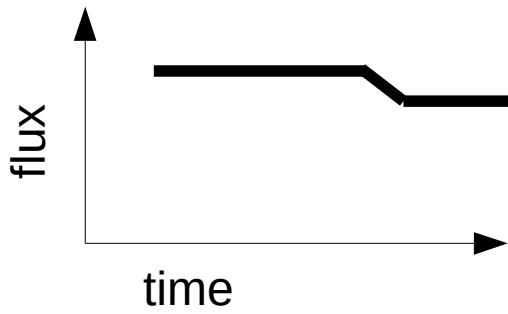
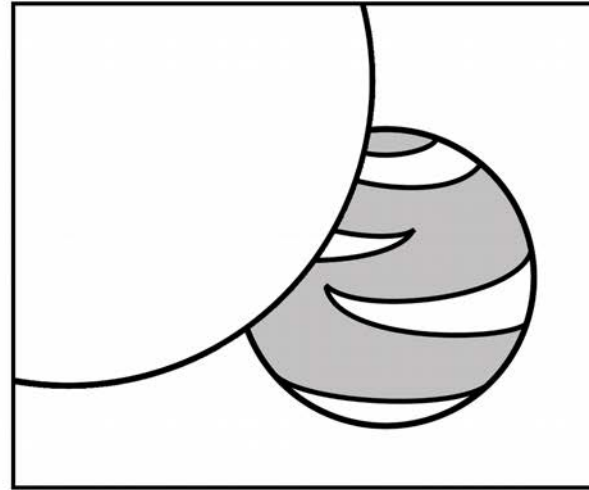
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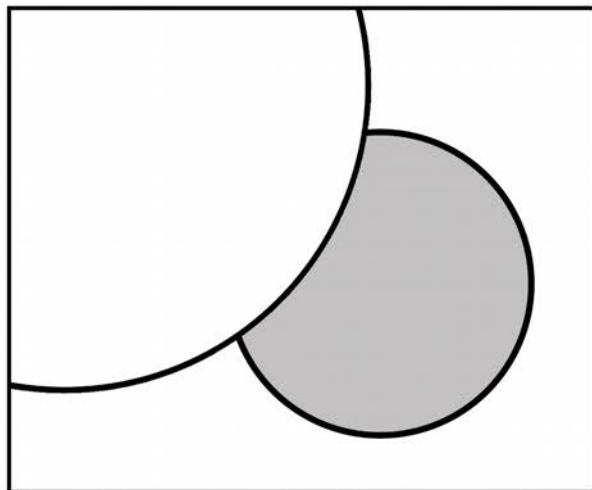
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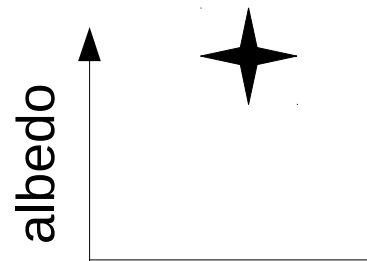
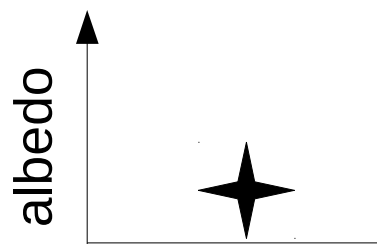
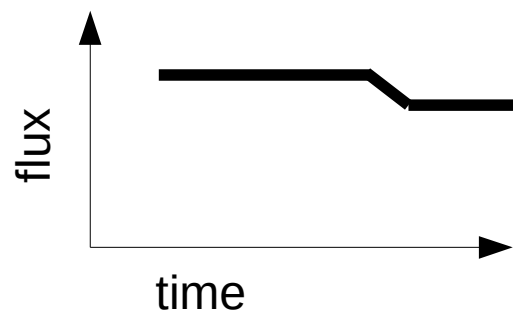
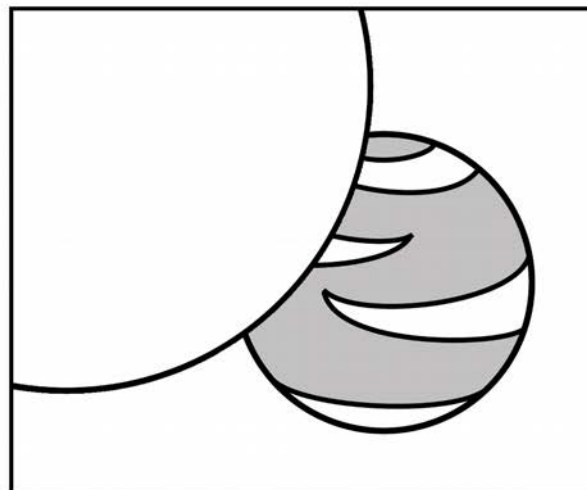
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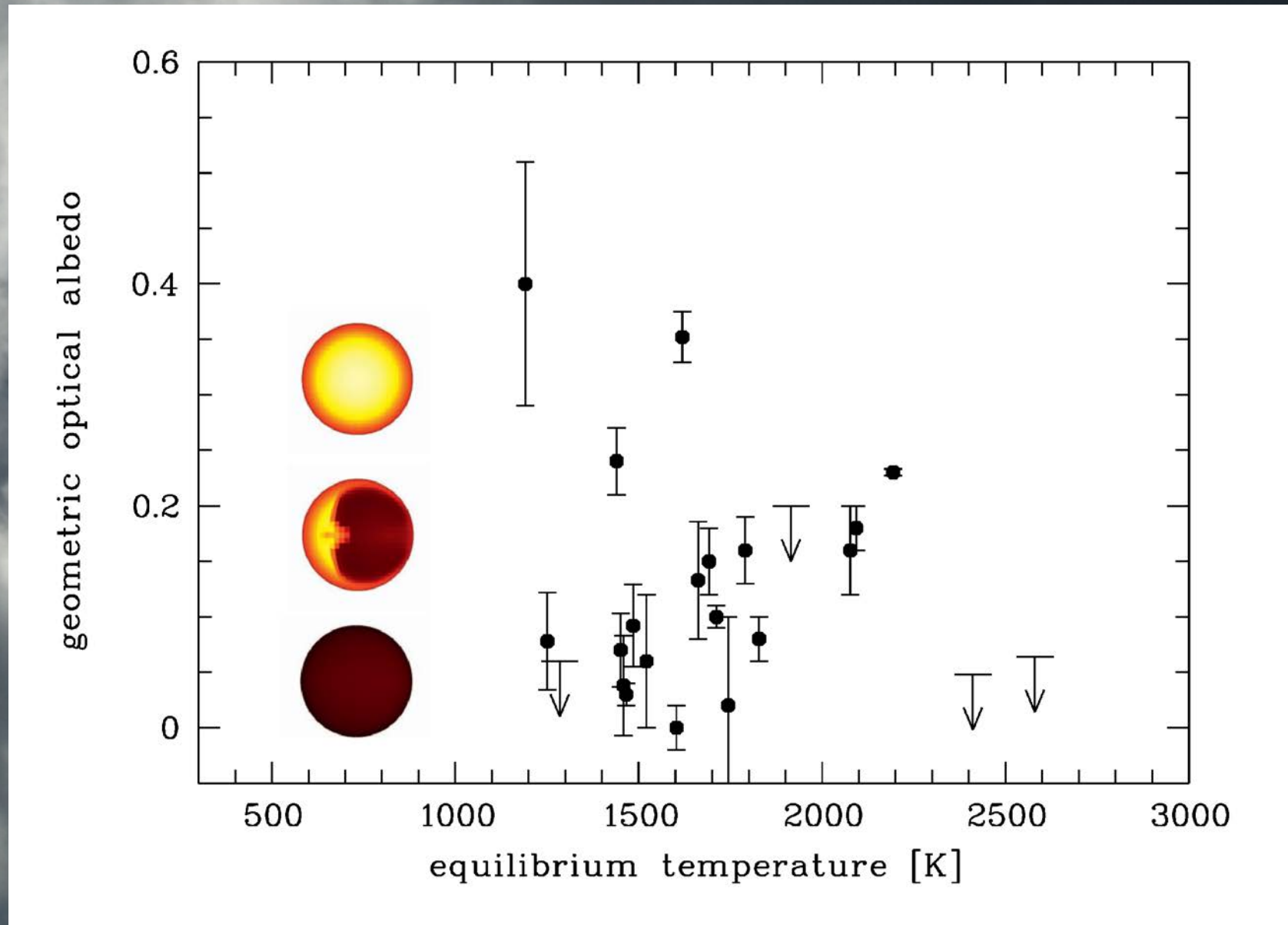
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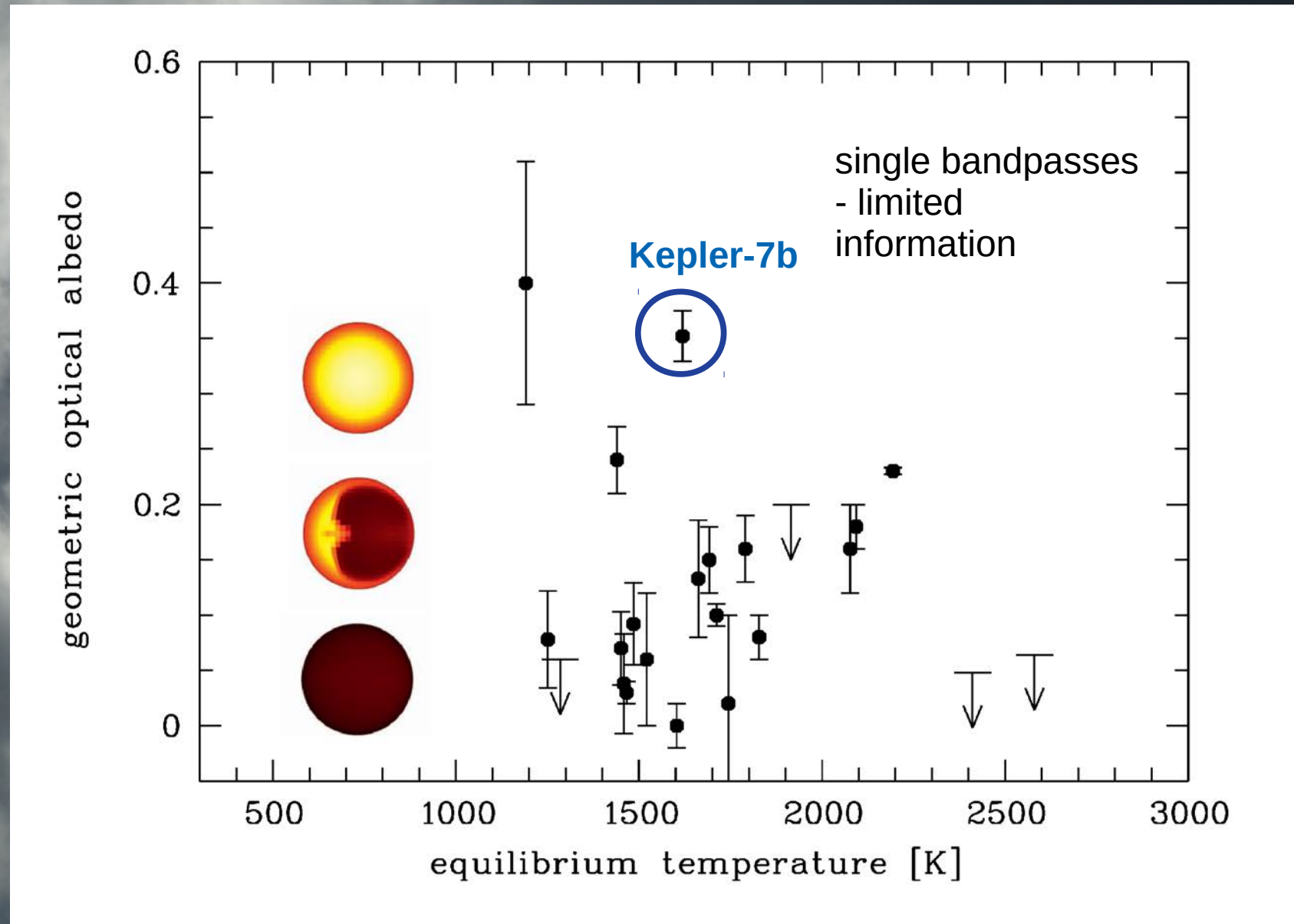
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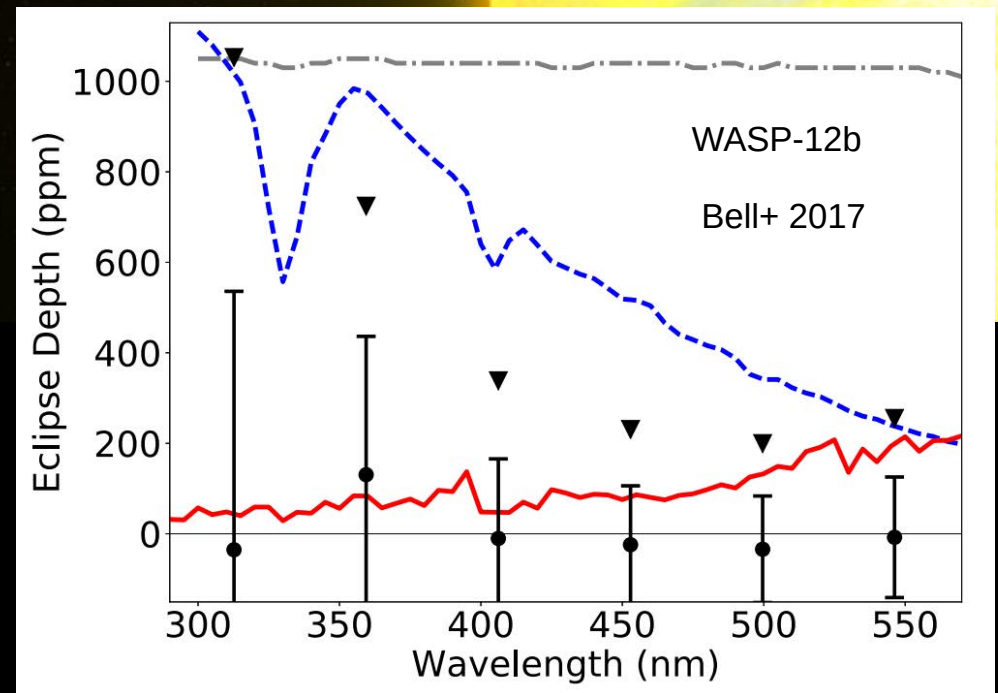
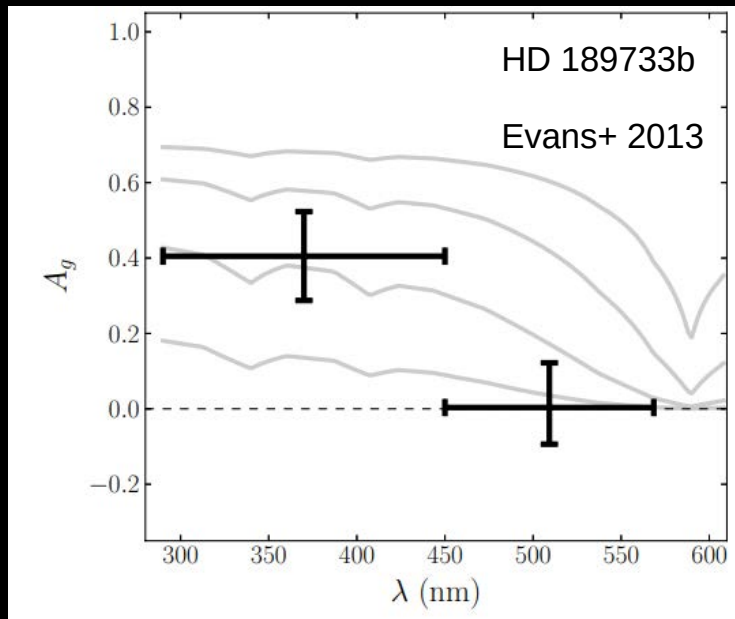
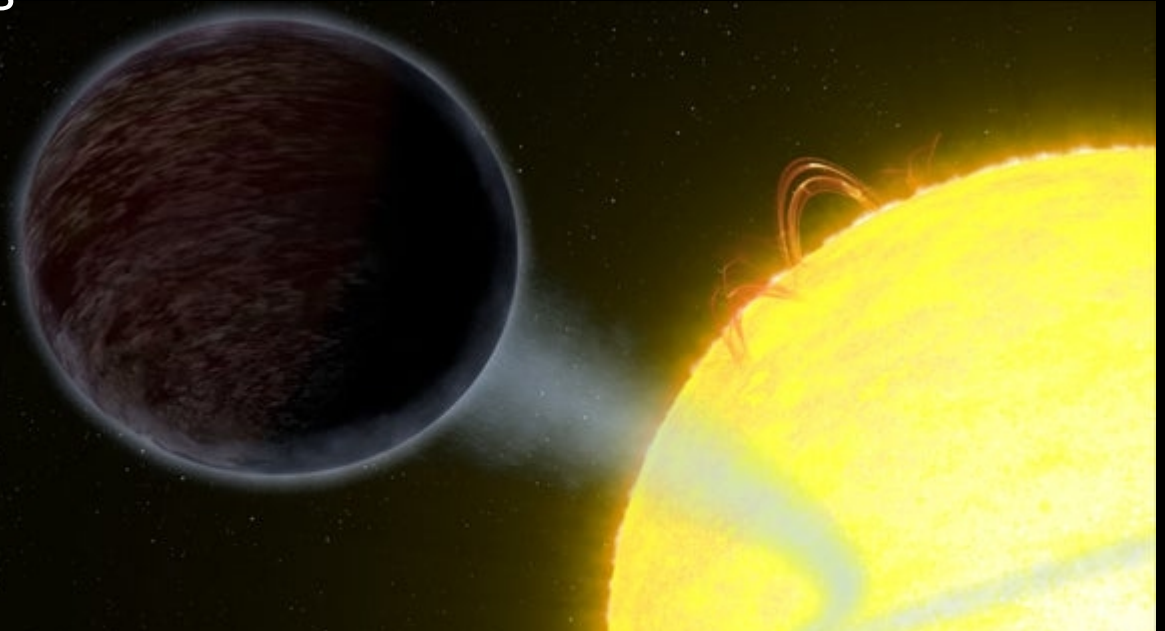
# Diverse albedo distribution from Kepler



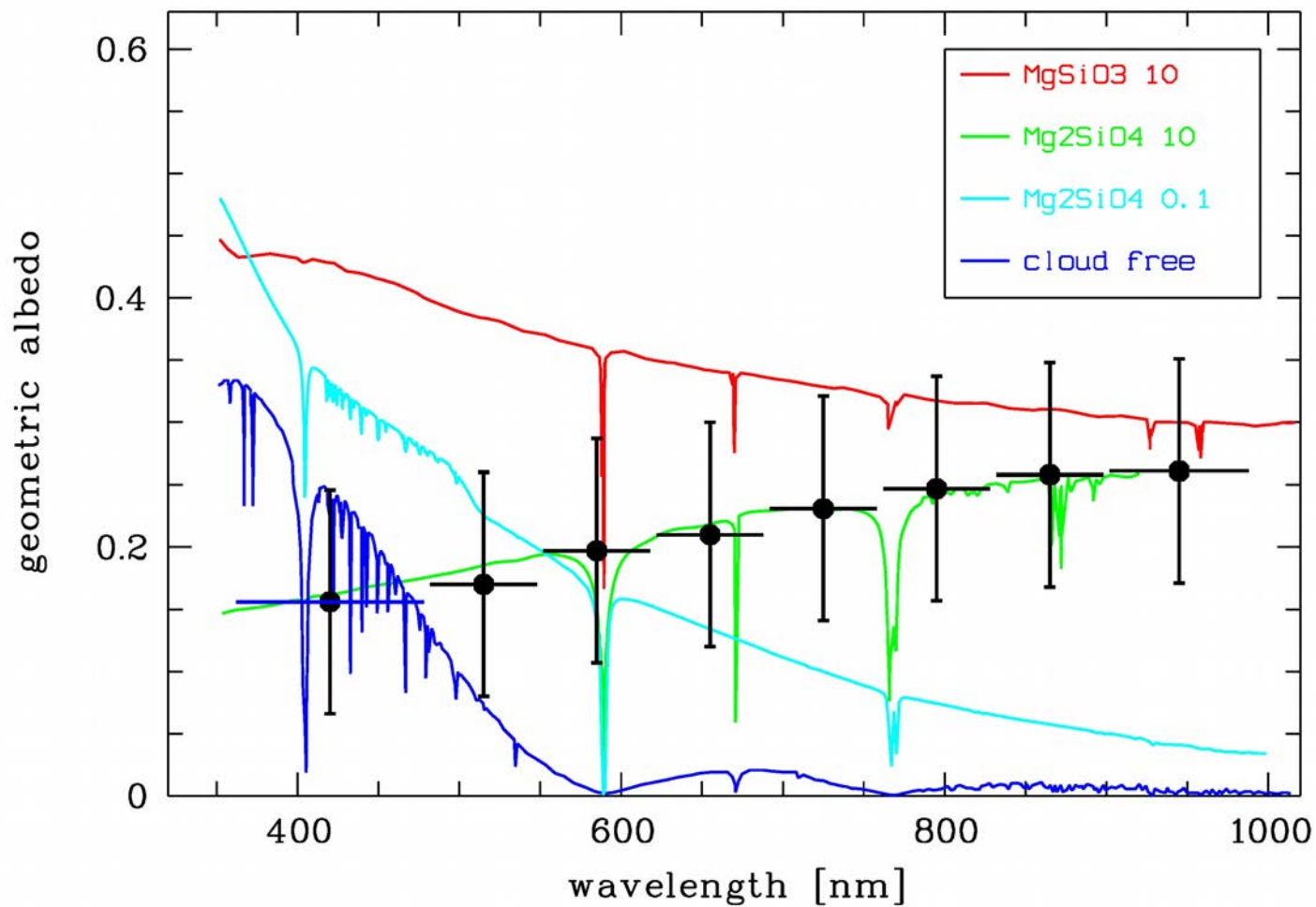
# Diverse albedo distribution from Kepler



# HST view of optical albedos



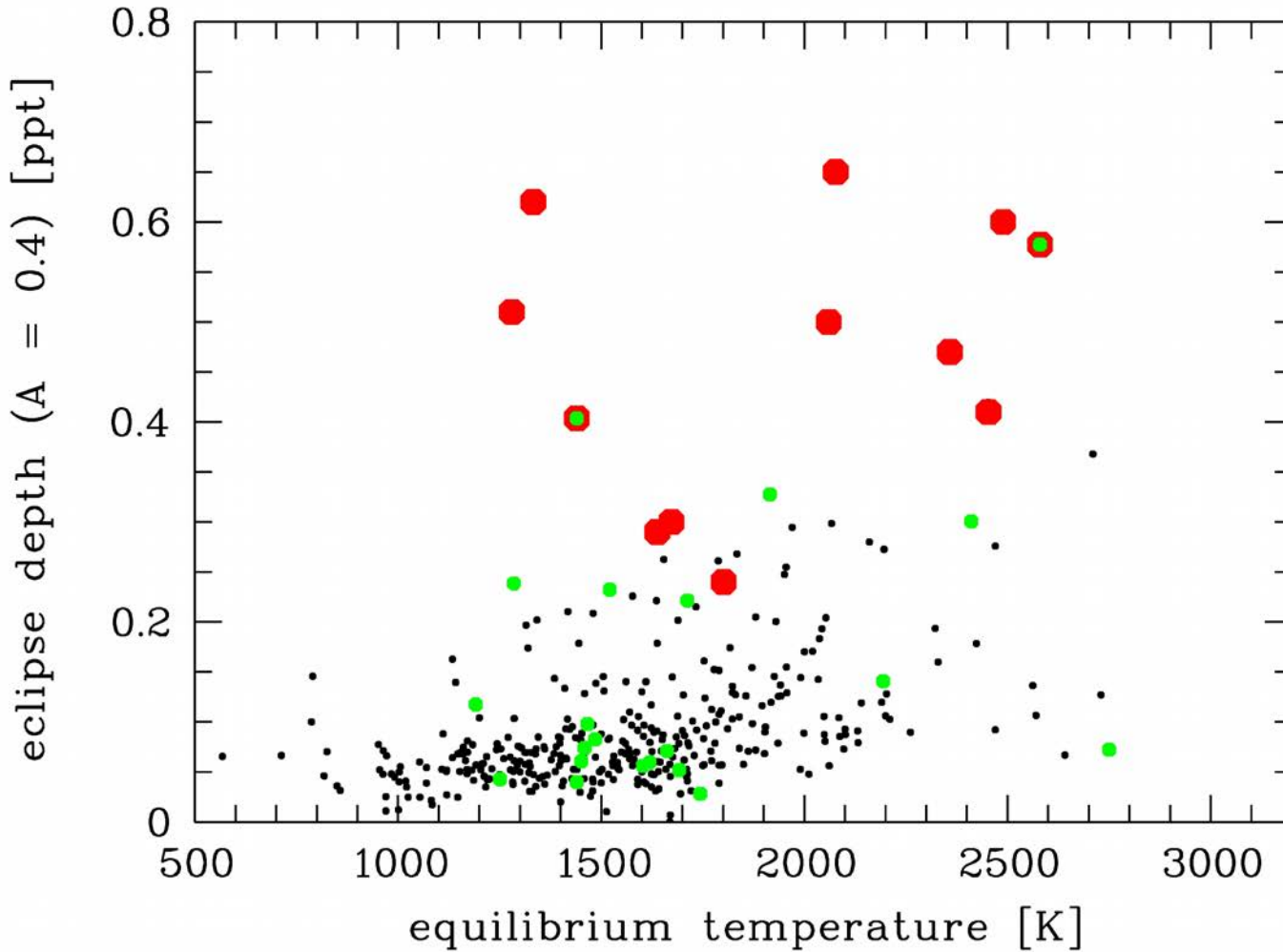
# Illustration of various reflection models



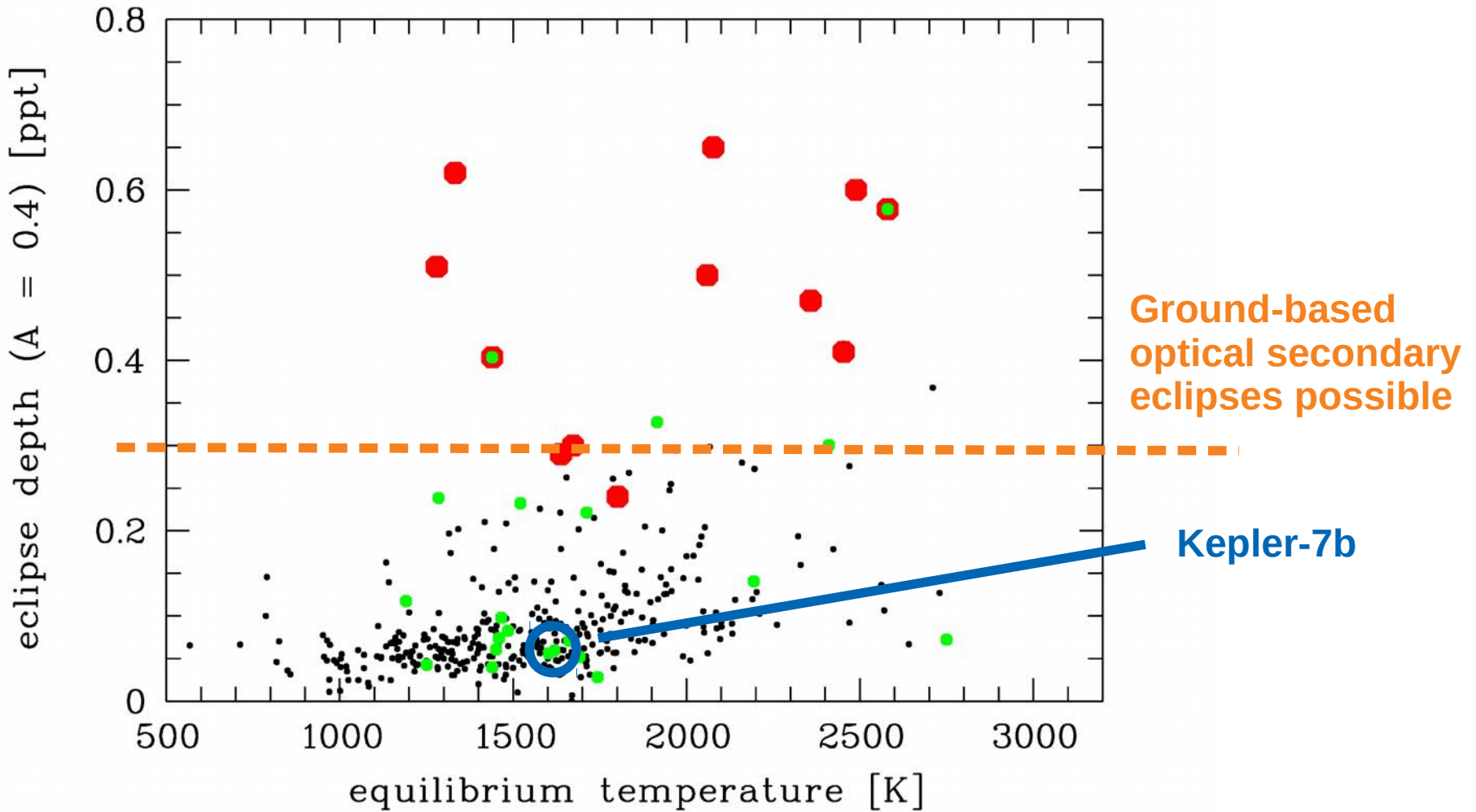
Webber+2015  
Daniel Kitzmann, private comm.



Which are the most favorable targets for albedo measurements?



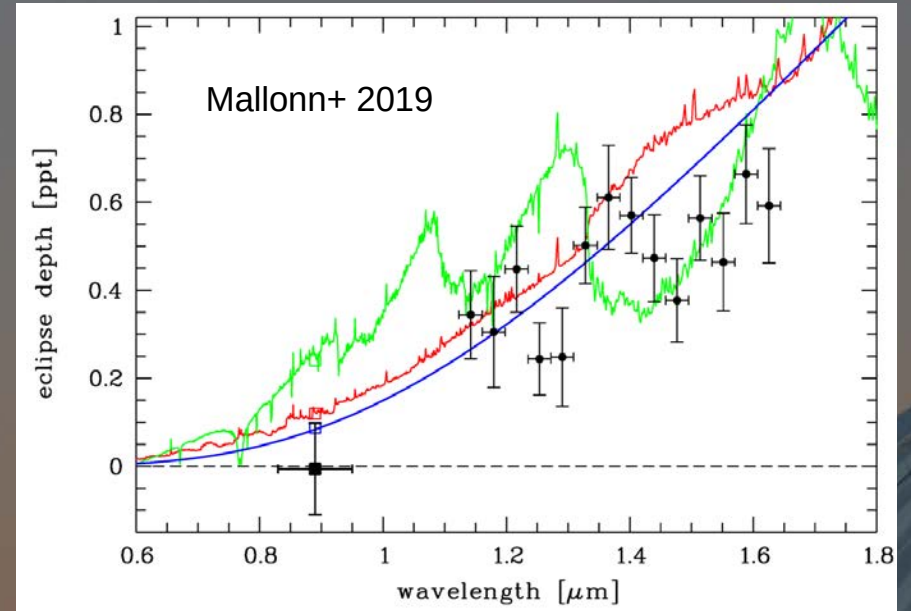
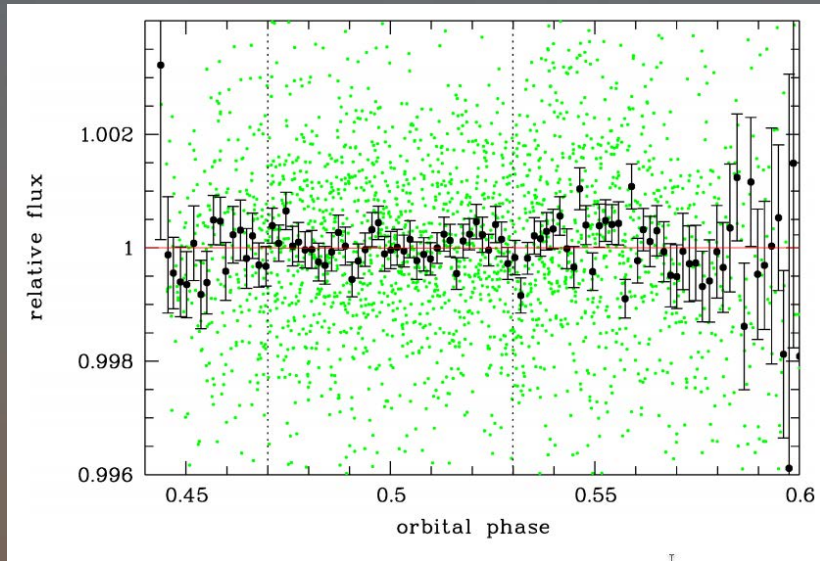
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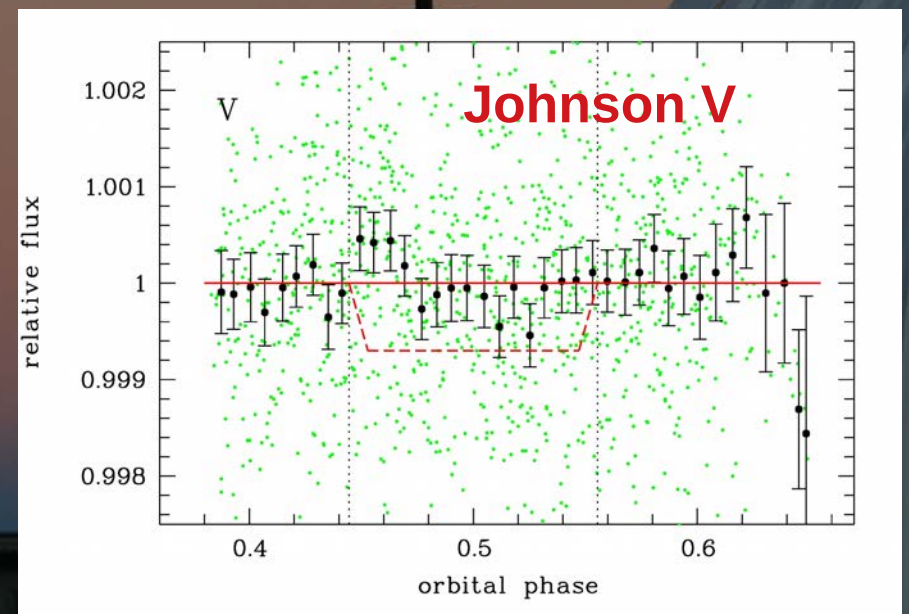
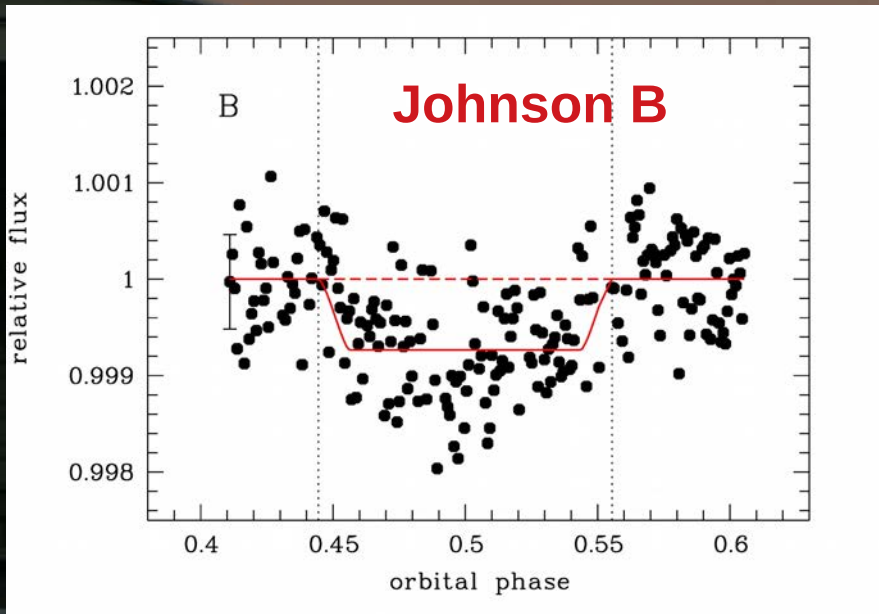
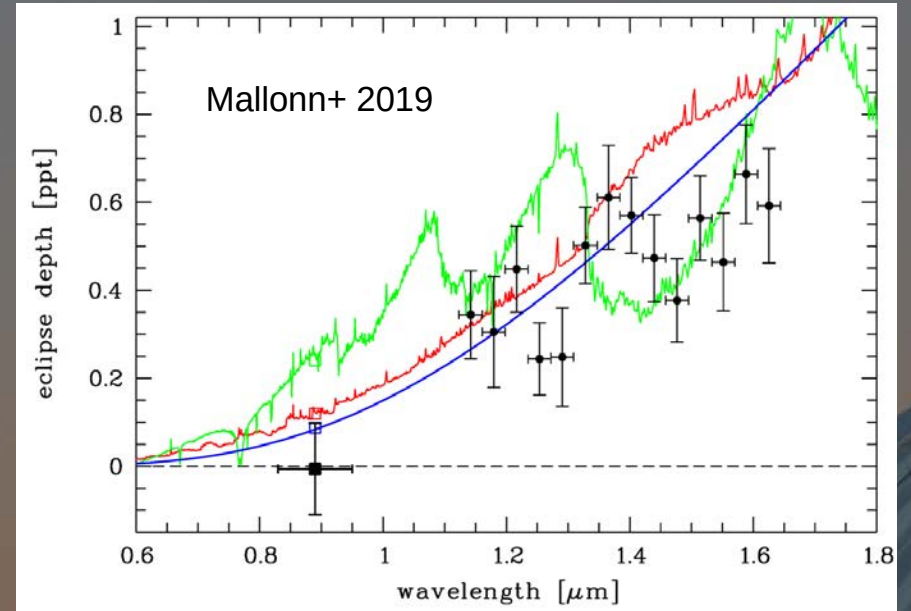
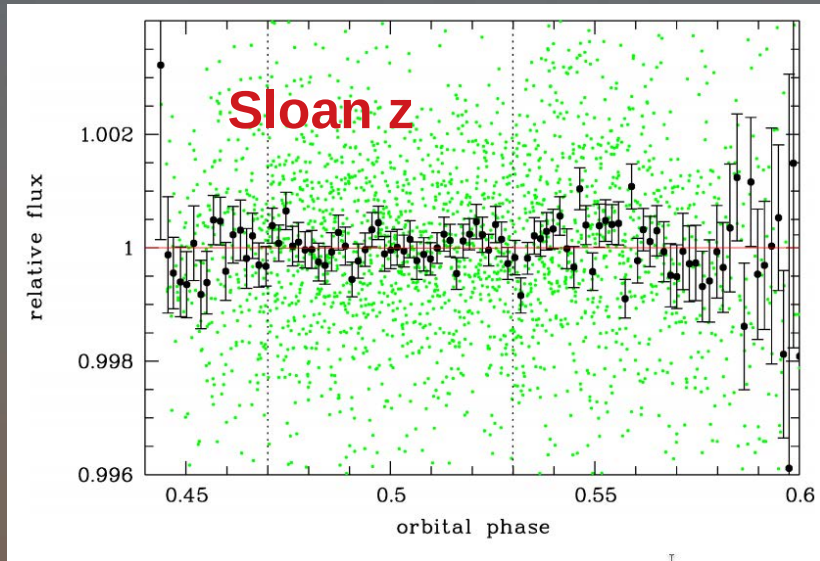
Ground-based optical secondary eclipses possible

Kepler-7b

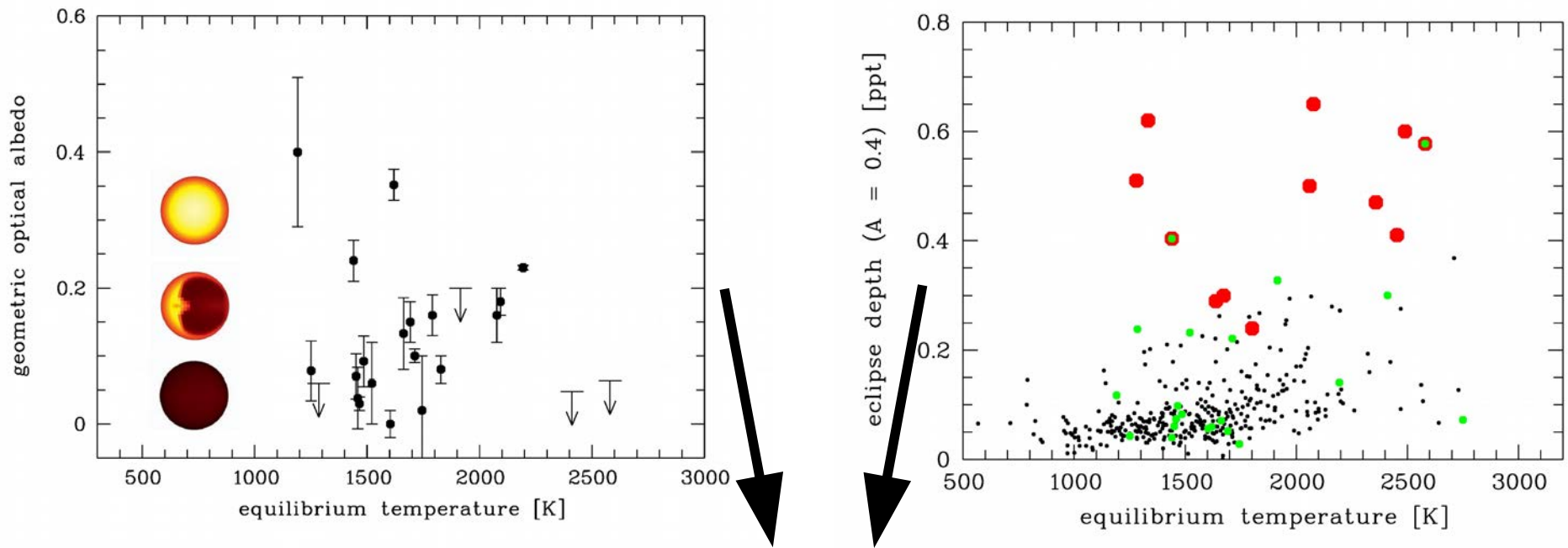
# Albedo measurements with ground-based telescopes



# Albedo measurements with ground-based telescopes



ARIEL will probe their reflection properties at one band pass



Ariel eclipse measurements in the optical band will find **suitable targets** which show **significant reflection**



Best targets for ground-based albedo **spectroscopy**

These albedo spectra will allow for a retrieval of cloud parameters