

**SAG 22:**  
**A Target Star Archive for  
Exoplanet Science**

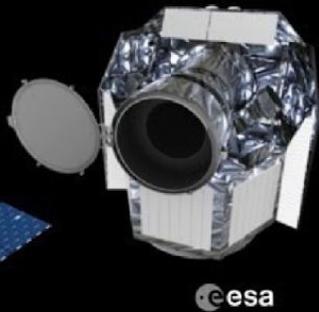
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# Current/Upcoming NASA and ESA Exoplanet Missions



2018

Transiting Exoplanet  
Survey Satellite (TESS)



2019

CHaracterising ExOPlanets  
Satellite (CHEOPS)



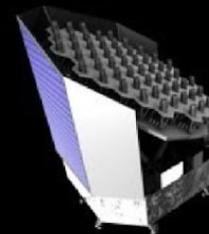
2021

James Webb Space  
Telescope (JWST)



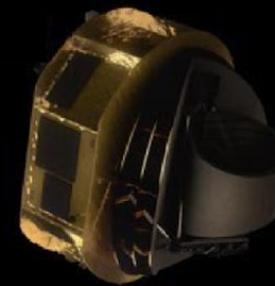
2025

Nancy Grace  
Roman Space  
Telescope



2026

PLAnetary  
Transits and  
Oscillations  
of stars  
(PLATO)



2028

Atmospheric  
Remote-sensing  
Infrared  
Exoplanet  
Large-survey  
(ARIEL)  
+  
Contribution  
to ARIEL  
Spectroscopy  
of Exoplanets  
(CASE)

# SAG 22 Activities

NASA exoplanet missions need reliable data on target stars

- Define the parameters of a set of high priority stars for upcoming NASA missions
- Survey the scientific community to determine key science use cases
- What stellar catalogs exist, and what are their limitations and degrees of completeness?
- Identify ideal user interfaces and access options for an archive

# Missions Examined

## Planned NASA

- Pandora
- SPARCS
- CUTE
- NEID
- Roman-CGI
- ARIEL / CASE
- JWST

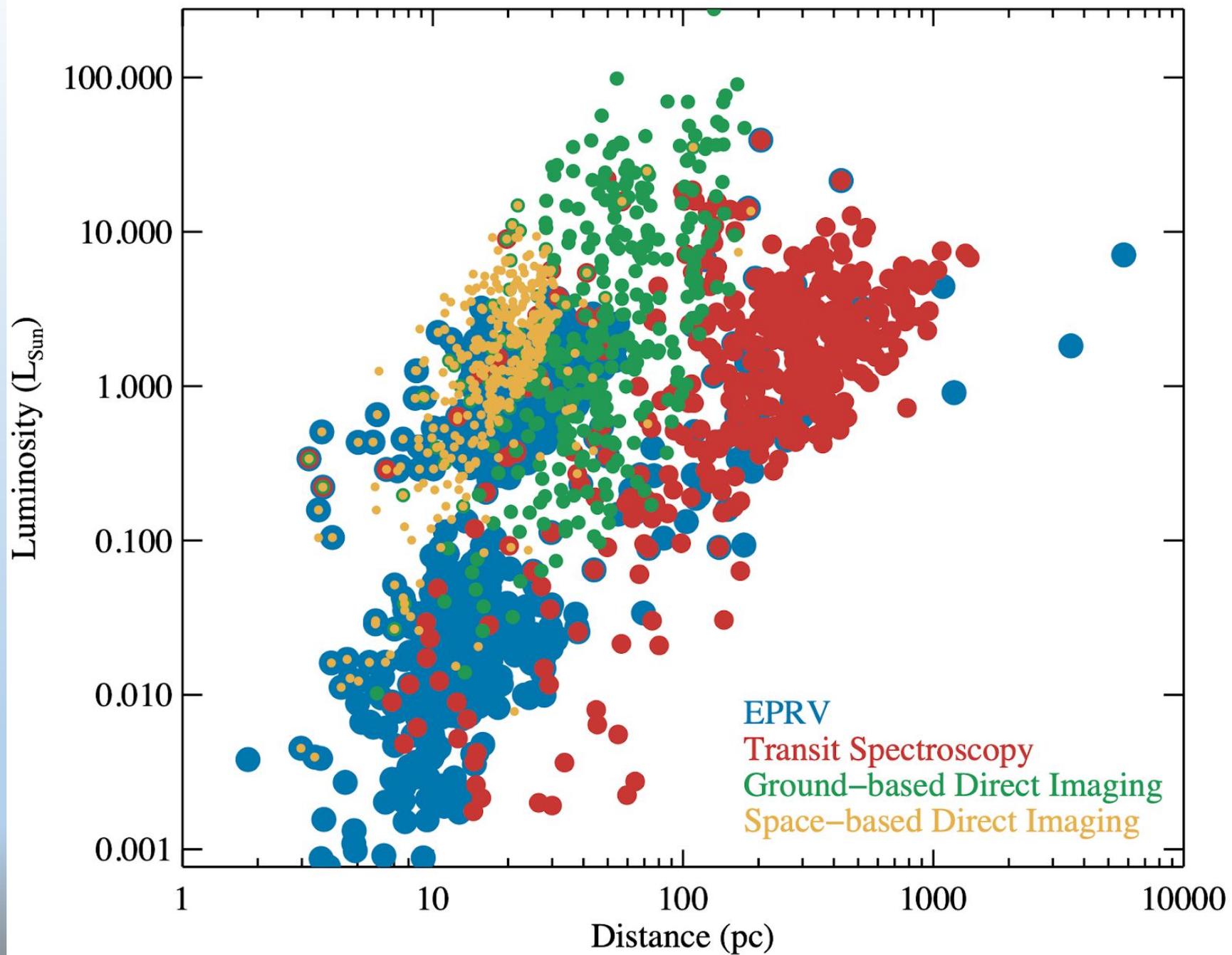
## Proposed NASA

- UV-SCOPE
- OST
- LUVOIR
- HabEx

## NASA-Adjacent

- ELTs (TMT, GMT, E-ELT)
- LIFE
- PLATO
- CHEOPS
- Twinkle
- Carmenes, MAROON-X, ESPRESSO, CPS, GPI, SPHERE

# Merged Target Lists



# SAG 22 Next Steps

- Final report writing: June through July
- End of July: Circulate report for comments
- Beginning of August: Submit report
  - Possibly revise this date depending on release of Decadal report