



Jet Propulsion Laboratory
California Institute of Technology

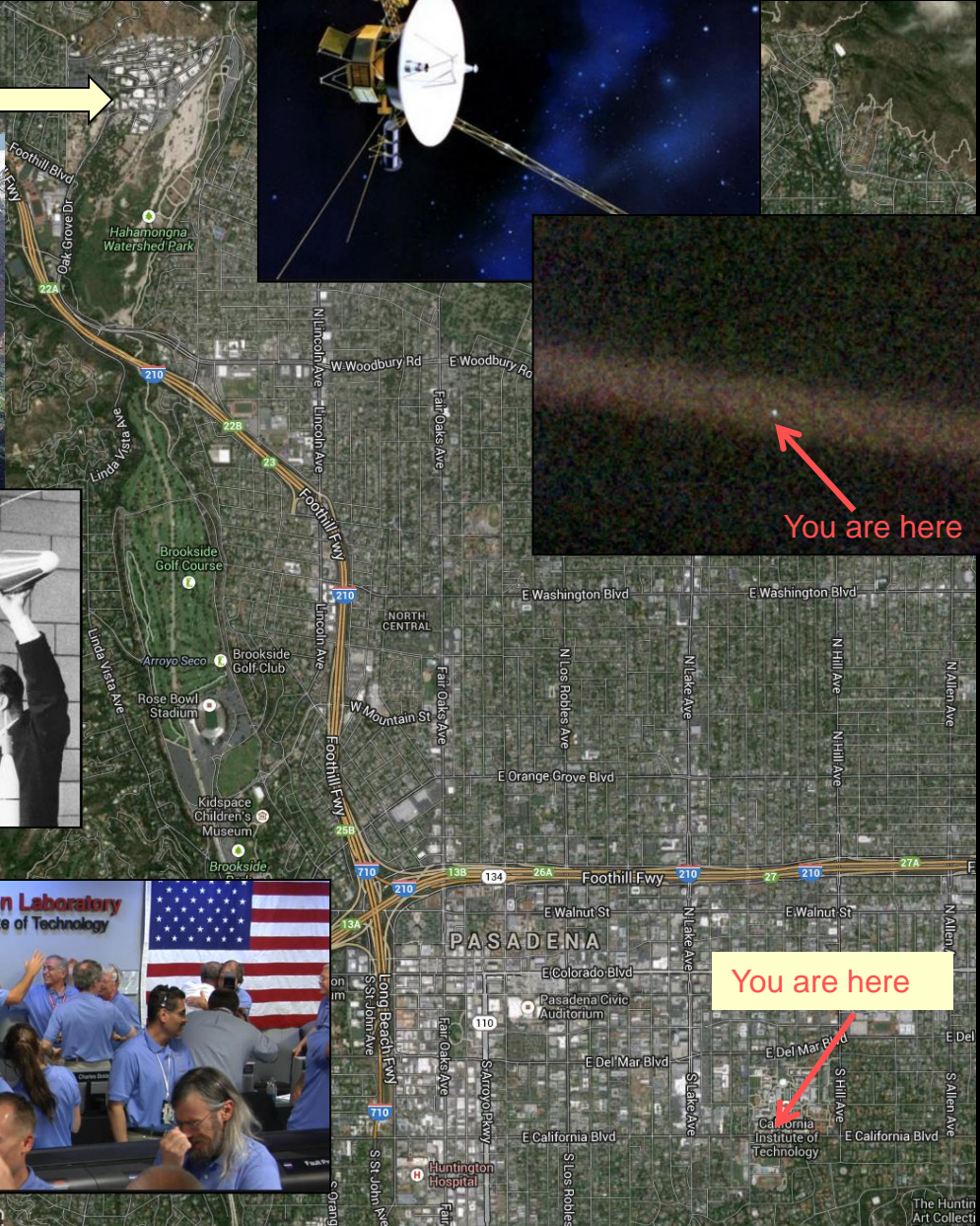
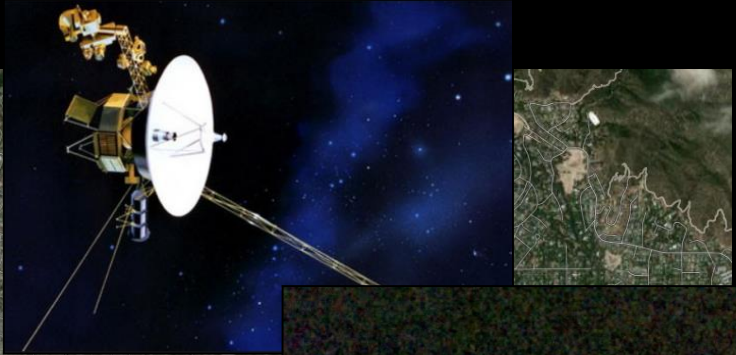
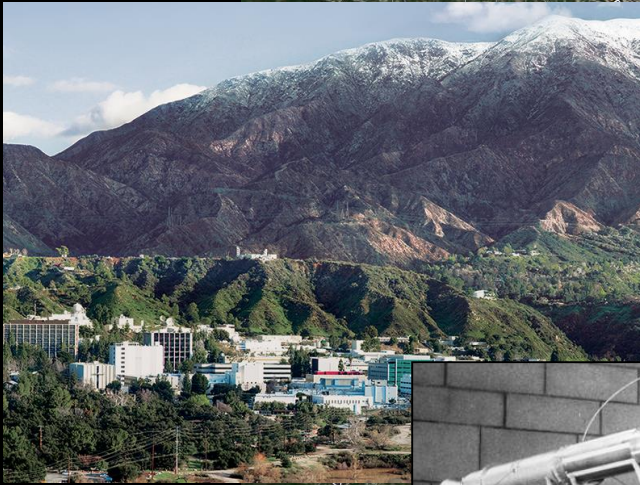
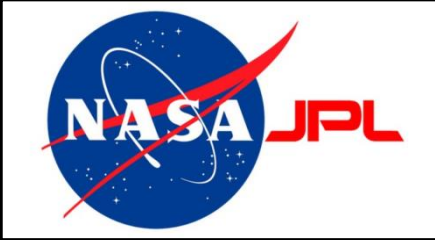
Introduction to the NASA Exoplanet Exploration Program

Gary Blackwood, Program Manager

July 27, 2015

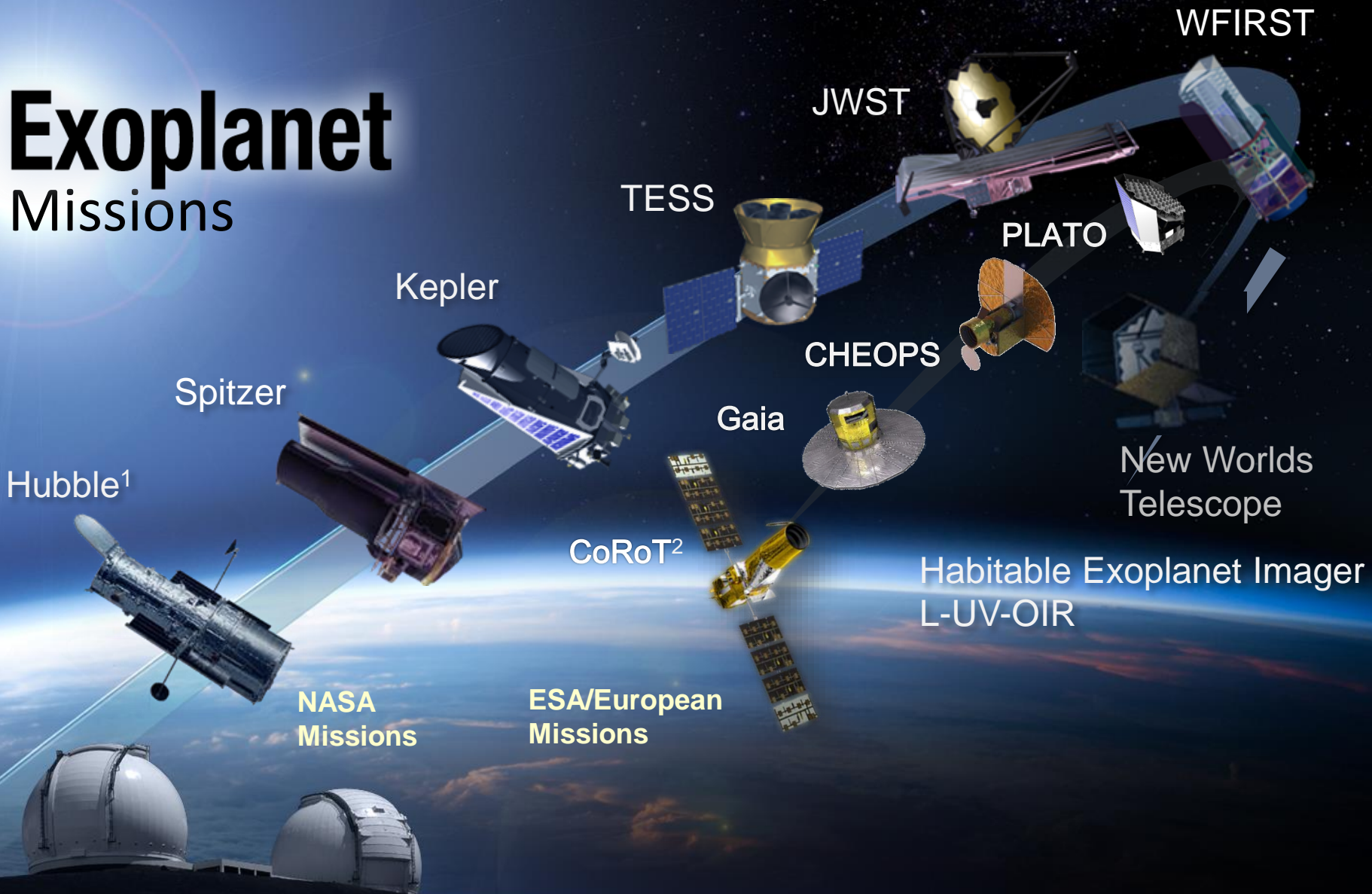
Sagan Exoplanet Summer Workshop

Exoplanetary System Demographics: Theory and Observations



You are here

Exoplanet Missions



¹ NASA/ESA Partnership

² CNES/ESA

NASA Exoplanet Exploration Program



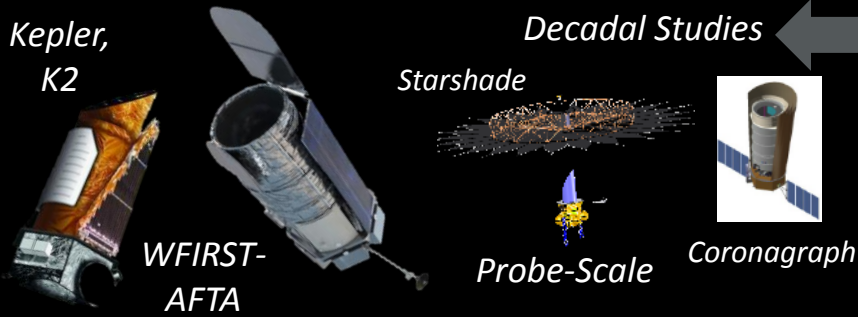
Purpose described in 2014 NASA Science Plan

1. Discovering planets around other stars
2. Characterizing their properties
3. Identifying candidates that could harbor life

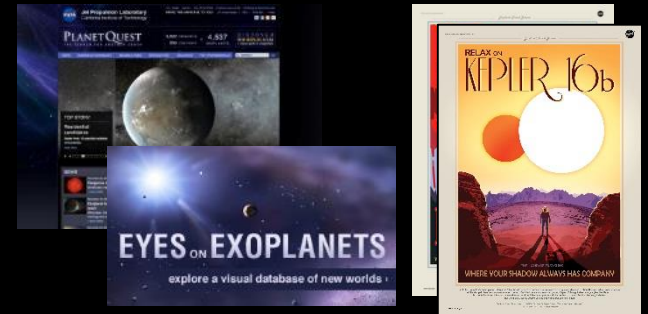
The Search for Life in our Galaxy

NASA Exoplanet Exploration Program

Space Missions and Mission Studies



Public Engagement



Supporting Research & Technology

Key Sustaining Research



Large Binocular Telescope Interferometer



Keck Single Aperture Imaging and RV



NN-EXPLORE

Technology Development



High Contrast Imaging

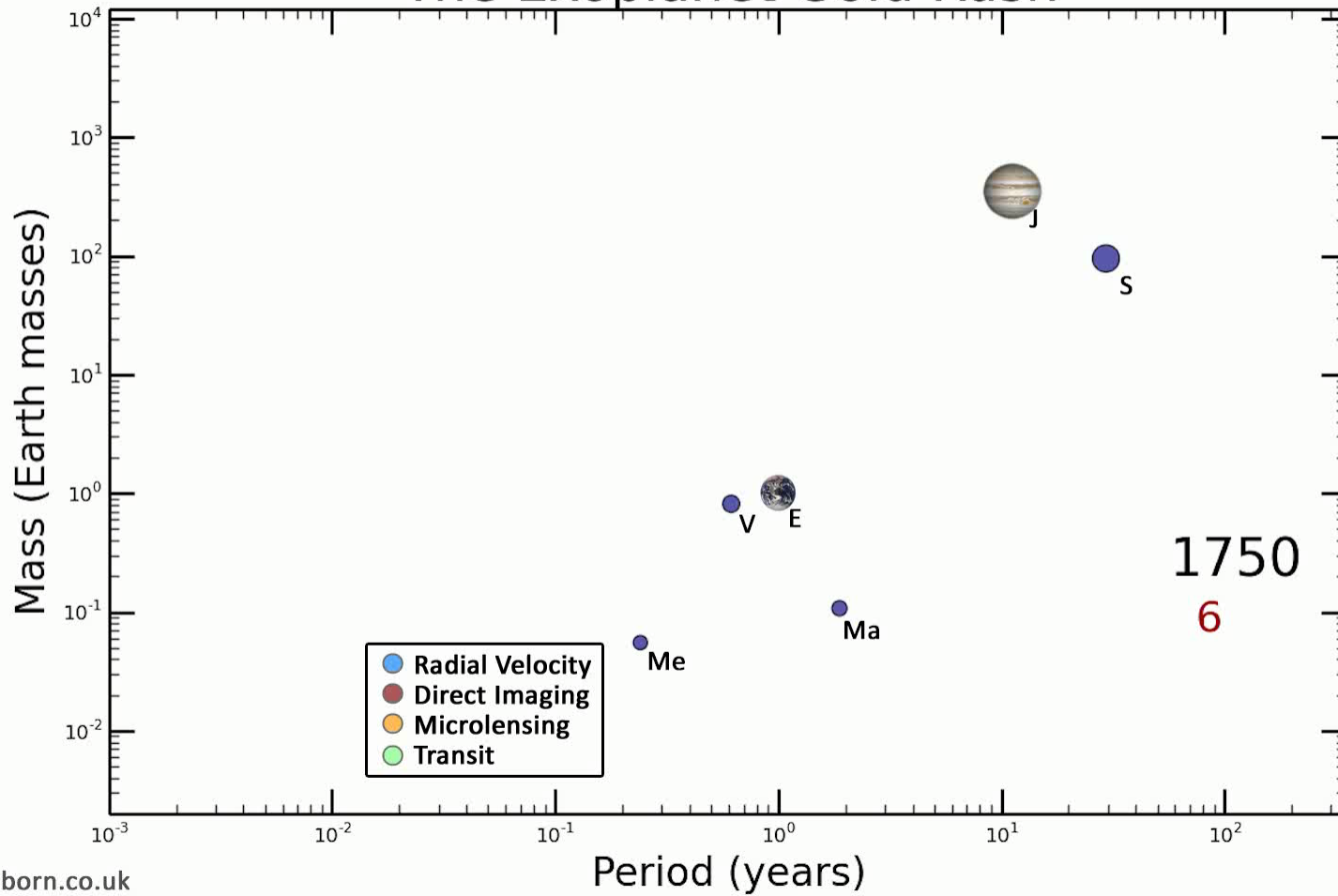


Deployable Star Shades

NASA Exoplanet Science Institute



The Exoplanet Gold Rush

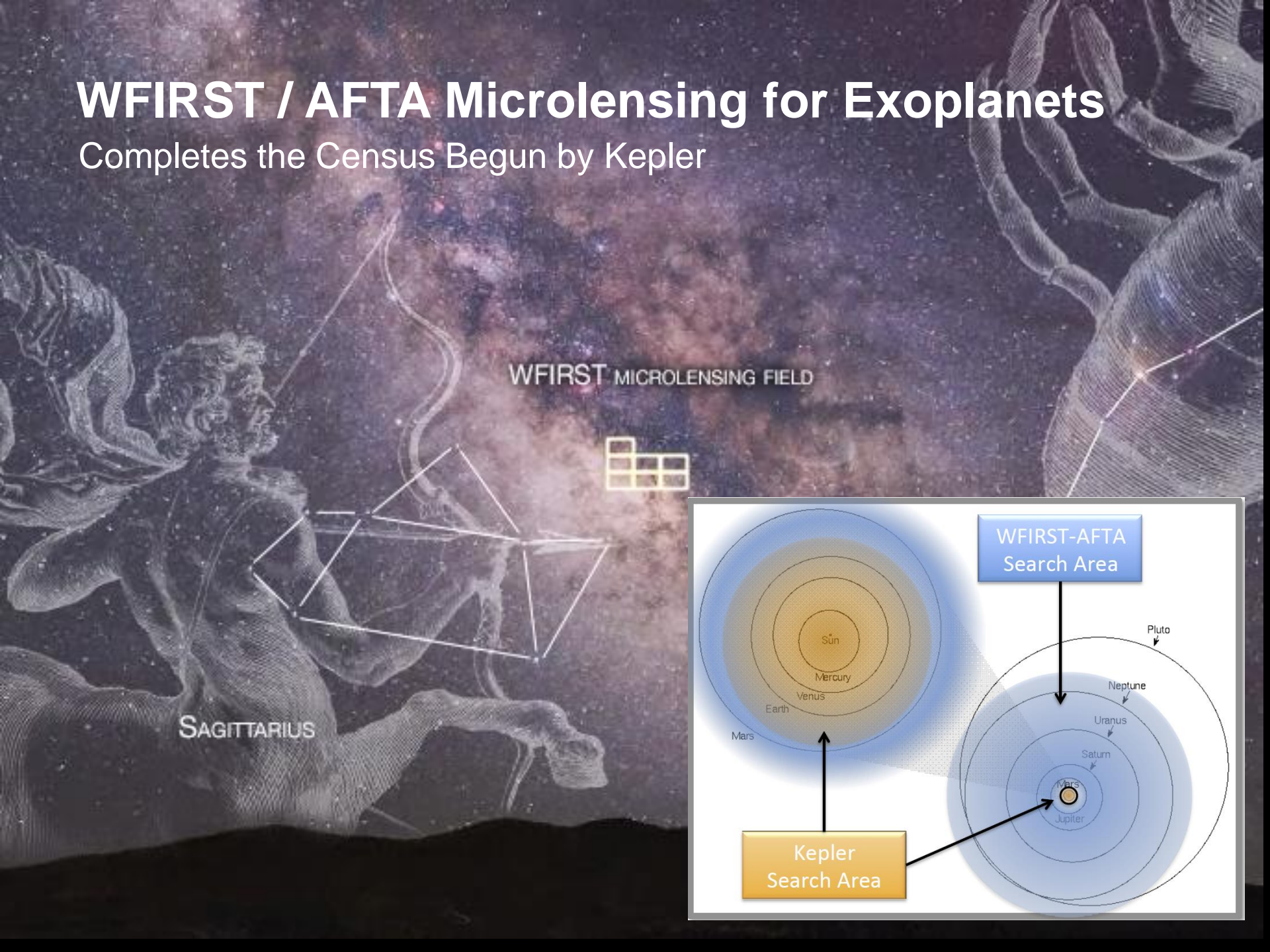


EXPLORE



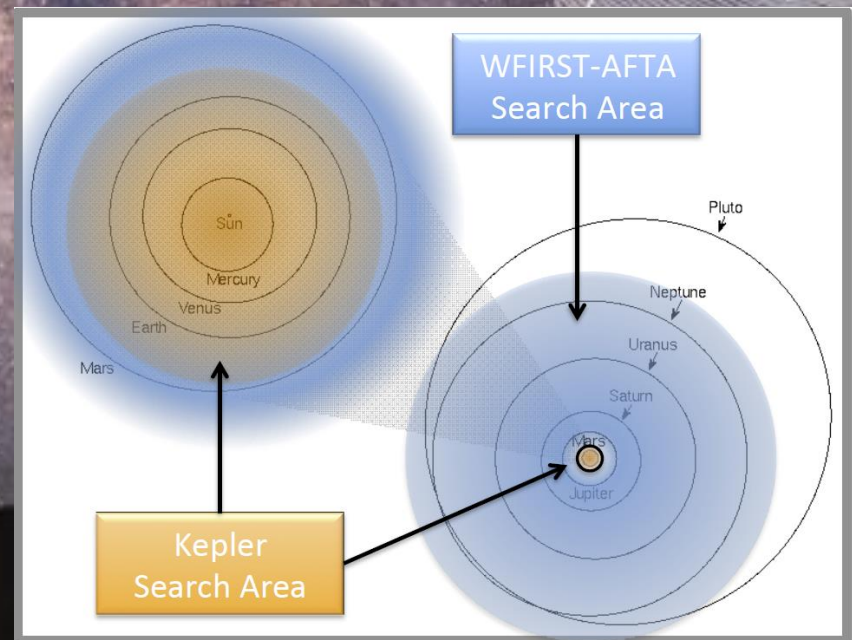
WFIRST / AFTA Microlensing for Exoplanets

Completes the Census Begun by Kepler



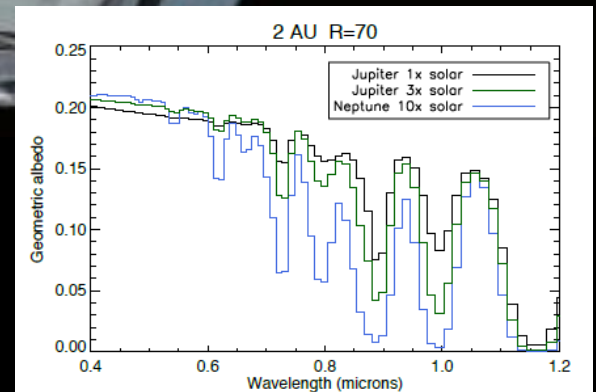
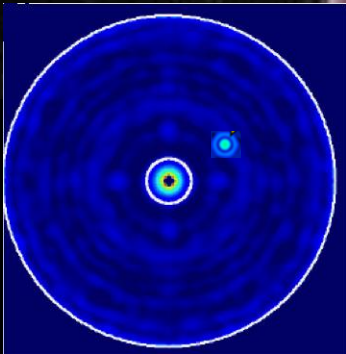
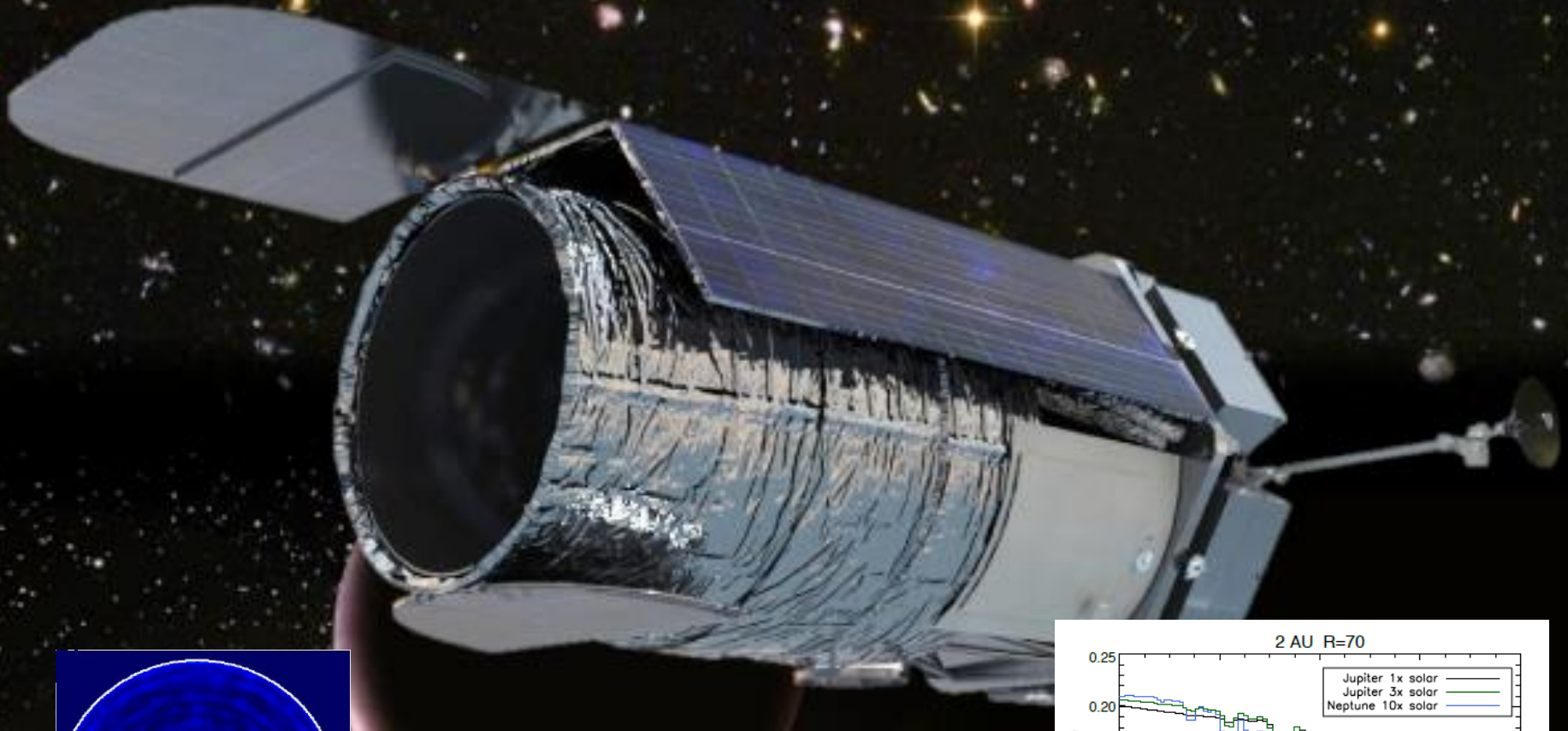
WFIRST MICROLENSING FIELD

SAGITTARIUS



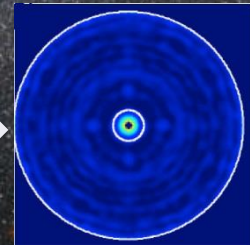
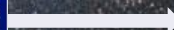
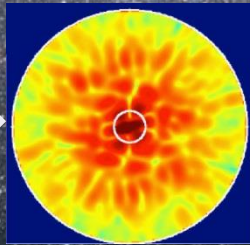
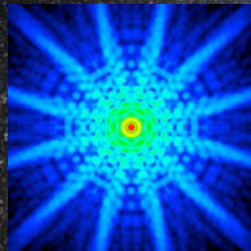
WFIRST / AFTA

Dark Energy, IR Survey, Exoplanet Census, Imaging and Spectroscopy



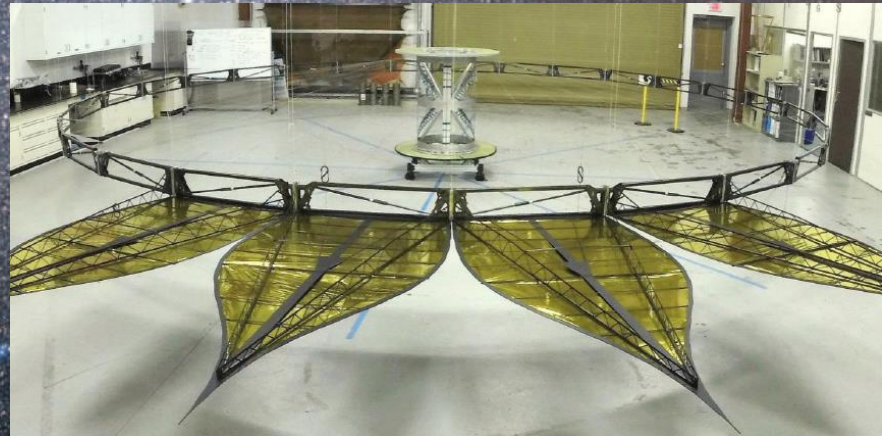
Technologies for High-Contrast Imaging

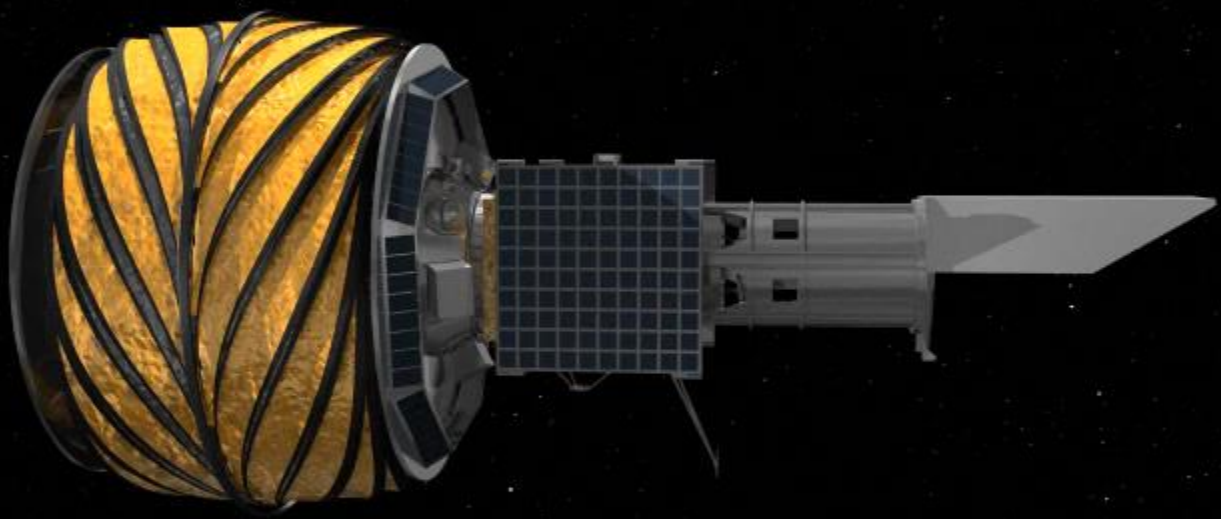
Coronagraph Masks (Internal Occulters)



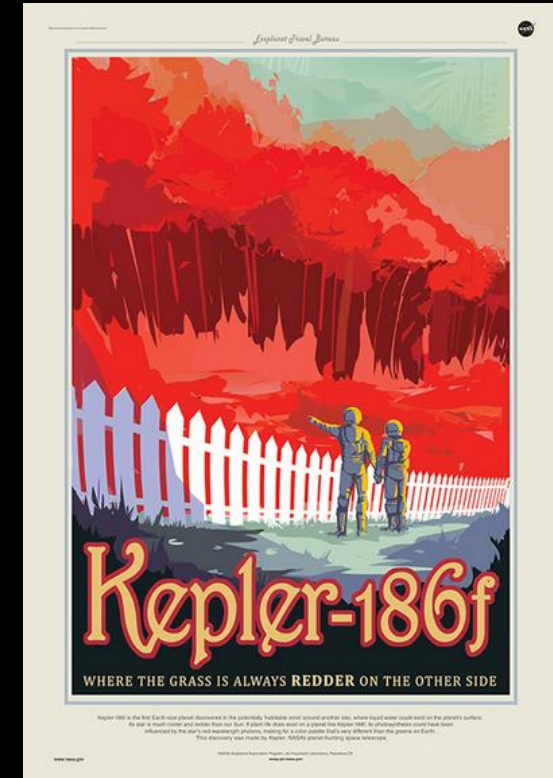
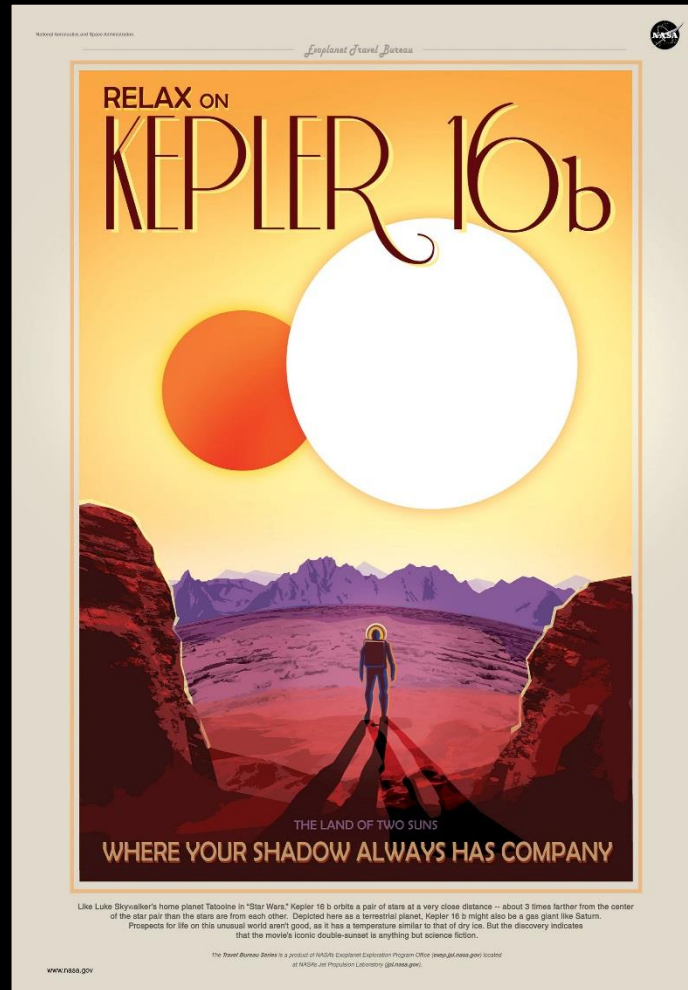
Technologies for High Contrast Imaging

Starshades (External Occulters)





Where will exploration take us in 100 years? Introducing the *Exoplanet Travel Bureau*



Next Travel Poster: 8/3 Release

Exoplanet Missions



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Imagine your role in the discovery of Habitable Worlds and Search for Life in our Galaxy



National Aeronautics and
Space Administration

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Pasadena, California

Acknowledgements

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