



Venus as an Exoplanet

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Take home point:

Venus is a compelling astrobiological target
for its ability to help us understand habitability



Mercury

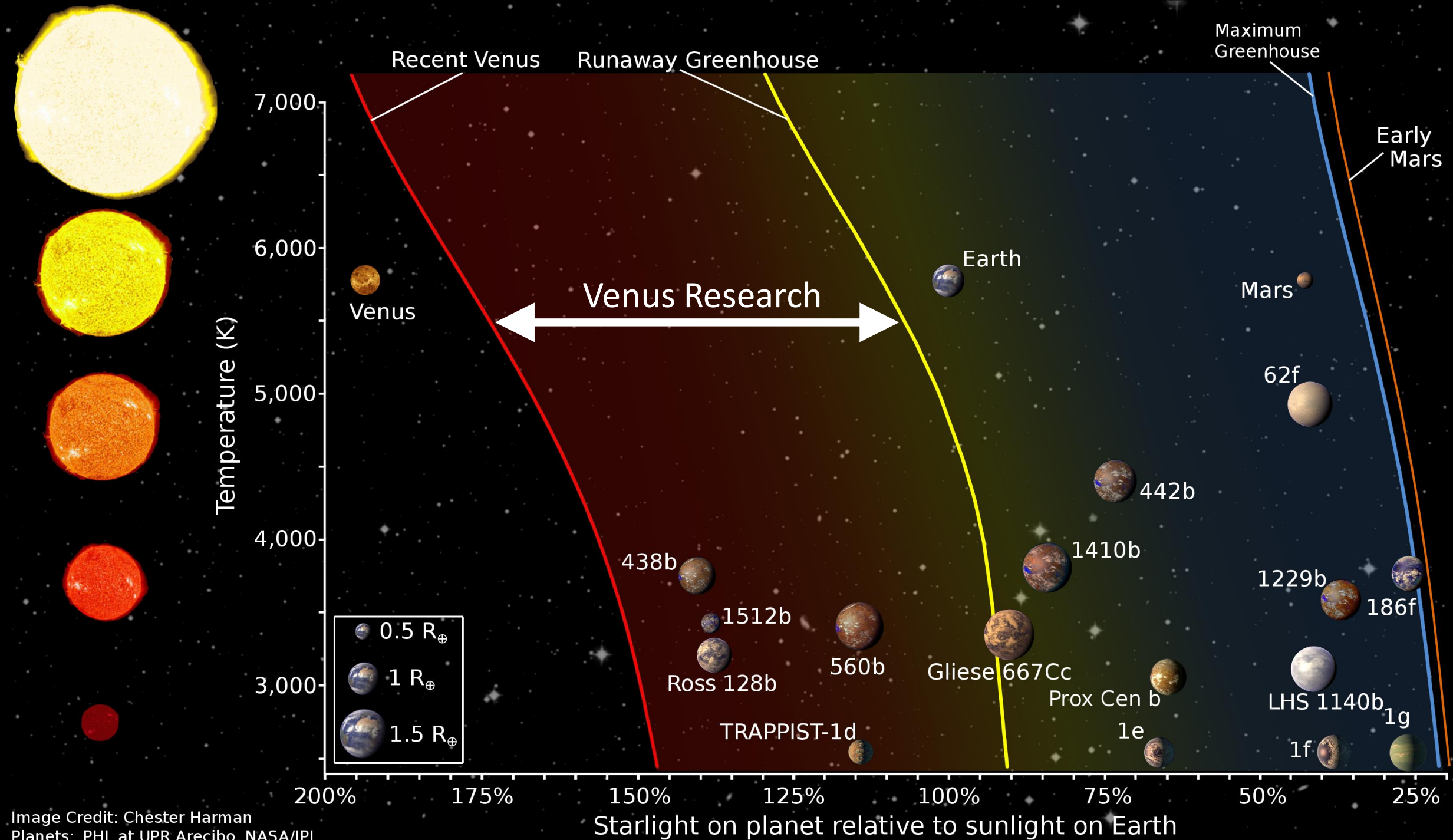
Venus

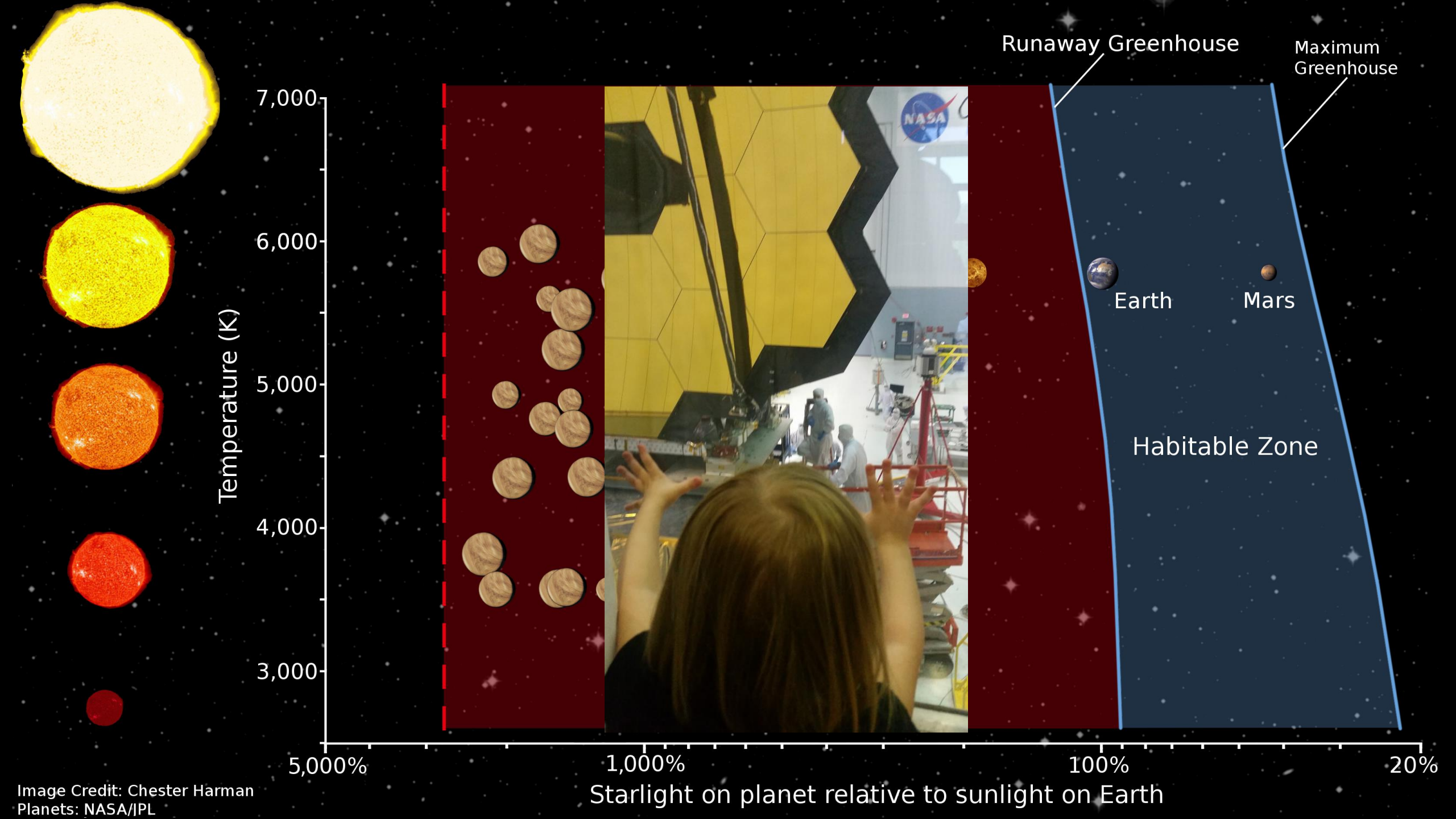
Earth

Mars

Jupiter

Saturn







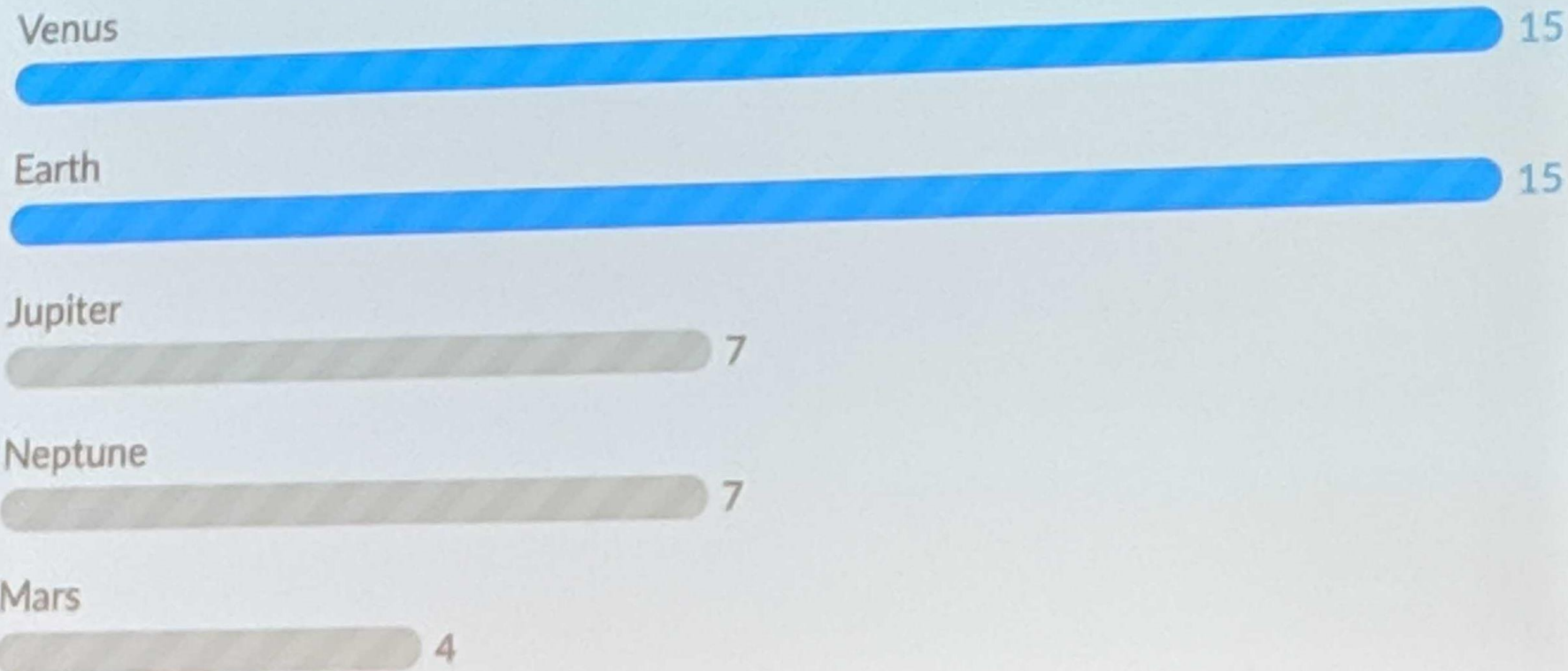




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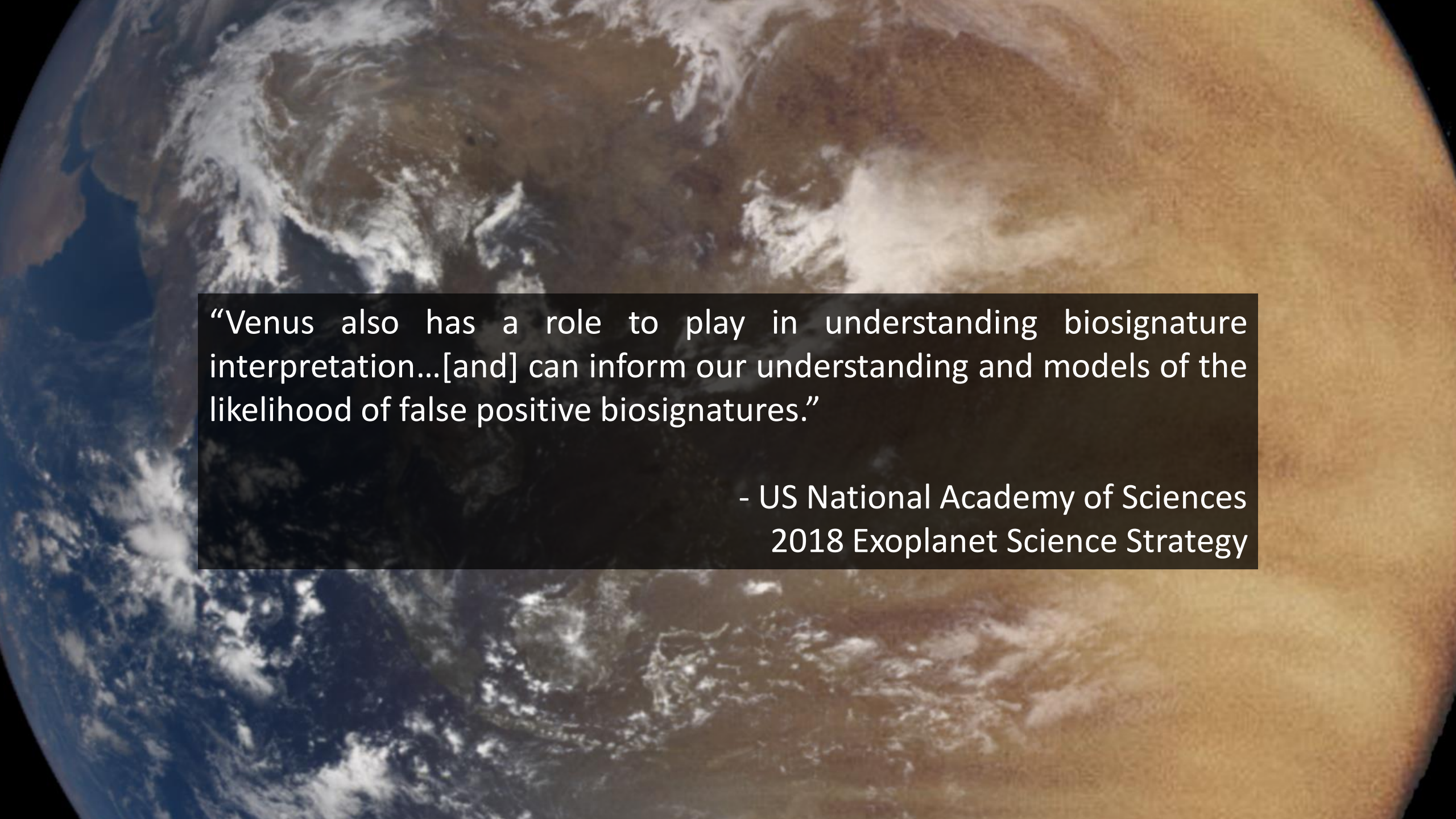
Which Solar System planet is most important for studying exoplanets?

050



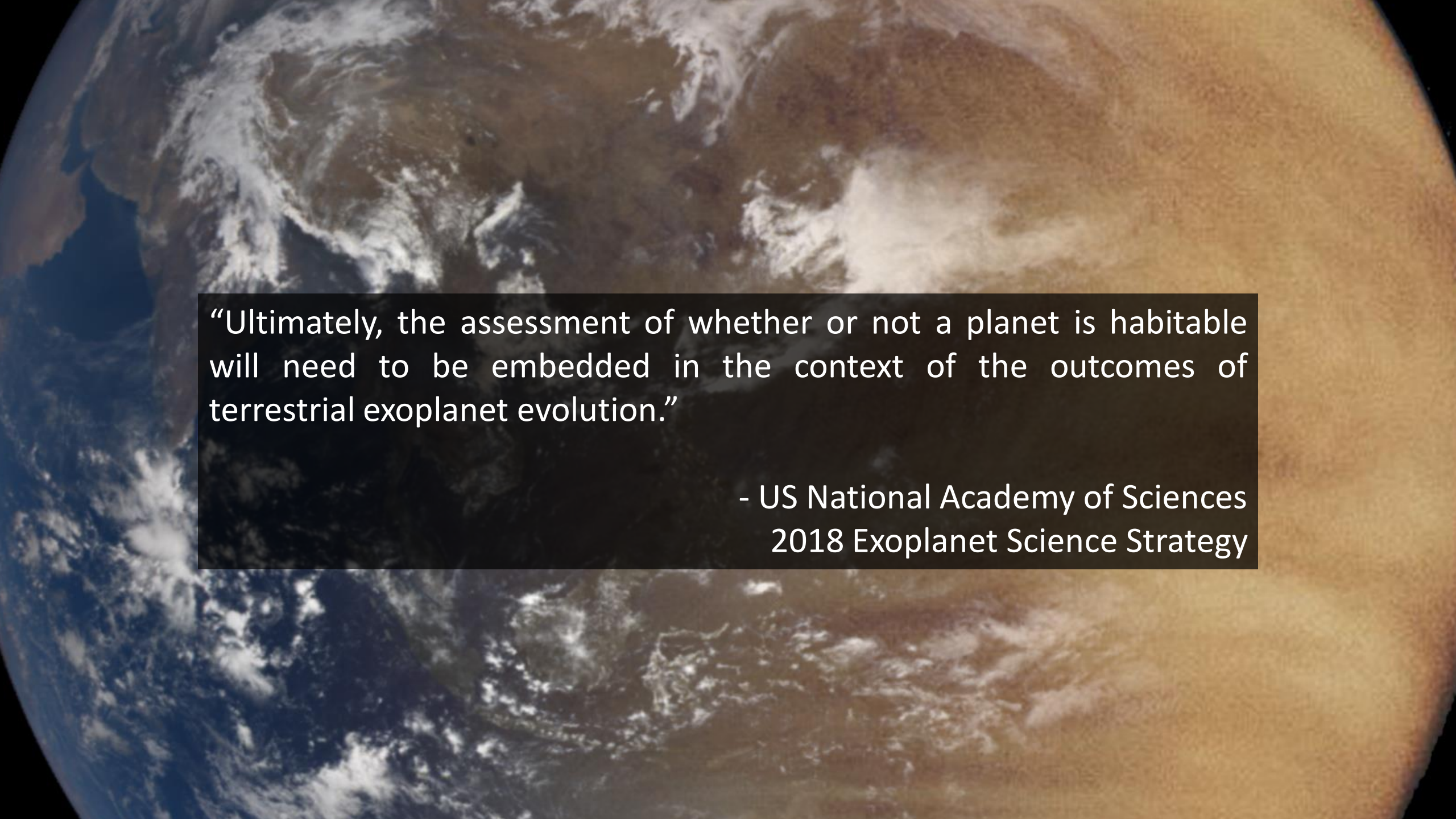
Exoplanet scientist poll:

Venus is the most important Solar System world to study!
(tied with Earth)



“Venus also has a role to play in understanding biosignature interpretation...[and] can inform our understanding and models of the likelihood of false positive biosignatures.”

- US National Academy of Sciences
2018 Exoplanet Science Strategy

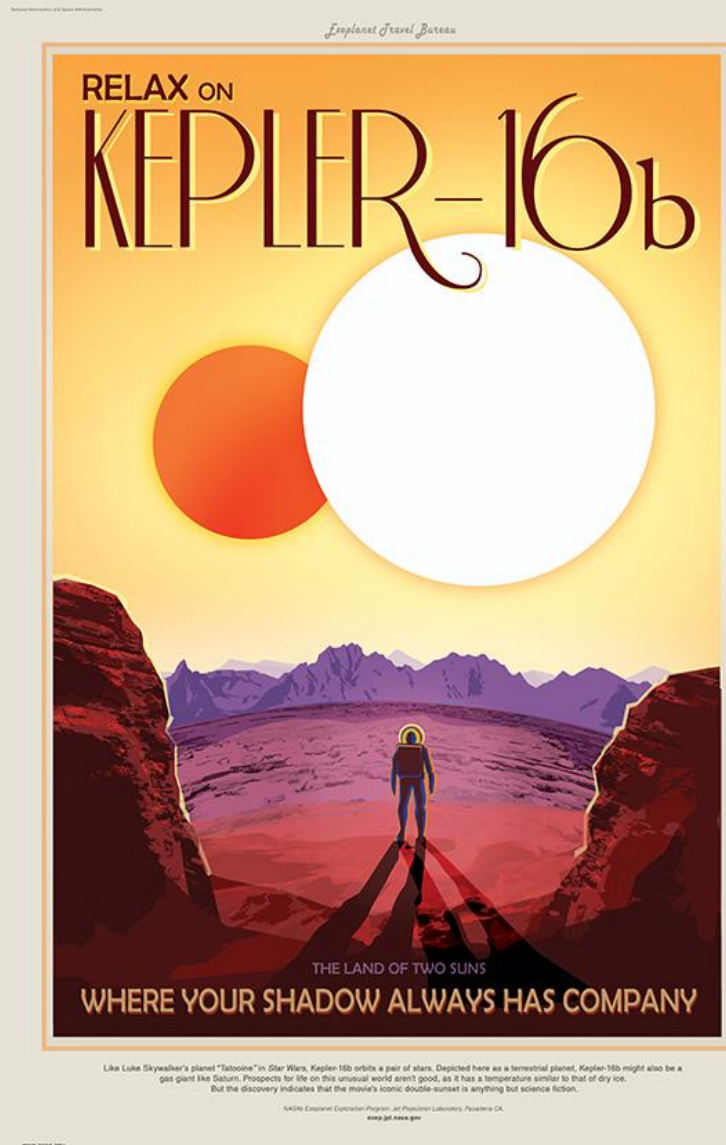
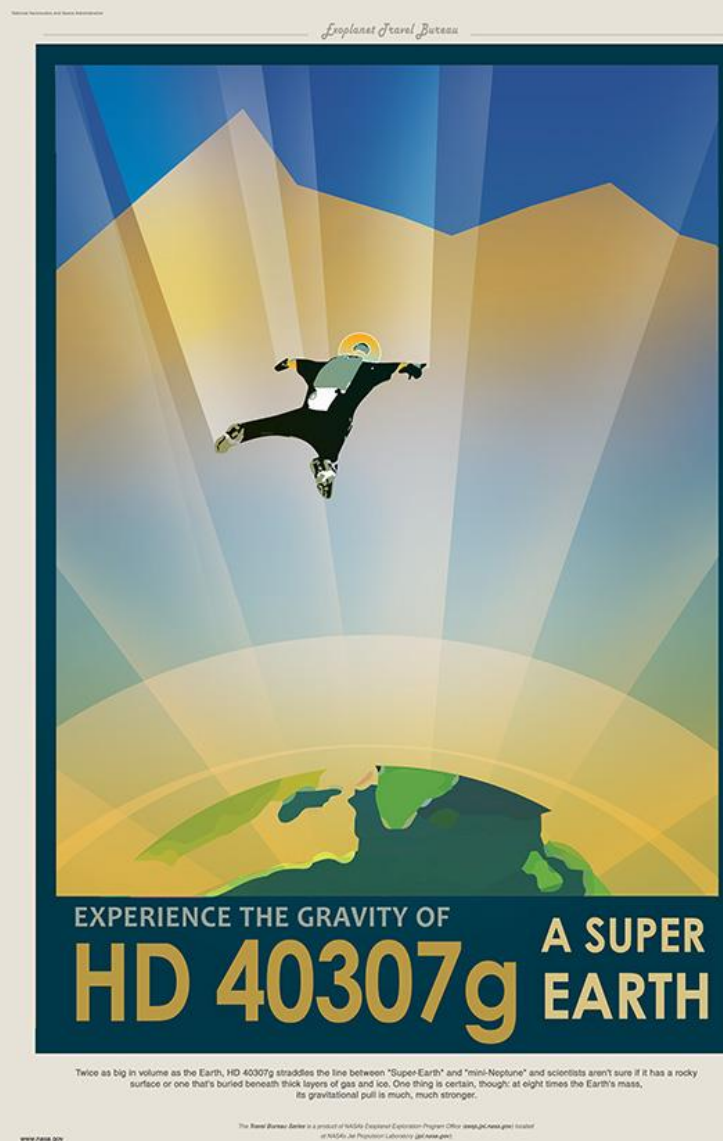


“Ultimately, the assessment of whether or not a planet is habitable will need to be embedded in the context of the outcomes of terrestrial exoplanet evolution.”

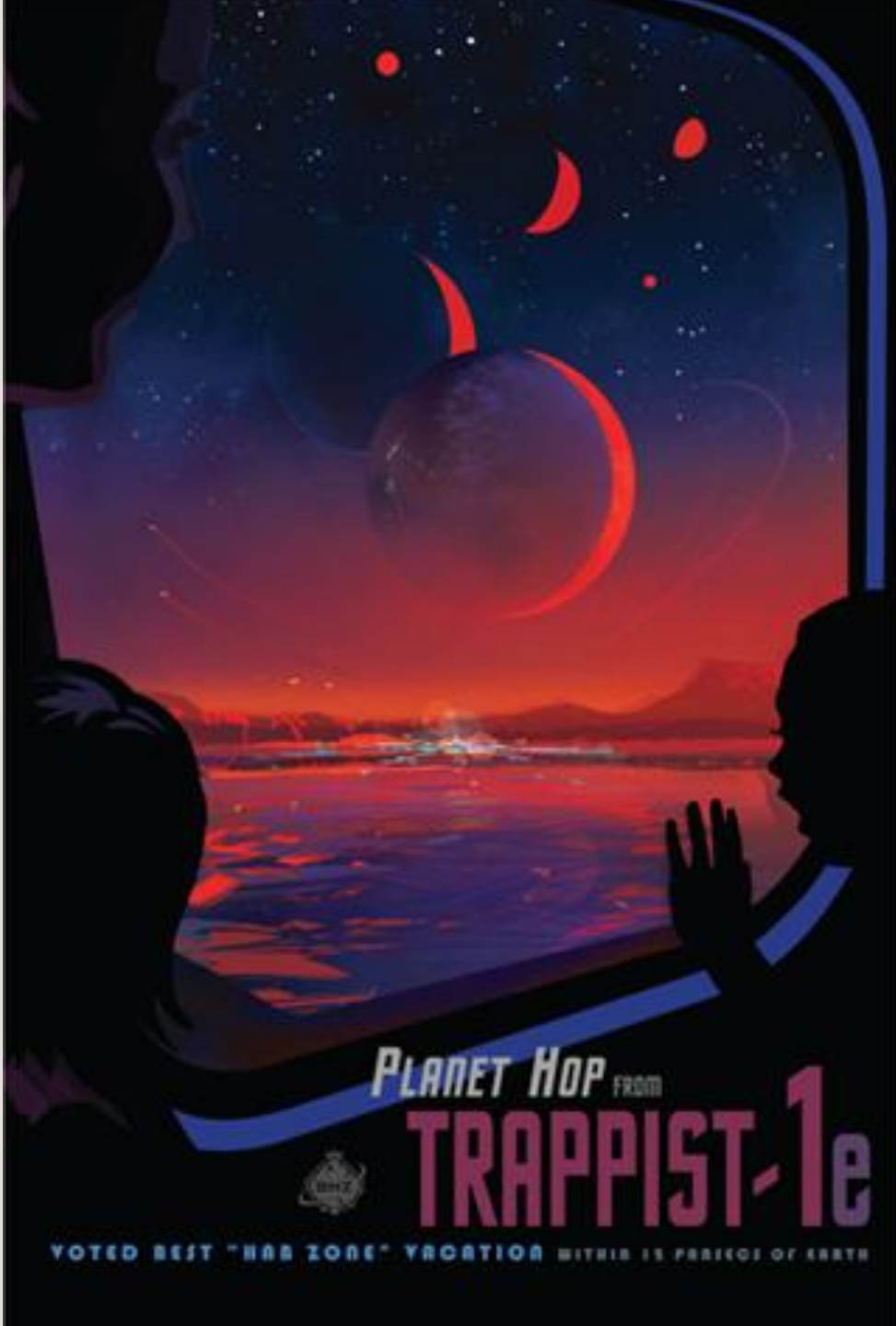
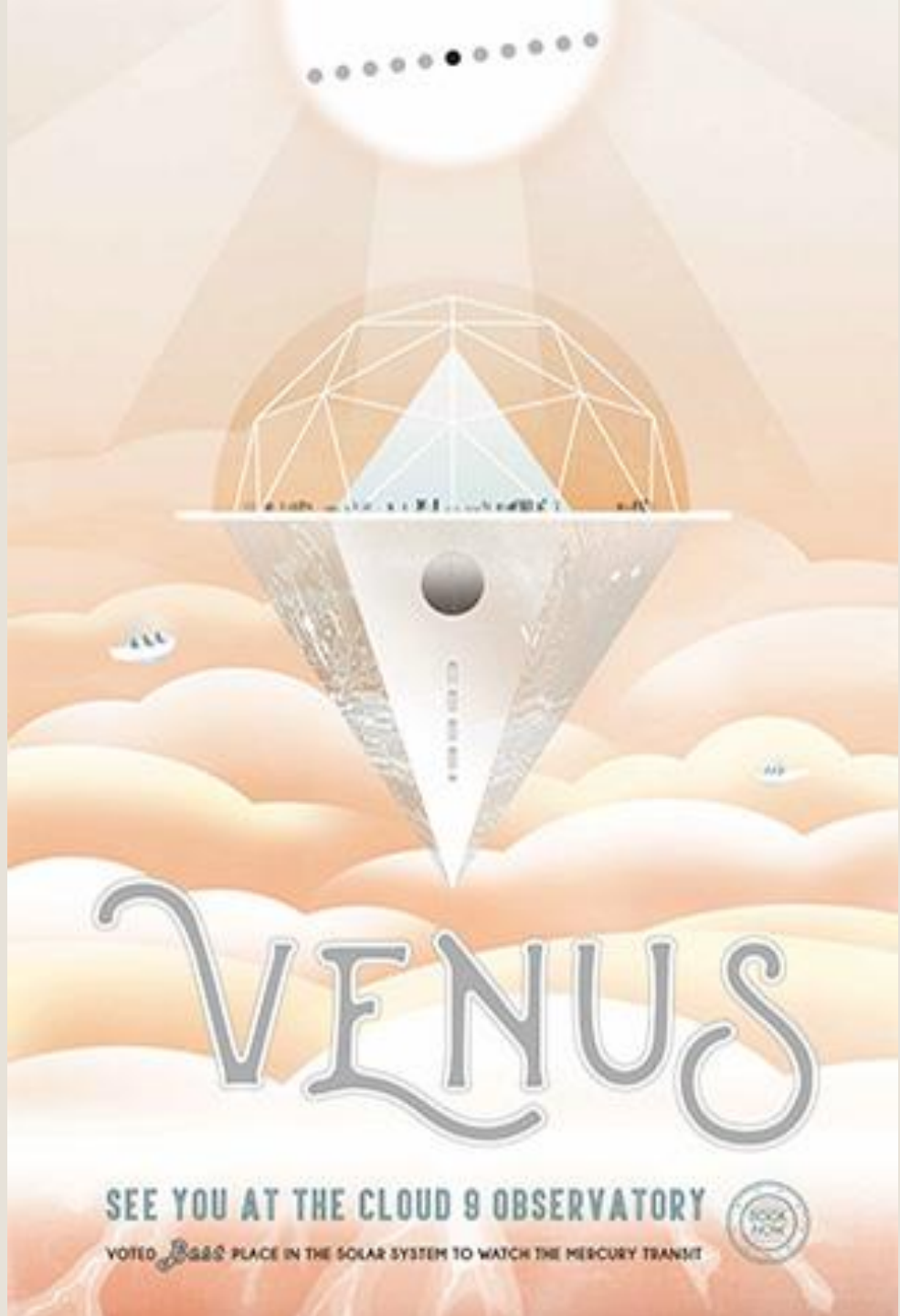
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2018 Exoplanet Science Strategy

The astrobiology and exoplanet communities have a strong consensus on two points:

1. Venus is an essential astrobiological target!
2. The first point has nothing to do with the possibility for “life in the clouds” of Venus



Courtesy NASA/JPL-
Caltech



Kepler Orrery IV

23 Nov 2010

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