ESOPIANETI

La Ricerca di Mondi in grado di Ospitare Vita Extraterrestre

CONOSCIAMOCI

Chi sei?

Da dove vieni?

Perché hai scelto lo scientifico?

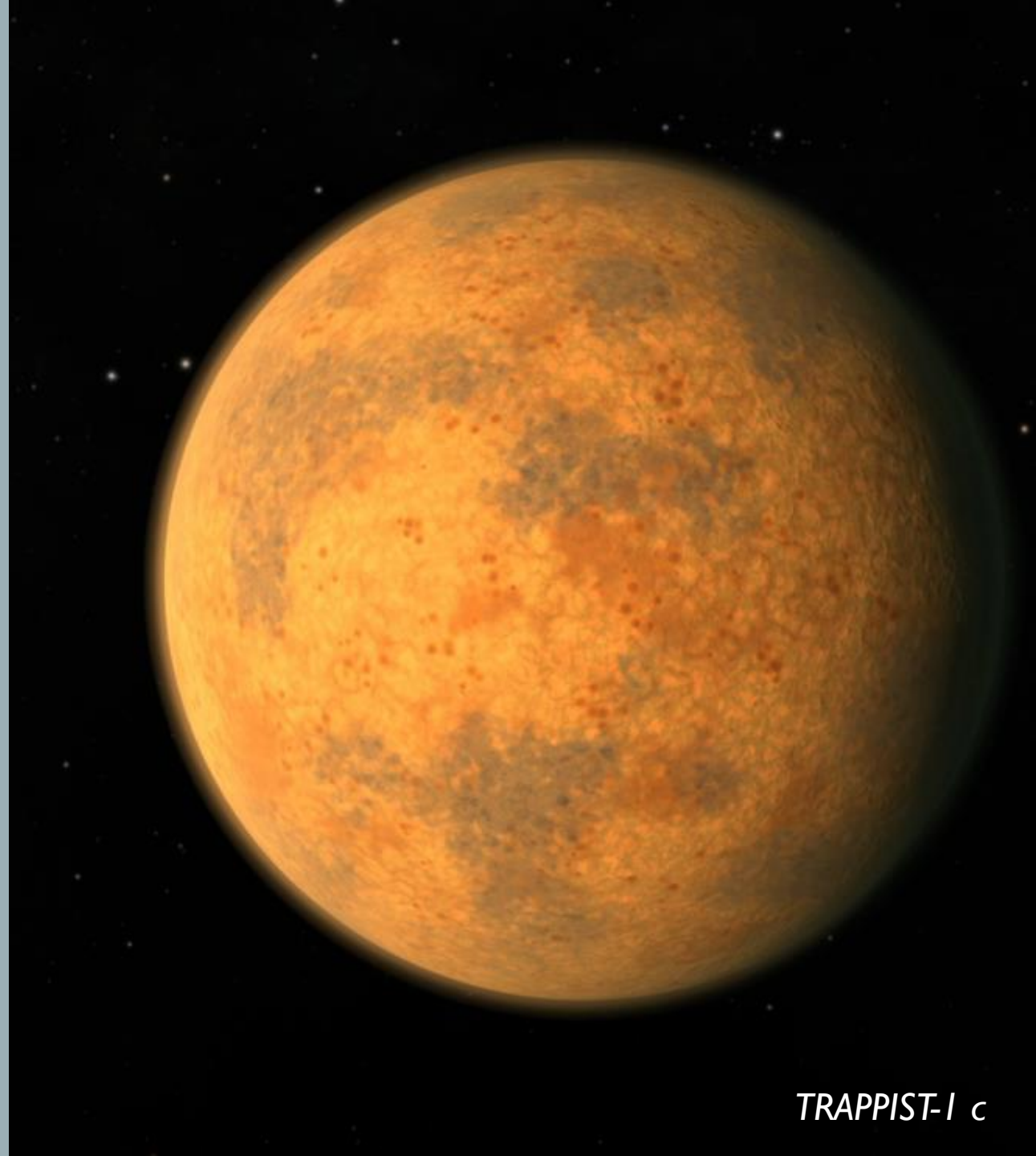
Quali sono I tuoi veri interessi?

TRAPPIST-1 b

BRAINSTORMING

Cosa ti viene in mente quando senti la parola

ESOPIANETA?



TRAPPIST-1 c

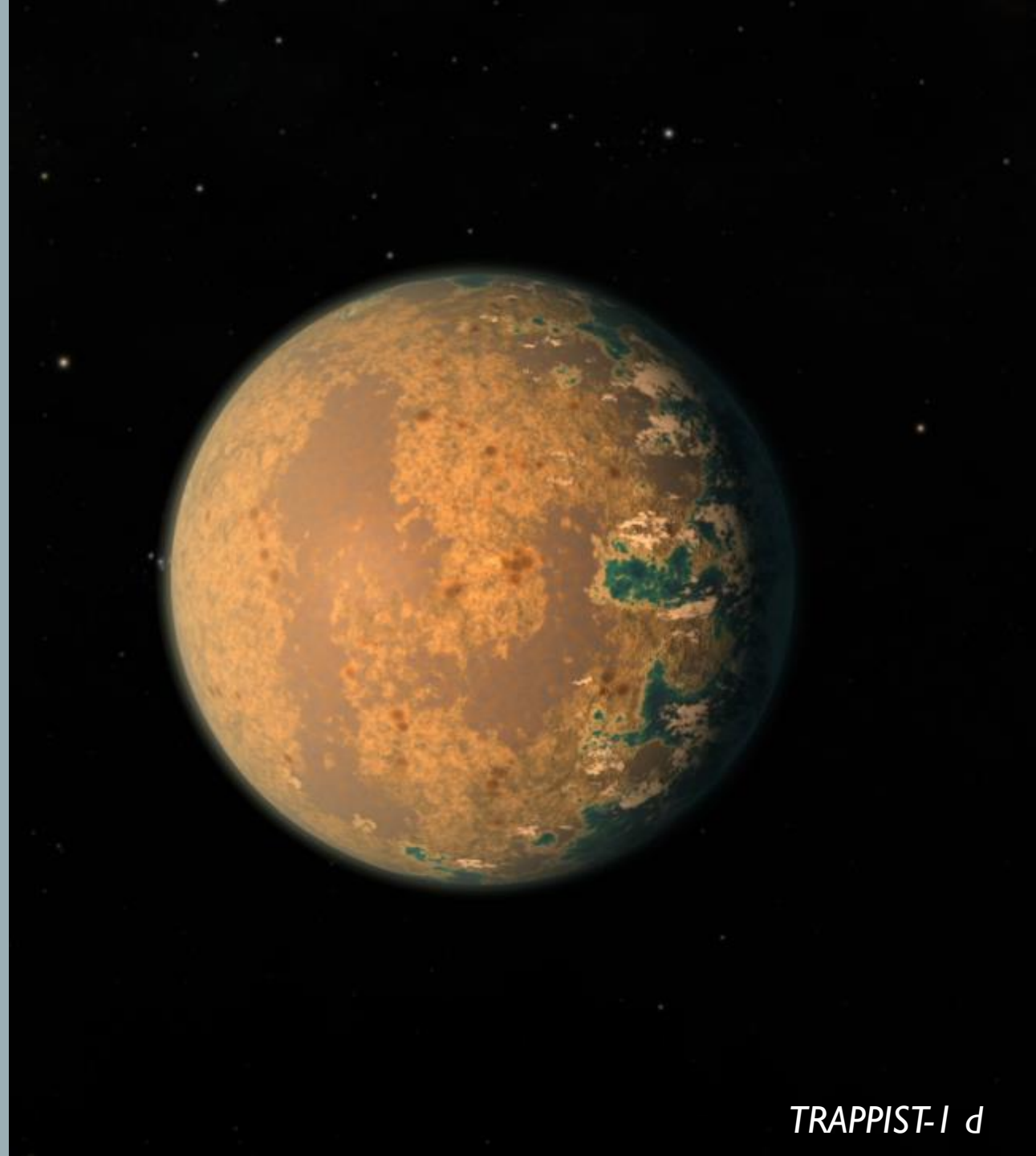
ESOPIANETI

1) Che cosa è un esopianeta?

2) Come vengono scoperti?

3) Che tipi di esopianeti ci sono?

4) Quali potrebbero ospitare vita?

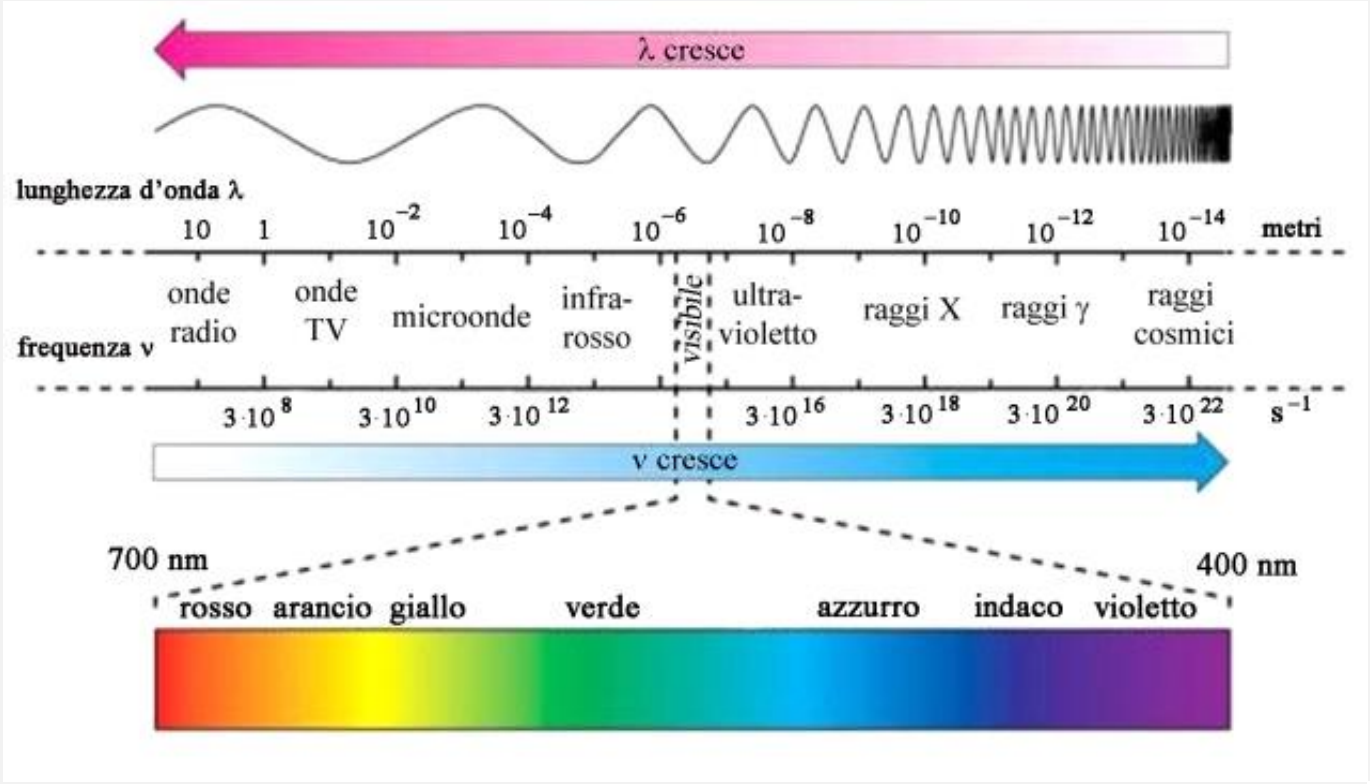


TRAPPIST-1 d

PER APPROFONDIRE (1/4)

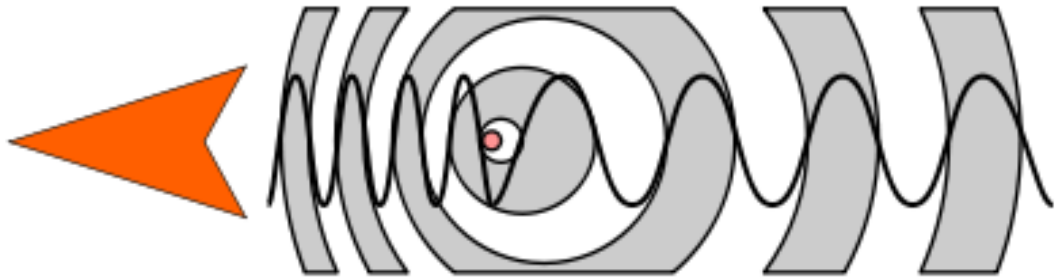
- Pianeta al di fuori del nostro Sistema Solare
- Attorno a cosa orbitano?
- Come vengono cercati?

VELOCITÀ RADIALI – EFFETTO DOPPLER



Frequenza (percepita dall'osservatore) d'onda

Effetto Doppler



Exoplanet Types

Terrestrial

Earth-sized or smaller, mostly made of rock and metal. Some could possess oceans or atmospheres and perhaps other signs of habitability.

Neptune-Like

Similar in size to our own Neptune and Uranus, with hydrogen or helium-dominated atmospheres. "Mini-Neptunes," not found in our solar system, are smaller than Neptune but larger than Earth.

Super-Earth

Typically "terrestrial," or rocky, and more massive than Earth but lighter than Neptune. They might or might not have atmospheres.

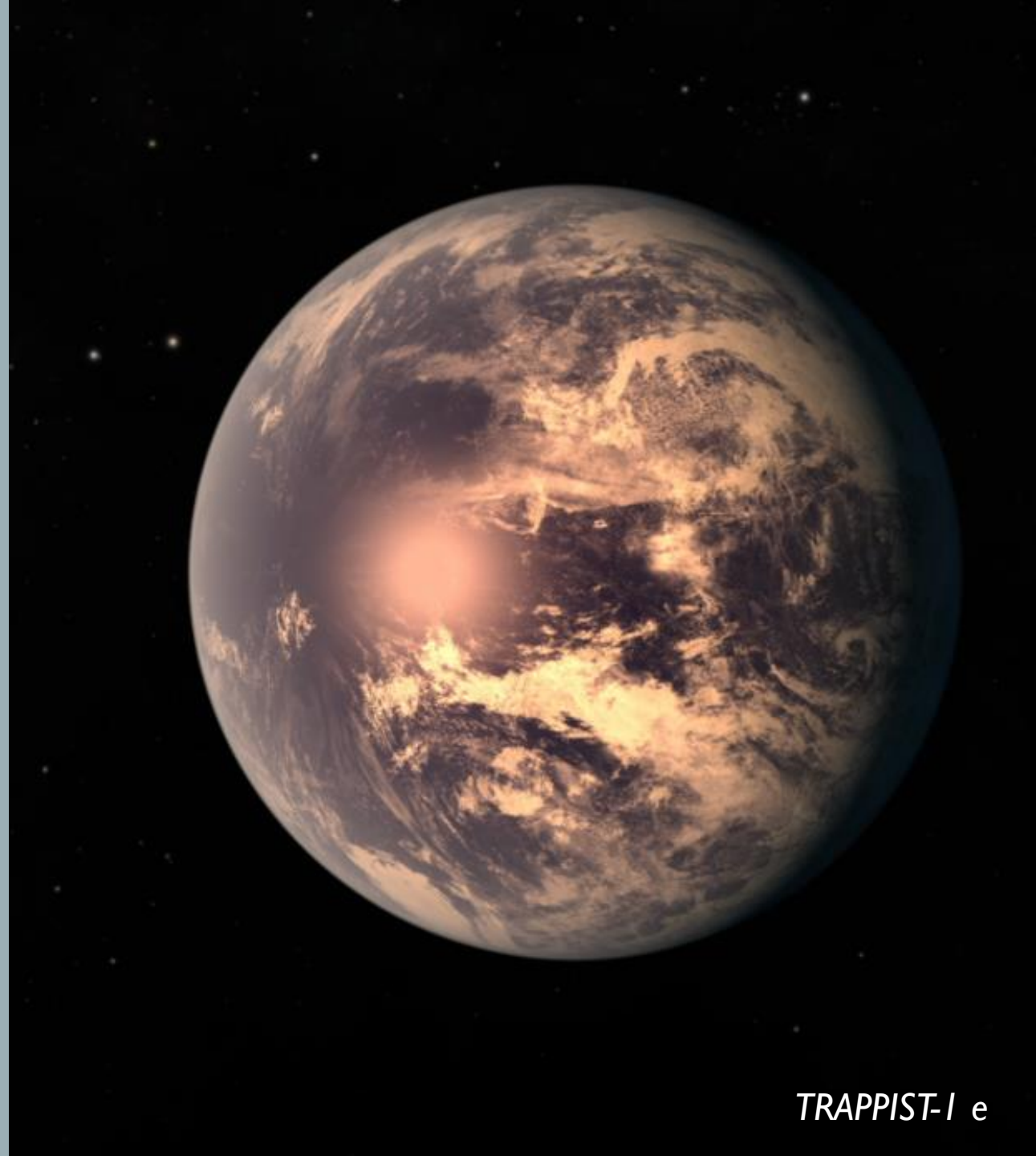
Gas Giants

The size of Saturn or Jupiter, or much larger. They include "hot Jupiters"- scorching planets in close orbits around their stars.

I DATI

Dove cercare i dati?

Quali dati usare?



TRAPPIST-1 e

IL DATASET

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Planetary Systems and Planetary Systems Composite Parameters Table Definitions

This page describes the parameters available in the Planetary Systems (PS) and Planetary Systems Composite Parameters (PSCompPars) interactive tables. These parameters can also be retrieved programmatically through the archive's Table Access Protocol (TAP) service.

Choosing the Right Table For Your Needs

Choosing data from the PS or PSCompPars tables depends on your use case:

- **PS** provides a single table view of the all of the ingested planetary systems for each known exoplanet with each row containing a self-contained set of parameters (planet + stellar + system) for each reference. **The PS Table contains one row per planet per reference.**
- **PSCompPars** is a more filled-in table, with only one row per planet, enabling a more statistical view of the known exoplanet population and their host environments. **This table provides a more complete, though not necessarily self-consistent, set of parameters.**

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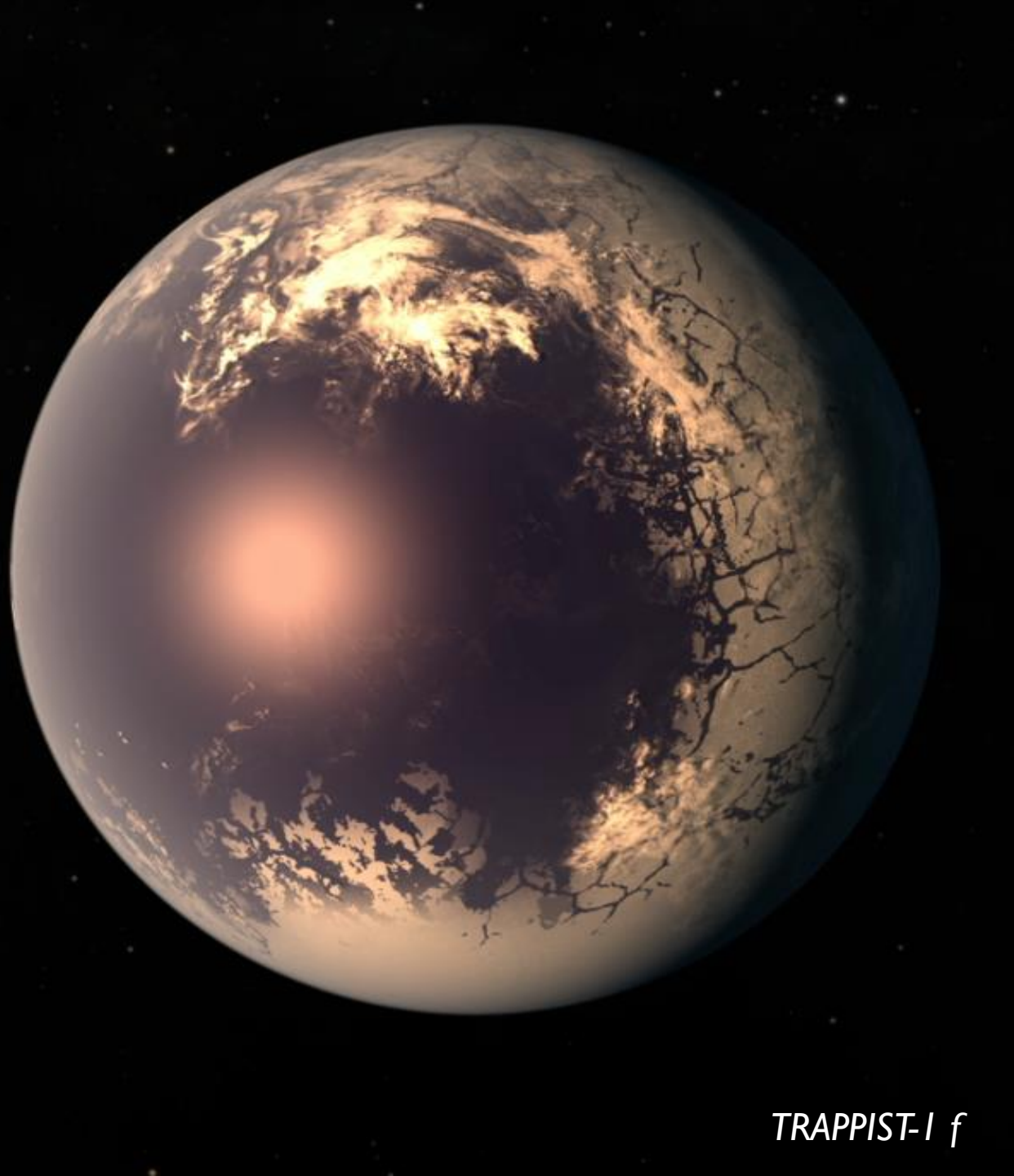
Select Columns | Download Table | Plot Table | View Documentation | User Preferences | Data may not be self-consistent if drawn from multiple sources, including calculations. (Learn more)

Planetary Systems Composite Data

Planet Name	Host Name	Number of Stars	Number of Planets	Discovery Method	Discovery Year	Discovery Facility	Controversial Flag	Orbital Period [days]	Orbit Semi-Major Axis [au]	Planet Radius [Earth Radius]	Planet Radius [Jupiter Radius]	Planet Mass or Mass*sin(i) [Earth Mass]	Planet Mass [Jupite
11 Com b	11 Com	2	1	Radial Velocity	2007	Xinglong Station	0	326.03±0.32	1.29±0.05	12.1	1.08	6165.6±476.7	19.4±1.5
11 UMi b	11 UMi	1	1	Radial Velocity	2009	Thueringer Lande	0	516.21997±3.20000	1.53±0.07	12.3	1.09	4685±795	14.74±2.5
14 And b	14 And	1	1	Radial Velocity	2008	Okayama Astroph	0	185.84±0.23	0.83	12.9	1.15	1525.5	4.8
14 Her b	14 Her	1	2	Radial Velocity	2002	W. M. Keck Obser	0	1765.03890112150	2.773068870992	12.6	1.12	2586.7464507277	8.1388
16 Cyg B b	16 Cyg B	3	1	Radial Velocity	1996	Multiple Observati	0	798.50000±1.00000	1.66±0.03	13.5	1.2	566±25	1.78±0.08
17 Sco b	17 Sco	1	1	Radial Velocity	2020	Lick Observatory	0	578.38	1.45±0.02	12.9	1.15	1373	4.32
18 Del b	18 Del	2	1	Radial Velocity	2008	Okayama Astroph	0	993.3±3.2	2.6	12.5	1.11	3273.5	10.3
1RXS J160929.1-210524 b	1RXS J160929.1-	1	1	Imaging	2008	Gemini Observatc	0		330	18.647	1.664	3000±300	8±1
24 Boo b	24 Boo	1	1	Radial Velocity	2018	Okayama Astroph	0	30.3506	0.190	13.9	1.24	289	0.910
24 Sex b	24 Sex	1	2	Radial Velocity	2010	Lick Observatory	0	452.8	1.333	13.4	1.19	632.46	1.99
24 Sex c	24 Sex	1	2	Radial Velocity	2010	Lick Observatory	0	883.0	2.08	13.9	1.24	273.32	0.86
2M0437 b	2MASS J0437217	1	1	Imaging	2021	Subaru Telescope	0		118.0±1.3	13	1.16	1271±318	4±1
2MASS J01033563-5515561 AB b	2MASS J010335	2	1	Imaging	2013	Paranal Observati	0		84	12.3	1.1	4132±318	13±1
2MASS J01225093-2439505 b	2MASS J012250	1	1	Imaging	2013	W. M. Keck Obser	0		52±6	11	1.0	7786.5±794.5	24.5±2.5
2MASS J02192210-3925225 b	2MASS J021922	1	1	Imaging	2015	Cerro Tololo Inter-	0		156±10	16.1±0.3	1.44±0.03	4418±350	13.9±1.1
2MASS J04414489+2301513 b	2MASS J044144	1	1	Imaging	2010	Hubble Space Tel	0		15.0	12.6	1.13	2383.6±794.5	7.5±2.5
2MASS J12073346-3932539 b	2MASS J120733	1	1	Imaging	2004	Paranal Observati	0		55	12.9	1.15	1589±636	5±2
2MASS J19383260+4603591 b	2MASS J193832	2	3	Eclipse Timing Va	2015	Kepler	0	406±4	0.92±0.02	13.4	1.2	604±32	1.9±0.1

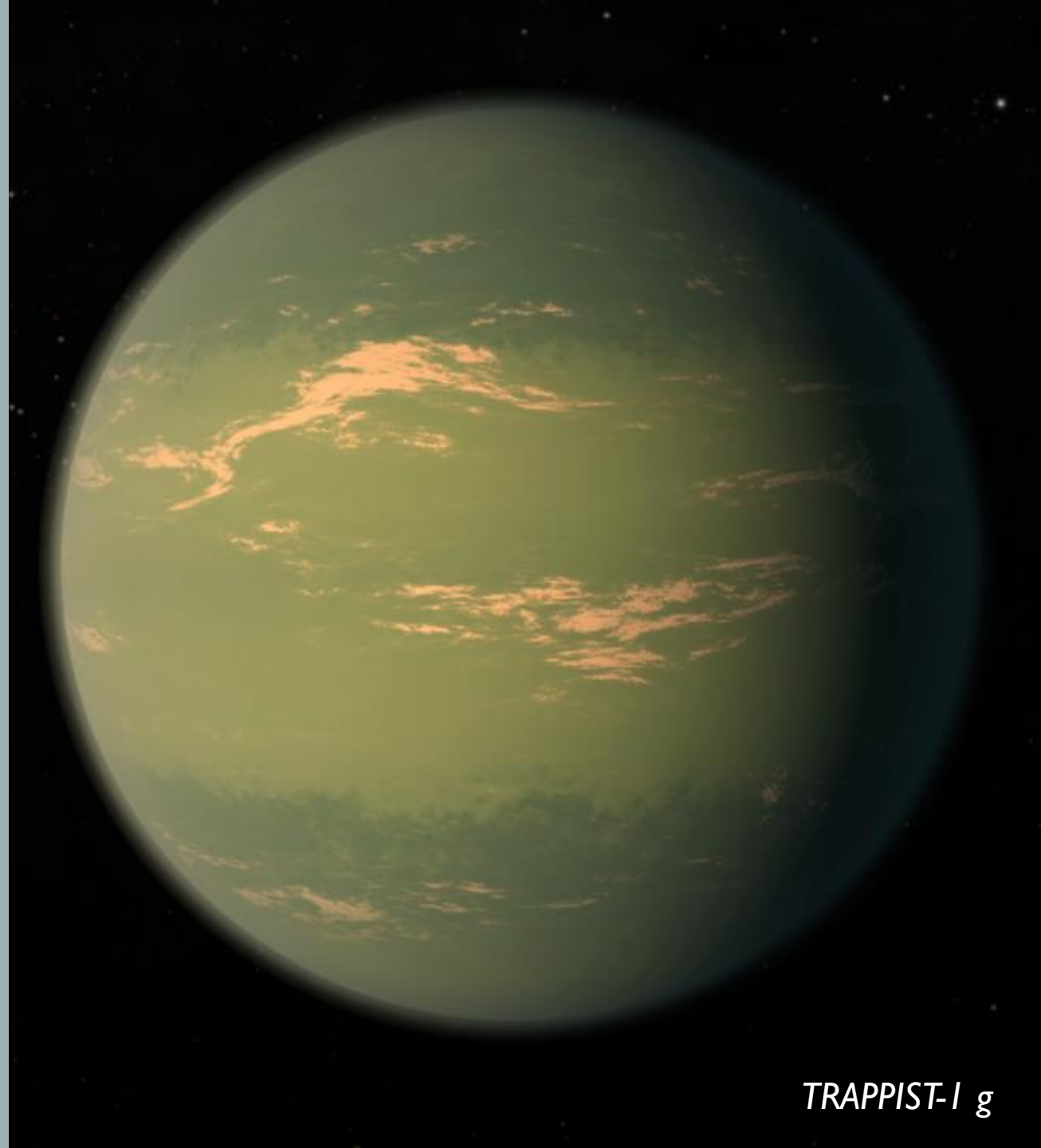


TRAPPIST-1 f

GOOGLE DRIVE/GITHUB

https://www.google.com/intl/it_it/drive/

https://github.com/



TRAPPIST-1 g

ALLA PROSSIMA!

TRAPPIST-1 h

REFERENCES

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https://it.wikipedia.org/wiki/TRAPPIST-1