



NASA

Data Science For Space Research & Exploration

Alyssa Columbus, NASA Datanaut

NASA Datanauts

1. Engage with NASA's open data to create innovative new processes and products.
2. Introduce and advance data science skills.
3. Outreach & create a vibrant data problem-solving community.



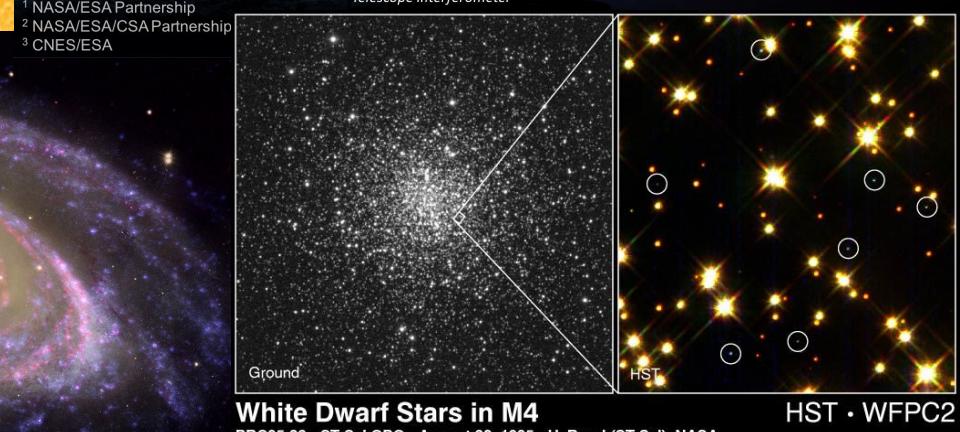
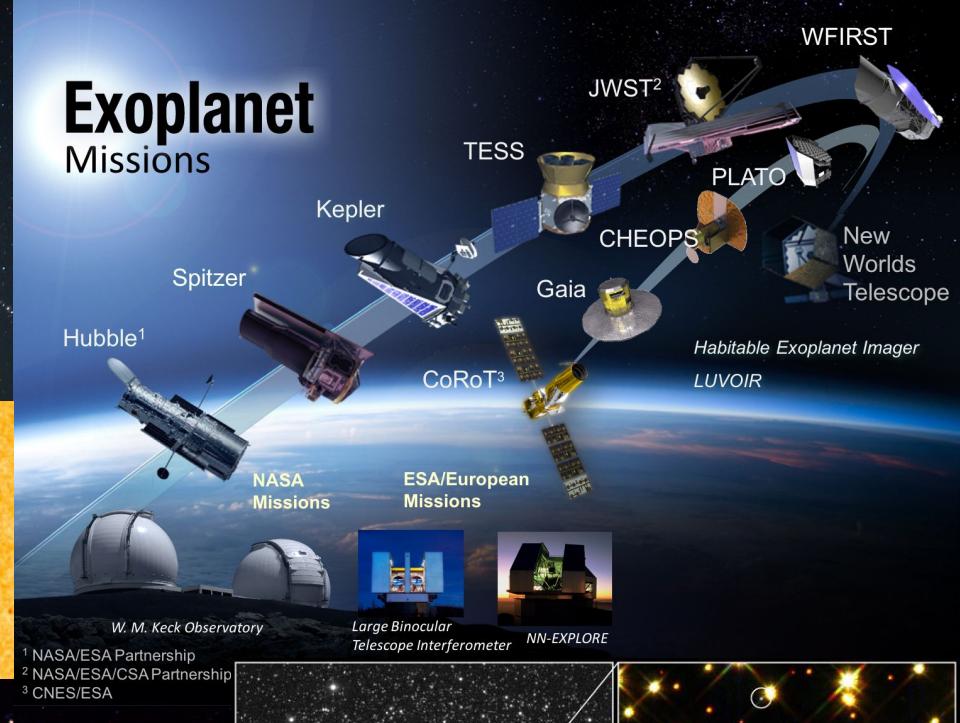
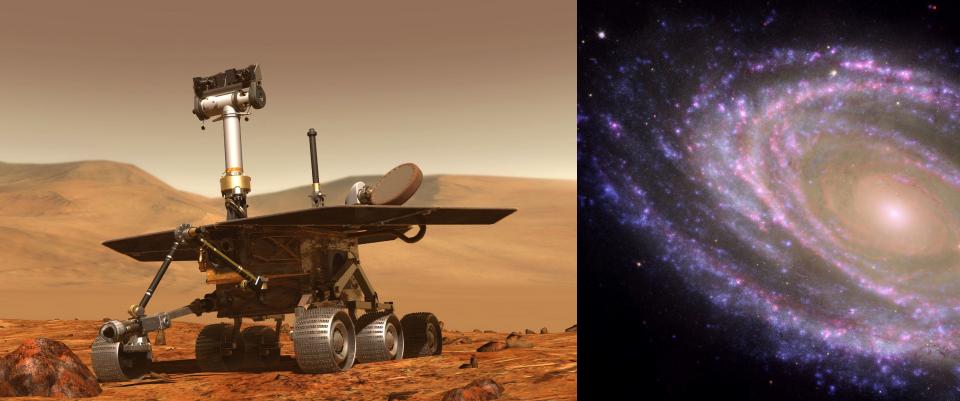
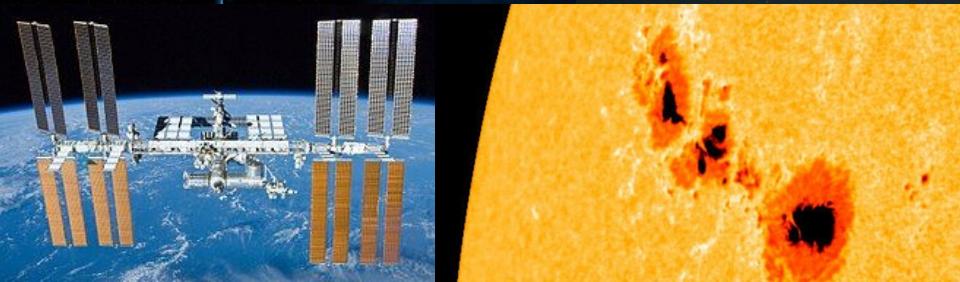
Questions We'll Answer Today

It's rocket
[data] science!



1. How does NASA use citizen & data science for space research & exploration?
 2. How can I get involved (or be a NASA Scientist too)?
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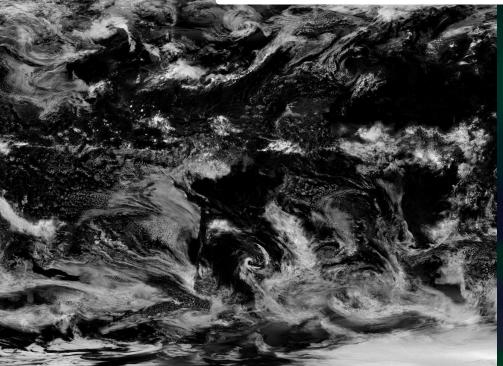
Data Science @ NASA



White Dwarf Stars in M4

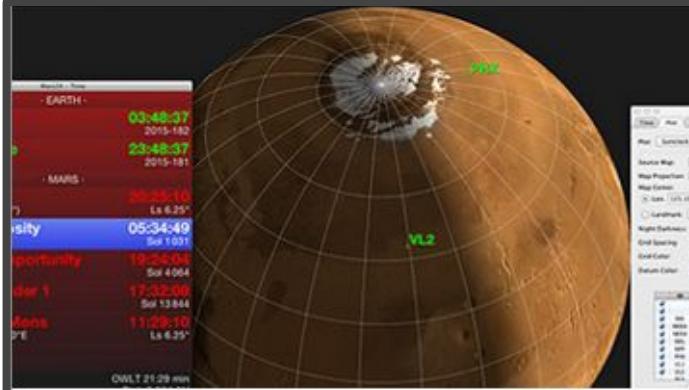
Ground, STS-107, HST, WFPC2

HST • WFPC2

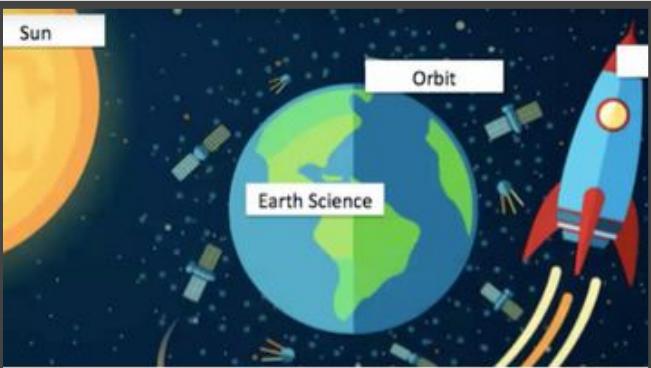




Sonification of Data for Better
Data Understanding and
Exploration



NASA's Mars24 Timekeeping
Algorithm in R



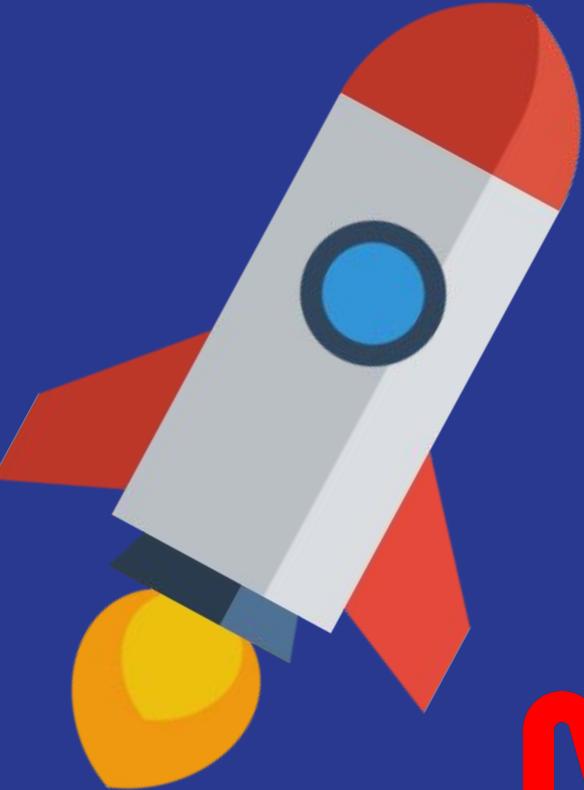
Mapping the NASA Dataverse



Friendship 7 3D Visualization



Print My Rocket



How YOU Can Be A **NASA** Scientist

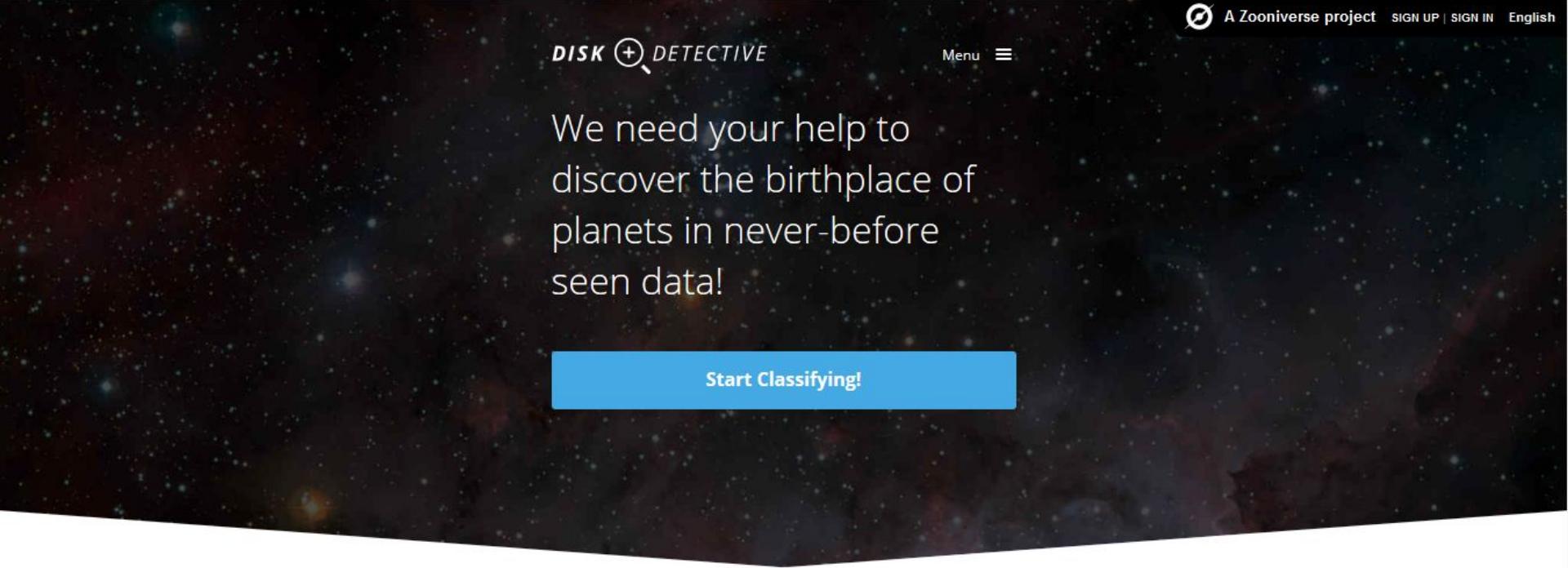
Citizen Science Projects for Everyone



**Help scan the realm beyond
Neptune for brown dwarfs and
planet nine.**

[Learn more](#)[Get started](#)

We need your help to
discover the birthplace of
planets in never-before
seen data!



Start Classifying!





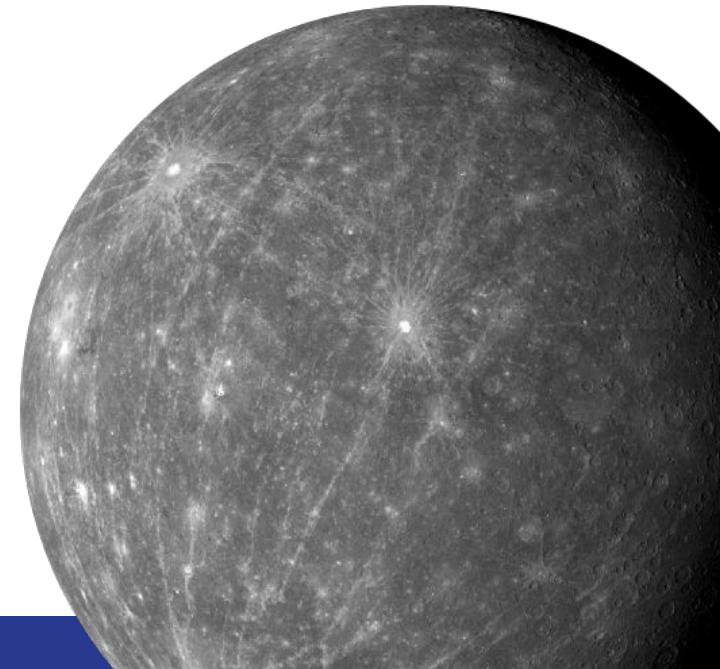
NASA and GLOBE Launch New Opportunity for Citizen Scientists

Want to be a citizen Earth scientist?
Join GLOBE Observer.

Find Other Citizen Science Projects

@ science.nasa.gov/citizenscientists

- Aurorasaurus
- Galaxy Zoo
- Target Asteroids
- And Many More!







Developer



You see development as building a better future. Discover NASA's tools to help you do just that! Access datasets, code repositories, APIs and more or get involved in one of our programs and connect with developers just like you. Maybe you've already built something using NASA data? Join the others who have told their story.

A large banner image showing a digital landscape with binary code (0s and 1s) floating in space, with streaks of light suggesting motion or data flow. A red "RESOURCE" button is visible in the upper right corner.

DATA

This inventory offers services that enable users the ability to discover, collaborate, interact, and share NASA data.

A photograph of a person's hands typing on a laptop keyboard. The laptop screen displays lines of code. A red "RESOURCE" button is visible in the upper left corner.

Code

A community-driven catalog of NASA's Software Release projects developers can use to register open source projects.

Thank You!



NASA



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R-Ladies Irvine: meetup.com/r-ladies-irvine
Kickoff: Wed, May 16, 7-8:30pm, RH 306