

National Aeronautics and Space Administration



### PUNCH4 – NASA Heliophysics Connections

Peg Luce

Acting Director, Heliophysics Division, NASA

### **NASA Heliophysics Division Leadership**



Nicole (Nicki) Rayl, Associate Director for Flight

Peg Luce, Acting Division Director

Therese Moretto-Jorgensen Acting Deputy Division Director

# **HPD STAFFING UPDATES**

### Welcome and Congratulations!



Genene Fisher



Kelly Korreck



Janet Kozyra



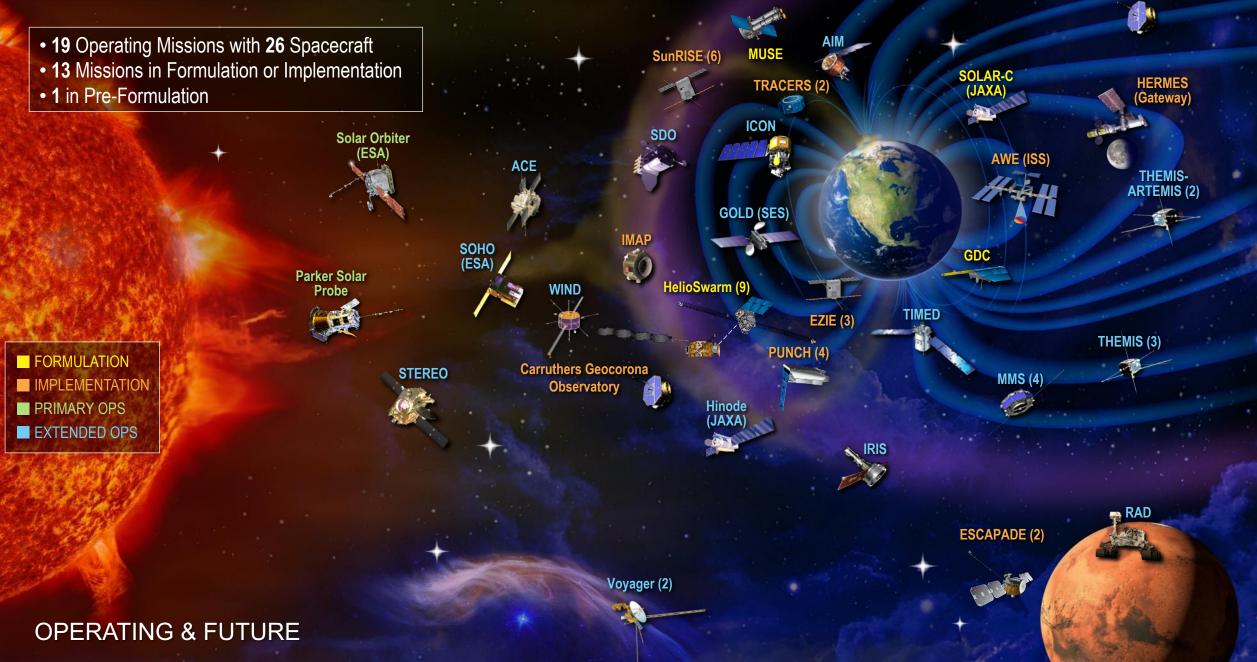
**Reiner Friedel** 

Elizabeth Esther

Hiring for new Program Scientists is underway!

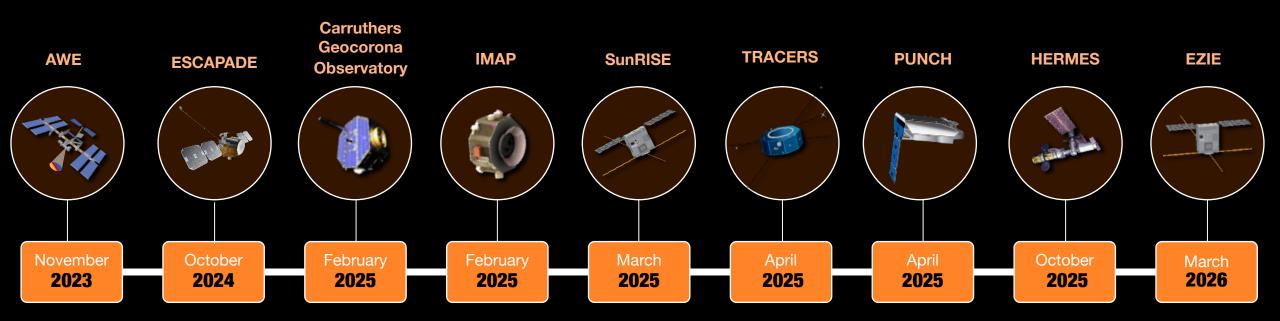


### HELIOPHYSICS SYSTEM OBSERVATORY



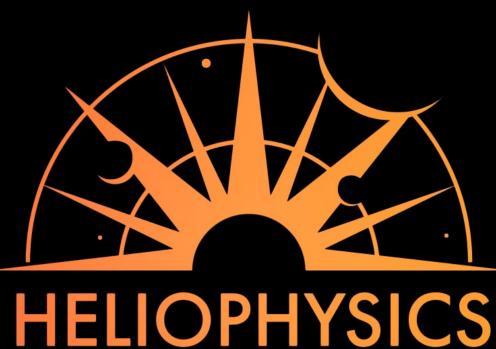
IBEX

# **HELIO MISSION FLEET TIMELINE**



#### Two solar eclipses

Annular on October 14, 2023, and total on April 8, 2024, across North America



### Parker Solar Probe

Parker will make its closest approach to the Sun in December 2024

Solar Cycle 25

Solar maximum will present more opportunities to experience space weather

For additional information, please visit <u>Eclipses Home | Eclipses – NASA Solar System Exploration</u>

#### SASKATCHEWAN C ALBERTA 4:35 PM HINGTON 9:15 AM 2024 Total Solar Eclipse roat Falls 3:30 EDT MONTANA NORTH DAKOTA Glendh MINNESOTA EGON Dickinson Bismarck **DOR** - Ennular -Aberdeen WISCONSI PDT Roise IDAHO Minneapol Cadi lao SOUTH DAKOTA MICHIGAN Hanid City SOLAT Saginaw Mitche 3:20 EDT Grand Rapids Por WYOMING Batte Detroit Dougia Chadron eveland PENNSYLVANIA 3:15.0 IOWA Aliance 9:25 PDT HIDSE EDT Scottsbluff Philad Salt City Carson City NEBRASKA Sacramento Galesbu UTAH S San Francisc EDT NEVADA Denver ILLINO. 0 1 1 0 VIBGINIA COLORADO as Cit Colorado Spring CALIFORNIA MDT Salina St. Louis Bornoka VIRGINIANOrfolk Virginia Beach CDT KANSAS sville MISSOURI KENTUCK Hutchinson 2023 Path of Annularity Sat. October 14, 2023 Las Vegas Dodge City Along a path about 125 miles wide, the Sun will appear as a "ring of fire" in the sky. Annularity lasts up to 5 minutes depending on the viewer's location within this path. Ponca City N CAROLINA Los Ange MDT Ala Enic 2024 Path of Totality Mon. April 8, 2024 Stilwater Tulsa •San Bernardino TENNESSEE Santa Dumas Long Beach OKLAHOMA Along a path about 115 miles wide, the Moon uerque, ARIZONA will completely block the Sun in the sky. Totality Armarill Oklahoma City<sup>9</sup> -lorence lasts up to about 4 minutes and 28 seconds Figrance Huntsville Hereloid The 2023 & 2024 San Diego depending on the viewer's location within this S. CAROLINA Glendale Scottscale Phoenix Mesa Lawton path. Ohidra CDT Outside of these paths, viewers within the 48 contiguous U.S. states and many other areas will see a partial solar **GEOBGLA** Iruin o Saffor MISSISSIPP eclipse (in the shaded areas below) RKANSAS TEXAS 1:45 Tucson NEWMEXICO CDT through the Selma /orth<sup>®</sup> Abilene El-Paso\_ ALABAMA eyes of CDT Lunar topography data from NASA's Lunar Reconnaissance Orbiter and the Japan Aerospace Exploration Agency's SELENE lunar orbiter LOUISPANA Bater Pouck M C 11:50 were used to precisely calculate the location of the Moon's shadow CDT for the 2023 and 2024 solar eclipses. The planetary positions are from CDT NASA's Jet Propulsion Laboratory Development Ephemeris 421. Earth imagery from NASA's Blue Marble: Next Generation series were 1:30 BAJA used to create the terrain and Earth at night imagery from NASA's 11:55 2:30 CDT CST ALIFOR Black Marble were used under the eclipse paths. West Palm Beach 2023 Annular Solar Eclipse 2024 Total Solar Eclipse Saturday October 14, 2023 Monday April 8, 2024 CST 12:00 Fort Lauderd Credit: Michala Garrison and the Scientific Visualization Studio (SVS), in CDT Miami Beach collaboration with the NASA Heliophysics Activation Team (NASA HEAT), part of NASA's Science Activation portfolio 2:20 PM Eclipse calculations by Emie Wright, NASA Goddard Space Flight Center Find More: http://solarsystem.nasa.gov/eclipses NP-2022-11-909-GSFC 12:05 PM CDT

### <u>Get Involved and Stay Informed!</u>

Stay in touch and help us find new ways to highlight your work and keep you in the loop!

Sign up for the NASA Eclipse Newsletter to receive updates on eclipse activities!

https://tinyurl.com/ym9epkjy

### Let us know what you've been working on:

https://bit.ly/SubmitHelioScience

#### Learn more about the next solar eclipse:

https://solarsystem.nasa.gov/eclipses/home/

#### Join us for our next Community Town Hall:

https://science.nasa.gov/researchers/virtual-townhall

For additional details on Eclipse information and events:

Events | News - NASA Solar System Exploration

NASA.gov/sunearth

B

blogs.nasa.gov/sunspot



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